ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	2x4 LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE, HALF SHADING INDICATES EMERGENCY FIXTURE.
	2x2 LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	4FT OR 8FT LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE HEAVY LINE INDICATES FIXTURE IS CONNECTED TO CRITICAL POWER SYSTEM
	4FT OR 8FT CHANNEL LIGHT FIXTURE, SUSPENDED OR SURFACE MOUNTED LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	UNDER COUNTER LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	STAGGER STRIP LIGHT FIXTURE, SURFACE MOUNTED IN LIGHTING COVE LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	DIRECT/INDIRECT FIXTURE, SUSPENDED LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	RECESSED LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE, SEE LIGHITNG FIXTURE SCHEDULE
	SURFACE LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	WALL MOUNTED LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	**FOR ALL LIGHTING TYPES ABOVE: -A HEAVY LINE THROUGH A FIXTURE SHOWS THE FIXTURE IS CONNECTED TO THE CRITICAL BRANCH POWER SYSTEM. -A FIXTURE HALF SHADED SHOWS THE FIXTURE IS ON THE LIFE SAFETY BRANCH POWER SYSTEM.
	RACEWAY CONCEALED ABOVE CEILING OR IN WALL
	RACEWAY CONCEALED BELOW FLOOR OR SLAB
	RACEWAY EXPOSED ON WALL OR CEILING
	CONDUIT, HOMERUN TO PANEL BOARD
	EXIT SIGN, SINGLE FACE, CEILING, ARROW INDICATES DIRECTION. LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	EXIT SIGN, DOUBLE FACE, CEILING MOUNTED, ARROW INDICATES DIRECTION. LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE)
	EXIT SIGN W/EMERGENCY LIGHTING UNIT, CEILING MOUNTED, ARROW INDICATES DIRECTION. LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	EXIT SIGN, SINGLE FACE, WALL/END MOUNTED, ARROW INDICATES DIRECTION. LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	EXIT SIGN, DOUBLE FACE, WALL/END MOUNTED, ARROW INDICATES DIRECTION. INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	EXIT SIGN W/EMERGENCY LIGHTING UNIT, WALL/END MOUNTED, ARROW INDICATES DIRECTION. INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
	EMERGENCY LIGHTING UNIT, 2-HEAD WITH BATTERY BACK-UP, WALL MOUNTED, "NOT SWITCHED" LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE
PE	PHOTOCELL, REMOTE MOUNTED, 120V, 10 SECOND TIME DELAY, UL WET LOCATION, RATED FOR 1500 W @ 120 VAC AND 4000 W @ 277 VAC (FOR USE WITH LAMP SOURCE(S) SHOWN)
$	SWITCH, SINGLE POLE, 120/277VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED, SEE ELECTRICAL MOUNTING HEIGHT DETAIL. LOWER CASE LETTER INDICATES FIXTURE SWITCHING, WHEN INDICATED
$3	3-WAY SWITCH, 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
$4	4-WAY SWITCH 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
$WP	WEATHERPROOF SWITCH, SINGLE POLE 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
$P	PILOT LIGHT SWITCH 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
3$P	3-WAY PILOT LIGHT SWITCH 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
4$P	4-WAY PILOT LIGHT SWITCH 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
$2P	SNAP SWITCH, 20A, 208V MINIMUM RATING, LARGER AS REQUIRED BY EQUIPMENT, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
D$	HEAVY DUTY LINE VOLTAGE DIMMER,1500W @ 120 VAC AND 4000W @ 277 VAC, 0-10V (IF REQUIRED) SINGLE POLE, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED LOWER CASE LETTER INDICATES FIXTURE SWITCHING (WHEN INDICATED)
D$3	THREE WAY HEAVY DUTY LINE VOLTAGE DIMMER,1500W @ 120 VAC AND 4000W @ 277 VAC, 0-10V (IF REQUIRED) SINGLE POLE, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED LOWER CASE LETTER INDICATES FIXTURE SWITCHING (WHEN INDICATED)
AFC$	ADJUSTABLE FAN CONTROL, 120/277VAC, SINGLE POLE, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL). LOWER CASE LETTER INDICATES FIXTURE SWITCHING (WHEN INDICATED)
$M	MANUAL MOTOR STARTER (SENTINEL)TOGGLE SWITCH
OS	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR, 360° COVERAGE 2 = SECOND CONTACT TO BE PROVIDED FOR CONNECTION TO BUILDING MANAGEMENT
OS	CEILING MOUNTED OCCUPANCY SENSOR, LONG RANGE COVERAGE 2 = SECOND CONTACT TO BE PROVIDED FOR CONNECTION TO BUILDING MANAGEMENT
OS	WALL MOUNTED OCCUPANCY SENSOR, 180° COVERAGE 2 = SECOND CONTACT TO BE PROVIDED FOR CONNECTION TO BUILDING MANAGEMENT
OS	WALL MOUNTED OCCUPANCY SENSOR, PIR TECHNOLOGY OCCUPANCY SENSOR, LOW VOLTAGE (24VDC) 19mA DRAW, WATTSTOPPER CX100-1, LONG RANGE SENSOR. INSTALL WHERE FREE OF OBSTRUCTIONS.
OS	WALL MOUNTED OCCUPANCY SENSOR, PIR TECHNOLOGY OCCUPANCY SENSOR, LOW VOLTAGE (24VDC) 19mA DRAW, WATTSTOPPER CX100-3, TWO SIDED AISLEWAY. INSTALL WHERE FREE OF OBSTRUCTIONS.
O$	WALL MOUNTED OCCUPANCY SENSOR, SINGLE BUTTON ON/OFF CONTROL, 180° COVERAGE, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.
O$D	WALL MOUNTED DUAL TECH OCCUPANCY SENSOR, DUAL BUTTON ON/OFF CONTROL WITH 0-10V DIMMING, 180° COVERAGE, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED. WATTSTOPPER DW-311 OR EQUAL.
O$F	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR, DUAL BUTTON ON/OFF CONTROL, 180° COVERAGE, ADDITIONAL POWER SUPPLY FOR FAN OPERATION, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.

SYMBOL	DESCRIPTION
	RECESSED GANG BOX WITH BLANK COVER PLATE, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED
	RECESSED SINGLE OUTLET, 120VAC, 20A, MOUNTED AS INDICATED ON DRAWING.
	RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED.
	RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.
	RECEPTACLE, QUADPLEX, 120VAC, 20A MOUNTED 16"AFF UNLESS OTHERWISE NOTED
	RECEPTACLE, QUADPLEX, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.
	RECEPTACLE, DUPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED.
	RECEPTACLE, DUPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.
	RECEPTACLE, QUADPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A MOUNTED 16"AFF UNLESS OTHERWISE NOTED
	RECEPTACLE, QUADPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.
	RECEPTACLE, 208VAC, 2 POLE, 3 WIRE, WALL MOUNTED, NEMA6-15R, UON
	RECEPTACLE, DUPLEX, 120VAC, 20A CEILING MOUNTED (LAY-IN / GYPBOARD / SUSPENDED)
	RECEPTACLE, DUPLEX, 120VAC, 20A FLOOR BOX, SIMILAR TO HUBBELL AFB10G55 WITH MOUNTING CUP HUBBELL CFBS1R4CUP AND COVER CFBS1R4CVRBRS. POWER BY CONTRACTOR.
	**FOR ALL RECEPTACLE TYPES ABOVE: +XX"- INDICATES MOUNTING HEIGHT OF DEVICE IN INCHES AFF (IF GIVEN). SEE ELECTRICAL MOUNTING HEIGHT DETAIL WP - LISTED WEATHER-RESISTANT TYPE DEVICE WITH WEATHERPROOF IN USE COVER TR - TAMPER RESISTANT
#A / # / # / #AF	SAFETY SWITCH, FUSED, HEAVY DUTY, SIZE AS INDICATED ON MECHANICAL EQUIPMENT CONNECTIONS SCHEDULE, SHEET E0.5, PROVIDE NEUTRAL BAR AS REQUIRED ##A = DISCONNECT SIZE / # = NUMBER OF POLES / # = NEMA RATING, / ##AF = FUSE SIZE
#A / #P / #W / # / #KAIC CB	ENCLOSED CIRCUIT BREAKER, SIZE AS INDICATED ON DRAWINGS ##A = BREAKER SIZE / # = POLES / #W = WIRES / # = NEMA RATING / # = KAIC RATING
	VARIABLE FREQUENCY DRIVE (VFD)
"Equip" #AMP HMCP (#HP) NEMA #	COMBINATION STARTER WITH CIRCUIT BREAKER DISCONNECT, FULL VOLTAGE, SIZE AS INDICATED ON DRAWINGS
MS##	MANUAL MOTOR STARTER, ELECTRICAL CONTRACTOR SHALL COORDINATE POLES AND SIZE WITH EQUIPMENT, 120V, 20A, SINGLE POLE, UON ## = AMPERAGE RATING WHEN INDICATED ON DRAWING
	3 UP/STOP/DN PUSHBUTTON CONTROLLER
	PANELBOARD, SURFACE OR RECESSED MOUNTED AS SHOWN. SIZE, RATINGS, AND MOUNTING AS INDICATED ON PANEL SCHEDULE. CONTRACTOR IS RESPONSIBLE FOR REQUIRED CLEARANCE IN FRONT OF ELECTRICAL PANEL. SEE NEC TABLE 110.26 WORKING SPACES FOR ADDITIONAL CLEARANCE CONDITIONS.
	UTILITY REVENUE METER
PP	MODULAR FURNITURE SERVICE POLE PROVIDED AND INSTALLED BY MODULAR FURNITURE VENDOR.
M	ELECTRICAL MOTOR
	GROUND BUS, "E" INDICATES ELECTRICAL GROUND BAR, "TG" INDICATES TELECOMMUNICATIONS GROUND BAR

SYMBOL	DESCRIPTION
WP WAP WALL CLNG	WIRELESS ACCESS POINT, DUAL GANG BOX WITH A SINGLE GANG PLASTER RING, SURGE PROTECTOR, WAP DEVICE, & DATA CABLE BY OWNER. IF INSTALLED IN A NON-ACCESSIBLE CEILING AREA, PROVIDE 1-1/4" CONDUIT WITH PULL STRING TO THE DATA CLOSET OR UNTIL IT REACHES AN ACCESSIBLE CEILING OR AN AREA OPEN TO THE CEILING STRUCTURE COMMUNICATING WITH THE DATA CLOSET. ONCE IN AN ACCESSIBLE CEILING AREA, SUPPORT CABLES USING J-HOOKS TO THE DATA CLOSET, SEE 2/E0.9. WP - LISTED WEATHER-RESISTANT TYPE DEVICE
	DUAL DATA OUTLET, TWO GANG BOX WITH A SINGLE GANG PLASTER RING MOUNTED 18" AFF UON. PROVIDE 1-1/4" CONDUIT W/ PULL STRING TO THE ACCESSIBLE CEILING ABOVE OR TO THE DATA CLOSET. IF OUTLET IS INSTALLED IN A NON-ACCESSIBLE CEILING AREA, EXTEND CONDUIT TO THE DATA CLOSET OR UNTIL IT REACHES AN ACCESSIBLE CEILING OR AN AREA OPEN TO THE CEILING STRUCTURE COMMUNICATING WITH THE DATA CLOSET. ONCE IN AN ACCESSIBLE CEILING AREA, SUPPORT CABLES USING J-HOOKS TO THE DATA CLOSET, SEE 2/E0.9. DATA CABLE BY OWNER.
	WALL TELEPHONE OUTLET, TWO GANG BOX WITH A SINGLE GANG PLASTER RING MOUNTED 18" AFF UON. PROVIDE 1-1/4" CONDUIT W/ PULL STRING TO THE ACCESSIBLE CEILING ABOVE OR TO THE DATA CLOSET. IF OUTLET IS INSTALLED IN A NON-ACCESSIBLE CEILING AREA, EXTEND CONDUIT TO THE DATA CLOSET OR UNTIL IT REACHES AN ACCESSIBLE CEILING OR AN AREA OPEN TO THE CEILING STRUCTURE COMMUNICATING WITH THE DATA CLOSET. ONCE IN AN ACCESSIBLE CEILING AREA, SUPPORT CABLES USING J-HOOKS TO THE DATA CLOSET, SEE 2/E0.9. DATA CABLE BY OWNER.
	DUAL DATA OUTLET, RECESSED CEILING MOUNTED. IF INSTALLED IN A NON-ACCESSIBLE CEILING AREA, PROVIDE 1-1/4" CONDUIT WITH PULL STRING TO THE DATA CLOSET OR UNTIL IT REACHES AN ACCESSIBLE CEILING OR AN AREA OPEN TO THE CEILING STRUCTURE COMMUNICATING WITH THE DATA CLOSET. ONCE IN AN ACCESSIBLE CEILING AREA, SUPPORT CABLES USING J-HOOKS TO THE DATA CLOSET, SEE 2/E0.9. DATA CABLE BY OWNER.
	COMBINATION POWER/DATA/TELEPHONE FLOOR BOX, SIMILAR TO HUBBELL AFB10G55 WITH MOUNTING CUP HUBBELL CFBS1R4CUP AND COVER CFBS1R4CVRBRS. PROVIDE 1-1/4" CONDUIT WITH PULL STRING TO THE ACCESSIBLE CEILING ABOVE OR TO THE DATA CLOSET. IF OUTLET IS INSTALLED IN A NON-ACCESSIBLE CEILING AREA, EXTEND CONDUIT TO THE DATA CLOSET OR UNTIL IT REACHES AN ACCESSIBLE CEILING OR AN AREA OPEN TO THE CEILING STRUCTURE COMMUNICATING WITH THE DATA CLOSET. ONCE IN AN ACCESSIBLE CEILING AREA, SUPPORT CABLES USING J-HOOKS TO THE DATA CLOSET, SEE 2/E0.9. DATA CABLE BY OWNER. POWER BY CONTRACTOR.
	JUNCTION BOX - WALL MOUNTED +##" - INDICATES MOUNTING HEIGHT OF DEVICE IN INCHES AFF (if given)
J	JUNCTION BOX - CEILING/ABOVE CEILING MOUNTED
J	JUNCTION BOX - FLOOR MOUNTED
TV	WALL MOUNTED DOUBLE GANG BOX FOR TELEVISION MOUNTED AT 72" AFF UNLESS NOTED OTHERWISE. BOX SHALL HAVE DUPLEX RECEPTACLE AND DATA CONNECTIONS FOR TELEVISION AS DIRECTED BY OWNER. BOX SHALL BE PASS & SEYMOUR TV2MW OR APPROVED EQUIVALENT. PROVIDE 1-1/4" CONDUIT WITH PULL STRING TO THE ACCESSIBLE CEILING ABOVE OR TO THE DATA CLOSET. IF OUTLET IS INSTALLED IN A NON-ACCESSIBLE CEILING AREA, EXTEND CONDUIT TO THE DATA CLOSET OR UNTIL IT REACHES AN ACCESSIBLE CEILING OR AN AREA OPEN TO THE CEILING STRUCTURE COMMUNICATING WITH THE DATA CLOSET. ONCE IN AN ACCESSIBLE CEILING AREA, SUPPORT CABLES USING J-HOOKS TO THE DATA CLOSET, SEE 2/E0.9. DATA CABLE BY OWNER. POWER BY CONTRACTOR.

TYPICAL ABBREVIATIONS:

A, AMP	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BOF	BOTTOM OF FIXTURE
BRKR	BREAKER
C, CND	CONDUIT
CAB	CABINET
CAT	CATALOG
CL	CHLORINE
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
CP	CONTROL PANEL
CR	CONTROL RELAY, CORROSION RESISTANT
CS	CONTROL SWITCH
CV	CONTROL VALVE
CT	CURRENT TRANSFORMER
CU	COPPER
EF	EXHAUST FAN
EMER	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ERGB	ELECTRICAL ROOM GROUND BAR
ENCL	ENCLOSURE
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EPRF	EXPLOSION PROOF
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FLA	FULL LOAD AMPS
FLUOR	FLUORESCENT
FLR	FLOOR
FWE	FURNISHED WITH EQUIPMENT
GEN	GENERATOR
G, GND	GROUND
GFCI	GROUND FAULT CURRENT INTERRUPTER
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSE POWER
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HV	HIGH VOLTAGE
Hz	HERTZ
IMC	INTERMEDIATE METALLIC CONDUIT
INCAND	INCANDESCENT
JB	JUNCTION BOX
K	THOUSAND
KCMIL	THOUSAND CIRCULAR MILLS
KVA	KILOVOLT AMPERE
KW	KILOWATTS
KWH	KILOWATT-HOURS
LP	LIGHTING PANEL, LIGHT POLE
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDS	MAIN DISTRIBUTION SWITCHBOARD
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N, NEUT	NEUTRAL
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
P	POLE
PA	PUBLIC ADDRESS
PB	PULL BOX, PUSH-BUTTON
PF	POWER FACTOR
PH,	PHASE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
PP	POWER PANEL, POWER POLE
PT	POTENTIAL TRANSFORMER
PWR	POWER
RECPT, RCP	RECEPTACLE
REQ'D	REQUIRED
RGS	RIGID GALVANIZED STEEL CONDUIT
RM	ROOM
RTU	REMOTE TELEMETRY UNIT
SCR	DC MOTOR DRIVE
SH	SHEET
SPEC	SPECIFICATION
SS	SELECTOR SWITCH
SST	STAINLESS STEEL
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCH GEAR
TEL	TELEPHONE
TGB	TELECOMMUNICATIONS GROUND BAR
TMGB	TELECOMMUNICATIONS MAIN GROUND BAR
TPS	TWISTED PAIR SHIELDED
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
TYP	TYPICAL
UGND	UNDERGROUND
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UTIL	UTILITY
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE, WATT
WH	WATT-HOUR
WP	WEATHERPROOF
XFMR	TRANSFORMER

CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL; SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL 028403 ARCHITECT R. DUNCAN McPHERSON
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
ABBREV. & LEGEND

E0
.1

GENERAL NOTES:

1. THE CONTRACTOR SHALL REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR WORK REQUIREMENTS, THE AMOUNT OF SPACE AVAILABLE FOR ELECTRICAL EQUIPMENT, AND LAYOUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THOROUGHLY FAMILIARIZING HIMSELF WITH ANY CONTRACTUAL REQUIREMENTS AS MAY BE SET FORTH IN THE OTHER DIVISIONS OF THE PROJECT SPECIFICATIONS.

3. UNLESS SPECIFICALLY NOTED OTHERWISE, SYSTEMS PROVIDED OR INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE COMPLETE AND FULLY-FUNCTIONING AFTER INSTALLATION. INCIDENTAL COMPONENTS MAY NOT BE SHOWN, AND ALL WORK WHICH MAY BE REASONABLY IMPLIED AS BEING INCIDENTAL TO THIS WORK, BUT REQUIRED FOR THE PROPER OPERATION OF THE EQUIPMENT OR SYSTEM, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER. ADDITIONAL CIRCUITS SHALL BE INSTALLED WHEREVER NEEDED TO CONFORM TO THE SPECIFIC REQUIREMENTS OF EQUIPMENT.

4. BIDDERS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORK INSTALLED IN STRICT ACCORDANCE WITH GOVERNING CODES, THE CONSTRUCTION DOCUMENTS NOTWITHSTANDING.

5. TEMPORARY POWER CONNECTIONS AS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. ALL TEMPORARY EQUIPMENT WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. THE CONTRACTOR SHALL PROVIDE DETAILS, METHODS, MATERIALS, ETC. TO THE ARCHITECT/ENGINEER PRIOR TO MAKING TEMPORARY CONNECTIONS. FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS INCLUDING CONTROL EQUIPMENT, MOTOR STARTERS, BRANCH AND FEEDER CIRCUIT BREAKERS, PANELBOARDS, TRANSFORMERS, ETC. FOR TEMPORARY POWER. COORDINATE WITH THE ELECTRICAL UTILITY COMPANY AS REQUIRED.

6. THE WORK SHALL INCLUDE COMPLETE TESTING OF ALL EQUIPMENT AND WIRING AT THE COMPLETION OF WORK AND ANY MINOR CORRECTIONS, CHANGES OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT.

7. ALL EQUIPMENT SHOWN DOTTED OR DASHED IS BY OTHERS.

8. DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

9. CIRCUIT ARRANGEMENTS AND CONFIGURATIONS ARE NOT INTENDED TO SHOW THE NUMBER OF FITTINGS, OR OTHER INSTALLATION DETAILS. UNLESS NOTED OTHERWISE, THE EXACT ROUTING OF FEEDER AND BRANCH CIRCUIT RACEWAYS AND CABLES IS THE RESPONSIBILITY OF THE CONTRACTOR. RISER AND GENERAL CIRCUIT ARRANGEMENTS ARE SHOWN SCHEMATICALLY/DIAGRAMMATICALLY ONLY. THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION.

10. UNLESS DIMENSIONED, DEVICE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADJUST EXACT LOCATIONS AS REQUIRED TO SERVE THE INTENDED PURPOSE AND TO AVOID CONFLICTS AND INTERFERENCES WITH OTHER TRADES. EXACT DEVICE LOCATIONS SHALL BE AS INDICATED ON THE ARCHITECTURAL DRAWINGS OR AS DIMENSIONED. IF NOT SHOWN ON THE ARCHITECTURAL DRAWINGS OR DIMENSIONED ON THE ELECTRICAL DRAWINGS, VERIFY EXACT LOCATION WITH THE ARCHITECT/ENGINEER PRIOR TO ROUGH-IN.

11. CONDUIT TERMINATING IN PRESSED STEEL BOXES SHALL HAVE DOUBLE LOCKNUTS AND INSULATED BUSHINGS. CONDUITS TERMINATING IN GASKETED ENCLOSURES SHALL BE TERMINATED WITH GROUNDING TYPE CONDUIT HUBS.

12. DEVICE BOXES SHOWN BACK-TO-BACK SHALL BE OFFSET A MINIMUM OF TWELVE (12) INCHES TO REDUCE SOUND TRANSMISSION BETWEEN ROOMS.

13. THE DRAWINGS INDICATE THE NUMBER OF BRANCH CIRCUIT HOMERUN PHASE CONDUCTORS VIA ARROWHEADS. PROVIDE NEUTRAL AND EQUIPMENT GROUND CONDUCTORS AS REQUIRED. ADDITIONAL CONDUCTORS REQUIRED FOR CONTROL SHALL BE INCLUDED EVEN IF NOT EXPLICITLY SHOWN.

14. SEAL ALL CONDUIT OPENINGS THROUGH EXTERIOR BUILDING WALLS WATERTIGHT.

15. ALL EXTERIOR WIRING DEVICES, BOXES, ETC. SHALL BE WEATHERPROOF. LIGHTING FIXTURES SHALL BE APPROPRIATELY RATED AND LISTED FOR THE ENVIRONMENT.

16. MAINTAIN CEILING FIRE RATINGS WITH ALL NECESSARY LIGHTING FIXTURE TRIM, ACCESSORIES, OPTIONS AND/OR FIELD FABRICATED SHROUDS COMPLYING WITH ALL APPLICABLE CODES.

17. RACEWAYS AND CABLES PENETRATING FLOORS, CEILINGS OR WALLS SHALL BE PROPERLY SEALED SMOKETIGHT.

18. RACEWAYS AND CABLES PENETRATING RATED FLOOR, CEILING OR WALL ASSEMBLIES SHALL BE PROPERLY SEALED IN ACCORDANCE WITH THE CORRESPONDING UNDERWRITERS LABORATORIES (OR OTHER APPROVED THIRD PARTY TESTING AGENCY) APPROVED AND LISTED FIRESTOPPING MATERIALS AND MANUFACTURER APPROVED INSTALLATION TECHNIQUES COMPLYING WITH ALL APPLICABLE CODES. SEE ARCHITECTURAL DRAWINGS FOR IDENTIFICATION OF RATED WALLS AND CEILINGS.

19. LIGHTING FIXTURES MOUNTED IN FIRE-RATED CEILINGS SHALL BE PROVIDED WITH ACCESSORIES NECESSARY TO MAINTAIN THE CEILING FIRE RATING.

20. ALL RACEWAYS AND CABLES SHALL BE CONCEALED EXCEPT THOSE SHOWN ON DRAWINGS TO BE EXPOSED. IF APPLICABLE, MATCH EXISTING RACEWAY INSTALLATION METHODS AND ROUTINGS AT OR NEAR EXISTING FACILITIES.

21. INSTALL EXPOSED RACEWAYS PARALLEL TO OR AT RIGHT ANGLES TO NEARBY SURFACES OR STRUCTURAL MEMBERS, AND FOLLOW THE SURFACE CONTOURS AS MUCH AS POSSIBLE. NO DIAGONAL RUNS WILL BE ALLOWED. ALL CONDUITS SHALL BE RUN STRAIGHT AND TRUE. RUN PARALLEL OR BANKED RACEWAYS TOGETHER ON COMMON SUPPORTS WHERE PRACTICAL. MAKE BENDS IN PARALLEL OR BANKED RUNS FROM SAME CENTERLINE TO MAKE BENDS PARALLEL.

22. PROVIDE AND PLACE ALL SLEEVES FOR CONDUITS PENETRATING WALLS, FLOORS, PARTITIONS, ETC. LOCATE ALL NECESSARY SLOTS FOR ELECTRICAL WORK AND FORM BEFORE CONCRETE IS POURED.

23. PATCHING OF WATERPROOFED SURFACES SHALL RENDER THE AREA OF THE PATCHING COMPLETELY WATERPROOF.

24. ALL MOTORS AND OTHER VIBRATING EQUIPMENT SHALL BE CONNECTED TO THE CONDUIT SYSTEM BY MEANS OF A SHORT SECTION (18 INCH MINIMUM) OF FLEXIBLE CONDUIT UNLESS OTHERWISE INDICATED. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED INSIDE THE FLEXIBLE CONDUIT AND TERMINATE AT THE LOAD END WITH AN APPROVED GROUNDING CLAMP OR LUG.

25. SURFACE MOUNTED PANELBOARDS, JUNCTION, OUTLET AND PULL BOXES, RACEWAYS, ETC., INSTALLED ON EXTERIOR SURFACES OR INSIDE ON EXTERIOR WALLS SHALL BE SUPPORTED BY SPACERS TO PROVIDE A 1/4" MINIMUM CLEARANCE BETWEEN THE WALL AND EQUIPMENT.

26. CEILING MOUNTED DEVICES INSTALLED IN ACOUSTICAL TILE CEILING AREAS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE WITH RODS OF SUFFICIENT SIZE TO PREVENT VERTICAL MOVEMENT OF THE OUTLET BOX. BRIDGES ALONE ARE NOT ADEQUATE UNLESS SPECIFICALLY APPROVED. CEILING MOUNTED EXIT LIGHT FIXTURES SHALL BE INSTALLED LEVEL. DO NOT SUPPORT DEVICES FROM ACOUSTICAL CEILING TILE.

27. EXCAVATION AND TRENCHING REQUIRED FOR THE INSTALLATION OF ELECTRICAL POWER AND TELECOMMUNICATIONS RACEWAYS SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF DIVISION 26 OF THE PROJECT SPECIFICATIONS.

28. PRIOR TO TRENCHING IN ANY AREA, THE CONTRACTOR SHALL CONTACT ELECTRICAL, COMMUNICATIONS/DATA/FIBER, CABLE TELEVISION, GAS AND WATER UTILITY PROVIDERS AND HAVE ALL UTILITIES IN THE AREA IDENTIFIED. DAMAGE TO ANY UNDERGROUND UTILITIES OR STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.

29. ALL UNDERGROUND RACEWAYS SHALL BE IDENTIFIED BY UNDERGROUND LINE MARKING TAPE LOCATED DIRECTLY ABOVE THE RACEWAY AT 6 TO 8 INCHES BELOW FINISHED GRADE. SEE SPECIFICATIONS SECTION 260553.

30. FINAL TYPED PANELBOARD DIRECTORIES INSTALLED IN THE PANELBOARD DOOR POCKET SHALL INCLUDE FINAL ACTUAL ROOM NAMES AND NUMBERS IN ADDITION TO THE GENERAL DESCRIPTION SHOWN ON THE PANEL SCHEDULES ON THE DRAWINGS.

31. CONDUCTOR SIZING IS BASED ON 75 DEGREE C. COPPER NEC RATINGS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL VERIFY, PRIOR TO INSTALLATION OF CONDUCTORS OR CONDUIT FEEDING ANY EQUIPMENT, THE ELECTRICAL EQUIPMENT IS RATED FOR USE WITH 75 DEGREE C. WIRING. IF ANY EQUIPMENT IS RATED FOR USE WITH LESS THAN 75 DEGREE C. CONDUCTORS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY FOR EVALUATION/CORRECTION.

32. DO NOT PULL CONDUCTORS UNTIL THE CONDUIT SYSTEM IS COMPLETE IN EVERY DETAIL. IN THE CASE OF CONCEALED WORK, "COMPLETE" MEANS UNTIL ALL ROUGH PLASTERING OR MASONRY HAS BEEN COMPLETED.

33. WHERE SIZE IS NOT SHOWN ON THE DRAWINGS, BRANCH CIRCUITS SHALL CONSIST OF #12 OR #10 AWG MINIMUM PHASE, NEUTRAL AND EQUIPMENT GROUND CONDUCTORS IN 1/2" MINIMUM RACEWAY. REFER TO THE "MINIMUM CONDUCTORS SIZE CHART" ON THE DRAWINGS AND INCREASE CONDUCTORS SIZES AS REQUIRED TO MAINTAIN A MAXIMUM OF 3% VOLTAGE DROP.

34. COMMON NEUTRAL BRANCH CIRCUITS ARE NOT PERMITTED. PROVIDE SEPARATE, INDIVIDUAL NEUTRAL CONDUCTORS FOR ALL RECEPTACLE AND LIGHTING BRANCH CIRCUITS.

35. KEEP CONDUCTOR SPLICES TO A MINIMUM. INSTALL SPLICES AND TAPES THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATINGS THAN CONDUCTORS BEING SPLICED. USE SPLICE AND TAP CONNECTORS COMPATIBLE WITH CONDUCTOR MATERIAL. INSTALL CONDUCTORS AT EACH OUTLET WITH AT LEAST 6 INCHES OF SLACK. CONNECT OUTLETS AND COMPONENTS TO WIRING AND TO GROUND AS INDICATED AND INSTRUCTED BY THE MANUFACTURER.

36. DO NOT SPLICE BRANCH CIRCUIT HOMERUNS WITHOUT THE PERMISSION OF THE ARCHITECT/ENGINEER. HOMERUNS SHALL BE CONTINUOUS FROM THE LAST OUTLET BOX TO THE SERVING PANELBOARD.

37. DO NOT COMBINE BRANCH CIRCUIT HOMERUNS UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS.

38. DO NOT CHANGE CIRCUITING SHOWN WITHOUT PERMISSION OF THE ARCHITECT/ENGINEER.

39. TROUGH TAPS SHALL BE AT SWITCH/CIRCUIT BREAKER AMPACITY, UNLESS NOTED OTHERWISE.

40. INSTALL WIRING DEVICES AT HEIGHTS AS SHOWN ON THE DRAWINGS. ALSO COORDINATE MOUNTING HEIGHTS WITH THE ARCHITECTURAL DRAWINGS AND CASEWORK DETAILS. IF CONFLICTING, ARCHITECTURAL DRAWINGS AND DETAILS SHALL GOVERN.

41. PROVIDE GROUND FAULT CIRCUIT-INTERRUPTER (GFCI) PROTECTION FOR PERSONNEL IN ACCORDANCE WITH THE NEC INCLUDING ALL ELECTRIC WATER COOLERS, EXTERIOR RECEPTACLES AND RECEPTACLES IN AREAS SUBJECT TO POSSIBLE WET CONDITIONS. ALL RECEPTACLES INSTALLED WITHIN 6 FEET OF A SINK SHALL BE GFI PROTECTED. ALL RECEPTACLES IN NON-RESIDENTIAL KITCHENS SHALL BE GFI PROTECTED.

42. GFCI RECEPTACLES SHALL BE READILY ACCESSIBLE AFTER INSTALLATION. IF CONDITIONS OF THE INSTALLATION TO NOT ALLOW FOR READY ACCESS, PROVIDE A STANDARD RECEPTACLE AND PROVIDE A GFCI CIRCUIT BREAKER TO FEED THE CIRCUIT. IN LIEU OF GFCI CIRCUIT BREAKERS, BLANK FACE GFCI DEVICES ARE ACCEPTABLE IF INSTALLED IN AN ACCESSIBLE LOCATION.

43. IN AREAS IN WHICH DUAL LEVEL SWITCHING IS INDICATED (TYPICALLY BY 2 OR MORE ADJACENT, GANGED SWITCHES), PROVIDE THE APPROPRIATE NUMBER OF CONDUCTORS TO FACILITATE THIS FUNCTION (AS TYPICALLY SHOWN).

44. CONNECT BATTERY PACK TYPE EMERGENCY AND EXIT LIGHTING FIXTURES AND EMERGENCY BATTERY (BODINE TYPE) DRIVERS TO THE UNSWITCHED LIGHTING CIRCUIT SERVING THE SPACE LIGHTED BY THE EMERGENCY AND EXIT FIXTURES. THESE CONNECTIONS ARE INTENTIONALLY NOT SHOWN TO MAINTAIN DRAWING CLARITY.

45. COORDINATE LIGHTING FIXTURE LOCATIONS WITH THE ARCHITECTURAL REFLECTED CEILING PLAN. IF CONFLICTS ARE NOTED, REQUEST CLARIFICATION FROM THE ARCHITECT/ENGINEER BEFORE PROCEEDING.

46. ADJACENT SWITCHES SHALL BE GANGED.

47. ADJACENT RECEPTACLES AND DATA/TELEPHONE OUTLETS SHALL BE INSTALLED 6 INCHES CENTER TO CENTER AND SHALL BE AT THE SAME ELEVATION.

48. SEPARATE NEUTRALS ARE REQUIRED FOR ALL LINE VOLTAGE DIMMED LIGHTING CIRCUITS.

49. WHERE THE DRAWINGS INDICATE A LIGHTING FIXTURE IS TO BE PROVIDED WITH SPECIAL FEATURES/SWITCHING (DIMMING, EMERGENCY BATTERY, MULTI-LEVEL, ETC), THE CONTRACTOR SHALL PROVIDE THESE FIXTURES WITH THE APPROPRIATE OPTIONS TO ACCOMMODATE THE SPECIAL FEATURES. THE CONTRACTOR SHALL PROVIDE THE FIXTURES AS INDICATED IN THE LIGHTING FIXTURE SCHEDULE WITH MODIFICATIONS AS REQUIRED BY DRAWING NOTES.

50. COORDINATE LOCATIONS OF PLUMBING, MECHANICAL, DATA, TELEPHONE, NURSE CALL, PAGING, ACCESS CONTROL, AUDIO/VISUAL EQUIPMENT, ETC. AND OF OWNER-PROVIDED EQUIPMENT WITH THE RESPECTIVE CONTRACTORS AND VENDORS AND THE OWNER BEFORE ROUGH-IN. ADJUST LIGHTING FIXTURES, RECEPTACLES AND ELECTRICAL EQUIPMENT TO ACCOMMODATE THIS EQUIPMENT. ADVISE THE ARCHITECT/ENGINEER OF CONFLICTS BEFORE ROUGH-IN. SEE SPECIFICATIONS SECTION 16XXX FOR ADDITIONAL DETAIL INVOLVING WORK WITH OTHER TRADES.

51. LIGHTING FIXTURES ARE, IN SOME INSTANCES, SHOWN TO BE INSTALLED ON THE BOTTOM OF THE EXPOSED STRUCTURE. THE CONTRACTOR SHALL NOT INSTALL FIXTURES ABOVE DUCTWORK WHICH BLOCKS LIGHTING FROM REACHING THE FLOOR. FIELD ADJUST FIXTURE LOCATIONS TO AVOID DUCTWORK AND OTHER EQUIPMENT WHICH INTERFERES WITH INTENDED LIGHTING OF THE SPACE. INSTALL FIXTURES ON WALLS IN SPACES WHERE FIXTURE OUTPUT WOULD OTHERWISE BE BLOCKED. COORDINATE RELOCATIONS WITH THE ARCHITECT/ENGINEER.

52. THE LOCATIONS OF ELECTRICAL EQUIPMENT SERVING MECHANICAL, PLUMBING, FOOD SERVICE EQUIPMENT, ETC. MAY NOT BE SHOWN PRECISELY ON THE ELECTRICAL DRAWINGS DUE TO THE VARIABILITY OF SPACE AND EQUIPMENT ROOM ARRANGEMENTS AND THE EQUIPMENT PROVIDED. LOCATIONS OF ELECTRICAL EQUIPMENT, PANELBOARDS, WIRING TROUGHS, LOCAL DISCONNECTING MEANS, ETC. SHALL BE COORDINATED WITH THE RESPECTIVE CONTRACTORS PRIOR TO ROUGH-IN. LOCATE AND/OR ADJUST EQUIPMENT LOCATIONS SHOWN IN CONSULTATION WITH OTHER TRADES TO MAINTAIN VISABILITY OF THE EQUIPMENT FROM DISCONNECTING MEANS AND PROVIDE ACCESS AND WORKING SPACE IN COMPLIANCE WITH CODES.

53. BEFORE COMMENCING WORK OR ORDERING MATERIALS, THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND VERIFY THE NAMEPLATE RATINGS OF ALL EQUIPMENT (MOTORS, HEATERS, COMPRESSORS, ETC.) AND ADJUST THE RATINGS OF THE ELECTRICAL EQUIPMENT (SWITCHES, FUSES, CIRCUIT BREAKERS, CONDUCTORS, RACEWAYS, ETC.) AS APPROPRIATE TO SERVE THIS EQUIPMENT.

54. ENERGIZE EQUIPMENT ONLY AFTER OBTAINING PERMISSION FROM THE ENTITY PROVIDING THE EQUIPMENT.

55. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL EQUIPMENT TERMINATIONS, PLUGS AND CORDSETS WITH VENDOR EQUIPMENT AND VERIFY ALL DEVICE LOCATIONS FOR SPECIALITY EQUIPMENT WITH CASEWORK PRIOR TO ROUGH-IN.

56. THE ARRANGEMENT OF ELECTRICAL DISTRIBUTION EQUIPMENT IN ELECTRICAL AND MECHANICAL EQUIPMENT ROOMS IS BASED ON PUBLISHED EQUIPMENT SIZES AND SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. DEVIATIONS FROM CONFIGURATIONS SHOWN IS THE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE NATIONAL ELECTRIC CODE REQUIRED CLEARANCES FOR ALL ELECTRICAL EQUIPMENT, SWITCHBOARDS, PANELBOARDS, TRANSFER SWITCHES, SAFETY SWITCHES, ETC. COORDINATE RESOLUTION OF CONFLICTS WITH OTHER TRADES. ADVISE THE ARCHITECT/ENGINEER OF CONFLICTS BEFORE ROUGH-IN.

57. COORDINATION WITH THE ELECTRICAL UTILITY COMPANY IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. COORDINATE WITH THE UTILITY COMPANY FOR PLACEMENT OF THE UTILITY'S FACILITIES AND THE CONTRACTOR'S SERVICE ENTRANCE RACEWAYS AND FOR CONNECTIONS TO THE CONTRACTOR'S SERVICE ENTRANCE CONDUCTORS.

58. TELECOMMUNICATIONS AND DATA CABLES WILL BE PROVIDED AND INSTALLED BY THE OWNER. LEAVE PULL WIRES OR ROPES OF ADEQUATE TENSILE STRENGTH IN ALL EMPTY CONDUITS.

59. PROVIDE TELEPHONE, CABLE TELEVISION, FIBER AND DATA SERVICE ENTRANCE CONDUIT IN SIZES AND LOCATIONS AS SHOWN ON THE DRAWINGS AND AS REQUIRED BY THE OWNER AND THE SERVICE UTILITIES. UTILITY SERVICE ENTRANCE CABLES WILL BE PROVIDED AND INSTALLED BY THE OWNER'S SERVICE UTILITIES. LEAVE PULL WIRES OR ROPES OF ADEQUATE TENSILE STRENGTH IN ALL EMPTY CONDUITS.

60. EXACT SPACING OF SMOKE AND HEAT DETECTORS AND A/V DEVICES SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE WITH POSITIONS SHOWN ON THE DRAWINGS. DETECTOR SPACING IS BASED UPON NFPA 72 INCLUDING APPENDIX A. SLIGHT ADJUSTMENTS MAY BE MADE IN SPACING IF REQUIRED BY FIELD CONDITIONS, BUT SPACING SHALL NOT EXCEED ADA, NFPA AND EQUIPMENT MANUFACTURERS SPACING CRITERIA. DO NOT INSTALL SMOKE DETECTORS WITHIN 3 FEET OF SUPPLY AIR DIFFUSERS OR RETURN GRILLES. PROVIDE FLEX CONDUIT CONNECTION TO SMOKE AND HEAT DETECTORS OF ADEQUATE LENGTH TO ALLOW HORIZONTAL ADJUSTMENT OF FOUR FEET FROM POSITION INDICATED ON DRAWINGS.

61. SAFETY: COMPLY WITH OSHA AND NEC ARC FLASH PROTECTION REQUIREMENTS.

62. FOOD SERVICE EQUIPMENT ELECTRICAL NOTES
    - A. SEE SPECIFICATIONS SECTION 16049 FOR ADDITIONAL REQUIREMENTS.
    - B. THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL ELECTRICAL CONNECTIONS TO ALL FOOD SERVICE AND RELATED KITCHEN EQUIPMENT.
    - C. THE CIRCLE OR ELONGATED BUBBLE SYMBOL WITH NUMBER IDENTIFIES FOOD SERVICE EQUIPMENT AS IT IS SHOWN ON THE FOOD SERVICE EQUIPMENT DRAWINGS. SEE FOOD SERVICE EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
    - D. SEE FOOD SERVICE EQUIPMENT DRAWINGS FOR EXACT EQUIPMENT LOCATIONS, DIMENSIONS, CONNECTION TYPE, POWER AND CIRCUIT REQUIREMENTS, CIRCUIT BREAKER SIZE, WIRING DEVICE TYPE, RATING AND CONFIGURATION AND ROUGH-IN LOCATIONS AND PROVIDE SUITABLE ELECTRICAL EQUIPMENT, DEVICES, CONNECTIONS, CIRCUITS AS REQUIRED BY THE FOOD SERVICE EQUIPMENT DRAWINGS.
    - E. THE ELECTRICAL CONTRACTOR SHALL VERIFY ROUGH-IN REQUIREMENTS, LOCATIONS, MOUNTING HEIGHTS, ORIENTATION, VOLTAGE, PHASE, AMPS, HP, KW, ETC. FOR ALL FOOD SERVICE EQUIPMENT PRIOR TO ROUGH-IN.
    - F. PROVIDE LOCAL DISCONNECTING MEANS FOR EQUIPMENT AS REQUIRED BY CODES AND THE AHJ.
    - G. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCHES, INTERLOCKS, CONDUIT, WIRING AND INSTALLATION AS SPECIFICALLY OUTLINED ON THE FOOD SERVICE EQUIPMENT DRAWINGS.
    - H. FINAL CONNECTION TO HARD WIRED FOOD SERVICE EQUIPMENT SHALL BE MADE WITH LIQUIDTIGHT FLEXIBLE CONDUIT.
    - I. COORDINATE ALL CONNECTIONS TO EQUIPMENT WITH THE FOOD SERVICE EQUIPMENT CONTRACTOR.
    - J. ENERGIZE EQUIPMENT ONLY AFTER OBTAINING PERMISSION FROM THE CONTRACTOR PROVIDING THE EQUIPMENT.
    - K. ALL CONVENIENCE OUTLETS IN THE KITCHEN SHALL BE INSTALLED HORIZONTALLY AND RATED 20 AMPS UNLESS NOTED OTHERWISE OR REQUIRED BY EQUIPMENT. ALL 125 VOLT RECEPTACLES MOUNTED IN THE KITCHEN SHALL BE GFCI TYPE. RECEPTACLES SHALL BE OF STANDARD NEMA CONFIGURATIONS.
    - L. ALL RACEWAYS SHALL BE CONCEALED IN WALLS WHERE POSSIBLE, OTHERWISE, STUB UP THROUGH FLOOR AT EQUIPMENT APPROX. 6" ABOVE FLOOR TO CLEAR EQUIPMENT BASES.
    - M. HOODS WILL BE FURNISHED PREWIRED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR WITH LIGHT FIXTURES AND SWITCHES/CONTROLS FOR LIGHTS AND FANS. THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO THE ELECTRICAL TERMINAL BOX PROVIDED WITH THE HOOD AND MAKE CONNECTIONS FROM THE TERMINAL BOX TO THE EXHAUST AND MAKE UP AIR FANS AS SHOWN.
    - N. FURNISH SHUNT TRIP CIRCUIT BREAKERS FOR ELECTRICAL FOOD SERVICE EQUIPMENT INSTALLED UNDER HOODS. CONNECT TO DE-ENERGIZE THESE UNITS UPON ACTIVATION OF THE EXHAUST HOOD FIRE SUPPRESSION SYSTEM. COORDINATE CONNECTIONS WITH THE FOOD SERVICE EQUIPMENT CONTRACTOR.
    - O. THE DISH MACHINE WILL BE FURNISHED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR PREWIRED TO AN INTEGRAL CONTROL PANEL READY FOR FINAL CONNECTION BY THE ELECTRICAL CONTRACTOR.
    - P. PROVIDE SEAL-OFF FITTINGS FOR ALL CONDUITS ENTERING OR LEAVING REFRIGERATED WALK-IN BOXES.

63. LOW VOLTAGE SYSTEMS ELECTRICAL COORDINATION NOTES
    - A. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ELECTRICAL WORK REQUIRED BY THE LOW VOLTAGE SYSTEMS DRAWINGS THE LOW VOLTAGE SYSTEMS VENDORS, THE OWNER AND THE GENERAL CONTRACTOR.
    - B. THE LOW VOLTAGE SYSTEMS DRAWINGS, OBTAINED BY THE CONTRACTOR FROM THE OWNER'S LOW VOLTAGE SYSTEMS VENDORS, SHALL BE CONSIDERED AN ESSENTIAL COMPONENT OF THE CONTRACT DOCUMENTS. SOME ELECTRICAL WORK SHOWN ON THESE DRAWINGS IS INTENTIONALLY NOT DUPLICATED ON THE ELECTRICAL DRAWINGS. THE CONTRACTOR SHALL PROVIDE, AS PART OF THIS CONTRACT, SOURCES OF POWER; POWER, RECEPTACLES, CONTROL AND COMMUNICATIONS CONDUCTORS, CABLES AND RACEWAYS; EMPTY RACEWAYS; JUNCTION, OUTLET AND PULL BOXES; MOUNTING HARDWARE; FINAL CONNECTIONS; CONNECTION HARDWARE; TESTING AND TESTING SUPPORT; ETC., FOR THE LOW VOLTAGE SYSTEMS AS SHOWN ON THE CONTRACT DRAWINGS AND THE LOW VOLTAGE SYSTEMS DRAWINGS. IF NOT SHOWN ON THE ELECTRICAL DRAWINGS, USE SPARE CIRCUIT BREAKERS IN ELECTRICAL PANELBOARDS FOR ADDITIONAL CIRCUITS SHOWN ON THE REFERENCE DRAWINGS AND MARK AS-BUILT DRAWINGS ACCORDINGLY.
    - C. SEE SPECIFICATIONS SECTIONS 16041 - PAGING SYSTEM, 16042 - NURSE CALL SYSTEM, 16043 - TELEPHONE AND DATA RACEWAY SYSTEM, 16044 - ACCESS CONTROL/SPECIAL LOCKING (MAG LOCK) RACEWAY SYSTEM, 16045 - CABLE TELEVISION RACEWAY SYSTEM, 16046 - SECURITY CAMERA RACEWAY SYSTEM, 16047 - AIPHONE SYSTEM RACEWAY SYSTEM AND 16049 - ELECTRICAL WORK IN CONNECTION WITH OTHER CONTRACTS FOR ADDITIONAL REQUIREMENTS AND CONTRACTOR RESPONSIBILITIES WITH REGARD TO THESE SYSTEMS.
    - D. THE CONTRACTOR IS CAUTIONED TO THOROUGHLY REVIEW BOTH THE CONTRACT DRAWINGS AND THE LOW VOLTAGE SYSTEMS REFERENCE DRAWINGS PRIOR TO SUBMITTING A BID. ELECTRICAL ITEMS SHOWN AND/OR NOTED ON THESE DRAWINGS TO BE PROVIDED BY THE "ELECTRICIAN" OR SIMILAR TERM SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE CONSIDERED AS BINDING AS MATERIAL, EQUIPMENT AND LABOR SHOWN ON THE CONTRACT DRAWINGS. NO EXTRAS WILL BE CONSIDERED OR APPROVED FOR ITEMS SHOWN ON EITHER DRAWINGS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR.

64. ATTIC LOW VOLTAGE SYSTEMS CABLE INSTALLATION NOTES
    - A. ALL LOW VOLTAGE SYSTEM CABLE INSTALLED FREE RUN IN THE ATTIC SHALL BE INSTALLED ON J HOOKS. CABLES SHALL BE INSTALLED IN A MANNER TO PROTECT THE CABLES FROM DAMAGE DURING INSTALLATION, FACILITATE CABLE MANAGEMENT AND IDENTIFICATION, AND PROVIDE A NEAT GROOMED APPEARANCE.
    - B. EACH CABLE SYSTEM SHALL BE INSTALLED AND SUPPORTED INDEPENDENTLY.
    - C. CABLING SHALL BE INSTALLED IN STRAIGHT PATHS IN A NEAT AND ORDERLY FASHION FOLLOWING MAINTENANCE WALKWAYS AND AT NINETY-DEGREE ANGLES. DIAGONAL, BEELINE AND OR NON-SUPPORTED CABLING ARE UNACCEPTABLE. CABLING SHALL BE ROUTED AS HIGH AS POSSIBLE AND ABOVE OTHER BUILDING FACILITIES IN THE PATH WITH THE LEAST OBSTRUCTIONS IN THE SPACE. PATHWAYS SHALL BE AT LEAST 2 FEET AWAY FROM ALL LIGHTING FIXTURES AND OTHER POTENTIAL EMF SOURCES. CABLES SHALL NOT BE STRAPPED TO ELECTRICAL POWER CONDUITS, PIPING OR OTHER SYSTEMS. HORIZONTAL CABLES SHALL BE BUNDLED USING HOOK AND LOOP STRAPS. PLASTIC CABLE TIES ARE NOT PERMITTED.
    - D. THE CABLE SUPPORT STRUCTURE SHALL UTILIZE APPROVED J HOOK CABLE SUPPORTS AND BE SIZED TO ACCOMMODATE CHANGE. J HOOK TYPE CABLE SUPPORTS SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE AND BE SPACED AT A MAXIMUM DISTANCE OF FOUR (4) FEET SO THAT SAG BETWEEN SUPPORTS DOES NOT EXCEED 12 INCHES. ALL J HOOKS SHALL BE SIZED WITH 20% SPARE CAPACITY. ALL ATTACHMENT HARDWARE SHALL BE APPROVED FOR THE TYPE OF INSTALLATION AND MAXIMUM LOAD RATING OF THE PRODUCTS INSTALLED.
    - E. ALL PENETRATIONS THROUGH WALLS AND CEILINGS SHALL BE SLEEVED. ALL SLEEVES SHALL HAVE PERMANENTLY ATTACHED PLASTIC BUSHINGS. SLEEVES SHALL BE SIZED TO ACCEPT 50% GROWTH. ALL SLEEVES SHALL BE FIRE-STOPPED USING THIRD PARTY TESTING AGENCY APPROVED METHODS AND SHALL MAINTAIN ASSEMBLY FIRE RATINGS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL; SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL R. DUNCAN McFADYEN

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

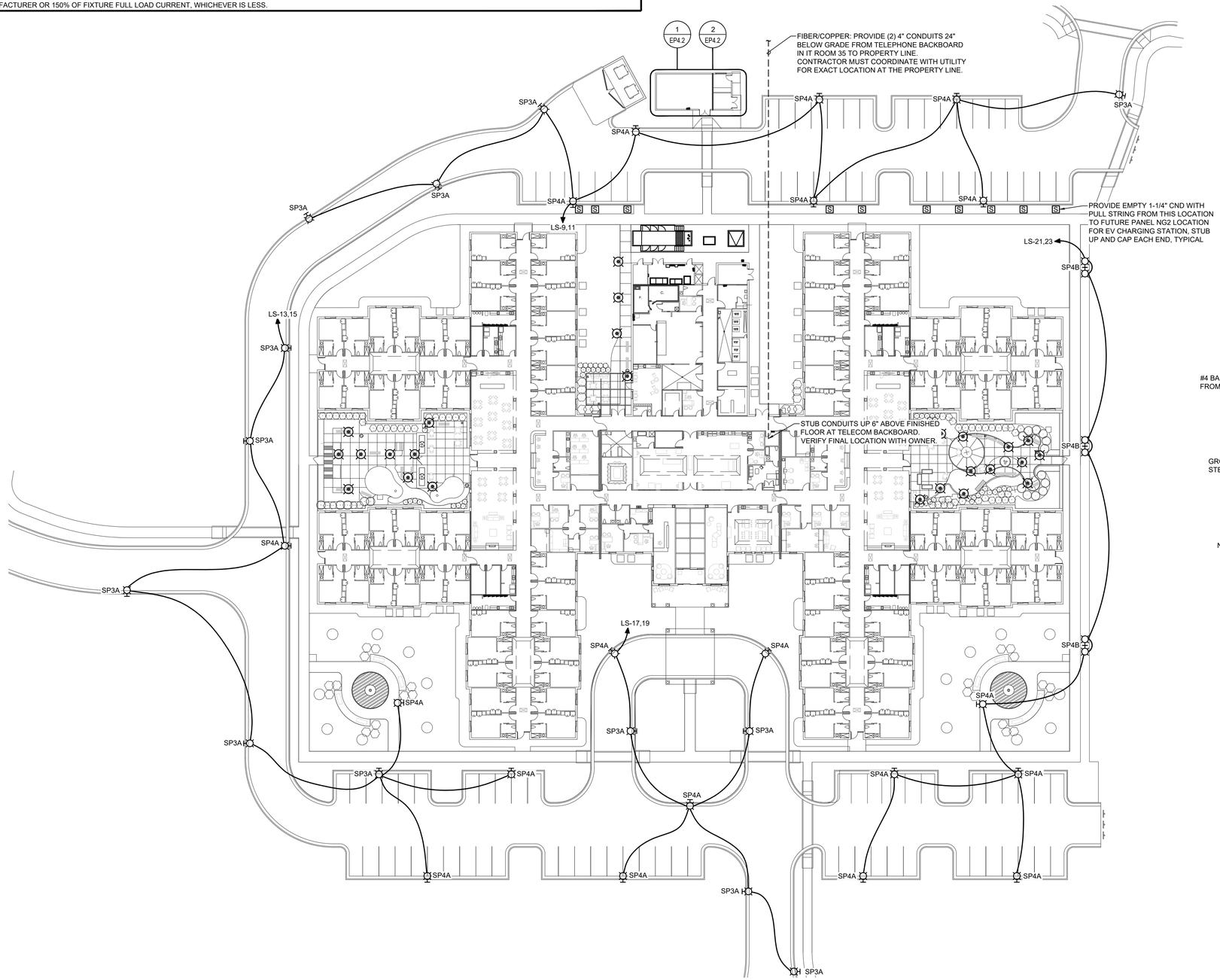
120 BED
NURSING FACILITY
ELECTRICAL
GENERAL NOTES

E0.2

SITE LIGHTING FIXTURE SCHEDULE

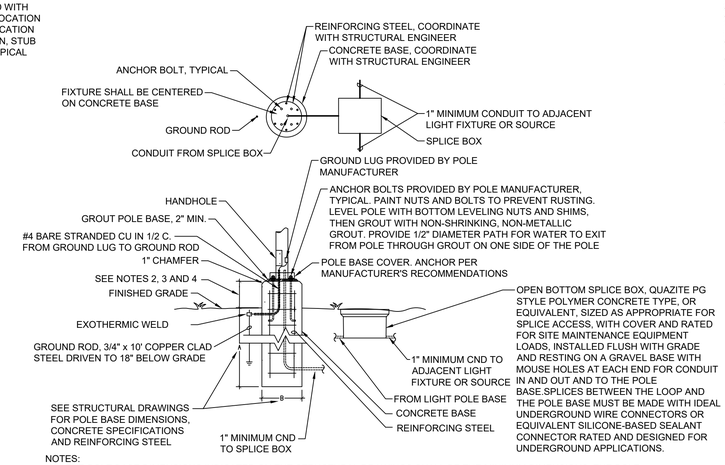
SYMBOL	DESCRIPTION	LIGHT ENGINE					MFG.	MODEL	MOUTNING	REMARKS
		WATTS	TYPE	COLOR TEMP	LUMENS	VOLTS				
SP3B	SINGLE LANTERN POLE LIGHT, TYPE 3 DISTRIBUTION & SIDE SHIELDS	129	LED	4000K	12402	120	SUN VALLEY LIGHTING	COL21/VLED-III/120LED 350MA NW/PT/RAL-9005-T/HS	POST TOP	SEE NOTE 1
SP4A	SINGLE LANTERN POLE LIGHT, TYPE 4 DISTRIBUTION	129	LED	4000K	11539	120	SUN VALLEY LIGHTING	COL21/VLED-III/120LED 350MA NW/PT/RAL-9005-T/HS	POST TOP	SEE NOTE 1
SP4B	DOUBLE LANTERN POLE LIGHT, TYPE 4 DISTRIBUTION	258	LED	4000K	-	120	SUN VALLEY LIGHTING	COL21/VLED-III/120LED 350MA NW/W-180/RAL-9005-T	POST TOP	SEE NOTE 1
SB	BOLLARD LIGHT	7	LED	3000K	425	120	LANDSCAPE FORMS INC.	AP401-T40035F-30K-UV1-SM-NMG	CONC. BASE SEE 2/E0.3	

NOTES:
1. HEIGHT OF OPTICS TO BE +18'0" ABOVE SURROUNDING GRADE. PROVIDE 'SUN VALLEY LIGHTING' 4200SB SPLITBASE, ROUND POLE WITH BASE PLATE AND XBW-2-180 ARM MOUNT (DOUBLE LANTERN ONLY,) COORDINATE FINAL SELECTION OF SPLIT BASE, POLE, AND ARM WITH OWNER AND 'SUN VALLEY LIGHTING' REPRESENTATIVE. SELECTION OF POLE GAUGE AND DIAMETER WILL BE SUBJECTION TO WIND LOAD RATING OF SITE LOCATION.
2. FIELD SET THE LIGHT DISTRIBUTION OF PARKING AREA FIXTURES AS DIRECTED.
3. PROVIDE BUSSMAN HEB FUSEHOLDERS IN EACH PHASE CONDUCTOR AT EACH POLE BASE AND BOLLARD. FUSE WITH KTK FUSES AS RECOMMENDED BY THE FIXTURE MANUFACTURER OR 150% OF FIXTURE FULL LOAD CURRENT, WHICHEVER IS LESS.



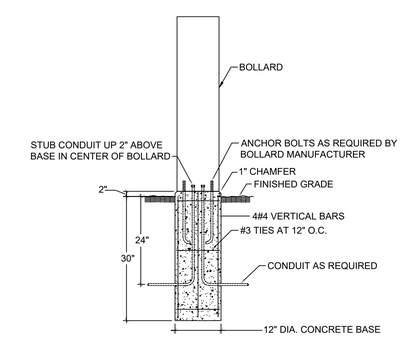
1 **ELECTRICAL SITE LIGHTING PLAN**
1" = 30'-0"

SEE MINIMUM CONDUCTOR SIZE CHART SHEET E0.5 FOR SITE LIGHTING CONDUCTOR SIZING.



NOTES:
1. THE POLE BASE DIMENSIONS INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE THE MINIMUM DIMENSIONS. THE POLE BASE SHALL ACCOMMODATE THE SPECIFIED BOLT CIRCLE PATTERN AND SPLIT POLE BASE. ANY CONFLICTS IN THE DIMENSIONS INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER.
2. WHEN POLE BASE IS LOCATED IN FINISHED SIDEWALK OR SIMILAR FINISHED AREA, THE TOP OF THE POLE BASE SHALL BE FLUSH WITH THE ADJACENT AREA SO THAT THE POLE BASE COVER SITS DIRECTLY ON THE SIDEWALK OR SIMILAR FINISHED AREA.
3. WHEN POLE BASE IN LOCATED IN PARKING LOT OR AREAS IMMEDIATELY ADJACENT TO PARKING LOT , THE TOP OF THE POLE BASE SHALL BE 24" ABOVE GRADE.
4. WHEN POLE BASE IN LOCATED IN LANDSCAPED AREAS, THE POLE BASE SHALL BE 4" ABOVE FINISHED GRADE.
5. CONTRACTOR SHALL CONFIRM ALL POLE BASE HEIGHTS WITH ARCHITECT PRIOR TO INSTALLATION.

3 **LIGHT POLE BASE DETAIL**
NOT TO SCALE



NOTE: ALL CONCRETE WORK SHALL CONFORM TO SPECIFICATIONS AND SHALL BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS

2 **TYPE "SB" BOLLARD BASE DETAIL**
NOT TO SCALE

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFEE

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
SITE PLAN

E0
.3

ENGINE-GENERATOR FUEL CONSUMPTON AND STORAGE CALCULATION

BASIS OF DESIGN ENGINE-GENERATOR SET: CAT C18
RATING: 600 KW / 750 KVA, STANDBY
FUEL: FUEL OIL, 35° API (60°F) GRAVITY, LHV 42,780 KJ/KG, AT 85°F, 7.001 LBS/GAL

FUEL CONSUMPTION	FULL LOAD	42.1	GALS/HR
	DEMAND LOAD	39.0	GALS/HR INTERPOLATED
	75% LOAD	33.8	GALS/HR
FUEL STORAGE CAPACITY REQ'D. FOR 96 HOURS RUN TIME AT			
	FULL LOAD	4042	GALS
	DEMAND LOAD	3773	GALS

FUEL STORAGE CAPACITY REQ'D. FOR 96 HOURS RUN TIME AT CALCULATED DEMAND LOAD X 133% = 5018 GALS.

NOTES:
1. SUB-BASE FUEL STORAGE TANK SPECIFIED FOR NO LESS THAN 5,018 GALLONS. THE GENERATOR FUEL STORAGE SYSTEM MUST BE SIZED TO PROVIDE A MINIMUM OF 96 HOURS OF OPERATION AT THE CALCULATED EMERGENCY DEMAND LOAD, WITH STORAGE CAPACITY INCREASED TO 133% OF THE CALCULATED FUEL CONSUMPTION TO ENSURE ADEQUATE OPERATIONAL MARGIN IN ACCORDANCE WITH HEALTHCARE EMERGENCY PREPAREDNESS PRACTICES. SEE SPECS SECTION 16035, PARAS. K. AND M.
2. SET LOW FUEL ALARM AT 54 HOURS USABLE FUEL REMAINING AT FULL LOAD. SEE SPECS SECTION 16035, PARA. W.
3. DEMAND LOAD USED IN CALCULATION DOES NOT CONSIDER POWER FACTOR, WHICH IS LESS THAN UNITY.

AUTOMATIC TRANSFER SWITCH SCHEDULE

EQUIPMENT DESCRIPTION	TYPE	TRIP TYPE	RATING/ TRIP	V	PHASE	WIRES	IC RATING	ENCLOSURE
LIFE SAFETY BRANCH ATS-1	AUTOMATIC TRANSFER SWITCH	N/A	100A	208/120	3	4	-	NEMA-1 SURFACE
CRITICAL BRANCH ATS-2	AUTOMATIC TRANSFER SWITCH	N/A	400A	208/120	3	4	-	NEMA-1 SURFACE
EQUIPMENT SYSTEM ATS-3	AUTOMATIC TRANSFER SWITCH	N/A	1600A	208/120	3	4	-	NEMA-1 FREE STANDING

NOTES:
1. AUTOMATIC TRANSFER SWITCHES ARE SOLID NEUTRAL, SEE SPECS SECTION 16036.
2. CONTRACTOR IS RESPONSIBLE FOR NEC ART. 110.26 WORKING SPACES FOR EQUIPMENT.

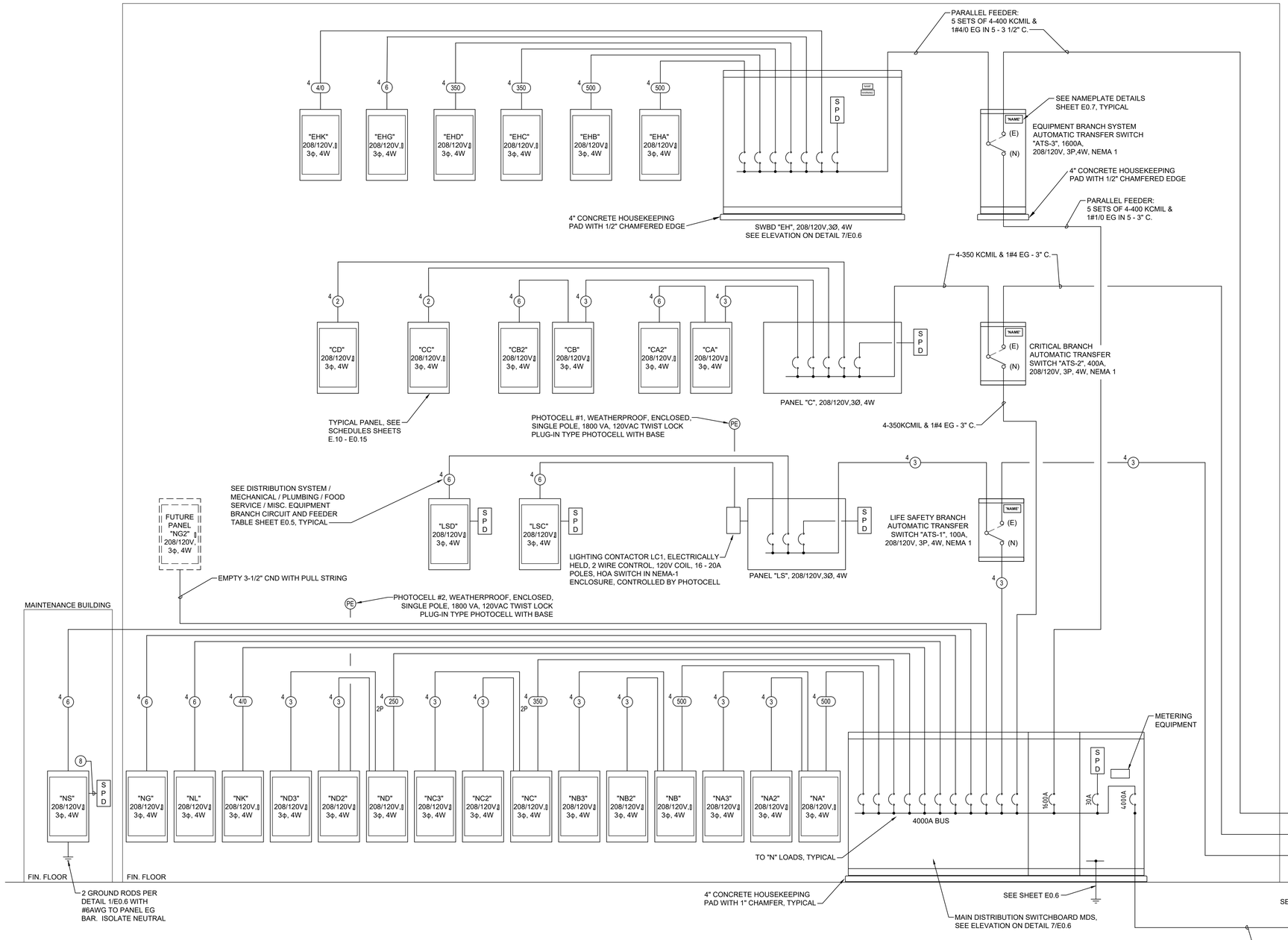
ESTIMATED ENGINE-GENERATOR SET LOAD SUMMARY

LOAD	LOAD DESCRIPTION	DEMAND LOAD PHASE A (VA)	PHASE B (VA)	PHASE C (VA)	TOTAL (VA)	EST. POWER FACTOR	EST. TOTAL KW
ATS-1	LIFE SAFETY LOADS	4,722	5,047	2,558	12,327	0.98	12
ATS-2	CRITICAL LOADS	28,245	34,622	33,877	96,744	0.98	95
ATS-3	EQUIPMENT LOADS	161,257	154,749	157,978	473,984	0.92	436
	TOTAL ESSENTIAL LOADS				583,055		
	TOTAL ENGINE-GENERATOR SET LOAD (VA)	194,224	194,418	194,413			
	TOTAL ENGINE-GENERATOR SET LOAD (KW)						543
	TOTAL ENGINE-GENERATOR SET LOAD (KVA)				583		

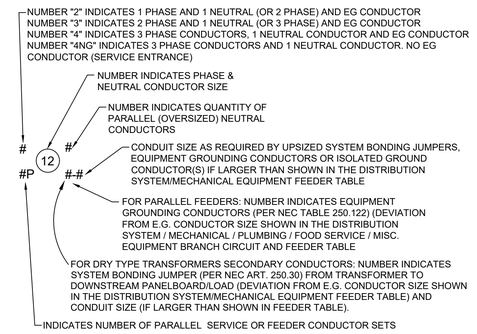
NOTES:
1. E-G SET RATING IS AT 80% PF.
2. SEE SPECIFICATIONS SECTION 16035, PARA. K. FOR SIZING REQUIREMENTS.
3. SEE MAIN DISTRIBUTION SWBD LOAD SUMMARY FOR UTILITY SERVICE ESTIMATED DEMAND LOADS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506



1 **POWER RISER DIAGRAM**
NOT TO SCALE



2 **CONDUCTORS IDENTIFICATION DETAIL**
NOT TO SCALE

NOTES:

1. ELECTRICAL CLEARANCE NOTE: CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR PANELBOARD CLEAR WORKING SPACE MARKED ON THE FLOOR STATING "ELECTRICAL-NOT FOR STORAGE".

2. SERIVCE AND FEEDER CONDUCTOR SIZE NOTE: POWER RISER DIAGRAM SERVICE AND FEEDER CONDUCTOR SIZES ARE BASED ON 75°C COPPER CONDUCTORS IN PVC RACEWAYS ROUTED IN/UNDER THE FLOOR SLAB DIRECTLY FROM SOURCE TO LOAD TO ACHIEVE NO MORE THAN TWO (2) PERCENT VOLTAGE DROP AT THE DEMAND LOAD SHOWN IN THE SWITCHBOARD AND PANELBOARD SCHEDULES. IF THE CONTRACTOR ELECTS TO INSTALL CIRCUITS IN A DIFFERENT MANNER, CALCULATE VOLTAGE DROP USING ACTUAL CONDUCTOR LENGTHS AND SUBMIT CALCULATIONS TO THE ARCHITECT/ENGINEER DOCUMENTING TWO (2) PERCENT OR LESS VOLTAGE DROP UNDER THE LOAD CONDITIONS INDICATED.

3. ALL ELECTRICAL EQUIPMENT INSTALLATIONS MUST COMPLY WITH REQUIRED CLEARANCE DETAILS 4 & 5 ON E0.8.

4. ALL WIRE SIZES SHOWN ARE COPPER.

5. RISER DIAGRAM IS DEPICTIVE ONLY.

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL R. DUNCAN McFEE
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL POWER
RISER DIAGRAM

E0
.4

CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL 042 ENGINEER R. DUNCAN McFETRIDGE

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

FOOD SERVICE EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ID	DESCRIPTION	VOLT	PHASE	BRANCH/FEEDER CIRCUIT CONDUCTORS (AWG)	CONNECTION	REMARKS
K2	WAREWASHER	208	3	3(4)	HARDWIRE	
K2	BOOSTER HEATER	208	3	3(6)	HARDWIRE	
K2.1	CONDENSATE HOOD					SEE FOOD SERVICE DRAWINGS
K12	HEATED BANQUET CART	120	1	2(12)	5-15P	
K13	REFRIGERATOR	120	1	2(12)	5-15P	
K14	EXHAUST HOOD					SEE FOOD SERVICE DRAWINGS
K14.1	UTILITY CABINET					SEE FOOD SERVICE DRAWINGS
K15	STEAM KETTLE	208	3	3(6)	HARDWIRE	
K18	ELECTRIC STEAMER	208	3	3(6)	HARDWIRE	
K22	CONVECTION OVEN	120	1	2(12) x 2	5-15P	2 CONNECTIONS
K23	HOT FOOD TABLE	208	1	2(10)	L6-30P	
K28	MIXER	120	1	2(12)	5-15P	
K30	BEVERAGE TABLE	120	1	2(10)		
K31	COFFEE MAKER	120	1	2(12)	5-15P	
K32	TEA BREWER	120	1	2(12)	5-15P	
K33	JUICE DISPENSER	120	1	2(12)	5-15P	
K34	ICE MAKER	120	1	2(12)	HARDWIRE	
K35	SLICER	120	1	2(12)	5-15P	
K43	WALK-INCOOLER/FREEZER					SEE FOOD SERVICE DRAWINGS
N1	REFRIGERATOR	120	1	2(12)	5-15P	
N2	ICE MAKER	120	1	2(12)	HARDWIRE	
S1	TEA BREWER	120	1	2(12)	5-15P	
S2	COFFEE MAKER	120	1	2(12)	5-15P	
S3	JUICE DISPENSER	120	1	2(12)	5-15P	
S4	REFRIGERATOR	120	1	2(12)	5-15P	

NOTES:
1. CONDUCTOR SIZES SHOWN ARE COPPER.
2. CORD SETS PROVIDED WITH EQUIPMENT. VERIFY WIRING DEVICE CONFIGURATION.
3. SEE FOOD SERVICE ELECTRICAL EQUIPMENT NOTES, SHEET E0.2

DISTRIBUTION SYSTEM / MECHANICAL / PLUMBING / FOOD SERVICE / MISC. EQUIPMENT BRANCH CIRCUIT AND FEEDER TABLE

ID# (NOTE 6)	BRANCH CKT / FEEDER RATING (AMPERES)	COPPER CONDX RATING (AMPERES)	COPPER CONDUCTORS	CU CONDX RACEWAY SIZE (INCHES)	AL CONDX RATING (AMPERES)	EQUIVALENT ALUMINUM CONDUCTORS	AL CONDX RACEWAYS SIZE (INCHES)
2(12)	20	20	2#12 & 1#12 EG	1/2	---	N/A	N/A
3(12)	20	20	3#12 & 1#12 EG	1/2	---	N/A	N/A
4(12)	20	20	4#12 & 1#12 EG	1/2	---	N/A	N/A
2(10)	30	30	2#10 & 1#10 EG	1/2	---	N/A	N/A
3(10)	30	30	3#10 & 1#10 EG	1/2	---	N/A	N/A
4(10)	30	30	4#10 & 1#10 EG	1/2	---	N/A	N/A
2(8)	35 - 50	50	2#8 & 1#10 EG	1/2	---	N/A	N/A
3(8)	35 - 50	50	3#8 & 1#10 EG	3/4	---	N/A	N/A
4(8)	35 - 50	50	4#8 & 1#10 EG	3/4	---	N/A	N/A
2(6)	60	65	2#6 & 1#10 EG	3/4	---	N/A	N/A
3(6)	60	65	3#6 & 1#10 EG	3/4	---	N/A	N/A
4(6)	60	65	4#6 & 1#10 EG	1	---	N/A	N/A
2(4)	70	65	2#6 & 1#8 EG	3/4	---	N/A	N/A
3(4)	70	65	3#6 & 1#8 EG	3/4	---	N/A	N/A
4(4)	70	65	4#6 & 1#8 EG	1	---	N/A	N/A
2(4)	80 - 90	85	2#4 & 1#8 EG	1	---	N/A	N/A
3(4)	80 - 90	85	3#4 & 1#8 EG	1	---	N/A	N/A
4(4)	80 - 90	85	4#4 & 1#8 EG	1-1/4	---	N/A	N/A
2(3)	100	100	2#3 & 1#8 EG	1	100	2#1 & 1#6 EG	1-1/4
3(3)	100	100	3#3 & 1#8 EG	1-1/4	100	3#1 & 1#6 EG	1-1/4
4(3)	100	100	4#3 & 1#8 EG	1-1/4	100	4#1 & 1#6 EG	1-1/2
2(2)	110	115	2#2 & 1 #6 EG	1	120	2#1/0 & 1 # 4 EG	1-1/4
3(2)	110	115	3#2 & 1 #6 EG	1-1/4	120	3#1/0 & 1 # 4 EG	1-1/2
4(2)	110	115	4#2 & 1 #6 EG	1-1/4	120	4#1/0 & 1 # 4 EG	2
2(1)	125	130	2#1 & 1 #6 EG	1-1/4	135	2#2/0 & 1#4 EG	1-1/2
3(1)	125	130	3#1 & 1 #6 EG	1-1/4	135	3#2/0 & 1#4 EG	2
4(1)	125	130	4#1 & 1 #6 EG	1-1/2	135	4#2/0 & 1#4 EG	2
3(1/0)	150	150	3#1/0 & 1 #6 EG	1-1/2	155	3#3/0 & 1#4 EG	2
4(1/0)	150	150	4#1/0 & 1 #6 EG	2	155	4#3/0 & 1#4 EG	2
3(2/0)	175	175	3#2/0 & 1 #6 EG	2	180	3#4/0 & 1#4 EG	2
4(2/0)	175	175	4#2/0 & 1 #6 EG	2	180	4#4/0 & 1#4 EG	2-1/2
3(3/0)	200	200	3#3/0 & 1 #6 EG	2	205	3- 250 KCMIL & 1#4 EG	2-1/2
4(3/0)	200	200	4#3/0 & 1 #6 EG	2	205	4- 250 KCMIL & 1#4 EG	2-1/2
3(4/0)	225	230	3#4/0 & 1 #4 EG	2	230	3- 300 KCMIL & 1#2 EG	2-1/2
4(4/0)	225	230	4#4/0 & 1 #4 EG	2-1/2	230	4- 300 KCMIL & 1#2 EG	2-1/2
3(250)	250	255	3 - 250 KCMIL & 1 #4 EG	2-1/2	250	3- 350 KCMIL & 1#2 EG	2-1/2
4(250)	250	255	4 - 250 KCMIL & 1 #4 EG	2-1/2	250	4- 350 KCMIL & 1#2 EG	3
3(350)	300	310	3 - 350 KCMIL & 1 #4 EG	2-1/2	310	3- 500 KCMIL & 1#2EG	3
4(350)	300	310	4 - 350 KCMIL & 1 #4 EG	3	310	4- 500 KCMIL & 1#2 EG	3
3(500)	400	380	3 - 500 KCMIL & 1 #3 EG	3	385	3 - 750 KCMIL & 1 #1 EG	3-1/2
4(500)	400	380	4 - 500 KCMIL & 1 #3 EG	3	385	4 - 750 KCMIL & 1 #1 EG	3-1/2
2 X 3(250)	500	2 X 255	6 - 250 KCMIL & 2 #2 EG	2 X 2-1/2	2 X 250	6 - 350 KCMIL & 2 #1/0 EG	2 X 2-1/2
2 X 4(250)	500	2 X 255	8 - 250 KCMIL & 2 #2 EG	2 X 2-1/2	2 X 250	8 - 350 KCMIL & 2 #1/0 EG	3 X 3
2 X 3(350)	600	2 X 310	6 - 350 KCMIL & 2 #1 EG	2 X 2-1/2	2 X 310	6 - 500 KCMIL & 2 #2/0 EG	2 X 3
2 X 4(350)	600	2 X 310	8 - 350 KCMIL & 2 #1 EG	2 X 3	2 X 310	8 - 500 KCMIL & 2 #2/0 EG	2 X 3
2 X 3(500)	800	2 X 380	6 - 500 KCMIL & 2 #1/0 EG	2 X 3	2 X 385	6 - 750 KCMIL & 2 #3/0 EG	2 X 3-1/2
2 X 4(500)	800	2 X 380	8 - 500 KCMIL & 2 #1/0 EG	2 X 3	2 X 385	8 - 750 KCMIL & 2 #3/0 EG	2 X 3-1/2
3 X 3(400)	1000	3 X 335	9 - 400 KCMIL & 3 #2/0 EG	3 X 3	3 X 340	9 - 600 KCMIL & 3 #4/0 EG	3 X 3
3 X 4(400)	1000	3 X 335	12 - 400 KCMIL & 3 #2/0 EG	3 X 3	3 X 340	12 - 600 KCMIL & 3 #4/0 EG	3 X 3-1/2
4 X 3(350)	1200	4 X 310	12 - 350 KCMIL & 4 #3/0 EG	4 X 2-1/2	4 X 310	12 - 500 KCMIL & 4-250 KCMIL EG	4 X 3
4 X 4(350)	1200	4 X 310	16 - 350 KCMIL & 4 #3/0 EG	4 X 3	4 X 310	16 - 500 KCMIL & 4-250 KCMIL EG	4 X 3

TABLE NOTES:
1. TABLE IS FOR SINGLE THWN CONDUCTORS IN EMT ONLY. OTHER INSULATIONS, RACEWAY TYPES OR CABLE CONFIGURATIONS MAY REQUIRE LARGER RACEWAYS OR DIFFERENT CABLE CONFIGURATIONS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
2. DRY TYPE TRANSFORMER SECONDARY CONDUCTORS AND PARALLEL FEEDERS REQUIRE UPSIZED SYSTEM BONDING JUMPERS AND EQUIPMENT GROUNDING CONDUCTORS AND RACEWAYS THAN SHOWN IN THIS TABLE. UPSIZE AS REQUIRED.
3. ALL CONDUCTOR RATINGS ARE FOR 75 DEGREES C.
4. ALL NEUTRALS ARE FULL SIZE.
5. CONTRACTOR MAY USE DIFFERENT COMBINATIONS OF CONDUCTORS TO ACHIEVE THE REQUIRED AMPACITY, UPON APPROVAL OF THE ARCHITECT/ENGINEER.
6. "(3)" REPRESENTS A 3 SURROUNDED BY A CIRCLE (OR ELIPSE FOR MULTI-DIGIT CONDUCTOR SIZES) ON THE DRAWINGS, TYPICAL. SEE DETAIL 5/E-006. "2X", "3 X" AND "4 X" (2, 3 & 4 PARALLEL SETS OF CONDUCTORS) REPRESENT "2P", "3P" AND "4P" TERMINOLOGY USED ON THE DRAWINGS.
7. THE NUMBER OF PARALLEL RACEWAYS IS TYPICALLY SHOWN AS "2 X 3", INDICATING 2 - 3" RACEWAYS.
8. SEE SPECS SECTION 16025 REGARDING ALLOWED USE OF ALUMINUM CONDUCTORS.

MINIMUM CONDUCTORS SIZE CHART

PROVIDE THE FOLLOWING MINIMUM SIZES FOR BRANCH CIRCUIT CONDUCTORS:

SINGLE PHASE CIRCUITS

CONDUCTOR SIZE (AWG)	BRANCH CIRCUIT BREAKER TRIP (AMPERES)	CIRCUIT VOLTAGE MAXIMUM ALLOWABLE CIRCUIT LENGTH (FEET) 120	208	240	277
#12	15	81	141	163	188
#10	15	135	234	270	312
#8	15	204	355	409	473
#12	20	61	106	122	141
#10	20	101	175	202	233
#8	20	153	266	307	354
#10	30	67	117	135	155
#8	30	102	177	204	236

THREE PHASE CIRCUITS

CONDUCTOR SIZE (AWG)	BRANCH CIRCUIT BREAKER TRIP (AMPERES)	CIRCUIT VOLTAGE MAXIMUM ALLOWABLE CIRCUIT LENGTH (FEET) 208	240	480
#12	15	163	188	377
#10	15	270	312	624
#12	20	122	141	283
#10	20	202	234	468
#10	30	135	156	312
#8	30	205	236	473
#8	40	153	177	354
#6	40	239	276	553
#8	50	123	142	283
#6	50	191	221	442
#6	60	159	184	368
#4	60	245	283	567

NOTES:
1. CONDUCTOR LENGTHS ARE BASED ON SINGLE & THREE PHASE, 90% POWER FACTOR LOADS USING 75°C COPPER CONDUCTORS IN EMT RACEWAYS TO ACHIEVE NO MORE THAN 3 PERCENT VOLTAGE DROP.
2. CALCULATIONS ASSUME LOADS OF 80% OF CIRCUIT BREAKER TRIP (12A, 16A & 24A, 32A, 40A & 48A, RESPECTIVELY) ARE CONCENTRATED AT THE END OF THE CIRCUITS.
3. IF LOAD CHARACTERISTICS DIFFER FROM ABOVE, CALCULATE USING KNOWN CHARACTERISTICS AND SUBMIT CALCULATIONS TO THE ARCHITECT/ENGINEER DOCUMENTING 3% OR LESS VOLTAGE DROP UNDER THE ACTUAL LOAD CONDITIONS.
4. WHEN A DEDICATED SINGLE LOAD LESS THAN NOTED ABOVE IS KNOWN, THE CONTRACTOR MAY UTILIZE SMALLER CONDUCTORS UPON SUBMISSION OF VOLTAGE DROP CALCULATIONS DOCUMENTING 3% OR LESS VOLTAGE DROP. THE MINIMUM LOAD SHALL BE ASSUMED TO BE 60% OF THE CB TRIP RATING REGARDLESS OF ACTUAL DEDICATED LOAD.
5. USE THE LARGER OF THE CONDUCTORS INDICATED ON THE DRAWINGS OR THIS TABLE.

MECHANICAL EQUIPMENT ELECTRICAL CONNECTIONS SCHEDULE

EQUIPMENT ID (DRAWING CODE)	V	PH	MOCP	LOCAL DISCONNECT (NOTE 4)	MIN CKT CONDX (NOTE 7)
AIR HANDLERS (AH)	208	1	15	2 POLE, 20 A SNAP SWITCH	2(12)
AIR HANDLERS (AH) AUXILLERY HEAT 1-6,8-12,14-16,18,19	208	3	45	3 POLE, 60 A FUSIBLE GDSS	3(8)
AIR HANDLERS (AH) AUXILLERY HEAT 7	208	3	35	3 POLE, 60 A FUSIBLE GDSS	3(10)
AIR HANDLERS (AH) AUXILLERY HEAT 13	208	3	60	3 POLE, 60 A FUSIBLE GDSS	3(6)
AIR HANDLERS (AH) AUXILLERY HEAT 20,21,28,29	208	3	25	3 POLE, 30 A FUSIBLE GDSS	3(12)
AIR HANDLERS (AH) AUXILLERY HEAT 22-27	208	3	40	3 POLE, 60 A FUSIBLE GDSS	3(8)
ALL ENERGY RECOVERY VENTILATORS (ER) 1-8,10-12,14,19,21	208	1	15	2 POLE, 20 A SNAP SWITCH	2(12)
ALL ENERGY RECOVERY VENTILATORS (ER) 9,13,15-18,20,22	208	1	20	2 POLE, 20 A SNAP SWITCH	2(12)
MINI SPLIT OUTDOOR UNITS (DCU)	208	1	20	2 POLE, 30 A FUSIBLE HDSS	2(12)
KITCHEN COOLER & FREEZER CONDENSERS TROUGH	208	3	50	2 - 3 POLE FUSIBLE HDSS 1 - 30A, 1 - 60A	3(8)
HEAT PUMPS (HP) 1-9,12-16,18,19	208	3	30	3 POLE, 30 A FUSIBLE HDSS	3(10)
HEAT PUMPS (HP) 10,11,17	208	3	35	3 POLE, 60 A FUSIBLE HDSS	3(10)
HEAT PUMPS (HP) 20-29	208	1	20	3 POLE, 30 A FUSIBLE HDSS	2(12)
MINI SPLIT INDOOR UNITS (DAH)	208	1		2 POLE, 20A SNAP SWITCH	2(12)
DOAS UNIT	208	3	150	3 POLE, 200 A FUSIBLE HDSS	3(1/0)
PTHP01	208	1	15	NEMA 6-15 PLUG	2(12)

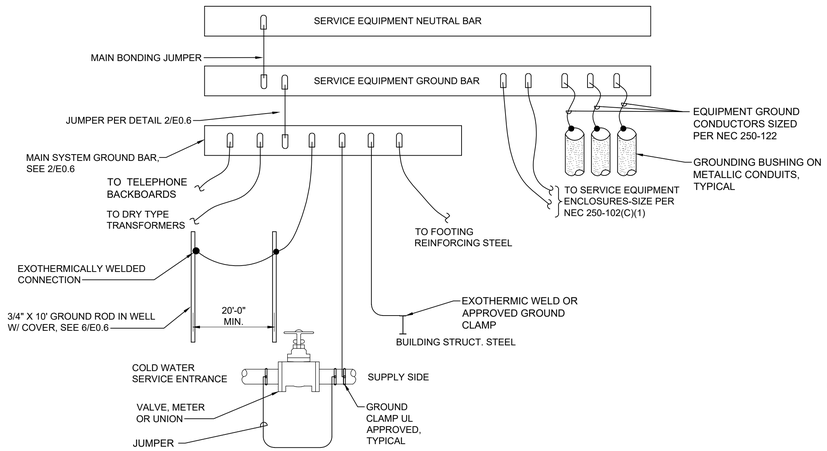
NOTES:
1. GDSS = GENERAL DUTY SAFETY SWITCH, NEMA-1 ENCLOSURE.
2. DHSS = HEAVY DUTY SAFETY SWITCH, NEMA-3R ENCLOSURE.
3. SEE PANEL SCHEDULES FOR CIRCUITS.
4. PROVIDE LOCAL DISCONNECT IF NOT PROVIDED WITH EQUIPMENT.
5. SEE MINIMUM BRANCH CIRCUIT SIZE CHART ON SHEET E0.5 AND INCREASE CONDUCTORS SIZES AS REQUIRED TO ACCOMMODATE CIRCUIT LENGTH.
6. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. CONDUCTOR COLUMN IS PHASE AND NEUTRALS (WHERE APPLICABLE). REFER TO DISTRIBUTION SYSTEM / MECH. / PLUMB. / FS / MISC. EQUIP. BRANCH CIRCUIT & FEEDER TABLE, SHEET E0.5 FOR FULL CIRCUIT DESCRIPTION. SIZES SHOWN ARE COPPER, AWG UNO.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

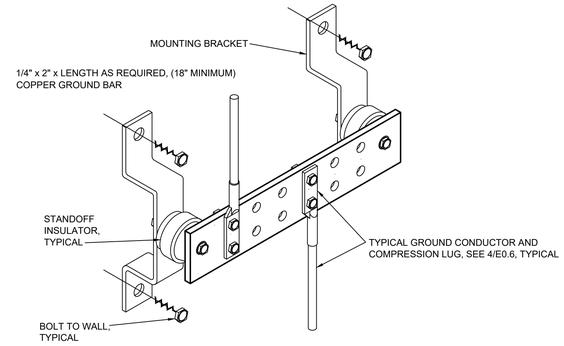
120 BED
NURSING FACILITY
ELECTRICAL
SCHEDULES

E0
.5



1 SERVICE GROUNDING DETAIL

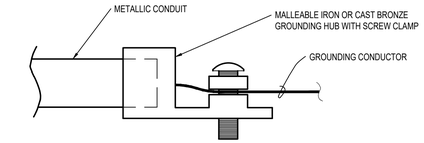
NOT TO SCALE



SEE SPECS SECTION 16027 FOR ADDITIONAL DETAILS

3 TYPICAL GROUNDING BAR MOUNTING DETAIL

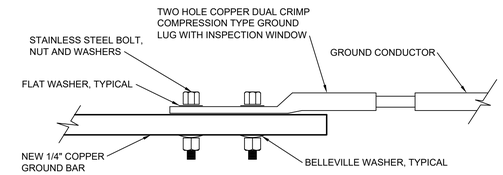
NOT TO SCALE



NOTE: INSTALL AT EACH END OF RACEWAY

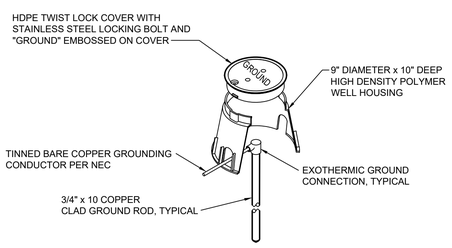
5 CONDUIT HUB AND GROUNDING CONDUCTOR DETAIL

NOT TO SCALE



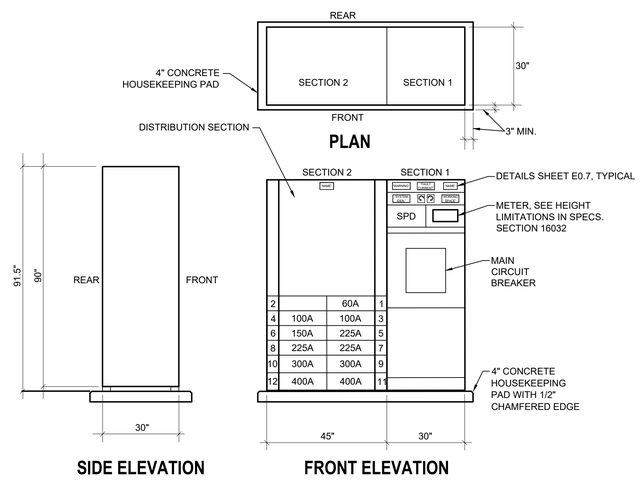
4 TYPICAL GROUND BAR CONNECTION DETAIL

NOT TO SCALE



6 GROUNDING INSPECTION WELL DETAIL

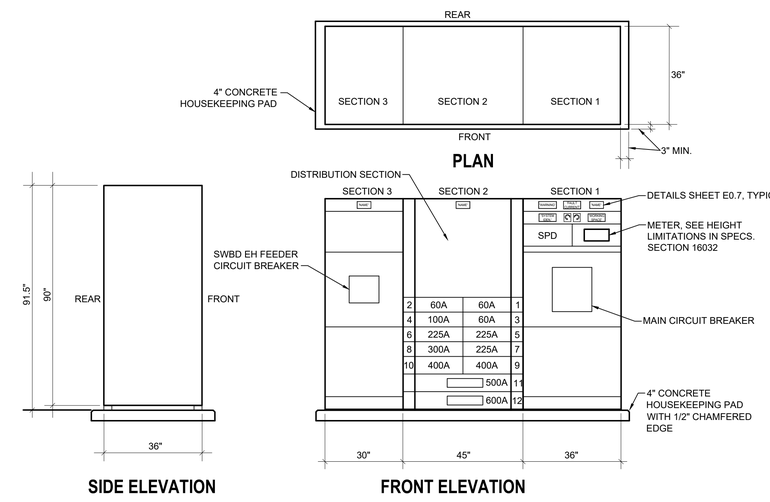
NOT TO SCALE



MAXIMUM ALLOWABLE DIMENSIONS SHOWN. VERIFY WITH ACTUAL EQUIPMENT PROVIDED

8 SWITCHBOARD "EH" ELEVATION

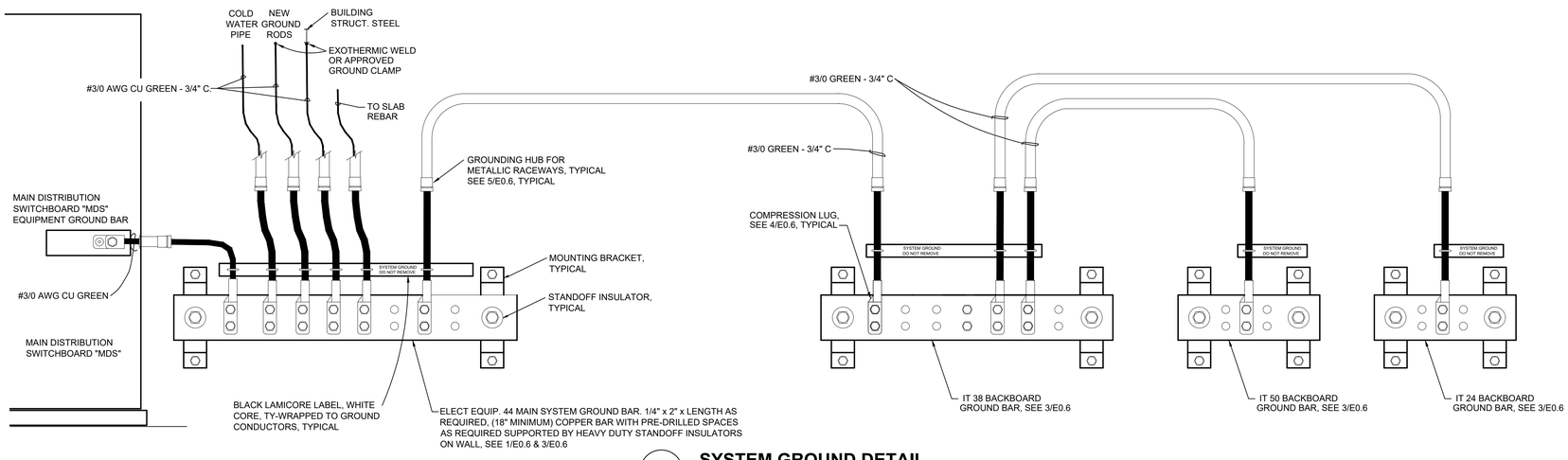
NOT TO SCALE



MAXIMUM ALLOWABNLE DIMENSIONS SHOWN. VERIFY WITH ACTUAL EQUIPMENT PROVIDED

7 MAIN DISTRIBUTION SWITCHBOARD "MDS" ELEVATION

NOT TO SCALE



2 SYSTEM GROUND DETAIL

NOT TO SCALE

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFEE
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

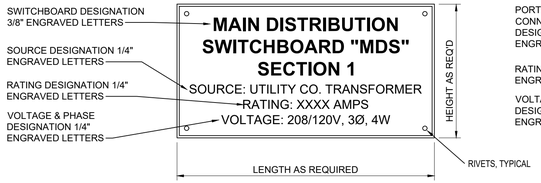
120 BED
NURSING FACILITY
ELECTRICAL
DETAILS

E0
.6

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

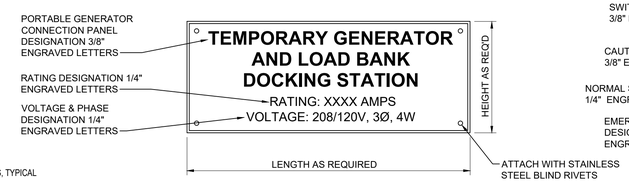
NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



NOTES: 1. SEE SPECS. SECTION 16019 FOR NAMEPLATE MATERIAL AND ENGRAVING COLORS

1 MAIN DISTRIBUTION SWITCHBOARD "MDS" NAMEPLATE DETAIL

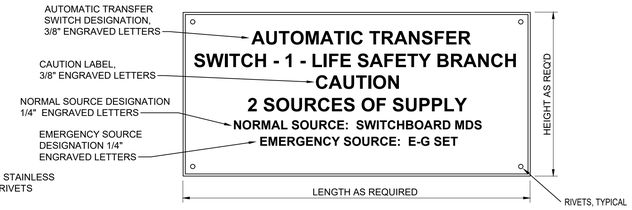
NOT TO SCALE



NOTE:
1. SEE SPECS. SECTION 16019 FOR NAMEPLATE MATERIAL AND ENGRAVING COLORS
2. IDENTIFIED AS "DUAL PURPOSE DOCKING STATION" ELSEWHERE IN THE DRAWINGS AND THE SPECIFICATIONS

2 TEMPORARY GENERATOR AND LOAD BANK DOCKING STATION NAMEPLATE DETAIL

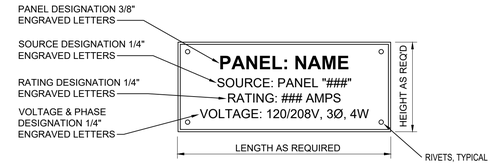
NOT TO SCALE



NOTES: 1. SEE SPECS. SECTION 16019 FOR NAMEPLATE MATERIAL AND ENGRAVING COLORS
2. SIMILAR FOR ATS - 2 AND ATS - 3

3 TYPICAL AUTOMATIC TRANSFER SWITCH NAMEPLATE DETAIL

NOT TO SCALE



NOTE: SEE SPECS. SECTION 16019 FOR NAMEPLATE MATERIAL AND ENGRAVING COLORS

4 TYPICAL PANELBOARD NAMEPLATE DETAIL

NOT TO SCALE

WARNING

Arc Flash and Shock Risk

Appropriate PPE Required

38 in	Arc Flash Boundary
4.10 cal/cm^2	Incident Energy at 18 in
PPE	Cotton Underwear + FR Shirt & Pants
480 VAC	Shock Risk when cover is removed
00	Glove Class
42 in	Limited Approach
12 in	Restricted Approach

Location:	PNL-MDP
SKM Systems Analysis, Inc.	SKM Systems Analysis, Inc. 1 Pearl St. Redondo Beach, CA 90277 (310) 698-4700

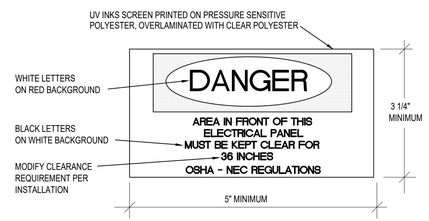
Job#:	232874	Prepared on:	03/01/23	By:	Engineer

Warning: Changes in equipment settings or system configuration will invalidate the calculated values and PPE requirements

NOTE: THE VALUES ABOVE ARE AN EXAMPLE OF THE NECESSARY CONTENTS OF THE LABEL CREATED AND APPLIED TO THE EQUIPMENT

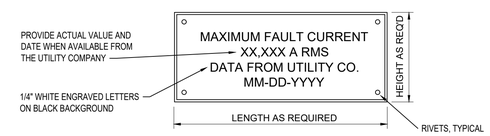
5 TYPICAL ARC FLASH LABEL

NOT TO SCALE



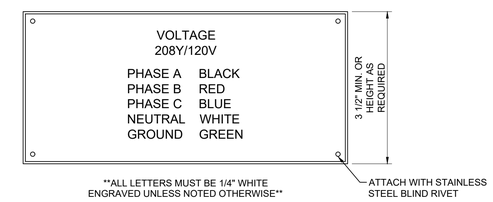
6 NEC WORKING SPACE LABEL DETAIL

NOT TO SCALE



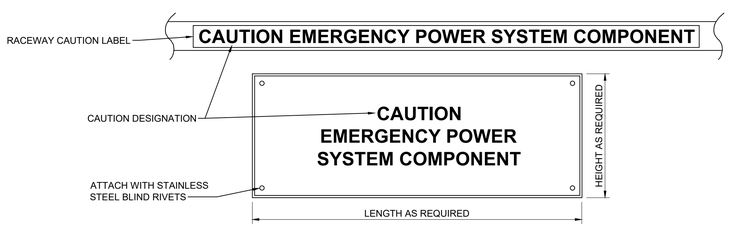
7 FAULT CURRENT NAMEPLATE DETAIL

NOT TO SCALE



8 SYSTEM IDENTIFICATION LABEL

NOT TO SCALE

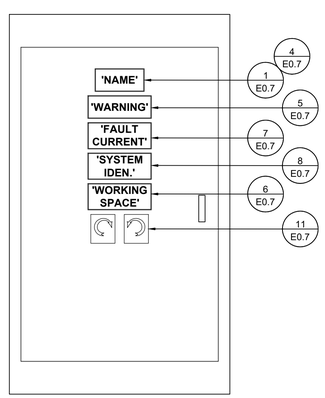


NOTE: SEE SPECS. SECTION 16019 FOR NAMEPLATE MATERIAL

INSTALL ENGRAVED NAMEPLATE ON EACH BOX AND ENCLOSURE (INCLUDING TRANSFER SWITCHES, GENERATOR ENCLOSED CIRCUIT BREAKERS, PANELBOARDS AND RECEPTACLES) ASSOCIATED WITH ATS1. INSTALL PERMANENT QUALITY VINYL ADHESIVE LABEL ON ALL EXPOSED RACEWAYS CONTAIN ATS1 CIRCUITS, WHERE BOXES ARE NOT VISIBLE, AT 25' MAXIMUM INTERVALS. LABEL MUST BE READILY VISIBLE FROM A STANDING POSITION IN THE SPACE. NAMEPLATE AND LABEL MUST BE 3/8" WHITE LETTERS ON RED BACKGROUND

9 EMERGENCY POWER SYSTEM COMPONENT AND RACEWAY NAMEPLATE AND LABEL

NOT TO SCALE

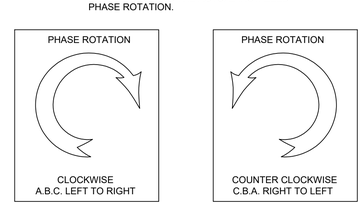


10 REQUIRED SWITCHBOARD & PANELBOARD NAMEPLATE & LABELS DETAIL

NOT TO SCALE

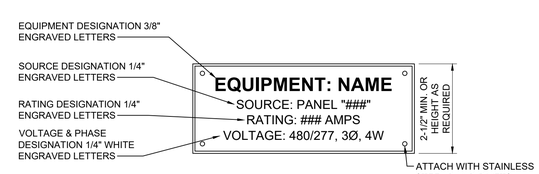
NOTES:
1. CONTRACTOR MUST IDENTIFY THE EXISTING PHASE ROTATION AT THE BEGINNING OF THE PROJECT SO THAT THIS ROTATION REMAINS THE SAME THROUGHOUT CONSTRUCTION.

2. UPON COMPLETION OF THE PROJECT THE CONTRACTOR MUST PROVIDE A PERMANENT LABEL INDICATING THE ACTUAL INSTALLED PHASE ROTATION.



11 PHASE ROTATION LABEL

NOT TO SCALE



NOTE: SEE SPECS. SECTION 16019 FOR NAMEPLATE MATERIAL AND ENGRAVING COLORS.

12 TYPICAL EQUIPMENT NAMEPLATE DETAIL

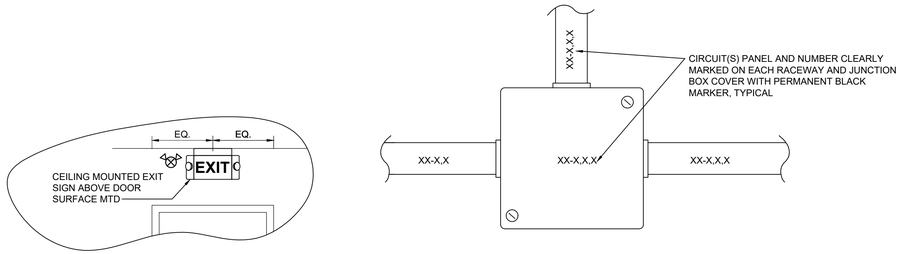
NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

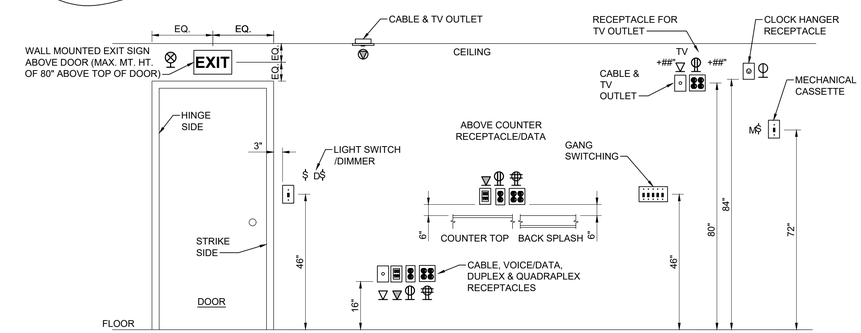
120 BED
NURSING FACILITY
ELECTRICAL
DETAILS

E0
.7



2 CIRCUIT IDENTIFICATION DETAIL

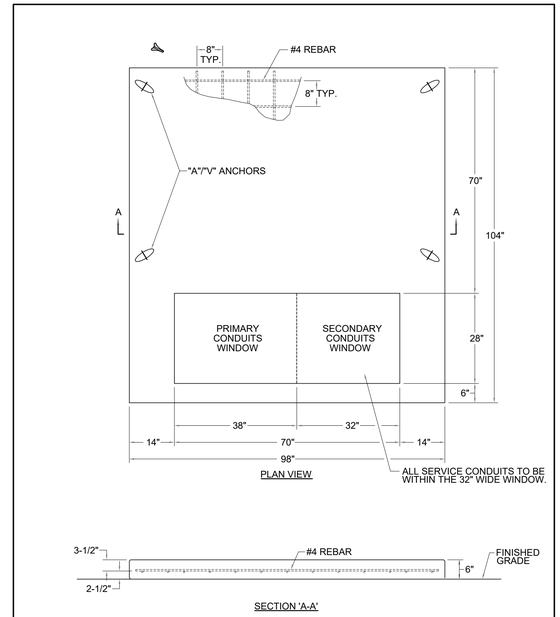
NOT TO SCALE



NOTE:
DETAIL SHOWN FOR REFERENCE ONLY, NOT ALL DEVICES ARE INDICATED ON PLANS.

1 ELECTRICAL DEVICES - MOUNTING HEIGHT DETAIL

NOT TO SCALE



NOTES:

1. PRECAST PAD SUPPLIERS ARE REQUIRED TO PROVIDE THE PADS WITH RECESSED "A/V" ANCHORS, TO BE USED FOR LIFTING THE PADS.

REVISED	BY	CHK'D	APPR.
3			
2			
1 2/25/20	MORGAN	VALENTIN	GRAHAM
0 3/31/19	MORGAN	VALENTIN	GRAHAM

LARGE FLAT PAD SPECIFICATIONS

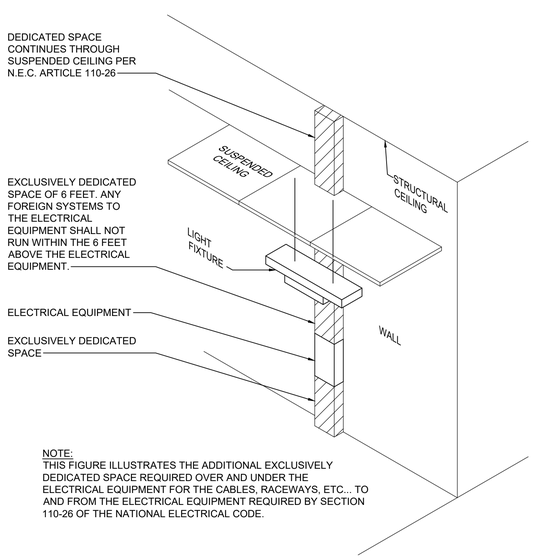
DUKE ENERGY.

DEC	DEM	DEP	DEF
		X	

PAGE 6

7 DUKE ENERGY LARGE FLAT PAD DETAIL

NOT TO SCALE



NOTE:
THIS FIGURE ILLUSTRATES THE ADDITIONAL EXCLUSIVELY DEDICATED SPACE REQUIRED OVER AND UNDER THE ELECTRICAL EQUIPMENT FOR THE CABLES, RACEWAYS, ETC... TO AND FROM THE ELECTRICAL EQUIPMENT REQUIRED BY SECTION 110-26 OF THE NATIONAL ELECTRICAL CODE.

4 DEDICATED SPACE FOR ELECTRICAL

NOT TO SCALE

TABLE 110.26(A)(1) - WORKING SPACES

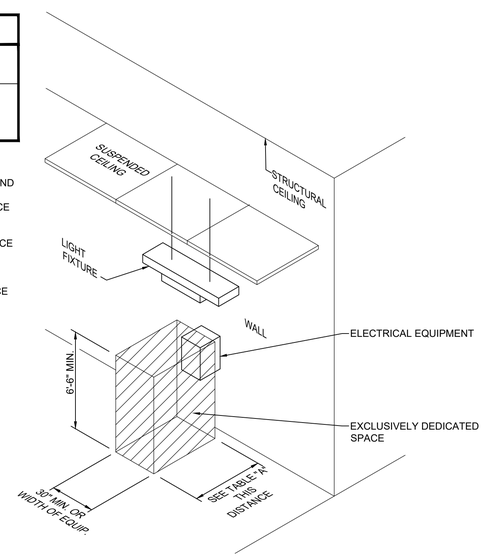
NOMINAL VOLTAGE TO GROUND	MINIMUM CLEAR DISTANCE (FEET)		
	CONDITION 1	CONDITION 2	CONDITION 3
0 - 150	900mm (3 ft)	900mm (3 ft)	900mm (3 ft)
151 - 600	900mm (3 ft)	1.0m (3 ft 6 in.)	1.2 m (4 ft.)
601 - 1000	900mm (3 ft)	1.2 m (4 ft.)	1.5 m (5 ft.)

NOTE: WHERE THE "CONDITIONS" ARE AS FOLLOWS:

CONDITION 1 - EXPOSED LIVE PARTS ON ONE SIDE OF WORKING SPACE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORKING SPACE THAT ARE EFFECTIVELY GUARDED BY INSULATING MATERIALS.

CONDITION 2 - EXPOSED LIVE PARTS ON ONE SIDE OF THE WORKING SPACE AND GROUNDED PARTS ON THE OTHER SIDE OF WORKING SPACE. CONCRETE BRICK, OR TILE WALLS SHALL BE CONSIDERED GROUNDED.

CONDITION 3 - EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE



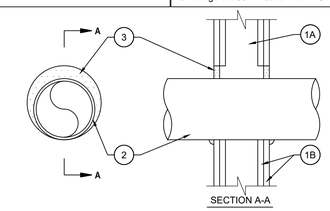
5 WORKING CLEARANCE FOR ELECTRICAL

NOT TO SCALE

System No. W-L-1054

January 21, 2020

ANSI / UL1479 (ASTM E814)	CAN / ULC S115
F Ratings - 1 and 2 Hr (See Items 1 & 3)	F Ratings - 1 and 2 Hr (See Items 1 & 3)
T Ratings - 0 Hr	FT Ratings - 0 Hr
L Ratings at Ambient - Less Than 1 CFM / sq ft	FH Ratings - 1and 2 HR (See Items 1 and 3)
L Ratings at 400 F - Less Than 1 CFM / sq ft	FTH Ratings - 0 Hr
	FTH Ratings - 0 Hr L Rating at Ambient - Less Than 1 CFM / sq ft
	L Ratings at 400 F - Less Than 1 CFM / sq ft



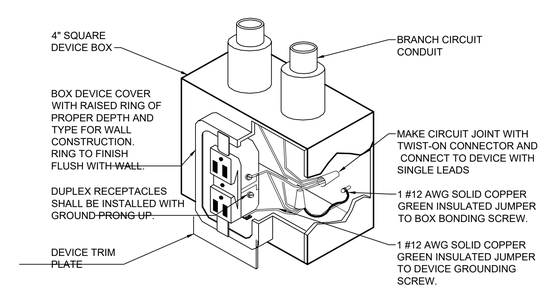
1. WALL ASSEMBLY — THE 1 OR 2 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
   A. STUDS — WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC. STEEL STUDS TO BE MIN 2-1/2 IN. (64 MM) WIDE AND SPACED MAX 24 IN. (610 MM) OC. FOR M RATING, STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE. WHEN STEEL STUDS ARE USED AND THE DIAM OF OPENING EXCEEDS THE WIDTH OF STUD CAVITY, THE OPENING SHALL BE FRAMED ON ALL SIDES USING LENGTHS OF STEEL STUD INSTALLED BETWEEN THE VERTICAL STUDS AND SCREW-ATTACHED TO THE STEEL STUDS AT EACH END. THE FRAMED OPENING IN THE WALL SHALL BE 4 TO 6 IN. (102 TO 152 MM) WIDER AND 4 TO 6 IN. (102 TO 152 MM) HIGHER THAN THE DIAM OF THE PENETRATING ITEM SUCH THAT, WHEN THE PENETRATING ITEM IS INSTALLED IN THE OPENING, A 2 TO 3 IN. (51 TO 76 MM) CLEARANCE IS PRESENT BETWEEN THE PENETRATING ITEM AND THE FRAMING ON ALL FOUR SIDES.
   B. GYPSUM BOARD* — 5/8 IN. (16 MM) THICK, 4 FT (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 32-1/4 IN. (819 MM) FOR STEEL STUD WALLS. MAX DIAM OF OPENING IS 14-1/2 IN. (368 MM) FOR WOOD STUD WALLS. THE F AND FH RATINGS OF THE FIRESTOP SYSTEM ARE EQUAL TO THE FIRE RATING OF THE WALL ASSEMBLY. THE M RATING IS APPLICABLE ONLY TO 1 HR RATED WALLS.
2. THROUGH-PENETRANTS — ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE SHALL BE MIN 0 IN. TO MAX 2-1/4 IN. (57 MM). PIPE MAY BE INSTALLED WITH CONTINUOUS POINT CONTACT. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
   A. STEEL PIPE — NOM 30 IN. (762 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
   B. IRON PIPE — NOM 30 IN. (762 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   C. CONDUIT — NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR 6 IN. (152 MM) . DIAM STEEL CONDUIT.
   D. COPPER TUBING — NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   E. COPPER PIPE — NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
3. FILL, VOID OR CAVITY MATERIAL* — SEALANT — MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT OR CONTINUOUS CONTACT LOCATIONS BETWEEN PIPE AND WALL, A MIN 1/2 IN. (13 MM) DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE PIPE WALL INTERFACE ON BOTH SURFACES OF WALL.

Movement Direction	Penetrant Item	Nominal Penetrant Diameter	Annular Space	Movement	Sealant Depth	F-Rating	L Rating with Movement
Y	2A, 2C*	2 in.	Max 2-1/4 in.	5%	5/8 in.	1 hr	N/A
Z	2A, 2C*	2 in.	2-1/4 in.	0.25 in.	5/8 in.	1 hr	N/A

* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION

6 1 AND 2 HOUR FIREWALL PENETRATION DETAIL

NOT TO SCALE



3 RECEPTACLE GROUNDING DETAIL

NOT TO SCALE

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL; SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

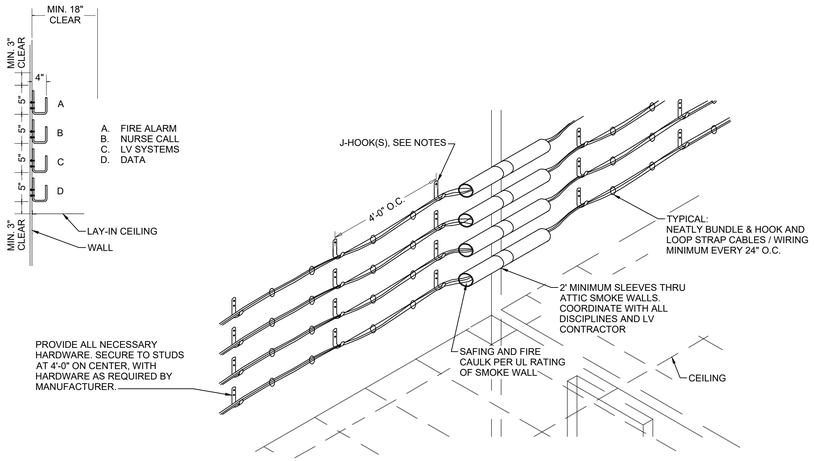
NORTH CAROLINA PROFESSIONAL SEAL 028403 ARCHITECT R. DUNCAN McPHERSON

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

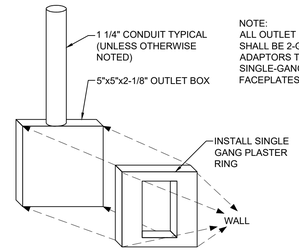
120 BED
NURSING FACILITY
ELECTRICAL
DETAILS

E0.8



2 ATTIC LOW VOLTAGE WIRE MANAGEMENT DETAIL

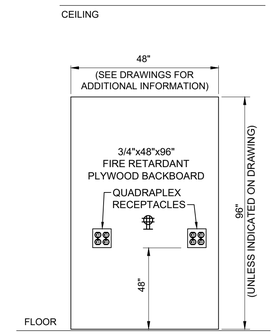
NOT TO SCALE



NOTE:
ALL OUTLET BOXES SHALL BE 2-GANG WITH ADAPTORS TO SINGLE-GANG FACEPLATES.

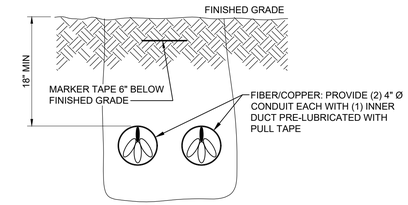
3 DATA OUTLET PATHWAY DETAIL

NOT TO SCALE



4 TELECOM BACKBOARD MOUNTING DETAIL

NOT TO SCALE

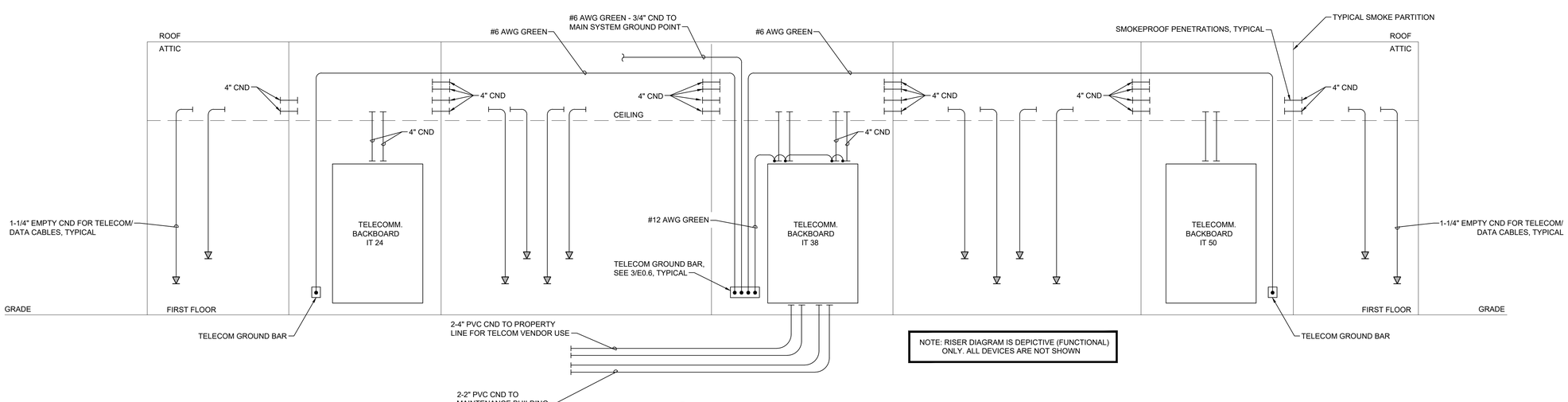


5 SECTION - FIBER/COPPER

NOT TO SCALE

NOTES:

1. CABLING SHALL BE INSTALLED IN STRAIGHT PATHS AND EXIT PATHWAYS AT NINETY DEGREE ANGLES. DIAGONAL BEELINE AND OR NON-SUPPORTED CABLING ARE UNACCEPTABLE. CABLING SHALL BE ROUTED AS HIGH AS POSSIBLE AND ABOVE OTHER BUILDING FACILITIES IN THE PATH WITH THE LEAST OBSTRUCTIONS IN THE ATTIC WHILE MAINTAINING THE SEPARATION REQUIREMENTS OF ANSI/TIA-568-C, ANSI/TIA/EIA-569-B, AND NFPA 70 (NEC). CABLE PATHWAYS SHALL BE CLEAR OF ALL POSSIBLE EMF AND RFI INTERFERENCE. CABLES SHALL BE INSTALLED AT LEAST TWO FEET AWAY FROM ALL LIGHTING FIXTURES AND OTHER POTENTIAL EMF SOURCES. ANY VIOLATIONS OF THIS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. CABLES SHALL NOT BE RUN PARALLEL WITH ELECTRICAL CONDUITS OR STRAPPED TO THEM.
2. THE CABLE SUPPORT STRUCTURE SHALL UTILIZE CAT 6 APPROVED CABLE SUPPORTS AND BE SIZED TO ACCOMMODATE CHANGE. J HOOK TYPE CABLE SUPPORTS SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE AND BE SPACE AT A MAXIMUM DISTANCE OF FOUR (4) FEET SO THAT THE SAG BETWEEN SUPPORTS DOES NOT EXCEED 12 INCHES. J HOOKS SHALL BE SIZED AS FOLLOWS: TWO INCH J HOOKS RATED FOR 75 CABLES AND SHALL BE USED TO SUPPORTS CABLE PATHS OF 50 OR LESS CABLES, FOUR IN J HOOKS RATED FOR 150 CABLES AND SHALL BE USED TO SUPPORT CABLE PATHS OF 51 TO 100 CABLES. ALL CABLE PATHS SHALL BE SIZED WITH 20% SPARE CAPACITY. ALL ATTACHMENT HARDWARE SHALL BE APPROVED FOR THE TYPE OF INSTALLATION AND MAXIMUM LOAD RATING OF THE PRODUCTS TO BE INSTALLED.
3. HORIZONTAL CABLES SHALL BE BUNDLED USING HOOK AND LOOP STRAPS. PLASTIC CABLE TIES ARE NOT PERMITTED.



NOTE: RISER DIAGRAM IS DEPICTIVE (FUNCTIONAL) ONLY. ALL DEVICES ARE NOT SHOWN

1 FUNCTIONAL TELECOMMUNICATIONS RISER DIAGRAM

NOT TO SCALE

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFEETERS

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL DETAILS
& TELECOM RISER

E0.9

NOTE: ARRANGE PANELBOARD BRANCH CIRCUIT BREAKERS AS SHOWN ON THE BELOW SCHEDULES. AGREEMENT OF CIRCUIT BREAKER (POLE) NUMBERS WITH THE PANEL SCHEDULES AND ELECTRICAL FLOOR PLANS IS REQUIRED IN ORDER TO AVOID CONFUSION DURING CONSTRUCTION, REDRAWING THE CIRCUITRY FOR RECORD DRAWING PURPOSES AND ACCURATE DOCUMENTATION OF THE AS-BUILT CONDITIONS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL; SUBJECT TO REVISION; NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION; PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS

SWITCHBOARD MDS & ESTIMATED DEMAND LOAD SUMMARY

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	XX ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	LOAD VA A	LOAD VA B	LOAD VA C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PANEL NA	50,590	500/3		54,978				60/3	4,388	PANEL NL
|	48,146	|	1		52,141		2	|	3,995	|
|	51,479	|				57,255		|	5,776	|
PANEL NB	41,517	400/3		68,882				225/3	27,365	PANEL NK
|	43,879	|	3		72,540		4	|	28,661	|
|	41,209	|				71,838		|	30,629	|
PANEL NC	53,925	600/3		56,837				60/3	2,912	PANEL NG
|	50,274	|	5		52,264		6	|	1,990	|
|	49,727	|				52,767		|	3,040	|
PANEL ND	50,145	500/3		51,933				60/3	1,788	PANEL NS
|	47,870	|	7		49,945		8	|	2,075	|
|	46,206	|				49,314		|	3,108	|
PANEL LS VIA LIFE SAFETY BRANCH ATS-1	4,780	100/3		71,340				400/3	66,560	FUTURE PANEL NG2
|	4,357	|	9		64,261		10	|	59,904	|
|	3,191	|				63,095		|	59,904	|
PANEL C VIA CRITICAL BRANCH ATS-2	28,245	300/3		28,245				225/3		PREPARED SPACE
|	34,622	|	11		34,622		12	|		|
|	33,877	|				33,877		|		|
SWITCHBOARD EH VIA EQUIPMENT ATS-3	161,257	1600/3		161,257				225/3		PREPARED SPACE
(100% RATED BREAKER)	154,749	|	13		154,749		14	|		|
|	157,978	|				157,978		|		|
				493,472	480,522	486,122	TTL PHASE VA			
				4,112	4,004	4,051	TTL PHASE AMPS			
				34%	33%	33%	PHASE BALANCE			

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.
2. COORDINATE SPD CIRCUIT BREAKER TRIP WITH SPD PROVIDED.

4,000 A. BUS (COPPER, UNO)
4,000 A. MAIN CIRCUIT BREAKER (100% RATED MAIN CIRCUIT BREAKER)
100 KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
R: TOTAL RECEPTACLES (VA) =	478,377			
RECEPTACLES FIRST 10 KVA		10,000	1.0	10,000
RECEPTACLES > 10 KVA		468,377	0.5	234,189
L: LIGHTING		57,520	1.25	71,900
M: MISCELLANEOUS EQUIPMENT		52,758	1.00	52,758
O: OTHER EQUIPMENT (CONTINUOUS)		26,558	1.25	33,197
B: LARGEST MOTOR		40,697	1.25	50,871
H: HVAC EQUIPMENT (FLA = MCA X 0.8)		709,812	1.00	709,812
K: KITCHEN EQUIPMENT		94,395	0.65	61,357
TOTAL CONNECTED (VA)		1,460,117		
TOTAL DEMAND (VA)				1,224,083
TOTAL DEMAND (AMPERES)				3,398
PANEL DEMAND LOADING VS RATING		84.9%		

ADDITIONAL NOTES (AS APPLICABLE):
4. SWBD EH CB SHALL BE 100% RATED & PROVIDED WITH AN ARC ENERGY REDUCTION MAINTENANCE SWITCH PER NEC ART. 240.87.
5. THE MCB SHALL BE 100% RATED & PROVIDED WITH AN ARC ENERGY REDUCTION MAINTENANCE SWITCH PER NEC ART. 240.87.
6. KITCHEN EQUIPMENT DEMAND FACTOR PER NEC TABLE 220.56.
7. SEE SPECIFICATIONS SECTION 16032 AND SWITCHBOARD ELEVATION 7/E0.6 FOR ADDITIONAL DETAILS AND REQUIREMENTS.

SWITCHBOARD EH

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	LOAD VA A	LOAD VA B	LOAD VA C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PANEL EHA	31,787	400/3		64,984				400/3	33,197	PANEL EHB
|	29,553	|	1		60,200		2	|	30,618	|
|	30,623	|				61,989		|	31,366	|
PANEL EHC	26,454	300/3		53,054				300/3	26,600	PANEL EHD
|	26,600	|	3		53,054		4	|	26,454	|
|	27,120	|				54,240		|	27,120	|
PANEL EHG	807	60/3		29,654				225/3	28,847	PANEL EHK
|	900	|	5		27,929		6	|	27,029	|
|	740	|				28,183		|	27,443	|
SPD		30/3		13,566				150/3	13,566	DOAS01
|		|	7		13,566		8	|	13,566	|
|		|				13,566		|	13,566	|
PREPARED SPACE		225/3						225/3		PREPARED SPACE
|		|	9				10	|		|
|		|						|		|
PREPARED SPACE		100/3						100/3		PREPARED SPACE
|		|	11				12	|		|
|		|						|		|
				161,257	154,749	157,978	TTL PHASE VA			
				1,344	1,290	1,316	TTL PHASE AMPS			
				34%	33%	33%	PHASE BALANCE			

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.
2. COORDINATE SPD CIRCUIT BREAKER TRIP WITH SPD PROVIDED.

1,600 A. BUS (COPPER, UNO)
1,600 A. MAIN CIRCUIT BREAKER (100% RATED MAIN CIRCUIT BREAKER)
100 KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
R: TOTAL RECEPTACLES (VA) =	360			
RECEPTACLES FIRST 10 KVA		360	1.0	360
RECEPTACLES > 10 KVA			0.5	
L: LIGHTING			1.25	
M: MISCELLANEOUS EQUIPMENT		12,240	1.00	12,240
O: OTHER EQUIPMENT (CONTINUOUS)		17,646	1.25	22,057
B: LARGEST MOTOR		40,697	1.25	50,871
H: HVAC EQUIPMENT (FLA = MCA X 0.8)		399,729	1.00	399,729
K: KITCHEN EQUIPMENT		3,312	1.00	3,312
TOTAL CONNECTED (VA)		473,984		
TOTAL DEMAND (VA)				488,569
TOTAL DEMAND (AMPERES)				1,356
PANEL DEMAND LOADING VS RATING		84.8%		

ADDITIONAL NOTES (AS APPLICABLE):
4. THE MCB SHALL BE 100% RATED & PROVIDED WITH AN ARC ENERGY REDUCTION MAINTENANCE SWITCH PER NEC ART. 240.87.
5. KITCHEN EQUIPMENT DEMAND FACTOR PER NEC TABLE 220.56.
6. SEE SPECIFICATIONS SECTION 16032 AND SWITCHBOARD ELEVATION 7/E0.6 FOR ADDITIONAL DETAILS AND REQUIREMENTS.

PANEL C

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PANEL CA	6,630	100/3	1	14,210			2	100/3	7,580	PANEL CB
|	8,270	|	3		18,252		4	|	9,982	|
|	6,384	|	5			17,144	6	|	10,760	|
PANEL CC	6,990	100/3	7	14,035			8	100/3	7,045	PANEL CD
|	7,710	|	9		15,672		10	|	7,962	|
|	7,716	|	11			15,695	12	|	7,979	|
SPARE		100/3	13				14	30/3		SPD
|		|	15				16	|		|
|		|	17				18	|		|
SPARE		100/3	19				20	100/3		SPARE
|		|	21				22	|		|
|		|	23				24	|		|
SPARE		20/1	25				26	70/3		SPACE
LIGHTING: KITCHEN 43	698	20/1	27		698		28	|		|
LIGHTING: LAUNDRY & MECH/ELEC EQUIP	1,038	20/1	29			1,038	30	|		|
				28,245	34,622	33,877	TTL PHASE VA			
				235	289	282	TTL PHASE AMPS			
				29%	36%	35%	PHASE BALANCE			

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.
2. COORDINATE SPD CIRCUIT BREAKER TRIP WITH SPD PROVIDED.

400 A. BUS (COPPER, UNO)
300 A. MAIN LUGS AND/OR FEEDER RATING
85 KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	60,680			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		50,680	0.50	25,340
LIGHTING		20,288	1.25	25,360
MISCELLANEOUS EQUIPMENT		15,776	1.00	15,776
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		96,744		
TOTAL DEMAND (VA)				76,476
TOTAL DEMAND (AMPERES)				212.3
PANEL DEMAND LOADING VS RATING		70.8%		

PANEL NG

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
LIGHTING: ATTIC	742	20/1	1	942			2	20/1	200	EG SET BATTERY CHARGER
RCPS: MECH EQUIP 47	540	20/1	3		740		4	20/1	200	DOCKING STATION BATTERY CHARGER
RCPS: ELEC EQUIP 46	540	20/1	5			1,790	6	30/2	1,250	EG SET BLOCK HEATER (NOTE 2)
RCPS: ATTIC	720	20/1	7	1,970			8	|	1,250	|
SPARE		20/1	9		1,250		10	30/2	1,250	DOCKING STATION BLOCK HEATER (NOTE 2)
SPARE		20/1	11			1,250	12	|	1,250	|
SPARE		20/1	13				14	20/1		SPARE
SPARE		20/1	15				16	20/1		SPARE
SPARE		20/1	17				18	20/1		SPARE
				2,912	1,990	3,040	TTL PHASE VA			
				24	17	25	TTL PHASE AMPS			
				37%	25%	38%	PHASE BALANCE			

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.
2. GFPE CIRCUIT BREAKER.

60 A. BUS (COPPER, UNO)
60 A. MAIN LUGS AND/OR FEEDER RATING
25 KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	1,800			
RECEPTACLES FIRST 10 KVA		1,800	1.00	1,800
RECEPTACLES > 10 KVA			0.50	
LIGHTING		742	1.25	928
MISCELLANEOUS EQUIPMENT		5,400	1.00	5,400
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		7,942		
TOTAL DEMAND (VA)				8,128
TOTAL DEMAND (AMPERES)				22.6
PANEL DEMAND LOADING VS RATING		37.6%		

PANEL NL

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
RCPS: LAUNDRY 48	900	20/1	1	1,800			2	20/1	900	RCPS: HOUSEKEEPING OFF 42
CHEMICAL EQUIPMENT	200	20/1	3		920		4	20/1	720	RCPS: STAFF LOUNGE 40
RCPS: CORRIDOR 75	720	20/1	5			1,320	6	20/1	600	FRIDGE: STAFF LOUNGE 40 (NOTE 3)
SPARE		20/1	7	360			8	20/1	360	RCPS: COUNTER - STAFF LOUNGE 40
SPARE		20/1	9		847		10	20/1	847	LIGHTING: LAUNDRY
SPARE		20/1	11				12	20/1		SPARE
SPARE		20/1	13				14	20/1		SPARE
SPARE		20/1	15				16	20/1		SPARE
WASHER	1,500	20/2	17			2,228	18	20/2	728	DRYER
|	1,500	|	19	2,228			20	|	728	|
WASHER	1,500	20/2	21		2,228		22	20/2	728	DRYER
|	1,500	|	23			2,228	24	|	728	|
				4,388	3,995	5,776	TTL PHASE VA			
				37	33	48	TTL PHASE AMPS			
				31%	28%	41%	PHASE BALANCE			

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.
2. GFCI CIRCUIT BREAKERS AS REQUIRED BY THE NEC.

60 A. BUS (COPPER, UNO)
60 A. MAIN LUGS AND/OR FEEDER RATING
14 KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	3,600			
RECEPTACLES FIRST 10 KVA		3,600	1.00	3,600
RECEPTACLES > 10 KVA			0.50	
LIGHTING		847	1.25	1,059
MISCELLANEOUS EQUIPMENT		800	1.00	800
OTHER EQUIPMENT (CONTINUOUS)		8,912	1.25	11,140
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		14,159		
TOTAL DEMAND (VA)				16,599
TOTAL DEMAND (AMPERES)				46.1
PANEL DEMAND LOADING VS RATING		76.8%		

PANEL NS

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
SPARE		20/1	1	540			2	20/1	540	RECEPTACLES
LIGHTS	275	20/1	3		2,075		4	20/1	1,800	RECEPTACLE
EXTERIOR LIGTHING THRU PC	60	20/1	5			1,860	6	20/1	1,800	RECEPTACLE
SPARE		20/1	7				8	20/1		SPARE
SPARE		20/1	9				10	20/1		SPARE
SPARE		20/1	11			1,248	12	15/2	1,248	PTHP01: MAINTENANCE BLDG
SPARE		20/1	13	1,248			14	|	1,248	|
SPARE		20/1	15				16	20/1		SPARE
SPARE		20/1	17				18	20/1		SPARE
SPARE		20/1	19				20	30/3		SPD
SPARE		20/1	21				22	|		|
SPARE		20/1	23				24	|		|
				1,788	2,075	3,108	TTL PHASE VA			
				15	17	26	TTL PHASE AMPS			
				26%	30%	45%	PHASE BALANCE			

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

60 A. BUS (COPPER, UNO)
60 A. MAIN CIRCUIT BREAKER
10 KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	4,140			
RECEPTACLES FIRST 10 KVA		4,140	1.00	4,140
RECEPTACLES > 10 KVA			0.50	
LIGHTING		335	1.25	419
MISCELLANEOUS EQUIPMENT			1.00	
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		2,496	1.00	2,496
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		6,971		
TOTAL DEMAND (VA)				7,055
TOTAL DEMAND (AMPERES)				19.6
PANEL DEMAND LOADING VS RATING		32.6%		

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PANEL SCHEDULES

E0
.10

NOTE: ARRANGE PANELBOARD BRANCH CIRCUIT BREAKERS AS SHOWN ON THE BELOW SCHEDULES. AGREEMENT OF CIRCUIT BREAKER (POLE) NUMBERS WITH THE PANEL SCHEDULES AND ELECTRICAL FLOOR PLANS IS REQUIRED IN ORDER TO AVOID CONFUSION DURING CONSTRUCTION, REDRAWING THE CIRCUITRY FOR RECORD DRAWING PURPOSES AND ACCURATE DOCUMENTATION OF THE AS-BUILT CONDITIONS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL; SUBJECT TO REVISION; NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION; PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PANEL NA

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
HP02	1,739	30/3	1	5,966			2	45/3	4,227	AH02 AUX HEAT
|	1,739	|	3		5,966		4	|	4,227	|
|	1,739	|	5			5,966	6	|	4,227	|
HP09	1,739	30/3	7	5,966			8	45/3	4,227	AH09 AUX HEAT
|	1,739	|	9		5,966		10	|	4,227	|
|	1,739	|	11			5,966	12	|	4,227	|
HP20	998	20/2	13	3,078			14	25/2	2,080	AH20 AUX HEAT
|	998	|	15		3,078		16	|	2,080	|
HP22	998	20/2	17			4,160	18	40/2	3,162	AH22 AUX HEAT
|	998	|	19	4,160			20	|	3,162	|
ER03	520	15/2	21		1,186		22	15/2	666	AH02
|	520	|	23			1,186	24	|	666	|
ER04	520	15/2	25	1,186			26	15/2	666	AH09
|	520	|	27		1,186		28	|	666	|
ER13	728	20/2	29			978	30	15/2	250	AH20
|	728	|	31	978			32	|	250	|
DCU01	1,331	20/2	33		1,581		34	15/2	250	AH22
|	1,331	|	35			1,581	36	|	250	|
SPARE		20/1	37	4,160			38	50/2	4,160	EV CHARGER
SPARE		20/1	39		4,160		40	|	4,160	|
SPARE		20/1	41			6,656	42	80/2	6,656	EV CHARGER
SPARE		20/1	43	6,656			44	|	6,656	|
SPARE		20/1	45		6,656		46	80/2	6,656	EV CHARGER
SPARE		20/1	47			6,656	48	|	6,656	|
PANEL NA2	8,358	100/3	49	18,440			50	100/3	10,082	PANEL NA3
|	8,652	|	51		18,367		52	|	9,715	|
|	7,573	|	53			18,330	54	|	10,757	|
NOTES (AS APPLICABLE):				50,590	48,146	51,479	TTL PHASE VA		600	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.				422	401	429	TTL PHASE AMPS		500	A. MAIN LUGS AND/OR FEEDER RATING
				34%	32%	34%	PHASE BALANCE		30	KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	76,787			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		66,787	0.50	33,394
LIGHTING		6,916	1.25	8,645
MISCELLANEOUS EQUIPMENT		2,396	1.00	2,396
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR		5,217	1.25	6,521
HVAC EQUIPMENT (FLA = MCA X 0.8)		55,083	1.00	55,083
KITCHEN EQUIPMENT	3	3,816	0.90	3,434
TOTAL CONNECTED (VA)		150,215		
TOTAL DEMAND (VA)				119,473
TOTAL DEMAND (AMPERES)				331.6
PANEL DEMAND LOADING VS RATING		66.3%		

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

PANEL NA2

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
RCPS: S.U./ S.L. 34 & NOUR. STA. 33	720	20/1	1	900			2	20/1	180	EXTERIOR RCP: CORRIDOR 421
N1: FRIDGE-NOUR. STA. 33	360	20/1	3		1,260		4	20/1	900	RCPS: CORRIDOR 421
RCPS: COUNTER-NOUR. STA. 33	540	20/1	5			720	6	20/1	180	EXTERIOR RCP: CORRIDOR 325
N2: ICE MAKER-NOUR. STA. 33	1,200	20/1	7	1,920			8	20/1	720	RCPS: CORRIDOR 325
S4: FRIDGE-DINING 30	336	20/1	9		1,416		10	20/1	1,080	RCPS: WHL./CHR. 31 & C.U./C.L. 32
S3: JUICE DISPENSER-DINING 30	720	20/1	11			1,800	12	20/1	1,080	RCPS: DINING AREA 30
S2: COFFEE MAKER-DINING 30	1,368	20/1	13	1,548			14	20/1	180	EXTERIOR RCP: WEST COURTYARD
S1: TEA BREWER-DINING 30	1,728	20/1	15		2,109		16	20/1	381	CHARGING BOLLARD: EAST COURTYARD
FRIDGE: DINING 30	500	20/1	17			1,580	18	20/1	1,080	RCPS: NURSE STATION 29
RCPS: SERVING ISLAND-DINING 30	720	20/1	19	1,080			20	20/1	360	RCP: NURSE STATION 29
CHARGING BOLLARDS: NORTH COURTYARD	762	20/1	21		1,122		22	20/1	360	RCP: NURSE STATION 29
EXTERIOR RCP: NORTH COURTYARD	180	20/1	23			540	24	20/1	360	RCP: NURSE STATION 29
RCPS: TUB ROOM 35	720	20/1	25	1,440			26	20/1	720	RCPS: IN-SERV. TRAINING 27
RCPS: PHYSICAL THER 37	720	20/1	27		1,800		28	20/1	1,080	RCPS: IN-SERV. TRAINING 27
FLOOR RCP: PHYSICAL THER 37	180	20/1	29			1,080	30	20/1	900	RCPS: ATTIC
FLOOR RCP: PHYSICAL THER 37	180	20/1	31	360			32	20/1	180	RCP: HVAC SERVICE
FLOOR RCP: PHYSICAL THER 37	180	20/1	33		360		34	20/1	180	RCP: HVAC SERVICE
LIGHTING: DINING AREA 30	530	20/1	35			1,070	36	20/1	540	RCPS: IT 24
SPARE		20/1	37	1,110			38	20/1	1,110	LIGHTING: CORR 72,74
LIGHTING: NURSE STATION 29	502	20/1	39		585		40	20/2	83	DAH02
LIGHTING: CORRIDORS 325,421	700	20/1	41			783	42	|	83	|
SPARE		20/1	43				44	20/1		SPARE
SPARE		20/1	45				46	20/1		SPARE
SPARE		20/1	47				48	20/1		SPARE
SPARE		20/1	49				50	20/1		SPARE
SPARE		20/1	51				52	20/1		SPARE
SPARE		20/1	53				54	20/1		SPARE
NOTES (AS APPLICABLE):				8,358	8,652	7,573	TTL PHASE VA		100	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.				70	72	63	TTL PHASE AMPS		100	A. MAIN LUGS AND/OR FEEDER RATING
2. GFCI CIRCUIT BREAKER.				34%	35%	31%	PHASE BALANCE		25	KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	15,363			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		5,363	0.50	2,682
LIGHTING		2,842	1.25	3,553
MISCELLANEOUS EQUIPMENT		2,396	1.00	2,396
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		166	1.00	166
KITCHEN EQUIPMENT	3	3,816	0.90	3,434
TOTAL CONNECTED (VA)		24,583		
TOTAL DEMAND (VA)				22,231
TOTAL DEMAND (AMPERES)				61.7
PANEL DEMAND LOADING VS RATING		61.7%		

ADDITIONAL NOTES (AS APPLICABLE):
3. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

PANEL NA3

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PRIVATE ROOM 301 RECEPTACLES	360	20/1	1	1,260			2	20/1	900	DOUBLE ROOM 401 RECEPTACLES
PRIVATE ROOM 301 BATH RECPTACLES	500	20/1	3		1,000		4	20/1	500	DOUBLE ROOM 401 BATH RECEPTACLES
PRIVATE ROOM 302 RECEPTACLES	360	20/1	5			1,260	6	20/1	900	DOUBLE ROOM 402 RECEPTACLES
PRIVATE ROOM 302 BATH RECEPTACLES	500	20/1	7	1,000			8	20/1	500	DOUBLE ROOM 402 BATH RECEPTACLES
PRIVATE ROOM 303 RECEPTACLES	360	20/1	9		1,260		10	20/1	900	DOUBLE ROOM 403 RECEPTACLES
PRIVATE ROOM 303 BATH RECEPTACLES	500	20/1	11			1,000	12	20/1	500	DOUBLE ROOM 403 BATH RECEPTACLES
PRIVATE ROOM 304 RECEPTACLES	360	20/1	13	1,260			14	20/1	900	DOUBLE ROOM 404 RECEPTACLES
PRIVATE ROOM 304 BATH RECEPTACLES	500	20/1	15		1,000		16	20/1	500	DOUBLE ROOM 404 BATH RECEPTACLES
DOUBLE ROOM 305 RECEPTACLES	900	20/1	17			1,800	18	20/1	900	DOUBLE ROOM 405 RECEPTACLES
DOUBLE ROOM 305 BATH RECEPTACLES	500	20/1	19	1,000			20	20/1	500	DOUBLE ROOM 405 BATH RECEPTACLES
DOUBLE ROOM 306 RECEPTACLES	900	20/1	21		1,800		22	20/1	900	DOUBLE ROOM 406 RECEPTACLES
DOUBLE ROOM 306 BATH RECEPTACLES	500	20/1	23			1,000	24	20/1	500	DOUBLE ROOM 406 BATH RECEPTACLES
DOUBLE ROOM 307 RECEPTACLES	900	20/1	25	1,800			26	20/1	900	DOUBLE ROOM 407 RECEPTACLES
DOUBLE ROOM 307 BATH RECEPTACLES	500	20/1	27		1,000		28	20/1	500	DOUBLE ROOM 407 BATH RECEPTACLES
DOUBLE ROOM 308 RECEPTACLES	900	20/1	29			1,800	30	20/1	900	DOUBLE ROOM 408 RECEPTACLES
DOUBLE ROOM 308 BATH RECEPTACLES	500	20/1	31	1,000			32	20/1	500	DOUBLE ROOM 408 BATH RECEPTACLES
PRIVATE ROOM 309 RECEPTACLES	360	20/1	33		1,260		34	20/1	900	DOUBLE ROOM 409 RECEPTACLES
PRIVATE ROOM 309 BATH RECEPTACLES	500	20/1	35			1,000	36	20/1	500	DOUBLE ROOM 409 BATH RECEPTACLES
PRIVATE ROOM 310 RECEPTACLES	360	20/1	37	1,260			38	20/1	900	DOUBLE ROOM 410 RECEPTACLES
PRIVATE ROOM 310 BATH RECEPTACLES	500	20/1	39		1,000		40	20/1	500	DOUBLE ROOM 410 BATH RECEPTACLES
PRIVATE ROOM 311 RECEPTACLES	360	20/1	41			1,362	42	20/1	1,002	BEDROOM LIGHTING: 301-306
PRIVATE ROOM 311 BATH RECEPTACLES	500	20/1	43	1,502			44	20/1	1,002	BEDROOM LIGHTING: 307-312
PRIVATE ROOM 312 RECEPTACLES	360	20/1	45		1,395		46	20/1	1,035	BEDROOM LIGHTING: 401-405
PRIVATE ROOM 312 BATH RECEPTACLES	500	20/1	47			1,535	48	20/1	1,035	BEDROOM LIGHTING: 406-410
SPARE		20/1	49				50	20/1		SPARE
SPARE		20/1	51				52	20/1		SPARE
SPARE		20/1	53				54	20/1		SPARE
NOTES (AS APPLICABLE):				10,082	9,715	10,757	TTL PHASE VA		100	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.				84	81	90	TTL PHASE AMPS		100	A. MAIN LUGS AND/OR FEEDER RATING
				33%	32%	35%	PHASE BALANCE		25	KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	26,480			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		16,480	0.50	8,240
LIGHTING		4,074	1.25	5,093
MISCELLANEOUS EQUIPMENT			1.00	
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		30,554		
TOTAL DEMAND (VA)				23,333
TOTAL DEMAND (AMPERES)				64.8
PANEL DEMAND LOADING VS RATING		64.8%		

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

PANEL NB

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
HP03	1,739	30/3	1	5,966			2	45/3	4,227	AH03 AUX HEAT
|	1,739	|	3		5,966		4	|	4,227	|
|	1,739	|	5			5,966	6	|	4,227	|
HP19	1,739	30/3	7	5,966			8	45/3	4,227	AH19 AUX HEAT
|	1,739	|	9		5,966		10	|	4,227	|
|	1,739	|	11			5,966	12	|	4,227	|
HP26	998	20/2	13	4,160			14	40/2	3,162	AH26 AUX HEAT
|	998	|	15		4,160		16	|	3,162	|
HP28	998	20/2	17			3,078	18	25/2	2,080	AH28 AUX HEAT
|	998	|	19	3,078			20	|	2,080	|
ER05	520	15/2	21		1,186		22	15/2	666	AH03
|	520	|	23			1,186	24	|	666	|
ER06	520	15/2	25	1,186			26	15/2	666	AH19
|	520	|	27		1,186		28	|	666	|
ER22	728	20/2	29			978	30	15/2	250	AH26
|	728	|	31	978			32	|	250	|
RANGE 37C (NOTE 1)	2,500	50/2	33		2,750		34	15/2	250	AH28
|	2,500	|	35			2,750	36	|	250	|
WASHER 37C (NOTES 1, 2)	1,500	20/1	37	1,500			38	20/1		SPARE
DRYER 37C (NOTES 1, 2)	2,250	30/2	39		3,581		40	20/2	1,331	DCU02
|	2,250	|	41			3,581	42	|	1,331	|
SPARE		20/1	43	8,568			44	100/3	8,568	PANEL NB2
SPARE		20/1	45		9,370		46	|	9,370	|
SPARE		20/1	47			6,980	48	|	6,980	|
SPARE		20/1	49	10,115			50	100/3	10,115	PANEL NB3
SPARE		20/1	51		9,715		52	|	9,715	|
SPARE		20/1	53			10,724	54	|	10,724	|
NOTES (AS APPLICABLE):				41,517	43,879	41,209	TTL PHASE VA		400	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.				346	366	343	TTL PHASE AMPS		400	A. MAIN LUGS AND/OR FEEDER RATING
				33%	35%	33%	PHASE BALANCE		25	KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	43,082			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		33,082	0.50	16,541
LIGHTING		5,328	1.25	6,660
MISCELLANEOUS EQUIPMENT		14,246	1.00	14,246
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR		5,217	1.25	6,521
HVAC EQUIPMENT (FLA = MCA X 0.8)		54,916	1.00	54,916
KITCHEN EQUIPMENT	3	3,816	0.90	3,434
TOTAL CONNECTED (VA)		126,605		
TOTAL DEMAND (VA)				112,319
TOTAL DEMAND (AMPERES)				311.8
PANEL DEMAND LOADING VS RATING		77.9%		

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

PANEL NB2

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
RCPS: S.U./S.L. 60 & NOUR. STA. 57	720	20/1	1	900			2	20/1	180	EXTERIOR RCP: CORRIDOR 521
N1: FRIDGE-NOUR. STA. 57	360	20/1	3		1,440		4	20/1	1,080	RCPS: CORRIDOR 521
RCPS: COUNTER-NOUR. STA. 57	540	20/1	5			720	6	20/1	180	EXTERIOR RCP: CORRIDOR 625
N2: ICE MAKER-NOUR. STA. 57	1,200	20/1	7	1,920			8	20/1	720	RCPS: CORRIDOR 625
S4: FRIDGE-DINING 61	336	20/1	9		1,416		10	20/1	1,080	RCPS: WHL./CHR. 85 & C.U./C.L. 59
S3: JUICE DISPENSER-DINING 61	720	20/1	11			1,800	12	20/1	1,080	RCPS: DINING AREA 61
S2: COFFEE MAKER-DINING 61	1,368	20/1	13	1,548			14	20/1	180	EXTERIOR RCP: EAST COURTYARD
S1: TEA BREWER-DINING 61	1,728	20/1	15		2,490		16	20/1	762	CHARGING STATIONS: EAST COURTYARD
FRIDGE: DINING 61	500	20/1	17			1,580	18	20/1	1,080	RCPS: NURSE STATION 54
RCPS: SERVING ISLAND-DINING 61	720	20/1	19	1,080			20	20/1	360	RCP: NURSE STATION 54
EXTERIOR RCPS: HVAC SERVICES	720	20/1	21		1,080		22	20/1	360	RCP: NURSE STATION 54
RCPS: CORRIDOR 74	1,080	20/1	23			1,440	24	20/1	360	RCP: NURSE STATION 54
RCPS: SPEECH THER 37D	540	20/1	25	1,620			26	20/1	1,080	COUNTER RPCS: OCCUP THER 37C
RCPS: THER OFF 37E	720	20/1	27		1,320		28	20/1	600	FRIDGE: OCCUP THER 37C
FLOOR RCP: PHYSICAL THER 37	180	20/1	29			1,260	30	20/1	1,080	RCPS: ATTIC
FLOOR RCP: PHYSICAL THER 37	180	20/1	31	430			32	20/1	250	COURTYARD FOUNTAIN
FLOOR RCP: PHYSICAL THER 37	180	20/1	33		204		34	20/1	24	COURTYARD LANDSCAPE LIGHTING
RCP: HVAC SERVICE	180	20/1	35			180	36	20/1		SPARE
RCPS: IT EQUIP 38	540	20/1	37	1,070			38	20/1	530	LIGHTING: DINING AREA 61
RCPS: IT EQUIP 50	720	20/1	39		1,420		40	20/1	700	LIGHTING: CORRIDORS 521,625
SPARE		20/1	41				42	20/1		SPARE
SPARE		20/1	43				44	20/1		SPARE
SPARE		20/1	45				46	20/1		SPARE
SPARE		20/1	47				48	20/1		SPARE
SPARE		20/1	49				50	20/1		SPARE
SPARE		20/1	51				52	20/1		SPARE
SPARE		20/1	53				54	20/1		SPARE
NOTES (AS APPLICABLE):				8,568	9,370	6,980	TTL PHASE VA		100	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.				71	78	58	TTL PHASE AMPS		100	A. MAIN LUGS AND/OR FEEDER RATING
				34%	38%	28%	PHASE BALANCE		22	KAIC MINIMUM RATING

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	16,602			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		6,602	0.50	3,301
LIGHTING		1,254	1.25	1,568
MISCELLANEOUS EQUIPMENT		3,246	1.00	3,246
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT	3	3,816	0.90	3,434
TOTAL CONNECTED (VA)		24,918		
TOTAL DEMAND (VA)				21,549
TOTAL DEMAND (AMPERES)				59.8
PANEL DEMAND LOADING VS RATING		59.8%		

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

PANEL NB3

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
DOUBLE ROOM 501 RECEPTACLES	900	20/1	1	1,260			2	20/1	360	PRIVATE ROOM 601 RECEPTACLES
DOUBLE ROOM 501 BATH RECEPTACLES	500	20/1	3		1,000		4	20/1	500	PRIVATE ROOM 601 BATH RECEPTACLES
DOUBLE ROOM 502 RECEPTACLES	900	20/1	5			1,260	6	20/1	360	PRIVATE ROOM 602 RECEPTACLES
DOUBLE ROOM 502 BATH RECEPTACLES	500	20/1	7	1,000			8	20/1	500	PRIVATE ROOM 602 BATH RECEPTACLES
DOUBLE ROOM 503 RECEPTACLES	900	20/1	9		1,260		10	20/1	360	PRIVATE ROOM 603 RECEPTACLES
DOUBLE ROOM 503 BATH RECEPTACLES	500	20/1	11			1,000	12	20/1	500	PRIVATE ROOM 603 BATH RECEPTACLES
DOUBLE ROOM 504 RECEPTACLES	900	20/1	13	1,260			14	20/1	360	PRIVATE ROOM 604 RECEPTACLES
DOUBLE ROOM 504 BATH RECEPTACLES	500	20/1	15		1,000		16	20/1	500	PRIVATE ROOM 604 BATH RECEPTACLES
DOUBLE ROOM 505 RECEPTACLES	900	20/1	17			1,800	18	20/1	900	DOUBLE ROOM 605 RECEPTACLES
DOUBLE ROOM 505 BATH RECEPTACLES	500	20/1	19	1,000			20	20/1	500	DOUBLE ROOM 605 BATH RECEPTACLES
DOUBLE ROOM 506 RECEPTACLES	900	20/1	21		1,800		22	20/1	900	DOUBLE ROOM 606 RECEPTACLES
DOUBLE ROOM 506 BATH RECEPTACLES	500	20/1	23			1,000	24	20/1	500	DOUBLE ROOM 606 BATH RECEPTACLES
DOUBLE ROOM 507 RECEPTACLES	900	20/1	25	1,800			26	20/1	900	DOU

NOTE: ARRANGE PANELBOARD BRANCH CIRCUIT BREAKERS AS SHOWN ON THE BELOW SCHEDULES. AGREEMENT OF CIRCUIT BREAKER (POLE) NUMBERS WITH THE PANEL SCHEDULES AND ELECTRICAL FLOOR PLANS IS REQUIRED IN ORDER TO AVOID CONFUSION DURING CONSTRUCTION, REDRAWING THE CIRCUITRY FOR RECORD DRAWING PURPOSES AND ACCURATE DOCUMENTATION OF THE AS-BUILT CONDITIONS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PANEL NC

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
HP04	1,739	30/3	1	5,966			2	45/3	4,227	AH04 AUX HEAT
|	1,739	|	3		5,966		4	|	4,227	|
|	1,739	|	5			5,966	6	|	4,227	|
HP12	1,739	30/3	7	5,774			8	45/3	4,035	AH12 AUX HEAT
|	1,739	|	9		5,774		10	|	4,035	|
|	1,739	|	11			5,774	12	|	4,035	|
HP15	1,739	30/3	13	5,966			14	45/3	4,227	AH15 AUX HEAT
|	1,739	|	15		5,966		16	|	4,227	|
|	1,739	|	17			5,966	18	|	4,227	|
HP27	998	20/2	19	4,160			20	40/2	3,162	AH27 AUX HEAT
|	998	|	21		4,160		22	|	3,162	|
HP29	998	20/2	23			3,078	24	25/2	2,080	AH29 AUX HEAT
|	998	|	25	3,078			26	|	2,080	|
AH04	666	15/2	27		1,186		28	15/2	520	ER07
|	666	|	29			1,186	30	|	520	|
AH10	749	15/2	31	1,269			32	15/2	520	ER08
|	749	|	33		1,269		34	|	520	|
AH12	666	15/2	35			1,186	36	15/2	520	ER14
|	666	|	37	1,186			38	|	520	|
AH15	666	15/2	39		1,394		40	20/2	728	ER18
|	666	|	41			1,394	42	|	728	|
AH27	250	15/2	43	2,440			44	35/3	2,190	HP10
|	250	|	45		2,440		46	|	2,190	|
AH29	250	15/2	47			2,440	48	|	2,190	|
|	250	|	49	4,573			50	45/3	4,323	AH10 AUX HEAT
SPARE		20/1	51		4,323		52	|	4,323	|
SPARE		20/1	53			4,323	54	|	4,323	|
PANEL NC2	7,989	100/3	55	19,513			56	100/3	11,524	PANEL NC3
|	7,154	|	57		17,796		58	|	10,642	|
|	7,772	|	59			18,414	60	|	10,642	|

	53,925	50,274	49,727	TTL PHASE VA	600 A. BUS (COPPER, UNO)
	449	419	414	TTL PHASE AMPS	600 A. MAIN LUGS AND/OR FEEDER RATING
	35%	33%	32%	PHASE BALANCE	25 KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	48,720			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		38,720	0.50	19,360
LIGHTING		7,003	1.25	8,754
MISCELLANEOUS EQUIPMENT			1.00	
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR		6,571	1.25	8,214
HVAC EQUIPMENT (FLA = MCA X 0.8)		91,632	1.00	91,632
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		153,926		
TOTAL DEMAND (VA)				137,960
TOTAL DEMAND (AMPERES)				382.9
PANEL DEMAND LOADING VS RATING		63.8%		

PANEL NC2

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
RCP: NURSE STATION 54	360	20/1	1	540			2	20/1	180	EXTERIOR RCP: CORRIDOR 825
RCP: NURSE STATION 54	360	20/1	3		1,080		4	20/1	720	RCPS: CORRIDOR 825
RCPS: UNIT MANAGER 55	900	20/1	5			1,080	6	20/1	180	EXTERIOR RCP: CORRIDOR 725
RCPS: BEAUTY SALON 56	900	20/1	7	1,620			8	20/1	720	RCPS: CORRIDOR 725
RCPS: COUNTER-ACT ROOM 10	360	20/1	9		1,080		10	20/1	720	RCPS: S.U./S.L. 65 & C.U./C.L. 66
EXTERIOR RCP: HP04, 15, 16, 27, 29	180	20/1	11			900	12	20/1	720	RCPS: SPLY. STO. 63 & WHL./ CHR. 64
EXTERIOR RCP: HP10, 12	180	20/1	13	1,260			14	20/1	1,080	RCPS: LIVING ROOM 64
RCPS: M.D.S. OFFICE 68	900	20/1	15		1,260		16	20/1	360	RCPS: PORCH 79
RCPS: M.D.S. OFFICE 68	900	20/1	17			1,800	18	20/1	900	RCPS: LOBBY 1A
RCPS: SCH. OFFICE 70	900	20/1	19	2,160			20	20/1	1,260	RCPS: ACT ROOM 10
RCPS: D.O.N. OFFICE 69	900	20/1	21		1,260		22	20/1	360	RCPS: COUNTER - ACT ROOM 10
RCPS: FAMILY ROOM 67	1,080	20/1	23			1,980	24	20/1	900	RCPS: PHYSICAL THER. 37
RCPS: SOC WORK 71	900	20/1	25	1,620			26	20/1	720	RCPS: ATTIC
SPARE		20/1	27		900		28	20/1	900	RCPS: RETURN THER. 37G
LIGHTING: LIVING ROOM 62	500	20/1	29			1,400	30	20/1	900	RCPS: BEAUTY SALON 56
LIGHTING: NURSE STATION 34	469	20/1	31	789			32	20/1	320	LIGHTING: ACT ROOM 10
LIGHTING: CORRIDORS 725, 825	426	20/1	33		1,574		34	20/1	1,148	LIGHTING: LOBBY 1A
SPARE		20/1	35			612	36	20/1	612	LIGHTING: PHYSICAL THER. 37
SPARE		20/1	37				38	20/1		SPARE
SPARE		20/1	39				40	20/1		SPARE
SPARE		20/1	41				42	20/1		SPARE
SPARE		20/1	43				44	20/1		SPARE
SPARE		20/1	45				46	20/1		SPARE
SPARE		20/1	47				48	20/1		SPARE
SPARE		20/1	49				50	20/1		SPARE
SPARE		20/1	51				52	20/1		SPARE
SPARE		20/1	53				54	20/1		SPARE

	7,989	7,154	7,772	TTL PHASE VA	100 A. BUS (COPPER, UNO)
	67	60	65	TTL PHASE AMPS	100 A. MAIN LUGS AND/OR FEEDER RATING
	35%	31%	34%	PHASE BALANCE	25 KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	19,440			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		9,440	0.50	4,720
LIGHTING		3,475	1.25	4,344
MISCELLANEOUS EQUIPMENT			1.00	
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		22,915		
TOTAL DEMAND (VA)				19,064
TOTAL DEMAND (AMPERES)				52.9
PANEL DEMAND LOADING VS RATING		52.9%		

PANEL NC3

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PRIVATE ROOM 701 RECEPTACLES	360	20/1	1	1,440			2	20/1	1,080	LARGE ROOM 801 RECEPTACLES
PRIVATE ROOM 701 BATH RECEPTACLES	500	20/1	3		1,000		4	20/1	500	LARGE ROOM 801 BATH RECEPTACLES
PRIVATE ROOM 702 RECEPTACLES	360	20/1	5			1,440	6	20/1	1,080	LARGE ROOM 802 RECEPTACLES
PRIVATE ROOM 702 BATH RECEPTACLES	500	20/1	7	1,000			8	20/1	500	LARGE ROOM 802 BATH RECEPTACLES
PRIVATE ROOM 703 RECEPTACLES	360	20/1	9		1,440		10	20/1	1,080	LARGE ROOM 803 RECEPTACLES
PRIVATE ROOM 703 BATH RECEPTACLES	500	20/1	11			1,000	12	20/1	500	LARGE ROOM 803 BATH RECEPTACLES
PRIVATE ROOM 704 RECEPTACLES	360	20/1	13	1,440			14	20/1	1,080	LARGE ROOM 804 RECEPTACLES
PRIVATE ROOM 704 BATH RECEPTACLES	500	20/1	15		1,000		16	20/1	500	LARGE ROOM 804 BATH RECEPTACLES
PRIVATE ROOM 705 RECEPTACLES	360	20/1	17			1,440	18	20/1	1,080	LARGE ROOM 805 RECEPTACLES
PRIVATE ROOM 705 BATH RECEPTACLES	500	20/1	19	1,000			20	20/1	500	LARGE ROOM 805 BATH RECEPTACLES
PRIVATE ROOM 706 RECEPTACLES	360	20/1	21		1,440		22	20/1	1,080	LARGE ROOM 806 RECEPTACLES
PRIVATE ROOM 706 BATH RECEPTACLES	500	20/1	23			1,000	24	20/1	500	LARGE ROOM 806 BATH RECEPTACLES
PRIVATE ROOM 707 RECEPTACLES	360	20/1	25	1,440			26	20/1	1,080	LARGE ROOM 807 RECEPTACLES
PRIVATE ROOM 707 BATH RECEPTACLES	500	20/1	27		1,000		28	20/1	500	LARGE ROOM 807 BATH RECEPTACLES
PRIVATE ROOM 708 RECEPTACLES	360	20/1	29			1,440	30	20/1	1,080	LARGE ROOM 808 RECEPTACLES
PRIVATE ROOM 708 BATH RECEPTACLES	500	20/1	31	1,000			32	20/1	500	LARGE ROOM 808 BATH RECEPTACLES
PRIVATE ROOM 709 RECEPTACLES	360	20/1	33		1,440		34	20/1	1,080	LARGE ROOM 809 RECEPTACLES
PRIVATE ROOM 709 BATH RECEPTACLES	500	20/1	35			1,000	36	20/1	500	LARGE ROOM 809 BATH RECEPTACLES
PRIVATE ROOM 710 RECEPTACLES	360	20/1	37	1,440			38	20/1	1,080	LARGE ROOM 810 RECEPTACLES
PRIVATE ROOM 710 BATH RECEPTACLES	500	20/1	39		1,000		40	20/1	500	LARGE ROOM 810 BATH RECEPTACLES
PRIVATE ROOM 711 RECEPTACLES	360	20/1	41			1,440	42	20/1	1,080	LARGE ROOM 811 RECEPTACLES
PRIVATE ROOM 711 BATH RECEPTACLES	500	20/1	43	1,000			44	20/1	500	LARGE ROOM 811 BATH RECEPTACLES
PRIVATE ROOM 712 RECEPTACLES	360	20/1	45		1,440		46	20/1	1,080	LARGE ROOM 812 RECEPTACLES
PRIVATE ROOM 712 BATH RECEPTACLES	500	20/1	47			1,000	48	20/1	500	LARGE ROOM 812 BATH RECEPTACLES
BEDROOM LIGHTING: 807-812	882	20/1	49	1,764			50	20/1	882	BEDROOM LIGHTING: 701-706
SPARE		20/1	51		882		52	20/1	882	BEDROOM LIGHTING: 707-712
SPARE		20/1	53			882	54	20/1	882	BEDROOM LIGHTING: 801-806

	11,524	10,642	10,642	TTL PHASE VA	100 A. BUS (COPPER, UNO)
	96	89	89	TTL PHASE AMPS	100 A. MAIN LUGS AND/OR FEEDER RATING
	35%	32%	32%	PHASE BALANCE	25 KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	29,280			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		19,280	0.50	9,640
LIGHTING		3,528	1.25	4,410
MISCELLANEOUS EQUIPMENT			1.00	
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		32,808		
TOTAL DEMAND (VA)				24,050
TOTAL DEMAND (AMPERES)				66.8
PANEL DEMAND LOADING VS RATING		66.8%		

PANEL ND

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
HP01	1,739	30/3	1	5,966			2	45/3	4,227	AH01 AUX HEAT
|	1,739	|	3		5,966		4	|	4,227	|
|	1,739	|	5			5,966	6	|	4,227	|
HP05	1,739	30/3	7	5,966			8	45/3	4,227	AH05 AUX HEAT
|	1,739	|	9		5,966		10	|	4,227	|
|	1,739	|	11			5,966	12	|	4,227	|
HP11	2,190	35/3	13	4,270			14	25/2	2,080	AH21 AUX HEAT
|	2,190	|	15		4,270		16	|	2,080	|
|	2,190	|	17			5,352	18	40/2	3,162	AH23 AUX HEAT
HP21	998	20/2	19	4,160			20	|	3,162	|
|	998	|	21		1,664		22	15/2	666	AH01
HP23	998	20/2	23			1,664	24	|	666	|
|	998	|	25	1,664			26	15/2	666	AH05
HP25	998	20/2	27		1,664		28	|	666	|
|	998	|	29			1,747	30	15/2	749	AH11
ER01	520	15/2	31	1,269			32	|	749	|
|	520	|	33		770		34	15/2	250	AH25
ER02	520	15/2	35			770	36	|	250	|
|	520	|	37	3,682			38	40/2	3,162	AH25 AUX HEAT
ER09	728	20/2	39		3,890		40	|	3,162	|
|	728	|	41			1,456	42	20/2	728	ER15
SPARE		20/1	43	728			44	|	728	|
SPARE		20/1	45				46	20/1		SPARE
SPARE		20/1	47			250	48	15/2	250	AH21
AH11 AUX HEAT	4,323	45/3	49	4,573			50	|	250	|
|	4,323	|	51		4,573		52	15/2	250	AH23
|	4,323	|	53			4,573	54	|	250	|
PANEL ND2	6,343	100/3	55	17,867			56	100/3	11,524	PANEL ND3
|	8,465	|	57		19,107		58	|	10,642	|
|	7,820	|	59			18,462	60	|	10,642	|

	50,145	47,870	46,206	TTL PHASE VA	600 A. BUS (COPPER, UNO)
	418	399	385	TTL PHASE AMPS	500 A. MAIN LUGS AND/OR FEEDER RATING
	35%	33%	32%	PHASE BALANCE	25 KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	49,640			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		39,640	0.50	19,820
LIGHTING		5,130	1.25	6,413
MISCELLANEOUS EQUIPMENT		500	1.00	500
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR		6,571	1.25	8,214
HVAC EQUIPMENT (FLA = MCA X 0.8)		82,380	1.00	82,380
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		144,221		
TOTAL DEMAND (VA)				127,327
TOTAL DEMAND (AMPERES)				353.4
PANEL DEMAND LOADING VS RATING		70.7%		

PANEL ND2

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
RCP: NURSE STATION 29	360	20/1	1	540			2	20/1	180	EXTERIOR RCP: CORRIDOR 125
RCP: NURSE STATION 29	360	20/1	3		1,080		4	20/1	720	RCPS: CORRIDOR 125
RCPS: UNIT MANAGER 25	900	20/1	5			1,080	6	20/1	180	EXTERIOR RCP: CORRIDOR 225
RCPS: OFFICE 11	900	20/1	7	1,620			8	20/1	720	RCPS: CORRIDOR 225
RCPS: OFFICE 12	900	20/1	9		1,620		10	20/1	720	RCPS: S.U./S.L. 19 & C.U./C.L. 20
RCPS: OFFICE 15	900	20/1	11			1,620	12	20/1	720	RCPS: SUPLY. STO. 22 & WHL./ CHR. 21
RCPS: OFFICE 16	900	20/1	13	1,980			14	20/1	1,080	RCPS: LIVING AREA 23
RCPS: A.D.O.N. OFFICE 17	900	20/1	15		1,440		16	20/1	540	RCPS: RESTROOMS LOBBY 5, 6
RCPS: HALL 14 & CORRIDOR 73	900	20/1	17			2,180	18	20/1	1,280	RCPS: WORK 7
RCPS: NHA OFF 4	900	20/1	19	1,400			20	20/1	500	EWC: CORR 72
RCPS: ADMIS OFF 3	900	20/1	21		1,620		22	20/1	720	RCPS: CORRIDOR 720
RCPS: RECEPT 8	900	20/1	23			1,980	24	20/1	1,080	RCPS: EXEC CONF ROOM 36
EXTERIOR RCP: HP01, 05, 06, 21, 23	180	20/1	25	720			26	20/1	540	RCPS: EXEC CONF ROOM 36
RCPS: ATTIC	900	20/1	27		1,800		28	20/1	900	RCPS: PHYSICAL THER 37
LIGHTING: LIVING AREA 23	500	20/1	29			680	30	20/1	180	EXTERIOR RCP: HP11, 25
SPARE		20/1	31	83			32	20/2	83	DAH01
LIGHTING: CORRIDORS 125,225	822	20/1	33		905		34	|	83	|
LIGHTING: PORCH VIA PHOTOCELL	280	20/1	35			280	36	20/1		SPARE
SPARE		20/1	37				38	20/1		SPARE
SPARE		20/1	39				40	20/1		SPARE
SPARE		20/1	41				42	20/1		SPARE
SPARE		20/1	43				44	20/1		SPARE
SPARE		20/1	45				46	20/1		SPARE
SPARE		20/1	47				48	20/1		SPARE
SPARE		20/1	49				50	20/1		SPARE
SPARE		20/1	51				52	20/1		SPARE
SPARE		20/1	53				54	20/1		SPARE

	6,343	8,465	7,820	TTL PHASE VA	100 A. BUS (COPPER, UNO)
	53	71	65	TTL PHASE AMPS	100 A. MAIN LUGS AND/OR FEEDER RATING
	28%	37%	35%	PHASE BALANCE	22 KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	20,360			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		10,360	0.50	5,180
LIGHTING		1,602	1.25	2,003
MISCELLANEOUS EQUIPMENT		500	1.00	500
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		166	1.00	166
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		22,628		
TOTAL DEMAND (VA)				17,849
TOTAL DEMAND (AMPERES)				49.5
PANEL DEMAND LOADING VS RATING		49.5%		

PANEL ND3

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
LARGE BEDROOM 101 RECEPTACLES	1,080	20/1	1	1,440			2	20/1	360	PRIVATE BEDROOM 201 RECEPTACLES
LARGE BEDROOM 101 BATH RECEPTACLES	500	20/1	3		1,000		4	20/1	500	PRIVATE BEDROOM 201 BATH RECEPTACLES
LARGE BEDROOM 102 RECEPTACLES	1,080	20/1	5			1,440	6	20/1	360	PRIVATE BEDROOM 202 RECEPTACLES
LARGE BEDROOM 102 BATH RECEPTACLES	500	20/1	7	1,000			8	20/1	500	PRIVATE BEDROOM 202 BATH RECEPTACLES
LARGE BEDROOM 103 RECEPTACLES	1,080	20/1	9		1,440		10	20/1	360	PRIVATE BEDROOM 203 RECEPTACLES
LARGE BEDROOM 103 BATH RECEPTACLES	500	20/1	11			1,000	12	20/1	500	PRIVATE BEDROOM 203 BATH RECEPTACLES
LARGE BEDROOM 104 RECEPTACLES	1,080	20/1	13	1,440			14	20/1	360	PRIVATE BEDROOM 204 RECEPTACLES
LARGE BEDROOM 104 BATH RECEPTACLES	500	20/1	15		1,000		16	20/1	500	PRIVATE BEDROOM 204 BATH RECEPTACLES
LARGE BEDROOM 105 RECEPTACLES	1,080	20/1	17			1,440	18	20/1	360	PRIVATE BEDROOM 205 RECEPTACLES
LARGE BEDROOM 105 BATH RECEPTACLES	500	20/1	19	1,000			20	20/1	500	PRIVATE BEDROOM 205 BATH RECEPTACLES
LARGE BEDROOM 106 RECEPTACLES	1,080	20/1	21		1,440		22	20/1	360	PRIVATE BEDROOM 206 RECEPTACLES
LARGE BEDROOM 106 BATH RECEPTACLES	500	20/1	23			1,000	24	20/1	500	PRIVATE BEDROOM 206 BATH RECEPTACLES
LARGE BEDROOM 107 RECEPTACLES	1,080

NOTE: ARRANGE PANELBOARD BRANCH CIRCUIT BREAKERS AS SHOWN ON THE BELOW SCHEDULES. AGREEMENT OF CIRCUIT BREAKER (POLE) NUMBERS WITH THE PANEL SCHEDULES AND ELECTRICAL FLOOR PLANS IS REQUIRED IN ORDER TO AVOID CONFUSION DURING CONSTRUCTION, REDRAWING THE CIRCUITRY FOR RECORD DRAWING PURPOSES AND ACCURATE DOCUMENTATION OF THE AS-BUILT CONDITIONS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL DUNCAN McFARLAND

NOT FINAL; SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PANEL CA

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PRIVATE ROOM 301 HEADBOARD RECEPTACLES	360	20/1	1	720			2	20/1	360	PRIVATE ROOM 302 HEADBOARD RECEPTACLES
PRIVATE ROOM 301 BED RECEPTACLE	180	20/1	3		360		4	20/1	180	PRIVATE ROOM 302 BED RECEPTACLE
PRIVATE ROOM 303 HEADBOARD RECEPTACLES	360	20/1	5			720	6	20/1	360	PRIVATE ROOM 304 HEADBOARD RECEPTACLES
PRIVATE ROOM 303 BED RECEPTACLE	180	20/1	7	360			8	20/1	180	PRIVATE ROOM 304 BED RECEPTACLE
DOUBLE ROOM 305 HEADBOARD RECEPTACLES	360	20/1	9		720		10	20/1	360	DOUBLE ROOM 306 HEADBOARD RECEPTACLES
DOUBLE ROOM 305 BED 1 RECEPTACLE	180	20/1	11			360	12	20/1	180	DOUBLE ROOM 306 BED 1 RECEPTACLE
SPARE		20/1	13				14	20/1		SPARE
DOUBLE ROOM 305 BED 2 RECETPACLE	180	20/1	15		360		16	20/1	180	DOUBLE ROOM 306 BED 2 RECEPTACLE
DOUBLE ROOM 307 HEADBOARD RECEPTACLES	360	20/1	17			720	18	20/1	360	DOUBLE ROOM 308 HEADBOARD RECEPTACLES
DOUBLE ROOM 307 BED 1 RECEPTACLE	180	20/1	19	360			20	20/1	180	DOUBLE ROOM 308 BED 1 RECEPTACLE
SPARE		20/1	21				22	20/1		SPARE
DOUBLE ROOM 307 BED 2 RECETPACLE	180	20/1	23			360	24	20/1	180	DOUBLE ROOM 308 BED 2 RECEPTACLE
PRIVATE ROOM 309 HEADBOARD RECEPTACLES	360	20/1	25	720			26	20/1	360	PRIVATE ROOM 310 HEADBOARD RECEPTACLES
PRIVATE ROOM 309 BED RECEPTACLE	180	20/1	27		360		28	20/1	180	PRIVATE ROOM 310 BED RECEPTACLE
PRIVATE ROOM 311 HEADBOARD RECEPTACLES	360	20/1	29			720	30	20/1	360	PRIVATE ROOM 312 HEADBOARD RECEPTACLES
PRIVATE ROOM 311 BED RECEPTACLE	180	20/1	31	360			32	20/1	180	PRIVATE ROOM 312 BED RECEPTACLE
LIGHTING: 31-34, 24-28, 36	1,736	20/1	33		2,360		34	20/1	624	BEDROOM LIGHTING: 301-306
RCPS: MED PREP 28	720	20/1	35			1,344	36	20/1	624	BEDROOM LIGHTING: 307-312
NURSE CALL: IT 24	200	20/1	37	870			38	20/1	670	BEDROOM LIGHTING: 401-405
NURSE CALL: IT 24	200	20/1	39		870		40	20/1	670	BEDROOM LIGHTING: 406-410
SPARE		20/1	41				42	20/1		SPARE
IT EQUIP 24	360	20/1	43	360			44	20/1		SPARE
IT EQUIP 24	360	20/1	45		360		46	20/1		SPARE
IT EQUIP 24	360	20/1	47			360	48	20/1		SPARE
IT EQUIP 24	360	20/1	49	2,880			50	60/3	2,520	PANEL CA2
SPARE		20/1	51		2,880		52	|	2,880	|
SPARE		20/1	53			1,800	54	|	1,800	|
				6,630	8,270	6,384	TTL PHASE VA		100	A. BUS (COPPER, UNO)
				55	69	53	TTL PHASE AMPS		100	A. MAIN LUGS AND/OR FEEDER RATING
				31%	39%	30%	PHASE BALANCE		10	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	16,560			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		6,560	0.50	3,280
LIGHTING		4,324	1.25	5,405
MISCELLANEOUS EQUIPMENT		400	1.00	400
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		21,284		
TOTAL DEMAND (VA)				19,085
TOTAL DEMAND (AMPERES)				53.0
PANEL DEMAND LOADING VS RATING		53.0%		

PANEL CA2

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
DOUBLE ROOM 401 HEADBOARD RECEPTACLES	360	20/1	1	720			2	20/1	360	DOUBLE ROOM 406 HEADBOARD RECEPTACLES
DOUBLE ROOM 401 BED 1 RECEPTACLE	180	20/1	3		360		4	20/1	180	DOUBLE ROOM 406 BED 1 RECEPTACLE
SPARE		20/1	5				6	20/1		SPARE
DOUBLE ROOM 401 BED 2 RECEPTACLE	180	20/1	7	360			8	20/1	180	DOUBLE ROOM 406 BED 2 RECEPTACLE
DOUBLE ROOM 402 HEADBOARD RECEPTACLES	360	20/1	9		720		10	20/1	360	DOUBLE ROOM 407 HEADBOARD RECEPTACLES
DOUBLE ROOM 402 BED 1 RECEPTACLE	180	20/1	11			360	12	20/1	180	DOUBLE ROOM 407 BED 1 RECEPTACLE
SPARE		20/1	13				14	20/1		SPARE
DOUBLE ROOM 402 BED 2 RECEPTACLE	180	20/1	15		360		16	20/1	180	DOUBLE ROOM 407 BED 2 RECEPTACLE
DOUBLE ROOM 403 HEADBOARD RECEPTACLES	360	20/1	17			720	18	20/1	360	DOUBLE ROOM 408 HEADBOARD RECEPTACLES
DOUBLE ROOM 403 BED 1 RECEPTACLE	180	20/1	19	360			20	20/1	180	DOUBLE ROOM 408 BED 1 RECEPTACLE
SPARE		20/1	21				22	20/1		SPARE
DOUBLE ROOM 403 BED 2 RECEPTACLE	180	20/1	23			360	24	20/1	180	DOUBLE ROOM 408 BED 2 RECEPTACLE
DOUBLE ROOM 404 HEADBOARD RECEPTACLES	360	20/1	25	720			26	20/1	360	DOUBLE ROOM 409 HEADBOARD RECEPTACLES
DOUBLE ROOM 404 BED 1 RECEPTACLE	180	20/1	27		360		28	20/1	180	DOUBLE ROOM 409 BED 1 RECEPTACLE
SPARE		20/1	29				30	20/1		SPARE
DOUBLE ROOM 404 BED 2 RECEPTACLE	180	20/1	31	360			32	20/1	180	DOUBLE ROOM 409 BED 2 RECEPTACLE
DOUBLE ROOM 405 HEADBOARD RECEPTACLES	360	20/1	33		720		34	20/1	360	DOUBLE ROOM 410 HEADBOARD RECEPTACLES
DOUBLE ROOM 405 BED 1 RECEPTACLE	180	20/1	35			360	36	20/1	180	DOUBLE ROOM 410 BED 1 RECEPTACLE
SPARE		20/1	37				38	20/1		SPARE
DOUBLE ROOM 405 BED 2 RECEPTACLE	180	20/1	39		360		40	20/1	180	DOUBLE ROOM 410 BED 2 RECEPTACLE
SPARE		20/1	41				42	20/1		SPARE
SPARE		20/1	43				44	20/1		SPARE
SPARE		20/1	45				46	20/1		SPARE
SPARE		20/1	47				48	20/1		SPARE
SPARE		20/1	49				50	20/1		SPARE
SPARE		20/1	51				52	20/1		SPARE
SPARE		20/1	53				54	20/1		SPARE
				2,520	2,880	1,800	TTL PHASE VA		60	A. BUS (COPPER, UNO)
				21	24	15	TTL PHASE AMPS		60	A. MAIN LUGS AND/OR FEEDER RATING
				35%	40%	25%	PHASE BALANCE		10	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	7,200			
RECEPTACLES FIRST 10 KVA		7,200	1.00	7,200
RECEPTACLES > 10 KVA			0.50	
LIGHTING			1.25	
MISCELLANEOUS EQUIPMENT			1.00	
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		7,200		
TOTAL DEMAND (VA)				7,200
TOTAL DEMAND (AMPERES)				20.0
PANEL DEMAND LOADING VS RATING		33.3%		

PANEL CC

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PRIVATE ROOM 701 HEADBOARD RECEPTACLES	360	20/1	1	720			2	20/1	360	LARGE ROOM 801 HEADBOARD RECEPTACLES
PRIVATE ROOM 701 BED RECEPTACLE	180	20/1	3		360		4	20/1	180	LARGE ROOM 801 BED RECEPTACLE
PRIVATE ROOM 702 HEADBOARD RECEPTACLES	360	20/1	5			720	6	20/1	360	LARGE ROOM 802 HEADBOARD RECEPTACLES
PRIVATE ROOM 702 BED RECEPTACLE	180	20/1	7	360			8	20/1	180	LARGE ROOM 802 BED RECEPTACLE
PRIVATE ROOM 703 HEADBOARD RECEPTACLES	360	20/1	9		720		10	20/1	360	LARGE ROOM 803 HEADBOARD RECEPTACLES
PRIVATE ROOM 703 BED RECEPTACLE	180	20/1	11			360	12	20/1	180	LARGE ROOM 803 BED RECEPTACLE
PRIVATE ROOM 704 HEADBOARD RECEPTACLES	360	20/1	13	720			14	20/1	360	LARGE ROOM 804 HEADBOARD RECEPTACLES
PRIVATE ROOM 704 BED RECEPTACLE	180	20/1	15		360		16	20/1	180	LARGE ROOM 804 BED RECEPTACLE
PRIVATE ROOM 705 HEADBOARD RECEPTACLES	360	20/1	17			720	18	20/1	360	LARGE ROOM 805 HEADBOARD RECEPTACLES
PRIVATE ROOM 705 BED RECEPTACLE	180	20/1	19	360			20	20/1	180	LARGE ROOM 805 BED RECEPTACLE
PRIVATE ROOM 706 HEADBOARD RECEPTACLES	360	20/1	21		720		22	20/1	360	LARGE ROOM 806 HEADBOARD RECEPTACLES
PRIVATE ROOM 706 BED RECEPTACLE	180	20/1	23			360	24	20/1	180	LARGE ROOM 806 BED RECEPTACLE
PRIVATE ROOM 707 HEADBOARD RECEPTACLES	360	20/1	25	720			26	20/1	360	LARGE ROOM 807 HEADBOARD RECEPTACLES
PRIVATE ROOM 707 BED RECEPTACLE	180	20/1	27		360		28	20/1	180	LARGE ROOM 807 BED RECEPTACLE
PRIVATE ROOM 708 HEADBOARD RECEPTACLES	360	20/1	29			720	30	20/1	360	LARGE ROOM 808 HEADBOARD RECEPTACLES
PRIVATE ROOM 708 BED RECEPTACLE	180	20/1	31	360			32	20/1	180	LARGE ROOM 808 BED RECEPTACLE
PRIVATE ROOM 709 HEADBOARD RECEPTACLES	360	20/1	33		720		34	20/1	360	LARGE ROOM 809 HEADBOARD RECEPTACLES
PRIVATE ROOM 709 BED RECEPTACLE	180	20/1	35			360	36	20/1	180	LARGE ROOM 809 BED RECEPTACLE
PRIVATE ROOM 710 HEADBOARD RECEPTACLES	360	20/1	37	720			38	20/1	360	LARGE ROOM 810 HEADBOARD RECEPTACLES
PRIVATE ROOM 710 BED RECEPTACLE	180	20/1	39		360		40	20/1	180	LARGE ROOM 810 BED RECEPTACLE
PRIVATE ROOM 711 HEADBOARD RECEPTACLES	360	20/1	41			720	42	20/1	360	LARGE ROOM 811 HEADBOARD RECEPTACLES
PRIVATE ROOM 711 BED RECEPTACLE	180	20/1	43	360			44	20/1	180	LARGE ROOM 811 BED RECEPTACLE
PRIVATE ROOM 712 HEADBOARD RECEPTACLES	360	20/1	45		720		46	20/1	360	LARGE ROOM 812 HEADBOARD RECEPTACLES
PRIVATE ROOM 712 BED RECEPTACLE	180	20/1	47			360	48	20/1	180	LARGE ROOM 812 BED RECEPTACLE
LIGHTING: 63-71	1,236	20/1	49	1,770			50	20/1	534	BEDROM LIGHTING: 701-706
TELECOM RACK: IT 50	2,496	30/2	51		3,030		52	20/1	534	BEDROOM LIGHTING: 707-712
|	2,496	|	53			3,396	54	20/1	900	BEDROOM LIGHTING: 801-806
SPARE		20/1	55	900			56	20/1	900	BEDROOM LIGHTING: 807-812
SPARE		20/1	57		360		58	20/1	360	RCPS: RETURN THER 37G
SPARE		20/1	59				60	20/1		SPARE
SPARE		20/1	61				62	20/1		SPARE
SPARE		20/1	63				64	20/1		SPARE
SPARE		20/1	65				66	20/1		SPARE
				6,990	7,710	7,716	TTL PHASE VA		100	A. BUS (COPPER, UNO)
				58	64	64	TTL PHASE AMPS		100	A. MAIN LUGS AND/OR FEEDER RATING
				31%	34%	34%	PHASE BALANCE		10	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	13,320			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		3,320	0.50	1,660
LIGHTING		4,104	1.25	5,130
MISCELLANEOUS EQUIPMENT		4,992	1.00	4,992
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		22,416		
TOTAL DEMAND (VA)				21,782
TOTAL DEMAND (AMPERES)				60.5
PANEL DEMAND LOADING VS RATING		60.5%		

PANEL CB

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
DOUBLE ROOM 501 HEADBOARD RECEPTACLES	360	20/1	1	720			2	20/1	360	DOUBLE ROOM 506 HEADBOARD RECEPTACLES
DOUBLE ROOM 501 BED 1 RECEPTACLE	180	20/1	3		360		4	20/1	180	DOUBLE ROOM 506 BED 1 RECEPTACLE
SPARE		20/1	5				6	20/1		SPARE
DOUBLE ROOM 501 BED 2 RECEPTACLE	180	20/1	7	360			8	20/1	180	DOUBLE ROOM 506 BED 2 RECEPTACLE
DOUBLE ROOM 502 HEADBOARD RECEPTACLES	360	20/1	9		720		10	20/1	360	DOUBLE ROOM 507 HEADBOARD RECEPTACLES
DOUBLE ROOM 502 BED 1 RECEPTACLE	180	20/1	11			360	12	20/1	180	DOUBLE ROOM 507 BED 1 RECEPTACLE
SPARE		20/1	13				14	20/1		SPARE
DOUBLE ROOM 502 BED 2 RECEPTACLE	180	20/1	15		360		16	20/1	180	DOUBLE ROOM 507 BED 2 RECEPTACLE
DOUBLE ROOM 503 HEADBOARD RECEPTACLES	360	20/1	17			720	18	20/1	360	DOUBLE ROOM 508 HEADBOARD RECEPTACLES
DOUBLE ROOM 503 BED 1 RECEPTACLE	180	20/1	19	360			20	20/1	180	DOUBLE ROOM 508 BED 1 RECEPTACLE
SPARE		20/1	21				22	20/1		SPARE
DOUBLE ROOM 503 BED 2 RECEPTACLE	180	20/1	23			360	24	20/1	180	DOUBLE ROOM 508 BED 2 RECEPTACLE
DOUBLE ROOM 504 HEADBOARD RECEPTACLES	360	20/1	25	720			26	20/1	360	DOUBLE ROOM 509 HEADBOARD RECEPTACLES
DOUBLE ROOM 504 BED 1 RECEPTACLE	180	20/1	27		360		28	20/1	180	DOUBLE ROOM 509 BED 1 RECEPTACLE
SPARE		20/1	29				30	20/1		SPARE
DOUBLE ROOM 504 BED 2 RECEPTACLE	180	20/1	31	360			32	20/1	180	DOUBLE ROOM 509 BED 2 RECEPTACLE
DOUBLE ROOM 505 HEADBOARD RECEPTACLES	360	20/1	33		720		34	20/1	360	DOUBLE ROOM 510 HEADBOARD RECEPTACLES
DOUBLE ROOM 505 BED 1 RECEPTACLE	180	20/1	35			360	36	20/1	180	DOUBLE ROOM 510 BED 1 RECEPTACLE
IT EQUIP 50	360	20/1	37	360			38	20/1		SPARE
DOUBLE ROOM 505 BED 2 RECEPTACLE	180	20/1	39		360		40	20/1	180	DOUBLE ROOM 510 BED 2 RECEPTACLE
RCPS: MED PREP 52	720	20/1	41			1,390	42	20/1	670	BEDROOM LIGHTING: 501-505
IT EQUIP 50	360	20/1	43	1,030			44	20/1	670	BEDROOM LIGHTING: 506-510
IT EQUIP 50	360	20/1	45		984		46	20/1	624	BEDROOM LIGHTING: 601-606
IT EQUIP 50	360	20/1	47			984	48	20/1	624	BEDROOM LIGHTING: 607-612
LIGHTING: NURSES' STATION 54	590	20/1	49	950			50	20/1	360	IT EQUIP 38
NURSE CALL: IT 50	200	20/1	51		560		52	20/1	360	IT EQUIP 38
NURSE CALL: IT 50	200	20/1	53			560	54	20/1	360	IT EQUIP 38
PANEL CB2	2,520	60/3	55	2,720			56	20/1	200	NURSE CALL: IT 38
|	3,062	|	57		5,558		58	30/2	2,496	TELECOM RACK: IT 38
|	3,530	|	59			6,026	60	|	2,496	|
				7,580	9,982	10,760	TTL PHASE VA		100	A. BUS (COPPER, UNO)
				63	83	90	TTL PHASE AMPS		100	A. MAIN LUGS AND/OR FEEDER RATING
				27%	35%	38%	PHASE BALANCE		10	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	17,840			
RECEPTACLES FIRST 10 KVA		10,000	1.00	10,000
RECEPTACLES > 10 KVA		7,840	0.50	3,920
LIGHTING		5,090	1.25	6,363
MISCELLANEOUS EQUIPMENT		5,392	1.00	5,392
OTHER EQUIPMENT (CONTINUOUS)			1.25	
LARGEST MOTOR			1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)			1.00	
KITCHEN EQUIPMENT			1.00	
TOTAL CONNECTED (VA)		28,322		
TOTAL DEMAND (VA)				25,675
TOTAL DEMAND (AMPERES)				71.3
PANEL DEMAND LOADING VS RATING		71.3%		

PANEL CB2

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PRIVATE ROOM 601 HEADBOARD RECEPTACLES	360	20/1	1	720			2	20/1	360	PRIVATE ROOM 602 HEADBOARD RECEPTACLES
PRIVATE ROOM 601 BED RECEPTACLE	180	20/1	3		360		4	20/1	180	PRIVATE ROOM 602 BED RECEPTACLE
PRIVATE ROOM 603 HEADBOARD RECEPTACLES	360	20/1	5			720	6	20/1	360	PRIVATE ROOM 604 HEADBOARD RECEPTACLES
PRIVATE ROOM 603 BED RECEPTACLE	180	20/1	7	360			8	20/1	180	PRIVATE ROOM 604 BED RECEPTACLE
DOUBLE ROOM 605 HEADBOARD RECEPTACLES	360	20/1	9		720		10	20/1	360	DOUBLE ROOM 606 HEADBOARD RECEPTACLES
DOUBLE ROOM 605 BED 1 RECEPTACLE	180	20/1	11			360	12	20/1	180	DOUBLE ROOM 606 BED 1 RECEPTACLE
SPARE		20/1	13				14	20/1		SPARE
DOUBLE ROOM 605 BED 2 RECEPTACLE	180	20/1	15		360		16	20/1	180	DOUBLE ROOM 606 BED 2 RECEPTACLE
DOUBLE ROOM 607 HEADBOARD RECEPTACLES	360	20/1	17			720	18	20/1	360	DOUBLE ROOM 608 HEADBOARD RECEPTACLES
DOUBLE ROOM 607 BED 1 RECEPTACLE	180	20/1	19	360			20	20/1	180	DOUBLE ROOM 608 BED 1 RECEPTACLE
SPARE		20/1	21				22	20/1		SPARE
DOUBLE ROOM 607 BED 2 RECEPTACLE	180	20/1	23			360	24	20/1	180	DOUBLE ROOM 608 BED 2 RECEPTACLE
PRIVATE ROOM 609 HEADBOARD RECEPTACLES	360	20/1	25	720			26	20/1	360	PRIVATE ROOM 610 HEADBOARD RECEPTACLES
PRIVATE ROOM 609 BED RECEPTACLE	180	20/1	27		360		28	20/1	180	PRIVATE ROOM 610 BED RECEPTACLE
PRIVATE ROOM 611 HEADBOARD RECEPTACLES	360	20/1	29			720	30	20/1	360	PRIVATE ROOM 612 HEADBOARD RECEPTACLES
PRIVATE ROOM 611 BED RECEPTACLE	180	20/1	31	360			32	20/1	180	PRIVATE ROOM 612 BED RECEPTACLE
LIGHTING: 37D,E,F;38;50-56	1,262	20/1	33		1,262		34	20/1		SPARE
LIGHTING: 57-60	650	20/1	35			650	36	20/1		SPARE
SPARE		20/1	37				38	20/1		SPARE
SPARE		20/1	39				40	20/1		SPARE
SPARE		20/1	41				42	20/1		SPARE
				2,520	3,062	3,530	TTL PHASE VA		60	A. BUS (COPPER, UNO)
				21	26	29	TTL PHASE AMPS		60	A. MAIN LUGS AND/OR FEEDER RATING
				28%	34%	39%	PHASE BALANCE		10	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:		CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	7,200			
RECEPTACLES FIRST

NOTE: ARRANGE PANELBOARD BRANCH CIRCUIT BREAKERS AS SHOWN ON THE BELOW SCHEDULES. AGREEMENT OF CIRCUIT BREAKER (POLE) NUMBERS WITH THE PANEL SCHEDULES AND ELECTRICAL FLOOR PLANS IS REQUIRED IN ORDER TO AVOID CONFUSION DURING CONSTRUCTION, REDRAWING THE CIRCUITRY FOR RECORD DRAWING PURPOSES AND ACCURATE DOCUMENTATION OF THE AS-BUILT CONDITIONS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL; SUBJECT TO REVISION; NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION; PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS

PANEL EHA

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PTHP01: ROOM 301	1,248	15/2	1	2,496			2	15/2	1,248	PTHP01: ROOM 302
	1,248		3		2,496		4		1,248	
PTHP01: ROOM 303	1,248	15/2	5			2,496	6	15/2	1,248	PTHP01: ROOM 304
	1,248		7	2,496			8		1,248	
PTHP01: ROOM 305	1,248	15/2	9		2,496		10	15/2	1,248	PTHP01: ROOM 306
	1,248		11			2,496	12		1,248	
PTHP01: ROOM 307	1,248	15/2	13	2,496			14	15/2	1,248	PTHP01: ROOM 308
	1,248		15		2,496		16		1,248	
PTHP01: ROOM 309	1,248	15/2	17			2,496	18	15/2	1,248	PTHP01: ROOM 310
	1,248		19	2,496			20		1,248	
PTHP01: ROOM 311	1,248	15/2	21		2,496		22	15/2	1,248	PTHP01: ROOM 312
	1,248		23			2,496	24		1,248	
PTHP01: ROOM 401	1,248	15/2	25	2,496			26	15/2	1,248	PTHP01: ROOM 402
	1,248		27		2,496		28		1,248	
PTHP01: ROOM 403	1,248	15/2	29			2,496	30	15/2	1,248	PTHP01: ROOM 404
	1,248		31	2,496			32		1,248	
PTHP01: ROOM 405	1,248	15/2	33		2,496		34	15/2	1,248	PTHP01: ROOM 406
	1,248		35			2,496	36		1,248	
PTHP01: ROOM 407	1,248	15/2	37	2,496			38	15/2	1,248	PTHP01: ROOM 408
	1,248		39		2,496		40		1,248	
PTHP01: ROOM 409	1,248	15/2	41			2,496	42	15/2	1,248	PTHP01: ROOM 410
	1,248		43	2,496			44		1,248	
SPARE		20/1	45				46	20/1		SPARE
ER11	520	15/2	47			1,040	48	15/2	520	ER12
	520		49	1,040			50		520	
AH07	666	15/2	51		1,331		52	15/2	666	AH08
	666		53			1,331	54		666	
AH07 AUX HEAT	3,074	35/3	55	7,302			56	45/3	4,227	AH08 AUX HEAT
	3,074		57		7,302		58		4,227	
	3,074		59			7,302	60		4,227	
HP07	1,739	30/3	61	3,478			62	30/3	1,739	HP08
	1,739		63		3,478		64		1,739	
	1,739		65			3,478	66		1,739	
SPARE		20/1	67				68	20/1		SPARE
SPARE		20/1	69				70	20/1		SPARE
SPARE		20/1	71				72	20/1		SPARE

31,787	29,583	30,623	TTL PHASE VA	400	A. BUS (COPPER, UNO)
265	247	255	TTL PHASE AMPS	400	A. MAIN LUGS AND/OR FEEDER RATING
35%	32%	33%	PHASE BALANCE	30	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =			
RECEPTACLES FIRST 10 KVA		1.00	
RECEPTACLES > 10 KVA		0.50	
LIGHTING		1.25	
MISCELLANEOUS EQUIPMENT		1.00	
OTHER EQUIPMENT (CONTINUOUS)		1.25	
LARGEST MOTOR	5,217	1.25	6,521
HVAC EQUIPMENT (FLA = MCA X 0.8)	86,776	1.00	86,776
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	91,993		
TOTAL DEMAND (VA)			93,297
TOTAL DEMAND (AMPERES)			259.0
PANEL DEMAND LOADING VS RATING	64.7%		

PANEL EHB

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PTHP01: ROOM 501	1,248	15/2	1	2,496			2	15/2	1,248	PTHP01: ROOM 502
	1,248		3		2,496		4		1,248	
PTHP01: ROOM 503	1,248	15/2	5			2,496	6	15/2	1,248	PTHP01: ROOM 504
	1,248		7	2,496			8		1,248	
PTHP01: ROOM 505	1,248	15/2	9		2,496		10	15/2	1,248	PTHP01: ROOM 506
	1,248		11			2,496	12		1,248	
PTHP01: ROOM 507	1,248	15/2	13	2,496			14	15/2	1,248	PTHP01: ROOM 508
	1,248		15		2,496		16		1,248	
PTHP01: ROOM 509	1,248	15/2	17			2,496	18	15/2	1,248	PTHP01: ROOM 510
	1,248		19	2,496			20		1,248	
PTHP01: ROOM 601	1,248	15/2	21		2,496		22	15/2	1,248	PTHP01: ROOM 602
	1,248		23			2,496	24		1,248	
PTHP01: ROOM 603	1,248	15/2	25	2,496			26	15/2	1,248	PTHP01: ROOM 604
	1,248		27		2,496		28		1,248	
PTHP01: ROOM 605	1,248	15/2	29			2,496	30	15/2	1,248	PTHP01: ROOM 606
	1,248		31	2,496			32		1,248	
PTHP01: ROOM 607	1,248	15/2	33		2,496		34	15/2	1,248	PTHP01: ROOM 608
	1,248		35			2,496	36		1,248	
PTHP01: ROOM 609	1,248	15/2	37	2,496			38	15/2	1,248	PTHP01: ROOM 610
	1,248		39		2,496		40		1,248	
PTHP01: ROOM 611	1,248	15/2	41			2,496	42	15/2	1,248	PTHP01: ROOM 612
	1,248		43	2,496			44		1,248	
SPARE		20/1	45				46	20/1		SPARE
AH17	749	20/2	47			749	48	20/1		SPARE
	749		49	749			50	20/1		SPARE
AH18	666	15/2	51		666		52	20/1		SPARE
	666		53			666	54	20/1		SPARE
AH18 AUX HEAT	4,227	45/3	55	8,551			56	45/3	4,323	AH17 AUX HEAT
	4,227		57		8,551		58		4,323	
	4,227		59			8,551	60		4,323	
HP18	1,739	30/3	61	3,929			62	35/3	2,190	HP17
	1,739		63		3,929		64		2,190	
	1,739		65			3,929	66		2,190	
SPARE		20/1	67				68	20/1		SPARE
SPARE		20/1	69				70	20/1		SPARE
SPARE		20/1	71				72	20/1		SPARE

33,197	30,618	31,366	TTL PHASE VA	400	A. BUS (COPPER, UNO)
277	255	261	TTL PHASE AMPS	400	A. MAIN LUGS AND/OR FEEDER RATING
35%	32%	33%	PHASE BALANCE	25	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =			
RECEPTACLES FIRST 10 KVA		1.00	
RECEPTACLES > 10 KVA		0.50	
LIGHTING		1.25	
MISCELLANEOUS EQUIPMENT		1.00	
OTHER EQUIPMENT (CONTINUOUS)		1.25	
LARGEST MOTOR	6,571	1.25	8,214
HVAC EQUIPMENT (FLA = MCA X 0.8)	88,609	1.00	88,609
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	95,181		
TOTAL DEMAND (VA)			96,824
TOTAL DEMAND (AMPERES)			268.8
PANEL DEMAND LOADING VS RATING	67.2%		

PANEL EHC

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PTHP01: ROOM 701	1,248	15/2	1	2,496			2	15/2	1,248	PTHP01: ROOM 702
	1,248		3		2,496		4		1,248	
PTHP01: ROOM 703	1,248	15/2	5			2,496	6	15/2	1,248	PTHP01: ROOM 704
	1,248		7	2,496			8		1,248	
PTHP01: ROOM 705	1,248	15/2	9		2,496		10	15/2	1,248	PTHP01: ROOM 706
	1,248		11			2,496	12		1,248	
PTHP01: ROOM 707	1,248	15/2	13	2,496			14	15/2	1,248	PTHP01: ROOM 708
	1,248		15		2,496		16		1,248	
PTHP01: ROOM 709	1,248	15/2	17			2,496	18	15/2	1,248	PTHP01: ROOM 710
	1,248		19	2,496			20		1,248	
PTHP01: ROOM 711	1,248	15/2	21		2,496		22	15/2	1,248	PTHP01: ROOM 712
	1,248		23			2,496	24		1,248	
PTHP01: ROOM 801	1,248	15/2	25	2,496			26	15/2	1,248	PTHP01: ROOM 802
	1,248		27		2,496		28		1,248	
PTHP01: ROOM 803	1,248	15/2	29			2,496	30	15/2	1,248	PTHP01: ROOM 804
	1,248		31	2,496			32		1,248	
PTHP01: ROOM 805	1,248	15/2	33		2,496		34	15/2	1,248	PTHP01: ROOM 806
	1,248		35			2,496	36		1,248	
PTHP01: ROOM 807	1,248	15/2	37	2,496			38	15/2	1,248	PTHP01: ROOM 808
	1,248		39		2,496		40		1,248	
PTHP01: ROOM 809	1,248	15/2	41			2,496	42	15/2	1,248	PTHP01: ROOM 810
	1,248		43	2,496			44		1,248	
PTHP01: ROOM 811	1,248	15/2	45		2,496		46	15/2	1,248	PTHP01: ROOM 812
	1,248		47			2,496	48		1,248	
AH16 AUX HEAT	4,227	45/3	49	4,227			50	20/1		SPARE
	4,227		51		4,227		52	20/1		SPARE
	4,227		53			4,747	54	15/2	520	ER19
HP16	1,739	30/3	55	2,259			56		520	
	1,739		57		2,405		58	15/2	666	AH16
	1,739		59			2,405	60		666	
SPARE		20/1	61				62	20/1		SPARE
SPARE		20/1	63				64	20/1		SPARE
SPARE		20/1	65				66	20/1		SPARE

26,454	26,600	27,120	TTL PHASE VA	400	A. BUS (COPPER, UNO)
220	222	226	TTL PHASE AMPS	300	A. MAIN LUGS AND/OR FEEDER RATING
33%	33%	34%	PHASE BALANCE	14	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =			
RECEPTACLES FIRST 10 KVA		1.00	
RECEPTACLES > 10 KVA		0.50	
LIGHTING		1.25	
MISCELLANEOUS EQUIPMENT		1.00	
OTHER EQUIPMENT (CONTINUOUS)		1.25	
LARGEST MOTOR	5,217	1.25	6,521
HVAC EQUIPMENT (FLA = MCA X 0.8)	74,957	1.00	74,957
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	80,174		
TOTAL DEMAND (VA)			81,478
TOTAL DEMAND (AMPERES)			226.2
PANEL DEMAND LOADING VS RATING	75.4%		

PANEL EHD

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
PTHP01: ROOM 101	1,248	15/2	1	2,496			2	15/2	1,248	PTHP01: ROOM 102
	1,248		3		2,496		4		1,248	
PTHP01: ROOM 103	1,248	15/2	5			2,496	6	15/2	1,248	PTHP01: ROOM 104
	1,248		7	2,496			8		1,248	
PTHP01: ROOM 105	1,248	15/2	9		2,496		10	15/2	1,248	PTHP01: ROOM 106
	1,248		11			2,496	12		1,248	
PTHP01: ROOM 107	1,248	15/2	13	2,496			14	15/2	1,248	PTHP01: ROOM 108
	1,248		15		2,496		16		1,248	
PTHP01: ROOM 109	1,248	15/2	17			2,496	18	15/2	1,248	PTHP01: ROOM 110
	1,248		19	2,496			20		1,248	
PTHP01: ROOM 111	1,248	15/2	21		2,496		22	15/2	1,248	PTHP01: ROOM 112
	1,248		23			2,496	24		1,248	
PTHP01: ROOM 201	1,248	15/2	25	2,496			26	15/2	1,248	PTHP01: ROOM 202
	1,248		27		2,496		28		1,248	
PTHP01: ROOM 203	1,248	15/2	29			2,496	30	15/2	1,248	PTHP01: ROOM 204
	1,248		31	2,496			32		1,248	
PTHP01: ROOM 205	1,248	15/2	33		2,496		34	15/2	1,248	PTHP01: ROOM 206
	1,248		35			2,496	36		1,248	
PTHP01: ROOM 207	1,248	15/2	37	2,496			38	15/2	1,248	PTHP01: ROOM 208
	1,248		39		2,496		40		1,248	
PTHP01: ROOM 209	1,248	15/2	41			2,496	42	15/2	1,248	PTHP01: ROOM 210
	1,248		43	2,496			44		1,248	
PTHP01: ROOM 211	1,248	15/2	45		2,496		46	15/2	1,248	PTHP01: ROOM 212
	1,248		47			2,496	48		1,248	
AH06 AUX HEAT	4,227	45/3	49	4,227			50	20/1		SPARE
	4,227		51		4,227		52	20/1		SPARE
	4,227		53			4,893	54	15/2	666	AH06
HP06	1,739	30/3	55	2,405			56		666	
	1,739		57		2,259		58	15/2	520	ER10
	1,739		59			2,259	60		520	
SPARE		20/1	61				62	20/1		SPARE
SPARE		20/1	63				64	20/1		SPARE
SPARE		20/1	65				66	20/1		SPARE

26,600	26,454	27,120	TTL PHASE VA	400	A. BUS (COPPER, UNO)
222	220	226	TTL PHASE AMPS	300	A. MAIN LUGS AND/OR FEEDER RATING
33%	33%	34%	PHASE BALANCE	10	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

ADDITIONAL NOTES (AS APPLICABLE):
2. PROVIDE ARC FAULT CIRCUIT BREAKERS FOR ALL 120V, 15A & 20A PATIENT ROOM BRANCH CIRCUITS SUPPLYING OUTLETS AND DEVICES.

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	180		
RECEPTACLES FIRST 10 KVA	180	1.00	180
RECEPTACLES > 10 KVA		0.50	
LIGHTING		1.25	
MISCELLANEOUS EQUIPMENT	1,440	1.00	1,440
OTHER EQUIPMENT (CONTINUOUS)	827	1.25	1,034
LARGEST MOTOR		1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		1.00	
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	2,447		
TOTAL DEMAND (VA)			2,654
TOTAL DEMAND (AMPERES)			7.4
PANEL DEMAND LOADING VS RATING	12.3%		

PANEL EHG

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX 100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED	ULSE LABEL
	NEMA -	1	ENCLOSURE						ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
GWH1A	360	20/1	1	720			2	20/1	360	GWH2A
GWH1B	360	20/1	3		720		4	20/1	360	GWH2B
CP1	370	20/1	5			740	6	20/1	370	CP1
CP2	87	20/1	7	87			8	20/1		SPARE
RCP: MECH EQUIP 47	180	20/1	9		180		10	20/1		SPARE
SPARE		20/1	11				12	20/1		SPARE
SPARE		20/1	13				14	20/1		SPARE
SPARE		20/1	15				16	20/1		SPARE
SPARE		20/1	17				18	20/1		SPARE

807	900	740	TTL PHASE VA	60	A. BUS (COPPER, UNO)
7	8	6	TTL PHASE AMPS	60	A. MAIN LUGS AND/OR FEEDER RATING
33%	37%	30%	PHASE BALANCE	10	KAIC MINIMUM RATING

NOTES (AS APPLICABLE):
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =	180		
RECEPTACLES FIRST 10 KVA	180	1.00	180
RECEPTACLES > 10 KVA		0.50	
LIGHTING		1.25	
MISCELLANEOUS EQUIPMENT	1,440	1.00	1,440
OTHER EQUIPMENT (CONTINUOUS)	827	1.25	1,034
LARGEST MOTOR		1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		1.00	
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	2,447		
TOTAL DEMAND (VA)			2,654
TOTAL DEMAND (AMPERES)			7.4
PANEL DEMAND LOADING VS RATING	12.3%		

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PANEL SCHEDULES

E0
.14

NOTE: ARRANGE PANELBOARD BRANCH CIRCUIT BREAKERS AS SHOWN ON THE BELOW SCHEDULES. AGREEMENT OF CIRCUIT BREAKER (POLE) NUMBERS WITH THE PANEL SCHEDULES AND ELECTRICAL FLOOR PLANS IS REQUIRED IN ORDER TO AVOID CONFUSION DURING CONSTRUCTION, REDRAWING THE CIRCUITRY FOR RECORD DRAWING PURPOSES AND ACCURATE DOCUMENTATION OF THE AS-BUILT CONDITIONS.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PANEL LS

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
EXTERIOR EGRESS LIGHTING VIA LC1	327	20/1	1	827			2	20/1	500	EG SET MAINTENANCE RCP
LIGHTING: PORCH/ DROP OFF VIA LC1	140	20/1	3		340		4	20/1	200	EG SET ENCLOSURE LIGHTS
LIGHTING: WEST COURTYARD VIA LC1	63	20/1	5			423	6	20/1	360	RCPS: ELEC EQUIP 46
LIGHTING: EAST COURTYARD VIA LC1	63	20/1	7	263			8	20/1	200	EG SET BATTERY HEATER
SITE LIGHTING VIA LC1	575	20/2	9		575		10	20/1		SPARE
|	575	|	11			575	12	20/1		SPARE
SITE LIGHTING VIA LC1	518	20/2	13	518			14	20/1		SPARE
|	518	|	15		518		16	20/1		SPARE
SITE LIGHTING VIA LC1	460	20/2	17			660	18	20/1	200	ACCESS CONTROL
|	460	|	19	660			20	20/1	200	FACP
SITE LIGHTING VIA LC1	633	20/2	21		2,025		22	20/1	1,392	LIGHTING: 37,74,75
|	633	|	23			633	24	20/1		SPARE
SPARE		20/1	25				26	20/1		SPARE
SPARE		20/1	27				28	20/1		SPARE
SPARE		20/1	29				30	20/1		SPARE
SPD		30/3	31				32	20/1		SPARE
|		|	33				34	20/1		SPARE
|		|	35				36	20/1		SPARE
PANEL LSC	1,256	60/3	37	2,512			38	60/3	1,256	PANEL LSD
|	450	|	39		900		40	|	450	|
|	450	|	41			900	42	|	450	|

NOTES (AS APPLICABLE):						
	4,780	4,357	3,191	TTL PHASE VA	100	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.	40	36	27	TTL PHASE AMPS	100	A. MAIN LUGS AND/OR FEEDER RATING
2. COORDINATE SPD CIRCUIT BREAKER TRIP WITH SPD PROVIDED.	39%	35%	26%	PHASE BALANCE	42	KAIC MINIMUM RATING

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) = 860			
RECEPTACLES FIRST 10 KVA	860	1.00	860
RECEPTACLES > 10 KVA		0.50	
LIGHTING	10,067	1.25	12,584
MISCELLANEOUS EQUIPMENT	1,400	1.00	1,400
OTHER EQUIPMENT (CONTINUOUS)		1.25	
LARGEST MOTOR		1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		1.00	
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	12,327		
TOTAL DEMAND (VA)			14,844
TOTAL DEMAND (AMPERES)			41.2
PANEL DEMAND LOADING VS RATING	41.2%		

ADDITIONAL NOTES (AS APPLICABLE):
3. PROVIDE CIRCUIT BREAKER LOCKING DEVICE WHERE NOTED AND FOR FACP AND UNIT TYPE SMOKE DETECTOR CIRCUITS.

PANEL LSC

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
LIGHTING: CORRIDORS 725, 825	671	20/1	1	1,256			2	20/1	585	LIGHTING: COORDIORS 521, 625
LIGHTING: DINING AREA 61	250	20/1	3		450		4	20/1	200	PAGING SYSTEM
LIGHTING: LIVING ROOM 62	250	20/1	5			450	6	20/1	200	ACCESS CONTROL
SPARE		20/1	7				8	20/1		SPARE
SPARE		20/1	9				10	20/1		SPARE
SPARE		20/1	11				12	20/1		SPARE
SPARE		20/1	13				14	30/3		SPD
SPARE		20/1	15				16	|		|
SPARE		20/1	17				18	|		|

NOTES (AS APPLICABLE):						
	1,256	450	450	TTL PHASE VA	60	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.	10	4	4	TTL PHASE AMPS	60	A. MAIN LUGS AND/OR FEEDER RATING
2. COORDINATE SPD CIRCUIT BREAKER TRIP WITH SPD PROVIDED.	58%	21%	21%	PHASE BALANCE	10	KAIC MINIMUM RATING

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =			
RECEPTACLES FIRST 10 KVA		1.00	
RECEPTACLES > 10 KVA		0.50	
LIGHTING	1,756	1.25	2,195
MISCELLANEOUS EQUIPMENT	400	1.00	400
OTHER EQUIPMENT (CONTINUOUS)		1.25	
LARGEST MOTOR		1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		1.00	
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	2,156		
TOTAL DEMAND (VA)			2,595
TOTAL DEMAND (AMPERES)			7.2
PANEL DEMAND LOADING VS RATING	12.0%		

PANEL LSD

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
LIGHTING: CORRIDORS 125, 225	615	20/1	1	1,256			2	20/1	641	LIGHTING: CORRIDORS 325, 421
LIGHTING: LIVING AREA 23	250	20/1	3		450		4	20/1	200	PAGING SYSTEM
LIGHTING: DINING AREA 30	250	20/1	5			450	6	20/1	200	ACCESS CONTROL
SPARE		20/1	7				8	20/1		SPARE
SPARE		20/1	9				10	20/1		SPARE
SPARE		20/1	11				12	20/1		SPARE
SPARE		20/1	13				14	30/3		SPD
SPARE		20/1	15				16	|		|
SPARE		20/1	17				18	|		|

NOTES (AS APPLICABLE):						
	1,256	450	450	TTL PHASE VA	60	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.	10	4	4	TTL PHASE AMPS	60	A. MAIN LUGS AND/OR FEEDER RATING
2. COORDINATE SPD CIRCUIT BREAKER TRIP WITH SPD PROVIDED.	58%	21%	21%	PHASE BALANCE	10	KAIC MINIMUM RATING

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) =			
RECEPTACLES FIRST 10 KVA		1.00	
RECEPTACLES > 10 KVA		0.50	
LIGHTING	1,756	1.25	2,195
MISCELLANEOUS EQUIPMENT	400	1.00	400
OTHER EQUIPMENT (CONTINUOUS)		1.25	
LARGEST MOTOR		1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		1.00	
KITCHEN EQUIPMENT		1.00	
TOTAL CONNECTED (VA)	2,156		
TOTAL DEMAND (VA)			2,595
TOTAL DEMAND (AMPERES)			7.2
PANEL DEMAND LOADING VS RATING	12.0%		

PANEL NK

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
CONVIENCE RCPS	1,080	20/1	1	2,520			2	20/1	1,440	K25: MOBILE HEATED CABINET
RCPS: KITCHEN OFFICE	900	20/1	3		2,340		4	20/1	1,440	K25: MOBILE HEATED CABINET
RCP: GENERAL	180	20/1	5			900	6	20/1	720	K29: MIXER
RCP: GRIDDLE	180	20/1	7	540			8	20/1	360	K35: SLICER
K12: HEATED BANQUET CART	1,656	20/1	9		2,376		10	20/1	720	K33: JUICE DISPENSER
K12: HEATED BANQUET CART	1,656	20/1	11			3,384	12	20/1	1,728	K32: TEA BRWER
SPARE		20/1	13	1,368			14	20/1	1,368	K31: COFFEE MAKER
SPARE		20/1	15				16	20/1		SPARE
SPARE		20/1	17			2,400	18	30/1	2,400	K30: BEVERAGE TABLE
SPARE		20/1	19	864			20	20/1	864	LIGHTING: KITCHEN / STAFF LOUNGE
SPARE		20/1	21				22	20/1		SPARE
SPARE		20/1	23				24	20/1		SPARE
SPARE		20/1	25				26	20/1		SPARE
SPARE		20/1	27				28	20/1		SPARE
SPARE		20/1	29				30	20/1		SPARE
SPARE		20/1	31				32	20/1		SPARE
SPARE		20/1	33				34	20/1		SPARE
SPARE		20/1	35				36	20/1		SPARE
K2: WAREWASHER EST-44	6,605	70/3	37	6,605			38	20/1		SPARE
|	6,605	|	39		6,605		40	20/1		SPARE
|	6,605	|	41			6,605	42	20/1		SPARE
K2: WAREWASHER BOOSTER HEATER	5,044	60/3	43	5,044			44	20/1		SPARE
|	5,044	|	45		5,044		46	20/1		SPARE
|	5,044	|	47			5,044	48	20/1		SPARE
K15: STEAM KETTLE	4,912	60/3	49	4,912			50	20/1		SPARE
|	4,912	|	51		4,912		52	20/1		SPARE
|	4,912	|	53			4,912	54	20/1		SPARE
K18: ELECTRIC STEAMER	5,512	60/3	55	5,512			56	20/1		SPARE
|	5,512	|	57		7,384		58	30/2	1,872	K23: HOT FOOD TABLE
|	5,512	|	59			7,384	60	|	1,872	|

NOTES (AS APPLICABLE):						
	27,365	28,661	30,629	TTL PHASE VA	225	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.	228	239	255	TTL PHASE AMPS	225	A. MAIN LUGS AND/OR FEEDER RATING
2. GFCI CIRCUIT BREAKERS AS REQUIRED BY THE NEC.	32%	33%	35%	PHASE BALANCE	50	KAIC MINIMUM RATING

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) = 2,340			
RECEPTACLES FIRST 10 KVA	2,340	1.00	2,340
RECEPTACLES > 10 KVA		0.50	
LIGHTING	864	1.25	1,080
MISCELLANEOUS EQUIPMENT		1.00	
OTHER EQUIPMENT (CONTINUOUS)		1.25	
LARGEST MOTOR		1.25	
HVAC EQUIPMENT (FLA = MCA X 0.8)		1.00	
KITCHEN EQUIPMENT 24	83,451	0.65	54,243
TOTAL CONNECTED (VA)	86,655		
TOTAL DEMAND (VA)			57,663
TOTAL DEMAND (AMPERES)			160.1
PANEL DEMAND LOADING VS RATING	71.1%		

ADDITIONAL NOTES (AS APPLICABLE):
3. K## REPRESENTS KITCHEN EQUIPMENT NUMBERS.
4. KITCHEN EQUIPMENT DEMAND FACTOR PER NEC TABLE 220.56.

PANEL EHK

TYPE:	208	120	VOLTS	3	PHASE	4	WIRE	PROVIDE	XX	EQUIPMENT GROUND BUS
BOLT-ON	MOUNT:	SURFACE						IF	XX	100 % NEUTRAL BUS
HINGED TRIM	FEED:	TOP						CHECKED		ULSE LABEL
	NEMA -	1	ENCLOSURE							ISOLATED GROUND BAR

LOAD SERVED	LOAD VA	CKT BKR TRIP/POLES	CKT #	PHASE LOAD VA A	B	C	CKT #	CKT BKR TRIP/POLES	LOAD VA	LOAD SERVED
HP13	1,739	30/3	1	6,639			2	60/3	4,900	AH13 AUX HEAT
|	1,739	|	3		6,639		4	|	4,900	|
|	1,739	|	5			6,639	6	|	4,900	|
HP14	1,739	30/3	7	5,966			8	45/3	4,227	AH14 AUX HEAT
|	1,739	|	9		5,966		10	|	4,227	|
|	1,739	|	11			5,966	12	|	4,227	|
HP24	998	20/2	13	4,160			14	40/2	3,162	AH24 AUX HEAT
|	998	|	15		4,160		16	|	3,162	|
ER16	728	20/2	17			1,394	18	15/2	666	AH13
|	728	|	19	1,394			20	|	666	|
ER17	728	20/2	21		1,394		22	15/2	666	AH14
|	728	|	23			1,394	24	|	666	|
K34: ICE MAKER	1,584	20/1	25	1,834			26	15/2	250	AH24
K13: FRIDGE	648	20/1	27		898		28	|	250	|
K22: CONVECTION OVEN (NOTE 5)	1,080	20/1	29			1,280	30	20/1	200	GAS SHUTOFF VALVE
KEF03	562	20/2	31	2,435			32	20/3	1,873	KEF01
|	562	|	33		2,435		34	|	1,873	|
SPARE		20/1	35			1,873	36	|	1,873	|
KEF02	1,873	20/3	37	3,273			38	15/1	1,400	K14 CONTROL POWER
|	1,873	|	39		1,873		40	20/1		SPARE
|	1,873	|	41			2,593	42	20/1	720	K14: AU1
SPARE		20/1	43	180			44	20/1	180	RCP: ROOF HVAC SERVICE
SPARE		20/1	45				46	20/1		SPARE
SPARE		20/1	47				48	20/1		SPARE
SPARE		20/1	49				50	20/1		SPARE
COOLER UNIT COOLER + DOORS	326	20/1	51		326		52	20/1		SPARE
FREEZER UNIT COOLER	1,466	20/2	53			2,966	54	20/2	1,500	WASHER
|	1,466	|	55	2,966			56	|	1,500	|
COOLER / FREEZER CONDENSER TROUGH	2,610	50/2	57		3,338		58	20/2	728	DRYER
|	2,610	|	59			3,338	60	|	728	|

NOTES (AS APPLICABLE):						
	28,847	27,029	27,443	TTL PHASE VA	400	A. BUS (COPPER, UNO)
1. COORDINATE CIRCUIT BREAKER TRIP WITH EQUIPMENT.	240	225	229	TTL PHASE AMPS	300	A. MAIN LUGS AND/OR FEEDER RATING
2. GFCI CIRCUIT BREAKERS AS REQUIRED BY THE NEC.	35%	32%	33%	PHASE BALANCE	50	KAIC MINIMUM RATING

DEMAND SUMMARY:	CONN. (VA)	DEMAND FACTOR	DEMAND (VA)
TOTAL RECEPTACLES (VA) = 180			
RECEPTACLES FIRST 10 KVA	180	1.00	180
RECEPTACLES > 10 KVA		0.50	
LIGHTING		1.25	
MISCELLANEOUS EQUIPMENT	10,800	1.00	10,800
OTHER EQUIPMENT (CONTINUOUS)	16,819	1.25	21,023
LARGEST MOTOR	5,217	1.25	6,521
HVAC EQUIPMENT (FLA = MCA X 0.8)	46,991	1.00	46,991
KITCHEN EQUIPMENT 3	3,312	0.90	2,981
TOTAL CONNECTED (VA)	83,319		
TOTAL DEMAND (VA)			88,496
TOTAL DEMAND (AMPERES)			245.6
PANEL DEMAND LOADING VS RATING	81.9%		

ADDITIONAL NOTES (AS APPLICABLE):
3. K## REPRESENTS KITCHEN EQUIPMENT NUMBERS.
4. KITCHEN EQUIPMENT DEMAND FACTOR PER NEC TABLE 220.56.
5. PROVIDE SHUNT TRIP CIRCUIT BREAKER.

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

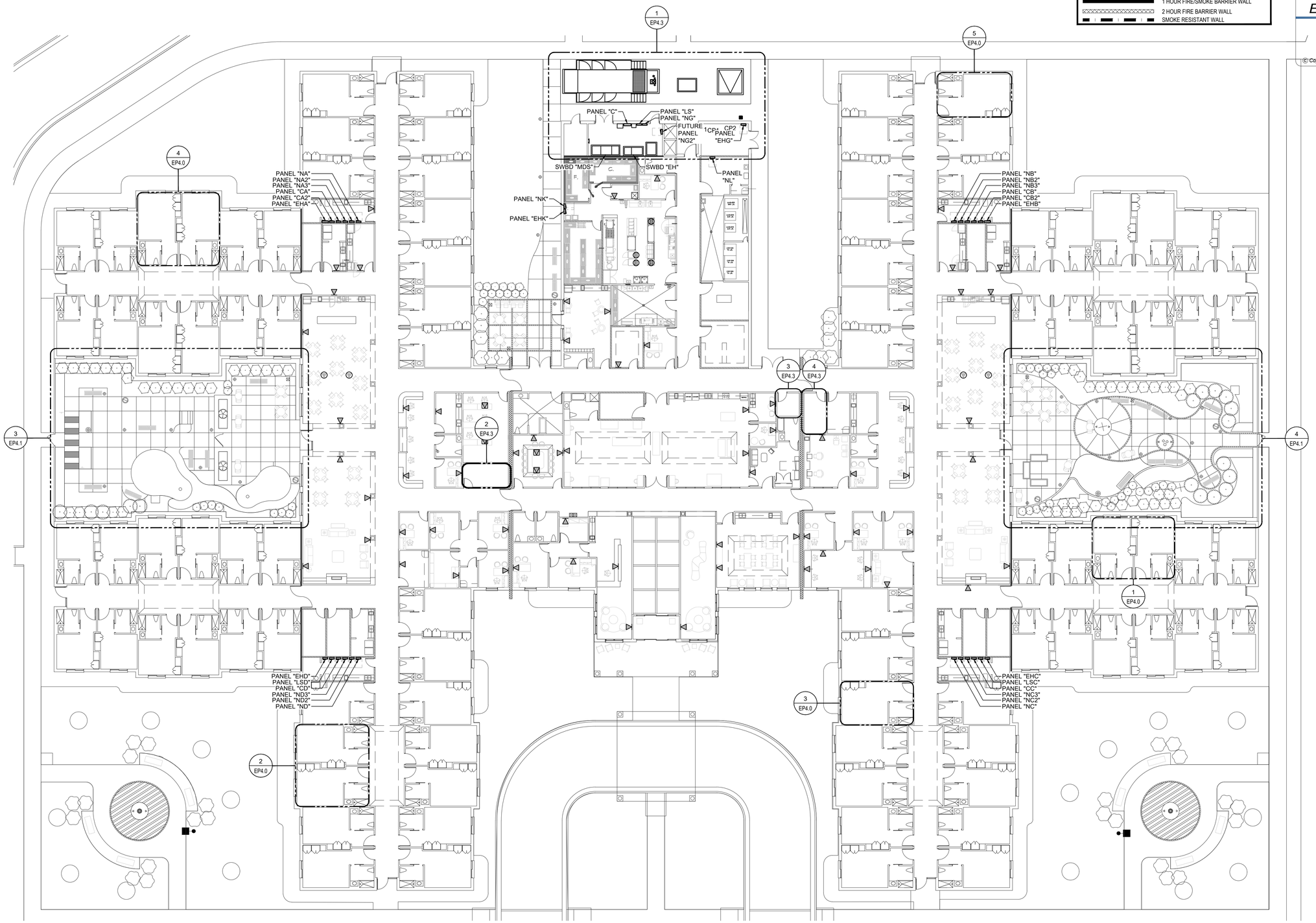
David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PANEL SCHEDULES

E0
.15

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL



1 **OVERALL REFERENCE & PANELBOARD LOCATION PLAN**

1/16" = 1'-0"

0 8' 16' 32'

PLAN NORTH

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL; SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — R. DUNCAN McFEE

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL REFERENCE & PANELBOARD PLAN

EP 1.0

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

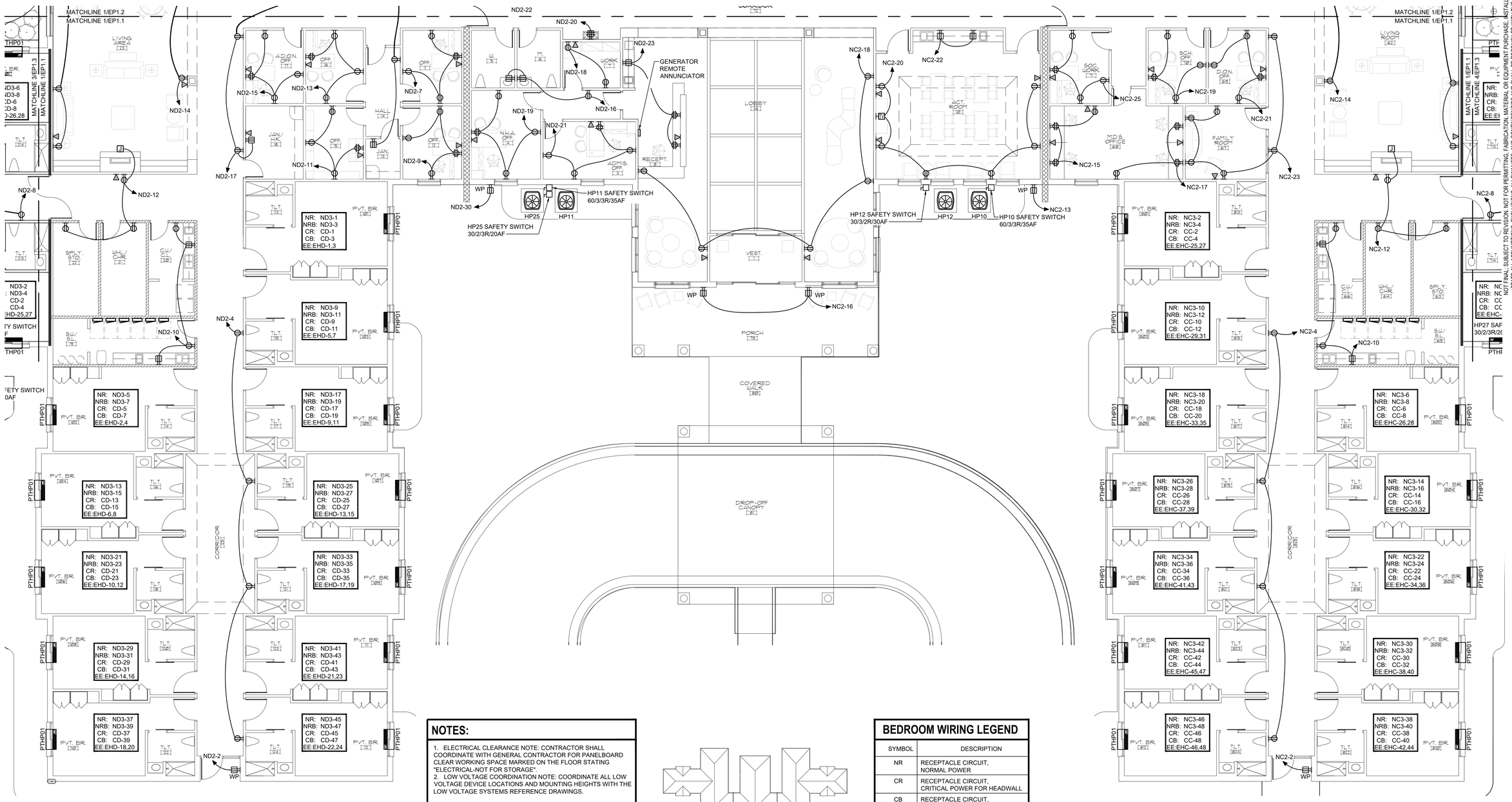
CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFATTER

NOT FINAL, SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

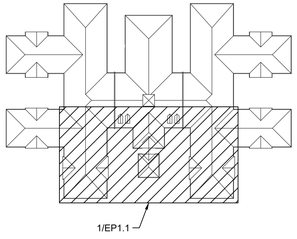


NOTES:

1. ELECTRICAL CLEARANCE NOTE: CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR PANELBOARD CLEAR WORKING SPACE MARKED ON THE FLOOR STATING "ELECTRICAL-NOT FOR STORAGE".
2. LOW VOLTAGE COORDINATION NOTE: COORDINATE ALL LOW VOLTAGE DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH THE LOW VOLTAGE SYSTEMS REFERENCE DRAWINGS.

3. COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

4. SEE ENLARGED BEDROOM PLANS ON SHEET EP4.0 FOR BEDROOM PLANS.



0 **KEYPLAN**
NOT TO SCALE

BEDROOM WIRING LEGEND

SYMBOL	DESCRIPTION
NR	RECEPTACLE CIRCUIT, NORMAL POWER
CR	RECEPTACLE CIRCUIT, CRITICAL POWER FOR HEADWALL
CB	RECEPTACLE CIRCUIT, CRITICAL POWER FOR BED
NRB	BATHROOM RECEPTACLE CIRCUIT, NORMAL POWER
EH	EQUIPMENT CIRCUIT, EMERG. EQUIP POWER FOR DAHU
NL	LIGHTING CIRCUIT, NORMAL POWER
CL	LIGHTING CIRCUIT, CRITICAL POWER

1 **PARTIAL POWER PLAN**
1/8" = 1'-0"

PLAN NORTH

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

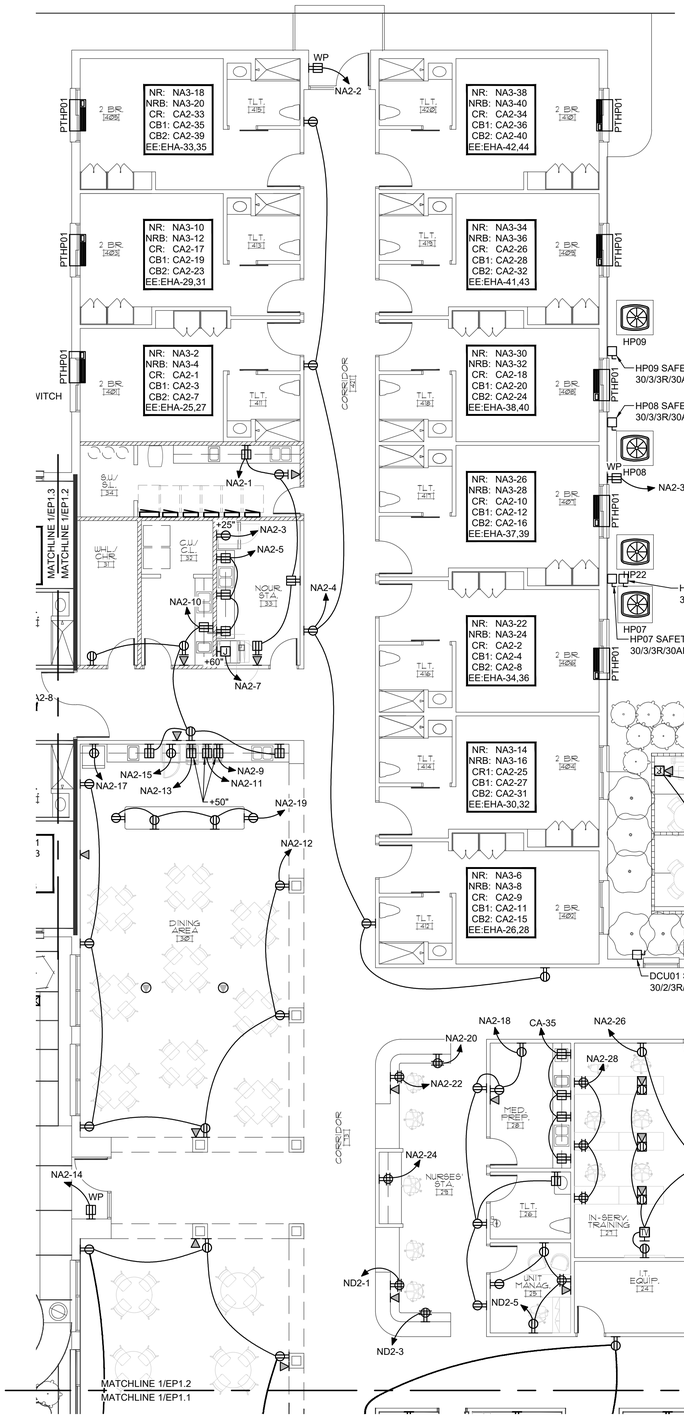
120 BED NURSING FACILITY
ELECTRICAL
PARTIAL POWER PLAN

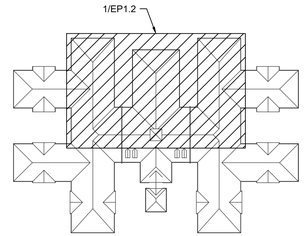
EP 1.1

1 PARTIAL POWER PLAN

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

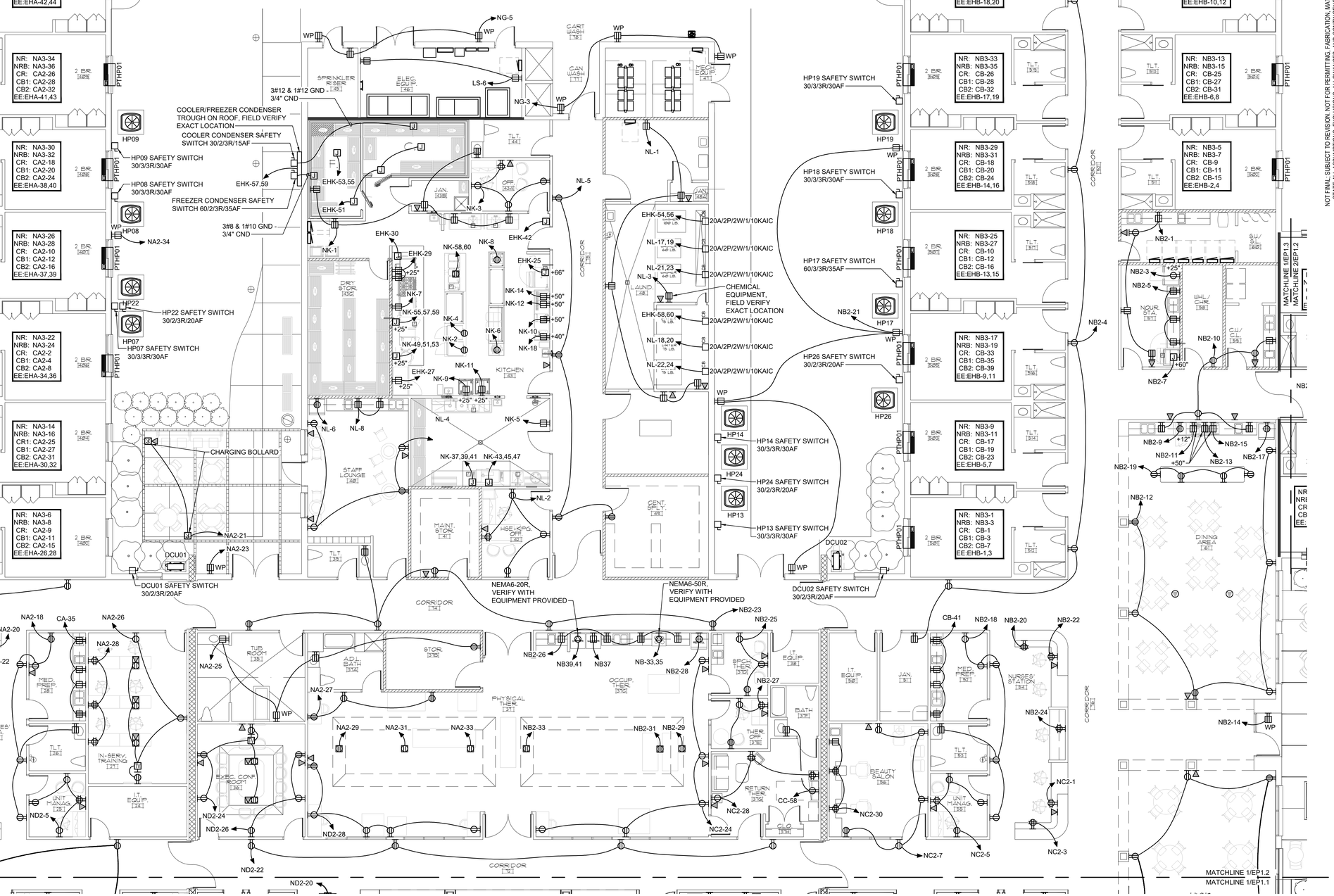
PLAN NORTH





0 KEYPLAN

NOT TO SCALE



NOTES:

1. ELECTRICAL CLEARANCE NOTE: CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR PANELBOARD CLEAR WORKING SPACE MARKED ON THE FLOOR STATING "ELECTRICAL-NOT FOR STORAGE".
2. LOW VOLTAGE COORDINATION NOTE: COORDINATE ALL LOW VOLTAGE DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH THE LOW VOLTAGE SYSTEMS REFERENCE DRAWINGS.
3. COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
4. SEE ENLARGED BEDROOM PLANS ON SHEET EP4.0 FOR BEDROOM PLANS.

BEDROOM WIRING LEGEND

SYMBOL	DESCRIPTION
NR	RECEPTACLE CIRCUIT, NORMAL POWER
CR	RECEPTACLE CIRCUIT, CRITICAL POWER FOR HEADWALL
CB	RECEPTACLE CIRCUIT, CRITICAL POWER FOR BED
NRB	BATHROOM RECEPTACLE CIRCUIT, NORMAL POWER
EH	EQUIPMENT CIRCUIT, EMERG. EQUIP POWER FOR DAHU
NL	LIGHTING CIRCUIT, NORMAL POWER
CL	LIGHTING CIRCUIT, CRITICAL POWER

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049 DUNCAN McFETRIDGE
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL; SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PARTIAL POWER PLAN

EP 1.2

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

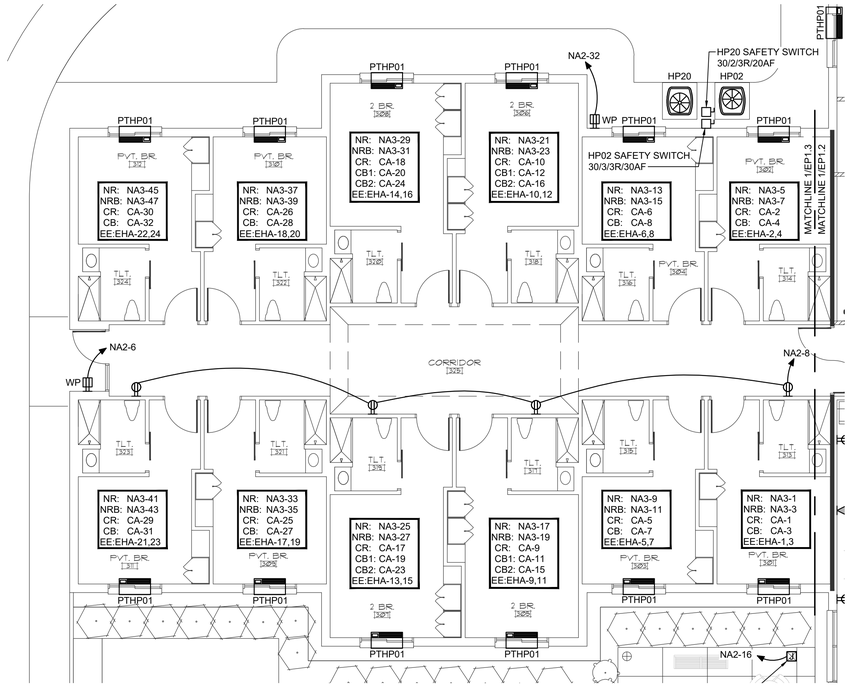
CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

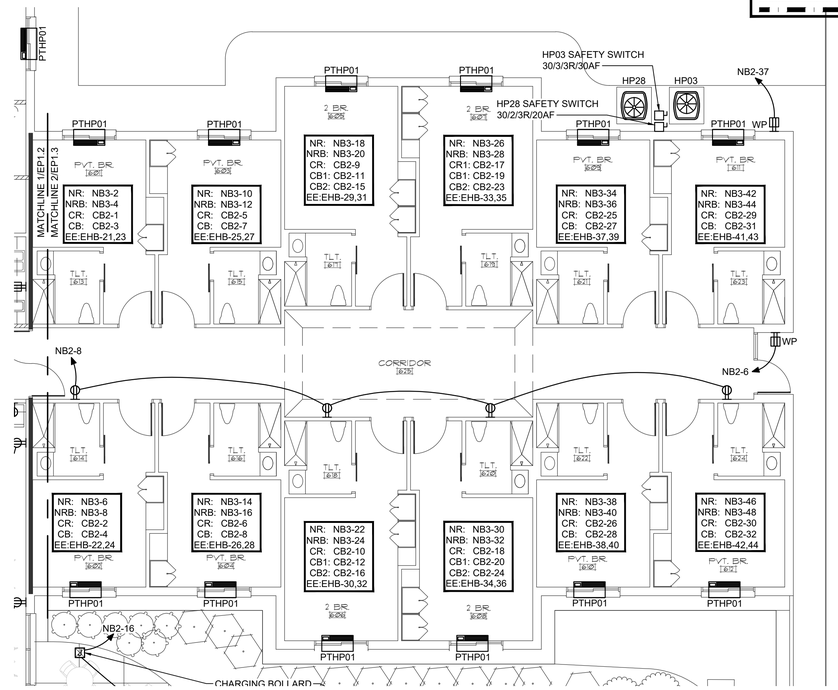
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL R. DUNCAN McFETRIDGE

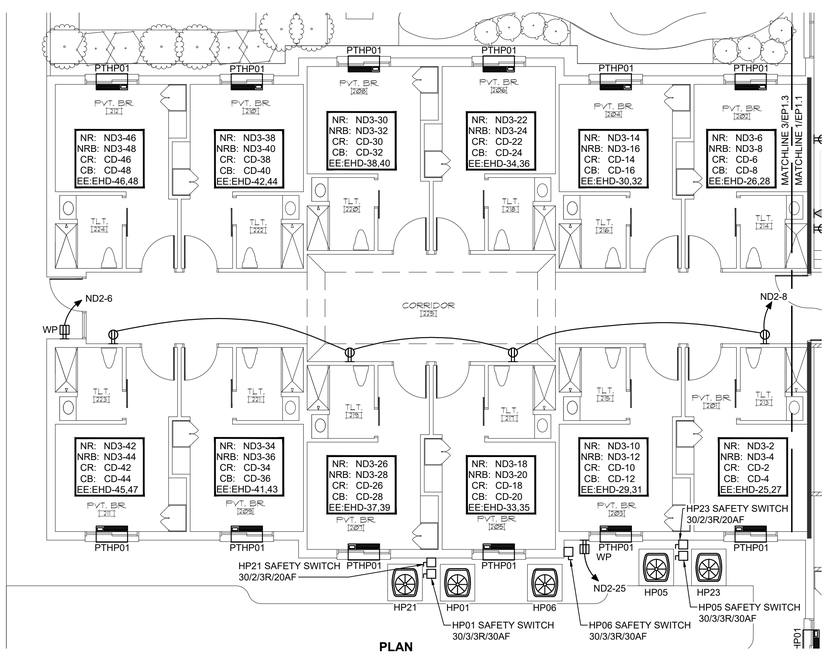
NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



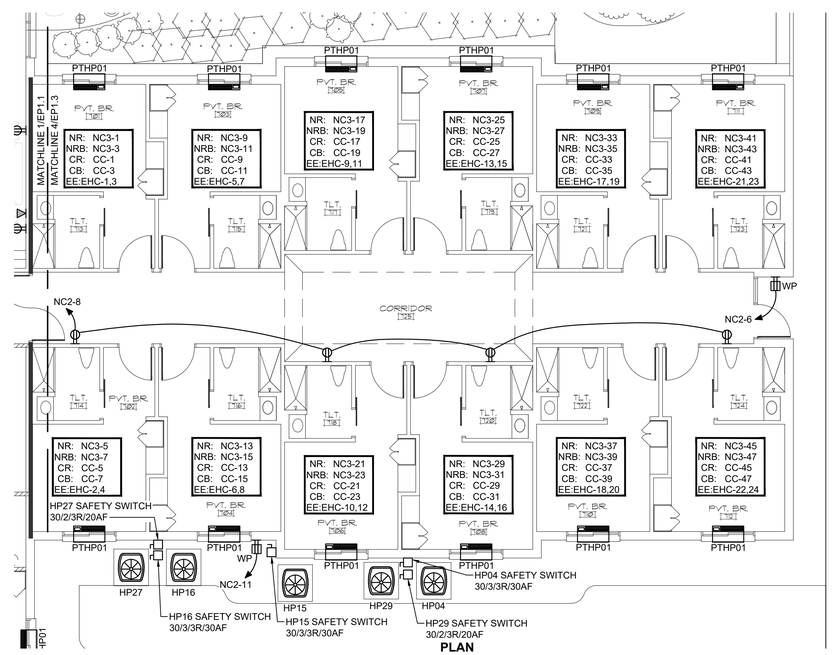
1 **PARTIAL POWER PLAN**
1/8" = 1'-0"



2 **PARTIAL POWER PLAN**
1/8" = 1'-0"



3 **PARTIAL POWER PLAN**
1/8" = 1'-0"



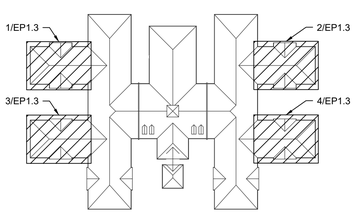
4 **PARTIAL POWER PLAN**
1/8" = 1'-0"

BEDROOM WIRING LEGEND

SYMBOL	DESCRIPTION
NR	RECEPTACLE CIRCUIT, NORMAL POWER
CR	RECEPTACLE CIRCUIT, CRITICAL POWER FOR HEADWALL
CB	RECEPTACLE CIRCUIT, CRITICAL POWER FOR BED
NRB	BATHROOM RECEPTACLE CIRCUIT, NORMAL POWER
EH	EQUIPMENT CIRCUIT, EMERG. EQUIP POWER FOR DAHU
NL	LIGHTING CIRCUIT, NORMAL POWER
CL	LIGHTING CIRCUIT, CRITICAL POWER

NOTES:

1. ELECTRICAL CLEARANCE NOTE: CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR PANELBOARD CLEAR WORKING SPACE MARKED ON THE FLOOR STATING "ELECTRICAL-NOT FOR STORAGE".
2. LOW VOLTAGE COORDINATION NOTE: COORDINATE ALL LOW VOLTAGE DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH THE LOW VOLTAGE SYSTEMS REFERENCE DRAWINGS.
3. COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
4. SEE ENLARGED BEDROOM PLANS ON SHEET EP4.0 FOR BEDROOM PLANS.



0 **KEYPLAN**
NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PARTIAL POWER PLAN

EP
1.3

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

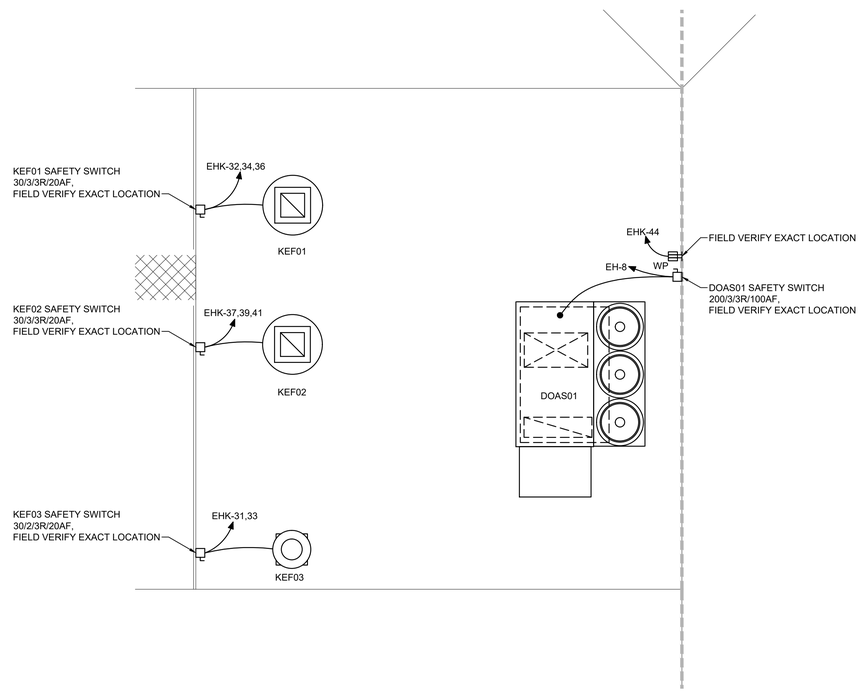
CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER R. DUNCAN McFETRIDGE

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

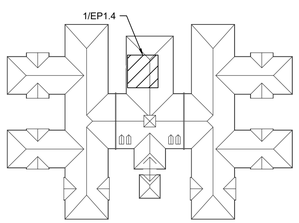


1 **ROOF POWER PLAN**
1/4" = 1'-0"
0 2' 4' 8'

PLAN NORTH

KITCHEN HOOD ELECTRICAL COORDINATION NOTES

1. THE KITCHEN HOODS BASIS OF DESIGN IS CAPTIVEAIRE, REFERENCE JOB NUMBER 8326937. HOODS ARE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ELECTRICAL WORK REQUIRED BY THE HOODS WITH THE MECHANICAL AND GENERAL CONTRACTORS.
2. CONTRACTOR IS RESPONSIBLE TO OBTAIN THE MOST RECENT CAPTIVEAIRE DRAWINGS FROM THE OWNER. CAPTIVEAIRE DRAWINGS SHALL BE CONSIDERED AN ESSENTIAL COMPONENT OF THE CONTRACT DOCUMENTS. SOME ELECTRICAL WORK SHOWN ON THESE DRAWINGS IS INTENTIONALLY NOT DUPLICATED ON THE ELECTRICAL DRAWINGS. THE CONTRACTOR SHALL PROVIDE, AS PART OF THIS CONTRACT, SOURCES OF POWER; POWER, CONTROL AND COMMUNICATIONS CONDUCTORS, CABLES AND RACEWAYS; EMPTY RACEWAYS; JUNCTION, OUTLET AND PULL BOXES; MOUNTING HARDWARE; FINAL CONNECTIONS; CONNECTION HARDWARE; TESTING AND TESTING SUPPORT; ETC., FOR THE CAPTIVEAIRE EQUIPMENT AS SHOWN ON THE CONTRACT DRAWINGS AND THE CAPTIVEAIRE DOCUMENTS.
3. THE CONTRACTOR IS CAUTIONED TO THOROUGHLY REVIEW BOTH THE CONTRACT DRAWINGS AND THE CAPTIVEAIRE DRAWINGS PRIOR TO SUBMITTING A BID. ELECTRICAL ITEMS SHOWN AND/OR NOTED ON THESE DRAWINGS TO BE PROVIDED BY THE "ELECTRICIAN" OR SIMILAR TERM SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE CONSIDERED AS BINDING AS MATERIAL, EQUIPMENT AND LABOR SHOWN ON THE CONTRACT DRAWINGS. NO EXTRAS WILL BE CONSIDERED OR APPROVED FOR ITEMS SHOWN ON EITHER DRAWINGS TO BE PROVIDED BY THE CONTRACTOR. INSTALLATION OF CERTAIN MATERIALS FURNISHED BY CAPTIVEAIRE AS NOTED ON THESE REFERENCE DRAWINGS IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR.



0 **KEYPLAN**
NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
ROOF POWER PLAN

EP
1.4

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

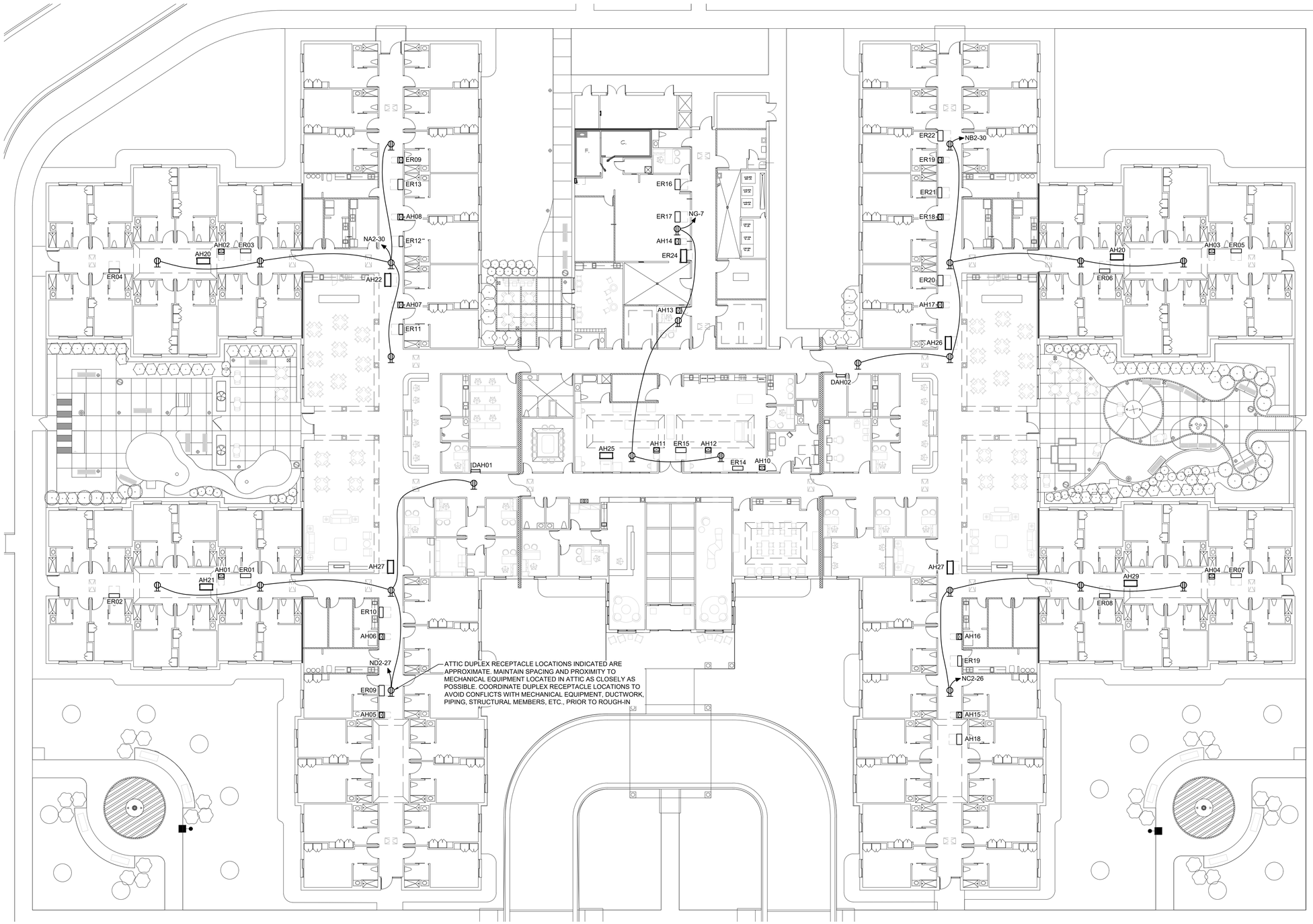
CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL - SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049 R. DUNCAN McFADYEN

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION



1 **ATTIC POWER PLAN**
1/16" = 1'-0"
0 8' 16' 32'

PLAN NORTH

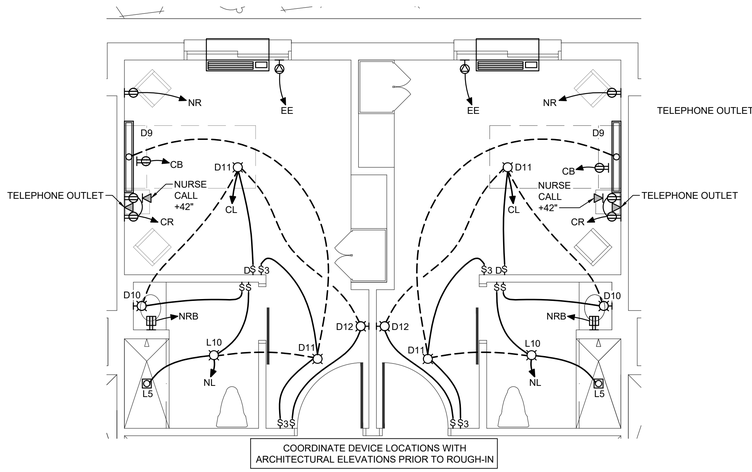
NOTE: SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON SHEET E0.5 FOR CONDUIT/ WIRE SIZE AND DISCONNECT SWITCH REQUIREMENTS, TYPICAL

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
ATTIC POWER PLAN

EP 1.5

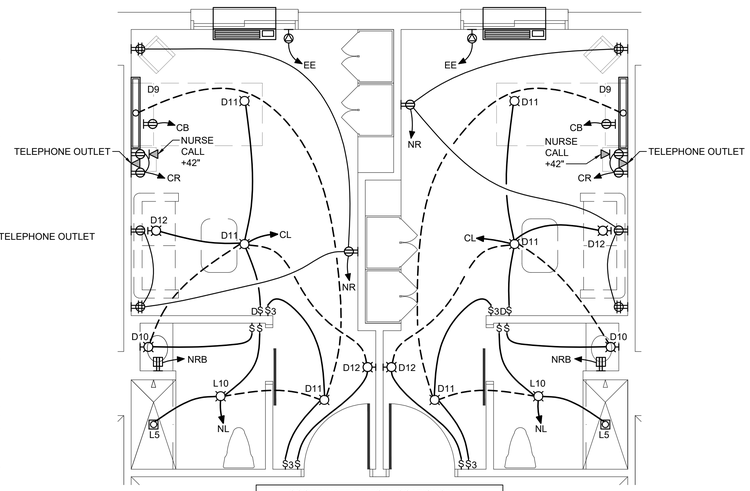


COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

1 TYPICAL ENLARGED PLAN - PRIVATE BEDROOM SUITE

1/4" = 1'-0"

0 2' 4' 8'

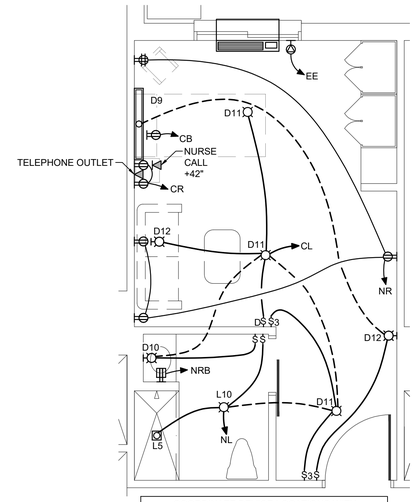


COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

2 TYPICAL ENLARGED PLAN - LARGE PRIVATE BEDROOM SUITE

1/4" = 1'-0"

0 2' 4' 8'

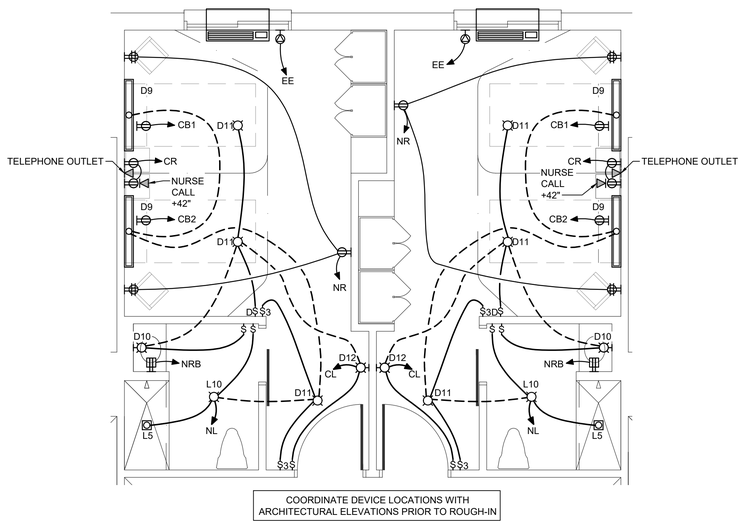


COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

3 TYPICAL ENLARGED PLAN - LARGE PRIVATE BEDROOM "HALF" SUITE

1/4" = 1'-0"

0 2' 4' 8'

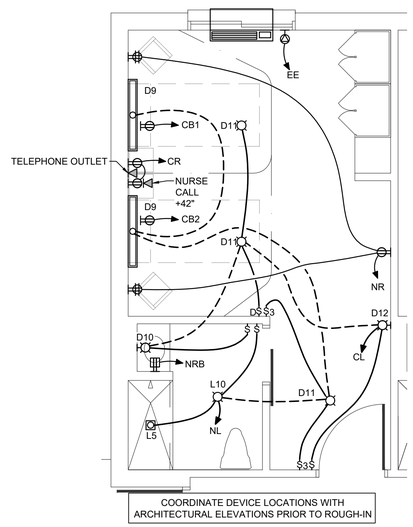


COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

4 TYPICAL ENLARGED PLAN - SEMI-PRIVATE BEDROOM SUITE

1/4" = 1'-0"

0 2' 4' 8'



COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

5 TYPICAL ENLARGED PLAN - SEMI-PRIVATE BEDROOM "HALF" SUITE

1/4" = 1'-0"

0 2' 4' 8'

WALL TYPE LEGEND

	1 HOUR FIRE BARRIER WALL
	1 HOUR FIRE/SMOKE BARRIER WALL
	2 HOUR FIRE BARRIER WALL
	SMOKE RESISTANT WALL

BEDROOM WIRING LEGEND

SYMBOL	DESCRIPTION
NR	RECEPTACLE CIRCUIT, NORMAL POWER
CR	RECEPTACLE CIRCUIT, CRITICAL POWER FOR HEADWALL
CB	RECEPTACLE CIRCUIT, CRITICAL POWER FOR BED
NRB	BATHROOM RECEPTACLE CIRCUIT, NORMAL POWER
EE	EQUIPMENT CIRCUIT, EQUIPMENT POWER FOR PTPH01
NL	LIGHTING CIRCUIT, NORMAL POWER
CL	LIGHTING CIRCUIT, CRITICAL POWER

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049 R. DUNCAN McFEE

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

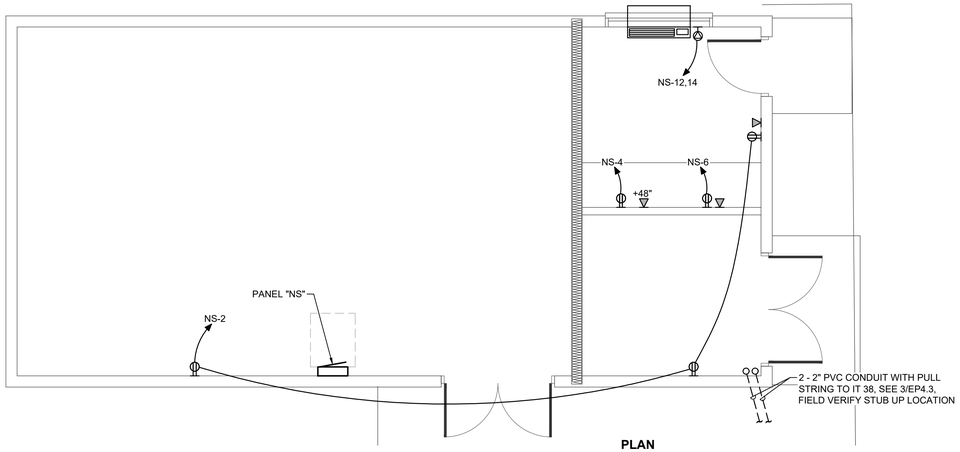
120 BED NURSING FACILITY
ELECTRICAL
BEDROOM PLANS

EP 4.0

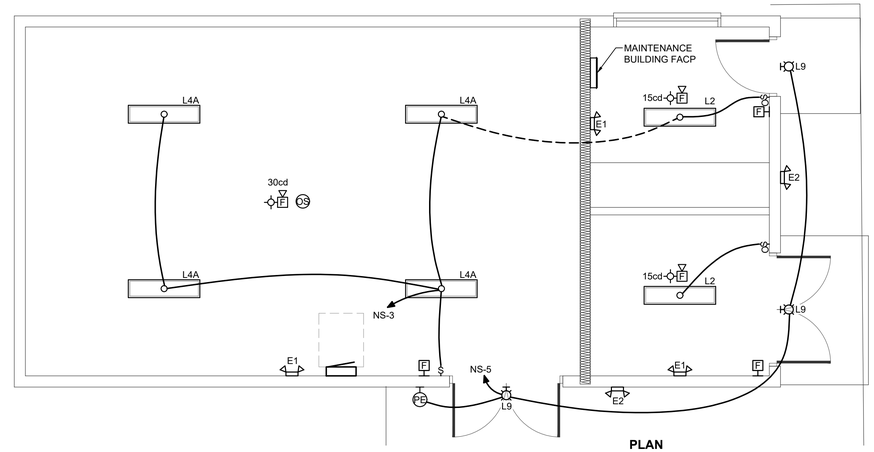
CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

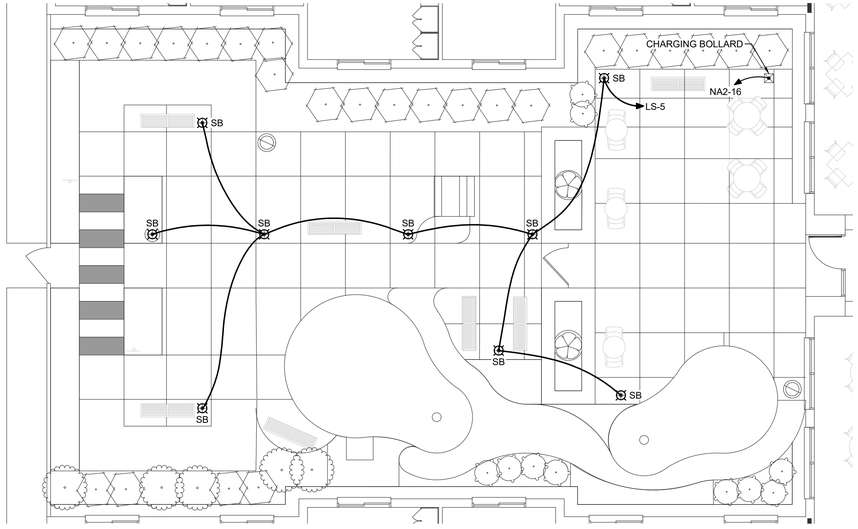
NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



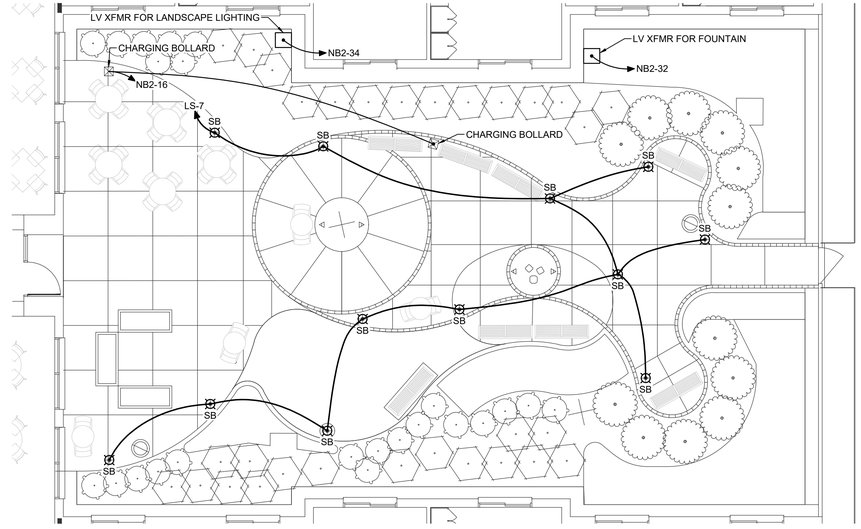
1 **MAINTENANCE BUILDING POWER PLAN**
1/4" = 1'-0"



2 **MAINTENANCE BUILDING LIGHTING AND FIRE ALARM SYSTEM PLAN**
1/4" = 1'-0"



3 **WEST COURTYARD PLAN**
1/4" = 1'-0"



4 **EAST COURTYARD PLAN**
1/4" = 1'-0"

NOTES:

1. ELECTRICAL CLEARNACE NOTE: CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR PANELBOARD CLEAR WORKING SPACE MARKED ON THE FLOOR STATING "ELECTRICAL-NOT FOR STORAGE". REFER TO FBC 450.3.14.5 FOR ADDITIONAL INFORMATION.
2. COORDINATE ELECTRICAL DEVICES, EQUIPMENT, CIRCUITS, MOUNTING HEIGHTS, ETC. AND LOW VOLTAGE SYSTEMS EQUIPMENT LOCATIONS AND DETAILS WITH THE OWNER PRIOR TO ROUGH IN AND INSTALL ELECTRICAL EQUIPMENT AS REQUIRED AND AS DIRECTED BY THE OWNER AND LOW VOLTAGE SYSTEMS VENDORS. DOCUMENT ALL INSTALLATION CHANGES ON THE AS-BUILT DRAWINGS.

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

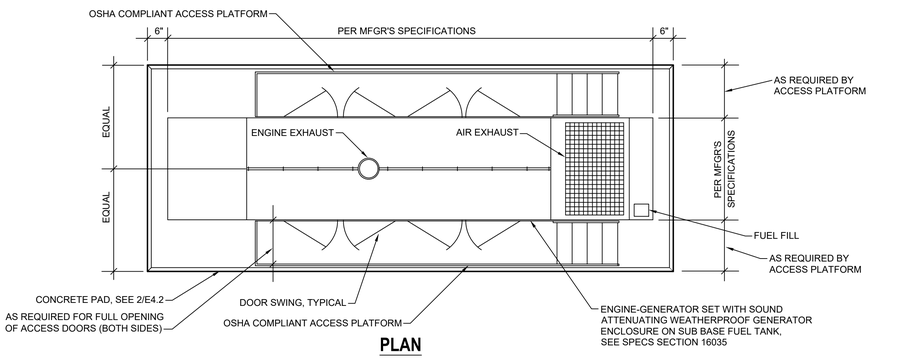
120 BED
NURSING FACILITY
ELECTRICAL
ENLARGED PLANS

EP
4.1

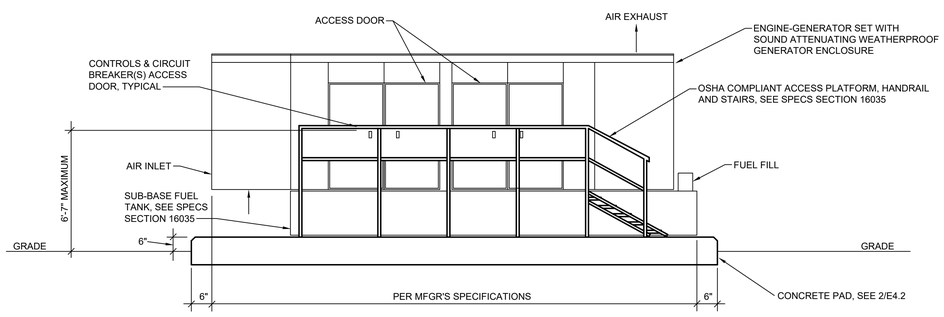
CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



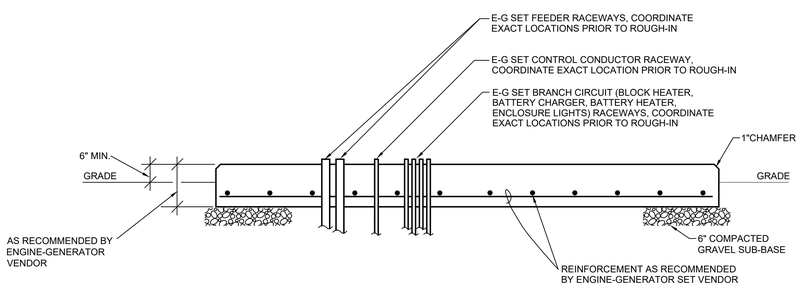
PLAN



ELEVATION

3 ENGINE-GENERATOR SET DETAIL

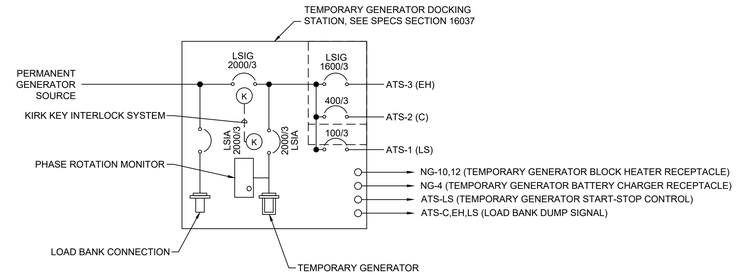
NOT TO SCALE



NOTE: FIELD VERIFY EXACT PAD SIZE REQUIREMENTS AND RACEWAY STUB-UP LOCATIONS WITH ENGINE-GENERATOR VENDOR, SUB-BASE FUEL TANK VENDOR AND STRUCTURAL ENGINEER PRIOR TO POURING OF PAD

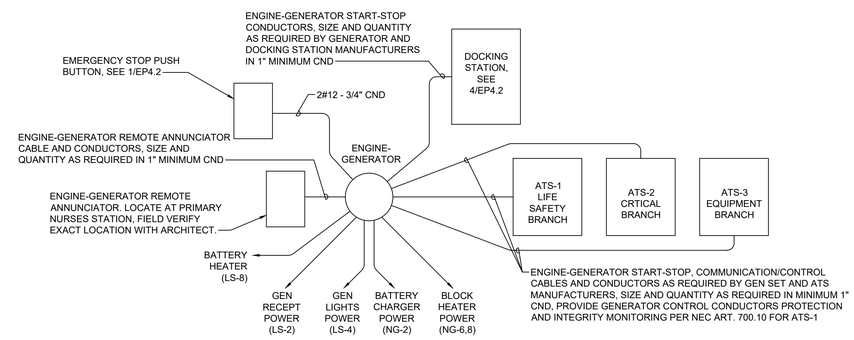
2 ENGINE-GENERATOR SET CONCRETE PAD DETAIL

NOT TO SCALE



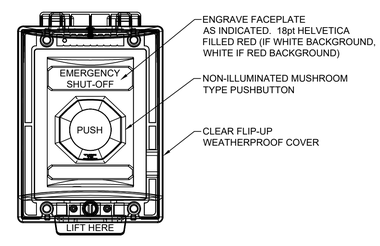
4 TEMPORARY GENERATOR DOCKING STATION DETAIL

NOT TO SCALE



5 GENERATOR CONTROL BLOCK DIAGRAM

NOT TO SCALE



1 ENGINE-GENERATOR REMOTE EMERGENCY SHUTOFF SWITCH

NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

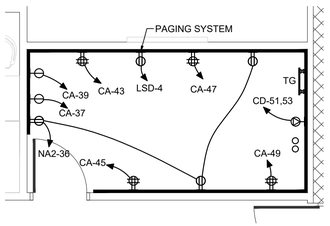
120 BED
NURSING FACILITY
ELECTRICAL GENERATOR
PLAN AND DETAILS

EP
4.2

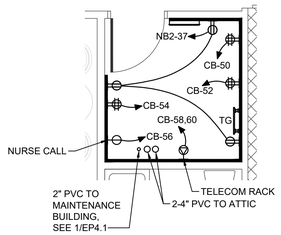
CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

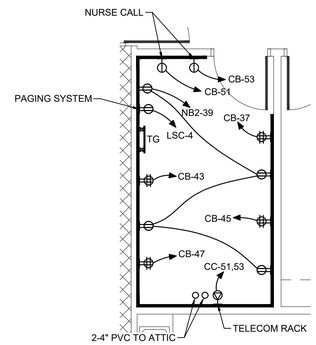
NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



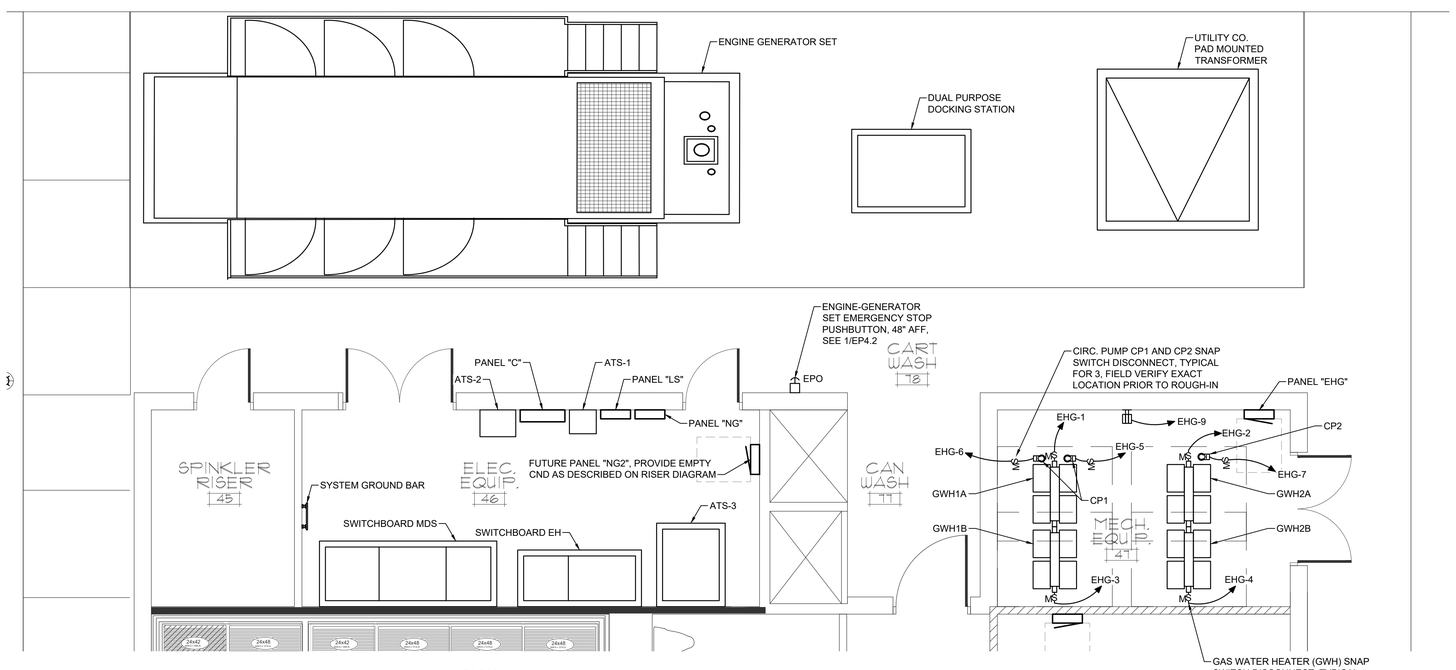
2 IT EQUIP 24 PLAN
1/4" = 1'-0"



3 IT EQUIP 38 PLAN
1/4" = 1'-0"



4 IT EQUIP 50 PLAN
1/4" = 1'-0"



1 ELEC ROOM POWER PLAN
1/4" = 1'-0"

PLAN NORTH

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED NURSING FACILITY
ELECTRICAL
ENLARGED PLAN

EP 4.3

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

LIGHTING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER/SERIES (BASIS OF DESIGN)	ALTERNATE FIXTURE	NOM. SIZE	TEMP(oK)	LAMPS	VOLTS	DELIVERED LUMENS	WATTS	LENS	COLOR	MOUNTING HEIGHT	BALLAST/ DRIVER	REMARKS
L1	2x4 SURFACE MOUNTED LED	LITHONIA 2RTLX4 60L EZ1 LP840	METALUX 24CZSCT3-UNV SK-24-WS	2'x4'	4000K	LED	120	5187	55		WHITE	SURFACE CEILING	10% DIMMING	
L2	2x4 SURFACE MOUNTED LED	LITHONIA 2RTLX4 72L EZ1 LP840	METALUX 24CZSCT3-UNV SK-24-WS	2'x4'	4000K	LED	120	6669	72		WHITE	SURFACE CEILING	10% DIMMING	
L4	4' SURFACE MOUNTED WRAPAROUND	LITHONIA LBL4 7200LM 80 CRI 40K MIN1 ZT MVOLT	METALUX 4NWS3C3-UNV	4'	4000K	LED	120	7336	62		WHITE	SURFACE CEILING	10% DIMMING	
L4A	4' SURFACE MOUNTED WRAPAROUND	LITHONIA LBL4 7200LM 80 CRI	METALUX 4NWS3C3-UNV	4'	4000K	LED	120	4253	32		WHITE	SURFACE CEILING	10% DIMMING	
L5	4" RECESSED LED SHOWER LIGHT	LITHONIA LDN4 40/15 L04AR LSS MVOLT EZ10	HALO COMM HC415D010 / HM40525840 / 41PSMDW	4"	4000K	LED	120	1444	20		WHITE	RECESSED CEILING	10% DIMMING	WET LOCATION LABEL, WHITE PAINTED FLANGE
L6	6" RECESSED LED DOWNLIGHT	LITHONIA LDN6 40/40 L06AR LSS MVOLT EZ10	HALO COMM HC630D010 / HM63040840 / 61WDC	6"	4000K	LED	120	3978	44		WHITE	RECESSED CEILING	10% DIMMING	WHITE PAINTED FLANGE
L7	4" RECESSED LED DOWNLIGHT	LITHONIA LDN4 40/15 L04AR LSS MVOLT EZ10	HALO COMM HC410D010 / HM40525840 / 41WDC	4"	4000K	LED	120	1444	20		WHITE	RECESSED CEILING	10% DIMMING	WET LOCATION LABEL, WHITE PAINTED FLANGE
L8	4' VAPOR TIGHT LED	PHILIPS V3W516840UNVDM	METALUX 4APVTLD-SL3C3		3500K	LED	120	3700	35			SURFACE CEILING		WET LOCATION LABEL
L9	WALL MOUNTED LED	BROWNLEE 7704-4-BL-C24-40K	SONNEMAN 7472.74-WL		4000K	LED	120	1400	23		WHITE	WALL FIELD VERIFY		WET LOCATION LABEL
L10	SURFACE MOUNTED LED PATIENT BATHROOMS	PROGRESS LIGHTING P7251 0903K9	ASD LIGHTING CORP ASD-LFMDR-10D16CC-NK		3000K	LED	120	1027	22		WHITE	SURFACE CEILING		
L14	SURFACE MOUNTED LED	LEVITON 49875	HALO LIGHTING VT0840L		4000K	LED	120		14			SURFACE MOUNTED IN ATTIC		100 WATT EQUIVALENT A19 LED LAMP, WIRE GUARD
X1	LED EXIT FIXTURE	LITHONIA EXR LED M6	SURE-LITES APX7R			LED	120		1		WHITE	WALL OR CEILING AS INDICATED		SINGLE FACE, 90 MINUTE BATTERY BACKUP
X2	LED EXIT FIXTURE	LITHONIA EXR LED M6	SURE-LITES APX7R			LED	120		1		WHITE	WALL OR CEILING AS INDICATED		DOUBLE FACE, 90 MINUTE BATTERY BACKUP
E1	EMERGENCY FIXTURE	LITHONIA ELM4L	SURE-LITES APEL			LED	120	640	3		WHITE	WALL AT 7'-6"		90 MINUTE BATTERY BACKUP
E2	EMERGENCY FIXTURE WET LOCATION	LITHONIA ELM4L ELM4L WPVS LRG W	SURE-LITES APEL			LED	120	640	3		WHITE	WALL AT 7'-6"		90 MINUTE BATTERY BACKUP WET LOCATION LABEL

GENERAL NOTES:

A. THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE.
B. DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES.
C. NO SUBSTITUTIONS WILL BE ALLOWED DUE TO THE LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID.
D. ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS.
E. THE ELECTRICAL CONTRACTOR MUST RECEIVE APPROVAL FOR ALL LIGHTING FIXTURES FROM THE ARCHITECT/OWNER PRIOR TO PURCHASE AND ROUGH-IN.
F. FIXTURES INSTALLED IN CEILINGS INDICATED ON THE ARCHITECTURAL PLANS AS HAVING INSULATION IN CONTACT WITH THE CEILING SURFACE MUST BE MANUFACTURER RATED "IC".
G. ALL LIGHTING FIXTURES PENETRATING RATED FLOOR/CEILING ASSEMBLY MUST BE PROVIDED WITH ACCESSORIES TO MAINTAIN ASSEMBLY FIRE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL RATINGS.
H. "NL" ADJACENT TO FIXTURE INDICATES AN UNSWITCHED 24 HOUR NIGHT LIGHT. THE FIXTURE MUST BE CONNECTED TO THE UNSWITCHED INDICATED CIRCUIT.
I. LED MODULES MUST BE REPLACEABLE.
J. ACRYLIC PRISMATIC LENSES MUST BE 0.125" NOMINAL MINIMUM THICKNESS.
K. ALL EXIT AND EMERGENCY FIXTURES MUST COPMLY WITH NCSBC STANDARDS AND HAVE AUTOMATIC TESTING DEVICES.
L. LED EMERGENCY BATTERY MUST PROVIDE A MINIMUM OF 50% RATED FIXTURE OUTPUT FOR 90 MINUTES MINIMUM.
M. THE ABOVE FIXTURE TYPES ARE LISTED AS THE DESIGN BASIS. IF THE CONTRACTOR ELECTS TO SUBMIT A FIXTURE OTHER THAN THE BASIS OF DESIGN FIXTURE, REQUIREMENTS OF NOTES O. AND P. APPLY.
N. LIGHTING FIXTURES HAVE BEEN SELECTED AND SPECIFIED TO ACHIEVE REQUIRED/DESIRED ILLUMINATION LEVELS AND OTHER CHARACTERISTICS IN THEIR RESPECTIVE AREAS. SPECIFIED FIXTURES HAVE SPECIFIC CHARCTERISTICS WHICH MAY CREATE UNIQUE ILLUMINATION RESULTS ESSENTIAL TO THE PROJECT. LIGHTING FIXTURES PROVIDED MUST MEET THE AESTHETICS, DETAILS, AND SPECIFICATIONS STATED ABOVE AND IN THE DIVISION 16 SPECIFICATIONS, AND MOUNTING HEIGHTS AND SPACINGS SHOWN ON THE DRAWINGS. ANY DEVIATIONS FROM THE SPECIFIED FIXTURES MUST DEEM ALL PARTIES IN THE SUPPLY CHAIN AND CONTRACTOR RESPONSIBLE FOR PROVIDING DETAILED COMPARISONS OF THE SPECIFIED FIXTURE AND THE PROPOSED FIXTURE FOR THE ARCHITECT AND ENGINEER REVIEW IN DETERMINING EQUALITY. PROVIDE COMPLETE POINT BY POINT ILLUMINATION STUDIES FOR ALL SUBSTITUTIONS.
O. SUBSTITUIONS MAY BE APPROVED BY THE ARCHITECT AND ENGINEER IF THEY ARE JUDGED TO BE EQUAL TO THE SPECIFIED FIXTURES. "EQUAL" MAY INCLUDE, AT THE SOLE DISCRETION OF THE ARCHITECT AND ENGINEER, LENS MATERIAL AND CHARACTERISTICS, COLORS, REFLECTORS, HOUSING MATERIAL AND CONFIGURATION, FINISHES, PHOTOMETRICS, EFFICIENCY, OPTIONS, FUNCTIONALITY, ETC.

2018 APPENDIX B BUILDING CODE SUMMARY
ELECTRICAL SUMMARY
ELECTRICAL SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE:

ENERGY CODE: ☑ PRESCRIPTIVE ☐ PERFORMANCE
ASHRAE 90.1: ☐ PRESCRIPTIVE ☐ PERFORMANCE

LIGHTING SCHEDULE (EACH FIXTURE TYPE)

LAMP TYPE REQUIRED IN FIXTURE: SEE FIXTURE SCHEDULE
NUMBER OF LAMPS IN FIXTURE: SEE FIXTURE SCHEDULE
BALLAST TYPE USED IN THE FIXTURE: SEE FIXTURE SCHEDULE
NUMBER OF BALLASTS IN FIXTURE: SEE FIXTURE SCHEDULE
TOTAL WATTAGE PER FIXTURE: SEE FIXTURE SCHEDULE

TOTAL INTERIOR WATTAGE: WHOLE BUILDING
ALLOWED = 63,307 WATTS
ADDITIONAL 10% = 56,976 WATTS
SPECIFIED = 54,402 WATTS

EXTERIOR ALLOWANCE:
(TRADEABLE SURFACES)
ALLOWED = 6,396 WATTS
SPECIFIED = 3,118 WATTS

(NON-TRADEABLE SURFACES:)
ALLOWED = N/A WATTS
SPECIFIED = N/A WATTS

(FIXTURE EFFICACY:) NOTE: GROUNDS LIGHTING, LANDSCAPE, AREA ETC…

FIXTURE	LUMENS	WATTS / FIXTURE	LUMENS / WATT
L9	1,400	23	61
SB	425	7	61
SP3B	11,539	129	89
SP4A	12,402	129	96
SP4B	12,402	129	96

ADDITIONAL PRESCRIPTIVE COMPLIANCE

- ☐ C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE
- ☑ C406.3 REDUCED LIGHTING POWER DENSITY
- ☐ C406.4 ENHANCED DIGITAL LIGHTING CONTROLS
- ☐ C406.5 ON-SITE RENEWABLE ENERGY
- ☐ C406.6 DEDICATED OUTSIDE AIR SYSTEM
- ☐ C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
LIGHTING
FIXTURE SCHEDULE

EL
0.1

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

DECORATIVE LIGHTING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER/SERIES (BASIS OF DESIGN)	NOM. SIZE	TEMP(oK)	LAMPS	VOLTS	DELIVERED LUMENS	WATTS	COLOR	MOUNTING HEIGHT	BALLAST/ DRIVER	REMARKS
D1	WALL SCONCE	JAMES ALLEN QZBF8634 KENTON INDOOR LIGHT BAR	4.75"H 28.25"W	3000K	LED	120	1650	23	AGED BRASS	WALL MOUNTED 66" AFF		
D2	CEILING LIGHT FIXTURE	ALORA LIGHTING BRISBANE FM556216AGWH	16"DIA 4 1/8"H	3500K	LED	120		30	AGED GOLD/ WHITE	CEILING MOUNTED		3 - 60W E26 MEDIUM BULBS
D3	WALL SCONCE	ALORA LIGHTING WV355116 WYNWOOD INDOOR LIGHTING	15.75"H 3.68"W 5"EXT	3500K	LED	120		10	URBAN BRONZE	WALL MOUNTED 66" AFF		60W E26 MEDIUM BASE BULB
D4	VANITY LIGHT FIXTURE	PROGRESS LIGHTING MERRY COLLECTION THREE-LIGHT ETCHED GLASS BATH VANITY WALL LIGHT	24"W 10.5"H 6.5"D	3500K	LED	120		50	MATTE BLACK	WALL MOUNTED ABOVE MIRROR		3 - 100W E26 MEDIUM BASE BULBS
D5	SEMI-FLUSH CEILING FIXTURE	FOSS & MAIN FLAIRE LINEN BLEND SEMI-FLUSH MOUNT	9.5"H 22"DIA	3500K	LED	120		50	BRUSHED NICKEL/ OFF WHITE	CEILING MOUNTED		5 - 60W E26 MEDIUM BASE BULBS
D6	MINI-PENDANT	JAMES ALLEN INEZ 13" WIDE PENDANT	11.75"H 13.25"DIA	3500K	LED	120		10	BLACK MATTE/ HERITAGE GOLD	SUSPENDED 75" AFF		60W E26 MEDIUM BASE BULB
D7	CEILING FIXTURE	ALORA LIGHTING SF473710 BETTY INDOOR LIGHTING	13.375"H 13"W 13 13/16"D	3500K	LED	120		10	AGED GOLD/ OPAN WHITE	CEILING MOUNTED		60W E26 MEDIUM BASE BULB
D8	VANITY LIGHT FIXTURE PUBLIC RESTROOMS	CAPITAL LIGHTING 652621BN THEO DUAL SCONCE	5"W 20.5"H	3500K	LED	120		34	BRUSHED NICKEL	WALL MOUNTED ABOVE MIRROR		2 - 100W E26 MEDIUM BASE BULBS
D9	OVERBED LIGHT FIXTURE	AFX LIGHTING RANDOLPH COLLECTION LED OVERBED LIGHT	38"x 4"x 4.88"	3000K	LED	120	4050	60	JUTE/ SATIN NICKEL	WALL MOUNTED AT 5'-6" AFF		PROVIDE SWITCH
D10	VANITY LIGHT FIXTURE RESIDENT RESTROOMS	GENERATION LIGHTING 4424503EN3-962 HANFORD THREE LIGHT WALL	24"W 10.5"H 6.5"D	3000K	LED	120		28	BRUSHED NICKEL	WALL MOUNTED ABOVE MIRROR		3 - 9.3W A19 MEDIUM BASE BULBS
D11	CEILING FIXTURE RESIDENT RESTROOMS	PROGRESS LIGHTING EDESSA FLUSH MOUNT	16"DIA 4.5"H	3000K	LED	120		45	BRUSHED NICKEL	CEILING MOUNTED	10% DIMMING	3 - 15W E26 MEDIUM BASE BULBS
D12	WALL SCONCE	PROGRESS LIGHTING LED WALL BRACKET	4.75"W 11"H 2.75"D	3000K	LED	120	918	16	BRUSHED NICKEL	AS INDICATED ON ARCHITECTURAL DRAWINGS		
D13	CEILING FIXTURE RESIDENT RESTROOMS	PROGRESS LIGHTING APOGEE P350071-009-30 CLOSE-TO-CEILING LIGHT	21"DIA 4.5"H	3000K	LED	120	2550	41	BRUSHED NICKEL	CEILING MOUNTED		
D14	CHANDELIER	VISUAL COMFORT & CO. KLEE 6-LIGHT CHANDELIER	56"DIA 8.5"H	3000K	LED	120	3490	45.6	NIGHT-SHADE BLACK			
D15	CEILING FIXTURE	MILLENIUM LIGHTING LAPHIA THREE LIGHT SEMI-FLUSH MOUNT	15.75"DIA 11.25"H	3500K	LED	120		30	BRUSHED NICKEL, ETCHED OPAL			3 - 60W E26 MEDIUM BASE BULBS

GENERAL NOTES:

A. THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE.
B. DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES.
C. NO SUBSTITUTIONS WILL BE ALLOWED DUE TO THE LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID.
D. ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS.
E. FIXTURES TO BE INSTALLED IN CEILINGS INDICATED ON THE ARCHITECTURAL PLANS AS HAVING INSULATION IN CONTACT WITH THE CEILING SURFACE, SHALL BE IC RATED BY MANUFACTURER.
F. ACRYLIC PRISMATIC LENSES SHALL BE 0.125" NOMINAL MINIMUM THICKNESS.
G. LED MODULES SHALL BE REPLACEABLE.
H. ELECTRICAL CONTRACTOR SHALL RECEIVE APPROVAL FOR ALL LIGHTING FIXTURES FROM ARCHITECT/OWNER PRIOR TO PURCHASE AND ROUGH-IN.
I. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL RATINGS.

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL R. DUNCAN McFETRIDGE

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
DECORATIVE LIGHTING
FIXTURE SCHEDULE

EL
0.2

WALL TYPE LEGEND

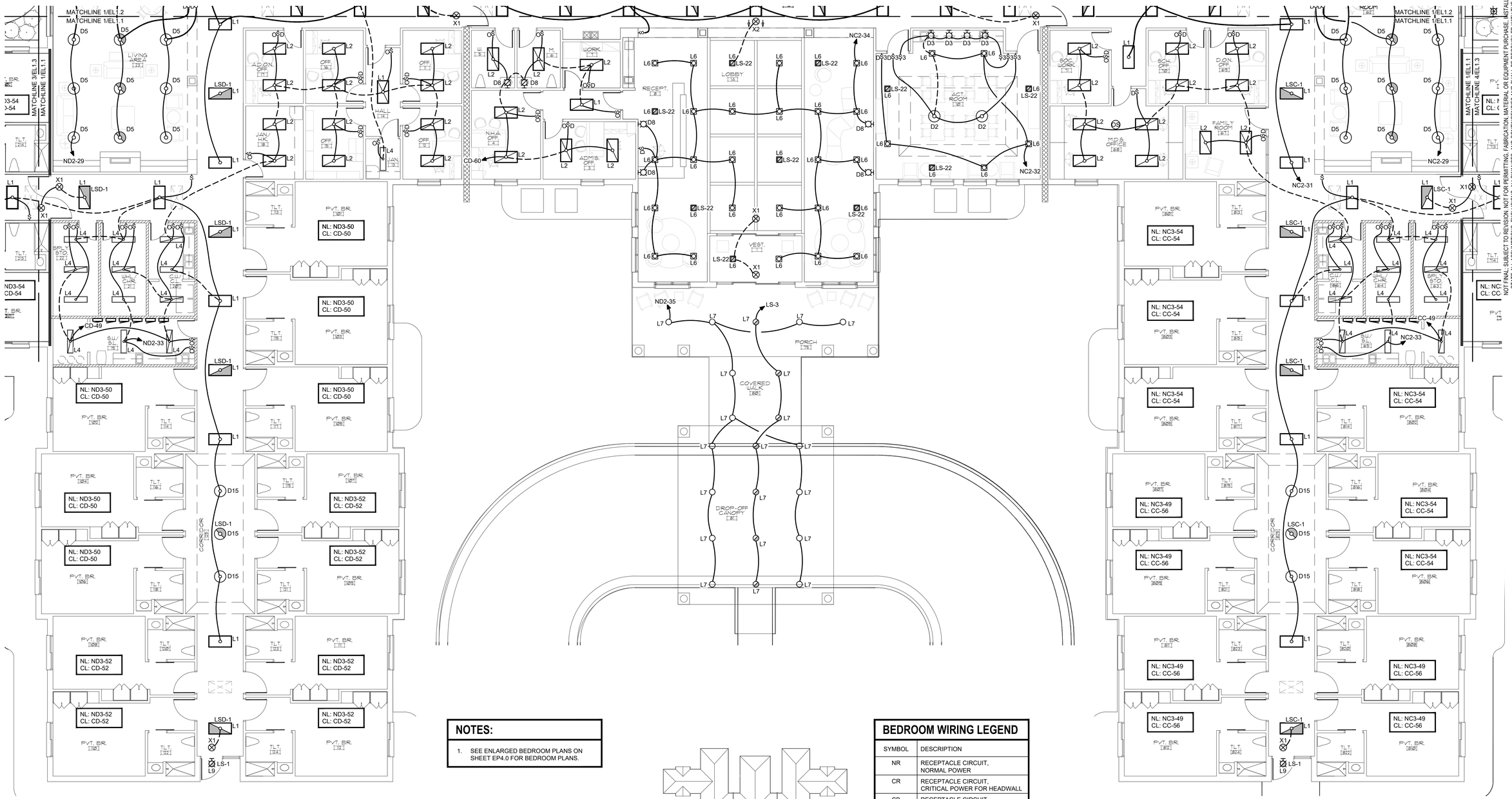
- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFETRIDGE
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

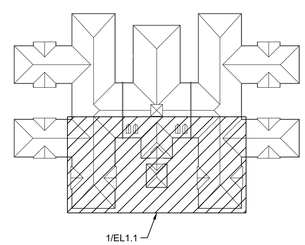


NOTES:

1. SEE ENLARGED BEDROOM PLANS ON SHEET EP4.0 FOR BEDROOM PLANS.

BEDROOM WIRING LEGEND

SYMBOL	DESCRIPTION
NR	RECEPTACLE CIRCUIT, NORMAL POWER
CR	RECEPTACLE CIRCUIT, CRITICAL POWER FOR HEADWALL
CB	RECEPTACLE CIRCUIT, CRITICAL POWER FOR BED
NRB	BATHROOM RECEPTACLE CIRCUIT, NORMAL POWER
EH	EQUIPMENT CIRCUIT, EMERG. EQUIP POWER FOR DAHU
NL	LIGHTING CIRCUIT, NORMAL POWER
CL	LIGHTING CIRCUIT, CRITICAL POWER



0 KEYPLAN
NOT TO SCALE

1 PARTIAL LIGHTING PLAN
1/8" = 1'-0"
0 4' 8' 16'
PLAN NORTH

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED NURSING FACILITY
ELECTRICAL
PARTIAL LIGHTING PLAN

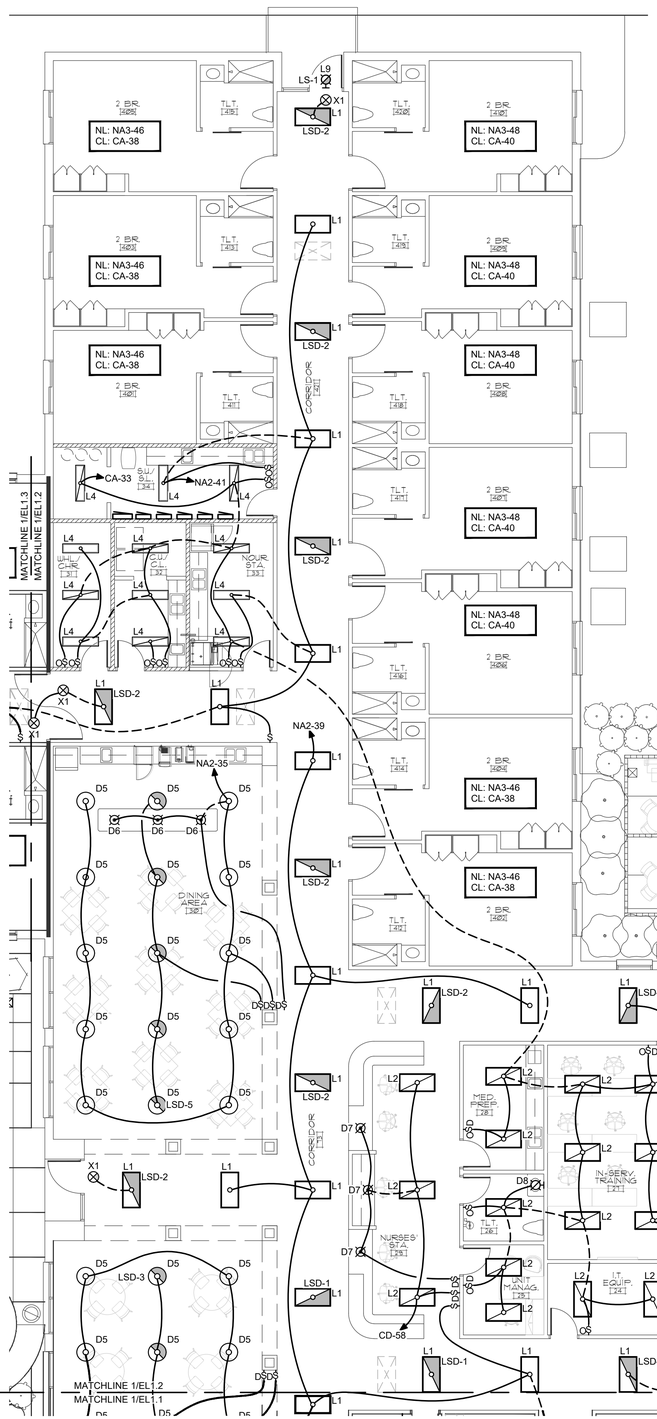
EL 1.1

1 PARTIAL LIGHTING PLAN

1/8" = 1'-0"

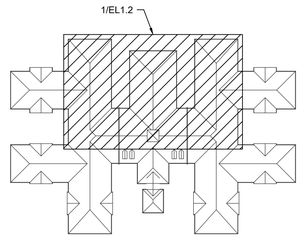
0 4' 8' 16'

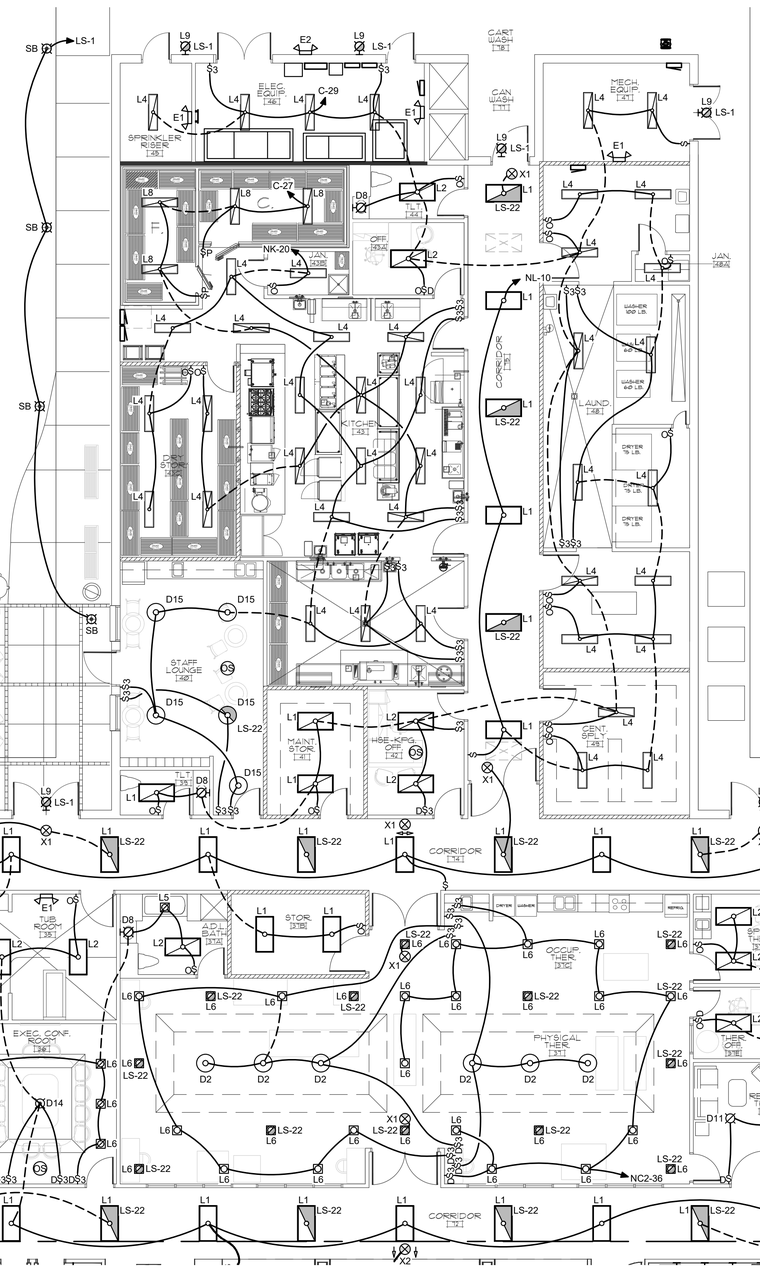
PLAN NORTH



0 KEYPLAN

NOT TO SCALE





NOTES:

1. SEE ENLARGED BEDROOM PLANS ON SHEET EP4.0 FOR BEDROOM PLANS.

BEDROOM WIRING LEGEND

SYMBOL	DESCRIPTION
NR	RECEPTACLE CIRCUIT, NORMAL POWER
CR	RECEPTACLE CIRCUIT, CRITICAL POWER FOR HEADWALL
CB	RECEPTACLE CIRCUIT, CRITICAL POWER FOR BED
NRB	BATHROOM RECEPTACLE CIRCUIT, NORMAL POWER
EH	EQUIPMENT CIRCUIT, EMERG. EQUIP POWER FOR DAHU
NL	LIGHTING CIRCUIT, NORMAL POWER
CL	LIGHTING CIRCUIT, CRITICAL POWER

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL; SUBJECT TO REVISION. NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER R. DUNCAN McFEE

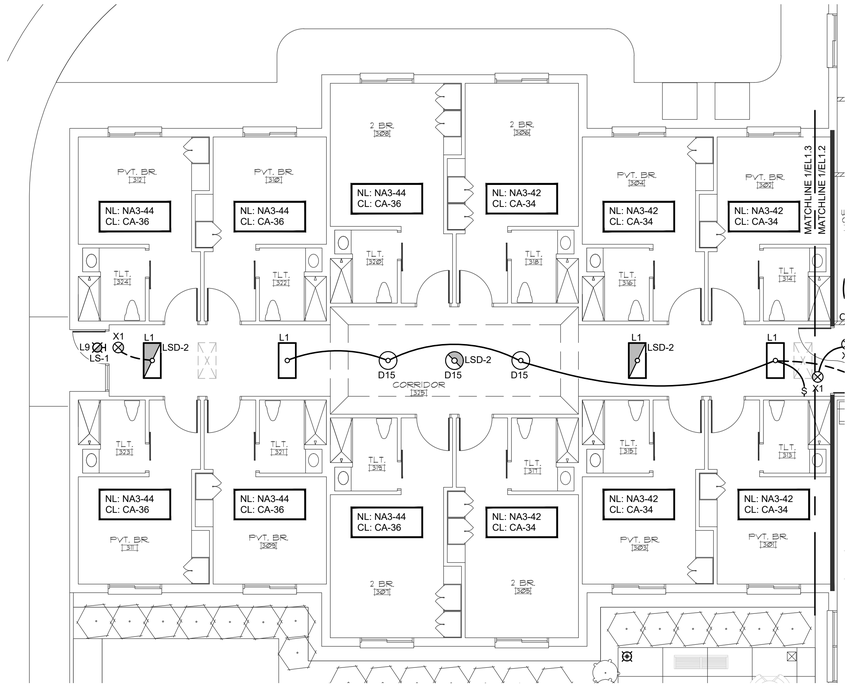
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

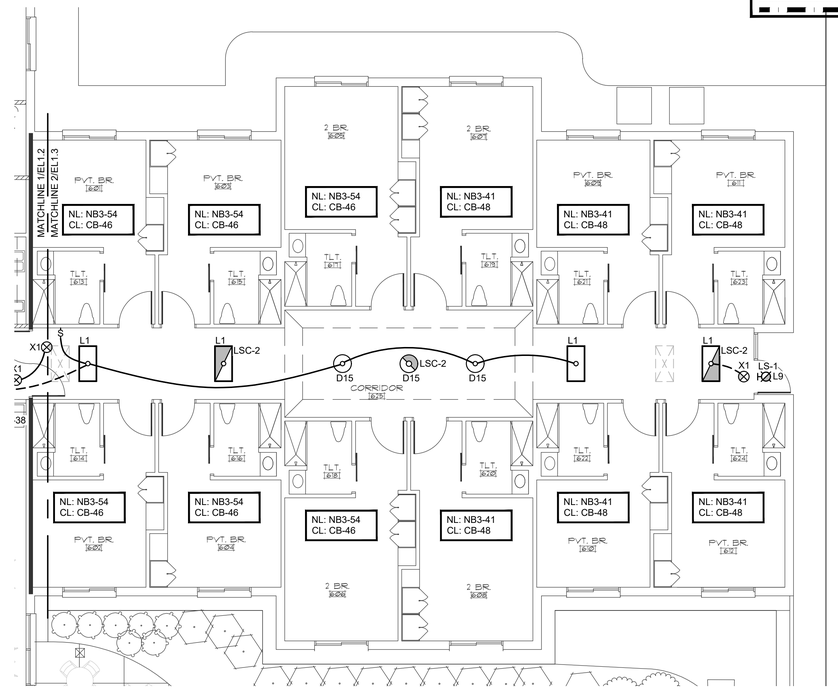
David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PARTIAL LIGHTING PLAN

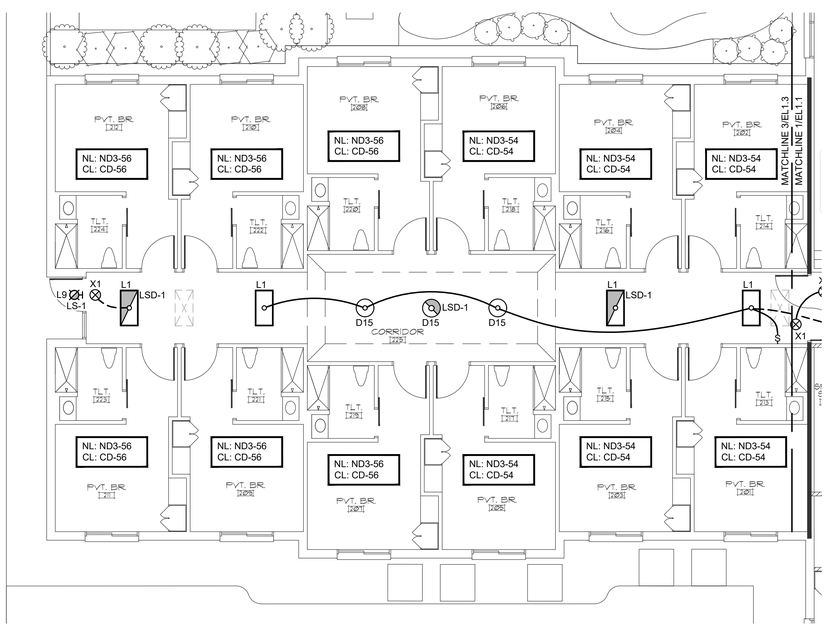
EL 1.2



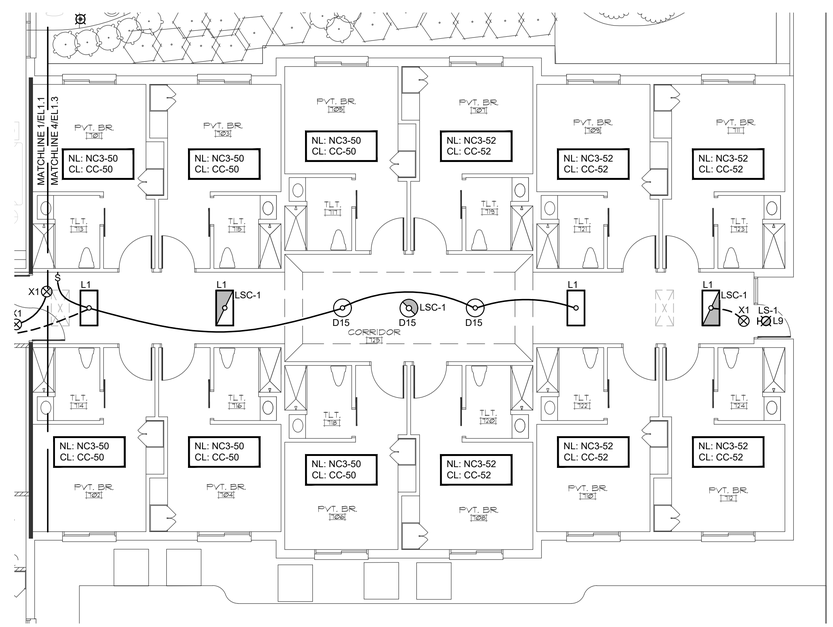
1 **PARTIAL LIGHTING PLAN**
1/8" = 1'-0"
PLAN NORTH



2 **PARTIAL LIGHTING PLAN**
1/8" = 1'-0"
PLAN NORTH



3 **PARTIAL LIGHTING PLAN**
1/8" = 1'-0"
PLAN NORTH



4 **PARTIAL LIGHTING PLAN**
1/8" = 1'-0"
PLAN NORTH

WALL TYPE LEGEND

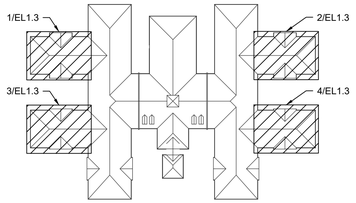
- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

BEDROOM WIRING LEGEND

SYMBOL	DESCRIPTION
NR	RECEPTACLE CIRCUIT, NORMAL POWER
CR	RECEPTACLE CIRCUIT, CRITICAL POWER FOR HEADWALL
CB	RECEPTACLE CIRCUIT, CRITICAL POWER FOR BED
NRB	BATHROOM RECEPTACLE CIRCUIT, NORMAL POWER
EH	EQUIPMENT CIRCUIT, EMERG. EQUIP POWER FOR DAHU
NL	LIGHTING CIRCUIT, NORMAL POWER
CL	LIGHTING CIRCUIT, CRITICAL POWER

NOTES:

1. SEE ENLARGED BEDROOM PLANS ON SHEET EP4.0 FOR BEDROOM PLANS.



0 **KEYPLAN**
NOT TO SCALE

CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER R. DUNCAN McFEETERS

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PARTIAL LIGHTING PLAN

EL 1.3

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

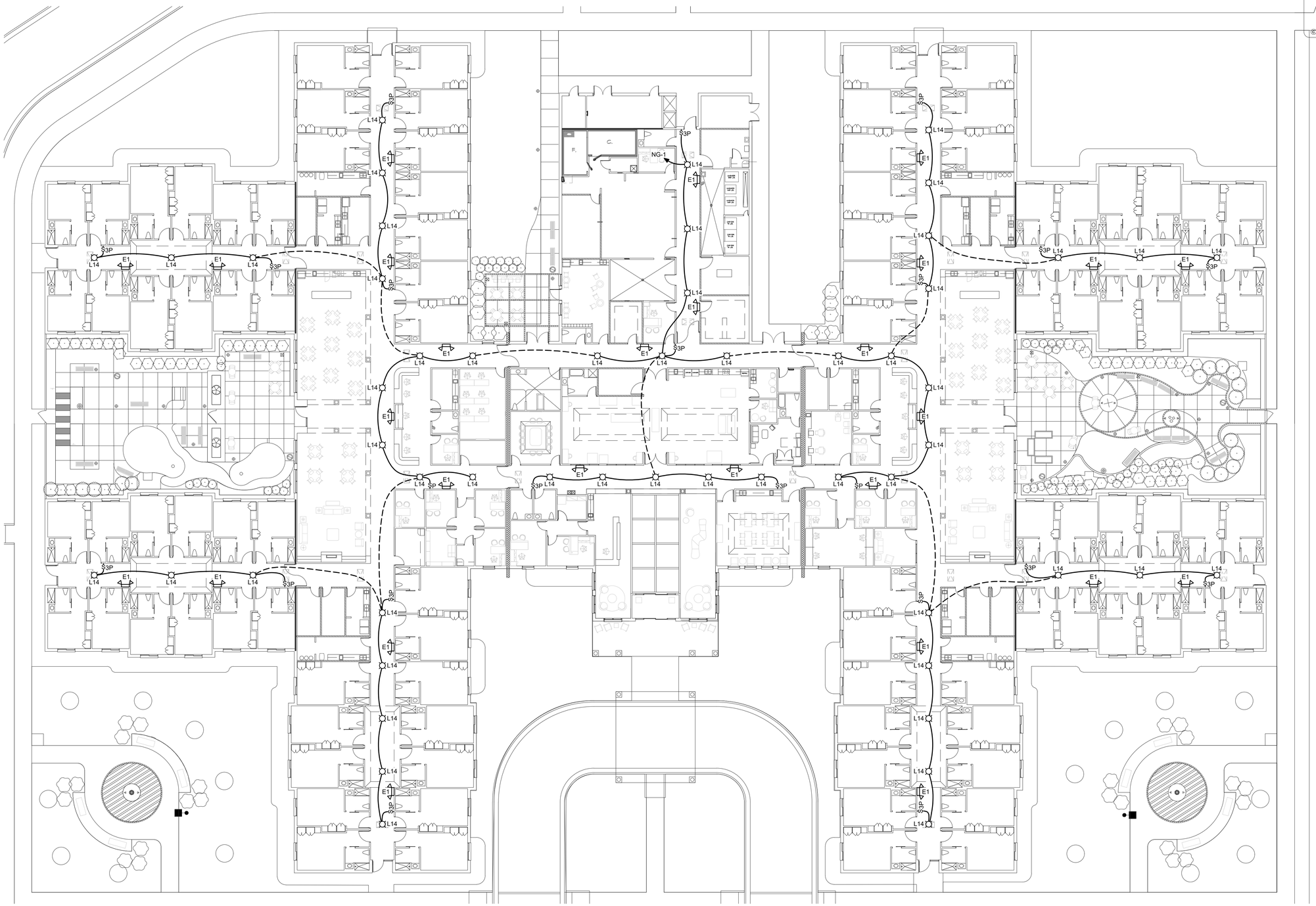
CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFEETERS

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



1 **ATTIC LIGHTING PLAN**
1/16" = 1'-0"
0 8' 16' 32'

PLAN NORTH

NOTE: COORDINATE ALL ATTIC LIGHTING FIXTURE SWITCH LOCATIONS WITH FINAL ATTIC ACCESS PANEL LOCATIONS, SEE ARCHITECTURAL SHEETS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

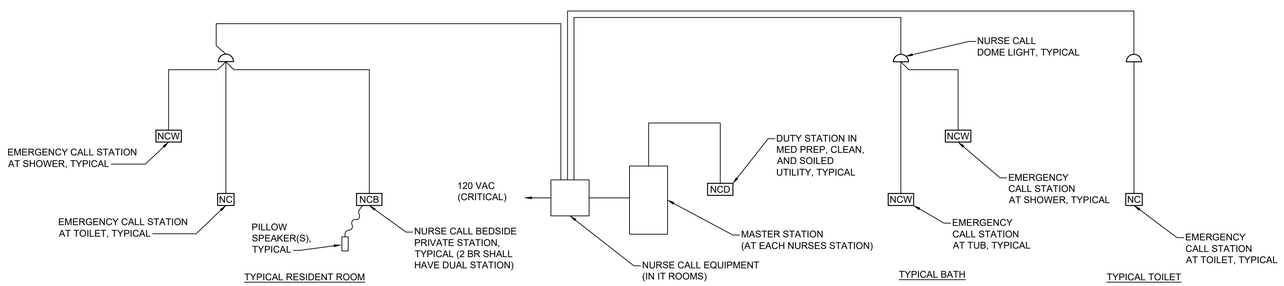
David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED NURSING FACILITY
ELECTRICAL
ATTIC POWER PLAN

EL 1.4

LOW VOLTAGE SYSTEMS ELECTRICAL COORDINATION NOTES

1. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ELECTRICAL WORK REQUIRED BY THE OWNER AND THE GENERAL CONTRACTOR.
2. THE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF ELECTRICAL EQUIPMENT INCLUDING RECEPTACLES, LIGHTING FIXTURES, ETC. WITH THE LOW VOLTAGE DEVICES AND EQUIPMENT.
3. SEE SPECIFICATIONS SECTIONS 16041 – PAGING SYSTEM, 16042 – NURSE CALL SYSTEM, 16043 – TELEPHONE AND DATA RACEWAY SYSTEM, 16044 – ACCESS CONTROL/SPECIAL LOCKING (MAG LOCK) RACEWAY SYSTEM, 16045 – CABLE TELEVISION RACEWAY SYSTEM, 16046 – SECURITY CAMERA RACEWAY SYSTEM, 16047 – AIPHONE SYSTEM RACEWAY SYSTEM AND 16049 – ELECTRICAL WORK IN CONNECTION WITH OTHER CONTRACTS FOR ADDITIONAL REQUIREMENTS AND CONTRACTOR RESPONSIBILITIES WITH REGARD TO THESE SYSTEMS.
4. THE CONTRACTOR SHALL PROVIDE, AS PART OF THIS CONTRACT, SOURCES OF POWER; POWER, RECEPTACLES, CONTROL AND COMMUNICATIONS CONDUCTORS, CABLES AND RACEWAYS; EMPTY RACEWAYS; JUNCTION, OUTLET AND PULL BOXES; MOUNTING HARDWARE; FINAL CONNECTIONS; CONNECTION HARDWARE; TESTING AND TESTING SUPPORT; ETC., FOR THE LOW VOLTAGE SYSTEMS AS SHOWN ON THE CONTRACT DRAWINGS.



NOTES:
1. NURSE CALL SYSTEM CABLING SHALL BE ROUTED EXPOSED IN ATTIC SPACE. PROVIDE 3/4" RACEWAY FROM ALL WALL MOUNTED DEVICES TO ATTIC SPACE AND BETWEEN DEVICES AND EQUIPMENT AS REQUIRED.
2. RISER DIAGRAM IS DEPICTIVE AND FUNCTIONAL ONLY. ALL DEVICES ARE NOT SHOWN.

1 FUNCTIONAL NURSE CALL RISER DIAGRAM

NOT TO SCALE

SYSTEMS LEGEND

SYMBOL	DESCRIPTION
NURSE CALL SYSTEM, SEE SPECIFICATIONS SECTION 16042	
NCB	NURSE CALL BED STATION
NCB D	NURSE CALL DUAL BED STATION
	NURSE CALL DOME LIGHT
Z	NURSE CALL ZONE LIGHT
NCD	NURSE CALL DUTY STATION
NCS	NURSE CALL STAFF STATION
CCL	NURSE CALL CODE LIGHT
NCM	NURSE CALL MASTER STATION
NC	NURSE CALL STATION WITH PULL CORD
NCW	NURSE CALL STATION WITH PULL CORD, WEATHERPROOF, UL LISTED FOR SHOWERS
CCA	CODE CALL ANNUNCIATOR
CCB	CODE CALL BUTTON
LED	LED NURSE CALL ALPHANUMERIC ANNUNCIATOR, ARROWS INDICATE (2) SIDED, WALL OR CEILING MOUNTED AS SHOWN ON PLANS
LED	LED NURSE CALL ALPHANUMERIC ANNUNCIATOR, ARROW INDICATE (1) SIDED, WALL OR CEILING MOUNTED AS SHOWN ON PLANS
PAGING SYSTEM, SEE SPECIFICATIONS SECTION 16041	
S	CEILING MOUNTED SPEAKER
S	WALL MOUNTED SPEAKER
V	SPEAKER VOLUME CONTROL, 42" AFF
MAGNETIC LOCK SYSTEM	
CR	CARD READER
S	EMERGENCY RELEASE PULL STATION
ML	MAG LOCK
DSCP	DOOR SECURITY CONTROL PANEL
ES	ELECTRIC STRIKE
RTE	REQUEST TO EXIT
PIR	MOTION SENSOR
SECURITY SYSTEM	
	SECURITY CAMERA

(SYMBOLS SHOWN FOR REFERENCE ONLY AND MAY NOT IMPLY CONTRACTUAL REQUIREMENTS)

NOTE: NURSE CALL, PAGING, MAGNETIC LOCK, AND SECURITY SYSTEMS CABLING SHALL BE ROUTED EXPOSED IN ATTIC SPACE. PROVIDE 4" x 4" x 2 1/8" BOX AND 3/4" MINIMUM RACEWAY FROM ALL WALL MOUNTED DEVICES TO ATTIC SPACE AND BETWEEN DEVICES AND EQUIPMENT AS REQUIRED.

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

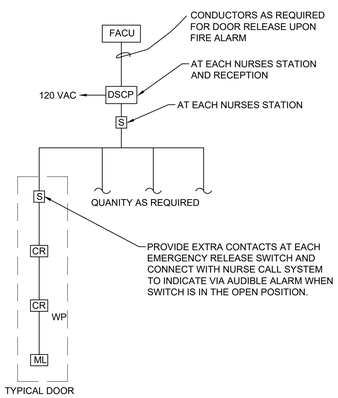
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER R. DUNCAN McFEE

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina



NOTES:
1. MAGNETIC LOCK SYSTEM CABLING SHALL BE ROUTED EXPOSED IN ATTIC SPACE. PROVIDE 3/4" RACEWAY FROM ALL WALL MOUNTED DEVICES TO ATTIC SPACE AND BETWEEN DEVICES AND EQUIPMENT AS REQUIRED.
2. RISER DIAGRAM IS DEPICTIVE AND FUNCTIONAL ONLY. ALL DEVICES ARE NOT SHOWN.

2 FUNCTIONAL MAGNETIC LOCK DOOR SYSTEM

NOT TO SCALE

MAGNETIC DOOR LOCK SYSTEM NOTES:

1. THE SPECIAL LOCKING SYSTEM SHALL MEET ALL REQUIREMENTS OF THE LATEST NORTH CAROLINA STATE BUILDING CODE.
2. THE SPECIAL LOCKING SYSTEM SHALL BE APPROVED BY THE APPROPRIATE FIRE AND BUILDING INSPECTION AUTHORITY PRIOR TO INSTALLATION, AFTER INSTALLATION AND PRIOR TO INITIAL USE AND REVIEWED PERIODICALLY THEREAFTER.
3. THE FOLLOWING REQUIREMENTS SHALL BE MET:
   A. NOT MORE THAN ONE SYSTEM SHALL BE LOCATED IN ANY EGRESS PATH.
   B. ON/OFF EMERGENCY RELEASE SWITCHES SHALL BE LOCATED AND IDENTIFIED AT EACH NURSE / STAFF STATION SERVING THE LOCKED UNIT.
   C. AN ON/OFF EMERGENCY RELEASE SWITCH SHALL BE LOCATED AT EACH LOCKED DOOR WITHIN 3 FEET OF THE DOOR AND SHALL NOT DEPEND ON RELAYS OR OTHER DEVICES TO CAUSE THE INTERRUPTION OF POWER.
   D. ANY REQUIRED EMERGENCY RELEASE SWITCH REQUIRED SHALL BE THE LOCKING TYPE. ALL STAFF RESPONSIBLE FOR THE EVACUATION OF OCCUPANTS MUST CARRY EMERGENCY RELEASE KEYS.
   E. PROVIDE ADDITIONAL EMERGENCY RELEASE SWITCHES FOR CONVENIENCE AS DIRECTED BY THE OWNER/ARCHITECT.
5. ALL MAGNETIC LOCKS SHALL OPEN UNDER THE FOLLOWING CONDITIONS:
   A. UNLOCK UPON ACTIVATION OF THE AUTOMATIC FIRE DETECTION SYSTEM OR AUTOMATIC SPRINKLER SYSTEM.
   B. UNLOCK UPON LOSS OF POWER CONTROLLING THE LOCKING DEVICE.
   C. UNLOCK UPON ACTIVATION OF MASTER SHUTOFF SWITCH AT NURSE / STAFF STATIONS.
6. INDIVIDUAL DOORS SHALL OPEN UNDER THE FOLLOWING CONDITIONS:
   A. UNLOCK FROM ACTIVATION OF A SWITCH LOCATED BEHIND GLASS LOCATED WITHIN 3'-0" OF THE DOOR.
   B. UNLOCK FROM ACTIVATION OF KEYPAD OPERATOR LOCATED WITHIN 3'-0" OF THE DOOR.
   C. UNLOCK FROM ACTIVATION OF EMERGENCY RELEASE AT NURSE / STAFF STATIONS.
7. EMERGENCY LIGHTING SHALL BE PROVIDED AT EACH DOOR EQUIPPED WITH SPECIAL LOCKING.
8. A WIRING DIAGRAM AND SYSTEM COMPONENTS LOCATION PLAN SHALL BE PROVIDED UNDER GLASS ADJACENT TO THE FIRE ALARM CONTROL PANEL AND AT EACH NURSE / STAFF STATION.
9. MANUFACTURER AND MODEL NUMBER OF ALL SYSTEM COMPONENTS INCLUDING SWITCH LOCATED BEHIND GLASS SHALL BE APPROVED BY THE OWNER PRIOR TO INSTALLATION.

ATTIC LOW VOLTAGE SYSTEMS CABLE INSTALLATION NOTES:

1. ALL LOW VOLTAGE SYSTEM CABLE INSTALLED FREE RUN IN THE ATTIC SHALL BE INSTALLED ON J HOOKS. CABLES SHALL BE INSTALLED IN A MANNER TO PROTECT THE CABLES FROM DAMAGE DURING INSTALLATION, FACILITATE CABLE MANAGEMENT AND IDENTIFICATION, AND PROVIDE A NEAT AND GROOMED APPEARANCE.
2. EACH CABLE SYSTEM SHALL BE INSTALLED AND SUPPORTED INDEPENDENTLY.
3. CABLING SHALL BE INSTALLED IN STRAIGHT PATHS IN A NEAT AND ORDERLY FASHION FOLLOWING MAINTENANCE WALKWAYS AND AT NINETY-DEGREE ANGLES. DIAGONAL, BEELINE AND OR NON-SUPPORTED CABLING ARE UNACCEPTABLE. CABLING SHALL BE ROUTED AS HIGH AS POSSIBLE AND ABOVE OTHER BUILDING FACILITIES IN THE PATH WITH THE LEAST OBSTRUCTIONS IN THE SPACE. PATHWAYS SHALL BE AT LEAST 2 FEET AWAY FROM ALL LIGHTING FIXTURES AND OTHER POTENTIAL EMF SOURCES. CABLES SHALL NOT BE STRAPPED TO ELECTRICAL POWER CONDUITS, PIPING OR OTHER SYSTEMS. THE PLACING OF CABLE TIES SHALL NOT DEFORM THE CABLES.
4. THE CABLE SUPPORT STRUCTURE SHALL UTILIZE APPROVED J HOOK CABLE SUPPORTS AND BE SIZED TO ACCOMMODATE CHANGE. J HOOK TYPE CABLE SUPPORTS SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE AND BE SPACED AT A MAXIMUM DISTANCE OF FOUR (4) FEET SO THAT SAG BETWEEN SUPPORTS DOES NOT EXCEED 12 INCHES. ALL J HOOKS SHALL BE SIZED WITH 20% SPARE CAPACITY. ALL ATTACHMENT HARDWARE SHALL BE APPROVED FOR THE TYPE OF INSTALLATION AND MAXIMUM LOAD RATING OF THE PRODUCTS INSTALLED.
5. ALL PENETRATIONS THROUGH WALL AND CEILINGS SHALL BE SLEEVED. ALL SLEEVES SHALL HAVE PERMANENTLY ATTACHED PLASTIC BUSHINGS. SLEEVES SHALL BE SIZED TO ACCEPT 50% GROWTH. ALL SLEEVES SHALL BE FIRE-STOPPED USING THIRD PARTY TESTING AGENCY APPROVED METHODS AND SHALL MAINTAIN ASSEMBLY FIRE RATINGS.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ELECTRICAL WORK REQUIRED BY THE OWNER'S LOW VOLTAGE SYSTEMS VENDOR'S DRAWINGS, THE OWNER AND THE GENERAL CONTRACTOR.
7. THE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF ELECTRICAL EQUIPMENT INCLUDING RECEPTACLES, LIGHTING FIXTURES, ETC. WITH THE LOW VOLTAGE DEVICES AND EQUIPMENT SHOWN ON THE LOW VOLTAGE SYSTEMS VENDOR'S DRAWINGS.
8. SEE SPECIFICATIONS SECTIONS 16041 - PAGING SYSTEM, 16042 - NURSE CALL SYSTEM, 16043 - TELEPHONE AND DATA RACEWAY SYSTEM, 16044 - ACCESS CONTROL/ SPECIAL LOCKING (MAG LOCK) RACEWAY SYSTEM, 16045 - CABLE TELEVISION RACEWAY SYSTEM, 16046 - SECURITY CAMERA RACEWAY SYSTEM AND 16049 - ELECTRICAL WORK IN CONNECTION WITH OTHER CONTRACTS FOR ADDITIONAL REQUIREMENTS AND CONTRACTOR RESPONSIBILITIES WITH REGARD TO THESE SYSTEMS.
9. THE LOW VOLTAGE SYSTEMS DRAWINGS, OBTAINED BY THE CONTRACTOR FROM THE OWNER'S LOW VOLTAGE SYSTEMS VENDORS, SHALL BE CONSIDERED AN ESSENTIAL COMPONENT OF THE CONTRACT DOCUMENTS. SOME ELECTRICAL WORK SHOWN ON THESE DRAWINGS IS INTENTIONALLY NOT DUPLICATED ON THE ELECTRICAL DRAWINGS. THE CONTRACTOR SHALL PROVIDE, AS PART OF THIS CONTRACT, SOURCES OF POWER; POWER, RECEPTACLES, CONTROL AND COMMUNICATIONS CONDUCTORS, CABLES AND RACEWAYS; EMPTY RACEWAYS; JUNCTION, OUTLET AND PULL BOXES; MOUNTING HARDWARE; FINAL CONNECTIONS; CONNECTION HARDWARE; TESTING AND TESTING SUPPORT; ETC., FOR THE LOW VOLTAGE SYSTEMS AS SHOWN ON THE CONTRACT DRAWINGS AND THE LOW VOLTAGE SYSTEMS DRAWINGS. IF NOT SHOWN ON THE ELECTRICAL DRAWINGS, USE SPARE CIRCUIT BREAKERS IN ELECTRICAL PANELBOARDS FOR ADDITIONAL CIRCUITS SHOWN ON THE REFERENCE DRAWINGS AND MARK AS-BUILT DRAWINGS ACCORDINGLY.
10. THE CONTRACTOR IS CAUTIONED TO THOROUGHLY REVIEW BOTH THE CONTRACT DRAWINGS AND THE LOW VOLTAGE SYSTEMS DRAWINGS PRIOR TO SUBMITTING A BID. ELECTRICAL ITEMS SHOWN AND/OR NOTED ON THESE DRAWINGS TO BE PROVIDED BY THE "ELECTRICIAN" OR SIMILAR TERM SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE CONSIDERED AS BINDING AS MATERIAL, EQUIPMENT AND LABOR SHOWN ON THE CONTRACT DRAWINGS. NO EXTRAS WILL BE CONSIDERED OR APPROVED FOR ITEMS SHOWN ON EITHER DRAWINGS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR.

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL SYSTEM
LEGEND, RISER, & NOTES

S0.1

WALL TYPE LEGEND

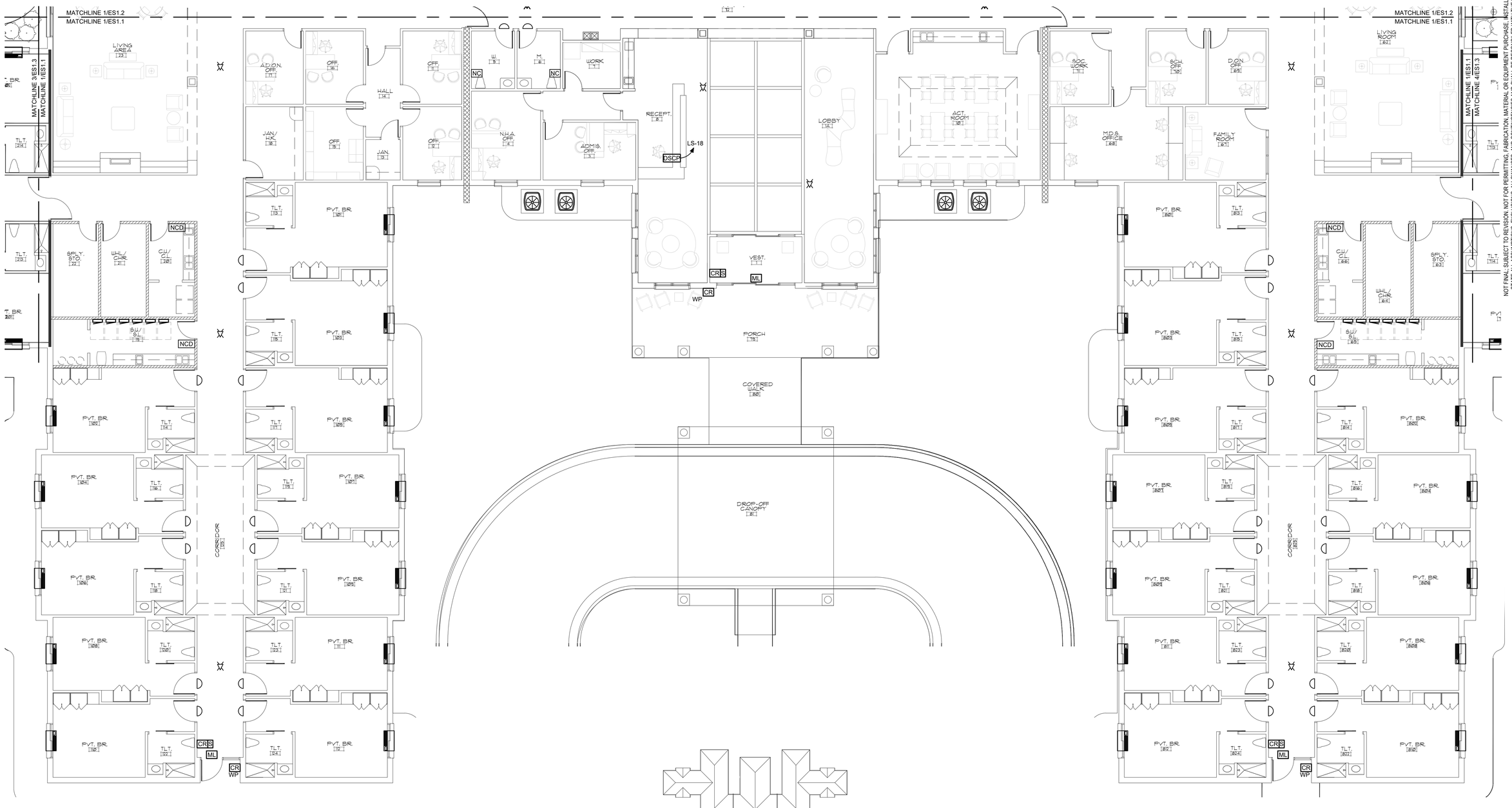
- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF
Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

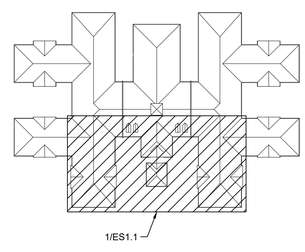
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DUNCAN McFETRIDGE
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



1 **PARTIAL SYSTEMS PLAN**
1/8" = 1'-0"
0 4' 8' 16'
PLAN NORTH



0 **KEYPLAN**
NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PARTIAL SYSTEMS PLAN

ES 1.1

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFEETERS
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

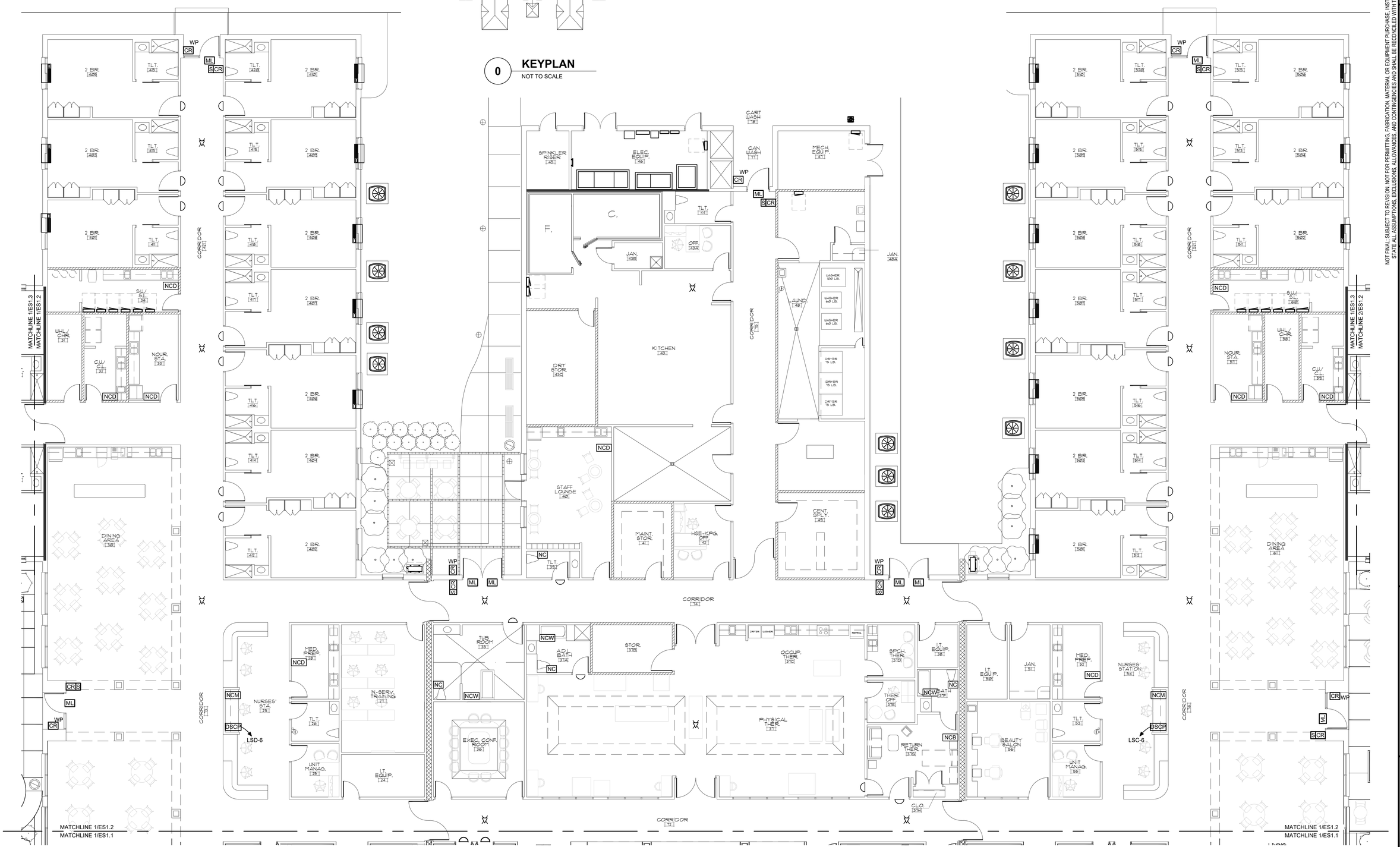
David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED NURSING FACILITY
ELECTRICAL
PARTIAL SYSTEMS PLAN

ES 1.2

1 PARTIAL SYSTEMS PLAN
1/8" = 1'-0"

PLAN NORTH



0 KEYPLAN
NOT TO SCALE

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

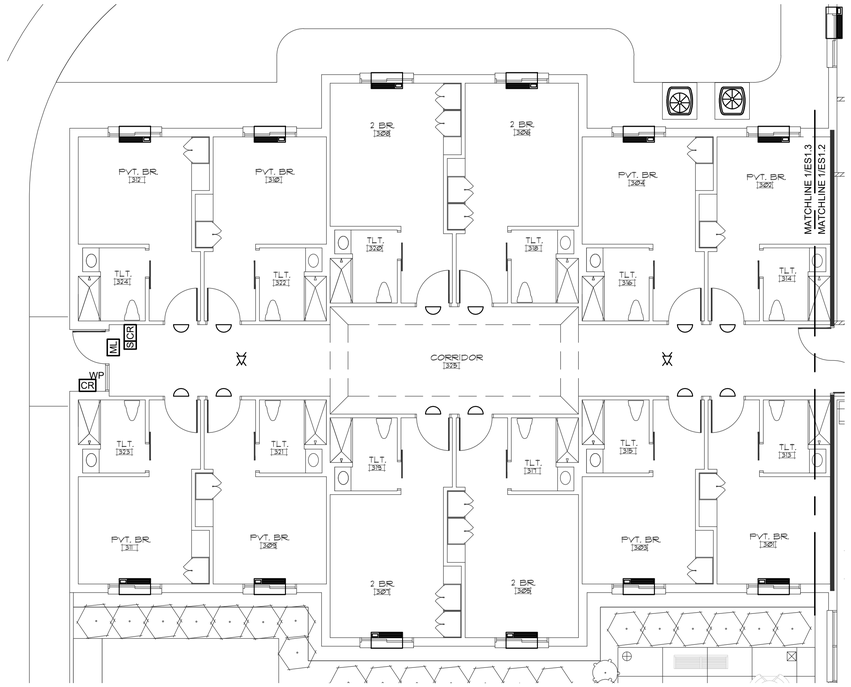
CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

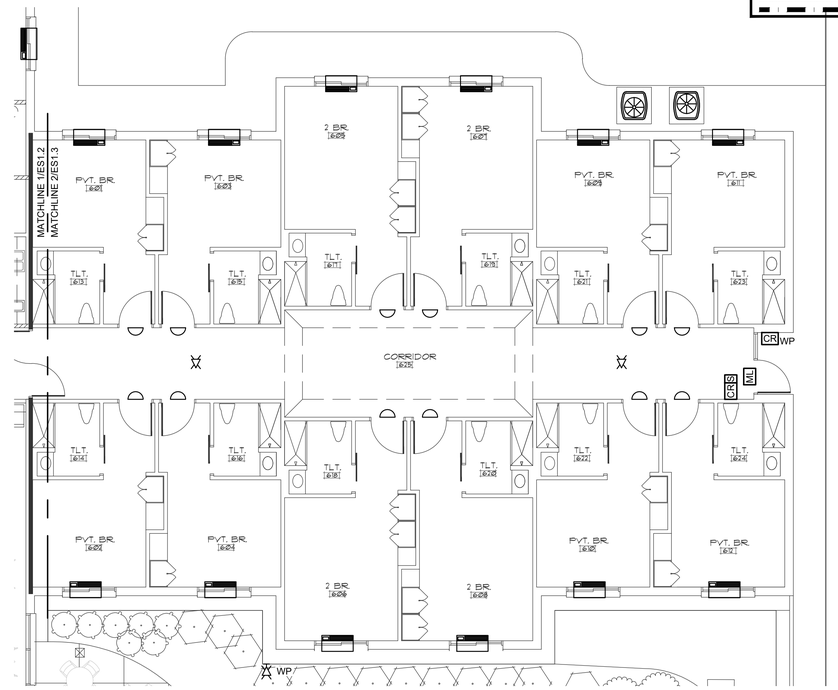
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFETRIDGE

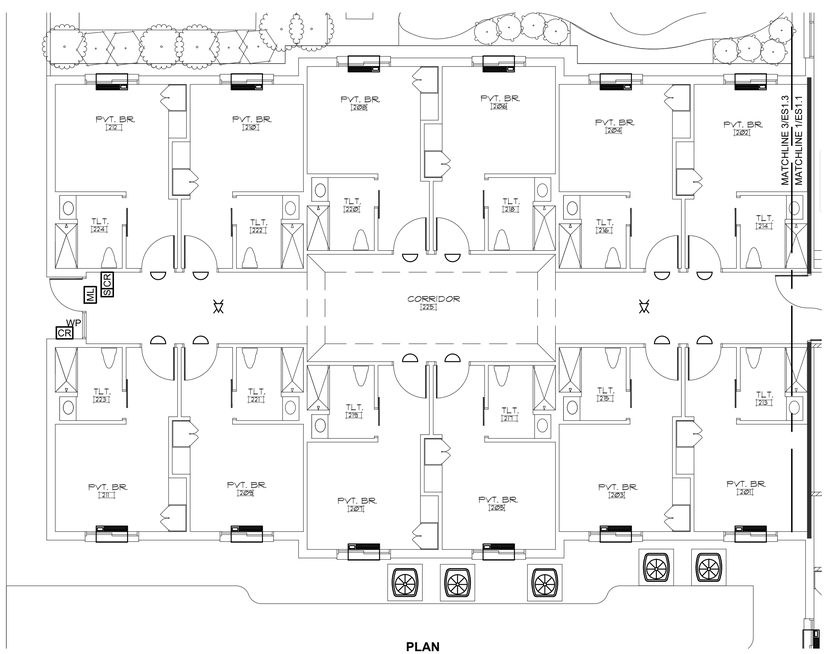
NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



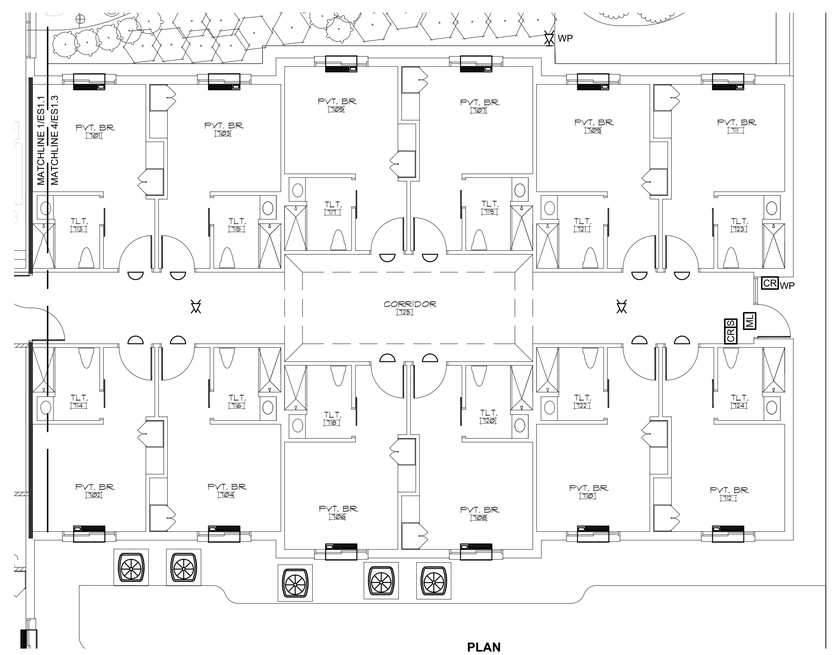
1 **PARTIAL SYSTEMS PLAN**
1/8" = 1'-0"
PLAN NORTH



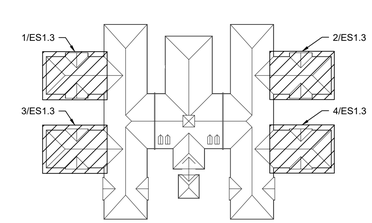
2 **PARTIAL SYSTEMS PLAN**
1/8" = 1'-0"
PLAN NORTH



3 **PARTIAL SYSTEMS PLAN**
1/8" = 1'-0"
PLAN NORTH



4 **PARTIAL SYSTEMS PLAN**
1/8" = 1'-0"
PLAN NORTH



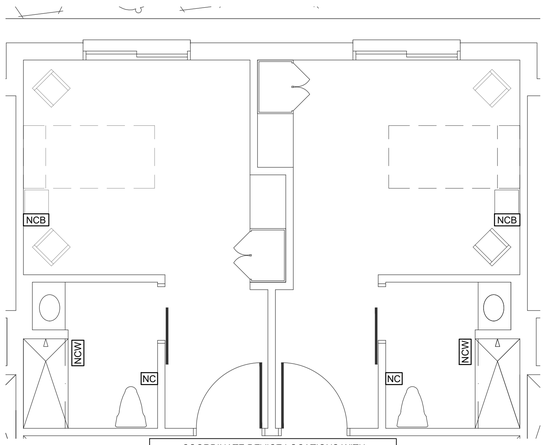
0 **KEYPLAN**
NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
ELECTRICAL
PARTIAL SYSTEMS PLAN

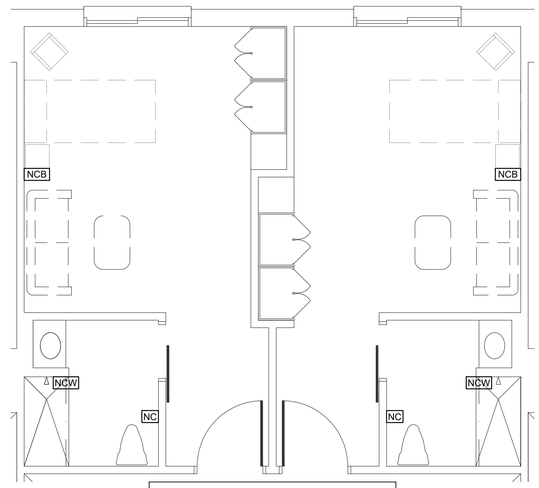
ES 1.3



COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

1 TYPICAL ENLARGED PLAN - PRIVATE BEDROOM SUITE

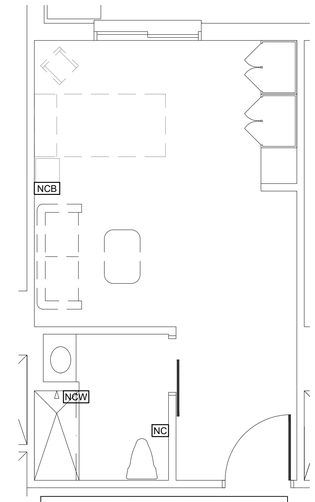
1/4" = 1'-0" 0 2' 4' 8'



COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

2 TYPICAL ENLARGED PLAN - LARGE PRIVATE BEDROOM SUITE

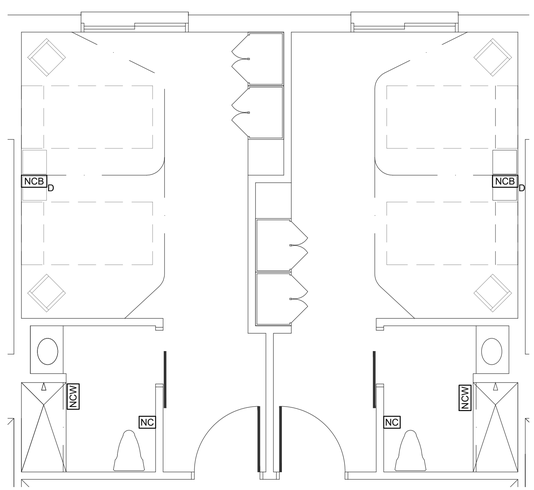
1/4" = 1'-0" 0 2' 4' 8'



COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

3 TYPICAL ENLARGED PLAN - LARGE PRIVATE BEDROOM "HALF" SUITE

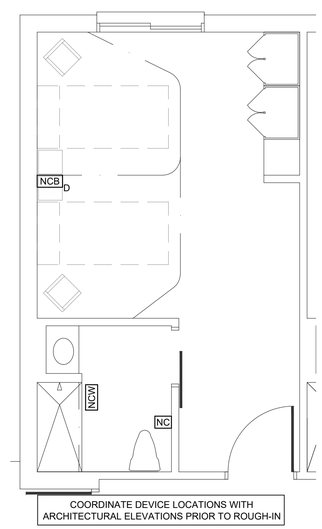
1/4" = 1'-0" 0 2' 4' 8'



COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

4 TYPICAL ENLARGED PLAN - SEMI-PRIVATE BEDROOM SUITE

1/4" = 1'-0" 0 2' 4' 8'



COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN

5 TYPICAL ENLARGED PLAN - SEMI-PRIVATE BEDROOM "HALF" SUITE

1/4" = 1'-0" 0 2' 4' 8'

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL 028 ARCHITECT R. DUNCAN McFEE

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
NURSE CALL SYSTEM
BEDROOM PLANS

ES
4.0

FIRE ALARM SYSTEM CONTROL MATRIX

SYSTEM INPUTS	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE NOTIFICATION APPLIANCES	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ALARM SIGNAL TO MONITORING SERVICE	SUPERVISORY SIGNAL TO MONITORING SERVICE	TROUBLE SIGNAL TO MONITORING SERVICE	DISPLAY/PRINT CHANGE OF STATUS	RELEASE MAGNETICALLY HELD DOORS	SIGNAL HVAC CONTROL SYSTEM
	SYSTEM OUTPUTS									
SMOKE DETECTORS	X	X			X			X	X	X
HEAT DETECTORS	X	X			X			X	X	X
MANUAL PULL STATIONS	X	X			X			X	X	
CARBON MONOXIDE DETECTORS				X		X				
SYSTEM TROUBLE CONDITION			X				X	X		
LOSS OF FACU AC POWER (NOTE 1)			X				X	X		
GROUND FAULT			X				X	X		
SHORT CIRCUIT			X				X	X		
OPEN CIRCUIT			X				X	X		
EXHAUST HOOD FIRE SUPPRESSION SYSTEM	X	X			X			X	X	X
SPRINKLER RISER #1 (SPRINKLER RISER 45) SYSTEM FLOW SWITCH (ES)	X	X			X			X	X	X
SPRINKLER RISER #1 (SPRINKLER RISER 45) SYSTEM TAMPER SWITCH (ES)				X		X		X		
SPRINKLER RISER #1 (SPRINKLER RISER 45) PRESSURE SWITCH (ES)				X		X		X		
SPRINKLER RISER #1 (SPRINKLER RISER 45) PIV SUPERVISORY				X		X		X		
SPRINKLER RISER #1 RPZ TAMPER SWITCH (ES)				X		X		X		

NOTES:
1. ONLY AFTER LOSS OF POWER FOR > 8 HOURS.
2. ALL SPRINKLER FIRE ALARM SYSTEM CONNECTIONS ARE NOT SHOWN. REFER TO FIRE PROTECTION DRAWINGS FOR SPRINKLER DEVICE LOCATIONS.

FIRE ALARM LEGEND

SYMBOL	DESCRIPTION
F	FIRE ALARM MANUAL STATION, 48" AFF
15cd F	FIRE ALARM HORN/STROBE DEVICE, 80" AFF, "15cd" INDICATED CANDELA RATING
15cd F	FIRE ALARM VISUAL (ONLY) DEVICE, 80" AFF, "15 cd" INDICATES CANDELA RATING
15cd F	FIRE ALARM HORN/STROBE DEVICE, CEILING MOUNTED, "15cd" INDICATES CANDELA RATING
15cd F	FIRE ALARM VISUAL (ONLY) CEILING MOUNTED, "15cd" INDICATES CANDELA RATING
15cd F	FIRE ALARM CHIME/STROBE DEVICE, CEILING MOUNTED, "15cd" INDICATES CANDELA RATING
	DOOR HOLD OPEN DEVICE BY G.C.
?	SMOKE DETECTOR, CEILING MOUNTED
	HEAT DETECTOR, CEILING MOUNTED
C	CARBON MONOXIDE DETECTOR, CEILING MOUNTED
F	EXTERIOR ELECTRIC WATER BELL , WP, ANNUNCIATED WATER FLOW
	SPRINKLER TAMPER SWITCH
	SPRINKLER FLOW SWITCH
C	CONTROL MODULE
M	MONITOR MODULE
R	DUCT SMOKE DETECTOR, REMOTE INDICATING DEVICE (RAIL)
R	REMOTE INDICATING DEVICE (RAIL), WALL MOUNTED
I	ISOLATION MODULE
FACP	FIRE ALARM CONTROL UNIT (FACP)
FA REMOTE ANN	FIRE ALARM REMOTE ANNUNCIATOR PANEL

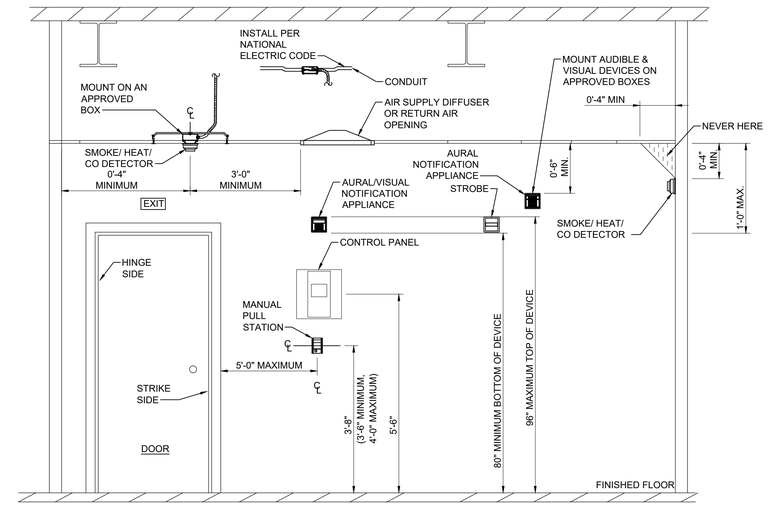
(SYMBOLS SHOWN FOR REFERENCE ONLY AND MAY NOT IMPLY CONTRACTUAL REQUIREMENTS)

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

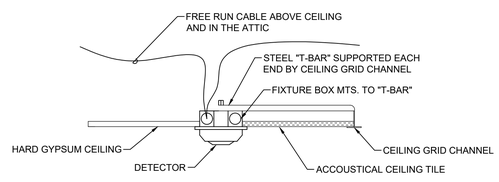


NOTE:
DETAIL SHOWN FOR REFERENCE ONLY, NOT ALL DEVICES ARE INDICATED ON PLANS.

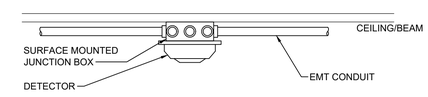
2 DEVICE MOUNTING DETAIL
NOT TO SCALE

ATTIC LOW VOLTAGE SYSTEMS CABLE INSTALLATION NOTES:

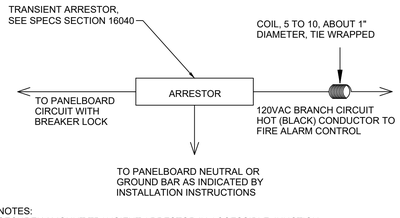
1. ALL LOW VOLTAGE SYSTEM CABLE INSTALLED FREE RUN IN THE ATTIC SHALL BE INSTALLED ON J HOOKS. CABLES SHALL BE INSTALLED IN A MANNER TO PROTECT THE CABLES FROM DAMAGE DURING INSTALLATION, FACILITATE CABLE MANAGEMENT AND IDENTIFICATION, AND PROVIDE A NEAT AND GROOMED APPEARANCE.
2. EACH CABLE SYSTEM SHALL BE INSTALLED AND SUPPORTED INDEPENDENTLY.
3. CABLING SHALL BE INSTALLED IN STRAIGHT PATHS IN A NEAT AND ORDERLY FASHION FOLLOWING MAINTENANCE WALKWAYS AND AT NINETY-DEGREE ANGLES. DIAGONAL, BEELINE AND OR NON-SUPPORTED CABLING ARE UNACCEPTABLE. CABLING SHALL BE ROUTED AS HIGH AS POSSIBLE AND ABOVE OTHER BUILDING FACILITIES IN THE PATH WITH THE LEAST OBSTRUCTIONS IN THE SPACE. PATHWAYS SHALL BE AT LEAST 2 FEET AWAY FROM ALL LIGHTING FIXTURES AND OTHER POTENTIAL EMF SOURCES. CABLES SHALL NOT BE STRAPPED TO ELECTRICAL POWER CONDUITS, PIPING OR OTHER SYSTEMS. THE PLACING OF CABLE TIES SHALL NOT DEFORM THE CABLES.
4. THE CABLE SUPPORT STRUCTURE SHALL UTILIZE APPROVED J HOOK CABLE SUPPORTS AND BE SIZED TO ACCOMMODATE CHANGE. J HOOK TYPE CABLE SUPPORTS SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE AND BE SPACED AT A MAXIMUM DISTANCE OF FOUR (4) FEET SO THAT SAG BETWEEN SUPPORTS DOES NOT EXCEED 12 INCHES. ALL J HOOKS SHALL BE SIZED WITH 20% SPARE CAPACITY. ALL ATTACHMENT HARDWARE SHALL BE APPROVED FOR THE TYPE OF INSTALLATION AND MAXIMUM LOAD RATING OF THE PRODUCTS INSTALLED.
5. ALL PENETRATIONS THROUGH WALLS AND CEILINGS SHALL BE SLEEVED. ALL SLEEVES SHALL HAVE PERMANENTLY ATTACHED PLASTIC BUSHINGS. SLEEVES SHALL BE SIZED TO ACCEPT 50% GROWTH. ALL SLEEVES SHALL BE FIRE-STOPPED USING THIRD PARTY TESTING AGENCY APPROVED METHODS AND SHALL MAINTAIN ASSEMBLY FIRE RATINGS.



3 TYPICAL CEILING MOUNTED DEVICE DETAIL
NOT TO SCALE

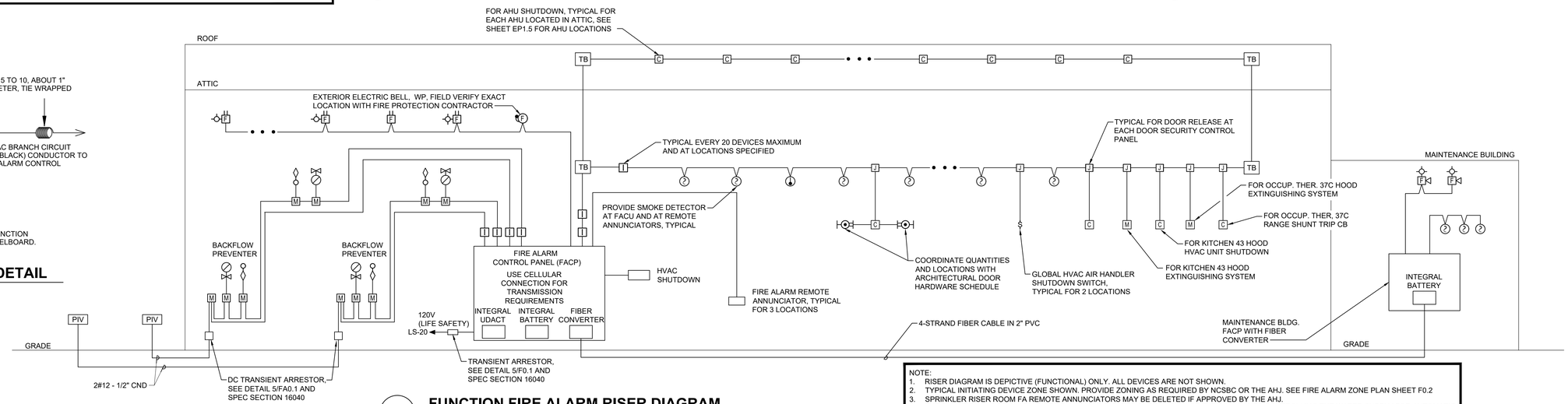


4 TYPICAL SURFACE MOUNTED DEVICE DETAIL
NOT TO SCALE



NOTES:
SECURELY MOUNT TRANSIENT ARRESTOR IN ACCESSIBLE JUNCTION BOX OR PROPER METAL ENCLOSURE ADJACENT TO THE PANELBOARD. PROVIDE ENGRAVED LABEL INDICATING ITS LOCATION

5 TRANSIENT ARRESTOR DETAIL
NOT TO SCALE



1 FUNCTION FIRE ALARM RISER DIAGRAM
NOT TO SCALE

NOTE:
1. RISER DIAGRAM IS DEPICTIVE (FUNCTIONAL) ONLY. ALL DEVICES ARE NOT SHOWN.
2. TYPICAL INITIATING DEVICE ZONE SHOWN. PROVIDE ZONING AS REQUIRED BY NCSBC OR THE AHJ. SEE FIRE ALARM ZONE PLAN SHEET F0.2
3. SPRINKLER RISER ROOM FA REMOTE ANNUNCIATORS MAY BE DELETED IF APPROVED BY THE AHJ.
5. THE FUNCTIONAL FIRE ALARM RISER DIAGRAM INDICATES SUPERVISION OF TYPICAL VALVES CONTROLLING THE WATER SUPPLY FOR AUTOMATIC SPRINKLER SYSTEMS, PUMPS, TANKS, WATER LEVELS AND TEMPERATURES, CRITICAL AIR PRESSURES AND WATERFLOW SWITCHES. THE CONTRACTOR MUST COORDINATE ALL OF THE ABOVE WITH THE FIRE PROTECTION DRAWINGS AND THE FIRE PROTECTION CONTRACTOR.
6. SEE SPECIFICATIONS SECTION 16040 FOR ADDITIONAL DETAILS AND REQUIREMENTS.

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

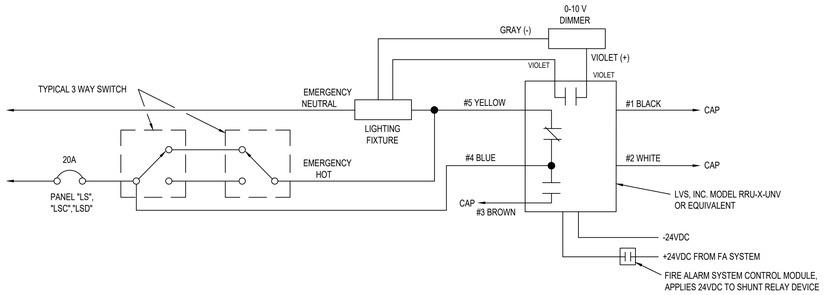
NORTH CAROLINA PROFESSIONAL SEAL 045 ARCHITECT R. DUNCAN McPHERSON
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
FIRE ALARM SYSTEM
NOTES AND DETAILS

FA 0.1



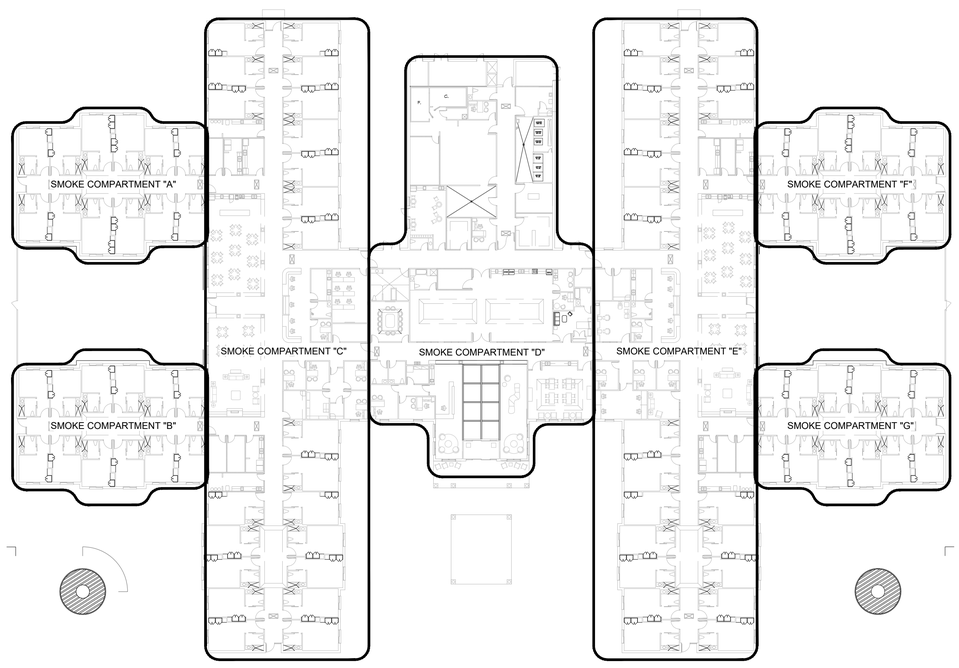
2 LIFE SAFETY LIGHTING SHUNT RELAY DETAIL (TYP)

NOT TO SCALE

NOTE: 3 WAY SWITCHING SHOWN

3 FACP PLACARD DETAIL

NOT TO SCALE



1 FIRE ALARM ZONE PLAN

NOT TO SCALE

NOTE:
SMOKE COMPARTMENT NOTIFICATION APPLIANCE ZONING IS SHOWN. PROVIDE ZONING OF NOTIFICATION APPLIANCE CIRCUITS AND SYSTEM OPERATION AS REQUIRED BY THE NORTH CAROLINA STATE BUILDING CODE, DHFC AND LOCAL CODE OFFICIALS.

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER R. DUNCAN McFEE

GENERAL FIRE ALARM NOTES

1. ALL ELECTRICAL WORK SHALL BE IN FULL COMPLIANCE WITH NFPA 70, THE SOUTH CAROLINA STATE BUILDING CODE, ALL LOCAL CODES AND ORDINANCES AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL EQUIPMENT PROVIDED BY THE CONTRACTOR SHALL BE LISTED AND LABELED BY A NATIONALLY-RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, FOR THE CONDITIONS OF INSTALLATION. ALL MATERIAL, EQUIPMENT AND DEVICES SHALL BE NEW CURRENT PRODUCTS OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH PRODUCTS. EQUIPMENT SHALL BE SUITABLE FOR ITS APPLICATION (E.G. WHEN INSTALLED OUTDOORS, IT SHALL BE WEATHERPROOF, ETC.)
3. THE CONTRACTOR SHALL REVIEW THE FIRE ALARM DRAWINGS AND SPECIFICATIONS FOR WORK REQUIREMENTS, THE AMOUNT OF SPACE AVAILABLE FOR FIRE ALARM EQUIPMENT, AND LAYOUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER.
4. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THOROUGHLY FAMILIARIZING HIMSELF WITH ANY CONTRACTUAL REQUIREMENTS AS MAY BE SET FORTH IN THE OTHER DIVISIONS OF THE PROJECT SPECIFICATIONS.
5. UNLESS SPECIFICALLY NOTED OTHERWISE, SYSTEMS PROVIDED OR INSTALLED BY THE FIRE ALARM CONTRACTOR SHALL BE COMPLETE AND FULLY-FUNCTIONING AFTER INSTALLATION. INCIDENTAL COMPONENTS MAY NOT BE SHOWN, AND ALL WORK WHICH MAY BE REASONABLY IMPLIED AS BEING INCIDENTAL TO THIS WORK, BUT REQUIRED FOR THE PROPER OPERATION OF THE EQUIPMENT OR SYSTEM, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
6. THE WORK SHALL INCLUDE COMPLETE TESTING OF ALL EQUIPMENT AND WIRING AT THE COMPLETION OF WORK AND ANY MINOR CORRECTIONS, CHANGES OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT.
7. ALL FIRE ALARM EQUIPMENT SHALL, AT ALL TIMES DURING CONSTRUCTION, BE ADEQUATELY PROTECTED AGAINST MECHANICAL INJURY, OR DAMAGE BY WATER AND/OR THE ELEMENTS. FIRE ALARM EQUIPMENT SHALL NOT BE STORED OUT OF DOORS, BUT SHALL BE STORED IN DRY PERMANENT SHELTERS. IF AN APPARATUS HAS BEEN DAMAGED, OR HAS BEEN SUBJECT TO POSSIBLE INJURY BY WATER OR THE ELEMENTS, SUCH DAMAGE SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
8. DO NOT SCALE FIRE ALARM DRAWINGS. FIELD VERIFY ALL DIMENSIONS.
9. FIRE ALARM DEVICE LAYOUTS ARE NOT INTENDED TO SHOW THE NUMBER OF FITTINGS, OR OTHER INSTALLATION DETAILS. UNLESS NOTED OTHERWISE, THE EXACT ROUTING OF RACEWAYS AND CABLES IS THE RESPONSIBILITY OF THE CONTRACTOR. RISER AND GENERAL CIRCUIT ARRANGEMENTS ARE SHOWN SCHEMATICALLY/ DIAGRAMMATICALLY ONLY. THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION.
10. UNLESS DIMENSIONED, DEVICE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADJUST EXACT LOCATIONS AS REQUIRED TO SERVE THE INTENDED PURPOSE AND TO AVOID CONFLICTS AND INTERFERENCES WITH OTHER TRADES. EXACT DEVICE LOCATIONS IF NOT SHOWN ON THE FIRE ALARM DRAWINGS OR DIMENSIONED ON THE FIRE ALARM DRAWINGS, VERIFY EXACT LOCATION WITH THE ENGINEER PRIOR TO ROUGH-IN.
11. CONDUIT TERMINATING IN PRESSED STEEL BOXES SHALL HAVE DOUBLE LOCKNUTS AND INSULATED BUSHINGS. CONDUITS TERMINATING IN GASKETED ENCLOSURES SHALL BE TERMINATED WITH GROUNDING TYPE CONDUIT HUBS.
12. ALL EXTERIOR WIRING DEVICES, BOXES, ETC. SHALL BE WEATHERPROOF. FIRE ALARM DEVICES SHALL BE APPROPRIATELY RATED AND LISTED FOR THE ENVIRONMENT.
13. MAINTAIN CEILING FIRE RATINGS WITH ALL NECESSARY ACCESSORIES, OPTIONS AND/OR FIELD FABRICATED SHROUDS COMPLYING WITH ALL APPLICABLE CODES.
14. RACEWAYS PENETRATING FLOORS, CEILINGS OR WALLS SHALL BE PROPERLY SEALED SMOKETIGHT.
15. ALL RACEWAYS SHALL BE CONCEALED WHERE POSSIBLE. IF APPLICABLE, MATCH EXISTING RACEWAY INSTALLATION METHODS AND ROUTINGS AT OR NEAR EXISTING FACILITIES.
16. INSTALL EXPOSED RACEWAYS PARALLEL TO OR AT RIGHT ANGLES TO NEARBY SURFACES OR STRUCTURAL MEMBERS, AND FOLLOW THE SURFACE CONTOURS AS MUCH AS POSSIBLE. NO DIAGONAL RUNS WILL BE ALLOWED. ALL CONDUITS SHALL BE RUN STRAIGHT AND TRUE. RUN PARALLEL OR BANKED RACEWAYS TOGETHER ON COMMON SUPPORTS WHERE PRACTICAL. MAKE BENDS IN PARALLEL OR BANKED RUNS FROM SAME CENTERLINE TO MAKE BENDS PARALLEL.
17. PROVIDE AND PLACE ALL SLEEVES FOR CONDUITS PENETRATING WALLS, FLOORS, PARTITIONS, ETC. LOCATE ALL NECESSARY SLOTS FOR ELECTRICAL WORK AND FORM BEFORE CONCRETE IS POURED.
18. PATCHING OF WATERPROOFED SURFACES SHALL RENDER THE AREA OF THE PATCHING COMPLETELY WATERPROOF.
19. SURFACE MOUNTED PANELS, JUNCTION AND PULL BOXES, RACEWAYS, ETC., INSTALLED ON EXTERIOR SURFACES OR INSIDE ON EXTERIOR WALLS SHALL BE SUPPORTED BY SPACERS TO PROVIDE A 1/4" MINIMUM CLEARANCE BETWEEN THE WALL AND EQUIPMENT.
20. CEILING MOUNTED DEVICES INSTALLED IN ACOUSTICAL TILE CEILING AREAS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE WITH RODS OF SUFFICIENT SIZE TO PREVENT VERTICAL MOVEMENT OF THE DEVICE BOX. BRIDGES ALONE ARE NOT ADEQUATE UNLESS SPECIFICALLY APPROVED. CEILING MOUNTED DEVICES SHALL BE INSTALLED LEVEL. DO NOT SUPPORT DEVICES FROM ACOUSTICAL CEILING TILE.
21. COORDINATE LOCATIONS OF FIRE ALARM DEVICES BEFORE ROUGH-IN. ADVISE THE ENGINEER OF CONFLICTS BEFORE ROUGH-IN.
22. EXACT SPACING OF SMOKE AND HEAT DETECTORS BE FOLLOWED AS CLOSELY AS POSSIBLE WITH POSITIONS SHOWN ON THE DRAWINGS. DETECTOR SPACING IS BASED UPON NFPA 72 INCLUDING APPENDIX A. SLIGHT ADJUSTMENTS MAY BE MADE IN SPACING IF REQUIRED BY FIELD CONDITIONS, BUT SPACING SHALL NOT EXCEED ADA, NFPA AND EQUIPMENT MANUFACTURERS SPACING CRITERIA. DO NOT INSTALL SMOKE DETECTORS WITHIN 3 FEET OF SUPPLY AIR DIFFUSERS OR RETURN GRILLES. PROVIDE FLEX CONDUIT CONNECTION TO SMOKE AND HEAT DETECTORS OF ADEQUATE LENGTH TO ALLOW HORIZONTAL ADJUSTMENT OF FOUR FEET FROM POSITION INDICATED ON DRAWINGS.
23. INSTALLATION INFORMATION PACKED WITH DEVICES AND EQUIPMENT SHALL BE RETAINED FOR INCLUSION IN THE OPERATIONS AND MAINTENANCE MANUALS.
24. INSTALL WORK AT SUCH TIME AS TO REQUIRE THE MINIMUM AMOUNT TO CUTTING AND PATCHING.
25. CUT OPENINGS ONLY LARGE ENOUGH TO ALLOW EASY INSTALLATION OF THE CONDUIT.

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
FIRE ALARM SYSTEM
NOTES AND ZONE PLAN

FA
0.2

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

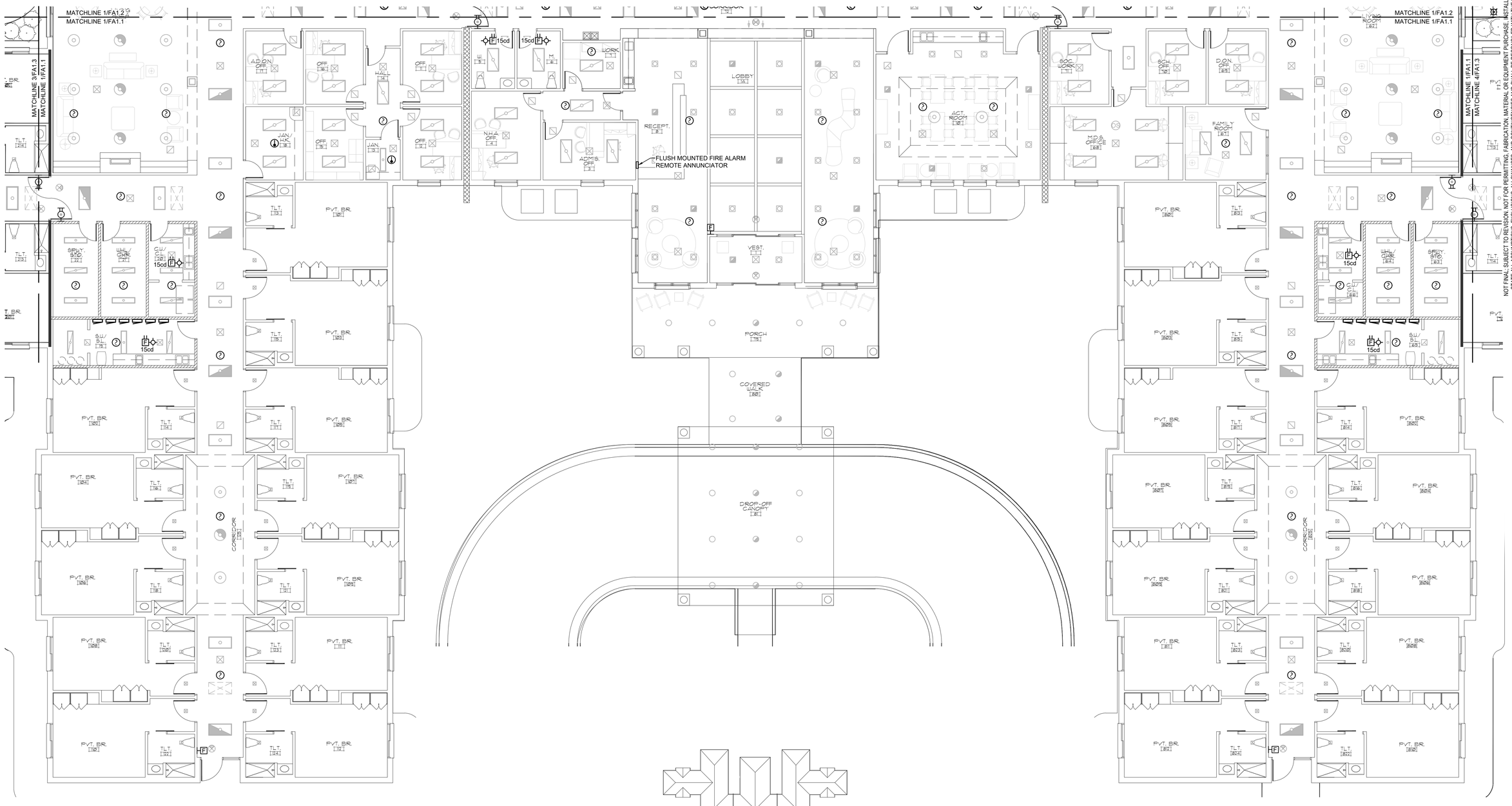
CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

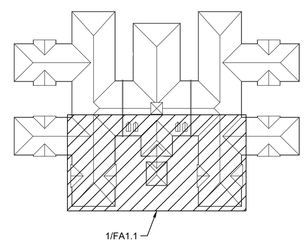
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER 042 R. DUNCAN McFETRIDGE

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.



1 **PARTIAL FIRE ALARM PLAN**
1/8" = 1'-0"
0 4' 8' 16'
PLAN NORTH



0 **KEYPLAN**
NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
FIRE ALARM SYSTEM
PARTIAL FLOOR PLAN

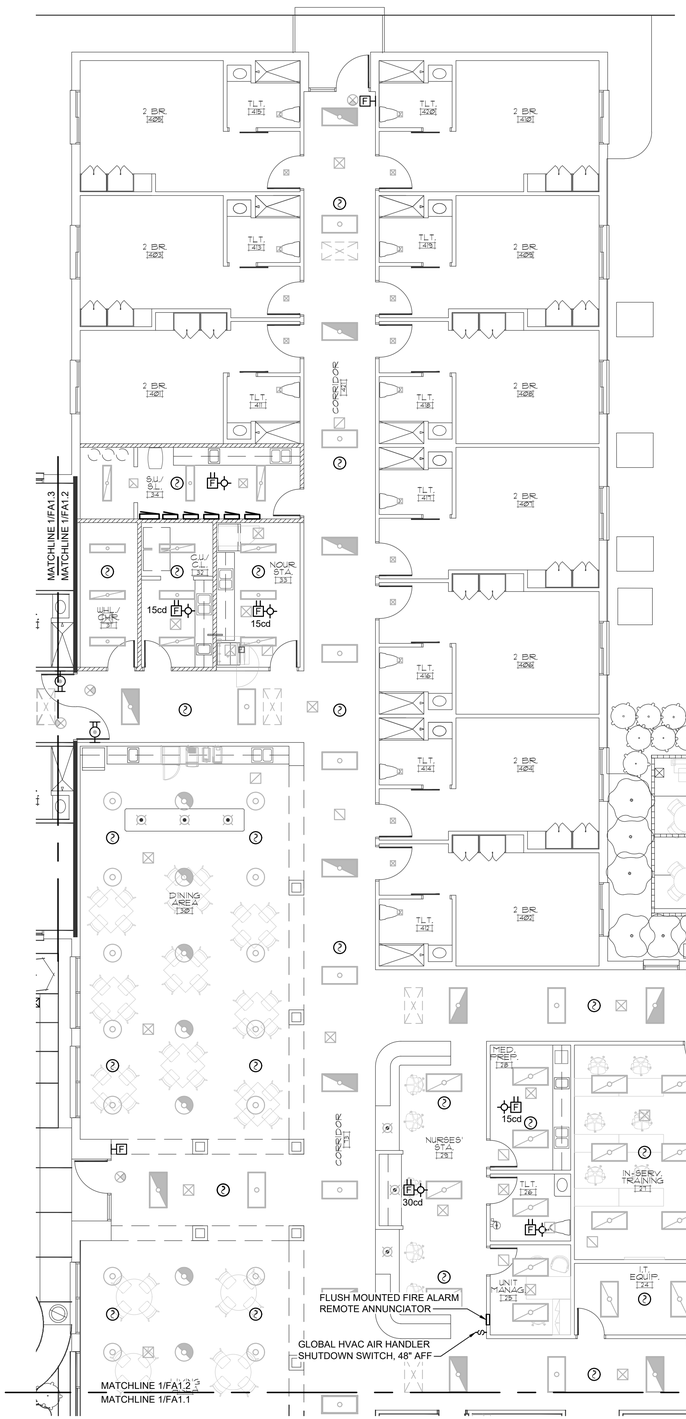
FA 1.1

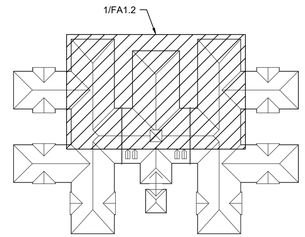
1 PARTIAL FIRE ALARM PLAN

1/8" = 1'-0"

0 4' 8' 16'

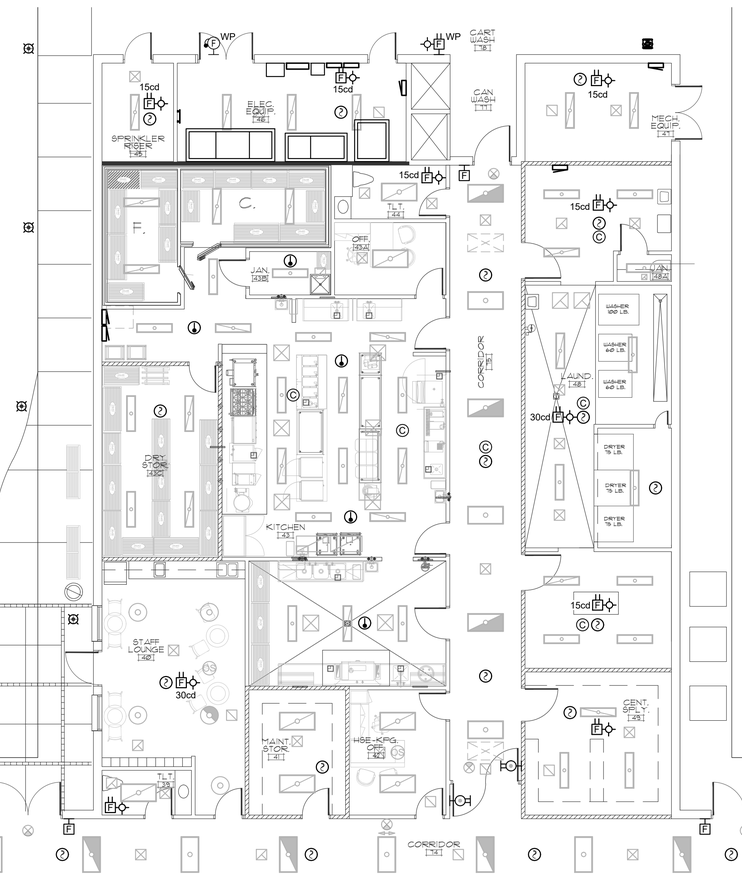
PLAN NORTH





0 KEYPLAN

NOT TO SCALE



CARBON MONOXIDE DETECTOR PLACEMENT NOTES:

A. PROVIDE CARBON MONOXIDE (CO) DETECTION IN AREAS WHERE FUEL-BURNING APPLIANCES ARE INSTALLED, INCLUDING BUT NOT LIMITED TO COMMERCIAL KITCHENS AND LAUNDRY ROOMS WITH GAS-FIRED EQUIPMENT.

B. INSTALL CO DETECTORS AS SHOWN AND IN THE SAME ROOM AS FUEL-BURNING APPLIANCES AND/OR IN ADJACENT SPACES WHERE CO CAN MIGRATE, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPLICABLE CODES.

C. LOCATE DETECTORS ON WALLS OR CEILINGS AS SHOWN AND PER MANUFACTURER'S REQUIREMENTS; DO NOT INSTALL WITHIN DEAD AIR SPACES, DIRECTLY ABOVE APPLIANCES, OR IN AREAS SUBJECT TO EXCESSIVE MOISTURE, GREASE, OR AIR TURBULENCE.

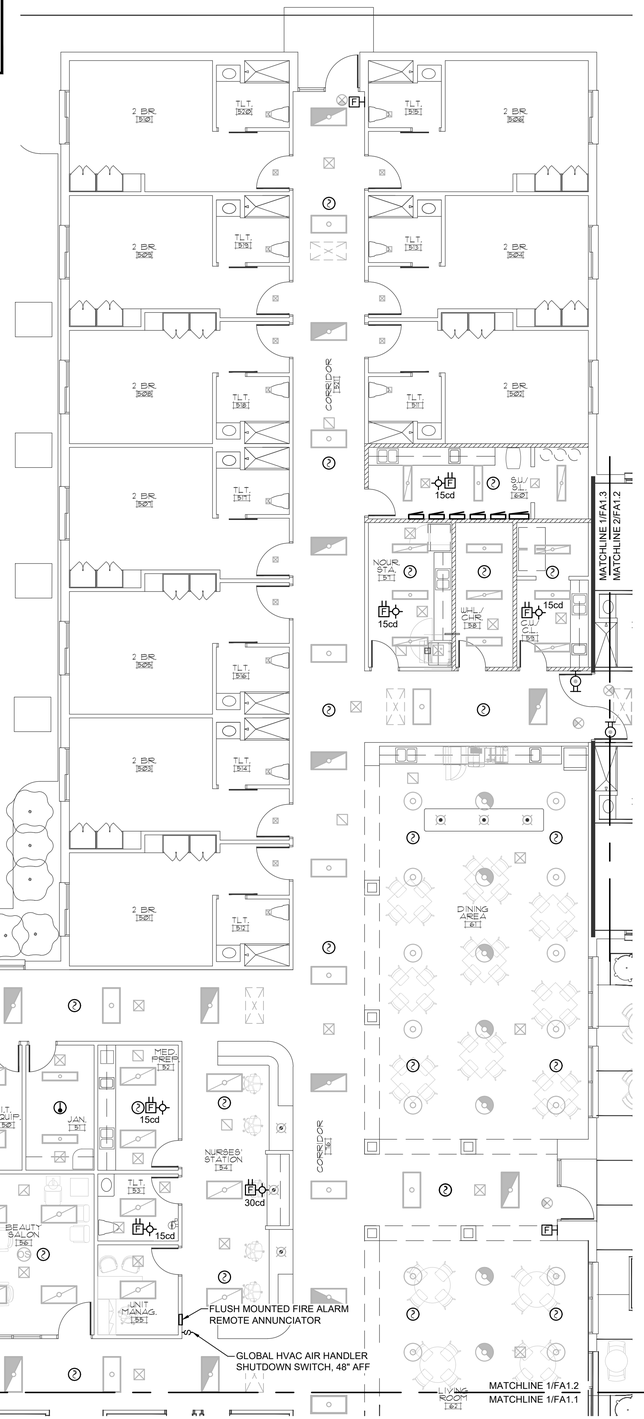
D. CO ALARM ACTIVATION SHALL INITIATE A DISTINCT SUPERVISORY OR ALARM SIGNAL AS REQUIRED BY CODE AND SHALL NOT BE SILENCED BY NORMAL FIRE ALARM ACKNOWLEDGE FUNCTIONS.

E. CO DETECTORS SHALL BE LISTED FOR COMMERCIAL APPLICATIONS AND INSTALLED IN ACCORDANCE WITH NFPA 720 (WHERE ADOPTED) OR NFPA 72 REQUIREMENTS FOR CO DETECTION.

F. CO DETECTOR LOCATIONS AND QUANTITIES SHALL BE COORDINATED WITH THE FIRE ALARM SYSTEM DESIGNER AND AUTHORITY HAVING JURISDICTION (AHJ) PRIOR TO INSTALLATION.

WALL TYPE LEGEND

- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL



CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL R. DUNCAN McFEE

PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION

NOT FINAL; SUBJECT TO REVISION; NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION; PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
FIRE ALARM SYSTEM
PARTIAL FLOOR PLAN

FA 1.2

WALL TYPE LEGEND

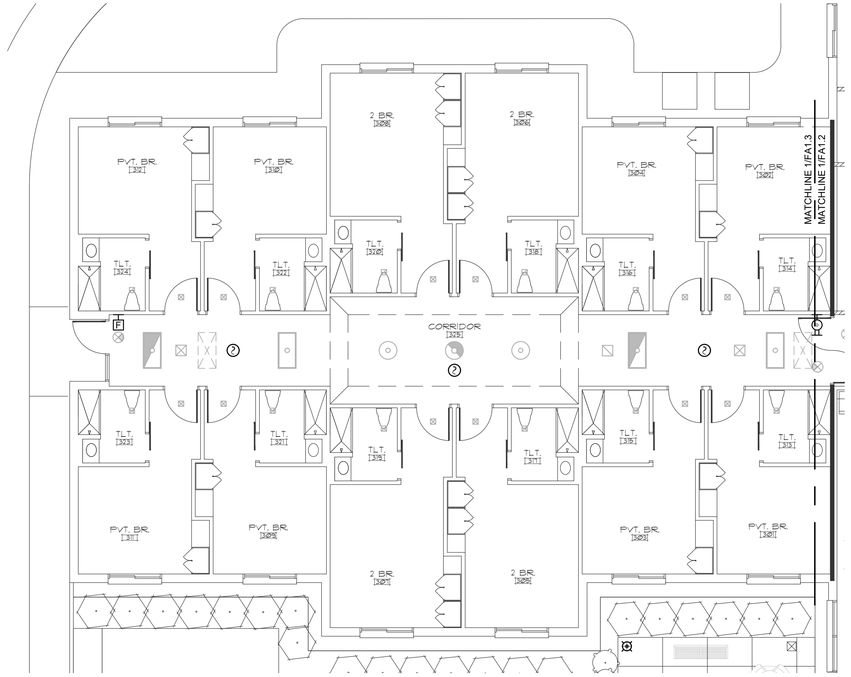
- 1 HOUR FIRE BARRIER WALL
- 1 HOUR FIRE/SMOKE BARRIER WALL
- 2 HOUR FIRE BARRIER WALL
- SMOKE RESISTANT WALL

CBHF Engineers, PLLC
2246 Yaupon Drive
Wilmington, NC 28401
Phone: 910.791.4000
www.cbhfengineers.com

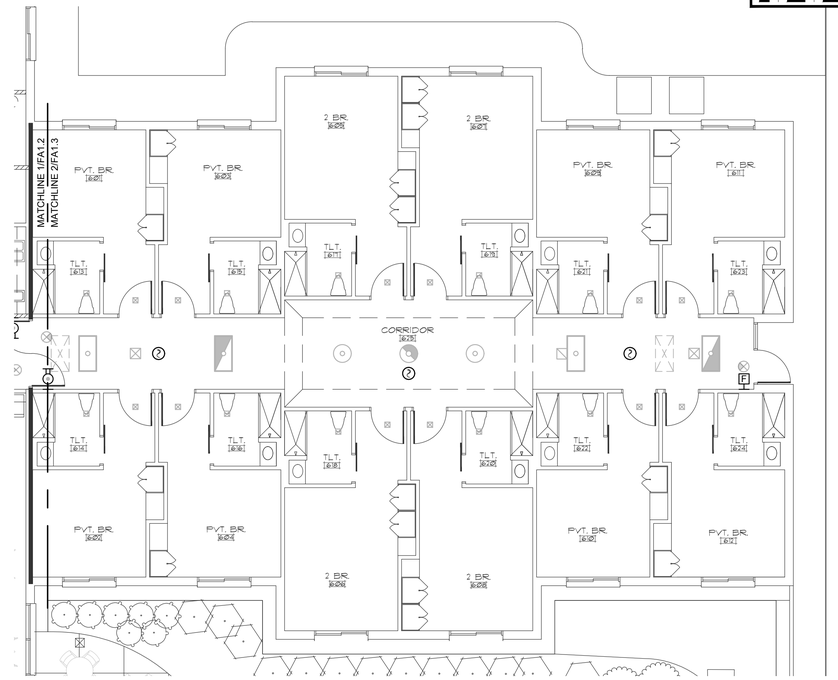
© Copyright 2026 CBHF Engineers, PLLC NC# P-0506

NOT FINAL, SUBJECT TO REVISION, NOT FOR PERMITTING, FABRICATION, MATERIAL OR EQUIPMENT PURCHASE, INSTALLATION, OR CONSTRUCTION. PRICING SHALL STATE ALL ASSUMPTIONS, EXCLUSIONS, ALLOWANCES, AND CONTINGENCIES AND SHALL BE RECONCILED WITH THE FINAL SIGNED AND SEALED DOCUMENTS.

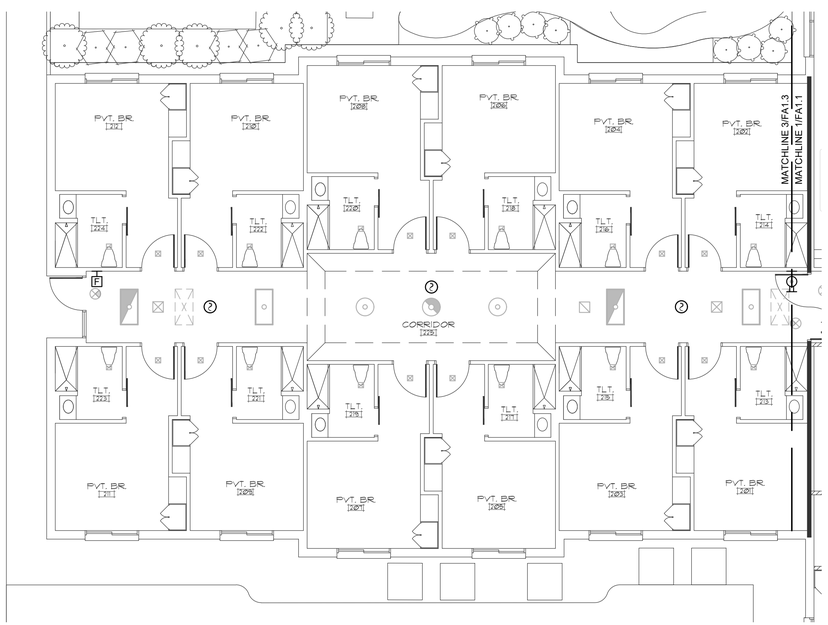
PRELIMINARY - PRICING ONLY - NOT FOR CONSTRUCTION



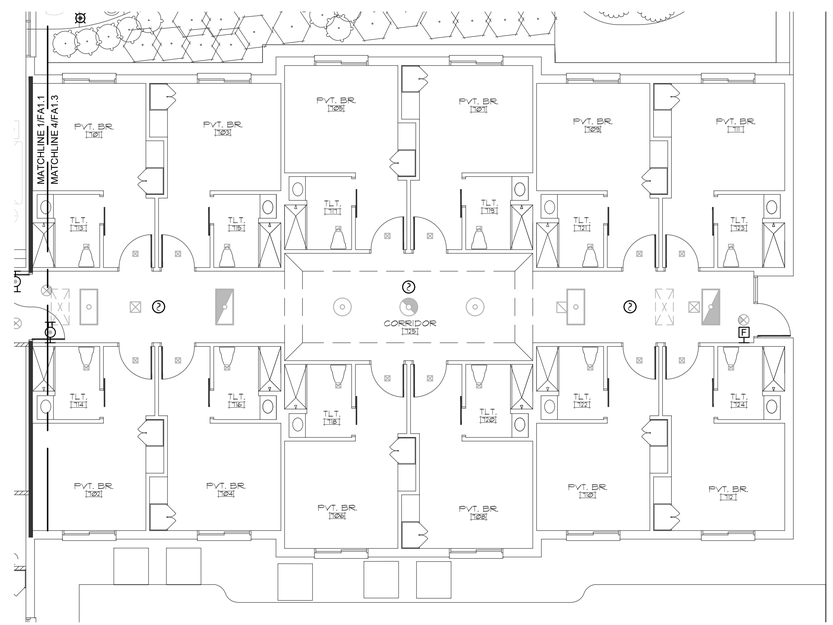
1 PARTIAL FIRE ALARM PLAN
1/8" = 1'-0"
PLAN NORTH



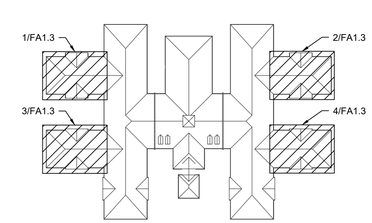
2 PARTIAL FIRE ALARM PLAN
1/8" = 1'-0"
PLAN NORTH



3 PARTIAL FIRE ALARM PLAN
1/8" = 1'-0"
PLAN NORTH



4 PARTIAL FIRE ALARM PLAN
1/8" = 1'-0"
PLAN NORTH



0 KEYPLAN
NOT TO SCALE

PRINCIPLE HEALTH CARE
WAKE COUNTY
Holly Springs, North Carolina

David R. Polston - Architect
3806 Park Ave. Suite C, Wilmington, NC 28403
Architecture Planning Design

120 BED
NURSING FACILITY
FIRE ALARM SYSTEM
PARTIAL FLOOR PLAN

F 1.3