

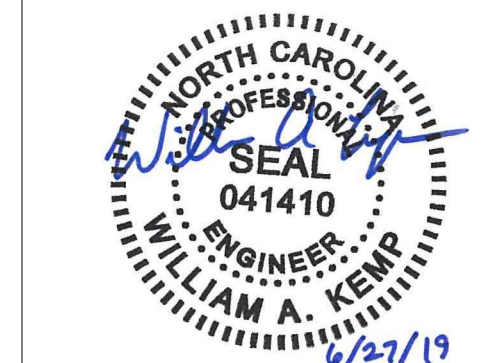
This drawing and the design shown are the property of Little Overseas Architectural Consulting... The reproduction, copying or other use of the drawing without their written consent is prohibited and any infringement will be subject to legal action.

© Little 2018



Dewberry Engineers Inc. 2610 WYCLIFF ROAD SUITE 410 RALEIGH, NC 27607

PHONE: 919.881.9939 FAX: 919.881.9923 NCBEL # F-0929



CONSTRUCTION DOCUMENTS

06.27.2019

Table with columns NO., REASON, DATE for change tracking.

PRINCIPAL IN CHARGE MSW PROJECT MANAGER GAM

DESIGN TEAM WAK, ELP, GM

HARNETT COUNTY GOVERNMENT SERVICES CENTER

514-8066-00

ELECTRICAL SYMBOLS, ABBREVIATIONS & NOTES

E-001

Table listing electrical symbols and notes E-001 through E-502, including notes on standard wall mounting heights.

STANDARD WALL MOUNTING HEIGHTS

Table with columns: DEVICE OR EQUIPMENT TYPE, MOUNTING HEIGHT (AFF/AFG), MEASURED TO, NOTES. Lists items like AV, COAX, DATA & TELECOM, RECEPTACLES, LIGHT SWITCHES, etc.

- NOTES: 1. UNLESS NOTED OTHERWISE, WALL MOUNTING HEIGHTS INDICATED ON DRAWINGS SHALL SUPERSEDE STANDARD WALL MOUNTING HEIGHTS LISTED HERE...

ABBREVIATIONS - ELECTRICAL

Table listing electrical abbreviations such as QTY, QUAN, R, REMOVE, RCF, RETURN AIR FAN, etc.

ABBREVIATIONS - ELECTRICAL

Table listing electrical abbreviations such as KVAR, KILOVOLT-AMPERES REACTIVE, KW, KILOWATT, etc.

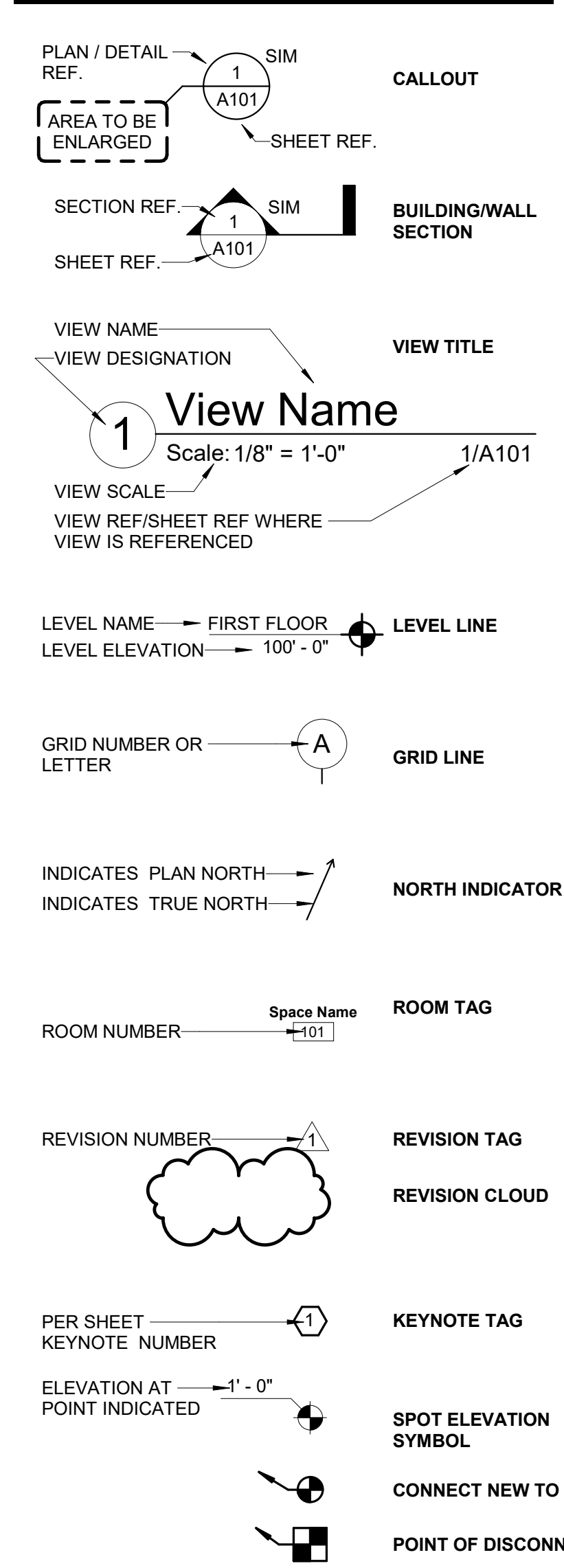
ABBREVIATIONS - ELECTRICAL

Table listing electrical abbreviations such as E, EXISTING, EA, EACH, EQ, EQUIPMENT BRANCH, etc.

ABBREVIATIONS - ELECTRICAL

Table listing electrical abbreviations such as A, AMP, AMPERE, A/C, AIR CONDITIONING, etc.

STANDARD DETAILING SYMBOLS



ELECTRICAL SYMBOLS AV, DATA & TELECOMMUNICATIONS

Table listing electrical symbols for AV, data, and telecommunications, including data outlets, junction boxes, and power/telecom handholes.

ELECTRICAL SYMBOLS SECURITY

Table listing electrical symbols for security, including security cameras, alarm keypads, door security hardware, and motion detectors.

ELECTRICAL SYMBOLS BONDING & GROUNDING

Table listing electrical symbols for bonding and grounding, including ground rods, ground conductors, and exothermic connections.

ELECTRICAL SYMBOLS FIRE ALARM

Table listing electrical symbols for fire alarm, including smoke detectors, heat detectors, pull stations, horns, strobes, and fire alarm relays.

ELECTRICAL SYMBOLS LIGHTING

Table listing electrical symbols for lighting, including recessed light fixtures, pendant light fixtures, strip light fixtures, and various types of switches.

ELECTRICAL SYMBOLS POWER

Table listing electrical symbols for power, including duplex outlets, quadruplex outlets, 220V outlets, junction boxes, and power distribution panels.

ELECTRICAL SYMBOLS POWER

Table listing electrical symbols for power, including simple outlets, duplex outlets, quadruplex outlets, 220V outlets, and power distribution panels.



Dewberry Engineers Inc.

2610 WYCLIFF ROAD  
SUITE 410  
RALEIGH, NC 27607  
PHONE: 919.881.9939  
FAX: 919.881.9923  
NCBELS # F-0929



**ELECTRICAL NOTES**

**GENERAL**

- THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT SHOW ALL DETAILS REQUIRED FOR THE COMPLETE SYSTEM. THEY SHOULD HOWEVER BE FOLLOWED AS CLOSELY AS POSSIBLE IN THE GENERAL ARRANGEMENT AND LOCATION OF EQUIPMENT. ALL DIMENSIONS SHALL BE CHECKED AT THE BUILDING AND ALL STRUCTURAL AND FINISH CONDITIONS INVESTIGATED. THE CONTRACTOR SHALL ARRANGE HIS WORK TO MEET THESE CONDITIONS AND PROVIDE SUCH EQUIPMENT AND ACCESSORIES AS MAY BE REQUIRED.
- PROPERLY SUPPORT ALL WORK AND EQUIPMENT INSTALLED UNDER THIS CONTRACT PLUMB AND PARALLEL WITH BUILDING LINES. STUDY ALL GENERAL, STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS, SHOP DRAWINGS, AND CATALOG DATA TO DETERMINE HOW EQUIPMENT, ACCESSORIES, PIPING, FIXTURES, AND RELATED ITEMS ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED. PROVIDE ALL BOLTS, INSERTS, PIPE STANDS, BRACKETS, STRUCTURAL SUPPORTS, AND ACCESSORIES FOR PROPER SUPPORT OF EQUIPMENT FURNISHED UNDER THIS CONTRACT.
- COORDINATE THE ELECTRICAL WORK WITH ALL OTHER CONTRACTORS BEFORE BEGINNING WORK TO ENSURE THAT THE ELECTRICAL WORK DOES NOT INTERFERE WITH OTHER WORK. LINES WHICH REQUIRE SLOPE SHALL TAKE PRECEDENCE OVER ELECTRICAL WORK. COORDINATE THIS WITH THE PLUMBING, HVAC AND GENERAL CONTRACTORS.
- NOTIFY THE ENGINEER IN WRITING IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCY OR POINTS OF CONFLICT IN THE DRAWINGS OR THE SPECIFICATIONS. THE ENGINEER WILL CLARIFY SUCH DISCREPANCY OR POINTS OF CONFLICT IN WRITING PRIOR TO THE PROGRESS OF THE WORK BEYOND THE POINT CONCERNED.
- BEFORE INSTALLING EQUIPMENT, MAKE FIELD MEASUREMENTS TO ENSURE THAT ALL ITEMS OF EQUIPMENT FURNISHED WILL FIT INTO THE SPACE AS SHOWN ON THE DRAWINGS. WHERE EQUIPMENT WILL NOT FIT AS SHOWN ON THE DRAWINGS, PROVIDE A DRAWING TO THE ENGINEER FOR APPROVAL WITH A PROPOSED REVISED ARRANGEMENT BEFORE INSTALLING THE EQUIPMENT.
- PRIOR TO ROUGH-IN COORDINATE THE LOCATION AND MOUNTING HEIGHT OF ALL WALL MOUNTED DEVICES WITH THE ARCHITECTURAL INTERIOR ELEVATIONS AND CASEWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. NOTIFY THE ARCHITECT IN THE EVENT OF A CONFLICT. MINOR ADJUSTMENTS IN DEVICE LOCATION, I.E. 5'-7", SHALL BE MADE IN ANY DIRECTION WITH NO ADDITIONAL COST TO THE OWNER.
- ALL WALL MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO RECEPTACLES, SWITCHES, TELECOM OUTLETS, SECURITY DEVICES, INTEGRATED COMMUNICATIONS DEVICES, AND FIRE ALARM DEVICES, SHALL BE RECESSED WITHIN WALLS, FURRING, OR CASEWORK, UNLESS NOTED OTHERWISE. USE OF EXPOSED SURFACE MOUNTED CONDUIT OR RACEWAY IS PROHIBITED EXCEPT IN ELECTRICAL AND MECHANICAL SPACES AND LOCATIONS NOTED ON THE DRAWINGS.
- LOCATION OF ALL FLOOR-MOUNTED DEVICES OUTLETS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN.
- OUTLET BOXES INCLUDING BUT NOT LIMITED TO LIGHT SWITCHES, RECEPTACLES, TELECOM OUTLETS, SECURITY DEVICES, INTEGRATED COMMUNICATIONS DEVICES, ETC. LOCATED ON OPPOSITE SIDES OF FIRE RATED PARTITIONS SHALL NOT BE MOUNTED IN THE SAME WALL CAVITY. WALL PENETRATIONS SHALL BE SEPARATED BY MOUNTING BOXES ON OPPOSITE SIDES OF WALL STUDS OR OTHER VERTICAL STRUCTURAL MEMBER INSIDE THE WALL.
- FEEDER CONDUITS, BRANCH CIRCUITS AND CABLE TRAY ROUTING SHALL CONFORM TO THE DETAILS ON DRAWINGS AND SPECIFICATIONS. COORDINATE ROUTING WITH THE WORK OF OTHER TRADES BEFORE AND DURING CONSTRUCTION.
- RACEWAYS SHALL BE INSTALLED CONCEALED IN NEW WALL CONSTRUCTION ABOVE CEILINGS, BELOW FLOOR, AND IN OTHER CAVITIES TO THE GREATEST EXTENT POSSIBLE. WHERE EXPOSED RACEWAYS MUST BE USED, LAYOUT RACEWAYS TO MINIMIZE THE NUMBER OF VERTICAL RUNS.
- THE ARRANGEMENT, GROUPING, AND ROUTING OF BRANCH CIRCUITS SHALL BE PROVIDED AT THE CONTRACTOR'S DISCRETION IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICE FOR ELECTRICAL WORK, THE NATIONAL ELECTRICAL CODE REQUIREMENTS, LOCAL ORDINANCES, AND THE FOLLOWING:
  - WHERE MULTIWIRED BRANCH CIRCUITS (MORE THAN ONE CIRCUIT PER CONDUIT) ARE INSTALLED, THE CONTRACTOR SHALL INSTALL A DEDICATED NEUTRAL CONDUCTOR PER CIRCUIT PER NEC ARTICLE 210.4.
  - MULTIPLE SINGLE-POLE BRANCH CIRCUITS (UP TO 3 HOTS, 3 NEUTRALS, 1 GROUND) RATED FOR 30-AMPS OR LESS MAY BE PULLED INTO A SINGLE RACEWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE RACEWAYS AND DERATING CONDUCTORS PER NEC ARTICLE 310.15.
  - THE USE OF MULTIPOLE BREAKERS TO SERVE MULTIWIRED BRANCH CIRCUITS IS NOT ALLOWED.
  - BRANCH CIRCUIT AND FEEDER CIRCUIT SHALL BE ROUTED OVERHEAD UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE ARCHITECT AND ENGINEER.
  - A GROUND CONDUCTOR SHALL BE PROVIDED IN ALL RACEWAYS UNLESS NOTED OTHERWISE.
- COORDINATE LOCATION OF ALL RATED WALL ASSEMBLIES WITH THE ARCHITECTURAL DRAWINGS BEFORE AND DURING CONSTRUCTION.
- DEVICES REQUIRED TO ADA ACCESSIBLE SHALL BE INSTALLED PER ANSI A117.1.

**ELECTRICAL NOTES (CONT.)**

**LIGHTING**

- FOR THE EXACT LOCATION OF ALL CEILING MOUNTED LIGHTING FIXTURES AND DEVICES REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN.
- LIGHT FIXTURE LOCATIONS IN MECHANICAL SPACES SHALL BE COORDINATED AND DETERMINED IN THE FIELD. FIXTURES SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPING. CHAIN OR TRAPEZE-TYPE HANGERS SHALL BE PROVIDED WHERE FIXTURES CAN NOT BE MOUNTED DIRECTLY TO STRUCTURE OR CEILING.
- LIGHT FIXTURE CATALOG NUMBERS ARE INDICATIVE OF THE STYLE OF FIXTURE REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FIXTURES WITH THE PROPER TRIM, VOLTAGE AND OPTIONS NECESSARY FOR INSTALLATION.

**POWER**

- FOR THE EXACT LOCATION OF ALL CEILING MOUNTED LIGHTING FIXTURES AND DEVICES REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN.
- LIGHT FIXTURE LOCATIONS IN MECHANICAL SPACES SHALL BE COORDINATED AND DETERMINED IN THE FIELD. FIXTURES SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPING. CHAIN OR TRAPEZE-TYPE HANGERS SHALL BE PROVIDED WHERE FIXTURES CAN NOT BE MOUNTED DIRECTLY TO STRUCTURE OR CEILING.
- LIGHT FIXTURE CATALOG NUMBERS ARE INDICATIVE OF THE STYLE OF FIXTURE REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FIXTURES WITH THE PROPER TRIM, VOLTAGE AND OPTIONS NECESSARY FOR INSTALLATION.

**POWER**

- FOR THE EXACT LOCATION OF ALL CEILING MOUNTED LIGHTING FIXTURES AND DEVICES REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN.
- LIGHT FIXTURE LOCATIONS IN MECHANICAL SPACES SHALL BE COORDINATED AND DETERMINED IN THE FIELD. FIXTURES SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPING. CHAIN OR TRAPEZE-TYPE HANGERS SHALL BE PROVIDED WHERE FIXTURES CAN NOT BE MOUNTED DIRECTLY TO STRUCTURE OR CEILING.
- LIGHT FIXTURE CATALOG NUMBERS ARE INDICATIVE OF THE STYLE OF FIXTURE REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FIXTURES WITH THE PROPER TRIM, VOLTAGE AND OPTIONS NECESSARY FOR INSTALLATION.

**TELECOM**

- TELECOM/TELEVISION OUTLET SHALL BE PROVIDED WITH A 3/4" (1" TO FLOOR BOXES) CONDUIT WITH PULL WIRE TO ABOVE THE LAY IN CEILING IN THE CORRIDOR. TURN CONDUIT 12" INTO CEILING CAVITY AT A MINIMUM OF 6" ABOVE THE CEILING. THE END OF THE CONDUIT SHALL BE TERMINATED WITH AN INSULATED THROAT BUSHING.
- ALL TELECOM CABLES SHALL NOT EXCEED 295 FEET IN LENGTH AND INSTALLED PER MANUFACTURER RECOMMENDATIONS.
- TELECOM CABLES SHALL BE SUPPORTED WITH J-HOOKS AND D-RINGS. PROVIDE J-HOOKS AT INTERVALS NOT EXCEEDING 5 FEET. PROVIDE J-HOOKS WITHIN 6" FROM CABINETS, BOXES, FITTINGS, OUTLETS, RACKS, FRAMES AND TERMINALS. CABLES SHALL NOT BE SUPPORTED DIRECTLY FROM STRUCTURE. ALL WALL PENETRATIONS SHALL BE METAL SLEEVES AND SIZED AS INDICATED ON THE DRAWINGS. SEAL ALL FIRE RATED ASSEMBLY PENETRATIONS PER SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF ASSEMBLIES.
- ALL FIBER OPTIC AND TELECOM CABLING SHALL BE TESTED AND TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
- FIBER OPTIC AND TELECOM CABLING SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE AND EIA/TIA STANDARDS.
- TELECOM CABLING SHALL BE ROUTED PERPENDICULAR OR PARALLEL WITH THE BUILDING STRUCTURE AND CONCEALED IN ALL FINISHED SPACES.
- PROVIDE DOUBLE GANG BOX FOR ALL TELECOM OUTLETS WITH A SINGLE GANG MUD RING.

**CONSTRUCTION DOCUMENTS**

06.27.2019

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

PRINCIPAL IN CHARGE

MBW

PROJECT MANAGER

GAM

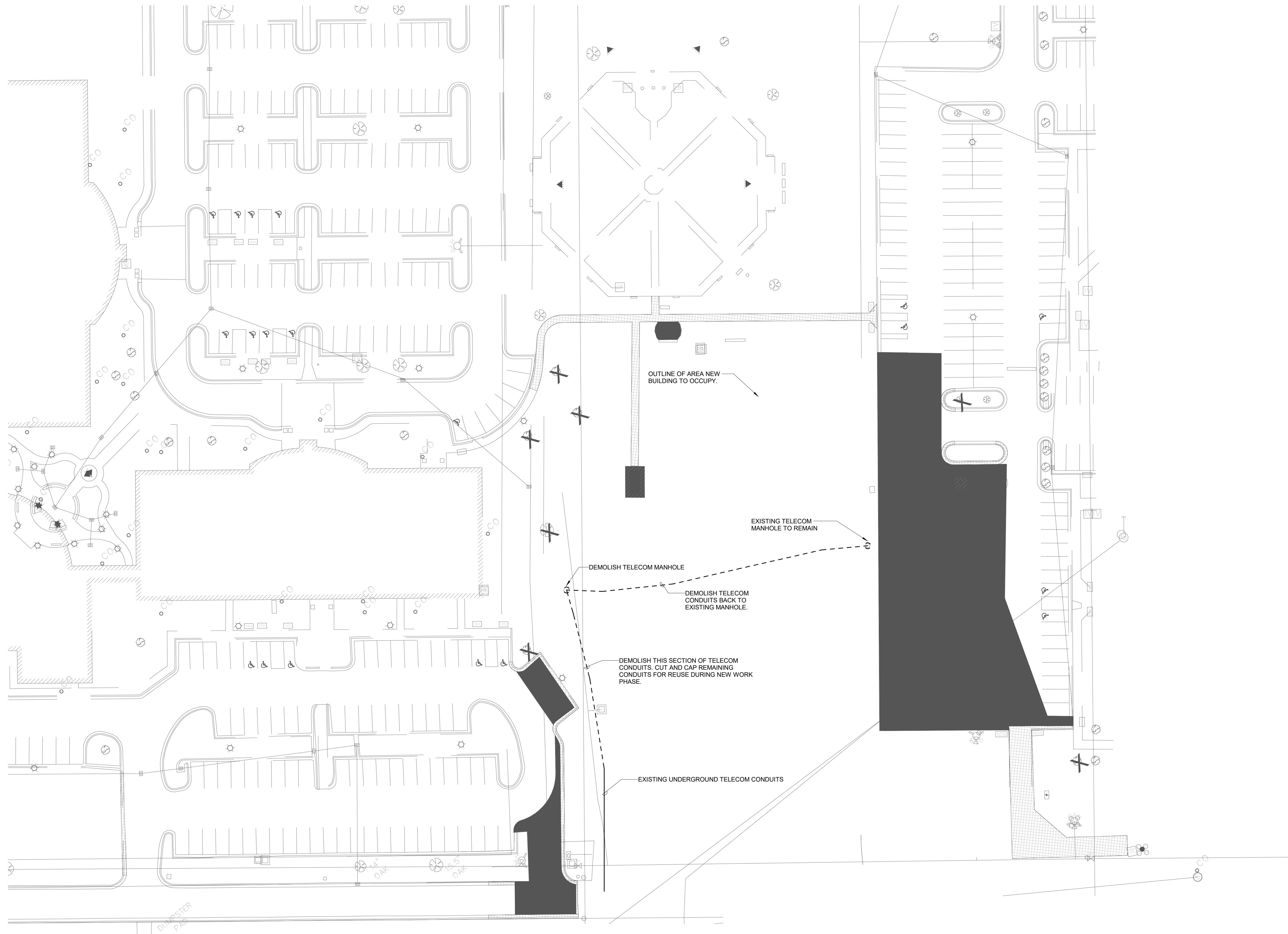
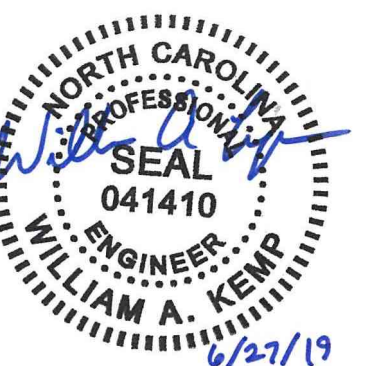
DESIGN TEAM

WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

514-8066-00

ELECTRICAL  
SYMBOLS,  
ABBREVIATIONS &  
NOTES



**CONSTRUCTION DOCUMENTS**

06.27.2019

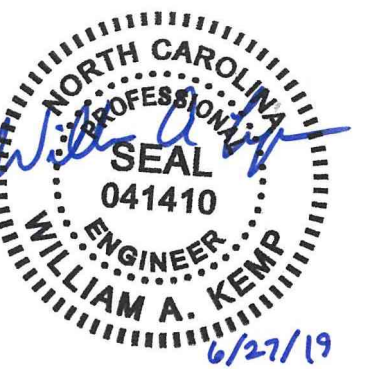
| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |
|     |        |      |
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES CENTER

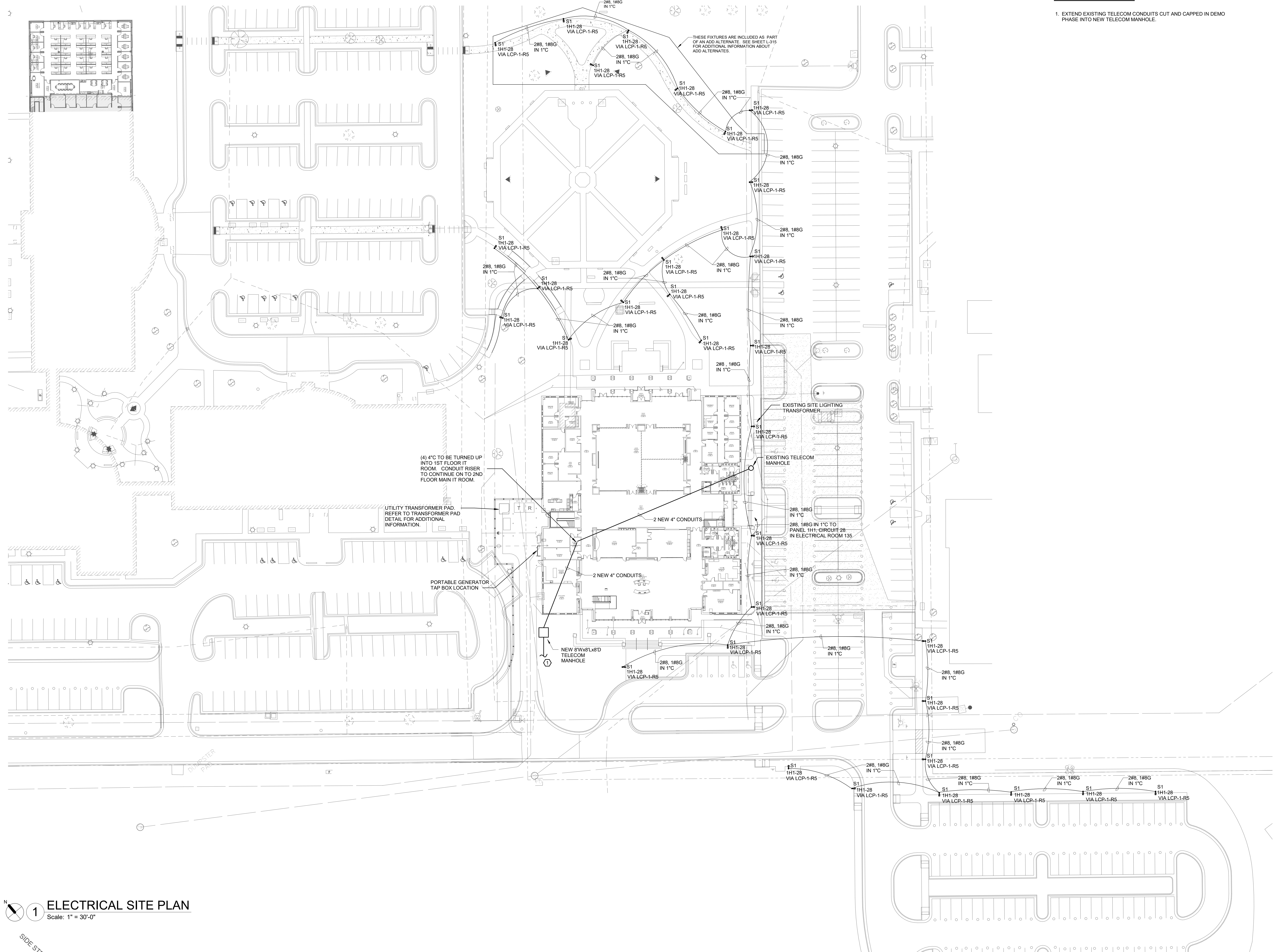
514-8066-00

DEMOLITION  
ELECTRICAL SITE



# KEYED NOTES:

1. EXTEND EXISTING TELECOM CONDUITS CUT AND CAPPED IN DEMO PHASE INTO NEW TELECOM MANHOLE.



**1 ELECTRICAL SITE PLAN**  
Scale: 1" = 30'-0"

SIDE STP

CONSTRUCTION DOCUMENTS

06.27.2019

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |
|     |        |      |
|     |        |      |
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES CENTER

514-8066-00

NEW WORK  
ELECTRICAL SITE



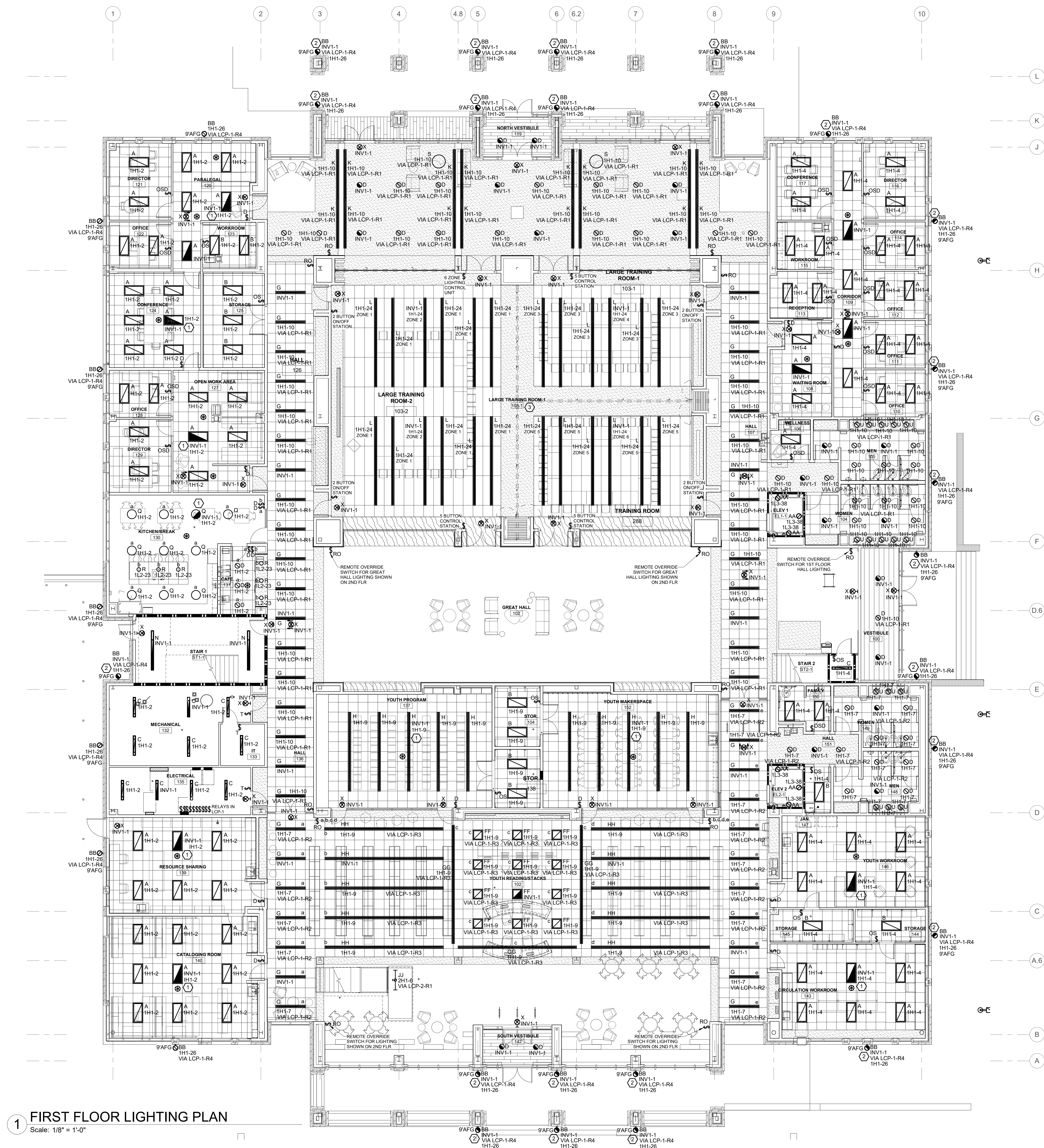
**GENERAL NOTES**

1. PROVIDE AN UN-SWITCHED CONDUCTOR TO ALL EMERGENCY LIGHT FIXTURES OPERATED BY INVERTER.
2. REFER TO LIGHTING FIXTURE SCHEDULE, RELAY SCHEDULES AND RELAY LIGHTING CONTROL DIAGRAM ON SHEET E-502 FOR ADDITIONAL INFORMATION.

**# KEYED NOTES:**

1. SWITCHED EMERGENCY LIGHTING FIXTURES IN THIS AREA SHALL BE CONTROLLED VIA EMERGENCY LIGHTING TRANSFER DEVICE. EMERGENCY FIXTURES THAT ARE SWITCHED SHALL BE BROUGHT TO FULL BRIGHTNESS UPON LOSS OF NORMAL POWER. REFER TO EMERGENCY LIGHTING TRANSFER DEVICE DETAIL ON SHEET E-403 FOR ADDITIONAL INFORMATION. CIRCUITS SERVING FIXTURE ARE DENOTED BY A NORMAL POWER CIRCUIT AND INVERTER POWER CIRCUIT.
2. SWITCHED EMERGENCY WALL MOUNTED EXTERIOR LIGHTING FIXTURES SHALL BE CONTROLLED VIA EMERGENCY LIGHTING TRANSFER DEVICE. EMERGENCY FIXTURES THAT ARE SWITCHED SHALL BE BROUGHT TO FULL BRIGHTNESS UPON LOSS OF NORMAL POWER. REFER TO EMERGENCY LIGHTING TRANSFER DEVICE DETAIL ON SHEET E-403 FOR ADDITIONAL INFORMATION. CIRCUITS SERVING FIXTURE ARE DENOTED BY A NORMAL POWER CIRCUIT AND INVERTER POWER CIRCUIT.
3. REFER TO TRAINING ROOM DIMMING SYSTEM ONE-LINE DIAGRAM ON SHEET E-404 FOR ADDITIONAL INFORMATION.

IN PUBLIC SPACES WITHOUT OCCUPANCY SENSORS, LIGHTING SHALL BE CONTROLLED WITH LOW VOLTAGE RELAYS SET TO TURN LIGHTS ON/OFF PER OWNER'S BUILDING OCCUPANCY SCHEDULE. LIGHTING CONTROL RELAY PANELS ARE LOCATED NEAR ELECTRICAL PANELS. REMOTE OVERRIDE SWITCHES ARE ALSO PLACED IN PUBLIC SPACES FOR BUILDING STAFF TO TURN LIGHTS ON/OFF OVERRIDING BUILDING OCCUPANCY SCHEDULE.



**1 FIRST FLOOR LIGHTING PLAN**  
Scale: 1/8" = 1'-0"

**○ RATED WALLS & PARTITIONS**

|        |                 |          |                      |
|--------|-----------------|----------|----------------------|
| 1-HOUR | FIRE BARRIER    | 1-HOUR   | FIRE & SMOKE BARRIER |
| 2-HOUR | FIRE BARRIER    | 2-HOUR   | FIRE & SMOKE BARRIER |
| 3-HOUR | FIRE BARRIER    | 3-HOUR   | FIRE & SMOKE BARRIER |
| 2-HOUR | FIRE WALL       | 0.5-HOUR | FIRE PARTITION       |
| 3-HOUR | FIRE WALL       | 1-HOUR   | FIRE PARTITION       |
| 4-HOUR | FIRE WALL       |          |                      |
| 0-HOUR | SMOKE PARTITION | 1-HOUR   | SMOKE BARRIER        |

**CONSTRUCTION DOCUMENTS**

06.27.2019

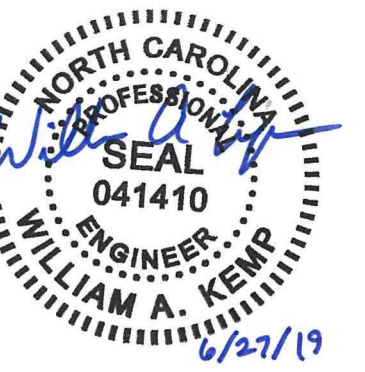
| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

514-8066-00

FIRST FLOOR  
LIGHTING PLAN



CONSTRUCTION DOCUMENTS

06.27.2019

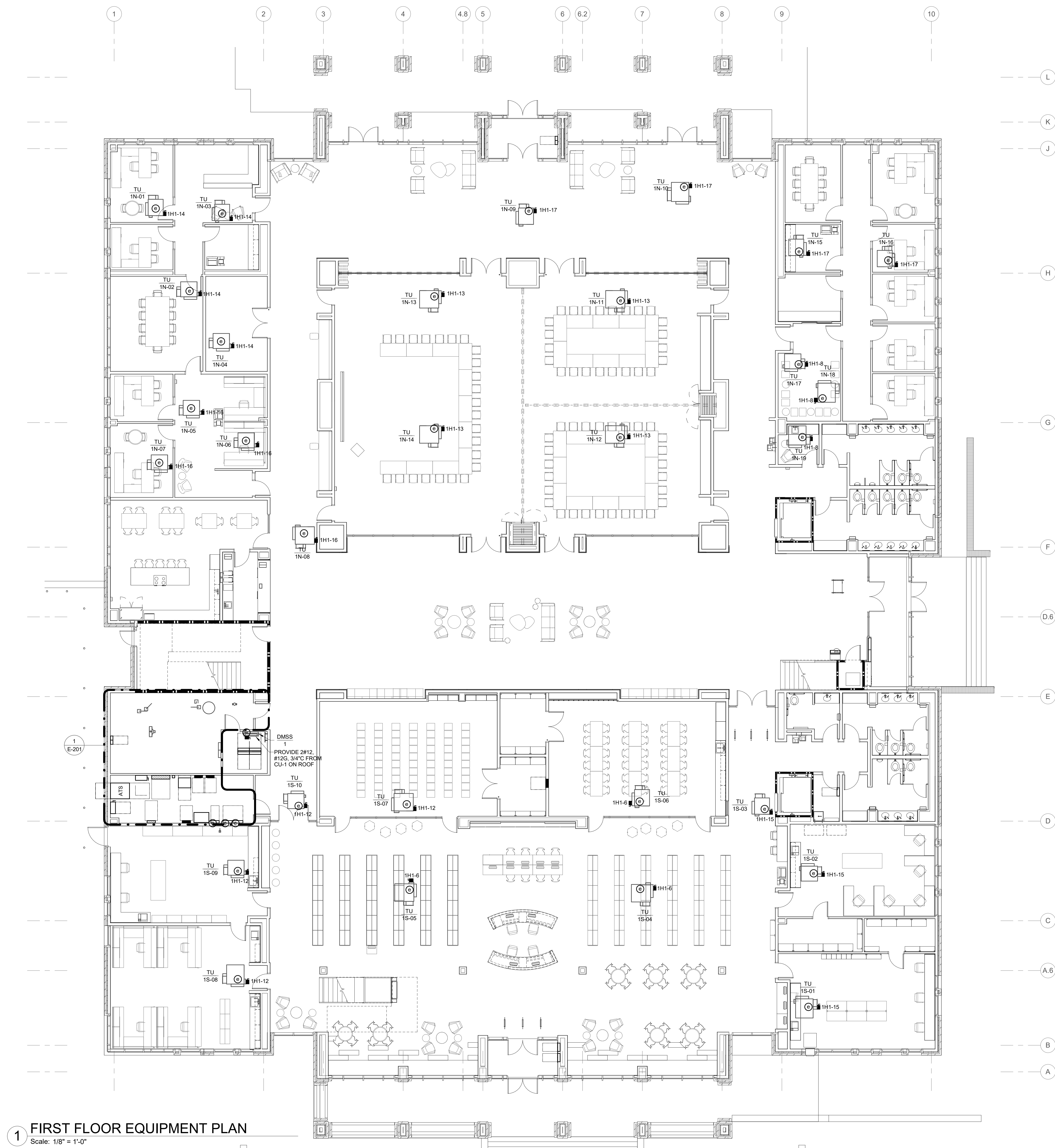
| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

514-8066-00

FIRST FLOOR  
EQUIPMENT PLAN



**○ RATED WALLS & PARTITIONS**

|                        |                             |
|------------------------|-----------------------------|
| 1-HOUR FIRE BARRIER    | 1-HOUR FIRE & SMOKE BARRIER |
| 2-HOUR FIRE BARRIER    | 2-HOUR FIRE & SMOKE BARRIER |
| 3-HOUR FIRE BARRIER    | 3-HOUR FIRE & SMOKE BARRIER |
| 2-HOUR FIRE WALL       | 0.5-HOUR FIRE PARTITION     |
| 3-HOUR FIRE WALL       | 1-HOUR FIRE PARTITION       |
| 4-HOUR FIRE WALL       |                             |
| 0-HOUR SMOKE PARTITION | 1-HOUR SMOKE BARRIER        |

**1 FIRST FLOOR EQUIPMENT PLAN**  
Scale: 1/8" = 1'-0"

**GENERAL NOTES**

- FLOOR BOX LOCATIONS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS PRIOR TO INSTALLATION.
- FLAT PANEL DISPLAY WALL BOXES SHALL BE MOUNTED AT 60" AFF. COORDINATE WITH ARCHITECTURAL PLANS PRIOR TO INSTALLATION.

**# KEYED NOTES:**

- RECEPTACLE AND DATA OUTLET FOR PROJECTOR SHALL BE MOUNTED IN THE CEILING TILE. COORDINATE EXACT LOCATION OF PROJECTOR WITH AUDIOVISUAL PLANS.
- PROVIDE FLOOR BOX. FLOOR BOX SHALL PROVIDE POWER, DATA AND AUDIOVISUAL CONNECTIONS FOR PODIUM. COORDINATE EXACT LOCATION WITH AUDIOVISUAL PLANS.
- PROVIDE SINGLE GANG JUNCTION BOX ADJACENT TO THE LIGHT SWITCH AT 48" AFF FOR AUDIOVISUAL SYSTEM CONTROLLER. COORDINATE EXACT LOCATION WITH AUDIOVISUAL PLANS.
- PROVIDE 2-GANG BOX WITH SINGLE GANG MUD RING AND 1-1/2" FROM SOURCE PANEL FOR FUTURE LARGER EQUIPMENT CONNECTION.
- COORDINATE LOCATION OF FLOORBOX WITH OWNER FOR FUTURE METAL DETECTOR INSTALLATION.
- COORDINATE LOCATIONS OF FLOORBOX WITH OWNER FOR RFID GATE INSTALLATION.
- PROVIDE A CEILING MOUNTED REMOTE ALARM INDICATOR LIGHT WITH KEYED TEST SWITCH NEAR THE LOCATION OF THE DUCT DETECTOR. COORDINATE LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

This drawing and the design shown are the property of Little Diversified Architectural Consulting. The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.

© Little 2018



**Dewberry**  
Dewberry Engineers Inc.  
2610 WYCLIFF ROAD  
SUITE 410  
RALEIGH, NC 27607  
PHONE: 919.881.9939  
FAX: 919.881.9923  
NCBELS # F-0929



**CONSTRUCTION DOCUMENTS**

06.27.2019

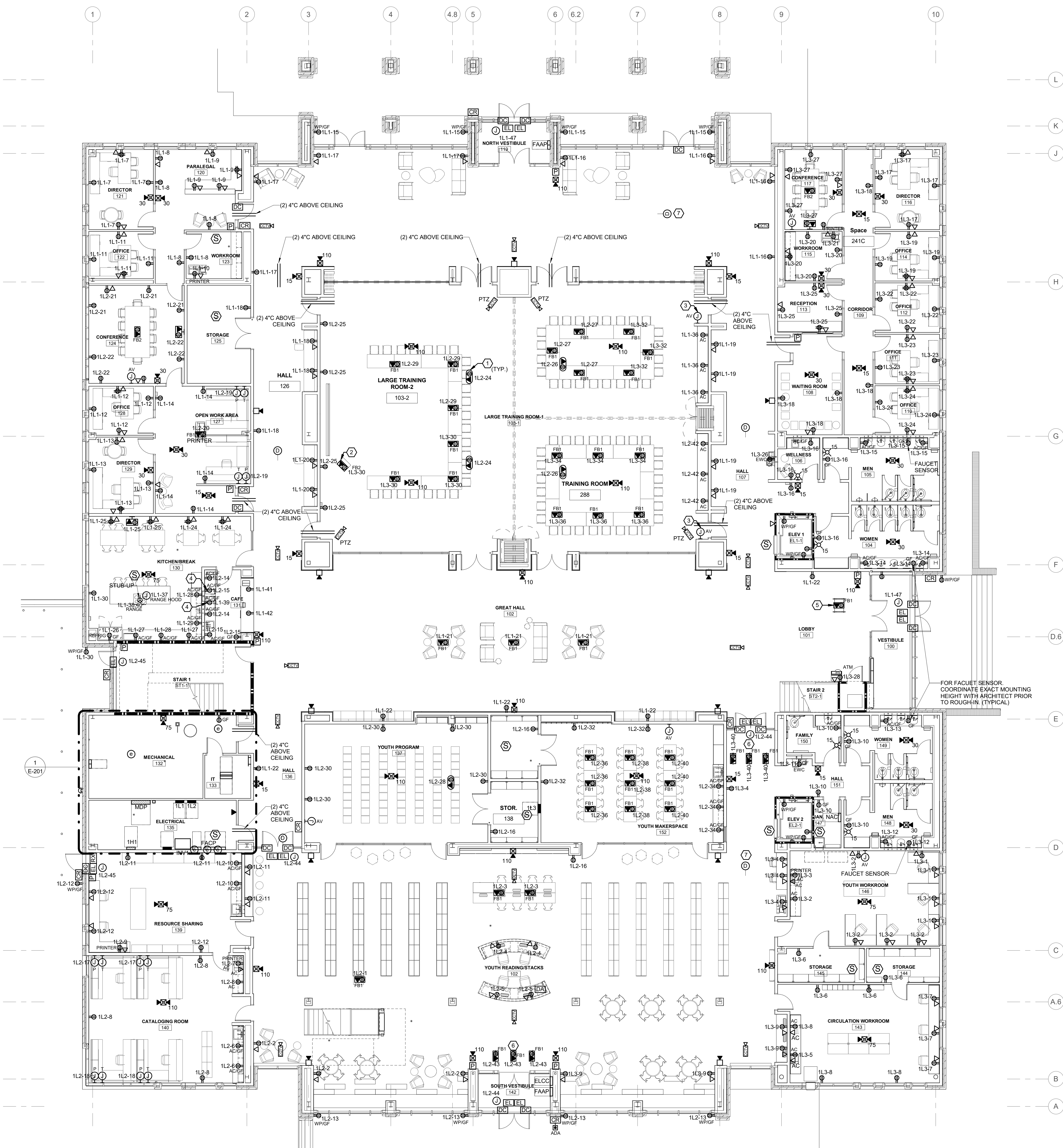
| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

514-8066-00

FIRST FLOOR POWER  
& LOW VOLTAGE PLAN



**1 FIRST FLOOR POWER & LOW VOLTAGE PLAN**  
Scale: 1/8" = 1'-0"

**○ RATED WALLS & PARTITIONS**

|                        |                             |
|------------------------|-----------------------------|
| 1-HOUR FIRE BARRIER    | 1-HOUR FIRE & SMOKE BARRIER |
| 2-HOUR FIRE BARRIER    | 2-HOUR FIRE & SMOKE BARRIER |
| 3-HOUR FIRE BARRIER    | 3-HOUR FIRE & SMOKE BARRIER |
| 1-HOUR FIRE WALL       | 0.5-HOUR FIRE PARTITION     |
| 2-HOUR FIRE WALL       | 1-HOUR FIRE PARTITION       |
| 3-HOUR FIRE WALL       |                             |
| 4-HOUR FIRE WALL       |                             |
| 0-HOUR SMOKE PARTITION | 1-HOUR SMOKE BARRIER        |



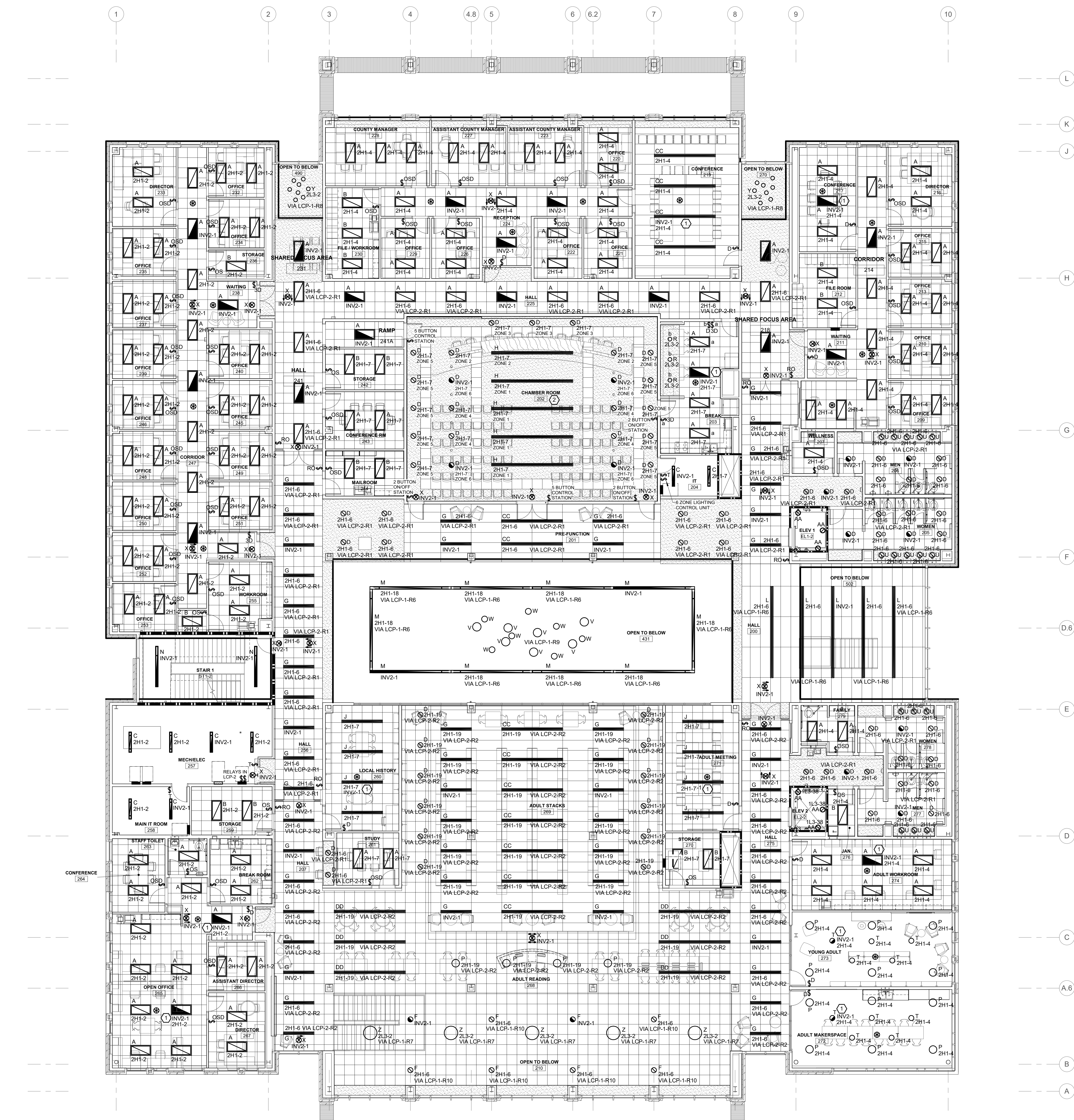
**GENERAL NOTES**

1. PROVIDE AN UN-SWITCHED CONDUCTOR TO ALL EMERGENCY LIGHT FIXTURES OPERATED BY INVERTER.
2. REFER TO LIGHTING FIXTURE SCHEDULE, RELAY SCHEDULES AND RELAY LIGHTING CONTROL DIAGRAM ON SHEET E-502 FOR ADDITIONAL INFORMATION.

**# KEYED NOTES:**

- 1 SWITCHED EMERGENCY LIGHTING FIXTURES IN THIS AREA SHALL BE CONTROLLED VIA EMERGENCY LIGHTING TRANSFER DEVICE. EMERGENCY FIXTURES THAT ARE SWITCHED SHALL BE BROUGHT TO FULL BRIGHTNESS UPON LOSS OF NORMAL POWER. REFER TO EMERGENCY LIGHTING TRANSFER DEVICE DETAIL ON SHEET E-403 FOR ADDITIONAL INFORMATION. CIRCUITS SERVING FIXTURE ARE DENOTED BY A NORMAL POWER CIRCUIT AND INVERTER POWER CIRCUIT.
- 2 REFER TO CHAMBER ROOM DIMMING SYSTEM ONE-LINE DIAGRAM ON SHEET E-404 FOR ADDITIONAL INFORMATION.

IN PUBLIC SPACES WITHOUT OCCUPANCY SENSORS, LIGHTING SHALL BE CONTROLLED WITH LOW VOLTAGE RELAYS SET TO TURN LIGHTS ON/OFF PER OWNER'S BUILDING OCCUPANCY SCHEDULE. LIGHTING CONTROL RELAY PANELS ARE LOCATED NEAR ELECTRICAL PANELS. REMOTE OVERRIDE SWITCHES ARE ALSO PLACED IN PUBLIC SPACES FOR BUILDING STAFF TO TURN LIGHTS ON/OFF OVERRIDING BUILDING OCCUPANCY SCHEDULE.



**○ RATED WALLS & PARTITIONS**

|                        |                             |
|------------------------|-----------------------------|
| 1-HOUR FIRE BARRIER    | 1-HOUR FIRE & SMOKE BARRIER |
| 2-HOUR FIRE BARRIER    | 2-HOUR FIRE & SMOKE BARRIER |
| 3-HOUR FIRE BARRIER    | 3-HOUR FIRE & SMOKE BARRIER |
| FIRE WALL              | FIRE PARTITION              |
| 2-HOUR FIRE WALL       | 0.5-HOUR FIRE PARTITION     |
| 3-HOUR FIRE WALL       | 1-HOUR FIRE PARTITION       |
| 4-HOUR FIRE WALL       |                             |
| 0-HOUR SMOKE PARTITION | 1-HOUR SMOKE BARRIER        |

**1 SECOND FLOOR LIGHTING PLAN**  
Scale: 1/8" = 1'-0"

**CONSTRUCTION DOCUMENTS**

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

06.27.2019

PRINCIPAL IN CHARGE  
MBW

PROJECT MANAGER  
GAM

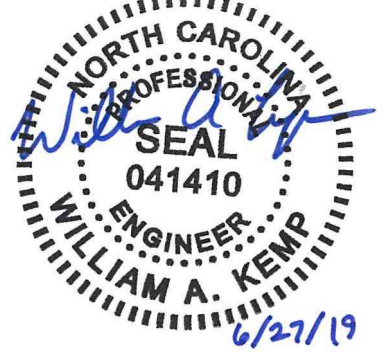
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES CENTER

514-8066-00

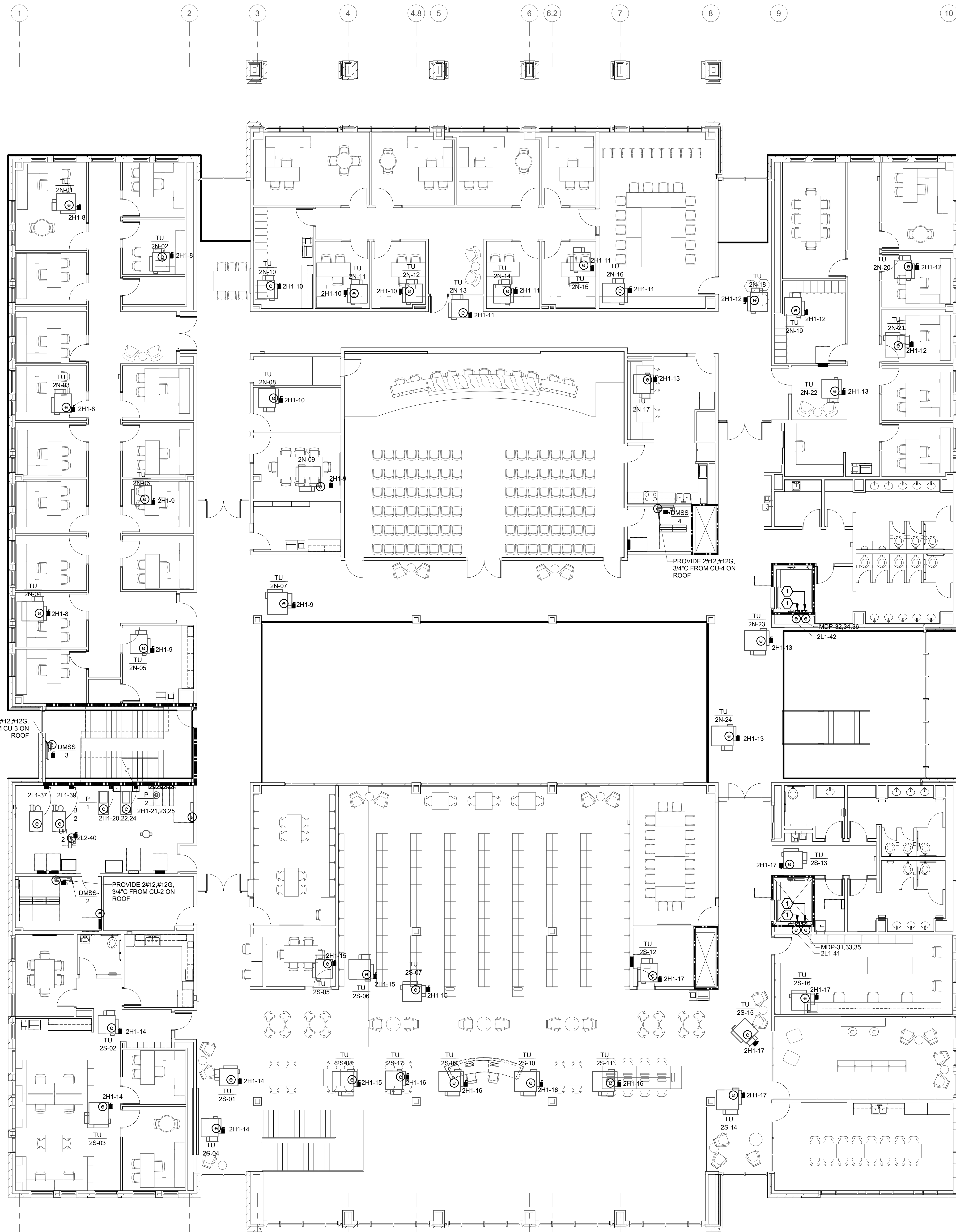
SECOND FLOOR  
LIGHTING PLAN





# KEYED NOTES:

- 1 PROVIDE ELEVATOR DISCONNECT WITH SHUNT TRIP FOR ELEVATOR CAB LIGHTS/ELEVATOR POWER.



L  
K  
J  
H  
G  
F  
D.6  
E  
D  
C  
A.6  
B  
A

1 SECOND FLOOR EQUIPMENT PLAN  
Scale: 1/8" = 1'-0"

○ RATED WALLS & PARTITIONS

|        |  |                      |          |  |
|--------|--|----------------------|----------|--|
| 1-HOUR |  | FIRE & SMOKE BARRIER | 1-HOUR   |  |
| 2-HOUR |  | FIRE & SMOKE BARRIER | 2-HOUR   |  |
| 3-HOUR |  | FIRE & SMOKE BARRIER | 3-HOUR   |  |
|        |  | FIRE WALL            | 0.5-HOUR |  |
|        |  | FIRE WALL            | 1-HOUR   |  |
|        |  | FIRE WALL            |          |  |
|        |  | SMOKE PARTITION      | 1-HOUR   |  |
| 0-HOUR |  | SMOKE BARRIER        |          |  |

CONSTRUCTION DOCUMENTS

06.27.2019

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

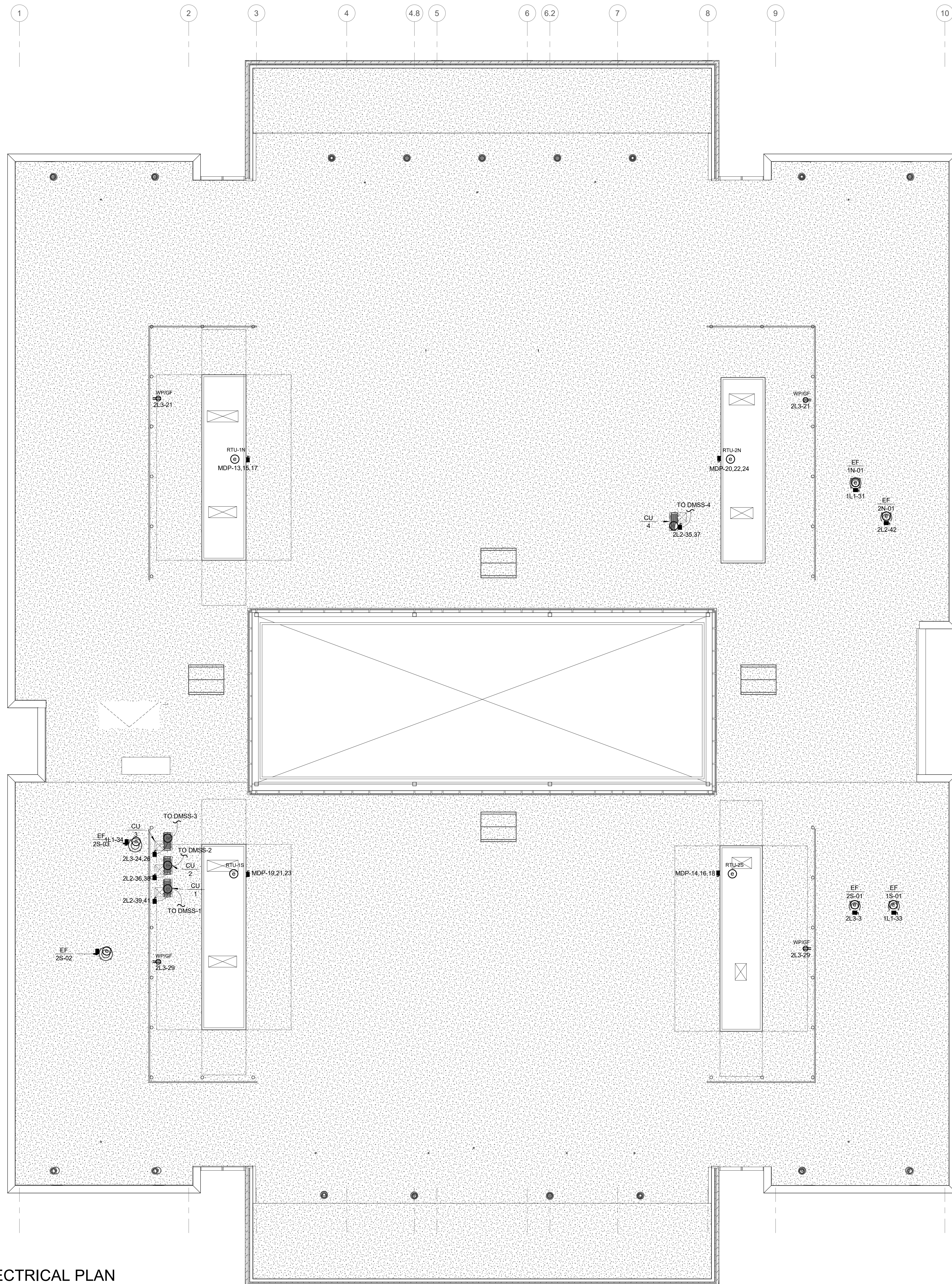
PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

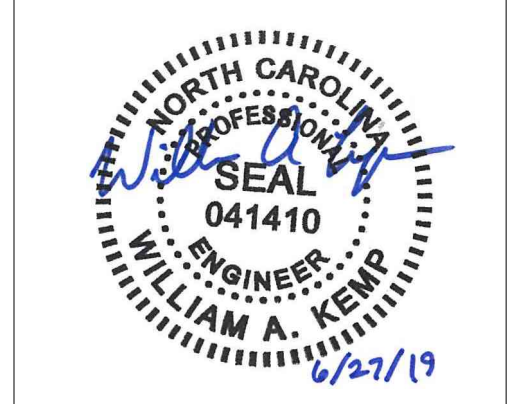
514-8066-00

SECOND FLOOR  
EQUIPMENT PLAN





# KEYED NOTES:



CONSTRUCTION DOCUMENTS

06.27.2019

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |
|     |        |      |
|     |        |      |
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

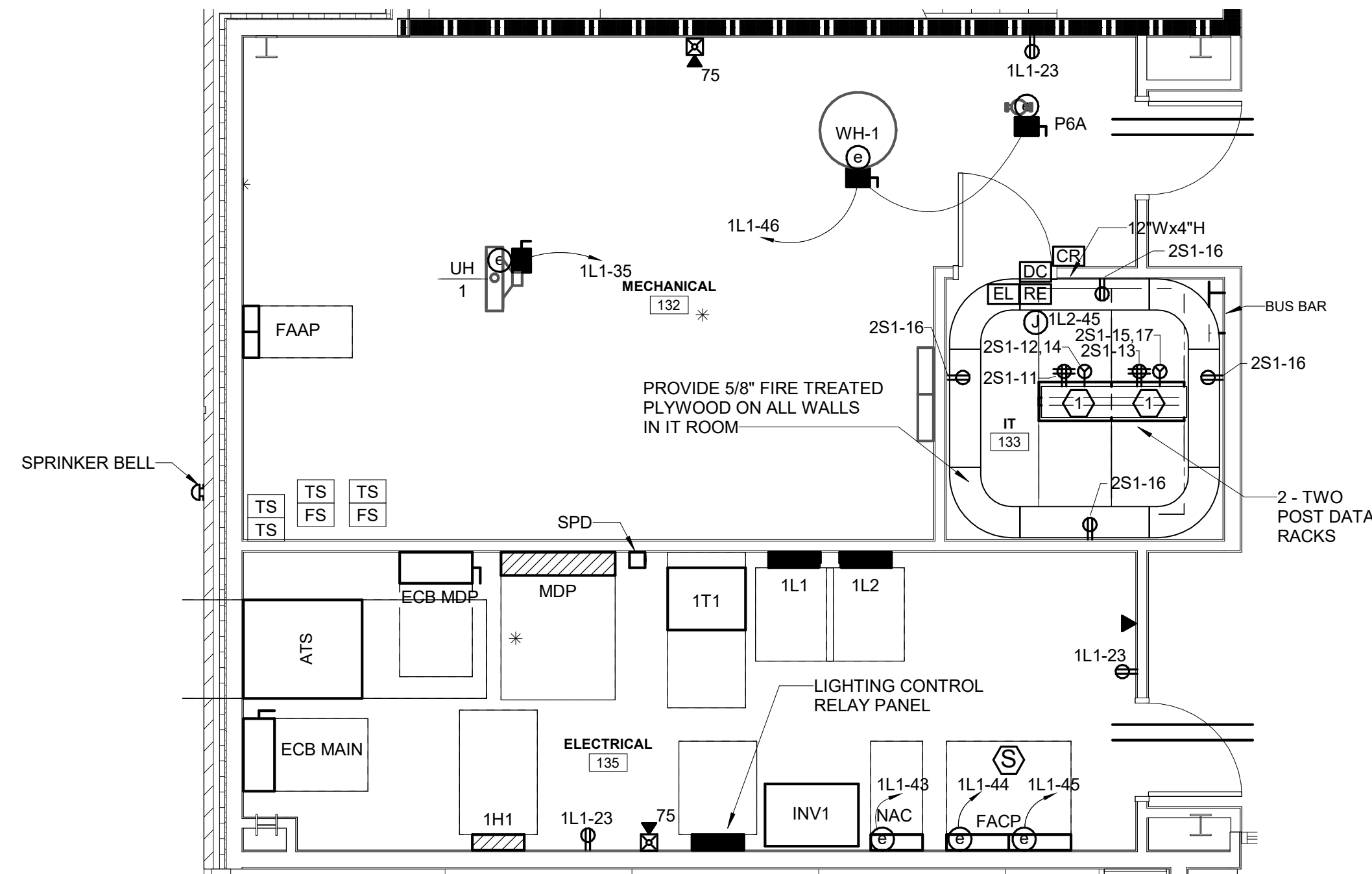
514-8066-00

ROOF ELECTRICAL  
PLAN

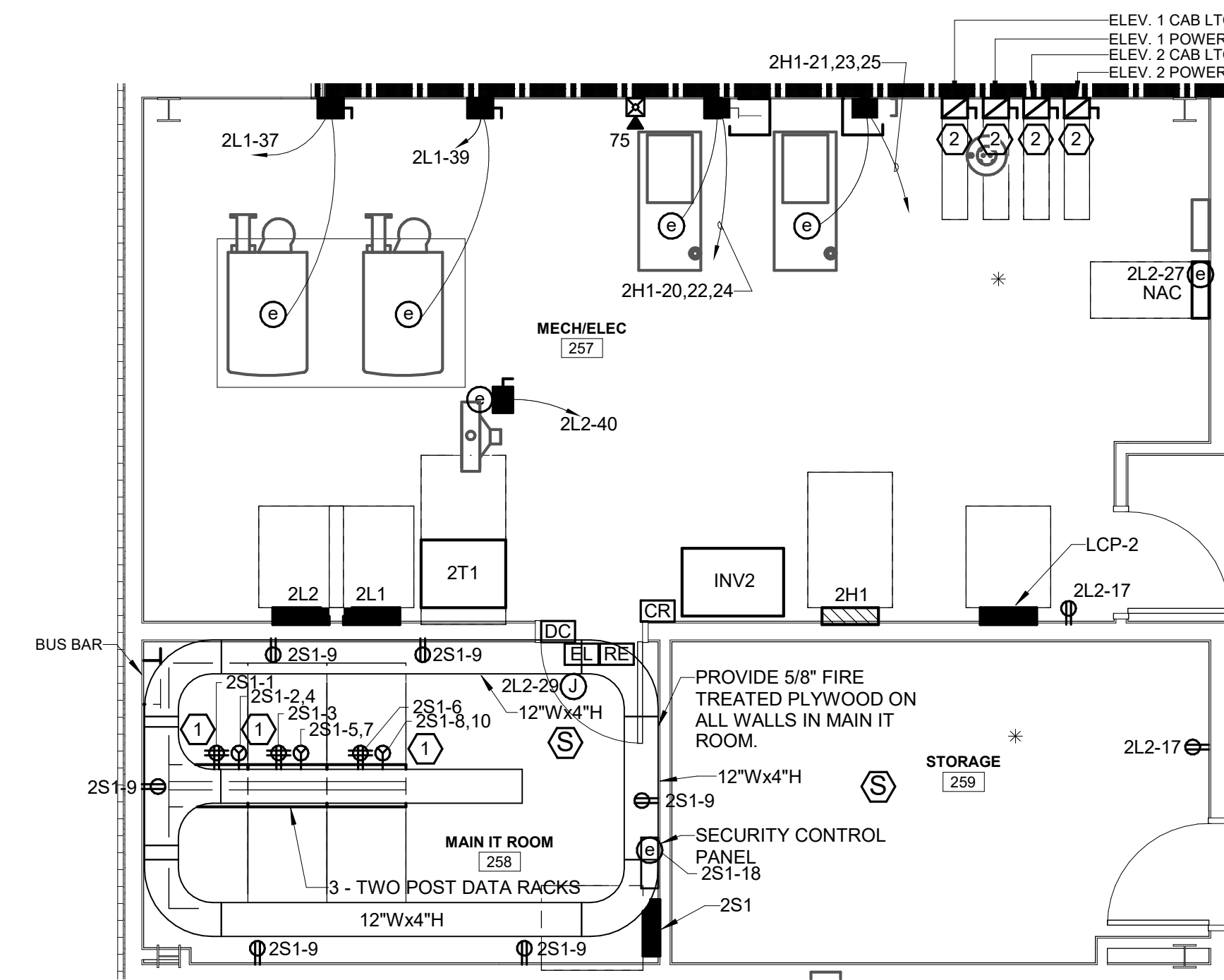
**1 ROOF ELECTRICAL PLAN**  
Scale: 1/8" = 1'-0"

# KEYED NOTES:

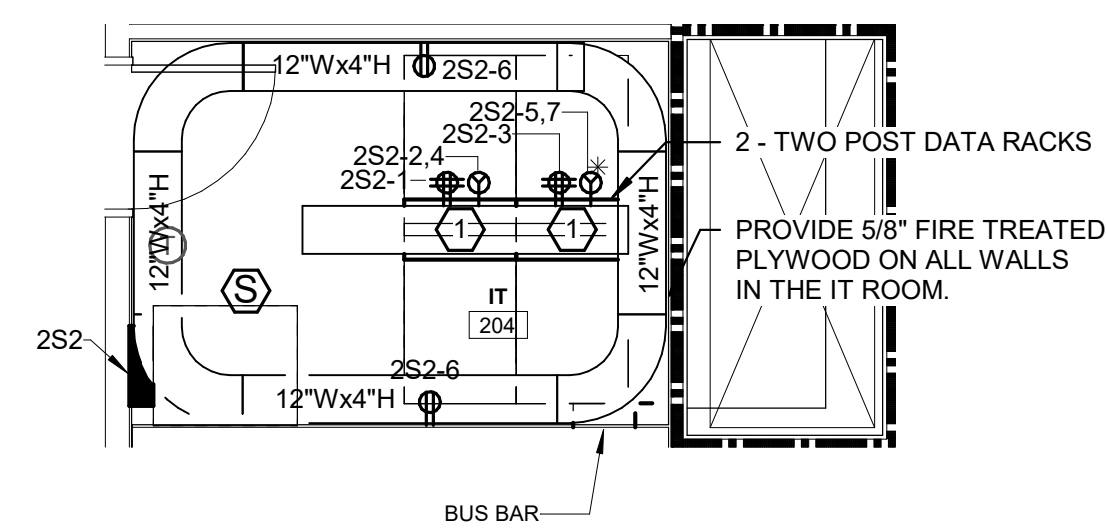
- 1 PROVIDE A DUPLEX AND 208V (L6-20) RECEPTACLES AT RACK AS INDICATED. ATTACH RECEPTACLES TO LADDER RACK ABOVE.
- 2 PROVIDE ELEVATOR DISCONNECT WITH SHUNT TRIP FOR ELEVATOR CAB LIGHTS/ELEVATOR POWER.



1 FIRST FLOOR ELECTRICAL AND MECHANICAL ROOMS  
Scale: 1/4" = 1'-0"



2 SECOND FLOOR ELECTRICAL AND MECHANICAL ROOMS  
Scale: 1/4" = 1'-0"



3 SECOND FLOOR IT ROOM  
Scale: 1/4" = 1'-0"



CONSTRUCTION DOCUMENTS

06.27.2019

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

PRINCIPAL IN CHARGE

MBW

PROJECT MANAGER

GAM

DESIGN TEAM

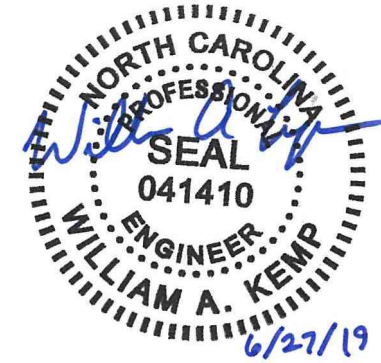
WAK, ELP, GM

HARNETT COUNTY

GOVERNMENT SERVICES CENTER

514-8066-00

LARGE SCALE FLOOR PLANS



**GENERAL NOTES:**

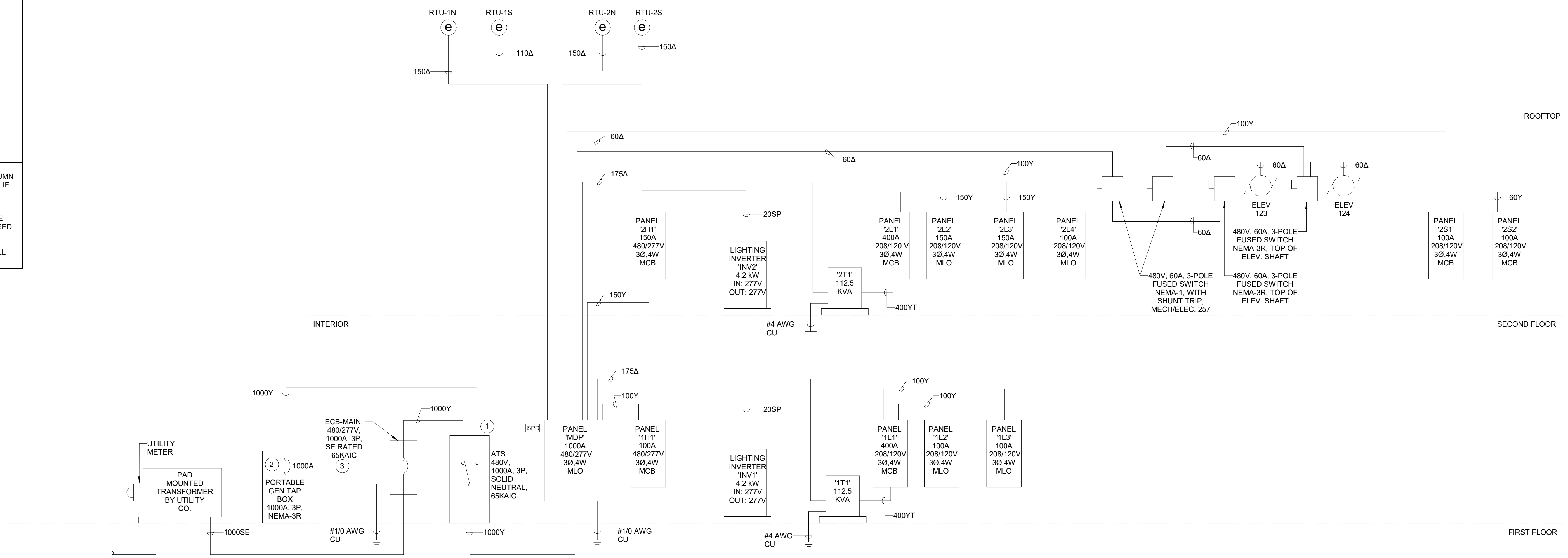
- TRANSFER SWITCHES ARE OPEN-TRANSITION WITHOUT BYPASS ISOLATION, UNLESS OTHERWISE NOTED.

**# KEYED NOTES:**

- OPEN TRANSITION TRANSFER SWITCH WITH BYPASS ISOLATION.
- PROVIDE PORTABLE GENERATOR TAP BOX WITH INTEGRAL 1000A LSI GA CIRCUIT BREAKER AS THE PRIMARY OVERCURRENT PROTECTION FOR THE TAP BOX.
- ELECTRONIC LSI GA BREAKER WITH INTEGRAL AMMETER.

| STANDARD FEEDER CHART                       |              |   |
|---|--------------|---|
| SINGLE PHASE, NEUTRAL & EQUIPMENT GROUND    |              |   |
| FEEDER TAG                                  | AMPACITY (A) | COPPER FEEDER SIZE  |
| 20SP  | 20           | #12, 1#12N, 1#12G IN 3/4"C  |
| THREE PHASE, NEUTRAL & EQUIPMENT GROUND     |              |   |
| FEEDER TAG                                  | AMPACITY (A) | COPPER FEEDER SIZE  |
| 60Y   | 60           | #6, 1#6N, 1#10G IN 1"C  |
| 90Y   | 85           | #4, 1#4N, 1#8G IN 1-1/4"C   |
| 100Y  | 100          | #3, 1#3N, 1#8G IN 1-1/4"C   |
| 110Y  | 115          | #2, 1#2N, 1#6G IN 1-1/4"C   |
| 125Y  | 130          | #1, 1#1N, 1#6G IN 1-1/2"C   |
| 150Y  | 150          | #1/0, 1#1/0N, 1#6G IN 1-1/2"C                                     |
| 175Y  | 175          | #2/0, 1#2/0N, 1#6G IN 2"C   |
| 200Y  | 200          | #3/0, 1#3/0N, 1#6G IN 2"C   |
| 225Y  | 230          | #4/0, 1#4/0N, 1#4G IN 2-1/2"C                                     |
| 250Y  | 255          | 3-250kcmil, 1-250kcmil N, 1#4G IN 2-1/2"C                         |
| 300Y  | 300          | 3-350kcmil, 1-350kcmil N, 1#4G IN 2-1/2"C                         |
| 350Y  | 380          | 3-500kcmil, 1-500kcmil N, 1#3G IN 4"C                             |
| 400Y  | 400          | 2 SETS OF 3#3/0, 1#3/0N, 1#3G IN 2"C EACH SET                     |
| 500Y  | 500          | 2 SETS OF 3-250kcmil, 1-250kcmil N, 1#2G IN 2-1/2"C EACH SET      |
| 600Y  | 600          | 2 SETS OF 3-350kcmil, 1-350kcmil N, 1#1G IN 2-1/2"C EACH SET      |
| 800Y  | 800          | 3 SETS OF 3-300kcmil, 1-300kcmil N, 1#1/0G IN 2-1/2"C EACH SET    |
| 1000Y                                       | 1000         | 3 SETS OF 3-400kcmil, 1-400kcmil N, 1#2/0G IN 4"C EACH SET        |
| 1200Y                                       | 1200         | 4 SETS OF 3-350kcmil, 1-350kcmil N, 1#3/0G IN 4"C EACH SET        |
| 1200Y ALT                                   | 1200         | 3 SETS OF 3-600kcmil, 1-600kcmil N, 1#3/0G IN 4"C EACH SET        |
| 1600Y                                       | 1600         | 5 SETS OF 3-400kcmil, 1-400kcmil N, 1#4/0G IN 4"C EACH SET        |
| 1600Y ALT                                   | 1600         | 4 SETS OF 3-600kcmil, 1-600kcmil N, 1#4/0G IN 4"C EACH SET        |
| 1900Y                                       | 1900         | 5 SETS OF 3-500kcmil, 1-500kcmil N, 1-250kcmil G IN 4"C EACH SET  |
| 2000Y                                       | 2000         | 6 SETS OF 3-400kcmil, 1-400kcmil N, 1-250kcmil G IN 4"C EACH SET  |
| 2000Y ALT                                   | 2000         | 5 SETS OF 3-600kcmil, 1-600kcmil N, 1-250kcmil G IN 4"C EACH SET  |
| 2500Y                                       | 2500         | 7 SETS OF 3-500kcmil, 1-500kcmil N, 1-350kcmil G IN 4"C EACH SET  |
| 2500Y ALT                                   | 2500         | 6 SETS OF 3-600kcmil, 1-600kcmil N, 1-350kcmil G IN 4"C EACH SET  |
| 3000Y                                       | 3000         | 8 SETS OF 3-500kcmil, 1-500kcmil N, 1-400kcmil G IN 4"C EACH SET  |
| 3000Y ALT                                   | 3000         | 7 SETS OF 3-750kcmil, 1-750kcmil N, 1-400kcmil G IN 4"C EACH SET  |
| 4000Y                                       | 4000         | 11 SETS OF 3-500kcmil, 1-500kcmil N, 1-500kcmil G IN 4"C EACH SET |
| 4000Y ALT                                   | 4000         | 9 SETS OF 3-750kcmil, 1-750kcmil N, 1-400kcmil G IN 4"C EACH SET  |
| THREE PHASE, NEUTRAL & GROUNDING ELECTRODE  |              |   |
| FEEDER TAG                                  | AMPACITY (A) | COPPER FEEDER SIZE  |
| 100YT                                       | 100          | #3, 1#3N, 1#8G IN 1-1/4"C   |
| 150YT                                       | 150          | #1/0, 1#1/0N, 1#6G IN 1-1/2"C                                     |
| 225YT                                       | 230          | #4/0, 1#4/0N, 1#2G IN 2-1/2"C                                     |
| 350YT                                       | 380          | 3-500kcmil, 1-500kcmil N, 1#1/0G IN 4"C                           |
| 400YT                                       | 400          | 2 SETS OF 3#3/0, 1#3/0N, 1#2G IN 2"C EACH SET                     |
| 500YT                                       | 500          | 2 SETS OF 3-250kcmil, 1-250kcmil N, 1#1/0G IN 2-1/2"C EACH SET    |
| 600YT                                       | 600          | 2 SETS OF 3-350kcmil, 1-350kcmil N, 1#2/0G IN 2-1/2"C EACH SET    |
| 800YT                                       | 800          | 3 SETS OF 3-300kcmil, 1-300kcmil N, 1#2/0G IN 2-1/2"C EACH SET    |
| THREE PHASE & EQUIPMENT GROUND (NO NEUTRAL) |              |   |
| FEEDER TAG                                  | AMPACITY (A) | COPPER FEEDER SIZE  |
| 50A   | 50           | #6, 1#10G IN 3/4"C  |
| 60A   | 60           | #6, 1#10G IN 3/4"C  |
| 70A   | 65           | #6, 1#8G IN 3/4"C   |
| 80A   | 85           | #4, 1#8G IN 1"C   |
| 90A   | 85           | #4, 1#8G IN 1"C   |
| 100A  | 100          | #3, 1#8G IN 1"C   |
| 110A  | 115          | #2, 1#6G IN 1-1/4"C   |
| 125A  | 130          | #1, 1#6G IN 1-1/4"C   |
| 150A  | 150          | #1/0, 1#6G IN 1-1/2"C   |
| 175A  | 175          | #2/0, 1#6G IN 1-1/2"C   |
| 200A  | 200          | #3/0, 1#6G IN 2"C   |
| 225A  | 230          | #4/0, 1#4G IN 2"C   |
| 250A  | 255          | 3-250kcmil, 1#4G IN 2"C   |
| 300A  | 300          | 3-350kcmil, 1#4G IN 2-1/2"C                                       |
| 350A  | 380          | 3-500kcmil, 1#3G IN 2-1/2"C                                       |
| 400A  | 400          | 2 SETS OF 3#3/0, 1#3G IN 2"C EACH SET                             |
| THREE PHASE & GROUNDED NEUTRAL (SERVICE)    |              |   |
| FEEDER TAG                                  | AMPACITY (A) | COPPER FEEDER SIZE  |
| 400SE                                       | 400          | 2 SETS OF 3#3/0, 1#3/0GN IN 2"C EACH SET                          |
| 600SE                                       | 600          | 2 SETS OF 3-350kcmil, 1-350kcmil GN IN 2-1/2"C EACH SET           |
| 800SE                                       | 800          | 3 SETS OF 3-300kcmil, 1-300kcmil GN IN 2-1/2"C EACH SET           |
| 1000SE                                      | 1000         | 3 SETS OF 3-400kcmil, 1-400kcmil GN IN 4"C EACH SET               |
| 1200SE                                      | 1200         | 4 SETS OF 3-350kcmil, 1-350kcmil GN IN 4"C EACH SET               |
| 1200SE ALT                                  | 1200         | 3 SETS OF 3-600kcmil, 1-600kcmil GN IN 4"C EACH SET               |
| 1600SE                                      | 1600         | 5 SETS OF 3-400kcmil, 1-400kcmil GN IN 4"C EACH SET               |
| 1600SE ALT                                  | 1600         | 4 SETS OF 3-600kcmil, 1-600kcmil GN IN 4"C EACH SET               |
| 1900SE                                      | 1900         | 5 SETS OF 3-500kcmil, 1-500kcmil GN IN 4"C EACH SET               |
| 2000SE                                      | 2000         | 6 SETS OF 3-400kcmil, 1-400kcmil GN IN 4"C EACH SET               |
| 2000SE ALT                                  | 2000         | 5 SETS OF 3-600kcmil, 1-600kcmil GN IN 4"C EACH SET               |
| 2500SE                                      | 2500         | 7 SETS OF 3-500kcmil, 1-500kcmil GN IN 4"C EACH SET               |
| 2500SE ALT                                  | 2500         | 6 SETS OF 3-600kcmil, 1-600kcmil GN IN 4"C EACH SET               |
| 3000SE                                      | 3000         | 8 SETS OF 3-500kcmil, 1-500kcmil GN IN 4"C EACH SET               |
| 3000SE ALT                                  | 3000         | 7 SETS OF 3-750kcmil, 1-750kcmil GN IN 4"C EACH SET               |
| 4000SE                                      | 4000         | 11 SETS OF 3-500kcmil, 1-500kcmil GN IN 4"C EACH SET              |
| 4000SE ALT                                  | 4000         | 9 SETS OF 3-750kcmil, 1-750kcmil GN IN 4"C EACH SET               |

- NOTES:
- AMPACITY LISTED IS BASED ON NEC TABLE 310.15(B)(16) AND THE 75°C RATING COLUMN UNLESS LIMITED BY EQUIPMENT GROUNDING CONDUCTOR PER NEC TABLE 250.122. IF TERMINALS OR SPLICES RATED LESS THAN 75°C ARE ENCOUNTERED CONTRACTOR SHALL RESIZE PHASE CONDUCTOR AND EQUIPMENT GROUND ACCORDINGLY.
  - IF PHASE CONDUCTORS ARE INCREASED ABOVE SIZE LISTED FOR ANY REASON, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE INCREASED PROPORTIONALLY BASED ON CIRCULAR MIL AREA PER NEC 250.122(B).
  - CONDUIT SIZE IS BASED ON THHN/THWN CONDUCTORS IN EMT. CONTRACTOR SHALL ADJUST CONDUIT SIZE PER NEC CHAPTER 9, TABLE 1.



**1 ELECTRICAL RISER DIAGRAM**  
Scale: NOT TO SCALE

**CONSTRUCTION DOCUMENTS**

06.27.2019

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

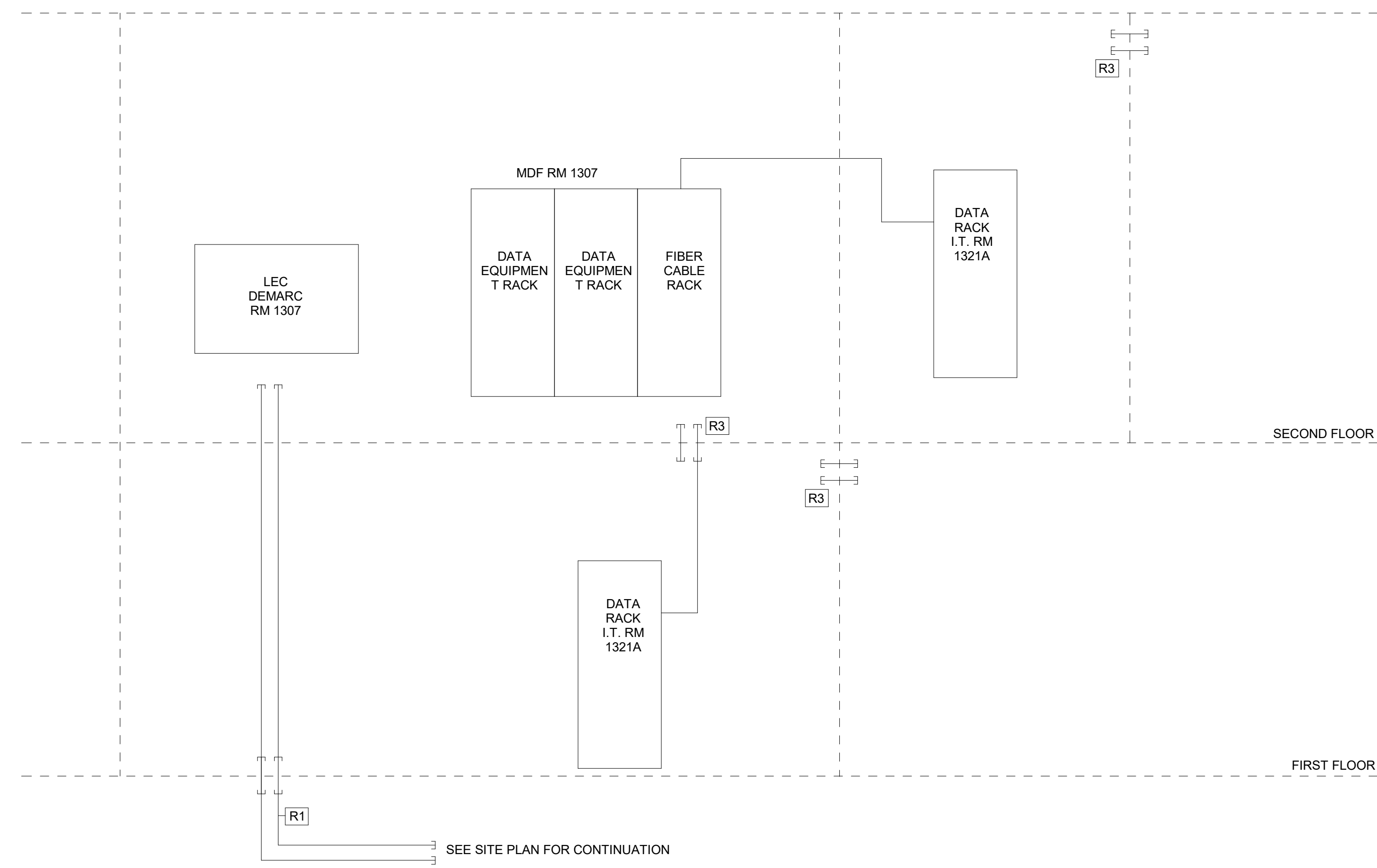
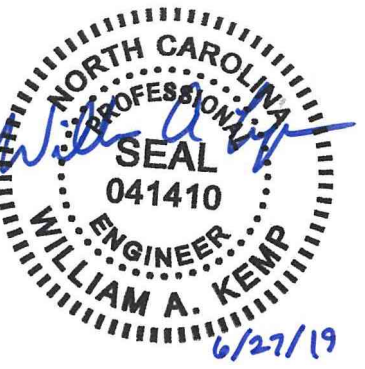
PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

514-8066-00

RISER DIAGRAMS





| CABLE TAG | DESCRIPTION                     |
|-----------|---------------------------------|
| R1        | 3-4" FOR FIBER SERVICE TO SITE. |
| R2        | 1-4" SLEEVE FOR FIBER           |
| R3        | 2-4" SLEEVE BETWEEN FLOORS      |

**1 TELECOMMUNICATIONS RISER DIAGRAM**  
Scale: N.T.S.

CONSTRUCTION DOCUMENTS

06.27.2019

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES CENTER

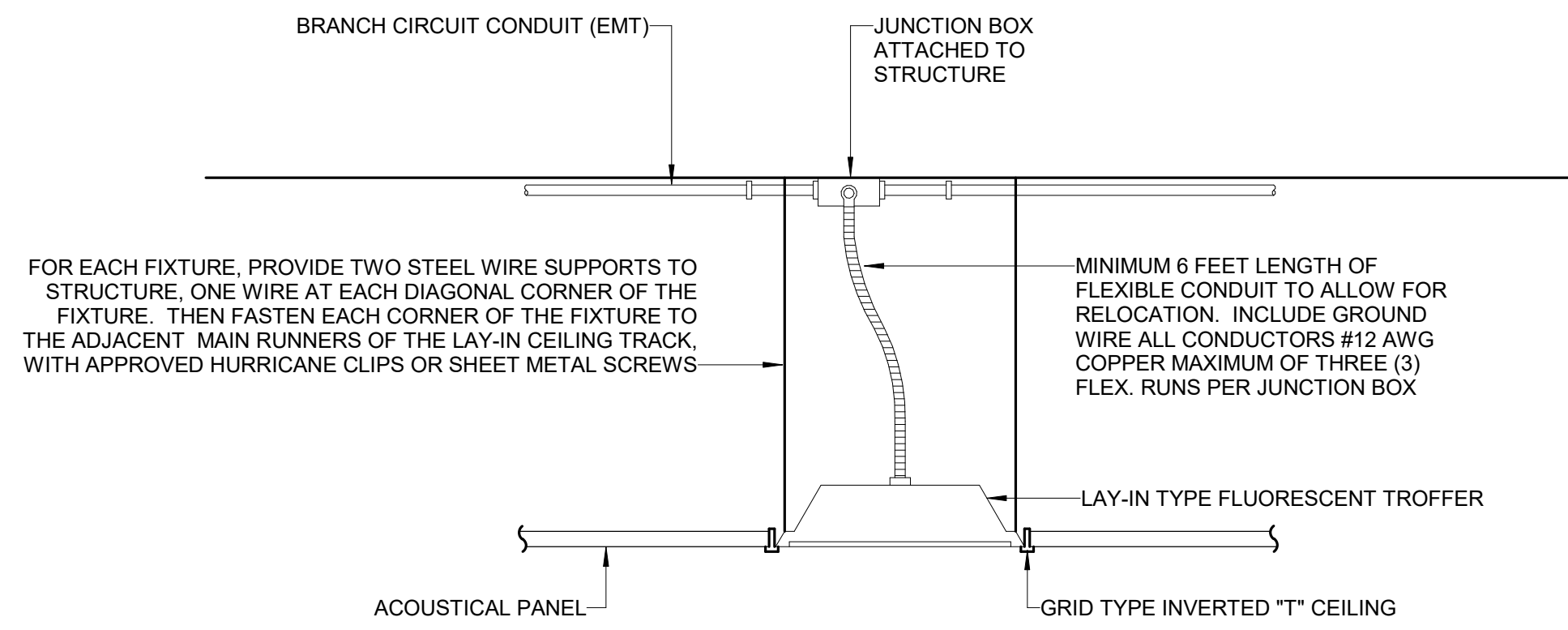
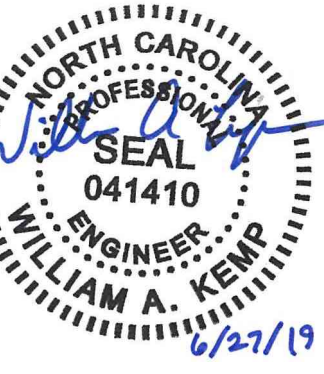
514-8066-00

RISER DIAGRAMS

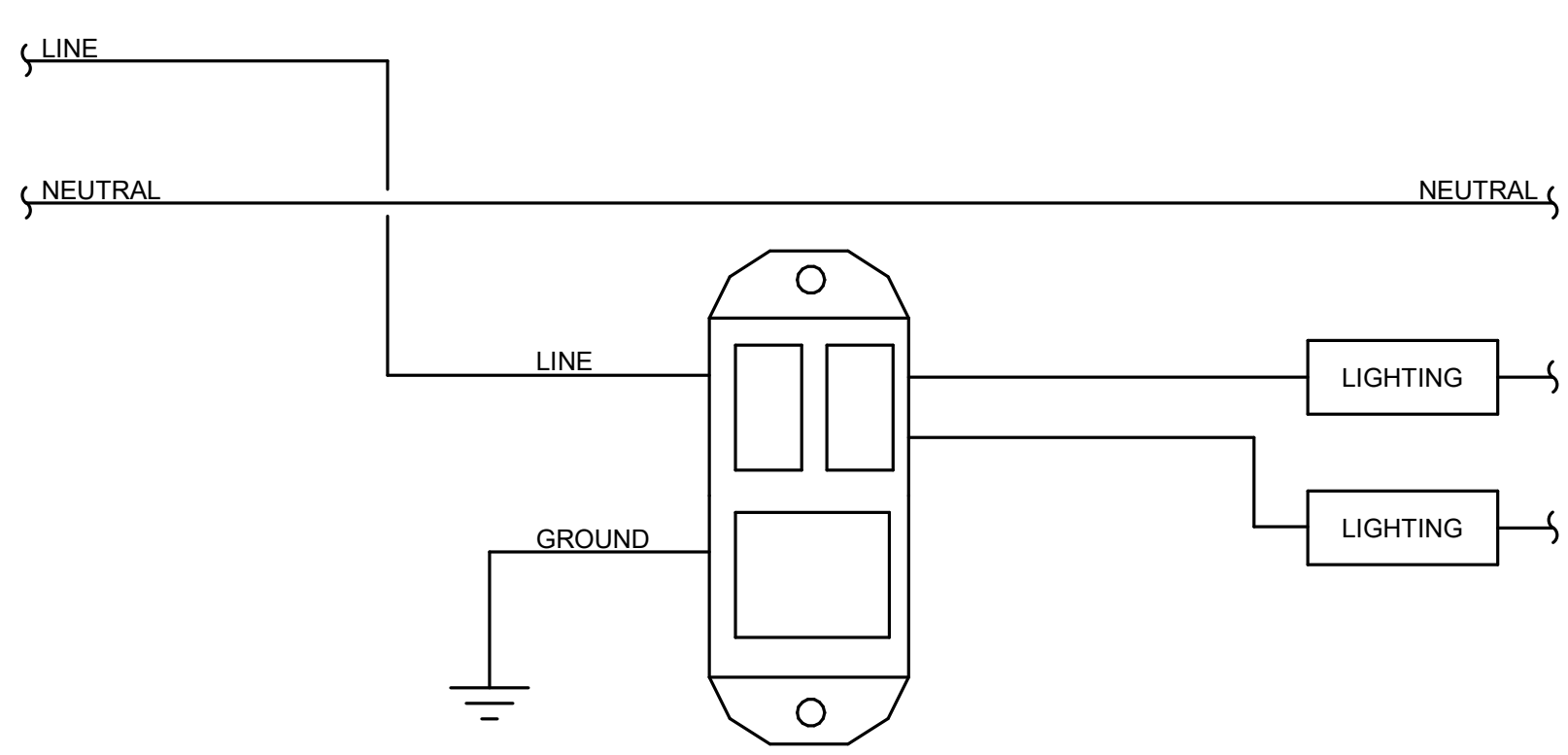






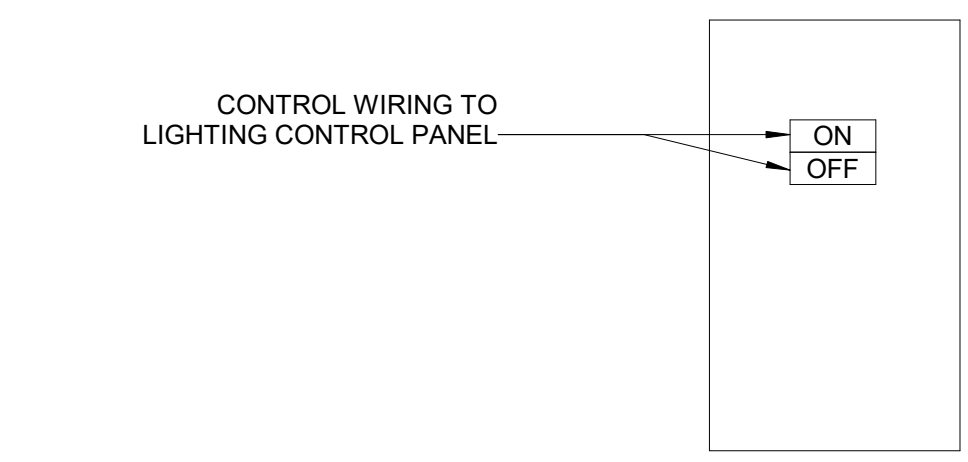


1 LIGHT FIXTURE MOUNTING  
Scale: N.T.S.



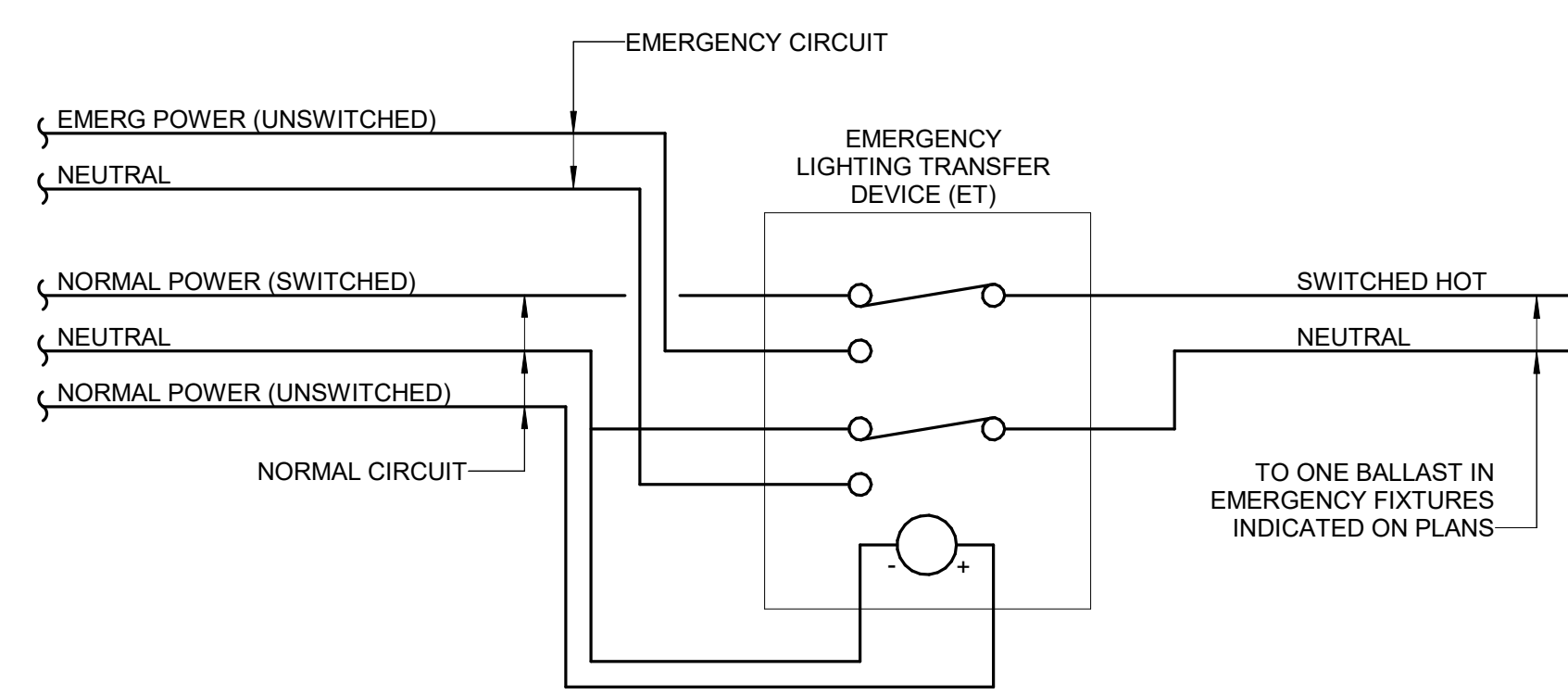
2 OCCUPANCY SENSOR WALL SWITCH  
Scale: N.T.S.

- NOTES:
1. OVERRIDE SWITCHES SHALL OVERRIDE ALL CORRIDOR LIGHTING AND LOBBY AREAS ON THE SAME FLOOR AS THE OVERRIDE BUTTON.
  2. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



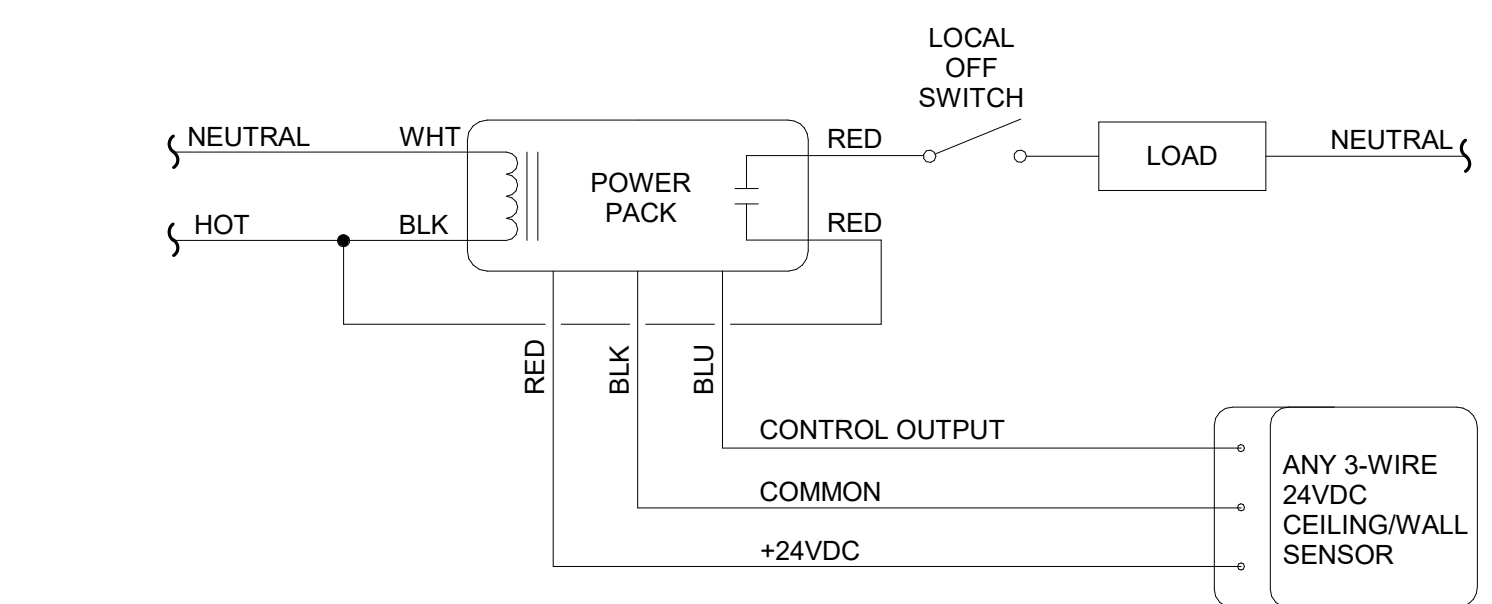
3 LIGHT CONTROL SYSTEM OVERRIDE SWITCH  
Scale: N.T.S.

- NOTES:
1. INTENT OF EMERGENCY TRANSFER CONTACTOR DETAIL IS TO PROVIDE TRANSFER OF LIGHTING FROM NORMAL SWITCHED POWER SOURCE TO EMERGENCY UNSWITCHED SOURCE UPON LOSS OF NORMAL POWER TO LIGHTING. DIMMABLE LIGHTING DESIGNATED AS EMERGENCY SHALL BE COME ON AT FULL BRIGHTNESS UPON POWER LOSS.
  2. CONTACTOR SHALL BE UL1008 LISTED AS EMERGENCY TRANSFER CONTACTOR.

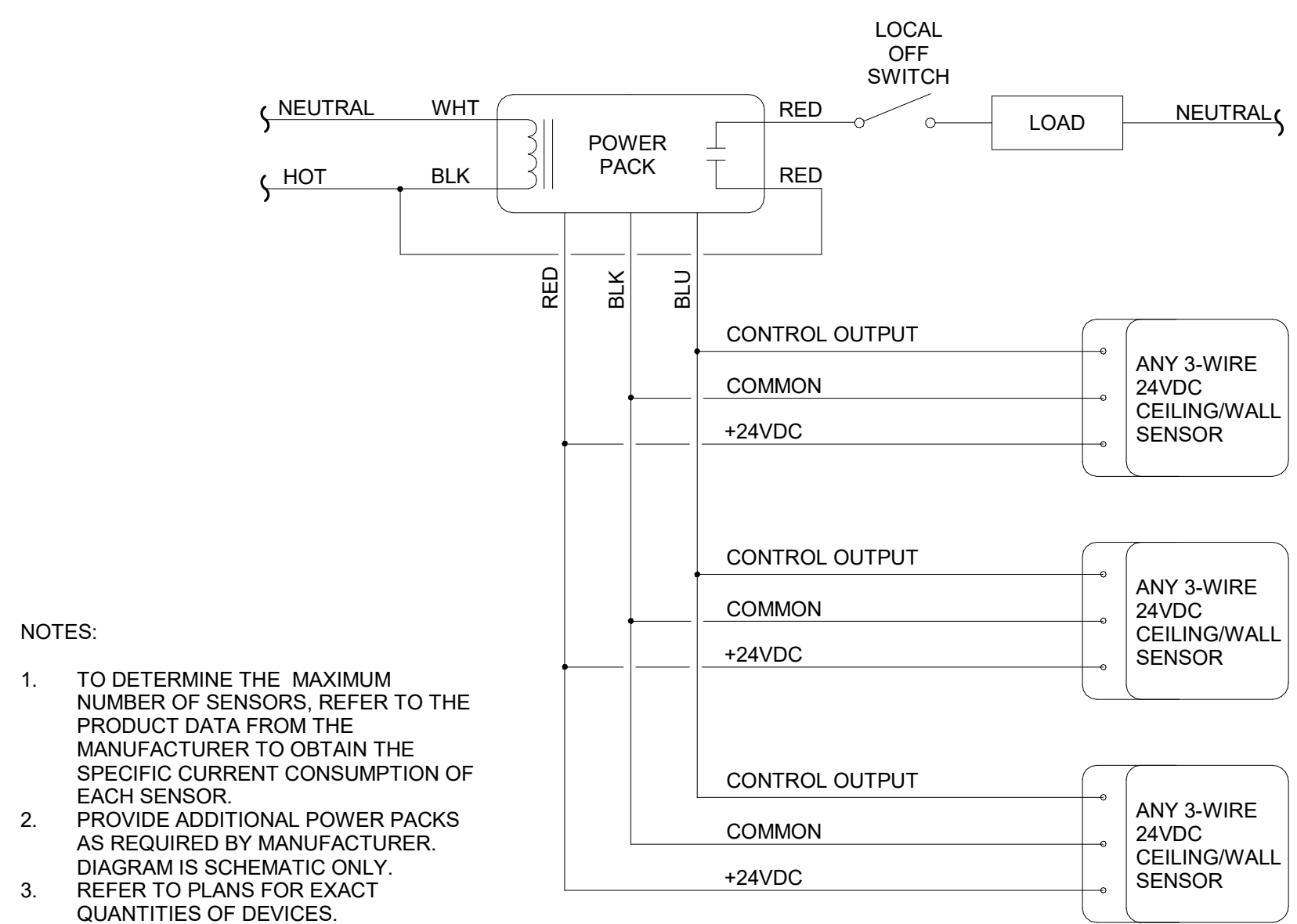


4 LIGHT EMERGENCY TRANSFER DEVICE  
Scale: N.T.S.

- NOTE:
1. REFER TO PLANS FOR ACTUAL SWITCHING REQUIREMENTS. ADDITIONAL SENSORS MAY BE REQUIRED BY PLANS.



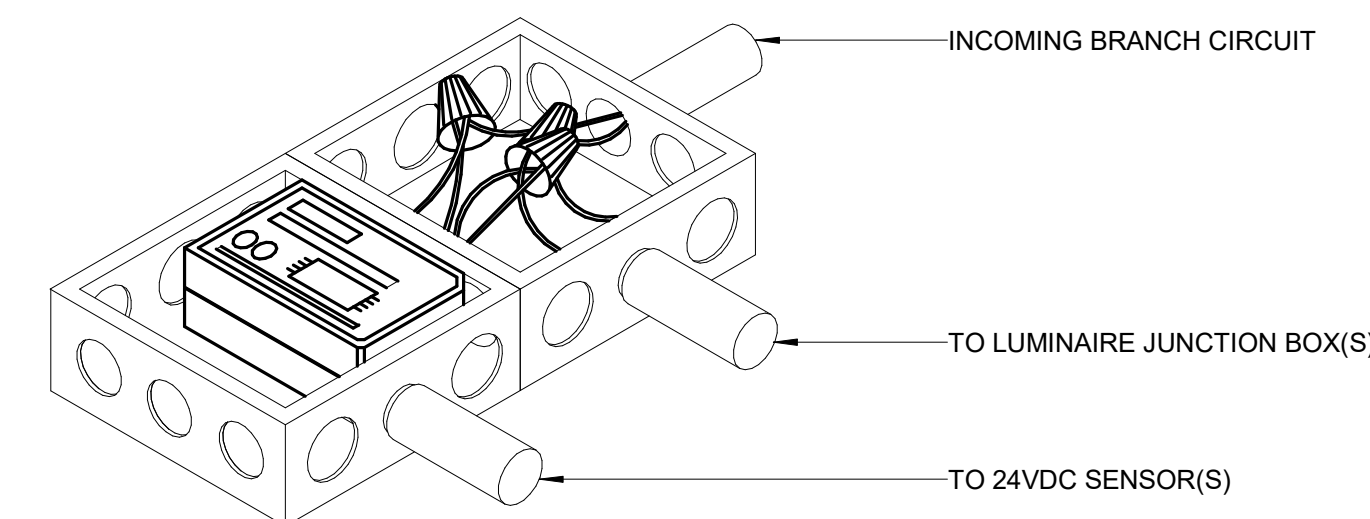
5 LIGHT LV OCCUPANCY SENSOR  
Scale: N.T.S.



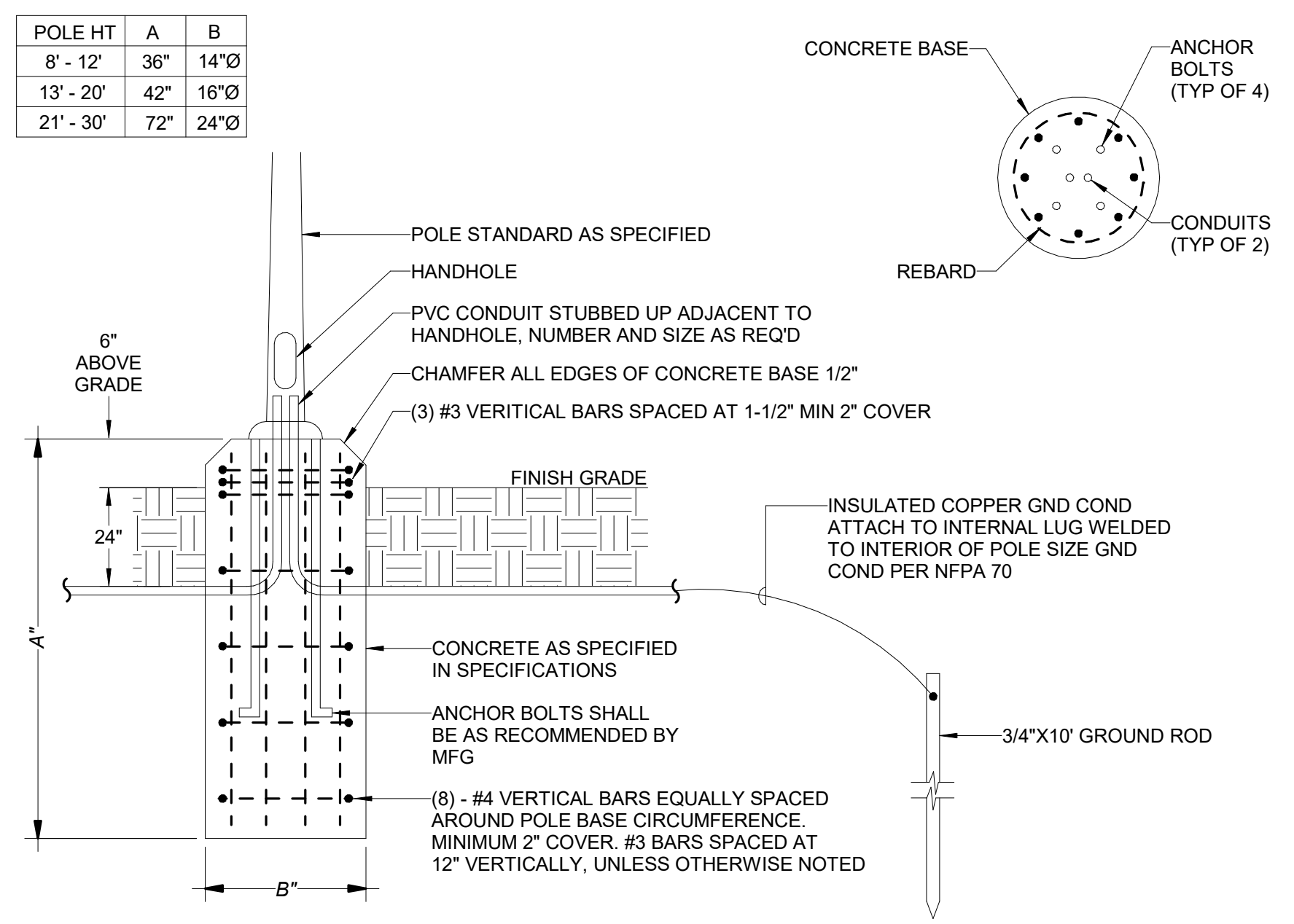
- NOTES:
1. TO DETERMINE THE MAXIMUM NUMBER OF SENSORS, REFER TO THE PRODUCT DATA FROM THE MANUFACTURER TO OBTAIN THE SPECIFIC CURRENT CONSUMPTION OF EACH SENSOR.
  2. PROVIDE ADDITIONAL POWER PACKS AS REQUIRED BY MANUFACTURER. DIAGRAM IS SCHEMATIC ONLY. REFER TO PLANS FOR EXACT QUANTITIES OF DEVICES.

6 LIGHT LV OCCUPANCY SENSOR (MULTIPLE)  
Scale: N.T.S.

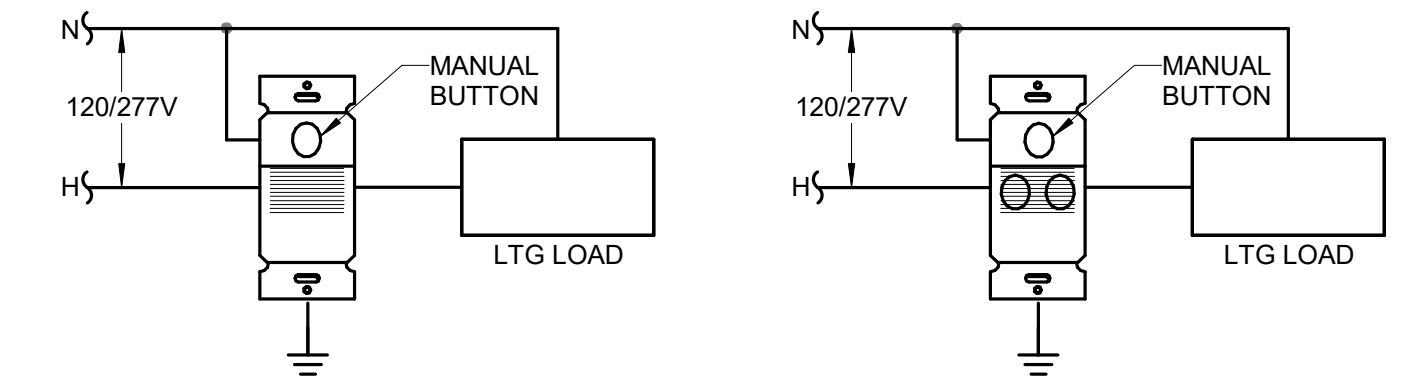
- NOTES:
1. DO NOT MOUNT POWER PACKS CLOSER THAN 6-12 INCHES FROM SENSOR(S).
  2. MOUNT JUNCTION BOX VERTICALLY TO WALL OR HORIZONTALLY TO BOTTOM OF TRUSS/BEAM.



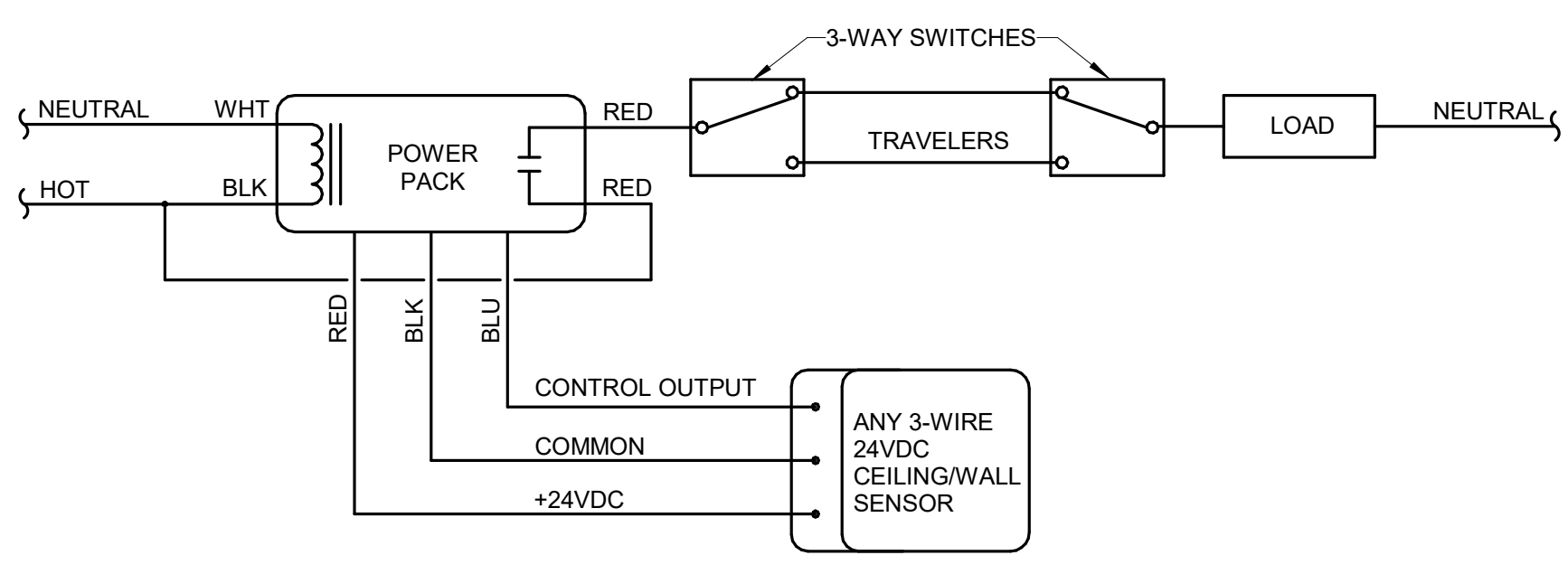
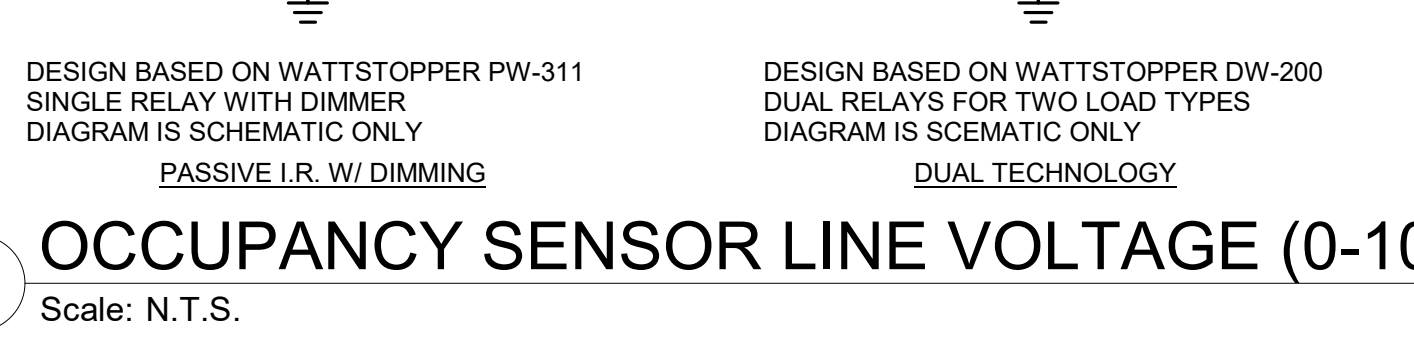
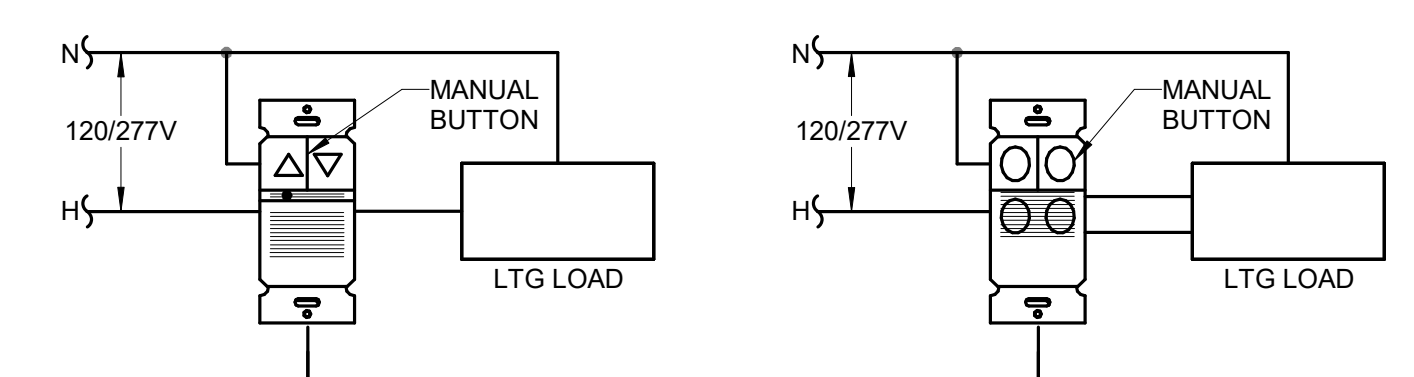
7 LIGHT SENSOR PACK INSTANTION (CONCEALED)  
Scale: N.T.S.



8 LIGHT FIXTURE POLE FOUNDATION  
Scale: N.T.S.

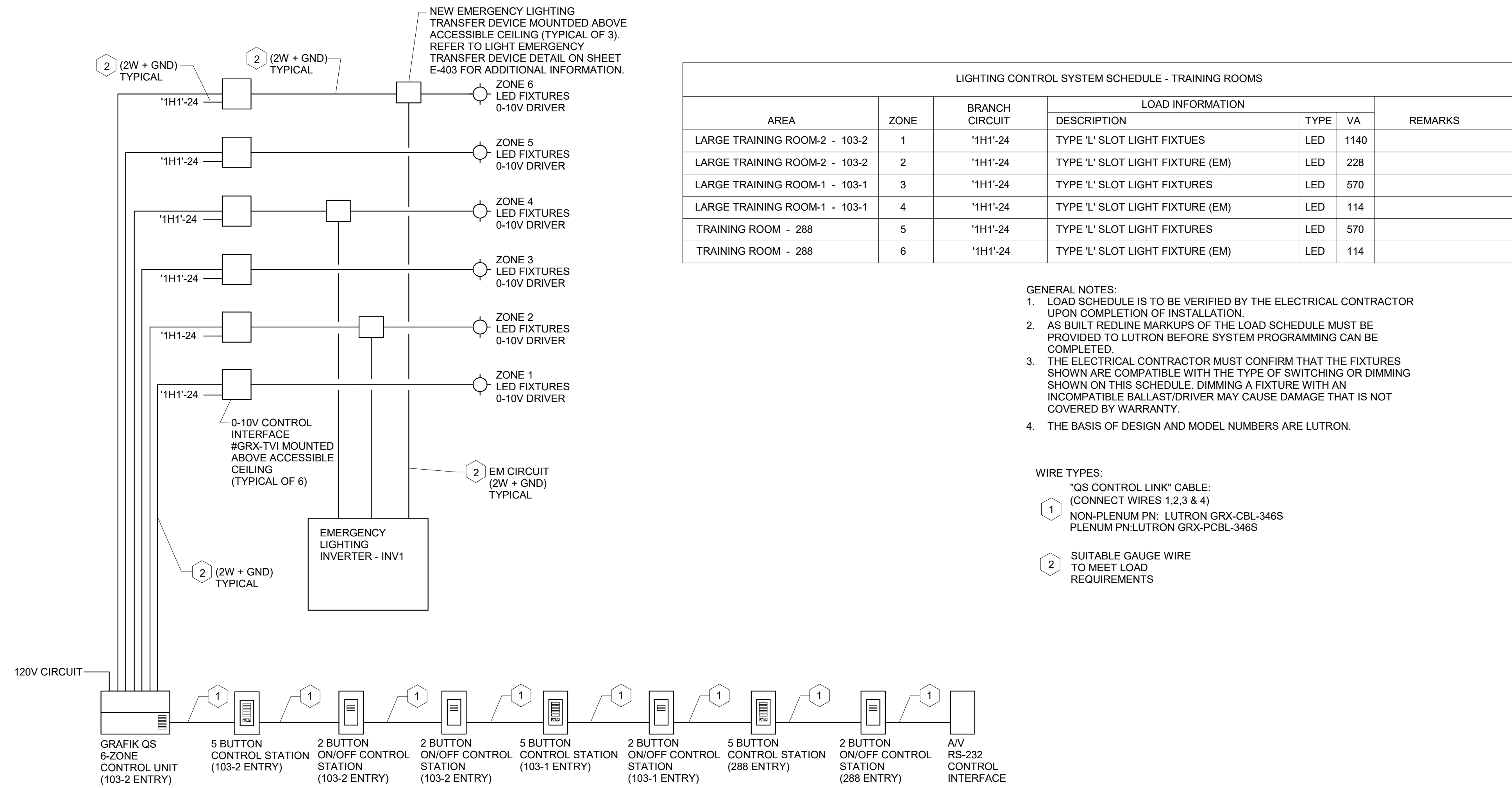
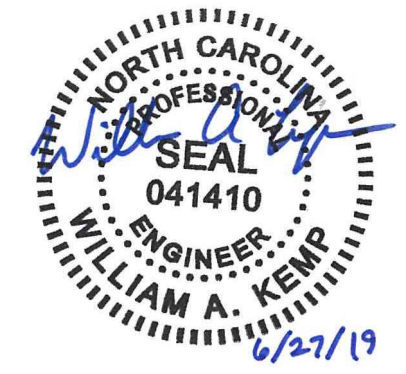


9 OCCUPANCY SENSOR LINE VOLTAGE (0-10V DIM)  
Scale: N.T.S.



10 OCCUPANCY SENSOR 3 WAY SWITCHING LV  
Scale: 12" = 1'-0"

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |
|     |        |      |
|     |        |      |

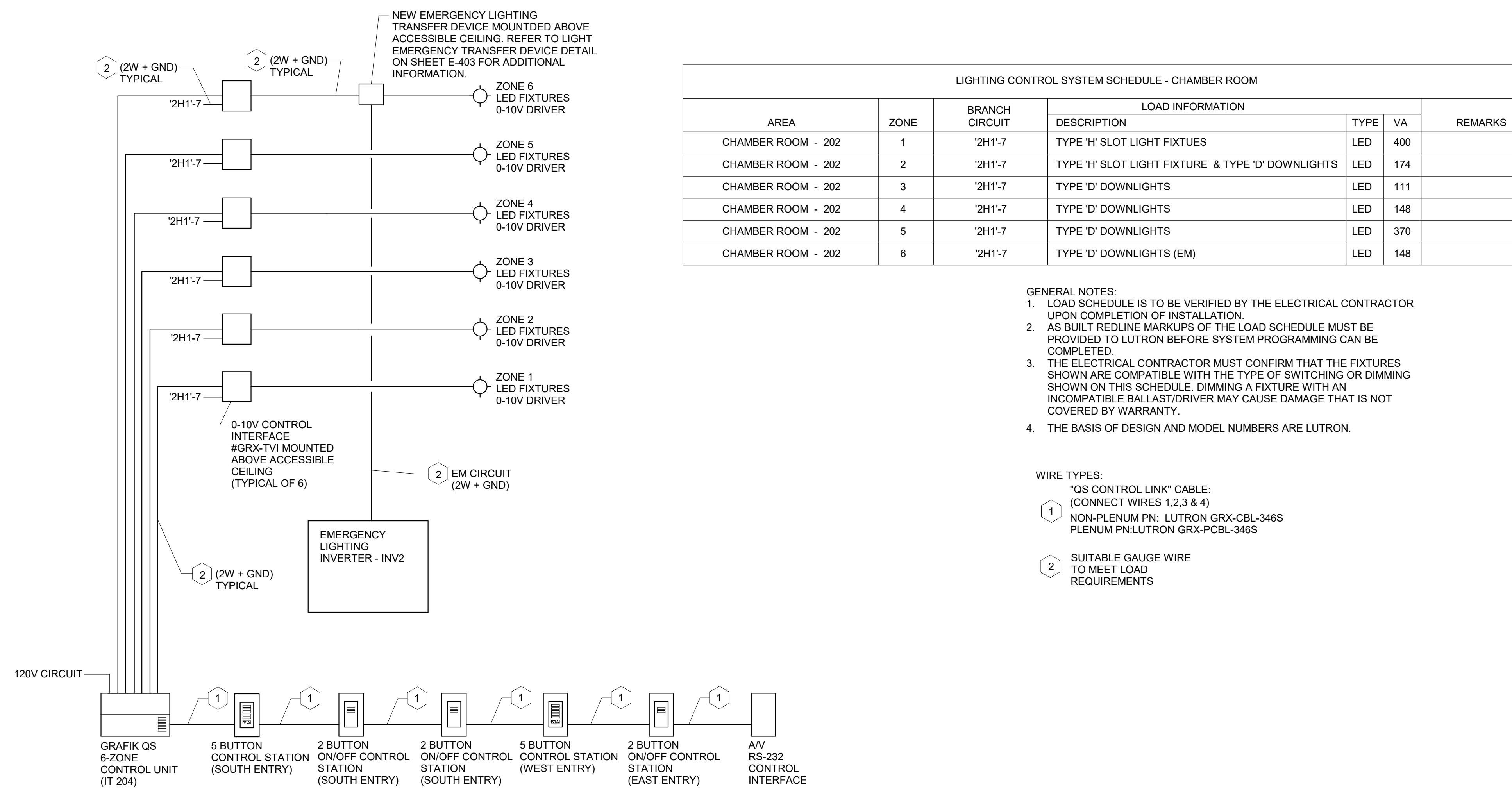


| LIGHTING CONTROL SYSTEM SCHEDULE - TRAINING ROOMS |      |                |                                  |                  |      |         |
|---|------|----------------|----------------------------------|------------------|------|---------|
| AREA  | ZONE | BRANCH CIRCUIT | DESCRIPTION                      | LOAD INFORMATION |      | REMARKS |
|   |      |                |                                  | TYPE             | VA   |         |
| LARGE TRAINING ROOM-2 - 103-2                     | 1    | '1H1'-24       | TYPE 'L' SLOT LIGHT FIXTURES     | LED              | 1140 |         |
| LARGE TRAINING ROOM-2 - 103-2                     | 2    | '1H1'-24       | TYPE 'L' SLOT LIGHT FIXTURE (EM) | LED              | 228  |         |
| LARGE TRAINING ROOM-1 - 103-1                     | 3    | '1H1'-24       | TYPE 'L' SLOT LIGHT FIXTURES     | LED              | 570  |         |
| LARGE TRAINING ROOM-1 - 103-1                     | 4    | '1H1'-24       | TYPE 'L' SLOT LIGHT FIXTURE (EM) | LED              | 114  |         |
| TRAINING ROOM - 288                               | 5    | '1H1'-24       | TYPE 'L' SLOT LIGHT FIXTURES     | LED              | 570  |         |
| TRAINING ROOM - 288                               | 6    | '1H1'-24       | TYPE 'L' SLOT LIGHT FIXTURE (EM) | LED              | 114  |         |

- GENERAL NOTES:
- LOAD SCHEDULE IS TO BE VERIFIED BY THE ELECTRICAL CONTRACTOR UPON COMPLETION OF INSTALLATION.
  - AS BUILT REDLINE MARKUPS OF THE LOAD SCHEDULE MUST BE PROVIDED TO LUTRON BEFORE SYSTEM PROGRAMMING CAN BE COMPLETED.
  - THE ELECTRICAL CONTRACTOR MUST CONFIRM THAT THE FIXTURES SHOWN ON THIS SCHEDULE. DIMMING A FIXTURE WITH AN INCOMPATIBLE BALLAST/DRIVER MAY CAUSE DAMAGE THAT IS NOT COVERED BY WARRANTY.
  - THE BASIS OF DESIGN AND MODEL NUMBERS ARE LUTRON.

- WIRE TYPES:
- \*QS CONTROL LINK\* CABLE:  
(CONNECT WIRES 1,2,3 & 4)
  - NON-PLENUM PN: LUTRON GRX-CBL-346S  
PLENUM PN:LUTRON GRX-PCBL-346S
  - SUITABLE GAUGE WIRE TO MEET LOAD REQUIREMENTS

1 TRAINING ROOM DIMMING SYSTEM ONE-LINE DIAGRAM  
Scale: N.T.S.



| LIGHTING CONTROL SYSTEM SCHEDULE - CHAMBER ROOM |      |                |   |                  |     |         |
|---|------|----------------|---|------------------|-----|---------|
| AREA  | ZONE | BRANCH CIRCUIT | DESCRIPTION                                       | LOAD INFORMATION |     | REMARKS |
|   |      |                |   | TYPE             | VA  |         |
| CHAMBER ROOM - 202                              | 1    | '2H1'-7        | TYPE 'H' SLOT LIGHT FIXTURES                      | LED              | 400 |         |
| CHAMBER ROOM - 202                              | 2    | '2H1'-7        | TYPE 'H' SLOT LIGHT FIXTURE & TYPE 'D' DOWNLIGHTS | LED              | 174 |         |
| CHAMBER ROOM - 202                              | 3    | '2H1'-7        | TYPE 'D' DOWNLIGHTS                               | LED              | 111 |         |
| CHAMBER ROOM - 202                              | 4    | '2H1'-7        | TYPE 'D' DOWNLIGHTS                               | LED              | 148 |         |
| CHAMBER ROOM - 202                              | 5    | '2H1'-7        | TYPE 'D' DOWNLIGHTS                               | LED              | 370 |         |
| CHAMBER ROOM - 202                              | 6    | '2H1'-7        | TYPE 'D' DOWNLIGHTS (EM)                          | LED              | 148 |         |

- GENERAL NOTES:
- LOAD SCHEDULE IS TO BE VERIFIED BY THE ELECTRICAL CONTRACTOR UPON COMPLETION OF INSTALLATION.
  - AS BUILT REDLINE MARKUPS OF THE LOAD SCHEDULE MUST BE PROVIDED TO LUTRON BEFORE SYSTEM PROGRAMMING CAN BE COMPLETED.
  - THE ELECTRICAL CONTRACTOR MUST CONFIRM THAT THE FIXTURES SHOWN ON THIS SCHEDULE. DIMMING A FIXTURE WITH AN INCOMPATIBLE BALLAST/DRIVER MAY CAUSE DAMAGE THAT IS NOT COVERED BY WARRANTY.
  - THE BASIS OF DESIGN AND MODEL NUMBERS ARE LUTRON.

- WIRE TYPES:
- \*QS CONTROL LINK\* CABLE:  
(CONNECT WIRES 1,2,3 & 4)
  - NON-PLENUM PN: LUTRON GRX-CBL-346S  
PLENUM PN:LUTRON GRX-PCBL-346S
  - SUITABLE GAUGE WIRE TO MEET LOAD REQUIREMENTS

2 CHAMBER ROOM DIMMING SYSTEM ONE-LINE DIAGRAM  
Scale: N.T.S.

CONSTRUCTION DOCUMENTS

06.27.2019

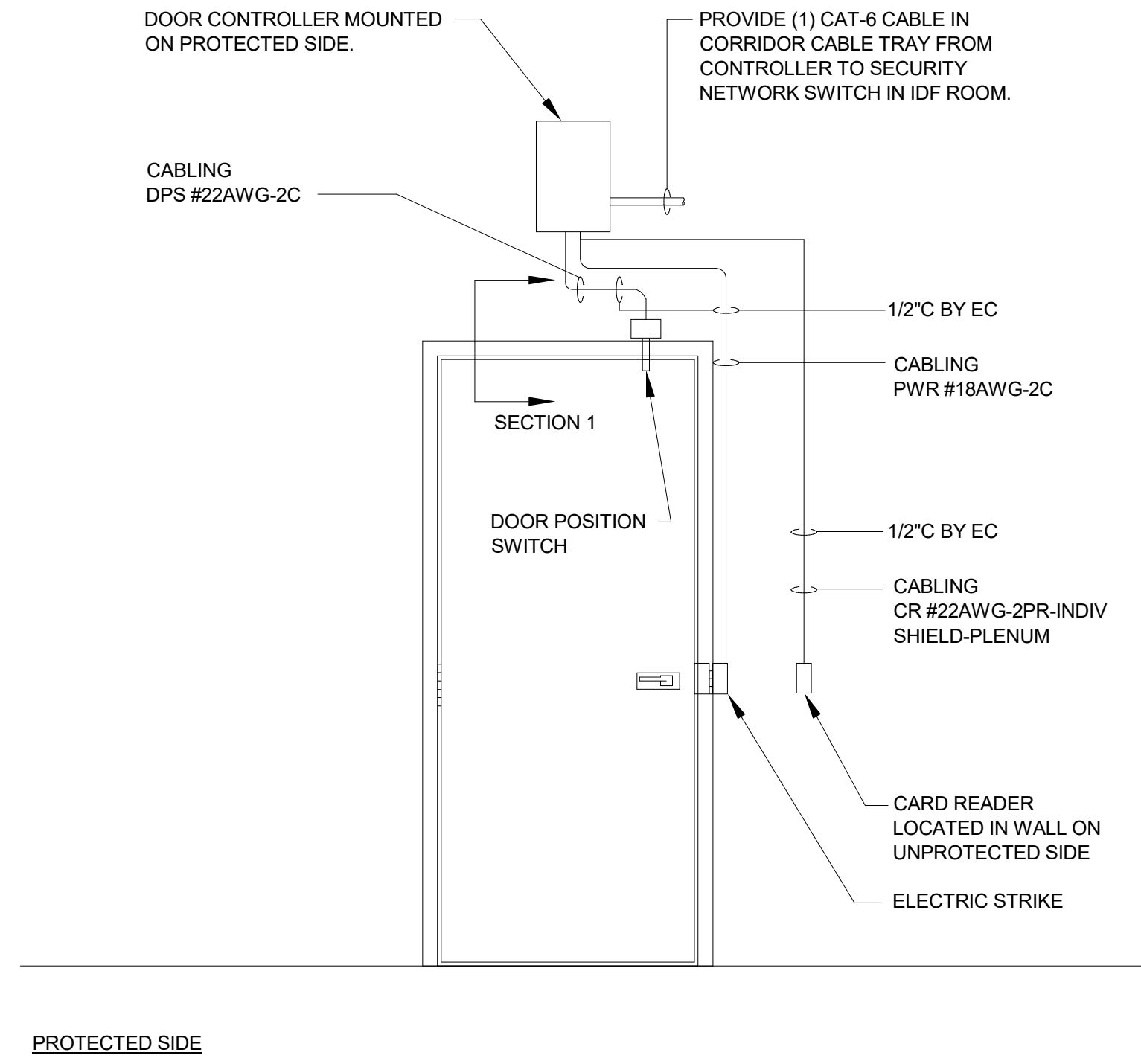
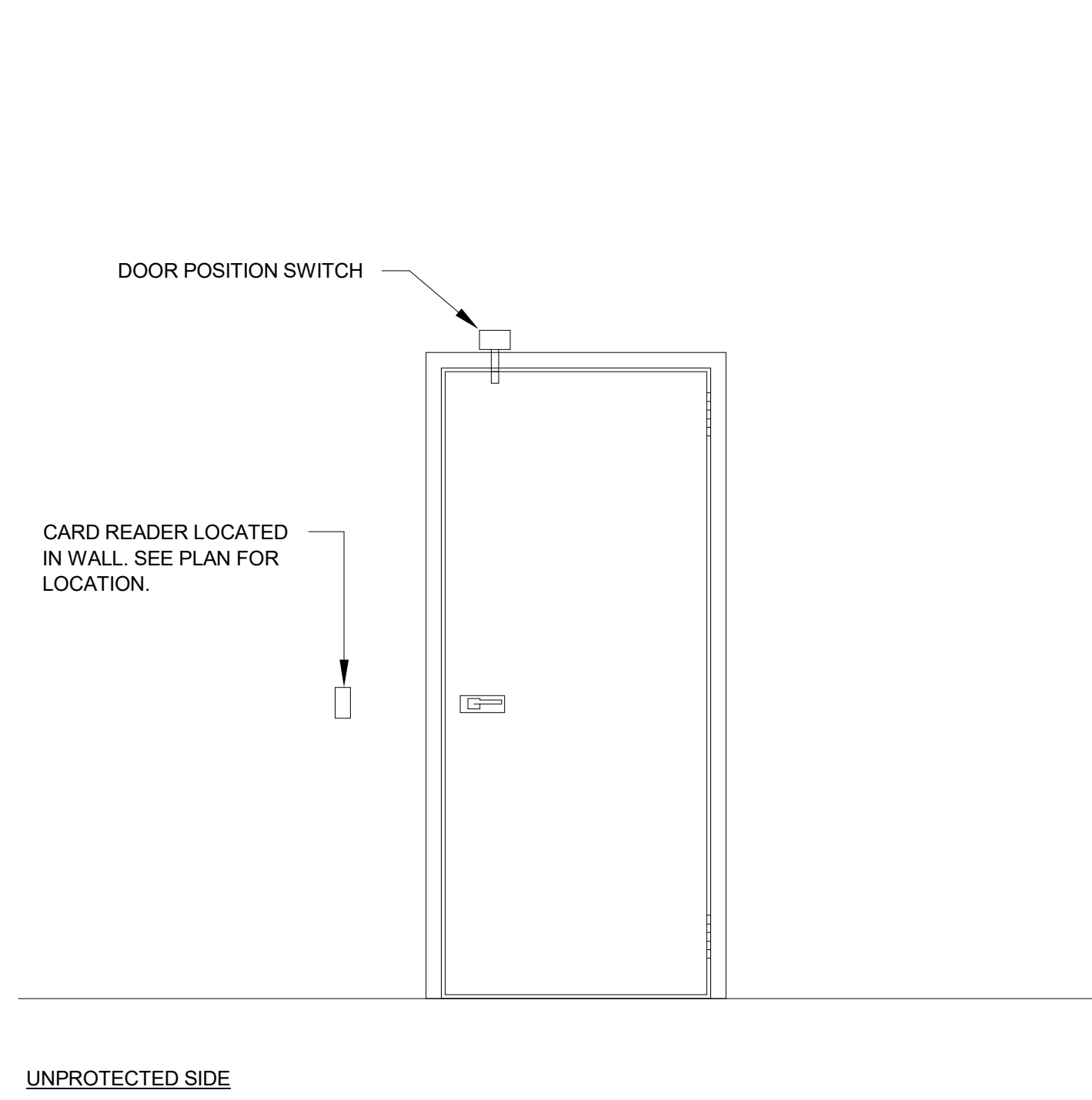
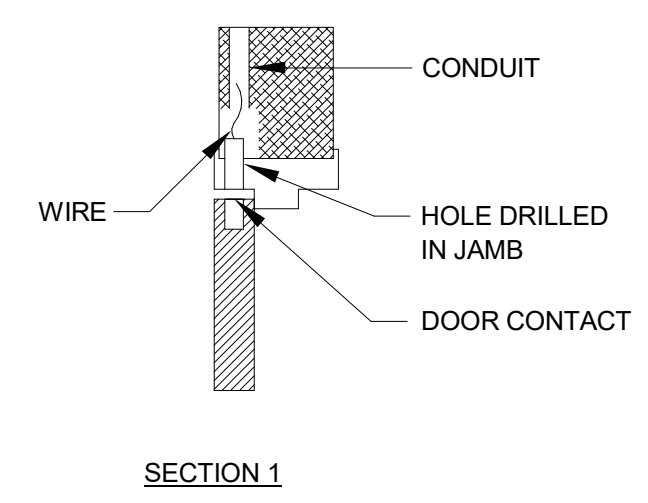
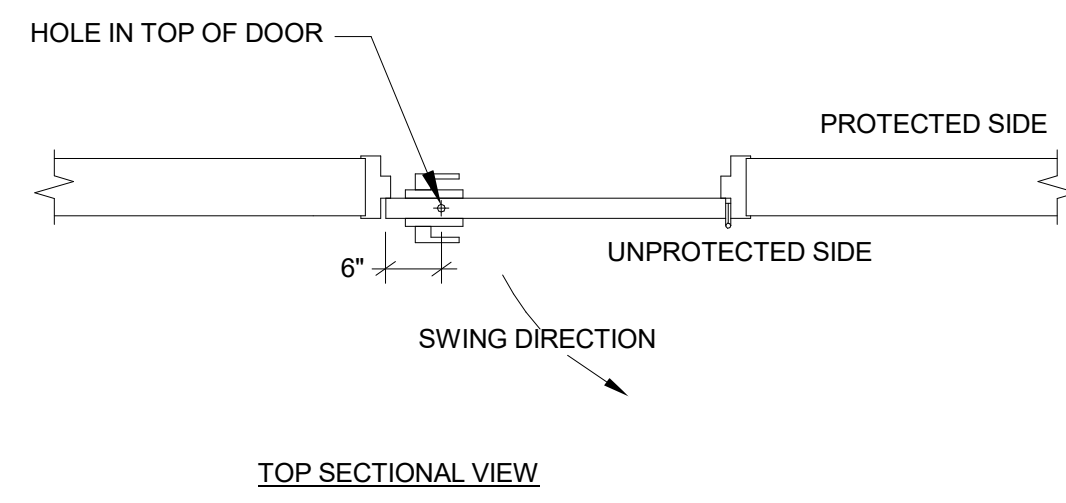
| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |
|     |        |      |
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES  
CENTER

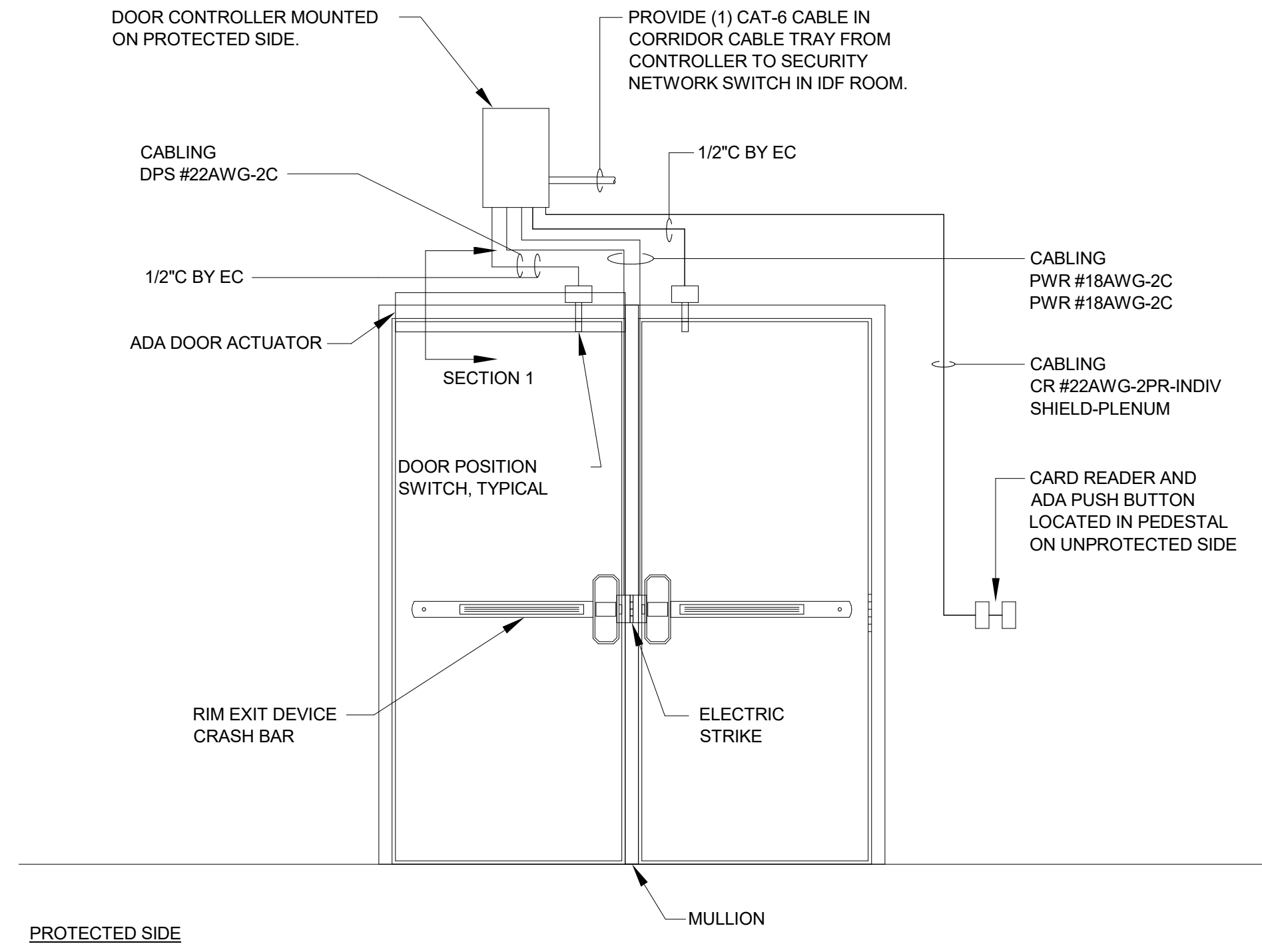
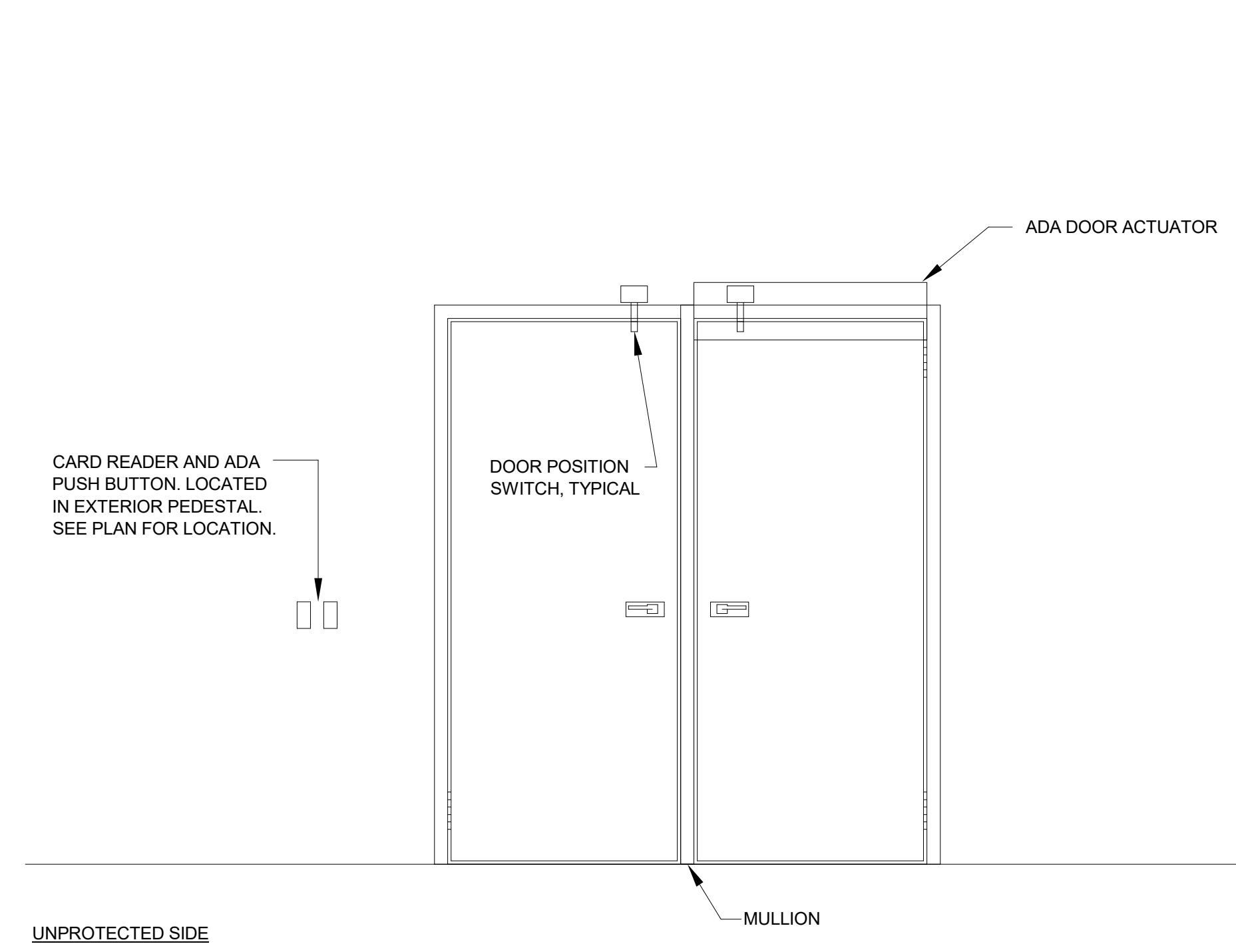
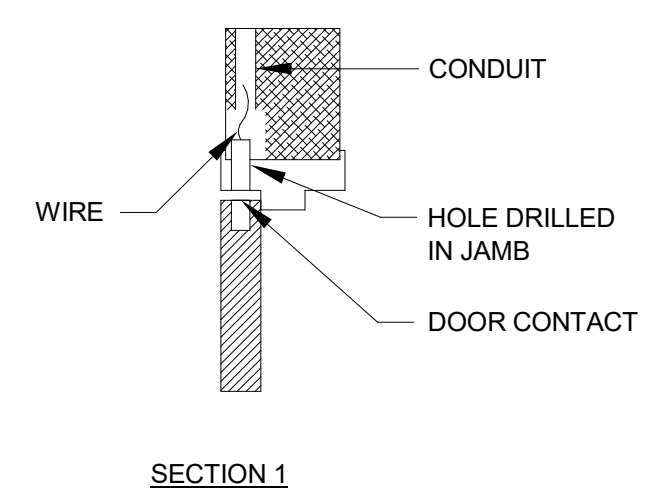
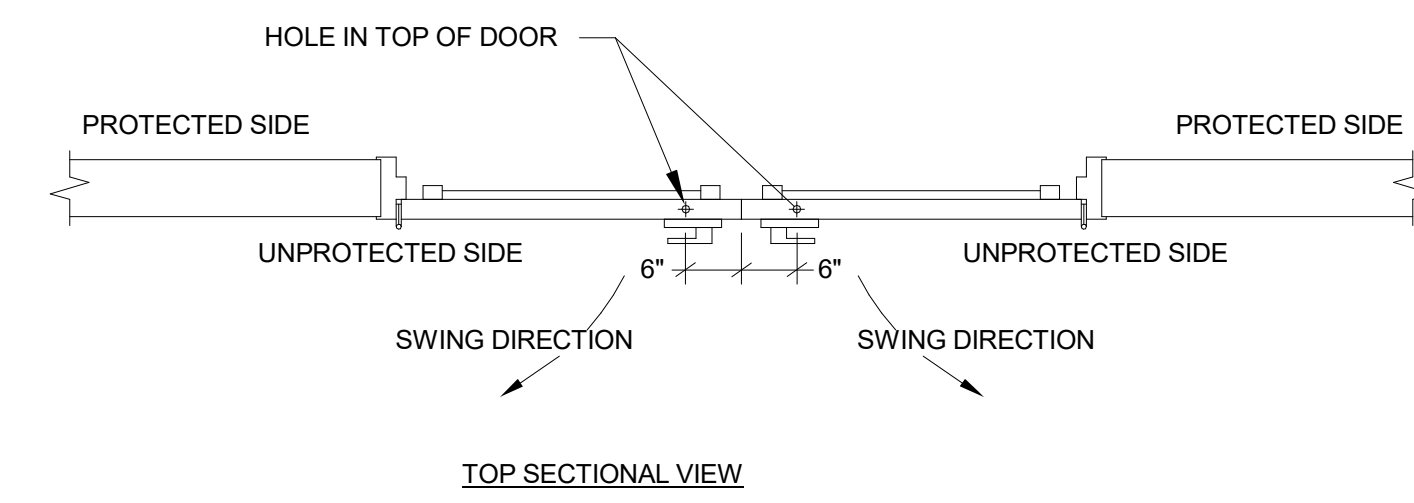
514-8066-00

DETAILS



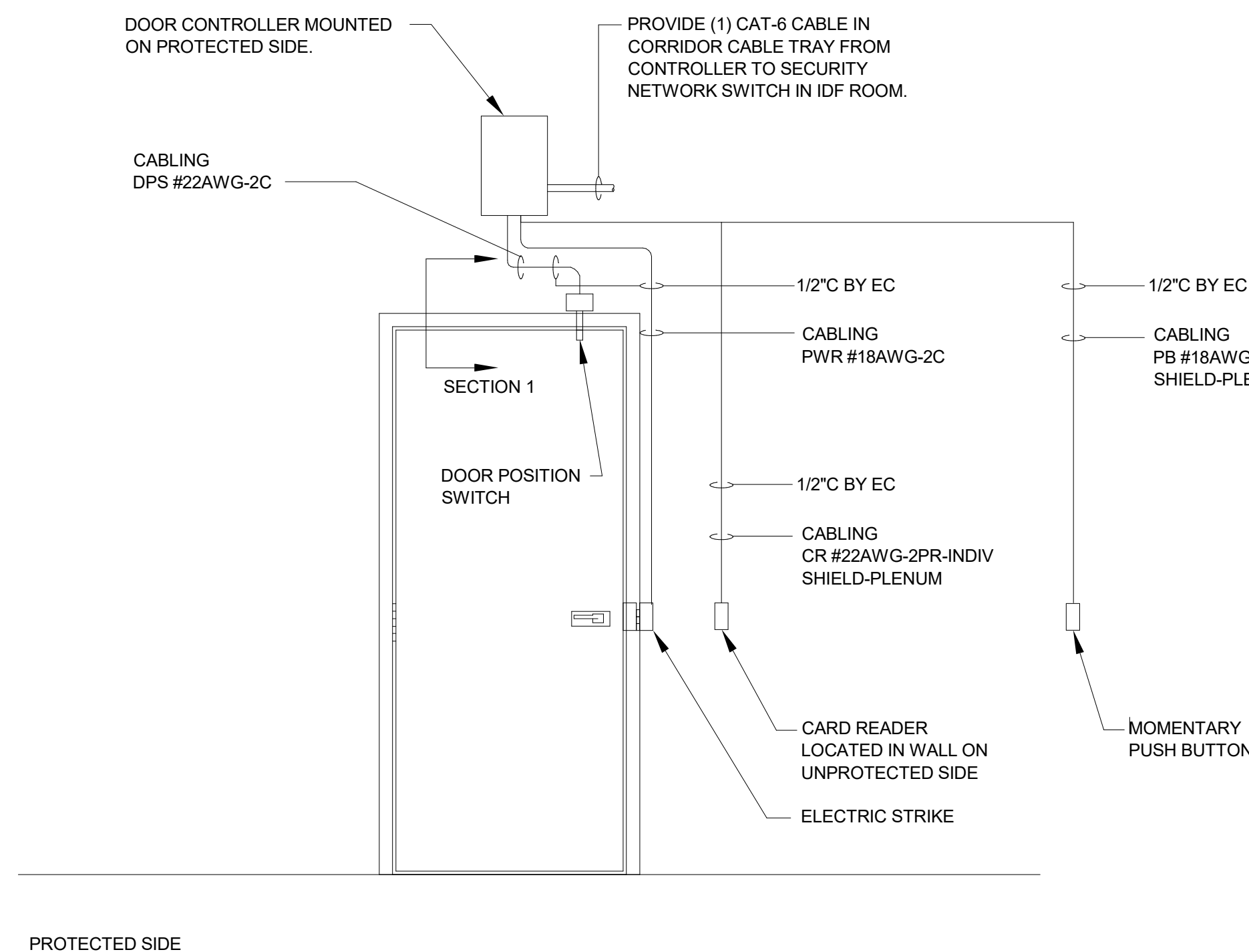
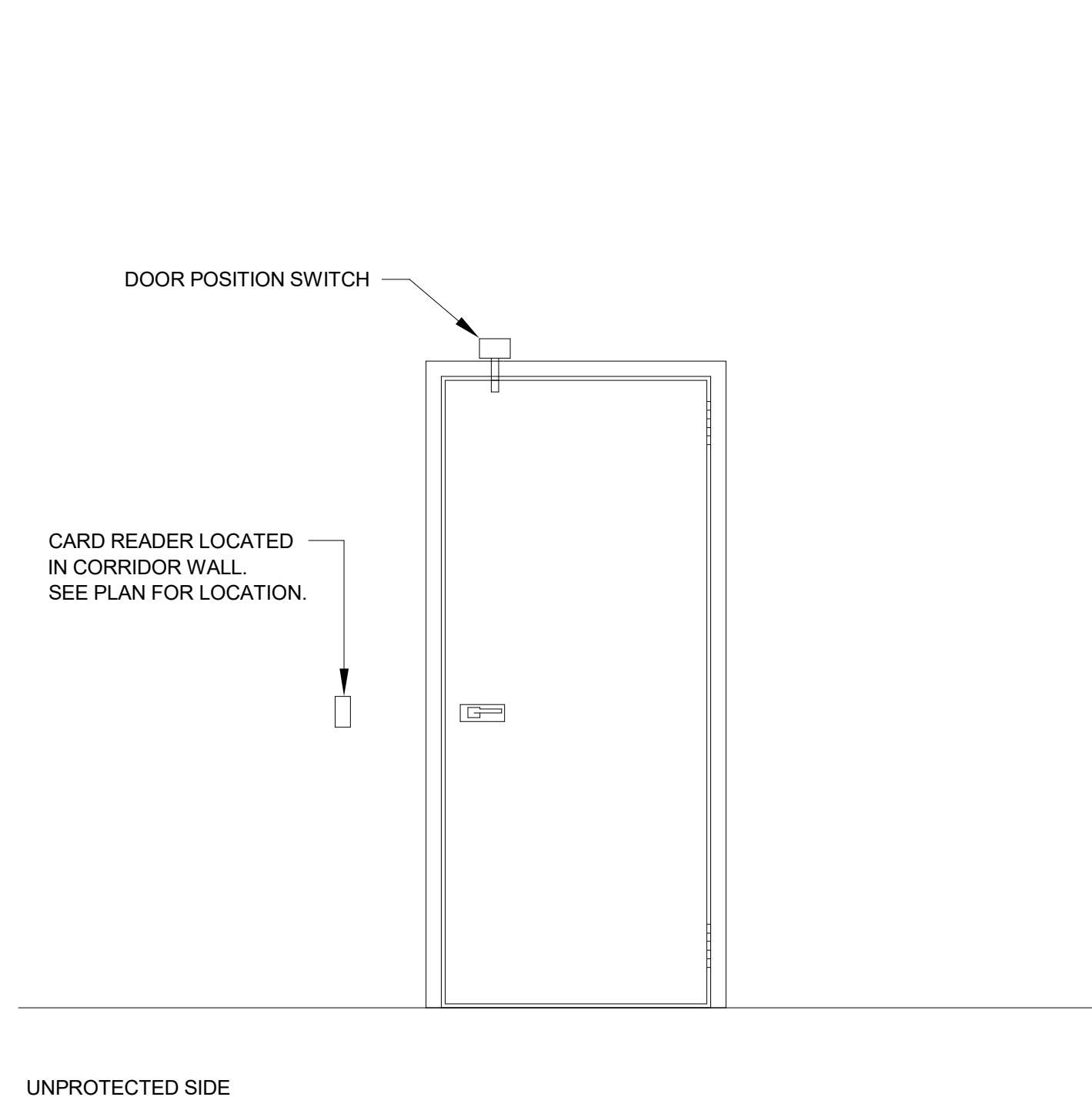
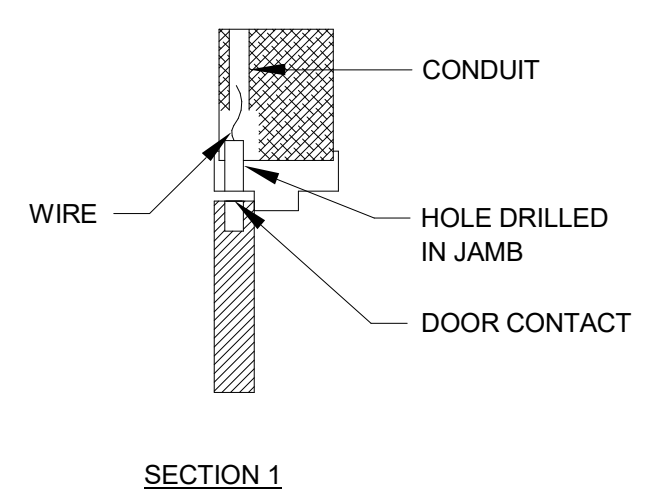
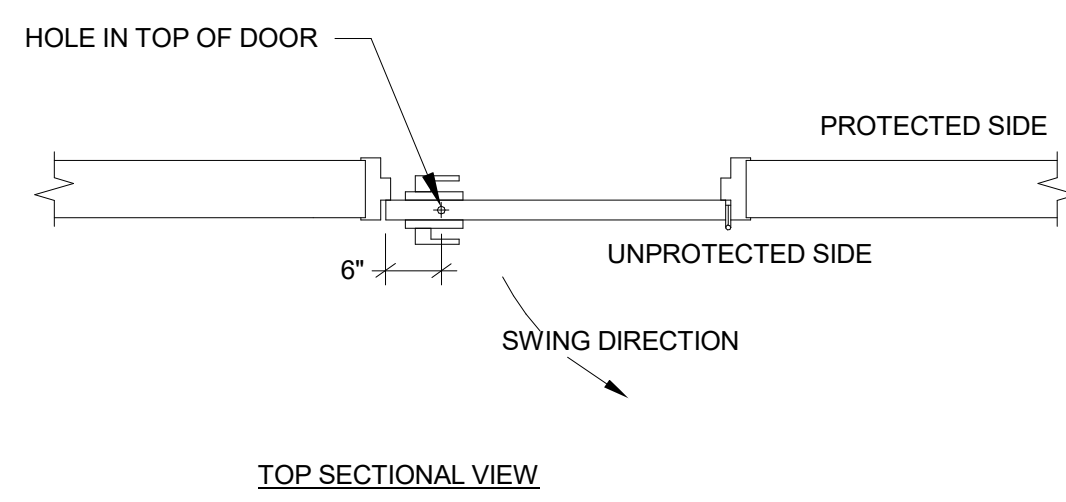
1 SINGLE-DOOR WITH CARD READER, DOOR CONTACTS, AND ELECTRIC STRIKE DETAIL

Scale: NTS



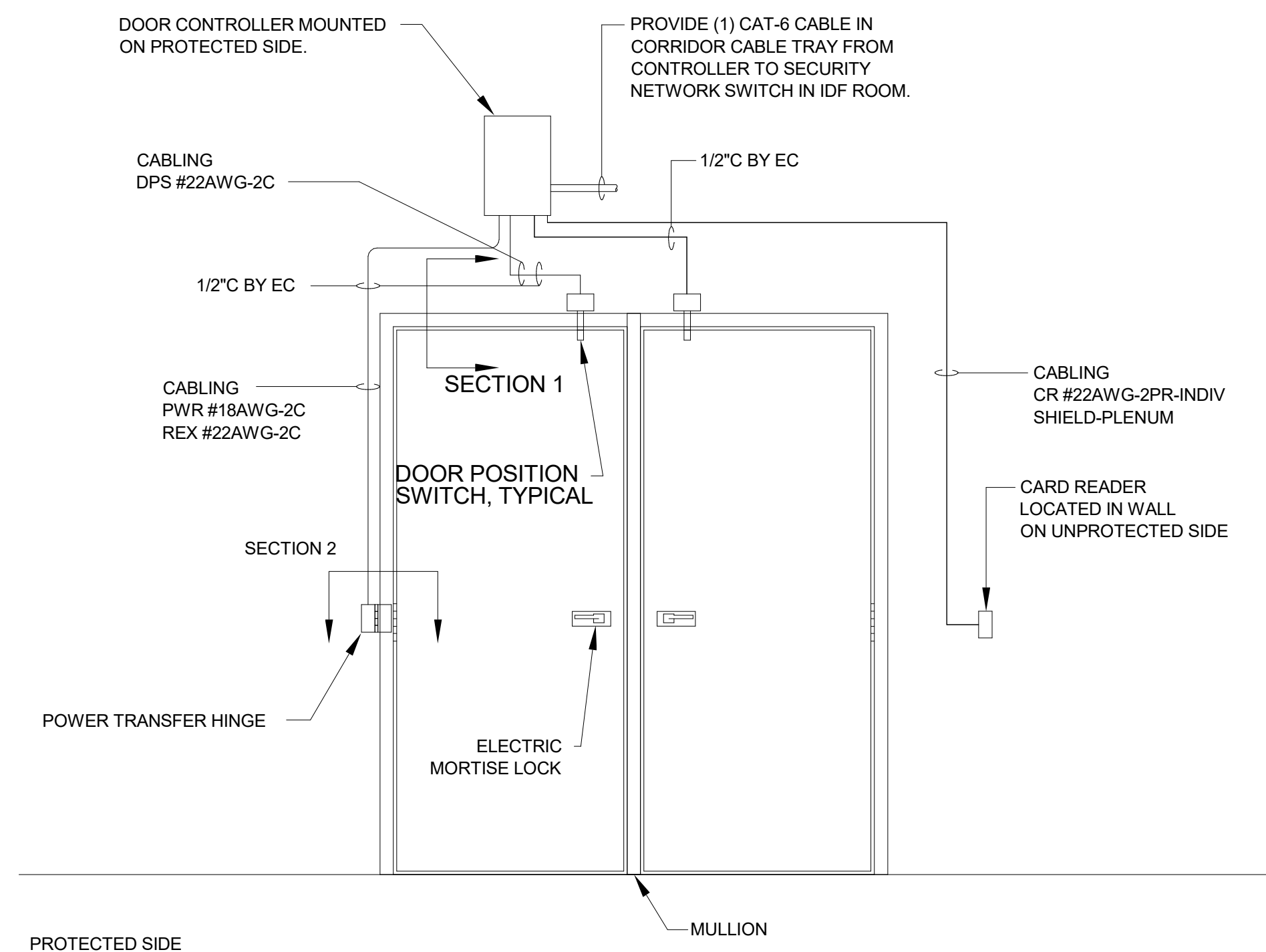
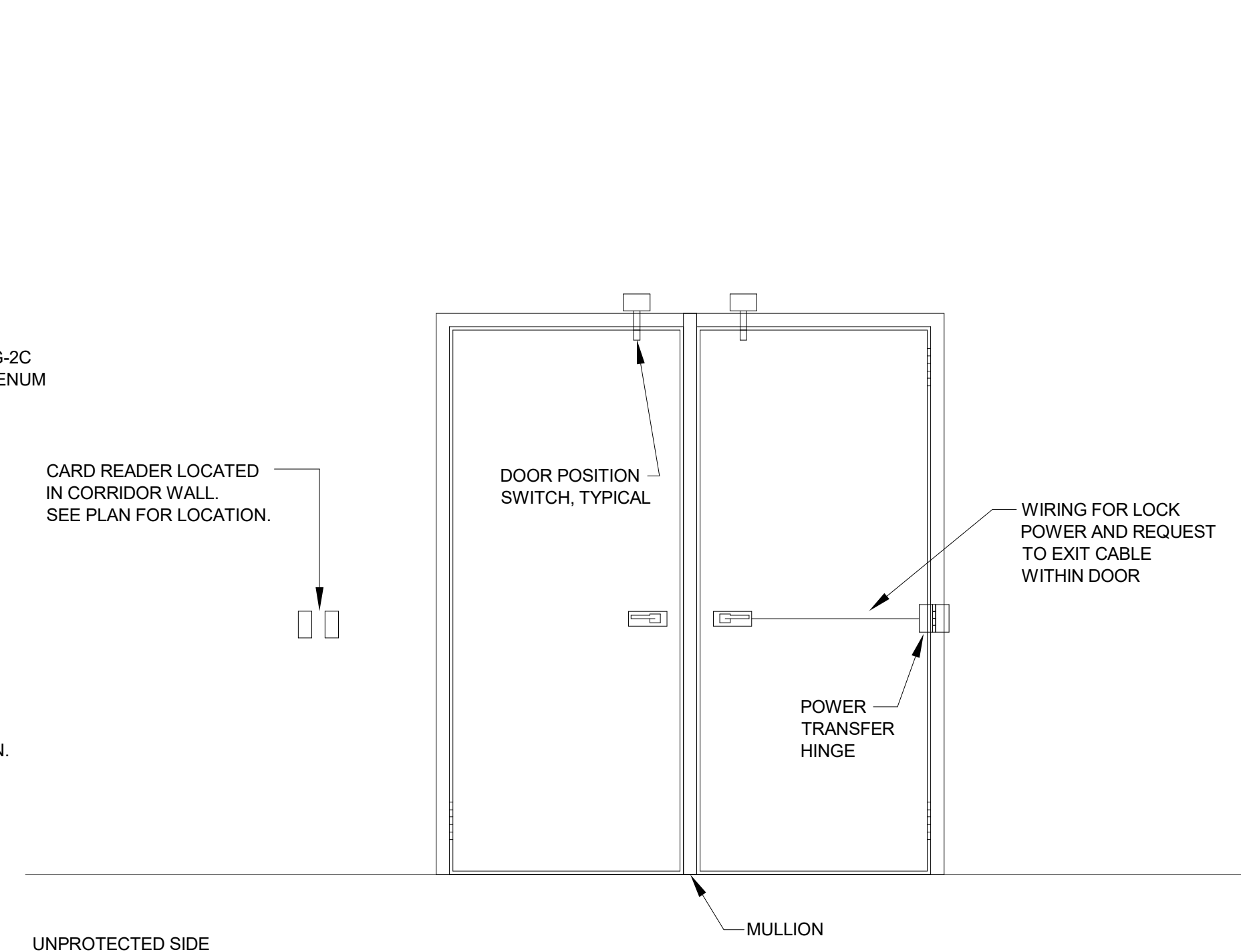
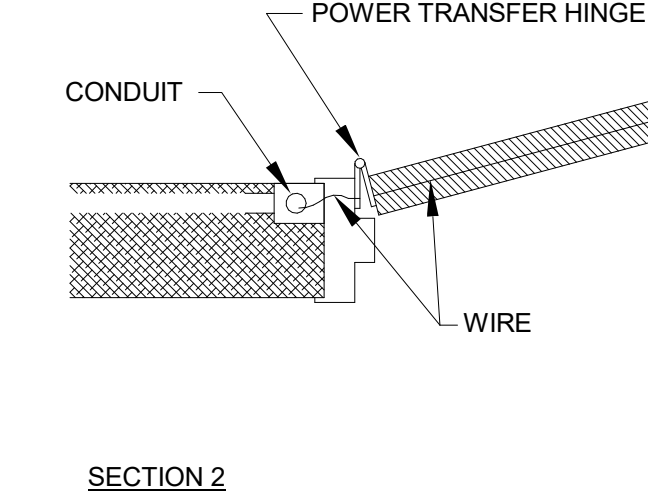
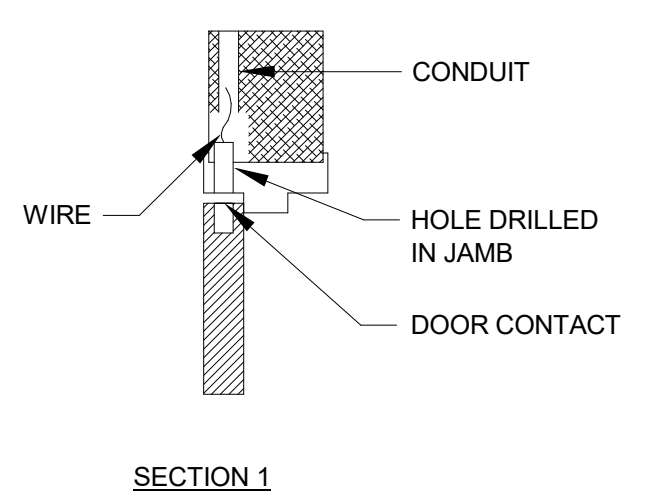
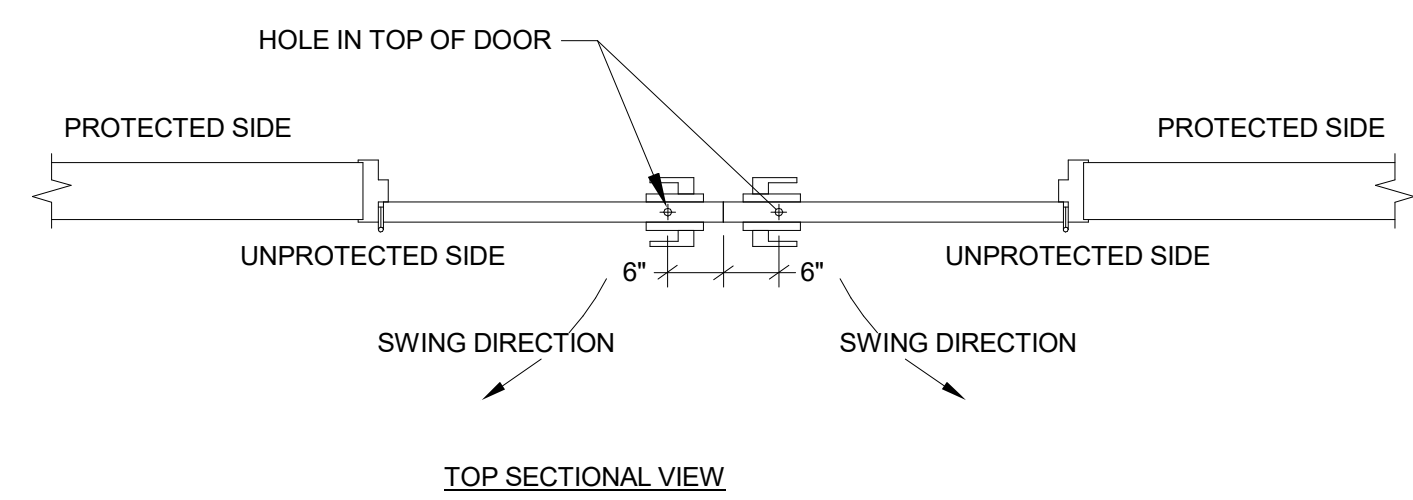
2 DOUBLE-DOOR WITH ADA ACTUATOR, CARD READER, DOOR CONTACTS, ELECTRIFIED PANIC DEVICE, AND ELECTRIC STRIKE DETAIL

Scale: NTS



3 SINGLE-DOOR WITH CARD READER, DOOR CONTACTS, MOMENTARY PUSH BUTTON, AND ELECTRIC STRIKE DETAIL

Scale: NTS



4 DOUBLE-DOOR WITH CARD READER, DOOR CONTACTS, ELECTRIC MORTISE LOCK, AND POWER TRANSFERRED HINGE DETAIL

Scale: NTS

| NO. | REASON | DATE |
|-----|--------|------|
|     |        |      |

PRINCIPAL IN CHARGE  
MBW  
PROJECT MANAGER  
GAM  
DESIGN TEAM  
WAK, ELP, GM

HARNETT COUNTY  
GOVERNMENT SERVICES CENTER

514-8066-00

DETAILS

| PANEL DESIGNATION: MDP   |             |       |   |  |              |              |              |   |   |    |             |     |
|--|-------------|-------|---|--|--------------|--------------|--------------|---|---|----|-------------|-----|
| LOCATION: ELECTRICAL 135<br>SUPPLY FROM: MDP<br>MOUNTING: Surface<br>ENCLOSURE: Type 1 |             |       |   | VOLTAGE RATING: 480/277 Wye<br># OF PHASES: 3<br># OF WIRES: 4<br>SE RATED: NO |              |              |              | MAIN CIRCUIT BREAKER: MCB<br>BREAKER RATING: 1000 A<br>BUS RATING: 1000 A<br>NEUTRAL RATING: 100%<br>MINIMUM KAIC: 42 |   |    |             |     |
| PANEL NOTES:   |             |       |   |  |              |              |              |   |   |    |             |     |
| CKT  | LOAD SERVED | CB    | P | N  | PHASE A (VA) | PHASE B (VA) | PHASE C (VA) | N   | P | CB | LOAD SERVED | CKT |
| 1  |             |       |   |  | 5673         | 17427        |              |   |   |    |             | 2   |
| 3  | 1H1         | 100 A | 3 |  |              | 11199        | 14660        |   |   |    | 150 A 2H1   | 4   |
| 5  |             |       |   |  |              |              |              |   |   |    |             | 6   |
| 7  |             |       |   |  | 37386        | 42773        |              |   |   |    | 9328        | 8   |
| 9  | 1T1         | 175 A | 3 |  |              | 40434        | 41186        |   |   |    | 31995       | 10  |
| 11   |             |       |   |  |              |              |              |   |   |    | 34147       | 12  |
| 13   |             |       |   |  | 31260        | 33061        |              |   |   |    |             | 14  |
| 15   | RTU-IN      | 150 A | 3 |  |              | 31260        | 33061        |   |   |    | 31260       | 16  |
| 17   |             |       |   |  |              |              |              |   |   |    | 33061       | 18  |
| 19   |             |       |   |  | 23861        | 33061        |              |   |   |    |             | 20  |
| 21   | RTU-IS      | 110 A | 3 |  |              | 23861        | 33061        |   |   |    | 23861       | 22  |
| 23   |             |       |   |  |              |              |              |   |   |    | 33061       | 24  |
| 25   |             |       |   |  | 0            |              |              |   |   |    |             | 26  |
| 27   | SDP         | 20 A  | 3 |  |              | 0            |              |   |   |    |             | 28  |
| 29   |             |       |   |  |              |              |              |   |   |    | 0           | 30  |
| 31   |             |       |   |  | 9423         | 9423         |              |   |   |    |             | 32  |
| 33   | ELEV 223    | 60 A  | 3 |  |              | 9423         | 9423         |   |   |    | 9423        | 34  |
| 35   |             |       |   |  |              |              |              |   |   |    | 9423        | 36  |
| 37   |             |       |   |  |              |              |              |   |   |    |             | 38  |
| 39   |             |       |   |  |              |              |              |   |   |    |             | 40  |
| 41   |             |       |   |  |              |              |              |   |   |    |             | 42  |
| TOTAL LOAD:  |             |       |   |  | 243348 VA    | 247569 VA    | 229156 VA    |   |   |    |             |     |
| TOTAL AMPS:  |             |       |   |  | 886 A        | 902 A        | 827 A        |   |   |    |             |     |

| CIRCUIT BREAKER NOTES (N):         |  |  |  |                |                  |                        |  |  |  |  |  |
|------------------------------------|--|--|--|----------------|------------------|------------------------|--|--|--|--|--|
| LOAD CLASSIFICATION                |  |  |  | CONNECTED LOAD | ESTIMATED DEMAND | PANEL TOTALS           |  |  |  |  |  |
| HVAC                               |  |  |  | 13520 VA       | 13520 VA         | TOTAL LOAD: 720075 VA  |  |  |  |  |  |
| Lighting                           |  |  |  | 40408 VA       | 50510 VA         | DEMAND FACTOR: 92.01%  |  |  |  |  |  |
| Motor                              |  |  |  | 453997 VA      | 478793 VA        | DEMAND LOAD: 662527 VA |  |  |  |  |  |
| Other                              |  |  |  | 2310 VA        | 2310 VA          | DEMAND AMPS: 797 A     |  |  |  |  |  |
| Receptacle                         |  |  |  | 161820 VA      | 95910 VA         |                        |  |  |  |  |  |
| Power                              |  |  |  | 8900 VA        | 8900 VA          |                        |  |  |  |  |  |
| HEATING                            |  |  |  | 3120 VA        | 2184 VA          |                        |  |  |  |  |  |
| Electric Range - 3.5 kW to 8.75 kW |  |  |  | 16000 VA       | 10400 VA         |                        |  |  |  |  |  |

| PANEL DESIGNATION: 1L2   |                                 |      |   |  |                  |                       |          |  |      |    |             |                                |    |
|--|---------------------------------|------|---|--|------------------|-----------------------|----------|--|------|----|-------------|--------------------------------|----|
| LOCATION: ELECTRICAL 135<br>SUPPLY FROM: 1L1<br>MOUNTING: Surface<br>ENCLOSURE: Type 1 |                                 |      |   | VOLTAGE RATING: 120/208 Wye<br># OF PHASES: 3<br># OF WIRES: 4<br>SE RATED: NO |                  |                       |          | MAIN CIRCUIT BREAKER: NO<br>BREAKER RATING: N/A<br>BUS RATING: 100 A<br>NEUTRAL RATING: 100%<br>MINIMUM KAIC: 10 |      |    |             |                                |    |
| PANEL NOTES:   |                                 |      |   |  |                  |                       |          |  |      |    |             |                                |    |
| CKT  | LOAD SERVED                     | CB   | P | N  | A                | B                     | C        | N  | P    | CB | LOAD SERVED | CKT                            |    |
| 1  | Receptacle                      | 20 A | 1 |  | 360              | 540                   |          |  |      | 1  | 20 A        | Receptacle                     | 2  |
| 3  | Receptacle                      | 20 A | 1 |  |                  | 720                   | 360      |  |      | 1  | 20 A        | Receptacle                     | 4  |
| 5  | Receptacle                      | 20 A | 1 |  |                  |                       |          | 360  | 360  | 1  | 20 A        | Receptacle CATALOGING ROOM...  | 6  |
| 7  | Receptacle CATALOGING ROOM...   | 20 A | 1 |  | 1000             | 720                   |          |  |      | 1  | 20 A        | Receptacle CATALOGING ROOM...  | 8  |
| 9  | Receptacle RESOURCE SHARIN...   | 20 A | 1 |  |                  | 1000                  | 360      |  |      | 1  | 20 A        | Receptacle RESOURCE SHARIN...  | 10 |
| 11   | Receptacle RESOURCE SHARIN...   | 20 A | 1 |  |                  |                       | 720      | 720  |      | 1  | 20 A        | Receptacle RESOURCE SHARIN...  | 12 |
| 13   | Receptacle                      | 20 A | 1 |  | 720              | 360                   |          |  |      | 1  | 20 A        | Receptacle CAFE 131            | 14 |
| 15   | Receptacle CAFE 131             | 20 A | 1 |  |                  | 540                   | 1360     |  |      | 1  | 20 A        | Receptacle STOR. 104           | 16 |
| 17   | Receptacle CATALOGING ROOM...   | 20 A | 1 |  |                  |                       |          | 1000   | 1000 | 1  | 20 A        | Receptacle CATALOGING ROOM...  | 18 |
| 19   | Receptacle OPEN WORK AREA 127   | 20 A | 1 |  | 1000             | 360                   |          |  |      | 1  | 20 A        | Receptacle OPEN WORK AREA 127  | 20 |
| 21   | Receptacle CONFERENCE 124       | 20 A | 1 |  |                  | 720                   | 900      |  |      | 1  | 20 A        | Receptacle CONFERENCE 124      | 22 |
| 23   | Lighting KITCHEN/BREAK 130      | 20 A | 1 |  |                  |                       |          | 18   | 1000 | 1  | 20 A        | Power LARGE TRAINING ROOM...   | 24 |
| 25   | Receptacle LARGE TRAINING...    | 20 A | 1 |  | 720              | 1000                  |          |  |      | 1  | 20 A        | Power LARGE TRAINING ROOM...   | 26 |
| 27   | Receptacle LARGE TRAINING...    | 20 A | 1 |  |                  | 1080                  | 500      |  |      | 1  | 20 A        | Power YOUTH PROGRAM 137        | 28 |
| 29   | Receptacle LARGE TRAINING...    | 20 A | 1 |  |                  |                       |          | 1080   | 900  | 1  | 20 A        | Receptacle YOUTH PROGRAM 137   | 30 |
| 31   |                                 | 20 A | 3 |  | 5720             | 540                   |          |  |      | 1  | 20 A        | Receptacle YOUTH MAKERSPAC...  | 32 |
| 33   | 2S1                             | 20 A | 3 |  |                  | 5910                  | 540      |  |      | 1  | 20 A        | Receptacle YOUTH MAKERSPAC...  | 34 |
| 35   |                                 | 20 A | 1 |  |                  |                       | 4970     | 1080   |      | 1  | 20 A        | Receptacle YOUTH MAKERSPAC...  | 36 |
| 37   | Spare                           | 20 A | 1 | --   | 0                | 1080                  |          |  |      | 1  | 20 A        | Receptacle YOUTH MAKERSPAC...  | 38 |
| 39   | Spare                           | 20 A | 1 | --   | 0                | 1080                  |          |  |      | 1  | 20 A        | Receptacle YOUTH MAKERSPAC...  | 40 |
| 41   | Spare                           | 20 A | 1 | --   |                  |                       | 0        | 540  |      | 1  | 20 A        | Receptacle TRAINING ROOM 288   | 42 |
| 43   | RFID GATES                      | 20 A | 1 |  | 1080             | 1500                  |          |  |      | 1  | 20 A        | Receptacle SOUTH VESTIBULE 142 | 44 |
| 45   | Receptacle RESOURCE SHARING 139 | 20 A | 1 |  |                  | 1500                  |          |  |      | 1  | 20 A        |                                | 46 |
| 47   |                                 |      |   |  |                  |                       |          |  |      |    |             | 48                             |    |
| 49   |                                 |      |   |  |                  |                       |          |  |      |    |             | 50                             |    |
| 51   |                                 |      |   |  |                  |                       |          |  |      |    |             | 52                             |    |
| 53   |                                 |      |   |  |                  |                       |          |  |      |    |             | 54                             |    |
| TOTAL LOAD:  |                                 |      |   |  | 16700 VA         | 16570 VA              | 13748 VA |  |      |    |             |                                |    |
| TOTAL AMPS:  |                                 |      |   |  | 143 A            | 142 A                 | 115 A    |  |      |    |             |                                |    |
| LOAD CLASSIFICATION  |                                 |      |   | CONNECTED LOAD   | ESTIMATED DEMAND | PANEL TOTALS          |          |  |      |    |             |                                |    |
| HVAC   |                                 |      |   | 18 VA  | 23 VA            | TOTAL LOAD: 47018 VA  |          |  |      |    |             |                                |    |
| Receptacle   |                                 |      |   | 44140 VA   | 27070 VA         | DEMAND FACTOR: 63.70% |          |  |      |    |             |                                |    |
| Power  |                                 |      |   | 2860 VA  | 2860 VA          | DEMAND LOAD: 29953 VA |          |  |      |    |             |                                |    |
|  |                                 |      |   |  |                  | DEMAND AMPS: 83 A     |          |  |      |    |             |                                |    |

| PANEL DESIGNATION: 2L1  |                                |       |   |  |                  |                       |              |  |      |    |             |                                |    |
|---|--------------------------------|-------|---|--|------------------|-----------------------|--------------|--|------|----|-------------|--------------------------------|----|
| LOCATION: MECH/ELEC 257<br>SUPPLY FROM: 211<br>MOUNTING: Surface<br>ENCLOSURE: Type 1 |                                |       |   | VOLTAGE RATING: 120/208 Wye<br># OF PHASES: 3<br># OF WIRES: 4<br>SE RATED: NO |                  |                       |              | MAIN CIRCUIT BREAKER: YES<br>BREAKER RATING: 400A<br>BUS RATING: 400 A<br>NEUTRAL RATING: 100%<br>MINIMUM KAIC: 10 |      |    |             |                                |    |
| PANEL NOTES:  |                                |       |   |  |                  |                       |              |  |      |    |             |                                |    |
| CKT   | LOAD SERVED                    | CB    | P | N  | PHASE A (VA)     | PHASE B (VA)          | PHASE C (VA) | N  | P    | CB | LOAD SERVED | CKT                            |    |
| 1   |                                |       |   |  | 14756            | 11257                 |              |  |      |    |             | 2                              |    |
| 3   | 2L2                            | 150 A | 3 |  |                  | 14619                 | 12947        |  |      |    | 150 A 2L3   | 4                              |    |
| 5   |                                |       |   |  |                  |                       |              |  |      |    |             | 6                              |    |
| 7   | Receptacle DIRECTOR 233        | 20 A  | 1 |  | 900              | 6280                  |              |  |      |    |             | 8                              |    |
| 9   | Receptacle OFFICE 234          | 20 A  | 1 |  |                  | 900                   | 3240         |  |      | 3  | 100 A 2L4   | 10                             |    |
| 11  | Receptacle OFFICE 237          | 20 A  | 1 |  |                  |                       | 900          | 4280   |      | 1  | 20 A        | Receptacle OFFICE 232          | 12 |
| 13  | Receptacle OFFICE 246          | 20 A  | 1 |  | 900              | 900                   |              |  |      | 1  | 20 A        | Receptacle OFFICE 235          | 14 |
| 15  | Receptacle OFFICE 250          | 20 A  | 1 |  |                  | 900                   | 900          |  |      | 1  | 20 A        | Receptacle OFFICE 239          | 16 |
| 17  | Receptacle OFFICE 253          | 20 A  | 1 |  |                  |                       | 900          | 900  |      | 1  | 20 A        | Receptacle OFFICE 248          | 18 |
| 19  | Receptacle WORKROOM 255        | 20 A  | 1 |  | 900              | 900                   |              |  |      | 1  | 20 A        | Receptacle OFFICE 245          | 20 |
| 21  | Receptacle CORRIDOR 247        | 20 A  | 1 |  |                  | 1260                  | 900          |  |      | 1  | 20 A        | Receptacle OFFICE 252          | 22 |
| 23  | Receptacle OFFICE 245          | 20 A  | 1 |  |                  |                       |              | 900  | 1000 | 1  | 20 A        | Receptacle WORKROOM 255        | 24 |
| 25  | Receptacle COUNTY MANAGER...   | 20 A  | 1 |  | 900              | 900                   |              |  |      | 1  | 20 A        | Receptacle OFFICE 251          | 26 |
| 27  | Receptacle FILE / WORKROOM 230 | 20 A  | 1 |  |                  | 720                   | 900          |  |      | 1  | 20 A        | Receptacle OFFICE 249          | 28 |
| 29  | Receptacle OFFICE 226          | 20 A  | 1 |  |                  |                       |              | 900  | 900  | 1  | 20 A        | Receptacle OFFICE 240          | 30 |
| 31  | Receptacle OFFICE 222          | 20 A  | 1 |  | 900              | 1000                  |              |  |      | 1  | 20 A        | Receptacle FILE / WORKROOM 230 | 32 |
| 33  | Receptacle ASSISTANT COUNTY... | 20 A  | 1 |  |                  | 720                   | 900          |  |      | 1  | 20 A        | Receptacle OFFICE 229          | 34 |
| 35  | Receptacle OFFICE 220          | 20 A  | 1 |  |                  |                       | 720          | 900  |      | 1  | 20 A        | Receptacle OFFICE 221          | 36 |
| 37  | BOILER B-1                     | 20 A  | 1 |  | 1560             | 720                   |              |  |      | 1  | 20 A        | Receptacle RECEPTION 224       | 38 |
| 39  | BOILER B-2                     | 20 A  | 1 |  |                  | 1560                  | 720          |  |      | 1  | 20 A        | Receptacle ASSISTANT COUNTY... | 40 |
| 41  | Lighting                       | 20 A  | 1 |  |                  |                       | 500          | 500  |      | 1  | 20 A        | ELEV. CAB LTG                  | 42 |
| TOTAL LOAD:   |                                |       |   |  | 42773 VA         | 41186 VA              | 34147 VA     |  |      |    |             |                                |    |
| TOTAL AMPS:   |                                |       |   |  | 365 A            | 352 A                 | 285 A        |  |      |    |             |                                |    |
| LOAD CLASSIFICATION   |                                |       |   | CONNECTED LOAD   | ESTIMATED DEMAND | PANEL TOTALS          |              |  |      |    |             |                                |    |
| HVAC  |                                |       |   | 13520 VA   | 13520 VA         | TOTAL LOAD: 119106 VA |              |  |      |    |             |                                |    |
| Lighting  |                                |       |   | 1645 VA  | 2056 VA          | DEMAND FACTOR: 68.15% |              |  |      |    |             |                                |    |
| Motor   |                                |       |   | 1041 VA  | 1161 VA          | DEMAND LOAD: 78121 VA |              |  |      |    |             |                                |    |
| Receptacle  |                                |       |   | 85960 VA   | 47980 VA         | DEMAND AMPS: 217 A    |              |  |      |    |             |                                |    |
| Power   |                                |       |   | 4820 VA  | 4820 VA          |                       |              |  |      |    |             |                                |    |
| HEATING   |                                |       |   | 3120 VA  | 2184 VA          |                       |              |  |      |    |             |                                |    |
| Electric Range - 3.5 kW to 8.75 kW  |                                |       |   | 8000 VA  | 6400 VA          |                       |              |  |      |    |             |                                |    |

| PANEL DESIGNATION: 1H1   |                            |      |   |  |              |              |              |  |      |    |             |                                 |       |    |
|--|----------------------------|------|---|--|--------------|--------------|--------------|--|------|----|-------------|---------------------------------|-------|----|
| LOCATION: ELECTRICAL 135<br>SUPPLY FROM: MDP<br>MOUNTING: Surface<br>ENCLOSURE: Type 1 |                            |      |   | VOLTAGE RATING: 480/277 Wye<br># OF PHASES: 3<br># OF WIRES: 4<br>SE RATED: NO |              |              |              | MAIN CIRCUIT BREAKER: NO<br>BREAKER RATING: N/A<br>BUS RATING: 100 A<br>NEUTRAL RATING: 100%<br>MINIMUM KAIC: 42 |      |    |             |                                 |       |    |
| PANEL NOTES:   |                            |      |   |  |              |              |              |  |      |    |             |                                 |       |    |
| CKT  | LOAD SERVED                | CB   | P | N  | PHASE A (VA) | PHASE B (VA) | PHASE C (VA) | N  | P    | CB | LOAD SERVED | CKT                             |       |    |
| 1  |                            |      |   |  |              | 2668         |              |  |      | 1  | 20 A        | Lighting DIRECTOR 121           | 2     |    |
| 3  |                            |      |   |  |              |              | 1787         |  |      | 1  | 20 A        | Lighting DIRECTOR 116           | 4     |    |
| 5  |                            |      |   |  |              |              |              | 936  |      | 1  | 20 A        | TU-IS-04, 05, 06                | 6     |    |
| 7  | Lighting                   | 20 A | 1 |  | 1016         | 480          |              |  |      | 1  | 20 A        | TU-IN-17, 18, 19                | 8     |    |
| 9  | Lighting YOUTH PROGRAM 137 | 20 A | 1 |  |              |              | 2904         | 2955   |      | 1  | 20 A        | Lighting FRONT PORCH 118        | 10    |    |
| 11   | INVERTER INV1              | 20 A | 1 |  |              |              |              | 4026   | 1036 | 1  | 20 A        | TU-IS-07, 08, 09, 10            | 12    |    |
| 13   | TU-IN-11,12,13,14          | 20 A | 1 |  | 760          | 490          |              |  |      | 1  | 20 A        | TU-IN-01, 02, 03, 04            | 14    |    |
| 15   | TU-IS-01, 02, 03, 10       | 20 A | 1 |  |              |              | 570          | 673  |      | 1  | 20 A        | TU-IN-05, 06, 07, 08            | 16    |    |
| 17   | TU-IN-09,10,15,16          | 20 A | 1 |  |              |              |              | 1050   |      |    |             | 18                              |       |    |
| 19   | Spare                      | 20 A | 1 | --   | 0            |              |              |  |      |    |             | 20                              |       |    |
| 21   | Spare                      | 20 A | 1 | --   | 0            |              |              |  |      |    |             | 22                              |       |    |
| 23   | Spare                      | 20 A | 1 | --   |              |              | 0            | 2280   |      | 1  | 20 A        | Lighting LARGE TRAINING ROOM... | 24    |    |
| 25   | Spare                      | 20 A | 1 | --   | 0            | 259          |              |  |      | 1  | 20 A        | Lighting                        | 26    |    |
| 27   | Spare                      | 20 A | 1 | --   |              | 0            | 2310         |  |      | 1  | 20 A        | Other                           | 28    |    |
| 29   | Spare                      | 20 A | 1 | --   |              |              |              | 0  | 0    | -- | 1           | 20 A                            | Spare | 30 |
| 31   | Spare                      | 20 A | 1 | --   | 0            | 0            |              |  |      | -- | 1           | 20 A                            | Spare | 32 |
| 33   | Spare                      | 20 A | 1 | --   |              | 0            | 0            |  |      | -- | 1           | 20 A                            | Spare | 34 |
| 35   | Spare                      |      |   |  |              |              |              |  |      |    |             |                                 |       |    |

