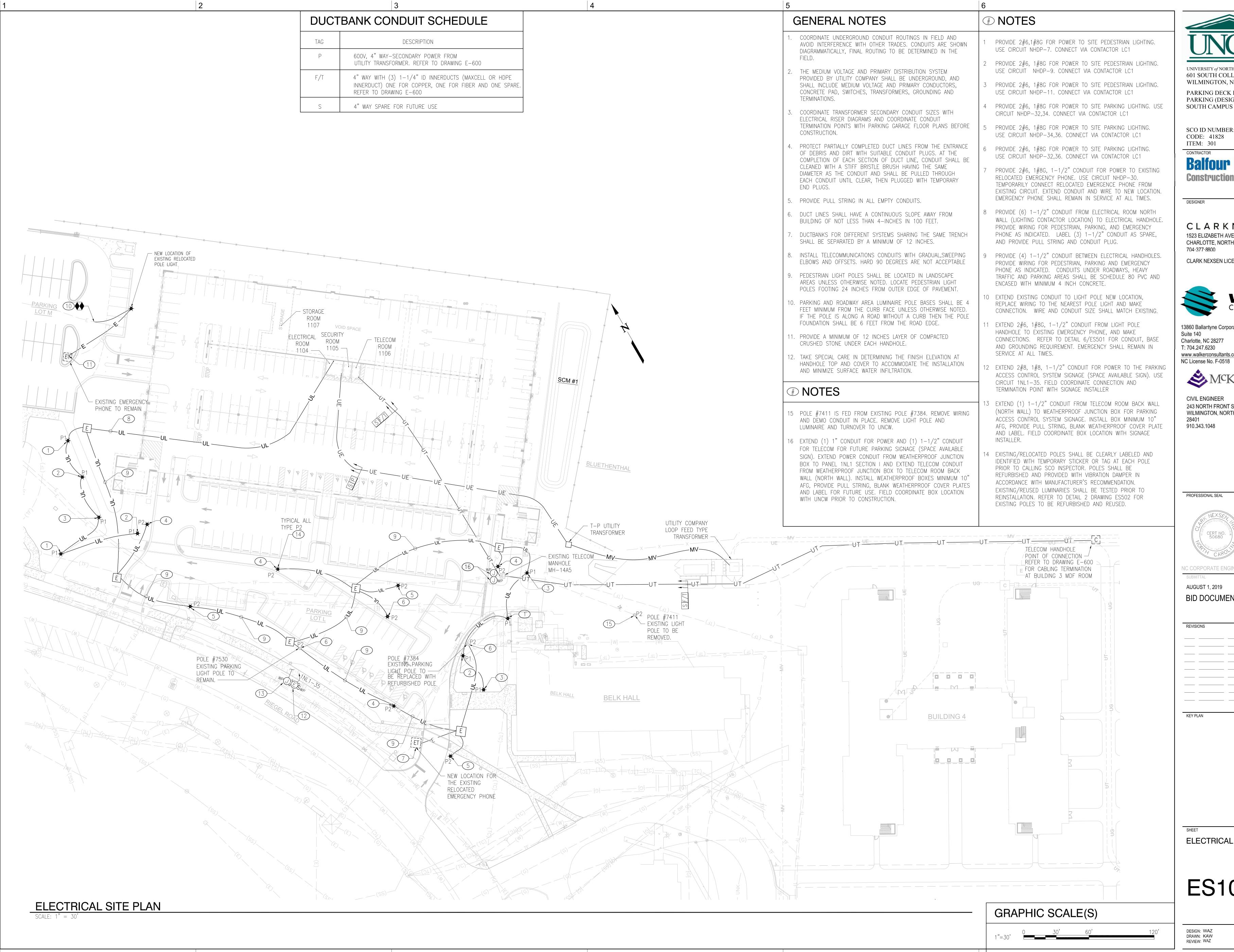
| 1 | | 2 | | 3 OTDIO AL OYAROL LEGEND | 4 | 5 | | NOTEO | |
|----------------------------------|--------------------|---|---------------------------|--|------------------|--|---|---|---|
| | | | | CTRICAL SYMBOL LEGEND | | | GENERAL | NOTES | |
| | SYMBOL 1 | MOTE REFERENCE NUMBER. | SYMBOL | SECURITY | SYMBOL | TELECOM DEVICE OUTLETS | 1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF D | DEVICES ONLY. | T IN TOTAT |
| | ELECT | | | CEILING MOUNTED SECURITY CAMERA . PELCO SARIX MODEL #IMP221-1ES. | | TELECOMMUNICATIONS SCOPE NOTES: 1. FURNISH AND INSTALL ALL TELECOM NETWORK EQUIPMENT, JACKS. | 2. TERMINALS/LUGS SHALL BE 60/75 DEGREE RATED. | | |
| | ROOM 101 | TYPICAL ROOM NAME AND NUMBER FOR COMMON SPACES. | c | COMPATIBLE WITH LENEL 7.2 SOFTWARE VERSION. PROVIDE WITH PENDANT MOUNTING KIT AND CONDUIT REQUIRED TO LOCATE CAMERA | | FACEPLATES, PATCH PANELS, CABLING, CABLE TERMINATIONS, AND PERFORM TESTING. TELECOMMUNICATIONS CABINET'S UPS WILL BE | 3. LIGHT SWITCHES SHALL BE MOUNTED A MINIMUM OF 6" FROM EDGE OF DOOR FRA | ME, MAXIMUM OF 12". FOR EXCEPTIONS, CONTACT ARCHITECT PRIOR TO | |
| | 101 | INDICATES DETAIL NUMBER | | LENS TO INVERTED TEES HEIGHT OF DECK STRUCTURE. REFER TO DETAIL 10, DRAWING E-500. | | PROVIDED BY UNCW-IT. | INSTALLATION. | | UNIVERSITY of NORTH CAROLINA WILMINGTON 601 S COLLEGE ROAD |
| | | INDICATES DETAIL NUMBER | | ACCESS CONTROL DEVICES | | 2. INFRASTRUCTURE INCLUDING JUNCTION BOXES, BLANK PLATES, CONDUIT RACEWAY, CONDUIT BUSHINGS, EQUIPMENT GROUND BARS, | 4. WHERE A HOMERUN IS SHOWN, THE CIRCUIT SHALL BE INSTALLED IN A DEDICATED HOMERUN IS NOT SHOWN, COMBINE CIRCUITS IN ACCORDANCE WITH THE NEC AS | , | WILMINGTON, NORTH CAROLINA 2840 |
| | E-500 | DETAIL REFERENCE BUBBLE | | ACCESS CONTROL SCOPE: | | AND OTHER COMPONENTS OF THE TELECOMMUNICATIONS PATHWAY SYSTEM SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. | SINGLE PHASE CIRCUITS SHALL HAVE A DEDICATED NEUTRAL. | | PARKING DECK II AND SURFACE PARKING (DESIGN-BUILD) |
| | | INDICATES SHEET ON WHICH DETAIL IS LOCATED | | CONTRACTOR TO PROVIDE SYSTEM PANELS, POWER SUPPLIES, MISCELLANEOUS ELECTRONIC EQUIPMENT, CONDUIT | | DATA OUTLET DOV MOUNTED 4LC!! AFF LION DDOVIDE TWO CANC A 4/0!! | A MAXIMUM OF THREE 20A, 1-POLE BRANCH CIRCUITS MAY BE COMBINED IN A CIN A SINGLE RACEWAY. SHARING NEUTRAL NOT ALLOWED. | COMMON HOMERUN FOR A TOTAL OF SIX CURRENT CARRYING CONDUCTORS | SOUTH CAMPUS - 4965 RIEGEL ROAD |
| | | | | INFRASTRUCTURE, LINE AND LOW VOLTAGE POWER AND DATA CABLING FOR A COMPLETE SYSTEM. | • | DATA OUTLET BOX, MOUNTED 1'-6" AFF, UON. PROVIDE TWO-GANG, 2-1/8" DEEP x 4-11/16" BOX AND GASKETED STAINLESS STEEL COVERPLATE WITH 1" | DRANGU OIDOUTO LABOER TUAN COA QUALL DE OFRARATELY LIOMERUN TO RAN | NEL. | |
| | | | | 2. CONTRACTOR TO PULL ALL WIRE, CABLING AND MAKE ALL TERMINATIONS. | | CONDUIT FROM OUTLET LOCATION SHOWN TO TELECOM ROOM. VOICE OUTLET BOX, MOUNTED 1'-6" AFF, UON PROVIDE TWO-GANG, 2-1/2" | 5. CONDUCTORS FOR BRANCH CIRCUITS SHALL BE SIZED TO PREVENT VOLTAGE DRO | OP EXCEEDING 3% AT THE FARTHEST POINT. | SCO ID NUMBER: 18-19226-01A CODE: 41828 |
| | | | | 3. OWNER TO PROVIDE ALL NETWORK SWITCHES AND NETWORK EQUIPMENT. ASIGN SWITCH PORTS AND IP ADDRESSES. | ∇ | DEEP x 4-11/16" SQUARE BOX AND GASKETED STAINLESS STEEL COVERPLATE WITH 1" CONDUIT FROM OUTLET LOCATION SHOWN TO | 6. EXTERIOR UNDERGROUND ELECTRICAL BRANCH CIRCUITS SHALL UTILIZE MINIMUN OTHERWISE NOTED. | ONDUCTOR SIZE #10 AWG AND MINIMUM CONDUIT SIZE 1" UNLESS | ITEM: 301 |
| | | | | 4. OWNER TO SETUP STATUS LEVELS, DOOR SCHEDULE, AND ASSIGN ACCESS AS APPROPRIATE. | F | TELECOM ROOM. | 7. THE UPPER CASE SUFFIX "SC" AFTER A BRANCH CIRCUIT HOMERUN DESIGNATION | INDICATES A "SDUT CIDCUIT" WILLIGH MEANS THE HOMEDHN ODICINATES | CONTRACTOR |
| | | | CR | 2-1/8" DEEP SINGLE-GANG JUNCTION BOX WITH PLASTER RING FOR CARD READ | ER. EV | EMERGENCY PHONE. INSTALL WALL MOUNTED EMERGENCY UNIT AT LOCATIONS INDICATED ON DRAWINGS SO THAT PUSH BUTTON IS 46" ABOVE | FROM MULTIPLE LOCATIONS. INSTALL ONLY ONE CONDUCTOR PER CIRCUIT BREAD SHALL BE MADE IN A SEPARATE SPLICE BOX OUTSIDE THE PANELBOARD ENCLOSE. | KER POLE. SPLICES NECESSARY TO COMPLY WITH THIS REQUIREMENT | Balfour Beatty |
| | | | | MOUNT 42" AFF MEASURED TO CENTER OF BOX. | | FINISHED FLOOR. UNIT SHALL BE FED FROM BOTTOM. COORDINATE SYSTEM CONNECTION WITH EQUIPMENT MANUFACTURER. TEST AND VERIFY SYSTEM | | JNE. | Construction |
| E | | | | | | OPERATION PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE COMPLETE WALL MOUNT CALL 24 WIRELESS CALL BOX SYSTEM INCLUDING | 8. PROVIDE HOUSEKEEPING PADS FOR INDOOR FLOOR MOUNTED EQUIPMENT. | LEND DEFORE ANY CARLING IO INOTALLED | |
| | Λ | LIGHTING LUMINAIRE TYPE, SEE LUMINAIRE SCHEDULE ON DRAWING E-700. | | WIRING, CONDUIT AND RACEWAY | | STROBE AND DECALS. CALL BOX - MODEL C24-10A-MU-UHF AC MARK III WIRELESS. STROBE/LOCATOR LIGHT - MODEL C24-000-568, T-MOUNT - FLAT | | | DESIGNER |
| | 0 | LIGHT EMITTING DIODE (LED) LIGHTING FIXTURE.—(I INDICATES BRACKET, | | BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT RUN CONCEALED IN PARKING GARAGE STRUCTURE. REFER TO SPECIFICATIONS FOR CONDUIT | | SURFACE DECAL, BOX FRONT 10" - C24-000-080. DECAL, SIDE ASSISTANCE C24-000-092. PHONE SUPPLIER SHALL PROVIDE SET-UP, PROGRAMMING AND | 10. UNLESS OTHERWISE NOTED ON THE ELECTRICAL CONTRACT DRAWINGS OR SPEC PLANS. | IFICATIONS, MOUNTING HEIGHTS SHALL BE AS NOTED ON ARCHITECTURAL | |
| | | WALL MOUNTED FIXTURES). | | TYPE REQUIRED. REFER TO PANEL SCHEDULES FOR CONDUIT AND WIRE SIZES, U.O.N. | | TESTING TO INTERFACE WITH EXISTING UNCW C24 TEMPLATE. MOUNT STROBE / LOCATOR LIGHT ABOVE CALLBOX AT 96" AFF TO THE CENTER. | 11. WHEN SHOWN ADJACENT TO ELECTRICAL DEVICES THE FOLLOWING SUBSCRIPTS | SHALL BE DEFINED AS FOLLOWS: | CLARKNEXSEN |
| | 0 0 | LED LIGHTING FIXTURE (— INDICATES BRACKET, WALL MOUNTED FIXTURES). | | HOMERUNS TO PANEL. PANEL AND BRANCH CIRCUIT AS INDICATED. | | SITE | WP = WEATHERPROOF +72" = MOUNTING HEIGHT IN INCHES MEASURED <u>TO TOP</u> OF DEVICE, UON. | | 1523 ELIZABETH AVENUE, SUITE 300 CHARLOTTE, NORTH CAROLINA 28204 |
| | | EMERGENCY LED LIGHTING FIXTURE (H. INDICATES BRACKET, WALL | CKT | SUFFIXES, WHEN USED: (SC)- SPLIT CIRCUIT. CIRCUIT HAS MULTIPLE HOMERUN | EXISTING PROVIDE | | 12. CONDUITS SHALL CONTAIN A GREEN COLORED EQUIPMENT GROUNDING CONDUCT | FOR PROVIDING CONTINUITY TO BOXES, DEVICES AND LUMINAIRES. | 704·377·8800 |
| | | MOUNTED FIXTURES). | OK1 | DESIGNATIONS. THE ELECTRICAL CONTRACTOR SHALL INSTALL ONLY ONE CONDUCTOR PER CIRCUIT BREAKER POLE. | | UTILITY PADMOUNTED TRANSFORMER, T-P INDICATES BUILDING TRANSFORMER IS FEEDING. | 13. AT STAIRS AND ELEVATOR TOWERS RUN CONDUITS BELOW SLAB AND FROM BOTT | , | CLARK NEXSEN LICENSE NUMBER: C-1028 |
| | ⊗ ⊗ + | LED EXIT LIGHTING FIXTURE. ARROW, WHEN USED, INDICATES DIRECTION. (☐ INDICATES BRACKET, WALL MOUNTED FIXTURES). FILLED IN QUADRANT(s) OF SYMBOL | | SPLICES NECESSARY TO COMPLY WITH THIS REQUIREMENT SHALL BE MADE IN A SEPARATE SPLICE BOX OUTSIDE THE | | UTILITY PADMOUNTED SWITCH | UNLESS OTHERWISE NOTED. DO NOT ROUTE VERTICAL CONDUIT RISERS THROUG | | |
| | | INDICATES NUMBER AND ORIENTATION OF ILLUMINATED FACES. CONNECT EXIT LIGHT FIXTURE AHEAD OF LOCAL CONTROL. | | PANELBOARD ENCLOSURE. | SV | V | 14. PROVIDE CONDUIT EXPANSION FITTINGS FOR CONDUITS THAT CROSS EXPANSION | | S MALVED |
| | | FIXTORE MILAD OF LOOPE CONTINUE. | | | | ELECTRICAL HANDHOLE. REFER TO HANDHOLE DETAIL DRAWING ES501. | 15. DO NOT ENCASE CONDUIT IN SLAB ON GRADE. INSTALL CONDUIT BELOW SLAB ON | | WALKER CONSULTANTS |
| | S | SINGLE POLE SWITCH. | | MISCELLANEOUS TELECOMMUNICATIONS EQUIPMENT | | TELECOMMUNICATIONS HANDHOLE. | 16. PROVIDE HOT DIPPED GALVANIZED STEEL GUARDS AROUND JUNCTION BOXES, CC BUMPER DAMAGE. | NDUITS AND OTHER EQUIPMENT WHICH MAY BE EXPOSED TO POSSIBLE | |
| | S3 | THREE-WAY SWITCH WALL MOUNT OCCUPANCY SENSOR SWITCH | | GROUND BUSBAR MOUNTED 18" AFF MEASURED TO TOP. SEE DETAIL 5 ON | | UNDERGROUND ELECTRICAL BRANCH CIRCUIT. PROVIDE 1-1" PVC | 17. FERROUS RACEWAYS, BOXES, CABINETS, ELBOWS, COUPLINGS, FITTINGS, SUPPO | , | 13860 Ballantyne Corporate Place Suite 140 |
| | Sos Sk | KEYED SWITCH. | TMGB | DRAWING E-500 FOR CONFIGURATION REQUIREMENTS AND DETAIL 3 ON DRAIWING E-600 FOR CONNECTION. | | CONDUIT, UON. INSTALL 30" BELOW GRADE. | ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED, AND SHALL BE SUITABLY PR COMPLIANCE WITH NEC AND SPECIFICATION SECTION 260533. | , | Charlotte, NC 28277 T: 704.247.6230 |
| | ST | SINGLE-POLE TIMER SWITCH WITH 2 MINUTE FLICKER WARNING PRIOR TO TURN OFF. ADJUSTABLE FROM 1 MINUTE TO 18 HOURS. NSI INDUSTRIES #SS20F. | | GROUND BUSBAR MOUNTED 18" AFF MEASURED TO TOP. SAME AS TMGB | —MV — | UNDERGROUND MEDIUM VOLTAGE ELECTRICAL CABLE BY UTILITY COMPANY. | 18. SURFACE MOUNTED BOXES, RACEWAYS, AND FITTINGS SHALL BE MOUNTED SO THE | HAT THERE IS AT LEAST A 1/4 INCH AIRSPACE BETWEEN IT AND THE | www.walkerconsultants.com NC License No. F-0518 |
| | ŚŚ | TWO-SINGLE POLE SWITCHES FOR DUAL LEVEL LIGHTING CONTROL. SEE | SGB | EXCEPT 1/4" x 4" x 12". REFER TO DETAIL 5 ON DRAWING E-500 FOR CONFIGURATION REQUIREMENTS AND DETAIL 3 ON DRAWING E-600 FOR | —UE— | UNDERGROUND ELECTRICAL DUCTBANK. REFER TO DUCTBANK DETAIL DRAWING ES501. | CONCRETE WALL OR CEILING. | | A |
| D | \$3 \$3 | PLANS FOR SWITCHING ARRANGEMENT. TWO THREE-WAY SWITCHES, FOR DUAL LEVEL LIGHTING CONTROL. | | CONNECTION. | —UT— | UNDERGROUND TELECOMMUNICATIONS DUCTBANK. REFER TO DUCTBANK | | | S MCKIM&CREEL |
| | 5353 | SEE PLANS FOR SWITCHING ARRANGEMENT. | | 3/4" NON-FIRE RATED PLYWOOD HORIZONTALLY COVERED. PLYWOOD SHALL BE VOID FREE AND FINISHED ON ONE SIDE. MOUNTED 4 INCHES | —UL— | DETAIL DRAWING ES501. UNDERGROUND LIGHTING DUCTBANK. PROVIDE 1-1-1/2" PVC CONDUIT, UON. | PERFORMANCE REQUI | REMENTS | CIVIL ENGINEER |
| | ©\$ | CEILING MOUNTED OCCUPANCY SENSOR. SENSORS SHALL BE WIRED IN | | ABOVE FINISH FLOOR AROUND THE TOTAL PERIMETER OF THE ROOM. THE NON-FIRE RATED PLYWOOD HAS AT LEAST TWO COATS OF FIRE RESISTANT | E B | INSTALL 30" BELOW GRADE. | A. SEISMIC-RESTRAINT LOADING: | | 243 NORTH FRONT STREET WILMINGTON, NORTH CAROLINA |
| | | PARALLEL IN AREAS CONTAINING MULTIPLE SENSORS. SUBSCRIPTS, WHEN USED, INDICATE THE FOLLOWING: | | WHITE PAINT. PAINT TO BE APPLIED ON ALL SIX SIDES WITH A MINIMUM OF TWO COATS. THE PLYWOOD SHALL BE MOUNTED AT EIGHT (8) FEET HIGH | | POLE MOUNTED PARKING DECK LIGHTING FIXTURE. SUBSCRIPT "E" INDICATES FIXTURE IS CONNECTED TO EMERGENCY CIRCUIT. SUBSCRIPT | 1. SITE CLASS AS DEFINED IN THE IBC: AS INDICATI 2. ASSIGNED SEISMIC USE GROUP OR BUILDING CA | | 28401 910.343.1048 |
| | | (BLANK) = DUAL TECHNOLOGY (INFRARED AND ULTRA-SONIC) PI = VACANCY SENSOR, PASSIVE INFRARED | | AND FOUR (4) FEET WIDE AROUND THE ENTIRE TELECOMMUNICATIONS ROOM. PROVIDE SUFFICIENT QUANTITY OF PLYWOOD TO COVER ALL | -₩ | INDICATES FIXTURE TYPE. SEE LUMINAIRE SCHEDULE ON DRAWING E-700. POLE MOUNTED SITE LIGHTING FIXTURE. SUBSCRIPT INDICATES FIXTURE | INDICATED ON STRUCTURAL DRAWINGS. A. COMPONENT IMPORTANCE FACTOR: IN AC | 301.27.11.02.11.11.11.03.21.1 | |
| | 69 | V = VACANCY SENSOR, DUAL TECHNOLOGY | | WALLS OF THE ROOM COMPLETELY AS INDICATED ON DETAIL 3 DRAWING | /`P | TYPE. SEE LUMINARE SCHEDULE ON DRAWING E-700 AND POLE DETAILS DRAWING ES502. | B. COMPONENT RESPONSE MODIFICATION FACTOR: IN A | ACCORDANCE WITH ASCE7. | |
| | (US) (PC) | CEILING MOUNTED DAYLIGHT HARVESTING CONTROL SENSOR PHOTOCELL | | E-101. CUT TO FIT ROOM PERIMETER AS REQUIRED. | † † | DUCTBANK DETAIL. REFER TO DRAWING ES501 FOR DUCTBANK | 3. DESIGN SPECTRAL RESPONSE ACCELERATION A 4. DESIGN SPECTRAL RESPONSE ACCELERATION A | \ | |
| | _ | | | | | CONFIGURATION AND TYPICAL DETAIL AND TO DRAWING ES101 FOR DUCTBANK CONDUIT SCHEDULE. | B. LIFE SAFETY SYSTEM: | | |
| | LC | LIGHTING CONTACTOR FOR CONTROL OF EXTERIOR LIGHTING AND SIGN LIGHTING. SEE DETAIL 1 ON DRAWING E-700. | | PARKING ASSIST SYSTEM | _ | POINT OF CONNECTION NEW-TO-EXISTING. PROVIDE MATERIAL AND | 1. LIFE-SAFETY LIGHTING, EMERGENCY LIGHTING F COMPONENT IMPORTANCE FACTOR OF 1.5 SHA | | |
| | ГС | TIMECLOCK OFF DETAIL 4 ON DRAWING F 700 | POSU | SURFACE CEILING MOUNTED POWER SUPPLY FOR PARKING ACCESS CONTROL SYSTEM WITH EQUIPMENT POWER CONNECTION AS NOTED ON | ◆ | LABOR REQUIRED TO MAKE CONNECTION. | SYSTEMS WILL BE ASSIGNED AN IP OF 1.0. | | PROFESSIONAL SEAL |
| | | TIMECLOCK. SEE DETAIL 1 ON DRAWING E-700. | (E) | PLANS. PRORIDE (1) 1-1/4" EMPTY CONDUIT HOMERUN DOWN TO PARKING ACCESS CONTROL SYSTEM SERVER IN TELECOM ROOM. POWER SUPPLY, | EI | EXISTING RELOCATED EMERGENCY TELEPHONE. REFER TO DETAIL | C. LIGHT POLES: 1. BASED ON AASHTO LTS-5 SPECIFICATION AND A | SCE 7-05. THE WIND SPEED IN | PROFESSIONAL SEAL |
| | | | | SYSTEM COMPONENTS AND COMMUNICATION CABLING BY SYSTEM VENDOR. COORIDNATE EQUIPMENT REQUIREMENTS AND FINAL LOCATION | | 6/ES501 FOR BASE, CONDUIT AND OTHER REQUIREMENTS. | WILMINGTON, NC IS 131 MPH. | OGE 7-00, THE WIND OF EED IN | NEXSEN DEFINE THE CARO |
| | | | | WITH SYSTEM'S VENDOR PRIOR TO CONSTRUCTION. | | | | | CFRI NO. SEAL |
| | | | | | | | | | CERT NO. 50680 SEAL 027786 |
| | | | | EQUIPMENT CONNECTIONS | | | | | PA CARO DE 2017 OF OIL |
| C | | POWER DEVICES | | | | | REFER TO SPECIFICATION SECTION 012300 AND DRAW | /ING G001 FOR PROJECT ALTERNATES | 17:11:49-04'00' NC CORPORATE ENGINEERING LICENSE #C-1028 |
| | | WHEN USED: | E | EQUIPMENT CONNECTION. SEE EQUIPMENT CONNECTION SCHEDULE ON DRAWING E-700 FOR CONNECTION REQUIREMENTS. | | | ABBREVIAT | IONS | SUBMITTAL |
| | | WP = WEATHERPROOF RECEPTACLE. RECEPTACLE SHALL BE LISTED | | STANDARD SIZE WALL OR CEILING MOUNTED JUNCTION BOX, UNLESS | | | A AMPERE | KVA KILOVOLT AMPERE | AUGUST 1, 2019 |
| | | WEATHER-RESISTANT TYPE AND PROVIDED WITH WHILE-IN-USE EXTRA DUTY RATED COVER. | | OTHERWISE NOTED. | | | AF AMPERE FRAME AFF ABOVE FINISHED FLOOR | LTG LIGHTING MC METAL CLAD CABLE | BID DOCUMENTS |
| | - | SINGLE RECEPTACLE, 20A, 125 VAC, MOUNT AT 18" AFF, UON. | □ 3P 30 NEMA 3R, L | UNFUSED DISCONNECT SWITCH. RATINGS AND CHARACTISTICS AS INDICATED ON EQUIPMENT SCHEDULE. WHEN USED: | | | AFG ABOVE FINISHED GRADE AT AMPERE TRIP | MCA MINIMUM CIRCUIT AMPACITY MCB MAIN CIRCUIT BREAKER | |
| | ⊕ | WALL MOUNTED DUPLEX CONVENIENCE RECEPTACLE, 20A, 125 VAC. MOUNT AT 18" AFF, UON. | INLIVIA OR, L | NEMA 3R= NEMA 3R ENCLOSURE REQUIRED L = PERMANENT PROVISIONS FOR LOCKING DISCONNECT IN OPEN | | | ATL ACROSS THE LINE ATS AUTOMATIC TRANSFER SWITCH | MGMT MANAGEMENT MLO MAIN LUG ONLY | REVISIONS |
| | ⊕- | WALL MOUNTED DUPLEX CONVENIENCE RECEPTACLE WITH INTEGRAL GROUND FAULT PROTECTION, 20A, 125 VAC. MOUNT AT 18" AFF, UON. | | POSITION. 3P = NUMBER OR POLES | | | AWG AMERICAN WIRE GAUGE BG BELOW GRADE | MOCP MAXIMUM OVERCURRENT PROTECTION MSB MAIN SWITCHBOARD | · |
| | - | WALL MOUNTED DOUBLE DUPLEX CONVENIENCE RECEPTACLE, 20A, 125 VAC, MOUNT AT 18" AFF, UON. | | 30 = DEVICE RATING | | | BK/BD BACKBOARD BLDG BUILDING | MT MOUNT MTD MOUNTED | |
| | $lackbox{}$ | WALL MOUNTED SPECIAL PURPOSE RECEPTACLE. DESCRIPTION AS INDICATED ON PLANS, MOUNT AT 18" AFF, UON. | | NF = NON-FUSED | | | BRKR BREAKER B.S. BUSSED SPACE | MTG MOUNTING MV MEDIUM VOLTAGE | |
| | EVC | ELECTRIC VEHICLE CHARGER, 208V, 2-POLE, DUAL CONNECTOR PEDESTALS. PROVIDE | $2P = 3P = \frac{30}{20}$ | FUSED DISCONNECT SWITCH. RATINGS AND CHARACTISTICS AS INDICATED | | | C CONDUIT CATV CABLE TELEVISION | NAS NON-AUTOMATIC SWITCH NEC NATIONAL ELECTRICAL CODE | |
| | | WITH INTERNAL GROUND FAULT AND SURGE PROTECTION. ASSEMBLY SHALL BE SUITABLE FOR OUTDOOR INSTALLATION (NEMA 3R). PROVIDE WITH CELLULAR COMMUNICATION | NEMA 3R, L | ON EQUIPMENT SCHEDULE. WHEN USED: NEMA 3R= NEMA 3R ENCLOSURE REQUIRED NEMA 1 PROVIDIONS FOR LOCKING PROCESSING FOR LOCKING FOR LOCKING PROCESSING FOR LOCKING PROCESSING FOR LOCKING FOR LOCKING PROCESSING FOR LOCKING FOR LOCKI | | | CB CIRCUIT BREAKER CD CANDELA | NEU NEUTRAL NF NON-FUSED | |
| | | POWERCHARGE NETWORKED COMERCIAL ELECTRIC VEHICLE CHARGER, MODEL #P20-DPN. OR APPROVED EQUAL. DUAL STATION REQUIRES TWO FEEDS. | | L = PERMANENT PROVISIONS FOR LOCKING DISCONNECT IN OPEN POSITION. | | | CKT CIRCUIT CLG CEILING | NO NORMALLY OPEN OC ON CENTER | |
| | [EVC] _F | ELECTRIC VEHICLE CHARGER FUTURE CONNECTION. PROVIDE TWO WEATHER PROOF | | 3P = NUMBER OR POLES 30 = DEVICE RATING | | | CORR CORRIDOR CTLR CONTROLLER | P POLE PB PULL BOX | KEY PLAN |
| | F | JUNCTION BOXES, MOUNT SIDE BY SIDE AT 10" AFF. EXTEND 3/4" CONDUITS FROM EACH JUNCTION BOX TO PANEL 1NL1 SECTION II, PROVIDE PULL STRING, BLANK COVER PLATE AND | | 20 = FUSE RATING, OR "FPN" = FUSE PER NAMEPLATE | | | dBA DECIBELS ADJUSTED | PB PULL BOX PH PHASE PNL PANEL | |
| | | LABEL FOR "FUTURE ELECTRIC VEHICLE CHARGER". | | DISCONNECT SWITCH PROVIDED WITH EQUIPMENT. NEMA 1 ENCLOSURE | | | DISC DISCONNECT DIST. DISTRIBUTION DWG DRAWING | PSI POUNDS PER SQUARE INCH | |
| В | _ | DISTRIBUTION | | FOR INDOOR INSTALLATIONS, AND NEMA 3R ENCLOSURE FOR EXTERIOR INSTALLATIONS. | | | EB ELECTRONIC BALLAST | PVC POLY VINYL CHLORIDE QTY QUANTITY PECERTACLE | |
| _ | | PANELBOARD - 480Y/277V 3 PH, 4W. DASHED OUTLINE INDICATED REQUIRED WORKING SPACE CLEARANCE. SEE POWER RISER AND PANELBOARD | Sts | THERMAL SWITCH. HORSE POWER RATED. | | | EC EMPTY CONDUIT ECB ENCLOSED CIRCUIT BREAKER | RECEPT RECEPTACLE REQ'D REQUIRED RECEPTACLE RECEPTACLE RECEPTACLE RECEPTACLE RECEPTACLE | |
| | | SCHEDULES FOR SPECIFICS. MOUNTING HEIGHT SHALL BE 72" TO TOP OF PANELBOARD CAN. MOUNTING HEIGHTS SHALL BE CONSISTENT | | | | | E.F. EACH FACE ELEV. ELEVATOR | RMC RIGID METAL CONDUIT SC SPLIT CIRCUIT | |
| | | THROUGHOUT BUILDING. | | | | | EMER. EMERGENCY EMT ELECTRICAL METALLIC TUBING | SCO STATE CONSTRUCTION OFFICE SF SUPPLY FAN | |
| | | PANELBOARD - 208Y/120V 3 PH, 4W. DASHED OUTLINE INDICATED REQUIRED WORKING SPACE CLEARANCE. SEE POWER RISER AND PANELBOARD | | | | | EQ. EQUAL EQUIP EQUIPMENT | SGB SECURITY ROOM GROUND BAR S/N SOLID NEUTRAL | |
| 75 | Ц | SCHEDULES FOR SPECIFICS. MOUNTING HEIGHT SHALL BE 72" TO TOP OF PANELBOARD CAN. MOUNTING HEIGHTS SHALL BE CONSISTENT | | | | | E.W. EACH WAY FACU FIRE ALARM CONTROL UNIT | SPD SURGE PROTECTION DEVICE STD STANDARD | N N |
| | \/=. | THROUGHOUT BUILDING. | | | | | FLA FULL LOAD AMPS FLUOR FLUORESCENT | SW SWITCH SWBD SWITCHBOARD | SHEET |
| oodyFF | XFMR | PAD MOUNTED DRY-TYPE TRANSFORMER, U.O.N. 480 VOLT PRIMARY, 208Y/120V SECONDARY. KVA RATING AS INDICATED ON PLANS. | | | | | FTC FIRE TERMINAL CABINET GB GROUND BAR | TC TIME CLOCK TEL TELEPHONE | ELECTRICAL LEGEND, NOTES |
| 7_amc | | METER. | | | | | GEN GENERATOR GFI GROUND FAULT INTERRUPTER | TGB TELEPHONE TERMINAL GROUND BAR TMGB TELECOMMUNICATIONS MAIN GROUND BAR | AND ABBREVIATIONS |
| ж | SPD | SURGE PROTECTIVE DEVICE. | | | | | GFP GROUND FAULT PROTECTION GND GROUND | TTB TELEPHONE TERMINAL BOARD TV TELEVISION | |
| ing De | 1 | | | | | | GRS GALVANIZED RIGID STEEL HDG HOT DIPPED GALVANIZED | UL UNDERWRITER'S LABORATORIES, INC. UNCW UNIVERSITY OF NORTH CAROLINA WILMINGTON. | |
| √ Park | MGB | GROUNDING ELECTRODE SYSTEM. SEE DETAIL 1 ON DRAWING E-500. GROUND BUSBAR FOR CONNECTION TO BUILDING GROUNDING ELECTRODE | | | | | HP HORSEPOWER HT. HEIGHT | UPS UNINTERRUPTIBLE POWER SUPPLY UON UNLESS OTHERWISE NOTED | E-001 |
| ONO. | MGB | GROUND BUSBAR FOR CONNECTION TO BUIDLING GROUNDING ELECTRODE SYSTEM. MOUNT 18" AFF TO TOP. SEE DETAIL 6 ON DRAWING E-500 FOR CONFIGURATION REQUIREMENTS | | | | | ID INSIDE DIAMETER IMC INTERMEDIATE METAL CONDUIT | UT UNDERGROUND TELEPHONE V VOLTS | |
| 8 PM s/8112_ | | CONFIGURATION REQUIREMENTS. | | | | | IT INFORMATION TECHNOLOGY KAIC THOUSAND AMP SYMMETRICAL INTERRUPTING CAPACITY RMS | VAC VOLTS ALTERNATING CURRENT VDC VOLTS DIRECT CURRENT | |
| 1:01:0 Project | | GROUND TEST WELL. SEE DETAIL 3 ON DRAWING E-500. | | | | | KCMIL THOUSAND CIRCULAR MILS | W WIRE WP WEATHERPROOF | DESIGN: WAZ |
| 1/2019 Revit A | | CONNECTION TO GROUNDING ELECTRODE. SEE DETAILS 1 AND 2 DRAWING E-500. | | | | | | XFMR TRANSFORMER | DRAWN: KAW REVIEW: WAZ |
| ‰ Ü | | | | | | | | | |



UNIVERSITY of NORTH CAROLINA WILMINGTON 601 SOUTH COLLEGE ROAD WILMINGTON, NORTH CAROLINA 28403 PARKING DECK II AND SURFACE PARKING (DESIGN-BUILD) SOUTH CAMPUS - 4965 RIEGEL ROAD

SCO ID NUMBER: 18-19226-01A CODE: 41828

Balfour Beatty

CLARKNEXSEN 1523 ELIZABETH AVENUE, SUITE 300 CHARLOTTE, NORTH CAROLINA 28204

CLARK NEXSEN LICENSE NUMBER: C-1028



13860 Ballantyne Corporate Place www.walkerconsultants.com NC License No. F-0518

CIVIL ENGINEER 243 NORTH FRONT STREET WILMINGTON, NORTH CAROLINA

PROFESSIONAL SEAL

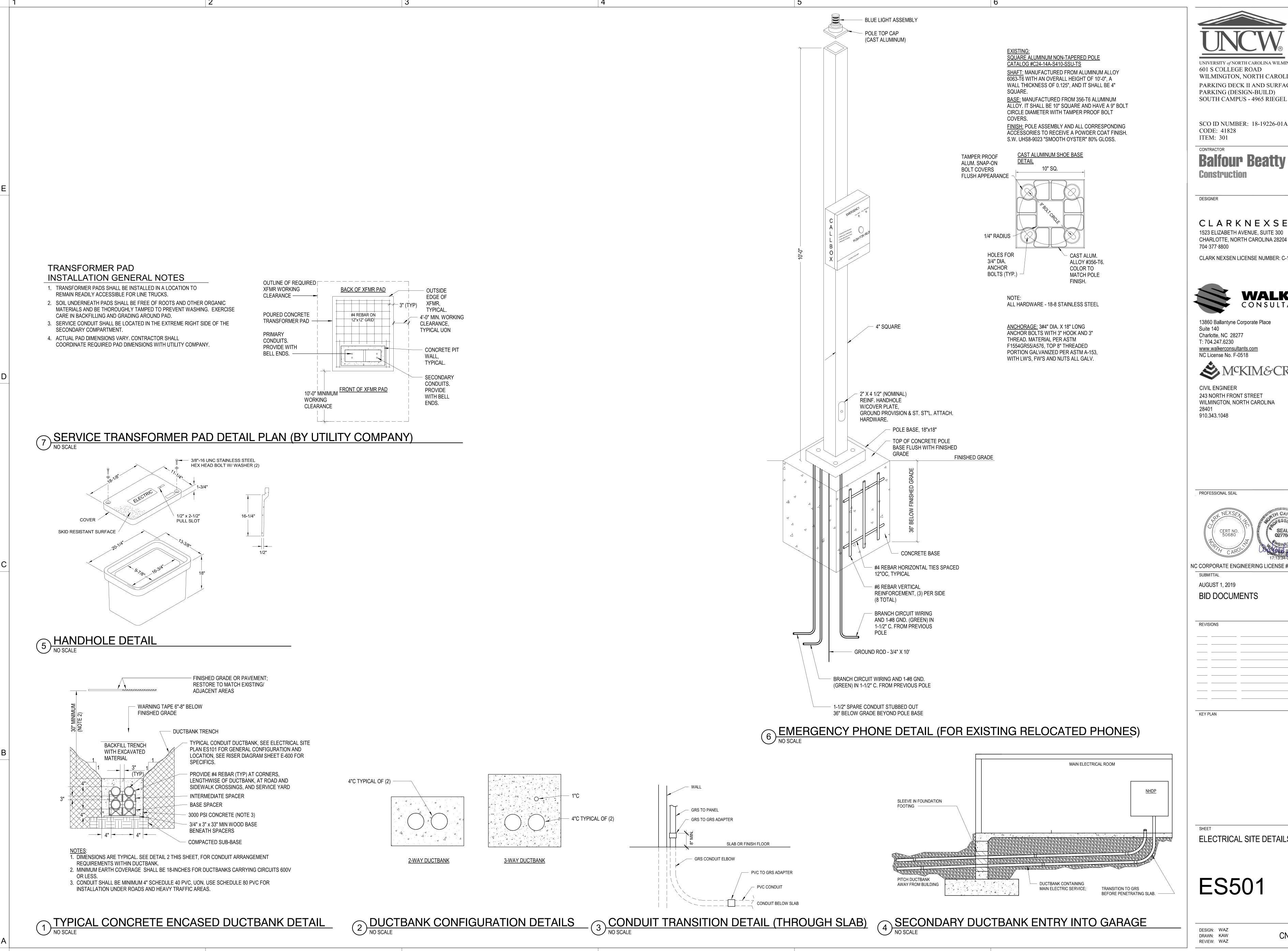


NC CORPORATE ENGINEERING LICENSE #C-1028

AUGUST 1, 2019 BID DOCUMENTS

ELECTRICAL SITE PLAN

ES101



UNIVERSITY of NORTH CAROLINA WILMINGTON 601 S COLLEGE ROAD WILMINGTON, NORTH CAROLINA 28403 PARKING DECK II AND SURFACE PARKING (DESIGN-BUILD) SOUTH CAMPUS - 4965 RIEGEL ROAD

SCO ID NUMBER: 18-19226-01A

Balfour Beatty

CLARKNEXSEN 1523 ELIZABETH AVENUE, SUITE 300

CLARK NEXSEN LICENSE NUMBER: C-1028



13860 Ballantyne Corporate Place www.walkerconsultants.com NC License No. F-0518

243 NORTH FRONT STREET WILMINGTON, NORTH CAROLINA



NC CORPORATE ENGINEERING LICENSE #C-1028

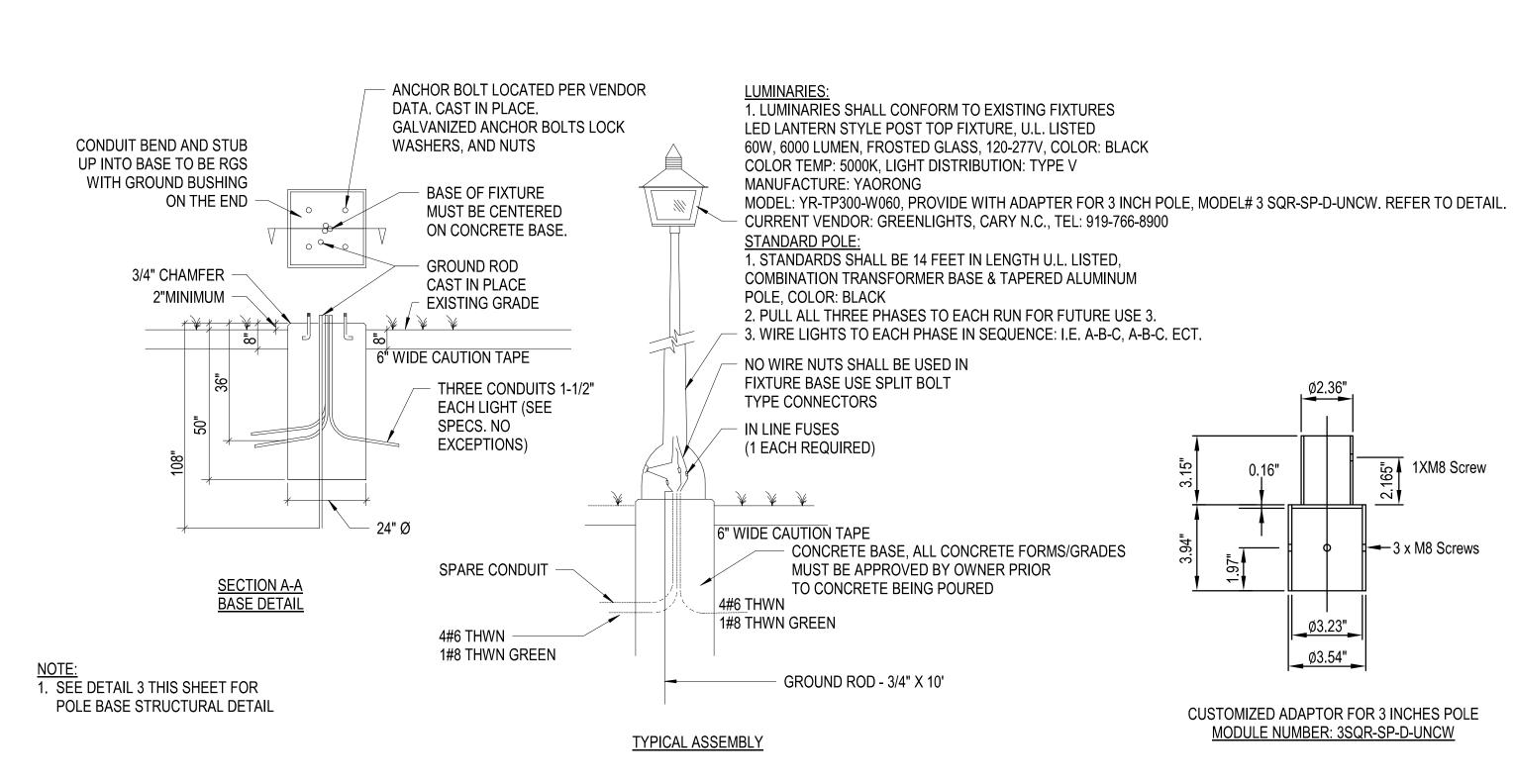
BID DOCUMENTS

ELECTRICAL SITE DETAILS

ES501

1. CONCRETE SHALL HAVE MINIMUM STRENGTH OF 4000 PSI AND MAXIMUM WATER/CEMENT RATIO OF 0.45. CONCRETE EXPOSED ABOVE GRADE SHALL CONTAIN ENTRAINED AIR. 2. ANCHOR BOLTS FOR RELOCATED LIGHT POLES SHALL MATCH DIAMETER AND EMBEDMENT OF EXISTING, AND SHALL BE POLE ASTM F15546R55 (WELDABLE), AT A MINIMUM. LIGHT POLE. SEE DETAIL 2 POLE - 8-#6 VERT ____18" AT TOP LIGHT POLE. SEE DETAIL 1 THIS SHEET. - #3 TIES, 6 SPACES / 3/4 " CHAMFER AT 4" OC FROM — 2' - 0" SQUARE BASE TOP, BALANCE AT ABOVE GRADE 10" OC - #3 SQUARE TIES, 4 REINF. PLAN - ABOVE GRADE SPACES AT 4" OC FROM TOP, BALANCE AT 10" OC UNDISTURBED SOIL OR STRUCTURAL 3" CLR 3" CLR 2'-0" DIA BELOW GRADE 2' - 0" DIA SIDEWALK LIGHT POLE BASE PARKING LIGHT POLE BASE REINF. PLAN - BELOW GRADE

POLE BASE STRUCTURAL DETAILS NO SCALE



SIDEWALK LIGHTING DETAILS

SERIES: APOLLO WATTAGE: 240W COLOR TEMO: 5000K LENS: A3M112 FIXTURE COLOR: BLACK STANDARD VOLTAGE: 480V NO SENSOR OPTIONS -ONE ARM BRACKET POLE, COLOR: BLACK ANCHOR BOLTS LOCATED PER VENDOR DATA. CAST IN PLACE. HAND-HOLE COVER PLATE ONE FOR EACH POLE BASE OF FIXTURE MUST BE CENTERED NO WIRE NUT SHALL BE USED ON CONCRETE BASE. GROUND ROD. PROVIDE GALVANIZED — CAST IN PLACE LOCK WASHER & NUTS IN FIXTURE BASE USE SPLIT BOLT FIXTURE CONNECTORS AND ANCHOR BOLTS IN LINE FUSES TWO FOR EACH FIXTURE TRON HEB-AA (2 EACH REQUIRED) EXISTING GRADE EXISTING GRADE ¥ ¥ ¥ 6" WIDE CAUTION TAPE 6" WIDE CAUTION TAPE - THREE CONDUITS 1-1/2" SPARE CONDUIT CONCRETE BASE 1. SEE DETAIL 3 THIS SHEET FOR POLE BASE STRUCTURAL DETAIL **ACH LIGHT** 2. EXISTING/ RELOCATED POLES SHALL BE CLEARLY LABELED AND IDENTIFIED (SEE SPECS. WITH TEMPORARY STICKER OR TAG AT EACH POLE. -- **→** 4#6 THHN NO EXCEPTIONS 3. POLE SHALL BE PROVIDED WITH VIBRATION DAMPER PER MANUFACTURER'S 1#8 THHN GREEN RECOMMENDATION 4. THE FOLLOWING ARE THE POLES, ARMS AND FIXTURES TO BE REFURBISHED GROUND ROD - 3/4" X 10' AND REUSED FROM P3 SITE AND EXISTING PARKING LOT "L"; 1#8 THHN GREEN A. FOUR (4) POLES FROM P3 SITE, POLES #7800, 7801, 7802, AND UNKNOWN DOUBLE-HEADED 28' PER RFI #058.

TYPICAL ASSEMBLY

FIXTURE:

MANUFACTURE: FINTRONX

PARKING LIGHT DETAILS (EXISTING RELOCATED POLE & LIGHT)
NO SCALE

REBAR ALL 4 SIDES

SECTION A-A BASE DETAIL

UNIVERSITY of NORTH CAROLINA WILMINGTON 601 S COLLEGE ROAD

WILMINGTON, NORTH CAROLINA 28403

SOUTH CAMPUS - 4965 RIEGEL ROAD

PARKING DECK II AND SURFACE

SCO ID NUMBER: 18-19226-01A CODE: 41828

PARKING (DESIGN-BUILD)

Balfour Beatty

DESIGNER

Construction

ITEM: 301

CLARKNEXSEN

1523 ELIZABETH AVENUE, SUITE 300 CHARLOTTE, NORTH CAROLINA 28204 704.377.8800

CLARK NEXSEN LICENSE NUMBER: C-1028



13860 Ballantyne Corporate Place Charlotte, NC 28277 T: 704.247.6230 www.walkerconsultants.com NC License No. F-0518



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PROFESSIONAL SEAL



NC CORPORATE ENGINEERING LICENSE #C-1028

SUBMITTAL AUGUST 1, 2019 **BID DOCUMENTS**

REVISIONS

KEY PLAN

ELECTRICAL SITE DETAILS

ES502

DESIGN: WAZ DRAWN: KAW

B. TWO (2) GREEN POLES (SINGLE HEADS) FROM P3 SITE, POLES #7631 AND

C. FOUR (4) POLES (SINGLE HEAD) FROM EXISTING PARKING LOT "L", POLES #

D. DOUBLE-HEADED POLES SHALL BE CONVERTED TO SINGLE HEAD AND USE

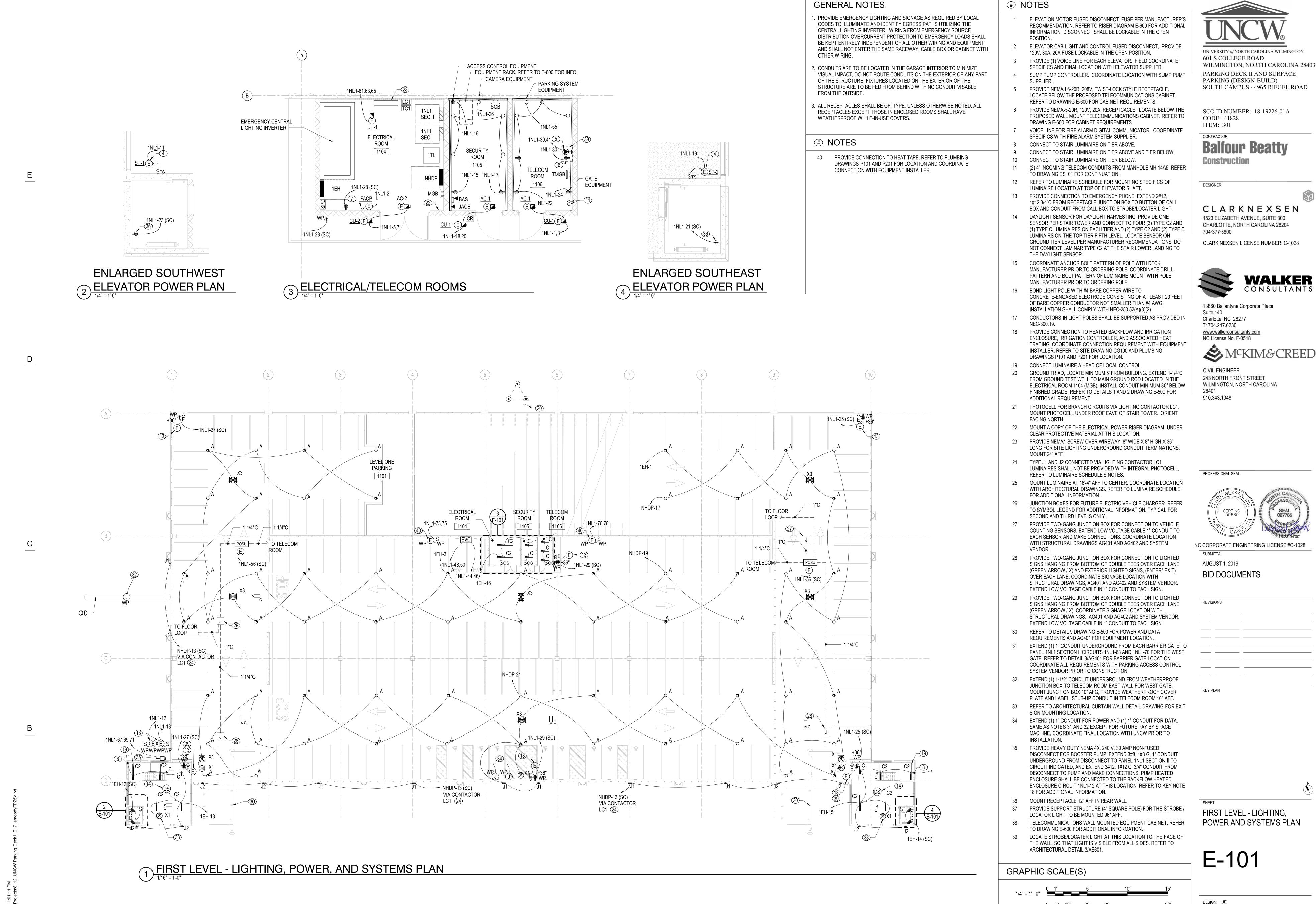
IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATION.

ONE ARM BRACKET AS INDICATED IN THIS DETAIL. CONVERSION SHALL BE

7532, 7831, 7832 AND 7833.

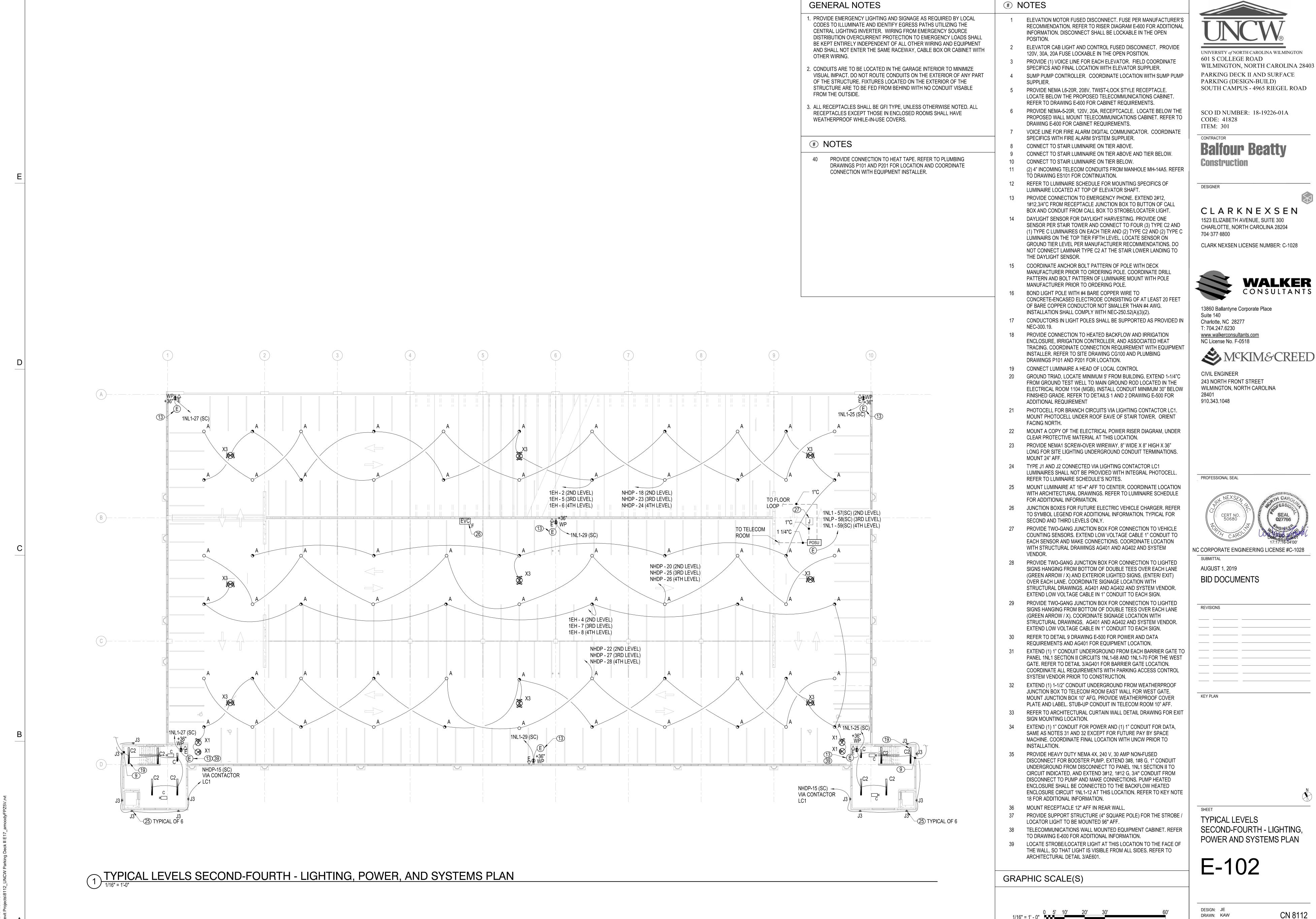
CN 8112

REVIEW: WAZ



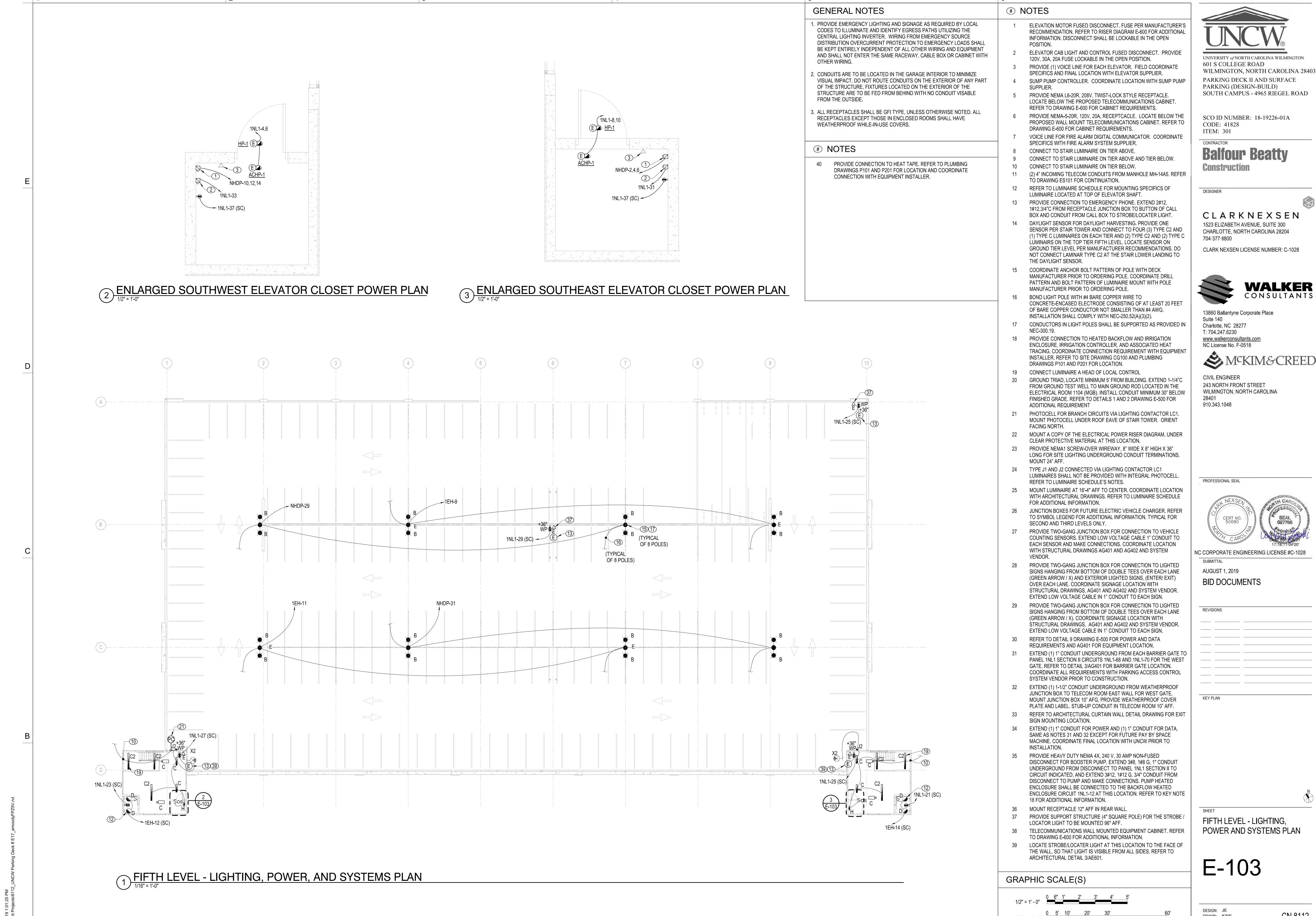
DESIGN: JE DRAWN: KAW REVIEW: WAZ

1/16" = 1' - 0"



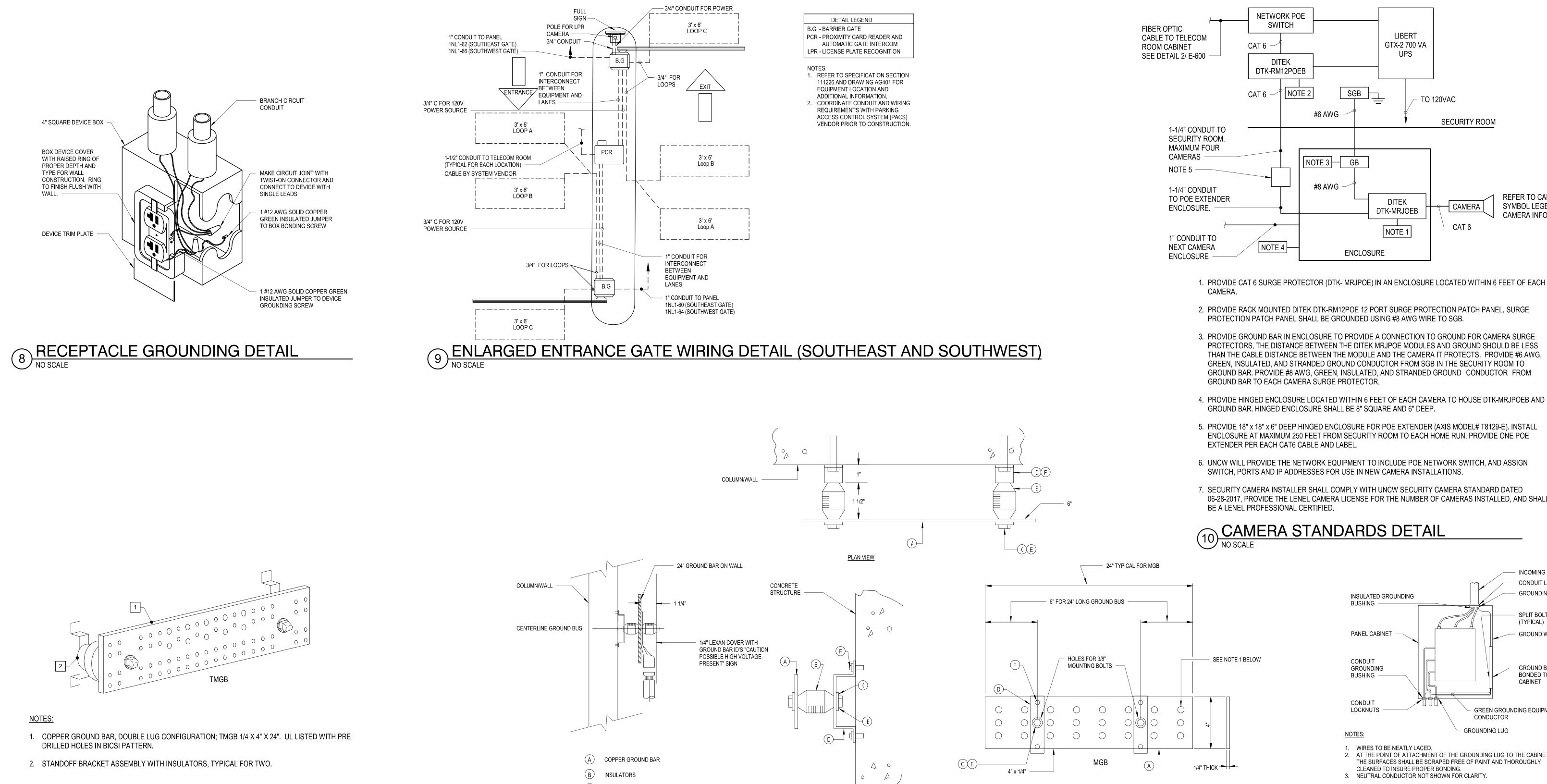


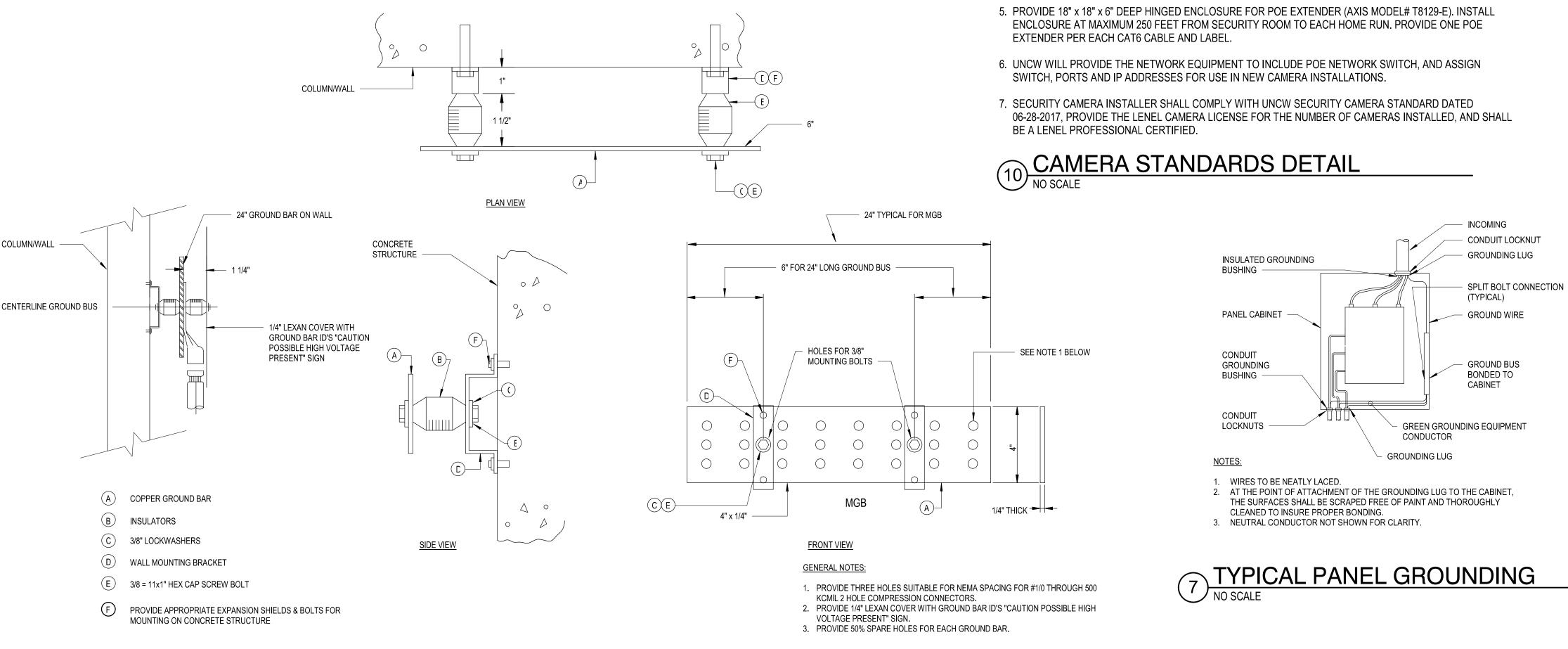
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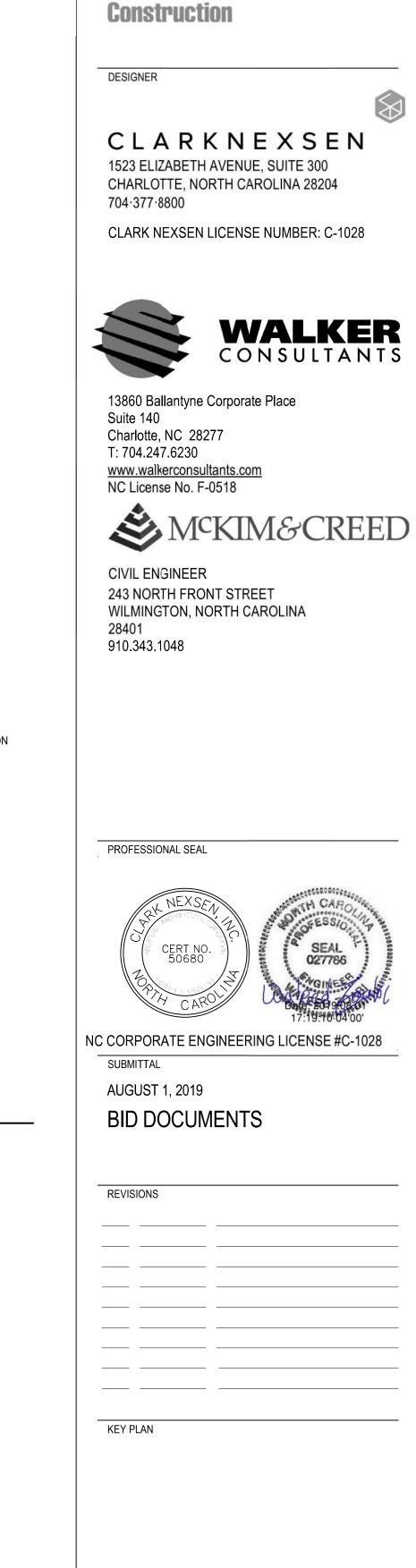




DRAWN: KAW REVIEW: WAZ







UNIVERSITY of NORTH CAROLINA WILMINGTON

PARKING DECK II AND SURFACE

PARKING (DESIGN-BUILD)

SCO ID NUMBER: 18-19226-01A

Balfour Beatty

WILMINGTON, NORTH CAROLINA 28403

SOUTH CAMPUS - 4965 RIEGEL ROAD

601 S COLLEGE ROAD

CODE: 41828

ITEM: 301

CONTRACTOR

LIBERT

GTX-2 700 VA

DITEK

DTK-MRJOEB

NOTE 1

ENCLOSURE

TO 120VAC

SECURITY ROOM

- CAMERA |

- CAT 6

REFER TO CAMERA

SYMBOL LEGEND FOR

CAMERA INFORMATION.

SGB

#6 AWG

NOTE 3 GB

#8 AWG

HEAVY DUTY GROUND

CAST BRONZE

CLAMP FOR WATER PIPE

- CABLE GROUND

CLAMP BRONZE

WATER PIPE

GROUND CABLE CONNECTION TO WATER PIPE

#3/0 AWG IN 1 1/4" C TO MAIN GROUND

BUS BAR IN MAIN ELECTRICAL ROOM

ELECTRICAL DETAILS

E-500

DESIGN: WAZ DRAWN: KAW REVIEW: WAZ

CN 8112

GROUNDING SYSTEM DETAIL

TELECOMMUNICATIONS GROUNDING BUSBAR DETAILS

NO SCALE

GROUNDED

CONDUCTOR

MAIN NEUTRAL BUS

TYPICAL BOLTED

WATER METER

METER AND ALL INSULATED PIPE JOINTS -

NOTES:

CONCRETE FOUNDATION

METAL UNDERGROUND

BRAIDED BONDING JUMPER AT

WATER PIPE

PROVIDE CONNECTION TO STEEL REINFORCING BARS

OR RODS NOT LESS THAN 1/2" IN DIAMETER OR NOT

LESS THAN 20' IN LENGTH LOCATE NEAR BOTTOM OF

PRESENT PROVIDE A MINIMUM 30' OF #4 CU. WITH 2"

MINIMUM CONCRETE ENCASEMENT -

CONCRETE FOUNDATION OR FOOTER THAT IS IN DIRECT

CONTACT WITH EARTH. IF REINFORCING BARS ARE NOT

#3/0 AWG BARE COPPER

CONNECTION USING ONE

HOLE COPPER LUG

BARE COPPER. PER NEC 250.102(C)

- #3/0 AWG BARE COPPER

- BARE COPPER. SEE RISER DIAGRAM FOR SIZE

EXOTHERMIC WELD

ELECTRODE (TYP)

SEE GROUNDING

TYPICAL

·── GROUNDING

EXOTHERMIC WELD

1. GROUNDING ELECTRODE SYSTEM. CONFORM TO NEC ARTICLE 250.

TMGB IN MAIN TELECOM RM.

MAIN GROUNDING BUS

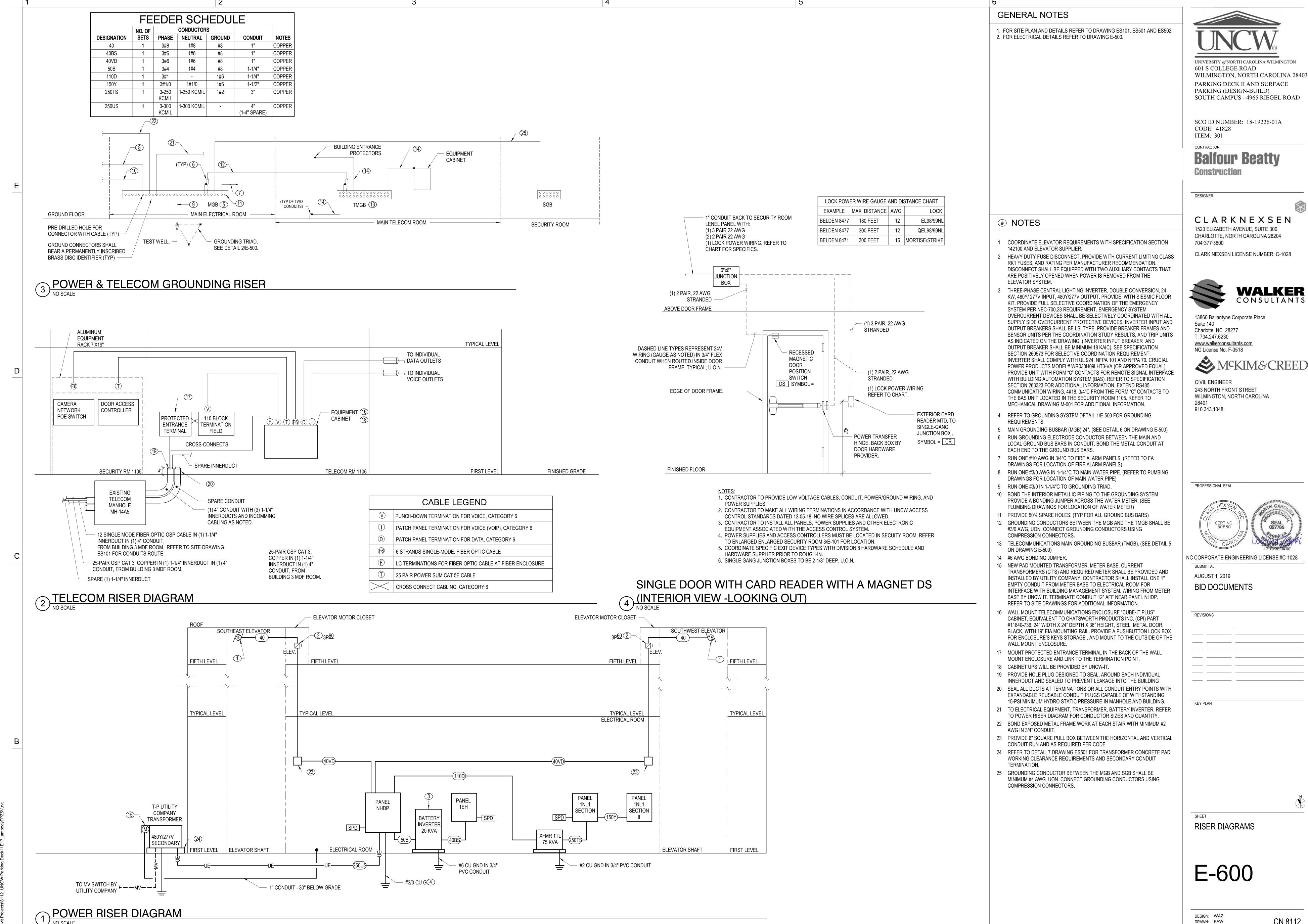
BARE COPPER CONDUCTORS INSTALLED IN 1-1/4" PVC CONDUIT TO SERVICE ENTRANCE EQUIPMENT GROUND BUS. SEE RISER DIAGRAM FOR WIRE SIZE. 10'-0" PROVIDE GROUND TEST WELL AT GROUND ROD NEAREST MAIN DISTRIBUTION PANEL. BARE COPPER GROUNDING CONDUCTOR. INSTALL 30" MIN. BELOW FINISHED GRADE. TYP. 3/4" DIA. x 10'-0" COPPER-CLAD STEEL GROUND RODS. DRIVE ROD FULL LENGTH INTO GROUND. TOP OF RODS SHALL BE 30" MIN. BELOW FINISHED GRADE. CONNECTIONS SHALL BE EXOTHERMIC WELDS, TYPICAL.

GROUNDING TRIAD

6 ELECTRICAL GROUNDING BUSBAR DETAIL
NO SCALE

REMOVABLE BOLT-ON COVER FINISHED GRADE / FLOOR -MECHANICAL GROUND CONNECTOR - CRUSHED STONE 1'-0" X 1'-0" X 1'-0" OPEN BOTTOM REINFORCED BARE STRANDED POLYMER CONCRETE COPPER CABLE BOX (2 EACH, STACKED) BARE STRANDED COPPER - TO GROUNDING ELECTRODE CABLE -TO BUILDING GROUNDING

GROUNDING TEST WELL

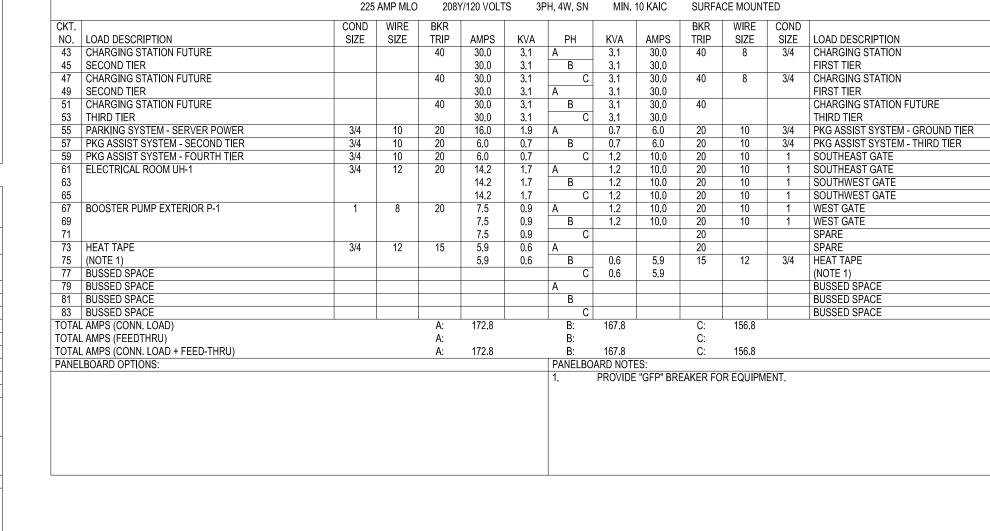


CN 8112

REVIEW: WAZ

LUMINAIRE SCHEDULE **TYPE** MANUFACTURER MOUNTING NOTES DESCRIPTION MODEL NO. VOLTAGE POWER 17" DIAMETER LED LUMINAIRE WITH TYPE V DISTRIBUTION, TEXTURED POLYCARBONATE LENS. LIGHT GRAY FINISH. INTEGRAL - ADJUST INTEGRAL LIGHTING CONTROL SYSTEM (TL50) SETTING INCLUDING: TIME-OUT TD17-QM-5S-TP-LG-72L-40K8-DCC-DV-FS-TL50 277 V KENALL 78 VA DRIVER, FUSING, INTEGRAL OCCUPANCY SENSOR AND PHOTOCELL (SUFFIX "TL50"). OR EQUIVALENT PERIOD, TURN-OFF DELAY, NON-OCCUPANCY DIM PERCENTAGE, AND OCCUPANCY LIGHT LEVEL TARGET PER UNCW RECOMMENDATIONS. 23" DIAMETER LED LUMINAIRE WITH TYPE V DISTRIBUTION, WIDE, TEXTURED CLEAR POLYCARBONATE LENS, LIGHT GRAY TPD23-5SW-TP-LG-295L40K-DCC-DV-FS-TMA-TW180-TL50 POLE MOUNTED |- ADJUST INTEGRAL LIGHTING CONTROL SYSTEM (TL50) SETTING INCLUDING; TIME-OUT KENALL 325 VA FINISH, INTEGRAL DRIVER, FUSING, INTEGRAL OCCUPANCY SENSOR AND PHOTOCELL (SUFFIX "TL50"). MOUNTED ON A 25'-0" OR EQUIVALENT PERIOD, TURN-OFF DELAY, NON-OCCUPANCY DIM PERCENTAGE, AND OCCUPANCY LIGHT LEVEL TARGET PER UNCW RECOMMENDATIONS. HINGED POLE. POLE TO BE PROVIDED WITH A DAMPER PER MANUFACTURER RECOMMENDATIONS. POLE: THSP25-7.15-7-K841-DM2180-WPRP-BC- WITH POLE: KW INDUSTRIES OR THSP-LW-7.15 LOWERING WINCH - POLE SHALL BE UL LISTED. **EQUIVALENT** 8" X 4' LINEAR 0-10 VOLT DIMMABLE LED LUMINAIRE WITH MATTE WHITE FINISH. CLEAR POLYCARBONATE LENS. INTEGRAL MLHA8-48-F-MW-CP-45L40K-DCC-1-DV-FS-PM 277 V PENDANT MTD KENALL 49 VA DRIVER AND FUSING. LUMINAIRE STEMS ARE NOT PROVIDED WITH FIXTURE, CONTRACTOR TO PROVIDE. OR EQUIVALENT 10'-0" FROM **BOTTOM OF FIXTURE TO AFF** 8" X 8' LINEAR (TWO 4'-0" LUMINAIRES FACTORY CONNECTED) LED LUMINARIE WITH MATTE WHITE FINISH, CLEAR PENDANT MTD KENALL MLHA8-96-F-MW-CP-45L40K-DCC-1-DV-FS-PM LED 277 V 98 VA POLYCARBONATE LENS, INTEGRAL DRIVER AND FUSING. LUMINAIRE STEMS ARE NOT PROVIDED WITH FIXTURE, CONTRACTOR OR EQUIVALENT 10'-0" FROM **BOTTOM OF** FIXTURE TO AFF VAPORTITE LED LUMINAIRE WITH SILVER FINISH, WALL MOUNTED 36" ABOVE ELEVATOR PIT FLOOR AND AT TOP OF ELEVATOR WJ1LW-20L-40K-EX-FJ1-CP104KO-PT 277 V SPECTRUM LED 16 VA WALL OR EQUIVALENT SHAFT 4'-0" ABOVE MOTOR MAINTENANCE DECK HEIGHT. FIELD COORDINATE SPECIFICS WITH ELEVATOR SUPPLIER. 2'-0" LINEAR LED STRIPLIGHT, WALL MOUNTED AND CENTERED ABOVE DOOR WITH WHITE STEEL FINISH, FROSTED ACRYLIC COLUMBIA LCL2-40ML-EU 277 V 24 VA WALL LENS AND ON/OFF OR EQUIVALENT DRIVER FUNCTION. 18" ARCHITECTURAL STYLE WALL PACK WITH SINGLE FUSE, TYPE IV FORWARD THROW DISTRIBUTION, GRAY FINISH AND KIM LIGHTING WDM-D-48L-55-4K8-4F-UNV-LG-PC-SF LED 277 V WALL MTD - DO NOT PROVIDE INTEGRAL PHOTO CELL FOR LUMINARES CONTROLLED VIA LIGHTING 55 VA INTEGRAL PHOTOCELL UON. CENTER OF FIXTURE WALL MOUNTED 10'-2" AFG. OR EQUIVALENT 13" ARCHITECTURAL STYLE WALL PACK WITH SINGLE FUSE, FORWARD THROW DISTRIBUTION, DIFFUSE LENS, GRAY FINISH - DO NOT PROVIDE INTEGRAL PHOTO CELL FOR LUMINARES CONTROLLED VIA LIGHTING KIM LIGHTING WDS-D-24L-40-4K8-FTD-UNV-LG-PC-SF LED 277 V 42 VA WALL MTD AND INTEGRAL PHOTOCELL UON. CENTER OF FIXTURE WALL MOUNTED 10'-2" AFG. OR EQUIVALENT CONTACTOR 18" ARCHITECTURAL STYLE UP MOUNTING WALL PACK WITH SINGLE FUSE, TYPE SPOT/COLUMN DISTRIBUTION, GREY FINISH. KIM LIGHTING WDM-U-48L-65-4K8-SP-UNV-LG-SF LED 277 V WALL MTD 68 VA MOUNT CENTER OF FIXTURE AT 16'-4" AFG. OR EQUIVALENT P1 POST TOP LIGHT WITH TYPE V DISTRIBUTION, 6000 LUMEN OUTPUT, 5000K CCT, FROSTED GLASS AND BLACK FINISH. YAORONG YR-TP300-W060 277 V 60 VA | MOUNTED ON 14' | - POLE SHALL BE UL LISTED. REFER TO DETAIL 1 / ES502. MOUNTED ON 14' BLACK POLE. POLE: GE LIGHTING POLE: ARTA-14-3S-5.0-B-BL-T POLE SOLUTION OR EQUIVALENT 13.6" X 4" STREET LIGHT WITH TYPE III DISTRIBUTION, 24,600 LUMEN OUTPUT, 5000K CCT, AND BLACK FINISH. REUSE EXISTING FINTRONX PLK-240-48-50K-A3M112--BL POLE MOUNTED - REUSE EXISTING/ RELOCATED POLES. REFER TO DETAIL 2 / ES502. POLE AND LIGHT. SINGLE FACE WET LABEL EXIT SIGN WITH RED LETTERS AND WHITE DIE-CAST ALUMINUM HOUSING. PROVIDE WITH PENDANT SEWL-SRW PENDANT MTD DUAL-LITE LED 277 V OR EQUIVALENT 8'-2" TO BOTTOM MOUNT KIT. SIGN TO BE MOUNTED A MINIMUM OF 8'-2" ABOVE FINISHED FLOOR TO BOTTOM OF EXIT SIGN WITH WORDING IN OF SIGN MINIMUM COMPLETE VIEW BELOW BEAMS. SINGLE FACE WET LABEL EXIT SIGN WITH RED LETTERS AND WHITE DIE-CAST HOUSING, FLAT WALL MOUNTED AND CENTERED DUAL-LITE SEWL-SRW 277 V 5 VA FLAT WALL OR EQUIVALENT DOUBLED FACED EXIT SIGN WITH RED LETTERS AND WHITE DIE-CAST ALUMINUM HOUSING. PROVIDE WITH PENDANT MOUNT DUAL-LITE SEWL-DRW LED 277 V PENDANT MTD 5 VA KIT AND CHEVRONS AS NOTED ON FLOOR PLANS. BE MOUNTED A MINIMUM OF 8'-2" ABOVE FINISHED FLOOR TO BOTTOM OF OR EQUIVALENT 8'-2" TO BOTTOM EXIT SIGN WITH WORDING IN COMPLETE VIEW BELOW BEAMS. OF SIGN MINIMUM EQUIPMENT CONNECTION SCHEDULE **EQUIPMENT DESIGNATION EQUIPMENT RATINGS** STARTER DISCONNECT DATA **EQUIPMENT DESIGNATION** DESCRIPTION HP / WATTS LOCATION KVA OCPD RATING TELECOM AND SECURITY ROOMS SPLIT SYSTEM 1 9.6 2.00 CU-1/AC-1 MAG 1 9.6 ELECTRICAL ROOM 2.00 ELECTRICAL ROOM **UNIT HEATER** 13.9 5.01 SOUTHEAST ELEVATOR SHAFT SUMP PUMP .5 HP 9.8 ____ SUMP PUMP .5 HP SOUTHWEST ELEVATOR SHAFT 9.8 MRS 20 1.18 ----FACP ELECTRICAL ROOM FIRE ALARM CONTROL UNIT 720W 6.0 0.72 ____ ____ ____ HP-1/ACHP-**HEAT PUMP** 9.6 MAG ELEVATOR CLOSET 30 MANUF BOOSTER PUMP 2HP EXTERIOR 208 3 20 NF **ABBREVIATIONS** MAG NON-FUSED MAGNETIC STARTER

PANEL NHDP SCHEDULE PANEL 1NL1 SECTION I SCHEDULE 250 AMP MCB 480Y/277 VOLTS 3PH, 4W, SN MIN. 18 KAIC SURFACE MOUNTED SE RATED 250 AMP MCB 208Y/120 VOLTS 3PH, 4W, SN MIN. 10 KAIC SURFACE MOUNTED COND | WIRE | BKR | WIRE | COND NO. LOAD DESCRIPTION NO. LOAD DESCRIPTION TELECOM RM CU-1/AC-1 3 VIA BATTERY INVERTER 1-1/2 6 20 0.7 0.2 A 21.0 SPARE 0.7 0.2 B 5.8 21.0 40 * * SOUTHWEST ELEVATOR MOTOR 5 LSLTYPE, 100 A FRAME 50 A TRIE ELECTRICAL RM CU-2/AC-2 EXTERIOR PEDESTRIAN LIGHTING SPARE (FUTURE PARKING SIGNAGE SOUTHWEST ELEVATOR SHAFT SP-13 EXTERIOR BUILDING LIGHTING HEAT TRACING (NOTE 3) 15 EXTERIOR WALL WASH STAIR LIGHTING SECURITY RM RECEPTACLE FOR BAS 17 FIRST TIER LIGHTING SECURITY RM RECEPTACLE 19 FIRST TIER LIGHTING SOUTHEAST ELEVATOR SHAFT SP-2 1 FIRST TIER LIGHTING SOUTHEAST ELEVATOR SHAFT RECEPT THIRD TIER LIGHTING SOUTHWEST FLEVATOR SHAFT RECEP THIRD TIER LIGHTING EAST RECEPTACLES AND PHONE THIRD TIER LIGHTING WEST RECEPTACLES AND PHONE 29 FIFTH TIER LIGHTING MIDLE RECEPTACLES AND PHONE 1 FIFTH TIER LIGHTING SOUTHEAST ELEVATOR CAB LIGHT: LC1 LIGHTING CONTACTOR CO SOUTHWEST ELEVATOR CAB LIGHTS PARKING MANAGEMENT SITE SIGNAGE 37 PANEL 1NL1 SECTION I ELEVATOR CLOSET RECEPTACLE 102.8 28.5 B 39 TELECOM RM RACK RECEPTACLES 39 | FED VIA XFMR 1TL (75 KVA) TOTAL AMPS (CONN. LOAD) TOTAL AMPS (FEEDTHRU) TOTAL AMPS (FEEDTHRU) TOTAL AMPS (CONN. LOAD + FEED-THRU) TOTAL AMPS (CONN. LOAD + FEED-THRU) PANELBOARD OPTIONS: PANELBOARD NOTES: PANELBOARD OPTIONS: REFER TO RISER DIAGRAM SHEET E-600 FOR FEEDER AND CONDUIT SIZES. REFER TO RISER DIAGRAM SHEET E-600 FOR FEEDER AND CONDUIT SIZES BREAKER RATING AND WIRE SIZE MAY VARY BY MANUFACTURER. BREAKER RATING AND WIRE SIZE MAY VARY BY MANUFACTURER. PROVIDE BREAKER AND WIRE SIZE IN ACCORDANCE WITH MANUFACTURER PROVIDE BREAKER AND WIRE SIZE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. RECOMMENDATIONS. PROVIDE WITH RED LOCKABLE HANDLE FOR THE FIRE ALARM EQUIPMENT AND LOCK IN THE "ON" POSITION. PROVIDE "GFP" BREAKER FOR EQUIPMENT. FEEDTHRU CONN LOAD CONN LOAD PANEL 1NL1 SECTION II SCHEDULE



FURNISHED AND INSTALLED BY TRADE FURNISHING EQUIPMENT. DIVISION 26 LINE SIDE | LOAD SIDE WIRING AND RACEWAY ON LOAD SIDE OF EQUIPMENT DISCONNECT (UP TO AND INCLUDING FINAL CONNECTION TO EQUIPMENT) SHALL BE FURNISHED AND INSTALLED BY TRADE FURNISHING EQUIPMENT AND SIZED IN ACCORDANCE WITH EQUIPMENT NAMEPLATE DATA AND THE NEC. PROVIDE SEE "E" SHEETS FOR BRANCH CIRCUIT SEPARATE GROUND WIRE SIZED PER NEC. REQUIREMENTS TO LINE SIDE OF EQUIPMENT DISCONNECT. WHERE EQUIPMENT IS NOT WITHIN SIGHT OF EQUIPMENT DISCONNECT, TRADE FURNISHING EQUIPMENT SHALL FURNISH AND INSTALL AN ADDITIONAL NON-FUSED DISCONNECT SWITCH WITHIN SIGHT OF EQUIPMENT. MOTOR OPERATED DEVICE OR APPARATUS THAT IS MANUFACTURED AND DESIGNED TO UTILIZE ENERGY AND WHICH IS A COMPONENT OF THE SYSTEM DESIGN. MOTOR STARTER VFC SHALL BE AS RECOMMENDED BY MANUFACTURER OR EQUIPMENT OR AS OTHERWISE INDICATED ON CONTRACT DOCUMENTS.

NOTE: REQUIREMENTS FOR WIRING, MATERIALS, METHODS, AND COMPONENTS SHALL BE PER DIVISION 26 SPECIFICATIONS.

DIVISION OF WORK DETAIL FOR DIVISIONS 23/26
NO SCALE

EQUIPMENT DISCONNECT SWITCH, FUSED OR NON-FUSED PER

EQUIPMENT CONNECTION SCHEDULE.

12-POLE, 30A, 600V 277 VAC LIGHTING CONTACTOR 18 WCR PHOTOCELL ON TOP TIER. ORIENT ——————— NHDP - 7 FACING NORTH. REFER TO DRAWING E-103 FOR LOCATION. ——————— NHDP - 32 ——| **→** NHDP - 15 -|--| SPARE TIMECLOCK TC 1 COIL HAND NHDP-33 OFF AUTO (NOTE 1)

- 1. PHOTOCELL CONTACTS CLOSE AT DUSK, OPEN AT DAYBREAK.
- BE PROVIDED WITH HINGED DOOR AND LOCKABLE COVER. 3. REFER TO DRAWING E-101 FOR EQUIPMENT LOCATIONS.

EXTERIOR NORMALLY POWERED LIGHTING CONTROL - VIA CONTACTOR (LC1)

- LIGHTING CONTACTOR 2. LIGHTING CONTACTOR AND H.O.A. SELECTOR SWITCH SHALL CLARKNEXSEN 1523 ELIZABETH AVENUE, SUITE 300 CHARLOTTE, NORTH CAROLINA 28204 704.377.8800



CLARK NEXSEN LICENSE NUMBER: C-1028

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PARKING (DESIGN-BUILD)

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CIVIL ENGINEER 243 NORTH FRONT STREET WILMINGTON, NORTH CAROLINA 910.343.1048

PROFESSIONAL SEAL



NC CORPORATE ENGINEERING LICENSE #C-1028 SUBMITTAL

AUGUST 1, 2019 **BID DOCUMENTS**

REVISIONS

KEY PLAN

SCHEDULES

E-700

DESIGN: WAZ DRAWN: KAW REVIEW: WAZ CN 8112

PROVIDE BREAKER AND WIRE SIZE IN ACCORDANCE WITH MANUFACTURER

PROVIDE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION

KVA

KVA

KVA

KVA KVA AMPS AMPS

KVA | 5.1

KVA 17.9

KVA 156.5

KVA 187.8

PANEL 1EH SCHEDULE

100 AMP MLO 480Y/277 VOLTS 3PH, 4W, SN MIN. 14 KAIC SURFACE MOUNTED

NEC 28.2

1.00 | 15.4

1.25 6.4

1.00 | 17.9

A 20 10 3/4 SPD (NOTE 1)

ANELBOARD NOTES:

BREAKER RATING AND WIRE SIZE MAY VARY BY MANUFACTURER.

MOTOR RATED SWITCH

KVA 46.4

KVA 5.1

KVA | 17.7

KVA 103.9

MCCB

LOAD DESCRIPTION

OTALS (CONN. KVA)

TOTALS (CONN. KVA + 20%

OTALS (CONN. AMPS)

TOTALS (CONN. AMPS + 20%

NO. LOAD DESCRIPTION

FIRST TIER EMERGENCY LIGHTING

FIRST TIER EMERGENCY LIGHTING

THIRD TIER EMERGENCY LIGHTING

THIRD TIER EMERGENCY LIGHTING

9 FIFTH TIER EMERGENCY LIGHTING

11 FIFTH TIER EMERGENCY LIGHTING

13 STAIR TOWER SOUTHWEST

TOTAL AMPS (CONN. LOAD + FEED-THRU)

15 STAIR TOWER SOUTHEAST

TOTAL AMPS (CONN. LOAD) TOTAL AMPS (FEEDTHRU)

PANELBOARD OPTIONS:

RECEPTACLES

MECH EQUIP

ELEVATOR

FLECTRIC HEAT

MISCELLANEOUS

INDICATES NOT APPLICABLE

MOLDED CASE CIRCUIT BREAKER

ELECTRICALLY COMMUTATED MOTOR

(NOTE 1) BUSSED SPACE

BUSSED SPACE

BUSSED SPACE

NOTE 1: CONDUIT SIZES BASED OF 40% FILL OF EMT. CONTRACTOR SHALL SIZE CONDUIT PER NEC IF CONDUIT OTHER THAN EMT IS USED.