UNC Charlotte Phase 16

Addendum #4

Revision Narrative

2021-09-08

E-001 - TV 5 added to reference detail. Conduit notes updated.

E-008 – Revisions for clarifications on access control details.

E-009 - detail #9 updated (TV 5). Detail #7 updated (TV 3). Detail #8 updated (TV 4). Detail #6 updated (TV 2).

Rooms affected by #7: LOUNGE 050, Lounge 036, CONFERENCE 151, LOUNGE 254, LOUNGE 354, LOUNGE 454

Rooms affected by #9: STUDY 030, STUDY 110, STUDY 130, STUDY 136, STUDY 210, STUDY 230, STUDY 289, STUDY 310, STUDY 330, STUDY 389, STUDY 410, STUDY 430, STUDY 489, STUDY 510, STUDY 530, STUDY 589.

Rooms affected by #8: CLASSROOM 055

Rooms affected by #6: LOBBY COR008

E-010 - Alternate information removed. Base bid only.

E-200S - Removed conduit, conduit notes updated.

E-200S-A - Conduit and notes updated.

E-201N - Changed TV type.

E-201S - added Pokethru, TV detail updated.

E-202N - Changed TV type. Poke thru type changed.

E-202S - Changed TV type. Added note for opening type of junction box. Poke thru type changed.

E-203N - Changed TV type. Poke thru type changed.

E-203S - Changed TV type. Added note for opening type of junction box. Poke thru type changed.

E-204N - Changed TV type. Poke thru type changed.

E-204S - Changed TV type. Added note for opening type of junction box. Poke thru type changed.

E-205N-A - Changed TV type. Poke thru type changed.

E-205S-A - Changed TV type. Added note for opening type of junction box. Poke thru type changed.

E-400S - WAP added. ITS designations added.

E-400S-A - ITS designations added.

E-401S - ITS designations added.

TC100N:

- Study 030 – Removed Coax cable and added one Category cable for display.

TC100S:

- Study 030 – Removed Coax cable and added one Category cable for display.
- Lounge 050 – Changed (2) Wireless Access Points from Resident Life/3rd Party to ITS.
- Lounge 036 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Mech 058 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Corridor COR009 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Storage 061 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.

TC100SA:

- Lounge 050 – Changed (2) Wireless Access Points from Resident Life/3rd Party to ITS.
- Lounge 036 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Mech 058 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Corridor COR009 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Storage 061 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.

TC101N:

- Study 130 – Removed Coax cable and added one Category cable for display.
- Study 110 – Removed Coax cable and added one Category cable for display.
- Study 110 – Changed Display from Type 3 to Type 5.

TC101S:

- Conference Room 151 - Changed Category cable for display from CAT6 to CAT6A.
- RA Workroom 152 - Changed Category cable for display from CAT6 to CAT6A.
- Study 136 – Removed Coax cable and added one Category cable for display.
- Study 136 – Changed display from type 3 to type 5.
- Study 136 – Added floor box with (4) Cat6A cables.
- Office 174 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Storage 172 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Storage 166 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Lounge 159 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Lobby COR109 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Conference Room 151 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.

TC101SA:

- Conference Room 151 - Changed Category cable for display from CAT6 to CAT6A.
- RA Workroom 152 - Changed Category cable for display from CAT6 to CAT6A.
- Study 136 – Removed Coax cable and added one Category cable for display.
- Study 136 – Changed display from type 3 to type 5.
- Study 136 – Added poke thru with (4) Cat6A cables.
- Office 174 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Storage 172 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Storage 166 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Lounge 159 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Lobby COR109 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.
- Conference Room 151 – Changed (1) Wireless Access Point from Resident Life/3rd Party to ITS.

TC102N:

- Study 230 – Removed Coax cable and added one Category cable for display.
- Study 210 – Removed Coax cable and added one Category cable for display.
- Study 210 – Changed Display from Type 3 to Type 5.

TC103N:

- Study 330 – Removed Coax cable and added one Category cable for display.
- Study 310 – Removed Coax cable and added one Category cable for display.
- Study 310 – Changed Display from Type 3 to Type 5.

TC104N:

- Study 430 – Removed Coax cable and added one Category cable for display.
- Study 410 – Removed Coax cable and added one Category cable for display.
- Study 410 – Changed Display from Type 3 to Type 5.

TC105NA:

- Study 530 – Removed Coax cable and added one Category cable for display.

- Study 510 – Removed Coax cable and added one Category cable for display.
- Study 510 – Changed Display from Type 3 to Type 5.

TC601:

- Modified and updated Display Detail TV Symbol 2 and 3.
- Added Display Detail TV Symbol 4 and 5.

2018 NORTH CAROLINA ENERGY CONSERVATION CODE

COMMERCIAL ENERGY EFFICIENCY - ELECTRICAL SUMMARY

C401 METHOD OF COMPLIANCE

- ■ 2018 NCECC CHAPTER 4
- ☐ NC SPECIFIC COMCHECK PROVIDED
- ☐ N/A BASED ON PROJECT SCOPE
- ☐ ASHRAE 90.1-2013

C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS

- ☐ C406.2 EFFICIENT MECH EQUIPMENT
- ☐ C406.5 ON-SITE RENEWABLE ENERGY
- ■ C406.3 REDUCED LTG DENSITY
- ☐ C406.6 DEDICATED OA SYSTEM
- ☐ C406.4 ENHANCED DIGITAL LTG CNTLS
- ☐ C406.7 HI-EFF SERVICE WTR HTG
- ☐ NOT APPLICABLE BASED ON PROJECT SCOPE
- ☐ C406.7.1 WTR HTG LOAD FRACTION

C405.2 - LIGHTING CONTROLS (MANDATORY REQUIREMENTS):

- ■ LIGHTING SYSTEMS ARE PROVIDED WITH CONTROLS AS REQUIRED PER SECTION C405.2, EXCEPT WHERE EXEMPT.
- ☐ NOT APPLICABLE

C405.3 - EXIT SIGNS (MANDATORY REQUIREMENTS):

- ■ INTERNALLY ILLUMINATED EXIT SIGNS DO NOT EXCEED 5 WATTS PER SIDE.
- ☐ NOT APPLICABLE

C405.4 - INTERIOR LIGHTING POWER REQUIREMENTS (PRESCRIPTIVE) (NON-EXEMPT):

- ☐ NOT APPLICABLE PER 2018 NCECC C503.1, EXCEPTION 2.G.

C405.4.1 - TOTAL CONNECTED INTERIOR LIGHTING POWER:

65,518 WATTS SPECIFIED

13 % REDUCTION OF SPECIFIED VS. ALLOWED (APPLICABLE IF C406.1.2 IS SELECTED)

C405.4.2 - TOTAL ALLOWABLE INTERIOR LIGHTING POWER:

METHOD OF COMPLIANCE:

- ■ BUILDING AREA METHOD
- ☐ SPACE-BY-SPACE METHOD

75,322 WATTS ALLOWED

C405.5.1 - EXTERIOR BUILDING LIGHTING POWER (NON-EXEMPT):

- ☐ NOT APPLICABLE

TOTAL CONNECTED EXTERIOR LIGHTING POWER:

2,684 WATTS SPECIFIED

TOTAL ALLOWABLE EXTERIOR LIGHTING POWER:

3,744 WATTS ALLOWED

C405.6 - ELECTRICAL ENERGY CONSUMPTION (DWELLING UNITS):

- ☐ SEPARATE ELECTRICAL METERING HAS BEEN PROVIDED FOR EACH DWELLING UNIT IN GROUP R-2 BUILDINGS.
- ■ NOT APPLICABLE

C405.7 - ELECTRICAL TRANSFORMERS (MANDATORY REQUIREMENTS):

- ■ ELECTRICAL TRANSFORMERS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.7, EXCEPT WHERE EXEMPT.
- ☐ NOT APPLICABLE

C405.8 - ELECTRICAL MOTORS (MANDATORY REQUIREMENTS):

- ■ ELECTRICAL MOTORS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.8, EXCEPT WHERE EXEMPT.
- ☐ NOT APPLICABLE

C408 - SYSTEM COMMISSIONING:

- ☐ PROJECT AREA IS LESS THAN 10,000 SQUARE FEET AND IS EXEMPT FROM THE SYSTEM COMMISSIONING REQUIREMENTS OF SECTION C408.
- ■ PROJECT AREA IS GREATER THAN 10,000 SQUARE FEET AND REQUIRES SYSTEM COMMISSIONING PER SECTION C408.

ABBREVIATIONS

+42"	DIMENSION INDICATES HEIGHT ABOVE FINISHED FLOOR AT WHICH CENTER OF DEVICE IS TO MOUNTED. SEE PLANS.
3R	NEMA 3R
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLER UNIT
C.B.	CIRCUIT BREAKER
EC	EMPTY CONDUIT WITH PULL CORD
E.C.	ELECTRICAL CONTRACTOR
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FACP	FIRE ALARM CONTROL PANEL
FPN	FUSE PER NAMEPLATE
LC	LIGHTING CONTACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
U.G.	UNDERGROUND
WP	WEATHERPROOF
S.E.	SERVICE ENTRANCE
EM	EMERGENCY FIXTURE WITH GEN. BACK-UP
NL	NIGHT LIGHT. OPERATES 24/7.
MTD	MOUNTED
Isc	RMS SYMMETRICAL SHORT CIRCUIT CURRENT
AIC	AMPERE INTERRUPTING CAPACITY (EQUIPMENT RATING)

ALTERNATES

ALTERNATE 1 -	BUILD OUT THE FULL EXTENT OF LEVEL 5.
ALTERNATE 2 -	BUILD OUT THE ENTIRETY OF APARTMENT 176 (ONE BEDROOM SUITE).
ALTERNATE 3 -	BUILD OUT THE ENTIRETY OF APARTMENT 161 (TWO BEDROOM SUITE).
ALTERNATE 4 -	BUILD OUT THE ENTIRETY OF APARTMENT 165 (THREE BEDROOM SUITE).
ALTERNATE 5 -	BUILD OUT THE ENTIRETY OF CLASSROOM 055, LOBBY COR008, AND ASSOCIATED SPACES.
ALTERNATE 10 -	LIGHTNING PROTECTION SYSTEM PER SPECIFICATION SECTION 26 41 13 AND SHEET E-206.
ALTERNATE 11 -	GENERATOR LOAD BANK SYSTEM - SEE SHEET E-703 FOR MOBILE GENERATOR LOAD BANK SYSTEM IN LIEU OF BASE BID STATIC LOAD BANK. SEE SHEET E-703.
ALTERNATE 13 -	PROVIDE FIRE ALARM SYSTEM BY SIMPLEX IN LIEU OF OTHER APPROVED EQUALS PER SPECIFICATION SECTION 28 31 11. OWNER PREFERRED.
ALTERNATE 14 -	PROVIDE TELECOMMUNICATIONS SYSTEM USING ONLY THOSE MATERIALS LISTED IN SPECIFICATIONS DIVISION 27 IN LIEU OF ALL OTHER SPECIFIED MANUFACTURERS.
ALTERNATE 16 -	PROVIDE OPEN OPTIONS FOR ACCESS CONTROL PER SPECIFICATION SECTION 28 13 00. OWNER PREFERRED.

DEVICES AND PATHWAYS

- WIRING SYSTEM CONCEALED IN WALL OR CEILING. WHEN SHOWN, CROSS LINES INDICATE NUMBER OF WIRES. (GROUND WIRES ARE NOT SHOWN)
- WIRING SYSTEM CONCEALED IN OR UNDER SLAB OR UNDERGROUND.
- WIRING SYSTEM EXPOSED
- BRANCH CIRCUIT HOMERUN TO PANEL.
- J — JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
- DUPLEX RECEPTACLE, 20 AMP, 120 VOLT (USE 20 AMP FOR SINGLE RECEPTACLE ON A CIRCUIT.) HUBBELL 5352, OR EQUAL.
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER BACKSPLASH, OR AT HEIGHT NOTED.
- QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTACLES.
- EWC — TWO STANDARD NEMA 5-20R DUPLEX RECEPTACLE FOR ELECTRIC WATER COOLER. COORDINATE LOCATION WITH PLUMBING CONTRACTOR. SERVED BY GFI CIRCUIT BREAKER WHETHER SHOWN IN PANELBOARD SCHEDULE OR NOT.
- GFI — GROUND FAULT RECEPTACLE. NEMA 5-20R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI.
- WP GFI — WEATHERPROOF RECEPTACLE. NEMA 5-20R GFI WEATHER-RESISTANT DUPLEX. COVER SHALL BE SMOOTH METAL. WHERE NOTED PROVIDE WEATHERPROOF TYPE COVER.
- USB — DUPLEX RECEPTACLE, 20 AMP, 120 VOLT, WITH TWO USB PORTS, ONE TYPE A AND ONE TYPE C.
- SPECIAL OUTLET. SEE PLANS.
- SPD — SURGE PROTECTION DEVICE (SPD); SEE DETAIL
- M — MOTOR OPERATED DAMPER, INTERLOCK WITH FAN AS INDICATED. (DAMPER BY M.C.)
- GROUNDING BAR PER DIAGRAM.
- FB6 — SIX GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND ONE A/V. PROVIDE TWO NEMA -5-20R DUPLEX RECEPTACLES AND ONE AV PLATE EQUAL TO WIREMOLD RFB6E-OG-8CTC. ARCHITECT TO SELECT FINISH. STUB FROM BOX ONE CONCEALED 1.25 EC ROUTED TO TV. SEE DETAIL AND FLOOR PLANS. EQUALS: HUBBELL, THOMAS & BETTS, OR SPECIFICATION EQUAL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- FB4 — FOUR GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND ONE A/V. PROVIDE TWO NEMA -5-20R DUPLEX RECEPTACLES AND ONE COMM PLATE WITH PROVISIONS OFR FOUR RJ45 JACKS EQUAL TO WIREMOLD RF4BE-OG-6CTC. ARCHITECT TO SELECT FINISH. STUB FROM BOX ONE CONCEALED 1.25 EC ROUTED TO TV. SEE DETAIL AND FLOOR PLANS. EQUALS: HUBBELL, THOMAS & BETTS, OR SPECIFICATION EQUAL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- FOUR GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER ONLY. PROVIDE TWO NEMA 5-20R DUPLEX RECEPTACLES. EQUAL TO WIREMOLD RF4BE-OG-6CTC. ARCHITECT TO SELECT FINISH. EQUALS BY HUBBELL, THOMAS & BETTS, OR SPECIFICATION EQUAL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- PT4 — SIX GANG SEMI- FLUSH MOUNTED POKE THROUGH FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND COMMUNICATIONS. PROVIDE TWO NEMA 5-20R DUPLEX RECEPTACLES AND ONE COMM. PLATE WITH PROVISION FOR SIX RJ45 CAT6 JACKS. EQUAL TO WIREMOLD BATC2BK. ARCHITECT TO SELECT FINISH. STUB FROM BOX TWO CONCEALED 1.25 EC ROUTED TO WHICHEVER IS NEAREST, BB, J-HOOKS, OR CABLE TRAY. EQUALS: HUBBELL, THOMAS & BETTS, OR SPECIFICATION EQUAL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUG-IN.
- PT2 — FOUR GANG SEMI- FLUSH MOUNTED POKE THROUGH FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND COMMUNICATIONS. PROVIDE TWO NEMA 5-20R DUPLEX RECEPTACLES AND ONE A/V PLATE. EQUAL TO WIREMOLD BATC2BK. ARCHITECT TO SELECT FINISH. STUB FROM BOX TWO CONCEALED 1.25 EC ROUTED TO WHICHEVER IS NEAREST, BB, J-HOOKS, OR CABLE TRAY. EQUALS: HUBBELL, THOMAS & BETTS, OR SPECIFICATION EQUAL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUG-IN.
- PT — FOUR GANG SEMI- FLUSH MOUNTED POKE THROUGH FLOOR BOX WITH ACCESSIBLE COVER FOR POWER ONLY. PROVIDE TWO NEMA 5-20R DUPLEX RECEPTACLES. EQUAL TO WIREMOLD BATC2BK. ARCHITECT TO SELECT FINISH. EQUALS BY: HUBBELL, THOMAS & BETTS, OR SPECIFICATION EQUAL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUG-IN.

PANELS, DISCONNECTS

- M — CONNECTION TO MOTOR. STARTER PROVIDED BY OTHERS UNLESS OTHERWISE NOTED.
- S_M — FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER, WITH OVERLOAD PROTECTION
- NON-FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
- FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING/FUSE SIZE. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
- CIRCUIT BREAKER. NUMERALS INDICATE RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
- PLYWOOD TELEPHONE BACKBOARD. SIZE AS INDICATED ON RISER.
- PANELBOARD. SEE SCHEDULE FOR MOUNTING. TOP OF PANEL AT 6'-6" AFF.

SECURITY

- SECURITY CAMERA . PROVIDE 1.25" CONDUIT TO LOCAL ACCESSIBLE CEILING. PROVIDE DOUBLE GANG JUNCTION BOX WITH SINGLE GANG OPENING PLATE. PROVIDE PULL STRING. CAMERA BY OWNER.
- CR — CARD READER, MINIMUM 1/2" CONDUIT. PROVIDE SINGLE GANG JUNCTION BOX AND PULL STRING. SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.
- DPS — DOOR POSITION SWITCH. SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.
- KR — KEYED RESET SWITCH. PROVIDE SINGLE GANG JUNCTION BOX AND PULL STRING. SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.
- DA — DOOR ALARM. PROVIDE SINGLE GANG JUNCTION BOX AND PULL STRING SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.

FIRE ALARM

- FACP SD — FIRE ALARM CONTROL PANEL WITH LOCAL SMOKE DETECTOR
- RA — FIRE ALARM REMOTE ANNUNCIATOR. PROVIDE BOX AS REQUIRED PER MANUFACTURER RECOMMENDATION. PROVIDE 1"C CONDUIT FOR CABLING.
- F — FIRE ALARM MANUAL STATION. PROVIDE PROTECTION DEVICE
- SD — CEILING MOUNTED SMOKE DETECTOR. FA VENDOR PROVIDED.
- HD — CEILING MOUNTED HEAT DETECTOR.
- MD — CEILING MOUNTED MULTI-CRITERIA DETECTOR. SMOKE/HEAT DETECTOR UNLESS OTHERWISE NOTED.
- DD — DUCT MOUNTED SMOKE DETECTOR. FURNISHED AND CONNECTED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR. CUTTING OF DUCT, INSTALLATION OF DETECTOR, AND DETERMINATION OF SAMPLING TUBE LENGTH SHALL BE THE MECHANICAL CONTRACTOR. PROVIDE REMOTE INDICATING LIGHT, FOR EACH DETECTOR, VISIBLY LOCATED AND LABELED AT THE LOCAL CEILING.
- CO — CEILING MOUNTED CARBON MONOXIDE DETECTOR (CENTRAL SYSTEM CONNECTED)
- FS — SPRINKLER SYSTEM FLOW SWITCH *.
- TS — SPRINKLER SYSTEM TAMPER SWITCH *.
- SD — SMOKE DAMPER. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, CONNECTED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR. SEE DETAIL.
- FSD — FIRE SMOKE DAMPER. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, CONNECTED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR. SEE DETAIL.
- DH — MAGNETIC DOOR HOLDER, PROVIDED BY ELECTRICAL CONTR, INSTALLED BY ELEC. CONTR. PROVIDE A SMOKE DETECTOR WITHIN 5 FT. OF BOTH SIDES OF DOORS TO LOCALLY ACTIVATE DOOR UPON SMOKE SIGNAL.
- F — ADA COMPLIANT WALL MOUNT FIRE ALARM SPEAKER WITH STROBE LIGHT, 15CD UNLESS OTHERWISE NOTED. WHITE FINISH.**
- S — ADA COMPLIANT WALL MOUNT FIRE ALARM STROBE LIGHT, 15CD UNLESS OTHERWISE NOTED. WHITE FINISH.
- ADA COMPLIANT CEILING MOUNTED FIRE ALARM SPEAKER STROBE LIGHT, 15cd, UNLESS OTHERWISE NOTED. WHITE FINISH.**
- ADA COMPLIANT CEILING MOUNTED FIRE ALARM STROBE LIGHT, 15cd, UNLESS OTHERWISE NOTED. WHITE FINISH.
- SD SB — CEILING MOUNTED SMOKE DETECTOR WITH LOW FREQUENCY SOUNDER BASE.**
- PIV — POST INDICATING VALVE. FURNISHED AND INSTALLED BY SPRINKLER CONTRACTOR, CONNECTED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR.
- ISO — ISOLATION RELAY.
- DCP — DAMPER CONTROL POWER.

NOTES:

* COORDINATE THE EXACT NUMBER AND LOCATIONS OF TAMPER AND FLOW SWITCHES WITH THE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.

** AUDIBLE DEVICES WITHIN SLEEPING ROOMS SHALL BE SUBJECT TO LOW FREQUENCY REQUIREMENTS. A SQUARE WAVE 520HZ TONE COMPATIBLE WITH NFPA 72 18.4.5.3. COORDINATE WITH LOCAL CODES AND REQUIREMENTS. DEVICES ARE SYSTEM CONNECTED.

SPECIAL SYSTEMS

- TV — SEE TV DETAIL FOR TYPE AND REQUIREMENTS. MINIMUM 1.25" CONDUIT FOR CABLING AND 3/4" CONDUIT FOR POWER. PROVIDE PULL STRING FOR LOW VOLTAGE CABLING TO ACCESSIBLE CEILING.
- TV 2 — SEE TV DETAIL FOR TYPE AND REQUIREMENTS. MINIMUM 1.25" CONDUIT FOR CABLING AND 3/4" CONDUIT FOR POWER. PROVIDE PULL STRING FOR LOW VOLTAGE CABLING TO ACCESSIBLE CEILING.
- TV 3 — SEE TV DETAIL FOR TYPE AND REQUIREMENTS. MINIMUM 1.25" CONDUIT FOR CABLING AND 3/4" CONDUIT FOR POWER. PROVIDE PULL STRING FOR LOW VOLTAGE CABLING TO ACCESSIBLE CEILING.
- TV 4 — SEE TV DETAIL FOR TYPE AND REQUIREMENTS. MINIMUM 1.25" CONDUIT FOR CABLING AND 3/4" CONDUIT FOR POWER. PROVIDE PULL STRING FOR LOW VOLTAGE CABLING TO ACCESSIBLE CEILING AND TO FLOOR BOX/POKE THRU.
- TV 5 — SEE TV DETAIL FOR TYPE AND REQUIREMENTS. MINIMUM 1.25" CONDUIT AND 3/4" CONDUIT FOR CABLING AND 3/4" CONDUIT FOR POWER. PROVIDE PULL STRING FOR LOW VOLTAGE CABLING TO ACCESSIBLE CEILING AND TO FLOOR BOX/POKE THRU.
- GA — GENERATOR ANNUNCIATOR PANEL 1.5" MIN. CONDUIT TO ATS. PROVIDE BOX AS REQUIRED PER MANUFACTURER RECOMMENDATION PROVIDE CABLING PER MANUFACTURER RECOMMENDATIONS
- D — ACCESSIBLE DOOR OPENER PUSH BUTTON. PROVIDE MINIMUM (2) GANG BOX WITH SINGLE GANG OPENING. 3/4"C TO DOOR OPERATOR. COORDINATE WITH EQUIPMENT PROVIDED. SEE DETAIL.
- Y — HEARING IMPAIRED SYNC MODULE. SYSTEM SENSOR #MDL3W. MOUNT IN 4" SQUARE, 1.5" DEEP JUNCTION BOX. THE ENTIRE SYSTEM SHALL BE MOUNTED ABOVE THE CORRIDOR CEILING OUTSIDE THE STUDENT DORM ROOM. POWER SYSTEM FROM THE DORM ROOM RECEPTACLE BRANCH CIRCUIT.
- HIP — HEARING IMPAIRED PUSH BUTTON. EDWARDS #620, OR APPROVED EQUAL. 24V. IVORY CENTER BUTTON. CHROME TRIM RING, STAINLESS STEEL PUSHBUTTON COVER PLATE # 147-1. FACE PLATE SHALL BE BLANK WITHOUT LABELS. MOUNT 46" AFF.
- H — HEARING IMPAIRED VISUAL STROBE, WALL MOUNTED AT 80" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER. STROBE SHALL BE SYSTEM SENSOR #SW-P OR APPROVED EQUAL. PROVIDE WITH AMBER COLOR LENS. SYSTEM SENSOR #LENS-A OR APPROVED EQUAL.
- S_{HDS} — HEARING IMPAIRED DISABLING SWITCH, WALL MOUNTED AT 36" AFF

TELECOMMUNICATIONS

- S_W — WALL PHONE OUTLET (ITS) 44" AFF. 1.25" EC TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. SINGLE GANG BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
- VOICE/ DATA OUTLET (ITS) ABOVE COUNTER OR HEIGHT SPECIFIED. 1.25" EC TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. 5" SQUARE BOX WITH A DOUBLE-GANG OPENING AND PLASTER RING.
- VOICE/ DATA OUTLET(ITS), 1.25" EC TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. 5" SQUARE BOX WITH A DOUBLE-GANG OPENING AND PLASTER RING.
- VOICE/ DATA OUTLET (RESIDENT LIFE/THIRD PARTY) ABOVE COUNTER OR HEIGHT SPECIFIED. 1" EC TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
- VOICE/ DATA OUTLET (RESIDENT LIFE/THIRD PARTY). 1" EC TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
- E — ELEVATOR PHONE, 1.25" EC TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. TERMINATE CONDUIT AT ELEVATOR CONTROL CABINET.
- JACE — OUTLET FOR BAS JACE, 1.25" EC TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. TERMINATE CONDUIT AT THE JACE PANEL ENCLOSURE. CABLING WILL TERMINATE A SURFACE MOUNT TELECOM OUTLET.
- WAP ITS — WIRELESS ACCESS POINT (ITS), REFER TO TELECOM DRAWINGS FOR REQUIREMENTS. PROVIDE MINIMUM 1.25" CONDUIT FROM WAP TO ABOVE THE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. PROVIDE 5" SQUARE BACK BOX WITH TWO GANG PLASTER RING.
- WAP ITS — WIRELESS ACCESS POINT (ITS), WALL MOUNTED. REFER TO TELECOM DRAWINGS FOR REQUIREMENTS AND DETAILS. PROVIDE MINIMUM 1.25" CONDUIT FROM WAP TO ABOVE THE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. PROVIDE 5" SQUARE BACK BOX WITH TWO GANG PLASTER RING.
- WAP — WIRELESS ACCESS POINT (RESIDENT LIFE/THIRD PARTY). REFER TO TELECOM DRAWINGS FOR REQUIREMENTS. PROVIDE MINIMUM 1.25" CONDUIT FROM WAP TO ABOVE THE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. PROVIDE 4" SQUARE BACK BOX WITH TWO GANG PLASTER RING.
- WAP — WIRELESS ACCESS POINT (RESIDENT LIFE/THIRD PARTY), WALL MOUNTED. REFER TO TELECOM DRAWINGS FOR REQUIREMENTS. PROVIDE MINIMUM 1.25" CONDUIT FROM WAP TO ABOVE THE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. PROVIDE 4" SQUARE BACK BOX WITH TWO GANG PLASTER RING.

NOTE: FOR ALL "WAP" LOCATIONS IN AN ACT CEILING THE BACKBOX IS NOT REQUIRED.

- EL — EMERGENCY ELEVATOR LOBBY PHONE (TWO WAY COMMUNICATION CAMPUS SYSTEM), 1.25" EC TO ABOVE THE NEAREST ACCESSIBLE CORRIDOR CEILING J-HOOK SYSTEM, WITH PULL STRING. SINGLE GANG BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SEE ELEVATOR DETAILS ON SHEET E-006.

NOTE: THE IN-CAB (NOT ELEVATOR LOBBY) TWO WAY EMERGENCY VOICE/VIDEO SYSTEM IS PROVIDED AS PART OF THE ELEVATOR SYSTEM. SEE ELEVATOR DETAILS ON SHEET E-006 FOR POWER SOURCE REQUIREMENTS.

LIGHTING (SEE FIXTURE SCHEDULE)

- LED LIGHTING FIXTURE. SEE FIXTURE SCHEDULE. SUSPEND FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
- LED STRIP FIXTURE.
- LED LIGHTING FIXTURE.
- WALL MOUNTED LED LIGHTING FIXTURE.
- LED FIXTURE CONNECTED TO EMERGENCY POWER CIRCUIT. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE.
- LED DOWNLIGHT CONNECTED TO EMERGENCY CIRCUIT. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE.
- EXIT LIGHT WITH ARROWS AND NUMBERS OF FACES AS INDICATED ON PLANS OR AS REQUIRED. SEE LIGHTING FIXTURE SCHEDULE. WALL MOUNTED.
- EXTERIOR LED FIXTURE CONNECTED TO EMERGENCY CIRCUIT. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE.
- LIGHT BOLLARD OR POLE TOP FIXTURE. SEE FIXTURE SCHEDULE.
- $ — SINGLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER AH 1221, OR EQUAL BY HUBBELL, LEVITON, AND PASS & SEYMOUR.
- $_3$ — THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, OR EQUAL BY HUBBELL, LEVITON, AND PASS & SEYMOUR.
- $_K$ — KEYED SWITCH, 20 AMP, 120/277 VOLT, PROVIDE THREE AND FOUR WAY SWITCHES AS SHOWN ON DRAWINGS.
- $_R$ — 3-POSITION ROCKER SWITCH 120V (UP/NORMAL/DOWN) LEVITON SINGLE POLE DOUBLE THROW (CENTER OFF) MAINTAINED CONTACT 5685-2-W OR APPROVED EQUAL(1/2HP MAX) LOW VOLTAGE (24V): 56081-2W, E.C. TO VERIFY WITH SPECIFIED SCREEN TYPE
- $_D$ — DIMMER SWITCH. LUTRON SERIES, OR EQUAL. VERIFY LOAD ON CIRCUIT AND MATCH DIMMER SIZE TO LOAD AND DEVICE QUANTITY. PROVIDE DOUBLE GANG J-BOX WITH SINGLE GANG TRIM PLATE. PROVIDE DIMMING SWITCH AS RECOMMENDED BY LIGHTING MANUFACTURER. MATCH SWITCH TYPE TO LED SOURCE DRIVER, WATTAGE, AND QUANTITY.
- OCCDT — CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH CM PDT 10, WATT STOPPER #DT-300, COOPER OAC-DT OR EQUAL.
- $_{OC}$ — WALL MOUNTED OCCUPANCY SENSOR AND SWITCH. DUAL TECHNOLOGY WITH NEUTRAL, 120/277V RATED. WATT STOPPER #WS-250, OR EQUAL BY SENSOR SWITCH, AND LEVITON.
- PC — PHOTO CONTROL, EXTERIOR, MOUNT FACING NORTH.
- $_1$ — GENERATOR EMERGENCY RELAY DEVICE TO BRING FIXTURES CONNECTED TO EMERGENCY SOURCES ON AND TO FULL BRIGHTNESS. BASED ON BODINE BLCD-208, EQUALS BY: LEGRAND, ETC. OR APPROVED EQUAL.
- PP — CEILING MOUNTED OCCUPANCY SENSOR POWER PACK. SENSOR SWITCH #PP-20, WATT STOPPER #BZ-100, COOPER #SP-20, OR EQUAL. PROVIDE AS REQUIRED FOR LIGHTING CONTROL WHETHER SHOWN OR NOT SHOWN ON DRAWINGS. SUBSCRIPT "2P" INDICATES 2 POLE DEVICE, SUBSCRIPT "D" INDICATES DIMMING DEVICE. "RR" INDICATES REST ROOM LIGHTING POWER PACK, AND SHALL BE LOCATED ABOVE AN ACCESSIBLE CEILING OUTSIDE THE REST ROOM.

COMMISSIONING NOTE

THIS PROJECT INCLUDES A THIRD PARTY COMMISSIONING AGENT CONTRACTED BY THE OWNER. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER'S COMMISSIONING AGENT AND PROVIDE ALL THE NECESSARY TIME, MATERIALS, AND PROCEDURES REQUIRED FOR A FULLY COMMISSIONED PROJECT. SEE COMMISSIONING REQUIREMENTS IN THE PROJECT MANUAL FOR FURTHER INFORMATION.

SHUT DOWN REQUIREMENTS

ELECTRICAL CONTRACTOR SHALL SUBMIT, THROUGH THE GENERAL CONTRACTOR, A WRITTEN REQUEST FOR ANY AND ALL WORK REQUIRING A SHUT-DOWN OF ANY EXISTING OPERATING SYSTEM. ALL WORK REQUIRING A SHUT-DOWN MUST BE COORDINATED WITH AND APPROVED BY THE UNIVERSITY'S PROJECT CONSTRUCTION MANAGER PRIOR TO BEGINNING WORK. REQUEST MUST BE PROVIDED A MINIMUM OF ONE WEEK PRIOR TO REQUESTED SHUT-DOWN AND SHALL INCLUDE SPECIFIC TASK TO BE COMPLETED WITH SCHEDULE AND EXPECTED DURATION OF SHUT-DOWN.

TELECOM COORDINATION

1. SEE "TC" DRAWINGS FOR SLEEVES/CONDUITS REQUIRED FOR BUILDING TELECOM USE. THESE ARE PROVIDED BY THE ELECTRICAL CONTRACTOR.
2. WHERE TELECOM CONDUIT SLEEVES ENTER MDF OR IDF ROOMS, EXTEND TO CABLE TRAY AND GROUND THE CONDUIT SLEEVE TO THE CABLE TRAY PER DETAIL #1/ TC-601.
3. THE ELECTRICAL CONTRACTOR SHALL INCLUDE AND COORDINATE ALL WORK SHOWN ON THE "TC" SERIES DRAWINGS, DETAILS, AND RELATED SPECIFICATIONS..

COORDINATION DRAWINGS

PER SPECIFICATION SECTION 01 31 00 PROJECT MANAGEMENT AND COORDINATION, THE CONSTRUCTION MANAGER (CM) SHALL ORGANIZE COORDINATION MEETINGS TO DEVELOP A SET OF COORDINATION DRAWINGS WITH ALL CONTRACTORS (ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, IT/DATA, AND GENERAL BUILDING TRADES). ANY RELOCATION OF SYSTEM ROUTINGS SHALL BE IDENTIFIED AND ADDRESSED IN THE COORDINATION PHASE BY EACH OF THE CONTRACTORS. THESE DRAWINGS, WHEN COMPLETED, SHALL BE SIGNED OFF BY ALL OF THE ABOVE LISTED PARTIES. COMPLETE COORDINATION DRAWINGS SHALL BE COMPLETED PRIOR TO FABRICATION AND INSTALLATION OF THE ASSOCIATED TRADES RESPECTIVE SYSTEMS, AND PURCHASE OF EQUIPMENT. THE FOLLOWING ITEMS REPRESENT THE MINIMUM REQUIREMENTS OF THE COORDINATION DRAWINGS:

1. ALL COORDINATION DRAWINGS WILL BE PRODUCED AT 1/4"= 1'-0" SCALE
2. COORDINATION DRAWINGS WILL BE DISTRIBUTED ON REPRODUCIBLE MATERIAL 30"x42"
4. COORDINATION DRAWINGS ARE NOT SHOP DRAWINGS AND ARE REQUIRED IN ADDITION TO SHOP DRAWINGS.
5. ONCE THE COMPLETE COORDINATION DRAWINGS HAVE BEEN COMPILED, THE (CM) WILL DISTRIBUTE ONE SIGNED SET TO EACH OF THE FOLLOWING CONTRACTORS MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND GENERAL TRADES. ADDITIONAL SETS WILL BE SENT TO THE OWNER, ARCHITECT, AND ENGINEER

THE USE OF BUILDING INFORMATION MODELING (BIM) THROUGHOUT THE CONSTRUCTION PROCESS IS A REQUIREMENT FOR THIS PROJECT TO HELP REDUCE OR ELIMINATE FIELD DETECTED CONFLICTS, IMPROVE CONSTRUCTION QUALITY AND MAINTAIN AN AGGRESSIVE SCHEDULE. THE (CM) WILL BE RESPONSIBLE FOR CREATING THE MODEL AND MANAGING THE COORDINATION AND COLLISION DETECTION PROCESS. THE MODEL MUST CONTAIN COMPLETE ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION SYSTEMS CONSISTENT WITH THE DESIGN AND FABRICATION DRAWINGS.

BIM / ILM GENERAL NOTE

CM SHALL BE RESPONSIBLE FOR PROVIDING THE FINAL COORDINATION MODEL TO THE OWNER AT THE PROJECT COMPLETION THAT MEETS ALL APPLICABLE FORMATTING AND DOCUMENTATION REQU

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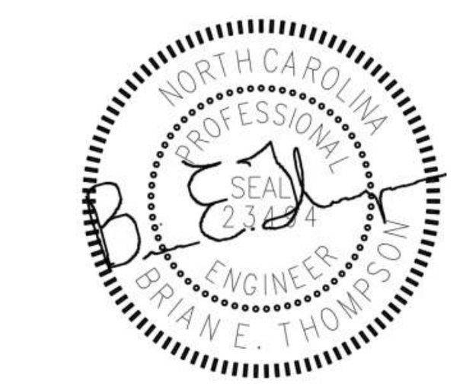
LANDDESIGN, INC.
Landscape Design
NC License # C-015
223 North Graham Street
Charlotte, North Carolina 28202
(t) 704/333.0325

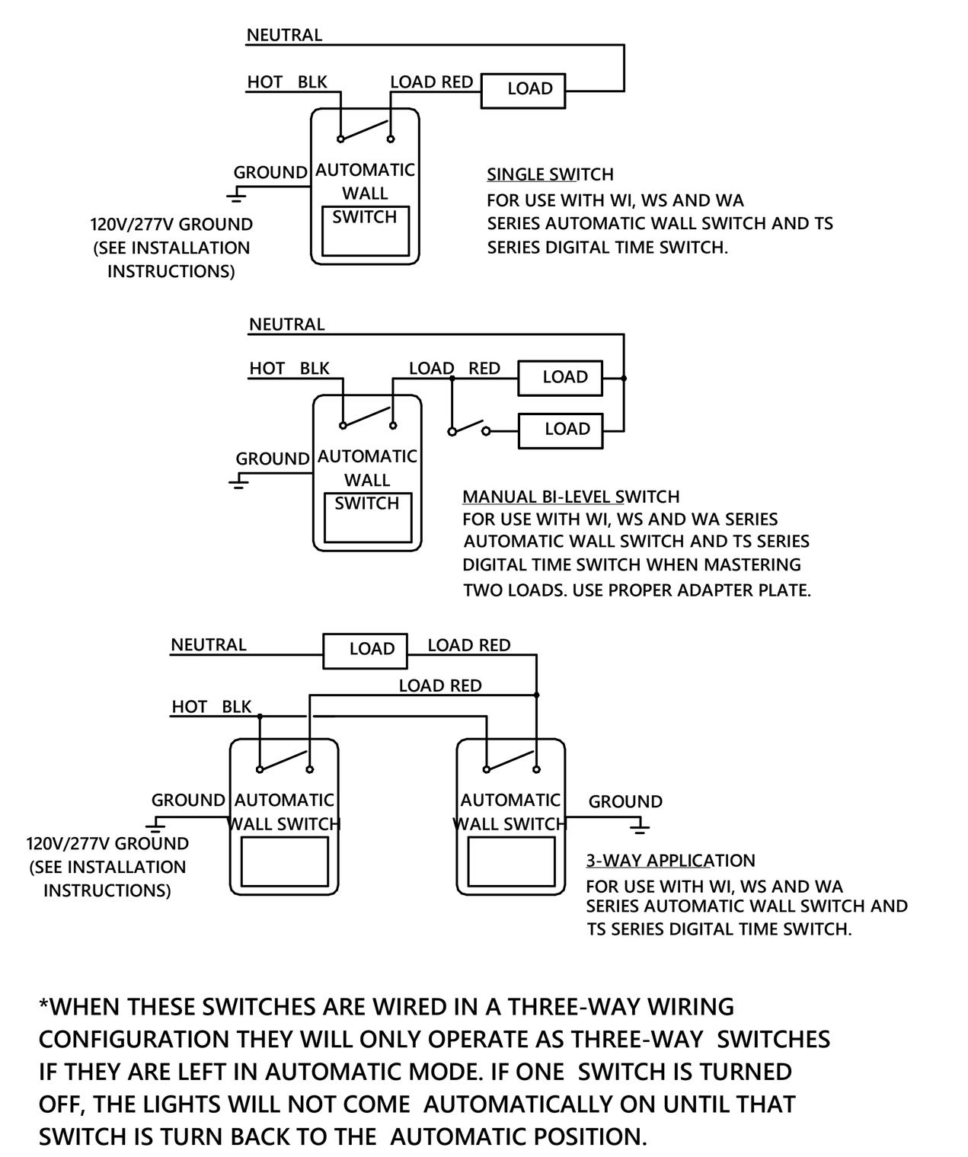


09.08.2021

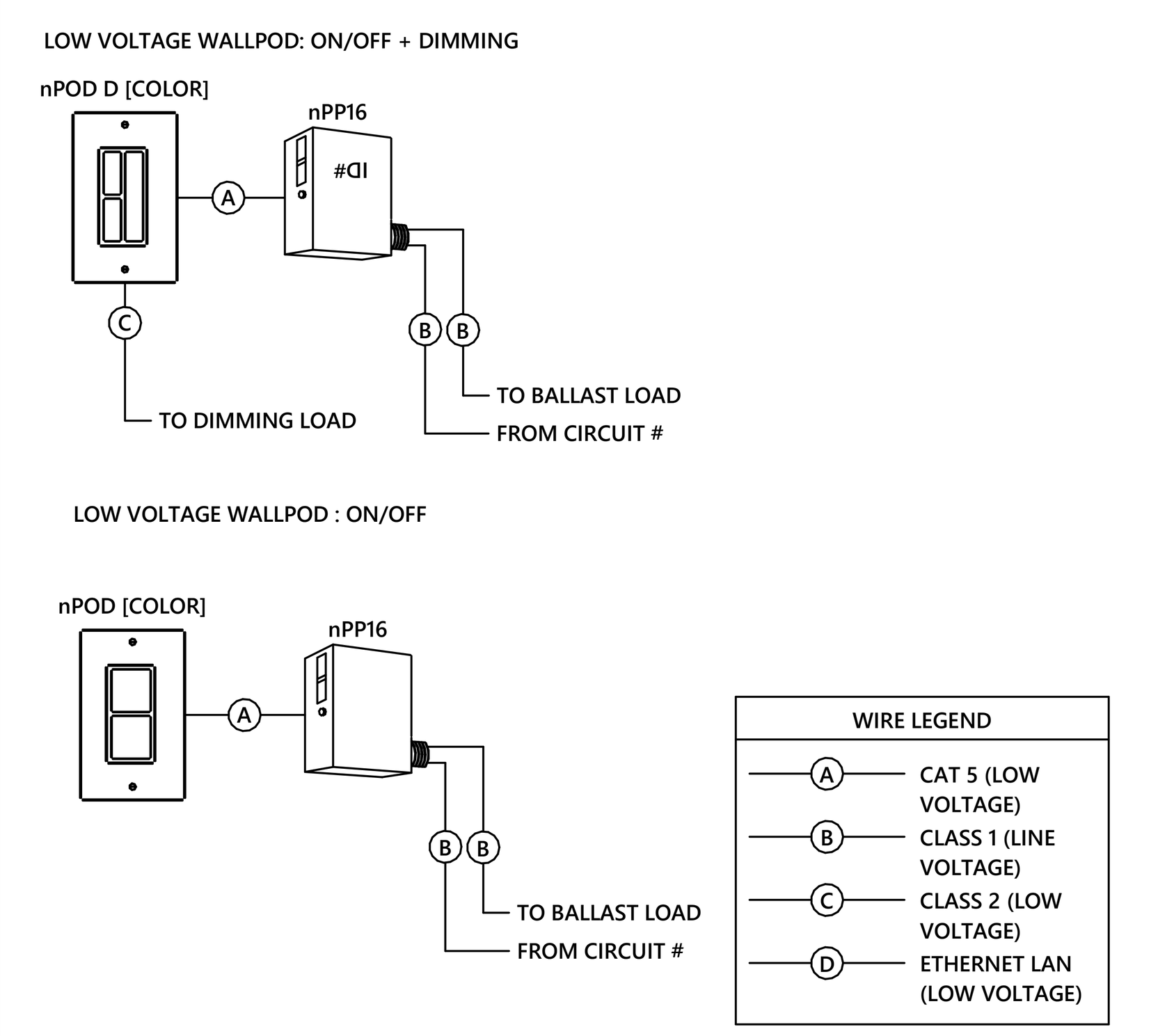
UNC CHARLOTTE

Charlotte, NC

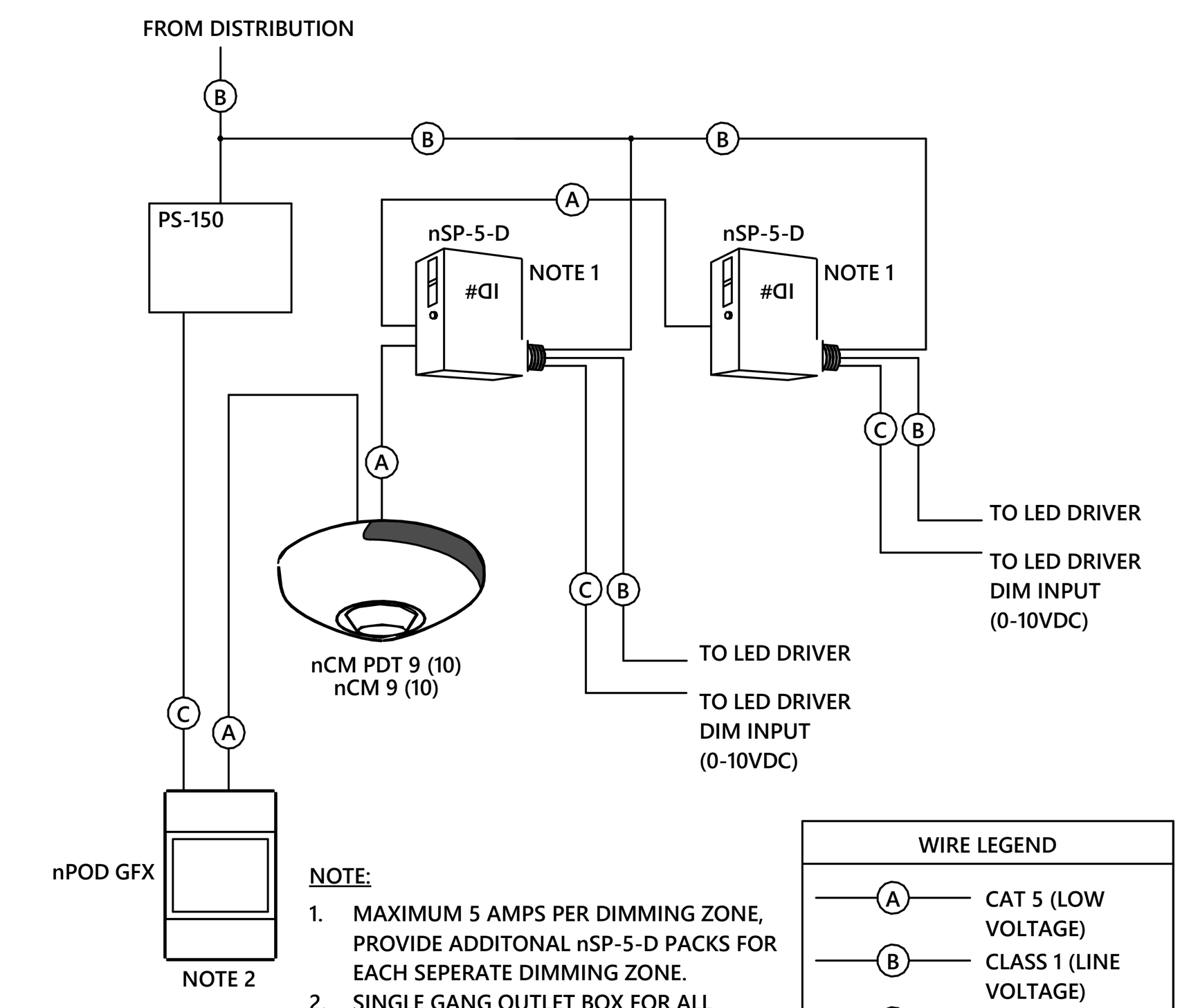
RESIDENCE HALL
PHASE XVI



1 SINGLE POLE OCCUPANCY SENSOR SWITCH
NOT TO SCALE

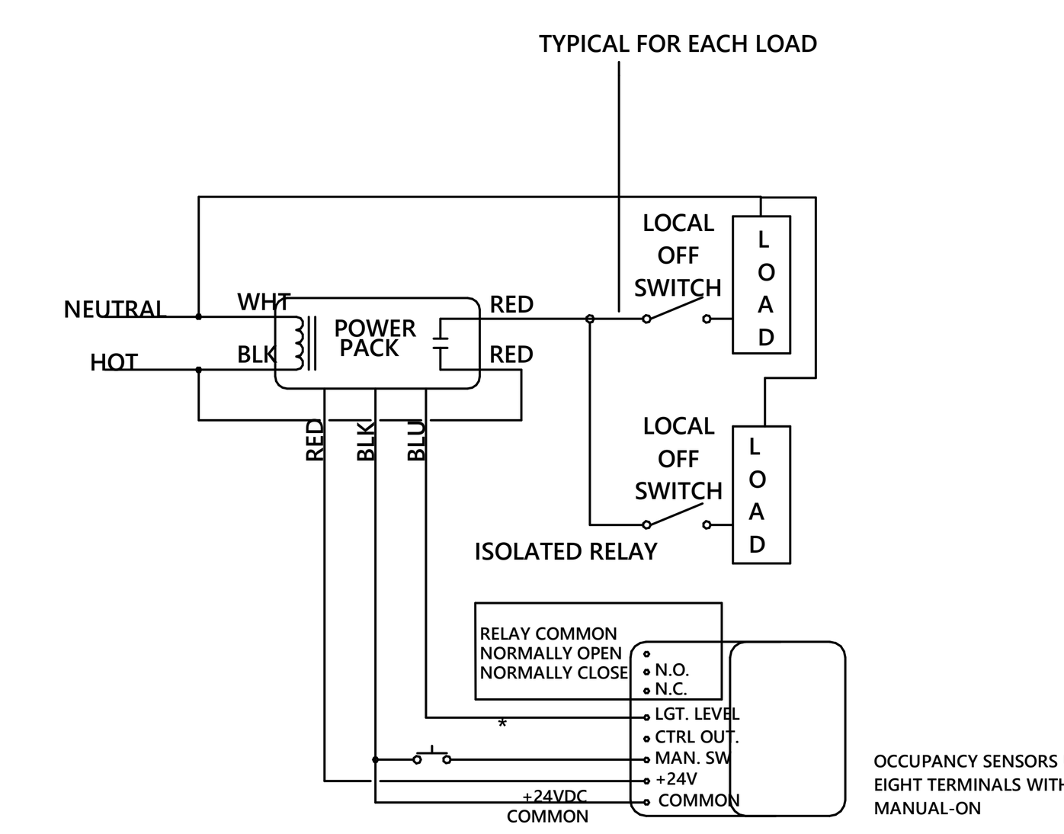


2 DIMMING-NORMAL SWITCH AND POWER PACK
NOT TO SCALE

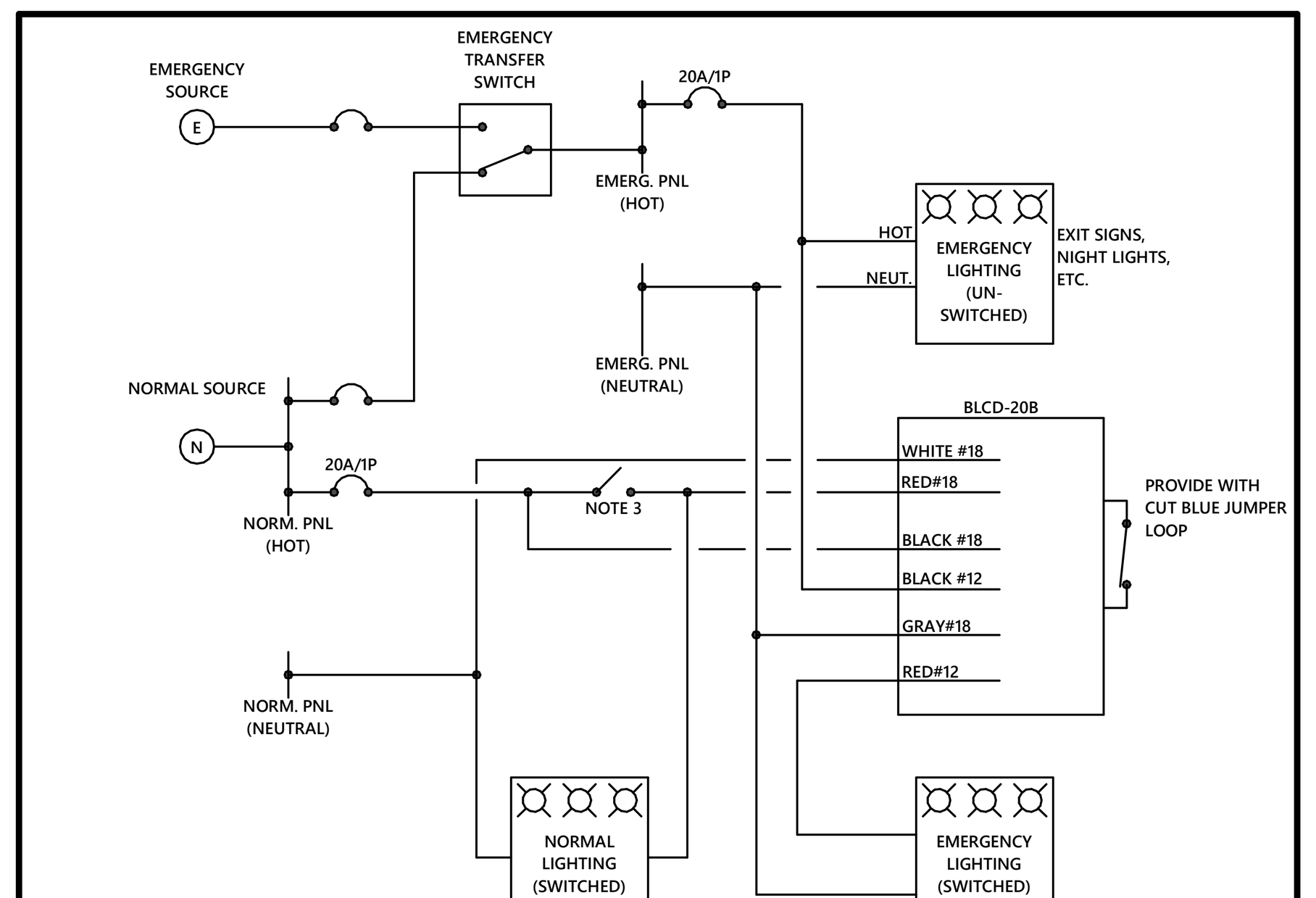


NOTE:
1. MAXIMUM 5 AMPS PER DIMMING ZONE, PROVIDE ADDITONAL nSP-5-D PACKS FOR EACH SEPERATE DIMMING ZONE.
2. SINGLE GANG OUTLET BOX FOR ALL CONTROL.
3. BASES OF DESIGN: NLIGHT SYSTEM.

3 LOCAL DIMMING CONTROL SYSTEM
NOT TO SCALE

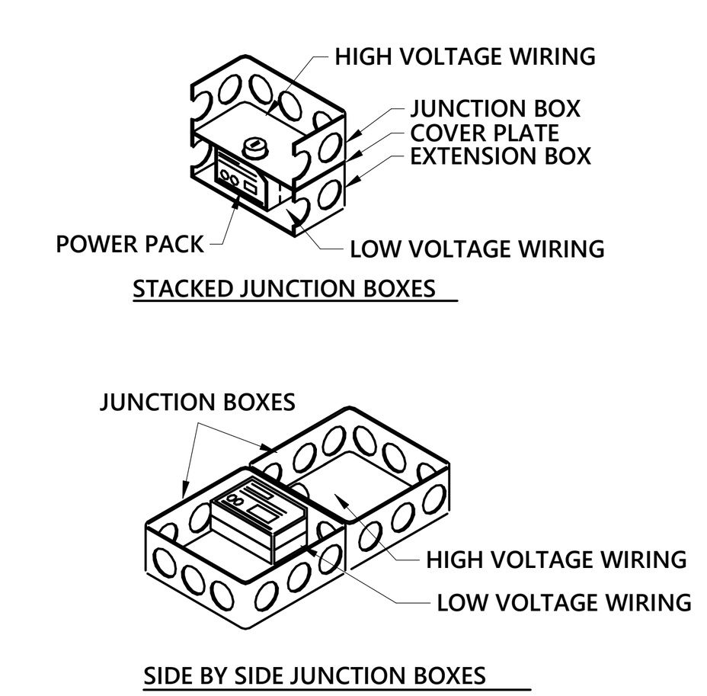


4 DT-200-300
NOT TO SCALE



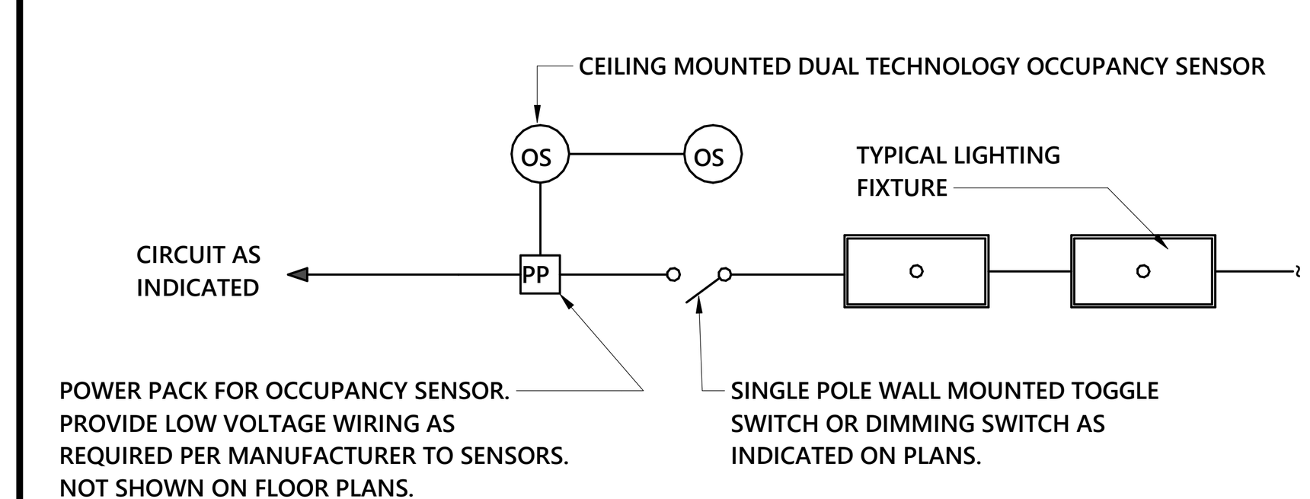
NOTES:
1. RELAY SHALL BE BODINE #BLCD-20B OR SC1008 BRANCH CIRCUIT ELTS (BCELTS), LEGRAND ELCU, OR EQUAL.
2. PROVIDE ONE RELAY PER LIFE SAFETY SWITCH LEG / CIRCUIT SHOWN ON PLANS.
3. LOCAL LIGHTING CONTROL (WALL SWITCH, OCCUPANCY SENSOR, RELAY, CONTACT, ETC.).
4. SWITCHED EMERGENCY FIXTURE SHALL BE POWERED VIA THE EMERGENCY PANEL. SWITCHED EMERGENCY FIXTURE SHALL BE CONTROLLED WITH NORMAL LOCAL LIGHTING FIXTURES ONLY WHEN NORMAL POWER IS AVAILABLE. UPON LOSS OF NORMAL POWER, SWITCHED EMERGENCY LIGHTING FIXTURE CONTROL SHALL BE BYPASSED AND THE FIXTURE SHALL BE FULLY ENERGIZED. RELAY SHALL NOT BE UTILIZED AS A POWER TRANSFER DEVICE.

5 EMERGENCY LIGHTING RELAY CONTROL CIRCUIT
NOT TO SCALE



NOTES:
POWER PACKS INSTALLED IN JUNCTION BOX.
DO NOT MOUNT POWER PACKS CLOSER THAN 6-12 INCHES FROM SENSOR.
PROVIDE DOUBLE STACKED JUNCTION BOX FOR MAXIMUM VENTILATION OF POWER PACK. PROVIDE BLANK COVER.
WHERE PERMITTED BY CODE AND AHJ, LEAVE (2) OPENINGS IN CONDUIT KNOCKOUT FOR VENTING OF POWER PACK. VERIFY WITH AHJ PRIOR TO KNOCKOUT REMOVAL.
POWER PACKS SHALL BE PROVIDED AS REQUIRED BY THE MANUFACTURE TO PROVIDE THE LIGHTING CONTROLED SHOWN ON THE PLANS. POWER PACKS ARE NOT SHOWN IN THE DRAWINGS.

6 POWER PACK INSTALLATION
NO SCALE



POWER PACK FOR OCCUPANCY SENSOR. PROVIDE LOW VOLTAGE WIRING AS REQUIRED PER MANUFACTURER TO SENSORS. NOT SHOWN ON FLOOR PLANS.

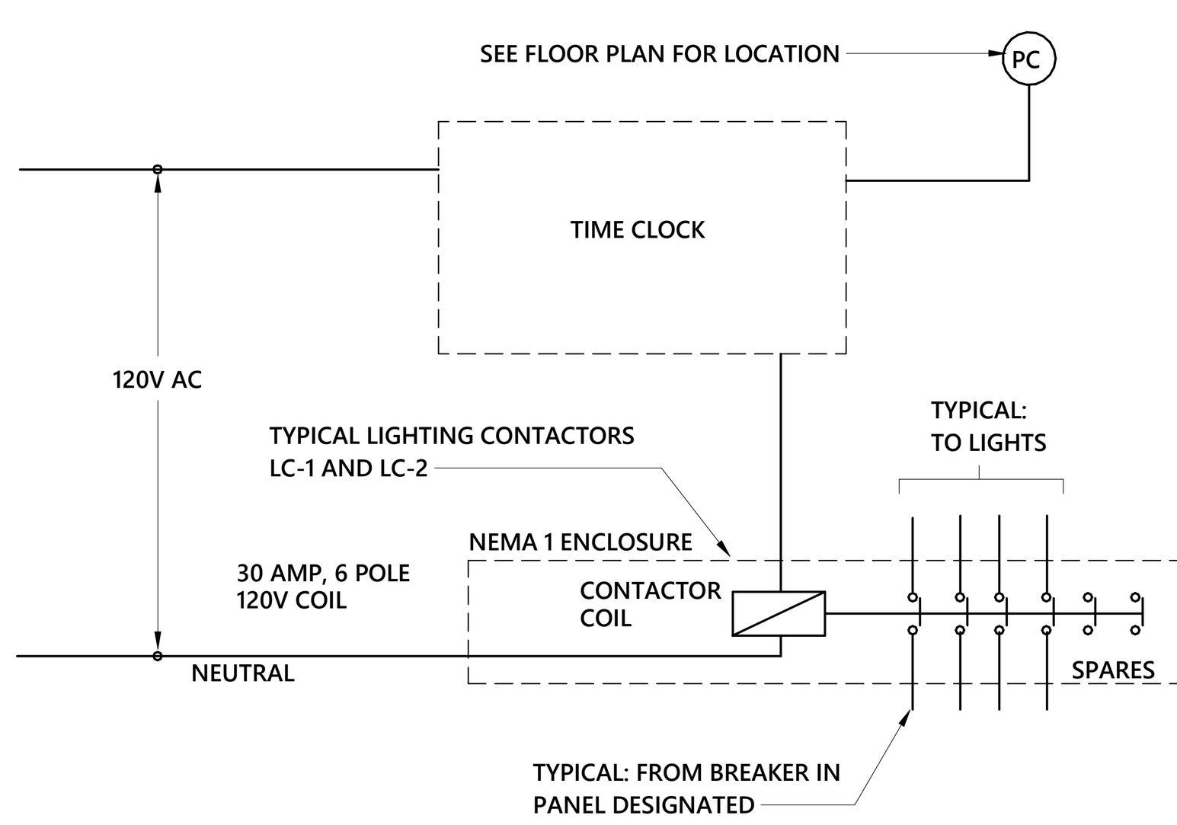
SINGLE POLE WALL MOUNTED TOGGLE SWITCH OR DIMMING SWITCH AS INDICATED ON PLANS.

NOTES:
1. OCCUPANCY SENSORS SHALL BE SET TO TIME OUT AFTER 15 MINUTES AND THE TRIM POTENTIOMETER IS SET TO 90% FOR SENSITIVITY.
2. OCCUPANCY SENSORS SHALL BE PLACED AS TO NOT FUNCTION UPON SOMEONE JUST PASSING BY THE ROOM DOOR BUT BY ACTUALLY ENTERING THE ROOM, IN AS MUCH AS POSSIBLE.

7 TYPICAL CEILING MOUNTED OCCUPANCY SENSOR WIRING DIAGRAMS
NO SCALE

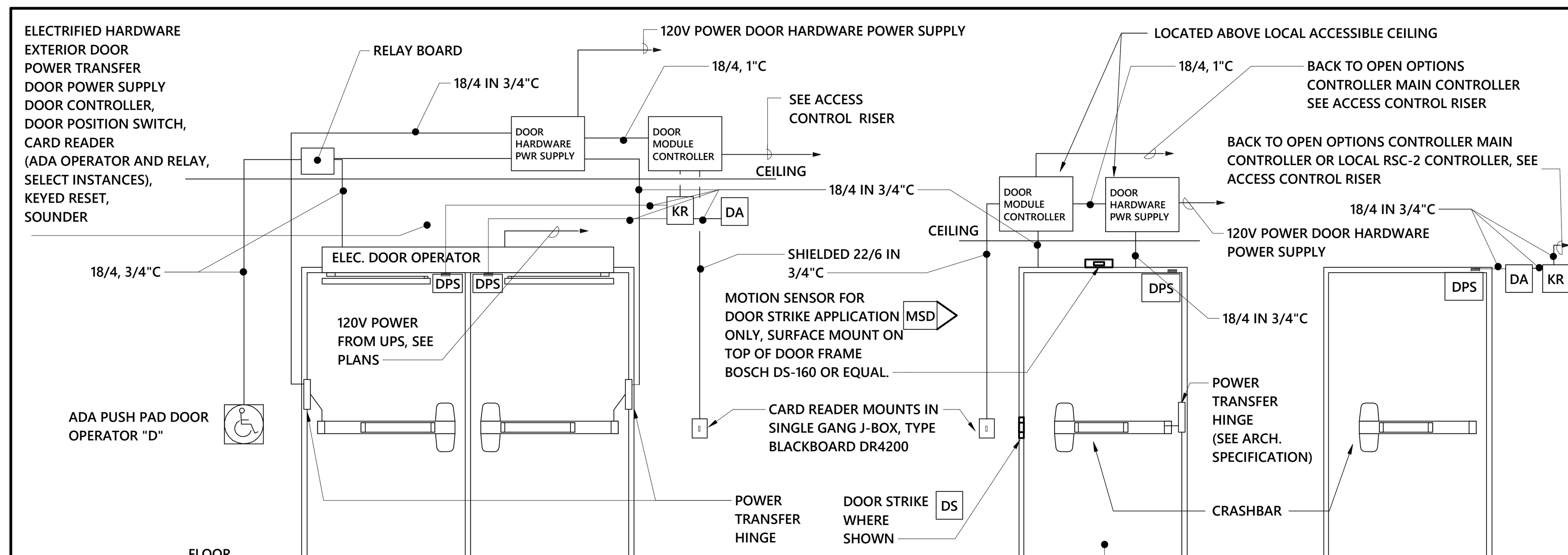
LIGHTING CONTROL NOTES:

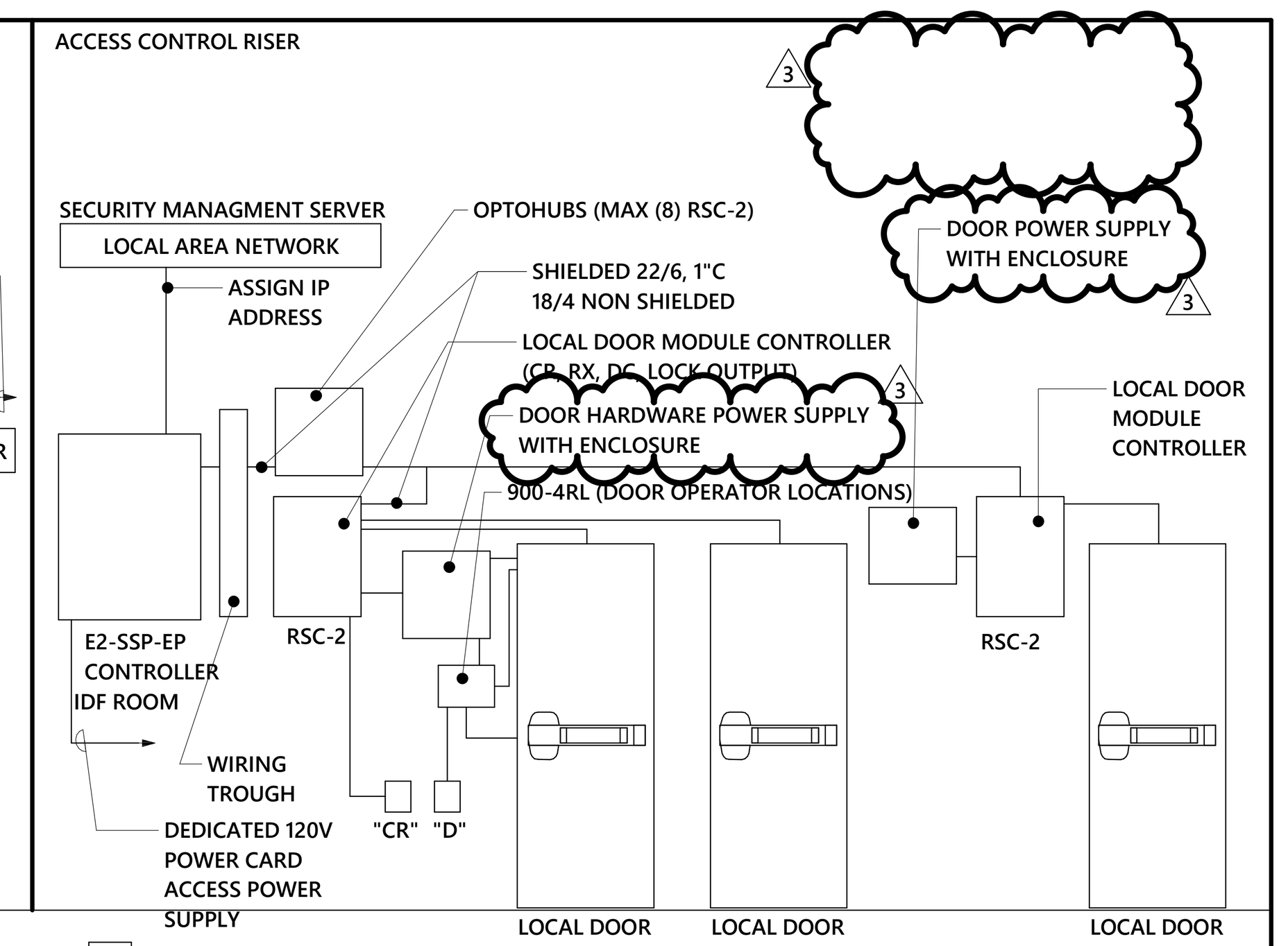
1. E.C. SHALL VERIFY VOLTAGE OF ALL COMPONENTS OF CONTROL SYSTEM INCLUDING: TIME CLOCK, PHOTO CELL, CONTACTOR CONTROL, RELAY, AND SWITCH OVERRIDE.
2. TIME CLOCK SHALL BE DIGITAL 24 HOUR AND AS MANUFACTURED BY TORK, PARAGON, INTERMATIC OR APPROVED EQUAL. CONTACTS SHALL BE SPST OR AS INDICATED, RATED 120/277V AT 30 AMPS, AND MINIMUM 30,000 SWITCHING CYCLES. PROVIDE WITH NUMBER OF CHANNELS AS INDICATED (MINIMUM OF 6 CHANNELS) OR AS REQUIRED TO MEET THE INTENT OF THE DRAWINGS. EACH CHANNEL SHALL BE INDIVIDUALLY PROGRAMMABLE WITH 128 ON-OFF OPERATIONS PER WEEK PLUS FOUR SEASONAL SCHEDULES TO MODIFY THE BASIC PROGRAM AND A HOLIDAY SCHEDULE THAT OVERRIDES THE WEEKLY OPERATION. THE CONTROLLER SHALL BE PROVIDED WITH A PHOTOELECTRIC SENSOR, ASTRONOMIC DIAL, INTEGRAL OVERRIDE SWITCH, AND A BATTERY BACKUP NON-VOLATILE MEMORY FOR SCHEDULES AND TIME CLOCK. TIME CLOCK SHALL BE IN A NEMA-1 ENCLOSURE. 120 VOLT INPUT. TIME CLOCK SHALL PROVIDE SEPARATE OUTPUT CONTROLS FOR EACH LIGHTING CONTROL CONTACTOR COIL. TIME CLOCK SHALL ACCEPT INPUT FROM PHOTO CELL(S). PHOTO CELL(S) SHALL BE RIGIDLY INSTALLED ON THE BUILDING FACING NORTH.
3. LIGHTING CONTACTORS SHALL SWITCH LOADS AT THE VOLTAGE AND AMPERE RATING INDICATED AND SHALL HAVE THE NUMBER OF POLES ON THE DRAWINGS OR AS REQUIRED. THE CONTACTOR AND CONTACTS SHALL BE CONTINUOUSLY RATED FOR THE LOAD SERVED. ALL LIGHTING CONTACTORS SHALL BE IN A NEMA-1 ENCLOSURE.
4. SYSTEM SHALL BE FAIL SAFE (CLOSE) FOR EMERGENCY CIRCUITS.
5. SEE SHEET E-601 FOR DESCRIPTION OF LIGHTING SEQUENCE.
6. LOCATE LIGHTING CONTROL LC-1 IN ATS ROOM 008 AND LIGHTING CONTROL LC-2 IN ELECTRICAL ROOM 006.



CONTACTOR	COIL VOLTAGE	POLES	CIRCUITS SWITCHED	ZONE DESCRIPTION
LC-1	120	3	EDP1-4,7	EXTERIOR BUILDING LIGHTING
LC-2	120	6	LPGN-8/10,11/13,15	SITE LIGHTING (POST TOP AND STEP LIGHTS)

8 LIGHTING CONTACTOR DETAIL
NOT TO SCALE





NOTES:
1. ALL DOORS ARE PROVIDED WITH FREE EGRESS AS PART OF THE HARDWARE. FIRE ALARM INTEGRATION NOT REQUIRED.
2. CARD READER AND PUSH PAD STATIONS SHALL BE MOUNTED AT 34"-36" AFF PER CAMPUS STANDARDS.
3. CRASHBAR, DOOR HARDWARE POWER SUPPLY AND POWER TRANSFER HARDWARE PROVIDED BY THE HARDWARE CONTRACTOR, AS SPECIFIED IN THE ARCHITECTURAL SPECIFICATIONS AND PLANS.
4. ACCESS CONTROLLERS, CABLING , READERS, KEYED RESET, ACCESS POWER SUPPLY , DOOR POSITION SWITCH, AND SOUNDER BY THE SUB SECURITY CONTRACTOR.
5. "KR" AND "DA" SHALL BE MOUNTED ADJACENT LOCAL DOOR AT 5' AFF.
6. STOREFRONT LOCATIONS SHALL UTILIZE MULLION FOR CABLING REQURIEMENTS. COORDINATE WITH GENERAL CONTRACTOR FOR ROUTING REQUIREMENTS.
7. MOUNT DOOR MODULE CONTROLLER IN A 10"X10"X4" PLENUM RATED METAL ENCLOSURE WITH HINGED DOOR AND LATCH.
8. ALL CONDUIT, BOXES, PATHWAYS ARE BY THE ELECTRICAL CONTRACTOR. 3/4" CONDUIT UNLESS OTHERWISE NOTED BY THE ELECTRICAL CONTRACTOR.
9. CONTRACTORS ASSOCIATED WITH A FULL WORKING DOOR ACCESS SYSTEM SHALL PROVIDE A MOCKUP INSTALLATION THAT INCLUDES THE DOOR, PATHWAYS, BOXES, LOCAL CONTROLLER, WIRING, POWER SUPPLIES, DOOR HARDWARE, READER, POSITION SENSORS, KEY RESET, AND DOOR ALARM. THIS SINGULAR INSTALLATION SHALL BE APPROVED PRIOR TO OTHER DOOR INSTALLATIONS, BY THE OWNER. CONTRACTOR SHALL WALK THE OWNER'S STAFF THROUGH OPERATION AND INSTALLATION OF THE FULL WORKING SYSTEM. MOCKUP MAY REMAIN IN PLACE ONCE APPROVED.

ELECTRIFIED HARDWARE INTERIOR DOOR POWER TRANSFER DOOR POWER SUPPLY DOOR CONTROLLER, DOOR POSITIONS SWITCH, CARD READER

NON-ELECTRIFIED HARDWARE DOOR (DOOR POSITION SWITCH, SOUNDER AND KEY RESET) EXTERIOR DOOR OR DOOR POSITION SWITCH ONLY (NON PUBLIC)

- KR — KEYED RESET, PROVIDE LOCK CYLINER FLUSH MOUNTED WITH GRAPHIC FOR LOCKED/UNLOCKED OVERRIDE, ON STAINLESS STEEL PLATE.
- DPS — DOOR POSITION SWITCH BASED ON CONTACTLESS TYPE 1078CW-N OR EQUAL, 2" FROM EDGE
- DA — DOOR PROP ALARM BASED ON HONEYWELL 748 OR EQUAL. EXTERIOR EXIT DOORS ONLY. MOUNT ON FLUSH JUNCTION BOX.
- DS — DOOR STRIKE (BY DOOR SUPPLIER).

9 TYPICAL CARD ACCESS, ADA DOOR OPENER & DOOR PROP ALARM
NO SCALE

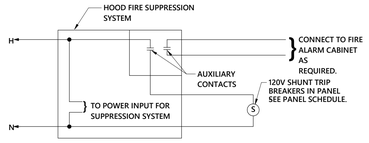
TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

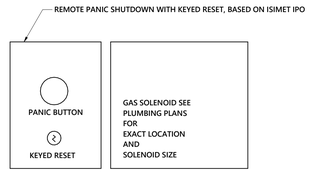
ELECTRICAL DETAILS

BID SET

E-008



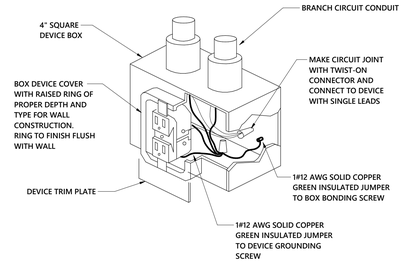
1 HOOD SHUTDOWN WIRING DETAIL
NOT TO SCALE



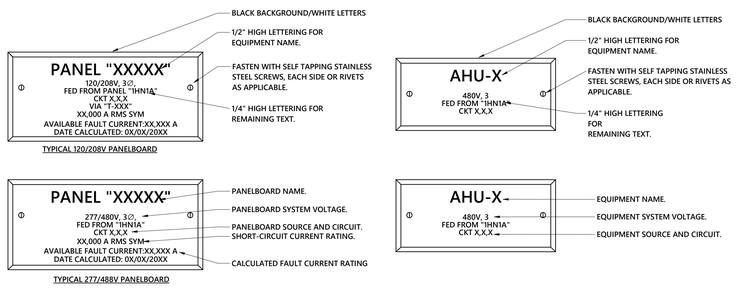
NOTES:
1. PROVIDE PHENOLIC LABEL ABOVE PUSH BUTTON: "EMERGENCY GAS SHUT-OFF".
2. PROVIDE REMOTE PANIC ASSEMBLY IPO-K-C WITH OPTION "C", PANIC BUTTON COVER.
3. CONNECT TO LOCAL 120V CIRCUIT FOR CONTROLLER.
4. SEE PLUMBING PLANS FOR EXACT SOLENOID SIZE REQUIREMENT.
5. 3/4" CONDUIT FROM EACH PANIC BUTTON TO SOLENOID ENCLOSURE. SEE PLANS FOR QUANTITY AND LOCATION.

EQUALS: LACS, AGS

2 EMERGENCY GAS SHUTOFF CONTROL DETAIL
NOT TO SCALE

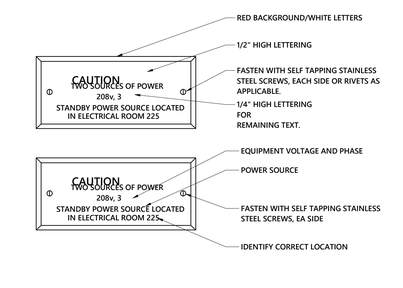


3 RECEPTACLE GROUNDING DETAIL
NO SCALE

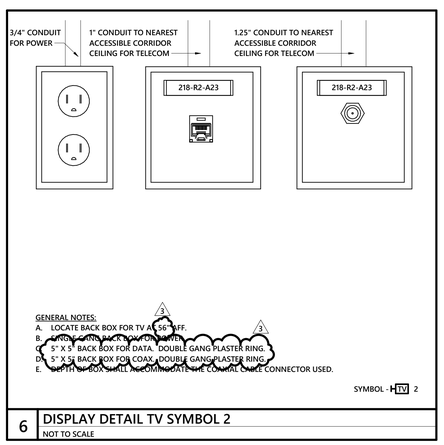


NOTES:
1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, COLORS, ETC.
2. PROVIDE SHORT-CIRCUIT CURRENT RATING AND AVAILABLE FAULT CURRENT ON EACH NON-DWELLING SERVICE EQUIPMENT NAMEPLATE.

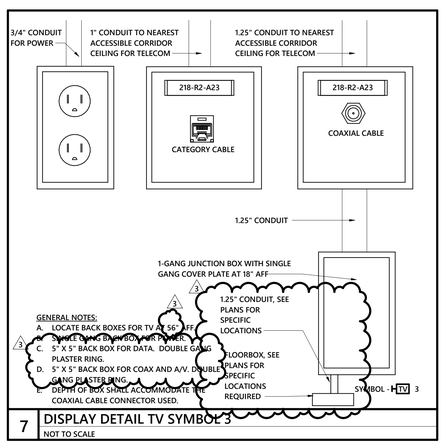
4 TYPICAL NAMEPLATE DIAGRAM
NO SCALE



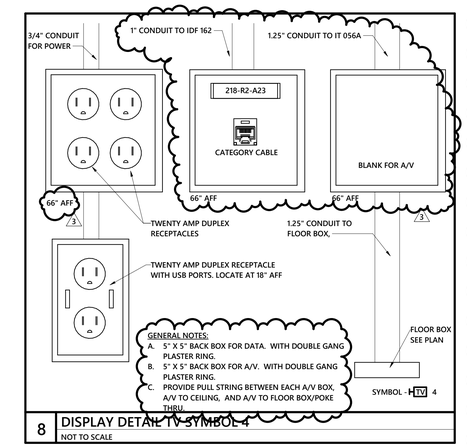
5 EMERGENCY POWER NAMEPLATE
NOT TO SCALE



6 DISPLAY DETAIL TV SYMBOL 2
NOT TO SCALE



7 DISPLAY DETAIL TV SYMBOL 3
NOT TO SCALE



8 DISPLAY DETAIL TV SYMBOL 4
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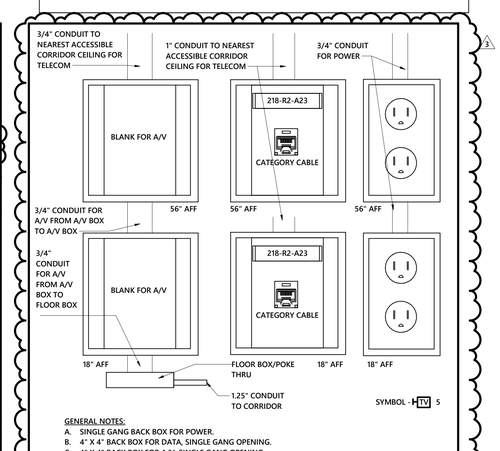

9 DISPLAY DETAIL TV SYMBOL 5
NOT TO SCALE

ELECTRICAL GENERAL PROJECT NOTES

A. THE WORK COVERED BY THESE SPECIFICATIONS CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, MATERIALS AND SUPPLIES AS NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATING ELECTRICAL SYSTEMS AS SHOWN ON THE PLANS.
B. ALL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, NFPA, STATE BUILDING CODE, AND ANY OTHER LOCAL REQUIREMENTS THAT MAY APPLY.
C. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL ELECTRICAL PERMITS AND INSPECTION FEES.
D. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. OR BY A STATE APPROVED THIRD PARTY TESTING AGENCY FOR THE USE INTENDED WHERE A STANDARD FOR SUCH MATERIALS AND USE EXISTS. ALL ITEMS OF THE SAME TYPE AND RATING SHALL BE IDENTICAL AND OF THE SAME MANUFACTURER.
E. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CATALOG DATA IN ELECTRONIC FORMAT (PDF) FOR ALL ELECTRICAL ITEMS IN THE SCOPE OF WORK, INCLUDING, BUT NOT LIMITED TO, RACEWAYS, BOXES, FITTINGS, CONDUCTORS, LUMINAIRES, LAMPS, BALLASTS, WIRING DEVICES, SAFETY SWITCHES, DISCONNECTS, TRANSFORMERS, PANELBOARDS, SWITCHBOARDS, GENERATOR MODIFICATIONS, AUTOMATIC TRANSFER SWITCHES (ATS), UNINTERRUPTIBLE POWER SUPPLY (UPS), LOAD BANK, FIRE ALARM, TELECOMMUNICATIONS, ETC. FOR APPROVAL AS APPLICABLE FOR THE PROJECT. ONE COMPLETE SET OF APPROVED SUBMITTALS SHALL BE MAINTAINED AT THE JOB SITE.
F. ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH THE BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, CONDUIT, WIRING, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, METHODS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COSTS ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED AFTER BIDS HAVE BEEN ACCEPTED AND ALL COSTS WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. CREDITS SHALL BE GIVEN TO THE OWNER WHERE SUCH EQUIPMENT AND METHODS RESULT IN LESS EXPENSE TO THE CONTRACTOR.
G. ONE COMPLETE SET OF THE LATEST CONSTRUCTION PLANS OF ALL TRADES SHALL BE MAINTAINED AT THE JOB SITE IN ADDITION, ALL ADDENDUMS, BULLETINS, AND/OR SKETCHES SHALL BE INCORPORATED INTO THE ON-SITE CONSTRUCTION PLANS AS THE JOB PROGRESSES.
H. COMPLETE ADEQUATE HOUSING SHALL BE PROVIDED FOR ALL MATERIALS STORED ON JOB SITE. ONLY CONDUIT MAY BE STORED OUTSIDE, BUT NOT IN CONTACT WITH THE GROUND.
I. THE CONDUIT AND NEUTRAL SYSTEM SHALL BE GROUNDED AT THE MAIN SERVICE EQUIPMENT. GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED PER NEC 250.
J. PROVIDE AN INTERSYSTEM BONDING TERMINATION DEVICE AT THE MAIN ELECTRICAL SERVICE PER NEC 250.94.
K. WIRING SHALL BE TESTED FOR CONTINUITY AND GROUNDS BEFORE BEING ENERGIZED. FAULTY WIRING SHALL BE REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
L. PROVIDE ALL CUTTING AND PATCHING FOR INSTALLATION OF WORK AND REPAIR ANY DAMAGE DONE.
M. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (UNLESS OTHERWISE NOTED), EXCEPT FOR CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR. CONTROL WIRING FOR SUCH EQUIPMENT SHALL BE PROVIDED BY THE RESPECTIVE DISCIPLINE.
N. ALL ELECTRICAL JUNCTION BOXES, SWITCHGEAR, CABLING, VOICE/DATA OUTLETS, LOW VOLTAGE CABINETS, EMERGENCY RECEPTACLES, ETC. SHALL BE LABELED ACCORDING TO PANEL/RACK AND CIRCUIT NUMBER.
O. UPON COMPLETION OF WORK, CONTRACTOR SHALL PRESENT ENGINEER WITH CERTIFICATE OF APPROVAL FROM LOCAL INSPECTOR AND/OR AUTHORITY HAVING JURISDICTION BEFORE WORK WILL BE APPROVED FOR FINAL PAYMENT.
P. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR EFFECTIVE THE DATE THE PROJECT IS ACCEPTED BY THE OWNER. ANY IMPERFECT MATERIALS OR WORKMANSHIP SHALL BE REPLACED WITHOUT ADDED COST TO THE PROJECT.
Q. IT SHALL NOT BE THE INTENT OF ISSUED PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE ELECTRICAL CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL NECESSARY ITEMS FOR A COMPLETE AND OPERATING SYSTEM.
R. THE WORD "PROVIDE" MEANS THAT THIS CONTRACTOR SHALL FURNISH, FABRICATE, ERECT, CONNECT, AND COMPLETELY INSTALL SYSTEMS IN PROPER OPERATING CONDITION. ALL LABOR, PRODUCT OPTIONS, ACCESSORIES AND INCIDENTAL MATERIALS REQUIRED SHALL BE INCLUDED AS PART OF THIS WORK TO COMPLETE THE INSTALLATION.
S. THE WORD "CONNECT" MEANS THAT THIS CONTRACTOR SHALL PROVIDE (SEE DEFINITION ABOVE) ALL DISCONNECTING MEANS, OVERCURRENT PROTECTION AND WIRING REQUIRED TO PLACE THE EQUIPMENT AND SYSTEMS IN PROPER OPERATING CONDITION AND TO COMPLY WITH CODE REQUIREMENTS.
T. CONTRACTOR SHALL COORDINATE THE ROUGH-IN OF ALL OUTLET LOCATIONS WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS, AND MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN.
U. ELECTRICAL CONTRACTOR SHALL NOT SCALE PLANS. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, UNLESS OTHERWISE NOTED.
V. CONTRACTOR SHALL TEST ALL "LIFE SAFETY" EQUIPMENT AND SYSTEMS FOR PROPER FUNCTION AND OPERATION. UPON SUCCESSFUL COMPLETION OF TESTS, CONFIRMATION SHALL BE SENT TO THE ENGINEER OF RECORD IN THE FORM OF A LETTER STATING THE TESTS PERFORMED, THE RESULTS, AND THE DATE TESTS WERE SUCCESSFULLY COMPLETE. "LIFE SAFETY" EQUIPMENT AND SYSTEMS CONSIST OF THOSE AS SPECIFIED IN THE STATE BUILDING CODE, THE NATIONAL ELECTRICAL CODE , NFPA 101, AND ANY OTHER LOCAL REQUIREMENTS THAT MAY APPLY.
W. IF DURING THE COURSE OF WORK, THE CONTRACTOR DISCOVERS A PROBLEM WITH THE PERFORMANCE OF THE INSTALLATION RELATIVE TO THE PLANS AND SPECIFICATIONS, THE NEC, OR OTHER CODES OR REQUIREMENTS, THE CONTRACTOR SHALL IMMEDIATELY BRING THE PROBLEM TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK.
X. WHERE THERE ARE CONFLICTS BETWEEN THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL BRING THE ISSUE TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK OR ORDERING ANY MATERIALS. NO ADDITIONAL COSTS SHALL BE WARRANTED WITHOUT A CHANGE TO THE PROJECT SCOPE.
Y. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PROVIDING TEMPORARY POWER AND LIGHTING FOR ALL TRADES.
Z. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE POWER COMPANY. WHERE MORE THAN ONE SERVICE IS SUPPLIED TO A BUILDING, PROVIDE IDENTIFICATION AT EACH SERVICE PER NEC 230-2(E).
AA. LIGHTING CONTROLS SHALL BE COMPLETE SYSTEMS AS PROVIDED BY THE MANUFACTURER. MANUFACTURER SHALL PROVIDE ALL PROJECT SPECIFIC WIRING DIAGRAMS AND COMPONENTS TO PROVIDE A COMPLETE LIGHTING CONTROL SYSTEMS. NOT ALL COMPONENTS ARE SHOWN ON THE DRAWINGS BUT SHALL BE PROVIDED AS REQUIRED. DIMMERS SHALL BE COMPATIBLE WITH THE LED DIMMING DRIVERS SUPPLIED TO THE SITE AND SHALL PROVIDE THE FULL RANGE OF DIMMING CALLED FOR ON THE DRAWINGS.
BB. EACH BIDDER SHALL VISIT THE JOB SITE PRIOR TO BIDDING TO FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND TO ASCERTAIN THE EXTENT OF WORK REQUIRED. FAILURE TO VISIT SITE SHALL NOT EXCUSE CONTRACTOR FROM PERFORMING REQUIRED WORK NOR SHALL IT BE AN ACCEPTABLE REASON FOR REQUESTING ADDITIONS TO THE CONTRACT.
CC. USE OF "MC" CABLE IS LIMITED TO WITHIN THE RESIDENCE APARTEMENTS AND BEDROOMS. SEE SPECIFICATIONS. NO "MC" CABLE SHALL BE USED IN THE SHELL AREAS.
DD. AT THE COMPLETION OF THE PROJECT; REMOVE ALL PULL STRINGS WHICH ARE NOT PLENUM RATED PULL STRINGS, OR CLOSE UP RACEWAY SYSTEM.
EE. WHERE PANELBOARD SCHEDULE SHOWS AN INCREASED WIRE SIZE FOR VOLTAGE DROP COORDINATE THE METHOD OF WIRE SIZE REDUCTION PRIOR TO PLACING UNDER THE SERVING DEVICE LUGS. WIRE SIZE AT THE DEVICE LUG SHALL MEET THE SIZES SHOWN BY THE MANUFACTURER FOR THE SPECIFIC DEVICE. WHERE REDUCED THE LENGTH OF THE REDUCED WIRE SHALL BE KEPT TO A MINUMUM. DO NOT REDUCE THE NUMBER OF STRANDS AS A METHOD TO REDUCE THE WIRE SIZE.
FF. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS OF EXPANSION JOINTS AND PROVIDE CONDUIT EXPANSION FITTINGS TO COMPLY WITH NEC 70,(2020), 300.4,(H).

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09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

ELECTRICAL DETAILS AND GENERAL PROJECT NOTES

BID SET

E-009

Optima # 18-0001 Sheet 9 of 84

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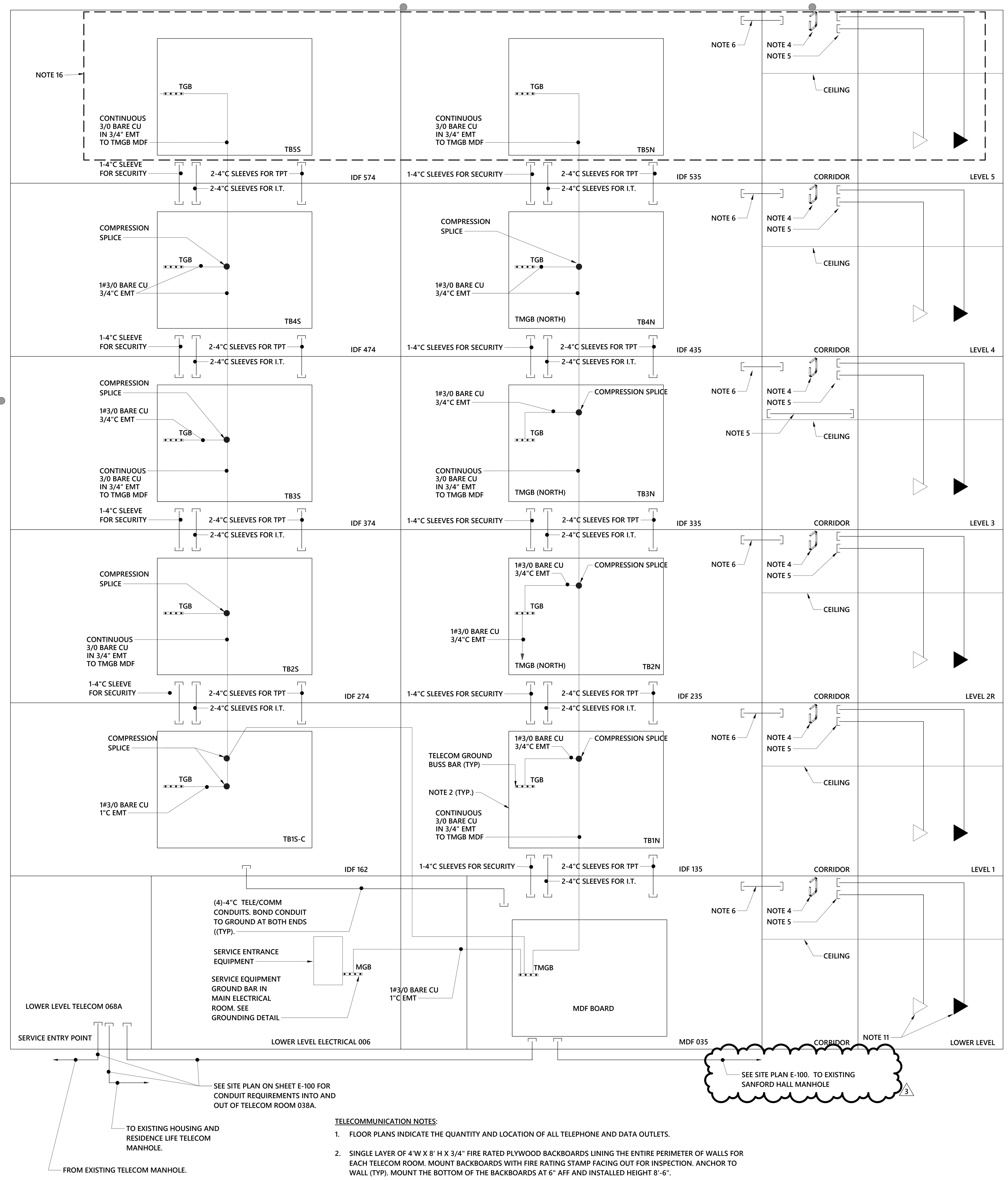


TELECOMMUNICATION NOTES:

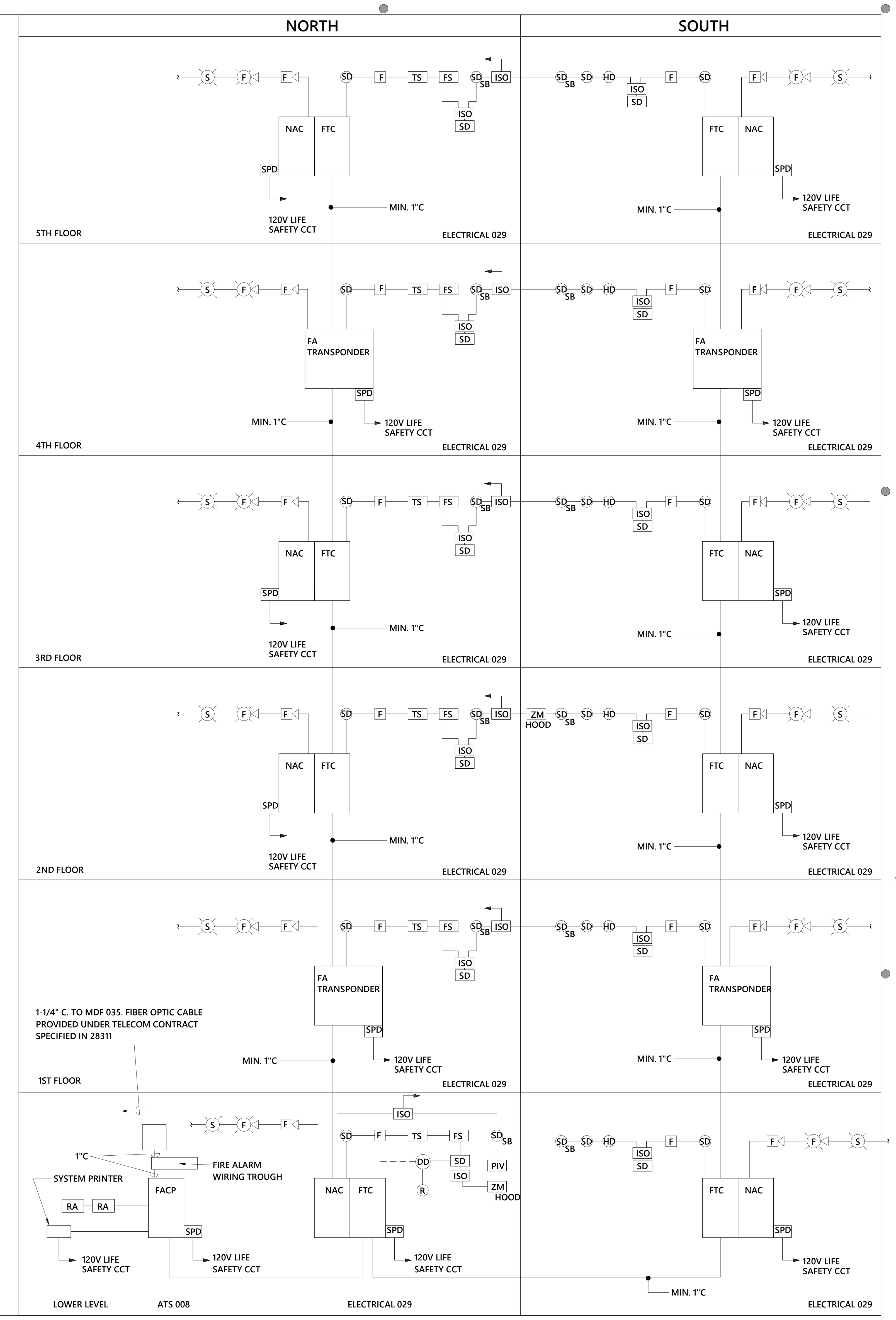
1. FLOOR PLANS INDICATE THE QUANTITY AND LOCATION OF ALL TELEPHONE AND DATA OUTLETS.
2. SINGLE LAYER OF 4'W X 8' H X 3/4" FIRE RATED PLYWOOD BACKBOARDS LINING THE ENTIRE PERIMETER OF WALLS FOR EACH TELECOM ROOM. MOUNT BACKBOARDS WITH FIRE RATING STAMP FACING OUT FOR INSPECTION. ANCHOR TO WALL (TYP). MOUNT THE BOTTOM OF THE BACKBOARDS AT 6" AFF AND INSTALLED HEIGHT 8'-6".
3. MAINTAIN ALL WALL PENETRATIONS TO RETAIN FIRE RATING.
4. PROVIDE J-HOOKS FOR THE ENTIRE LENGTH OF THE CORRIDOR ABOVE ACCESSIBLE CEILINGS. MAXIMUM 48" SPACING. WHERE INACCESSIBLE CEILINGS OCCUR SUBSTITUTE WITH 4" CONDUITS AS CALLED FOR ON THE TELECOMMUNICATION PLANS. WHERE CONDUITS ARE NOT SHOWN ON PLANS PROVIDE THREE (3) 4" CONDUITS WITH PULL CORD.
5. TYPICAL - ALL CONDUIT STUBS ABOVE CEILING SHALL TERMINATE WITHIN 12" OF J-HOOKS. PROVIDE BUSHING ON END OF CONDUIT.
6. 4" CONDUIT SLEEVES. REFER TO TELECOM DRAWINGS FOR NUMBER AND LOCATIONS OF CONDUIT SLEEVES AND CONDUIT PATHS. ALL CONDUITS AND SLEEVES FOR I.T. AND TELECOMMUNICATION SYSTEM WIRING SHALL BE COLOR ORANGE.
7. ALL CONDUITS AND SLEEVES FOR SECURITY SYSTEM WIRING SHALL BE DARK RED (BURGUNDY).
8. ALL CONDUITS AND SLEEVES FOR THIRD PARTY TELECOMMUNICATIONS (TPT) PROVIDER (STUDENT ROOM CABLING) WIRING SHALL BE COLOR BROWN.
9. TPT WILL BE CONSIDERED STUDENT ROOM CABLING. SEE TELECOMMUNICATIONS DRAWINGS.
10. BACKBONE TELECOMMUNICATIONS CABLING WHERE INSTALLED IN A J-HOOK ROW SHALL BE INSTALLED IN A SEPARATE J-HOOK DISTRIBUTION.
11. REFER TO TELECOMMUNICATION DRAWINGS FOR LOCATION OF DEVICES.
12. SEE TELECOMMUNICATION AND ELECTRICAL DRAWINGS FOR ADDITIONAL HORIZONTAL RACEWAY REQUIREMENTS.
13. WHERE CONDUITS STUB-OUT TO CABLE TRAY IN THE TELECOMMUNICATION ROOMS PROVIDE A GROUND WIRE BETWEEN THE CONDUIT AND CABLE TRAY.
14. FOR EACH UNDERGROUND CONDUIT STUB-UP PROVIDE A GROUNDING BUSHING WITH #6 BOUNDING JUMPER.
15. AFTER INSTALLATION OF TELECOM CABLES, REMOVE ALL REMAINING PULL STRINGS UNLESS THEY ARE PLENUM RATED.
16. ALTERNATE #1: THE ITEMS SHOWN WITHIN THE DASHED AREA ARE TO BE A PART OF ALTERNATE #1. THE CONDUIT PENETRATIONS AND SLEEVES THROUGH THE 5TH FLOOR ARE PART OF BASE BID WORK. SEE 5TH FLOOR PLAN FOR ANY ADDITIONAL TELECOM WORK REQUIRED IN BASE BID.

2 TELECOMMUNICATIONS PATHWAY RISER DIAGRAM

DIAGRAMMATIC

FIRE ALARM NOTES

1. FACP SHALL BE FULLY ANALOG ADDRESSABLE WITH CLASS A WIRING.
2. FACP SHALL BE EQUIPPED WITH FIBER COMMUNICATIONS CARD.
3. FACP SHALL BE CONNECTED TO A UL APPROVED CENTRAL STATION.
4. FACP SHALL HAVE A MINIMUM 24 HR. BATTERY BACKUP AND CONNECTION TO LIFE/SAFETY GENERATOR SOURCE
5. THE FIRE ALARM SYSTEM SHALL BE A VOICE EVAC TYPE.
6. ISOLATION MODULES SHALL BE PROVIDED FOR INITIATION DEVICES. LOOP ISOLATION MODULES FOR FACP SHALL BE MOUNTED IN NEMA 1 ENCLOSURE, DIRECTLY ADJACENT.
7. PROVIDE A DITEK #DTK-TSS-4D SERIES OR EQUAL SPD FOR 120V SUPPLY TO FACP AND EACH FA NAC
8. PROVIDE CEILING MOUNTED ADDRESSABLE TYPE SMOKE DETECTORS WITH SOUNDER BASES FOR ALL STUDENT RESIDENCE AND STAFF UNITS. THESE DETECTORS SHALL FUNCTION SIMILAR TO A SINGLE STATION SMOKE DETECTOR. WHEN THE DETECTOR IS ACTIVATED, THE SOUNDER BASE SHALL SOUND A LOCAL ALARM ONLY. IF A SECOND DETECTOR ELSEWHERE IN THE BUILDING IS ACTIVATED A GENERAL BUILDING ALARM SIGNAL SHALL BE INITIATED. PROGRAMMING OF DETECTORS SHALL ACTIVATE THE SOUNDER BASE FOR ALL SMOKE DETECTORS WITHIN THAT RESIDENT UNIT. PROGRAM SYSTEM TO OVERRIDE THE SOUNDER BASES WHILE VOICE INSTRUCTIONS ARE ACTIVE.
9. A SYNCHRONIZATION MODULE SHALL BE PROVIDED FOR ALL SMOKE DETECTORS EQUIPPED WITH SOUNDER BASES.
10. SMOKE DETECTORS IN CEILING SPACES WITH VARYING HEIGHTS, DETECTORS SHALL BE LOCATED IN HIGHEST ELEVATION TO DETECT SMOKE. I.E. SUITES, ETC. REGARDLESS OF GRAPHICAL LOCATION SHOWN. COORDINATE IN FIELD WITH CEILING HEIGHTS.
11. LOCATE FIRE ALARM PULL STATION WITHIN 5' OF THE EXIT DOOR.
12. LOCATE SMOKE/HEAT DETECTOR WITHIN 5' OF THE FA EQUIPMENT (FACP, FATC, NAC).
13. LOCATION OF CEILING MOUNTED SMOKE/HEAT DETECTOR SHALL BE FIELD COORDINATED PRIOR TO ROUGH IN. THE DETECTOR SHALL BE A MINIMUM OF 12" AWAY FROM LIGHT FIXTURES AND A MINIMUM OF 3' AWAY FROM AIR DISTRIBUTION DEVICES.
14. SMOKE DETECTORS SHALL NOT BE LOCATED GREATER THAN 15' FROM THE END OF CORRIDORS. THE DISTANCE BETWEEN DETECTORS SHALL NOT EXCEED 30'-0" ON CENTER. SITE CONDITIONS MAY REQUIRE ADDITINAL DEVICS DUE TO SPACING AND OTHER BUILDING ELEMENTS. PROVIDE AND INSTALL DETECTORS AS REQUIRED.
15. THE DUCT SMOKE DETECTORS SHALL COMPLY WITH IFC 907.12.
16. PROVIDE REMOTE ALARM INDICATOR LIGHT FOR DUCT SMOKE DETECTOR AT NEAREST PUBLIC AREA APPROVED BY THE STATE CONSTRUCTION OFFICE. PROVIDE ENGRAVED LABEL AFFIXED TO THE REMOTE INDICATOR.
17. DAMPER AND SMOKE DETECTORS SHALL BE VERIFIED WITH THE MECHANICAL DRAWINGS FOR QUANTITY AND LOCATION. TOTAL QUANTITY MINIMUM SHALL BE BASED ON BOTH MECHANICAL SCHEDULES AND MECHANICAL PLAN LOCATIONS AND ELECTRICAL PLANS. WHEN DEVICE QUANTITIES (ELECTRICAL VS. MECHANICAL) ARE IN CONFLICT, PROVIDE THE GREATER QUANTITY OF DETECTORS.
18. THE FIRE ALARM SYSTEM SHALL BE PROGRAMMED TO ACTUATE CORRIDOR ISOLATION (RELAY) SMOKE DAMPERS UPON SMOKE DETECTION WITHIN THE RESPECTIVE ZONE, ASSOCIATED CORRIDOR AND A GENERAL ALARM. COORDINATE WITH MECHANICAL CONTRACTOR.
19. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL FLOW, PRESSURE, & TAMPER SWITCHES WITH FIRE PROTECTION CONTRACTOR PRIOR TO INSTALLATION.
20. ALL VISUAL DEVICES WITHIN THE SAME AREA SHALL BE SYNCHRONIZED. THE FLASH PATTERN SHALL BE A THREE BEAT TEMPORAL.
21. ALL FIRE ALARM WIRING SHALL BE IN RED COLOR CONDUIT.
22. ALL AUDIBLE DEVICES SHALL BE SPEAKER TYPE FOR VOICE EVAC SYSTEM. EVERY SPEAKER SHALL HAVE MULTI-TEMPORAL SOUNDING CAPABILITY FOR EMERGENCY NOTIFICATION DURING THE ABSENCE OF VOICE INSTRUCTIONS. ALL AUDIBLE LEVELS SHALL BE TESTED IN ALL AREAS WITH DOORS CLOSED. THE MINIMUM AUDIBLE LEVELS ARE AS FOLLOWS:
    A. MINIMUM 15 dBA ABOVE AVERAGE AMBIENT SOUND IN PUBLIC SPACES AND MECHANICAL ROOMS
    B. MINIMUM 75 dBA AT THE BED PILLOW IN DORMITORIES
23. THE FIRE ALARM SYSTEM MANUFACTURER SHALL PROVIDE ALL NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER EXTENDERS THAT THE SYSTEM MAY REQUIRE AS PART OF BASE BID. CONTRACTOR SHALL INCLUDE IN THEIR BID THE ELECTRICAL FOR ANY ADDITIONAL NAC PANELS.
24. THE 120V POWER CIRCUIT FEEDING THE FACP AND EACH FATC SHALL BE DEDICATED FOR THE FIRE ALARM SYSTEM ONLY. PROVIDE A PERMANENT LABEL AT EACH PANEL AND CABINET INDICATING THE PANEL NAME AND CIRCUIT DESIGNATION.
25. CONTRACTOR SHALL INCLUDE IN BID LABOR TO RE-LOCATE UP TO 10 DEVICES UP TO 30' FROM EXISTING LOCATION.
26. CONTRACTOR SHALL PROVIDE IN THE BID FOR LABOR AND MATERIAL FOR AN ADDITIONAL (4) DUCT DETECTORS,. (8) NOTIFICATION DEVICES, (10) SMOKE DETECTORS EACH INSTALLED UP TO 200' FROM LOCAL PANEL (IN WALL NOT SURFACE MOUNTED) AS REQUIRED BY BUILDING CONDITIONS OR LOCAL AHJ/ENGINEER. SEE ALLOWANCES IN DIVISION 1.
27. PROVIDE AN ADDITIONAL 24 HOURS OF FIRE ALARM SYSTEM PROGRAMMING FOR OWNER'S PREFERENCES, AFTER FINAL ACCEPTANCE, WITH THE UNC CHARLOTTE RECEIVER. VERIFY WITH AUTHORIZED UNC CHARLOTTE PERSONNEL THE COMPATIBILITY OF SOFTWARE PRIOR TO ORDERING EQUIPMENT. THE CONTRACTOR SHALL PAY FOR THE REPLACEMENT OF ALL INSTALLED EQUIPMENT IF FOUND INCOMPATIBLE.
28. NOT USED.
29. THE FIRE ALARM SYSTEM SHALL NOTIFY THE CAMPUS POLICE OF ANY ALARM TYPE, PROVIDE AS REQUIRED PER UNC CHARLOTTE. THE SYSTEM SHALL BE TESTED AND APPROVED BY UNC CHARLOTTE.
30. THE FIRE ALARM SYSTEM SHALL CAUSE ALL HOLD OPEN DOORS TO CLOSE UPON GENERAL ALARM ACTIVATION IN THE BUILDING. WITH THE EXCEPTION OF THE HOLD OPENS AT THE ELEVATOR DOORS. THESE SHALL RELEASE UPON ACTIVATION OF THE SMOKE DETECTOR IN THE ASSOCIATED ELEVATOR LOBBY.
31. ACTIVATION OF THE RETURN/EXHAUST AIR DUCT DETECTOR AT THE ERV SHALL CAUSE THE UNIT TO SHUT DOWN AND ALL ASSOCIATED DAMPERS IN THE SYSTEM TO CLOSE. THIS DETECTOR IS NOTED ON THE FLOOR PLANS.
32. ACTIVATION OF KITCHEN HOOD SUPPRESSION SYSTEM PROVIDES SIGNAL TO FACP WHICH IN TURN ACTIVATES ALL ANNUNCIATING DEVICES & CUTS OFF ERV SUPPLY AIR.
33. ACTIVATION OF A DUCT DETECTOR SHALL CLOSE BOTH ASSOCIATED SUPPLY AND RETURN DAMPERS IN THE SHAFT OF THAT FLOOR. NOTE THE SUPPLY AND RETURN DUCTS FOR PROJECT EAST ARE IN TWO DIFFERENT SHAFTS. DAMPERS IN THESE TWO SHAFTS SHALL CLOSE WHEN AN ASSOCIATED DUCT DETECTOR IS ACTIVATED.
34. A SUPERVISED "ERV SHUTDOWN DEFEAT" SWITCH MUST BE PROVIDED IN/ADJACENT TO THE FACP. PROVIDE AN INFORMATIVE ENGRAVED LABEL AT THE FACP ABOUT THIS FUNCTION. THE SWITCH MUST CAUSE A SYSTEM "TROUBLE" INDICATION WHEN IT'S PLACED IN THE OFF-NORMAL ("SHUTDOWN DEFEATED") POSITION. THIS IS TO PROVIDE THE OWNER WITH A CONVENIENT MEANS TO TEMPORARILY RESUME HVAC OPERATION IN THE EVENT AN UNWANTED ALARM WILL NOT CLEAR, PRIOR TO ARRIVAL OF THE FIRE ALARM SERVICE TECHNICIAN.
35. ALL SPD DEVICES SHALL BE SUPERVISED BY THE FIRE ALARM SYSTEM.



1 FIRE ALARM RISER DIAGRAM

DIAGRAMMATIC

FIRE ALARM SYSTEM MATRIX

BUILDING SYSTEM OUTPUTS

	ACTIVATE COMMON ALARM SIGNAL INDICATOR	ACTIVATE AUDIBLE ALARM SIGNAL	ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE COMMON TROUBLE SIGNAL INDICATOR	ACTIVATE AUDIBLE TROUBLE SIGNAL	ACTIVATE GENERAL EVACUATION SIGNAL	DISPLAY CHANGE OF STATUS AND PRINT TO SYSTEM PRINTER	ACTIVATE EXTERNAL SPEAKER STROBE	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	RECALL ELEVATORS TO PRIMARY RECALL FLOOR	RECALL ELEVATORS TO ALTERNATE RECALL FLOOR	SHUNT TRIP AFTER ELEV. REACHES DESIGNATED FLOOR	SHUT DOWN RESPECTIVE ERV	RELEASE MAGNETIC DOOR HOLD OPEN DEVICES	RELEASE MAGNETIC DOOR HOLD OPEN DEVICES ONLY AT RESPECTIVE ELEVATOR AFTER RECALL IS COMPLETE	ACTUATE SMOKE DAMPER AT RESPECTIVE ZONE	ACTUATE CORRIDOR ISOLATION SMOKE DAMPER	ILLUMINATE THE FIREMAN'S HAT	SHOW CHANGE OF STATUS ON ANNUNCIATOR	SHOW CHANGE OF STATUS ON CENTRAL PANEL	SIGNALS TO BAS IN ADDITION TO GENERAL ALARM SIGNAL	RESPONSE BY CAMPUS POLICE
MANUAL FIRE ALARM PULL BOXES	X	X					X	X	X	X							X					X	X		
BUILDING SMOKE DETECTOR	X	X					X	X	X	X							X					X	X		
BUILDING CORRIDOR SMOKE DETECTOR	X	X					X	X	X	X							X			X		X	X		
DUCT SMOKE DETECTOR			X					X			X								X			X	X	X	X
DUCT SMOKE DETECTOR AT ERV UNIT			X					X			X					X			X			X	X	X	X
SMOKE DETECTOR - ELEVATOR MACHINE ROOM (LOBBY)	X	X					X	X	X	X			X								X	X	X	X	
SMOKE DETECTOR - ELEVATOR SHAFT	X	X						X			X		X	X							X	X	X		
SMOKE DETECTOR - PRIMARY FLOOR ELEV. LOBBY	X	X					X	X	X	X				X				X				X	X	X	
SMOKE DETECTOR - ELEV. LOBBY OTHER THAN PRIMARY	X	X					X	X	X	X			X					X				X	X	X	
SMOKE DETECTOR - AT DOOR HOLD OPENS	X	X					X	X	X	X							X					X	X		
MULTI-CRITERIA DETECTOR - SMOKE SIDE			X	X				X			X											X	X		X
MULTI-CRITERIA DETECTOR - HEAT SIDE	X	X					X	X	X	X							X					X	X		
BUILDING HEAT DETECTOR	X	X					X	X	X	X							X					X	X		
HEAT DETECTOR - ELEVATOR MACHINE ROOM	X	X					X	X	X	X			X		X		X					X	X		
HEAT DETECTOR - ELEVATOR SHAFT	X	X					X	X	X	X			X		X		X					X	X		
HOOD SUPPRESSION SYSTEM	X	X					X	X	X	X												X	X		
FLOW SWITCH - ANY ZONE OF SPRINKLER SYSTEM	X	X					X	X	X	X							X					X	X		
TAMPER SWITCH - ANY ZONE OF SPRINKLER SYSTEM			X	X				X			X											X	X		
TAMPER SWITCH - POST INDICATOR VALVE			X	X				X			X											X	X		
FIRE PUMP RUNNING	X	X					X	X	X	X							X					X	X		
FIRE PUMP FAILURE/PHASE REVERSAL			X	X				X			X											X	X		
ERV SHUTDOWN BYPASS SWITCH					X	X		X				X										X	X		
NOTIFICATION DEVICE SHORT CIRCUIT					X	X		X				X										X	X		
OPEN CIRCUIT					X	X		X				X										X	X		
GROUND FAULT					X	X		X				X										X	X		
FIRE ALARM A.C. POWER FAILURE AFTER 4 HRS					X	X		X				X										X	X		
FIRE ALARM SYSTEM LOW BATTERY					X	X		X														X	X		
BUILDING CARBON MONOXIDE DETECTOR			X	X				X			X											X	X		X
FIRE ALARM CABINET SPD'S			X					X				X										X	X		
MULTI DETECTOR - TRASH/LAUNDRY (HEAT PORTION)	X	X					X	X	X	X							X					X	X		
MULTI DETECTOR - TRASH/LAUNDRY (SMOKE PORTION)																									X

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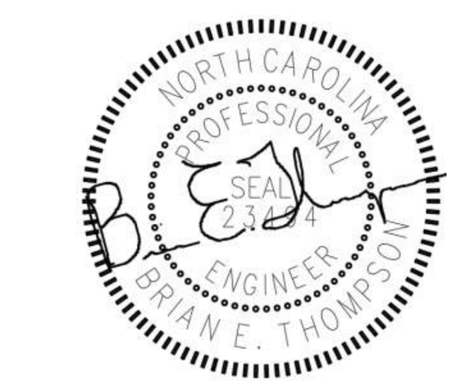


09.08.2021

UNC CHARLOTTE

Charlotte, NC

RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

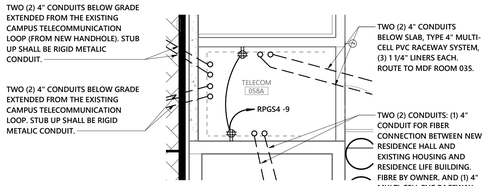
SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

ELECTRICAL DETAILS

BID SET

E-010

1. THE BACK SIDE OF ALL CONDUITS/RACEWAYS STUB UPS TO BE LOCATED AT 4" OFF THE WALL. AND SOLIDLY SUPPORTED BY UNISTRUT OFF THE WALL. STUB UP 36" AFF. CONDUITS SHALL BE STRAIGHT AND VERTICAL FROM FLOOR TO 36" AFF.
2. ALL UNDERGROUND CONDUITS/RACEWAYS SHALL BE CONCRETE ENCASED IN A DUCT BANK.
3. SEE SITE PLAN FOR CONTINUATION OF UNDERGROUND CONDUITS/RACEWAYS.



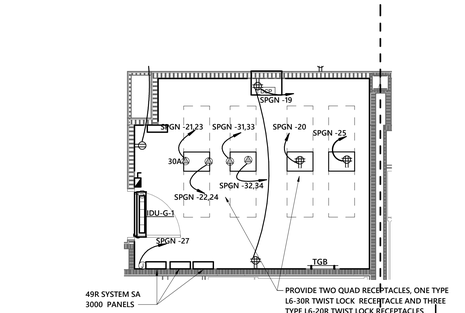
3 ENLARGED TELECOM ROOM 058A
1/4" = 1'-0"

UNIT CIRCUIT DESIGNATIONS

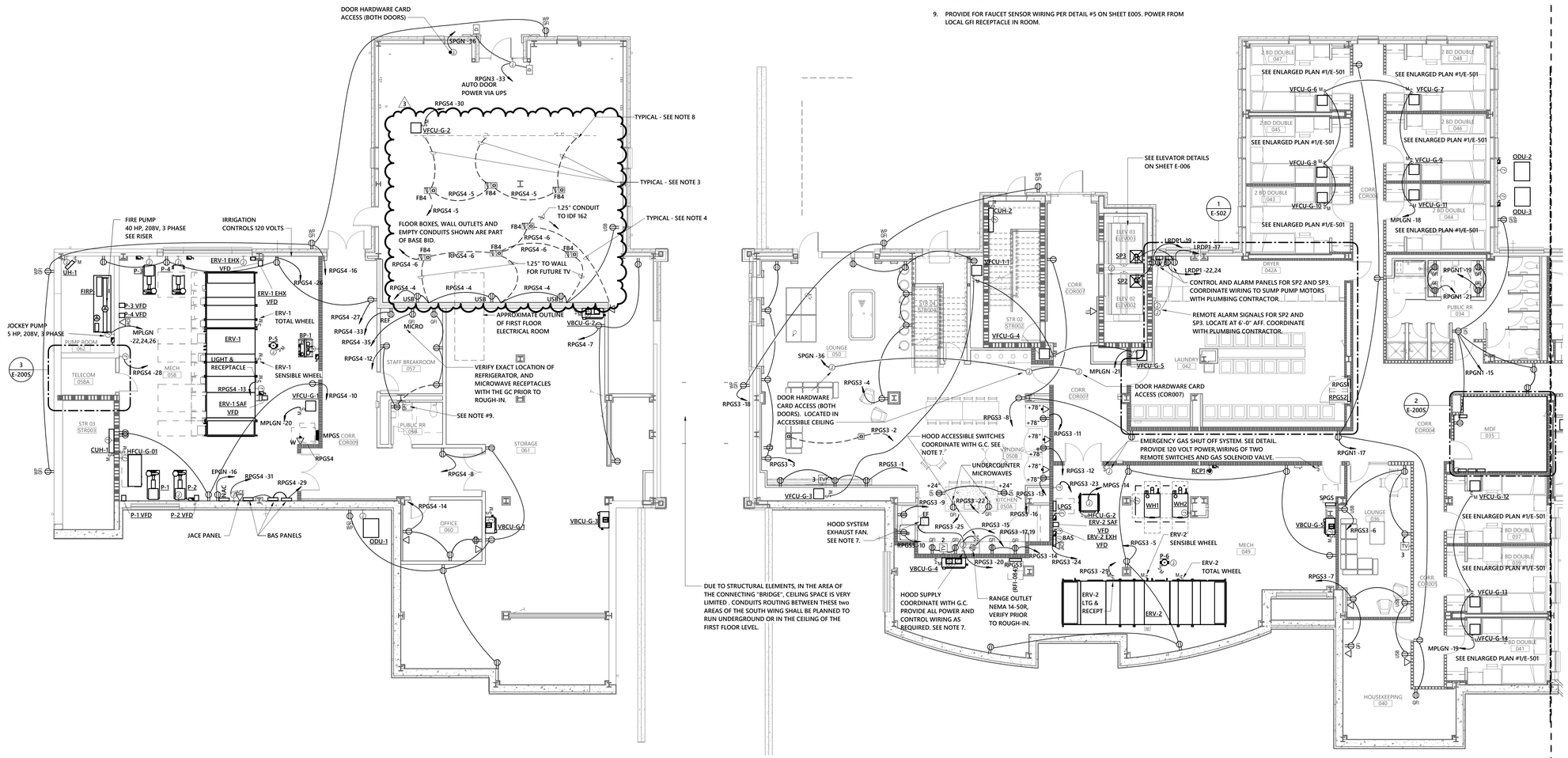
ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 037	RPGN3-12	RPGN3-13
2BD DOUBLE 039	RPGN3-14	RPGN3-15
2BD DOUBLE 041	RPGN3-16	RPGN3-17
2BD DOUBLE 043	RPGN3-18	RPGN3-19
2BD DOUBLE 044	RPGN3-20	RPGN3-21
2BD DOUBLE 045	RPGN3-22	RPGN3-23
2BD DOUBLE 046	RPGN3-24	RPGN3-25
2BD DOUBLE 047	RPGN3-26	RPGN3-27
2BD DOUBLE 048	RPGN3-28	RPGN3-29

GENERAL AND KEYED NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.
2. TYPICAL - FOR ALL TV OUTLETS IN THIS CLASSROOM PROVIDE A QUAD OUTLET IN LIEU OF A DUPLEX OUTLET.
3. TYPICAL - FOR ALL FLOOR BOXES IN THIS ROOM, PROVIDE A 1.25" CONDUIT FROM THE FLOOR BOX TO THE ASSOCIATED TV BOX.
4. PROVIDE A 1.25" CONDUIT FROM THE PODIUM FLOOR BOX TO IT ROOM 056A. STUB UP 9" AFF IN THE CORNER OF THE ROOM.
5. VERIFY EXACT LOCATION OF FLOOR BOXES WITH THE OWNER PRIOR TO ROUGH-IN.
6. AT THIS LOCATION PROVIDE THE TV BACK BOX, DUPLEX RECEPTACLE PER THE TV DETAIL. COORDINATE THE EXACT MOUNTING HEIGHT OF THIS DEVICE WITH UNC CHARLOTTE PRIOR TO ROUGH-IN.
7. HOOD AND EXHAUST SYSTEM FOR KITCHEN 050A. PROVIDE COMPLETE WIRING OF DENLAR 1000 RANGE HOOD, EXHAUST FAN AND MECHANICAL FIRE SUPPRESSION SYSTEM. PROVIDE FIRE ALARM CONNECTION AND 120 VOLT POWER FOR THE HOOD LIGHTS AND EXHAUST FAN. EXHAUST FAN IS REMOTE FROM HOOD AND ABOVE THE CEILING. FAN POWER IS FROM HOOD SYSTEM. WIRE FROM FAN TO HOOD CONTROLS PER MANUFACTURERS WIRING DIAGRAM. INSTALL REMOTE SWITCHES FOR THE ADA FAN SWITCH AND THE ADA LIGHT SWITCH. SWITCHES PROVIDED WITH EQUIPMENT. VERIFY LOCATION OF SWITCHES WITH THE GENERAL CONTRACTOR PRIOR TO ROUGH-IN. PROVIDE INTERFACE WIRING TO ELECTRIC RANGE ELEMENT DISCONNECT SHUT DOWN SYSTEM POWER TO THE RANGE IN THE EVENT THE FIRE SUPPRESSION SYSTEM IS ACTIVATED. FOLLOW THE WIRING HARNESS SCHEMATIC AND WIRING REQUIREMENTS PROVIDED BY THE MANUFACTURER.
8. APPROXIMATE FUTURE WALL LOCATION. ALIGN CONDUIT STUB UP LOCATIONS WITH DASHED LINE. CONTACT ARCHITECT AND COORDINATE EXACT LOCATION FOR FUTURE WALL CONDUIT STUB UPS.
9. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.



2 ENLARGED MDF 035
1/4" = 1'-0"



1 LOWER LEVEL POWER PLAN - SOUTH
1/8" = 1'-0"

RATED WALL LEGEND
1 HR FIRE RESISTIVE CONSTRUCTION
2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

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09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LOWER LEVEL POWER PLAN - SOUTH

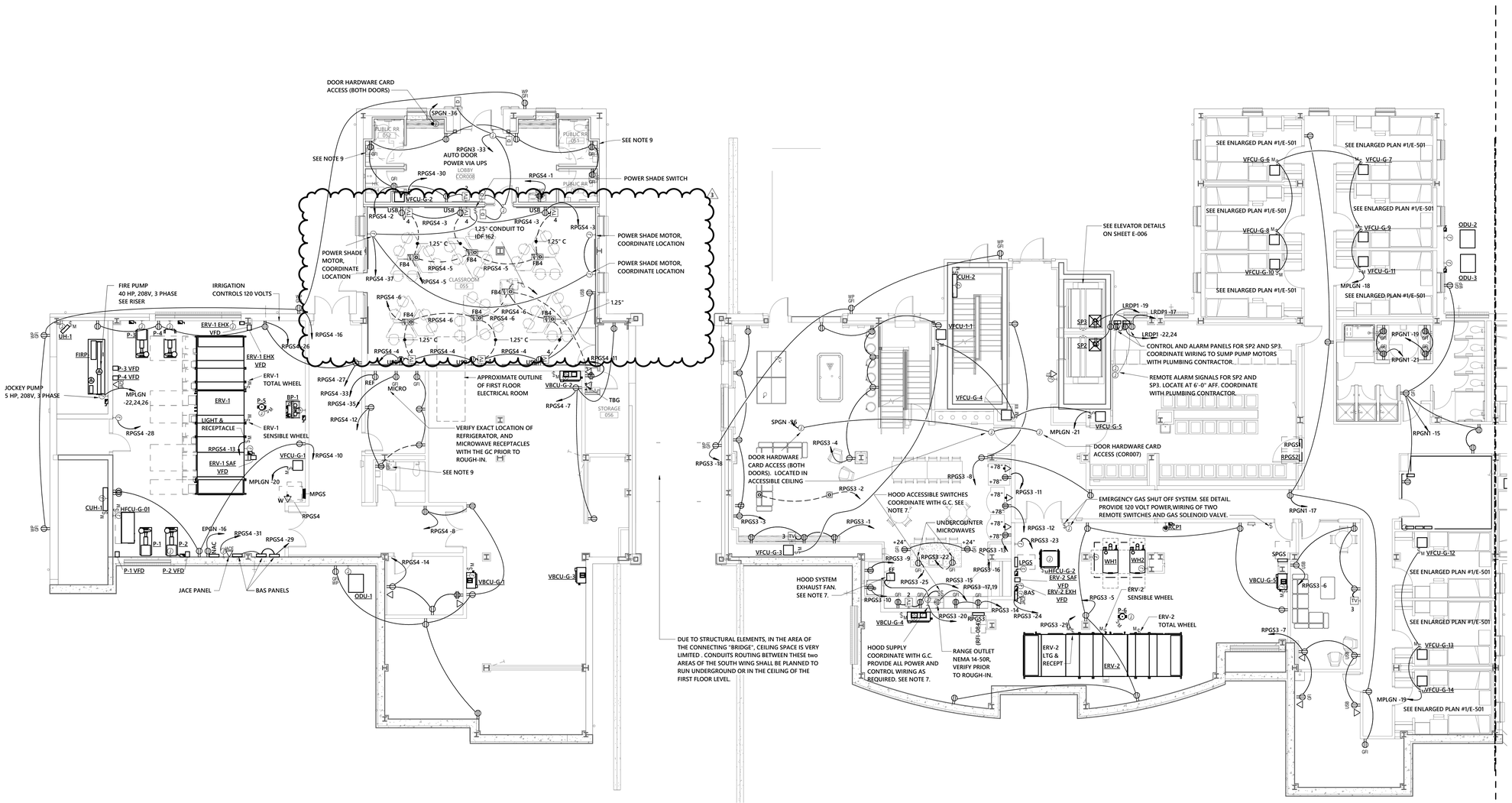
FIRST FLOOR SOUTH
PROJECT NORTH
TRUE NORTH

BID SET

E-200S

Optima # 18-0001 Sheet 15 of 84

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt



1 LOWER LEVEL POWER PLAN - SOUTH-ALT 5

1/8" = 1'-0"

SEE SHEET E-200S FOR NOTES, SCHEDULES AND LARGE SCALE PLAN.

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"

0 8' 12' 16' 20'

PROJECT NORTH

TRUE NORTH

BID SET

E-200S-A

Optima # 18-0001 Sheet 16 of 84

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

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UNC CHARLOTTE

Charlotte, NC

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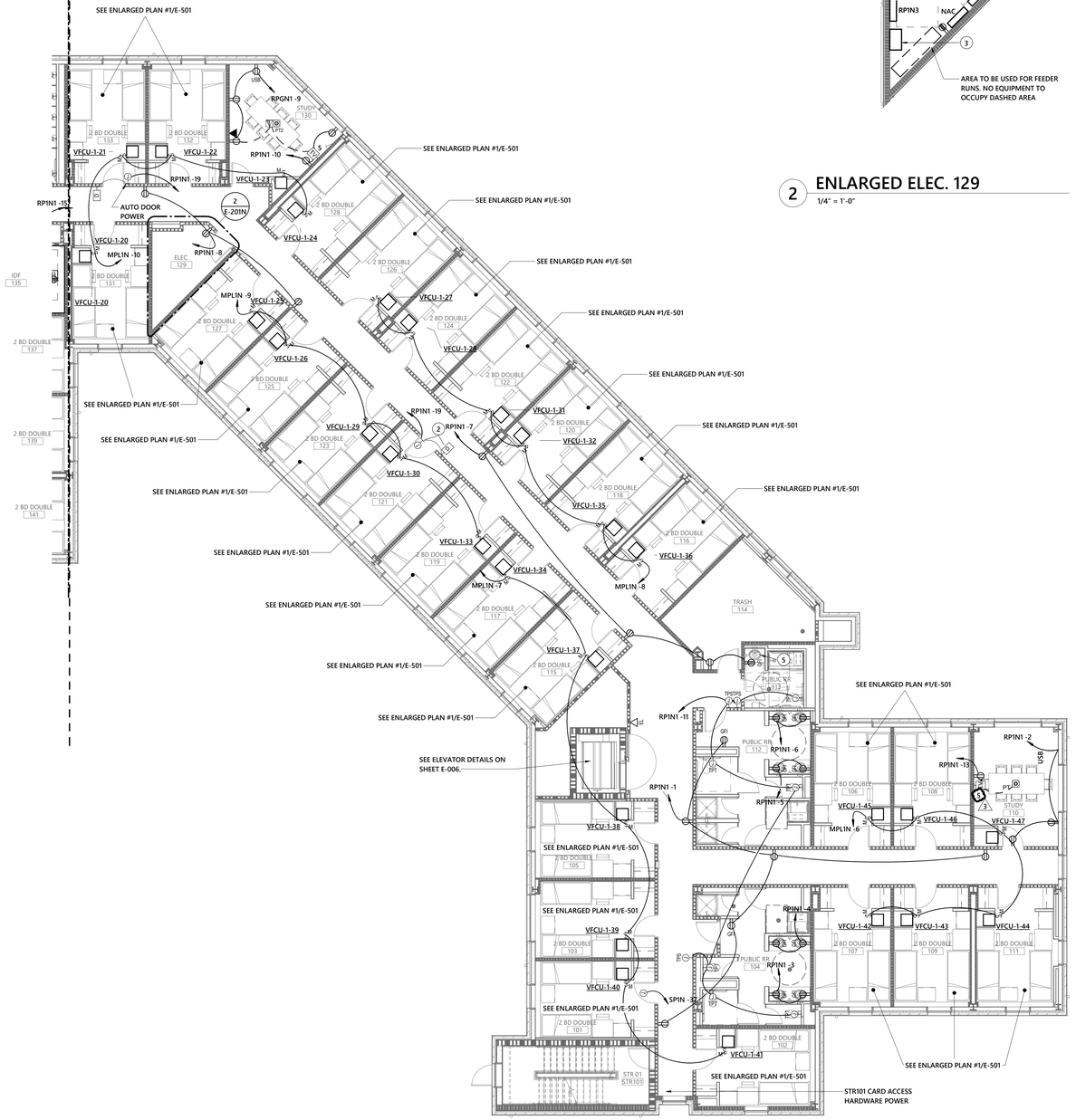
LOWER LEVEL POWER PLAN - SOUTH-ALT

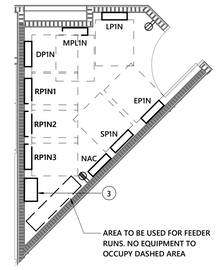
BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 101	RP1N2-3	RP1N2-4
2BD DOUBLE 102	RP1N2-5	RP1N2-6
2BD DOUBLE 103	RP1N2-7	RP1N2-8
2BD DOUBLE 105	RP1N2-9	RP1N2-10
2BD DOUBLE 106	RP1N2-11	RP1N2-12
2BD DOUBLE 107	RP1N2-13	RP1N2-14
2BD DOUBLE 108	RP1N2-15	RP1N2-16
2BD DOUBLE 109	RP1N2-17	RP1N2-18
2BD DOUBLE 111	RP1N2-19	RP1N2-20
2BD DOUBLE 115	RP1N2-21	RP1N2-22
2BD DOUBLE 116	RP1N2-23	RP1N2-24
2BD DOUBLE 117	RP1N2-25	RP1N2-26
2BD DOUBLE 118	RP1N2-27	RP1N2-28
2BD DOUBLE 119	RP1N2-29	RP1N2-30
2BD DOUBLE 120	RP1N2-31	RP1N2-32
2BD DOUBLE 121	RP1N2-33	RP1N2-34
2BD DOUBLE 122	RP1N3-29	RP1N3-30
2BD DOUBLE 123	RP1N3-27	RP1N3-28
2BD DOUBLE 124	RP1N3-25	RP1N3-26
2BD DOUBLE 125	RP1N3-23	RP1N3-24
2BD DOUBLE 126	RP1N3-1	RP1N3-2
2BD DOUBLE 127	RP1N3-3	RP1N3-4
2BD DOUBLE 128	RP1N3-5	RP1N3-6
2BD DOUBLE 131	RP1N3-7	RP1N3-8
2BD DOUBLE 132	RP1N3-9	RP1N3-10
2BD DOUBLE 133	RP1N2-1	RP1N2-2



1 LEVEL 1 POWER PLAN - NORTH
1/8" = 1'-0"



2 ENLARGED ELEC. 129
1/4" = 1'-0"

GENERAL AND KEYED NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.
2. AUTO DOOR, ROUGH-IN ONLY WITH BRANCH CIRCUIT TO PANELBOARD.
3. PROVIDE ONE (1) UPS SYSTEMS TO SERVE ADA AUTOMATIC DOORS, THIS FLOOR. EQUAL TO TRIPP LITE MODEL SMART 2200 NET. 120 VOLT INPUT, 120 VOLT OUTPUT, ALARMS, RS-232 PORT FOR MONITORING. RUN TIME: 11 MINUTES AT 1,600 WATTS, 27 MINUTES AT 850 WATTS. UL 1778 LISTED. PROVIDE REQUIRED OUTPUT AND INPUT CONNECTIONS TO SERVE THE ADA DOORS CONNECTED TO BRANCH CIRCUIT RP1N1-9. AND PROVIDE ONE (1) UPS SYSTEM TO SERVE THE OPTIONS ACCESS CONTROL PANEL. EQUAL TO APC MODEL BR1300G. 120 VOLT INPUT AND 120 VOLT OUTPUT, ALARMS, USB PORT FOR MONITORING. RUN TIME: 4.7 MINUTES AT 780 WATTS. PROVIDE REQUIRED OUTPUT AND INPUT CONNECTIONS TO SERVE THE OPTIONS ACCESS CONTROL PANEL CONNECTED TO BRANCH CIRCUIT RP1N1-26.
4. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
5. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.

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NORTH CAROLINA PROFESSIONAL SEAL ENGINEER
09.08.2021

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Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LEVEL 1 POWER PLAN - NORTH

RATED WALL LEGEND
1 HR FIRE RESISTIVE CONSTRUCTION
2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

FIRST FLOOR NORTH

PROJECT NORTH
TRUE NORTH

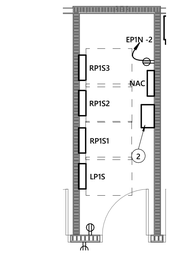
BID SET

E-201N

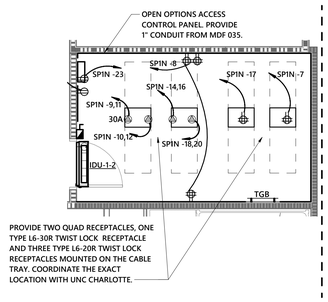
Optima # 18-0001 Sheet 17 of 84

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

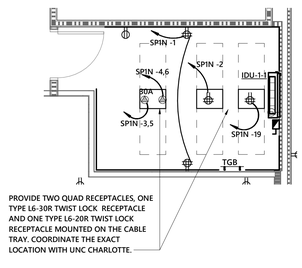
BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt



2 ENLARGED ELEC. 168
1/4" = 1'-0"



3 ENLARGED IDF 135
1/4" = 1'-0"



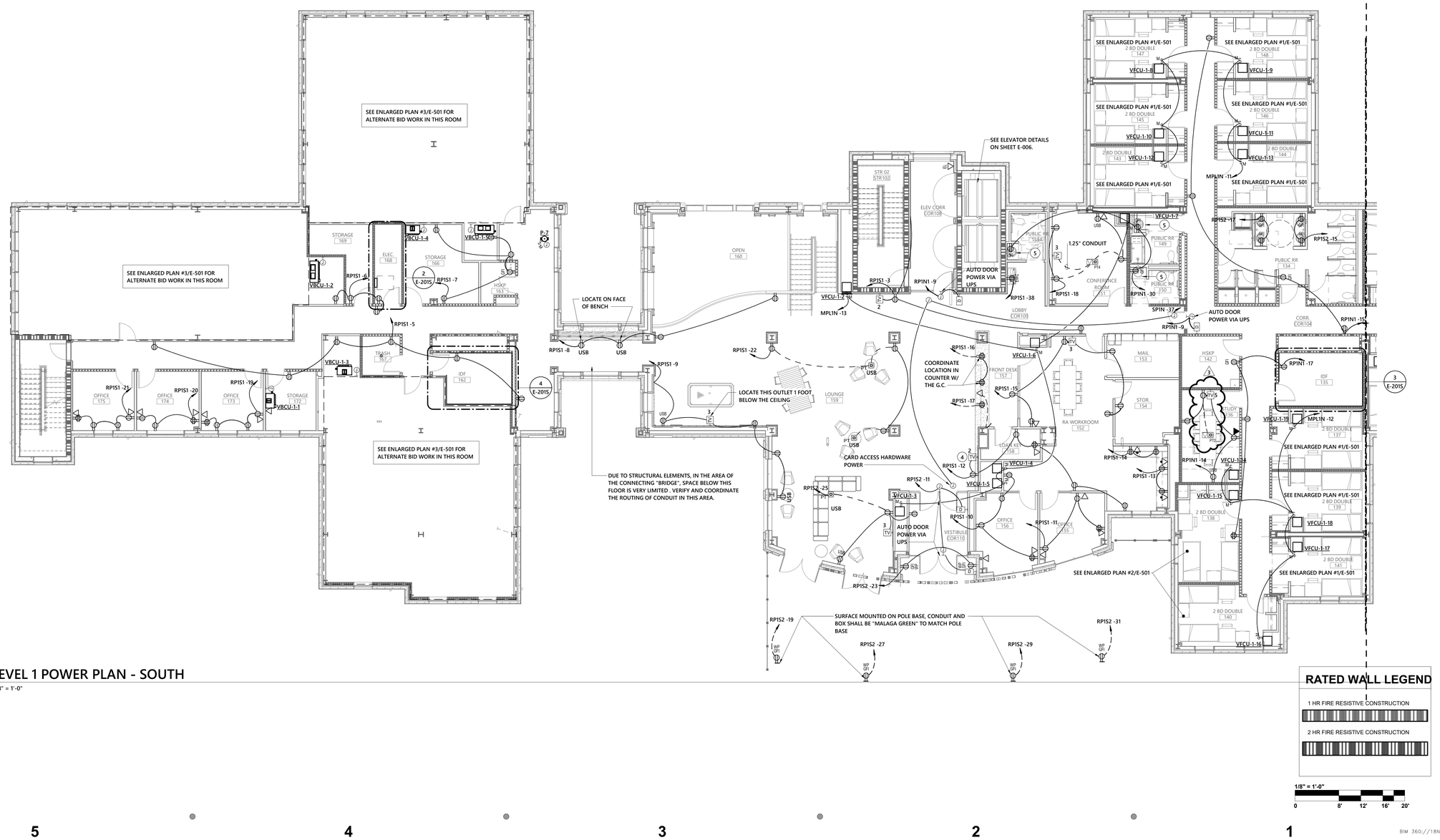
4 ENLARGED IDF 162
1/4" = 1'-0"

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 137	RP1N1-21	RP1N1-22
2BD DOUBLE 138	RP1N1-25	RP1N1-27
2BD DOUBLE 139	RP1N1-16	RP1N1-29
2BD DOUBLE 140	RP1N1-18	RP1N1-20
2BD DOUBLE 141	RP1N1-22	RP1N1-24
2BD DOUBLE 143	RP1N3-11	RP1N3-12
2BD DOUBLE 144	RP1N3-13	RP1N3-14
2BD DOUBLE 145	RP1N3-15	RP1N3-16
2BD DOUBLE 146	RP1N3-17	RP1N3-18
2BD DOUBLE 147	RP1N3-19	RP1N3-20
2BD DOUBLE 148	RP1N3-21	RP1N3-22

GENERAL AND KEYED NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.
2. PROVIDE ONE (1) UPS SYSTEMS TO SERVE ADA AUTOMATIC DOORS, THIS FLOOR. EQUAL TO TRIPP LITE MODEL SMART 2200 NET. 120 VOLT INPUT, 120 VOLT OUTPUT, ALARMS, RS-232 PORT FOR MONITORING. RUN TIME: 11 MINUTES AT 1,600 WATTS, 27 MINUTES AT 850 WATTS. UL 1778 LISTED. PROVIDE REQUIRED OUTPUT AND INPUT CONNECTIONS TO SERVE THE ADA DOORS CONNECTED TO BRANCH CIRCUIT RP1S2-11.
3. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
4. AT THIS TV OUTLET LOCATION DO NOT PROVIDE THE LOWER SINGLE GANG OUTLET AS SHOWN ON THE TELEVISION OUTLET DETAIL.
5. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.



1 LEVEL 1 POWER PLAN - SOUTH
1/8" = 1'-0"

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8" 12" 16" 20"

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UNC CHARLOTTE
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RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
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LEVEL 1 POWER PLAN - SOUTH

FIRST FLOOR SOUTH

PROJECT NORTH
TRUE NORTH

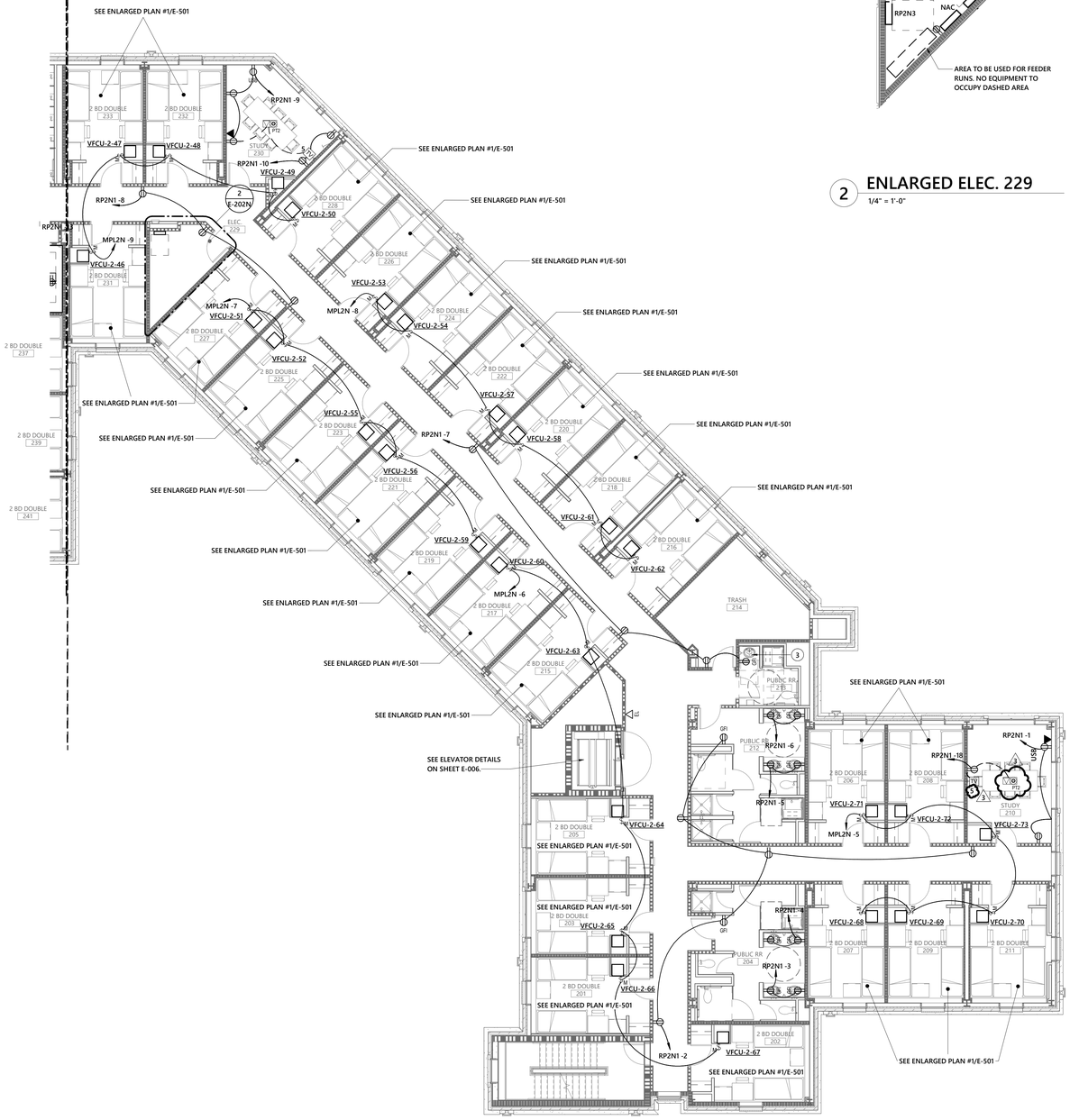
BID SET

E-201S

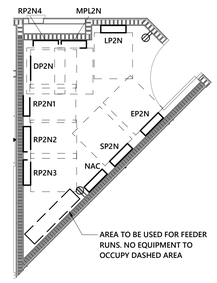
Optima # 18-0001 Sheet 18 of 84

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 201	RP2N2-1	RP2N2-2
2BD DOUBLE 202	RP2N3-9	RP2N3-10
2BD DOUBLE 203	RP2N2-3	RP2N2-4
2BD DOUBLE 205	RP2N2-5	RP2N2-6
2BD DOUBLE 206	RP2N2-7	RP2N2-8
2BD DOUBLE 207	RP2N2-9	RP2N2-10
2BD DOUBLE 208	RP2N2-11	RP2N2-12
2BD DOUBLE 209	RP2N2-13	RP2N2-14
2BD DOUBLE 211	RP2N2-15	RP2N2-16
2BD DOUBLE 215	RP2N2-17	RP2N2-18
2BD DOUBLE 216	RP2N2-19	RP2N2-20
2BD DOUBLE 217	RP2N2-21	RP2N2-22
2BD DOUBLE 218	RP2N2-23	RP2N2-24
2BD DOUBLE 219	RP2N2-25	RP2N2-26
2BD DOUBLE 220	RP2N2-27	RP2N2-28
2BD DOUBLE 221	RP2N2-29	RP2N2-30
2BD DOUBLE 222	RP2N2-31	RP2N2-32
2BD DOUBLE 223	RP2N2-33	RP2N2-34
2BD DOUBLE 224	RP2N2-35	RP2N2-36
2BD DOUBLE 225	RP2N2-37	RP2N2-38
2BD DOUBLE 226	RP2N4-2	RP2N4-3
2BD DOUBLE 227	RP2N4-1	RP2N2-4
2BD DOUBLE 228	RP2N3-1	RP2N3-2
2BD DOUBLE 231	RP2N3-3	RP2N3-4
2BD DOUBLE 232	RP2N3-5	RP2N3-6
2BD DOUBLE 233	RP2N3-7	RP2N3-8



1 LEVEL 2 POWER PLAN - NORTH
1/8" = 1'-0"



2 ENLARGED ELEC. 229
1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.
2. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.

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NORTH CAROLINA PROFESSIONAL SEAL ENGINEER
09.08.2021

UNC CHARLOTTE
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RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

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Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LEVEL 2 POWER PLAN - NORTH

RATED WALL LEGEND
1 HR FIRE RESISTIVE CONSTRUCTION
2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

SECOND FLOOR NORTH
PROJECT NORTH
TRUE NORTH

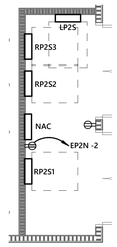
BID SET

E-202N

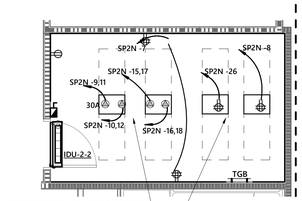
Optima # 18-0001 Sheet 19 of 84

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

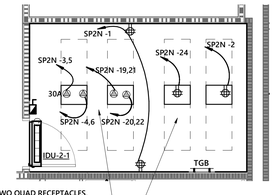


2 ENLARGED ELEC. 266
1/4" = 1'-0"



PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE.

3 ENLARGED IDF 235
1/4" = 1'-0"



PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE.

4 ENLARGED IDF 274
1/4" = 1'-0"

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 236	RP2N3-11	RP2N3-12
2BD DOUBLE 237	RP2N3-13	RP2N3-14
2BD DOUBLE 238	RP2N3-15	RP2N3-16
2BD DOUBLE 239	RP2N3-17	RP2N3-18
2BD DOUBLE 240	RP2N3-19	RP2N3-20
2BD DOUBLE 241	RP2N3-21	RP2N3-22
2BD DOUBLE 243	RP2N3-23	RP2N3-24
2BD DOUBLE 244	RP2N3-25	RP2N3-26
2BD DOUBLE 245	RP2N3-27	RP2N3-28
2BD DOUBLE 246	RP2N3-29	RP2N3-30
2BD DOUBLE 247	RP2N3-31	RP2N3-32

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 248	RP2N3-33	RP2N3-34
2BD DOUBLE 249	RP2N4-5	RP2N4-7
2BD DOUBLE 251	RP2N4-6	RP2N4-8
2BD DOUBLE 253	RP2S2-1	RP2S2-2
2BD DOUBLE 255	RP2S2-3	RP2S2-4
2BD DOUBLE 256	RP2S2-5	RP2S2-6
2BD DOUBLE 257	RP2S2-7	RP2S2-8
2BD DOUBLE 258	RP2S2-9	RP2S2-10
2BD DOUBLE 259	RP2S2-11	RP2S2-12
2BD DOUBLE 260	RP2S2-13	RP2S2-14

UNIT CIRCUIT DESIGNATIONS

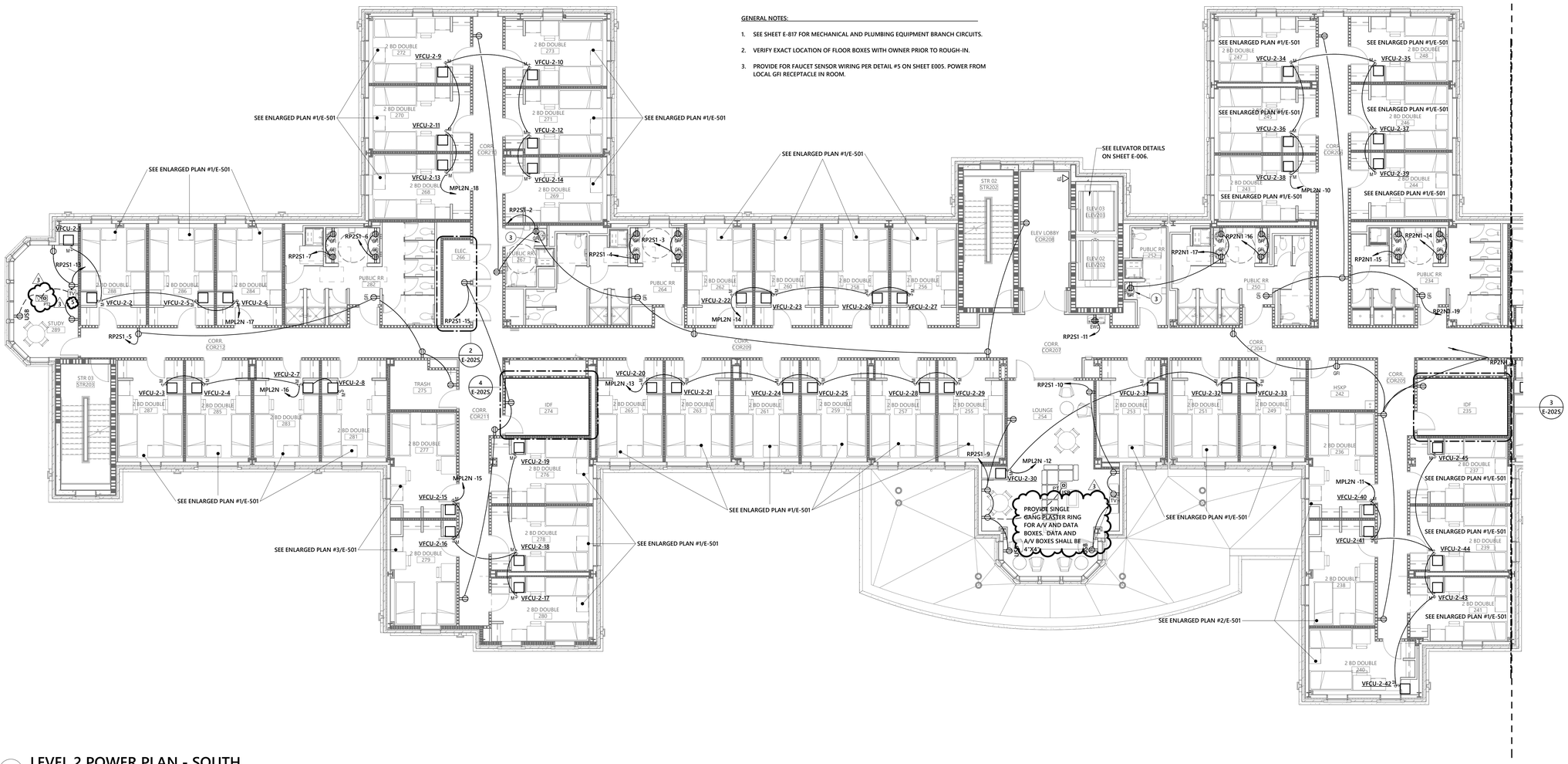
ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 261	RP2S2-15	RP2S2-16
2BD DOUBLE 262	RP2S2-17	RP2S2-18
2BD DOUBLE 263	RP2S2-19	RP2S2-20
2BD DOUBLE 265	RP2S2-21	RP2S2-22
2BD DOUBLE 268	RP2S2-23	RP2S2-24
2BD DOUBLE 269	RP2S2-25	RP2S2-26
2BD DOUBLE 270	RP2S2-27	RP2S2-28
2BD DOUBLE 271	RP2S2-29	RP2S2-30
2BD DOUBLE 272	RP2S2-31	RP2S2-32
2BD DOUBLE 273	RP2S2-33	RP2S2-34
2BD DOUBLE 276	RP2S3-17	RP2S3-18

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 277	RP2S3-19	RP2S3-20
2BD DOUBLE 278	RP2S3-21	RP2S3-22
2BD DOUBLE 279	RP2S3-23	RP2S3-24
2BD DOUBLE 280	RP2S3-1	RP2S3-2
2BD DOUBLE 281	RP2S3-3	RP2S3-4
2BD DOUBLE 283	RP2S3-5	RP2S3-6
2BD DOUBLE 284	RP2S3-7	RP2S3-8
2BD DOUBLE 285	RP2S3-9	RP2S3-10
2BD DOUBLE 286	RP2S3-11	RP2S3-12
2BD DOUBLE 287	RP2S3-13	RP2S3-14
2BD DOUBLE 288	RP2S3-15	RP2S3-16

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.
2. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.



1 LEVEL 2 POWER PLAN - SOUTH
1/8" = 1'-0"

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

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09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LEVEL 2 POWER PLAN - SOUTH

SECOND FLOOR SOUTH

PROJECT NORTH
TRUE NORTH

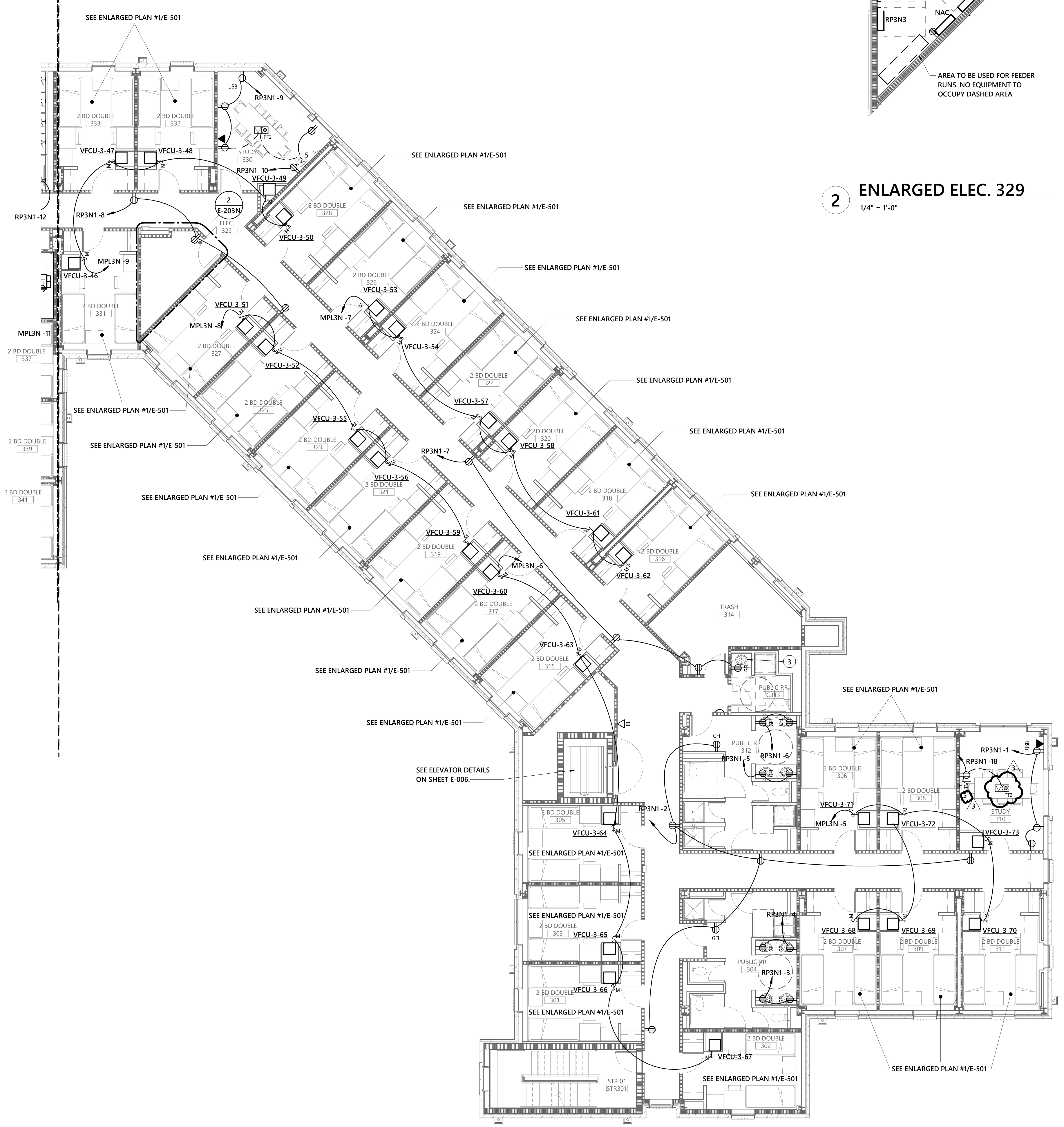
BID SET

E-202S

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

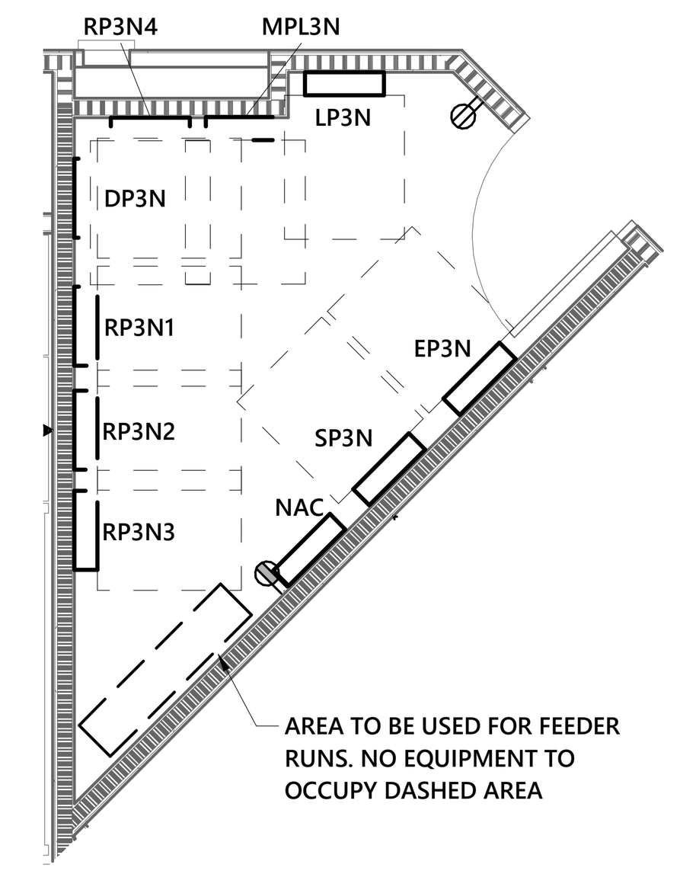
D C B A

5 4 3 2 1



1 LEVEL 3 POWER PLAN - NORTH

1/8" = 1'-0"



2 ENLARGED ELEC. 329

1/4" = 1'-0"

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 301	RP3N2-1	RP3N2-2
2BD DOUBLE 302	RP3N2-3	RP3N2-4
2BD DOUBLE 303	RP3N2-5	RP3N2-6
2BD DOUBLE 305	RP3N2-7	RP3N2-8
2BD DOUBLE 306	RP3N2-9	RP3N2-10
2BD DOUBLE 307	RP3N2-11	RP3N2-12
2BD DOUBLE 308	RP3N2-13	RP3N2-14
2BD DOUBLE 309	RP3N2-15	RP3N2-16
2BD DOUBLE 311	RP3N2-17	RP3N2-18
2BD DOUBLE 315	RP3N2-19	RP3N2-20
2BD DOUBLE 316	RP3N2-21	RP3N2-22
2BD DOUBLE 317	RP3N2-23	RP3N2-24
2BD DOUBLE 318	RP3N2-25	RP3N2-26
2BD DOUBLE 319	RP3N2-27	RP3N2-28
2BD DOUBLE 320	RP3N2-29	RP3N2-30
2BD DOUBLE 321	RP3N2-31	RP3N2-32
2BD DOUBLE 322	RP3N2-33	RP3N2-34
2BD DOUBLE 323	RP3N2-35	RP3N2-36
2BD DOUBLE 324	RP3N2-37	RP3N2-38
2BD DOUBLE 325	RP3N2-39	RP3N2-40
2BD DOUBLE 326	RP3N4-1	RP3N4-3
2BD DOUBLE 327	RP3N4-2	RP3N4-4
2BD DOUBLE 328	RP3N3-3	RP3N3-4
2BD DOUBLE 331	RP3N3-5	RP3N3-6
2BD DOUBLE 332	RP3N3-7	RP3N3-8
2BD DOUBLE 333	RP3N3-9	RP3N3-10

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUIT.
2. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

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09.08.2021

UNC CHARLOTTE

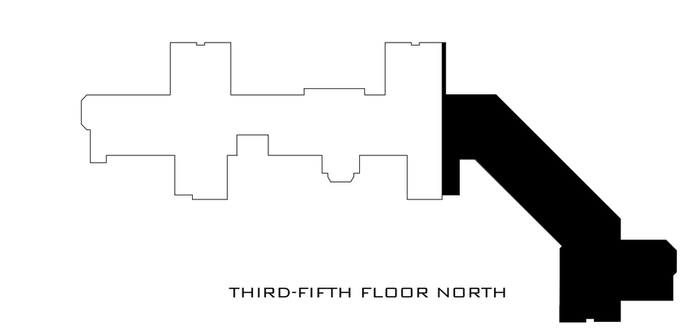
Charlotte, NC

RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

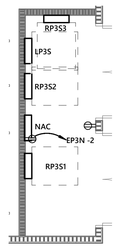
LEVEL 3 POWER PLAN - NORTH

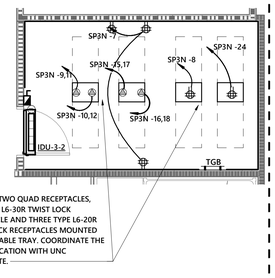


PROJECT NORTH
TRUE NORTH

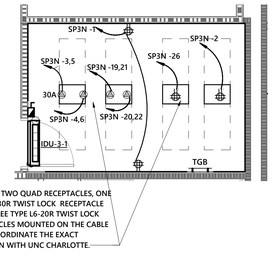
BID SET

E-203N





PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE.



PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE.

2 ENLARGED ELEC. 366
1/4" = 1'-0"

3 ENLARGED IDF 335
1/4" = 1'-0"

4 ENLARGED IDF 374
1/4" = 1'-0"

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 336	RP3N3-11	RP3N3-12
2BD DOUBLE 337	RP3N3-13	RP3N3-14
2BD DOUBLE 338	RP3N3-15	RP3N3-16
2BD DOUBLE 339	RP3N3-17	RP3N3-18
2BD DOUBLE 340	RP3N3-19	RP3N3-20
2BD DOUBLE 341	RP3N3-21	RP3N3-22
2BD DOUBLE 343	RP3N3-23	RP3N3-24
2BD DOUBLE 344	RP3N3-25	RP3N3-26
2BD DOUBLE 345	RP3N3-27	RP3N3-28
2BD DOUBLE 346	RP3N3-29	RP3N3-30
2BD DOUBLE 347	RP3N3-31	RP3N3-32

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 348	RP3N3-33	RP3N3-34
2BD DOUBLE 349	RP3N4-5	RP3N4-7
2BD DOUBLE 351	RP3N4-6	RP3N4-8
2BD DOUBLE 353	RP3S2-1	RP3S2-2
2BD DOUBLE 355	RP3S2-3	RP3S2-4
2BD DOUBLE 356	RP3S2-5	RP3S2-6
2BD DOUBLE 357	RP3S2-7	RP3S2-8
2BD DOUBLE 358	RP3S2-9	RP3S2-10
2BD DOUBLE 359	RP3S2-11	RP3S2-12
2BD DOUBLE 360	RP3S2-13	RP3S2-14

UNIT CIRCUIT DESIGNATIONS

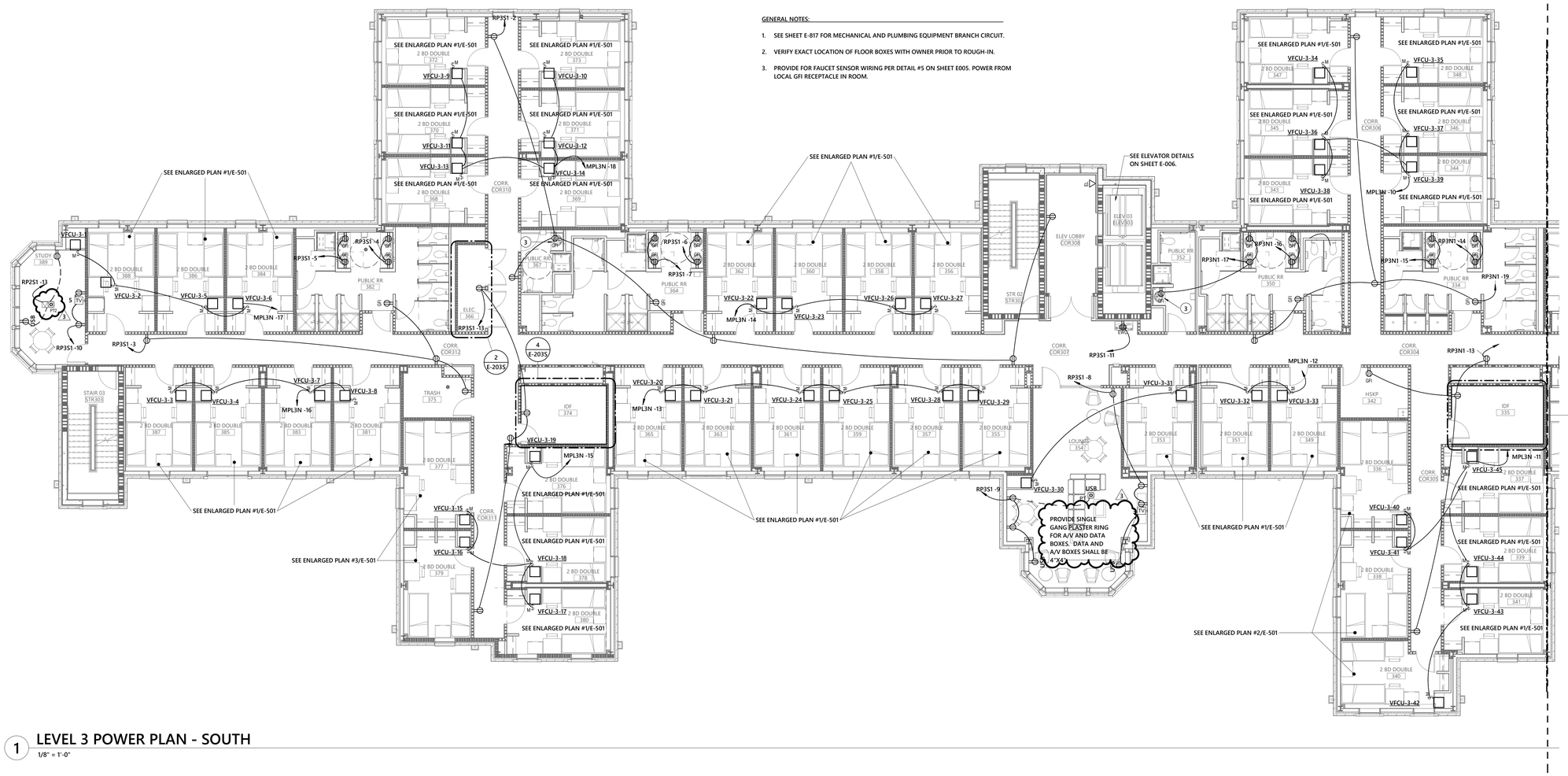
ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 361	RP3S2-15	RP3S2-16
2BD DOUBLE 362	RP3S2-17	RP3S2-18
2BD DOUBLE 363	RP3S2-19	RP3S2-20
2BD DOUBLE 365	RP3S2-21	RP3S2-22
2BD DOUBLE 368	RP3S2-23	RP3S2-24
2BD DOUBLE 369	RP3S2-25	RP3S2-26
2BD DOUBLE 370	RP3S2-27	RP3S2-28
2BD DOUBLE 371	RP3S2-29	RP3S2-30
2BD DOUBLE 372	RP3S2-31	RP3S2-32
2BD DOUBLE 373	RP3S2-33	RP3S2-34
2BD DOUBLE 376	RP3S3-17	RP3S3-18

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 377	RP3S3-19	RP2S3-20
2BD DOUBLE 378	RP3S3-21	RP3S3-22
2BD DOUBLE 379	RP3S3-23	RP3S3-24
2BD DOUBLE 380	RP3S3-1	RP3S3-2
2BD DOUBLE 381	RP3S3-3	RP3S3-4
2BD DOUBLE 383	RP3S3-5	RP3S3-6
2BD DOUBLE 384	RP3S3-7	RP3S3-8
2BD DOUBLE 385	RP3S3-9	RP3S3-10
2BD DOUBLE 386	RP3S3-11	RP3S3-12
2BD DOUBLE 387	RP3S3-13	RP3S3-14
2BD DOUBLE 388	RP3S3-15	RP3S3-16

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUIT.
2. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.



1 LEVEL 3 POWER PLAN - SOUTH
1/8" = 1'-0"

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

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NORTH CAROLINA PROFESSIONAL SEAL ENGINEER
09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LEVEL 3 POWER PLAN - SOUTH

THIRD-FIFTH FLOOR SOUTH

PROJECT NORTH
TRUE NORTH

BID SET

E-203S

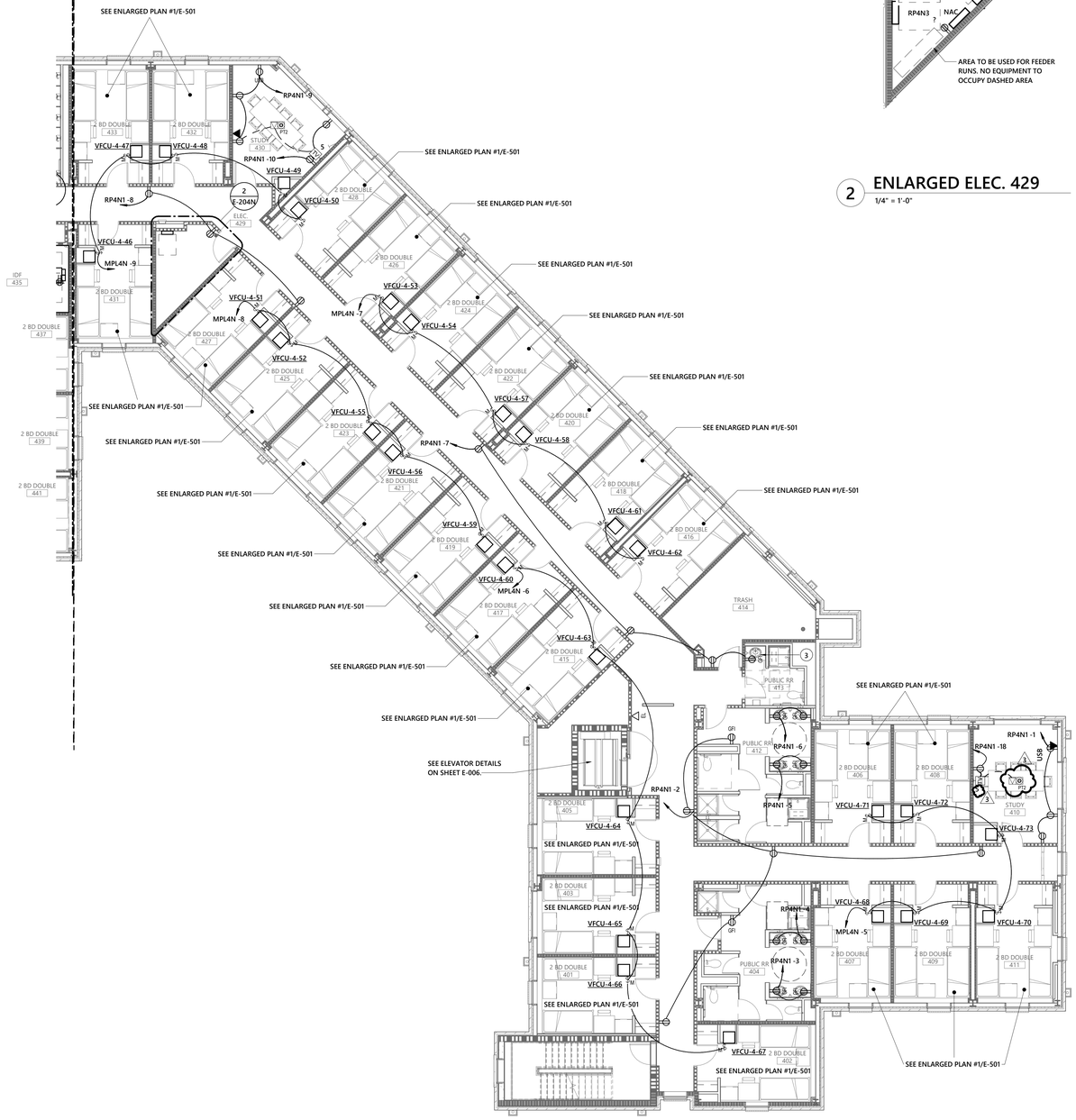
Optima # 18-0001 Sheet 22 of 84

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

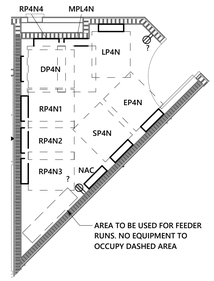
UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 401	RP4N2-1	RP4N2-2
2BD DOUBLE 402	RP4N2-7	RP4N2-8
2BD DOUBLE 403	RP4N2-3	RP4N2-4
2BD DOUBLE 405	RP4N2-5	RP4N2-6
2BD DOUBLE 406	RP4N2-9	RP4N2-10
2BD DOUBLE 407	RP4N2-11	RP4N2-12
2BD DOUBLE 408	RP4N2-13	RP4N2-14
2BD DOUBLE 409	RP4N2-15	RP4N2-16
2BD DOUBLE 411	RP4N2-17	RP4N2-18
2BD DOUBLE 415	RP4N2-19	RP4N2-20
2BD DOUBLE 416	RP4N2-21	RP4N2-22
2BD DOUBLE 417	RP4N2-23	RP4N2-24
2BD DOUBLE 418	RP4N2-25	RP4N2-26
2BD DOUBLE 419	RP4N2-27	RP4N2-28
2BD DOUBLE 420	RP4N2-29	RP4N2-30
2BD DOUBLE 421	RP4N2-31	RP4N2-32
2BD DOUBLE 422	RP4N2-33	RP4N2-34
2BD DOUBLE 423	RP4N2-35	RP4N2-36
2BD DOUBLE 424	RP4N2-37	RP4N2-38
2BD DOUBLE 425	RP4N4-2	RP4N4-4
2BD DOUBLE 426	RP4N4-1	RP4N4-3
2BD DOUBLE 427	RP4N3-1	RP4N3-2
2BD DOUBLE 428	RP4N3-3	RP4N3-4
2BD DOUBLE 431	RP4N3-5	RP4N3-6
2BD DOUBLE 432	RP4N3-7	RP4N3-8
2BD DOUBLE 433	RP4N3-9	RP4N3-10



1 LEVEL 4 POWER PLAN - NORTH

1/8" = 1'-0"



2 ENLARGED ELEC. 429

1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUIT.
2. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.

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NORTH CAROLINA PROFESSIONAL SEAL ENGINEER STAN LINDSEY

09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LEVEL 4 POWER PLAN - NORTH

BID SET

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

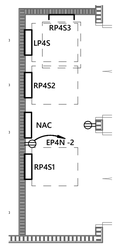
1/8" = 1'-0"
0 8' 12' 16' 20'

E-204N

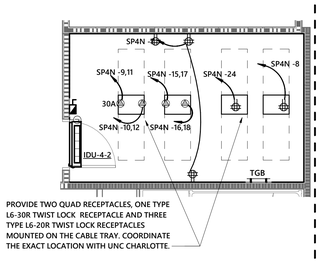
Optima # 18-0001 Sheet 23 of 84

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

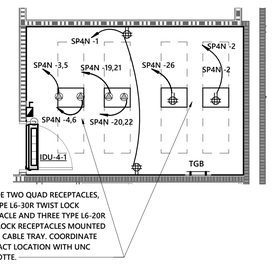


2 ENLARGED ELEC. 466
1/4" = 1'-0"



PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE.

3 ENLARGED IDF 435
1/4" = 1'-0"



PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE

4 ENLARGED IDF 474
1/4" = 1'-0"

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 436	RP4N3-11	RP4N3-12
2BD DOUBLE 437	RP4N3-13	RP4N3-14
2BD DOUBLE 438	RP4N3-15	RP4N3-16
2BD DOUBLE 439	RP4N3-17	RP4N3-18
2BD DOUBLE 440	RP4N3-19	RP4N3-20
2BD DOUBLE 441	RP4N3-21	RP4N3-22
2BD DOUBLE 443	RP4N3-23	RP4N3-24
2BD DOUBLE 444	RP4N3-25	RP4N3-26
2BD DOUBLE 445	RP4N3-27	RP4N3-28
2BD DOUBLE 446	RP4N3-29	RP4N3-30
2BD DOUBLE 447	RP4N3-31	RP4N3-32

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 448	RP4N3-33	RP4N3-34
2BD DOUBLE 449	RP4N4-5	RP4N4-7
2BD DOUBLE 451	RP4N4-6	RP4N4-8
2BD DOUBLE 453	RP4S2-1	RP4S2-2
2BD DOUBLE 455	RP4S2-3	RP4S2-4
2BD DOUBLE 456	RP4S2-5	RP4S2-6
2BD DOUBLE 457	RP4S2-7	RP4S2-8
2BD DOUBLE 458	RP4S2-9	RP4S2-10
2BD DOUBLE 459	RP4S2-11	RP4S2-12
2BD DOUBLE 460	RP4S2-13	RP4S2-14

UNIT CIRCUIT DESIGNATIONS

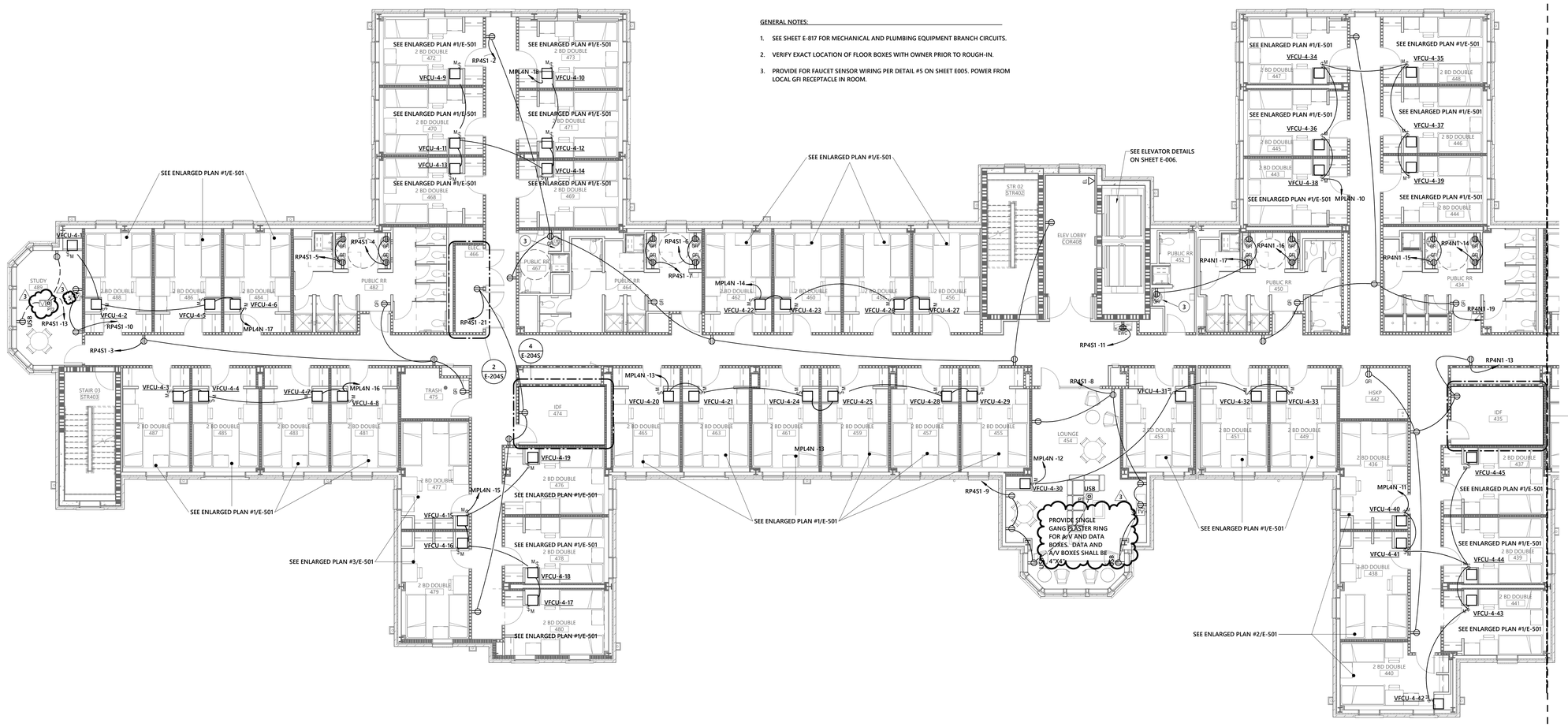
ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 461	RP4S2-15	RP4S2-16
2BD DOUBLE 462	RP4S2-17	RP4S2-18
2BD DOUBLE 463	RP4S2-19	RP4S2-20
2BD DOUBLE 465	RP4S2-21	RP4S2-22
2BD DOUBLE 468	RP4S2-23	RP4S2-24
2BD DOUBLE 469	RP4S2-25	RP4S2-26
2BD DOUBLE 470	RP4S2-27	RP4S2-28
2BD DOUBLE 471	RP4S2-29	RP4S2-30
2BD DOUBLE 472	RP4S2-31	RP4S2-32
2BD DOUBLE 473	RP4S3-17	RP4S3-18
2BD DOUBLE 476	RP4S3-17	RP4S3-18

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 477	RP4S3-19	RP4S3-20
2BD DOUBLE 478	RP4S3-21	RP4S3-22
2BD DOUBLE 479	RP4S3-23	RP4S3-24
2BD DOUBLE 480	RP4S3-1	RP4S3-2
2BD DOUBLE 481	RP4S3-3	RP4S3-4
2BD DOUBLE 483	RP4S3-5	RP4S3-6
2BD DOUBLE 484	RP4S3-7	RP4S3-8
2BD DOUBLE 485	RP4S3-9	RP4S3-10
2BD DOUBLE 486	RP4S3-11	RP4S3-12
2BD DOUBLE 487	RP4S3-13	RP4S3-14
2BD DOUBLE 488	RP4S3-15	RP4S3-16

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.
2. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.



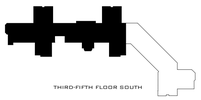
1 LEVEL 4 POWER PLAN - SOUTH
1/8" = 1'-0"

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'



PROJECT NORTH
TRUE NORTH

BID SET

E-204S

Optima # 18-0001 Sheet 24 of 84

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09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

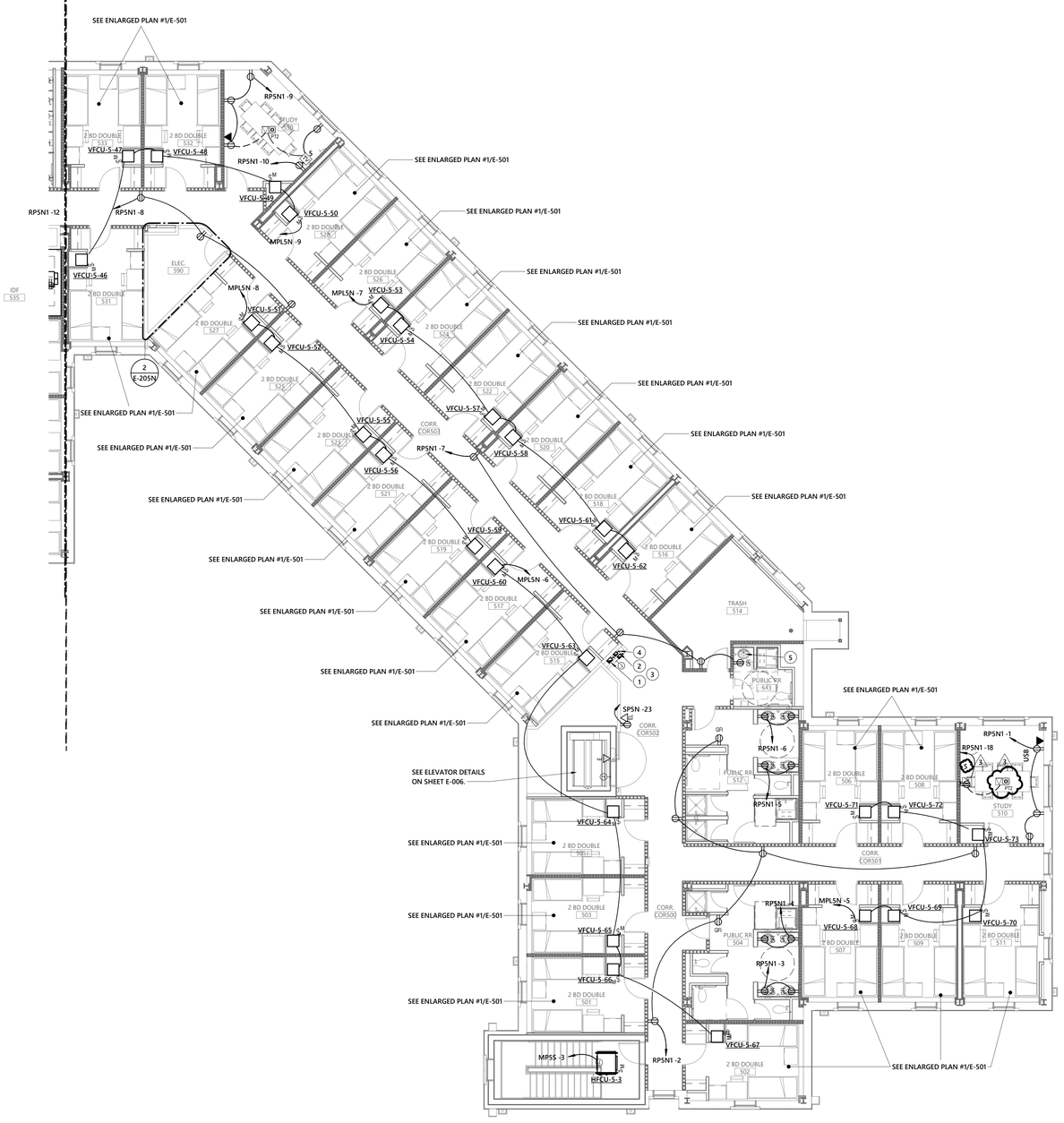
TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LEVEL 4 POWER PLAN - SOUTH

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 501	RP5N2-1	RP5N2-2
2BD DOUBLE 502	RP5N2-3	RP5N2-4
2BD DOUBLE 503	RP5N2-5	RP5N2-6
2BD DOUBLE 505	RP5N2-7	RP5N2-8
2BD DOUBLE 506	RP5N2-9	RP5N2-10
2BD DOUBLE 507	RP5N2-11	RP5N2-12
2BD DOUBLE 508	RP5N2-13	RP5N2-14
2BD DOUBLE 509	RP5N2-15	RP5N2-16
2BD DOUBLE 511	RP5N2-17	RP5N2-18
2BD DOUBLE 515	RP5N2-19	RP5N2-20
2BD DOUBLE 516	RP5N2-21	RP5N2-22
2BD DOUBLE 517	RP5N2-23	RP5N2-24
2BD DOUBLE 518	RP5N2-25	RP5N2-26
2BD DOUBLE 519	RP5N2-27	RP5N2-28
2BD DOUBLE 520	RP5N2-29	RP5N2-30
2BD DOUBLE 521	RP5N2-31	RP5N2-32
2BD DOUBLE 522	RP5N2-33	RP5N2-34
2BD DOUBLE 523	RP5N2-35	RP5N2-36
2BD DOUBLE 524	RP5N2-37	RP5N2-38
2BD DOUBLE 525	RP5N4-2	RP5N4-4
2BD DOUBLE 526	RP5N4-1	RP5N4-3
2BD DOUBLE 527	RP5N3-1	RP5N3-2
2BD DOUBLE 528	RP5N3-3	RP5N3-4
2BD DOUBLE 531	RP5N3-5	RP5N3-6
2BD DOUBLE 532	RP5N3-7	RP5N3-8
2BD DOUBLE 533	RP5N3-9	RP5N3-10



1 LEVEL 5 POWER PLAN - NORTH-ALT 1

1/8" = 1'-0"

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.
2. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.

KEYED NOTES: (X)

1. ELEVATOR EQUIPMENT, 41.0 FLA AT 208 VOLTS 3 PHASE. PROVIDE COMBINATION FUSIBLE, SHUNT TRIP, DISCONNECT SWITCH, 100/F60/3P WITH SURGE PROTECTION PER NEC 620.51(E) AND AUX CONTACTS, NC. KEY TEST SWITCH, AND LOCKABLE HANDLE. PROVIDE CONTROL CABLING TO JAMB MOUNTED ELEVATOR CONTROLLER. PROVIDE DUAL ELEMENT TIME DELAY FUSING WITH 5,00 AIC LIMITING RATING. COORDINATE FUSE SIZE WITH ELEVATOR INSTALLER.
2. ELEVATOR CONTROL AND CAB LIGHTING AT 120 VOLTS SINGLE PHASE. PROVIDE DISCONNECT SWITCH, 30/F20/1P WITH AUX CONTACTS, NC. PROVIDE CONTROL CIRCUIT TO JAMB MOUNTED ELEVATOR CONTROL PANEL.
3. ELEVATOR DISCONNECT SWITCHES LOCATED IN SHALLOW ACCESS SPACE. COORDINATE EXACT SIZE AND LOCATION WITH THE GENERAL CONTRACTOR.
4. ELEVATOR CONTROL AND CAB LIGHTING AT 120 VOLTS SINGLE PHASE. PROVIDE DISCONNECT SWITCH, 30/F20/1P WITH AUX CONTACTS, NC. PROVIDE CONTROL CIRCUIT TO NON-FUSED DISC IN ELEVATOR SHAFT.
5. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"

0 8' 12' 16' 20'

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09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

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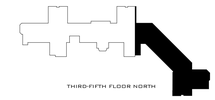
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LEVEL 5 POWER PLAN - NORTH - ALT

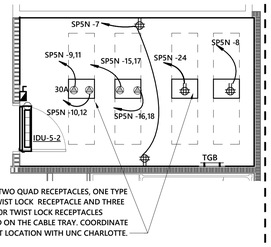


PROJECT NORTH
TRUE NORTH

BID SET

E-205N-A

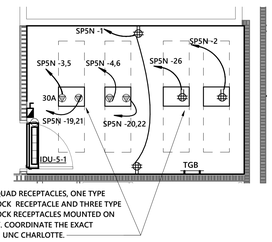
Optima # 18-0001 Sheet 26 of 84



PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE.

2 ENLARGED IDF 535

1/4" = 1'-0"



PROVIDE TWO QUAD RECEPTACLES, ONE TYPE L6-30R TWIST LOCK RECEPTACLE AND THREE TYPE L6-20R TWIST LOCK RECEPTACLES MOUNTED ON THE CABLE TRAY. COORDINATE THE EXACT LOCATION WITH UNC CHARLOTTE.

3 ENLARGED IDF 574

1/4" = 1'-0"

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 536	RPSN3-11	RPSN3-12
2BD DOUBLE 537	RPSN3-13	RPSN3-14
2BD DOUBLE 538	RPSN3-15	RPSN3-16
2BD DOUBLE 539	RPSN3-17	RPSN3-18
2BD DOUBLE 540	RPSN3-19	RPSN3-20
2BD DOUBLE 541	RPSN3-21	RPSN3-22
2BD DOUBLE 543	RPSN3-23	RPSN3-24
2BD DOUBLE 544	RPSN3-25	RPSN3-26
2BD DOUBLE 545	RPSN3-27	RPSN3-28
2BD DOUBLE 546	RPSN3-29	RPSN3-30
2BD DOUBLE 547	RPSN3-31	RPSN3-32

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 548	RPSN3-33	RPSN3-34
2BD DOUBLE 549	RPSN4-5	RPSN5-7
2BD DOUBLE 551	RPSN4-8	RPSN4-8
2BD DOUBLE 553	RPSS2-1	RPSS2-2
2BD DOUBLE 555	RPSS2-3	RPSS2-4
2BD DOUBLE 556	RPSS2-5	RPSS2-6
2BD DOUBLE 557	RPSS2-7	RPSS2-8
2BD DOUBLE 558	RPSS2-9	RPSS2-10
2BD DOUBLE 559	RPSS2-11	RPSS2-12
2BD DOUBLE 560	RPSS2-13	RPSS2-14

UNIT CIRCUIT DESIGNATIONS

ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 561	RPSS2-15	RPSS2-16
2BD DOUBLE 562	RPSS2-17	RPSS2-18
2BD DOUBLE 563	RPSS2-19	RPSS2-20
2BD DOUBLE 565	RPSS2-21	RPSS2-22
2BD DOUBLE 568	RPSS2-23	RPSS2-24
2BD DOUBLE 569	RPSS2-25	RPSS2-26
2BD DOUBLE 570	RPSS2-27	RPSS2-28
2BD DOUBLE 571	RPSS2-29	RPSS2-30
2BD DOUBLE 572	RPSS2-31	RPSS2-32
2BD DOUBLE 573	RPSS2-33	RPSS2-34
2BD DOUBLE 576	RPSS3-17	RPSS3-18

UNIT CIRCUIT DESIGNATIONS

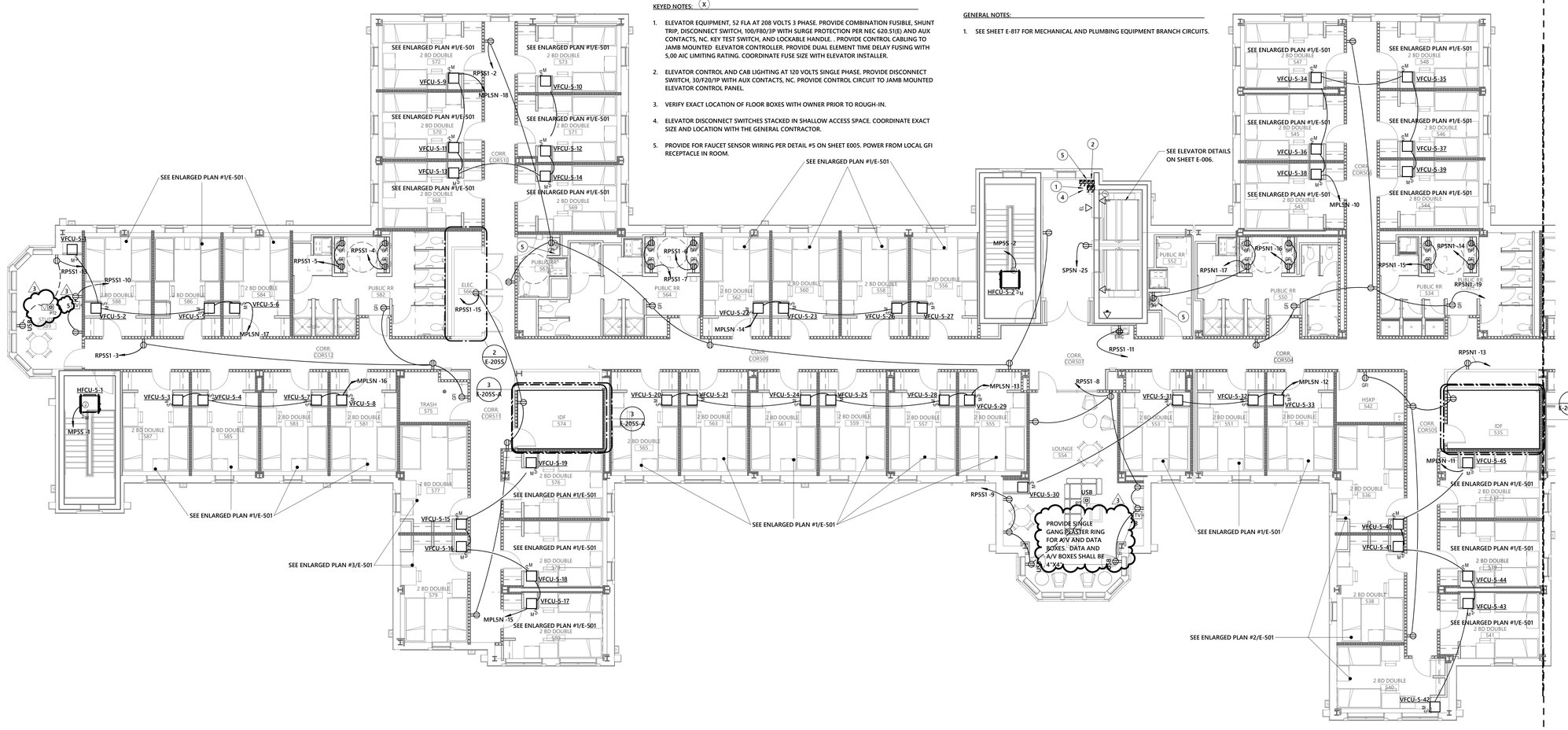
ROOM NUMBER	CIRCUIT #1	CIRCUIT #2
2BD DOUBLE 577	RPSS3-19	RPSS3-20
2BD DOUBLE 578	RPSS3-21	RPSS3-22
2BD DOUBLE 579	RPSS3-23	RPSS3-24
2BD DOUBLE 580	RPSS3-1	RPSS3-2
2BD DOUBLE 581	RPSS3-3	RPSS3-4
2BD DOUBLE 583	RPSS3-5	RPSS3-6
2BD DOUBLE 584	RPSS3-7	RPSS3-8
2BD DOUBLE 585	RPSS3-9	RPSS3-10
2BD DOUBLE 586	RPSS3-11	RPSS3-12
2BD DOUBLE 587	RPSS3-13	RPSS3-14
2BD DOUBLE 588	RPSS3-15	RPSS3-16

KEYED NOTES: (X)

1. ELEVATOR EQUIPMENT, 52 FLA AT 208 VOLTS 3 PHASE. PROVIDE COMBINATION FUSIBLE, SHUNT TRIP, DISCONNECT SWITCH, 100/F80/3P WITH SURGE PROTECTION PER NEC 620.51(E) AND AUX CONTACTS, NC. KEY TEST SWITCH, AND LOCKABLE HANDLE . PROVIDE CONTROL CABLING TO JAMB MOUNTED ELEVATOR CONTROLLER. PROVIDE DUAL ELEMENT TIME DELAY FUSING WITH 5,00 AIC LIMITING RATING. COORDINATE FUSE SIZE WITH ELEVATOR INSTALLER.
2. ELEVATOR CONTROL AND CAB LIGHTING AT 120 VOLTS SINGLE PHASE. PROVIDE DISCONNECT SWITCH, 30/F20/1P WITH AUX CONTACTS, NC. PROVIDE CONTROL CIRCUIT TO JAMB MOUNTED ELEVATOR CONTROL PANEL.
3. VERIFY EXACT LOCATION OF FLOOR BOXES WITH OWNER PRIOR TO ROUGH-IN.
4. ELEVATOR DISCONNECT SWITCHES STACKED IN SHALLOW ACCESS SPACE. COORDINATE EXACT SIZE AND LOCATION WITH THE GENERAL CONTRACTOR.
5. PROVIDE FOR FAUCET SENSOR WIRING PER DETAIL #5 ON SHEET E005. POWER FROM LOCAL GFI RECEPTACLE IN ROOM.

GENERAL NOTES:

1. SEE SHEET E-817 FOR MECHANICAL AND PLUMBING EQUIPMENT BRANCH CIRCUITS.



1 LEVEL 5 POWER PLAN - SOUTH-ALT 1

1/8" = 1'-0"

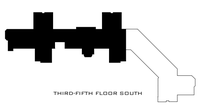
RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"

0 8' 12' 16' 20'



PROJECT NORTH

TRUE NORTH

BID SET

E-205S-A

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL

09.08.2021

UNC CHARLOTTE

Charlotte, NC

RESIDENCE HALL PHASE XVI

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3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

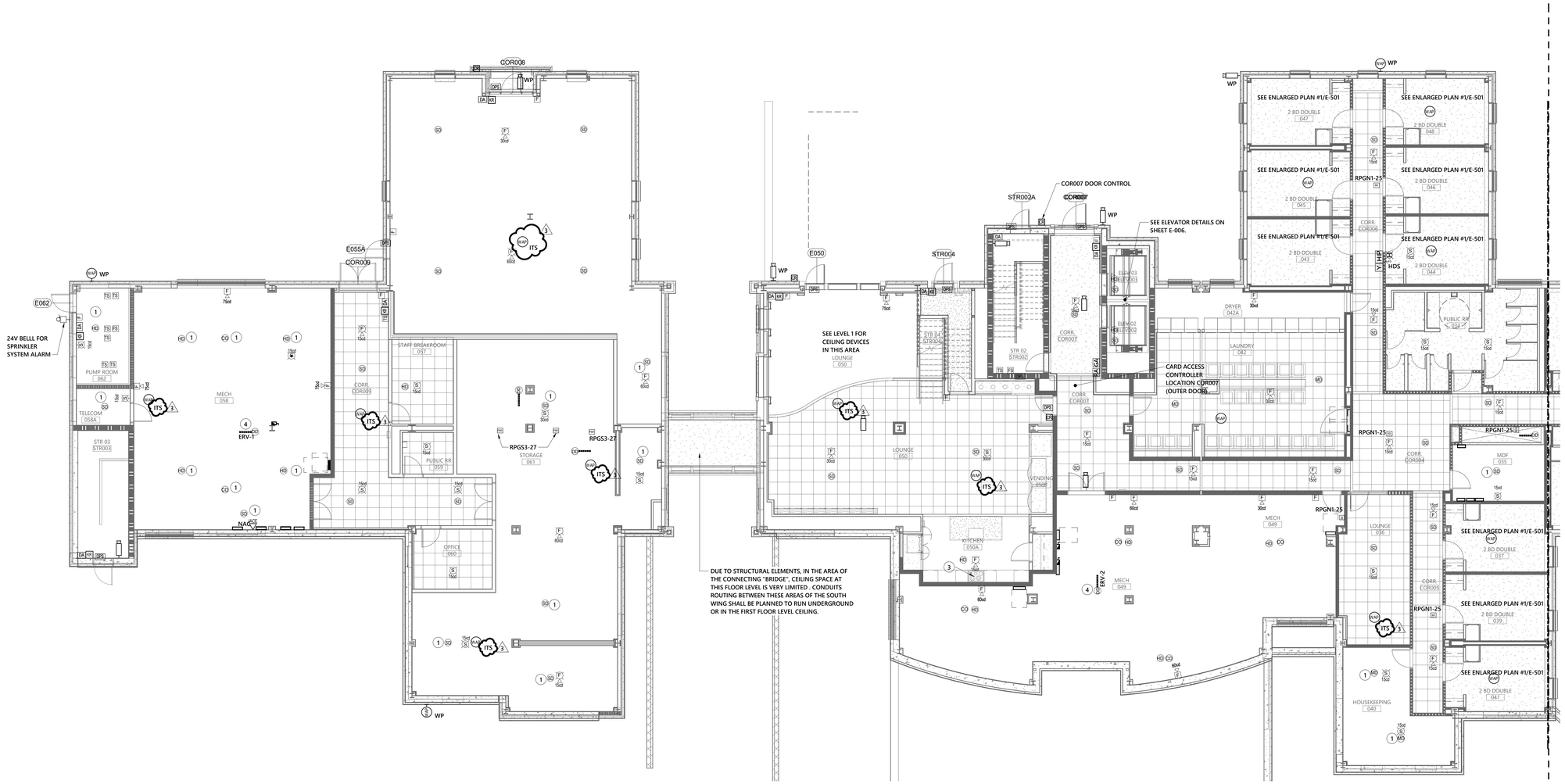
LEVEL 5 POWER PLAN - SOUTH - ALT

GENERAL NOTES:

1. REFER TO THE "TC" SERIES DRAWINGS AND ASSOCIATED SPECIFICATIONS FOR ADDITIONAL DEVICES, ELECTRICAL WORK AND REQUIREMENTS.

KEYED NOTES:

1. COORDINATE THE EXACT LOCATION OF THE FIRE ALARM SMOKE DETECTOR TO ALLOW EASY ACCESS FOR MAINTENANCE AND PROPER COVERAGE OF THE SPACE, PRIOR TO ROUGH-IN.
2. NOT USED.
3. PROVIDE WIRING OF RANGE HOOD SHUT DOWN SYSTEM. SEE DETAILS.
4. THIS DUCT DETECTOR SHUTS DOWN THE ASSOCIATED ERV UNIT.



1 LOWER LEVEL SYSTEMS PLAN - SOUTH
1/8" = 1'-0"

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

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09.08.2021

UNC CHARLOTTE
Charlotte, NC
RESIDENCE HALL PHASE XVI

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SCO ID: 18-18333-02E
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Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LOWER LEVEL SYSTEMS PLAN - SOUTH

GROUND and CLASSROOM FLOOR SOUTH

PROJECT NORTH
TRUE NORTH

BID SET

E-400S

Optima # 18-0001 Sheet 46 of 84

BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

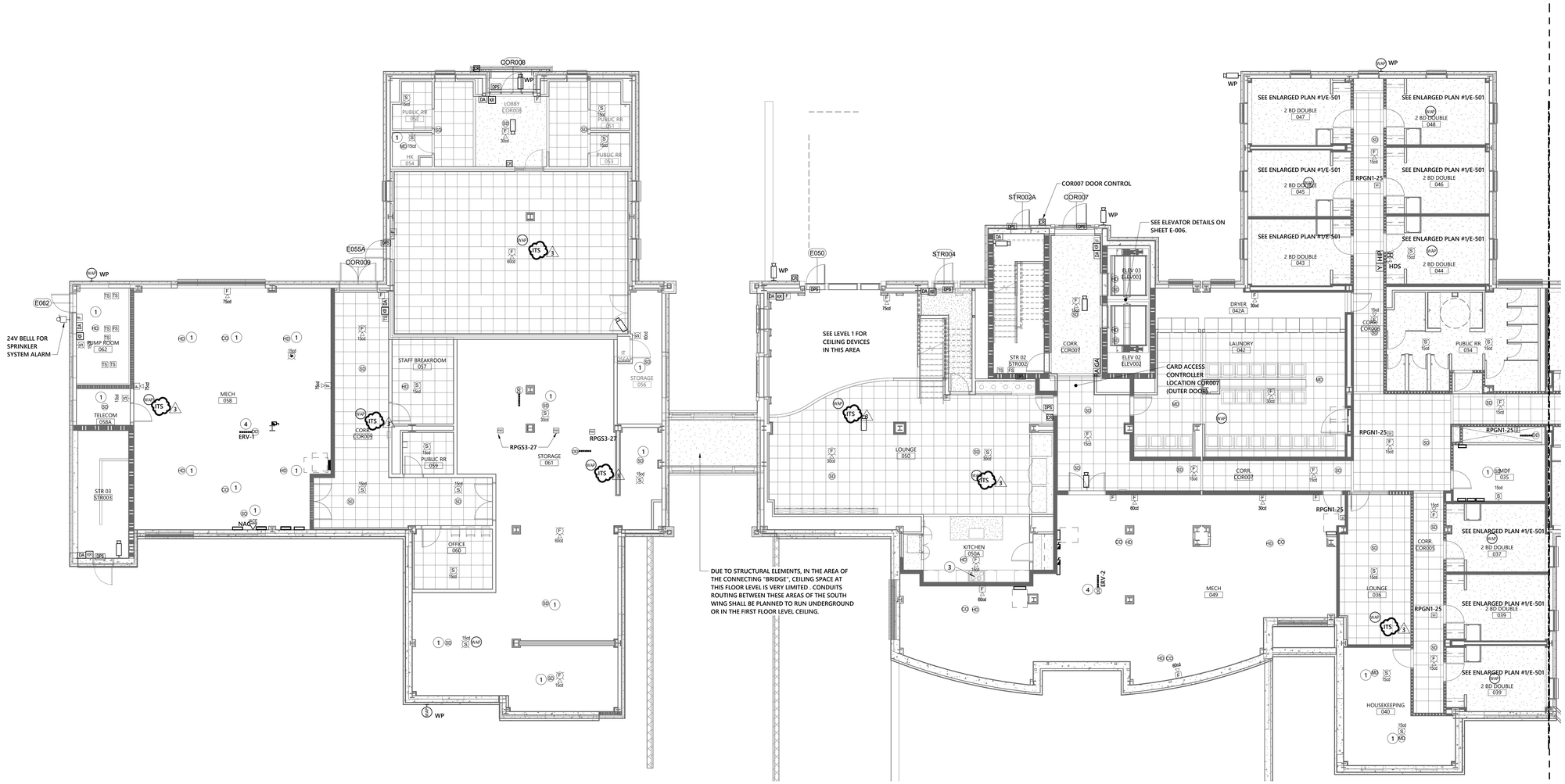
BIM 360://18NCC016 RH PHASE XVI/18-0001_UNCC-XVI A-MEP-V20.rvt

GENERAL NOTES:

1. REFER TO THE "TC" SERIES DRAWINGS AND ASSOCIATED SPECIFICATIONS FOR ADDITIONAL DEVICES, ELECTRICAL WORK AND REQUIREMENTS.

KEYED NOTES:

1. COORDINATE THE EXACT LOCATOIN OF THE FIRE ALARM SMOKE DETECTOR TO ALLOW EASY ACCESS FOR MAINTENANCE AND PROPER COVERAGE OF THE SPACE, PRIOR TO ROUGH-IN.



2 LOEWR LEVEL SYSTEMS RCP CEILING PLAN - SOUTH-ALT 5

1/8" = 1'-0"

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"

0 8' 12' 16' 20'

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09.08.2021

UNC CHARLOTTE

Charlotte, NC

RESIDENCE HALL PHASE XVI

TAG	DESCRIPTION	DATE
3	Addendum #4	09.08.2021

SCO ID: 18-18333-02E
Project: 18NCC016
Drawn By: MH
Designed By: JR
Checked By:
Date: AUGUST 16, 2021

LOWER LEVEL SYSTEMS PLAN - SOUTH - ALT

GROUND and CLASSROOM FLOOR SOUTH

PROJECT NORTH

TRUE NORTH

BID SET

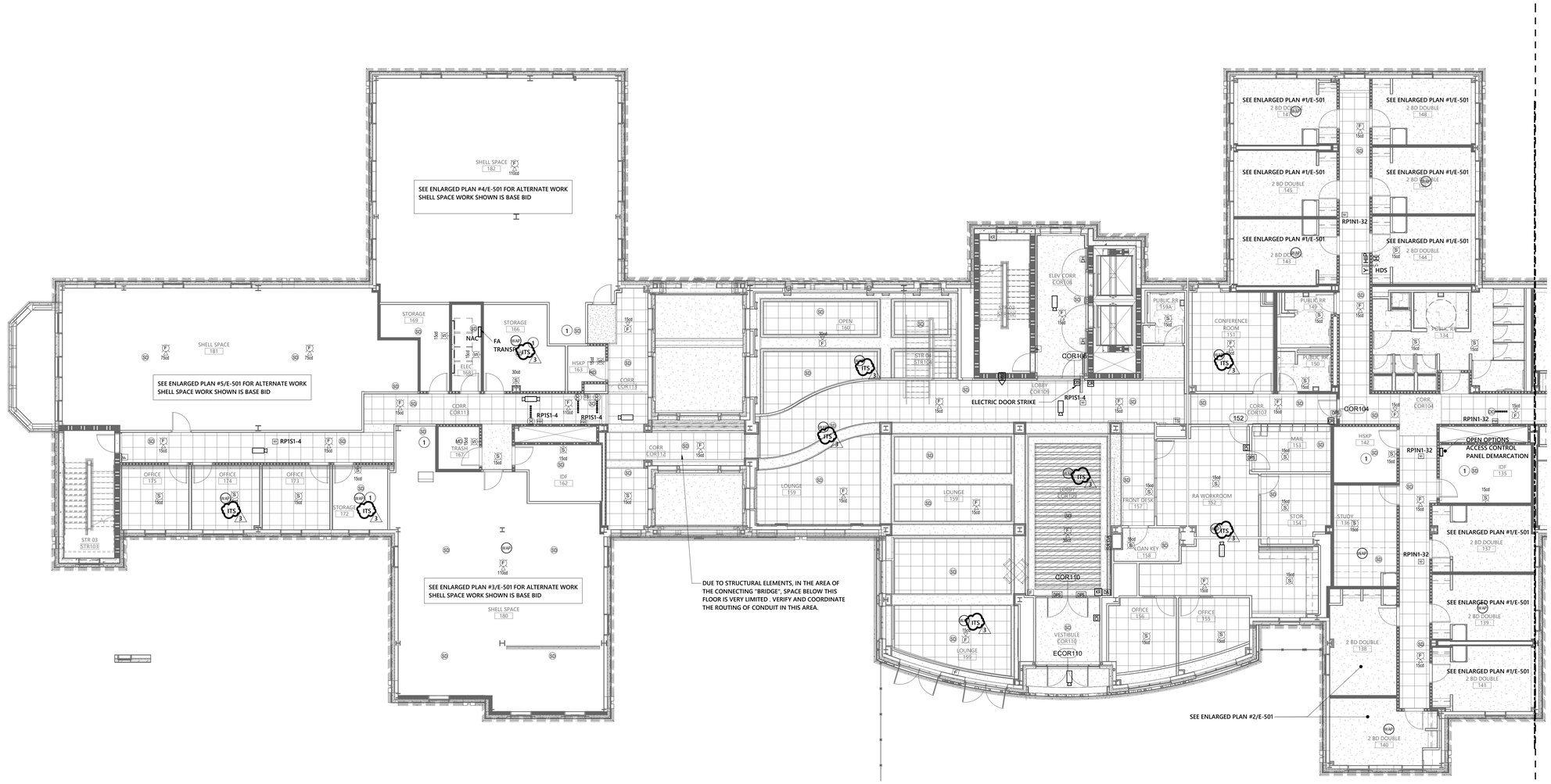
E-400S-A

GENERAL NOTES:

1. REFER TO THE "TC" SERIES DRAWINGS AND ASSOCIATED SPECIFICATIONS FOR ADDITIONAL DEVICES, ELECTRICAL WORK AND REQUIREMENTS.

KEYED NOTES:

1. COORDINATE THE EXACT LOCATOIN OF THE FIRE ALARM SMOKE DETECTOR TO ALLOW EASY ACCESS FOR MAINTENANCE AND PROPER COVERAGE OF THE SPACE, PRIOR TO ROUGH-IN.



1 LEVEL 1 SYSTEMS PLAN - SOUTH
1/8" = 1'-0"

RATED WALL LEGEND

1 HR FIRE RESISTIVE CONSTRUCTION

2 HR FIRE RESISTIVE CONSTRUCTION

1/8" = 1'-0"
0 8' 12' 16' 20'

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LEVEL 1 SYSTEMS PLAN - SOUTH

FIRST FLOOR SOUTH

PROJECT NORTH
TRUE NORTH

BID SET

E-401S

Optima # 18-0001 Sheet 49 of 84

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