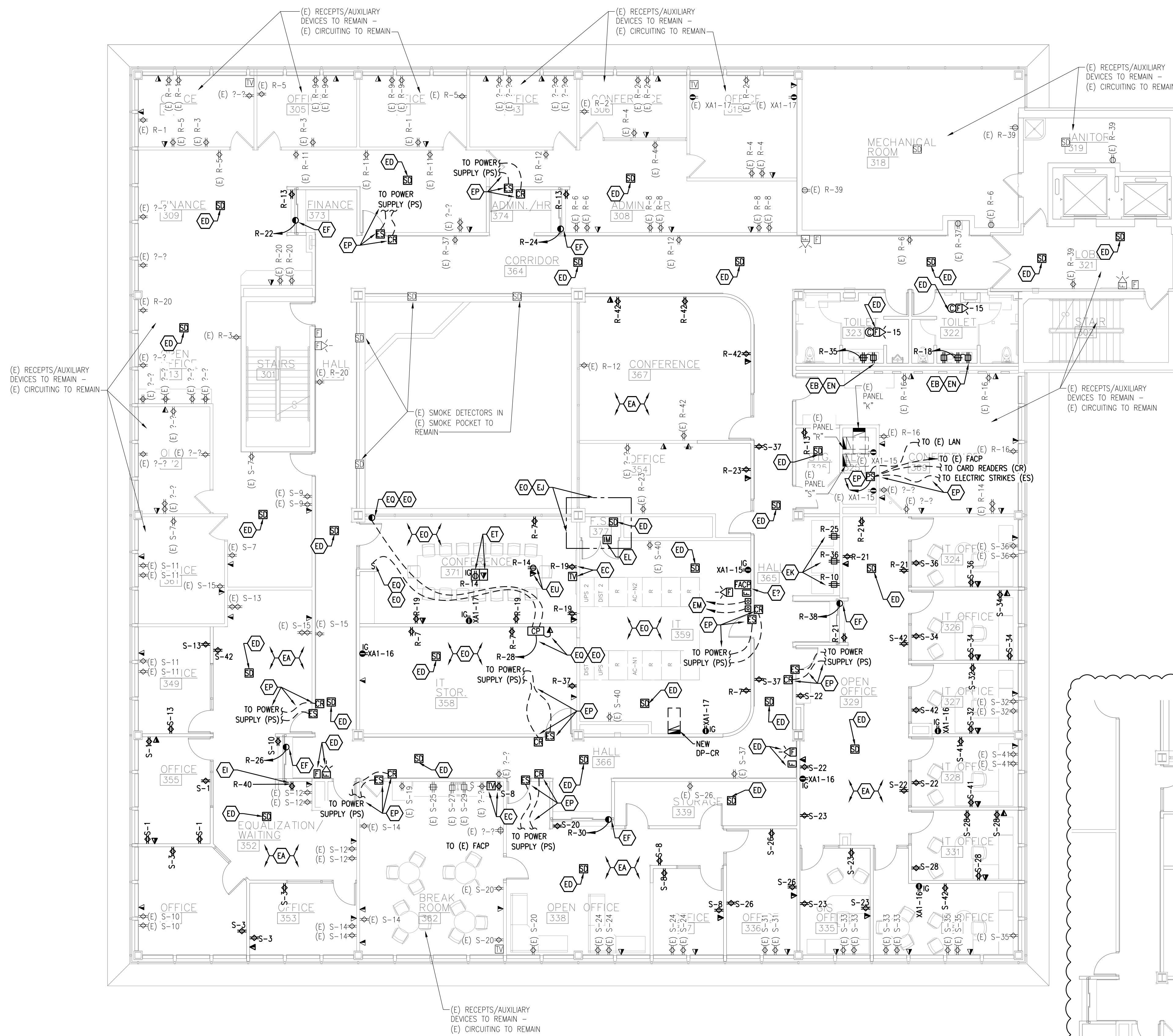
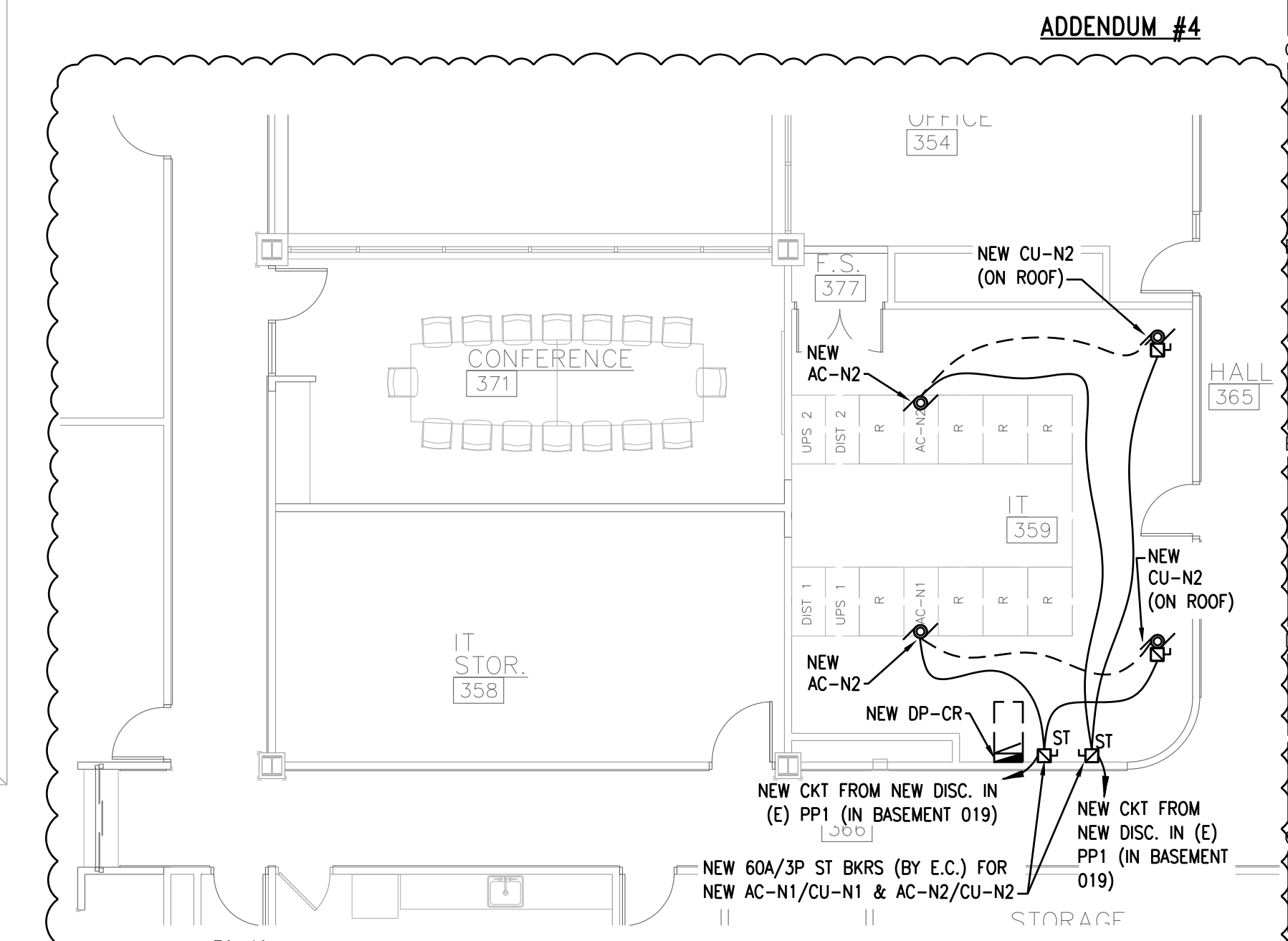


KEYED ELECTRICAL POWER CONSTRUCTION NOTES:

- EA COORD. LOCATION & MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES AND AUXILIARY (AUX.) ELECTRICAL DEVICES (TELECOM, AUDIO/VIDEO, FIRE ALARM, SECURITY, ETC.) WITH OWNER'S REP & OTHER TRADES PRIOR TO ROUGH-IN.
- EB FOR GFI RECEIPTS SERVING APPLIANCES THAT ARE INSTALLED IN A NON-ACCESSIBLE LOCATION, WIRE FROM A GFI RECEPT IN ACCESSIBLE LOCATION PER NEC.
- EC PROVIDE RECEPT, AND ROUGH-IN CABLE DROP FOR TV UP HIGH. COORD. EXACT LOCATION WITH OWNER'S REP. PRIOR TO ROUGH-IN.
- ED NEW FIRE ALARM WIRING/DEVICES WILL BE BY OTHERS - OWNER'S FIRE ALARM SUBCONTRACTOR (F.A.) = VETERAN'S ALARM (MIDLAND). E.C. SHALL PROVIDE BOX/CONDUIT ROUGH-INS FOR NEW FIRE ALARM DEVICES TO BE DESIGNED/BUILT BY OWNER'S F.A. - COORD. ALL FIRE ALARM WORK WITH F.A. VETERAN'S ALARM (DON OR KELLY @ 989-631-1111) PRIOR TO DEMOLITION & ROUGH-IN OF NEW WORK.
- EE PROVIDE RECEPTACLE, BELOW SINK (UP HIGH & BEHIND LAV GUARD), FOR EACH SINK'S SENSOR OPERATED FAUCET PLUG-IN (110V/1P). CKT THROUGH A DEAD FRONT GFI (LABELED AS SUCH) OR THROUGH NEARBY GFI RECEPT THAT IS IN AN ACCESSIBLE LOCATION. COORD. LOCATION WITH P.C. PRIOR TO ROUGH-IN.
- EF 24 VOLT DC MAGNETIC RELEASE FOR COUNTER FIRE SHUTTER DOOR. COORD. POWER (ASSUMED 600W @ 115V), SWITCHING, & FIRE ALARM REQUIREMENTS WITH SHUTTER DOOR MFR, AND WITH OWNER'S FIRE ALARM SUBCONTRACTOR (F.A. = VETERAN'S ALARM - DON OR KELLY @ 989.631.1111) PRIOR TO ROUGH-IN.
- EG PROVIDE POWER AND DATA DROP FOR LED DISPLAY, PROVIDED BY OWNER (ASSUMED 600W? - CONFIRM). COORD. REQUIREMENTS & LOCATION WITH OWNER PRI.
- EH PROVIDE POWER FOR REFRIGERATOR/FREEZER, PROVIDED BY OWNER. CIRCUIT FROM 20A BREAKER IN (E) EMERGENCY PANEL XA/XA1. COORD. REQUIREMENTS & LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- EI PROVIDE POWER FOR COPY MACHINE/PRINTER - BY OWNER (ASSUMED 1400W @ 120V). COORD. REQUIREMENTS & LOCATION WITH OWNER PRI.
- EJ RELOCATE ANY (E) CLEAN AGENT FIRE SUPPRESSION SYSTEM EQUIPMENT CONTROLS/WIRING/ETC. AS REQUIRED TO RELOCATE THE DOOR FOR THE CLEAN AGENT FIRE SUPPRESSION CLOSET TO ACCESS FROM NEW IT 358.
- EK PROVIDE NEW RECEPTACLE ON DEDICATED 20A @ 120V CKT FOR (E)/(R) VENDING MACHINE (ASSUMED 1,200W. CONFIRM) VERIFY/CONFIRM REQUIREMENTS PRI.
- EL ADDRESSABLE INTERFACE TO FIRE ALARM SYSTEM TO MONITOR CLEAN AGENT (NOVEC) FIRE PROTECTION SYSTEM. COORDINATE WITH OWNER'S FIRE ALARM SUB (F.A.) AND FIRE PROTECTION SUB (F.P.).
- EM RELOCATE (R) EXISTING (E) EM SHUT-DOWN BUTTON(S) & ASSOCIATED CONTROL WIRES TO DISABLE NOVEC FIRE PROTECTION (F.P.), UPS(S), & NEW IT-A/C UNITS AC-N1/CU-N1 & AC-N2/CU-N2. COORD. REQUIREMENTS WITH OWNER/I.D.C./F.P. PRI.
- EN PROVIDE RECEPTACLE, BELOW COUNTER MTD SINK, FOR EACH SINK'S SENSOR OPERATED FAUCET PLUG-IN (115V). CIRCUIT THROUGH A DEAD FRONT GFI (LABELED AS SUCH) OR THROUGH NEARBY GFI RECEPT THAT IS IN AN ACCESSIBLE LOCATION. COORD. LOCATION WITH P.C. PRI.
- EO ALL WORK IN THIS AREA TO BE COORDINATED WITH OWNER & OWNER'S IT/DATA-CENTER CONTRACTOR (I.D.C.) TO ENSURE NO INTERRUPTION OF IT/DATA-CENTER SERVICES TO THE OWNER. EXISTING (E) IT EQUIPMENT/SYSTEMS (DOWNSTREAM OF UPS) ARE TO BE REMOVED/REVISED BY OWNER/I.D.C. E.C. SHALL COORDINATE ALL DEMO & NEW WORK WITHIN THE (E) IT/DATA-CENTER AREA & THE NEW IT/DATA CENTER AREAS WITH THE OWNER/I.D.C.
- EP PROVIDE 120V POWER & LOW VOLTAGE ROUGH-INS (E.G. BOXES & CONDUIT STUBBED TO ACCESSIBLE CEILING SPACE AND TO (E) ELEC. CLOSET) FOR NEW DOOR ACCESS CONTROL SYSTEM COMPONENTS (ELECTRIC STRIKE, KEYPAD, CARD READER, ETC.). LOCATE POWER SUPPLY FOR THE SYSTEM IN (E) ELEC CLOSET, CONNECTED TO A SURGE PROTECTION STRIP (W/ 30 MIN. UPS) THAT IS PLUGGED INTO AN (E) EMERGENCY POWER RECEPTACLE. F.A. SHALL PROVIDE NEW F.A. SIGNAL TO/FROM DOOR ACCESS CONTROL SYSTEM CONTROLLER AS NEEDED TO RELEASE EXIT DOORS UPON FIRE ALARM EVENT. E.C. & F.A. SHALL COORD. REQUIREMENTS WITH DOOR ACCESS CONTROL SUPPLIER/OWNER PRIOR TO ROUGH-IN. REFER TO DETAIL.
- EQ PROVIDE POWER (ASSUMED 7.2A @ 115V - VERIFY/CONFIRM) & CONTROLS FOR NEW MOTORIZED BLIND SYSTEM. COORD. LOCATIONS & REQUIREMENTS FOR NEW SWITCH, CONTROL PANEL, DATA DROP CONNECTION, ETC. WITH BLINDS SUPPLIER/CONTRACTOR PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL PLANS & SPECS FOR ADDITIONAL INFORMATION.
- ER RELOCATE (R) EXISTING (E) POWER POLE AS REQUIRED TO ACCOMMODATE THE RENOVATIONS. COORD. LOCATION WITH OWNER/FURNITURE LAYOUT PRI.
- ES PROVIDE DEDICATED 120V GFI RECEPTACLE IN BASE CABINET BELOW SINK FOR NEW/RELOCATED INSTANT HOT WATER DISPENSER (ASSUMED 1,300W - VERIFY PRI).
- ET PROVIDE NEW FLOORBOX (FB) W/ RECEIPTS AND TELECOM DEVICES IN (E) ACCESS FLOOR SYSTEM - VERIFY/CONFIRM EXACT LOCATION WITH OWNER'S REP. PRI.
- EU PROVIDE NEW RECEPT. & NEW TELECOM DROP ABOVE ACCESSIBLE CEILING FOR OWNER'S PROJECTOR. VERIFY FINAL LOCATION & REQUIREMENTS W/ OWNER PRI.
- EV PROVIDE NEW RECEPTACLE, RECONNECT/EXTEND EXISTING CIRCUITING TO NEW RECEPT.



PLAN NORTH
THIRD FLOOR ELECTRICAL PLAN - POWER NEW WORK
 SCALE: 1/8" = 1'-0"



PLAN NORTH
IT A/C NEW WORK PLAN
 SCALE: 1/8" = 1'-0"



JLK Engineering
 Project Number:
ARC 2201-01
 Mechanical | Electrical | Plumbing
 795 Fairway Dr. | Gaylord, MI 49735 | P. 989.488.4837
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Archiverde
 DESIGN ARCHITECTURE INTERIORS
 139 Ashman Street
 Midland, MI 48640

RENOVATIONS TO
 MIDLAND COUNTY SERVICES BUILDING
 MIDLAND MICHIGAN

THIRD FLOOR ELECTRICAL PLAN - POWER NEW WORK

ISSUE PERMITS & BIDS
 11-11-2024
 Revised
 ADDENDUM #3
 11-21-2024
 ADDENDUM #4
 11-27-2024

SCALE:
 AS NOTED
 PROJECT NO.
 20220400
 DRAWING NO.
E3.3

PANEL: (E) O		225A	BUSING SIZE: 225A	FED FROM: (E) SWBD-B			
# OF POLES:	42	VOLTS: 120-208/3P/4W	NEUTRAL BUS: 225A	MOUNTING: SURFACE			
PHASE:	3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ:	60	ISOLATED GROUND: NO	REMARKS:				
LOCATION: (E) ELEC ROOM 118							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	WACS AND NEW & (E) LIGHTING - 121,124,128 & 133	780				
3	(E) 30	(E) COPIER IN ROOM 108		0			
5	-	-			0		
7	(E) 20	(E) RECEPTS - 133 & 135	720				
9	(E) 20	(E) RECEPTS - 134 & 135		720			
11	(E) 20	(E) RECEPTS - 134 & 143			720		
13	(E) 20	(E) RECEPTS - 133	720				
15	(E) 20	(E) POWER POLE - 133		180			
17	(E) 20	(E) POWER POLE - 133			180		
19	(E) 20	(E) ATRIUM SHADING ON ROOF	0				
21	(E) 20	(E) EXTERIOR RECEPTS - EAST SIDE		720			
23	(E) 20	(E) RECEPTS - 117 & 124			360		
25	(E) 20	(E) RECEPTS - 117 & 124	720				
27	(E) 20	(E) RECEPTS - 117, 124, 126		720			
29	(E) 20	(E) RECEPTS - 124 & 125			720		
31	(E) 20	(E) PRINTER IN 133	1000				
33	(E) 20	(E) RECEPTS - 133		540			
35	(E) 20	(E) RECEPTS - 131			360		
37	(E) 20	(E) RECEPTS - 131 & 132	720				
39	(E) 20	TAF-2 & CUH-5		160			
41	(E) 20	TAF-1 & CUH-6 IN 131			160		
2	(E) 20	(E) LIGHTING - 159		1224			
4	(E) 20	(E) RECEPTS - 108			360		
6	(E) 20	(E) RECEPTS - 107				540	
8	(E) 20	(E) POWER POLE 122	180				
10	(E) 20	(E) POWER POLE 122		180			
12	(E) 20	(E) RECEPT - 122			180		
14	(E) 20	(E) RECEPTS - 122 & 127	720				
16	(E) 20	(E) SPARE		0			
18	(E) 20	NEW & (E) RECEPTS - 123, 128 & 155			720		
20	(E) 20	(E) RECEPTS - 123 & 129	720				
22	(E) 20	(E) & NEW RECEPTS - 128		540			
24	(E) 20	(E) PRINTER IN 128			1000		
26	(E) 20	(E) RECEPTS - 126, 127, 128	720				
28	(E) 20	POWER POLE IN ROOM 128		180			
30	(E) 20	POWER POLE IN ROOM 128			180		
32	(E) 20	(E) RECEPTS - 128, 129 & 155	720				
34	(E) 20	HOT WATER DISPENSER IN 128		1300			
36	(E) 20	RECEPTS - COUNTER IN 128			540		
38	(E) 20	(E) SPARE	0				
40	(E) 20	SHUTTER DOOR IN 128		1200			
42	(E) 20	SHUTTER DOOR IN 122 & 148			1800		
KVA:	23	CONNECTED AMPS:	64.4	PHASE WATTS:	8,944	6,800	7,460
DEMAND KVA:	00	DEMAND AMPS:	00.0				

PANEL: (E) XA		200A MCB	BUSING SIZE: 200A	FED FROM: (E) XMFR X			
# OF POLES:	42	VOLTS: 120-208/3P/4W	NEUTRAL BUS: 225A	MOUNTING: RECESSED			
PHASE:	3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ:	60	ISOLATED GROUND: NO	REMARKS:				
LOCATION: (E) STORAGE ROOM 158							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) NIGHT LIGHTS - BASEMENT & 1ST FLOOR	750				
3	(E) 20	(E) TEMP CONTROL PANEL - BASEMENT		0			
5	(E) 20	(E) NIGHT LIGHTS & NEW EM LIGHTS 1ST FLOOR			741.8		
7	(E) 20	(E) LIGHTING - 156	910				
9	(E) 20	(E) LIGHTING - 115, 116 & 118		580			
11	(E) 20	(E) NOVAK SYSTEM FOR VAULT 120			0		
13	(E) 20	(E) RECEPTS - 152	360				
15	(E) 20	(E) SPARE		0			
17	(E) 20	(E) RECEPTS - 019			360		
19	(E) 20	(E) FIRE ALARM PANEL	0				
21	(E) 20	(E) ELEVATOR LIGHT		0			
23	(E) 20	(E) ELEVATOR LIGHT			0		
25	(E) 20	(E) RECEPT - 158	180				
27	(E) 20	(E) COMMUNICATION CONTROL		0			
29	(E) 20	REFRIGERATOR RECEPT - 128			1000		
31	(E) 20	(E) RECEPTS - 156	360				
33	(E) 20	(E) RECEPTS - 153		540			
35	(E) 20	(E) RECEPT FOR MICROWAVE IN 152			1100		
37	(E) 20	(E) NOVAK SYSTEM FOR VAULT 131	0				
39	(E) 20	(E) NOVAK SYSTEM FOR VAULT 129		0			
41	(E) 20	(E) RECEPT FOR HOT WATER IN 152			1300		
2	(E) 20	(E) EXIT LIGHTING - BASEMENT & 1ST FLOOR	30				
4	(E) 20	(E) SPARE		0			
6	(E) 20	(E) LIGHTING - 156			1050		
8	(E) 20	(E) LIGHTING - 152, 157, 158 & 159	823				
10	(E) 20	(E) RECEPT - BASEMENT TELE ROOM		180			
12	(E) 20	(E) RECEPT - BASEMENT TELE ROOM			180		
14	(E) 20	(E) HEATER BATT CHARGE EM GEN	0				
16	(E) 20	(E) RECEPT - 156 TABLE		360			
18	(E) 20	(E) SOUND SYSTEM - 156			0		
20	(E) 20	(E) RECEPTS - 156 TABLE & PODIUM	360				
22	(E) 20	(E) RECEPTS - 159		360			
24	(E) 20	(E) RECEPTS - 159 & (E) ROLL UP DOOR 133			360		
26	(E) 20	(E) RECEPTS - 159	360				
28	(E) 20	(E) RECEPTS - 159		360			
30	(E) 20	(E) RECEPTS - 159			360		
32	(E) 100	TO (E) PANEL X4 - 4TH FLOOR	0				
34	-	-		0			
36	-	-			0		
38	(E) 100	TO (E) PANEL XA1 - 2ND FLOOR	0				
40	-	-			0		
42	-	-			0		
KVA:	13	CONNECTED AMPS:	36.0	PHASE WATTS:	4,133	2,380	6,452
DEMAND KVA:	00	DEMAND AMPS:	00.0				

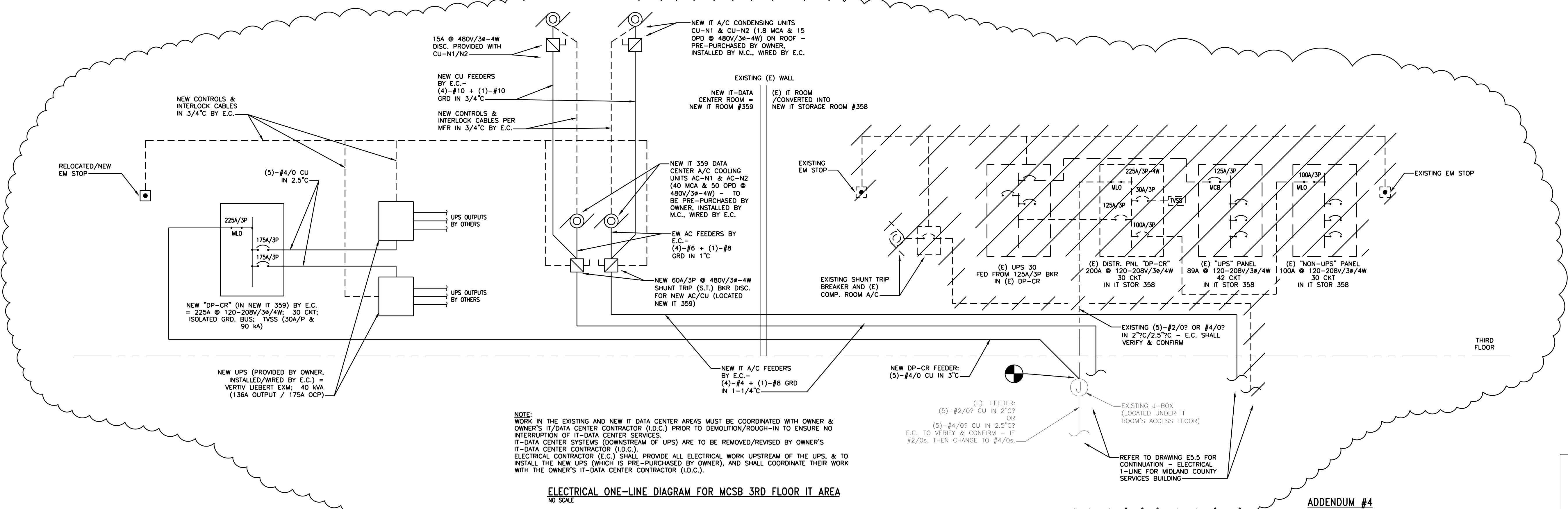
PANEL: (E) N		225A	BUSING SIZE: 225A	FED FROM: (E) SWBD-B			
# OF POLES:	42	VOLTS: 120-208/3P/4W	NEUTRAL BUS: 225A	MOUNTING: SURFACE			
PHASE:	3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ:	60	ISOLATED GROUND: NO	REMARKS:				
LOCATION: (E) ELEC ROOM 118							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) LIGHTING - 156		0			
3	(E) 20	(E) LIGHTING - 156		0			
5	(E) 20	(E) LIGHTING - 156			0		
7	(E) 20	(E) RECEPTS - 154 & 147	720				
9	(E) 20	(E) DOOR HARDWARE - 111,112 & 113		500			
11	(E) 20	(E) RECEPTS - 147			720		
13	(E) 20	(E) & NEW RECEPTS - 148 & 149	720				
15	(E) 20	(E) SPARE		0			
17	(E) 20	(E) RECEPTS - 154,155 & 147			540		
19	(E) 20	(E) PRINTER IN 117	1000				
21	(E) 20	(E) RECEPTS - 121, 155 & COUNTER 121		720			
23	(E) 20	(E) COPIER IN 117			1000		
25	(E) 20	(E) LAWN SPRINKLER SYSTEM	1000				
27	(E) 20	(E) EXTERIOR RECEPTS		720			
29	(E) 20	(E) RECEPTS - TREASURY VAULT			720		
31	(E) 20	(E) RECEPTS - 117 & 120	720				
33	(E) 20	(E) RECEPTS - 114 & 117 & CLOCK		460			
35	(E) 20	(E) RECEPTS - 115,116 & 117			720		
37	(E) 20	(E) TAF-3	100				
39	(E) 20	(E) RECEPTS - 117 & 120		720			
41	(E) 20	(E) UH-2, (E) CUH-3 & (E) CUH-4			100		
2	(E) 20	(E) LIGHTING - 156		0			
4	(E) 20	(E) LIGHTING - 156		0			
6	(E) 20	(E) FLOOR RECEPTS - 153			360		
8	(E) 20	(E) RECEPTS - 104 & 106	540				
10	(E) 20	(E) RECEPTS - 106 & 146		720			
12	(E) 20	(E) SPARE			0		
14	(E) 20	NEW & (E) RECEPTS - 106 & 147	720				
16	(E) 20	(E) RECEPTS - 149		720			
18	(E) 20	RECEPTS - 105			720		
20	(E) 20	(E) FLOOR RECEPT - 153	180				
22	(E) 20	(E) RECEPTS - MAIN DOOR		0			
24	(E) 20	(E) DOOR OPENER OUTSIDE		0			
26	(E) 20	(E) DOOR OPENER INSIDE	0				
28	(E) 20	(E) HEAT MATS FRONT ENTRANCE		0			
30	-	-			0		
32	(E) 20	(E) RECEPTS - 140 & (E) UH-1	590				
34	(E) 20	(E) RECEPTS - 140 & 149		720			
36	(E) 20	(E) RECEPTS - 139			720		
38	(E) 20	(E) RECEPTS - 101, 103 & 136	720				
40	(E) 20	(E) CUH-2		100			
42	(E) 20	(E) RECEPTS - 104 & 153 & CLOCK			540		
KVA:	19	CONNECTED AMPS:	51.4	PHASE WATTS:	7,010	5,380	6,140
DEMAND KVA:	00	DEMAND AMPS:	00.0				

PANEL: (E) H		100A	BUSING SIZE: 100A	FED FROM: (E) SWBD-A			
# OF POLES:	24	VOLTS: 277-480/3P/4W	NEUTRAL BUS: 100A	MOUNTING: SURFACE			
PHASE:	3	GROUND BUS: YES	TVSS: NO	AIC RMS AMPS: 14,000			
HERTZ:	60	ISOLATED GROUND: NO	REMARKS:				
LOCATION: (E) ELEC ROOM 118							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) LIGHTS-103,109,111,112,113,114,120,143,145,153,154,15	2883				
3	(E) 20	(E) LIGHTING - 117, 121 & 122		3383			
5	(E) 20	(E) LIGHTING - 107, 108, 129, 131, 132 & 133			3268		
7	(E) 20	(E) SPARE	0				
9	(E) 20	(E) SPARE		0			
11	(E) 20	(E) SPARE			0		
13	-	-	0				
15	-	-		0			
17	-	-	0				
19	-	-		0			
21	-	-			0		
23	-	-			0		
2	(E) 20	NEW & (E) LIGHTING - 104,105,106,146,148,149 & 147	1373.8				
4	(E) 20	NEW & (E) LIGHTING - 123,124,125,126,127 & 128		1660.6			
6	(E) 20	NEW & (E) LIGHTING - 134,135,136,139 & 140			2036.7		
8	(E) 20	(E) SPARE	0				
10	(E) 20	(E) SPARE		0			
12	(E) 20	(E) SPARE			0		
14	-	-	0				
16	-	-		0			
18							

PANEL: (E) R		225A		BUSSING SIZE: 225A		FED FROM: (E) SWBD-B	
# OF POLES:	42	VOLTS:	120-208/3P/4W	NEUTRAL BUS:	225A	MOUNTING:	SURFACE
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 325.1							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) RECEPTS - 304 & 307	720				
3	(E) 20	(E) RECEPTS - 313, 304 & 305		540			
5	(E) 20	(E) RECEPTS - 309, 304, 305 & 307			720		
7	(E) 20	RECEPTS - 358, 359 & 371	720				
9	(E) 20	(E) RECEPTS - 305 & 307		720			
11	(E) 20	(E) RECEPTS - 309			540		
13	(E) 20	RECEPTS - 325, 308 & 309	540				
15	(E) 20	(E) SPARE		0			
17	(E) 20	(E) SPARE			0		
19	(E) 20	RECEPTS - 371	720				
21	(E) 20	RECEPTS - 329		720			
23	(E) 20	NEW & (E) RECEPTS - 354			360		
25	(E) 20	DEDICATED RECEIPT FOR VENDING MACHINE	1200				
27	(E) 30	(E) SPARE		0			
29	-	-			0		
31	(E) 50	(E) SPARE	0				
33	-	-		0			
35	(E) 20	RECEPT - 323			360		
37	(E) 20	(E) RECEPTS - 364 & 358	540				
39	(E) 20	(E) RECEPTS - 321, 318 & 319		720			
41	(E) 20	(E) UNIT HEATER IN ROOM 318			400		
2	(E) 20	(E) RECEPTS - 306 & 315	720				
4	(E) 20	(E) RECEPTS - 306, 308 & 315		720			
6	(E) 20	(E) RECEPTS - 318, 308 & 364			720		
8	(E) 20	(E) RECEPTS - 308	720				
10	(E) 20	DEDICATED RECEIPT FOR VENDING MACHINE		1200			
12	(E) 20	(E) RECEPTS - 367, 364 & 308			540		
14	(E) 20	NEW & (E) RECEPTS - 369 & 371	540				
16	(E) 20	(E) RECEPTS - 369		720			
18	(E) 20	RECEPT - 322			360		
20	(E) 20	(E) RECEPTS - 313, 363 & 309	720				
22	(E) 20	SHUTTER DOOR FOR ROOM 373		1100			
24	(E) 20	SHUTTER DOOR FOR ROOM 374			1100		
26	(E) 20	SHUTTER DOOR FOR ROOM 352	1100				
28	(E) 20	MOTORIZED BLINDS FOR ROOM 371 (7.2A MAX)		900			
30	(E) 20	SHUTTER DOOR FOR ROOM 338			1100		
32	(E) 30	(E) SPARE	0				
34	(E) 20	(E) AUTOMATIC DOOR OPENERS		120			
36	(E) 20	DEDICATED RECEIPT FOR VENDING MACHINE			1200		
38	(E) 20	SHUTTER DOOR FOR ROOM 329	1100				
40	(E) 20	RECEPT FOR COPIER IN ROOM 352		1400			
42	(E) 20	NEW & (E) RECEPTS - 367			720		
KVA:	26	CONNECTED AMPS:	73.1	PHASE WATTS:	9,340	8,860	8,120
DEMAND KVA:	00	DEMAND AMPS:	00.0				

PANEL: (E) S		225A		BUSSING SIZE: 225A		FED FROM: (E) SWBD-B	
# OF POLES:	42	VOLTS:	120-208/3P/4W	NEUTRAL BUS:	225A	MOUNTING:	SURFACE
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 325.1							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	RECEPTS - 355	720				
3	(E) 20	RECEPTS - 351 & 353		720			
5	(E) 20	(E) SPARE			0		
7	(E) 20	(E) RECEPTS - 361 & 313	540				
9	(E) 20	(E) RECEPTS - 313		360			
11	(E) 20	(E) RECEPTS - 349 & 361			720		
13	(E) 20	NEW & (E) RECEPTS - 349	720				
15	(E) 20	(E) RECEPTS - 349, 352 & 363		720			
17	(E) 20	(E) SPARE			0		
19	(E) 20	(E) REFRIGERATOR - 362	1200				
21	(E) 20	(E) SPARE		0			
23	(E) 20	RECEPTS - 335 & 329			720		
25	(E) 20	(E) RECEPT IN ROOM 362	180				
27	(E) 20	(E) HOT WATER IN ROOM 362		1300			
29	(E) 20	(E) DISPOSER IN ROOM 362			700		
31	(E) 20	(E) RECEPTS - 336	360				
33	(E) 20	(E) RECEPTS - 335 & 332		720			
35	(E) 20	(E) RECEPTS - 332			540		
37	(E) 20	(E) RECEPTS - 365 & 366	540				
39	(E) 20	RECEPTS FOR WACs		360			
41	(E) 20	NEW & (E) RECEPTS - 328			720		
2	(E) 20	(E) SPARE	0				
4	(E) 30	(E) FC-1 SERVING ROOM 369		730			
6	-	-			730		
8	(E) 20	RECEPTS - 362, 338 & 337	720				
10	(E) 20	(E) RECEPTS - 351 & 352		540			
12	(E) 20	(E) RECEPTS - 352			720		
14	(E) 20	(E) RECEPTS - 353 & 362	720				
16	(E) 30	(E) FC-2 SERVING ROOM 362		730			
18	-	-			730		
20	(E) 20	(E) RECEPTS - 338 & 362	720				
22	(E) 20	RECEPTS - 329 & 328		720			
24	(E) 20	(E) RECEPTS - 337 & 338			720		
26	(E) 20	NEW & (E) RECEPTS - 339 & 336	720				
28	(E) 20	RECEPTS - 331		720			
30	(E) 20	(E) SPARE			0		
32	(E) 20	NEW & (E) RECEPTS - 327	720				
34	(E) 20	NEW & (E) RECEPTS - 324		720			
36	(E) 20	NEW & (E) RECEPTS - 326			720		
38	(E) 20	(E) SPARE	0				
40	(E) 20	(E) RECEPTS - 359		360			
42	(E) 20	RECEPTS - 352, 329, 327 & 332			720		
KVA:	24	CONNECTED AMPS:	67.5	PHASE WATTS:	7,860	8,700	7,740
DEMAND KVA:	00	DEMAND AMPS:	00.0				

PANEL: (E) K		100A		BUSSING SIZE: 100A		FED FROM: (E) SWBD-A	
# OF POLES:	24	VOLTS:	277-480/3P/4W	NEUTRAL BUS:	100A	MOUNTING:	SURFACE
PHASE:	3	GROUND BUS:	YES	TVSS:	NO	AIC RMS AMPS:	14,000
HERTZ:	60	ISOLATED GROUND:	NO	REMARKS:			
LOCATION: (E) ELEC ROOM 325.1							
CIRCUIT	BREAKER	DESCRIPTION	A	B	C		
1	(E) 20	(E) SPARE	0				
3	(E) 20	LIGHTING - 349, 355, 351, 353, 352, 362, 338, 337, 336 & 339		1306.5			
5	(E) 20	LIGHTING - 321, 318, 319, 364, 363, 369, 365, 367, 325/1, 322&323			1828.2		
7	(E) 20	(E) SPARE	0				
9	(E) 20	(E) SPARE		0			
11	(E) 20	(E) SPARE			0		
13	(E) 20	(E) SPARE	0				
15	(E) 20	(E) SPACE		0			
17	(E) 20	(E) SPACE			0		
19	(E) 20	(E) VVB #304	1939				
21	(E) 20	(E) SPACE		0			
23	(E) 20	(E) SPACE			0		
2	(E) 20	(E) SPARE	0				
4	(E) 20	LIGHTS - 306, 308, 303, 307, 305, 304, 309, 313, 372 & 361		1388.9			
6	(E) 20	LIGHTING - 335, 331, 328, 324, 329, 326 & 354			847.4		
8	(E) 20	(E) SPARE	0				
10	(E) 20	(E) SPARE		0			
12	(E) 20	(E) SPARE			0		
14	(E) 20	(E) SPACE	0				
16	(E) 20	(E) SPACE		0			
18	(E) 20	(E) SPACE			0		
20	(E) 20	(E) VVB #305	1939				
22	(E) 20	(E) SPACE		0			
24	(E) 20	(E) SPACE			0		
KVA:	09	CONNECTED AMPS:	11.1	PHASE WATTS:	3,878	2,695	2,676
DEMAND KVA:	09	DEMAND AMPS:	11.1				



ELECTRICAL ONE-LINE DIAGRAM FOR MCSB 3RD FLOOR IT AREA
NO SCALE

ADDENDUM #4



SCALE: AS NOTED
PROJECT NO. 20220400
DRAWING NO. E5.4

ELECTRICAL DETAILS

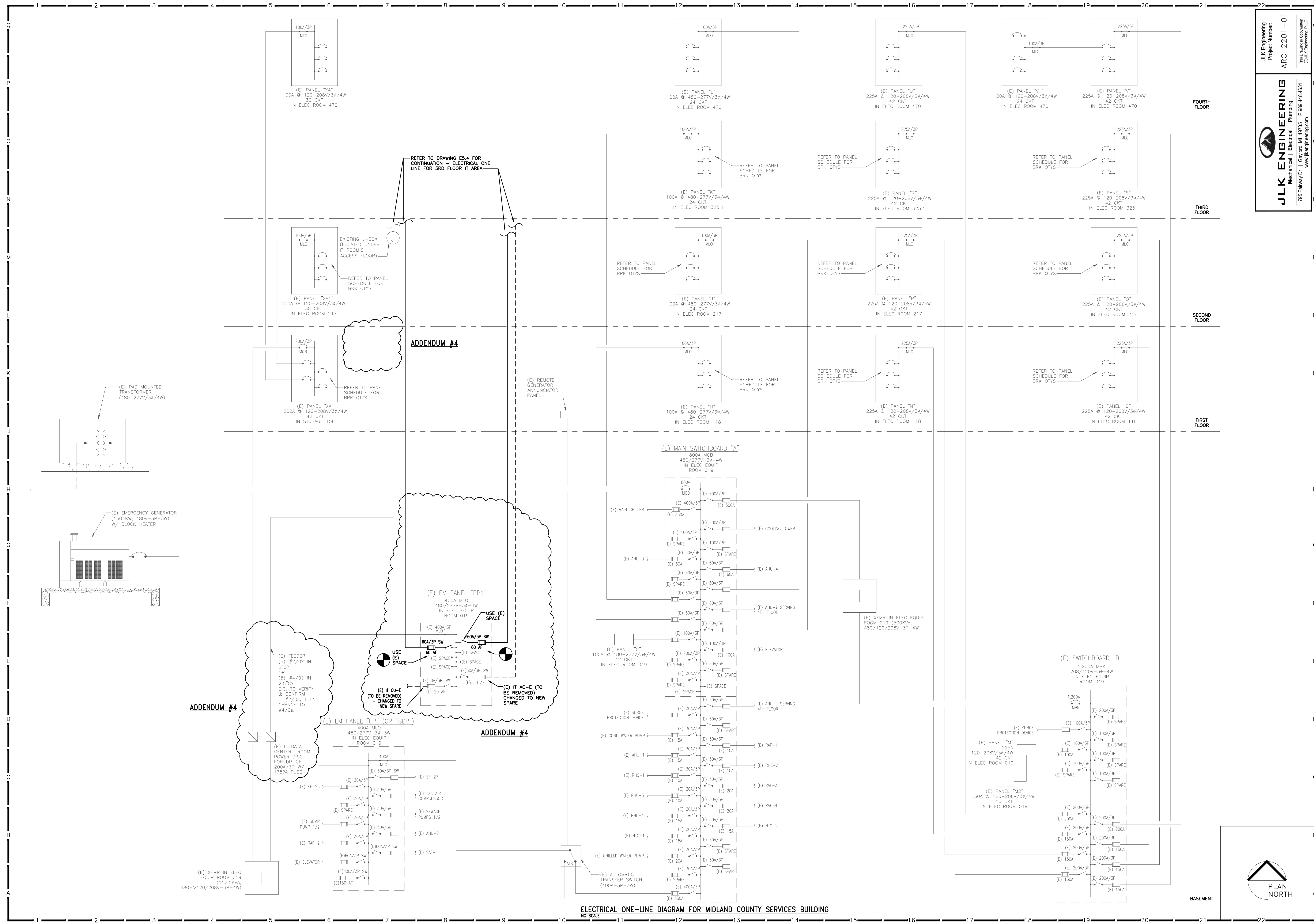
ISSUE PERMITS & BIDS 11-11-2024
Revised ADDENDUM #3 11-21-2024
ADDENDUM #4 11-27-2024

RENOVATIONS TO MIDLAND COUNTY SERVICES BUILDING
MIDLAND MICHIGAN

Archiverde
DESIGN ARCHITECTURE INTERIORS
139 Ashman Street
Midland, MI 48640

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Mechanical | Electrical | Plumbing
795 Fairway Dr., Gaylord, MI 49735 | P. 989.468.4637
www.jlkeengineering.com

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ELECTRICAL ONE-LINE DIAGRAM FOR MIDLAND COUNTY SERVICES BUILDING
NO SCALE

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RENOVATIONS TO
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MIDLAND MICHIGAN

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ISSUE PERMITS & BIDS
11-11-2024
Revised
ADDENDUM #3
11-21-2024
ADDENDUM #4
11-27-2024

SCALE:
AS NOTED

PROJECT NO.
20220400
DRAWING NO.

E5.5



JLK Engineering Project: 20220400 Midland County Services Building Rev: 02/2024 Date: 11/27/2024 File: E5.5.dwg DWG by: JPK/AS