ABBREVIATIONS

(D)	DEMOLISHED
(E)	EXISTING
(R)	RELOCATED
Ø	PHASE
A	AMPERE
AC	ABOVE COUNTER
AF	AMP FRAME (CIRCUIT BREAKER)
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AMP	AMPERE
AP	WIRELESS ACCESS POINT
AT	AMP TRIP (CIRCUIT BREAKER OR FUSE)
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO-VIDEO, AUDIO-VISUAL
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BJ	BONDING JUMPER
BKR	BREAKER
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CKT	CIRCUIT
CTL	CONTROL
CU	COPPER
DB	DECIBEL
DC	DIRECT CURRENT
DISC	DISCONNECT
DP	DISTRIBUTION PANELBOARD
DW	DISHWASHER
ECS	EMERGENCY COMMUNICATION SYSTEM
EGB	ELECTRICAL GROUNDING BUSBAR
EMD	ESTIMATED MAXIMUM DEMAND
EMGB	ELECTRICAL MAIN GROUNDING BUSBAR
EP	EXPLOSION PROOF
ER	EXISTING (TO BE) RELOCATED
ERMS	ENERGY REDUCTION MAINTENANCE SWITCH
EWC	ELECTRIC WATER COOLER
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FC	FOOT CANDLE
FLA	FULL LOAD AMPS
FS	FLOW SWITCH
FSD	FIRE SMOKE DAMPER
G	EQUIPMENT GROUNDING CONDUCTOR
GEN	GENERATOR
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFPE	GROUND FAULT PROTECTION OF EQUIPMENT
GND	EQUIPMENT GROUNDING CONDUCTOR
HH	HANDHOLE
HOA	HAND-OFF-AUTOMATIC
HP	HORSE POWER
IC	INTERCOM
IG	ISOLATED GROUND
JB	JUNCTION BOX
KAIC	THOUSAND AMPERE INTERRUPTING CIRCUIT
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATT
LT	LIGHT
LTG	LIGHTING
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MH	MANHOLE
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MRTS	MOTOR RATED TOGGLE SWITCH
MSB	MAIN SWITCHBOARD
MTD	MOUNTED
MTG	MOUNTING
MTS	MAIN TRANSFER SWITCH
N	NEUTRAL
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NF	NON-FUSED
NL	NIGHT LIGHT
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OS&Y	OUTSIDE SCREW AND YOKE
P	POLE(S)
PA	PUBLIC ADDRESS
PB	PULL BOX
PH	PHASE
PIV	POST INDICATOR VALVE
PNL	PANEL
PWR	POWER
RCP	REFLECTED CEILING PLAN
RECPT	RECEPTACLE
REF	REFERENCE
RESP	RESPONSIVE
SCCR	SHORT CIRCUIT CURRENT RATING
SD	SMOKE DAMPER
SEC	SECONDARY
SPD	SURGE PROTECTION DEVICE
SWBD	SWITCHBOARD
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TC	TIME CLOCK
TGB	TELECOMMUNICATIONS GRONDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GRONDING BUSBAR
TO	TELECOMMUNICATIONS OUTLET
TR	TELECOMMUNICATIONS ROOM
TS	TAMPER SWITCH
TV	TELEVISION
UG	UNDERGROUND
UPS	UNINTERRUPTABLE POWER SUPPLY
V	VOLT
VA	VOLT-AMPERE
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE
WA	TELECOMMUNICATIONS WORK AREA
WG	WIRE GUARD
WP	WEATHER-PROOF (NEMA 3R)
XFMR	TRANSFORMER

GENERAL SHEET NOTES

GENERAL SITE PLAN NOTES

1 ALL COMMUNICATIONS CONDUIT AND CABLES SHALL BE INSTALLED 36" (MINIMUM) BELOW FINISHED GRADE.

2 ALL CONDUCTORS FOR EXTERIOR LIGHTING AND POWER CIRCUITS SHALL BE #10 AWG MINIMUM.

GENERAL POWER NOTES

1 VERIFY ANY NEUTRAL WIRES REQUIRED ON 1Ø OR 3Ø MECHANICAL UNITS FURNISHED UNDER DIVISION 23. IF REQUIRED, PROVIDE NEUTRAL.

2 PROVIDE DEDICATED 120-VOLT CIRCUITS TO ALL HVAC BAS CONTROL DEVICES AND PANELS. COORDINATE QUANTITY WITH DIVISION 23. UTILIZE NEAREST SPARE 120-VOLT, 20/1 BREAKER. LABEL TYPED PANEL DIRECTORY ACCORDING TO LOAD BEING SERVED.

3 IN ADDITION TO DEVICES SHOWN, SEE SCHEDULE SHEETS FOR CONNECTIONS TO ALL MECHANICAL EQUIPMENT.

4 LOCATE SWITCHES FOR CONTROL OF FANS IN TWO-GANG BOX WITH LIGHT SWITCH WHERE APPLICABLE.

GENERAL LIGHTING NOTES

1 SEE LIGHT FIXTURE SCHEDULE AND SYMBOLS LEGEND FOR MOUNTING HEIGHTS, UNLESS NOTED OTHERWISE.

2 PROVIDE #10AWG MINIMUM CONDUCTORS FOR ALL EXTERIOR LIGHTING CIRCUITS.

3 SEE ARCHITECTURAL BUILDING ELEVATIONS FOR LOCATION OF BUILDING MOUNTED EXTERIOR LIGHT FIXTURES.

4 PROVIDE BEAD OF SILICON SEALANT AROUND RECESSED BACK BOX PERIMETER AT ALL BUILDING MOUNTED EXTERIOR LIGHT FIXTURE LOCATIONS.

5 CIRCUIT FIXTURES DENOTED WITH 'NL' AS UNSWITCHED NIGHT LIGHTS.

6 FIXTURES DENOTED WITH LOWER CASE LETTERS SHALL BE CONTROLLED BY SWITCHES DENOTED WITH THE SAME LOWER CASE LETTER IN EACH ROOM.

GENERAL DEVICE BOX NOTES

1 SEE SYMBOLS LEGEND THIS SHEET FOR MOUNTING HEIGHTS UNLESS NOTED OTHERWISE ON DRAWINGS.

2 ALL MOUNTING HEIGHTS ARE TO CENTERLINE OF BOXES UNLESS NOTES OTHERWISE.

3 PROVIDE BOX EXTENDER FOR FLUSH INSTALLATION OF DEVICES LOCATED IN ARCHITECTURAL CASEWORK THAT IS FLUSH WITH ADJACENT WALL (SUCH AS RECEPTACLES FOR GARBAGE DISPOSERS).

4 FLOOR BOXES: OBTAIN OWNER APPROVAL OF ALL BOX LOCATIONS PRIOR TO ROUGH IN. PROVIDE DEVICE PLATES AT DEVICES AND BLANK PLATES AT ALL UNUSED COMPARTMENTS.

5 COORDINATE LOCATION OF DEVICE BOXES FOR SWITCHES, RECEPTACLES, AND SYSTEMS DEVICES WITH MARKERBOARDS. ADJUST BOX LOCATIONS TO AVOID MARKERBOARDS.

6 COORDINATE LOCATION OF DEVICE BOXES FOR SWITCHES, RECEPTACLES, AND SYSTEMS DEVICES WITH TACKBOARDS. ADJUST BOX LOCATIONS TO AVOID TACKBOARDS. PROVIDE BOX EXTENDER FOR A FLUSH INSTALLATION WHERE DEVICES MUST BE MOUNTED AT TACKBOARD/TACKWALL.

7 CEILING MOUNTED RECEPTACLES: AT SUSPENDED CEILINGS, ROUTE POWER TO RECEPTACLE VIA FLEXIBLE METALLIC CONDUIT WITH 6-FOOT SERVICE LOOP. FEED FMC FROM A J-BOX RIGIDLY SUPPORTED A MAXIMUM OF 24-INCHES ABOVE SUSPENDED CEILING OR AT BOTTOM OF STRUCTURE ABOVE. WHICHEVER IS LOWER. LOCATE J-BOX DIRECTLY ABOVE RECEPTACLE AND SUPPORT VIA STRUCTURE, OR VIA THREAD ROD AND UNISTRUT HUNG FROM STRUCTURE ABOVE IN HIGH STRUCTURE APPLICATIONS.

8 DEVICES RECESSED IN MULLIONS: BACK BOXES TO BE RECESSED FOR FLUSH INSTALLATION OF DEVICE AND WALLPLATE. EXTEND CONCEALED CONDUIT IN MULLION UP TO WALL ABOVE AND STUB OUT ABOVE ACCESSIBLE CEILING. IN AREAS WITH NO CEILING, EXTEND CONDUIT TOWARDS CABLING SOURCE TO ABOVE NEAREST ACCESSIBLE CEILING.

GENERAL DEMOLITION NOTES

1 ITEMS INDICATED ON DEMOLITION PLANS ARE BASED ON AS-BUILT DRAWINGS AND FIELD OBSERVATIONS AND ARE INTENDED TO GIVE THE BIDDER A GENERAL REPRESENTATION OF EXISTING CONDITIONS.

2 REMOVE ALL ITEMS SHOWN FULL-TONE OR NOTED ELSEWHERE IN THE DOCUMENTS TO BE REMOVED OR DEMOLISHED. DEMOLISH ADDITIONAL ITEMS NOT SHOWN ON DRAWINGS, BUT WHICH MUST BE REMOVED TO COMPLETE THE PROJECT.

3 ITEMS SHOWN HALF-TONE ARE EXISTING TO REMAIN.

4 RELOCATE ITEMS DENOTED 'ER'. SEE LIGHTING, POWER AND/OR SPECIAL SYSTEM SHEETS FOR NEW LOCATIONS. 'ER' IS DEFINED AS EXISTING (TO BE) RELOCATED.

5 EXISTING CONDUIT MAY REMAIN IF ALL THE FOLLOWING ARE TRUE:
A. IT CAN BE REUSED TO FEED DEVICES INSTALLED UNDER THIS CONTRACT.
B. IT DOES NOT INTERFERE WITH OTHER TRADES.
C. IT WAS ORIGINALLY INSTALLED MEETING SPECIFICATIONS RELATED TO THIS PROJECT.
D. IT WILL NOT BE EXPOSED IN A FINISHED AREA (UNLESS NOTED OTHERWISE).

6 PROVIDE ELECTRICAL DEMOLITION ASSOCIATED WITH MECHANICAL EQUIPMENT TO BE REMOVED. IN ADDITION TO DEVICES SHOWN, REFER TO MECHANICAL AND ARCHITECTURAL DEMOLITION SHEETS TO DETERMINE EQUIPMENT TO BE REMOVED.

7 MAINTAIN FUNCTIONALITY OF ALL EXISTING LOW VOLTAGE SYSTEMS INCLUDING, BUT NOT LIMITED TO, TELECOM CABLING NETWORKS, INTERCOM, CLOCKS, FIRE ALARM, SAFETY AND SECURITY DURING ALL PHASES OF CONSTRUCTION. PROVIDE TEMPORARY INTERCONNECTIONS AS REQUIRED TO ACCOMMODATE CONSTRUCTION SCHEDULE.

GENERAL SYSTEMS NOTES

DIVISION 26

1 TELECOMMUNICATIONS OUTLETS: PROVIDE TWO-GANG BOX (2.25-INCH DEEP MINIMUM) WITH SINGLE-GANG STRAP MOUNT PLASTER RING AND 1-INCH CONDUIT STUBBED INTO ACCESSIBLE SPACE ABOVE FINISHED CEILING (EXCEPTION: VOICE-ONLY OR VIDEO-ONLY OUTLETS PER NOTE BELOW).

2 TELECOMMUNICATIONS OUTLET INDICATED AS ROUGH IN ONLY (NO SUBSCRIPTS): INSTALL PER NOTE ABOVE, WITH BLANK 302SS SINGLE-GANG WALLPLATE.

3 VOICE-ONLY OR VIDEO-ONLY TELECOMMUNICATIONS OUTLET: PROVIDE SINGLE-GANG BOX WITH 1-INCH CONDUIT STUBBED INTO ACCESSIBLE SPACE ABOVE FINISHED CEILING.

4 MISCELLANEOUS LOW VOLTAGE OUTLETS (CALL STATIONS, HANDSETS, VOLUME CONTROL, MICROPHONE OUTLETS, SURFACE-MOUNT WALL SPEAKERS AND FIRE ALARM DEVICES): PROVIDE SINGLE-GANG BOX WITH 3/4-INCH CONDUIT STUBBED INTO ACCESSIBLE SPACE ABOVE FINISHED CEILING.

5 INSULATED BUSHINGS: PROVIDE BUSHINGS ON ALL CONDUIT STUB UPS, INCLUDING BUT NOT LIMITED TO, OUTLETS FOR TELECOMMUNICATIONS, FIRE ALARM, SECURITY, ACCESS CONTROL, MASS NOTIFICATION, PUBLIC ADDRESS. ALL OTHER LOW VOLTAGE INTERCOMMUNICATIONS AND UNUSED STUB-UPS OR STUB-UPS INDICATED FOR FUTURE USE.

6 FLOOR BOXES CONTAINING TELECOMMUNICATIONS OUTLETS: FOR EACH LOW-VOLTAGE COMPARTMENT, ROUTE 1-INCH CONDUIT WITH PULL STRING UNDERFLOOR, UP NEAREST WALL, AND STUB INTO ACCESSIBLE SPACE ABOVE FINISHED CEILING. LABEL CONDUIT END 'FLOOR BOX'

7 SLEEVES FOR LOW VOLTAGE CABLES: PROVIDE 2-INCH SLEEVES UNLESS NOTED OTHERWISE. COORDINATE WITH PATH OF DUCTWORK AND GWB CEILING TO ENSURE ACCESSIBILITY, EXTEND SLEEVES AS REQUIRED. INSTALL ALL SLEEVES 4-INCHES ABOVE HIGHER CEILING OF TWO ADJACENT SPACES. REFER TO ROOM FINISH SCHEDULES AND REFLECTED CEILING PLANS FOR CEILING HEIGHTS. STUB SLEEVES INTO JOIST SPACE OF FINISHED ROOMS WITH EXPOSED STRUCTURE. PROVIDE INSULATED BUSHINGS ON BOTH ENDS OF ALL SLEEVES, INCLUDING UNUSED SLEEVES. PROVIDE GROUT OR ESCUTCHEONS TO SECURE SLEEVES TO WALL. PROVIDE FIRE-RATED SLEEVES AT ALL FIRE-RATED WALLS.

8 PROVIDE ADDITIONAL CONDUIT, BOXES, CONDUCTORS AND OVERCURRENT PROTECTION FOR 120-VOLT BRANCH CIRCUITS NOT SPECIFICALLY COVERED UNDER DIVISION 26 WORK, BUT REQUIRED TO COMPLETE DIVISION 08 AND 28 WORK. DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO, POWER SUPPLIES FOR DOOR HARDWARE, ACCESS CONTROL, FIRE ALARM AND VIDEO SURVEILLANCE.

9 CARD READERS: PROVIDE RECESSED SINGLE-GANG BOX WITH GASKETED BLANK COVERPLATE AND EMPTY 1-INCH CONDUIT STUBBED INTO NEAREST ACCESSIBLE SPACE ABOVE FINISHED CEILING OR JOIST SPACE OF ADJACENT EXPOSED STRUCTURE. LABEL CONDUIT END 'CARD READER'.

10 PROVIDE WATERFALL DROPOUTS AT ALL CABLE TRAY LOCATIONS ABOVE RUNWAYS, WALL/FLOOR MOUNTED RACKS, AND EQUIPMENT ENCLOSURES.

11 AUDIO VISUAL (AV) SYSTEMS: PROVIDE RECESSED BOXES, CONDUIT AND PULL STRINGS FOR ALL SYSTEM COMPONENTS.

GENERAL SYSTEMS NOTES

DIVISION 27

1 PROVIDE SURFACE MOUNT ENCLOSURE AND BAFFLE FOR ALL SPEAKERS IN FINISHED SPACES WITH NO CEILINGS (EXPOSED STRUCTURE).

2 UTILIZE SLEEVES AND FIRE RATED SLEEVES AT RATED WALLS PROVIDED UNDER DIVISION 26 FOR INSTALLATION OF ALL LOW VOLTAGE CABLING. FOLLOW INDUSTRY STANDARDS TO MAINTAIN 40% FILL REQUIREMENTS IN ALL SLEEVES (SUPERSEDES NEC - DO NOT FILL SLEEVES TO CAPACITY). PROVIDE ADDITIONAL SLEEVES MEETING DIVISION 26 REQUIREMENTS AS REQUIRED.

3 SYSTEM PANEL LOCATIONS: AUXILIARY SYSTEM PANELS, POWER SUPPLIES OR OTHER EQUIPMENT ENCLOSURES SHALL NOT BE LOCATED IN TELECOM ROOMS UNLESS NOTED OTHERWISE. IF DRAWINGS DO NOT DEPICT LOCATIONS FOR AUXILIARY COMPONENTS, CONSULT OWNER OR A/E FOR APPROVED LOCATIONS PRIOR TO EQUIPMENT INSTALL.

GENERAL SYSTEMS NOTES

DIVISION 28

1 PROVIDE MINIMUM CANDELA RATINGS FOR ROOMS WITH WALL MOUNTED VISUAL NOTIFICATION APPLIANCES AS FOLLOWS:
- <20'x20' = 15cd
- <28'x28' = 30cd
- <40'x40' = 60cd
- >40'x40' = 110cd

2 PROVIDE MINIMUM CANDELA RATINGS FOR ROOMS WITH CEILING MOUNTED VISUAL NOTIFICATION APPLIANCES ON MAXIMUM 10' HIGH CEILING AS FOLLOWS:
- <20'x20' = 15cd
- <30'x30' = 30cd
- <40'x40' = 60cd
- >40'x40' = 110cd

3 INCREASE DEVICE RATINGS/SETTINGS WHEN LOCATED OFF-CENTER IN ROOMS TO MAINTAIN NFPA COVERAGE.

4 VISUAL DEVICES IN CORRIDORS SHALL BE 15cd. VISUAL DEVICES LOCATED IN OTHER AREAS SHALL BE 110cd UNLESS NOTED OTHERWISE.

5 IN ADDITION TO DEVICES SHOWN, SEE SCHEDULE SHEETS FOR FIRE ALARM SYSTEM DEVICES CONNECTIONS TO MECHANICAL EQUIPMENT.

6 PROVIDE FIRE ALARM MONITORING OF ALL FLOW AND TAMPER SWITCHES. CONFIRM QUANTITIES AND LOCATION WITH DIVISION 21.

7 UTILIZE SLEEVES AND FIRE RATED SLEEVES AT RATED WALLS PROVIDED UNDER DIVISION 26 FOR INSTALLATION OF ALL LOW VOLTAGE CABLING. FOLLOW INDUSTRY STANDARDS TO MAINTAIN 40% FILL REQUIREMENTS IN ALL SLEEVES (SUPERSEDES NEC - DO NOT FILL SLEEVES TO CAPACITY). PROVIDE ADDITIONAL SLEEVES MEETING DIVISION 26 REQUIREMENTS AS REQUIRED.

8 SYSTEM PANEL LOCATIONS: AUXILIARY SYSTEM PANELS, POWER SUPPLIES OR OTHER EQUIPMENT ENCLOSURES SHALL NOT BE LOCATED IN TELECOM ROOMS UNLESS NOTED OTHERWISE. IF DRAWINGS DO NOT DEPICT LOCATIONS FOR AUXILIARY COMPONENTS, CONSULT OWNER OR A/E PRIOR TO EQUIPMENT INSTALLATION.

9 DUCT SMOKE DETECTION: DETERMINE QUANTITY AND PLACEMENT OF DETECTORS REQUIRED FOR COVERAGE OF DUCTWORK BASED ON NFPA REQUIREMENTS. PROVIDE MECHANICAL EQUIPMENT FAN SHUTDOWN RELAY AT ALL DUCT DETECTORS. SEE HVAC PLANS FOR EQUIPMENT LOCATIONS. COORDINATE SHUTDOWN CONTROL WITH DIVISION 23.

10 SMOKE DAMPERS AND FIRE-SMOKE DAMPERS: PROVIDE FIRE ALARM CONNECTION AND 120-VOLT POWER TO EACH FIRE/SMOKE DAMPER SHOWN ON HVAC PLANS. PROVIDE DEDICATED CIRCUIT TO DAMPERS, ROUTED THROUGH NORMALLY CLOSED FIRE ALARM RELAY, MOUNTED ON WALL IN NEAREST ELECTRICAL ROOM. COORDINATE WITH DAMPER MANUFACTURER FOR SPECIFIC DAMPER LOAD REQUIREMENTS. RELAY SHALL BE CONTROLLED BY FACP, SUCH THAT, ON GENERAL ALARM DAMPERS CLOSE. FIRE ALARM CONNECTION TO DAMPER SHALL BE A SUPERVISORY CIRCUIT MONITORING STATUS OF INTEGRAL SMOKE DETECTOR, AND SHALL PROVIDE REMOTE FIRE/SMOKE DAMPER RESET. FACP SHALL INITIATE A SUPERVISORY SIGNAL WHEN INTEGRAL DETECTOR GOES INTO ALARM. FIRE/SMOKE DAMPERS MAY BE GROUPED TOGETHER ON SUPERVISORY CIRCUITS TO SIMPLIFY WIRING. COORDINATE REQUIREMENTS WITH FIRE/SMOKE DAMPER MANUFACTURER. UTILIZE SPARE 20/1 BREAKERS. LABEL TYPED PANEL DIRECTORY 'FIRE/SMOKE DAMPERS - (INDICATE AREA SERVED)'.

* NOTE *

ALL NOTES ON THIS SHEET ARE APPLICABLE TO ALL OTHER SHEETS IN THIS SET.

THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE APPLICABLE IN THIS SET OF DRAWINGS.

GENERAL SYMBOLS

	POINT OF DISCONNECT - DEMOLITION REMOVED FROM EXISTING
	POINT OF CONNECTION - NEW CONNECTS TO EXISTING
	AREA NOT IN CONTRACT

ELECTRICAL SYMBOLS

LIGHTING

LIGHTING FIXTURE TAG

XXX — FIXTURE TYPE
XXX-X — CKT DESIGNATION (PNL - CKT NO.)
XXX-X — RELAY PANEL - RELAY NO. OR LOCAL SWITCH DESIGNATION

LIGHTING FIXTURES

- LIGHTING FIXTURE
- LIGHTING FIXTURE FOR EMERGENCY SYSTEM
- CEILING FIXTURE, SURFACE, RECESSED OR PENDANT
- LIGHTING FIXTURE ON EMERGENCY SYSTEM
- LIGHTING TRACK, TRACK MOUNTED LIGHT FIXTURES
- LIGHTING FIXTURE
- WALL MOUNTED LIGHTING FIXTURE
- WALL WASHER
- WALL MOUNTED LIGHTING FIXTURE
- EXIT SIGN, CEILING MOUNTED, DIRECTIONAL ARROW(S) AS INDICATED
- EXIT SIGN, WALL MOUNTED, DIRECTIONAL ARROW(S) AS INDICATED. MOUNT 94-INCHES AFF, UNO

AREA LIGHTING

- POLE WITH POLE MOUNTED AREA LIGHTING FIXTURE
- WALL MOUNTED AREA LIGHTING FIXTURE
- BOLLARD LIGHT FIXTURE

SWITCHES AND WALL-BOX CONTROLS

SWITCHES: MOUNT 42-INCHES AFF UNO

- SUPERSCRIPT , SWITCH SHALL CONTROL FIXUIRE DENOTED WITH SAME LOWER CASE LETTER
- SWITCH SYMBOL
- SUBSCRIPT, SWITCH TYPE - SEE BELOW
- LINE THRU SWITCH INDICATES A KEY OPERATED SWITCH

- S — SWITCH, SINGLE POLE
- S_2 — SWITCH, DOUBLE POLE
- S_3 — SWITCH, 3-WAY
- S_D — SWITCH, DIMMER
- S_{LV} — SWITCH, LOW VOLTAGE
- S_{OD} — SWITCH, WALL-BOX OCCUPANCY SENSOR, DIMMER
- S_{OS} — SWITCH, WALL-BOX OCCUPANCY SENSOR

CEILING MOUNTED LIGHTING CONTROL DEVICES
MAXIMUM MOUNTING HEIGHT OF 10-FEET AFF

- OS — OCCUPANCY SENSOR
- VS — VACANCY SENSOR

LIGHTING CONTROL DEVICES

- RP — LIGHTING CONTROL PANEL
- CV — CENTRAL INVERTER
- R — LOW VOLTAGE RELAY
- PC — PHOTOELECTRIC CELL
- LC — LIGHTING CONTACTOR
- BAT — REMOTE EMERGENCY BATTERY PACK

SAFETY

- FACP — FIRE ALARM CONTROL PANEL MOUNT CENTER OF DISPLAY 54-INCHES AFF
- FAA — FIRE ALARM ANNUNCIATOR PANEL MOUNT CENTER OF DISPLAY 54-INCHES AFF
- LOC — LOCAL OPERATOR'S CONSOLE MOUNT CENTER OF DISPLAY 54-INCHES AFF
- NAC — NOTIFICATION APPLIANCE CIRCUIT CABINET MOUNT CENTER OF DISPLAY 54-INCHES AFF
- F — MANUAL FIRE ALARM PULL STATION MOUNT 42-INCHES AFF

FIRE ALARM A/V DEVICES: MOUNT 94-INCHES AFF, OR 6-INCHES BELOW CEILING, WHICEVER IS HIGHER, UNO

- F — FIRE ALARM BELL
- F — FIRE ALARM HORN
- F — FIRE ALARM VISUAL WARNING SIGNAL
- F — FIRE ALARM BELL WITH VISUAL WARNING SIGNAL
- F — FIRE ALARM HORN WITH VISUAL WARNING SIGNAL
- F — MINI FIRE ALARM HORN WITH VISUAL WARNING SIGNAL
- F — FIRE ALARM SPEAKER WITH VISUAL WARNING SIGNAL
- F — FIRE ALARM SPEAKER, FLUSH IN CEILING
- F — FIRE ALARM SPEAKER WITH VISUAL WARNING SIGNAL, CEILING
- F — FIRE ALARM VISUAL WARNING SIGNAL, CEILING
- E — ECS SPEAKER, FLUSH IN CEILING
- E — ECS SPEAKER WITH VISUAL WARNING SIGNAL, CEILING
- E — ECS VISUAL WARNING SIGNAL, CEILING

- S — SPRINKLER SYSTEMS ELECTRIC BELL ALARM
- D — FIRE ALARM MAGNETIC DOOR HOLDER MOUNT 74-INCHES AFF
- L — REMOTE INDICATOR LAMP
- OSY — OS&Y VALVE
- FS — WATER FLOW ALARM SWITCH
- TS — TAMPER SWITCH
- T — BEAM TRANSMITTER
- R — BEAM RECEIVER
- FF — FIRE FIGHTERS TELEPHONE MOUNT 54-INCHES AFF
- DAS ANTENNA
- SFE — SITE SECURITY FIBER ENCLOSURE

- D — SMOKE DETECTOR - IONIZATION TYPE (D = DUCT)
- P — SMOKE DETECTOR - PHOTOELECTRIC TYPE (D = DUCT)
- SMOKE DETECTOR - IONIZATION TYPE
- P — SMOKE DETECTOR - PHOTOELECTRIC TYPE
- HEAT DETECTOR RATE-OF-RISE AND FIXED TEMPERATURE, 135 F
- HEAT DETECTOR, RATE-OF-RISE AND FIXEDTEMPERATURE, 200 F
- HEAT DETECTOR, FIXED TEMPERATURE ONLY, 135 F
- HEAT DETECTOR, FIXED TEMPERATURE ONLY, 200 F

POWER

- CIRCUIT HOME RUN
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUIT STUB-UP
- CONDUIT SLEEVE
- CONDUIT SEAL
- CONDUIT CONCEALED IN CEILING OR WALLS, POWER
- CONDUIT CONCEALED IN CEILING OR WALLS, OTHER (* = SEE ABBREVIATIONS)
- CONDUIT CONCEALED IN FLOOR OR UNDERGROUND, POWER
- CONDUIT CONCEALED IN FLOOR OR UNDERGROUND, OTHER (* = SEE ABBREVIATIONS)
- EXPOSED CONDUIT, POWER
- EXPOSED CONDUIT, OTHER (* = SEE ABBREVIATIONS)
- FRS — FIRE RATED SLEEVE
- T — TRANSFORMER
- XXX — BRANCH CIRCUIT PANELBOARD MOUNT 72-INCHES TO TOP
- XXX — MAIN DISTRIBUTION PANELBOARD MOUNT 72-INCHES TO TOP
- EQUIPMENT CABINET, AS NOTED
- UP — UNDERGROUND POWER CONDUIT(S)
- FO — UNDERGROUND FIBER CONDUIT(S)
- MOTOR STARTER OR DRIVE
- DISCONNECT SWITCH
- COMBINATION STARTER / DISCONNECT SWITCH
- CT — CURRENT TRANSFORMER ENCLOSURE
- M — METER
- GEN — GENERATOR
- ATS — AUTOMATIC TRANSFER SWITCH
- SYSTEM GROUND ELECTRODE
- T — THERMOSTAT
- MUSHROOM SWITCH
- MH — ELECTRICAL MANHOLE
- HH — ELECTRICAL HAND HOLE
- M — MOTOR CONNECTION, HORSEPOWER AS INDICATED
- S_F — FUSE AND SWITCH ASSEMBLY
- S_T — MANUAL CONTROLLER WITH THERMAL OVERLOAD
- S_M — MANUAL CONTROLLER W/O THERMAL OVERLOAD
- B — CIRCUIT BREAKER ENCLOSURE
- PB — PULL BOX
- EQUIPMENT CONNECTION
- CABLE TRAY, LADDER TYPE OR RUNWAY
- CABLE TRAY
- MULTI-OUTLET ASSEMBLIES MOUNT 18-INCHES AFF, UNO WHERE DENOTED 'AC', MOUNT ABOVE COUNTER
- DIVIDED SURFACE RACEWAY MOUNT 18-INCHES AFF, UNO WHERE DENOTED 'AC', MOUNT ABOVE COUNTER

PUSHBUTTON STATION: MOUNT 42-INCHES AFF UNO

- SWITCH, PUSH BUTTON, SINGLE
- SWITCH, PUSH BUTTON, DOUBLE
- SWITCH, PUSH BUTTON, TRIPLE

RECEPTACLES: MOUNT 18-INCHES AFF, UNO

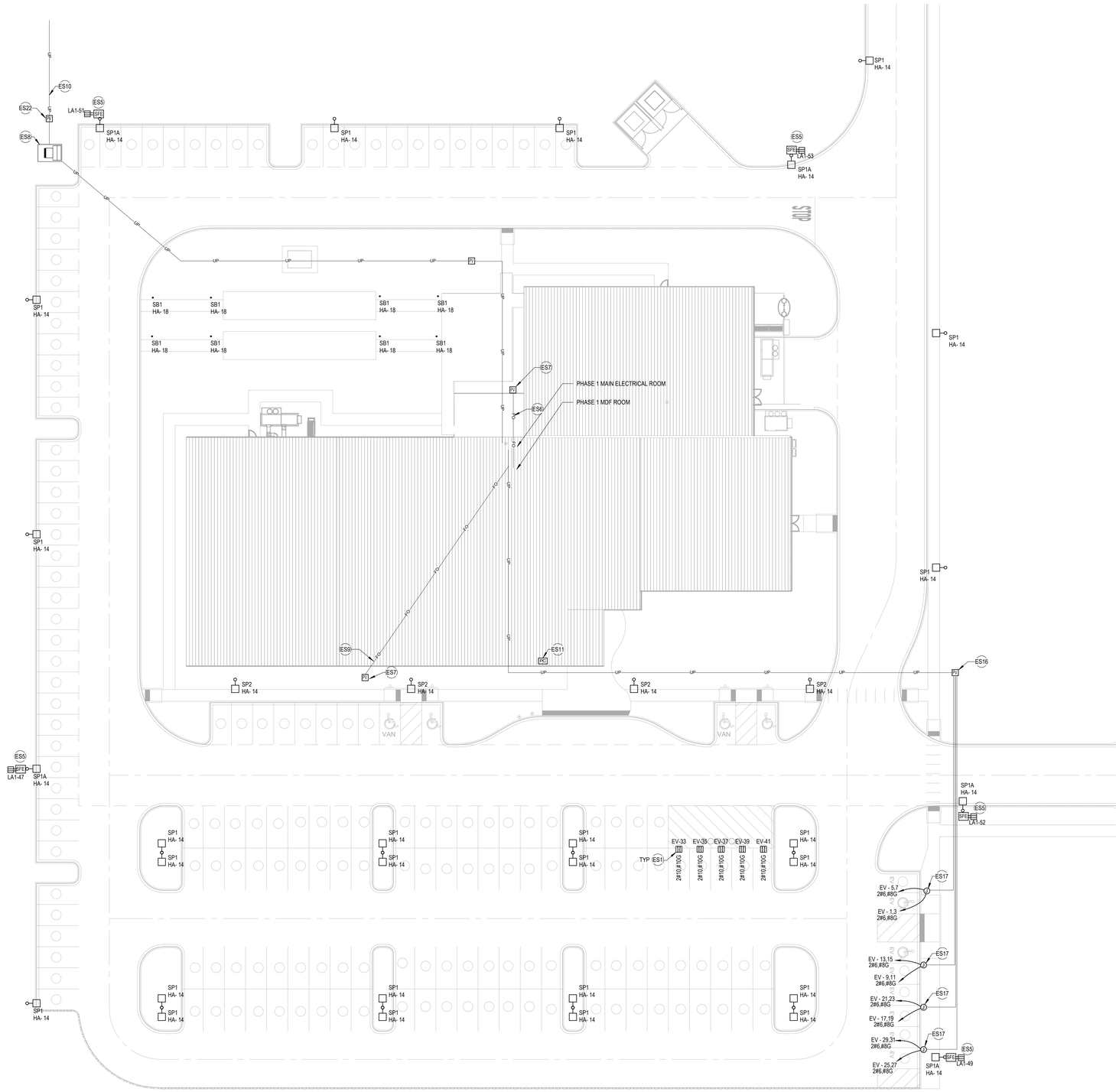
DIAGONAL LINE THROUGH SYMBOL OR DENOTED 'AC' INDICATES MOUNT DEVICE ABOVE COUNTER. WHERE INDICATED AS 'MOUNT ABOVE COUNTER' MOUNT BOTTOM OF BOX 2-INCHES ABOVE TOP OF BACKSPLASH OR 6-INCHES ABOVE COUNTERTOP IF NO BACKSPLASH EXISTS.

LABELS SHALL BE MACHINE PRINTED, UNO

- SIMPLEX RECEPTACLE
- DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE, GFI TYPE
- DUPLEX RECEPTACLE, MOUNT ABOVE COUNTER
- DUPLEX RECEPTACLE, GFI TYPE, MOUNT ABOVE COUNTER
- FOURPLEX RECEPTACLE
- FOURPLEX RECEPTACLE, GFI TYPE
- FOURPLEX RECEPTACLE, MOUNT ABOVE COUNTER
- FOURPLEX RECEPTACLE, GFI TYPE, MOUNT ABOVE COUNTER
- DUPLEX RECEPTACLE, FLUSH IN CEILING
- FOURPLEX RECEPTACLE, FLUSH IN CEILING
- CD — FOURPLEX RECEPTACLE, CORD DROP
- DUPLEX RECEPTACLE, HORIZONTALLY MOUNTED
- DUPLEX RECEPTACLE, HORIZ. MTD, GFI TYPE
- DUPLEX RECEPTACLE, HORIZ. MTD, ABOVE COUNTER
- DUPLEX RECEPTACLE, HORIZ. MTD, GFI TYPE, MOUNT ABOVE COUNTER
- R — WEATHER RESISTANT GFI DUPLEX RECEPTACLE, ROOF MOUNT 18-INCHES ABOVE ADJACENT STRUCTURE WITH A WEATHERPROOF, IN-USE COVER
- WP — WEATHER RESISTANT GFI DUPLEX RECEPTACLE, MOUNT 18-INCHES AFF WITH A WEATHERPROOF, IN-USE COVER
- EWC — STD DUPLEX RECEPTACLE TO SERVE ELECTRIC WATER COOLER, MOUNT AT HEIGHT PER EQUIPMENT MANUFACTURER'S INSTALLATION GUIDELINES. WIRE TO GFCI BKR IN PANELBOARD.
- TV — DUPLEX RECEPTACLE TO SERVE TELEVISION, MOUNT AT SAME HEIGHT AND WITHIN 8-INCHES OF ADJACENT TV OUTLET
- FOURPLEX RECEPTACLE, LEFT HALF SWITCH
- DUPLEX RECEPTACLE, EMERGENCY
- FOURPLEX RECEPTACLE, EMERGENCY
- DUPLEX RECEPTACLE, LOWER SWITCH
- DUPLEX RECEPTACLE, SWITCHED
- RANGE RECEPTACLE, MOUNT 8-INCHES AFF
- SPECIAL RECEPTACLE, DEEP WELL BOX
- FLUSH FLOOR OUTLET BOX UNO
- FLUSH FLOOR BOX WITH DUPLEX RECEPTACLE UNO
- MULTI-DEVICE FLOOR BOX WITH DUPLEX, RECEPTACLE AND TELECOMMUNICATIONS OUTLETS
- USB — USB ONLY RECEPTACLE
- RECEPTACLE WITH USB PORTS
- FLUSH JUNCTION BOX, CEILING MOUNTED
- P — JUNCTION BOX FOR FUTURE PROJECTOR POWER MOUNT 24-INCHES ABOVE SUSPENDED CEILING MOUNT 'tight' TO CEILING AT EXPOSED STRUCTURE LABEL BOX COVER 'PROJECTOR POWER'
- JUNCTION BOX ABOVE SUSPENDED CEILING WITH FLEX CONNECTION
- FLUSH JUNCTION BOX, WALL MOUNTED
- J — SURFACE JUNCTION BOX, WALL MOUNTED
- J — SURFACE JUNCTION BOX, CEILING MOUNTED
- HD — HAND DRYER, INSTALL HAND DRYER SPECIFIED IN DIV. 11
- UV — UTILITY VAULT
- PV — PULL VAULT

ONE-LINE DIAGRAM

- X — ENCLOSED CONTROLLER (ACROSS-THE-LINE UNO) MOUNT 60-INCHES AFF TO TOP
  X = STARTER NEMA SIZE
- XXX / XXAF / XX — ENCLOSED SWITCH; MOUNT 60-INCHES AFF TO TOP
  XXX = AMP RATING / NO. OF POLES
  XXAF = FUSE SIZE; AF=AMP FUSE; NF=NO FUSE
  X = STARTER NEMA SIZE
- XXX / XXAF / XX — COMBINATION CONTROLLER | DISCONNECT; MOUNT 60-INCHES AFF TO TOP
  XXX = AMP RATING / NO. OF POLES
  XXAF = FUSE SIZE: AF=AMP FUSE; NF=NO FUSE
  XX = ENCLOSURE NEMA RATING; BLANK=NEMA 1; WP=NEMA 3R
- M — METER SOCKET/METER
- SPD — SURGE PROTECTION DEVICE
- T / XX / Y — TRANSFORMER
  T = TRANSFORMER ID
  XX = SIZE
- XXXX LSIG — BREAKER
  XXXX = AMP RATING / POLES
  LSIG = ADJUSTABLE SETTINGS (WHERE NOTED)
  L = LONG TIME
  S = SHORT TIME
  I = INSTANTANEOUS
  G = GROUND FAULT PROTECTION OF EQUIPMENT
  GFPE = GROUND FAULT PROTECTION OF EQUIPMENT
  ERMS = ENERGY REDUCTION MAINTENANCE SWITCH



SHEET NOTES

ES1 PROVIDE RECEPTACLE BOLLARD FOR GOLF CART CHARGING STATION. BASIS OF DESIGN BK LIGHTING RB-21-RE1-BZP OR APPROVED EQUAL. SEE CIVIL DRAWINGS FOR EXACT LOCATIONS. ALL RECEPTACLES TO BE GFCI TYPE.

ES5 POLE MOUNTED SITE CAMERA. SEE CIVIL DRAWINGS FOR EXACT LOCATION. PROVIDE SECURITY ENCLOSURE MOUNTED DIRECTLY TO POLE FOR COPPER TO FIBER CONVERSION EQUIPMENT. FIBER TO BE ROUTED UNDERGROUND IN PVC CONDUIT BACK TO MDF ROOM. PROVIDE PULL BOX AT BASE OF POLE TO ALLOW FOR PULLING OF FIBER. SEE SHEET E6.2 FOR POLE REQUIREMENTS.

ES6 PROVIDE PULL VAULT TO INTERCEPT EXISTING FIBER COMMUNICATION CONDUIT DUCT BANK OF (4) 2" CONDUITS INSTALLED UNDER HUB SITE CONTRACT AND EXTEND CONDUITS TO MDF ROOM LOCATION. NEW CONDITS ARE TO BE CONCRETE ENCASED. PROVIDE (1) 144 STRAND OS2 FIBER FROM 1A OR OTHER SSNR RACK. PROVIDE (1) 48 STRAND SM FIBER FOR CLASS X LOOP FA FROM DATA CENTER SSNR RAN IN SEPARATE CONDUIT FROM OS2 FIBER. PROCUREMENT, INSTALLATION, TERMINATION, AND TESTING OF FIBER AT BOTH SSNR AND HUB MDF RACK SHALL BE UNDER DCS LVC CONTRACT.

ES7 PROVIDE MINIMUM 24"X36" PULL VAULT FOR COMMUNICATION CONDUITS.

ES8 PROVIDE NEW MEDIUM VOLTAGE TRANSFORMER ON PAD FOR BUILDING SERVICE. PRECAST PAD FOR MADDOX TRANSFORMER PROVIDED BY OWNER. BASIS OF DESIGN OLDCASTLE. SEE ONE LINE DIAGRAM FOR CONDUIT SIZING.

ES9 PROVIDE PULL VAULT TO INTERCEPT EXISTING FIBER COMMUNICATION CONDUIT DUCT BANK OF (4) 2" CONDUITS INSTALLED UNDER HUB SITE CONTRACT AND EXTEND CONDUITS TO MDF ROOM LOCATION. NEW CONDUITS ARE TO BE CONCRETE ENCASED. PROVIDE (1) 144 STRAND OS2 FIBER FROM 1A OR OTHER SSNR RACK. PROCUREMENT, INSTALLATION, TERMINATION, AND TESTING OF FIBER AT BOTH SSNR AND HUB MDF RACK SHALL BE UNDER DCS LVC CONTRACT.

ES10 PROVIDE CONNECTION TO EXISTING MEDIUM VOLTAGE SWITCH FOR PRIMARY FEEDER TO BUILDING TRANSFORMER. CONFIRM CONDUIT SIZING WITH DC DISTRIBUTION DESIGN TEAM PRIOR TO INSTALLATION. SEE CIVIL DRAWINGS FOR ROUTING.

ES11 PROVIDE PHOTO CELL MOUNTED TO EDGE OF EXTERIOR ROOFTOP FOR CONTROL OF PARKING LOT BOLLARD LIGHTS AND BUILDING MOUNTED SCONCES WITHOUT INTEGRAL PHOTOCELLS. CONTRACTOR TO FIELD VERIFY OPTIMUM LOCATION TO AVOID SHADING FROM EQUIPMENT OR BUILDING FEATURES. PHOTO CELL TO BE CONFIGURED SO THAT IN THE EVENT OF FAILURE FIXTURES WILL BE SET TO "ON".

ES16 PROVIDE PULL VAULT FOR CONNECTION TO EV CHARGER CONDUIT STUBS. SEE CIVIL DRAWINGS FOR EXACT LOCATIONS. PROVIDE (2) 2" CONDUITS FROM PULL VAULT TO PANEL EV LOCATION IN ELECTRICAL ROOM.

ES17 PROVIDE 1" SCHEDULE 40 PVC CONDUIT TO EACH EV CHARGER LOCATION. COORDINATE STUB UP LOCATION AND INSTALLATION REQUIREMENTS WITH CIVIL AND CHARGER MANUFACTURER INSTALLATION INSTRUCTIONS PRIOR TO TRENCHING.

ES22 MANHOLE. COORDINATE SIZE AND EXACT LOCATION WITH CIVIL PRIOR TO INSTALL.

ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

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4/3/2026
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KEY PLAN (AREAS)

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ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

SHEET NUMBER:
ES1.1A

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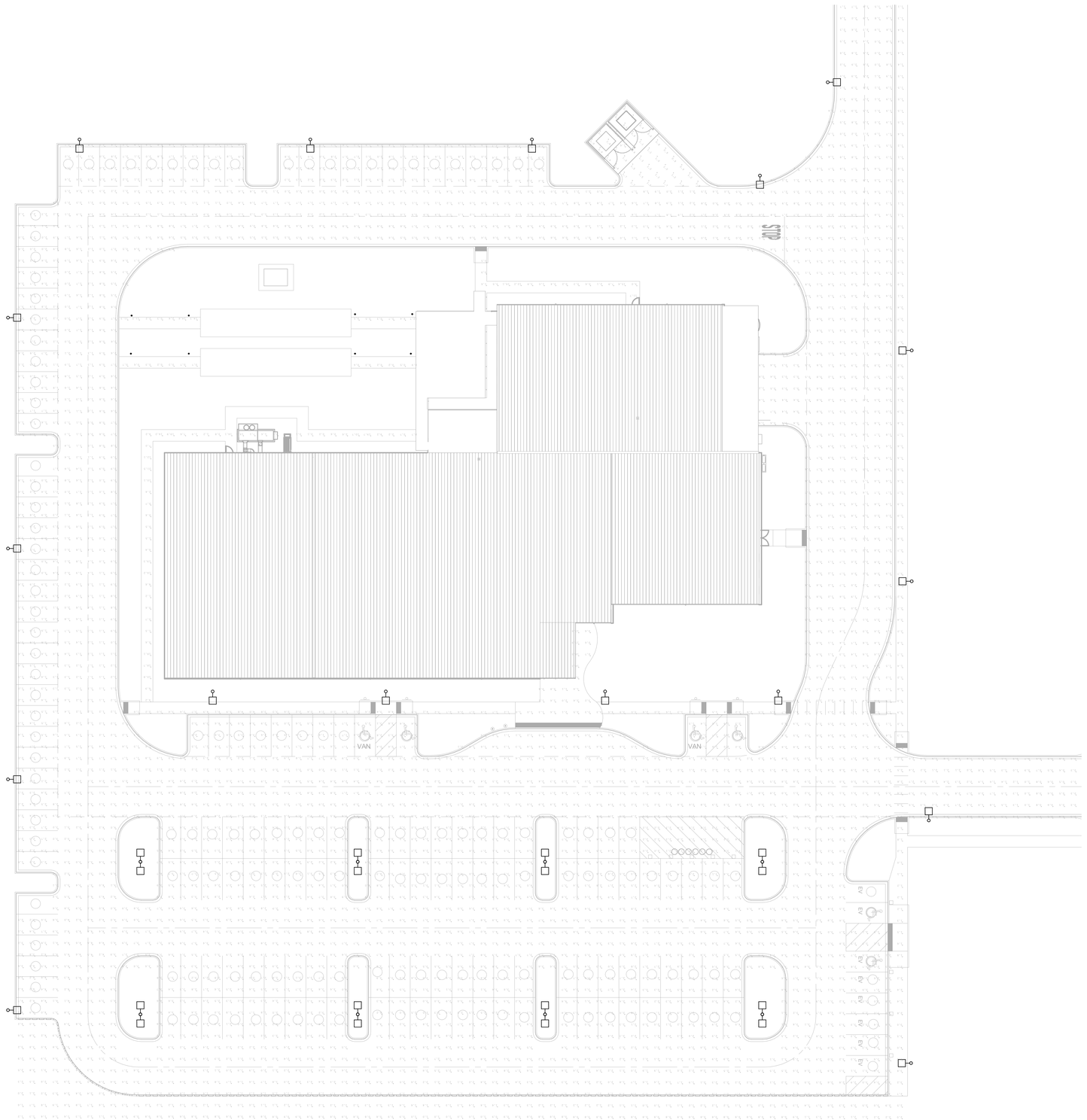

SITE PHOTOMETRIC PLAN
SCALE: 1" = 20'-0"

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SITE PHOTOMETRIC PLAN

SCALE: 1" = 20'-0"

SHEET NUMBER:
ES1.1B

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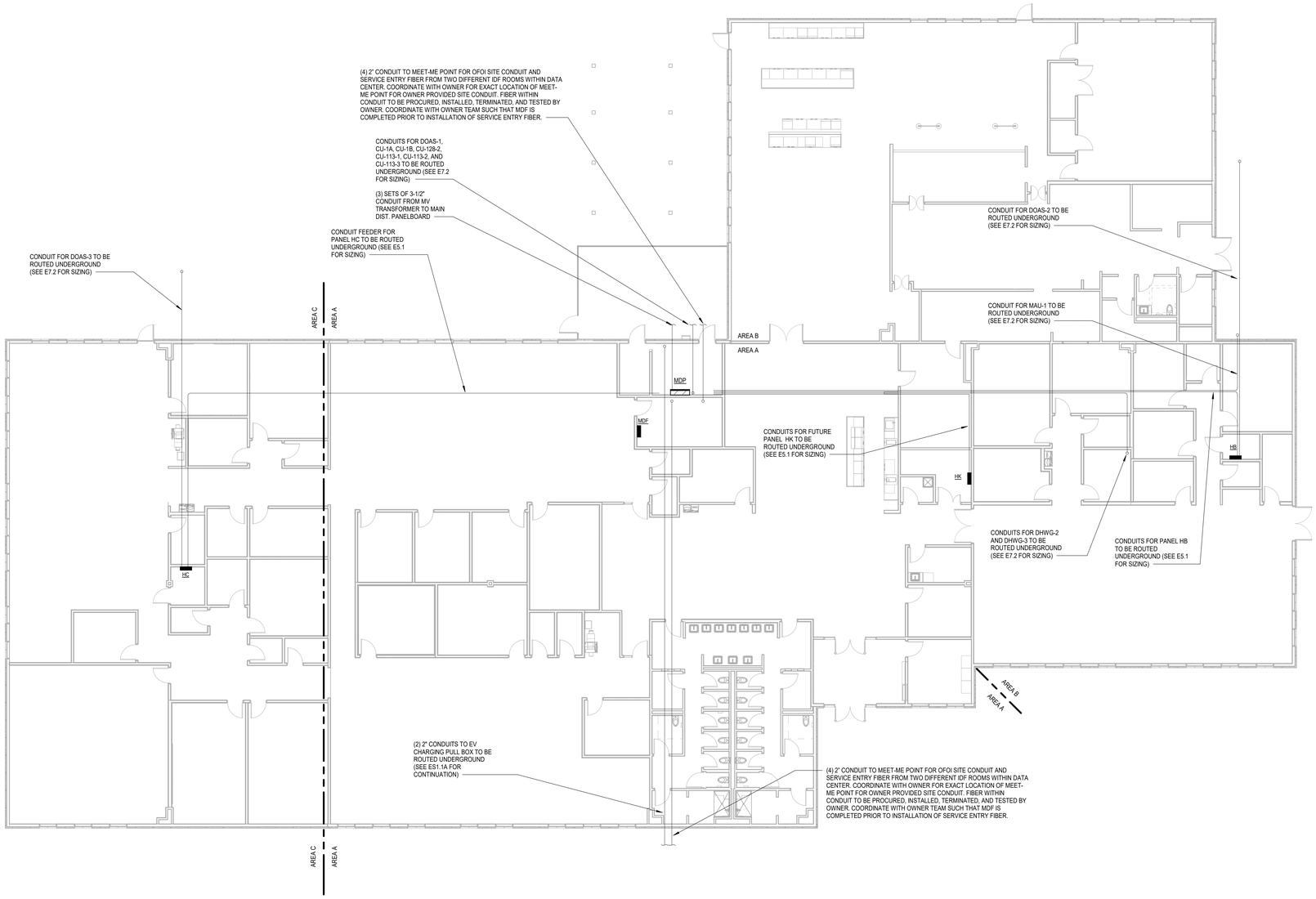

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ELECTRICAL UNDERGROUND UTILITY PLAN

SCALE: 1" = 10'-0"

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ELECTRICAL UTILITY CONNECTIONS

SCALE: 1" = 10'-0"

SHEET NUMBER:
ES1.1C

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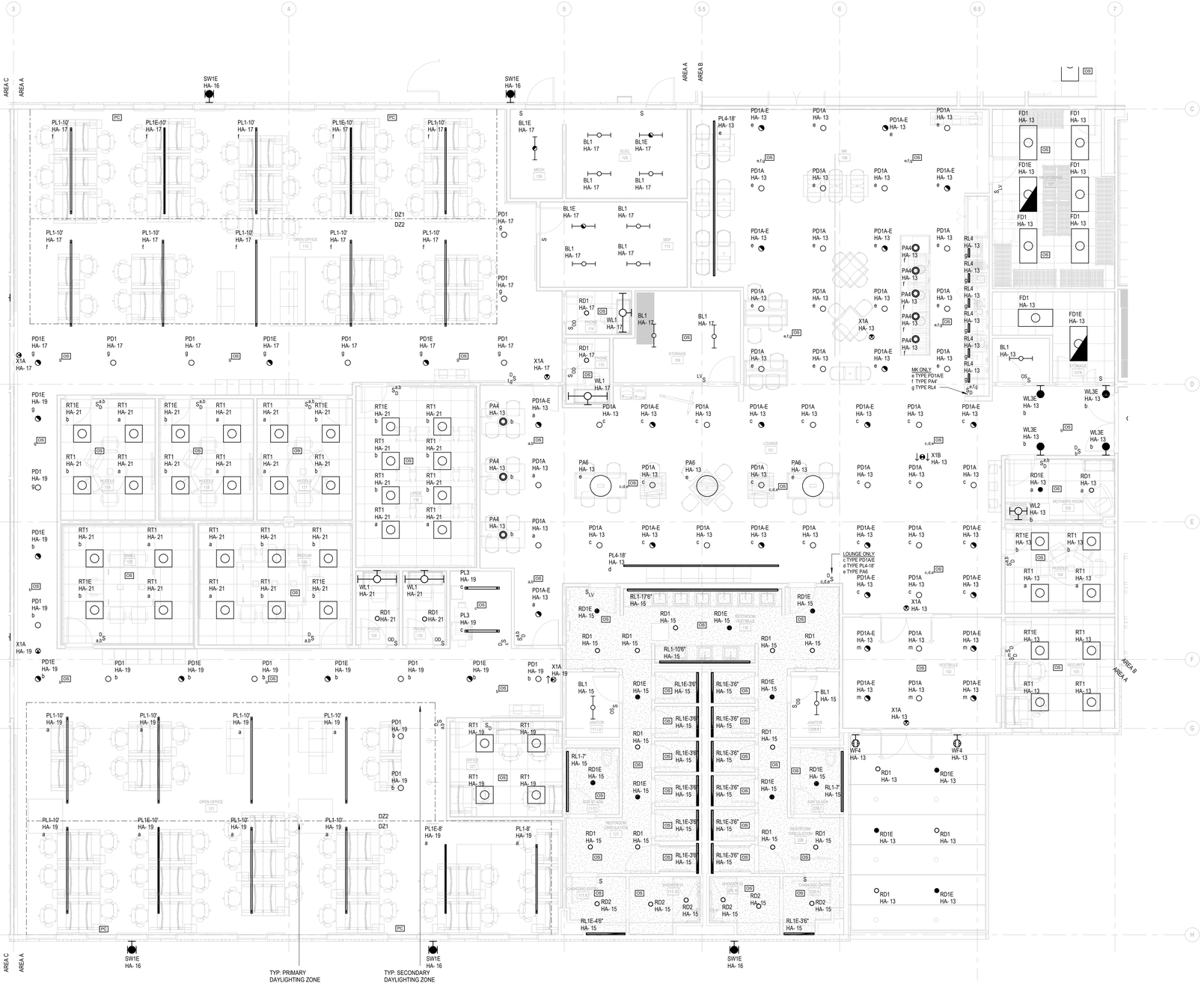

AREA A MOUNTING SCHEDULE

ROOM	TYPE	MOUNTING HEIGHT	NOTES
OPEN OFFICE	PL1 SERIES	9'-0" AFF	
PHONE ROOMS	WL1	6'-6" AFF	
COPY AREA	PL3	9'-0" AFF	
CIRCULATION	PD1 SERIES	9'-0" AFF	
LOUNGE 101	PA4 PD1A SERIES PL4 PA6 WF3E	6'-8" AFF 9'-0" AFF 10'-6" AFF 6'-8" AFF 5'-0" AFF TO CENTER OF LUMINAIRE	IF THERE IS NO OBSTRUCTION TO LIGHT, INSTALL AS HIGH AS POSSIBLE
INFORMAL 101A	PA4	6'-8" AFF	
MK108	PA4 PD1A SERIES PL4 WF3	VARIABLE 9'-0" AFF 10'-6" AFF 4'-0" AFF TO CENTER OF LUMINAIRE	SEE INTERIOR ELEVATIONS IF THERE IS NO OBSTRUCTION TO LIGHT, INSTALL AS HIGH AS POSSIBLE
EXTERIOR	WF4 SW1	6'-0" AFF TO CENTER OF LUMINAIRE 7'-0" AFF	

NOTE: ALL AFF MEASUREMENTS ARE TO THE BOTTOM OF THE LUMINAIRE UNLESS OTHERWISE NOTED

LIGHTING PLAN - AREA A

SCALE: 3/16" = 1'-0"

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LIGHTING PLAN - AREA A

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
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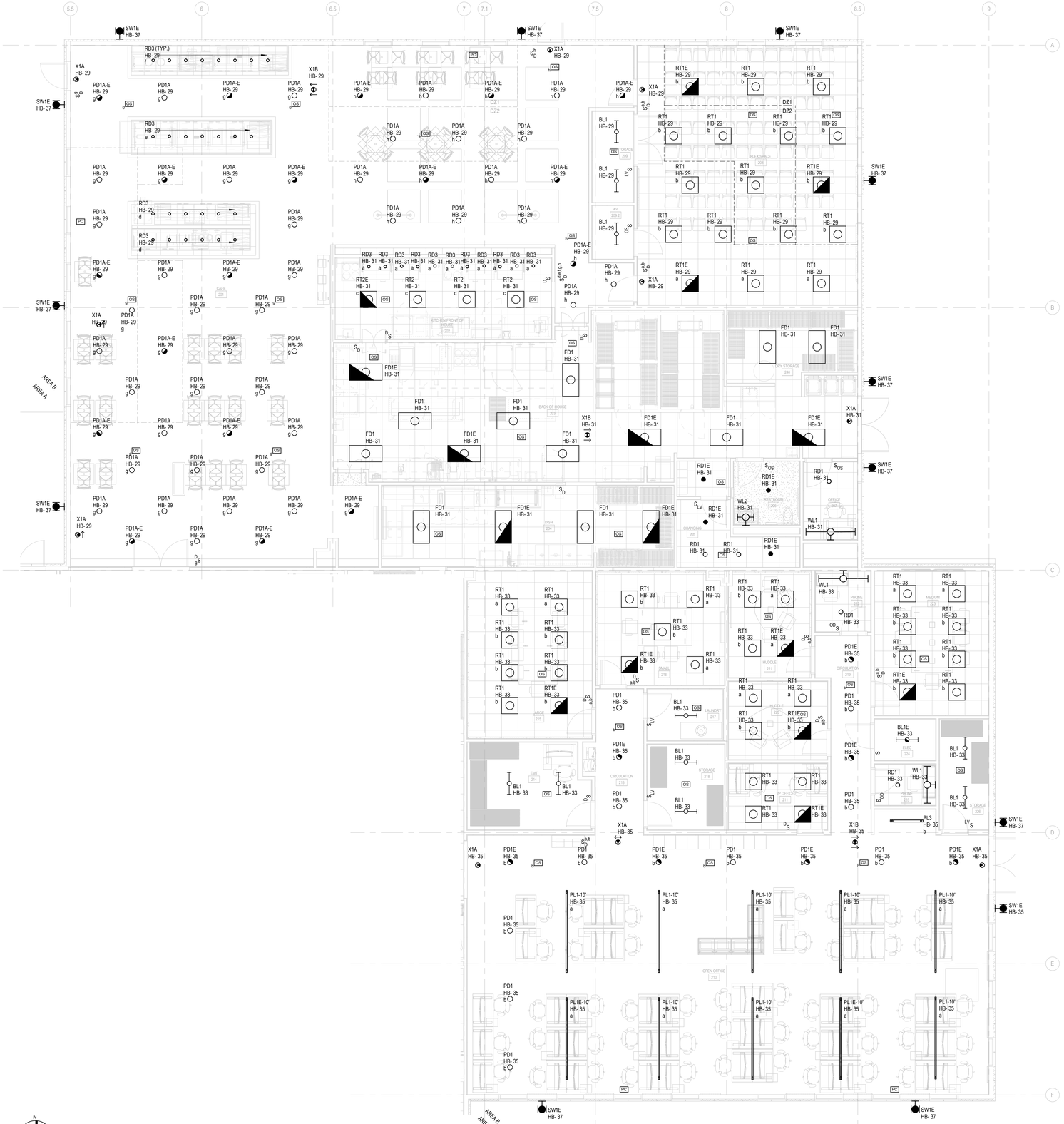

AREA B MOUNTING SCHEDULE

ROOM	TYPE	MOUNTING HEIGHT	NOTES
OPEN OFFICE	PL1 SERIES	9'-0"	
PHONE ROOMS	WL1	6'-6" TO BOTTOM OF LUMINAIRE	
COPY AREA	PL3	9'-0" AFF	
CIRCULATION	PD1 SERIES	9'-0" AFF	
CAFE 201	PD1A SERIES PL4	9'-0" AFF 10'-6" AFF	IF THERE IS NO OBSTRUCTION TO LIGHT, INSTALL AS HIGH AS POSSIBLE
EXTERIOR	WF4 SW1	6'-0" AFF TO CENTER OF LUMINAIRE 7'-0" AFF	

NOTE: ALL AFF MEASUREMENTS ARE TO THE BOTTOM OF THE LUMINAIRE

LIGHTING PLAN - AREA B

SCALE: 3/16" = 1'-0"

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KEY PLAN (AREAS)

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LIGHTING PLAN - AREA B (4.0)

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
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LIGHTING PLAN - AREA C

SCALE: 3/16" = 1'-0"

AREA C MOUNTING SCHEDULE

ROOM	TYPE	MOUNTING HEIGHT	NOTES
OPEN OFFICE	PL1 SERIES	9'-0"	
PHONE ROOMS	WL1	6'-6" TO BOTTOM OF LUMINAIRE	
COPY AREA	PD1	9'-0" AFF	
CIRCULATION	PD1 SERIES	9'-0" AFF	
EXTERIOR	SW1	7'-0" AFF	

NOTE: ALL AFF MEASUREMENTS ARE TO THE BOTTOM OF THE LUMINAIRE

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LIGHTING PLAN - AREA C

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E1.33

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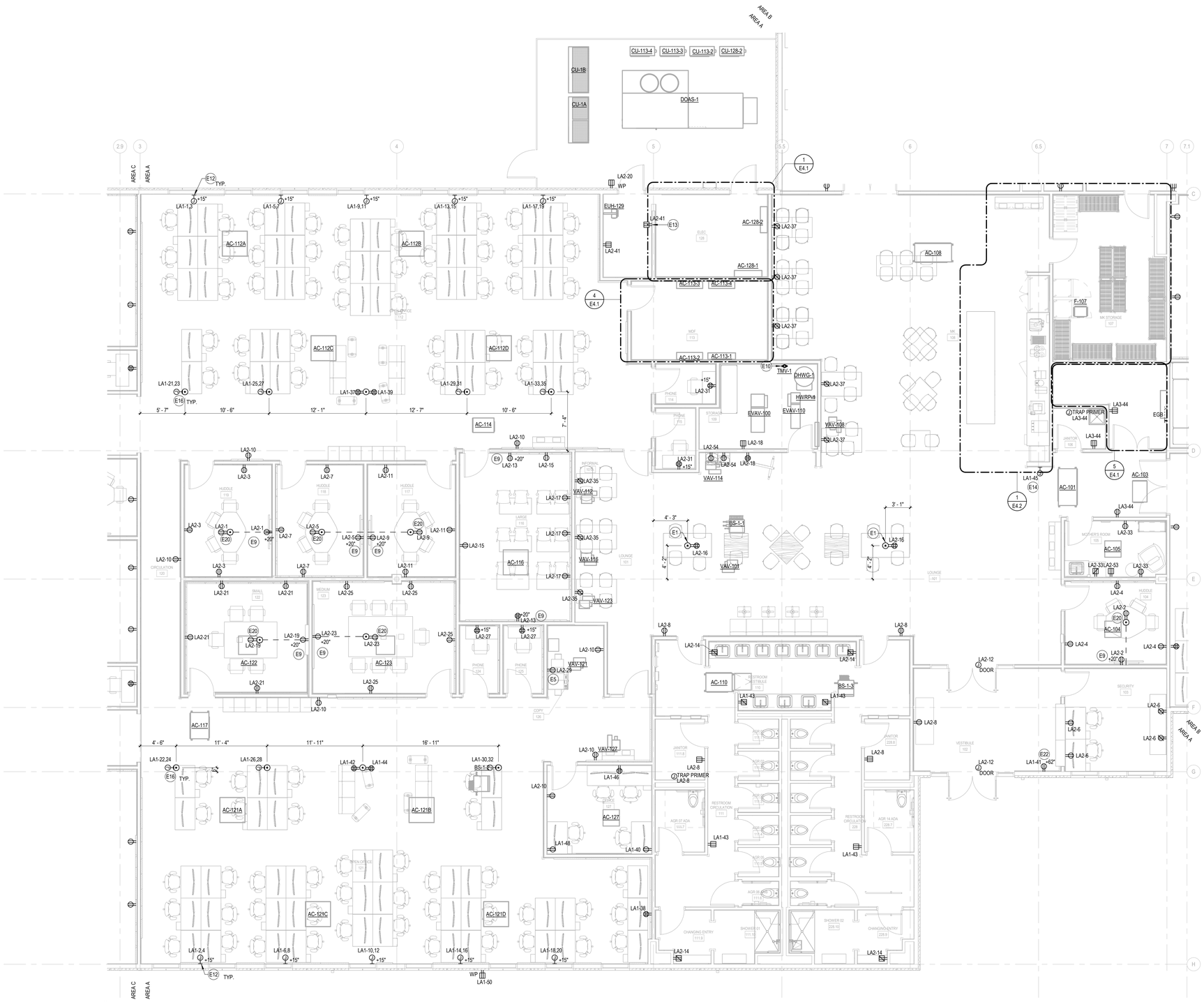

POWER PLAN - AREA A

SCALE: 3/16" = 1'-0"

SHEET NOTES

E1	PROVIDE FLUSH FLOOR BOX FOR POWER DISTRIBUTION, BASIS OF DESIGN LEGRAND RFBA SERIES.
E5	VERIFY CIRCUIT AND RECEPTACLE REQUIREMENTS FOR PRINTERS WITH OWNER.
E9	COORDINATE DEVICE LOCATIONS WITH AV DRAWINGS PRIOR TO ROUGH-IN.
E10	PROVIDE 120V CONNECTION TO THERMOSTATIC MIXING VALVE FROM GENERAL PURPOSE RECEPTACLE CIRCUIT WITHIN THIS SPACE. CONFIRM FINAL ROUGH IN REQUIREMENTS WITH SUBMITTALS AS TO WHAT CONNECTION TYPE MIXING VALVE WILL REQUIRE.
E12	PROVIDE HARDWIRED CONNECTION TO 4+4 WIRE SYSTEMS FURNITURE POWER SPINE. SEE MANUFACTURER SHOP DRAWINGS FOR EXACT CONNECTION DETAILS AND REQUIREMENTS.
E13	PROVIDE OUTLET FOR CONNECTION TO WATER SOFTENER SYSTEM. FIELD VERIFY EXACT LOCATION WITH MECHANICAL CONTRACTOR TO ENSURE THAT CORD FROM WATER SOFTENER IS ABLE TO REACH OUTLET WITH STOCK FACTORY PLUG CORD.
E14	PROVIDE CONNECTION TO TRAKA KEY BOX. VERIFY FINAL MOUNTING HEIGHT AND LOCATION WITH SECURITY TEAM PRIOR TO ROUGH IN.
E16	PROVIDE HARDWIRED CONNECTION TO 4+4 WIRE FURNITURE SYSTEM SPINE VIA FLOOR CORE AS SHOWN. BASIS OF DESIGN LEGRAND RFBA SERIES
E20	PROVIDE SURFACE MOUNTED, DUAL CHANNEL RACEWAY, BY CONNECTRAC, FOR POWER AND A/V CABLING AS SHOWN. CONTRACTOR TO RUN POWER AND A/V FROM CABINET BELOW DISPLAY TO FURNITURE LOCATION AS SHOWN. PROVIDE ALL NECESSARY TRANSITION PIECES TO MEET LOCAL CODES. COORDINATE WITH A/V INSTALLER PRIOR TO ROUGH-IN.
E22	CONFIRM FINAL MOUNTING HEIGHT AND CONNECTION TYPE FOR BIOMETRIC READER WITH SECURITY TEAM PRIOR TO ROUGH IN.

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POWER PLAN - AREA A
SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E2.11
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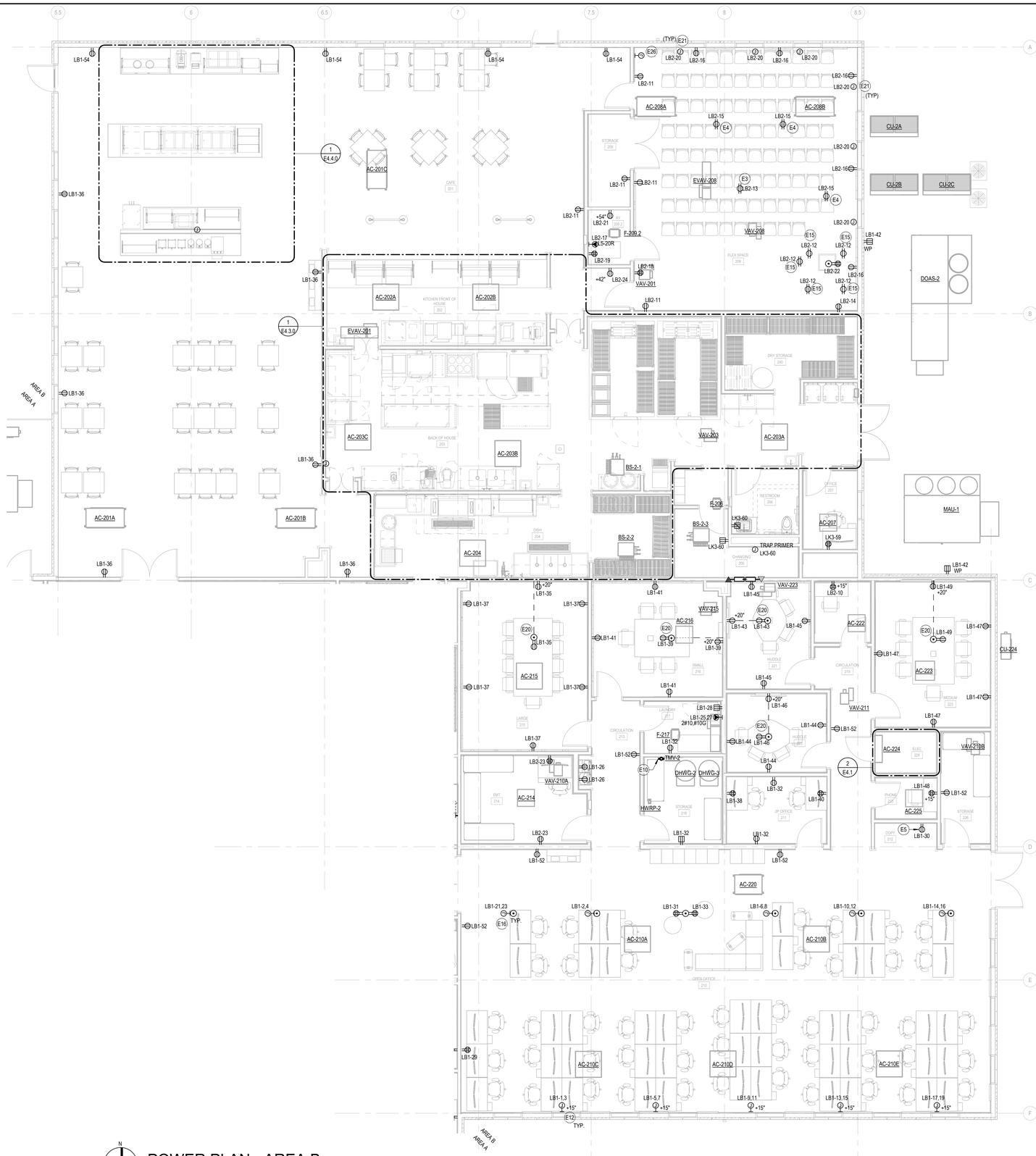

POWER PLAN - AREA B

SCALE: 3/16" = 1'-0"

SHEET NOTES

E3	PROVIDE CEILING MOUNTED RECEPTACLE FOR PROJECTOR AS SHOWN. CONFIRM EXACT LOCATION AND INSTALLATION INSTRUCTIONS WITH AV DRAWINGS PRIOR TO ROUGH IN.
E4	PROVIDE CEILING MOUNTED RECEPTACLE FOR DISPLAY MONITOR FOR LECTURN. CONFIRM EXACT LOCATION AND INSTALLATION INSTRUCTIONS WITH AV DRAWINGS PRIOR TO ROUGH IN.
E5	VERIFY CIRCUIT AND RECEPTACLE REQUIREMENTS FOR PRINTERS WITH OWNER.
E10	PROVIDE 120V CONNECTION TO THERMOSTATIC MIXING VALVE FROM GENERAL PURPOSE RECEPTACLE CIRCUIT WITHIN THIS SPACE. CONFIRM FINAL ROUGH IN REQUIREMENTS WITH SUBMITTALS AS TO WHAT CONNECTION TYPE MIXING VALVE WILL REQUIRE.
E12	PROVIDE HARDWIRED CONNECTION TO 4+4 WIRE SYSTEMS FURNITURE POWER SPINE. SEE MANUFACTURER SHOP DRAWINGS FOR EXACT CONNECTION DETAILS AND REQUIREMENTS.
E15	PROVIDE CEILING MOUNTED RECEPTACLE FOR AV SYSTEM LIGHTING. PROVIDE ADDITIONAL JUNCTION BOX ADJACENT TO OUTLET FOR MOUNTING OF LIGHT FIXTURE. CONFIRM EXACT LOCATION AND INSTALLATION INSTRUCTIONS WITH AV DRAWINGS PRIOR TO ROUGH IN
E16	PROVIDE HARDWIRED CONNECTION TO 4+4 WIRE FURNITURE SYSTEM SPINE VIA FLOOR CORE AS SHOWN. BASIS OF DESIGN LEGRAND RFBA SERIES
E20	PROVIDE SURFACE MOUNTED, DUAL CHANNEL RACEWAY, BY CONNECTRAC, FOR POWER AND A/V CABLING AS SHOWN. CONTRACTOR TO RUN POWER AND A/V FROM CABINET BELOW DISPLAY TO FURNITURE LOCATION AS SHOWN. PROVIDE ALL NECESSARY TRANSITION PIECES TO MEET LOCAL CODES. COORDINATE WITH A/V INSTALLER PRIOR TO ROUGH-IN.
E21	PROVIDE SINGLE GANG JUNCTION BOX ON STRUCTURAL DECK FOR MOTORIZED SHADE CONTROLLER. COORDINATE EXACT POWER REQUIREMENTS WITH INSTALLER PRIOR TO ROUGH-IN. TIE INTO WALL-MOUNTED CONTROL SWITCH.
E26	PROVIDE SINGLE GANG JUNCTION BOX FOR MOTORIZED SHADE CONTROL AT 48" AFF. VERIFY EXACT REQUIREMENTS WITH INSTALLER PRIOR TO ROUGH-IN.

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POWER PLAN - AREA B (4.0)

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E2.22.0

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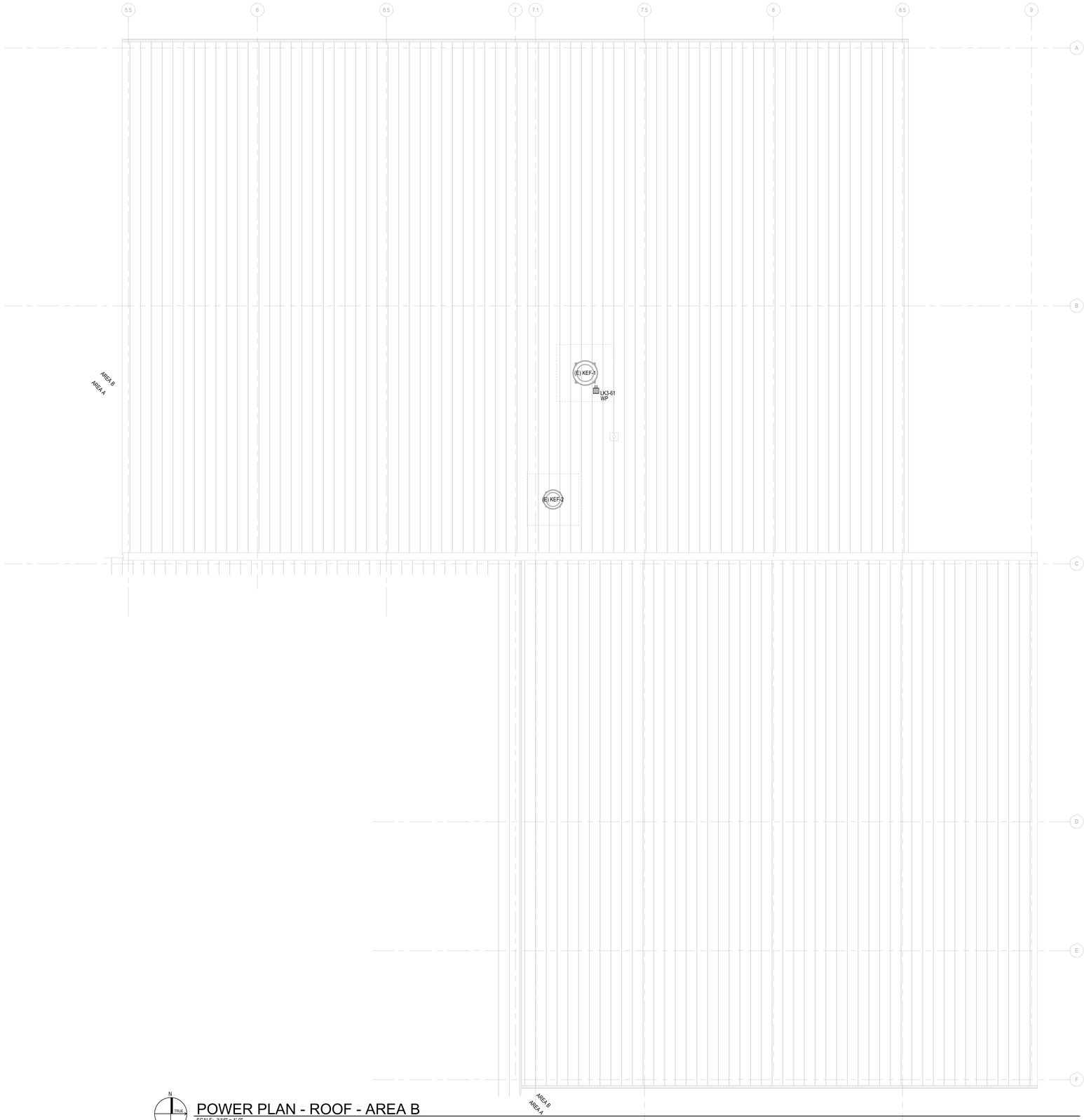

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POWER PLAN - ROOF - AREA B

SCALE: 3/16" = 1'-0"

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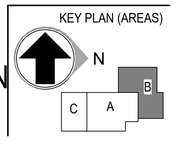

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POWER PLAN - AREA B - ROOF (4.0)

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E2.22R.0

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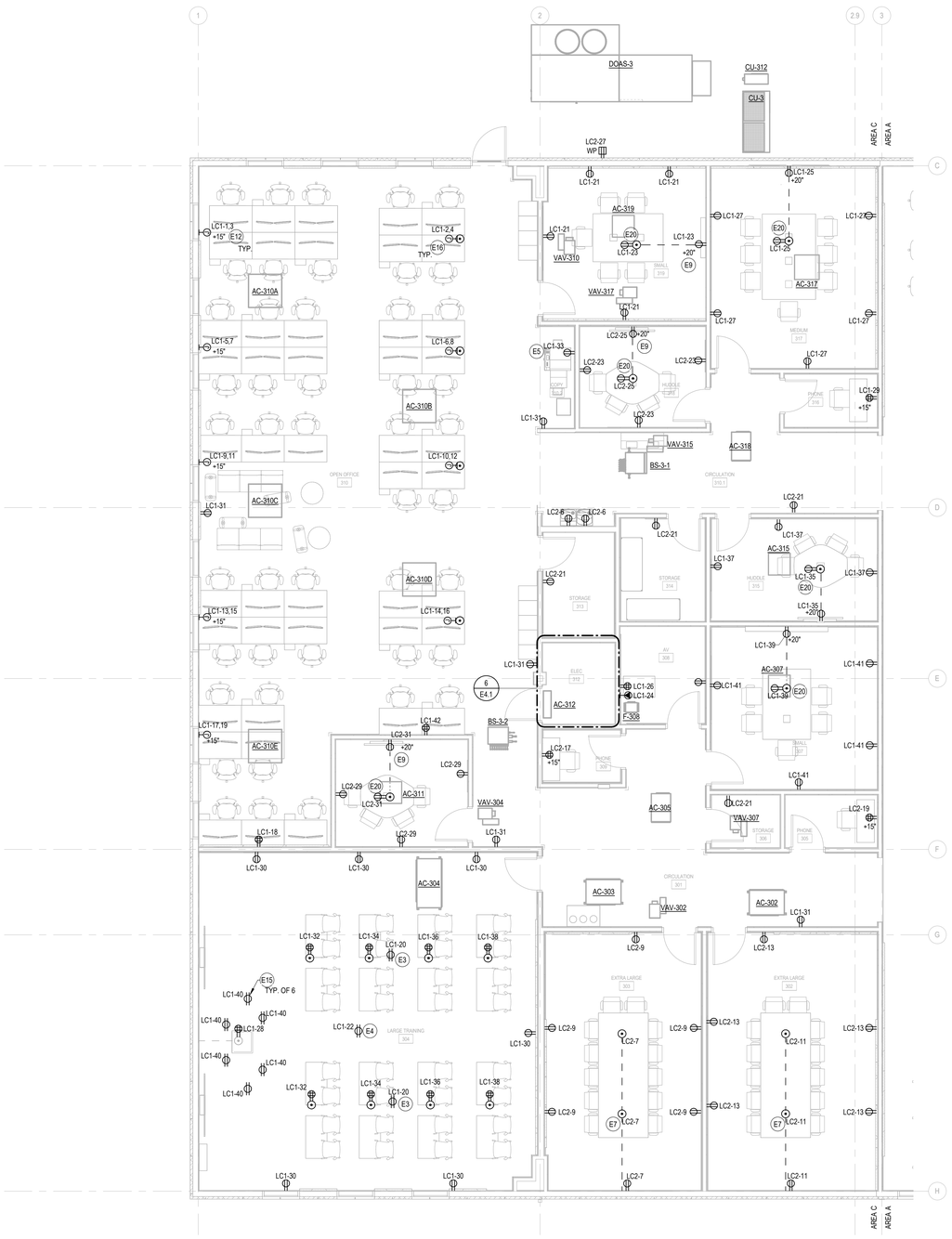

N
TRUE

POWER PLAN - AREA C

SCALE: 3/16" = 1'-0"

SHEET NOTES

- E3 PROVIDE CEILING MOUNTED RECEPTACLE FOR PROJECTOR AS SHOWN. CONFIRM EXACT LOCATION AND INSTALLATION INSTRUCTIONS WITH AV DRAWINGS PRIOR TO ROUGH IN.
- E4 PROVIDE CEILING MOUNTED RECEPTACLE FOR DISPLAY MONITOR FOR LECTURN. CONFIRM EXACT LOCATION AND INSTALLATION INSTRUCTIONS WITH AV DRAWINGS PRIOR TO ROUGH IN.
- E5 VERIFY CIRCUIT AND RECEPTACLE REQUIREMENTS FOR PRINTERS WITH OWNER.
- E7 PROVIDE SURFACE MOUNTED, DUAL CHANNEL RACEWAY, BY CONNECTRAC, FOR POWER AND A/V CABLING AS SHOWN. CONTRACTOR TO RUN POWER AND A/V FROM CABINET BELOW DISPLAY TO FURNITURE LOCATION AS SHOWN. PROVIDE WHIP FROM RACEWAY TO FURNITURE. PROVIDE ALL NECESSARY TRANSITION PIECES TO MEET LOCAL CODES. COORDINATE WITH A/V INSTALLER PRIOR TO ROUGH-IN.
- E9 COORDINATE DEVICE LOCATIONS WITH AV DRAWINGS PRIOR TO ROUGH-IN.
- E12 PROVIDE HARDWIRED CONNECTION TO 4+4 WIRE SYSTEMS FURNITURE POWER SPINE. SEE MANUFACTURER SHOP DRAWINGS FOR EXACT CONNECTION DETAILS AND REQUIREMENTS.
- E15 PROVIDE CEILING MOUNTED RECEPTACLE FOR AV SYSTEM LIGHTING. PROVIDE ADDITIONAL JUNCTION BOX ADJACENT TO OUTLET FOR MOUNTING OF LIGHT FIXTURE. CONFIRM EXACT LOCATION AND INSTALLATION INSTRUCTIONS WITH AV DRAWINGS PRIOR TO ROUGH IN
- E16 PROVIDE HARDWIRED CONNECTION TO 4+4 WIRE FURNITURE SYSTEM SPINE VIA FLOOR CORE AS SHOWN. BASIS OF DESIGN LEGRAND RFBA SERIES
- E20 PROVIDE SURFACE MOUNTED, DUAL CHANNEL RACEWAY, BY CONNECTRAC, FOR POWER AND A/V CABLING AS SHOWN. CONTRACTOR TO RUN POWER AND A/V FROM CABINET BELOW DISPLAY TO FURNITURE LOCATION AS SHOWN. PROVIDE ALL NECESSARY TRANSITION PIECES TO MEET LOCAL CODES. COORDINATE WITH A/V INSTALLER PRIOR TO ROUGH-IN.

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CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)

N
C
A
B

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DRAWN: Author
APPRV'D: Approver

CLY-HUB

PROJECT ADDRESS:
TULSA COUNTY, OK

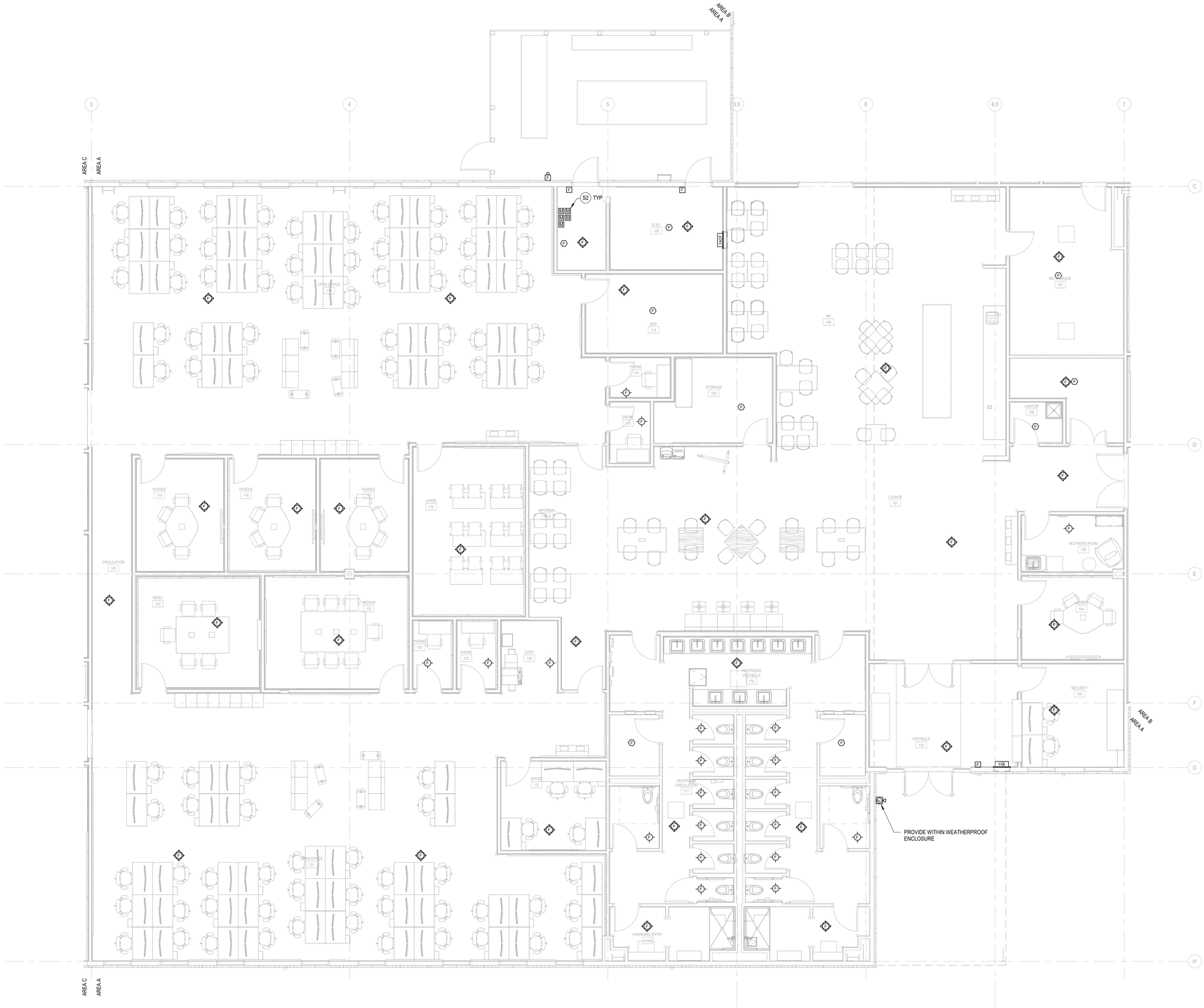
PROJ. NO. 10438332

POWER PLAN - AREA C

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E2.33

PHASE: ISSUE FOR CONSTRUCTION - HUB



N

FIRE ALARM PLAN - AREA A

SCALE: 3/16" = 1'-0"

GENERAL NOTES

A EC SHALL COORDINATE ANY AND ALL NECESSARY INSTALLATION OF JUNCTION BOXES AND CONDUIT WITH LOW VOLTAGE, SECURITY, A/V INSTALLERS PRIOR TO ROUGH-IN.

B ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED BARRIERS TO BE FILLED WITH FIRE-STOPPING MATERIAL TO MAINTAIN RATING OF ASSOCIATED BARRIER.

C CONTRACTOR TO PROVIDE DEDICATED 120V/20A CIRCUIT TO DUCT MOUNTED SMOKE DETECTOR FOR EQUIPMENT SUPPLYING MORE THAN 2,000CFM OF AIRFLOW. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND REQUIREMENTS.

SHEET NOTES

S2 COORDINATE MOUNTING LOCATION FOR MONITORING FLOW AND TAMPER SWITCHES WITH FIRE SPRINKLER INSTALLER.

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FIRE ALARM PLAN - AREA A

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E3.11

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GENERAL NOTES

A EC SHALL COORDINATE ANY AND ALL NECESSARY INSTALLATION OF JUNCTION BOXES AND CONDUIT WITH LOW VOLTAGE, SECURITY, A/V INSTALLERS PRIOR TO ROUGH-IN.

B ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED BARRIERS TO BE FILLED WITH FIRE-STOPPING MATERIAL TO MAINTAIN RATING OF ASSOCIATED BARRIER.

C CONTRACTOR TO PROVIDE DEDICATED 120V/20A CIRCUIT TO DUCT MOUNTED SMOKE DETECTOR FOR EQUIPMENT SUPPLYING MORE THAN 2,000CFM OF AIRFLOW. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND REQUIREMENTS.

SHEET NOTES

S15 PROVIDE SINGLE GANG JUNCTION BOX FOR CONNECTION OF AV RACK TO FIRE ALARM SYSTEM AND SECURITY SYSTEM. PROVIDE (2) 3/4" CONDUITS FROM JUNCTION BOX STUBBED UP TO CEILING SPACE ABOVE FOR CABLING. SEE AV DRAWING TA-401 FOR ADDITIONAL INFORMATION.

N TRUE

FIRE ALARM PLAN - AREA B

SCALE: 3/16" = 1'-0"

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FIRE ALARM PLAN - AREA B (4.0)

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E3.22.0

PHASE: ISSUE FOR CONSTRUCTION - HUB

GENERAL NOTES

A EC SHALL COORDINATE ANY AND ALL NECESSARY INSTALLATION OF JUNCTION BOXES AND CONDUIT WITH LOW VOLTAGE, SECURITY, A/V INSTALLERS PRIOR TO ROUGH-IN.

B ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED BARRIERS TO BE FILLED WITH FIRE-STOPPING MATERIAL TO MAINTAIN RATING OF ASSOCIATED BARRIER.

C CONTRACTOR TO PROVIDE DEDICATED 120V/20A CIRCUIT TO DUCT MOUNTED SMOKE DETECTOR FOR EQUIPMENT SUPPLYING MORE THAN 2,000CFM OF AIRFLOW. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND REQUIREMENTS.

SHEET NOTES

N TRUE

FIRE ALARM PLAN - AREA C

SCALE: 3/16" = 1'-0"

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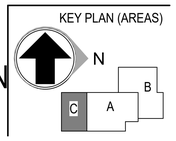

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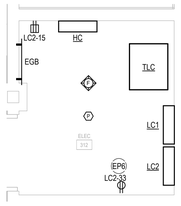
FIRE ALARM PLAN - AREA C

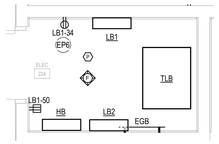
SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E3.33

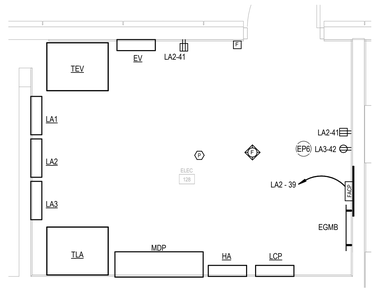
PHASE: ISSUE FOR CONSTRUCTION - HUB



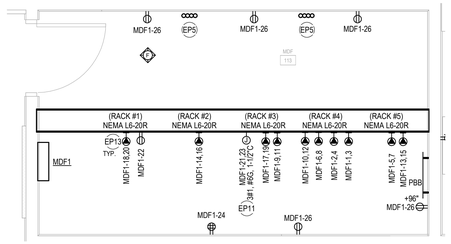
6 E4.1 ENLARGED ELEC 312
SCALE: 3/8" = 1'-0"



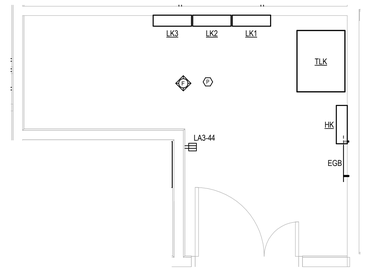
2 E4.1 ENLARGED ELEC 224
SCALE: 3/8" = 1'-0"



1 E4.1 ENLARGED ELEC 128
SCALE: 3/8" = 1'-0"



4 E4.1 POWER PLAN - ENLARGED MDF 113
SCALE: 3/8" = 1'-0"



5 E4.1 ENLARGED ELEC 107A
SCALE: 3/8" = 1'-0"

SHEET NOTES

EP5 FIBER SERVICE ENTRANCE CONDUITS, SEE ES1.1A FOR ADDITIONAL INFORMATION.

EP6 PROVIDE 120V/20A SINGLE POLE CIRCUIT FOR FUTURE SOUND MASKING GENERATOR. COORDINATE EXACT REQUIREMENTS PRIOR TO ROUGH-IN.

EP11 PROVIDE CONNECTION TO RACK MOUNTED UPS. VERIFY FINAL CONNECTION REQUIREMENTS WITH MANUFACTURER INSTALLATION DIRECTIONS PRIOR TO ROUGH IN.

EP13 JUNCTION BOXES FOR RACK OUTLETS AND POWER CONNECTIONS TO BE MOUNTED TO UNISTRUT SUPPORTS FOR CABLE TRAY ABOVE RACKS. FIELD VERIFY EXACT LOCATIONS.

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PROJ. NO. 10438332

ENLARGED ELECTRICAL PLANS
SCALE: 3/8" = 1'-0"

SHEET NUMBER:
E4.1
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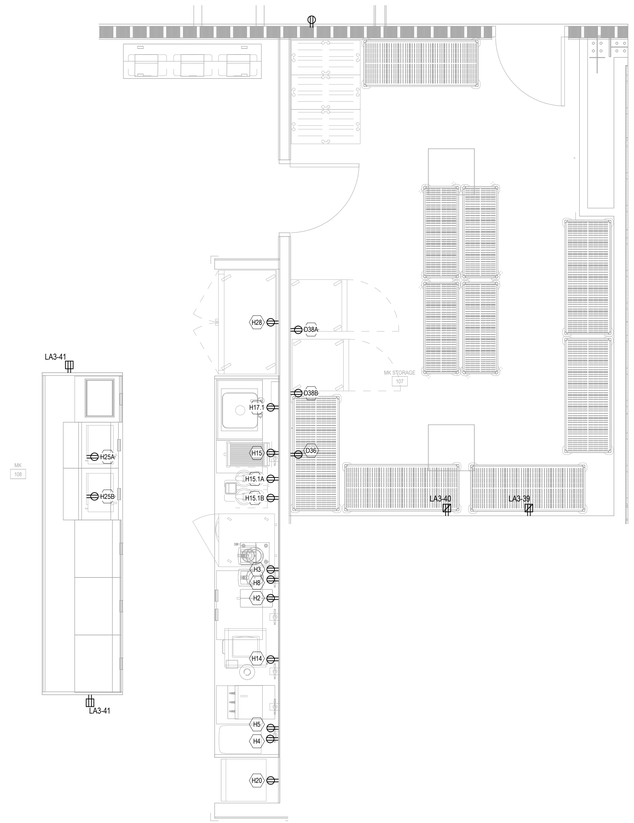

1 E4.2 ENLARGED KITCHEN PLAN - AREA A
SCALE: 3/8" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE

NOTES:
1. SEE E5.1 FOR FEEDER SCHEDULE

Equipment Serves	DESCRIPTION	ELECTRICAL DATA					MOCP	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	CONNECTION TYPE	NOTES
		LOAD		VOLT	PHASE	POLES						
		A	W									
D36	REACH-IN REFRIGERATOR	3.8	456	120	1	1	20 A	LA3	29	20-2W	NEMA 5-20R	
D38A	MOBILE HOLDING CABINET	13.8	1,656	120	1	1	20 A	LA3	31	20-2W	NEMA 5-20R	
D38B	MOBILE HOLDING CABINET	13.8	1,656	120	1	1	20 A	LA3	33	20-2W	NEMA 5-20R	
H2	COFFEE GRINDER	6	720	120	1	1	20 A	LA3	22	20-2W	NEMA 5-20R	
H3	COFFEE BREWER	16	1,920	120	1	1	20 A	LA3	36	20-2W	NEMA 5-20R	
H4	ICE AND WATER DISPENSER	4.5	540	120	1	1	20 A	LA3	26	20-2W	NEMA 5-20R	
H5	WATER DISPENSER	6	720	120	1	1	20 A	LA3	28	20-2W	NEMA 5-20R	
H6	UNDERCOUNTER REFRIGERATOR	2	240	120	1	1	20 A	LA3	20	20-2W	NEMA 5-20R	
H14	SURE IMMERSION	15	1,800	120	1	1	20 A	LA3	24	20-2W	NEMA 5-20R	
H15	ESPRESSO MACHINE	14.2	1,700	120	1	1	20 A	LA3	16	20-2W	NEMA 5-20R	
H15.1A	COFFEE GRINDER	3.3	400	120	1	1	20 A	LA3	18	20-2W	NEMA 5-20R	
H15.1B	COFFEE GRINDER	3.3	400	120	1	1	20 A	LA3	17	20-2W	NEMA 5-20R	
H17.1	ELECTRIC FAUCET	0.8	100	120	1	1	20 A	LA3	27	20-2W	NEMA 5-20R	
H20	WATER DISPENSER	12	1,440	120	1	1	20 A	LA3	15	20-2W	NEMA 5-20R	
H25A	MICROWAVE	13.4	1,608	120	1	1	20 A	LA3	30	20-2W	NEMA 5-20R	
H25B	MICROWAVE	13.4	1,608	120	1	1	20 A	LA3	32	20-2W	NEMA 5-20R	
H28	REACH-IN REFRIGERATOR	2.1	246	120	1	1	20 A	LA3	25	20-2W	NEMA 5-20R	

SHEET NOTES

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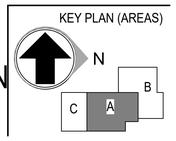

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PROJECT ADDRESS:
TULSA COUNTY, OK

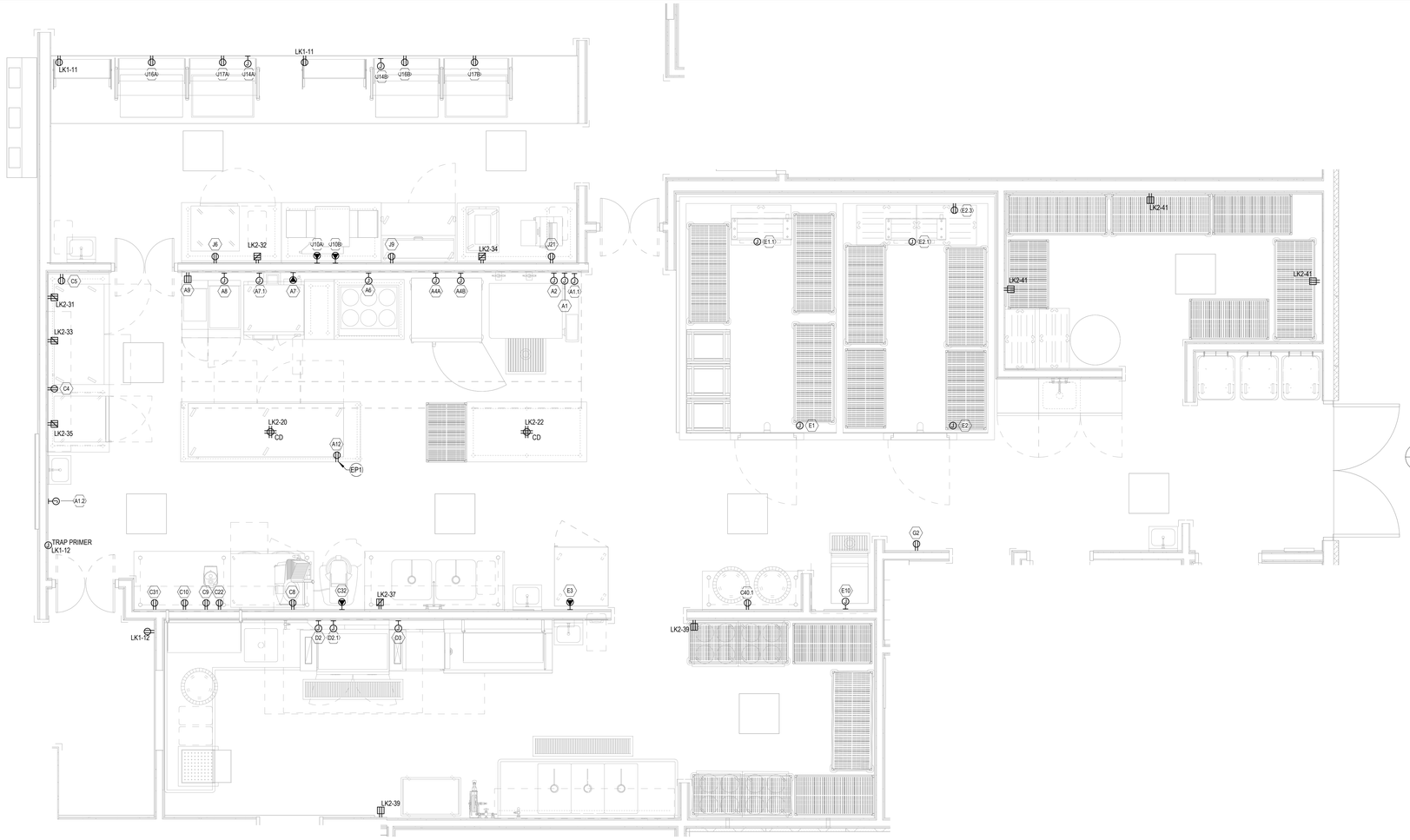
PROJ. NO. 10438332

KITCHEN EQUIPMENT PLAN - AREA A

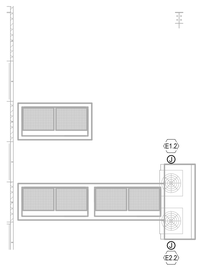
SCALE: 3/8" = 1'-0"

SHEET NUMBER:
E4.2

PHASE: ISSUE FOR CONSTRUCTION - HUB



1 E4.3.0 ENLARGED KITCHEN PLAN
SCALE: 3/8" = 1'-0"



2 E4.3.0 ENLARGED CAFE EXTERIOR 4.0
SCALE: 3/16" = 1'-0"

SHEET NOTES

EP1 WIRING DEVICE TO BE FED FROM BELOW, PROVIDE CONDUIT WITHIN SLAB.

KITCHEN EQUIPMENT SCHEDULE

NOTES:
1. SEE E5.1 FOR FEEDER SCHEDULE

Equipment Serves	DESCRIPTION	ELECTRICAL DATA				MOCP	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	CONNECTION TYPE	NOTES
		LOAD		VOLT	POLES						
		A	W								
A1	EXHAUST HOOD GAS VALVE	10	1,200	120	1	20 A	LK1	10	20-2W	JUNCTION BOX	CONFIRM REQUIREMENTS WITH HOOD MANUFACTURER SHOP DRAWINGS
A1.1	FIRE SUPRESSION SYSTEM	10	1,200	120	1	15 A	LK1	13	20-2W	JUNCTION BOX	CONFIRM REQUIREMENTS WITH HOOD MANUFACTURER SHOP DRAWINGS
A1.2	DEMANDAIRE CONTROL PANEL	5	600	120	1	20 A	LK1	9	20-2W	JUNCTION BOX	CONFIRM REQUIREMENTS WITH HOOD MANUFACTURER SHOP DRAWINGS
A2	VARIOCOOKER	52.9	43,980.2	480	3	70 A	HK	25,27,29	70-3W	JUNCTION BOX	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A4A	ELECTRIC COMBI-STEAMER	26.9	22,364.2	480	3	35 A	HK	19,21,23	40-3W	JUNCTION BOX	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A4B	ELECTRIC COMBI-STEAMER	26.9	22,364.2	480	3	35 A	HK	20,22,24	40-3W	JUNCTION BOX	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A6	INDUCTION RANGE	58.3	21,003.5	208	3	80 A	LK1	41,43,45	80-3W	JUNCTION BOX	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A7	ELECTRIC GRIDDLE	23	19,121	480	3	30 A	HK	13,15,17	30-3W	NEMA L16-30R	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A7.1	CONVECTION OVEN	9	7,482.5	480	3	15 A	HK	7,9,11	20-3W	JUNCTION BOX	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A8	ELECTRIC FRYER	27	22,447.4	480	3	35 A	HK	14,16,18	40-3W	JUNCTION BOX	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A9	CRISP N' HOLD FOOD STATION	15.1	1,812	120	1	20 A	LK1	44	20-2W	NEMA 5-20R	PROVIDE SHUNT TRIP CONNECTION FROM HOOD
A12	UNDERCOUNTER REFRIGERATOR	2.2	264	120	1	20 A	LK1	26	20-2W	NEMA 5-20R	
C4	MOBILE HOLDING CABINET	19.4	2,328	120	1	20 A	LK1	22	20-2W	NEMA 5-20R	
C5	UNDERCOUNTER REFRIGERATOR	4	480	120	1	20 A	LK1	20	20-2W	NEMA 5-20R	
C6	SLICER	5.6	672	120	1	20 A	LK1	34	20-2W	NEMA 5-20R	
C9	FOOD PROCESSOR	7	840	120	1	20 A	LK1	30	20-2W	NEMA 5-20R	
C10	VEGETABLE SLICER	3	360	120	1	20 A	LK1	28	20-2W	NEMA 5-20R	
C22	UNDERCOUNTER REFRIGERATOR	5.1	612	120	1	20 A	LK1	32	20-2W	NEMA 5-20R	
C31	PREP N' TEMP PRO STATION	5	600	120	1	20 A	LK1	24	20-2W	NEMA 5-20R	
C32	40QT MIXER	5.6	2,017	208	3	20 A	LK1	47,49,51	20-3W	NEMA L15-20R	
C40.1	SCALE AND MONITOR	10	1,200	120	1	20 A	LK1	31	20-2W	NEMA 5-20R	
D2	RACK CONVEYOR DISHWASHER	68	56,534.1	480	3	90 A	HK	26,28,30	90-3W	NEMA 3R, 100A DISC.	
D2.1	BLOWER-DRYER	15.7	13,052.7	480	3	20 A	HK	8,10,12	20-3W	JUNCTION BOX	
D3	CONDENSATE HOOD	2	240	120	1	15 A	LK1	14	20-2W	JUNCTION BOX	
E1	WALK-IN COOLER	8.3	1,000	120	1	20 A	LK2	38	20-2W	JUNCTION BOX	CIRCUIT FOR COOLER ACCESSORIES, LIGHTS, ETC.
E1.1	EVAPORATOR COIL	5	1,040	208	2	15 A	LK2	8,10	20-2W	JUNCTION BOX	
E1.2	COOLER CONDENSING UNIT	11.5	4,143.1	208	3	15 A	LK2	1,3,5	20-3W	NEMA 3R, 30A DISC.	
E2	WALK-IN FREEZER	8.3	1,000	120	1	20 A	LK2	40	20-2W	JUNCTION BOX	CIRCUIT FOR FREEZER ACCESSORIES, LIGHTS, ETC.
E2.1	EVAPORATOR COIL	0.9	180	208	2	15 A	LK2	11,13	20-2W	JUNCTION BOX	
E2.2	FREEZER CONDENSING UNIT	10.9	3,926.9	208	3	20 A	LK2	2,4,6	20-3W	NEMA 3R, 30A DISC.	
E2.3	WALK-IN FREEZER HEAT TRACE	4	480	120	1	20 A	LK2	18	20-2W	NEMA 5-20R	OUTLET PROVIDED BY WALK-IN MANUFACTURER
E3	BLAST CHILLER	10	3,602	208	3	20 A	LK1	50,52,54	20-3W	NEMA L15-20R	
E10	ICE MACHINE	8.2	984	120	1	20 A	LK1	38	20-2W	JUNCTION BOX	
G2	TIME CLOCK	5	600	120	1	20 A	LK1	29	20-2W	NEMA 5-20R	
J6	HEATED PROOFING CABINET	15.8	1,896	120	1	20 A	LK1	27	20-2W	NEMA 5-20R	
J9	PIZZA PREP TABLE	3.9	468	120	1	20 A	LK1	33	20-2W	NEMA 5-20R	
J10A	COUNTERTOP IMPINGER	24	4,992	208	2	50 A	LK1	35,37	50-2W	NEMA 6-50R	
J10B	COUNTERTOP IMPINGER	24	4,992	208	2	50 A	LK1	40,42	50-2W	NEMA 6-50R	
J14A	CUSTOM SNEEZE GUARD	8.1	972	120	1	20 A	LK1	19	20-2W	JUNCTION BOX	
J14B	CUSTOM SNEEZE GUARD	8.1	972	120	1	20 A	LK1	21	20-2W	JUNCTION BOX	
J16A	BUILT-IN HEATED SHELVES	8	960	120	1	20 A	LK1	17	20-2W	NEMA 5-20R	
J16B	BUILT-IN HEATED SHELVES	8	960	120	1	20 A	LK1	23	20-2W	NEMA 5-20R	
J17A	COLD/HOT SHELF	6.9	828	120	1	20 A	LK1	15	20-2W	NEMA 5-20R	
J17B	COLD/HOT SHELF	6.9	828	120	1	20 A	LK1	25	20-2W	NEMA 5-20R	
J21	DOUGH ROLLER	7.5	900	120	1	20 A	LK1	18	20-2W	NEMA 5-20R	

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4/3/2026
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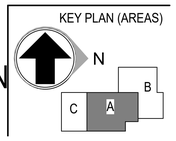
OKLAHOMA

CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)



REVISIONS		
NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRVD: Approver

CLY-HUB

PROJECT ADDRESS:
TULSA COUNTY, OK

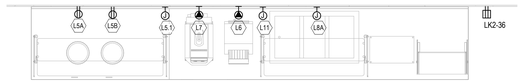
PROJ. NO. 10438332

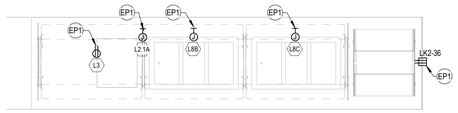
KITCHEN EQUIPMENT PLAN - AREA B (4.0)

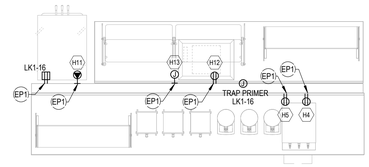
SCALE: As indicated

SHEET NUMBER:
E4.3.0

PHASE: ISSUE FOR CONSTRUCTION - HUB







1 E4.4.0 ENLARGED VITALITY PLAN
SCALE: 3/8" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE

NOTES:
1. SEE E5.1 FOR FEEDER SCHEDULE

Equipment Serves	DESCRIPTION	ELECTRICAL DATA				MOCP	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	CONNECTION TYPE	NOTES
		LOAD		VOLT	POLES						
		A	W								
H4	ICE AND WATER DISPENSER	4.5	540	120	1	20 A	LK3	56	20-2W	NEMA 5-20R	
H5	WATER DISPENSER	6	720	120	1	20 A	LK3	57	20-2W	NEMA 5-20R	
H11	SOFT SERVE FREEZER	12	2,225.6	208	2	20 A	LK2	12,14	20-2W	NEMA 6-20R	
H12	FROST TOP, DROP IN	6.7	804	120	1	20 A	LK2	25	20-2W	NEMA 5-20R	
H13	FOOD SHIELD	5	600	120	1	20 A	LK2	24	20-2W	JUNCTION BOX	
L2.1A	FOOD SHIELD	5	600	120	1	20 A	LK2	21	20-2W	JUNCTION BOX	
L3	BUILT-IN HEATED SHELVES	5	600	120	1	20 A	LK2	19	20-2W	NEMA 5-20R	
L5.1	FOOD SHIELD	5	600	120	1	20 A	LK2	30	20-2W	JUNCTION BOX	
L5A	ROUND FOOD WARMER	6.9	828	120	1	20 A	LK2	28	20-2W	NEMA 5-20R	
L5B	ROUND FOOD WARMER	6.9	828	120	1	20 A	LK2	26	20-2W	NEMA 5-20R	
L6	ELECTRIC CONVEYOR TOASTER	10.7	2,225.6	208	2	15 A	LK2	7,9	20-2W	NEMA 6-15R	
L7	SANDWICH PRESS	24	5,000	208	2	30 A	LK2	15,17	30-2W	NEMA 6-30R	
L8A	HOT & COLD PANS, DROP-IN	5.6	672	120	1	20 A	LK2	29	20-2W	JUNCTION BOX	
L8B	HOT & COLD PANS, DROP-IN	5.6	672	120	1	20 A	LK2	23	20-2W	JUNCTION BOX	
L8C	HOT & COLD PANS, DROP-IN	5.6	672	120	1	20 A	LK2	16	20-2W	JUNCTION BOX	
L11	FOOD SHIELD	5	600	120	1	20 A	LK2	27	20-2W	JUNCTION BOX	

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CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)
N
B
C
A

REVISIONS		
NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRV'D: Approver

CLY-HUB

PROJECT ADDRESS:
TULSA COUNTY, OK

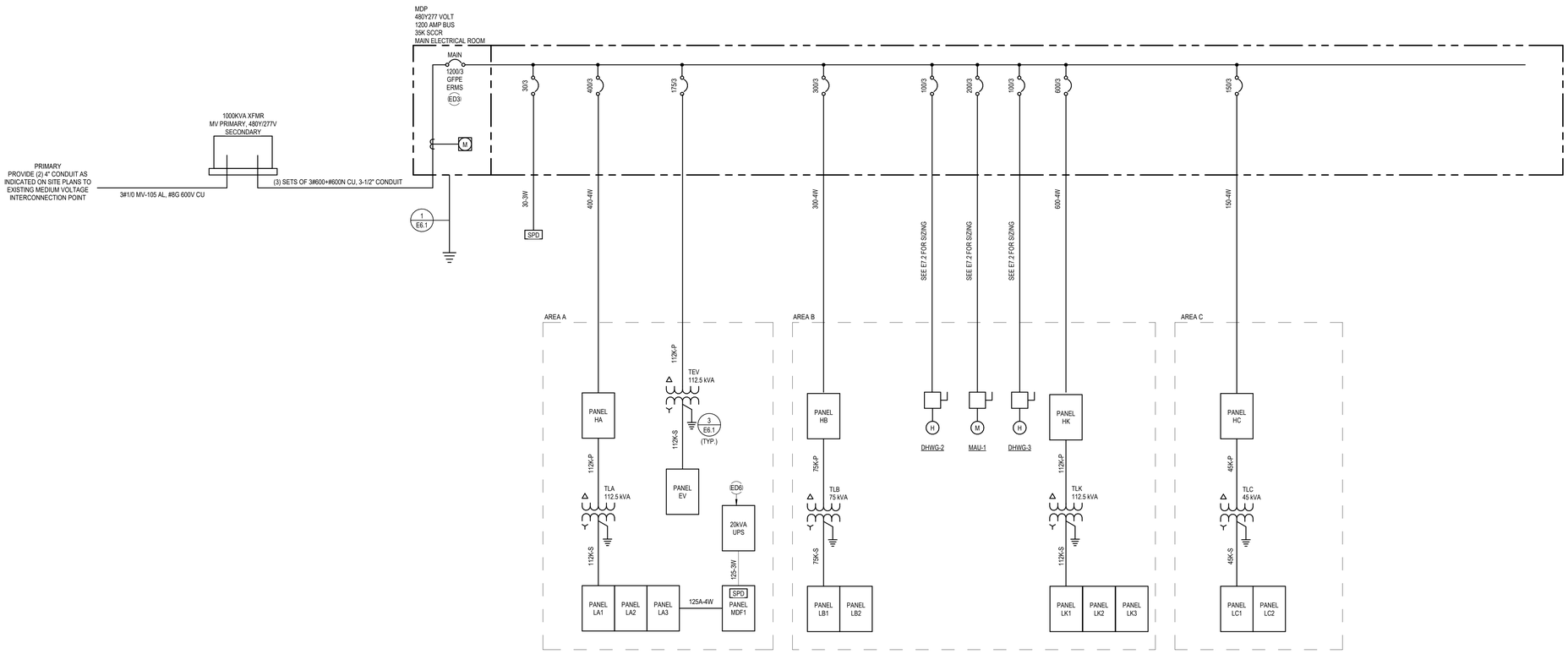
PROJ. NO. 10438332

KITCHEN EQUIPMENT PLAN - AREA B (4.0)

SCALE: 3/8" = 1'-0"

SHEET NUMBER:
E4.4.0

PHASE: ISSUE FOR CONSTRUCTION - HUB



1 / E5.1 ONE LINE DIAGRAM

NO SCALE

FEEDER SCHEDULE - ALUMINUM

MARK (AMPS)	# SETS	Ø & N	GND	CONDUIT SIZE MARK SUFFIX -4W	-3W	-2W
15				ALUMINUM IS NOT PERMITTED FOR SIZES 100AMP AND UNDER - USE COPPER		
20						
25						
30						
35						
40						
45						
50						
60						
70						
80						
90						
100						
110	1	1/0	4	2"	1-1/2"	1-1/4"
125	1	2/0	4	2"	2"	1-1/2"
150	1	3/0	4	2"	2"	1-1/2"
175	1	4/0	4	2-1/2"	2"	1-1/2"
200	1	250	4	2-1/2"	2-1/2"	2"
225	1	300	2	3"	2-1/2"	2"
250	1	350	2	3"	2-1/2"	2"
300	1	500	2	3-1/2"	3"	2-1/2"
350	1	750	1	4"	3-1/2"	3"
350	2	4/0	1	2-1/2"	2"	1-1/2"
400	2	250	1	2-1/2"	2-1/2"	2"
450	2	300	1/0	3"	2-1/2"	2"
500	2	350	1/0	3"	2-1/2"	2"
600	2	500	2/0	3-1/2"	3"	2-1/2"
700	2	750	3/0	4"	3-1/2"	3"
800	3	400	3/0	3"	3"	2-1/2"
1000	3	600	4/0	3-1/2"	3-1/2"	3"
1200	4	500	250	3-1/2"	3"	2-1/2"
1600	5	600	350	4"	3-1/2"	3"
2000	6	600	400	4"	3-1/2"	3"
2500	7	750	600	4"	4"	3-1/2"
3000	8	750	600	4"	4"	3-1/2"
4000	10	750	500 cu	4"	4"	3-1/2"

ABBREVIATIONS:

Ø	PHASE
N	NEUTRAL
GND	EQUIPMENT GROUNDING CONDUCTOR
-4W	FOUR WIRE + GROUND (3Ø,N,GND)
-3W	THREE WIRE + GROUND (3Ø,GND or 2Ø,N,GND)
-2W	TWO WIRE + GROUND

NOTES:

1. CONDUCTOR AMPACITIES ARE BASED ON NEC TABLE 310.15(B)(16).
2. CONDUIT SIZES ARE BASED ON A MAXIMUM FILL RATIO OF 40%.
3. SCHEDULE SHALL BE USED FOR FEEDERS AND BRANCH CIRCUITS WHERE APPLICABLE.
4. ALL FEEDERS AND BRANCH CIRCUITS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR.
5. SCHEDULE IS VALID FOR TYPE THHN, THWN-2, AND XHHW-2 CONDUCTORS. SEE SPECIFICATIONS FOR CONDUCTOR TYPES REQUIRED.
6. SCHEDULE IS VALID FOR TYPE EMT, IMC, FMC, LFMC, HDPE, AND RNC-40 RACEWAYS. SEE SPECIFICATIONS FOR RACEWAY APPLICATIONS.
7. OPTIONAL CONFIGURATIONS (1 OR 2 SETS) FOR SOME SIZES LISTED.
8. USE A COPPER GROUNDING CONDUCTOR FOR THE 4000 AMP FEEDER AS LISTED ABOVE.
9. NOT ALL SIZES USED.

FEEDER SCHEDULE - COPPER

MARK (AMPS)	# SETS	Ø & N	GND	CONDUIT SIZE MARK SUFFIX -4W	-3W	-2W
15	1	12	12	3/4"	3/4"	3/4"
20	1	12	12	3/4"	3/4"	3/4"
25	1	10	10	3/4"	3/4"	3/4"
30	1	10	10	3/4"	3/4"	3/4"
35	1	8	10	3/4"	3/4"	3/4"
40	1	8	10	3/4"	3/4"	3/4"
45	1	6	10	1"	3/4"	3/4"
50	1	6	10	1"	3/4"	3/4"
60	1	4	10	1-1/4"	1"	3/4"
70	1	4	8	1-1/4"	1"	3/4"
80	1	3	8	1-1/4"	1-1/4"	1"
90	1	2	8	1-1/4"	1-1/4"	1"
100	1	1	8	1-1/2"	1-1/2"	1-1/4"
110	1	1	6	1-1/2"	1-1/2"	1-1/4"
125	1	1	6	1-1/2"	1-1/2"	1-1/4"
150	1	1/0	6	2"	1-1/2"	1-1/4"
175	1	2/0	6	2"	1-1/2"	1-1/4"
200	1	3/0	6	2"	2"	1-1/2"
225	1	4/0	4	2-1/2"	2"	1-1/2"
250	1	250	4	2-1/2"	2"	1-1/2"
300	1	350	4	3"	2-1/2"	2"
350	1	500	3	3-1/2"	3"	2-1/2"
400	1	600	3	3-1/2"	3"	2-1/2"
400	2	3/0	3	2"	2"	1-1/2"
450	2	4/0	2	2-1/2"	2"	1-1/2"
500	2	250	2	2-1/2"	2-1/2"	2"
600	2	350	1	3"	2-1/2"	2"
700	2	500	1/0	3-1/2"	3"	2-1/2"
800	2	600	1/0	3-1/2"	3"	2-1/2"
1000	3	400	2/0	3"	3"	2-1/2"
1200	3	600	3/0	3-1/2"	3-1/2"	3"
1600	4	600	4/0	3-1/2"	3-1/2"	3"
2000	5	600	250	4"	3-1/2"	3"
2500	6	600	350	4"	3-1/2"	3"
3000	8	500	400	3-1/2"	3"	2-1/2"
4000	10	600	500	4"	3-1/2"	3"

ABBREVIATIONS:

Ø	PHASE
N	NEUTRAL
GND	EQUIPMENT GROUNDING CONDUCTOR
-4W	FOUR WIRE + GROUND (3Ø,N,GND)
-3W	THREE WIRE + GROUND (3Ø,GND or 2Ø,N,GND)
-2W	TWO WIRE + GROUND

NOTES:

1. CONDUCTOR AMPACITIES ARE BASED ON NEC TABLE 310.15(B)(16).
2. CONDUIT SIZES ARE BASED ON A MAXIMUM FILL RATIO OF 40%.
3. SCHEDULE SHALL BE USED FOR FEEDERS AND BRANCH CIRCUITS WHERE APPLICABLE.
4. ALL FEEDERS AND BRANCH CIRCUITS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR.
5. SCHEDULE IS VALID FOR TYPE THHN, THWN-2, AND XHHW-2 CONDUCTORS. SEE SPECIFICATIONS FOR CONDUCTOR TYPES REQUIRED.
6. SCHEDULE IS VALID FOR TYPE EMT, IMC, FMC, LFMC, HDPE, AND RNC-40 RACEWAYS. SEE SPECIFICATIONS FOR RACEWAY APPLICATIONS.
7. OPTIONAL CONFIGURATIONS (1 OR 2 SETS) ARE GIVEN FOR SOME SIZES.
8. NOT ALL SIZES USED.

3-PHASE TRANSFORMER PRIMARY AND SECONDARY SCHEDULE - COPPER

XFMR KVA	PRIMARY MARK	AMPS	# SETS	Ø	GND	C	SECONDARY MARK	AMPS	# SETS	Ø & N	BJ	C
15	15K-P	25	1	10	10	3/4"	15K-S	50	1	6	8	1"
30	30K-P	50	1	6	10	3/4"	30K-S	100	1	1	6	1-1/2"
45	45K-P	70	1	4	8	1"	45K-S	150	1	1/0	6	2"
75	75K-P	150	1	1/0	6	1-1/2"	75K-S	225	1	4/0	2	2-1/2"
112.5	112K-P	175	1	2/0	6	1-1/2"	112K-S	400	1	600	1/0	3-1/2"
150	150K-P	250	1	250	4	2"	150K-S	500	2	250	1/0	2-1/2"
225	225K-P	350	1	500	3	3"	225K-S	700	2	500	2/0	3-1/2"
300	300K-P	500	2	250	2	2-1/2"	300K-S	1000	3	400	3/0	3"

ABBREVIATIONS:

Ø	PHASE
BJ	BONDING JUMPER
C	CONDUIT SIZE
N	NEUTRAL
GND	EQUIPMENT GROUNDING CONDUCTOR
-P	PRIMARY - THREE WIRE + GROUND (3Ø,GND)
-S	SECONDARY - FOUR WIRE + BONDING JUMPER (3Ø, N, BJ)

NOTES:

1. CONDUCTOR AMPACITIES ARE BASED ON NEC TABLE 310.15(B)(16).
2. CONDUIT SIZES ARE BASED ON A MAXIMUM FILL RATIO OF 40%.
3. SCHEDULE SHALL BE USED FOR TRANSFORMERS WITH THE FOLLOWING CONFIGURATION: 480 V DELTA PRIMARY AND 208Y/120 V SECONDARY
4. ALL FEEDERS TO TRANSFORMERS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR.
5. SCHEDULE IS VALID FOR TYPE THHN, THWN-2, AND XHHW-2 CONDUCTORS. SEE SPECIFICATIONS FOR CONDUCTOR TYPES REQUIRED.
6. SCHEDULE IS VALID FOR TYPE EMT, IMC, FMC, LFMC, HDPE, AND RNC-40 RACEWAYS. SEE SPECIFICATIONS FOR RACEWAY APPLICATIONS.
7. NOT ALL SIZES USED.

3-PHASE TRANSFORMER PRIMARY AND SECONDARY SCHEDULE - ALUMINUM

XFMR KVA	PRIMARY MARK	AMPS	# SETS	Ø	GND	C	SECONDARY MARK	AMPS	# SETS	Ø & N	BJ	C
15	15K-P	ALUMINUM NOT PERMITTED - USE COPPER					15K-S	ALUMINUM NOT PERMITTED - USE COPPER				
30	30K-P	ALUMINUM NOT PERMITTED - USE COPPER					30K-S	ALUMINUM NOT PERMITTED - USE COPPER				
45	45K-P	ALUMINUM NOT PERMITTED - USE COPPER					45K-S	150	1	3/0	4	2"
75	75K-P	150	1	3/0	4	2"	75K-S	225	1	300	1/0	3"
112.5	112K-P	175	1	4/0	4	2"	112K-S	350	1	750	3/0	4"
150	150K-P	250	1	350	2	2-1/2"	150K-S	500	2	350	3/0	3"
225	225K-P	350	1	750	1	3-1/2"	225K-S	700	2	750	4/0	4"
300	300K-P	500	2	350	1/0	2-1/2"	300K-S	1000	3	600	250	4"

ABBREVIATIONS:

Ø	PHASE
BJ	BONDING JUMPER
C	CONDUIT SIZE
N	NEUTRAL
GND	EQUIPMENT GROUNDING CONDUCTOR
-P	PRIMARY - THREE WIRE + GROUND (3Ø,GND)
-S	SECONDARY - FOUR WIRE + BONDING JUMPER (3Ø, N, BJ)

NOTES:

1. CONDUCTOR AMPACITIES ARE BASED ON NEC TABLE 310.15(B)(16).
2. CONDUIT SIZES ARE BASED ON A MAXIMUM FILL RATIO OF 40%.
3. SCHEDULE SHALL BE USED FOR TRANSFORMERS WITH THE FOLLOWING CONFIGURATION: 480 V DELTA PRIMARY AND 208Y/120 V SECONDARY
4. ALL FEEDERS TO TRANSFORMERS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR.
5. SCHEDULE IS VALID FOR TYPE THHN, THWN-2, AND XHHW-2 CONDUCTORS. SEE SPECIFICATIONS FOR CONDUCTOR TYPES REQUIRED.
6. SCHEDULE IS VALID FOR TYPE EMT, IMC, FMC, LFMC, HDPE, AND RNC-40 RACEWAYS. SEE SPECIFICATIONS FOR RACEWAY APPLICATIONS.
7. NOT ALL SIZES USED.

GENERAL SINGLE LINE NOTES

A. OVERCURRENT DEVICES OF ENTIRE DISTRIBUTION SYSTEM SHALL MEET STATED FAULT CURRENT VALUES WITH FULLY RATED EQUIPMENT.

B. REFER TO SWITCHBOARD SCHEDULES AND DISTRIBUTION PANEL SCHEDULES FOR ADDITIONAL REQUIREMENTS. WHERE A DISCREPANCY EXISTS BETWEEN EQUIPMENT ON THE SINGLE LINE DIAGRAM AND THE DETAILED SCHEDULES, THE ITEM OR ARRANGEMENT WITH BETTER QUALITY, GREATER QUANTITY, OR HIGHER COST SHALL BE USED.

C. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

D. REFER TO THE MOTOR AND SPECIAL CONNECTION SCHEDULE FOR ALL FEEDERS DESIGNATED "EQ".

E. GROUNDING ELECTRODE CONDUCTORS SIZES ARE NOT INDICATED ON THE SINGLE LINE DIAGRAM. REFER TO THE GROUNDING RISER DIAGRAM FOR CONNECTIONS AND CONDUCTOR SIZES.

F. UNLESS NOTED OTHERWISE, ALL PANELBOARDS, TRANSFORMERS, AND SWITCHBOARDS ARE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED.

SHEET NOTES

ED3 MAIN SERVICE BREAKER TO BE 100% RATED FOR AMPERAGE INDICATED.

ED6 PROVIDE 20KVA N+1 TOWER UPS. APC #SRYL20K20RMXLT. PROVIDE REQUIRED ACCESSORIES FOR (12) NEMA L6-20R RECEPTS (3 PER BATTERY), ON BACK OF UPS. PROVIDE SHELF AT BOTTOM OF RACK TO SUPPORT UPS. SEE SHEET E4.1 FOR ADDITIONAL INFORMATION.

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CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)

N
B
C
A

REVISIONS

NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRV'D: Approver

CLY-HUB

PROJECT ADDRESS:
TULSA COUNTY, OK

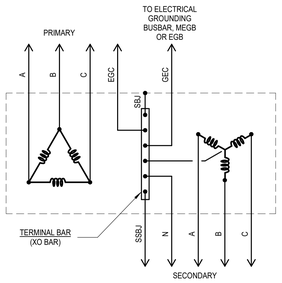
PROJ. NO. 10438332

ELECTRICAL DIAGRAMS

SCALE: 12" = 1'-0"

SHEET NUMBER:
E5.1

PHASE: ISSUE FOR CONSTRUCTION - HUB



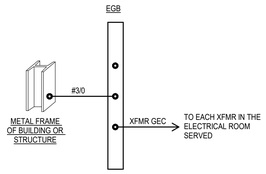
ABBREVIATIONS

A	PHASE A
B	PHASE B
C	PHASE C
N	NEUTRAL
EGC	EQUIPMENT GROUNDING CONDUCTOR
SSBJ	SUPPLY SIDE BONDING JUMPER
SBJ	SYSTEM BONDING JUMPER

NOTES

1. PROVIDE SYSTEM BONDING JUMPER AT TRANSFORMER AS INDICATED ON THIS DETAIL. DO NOT BOND NEUTRAL-GROUND AT LOAD SIDE PANELBOARD OR DISCONNECT.
2. SEE ONE-LINE DIAGRAM AND FEEDER SCHEDULES FOR SIZING OF FEEDER CONDUCTORS INCLUDING BJ.
3. BJ AND SBJ SHALL BE SIZED PER NEC TABLE 250.102(C)(1)
4. EGC SHALL BE SIZED PER NEC TABLE 250.122.

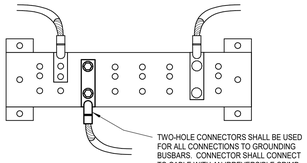
3 TRANSFORMER GROUNDING
3 / E6.1 SCALE: NOT TO SCALE



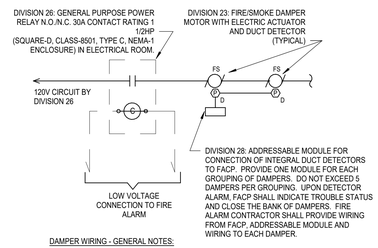
BUILDING / STRUCTURE GROUNDING NOTES:

1. PROVIDE AN ELECTRICAL GROUNDING BUSBAR IN EACH ELECTRICAL ROOM CONTAINING TRANSFORMER(S).
2. METAL FRAME OF BUILDING OR STRUCTURE. REF NEC 250.104(C) IF PRESENT IN BUILDING, BOND TO EGB. SEE TABLE FOR GROUNDING ELECTRODE CONDUCTOR (OR BONDING CONDUCTOR) SIZE.

6 SATELLITE ELECTRICAL ROOM GROUNDING
6 / E6.1 SCALE: NOT TO SCALE



7 GROUNDING BUSBAR CONNECTIONS
7 / E6.1 SCALE: NOT TO SCALE



DAMPER WIRING - GENERAL NOTES:

A. COORDINATE WITH DIVISION 23 QUANTITY, LOCATION AND ELECTRICAL CHARACTERISTICS OF ALL FIRE/SMOKE DAMPER MOTORS.

B. COORDINATE INTERCONNECTION REQUIREMENTS FROM RELAY TO FIRE ALARM SYSTEM WITH SYSTEM PROVIDER.

8 TYPICAL FIRE/SMOKE DAMPER WIRING
8 / E6.1 NO SCALE

EQUIPMENT LABELING DETAIL GENERAL NOTES:

A. LABEL SHALL BE BLACK OR WHITE LAMINATED ACRYLIC OR MELAMINE WITH ENGRAVED LETTERING AND SELF-ADHESIVE BACK.

B. LETTERING SHALL BE WHITE ON BLACK OR BLACK ON WHITE BACKGROUND AND 3/8-INCH HIGH MINIMUM.

C. PROVIDE THE FOLLOWING INFORMATION ON SWITCHBOARD LABELS:
SWITCHBOARD TAG
SYSTEM VOLTAGE, PHASE, WIRE
SHORT CIRCUIT RATING, DATE
CONDUCTOR COLORS

D. PROVIDE THE FOLLOWING INFORMATION ON DISTRIBUTION PANELBOARD AND PANELBOARD LABELS:
DISTRIBUTION PANELBOARD OR PANELBOARD TAG
SYSTEM VOLTAGE, PHASE, WIRE
FED FROM
SHORT CIRCUIT RATING, DATE
CONDUCTOR COLORS

E. PROVIDE THE FOLLOWING INFORMATION ON TRANSFORMER LABELS:
TRANSFORMER TAG
SYSTEM PRIMARY AND SECONDARY VOLTAGE, WYE, DELTA, OR SINGLE PHASE
FED FROM

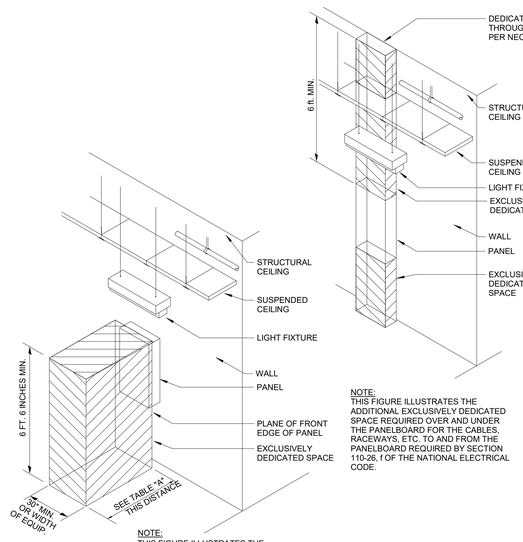
F. PROVIDE THE FOLLOWING INFORMATION ON SAFETY SWITCH OR CIRCUIT BREAKER ENCLOSURE LABELS:
SYSTEM VOLTAGE, PHASE, WIRE
FED FROM
FEEDS (LOAD BEING SERVED)

G. PROVIDE THE FOLLOWING INFORMATION AT INDIVIDUAL SWITCHBOARD AND DISTRIBUTION PANELBOARD BRANCH SWITCHES:
BRANCH SWITCH TAG (LOAD BEING SERVED)

H. PROVIDE THE FOLLOWING INFORMATION AT INDIVIDUAL SUB-FEED BREAKERS LOCATED IN BRANCH PANELS:
BRANCH SWITCH TAG (LOAD BEING SERVED)

I. CONDUCTOR COLORS SHALL ALSO FOLLOW REQUIREMENTS LISTED IN SPECIFICATIONS SECTION 260553.

2 EQUIPMENT LABELING
2 / E6.1 NO SCALE



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

NOTE:
THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF THE PANELBOARD REQUIRED BY SECTION 110-26 OF THE NATIONAL ELECTRICAL CODE.

TABLE 110-26,(a) WORKING SPACES

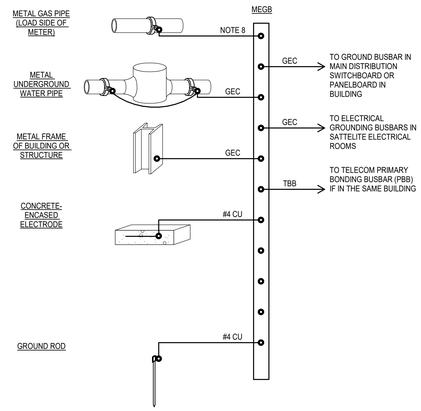
VOLTAGE TO GROUND, NOMINAL	MINIMUM CLEAR DISTANCE (FEET)			
CONDITION:	1	2	3
0-150	3	3	3
151-600	3	3 1/2	4

WHERE THE "CONDITIONS" ARE AS FOLLOWS:

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

NOTE:
NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES SHALL BE PERMITTED TO BE INSTALLED IN OR PASS THROUGH THE DEDICATED SPACES SHOWN ABOVE WITHOUT THE WRITTEN PERMISSION OF THE DESIGN ENGINEER AND THE AUTHORITY HAVING JURISDICTION.

5 ELECTRICAL WORKING CLEARANCES DETAIL
5 / E6.1 SCALE: NOT TO SCALE



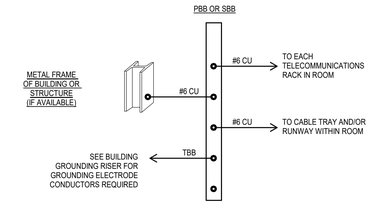
BUILDING / STRUCTURE GROUNDING NOTES:

1. PROVIDE A GROUNDING ELECTRODE SYSTEM FOR EACH BUILDING. REFER TO ARCHITECTURAL CODE PLAN FOR DEFINITION OF BUILDINGS.
2. BOND ALL GROUNDING ELECTRODES AS DEFINED IN NEC 250.52 THAT ARE PRESENT IN EACH BUILDING TO THE MAIN ELECTRICAL GROUNDING BUSBAR, MEGB, SERVING EACH BUILDING. COMMON ELECTRODES ARE INDICATED ON THIS RISER, OTHERS MAY BE PRESENT. PROVIDE ELECTRODES AS NOTED BELOW.
3. METAL UNDERGROUND WATER PIPE. REF NEC 250.52(A)(1). IF PRESENT IN BUILDING, BOND TO MEGB. SEE TABLE FOR GROUNDING ELECTRODE CONDUCTOR SIZE. PROVIDE BONDING JUMPER ACROSS WATER METER.
4. METAL FRAME OF BUILDING OR STRUCTURE. REF NEC 250.52(A)(2) OR REF NEC 250.104(C) IF METAL FRAME DOES NOT QUALIFY AS AN ELECTRODE. IF PRESENT IN BUILDING, BOND TO MEGB. SEE TABLE FOR GROUNDING ELECTRODE CONDUCTOR (OR BONDING CONDUCTOR) SIZE.
5. CONCRETE ENCASED ELECTRODE REF NEC 250.52(A)(3). PROVIDE 20-FT OF BARE #4 CU AT BOTTOM OF CONCRETE BLDG FOOTING. BOND TO MEGB. GROUNDING ELECTRODE CONDUCTOR SIZE SHALL BE #4 CU.
6. GROUND ROD REF NEC 250.52(A)(5) PROVIDE GROUND ROD. BOND TO MEGB. GROUNDING ELECTRODE CONDUCTOR SIZE SHALL BE #4 CU.
7. METAL GAS PIPE REF NEC 250.104(B) IF PRESENT IN BUILDING, BOND TO MEGB. SIZE PER TABLE 250.122

GROUNDING ELECTRODE CONDUCTOR SIZING (NEC 250.66)

SIZE OF LARGEST UNGROUNDED SERVICE CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS (AWG/KCMIL)		GROUNDING ELECTRODE SIZE (GEC)
COPPER	ALUMINUM	
#2 OR SMALLER	#1/0 OR SMALLER	#8 CU IN 3/4" C.
#1 OR #1/0	#2/0 OR #3/0	#6 CU IN 3/4" C.
#2/0 OR #3/0	#4/0 OR 250	#4 CU IN 3/4" C.
OVER #3/0 THROUGH 350	OVER 250 THROUGH 500	#2 CU IN 3/4" C.
OVER 350 THROUGH 600	OVER 500 THROUGH 900	#1/0 CU IN 3/4" C.
OVER 600 THROUGH 1100	OVER 900 THROUGH 1750	#2/0 CU IN 3/4" C.
OVER 1100	OVER 1750	#3/0 CU IN 1" C.

1 BUILDING OR STRUCTURE GROUNDING
1 / E6.1 SCALE: NOT TO SCALE



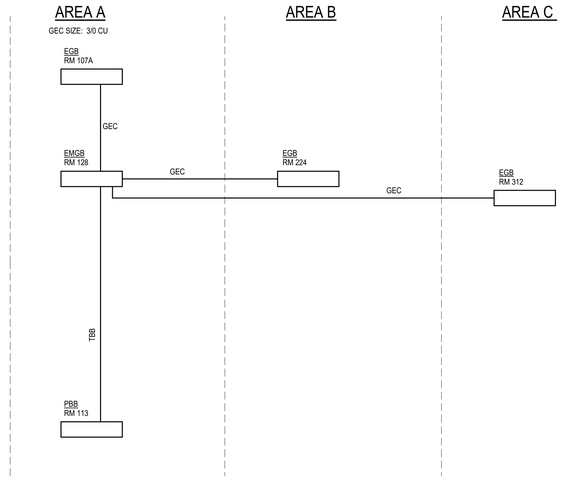
TELECOM ROOM GROUNDING NOTES:

1. PROVIDE A TELECOMMUNICATIONS GROUNDING BUSBAR (PBB OR SBB) IN EACH TELECOMMUNICATIONS ROOM.
2. SEE OVERALL BUILDING GROUNDING RISER ON E6.1 FOR TELECOMMUNICATIONS BONDING BACKBONE INFORMATION.

TELECOMMUNICATION BONDING BACKBONE SIZING (EIA 607C)

MAX PBB TO SBB LENGTH (FT)	TBB SIZE
13	#6
21	#4
26.5	#3
33	#2
42	#1
53	#1/0
66.5	#2/0
84	#3/0
106	#4/0
125	250 KCMIL
150	300 KCMIL
175	350 KCMIL
250	500 KCMIL
300	600 KCMIL
375	750 KCMIL

4 TELECOMMUNICATIONS ROOM GROUNDING
4 / E6.1 NO SCALE



9 OVERALL GROUNDING RISER
9 / E6.1 NO SCALE

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LICENSED PROFESSIONAL ENGINEER
JOSHUA WETZIG
32927
4/3/2026
OKLAHOMA

CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)
N
B
C
A

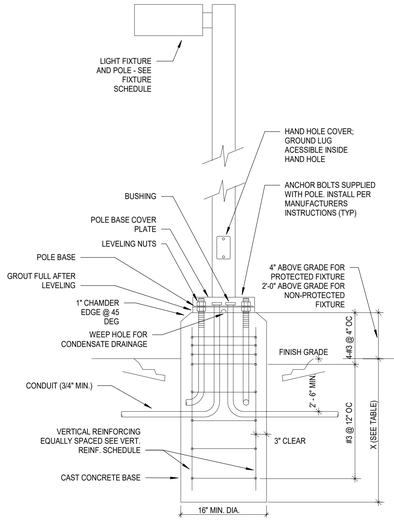
REVISIONS		
NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRV'D: Approver

CLY-HUB
PROJECT ADDRESS:
TULSA COUNTY, OK
PROJ. NO. 10438332

ELECTRICAL DETAILS
SCALE: As indicated

SHEET NUMBER:
E6.1
PHASE: ISSUE FOR CONSTRUCTION - HUB



VERT. REINF. SCHED.

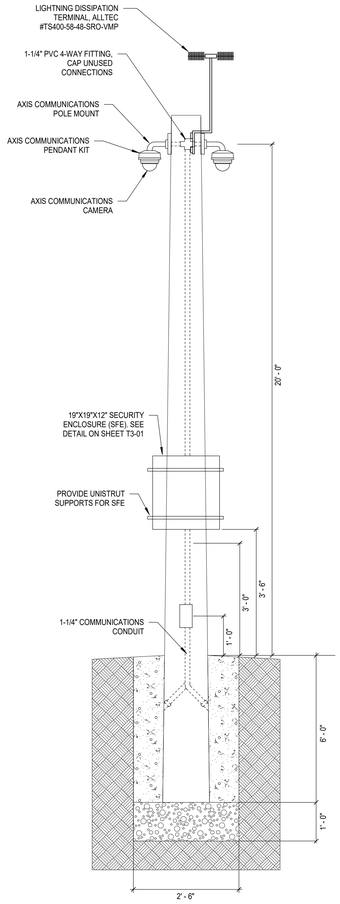
CONCRETE BASE DIA.	REINF.
16"	5-#6
18"	6-#6
20"	6-#7
22"	7-#7
24"	8-#7

TABLE - EMBEDMENT DEPTH, X

CONCRETE BASE DIA.	POLE HEIGHT	X =
16"	0'-0" TO 16'-0"	4'-6"
	16'-1" TO 20'-0"	5'-6"
	20'-1" TO 25'-0"	6'-0"
	25'-1" TO 30'-0"	7'-0"
18"	0'-0" TO 16'-0"	4'-6"
	16'-1" TO 20'-0"	5'-0"
	20'-1" TO 25'-0"	6'-0"
	25'-1" TO 30'-0"	6'-6"
20"	0'-0" TO 16'-0"	4'-6"
	16'-1" TO 20'-0"	5'-0"
	20'-1" TO 25'-0"	5'-6"
	25'-1" TO 30'-0"	6'-6"
22"	0'-0" TO 16'-0"	4'-0"
	16'-1" TO 20'-0"	5'-0"
	20'-1" TO 25'-0"	5'-6"
	25'-1" TO 30'-0"	6'-0"
24"	0'-0" TO 16'-0"	4'-0"
	16'-1" TO 20'-0"	4'-6"
	20'-1" TO 25'-0"	5'-0"
	25'-1" TO 30'-0"	6'-0"

NOTE: SACK RUB SMOOTH CONCRETE BASE OF ALL PHYSICAL DEFORMITIES.

2 / E6.2 LIGHT POLE DETAIL
NO SCALE



NOTES:

A. THE POLE-MOUNTED SECURITY ENCLOSURE AT EACH FIXED CAMERA POLE SHALL RECEIVE 12-STRANDS OF SINGLE-MODE OUTDOOR FIBER (FROM THE SPLICE ENCLOSURE) AND 120V SINGLE PHASE POWER.

B. PATHWAYS FOR FIBER OPTIC CABLE SHALL BE DESIGNED TO ALLOW SINGLE-MODE FIBER TO BE HOMERUNED IN A STAR TOPOLOGY FROM EACH POLE-MOUNTED SECURITY ENCLOSURE TO THE SPLICE ENCLOSURE. SIZE PATHWAYS TO ASSURE A MAXIMUM FILL RATIO OF NO MORE THAN 40 PERCENT FULL.

C. ELECTRICAL PATHWAYS SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODE REQUIREMENTS.

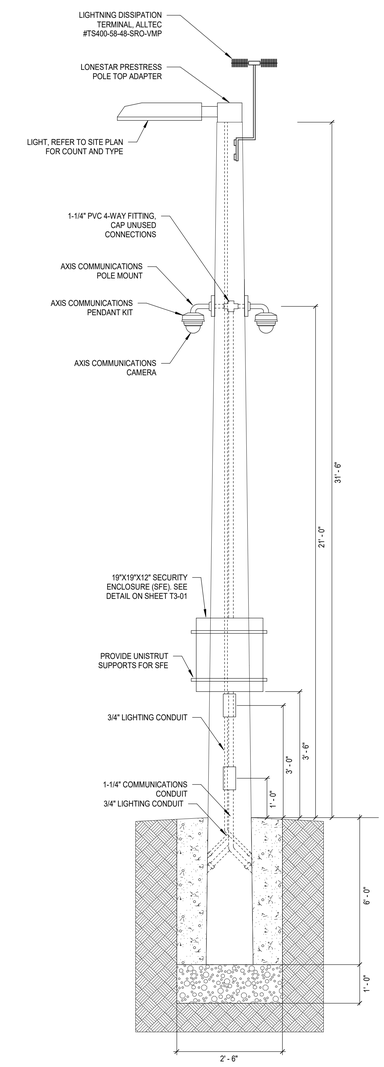
D. FIBER OPTIC PATHWAYS SHALL BE ARRANGED TO LIMIT MAXIMUM DISTANCE BETWEEN PULL POINTS TO 600' USING LONG RADIUS 90 DEGREE BENDS AND LIMITING THE MAXIMUM NUMBER OF BENDS TO NO MORE THAN 180 DEGREES (E.G., TWO 90 DEGREE BENDS) BETWEEN PULL POINTS, AND MEET OR EXCEED THE ANSI/TIA/EIA-758 CUSTOMER OWNED OUTSIDE PLANT TELECOMMUNICATIONS STANDARD.

E. THE GENERAL CONTRACTOR SHALL PROVIDE GEOTECHNICAL SOIL TESTING AT ALL POLE LOCATIONS TO ASSURE APPROPRIATE BEARING CAPACITY OF SOIL TO SUPPORT SECURITY POLES.

F. PROVIDE A BARE #8 COPPER WIRE GROUND CONDUCTOR FROM LIGHTNING DISSIPATION TERMINAL DOWN TO A GROUND ROD INSTALLED ADJACENT TO THE SECURITY POLE. PROVIDE AN ADDITIONAL CONDUCTOR TO GROUND THE SECURITY ENCLOSURE TO THE SAME GROUND ROD. CONDUCTORS ARE TO BE MOUNTED AND SECURED TO EXTERIOR OF CONCRETE POLE.

G. SEE SECURITY DRAWING T3-012 FOR CAMERA AND CAMERA MOUNTING HARDWARE REQUIREMENTS.

3 / E6.2 CONCRETE CAMERA POLE DETAIL
NO SCALE



NOTES:

A. THE POLE-MOUNTED SECURITY ENCLOSURE AT EACH FIXED CAMERA POLE SHALL RECEIVE 12-STRANDS OF SINGLE-MODE OUTDOOR FIBER (FROM THE SPLICE ENCLOSURE) AND 120V SINGLE PHASE POWER.

B. PATHWAYS FOR FIBER OPTIC CABLE SHALL BE DESIGNED TO ALLOW SINGLE-MODE FIBER TO BE HOMERUNED IN A STAR TOPOLOGY FROM EACH POLE-MOUNTED SECURITY ENCLOSURE TO THE SPLICE ENCLOSURE. SIZE PATHWAYS TO ASSURE A MAXIMUM FILL RATIO OF NO MORE THAN 40 PERCENT FULL.

C. ELECTRICAL PATHWAYS SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODE REQUIREMENTS.

D. FIBER OPTIC PATHWAYS SHALL BE ARRANGED TO LIMIT MAXIMUM DISTANCE BETWEEN PULL POINTS TO 600' USING LONG RADIUS 90 DEGREE BENDS AND LIMITING THE MAXIMUM NUMBER OF BENDS TO NO MORE THAN 180 DEGREES (E.G., TWO 90 DEGREE BENDS) BETWEEN PULL POINTS, AND MEET OR EXCEED THE ANSI/TIA/EIA-758 CUSTOMER OWNED OUTSIDE PLANT TELECOMMUNICATIONS STANDARD.

E. THE GENERAL CONTRACTOR SHALL PROVIDE GEOTECHNICAL SOIL TESTING AT ALL POLE LOCATIONS TO ASSURE APPROPRIATE BEARING CAPACITY OF SOIL TO SUPPORT SECURITY POLES.

F. PROVIDE A BARE #8 COPPER WIRE GROUND CONDUCTOR FROM LIGHTNING DISSIPATION TERMINAL DOWN TO A GROUND ROD INSTALLED ADJACENT TO THE SECURITY POLE. PROVIDE AN ADDITIONAL CONDUCTOR TO GROUND THE SECURITY ENCLOSURE TO THE SAME GROUND ROD. CONDUCTORS ARE TO BE MOUNTED AND SECURED TO EXTERIOR OF CONCRETE POLE.

G. SEE SECURITY DRAWING T3-012 FOR CAMERA AND CAMERA MOUNTING HARDWARE REQUIREMENTS.

1 / E6.2 CONCRETE CAMERA POLE DETAIL
NO SCALE

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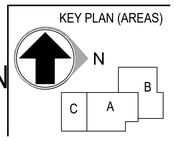
OKLAHOMA

CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)



REVISIONS		
NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRV'D: Approver

CLY-HUB

PROJECT ADDRESS:
TULSA COUNTY, OK

PROJ. NO. 10438332

ELECTRICAL DETAILS

SCALE: 3/16" = 1'-0"

SHEET NUMBER:
E6.2

PHASE: ISSUE FOR CONSTRUCTION - HUB

LIGHTING CONTROL SEQUENCE OF OPERATION

		CONTROL TYPE						
				OCCUPANCY SENSOR			DAYLIGHT SENSOR	
		ZONE CONTROL	TARGET ILLUMINANCE	ON OPERATION	OFF OPERATION	TIMEOUT	ZONE 1	ZONE 2
ROOM TYPE	PHONE ROOMS	REFER TO PLANS FOR KEYED ZONING BY LOWERCASE LETTER	20-30FC	MANUAL ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN		
	TRAINING		30-40FC	MANUAL ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	CIRCULATION		10-20FC	TIMECLOCK ON OR MANUAL ON @ 80% OUTPUT: OWNERSHIP TO DEFINE SCHEDULE HOURS FOR TIMECLOCK CONTROL	WHEN NO OCCUPANCY DETECTED, LIGHTS IN ZONE DIM TO 50% OUTPUT. TIMECLOCK OFF	15 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	OPEN OFFICE		30-40FC	AUTO ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	LOUNGE, MOTHER'S ROOM		10-20FC	MANUAL ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	5 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	INFORMAL ROOMS		10FC	MANUAL ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	ELEC/MECH/PLUMB		20FC	-	-	-	-	-
	JANITORIAL/STORAGE		20FC	MANUAL ON @ 100% OUTPUT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN	-	-
	HUDDLES		30FC	MANUAL ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN		
	OFFICES		30-40FC	MANUAL ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN		
	RESTROOM/LOCKER		15FC	AUTO ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	10 MIN	-	-
	CONFERENCE ROOMS		30-40FC	MANUAL ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	CAFÉ, MK		20-30FC	TIMECLOCK ON OR MANUAL ON @ 80% OUTPUT: OWNERSHIP TO DEFINE SCHEDULE HOURS FOR TIMECLOCK CONTROL	WHEN NO OCCUPANCY DETECTED, LIGHTS IN ZONE DIME TO 50% OUTPUT. TIMECLOCK OFF	15 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	FOOD SERVICE		50FC	AUTO ON @ OUTPUT LEVEL ROOM WAS LAST LEFT AT	AUTO OCCUPANCY OFF OR MANUAL OFF	15 MIN	IN DAYLIT AREAS: CONTINUOUSLY DIM FIXTURES TO TARGET LEVEL WHEN 150% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR	CONTINUOUSLY DIM FIXTURES WHEN 200% OF TARGET ILLUMINANCE IS MEASURED AT SENSOR
	EXTERIOR		N/A	AUTO ON VIA TIMECLOCK W/ PHOTOCELL OVERRIDE	AUTO OFF VIA TIMECLOCK W/ PHOTOCELL OVERRIDE	N/A	N/A	N/A

GENERAL CONTROL NOTES:
PROVIDE LIGHTING CONTROL PANEL FOR TIMECLOCK CONTROL OF ALL SPACES INDICATED.
PROVIDE NUMBER OF ZONES AS INDICATED ON PLANS.
LIGHTING CONTROLS INDICATED ARE FOR REFERENCE ONLY AND MUST BE COORDINATED WITH CONTROLS SHOP DRAWINGS FOR EXACT QUANTITIES OF SENSORS, DEVICES, AND ALL NECESSARY CONNECTIVITY EQUIPMENT.
COMPLETE COMMISSIONING OF CONTROL SYSTEM AND PROVIDE REPORT TO ENGINEER FOR REVIEW.

IECC COMMISSIONING NOTES:
PROJECT SHALL BE COMMISSIONED IN ACCORDANCE WITH SPECIFICATIONS. IN ADDITION TO OTHER PROJECT REQUIREMENTS, THE FOLLOWING DOCUMENTATION SHALL BE PROVIDED TO THE BUILDING OWNER WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.
- OPERATING AND MAINTENANCE MANUAL WITH COMPONENTS INDICATED
- AS BUILT DRAWINGS FOR ELECTRICAL POWER SYSTEMS.
- DOCUMENTATION CERTIFYING LIGHTING SYSTEM FUNCTIONAL TESTING INCLUDING:
  1. OCCUPANT SENSOR CONTROLS
  2. TIME-SWITCH CONTROLS
  3. DAYLIGHT RESPONSIVE CONTROLS

NOTES: VERIFY ALL ON/OFF, OCCUPIED/UNOCCUPIED TIMES WITH OWNER PRIOR TO PROGRAMMING.

LIGHTING FIXTURE SCHEDULE

TYPE	Description	CONSTRUCTION	LIGHT SOURCE				ELECTRICAL				PRODUCT		Remarks
		MOUNTING	LAMP	LUMENS	CCT	CRI	BALLAST/DRIVER	VOLT	WATTS	WATTS PER FOOT	MFR	MODEL	
BL1	4' LINEAR LENSED STRIP FIXTURE	SEE NOTE	LED	5000 lm	3500 K	80	LED DRIVER, 0-10V DIMMABLE 10%	277 V	35 W		COLUMBIA LIGHTING OR APPROVED ALTERNATE	LCL SERIES	STRIPLIGHT TO BE CHAIN-MOUNTED, SURFACE-MOUNTED OR WALL-MOUNTED AROUND OBSTACLES AS NEEDED
BL1E	4' LINEAR LENSED STRIP FIXTURE WITH EMERGENCY BATTERY PACK	SEE NOTE	LED	5000 lm	3500 K	80	LED DRIVER, 0-10V DIMMABLE 10%	277 V	35 W		COLUMBIA LIGHTING OR APPROVED ALTERNATE	LCL SERIES	STRIPLIGHT TO BE CHAIN-MOUNTED, SURFACE-MOUNTED OR WALL-MOUNTED AROUND OBSTACLES AS NEEDED
FD1	2-FOOT BY 4-FOOT KITCHEN TROFFER	RECESSED	LED	6000 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE 10%	277 V	49 W		KENALL OR APPROVED ALTERNATE	CSEDO 24 45LD DIM1 5F 4H SYM	
FD1E	2-FOOT BY 4-FOOT KITCHEN TROFFER WITH EMERGENCY BATTERY BACKUP	RECESSED	LED	6000 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE 10%	277 V	45 W		KENALL OR APPROVED ALTERNATE	CSEDO 24 45LD DIM1 5F 4H SYM LEL	
PA4	10-INCH NOMINAL PENDANT	PENDANT	LED	1500 lm	2700 K	90	LED DRIVER, ELV DIMMABLE, 2%	277 V	18 W		FLUXWERX OR APPROVED ALTERNATE	TC1-P09-W2827	SEE INTERIORS ELEVATIONS FOR INFORMATION ABOUT MOUNTING AND SPECIFIC SELECTION
PA6	22-INCH NOMINAL PENDANT	PENDANT	LED	800 lm	2700 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	8 W		CERNO	CASIA PENDANT	SEE INTERIORS ELEVATIONS FOR INFORMATION ABOUT MOUNTING AND SPECIFIC SELECTION
PD1	5-INCH NOMINAL PENDANT WITH 20 UP, 80 DOWN, CORD-HUNG; WIDE DISTRIBUTION	PENDANT	LED	1900 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	16 W		FLUXWERX OR APPROVED ALTERNATE	TC1-P05-W2835	
PD1A	SAME AS PD1, EXCEPT 2700K	PENDANT	LED	1900 lm	2700 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	16 W		FLUXWERX OR APPROVED ALTERNATE	TC1-P05-W2827	
PD1A-E	SAME AS PD1A, EXCEPT EMERGENCY BATTERY BACKUP	PENDANT	LED	1900 lm	2700 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	16 W		FLUXWERX OR APPROVED ALTERNATE	TC1-P05-W2827	
PD1E	SAME AS PD1, EXCEPT WITH EMERGENCY BATTERY PACK	PENDANT	LED	1900 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	16 W		FLUXWERX OR APPROVED ALTERNATE	TC1-P05-W2835	
PL1-8'	8-FOOT NOMINAL DIRECT/INDIRECT PENDANT WITH INTEGRAL OCCUPANCY SENSORS	PENDANT	LED	6400 lm	3500 K	90	LED DRIVER, 0-10V DIMMING	277 V	60 W		FINELITE, COOPER OR APPROVED ALTERNATE	HP-4 ID SERIES	
PL1-10'	10-FOOT NOMINAL DIRECT/INDIRECT PENDANT WITH INTEGRAL OCCUPANCY SENSORS	PENDANT	LED	8000 lm	3500 K	90	LED DRIVER, 0-10V DIMMING	277 V	100 W		FINELITE, COOPER OR APPROVED ALTERNATE	HP-4 ID SERIES	
PL1E-8'	8-FOOT NOMINAL DIRECT/INDIRECT PENDANT WITH INTEGRAL OCCUPANCY SENSORS	PENDANT	LED	6400 lm	3500 K	90	LED DRIVER, 0-10V DIMMING	277 V	60 W		FINELITE, COOPER OR APPROVED ALTERNATE	HP-4 ID SERIES	
PL1E-10'	SAME AS PL1-10' EXCEPT WITH EMERGENCY BATTERY BACKUP	PENDANT	LED	8000 lm	3500 K	90	LED DRIVER, 0-10V DIMMING	277 V	100 W		FINELITE, COOPER OR APPROVED ALTERNATE	HP-4 ID SERIES	
PL3	4-FOOT LINEAR 20% INDIRECT/80% DIRECT PENDANT	PENDANT	LED	1840 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	23 W		FINELITE, COOPER OR APPROVED ALTERNATE	PROFILE 20UP 80DN	
PL4-18'	2-INCH NOMINAL PENDANT-MOUNTED WALL-WASHING LINEAR; LUMENS IS PER LINEAR FOOT	PENDANT	LED	550 lm	2700 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	0 W	6.1	VODE OR APPROVED ALTERNATE	WINGRAIL (CEILING CABLE)	
RD1	4-INCH NOMINAL DOWNLIGHT WITH MEDIUM OPTICS	RECESSED	LED	1500 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	14 W	---	WILLIAMS, ACUITY, ALPHABET OR APPROVED ALTERNATE	4DR SERIES	
RD1E	SAME AS RD1, EXCEPT WITH EMERGENCY BATTERY BACKUP	RECESSED	LED	1500 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	14 W	---	WILLIAMS, ACUITY, ALPHABET OR APPROVED ALTERNATE	4DR SERIES	
RD2	4-INCH NOMINAL DOWNLIGHT WITH MEDIUM OPTICS; SEMI-SPECULAR FINISH; WET-RATED	RECESSED	LED	1500 lm	3500 K	90	LED DRIVER, 0-10V DIMMING, 1%	277 V	14 W	---	WILLIAMS, ACUITY, ALPHABET OR APPROVED ALTERNATE	4DR SERIES	
RD3	2-INCH NOMINAL DOWNLIGHT WITH ADJUSTABLE GIMBALL, NARROW OPTICS	RECESSED	LED	1000 lm	2700 K	90	LED DRIVER, 0-10V DIMMING, 1%	277 V	12 W	---	ALPHABET OR APPROVED ALTERNATE	NU2RA SERIES	
RL1-7'	2-INCH NOMINAL RECESSED PERIMETER WALL-GRAZER; 7-FOOT LENGTH; FLANGE SLOT BACK BOX	RECESSED	LED	4900 lm	3500 K	90	NO DIMMING	277 V	0 W	7.65	NULITE, ACUITY, COOPER, FOCAL POINT OR APPROVED ALTERNATE	RZ4 SERIES	
RL1-10'6"	2-INCH NOMINAL RECESSED PERIMETER WALL-GRAZER; FLANGE SLOT BACK BOX	RECESSED	LED	5250 lm	3500 K	90	NO DIMMING	277 V	0 W	4.73	NULITE, ACUITY, COOPER, FOCAL POINT OR APPROVED ALTERNATE	RZ4 SERIES	
RL1-17'6"	2-INCH NOMINAL RECESSED PERIMETER WALL-GRAZER; 17-FOOT LENGTH; FLANGE SLOT BACK BOX	RECESSED	LED	8750 lm	3500 K	90	NO DIMMING	277 V	0 W	4.73	NULITE, ACUITY, COOPER, FOCAL POINT OR APPROVED ALTERNATE	RZ4 SERIES	
RL1E-3'6"	2-INCH NOMINAL RECESSED PERIMETER WALL-GRAZER; 3-FOOT LENGTH; FLANGE SLOT BACK BOX; BATTERY PACK	RECESSED	LED	2100 lm	3500 K	90	NO DIMMING	277 V	0 W	7.65	NULITE, ACUITY, COOPER, FOCAL POINT OR APPROVED ALTERNATE	RZ4 SERIES	
RL1E-4'6"	2-INCH NOMINAL RECESSED PERIMETER WALL-GRAZER; FLANGE SLOT BACK BOX; EMERGENCY BATTERY BACKUP	RECESSED	LED	765 lm	3500 K	90	NO DIMMING	277 V	0 W	7.65	NULITE, ACUITY, COOPER, FOCAL POINT OR APPROVED ALTERNATE	RZ4 SERIES	
RL4	10-CELL ADJUSTABLE WALL-WASHER WITH REMOTE DRIVER; SOFT EDGE. FLOOD OPTICS WITH SQUARE BLACK CHROME LOUVER	RECESSED	LED	1100 lm	2700 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	15 W		LUMENWERX, COOPER OR APPROVED ALTERNATE	CLUSTER ADJUSTABLE	
RT1	2-FOOT BY 2-FOOT RECESSED TROFFER WITH INDIRECT OPTICS	RECESSED	LED	3300 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE 10%	277 V	35 W		ACUITY, OR APPROVED ALTERNATE	ENVX	
RT1E	SAME AS RT1, EXCEPT WITH EMERGENCY BATTERY	RECESSED	LED	3300 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE 10%	277 V	35 W		ACUITY, OR APPROVED ALTERNATE	ENVX	
RT2	2-FOOT BY 2-FOOT FOOD-GRADE RECESSED TROFFER	RECESSED	LED	3300 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE 10%	277 V	35 W		KENALL, FAILSAFE OR APPROVED ALTERNATE	FES8 SERIES	
RT2E	SAME AS RT2, EXCEPT WITH EMERGENCY BATTERY	RECESSED	LED	3300 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE 10%	277 V	35 W		KENALL, FAILSAFE OR APPROVED ALTERNATE	FES8 SERIES	
SB1	3-FOOT NOMINAL BOLLARD WITH ASSYMETRIC OPTICS	SITE	LED	1710 lm	3000 K	80	LED DRIVER	277 V	15 W		BEGA OR APPROVED ALTERNATE	84413	
SP1	SITE LIGHT ON 20-FOOT POLE. REFER TO STRUCTURAL DETAIL	SITE	LED	11335 lm	3000 K	80	LED DRIVER	277 V	102 W		ACUITY, OR APPROVED ALTERNATE	DSX SERIES	PROVIDE WITH INTEGRAL PHOTOCELL CONTROL
SP1A	SITE LIGHT ON 30-FOOT POLE FOR CAMERA AND LIGHTING MOUNTING; CONCRETE BASE, REFER TO STRUCTURAL DETAIL ON E6.6	SITE	LED	11338 lm	3000 K	80	LED DRIVER	277 V	102 W		ACUITY, OR APPROVED ALTERNATE	DSX SERIES	PROVIDE WITH INTEGRAL PHOTOCELL CONTROL
SP2	SITE LIGHT ON 20-FOOT POLE. REFER TO STRUCTURAL DETAIL	SITE	LED	7300 lm	3000 K	80	LED DRIVER	277 V	51 W		ACUITY, OR APPROVED ALTERNATE	DSX SERIES	PROVIDE WITH INTEGRAL PHOTOCELL CONTROL
SW1E	18-INCH WALL PACK WITH FORWARD THROW; INTEGRAL BATTERY PACK, INTEGRAL PHOTOCELL	WALL	LED	6790 lm	3000 K	80	NO DIMMING	277 V	51 W		HUBBELL OR APPROVED ALTERNATE	TRP2-D-50-3K7-F-T-US	
WF4	2-FOOT NOMINAL WALL SCONCE WITH INDIRECT OPTICS	WALL	LED	1200 lm	3000 K	80	NO DIMMING	277 V	0 W		LIGHTWAY OR APPROVED ALTERNATE	NEFW-LED-426-LED 02C 2 B1 B1	
WL1	INDIRECT/DIRECT WALL-MOUNTED LINEAR; SEE LENGTHS IN DRAWINGS	WALL	LED	2000 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	0 W	14	ALW, LUMENWERX OR APPROVED ALTERNATE	LIGHTPLANE 2 WALL GRAZER	CONTRACTOR TO VERIFY BUILT CONDITIONS PRIOR TO ORDERING
WL2	2-FOOT WALL-MOUNTED INDIRECT/DIRECT VANITY	WALL	LED	2000 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	0 W	14	ALW, LUMENWERX OR APPROVED ALTERNATE	LIGHTPLANE 2 WALL GRAZER	
WL3E	4-FOOT WALL-MOUNTED INDIRECT/DIRECT LINEAR, VERTICAL ORIENTATION; EMERGENCY BATTERY	WALL	LED	2000 lm	3500 K	90	LED DRIVER, 0-10V DIMMABLE, 1%	277 V	0 W	7	LUMENWERX OR APPROVED ALTERNATE	WALO-HLO-LED-90-500-27-4-UNV-D1-1# EB-DMB-W	
X1A	EXIT SIGN; CEILING MOUNTED, SINGLE-SIDED		LED	0 lm	0 K	0		277 V	3 W		ACUITY OR APPROVED ALTERNATE	EDG SERIES	
X1B	SAME AS X1A, EXCEPT DOUBLE-SIDED		LED	0 lm	0 K	0		277 V	5 W		ACUITY OR APPROVED ALTERNATE	EDG SERIES	

NOTES:

1. FURNISH ALL LIGHTING FIXTURES COMPLETE WITH MOUNTING ACCESSORIES TO MEET JOB REQUIREMENTS. VERIFY FIXTURE MOUNTING, LOCATION, AND FIXED OPTICAL ORIENTATION AGAINST ARCHITECT'S PLANS, ELEVATIONS, AND DETAIL DRAWINGS. EXACT LOCATION OF ALL FIXTURES SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGHING IN.
2. FIXTURES SHOWN IN CONTINUOUS RUNS TO SATISFY NOMINAL LENGTHS AS SHOWN ON DRAWINGS. FIXTURE TAGS SHOWN ONCE ON A CONTINUOUS ROW OF FIXTURES SHALL BE TYPICAL FOR THAT ROW UNLESS OTHERWISE NOTED.
3. ALL FIXTURES WILL BE SUPPORTED FROM THE BUILDING STRUCTURE, INDEPENDENT OF HUNG CEILING WITH ROD OR JACK CHAIN SUPPORT. AIRCRAFT CABLE LENGTHS, STEM LENGTHS, STEM FINISHES, AND STEM LOCATIONS OF ALL PENDANT FIXTURES TO BE VERIFIED AND CONFIRMED BY OWNER, ARCHITECT, AND CONSULTANT PRIOR TO ORDERING STEMS. AIRCRAFT CABLE HUNG FIXTURES TO BE PROVIDED WITH 18" OF EXTRA LENGTH WITH EXCESS TO BE LOCATED ABOVE THE CEILING ALONG WITH 18" OF EXTRA POWER CORD LENGTH.
4. LED FIXTURES WILL USE INTEGRAL DRIVERS UNLESS OTHERWISE NOTED. DIMMABLE DRIVERS SHALL BE COMPATIBLE WITH LAMPS AND DIMMERS/CONTROL SYSTEM.
5. ALL LIGHT FIXTURES ARE TO BE PROVIDED BY SPECIFIED MANUFACTURER OR APPROVED EQUAL. "ALTERNATE MANUFACTURER" AND "OR APPROVED" MEAN EQUIVALENT OR SUPERIOR IN PERFORMANCE, MATERIALS, WORKMANSHIP, AND APPEARANCE TO THE SPECIFIED EQUIPMENT.
6. CONTRACTOR TO PROVIDE AND INSTALL ALL TRANSFORMERS, DRIVERS, BATTERY PACKS, AND/OR BALLASTS REQUIRED TO OPERATE LAMPS SPECIFIED, INCLUDING REMOTE POWER SUPPLIES AND THE ENCLOSURES FOR SAME. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF COMPATIBILITY BETWEEN SPECIFIED LAMPS, SPECIFIED POWER SUPPLIES, DIMMING, AND OTHER CONTROL DEVICES SPECIFIED. NOTIFY ARCHITECT AND CONSULTANT OF AN INCOMPATIBILITY PRIOR TO ORDERING EQUIPMENT.
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE COORDINATION OF ALL LIGHTING EQUIPMENT AND CONTROL DEVICES WITH CEILING, WALL, AND GROUND TYPES SPECIFIED PRIOR TO ORDERING LIGHTING EQUIPMENT. NOTIFY ARCHITECT AND CONSULTANT OF ANY INCOMPATIBILITY PRIOR TO ORDERING EQUIPMENT.
8. ALL FIXTURES TO BE PROVIDED WITH A COLOR TEMPERATURE OF 3500K UNLESS OTHERWISE NOTED. ALL INTERIOR LIGHT SOURCES TO BE 85 CRI OR HIGHER. ALL LED LUMINAIRES TO HAVE A LIFE RATING OF 50,000 HOURS OR HIGHER AT L70 OR BETTER AND A FIVE-YEAR WARRANTY.
9. PRELIMINARY AIMING OF ALL ADJUSTABLE LIGHTING EQUIPMENT WILL BE DONE DURING INSTALLATION BY THE ELECTRICAL CONTRACTOR AS INDICATED ON THE LIGHTING PLANS / AIMING DIAGRAM, WHERE SUCH A DIAGRAM IS INCLUDED IN CONTRACT.
10. SCHEDULED LUMEN OUTPUT REPRESENTS DELIVERED LUMENS.
11. NO PENDANTS ABOVE FURNITURE TO BE MOUNTED BELOW 7'-0" AFF UNLESS OTHERWISE SPECIFIED.
12. ENGINEER TO CONFIRM ALL WATTAGES, VOLTAGES, CIRCUITING, AND EMERGENCY COMPONENTS AS REQUIRED. ENGINEER TO VERIFY ALL CONTROLS REQUIRED WITH BASIS OF DESIGN AND SEQUENCE OF OPERATIONS.
13. LUMINAIRE CATALOG/MODEL NUMBERS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE SUBJECT TO CHANGE. CONTRACTOR TO GENERATE EXACT CATALOG NUMBERS AT TIME OR ORDER. DEFER TO PERFORMANCE SPECIFICATIONS LISTED IN THIS SCHEDULE IN EVENT OF CONFLICT OR CHANGE.

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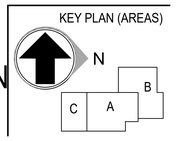
JOSHUA WETZIG
32927
4/3/2026
LICENSED PROFESSIONAL ENGINEER
OKLAHOMA

CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)



REVISIONS		
NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRV'D: Approver

CLY-HUB

PROJECT ADDRESS:
TULSA COUNTY, OK

PROJ. NO. 10438332

LIGHTING SCHEDULES

SCALE: 12" = 1'-0"

SHEET NUMBER:
E7.1

PHASE: ISSUE FOR CONSTRUCTION - HUB

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

NOTES:
1. WALL MOUNT WEATHERPROOF DISCONNECT ADJACENT TO UNIT AND PROVIDE LFMC CONNECTION.
2. PROVIDE CONTROL WIRING CONDUIT FROM OUTDOOR UNIT TO ASSOCIATED INDOOR UNITS PER MENUFACTURER'S RECOMMENDATION. OUTDOOR CONDUIT SHALL BE LMFC.

ID	LOAD					DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	FLA - UNIT A (A)	MCA - UNIT A (A)	MOCP - UNIT A (A)	VOLTAGE (V)	PHASE					
Phase 1										
CU-1A	30.5	30.7	35	460	3	NEMA 3R, FUSED	HA	2,4,6	40-3W	1
CU-1B	30.5	30.7	35	460	3	NEMA 3R, FUSED	HA	7,9,11	40-3W	1
CU-2A	26.7	35.1	40	460	3	NEMA 3R, FUSED	HB	1,3,5	40-3W	1
CU-2B	30.5	30.7	35	460	3	NEMA 3R, FUSED	HB	2,4,6	40-3W	1
CU-2C	26.7	30.7	35	460	3	NEMA 3R, FUSED	HB	13,15,17	40-3W	1
CU-3	28.5	32.8	40	460	3	NEMA 3R, FUSED	HC	1,3,5	40-3W	1
CU-113-2	17.1	21.4	25	208	1	NEMA 3R, 2P	LA2	44,46	25-2W	1,2
CU-113-3	17.1	21.4	25	208	1	NEMA 3R, 2P	LA1	34,36	25-2W	1,2
CU-113-4	17.1	21.4	25	208	1	NEMA 3R, 2P	LA2	48,50	25-2W	1,2
CU-128-2	17.1	21.4	25	208	1	NEMA 3R, 2P	LA2	43,45	25-2W	1,2
CU-224	17.1	21.4	25	208	1	NEMA 3R, 2P	LB1	22,24	25-2W	1,2
CU-312	14.6	18.3	20	208	1	NEMA 3R, 2P	LC2	1,3	20-2W	1,2

SPLIT SYSTEM AIR CONDITIONER SCHEDULE

NOTES:
1. INDOOR UNIT TO BE POWERED BY ASSOCIATED OUTDOOR UNIT (OU-).

ID	LOAD					VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	HP	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
Phase 1												
AC-101	0.5	2.3	3.1	15	557	208	1	MRTS	LA3	11,13	15-2W	
AC-103	0.5	0.5	0.8	15	115	208	1	MRTS	LA3	11,13	15-2W	
AC-104	0.1	0.2	0.3	15	62	208	1	MRTS	LA3	11,13	15-2W	
AC-105	0.1	0.2	0.3	15	62	208	1	MRTS	LA3	11,13	15-2W	
AC-107A	0.1	1	0.6	15	208	208	1	MRTS	LB1	51,53	15-2W	
AC-108	0.5	0.6	3.6	15	166	208	1	MRTS	LA3	8,10	15-2W	
AC-110	0.5	0.6	1.9	15	166	208	1	MRTS	LA3	11,13	15-2W	
AC-112A	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	8,10	15-2W	
AC-112B	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	8,10	15-2W	
AC-112C	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	8,10	15-2W	
AC-112D	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	8,10	15-2W	
AC-113-1	0.1	0.5	0.6	15	100	208	1	MRTS	LA3	8,10	15-2W	
AC-113-2	0.1	0	0	0	0	208	1	MRTS			15-2W	1
AC-113-3	0.1	0	0	0	0	208	1	MRTS			15-2W	1
AC-113-4	0.1	0	0	0	0	208	1	MRTS			15-2W	1
AC-114	0.5	0.6	0.8	15	166	208	1	MRTS	LA3	8,10	15-2W	
AC-116	0.1	0.5	0.3	15	120	208	1	MRTS	LA3	8,10	15-2W	
AC-117	0.5	0.6	1.9	15	166	208	1	MRTS	LA3	7,9	15-2W	
AC-121A	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	7,9	15-2W	
AC-121B	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	7,9	15-2W	
AC-121C	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	7,9	15-2W	
AC-121D	0.06	0.5	0.4	15	110	208	1	MRTS	LA3	7,9	15-2W	
AC-122	0.1	0.2	0.4	15	62	208	1	MRTS	LA3	7,9	15-2W	
AC-123	0.1	0.2	0.4	15	62	208	1	MRTS	LA3	7,9	15-2W	
AC-127	0.1	0.2	0.3	15	62	208	1	MRTS	LA3	7,9	15-2W	
AC-128-1	0.1	0.5	0.6	15	100	208	1	MRTS	LA3	8,10	15-2W	
AC-128-2	0.1	0	0	0	0	208	1	MRTS			15-2W	1
AC-201A	0.5	2.2	3.6	15	538	208	1	MRTS	LB1	18,20	15-2W	
AC-201B	0.5	2.2	3.6	15	538	208	1	MRTS	LB1	18,20	15-2W	
AC-201C	0.5	2.2	3.6	15	538	208	1	MRTS	LB1	18,20	15-2W	
AC-202A	0.1	0.5	1	15	110	208	1	MRTS	LB1	18,20	15-2W	
AC-202B	0.1	0.5	1	15	110	208	1	MRTS	LB1	18,20	15-2W	
AC-203A	0.1	0.5	1.6	15	110	208	1	MRTS	LB2	1,3	15-2W	
AC-203B	0.1	0.5	1.6	15	110	208	1	MRTS	LB1	51,53	15-2W	
AC-203C	0.1	0.5	1.6	15	110	208	1	MRTS	LB1	51,53	15-2W	
AC-204	0.1	0.5	1.6	15	110	208	1	MRTS	LB1	51,53	15-2W	
AC-207	0.1	0.2	0.3	15	62	208	1	MRTS	LB1	51,53	15-2W	
AC-208A	0.5	2.2	3.1	15	538	208	1	MRTS	LB1	18,20	15-2W	
AC-208B	0.5	2.2	3.1	15	538	208	1	MRTS	LB1	18,20	15-2W	
AC-210A	0.06	0.5	0.4	15	110	208	1	MRTS	LB2	1,3	15-2W	
AC-210B	0.06	0.5	0.4	15	110	208	1	MRTS	LB2	1,3	15-2W	
AC-210C	0.06	0.5	0.4	15	110	208	1	MRTS	LB2	1,3	15-2W	
AC-210D	0.06	0.5	0.4	15	110	208	1	MRTS	LB2	1,3	15-2W	
AC-210E	0.06	0.5	0.4	15	110	208	1	MRTS	LB2	1,3	15-2W	
AC-214	0.1	0.2	0.3	15	62	208	1	MRTS	LB1	51,53	15-2W	
AC-215	0.1	0.5	0.4	15	120	208	1	MRTS	LB2	1,3	15-2W	
AC-216	0.1	0.2	0.3	15	62	208	1	MRTS	LB1	51,53	15-2W	
AC-220	0.5	2.2	1.8	15	538	208	1	MRTS	LB2	1,3	15-2W	
AC-222	0.1	0.2	0.3	15	62	208	1	MRTS	LB1	51,53	15-2W	
AC-223	0.1	0.5	0.4	15	120	208	1	MRTS	LB2	1,3	15-2W	
AC-224	0.1	1	0	0	208	208	1	MRTS			15-2W	1
AC-225	0.1	0.2	0.3	15	62	208	1	MRTS	LB2	1,3	15-2W	
AC-302	0.5	2.3	1.8	15	557	208	1	MRTS	LC2	2,4	15-2W	
AC-303	0.5	2.3	1.8	15	557	208	1	MRTS	LC2	2,4	15-2W	
AC-304	0.5	2.3	3.6	15	557	208	1	MRTS	LC2	2,4	15-2W	
AC-305	0.5	2.3	0.8	15	557	208	1	MRTS	LC2	2,4	15-2W	
AC-307	0.1	0.2	0.3	15	62	208	1	MRTS	LC2	2,4	15-2W	
AC-310A	0.06	0.5	0.4	15	110	208	1	MRTS	LC2	8,10	15-2W	
AC-310B	0.06	0.5	0.4	15	110	208	1	MRTS	LC2	8,10	15-2W	
AC-310C	0.06	0.5	0.4	15	110	208	1	MRTS	LC2	8,10	15-2W	
AC-310D	0.06	0.5	0.4	15	110	208	1	MRTS	LC2	8,10	15-2W	
AC-310E	0.06	0.5	0.4	15	110	208	1	MRTS	LC2	2,4	15-2W	
AC-311	0.1	0.5	0.3	15	110	208	1	MRTS	LC2	2,4	15-2W	
AC-312	0.1	0	0	0	0	208	1	MRTS			15-2W	1
AC-315	0.1	0.2	0.3	15	62	208	1	MRTS	LC2	8,10	15-2W	
AC-317	0.1	0.2	0.4	15	62	208	1	MRTS	LC2	8,10	15-2W	
AC-318	0.5	2.3	0.8	15	557	208	1	MRTS	LC2	8,10	15-2W	
AC-319	0.1	0.2	0.3	15	62	208	1	MRTS	LC2	8,10	15-2W	

VARIABLE AIR VOLUME TERMINAL UNIT SCHEDULE

ID	LOAD				VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
Phase 1											
EVAV-100	0.2	0.2	15	50	277	1	MRTS	HA	23	15-2W	
EVAV-110	0.2	0.2	15	50	277	1	MRTS	HA	23	15-2W	
EVAV-201	0.2	0.2	15	50	277	1	MRTS	HB	8	15-2W	
EVAV-208	0.2	0.2	15	50	277	1	MRTS	HB	8	15-2W	
EVAV-210	0.2	0.2	15	50	277	1	MRTS	HB	8	15-2W	
VAV-101	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-108	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-112	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-114	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-116	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-121	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-123	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-127	0.3	0.4	15	50	277	1	MRTS	HA	23	15-2W	
VAV-201	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-203	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-208	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-210A	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-210B	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-211	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-215	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-223	0.3	0.4	15	50	277	1	MRTS	HB	8	15-2W	
VAV-302	0.3	0.4	15	50	277	1	MRTS	HC	8	15-2W	
VAV-304	0.3	0.4	15	50	277	1	MRTS	HC	8	15-2W	
VAV-307	0.3	0.4	15	50	277	1	MRTS	HC	8	15-2W	
VAV-310	0.3	0.4	15	50	277	1	MRTS	HC	8	15-2W	
VAV-315	0.3	0.4	15	50	277	1	MRTS	HC	8	15-2W	
VAV-317	0.3	0.4	15	50	277	1	MRTS	HC	8	15-2W	

DOAS UNIT SCHEDULE

NOTES:
1. NEUTRAL CONDUCTORS (WHERE REQUIRED) SHALL BE EQUAL IN SIZE TO THE PHASE CONDUCTORS.
2. FOR UNITS REQUIRING SMOKE DETECTION: FURNISH AND WIRE SMOKE DETECTION IN RETURN AIR DUCTWORK. DETERMINE QUANTITY OF DETECTORS REQUIRED BASED ON DUCTWORK CONFIGURATION AND NFPA 72. DETECTOR(S) SHALL BE INSTALLED UNDER DIV. 23.
3. AT UNIT DETECTORS, RECESS REMOTE STATUS AND TEST INDICATOR DEVICE IN ACP BELOW DETECTOR UNLESS REMOTE DEVICE IS NOTED AS WALL MOUNTED ON PLANS.

ID	LOCATION		ECM	LOAD					VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	NO.	NAME		HP	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
Phase 1															
DOAS-1		OUTDOOR	No	0	51.4	61	70	42,733	480	3	NEMA 3R, FUSED	HA	8,10,12	70-3W	1,2,3
DOAS-2		OUTDOOR	No	0	51.4	61	70	42,733	480	3	NEMA 3R, FUSED	HB	7,9,11	70-3W	1,2,3
DOAS-3		OUTDOOR	No	0	34.7	41.7	45	28,849	480	3	NEMA 3R, FUSED	HC	2,4,6	50-3W	1,2,3

PUMP SCHEDULE

ID	LOCATION		LOAD					VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	NO.	NAME	HP	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
Phase 1														
HWRP-1	109	STORAGE	0.09	0.6	0.8	15	70	115	1	MRTS	LA2	52	15-2W	
HWRP-2	218	STORAGE	0.09	0.6	0.8	15	70	115	1	MRTS	LB2	9	15-2W	

KITCHEN EXHAUST FAN SCHEDULE

NOTES:
1. FAN SHALL BE ENABLED VIA KITCHEN HOOD CONTROL PANEL. PROVIDE INTERLOCK FROM FAN TO EXHAUST FAN CONTROLS.

ID	LOCATION	ECM	LOAD					VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	NAME		HP	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
KEF-1	ROOF	Yes	3	4.7	5.9	15	3,266	460	3	NEMA 3R, FUSED	HK	1,3,5	20-3W	1
KEF-2	ROOF	Yes	1	1.8	2.2	15	2,600	460	3	NEMA 3R, FUSED	HK	2,4,6	20-3W	1

WATER HEATER SCHEDULE

NOTES:
1. DHWG-3 IS A REDUNDANT UNIT FOR DHWG-2, CONTROLS SEQUENCE SET TO ONLY POWER ON BACKUP UNIT IN THE EVENT OF FAILURE OF MAIN UNIT (DHWG-2)

ID	HEATING ELEMENT DATA			LOAD					VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	QTY	KW	SCR	HP	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
Phase 1															
DHWG-1	1	12	Yes	0	14.8	18.5	20	12,304	480	3	MRTS	HA	1,3,5	20-3W	
DHWG-2	4	15	Yes	0	72	90	100	60,000	480	3	NEMA 1, FUSED	MDP	1	100-3W	
DHWG-3	4	15	Yes	0	72	90	100	1	480	3	NEMA 1, FUSED	MDP	10	100-3W	1

FAN SCHEDULE

ID	LOCATION		LOAD				VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	NO.	NAME	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
F-107	107	MK STORAGE	3.3	4.1	15	396	120	1	MRTS	LA2	51	15-2W	
F-206	203	BACK OF HOUSE	0.8	1	15	100	120	1	MRTS	LK3	55	15-2W	
F-209.2	209.2	AV	0.8	1	15	96	120	1	MRTS	LB2	6	15-2W	
F-217	217	LAUNDRY	0.3	0.4	15	35	120	1	MRTS	LB2	8	15-2W	
F-308	308	AV	0.8	1	15	96	120	1	MRTS	LC2	5	15-2W	

AIR HANDLING UNIT SCHEDULE

NOTES:
1. KITCHEN HOOD MAU SHALL BE ENABLED VIA KITCHEN HOOD CONTROLS. ROUTE CIRCUIT VIA VFD FURNISHED BY DIV 23. CONCEAL ALL LINE AND LOW VOLTAGE CONNECTIONS IN CONDUIT. SEE MECHANICAL DETAILS SHEETS.
2. PROVIDE 120V INTERCONNECTION FROM MAKEUP AIR UNIT CONTROL SECTION TO SWITCH.
3. PROVIDE CONNECTION TO MOTORIZED BACKDRAFT DAMPER.

ID	SERVES	ELEC HEATING ELEMENT				ECM	LOAD					VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
		QTY	KW	SCR	STAGES		HP	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
MAU-1	BACK OF HOUSE	1	100	Yes		No	10	189.1	196.1	200	150,584	460	3	NEMA 3R, FUSED	MDP	11	200-3W	1,2,3

VARIABLE REFRIGERANT FLOW BRANCH SELECTOR SCHEDULE

ID	LOCATION		SERVES	LOAD				VOLTAGE (V)	PHASE	DISCONNECT	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	NO.	NAME		FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)							
Phase 1														
BS-1-1	101	LOUNGE	CU-1A	1.5	1.9	15	316	208	1	MRTS	LA3	8,10	20-2W	
BS-1-2	121	OPEN OFFICE	CU-1B	1.5	1.9	15	166	208	1	MRTS	LA3	7,9	20-2W	
BS-1-3	110	RESTROOM VESTIBULE	CU-1B	1.5	1.9	15	166	208	1	MRTS	LA3	11,13	20-2W	
BS-2-1	203	BACK OF HOUSE	CU-2A	1.5	1.9	15	316	208	1	MRTS	LB1	18,20	20-2W	
BS-2-2	228.29	DISH	CU-2B	1.5	1.9	15	316	208	1	MRTS	LB1	51,53	20-2W	
BS-2-3	205	CHANGING	CU-2C	1.5	1.9	15	316	208	1	MRTS	LB2	1,3	20-2W	
BS-3-1	310-1	CIRCULATION	CU-3	1.5	1.9	15	166	208	1	MRTS	LC2	8,10	20-2W	
BS-3-2	310	OPEN OFFICE	CU-3	1.5	1.9	15	316	208	1	MRTS	LC2	2,4	20-2W	

UNIT HEATER SCHEDULE

NOTES:
1. LOCAL DISCONNECTING MEANS FURNISHED INTEGRAL WITH UNIT UNLESS NOTED OTHERWISE

ID	LOCATION		ELEC HEATING ELEMENT				ECM	LOAD					VOLTAGE (V)	PHASE	PANEL	CIRCUIT NO.	CONDUIT & WIRE SIZE	NOTES
	NO.	NAME	QTY	KW	SCR	STAGES		HP	FLA (A)	MCA (A)	MOCP (A)	TOTAL LOAD (VA)						
Phase 1																		
EUH-129	129	MECH	1	2	Yes		No	0	11	13.8	15	2,200	208	1	LA3	12,14	15-2W	1

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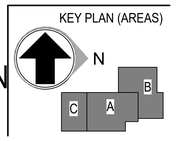
LICENSED PROFESSIONAL ENGINEER
JOSHUA WETZIG
32927
4/3/2026
OKLAHOMA

CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)



REVISIONS

NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRVD: Approver

CLY-HUB

PROJECT ADDRESS:
TULSA COUNTY, OK

PROJ. NO. 10438332

MECHANICAL CONNECTION SCHEDULES

SCALE:

SHEET NUMBER:
E7.2

PHASE: ISSUE FOR CONSTRUCTION - HUB

SWITCHBOARD: MDP

LOCATION ELEC 128
BUS RATING 1200.0 A
MAIN BREAKER 1200.0 A

VOLTAGE: 480Y/277
PHASES: 3
WIRES: 4
SCCR: 35kA

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	LOAD (kVA)	NOTES
1	DHWG-2	100.0 A	3		H	60	
2	PANEL HB	300.0 A	3		Spare; L; C; R; M	183	
3	PANEL EV VIA XFMR TEV	175.0 A	3		Spare; R	57	
4	PANEL HC	150.0 A	3		Spare; L; C; R; M; Power	94	
5	INTEGRAL SPD	--	3		--	--	
6	PANEL HK	600.0 A	3		Spare; R; H; K; M	309	
7	SPACE	--	1		--	--	
8	PANEL HA	400.0 A	3		Spare; L; C; R; K; O; M	224	
9	SPACE	--	1		--	--	
10	DHWG-3	100.0 A	3		H	0	
11	MAU-1	200.0 A	3		LM	151	
					TOTAL LOAD:	1,078 kVA	
					TOTAL AMPS:	1297 A	

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	25395 VA	125.00%	31744 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	198830 VA	52.51%	104415 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFCI (30mA)	**CONNECTED LOAD:** 1,078 kVA
K	KITCHEN	304609 VA	65.00%	197996 VA	NON-DWELLING KITCHEN EQUIPMENT, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 932 kVA
M	MOTOR	278304 VA	103.84%	288987 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 1297 A
C	COOLING	1100 VA	100.00%	1100 VA			**EMD CURRENT:** 1120.6 A
H	HEATING	62601 VA	100.00%	62601 VA			
O	OTHER	28828 VA	100.00%	28828 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
MAIN BREAKER TO BE 100 PERCENT RATED.

PANEL: LA2

LOCATION: ELEC 128
BUS RATING: 400.0 A
MAIN BREAKER: MLO

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: LA1
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	R - HUDDLE 119 DISPLAY	20	1		R	180	180					R		1	20	R - HUDDLE 104 DISPLAY	2
3	R - HUDDLE 119 CONV.	20	1		R			540	540			R		1	20	R - HUDDLE 104 CONV.	4
5	R - HUDDLE 118 DISPLAY	20	1		R					180	720	R		1	20	R - SECURITY 103	6
7	R - HUDDLE 118 CONV.	20	1		R	540	1,080					R		1	20	R - VESTIBULE 102 / LOUNGE 101	8
9	R - HUDDLE 117 DISPLAY	20	1		R			180	1,620			R		1	20	R - PRIVATE OFFICE 127/COPY 126	10
11	R - HUDDLE 117 CONV.	20	1		R					540	300	M		1	20	M - VESTIBULE 102 ADA DOORS	12
13	R - LARGE MTG 128 DISPLAY	20	1		R	540	360					R		1	20	R - RESTROOMS VESTIBULE 110	14
15	R - LARGE 116 CONV.	20	1		R			360	1,440			R		1	20	R - LOUNGE 101	16
17	R - LARGE 116	20	1		R					540	600	R; M		1	20	R STORAGE 109	18
19	R - SMALL 122 DISPLAY	20	1		R	180	0					R		1	20	R - EXTERIOR CONVENIENCE	20
21	R - SMALL 122 CONV.	20	1		R			720	0			Spare		1	20	SPARE	22
23	R - MEDIUM 123 DISPLAY	20	1		R					180	0	Spare		1	20	SPARE	24
25	R - MEDIUM 123 CONV.	20	1		R	720	0					Spare		1	20	SPARE	26
27	R - PHONE 124/125	20	1		R			720	0			Spare		1	20	SPARE	28
29	R - COPY 126	20	1		R					1,000	0	Spare		1	20	SPARE	30
31	R - PHONE 114/115, STORAGE 109	20	1		R	720	0					Spare		1	20	SPARE	32
33	R - MOTHER'S ROOM 105	20	1		R			360	0			Spare		1	20	SPARE	34
35	R - LOUNGE 101	20	1		R					540	0	Spare		1	20	SPARE	36
37	R - MK 108	20	1		R	900	0					Spare		1	20	SPARE	38
39	FACP	20	1		O			500	0			Spare		1	20	SPARE	40
41	R - ELEC 128/MECH 129	20	1		R					360	0	Spare		1	20	SPARE	42
43	CU-128-2 (NOTE 1)	25	2		M	1,778	1,778					M		2	25	CU-113-2 (NOTE 1)	44
45								1,778	1,778								46
47	SPARE	20	2		Spare					0	1,778	M		2	525	CU-113-4 (NOTE 1)	48
49						0	1,778										50
51	F-107	15	1		M			396	70			M		1	15	M - PUMP P-1 STORAGE 109	52
53	R - REFRIG. MOTHER'S RM 105	20	1	G	R					600	900	R	G	1	20	R - EWC LOUNGE 101	54
					TOTAL LOAD:	29273 VA		28347 VA		26210 VA							
					TOTAL AMPS	246.7 A		239.0 A		218.4 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	20780 VA	74.06%	15390 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 84 kVA
K	KITCHEN	17210 VA	65.00%	11187 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 73 kVA
M	MOTOR	13635 VA	106.52%	14524 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 232.7 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 203.5 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	28648 VA	100.00%	28648 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
FED FROM LA1 VIA FEED THRU LUGS

1. BREAKER TO BE PROVIDED BY CONTRACTOR AND FIELD INSTALLED INTO OWNER PROVIDED PANELBOARD.

PANEL: EV

LOCATION: ELEC 128
BUS RATING: 400.0 A
MAIN BREAKER: 400.0 A

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: TEV
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	EV CHARGER	40	2		R	3,120	0					Spare		2	40	FUTURE EV CHARGER	2
3								3,120	0								4
5	EV CHARGER	40	2		R					3,120	0	Spare		2	40	FUTURE EV CHARGER	6
7						3,120	0										8
9	EV CHARGER	40	2		R			3,120	0			Spare		2	40	FUTURE EV CHARGER	10
11										3,120	0						12
13	EV CHARGER	40	2		R	3,120	0					Spare		2	40	FUTURE EV CHARGER	14
15								3,120	0								16
17	EV CHARGER	40	2		R					3,120	0	Spare		2	40	FUTURE EV CHARGER	18
19						3,120	0										20
21	EV CHARGER	40	2		R			3,120	0			Spare		2	40	FUTURE EV CHARGER	22
23										3,120	0						24
25	EV CHARGER	40	2		R	3,120	0					Spare		2	40	FUTURE EV CHARGER	26
27								3,120	0								28
29	EV CHARGER	40	2		R					3,120	0	Spare		1	20	SPARE	30
31						3,120	0					Spare		1	20	SPARE	32
33	GOLF CART CHARGER	20	1		R			1,440	0			Spare		1	20	SPARE	34
35	GOLF CART CHARGER	20	1		R					1,440	0	Spare		1	20	SPARE	36
37	GOLF CART CHARGER	20	1		R	1,440	0					Spare		1	20	SPARE	38
39	GOLF CART CHARGER	20	1		R			1,440	0			Spare		1	20	SPARE	40
41	GOLF CART CHARGER	20	1		R					1,440	0	Spare		1	20	SPARE	42
					TOTAL LOAD:	20160 VA		18480 VA		18480 VA							
					TOTAL AMPS	168.0 A		154.0 A		154.0 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	57120 VA	58.75%	33560 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 57 kVA
K	KITCHEN	0 VA	0.00%	0 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 34 kVA
M	MOTOR	0 VA	0.00%	0 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 158.5 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 93.2 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:

PANEL: HA

LOCATION: ELEC 128
BUS RATING: 400.0 A
MAIN BREAKER: MLO

VOLTS: 480Y/277
PHASES: 3
WIRES: 4
SCCR: 35kA

MOUNTING: SURFACE
FED FROM: MDP
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1						4,101	6,124										2
3	WATER HEATER (DHWG-1)	20	3		M			4,101	6,124			M		3	40	CU-1A	4
5										4,101	6,124						6
7						6,124	14,244										8
9	CU-1B	40	3		M			6,124	14,244			M		3	70	DOAS-1 (NOTE 1)	10
11										6,124	14,244						12
13	L - LOUNGE 101	20	1		L	1,282	3,162					L		1	20	L - EXTERIOR POLES	14
15	L - RESTROOMS	20	1		L			500	255			L		1	20	L - EXTERIOR	16
17	L - OPEN OFFICE NORTH	20	1		L					3,064	120	L		1	20	L - EXTERIOR BOLLARDS	18
19	L - OPEN OFFICE SOUTH	20	1		L	2,431	0					Spare		1	20	SPARE	20
21	L - HUDDLE/CONF/PHONE	20	1		L			1,081	0			Spare		1	20	SPARE	22
23	VAVS	15	1		C; M					500	0	Spare		1	20	SPARE	24
25	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	26
27	SPACE	--	1					--	--					1	--	SPACE	28
29	SPACE	--	1							--	--			1	--	SPACE	30
31	SPACE	--	1			--	--							1	--	SPACE	32
33	SPACE	--	1					--	--					1	--	SPACE	34
35	SPACE	--	1							--	--			1	--	SPACE	36
37	SPACE	--	1			--	--							1	--	SPACE	38
39	SPACE	--	1					--	--					1	--	SPACE	40
41	SPACE	--	1							--	--			1	--	SPACE	42
43					Spare; R; K; O...	41,873	--										44
45	PANEL LA1 VIA TLA	175	3					40,565	--					3	--	N/A	46
47										37,348	--						48
					TOTAL LOAD:	79342 VA		72996 VA		71627 VA							
					TOTAL AMPS	287.2 A		264.3 A		258.6 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	11896 VA	125.00%	14870 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	53000 VA	59.43%	31500 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 224 kVA
K	KITCHEN	17210 VA	65.00%	11187 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 210 kVA
M	MOTOR	94258 VA	111.33%	104941 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 269.4 A
C	COOLING	400 VA	100.00%	400 VA			**EMD CURRENT:** 252.7 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	28828 VA	100.00%	28828 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
1. BREAKER TO BE PROVIDED BY CONTRACTOR AND FIELD INSTALLED INTO OWNER PROVIDED PANELBOARD.

PANEL: LA3

LOCATION: ELEC 128
BUS RATING: 400.0 A
MAIN BREAKER: MLO

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: LA2
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1						0	10,680										2
3	SPARE	60	3		Spare			0	9,824			Spare; R; O		3	125	PANEL MDF1	4
5										0	9,184						6
7						480	705										8
9	VRF INDOOR UNITS - OPEN OFFICE 121/127	15	2		M			480	705			M		2	15	VRF INDOOR UNITS - OPEN OFFICE 112, MK...	10
11										564	1,100						12
13	VRF INDOOR UNITS - LOUNGE 101, MOTHER...	15	2		M	564	1,100					M		2	15	UH-129	14
15	K - WATER DISPENSER (H20)	20	1	G	K			1,440	1,700			K	G	1	20	K - ESPRESSO MACHINE (H15)	16
17	K - COFFEE GRINDER (H15.1B)	20	1	G	K					400	400	K	G	1	20	K - COFFEE GRINDER (H15.1A)	18
19	SPARE	20	1	G	Spare	0	240					K	G	1	20	K - U/C REFRIG. (H8)	20
21	SPARE	20	1	G	Spare			0	720			K	G	1	20	K - COFFEE GRINDER (H2)	22
23	SPARE	20	1	G	Spare					0	1,800	K	G	1	20	K - COFFEE BREWER (H14)	24
25	K - REFRIGERATOR (H28)	20	1	G	K	246	540					K	G	1	20	K - WATER DISPENSER (H5)	26
27	K - FAUCET SENSOR (H17.1)	20	1	G	K			100	720			K	G	1	20	K - ICE DISPENSER (H4)	28
29	K - REFRIGERATOR (D36)	20	1	G	K					456	1,608	K	G	1	20	R - MICROWAVE (H25A)	30
31	K - PASS THRU REFRIG. (D38A)	20	1	G	K	1,656	1,608					K	G	1	20	R - MICROWAVE (H25B)	32
33	K - PASS THRU REFRIG. (D38B)	20	1	G	K			1,656	0			Spare	G	1	20	SPARE	34
35	SPARE	20	1	G	Spare					0	1,920	K	G	1	20	K - COFFEE BREWER (H3)	36
37	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	38
39	R - CONV. - MK STORAGE 107	20	1		R			0	0			R		1	20	K - CONVENIENCE OUTLET	40
41	R - CONV. - MK 108	20	1		R					360	180	R		1	20	R - SOUND MASKING GENERATOR	42
43	SPARE	20	1		Spare	0	720					R		1	20	R - JANITOR 106	44
45	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	46
47	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	48
49	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	50
51	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	52
53	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	54
					TOTAL LOAD:	18539 VA		17345 VA		17972 VA							
					TOTAL AMPS	155.3 A		144.5 A		150.6 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	2800 VA	100.00%	2800 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 54 kVA
K	KITCHEN	17210 VA	65.00%	11187 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 48 kVA
M	MOTOR	5140 VA	110.70%	5690 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 149.5 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 134.3 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	28148 VA	100.00%	28148 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
FED FROM LA2 VIA FEED THRU LUGS

PANEL: LA1

LOCATION: ELEC 128
BUS RATING: 400.0 A
MAIN BREAKER: 400.0 A

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: TLA
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	R - WORKSTATION FURNITURE	20	2		R	1,080	1,080					R		2	20	R - WORKSTATION FURNITURE	2
3								1,080	1,080								4
5	R - WORKSTATION FURNITURE	20	2		R					1,080	1,080	R		2	20	R - WORKSTATION FURNITURE	6
7						1,080	1,080										8
9	R - WORKSTATION FURNITURE	20	2		R			1,080	1,080			R		2	20	R - WORKSTATION FURNITURE	10
11										1,080	1,080						12
13	R - WORKSTATION FURNITURE	20	2		R	1,080	1,080					R		2	20	R - WORKSTATION FURNITURE	14
15								1,080	1,080								16
17	R - WORKSTATION FURNITURE	20	2		R					1,080	720	R		2	20	R - WORKSTATION FURNITURE	18
19						1,080	720										20
21	R - WORKSTATION FURNITURE	20	2		R			360	360			R		2	20	R - WORKSTATION FURNITURE	22
23										360	360						24
25	R - WORKSTATION FURNITURE	20	2		R	720	720					R		2	20	R - WORKSTATION FURNITURE	26
27								720	720								28
29	R - WORKSTATION FURNITURE	20	2		R					720	360	R		2	20	R - WORKSTATION FURNITURE	30
31						720	360										32
33	R - WORKSTATION FURNITURE	20	2		R			720	1,778			M		2	25	CU-113-3 (NOTE 1)	34
35										720	1,778						36
37	R - SYSTEM FURNITURE	20	1		R	360	360					R		1	20	R - SYSTEM FURNITURE	38
39	R - SYSTEM FURNITURE	20	1		R			360	180			R		1	20	R - SYSTEM FURNITURE	40
41	R - BIOMETRIC READER	20	1		R					180	360	R		1	20	R - SYSTEM FURNITURE	42
43	R - RESTROOM VESTIBULE 110 (PHASE 2)	20	1		R	720	360					R		1	20	R - SYSTEM FURNITURE	44
45	TRAKA KEY BOX	20	1		O			180	360			R		1	20	R - SYSTEM FURNITURE	46
47	R - SITE CAMERA FIBER ENCLOSURE	20	1		R					0	180	R		1	20	R - SYSTEM FURNITURE	48
49	R - SITE CAMERA FIBER ENCLOSURE	20	1		R	0	0					R		1	20	R - EXTERIOR CONVENIENCE	50
51	R - SITE CAMERA FIBER ENCLOSURE	20	1		R			0	0			R		1	20	R - SITE CAMERA FIBER ENCLOSURE	52
53	R - SITE CAMERA FIBER ENCLOSURE	20	1		R					0	0	Spare		1	20	SPARE	54
					TOTAL LOAD:	41873 VA		40565 VA		37348 VA							
					TOTAL AMPS	353.1 A		342.2 A		311.2 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	53000 VA	59.43%	31500 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 120 kVA
K	KITCHEN	17210 VA	65.00%	11187 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 93 kVA
M	MOTOR	17191 VA	105.17%	18080 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 332.5 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 258.6 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	28828 VA	100.00%	28828 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
1. BREAKER TO BE PROVIDED BY CONTRACTOR AND FIELD INSTALLED INTO OWNER PROVIDED PANELBOARD.

PANEL: MDF1

LOCATION: MDF 113
BUS RATING: 250.0 A
MAIN BREAKER: 125A

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: LA3
INTEGRAL SPD: YES
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	RACK #4 L6-20R	20	2		O	1,500	1,500					O		2	20	RACK #4 L6-20R	2
3								1,500	1,500								4
5	RACK #5 L6-20R	20	2		O					1,500	1,500	O		2	20	RACK #3 L6-20R	6
7						1,500	1,500										8
9	RACK #5 L6-20R	20	2		O			1,500	1,500			O		2	20	RACK #3 L6-20R	10
11										1,500	1,500						12
13	RACK #5 L6-20R	20	2		O	1,500	750					O		2	20	RACK #2 L6-20R	14
15								1,500	750								16
17	RACK #5 L6-20R	20	2		O					1,500	750	O		2	20	RACK #1 L6-20R	18
19						1,500	750										20
21	20kVA UPS (NOTE 1)	125	2		O			574	1,000			R		1	20	RACK #1 5-20R	22
23										574	360	R		1	20	R - ACCESS CONTROL PANEL	24
25	SPARE	20	1		Spare	0	180					R		1	20	R - MDF 113	26
27	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	28
29	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	30
31	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	32
33	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	34
35	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	36
37	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	38
39	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	40
41	SPARE	20	1		Spare					0	0	Spare		1

PANEL: HB

LOCATION: ELEC 224
BUS RATING: 400.0 A
MAIN BREAKER: 300A

VOLTS: 480Y/277
PHASES: 3
WIRES: 4
SCCR: 22kA

MOUNTING: SURFACE
FED FROM: MDP
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1						9,256	9,256										2
3	CU-2A	40	3		M			9,256	9,256			M		3	35	CU-2B (NOTE 1)	4
5										9,256	9,256						6
7						14,244	550					C; M		1	15	VAVS	8
9	DOAS-2	70	3		M			14,244	--					1	--	SPACE	10
11										14,244	--			1	--	SPACE	12
13						9,256	--							1	--	SPACE	14
15	CU-2C (NOTE 1)	35	3		M			9,256	--					1	--	SPACE	16
17										9,256	--			1	--	SPACE	18
19	SPACE	--	1			--	--							1	--	SPACE	20
21	SPACE	--	1					--	--					1	--	SPACE	22
23	SPACE	--	1							--	--			1	--	SPACE	24
25	SPACE	--	1			--	--							1	--	SPACE	26
27	SPACE	--	1					--	--					1	--	SPACE	28
29	L CAFE-2 221-2	20	1		L					1,119	0	Spare		1	20	SPARE	30
31	L - FRONT OF HOUSE 230	20	1		L	1,163	0					Spare		1	20	SPARE	32
33	L - CONF/HUDDLE/PHONE	20	1		L			1,570	0			Spare		1	20	SPARE	34
35	L - OPEN OFFICE 218	20	1		L					2,587	0	Spare		1	20	SPARE	36
37	L - EXTERIOR	20	1		L	612	0					Spare		1	20	SPARE	38
39	SPARE	20	1		Spare			0	--					1	--	SPACE	40
41	SPACE	--	1							--	--			1	--	SPACE	42
43					Spare;	15,126	--										44
45	TRANSFORMER 'TLB'	150	3		R; M			15,459	--					3	--	N/A	46
47										18,858	--						48
					TOTAL LOAD:	59463 VA		59040 VA		64575 VA							
					TOTAL AMPS	214.9 A		213.1 A		233.4 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	7051 VA	125.00%	8813 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	39120 VA	62.78%	24560 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 183 kVA
K	KITCHEN	0 VA	0.00%	0 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 181 kVA
M	MOTOR	108740 VA	109.82%	119424 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 220.2 A
C	COOLING	400 VA	100.00%	400 VA			**EMD CURRENT:** 217.7 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
1. BREAKER TO BE PROVIDED BY CONTRACTOR AND FIELD INSTALLED INTO OWNER PROVIDED PANELBOARD.

PANEL: HK

LOCATION: STORAGE 107A
BUS RATING: 600.0 A
MAIN BREAKER: 600 A

VOLTS: 480Y/277
PHASES: 3
WIRES: 4
SCCR: 35kA

MOUNTING: SURFACE
FED FROM: MDP
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1						1,089	867										2
3	KEF-1	15	3		M			1,089	867			H		3	15	KEF-2	4
5										1,089	867						6
7						2,494	4,351										8
9	K - CONVECTION OVEN (A7.1)	20	3	ST	K			2,494	4,351			K		3	20	K - BLOWER/DRYER (D2.1)	10
11										2,494	4,351						12
13						6,374	7,482										14
15	K - ELECTRIC GRIDDLE (A7)	30	3	ST	K			6,374	7,482			K	ST	3	35	K - ELECTRIC FRYER (A8)	16
17										6,374	7,482						18
19						7,455	7,455										20
21	K - COMBI-STEAMER (A4A)	35	3	ST	K			7,455	7,455			K	ST	3	35	K - COMBI-STEAMER (A4B)	22
23										7,455	7,455						24
25						14,660	18,845										26
27	K - VARIOCOOKER (A2)	70	3	ST	K			14,660	18,845			K		3	90	K - WAREWASHER (D2)	28
29										14,660	18,845						30
31						0	0										32
33	SPARE	80	3	ST	Spare			0	0			Spare	ST	3	80	SPARE	34
35										0	0						36
37						0	0										38
39	SPARE	80	3	ST	Spare			0	0			Spare		3	60	SPARE	40
41										0	0						42
43					Spare;	30,575	--										44
45	TRANSFORMER 'TLK'	175	3		R; K; M			33,553	--					3	--	N/A	46
47										31,914	--						48
					TOTAL LOAD:	101645 VA		104624 VA		102985 VA							
					TOTAL AMPS	367.0 A		378.4 A		372.5 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	13610 VA	86.74%	11805 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 309 kVA
K	KITCHEN	287399 VA	65.00%	186809 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 208 kVA
M	MOTOR	5646 VA	114.46%	6462 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 372.0 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 249.8 A
H	HEATING	2600 VA	100.00%	2600 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:

PANEL: LB1

LOCATION: ELEC 224
BUS RATING: 250.0 A
MAIN BREAKER: 225A

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: TLB
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	R - WORKSTATION FURNITURE	20	2		R	1,080	720					R		2	20	R - WORKSTATION FURNITURE	2
3								1,080	720								4
5	R - WORKSTATION FURNITURE	20	2		R					1,080	360	R		2	20	R - WORKSTATION FURNITURE	6
7						1,080	360										8
9	R - WORKSTATION FURNITURE	20	2		R			1,080	720			R		2	20	R - WORKSTATION FURNITURE	10
11										1,080	720						12
13	R - WORKSTATION FURNITURE	20	2		R	1,080	360					R		2	20	R - WORKSTATION FURNITURE	14
15								1,080	360								16
17	R - WORKSTATION FURNITURE	20	2		R					1,080	1,612	M		2	20	VRF INDOOR UNITS - CAFE	18
19						1,080	1,612										20
21	R - WORKSTATION FURNITURE	20	2		R			360	1,778			M		2	25	CU-224 (NOTE 1)	22
23										360	1,778						24
25	R - LAUNDRY 217 NEMA 6-30R	30	2		R	1,350	900					R	G	1	20	R - EWC CIRCULATION 207	26
27								1,350	180			R		1	20	R - WASHER LAUNDRY 205	28
29	R - WORKSTATION FURNITURE	20	1		R					540	1,000	R		1	20	R - COPY 215	30
31	R - SYSTEM FURNITURE	20	1		R	360	780					R; M		1	20	R - STORAGE 218 / TMV-2	32
33	R - SYSTEM FURNITURE	20	1		R			360	180			R		1	20	R - SOUND MASKING GENERATOR	34
35	R - LARGE MTG 215 DISPLAY	20	1		R					180	1,080	R		1	20	R - CONV. - CAFE 201	36
37	R - LARGE MTG 215 CONV.	20	1		R	900	360					R		1	20	R - OFFICE 211 DESK	38
39	R - SMALL 216 DISPLAY	20	1		R			180	360			R		1	20	R - OFFICE 211 DESK	40
41	R - SMALL 216	20	1		R					540	360	R		1	20	R - EXTERIOR HVAC CONV.	42
43	R - HUDDLE 221 DISPLAY	20	1		R	180	540					R		1	20	R - HUDDLE 220 CONV.	44
45	R - HUDDLE 221	20	1		R			540	180			R		1	20	R - HUDDLE 220 DISPLAY	46
47	R - MEDIUM 223 CONV.	20	1		R					720	360	R		1	20	R - PHONE 225	48
49	R - MEDIUM 223	20	1		R	180	180					R		1	20	R - ELEC 224	50
51	VRF INDOOR UNITS - KITCHEN/BOH (NOTE 1)	15	2		M			552	1,080			R		1	20	R - CONV.	52
53										552	720	R		1	20	R - CONV. CAFE-201	54
					TOTAL LOAD:	15126 VA		15459 VA		18858 VA							
					TOTAL AMPS	126.1 A		129.2 A		157.6 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	39120 VA	62.78%	24560 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 49 kVA
K	KITCHEN	0 VA	0.00%	0 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 35 kVA
M	MOTOR	6767 VA	101.99%	6902 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 137.2 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 97.2 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
FED FROM LB1 VIA FEED THRU LUGS

1. BREAKER TO BE PROVIDED BY CONTRACTOR AND FIELD INSTALLED INTO OWNER PROVIDED PANELBOARD.

PANEL: LB2

LOCATION: ELEC 224
BUS RATING: 250.0 A
MAIN BREAKER: MLO

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: LB1
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1						909	0										2
3	VRF INDOOR UNITS - OPEN OFFICE 218	15	2		M			909	0			Spare		2	20	SPARE	4
5										0	96	M		1	15	F-208	6
7	SPARE	20	2		Spare	0	35					M		1	15	F-218	8
9	HWRP-2	15	1		M			70	360			R		1	20	R - PHONE 222	10
11	R - FLEX 208 CONV.	20	1		R					900	500	R		1	20	TECH TALK LECTERN LIGHTS	12
13	R - PROJECT / SCREEN CAFE 201	20	1		R	180	180					R		1	20	MIC CHARGING STATIONS	14
15	R - MONITOR CAFE 201	20	1		R			540	900			R		1	20	R - FLEX 208	16
17	R - AV RACK 209.2	20	1		R					2,160	360	R		1	20	R - CHARGING - FLEX 208	18
19	R - AV RACK 209.2	20	1		R	360	360					R		1	20	M - FLEX 208 SHADES	20
21	R - BASE RACK - AV 209.2	20	1		R			180	360			R		1	20	R - CAFE LECTURN	22
23	R - EMT 214	20	1		R					540	180	R		1	20	R - AUDIO DEVICES	24
25	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	26
27	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	28
29	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	30
31	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	32
33	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	34
35	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	36
37	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	38
39	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	40
41	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	42
43	SPACE	--	1			--	--							1	--	SPACE	44
45	SPACE	--	1					--	--					1	--	SPACE	46
47	SPACE	--	1							--	--			1	--	SPACE	48
49	SPACE	--	1			--	--							1	--	SPACE	50
51	SPACE	--	1					--	--					1	--	SPACE	52
53	SPACE	--	1							--	--			1	--	SPACE	54
					TOTAL LOAD:	2024 VA		3319 VA		4736 VA							
					TOTAL AMPS	16.9 A		29.3 A		41.1 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	7700 VA	100.00%	7700 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 10 kVA
K	KITCHEN	0 VA	0.00%	0 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 10 kVA
M	MOTOR	1841 VA	104.29%	1920 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 28.0 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 28.2 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
FED FROM LB1 VIA FEED THRU LUGS

PANEL: LK1

LOCATION: STORAGE 107A
BUS RATING: 400.0 A
MAIN BREAKER: 400.0 A

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: TLK
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	SPACE	--	1			--	--							1	--	SPACE	2
3	SPACE	--	1					--	--					1	--	SPACE	4
5	SPACE	--	1							--	--			1	--	SPACE	6
7	SPACE	--	1			--	--							1	--	SPACE	8
9	K - HUMAN MACHINE INTERFACE (A1.2)	20	1		K			600	1,200			K		1	20	K - EXHAUST HOOD GAS VALVE (A1)	10
11	K - BADGE READER (J25A, J25B)	20	1		K					1,200	360	R; K		1	20	K - CONVENIENCE OUTLET	12
13	K - FIRE SUPRESSION SYSTEM (A1.1)	20	1		K	1,200	240					K		1	20	K - CONDENSATE HOOD (D3)	14
15	K - COLD/HOT SHELF (J17A)	20	1	G	K			828	360			R; M		1	20	R - CONVENIENCE OUTLET	16
17	K - BUILT-IN HEATED SHELF (J16A)	20	1	G	K					960	900	K	G	1	20	K - DOUGH ROLLER (J21)	18
19	K - SNEEZE GUARD (J14A)	20	1	G	K	972	480					K	G	1	20	K - UNDERCOUNTER REFRIGERATOR (C5)	20
21	K - SNEEZE GUARD (J14B)	20	1	G	K			972	2,328			K	G	1	20	K - MOBILE HOLDING CABINET (C4)	22
23	K - BUILT-IN HEATED SHELF (J16B)	20	1	G	K					960	600	K	G	1	20	K - PREP 'N' TEMP PRO STATION (C31)	24
25	K - COLD/HOT SHELF (J17B)	20	1	G	K	828	264					K	G	1	20	K - UNDERCOUNTER REFRIGERATOR (A12)	26
27	K - HEATED PROOFING CABINET (J5)	20	1	G	K			1,896	360			K	G	1	20	K - VEGETABLE SLICER (C10)	28
29	K - TIME CLOCK (G2)	20	1	G	K					600	840	K	G	1	20	K - FOOD PROCESSOR (C9)	30
31	K - SCALE AND MONITOR (C40.1)	20	1	G	K	1,200	612					K	G	1	20	K - UNDERCOUNTER REFRIGERATOR (C22)	32
33	K - PIZZA PREP TABLE (J9)	20	1	G	K			468	672			K	G	1	20	K- SLICER (C8)	34
35	K - COUNTERTOP IMPINGER (J10A)	50	2	G	K					2,496	100	M	G	1	20	K - CUSTOM SNEEZE GUARD (H13)	36
37						2,496	984					K	G	1	20	K - ICE MACHINE (E10)	38
39	SPACE RESERVED FOR SHUNT TRIP	--	1					--	2,496			K	G	2	50	K - COUNTERTOP IMPINGER (J10B)	40
41										7,001	2,496						42
43	K - INDUCTION RANGE (A6)	80	3	ST	K	7,001	1,812					K	ST	1	20	K - CRISP N' HOLD FOOD STATION (A9)	44
45								7,001	--					1	--	SPACE RESERVED FOR SHUNT TRIP	46
47										672	--			1	--	GFCI POD	48
49	K - 40QT MIXER (C32)	20	3	G	K	672	1,201										50
51								672	1,201			K	G	3	20	K - BLAST CHILLER (E3)	52
53	GFCI POD	--	1							--	1,201						54
					TOTAL LOAD:	30575 VA		33553 VA		31914 VA							
					TOTAL AMPS	254.8 A		281.3 A		267.7 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	13610 VA	86.74%	11805 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 96 kVA
K	KITCHEN	80052 VA	65.00%	52034 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 66 kVA
M	MOTOR	2380 VA	110.51%	2630 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 266.6 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 184.5 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:

PANEL: LK2

LOCATION: STORAGE 107A
BUS RATING: 400.0 A
MAIN BREAKER: MLO

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: LK1
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1						1,381	1,309										2
3	R - COOLER COND. UNIT (E1.2)	20	3		R			1,381	1,309			R		3	20	R - FREEZER COND. UNIT (E2.2)	4
5										1,381	1,309						6
7	K - TOASTER CONVEYOR (L6)	15	2	G	K	1,113	520					R		2	20	K - EVAPORATOR COIL (E1.1)	8
9								1,113	520								10
11	K - EVAPORATOR COIL (E2.1)	20	2		R	90	1,248					K	G	2	20	K - SOFT SERVE FREEZER (H11)	12
13										90	1,248						14
15	K - SANDWICH PRESS (L7)	30	2	G	K			2,496	672			K	G	1	20	K - HOT/COLD PANS, DROP-IN (L2C)	16
17										2,496	480	K	G	1	20	K - FREEZER HEAT TRACE (E2.3)	18
19	K - BUILT-IN HEATED SHELF (L3)	20	1	G	K	600	360					K	G	1	20	K - KITCHEN CORD DROP	20
21	K - FOOD SHIELD (L2.1A)	20	1	G	K			600	360			K	G	1	20	K - KITCHEN CORD DROP	22
23	K - HOT/COLD PANS, DROP-IN (L2B)	20	1	G	K					672	600	K	G	1	20	K - FOOD SHIELD (H13)	24
25	K - FROST TOP, DROP-IN (H12)	20	1	G	K	804	828					K	G	1	20	K - FOOD SHIELD (H13)	26
27	K - FOOD SHIELD (L11)	20	1	G	K			600	828			K	G	1	20	K - ROUND FOOD WARMER (L5B)	28
29	K - HOT & COLD PAN (L2A)	20	1	G	K					672	600	K	G	1	20	K - ROUND FOOD WARMER (L5A)	30
31	R - CONVENIENCE OUTLET	20	1		R	180	180					R		1	20	R - FOOD SHIELD (L5.1)	32
33	R - CONVENIENCE OUTLET	20	1		R			180	180			R		1	20	R - CONVENIENCE OUTLET	34
35	R - CONVENIENCE OUTLET	20	1		R					180	360	K		1	20	K - CONVENIENCE OUTLET	36
37	R - CONVENIENCE OUTLET	20	1		R	180	1,000					M		1	20	K - WALK-IN COOLER (E1)	38
39	R - CONVENIENCE OUTLET	20	1		R			360	1,000			M		1	20	K - WALK-IN FREEZER (E2)	40
41	R - CONVENIENCE OUTLET	20	1		R					540	0	Spare		1	20	SPARE	42
43	SPACE	--	1			--	--							1	--	SPACE	44
45	SPACE	--	1					--	--					1	--	SPACE	46
47	SPACE	--	1							--	--			1	--	SPACE	48
49	SPACE	--	1			--	--							1	--	SPACE	50
51	SPACE	--	1					--	--					1	--	SPACE	52
53	SPACE	--	1							--	--			1	--	SPACE	54
					TOTAL LOAD:	10612 VA		12499 VA		11528 VA							
					TOTAL AMPS	88.4 A		105.3 A		97.2 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	13250 VA	87.74%	11626 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 35 kVA
K	KITCHEN	19290 VA	65.00%	12538 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 27 kVA
M	MOTOR	2100 VA	111.91%	2350 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 96.1 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 73.6 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
FED FROM LK1 VIA FEED THRU LUGS

HB	**LB1**	**LB2**
HK	**LK1**	**LK2**

PANEL: HC

LOCATION: ELEC 312
BUS RATING: 250.0 A
MAIN BREAKER: 150A

VOLTS: 480Y/277
PHASES: 3
WIRES: 4
SCCR: 22kA

MOUNTING: SURFACE
FED FROM: MDP
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1						5,043	9,616										2
3	CU-3 (NOTE 1)	40	3		M			5,043	9,616			M		3	45	DOAS-3	4
5										5,043	9,616						6
7						15,306	300					C		1	15	VAVS	8
9	TRANSFORMER 'TLC'	70	3		Spare; R; M;...			15,466	--					1	--	SPACE	10
11										12,516	--			1	--	SPACE	12
13	SPACE	--	1			--	--							1	--	SPACE	14
15	SPACE	--	1					--	--					1	--	SPACE	16
17	SPACE	--	1							--	--			1	--	SPACE	18
19	SPACE	--	1			--	--							1	--	SPACE	20
21	SPACE	--	1					--	--					1	--	SPACE	22
23	SPACE	--	1							--	--			1	--	SPACE	24
25	SPACE	--	1			--	--							1	--	SPACE	26
27	SPACE	--	1					--	--					1	--	SPACE	28
29	SPACE	--	1							--	--			1	--	SPACE	30
31	SPACE	--	1			--	--							1	--	SPACE	32
33	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	34
35	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	36
37	SPARE	20	1		Spare	0	408					L		1	20	L - EXTERIOR	38
39	SPARE	20	1		Spare			0	4,792			L		1	20	L - OPEN OFFICE	40
41	SPARE	20	1		Spare					0	1,249	L		1	20	L - ENCLOSED ROOMS	42
					TOTAL LOAD:	30674 VA		34917 VA		28424 VA							
					TOTAL AMPS	112.0 A		127.3 A		102.6 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	6448 VA	125.00%	8060 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	35980 VA	63.90%	22990 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 94 kVA
K	KITCHEN	0 VA	0.00%	0 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 90 kVA
M	MOTOR	36157 VA	119.95%	43369 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 113.1 A
C	COOLING	300 VA	100.00%	300 VA			**EMD CURRENT:** 108.1 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
1. BREAKER TO BE PROVIDED BY CONTRACTOR AND FIELD INSTALLED INTO OWNER PROVIDED PANELBOARD.

PANEL: LC1

LOCATION: ELEC 312
BUS RATING: 150.0 A
MAIN BREAKER: 150 A

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: TLC
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	R - WORKSTATION FURNITURE	20	2		R	1,080	720					R		2	20	R - WORKSTATION FURNITURE	2
3								1,080	720								4
5	R - WORKSTATION FURNITURE	20	2		R					1,080	720	R		2	20	R - WORKSTATION FURNITURE	6
7						1,080	720										8
9	R - WORKSTATION FURNITURE	20	2		R			540	720			R		2	20	R - WORKSTATION FURNITURE	10
11										540	720						12
13	R - WORKSTATION FURNITURE	20	2		R	1,080	720					R		2	20	R - WORKSTATION FURNITURE	14
15								1,080	720								16
17	R - WORKSTATION FURNITURE	20	2		R					720	360	R		1	20	R - WORKSTATION FURNITURE	18
19						720	360					R		1	20	R - PROJ. LARGE TRAINING 304	20
21	R - SMALL 301C	20	1		R			720	180			R		1	20	R - MONITOR LARGE TRAINING 304	22
23	R - SMALL 301C - DISPLAY SCREEN	20	1		R					180	2,160	R		1	20	R - AV 308 RACK NEMA L5-20R	24
25	R - MEDIUM 316 DISPLAY	20	1		R	180	360					R		1	20	R - AV 308 L5-20R	26
27	R - XL CONF. RM 311 CONV.	20	1		R			900	360			R		1	20	R - LARGE TRAINING 304 LECTURN	28
29	R - PHONE 319	20	1		R					360	1,080	R		1	20	R - LARGE TRAINING 304	30
31	R - OPEN OFFICE 313	20	1		R	900	720					R		1	20	R - LARGE TRAINING 304 FLOOR BOXES	32
33	R - COPY 310	20	1		R			1,000	720			R		1	20	R - LARGE TRAINING 304 FLOOR BOXES	34
35	R - HUDDLE 314 DISPLAY	20	1		R					180	720	R		1	20	R - LARGE TRAINING 304 FLOOR BOXES	36
37	R - HUDDLE 314 CONV.	20	1		R	540	720					R		1	20	R - LARGE TRAINING 304 FLOOR BOXES	38
39	R - SMALL 315	20	1		R			180	600			R		1	20	TRAINING LECTERN LIGHTS	40
41	R - SMALL 315 CONV.	20	1		R					720	360	R		1	20	R - SYSTEM FURNITURE	42
					TOTAL LOAD:	15306 VA		15466 VA		12516 VA							
					TOTAL AMPS	131.1 A		132.5 A		104.3 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	35980 VA	63.90%	22990 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 43 kVA
K	KITCHEN	0 VA	0.00%	0 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 30 kVA
M	MOTOR	4272 VA	103.26%	4411 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 120.2 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 84.5 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:

PANEL: LC2

LOCATION: ELEC 312
BUS RATING: 150.0 A
MAIN BREAKER: 150 A

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: LC1
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
1	CU-312 (NOTE 1)	20	2		M	1,518	1,413					M		2	20	VRF INDOOR UNITS	2
3								1,518	1,413								4
5	F-308	15	1		M					96	900	R	G	1	20	R - EWC CIRCULATION 309	6
7	R - EXTRA LARGE 303 DISPLAY	20	1		R; Power	180	675					M		2	15	VRF INDOOR UNITS (NOTE 1)	8
9	R - EXTRA LARGE 303	20	1		R			900	675								10
11	R - EXTRA LARGE 302 DISPLAY	20	1		R; Power					180	0	Spare		1	20	SPARE	12
13	R - EXTRA LARGE 302	20	1		R	900	0					Spare		1	20	SPARE	14
15	R - ELEC 312 SOUNBD MASKING	20	1		R			180	0			Spare		1	20	SPARE	16
17	R - PHONE 309	20	1		R					360	0	Spare		1	20	SPARE	18
19	R - PHONE 305	20	1		R	360	0					Spare		1	20	SPARE	20
21	R - CONV.	20	1		R			900	0			Spare		1	20	SPARE	22
23	R - HUDDLE 318	20	1		R					540	0	Spare		1	20	SPARE	24
25	R - HUDDLE 318 DISPLAY	20	1		R	180	0					Spare		1	20	SPARE	26
27	R - EXT. HVAC CONV.	20	1		R			180	0			Spare		1	20	SPARE	28
29	R - HUDDLE 311	20	1		R					540	0	Spare		1	20	SPARE	30
31	R - HUDDLE 311 DISPLAY	20	1		R	180	0					Spare		1	20	SPARE	32
33	R - ELEC 312	20	1		R			180	0			Spare		1	20	SPARE	34
35	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	36
37	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	38
39	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	40
41	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	42
					TOTAL LOAD:	5406 VA		5946 VA		2616 VA							
					TOTAL AMPS	48.6 A		53.1 A		21.8 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	6660 VA	100.00%	6660 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 14 kVA
K	KITCHEN	0 VA	0.00%	0 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 14 kVA
M	MOTOR	4272 VA	103.26%	4411 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 38.8 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 39.2 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
1. BREAKER TO BE PROVIDED BY CONTRACTOR AND FIELD INSTALLED INTO OWNER PROVIDED PANELBOARD.

PANEL: LK3

LOCATION: STORAGE 107A
BUS RATING: 400.0 A
MAIN BREAKER: MLO

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
SCCR: 10kA

MOUNTING: SURFACE
FED FROM: LK2
INTEGRAL SPD: N/A
LUG ACCESSORIES: SEE ONE-LINE

CKT	CIRCUIT DESCRIPTION	BKR TRIP	P	BKR TYPE	LOAD TYPE	PHASE A (VA)		PHASE B (VA)		PHASE C (VA)		LOAD TYPE	BKR TYPE	P	BKR TRIP	CIRCUIT DESCRIPTION	CKT
55	F-206	15	1		M	100	540					K	G	1	20	K - ICE AND WATER DISPENSER (H4)	56
57	K - WATER DISPENSER (H5)	20	1	G	K			720	180			R		1	20	R CHANGING 223	58
59	R - OFFICE 207	20	1		R					360	540	R		1	20	R - RESTROOM 206, CHANGING 205	60
61	R - ROOF CONV.	20	1		R	180	0					Spare		1	20	SPARE	62
63	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	64
65	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	66
67	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	68
69	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	70
71	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	72
73	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	74
75	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	76
77	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	78
79	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	80
81	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	82
83	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	84
85	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	86
87	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	88
89	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	90
91	SPARE	20	1		Spare	0	0					Spare		1	20	SPARE	92
93	SPARE	20	1		Spare			0	0			Spare		1	20	SPARE	94
95	SPARE	20	1		Spare					0	0	Spare		1	20	SPARE	96
97	SPACE	--	1			--	--							1	--	SPACE	98
99	SPACE	--	1					--	--					1	--	SPACE	100
101	SPACE	--	1							--	--			1	--	SPACE	102
103	SPACE	--	1			--	--							1	--	SPACE	104
105	SPACE	--	1					--	--					1	--	SPACE	106
107	SPACE	--	1							--	--			1	--	SPACE	108
					TOTAL LOAD:	820 VA		900 VA		900 VA							
					TOTAL AMPS	6.8 A		7.6 A		7.6 A							

LOAD TYPE	LOAD DESCRIPTION	CONNECTED LOAD (VA)	DEMAN D...	ESTIMATED DEMAND (VA)	DEMAND FACTOR NOTES	BKR TYPE	PANEL TOTALS
L	LIGHTING	0 VA	0.00%	0 VA	CONTINUOUS LOAD @ 125%	G = GFCI (5mA)	
R	RECEPTACLES	1260 VA	100.00%	1260 VA	FIRST 10KVA @ 100%, REMAINDER @ 50%	GP = GFP (30mA)	**CONNECTED LOAD:** 3 kVA
K	KITCHEN	1260 VA	100.00%	1260 VA	NON-DWELLING KITCHEN LOADS, NEC ART. 220	ST = SHUNT TRIP	**ESTIMATED DEMAND:** 3 kVA
M	MOTOR	100 VA	125.00%	125 VA	LARGEST MOTOR, NEC ART. 430	LO = LOCK OUT	**CONNECTED CURRENT:** 7.3 A
C	COOLING	0 VA	0.00%	0 VA			**EMD CURRENT:** 7.3 A
H	HEATING	0 VA	0.00%	0 VA			
O	OTHER	0 VA	0.00%	0 VA			
Spare	SPARE	0 VA	0.00%	0 VA			

NOTES:
FED FROM LK2 VIA FEED THRU LUGS

HC	LC1	LC2
LK3		

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LICENSED PROFESSIONAL ENGINEER
JOSHUA WETZIG
32927
4/3/2026
OKLAHOMA

CONFIDENTIAL CLIENT
ISSUE FOR CONSTRUCTION
2026-04-03

KEY PLAN (AREAS)

N
B
C
A

REVISIONS		
NO.	DATE	DESCRIPTION
	2026-04-03	ISSUE FOR CONSTRUCTION - HUB

DRAWN: Author
APPRV'D: Approver

CLY-HUB
PROJECT ADDRESS:
TULSA COUNTY, OK
PROJ. NO. 10438332
SCALE:

PANEL SCHEDULES

SHEET NUMBER:
E8.3
PHASE: ISSUE FOR CONSTRUCTION - HUB