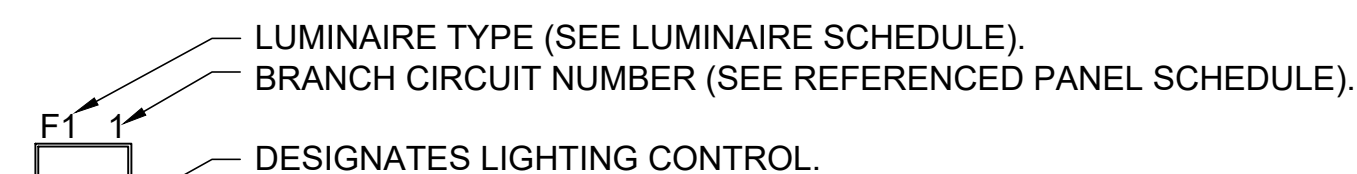


ELECTRICAL LEGEND

LIGHTING (FIXTURES)



NOTE: NUMBER ADJACENT TO LIGHTING FIXTURE INDICATES BRANCH CIRCUIT NUMBER. LOWERCASE LETTER ADJACENT TO LIGHTING FIXTURE INDICATES SWITCHING ARRANGEMENT. UNLESS OTHERWISE NOTED, LIGHTING IN EACH ROOM/AREA SHALL BE CONTROLLED BY WALL SWITCH(ES) OR OCCUPANCY SENSOR(S) SHOWN IN THAT ROOM/AREA. PROVIDE SWITCH CONTROL WIRING IN QUANTITY AND CONFIGURATION REQUIRED TO PROVIDE SWITCHING FUNCTIONS INDICATED.

- 2'X4' RECESSED TROFFER
- STRIP LIGHT.
- LIGHT FIXTURE CONNECTED TO BATTERY INVERTER.
- CEILING MOUNTED, ILLUMINATED EXIT SIGN. NUMBER OF SHADED QUADRANTS = NUMBER OF FACES, ARROWS (IF ANY) INDICATE DIRECTION OF EGRESS. PROVIDE WITH BATTERY BALLAST.
- WALL MOUNTED, ILLUMINATED EXIT SIGN. NUMBER OF SHADED QUADRANTS = NUMBER OF FACES, ARROWS (IF ANY) INDICATE DIRECTION OF EGRESS. PROVIDE WITH BATTERY BALLAST.

LIGHTING CONTROL

- S** RECESSED MOUNTED SINGLE POLE 20A SWITCH, RATED 120/277 VAC. (LETTER SUFFIX INDICATES LIGHT FIXTURES CONTROLLED), 3=3 WAY, 4=4 WAY, OS=OCCUPANCY SENSOR. WALL MOUNT 48" AFF UON.

FIRE ALARM

- F** FIRE ALARM MANUAL PULL STATION
- FIRE ALARM HORN STROBE
- FIRE ALARM STROBE LIGHT
- SMOKE DETECTOR
- HEAT DETECTOR
- DUCT DETECTOR
- FACP** FIRE ALARM CONTROL PANEL
- FAAP** FIRE ALARM REMOTE ANNUNCIATOR PANEL
- TS** TAMPER SWITCH
- FS** WATER FLOW SWITCH
- MM** MONITORING MODULE

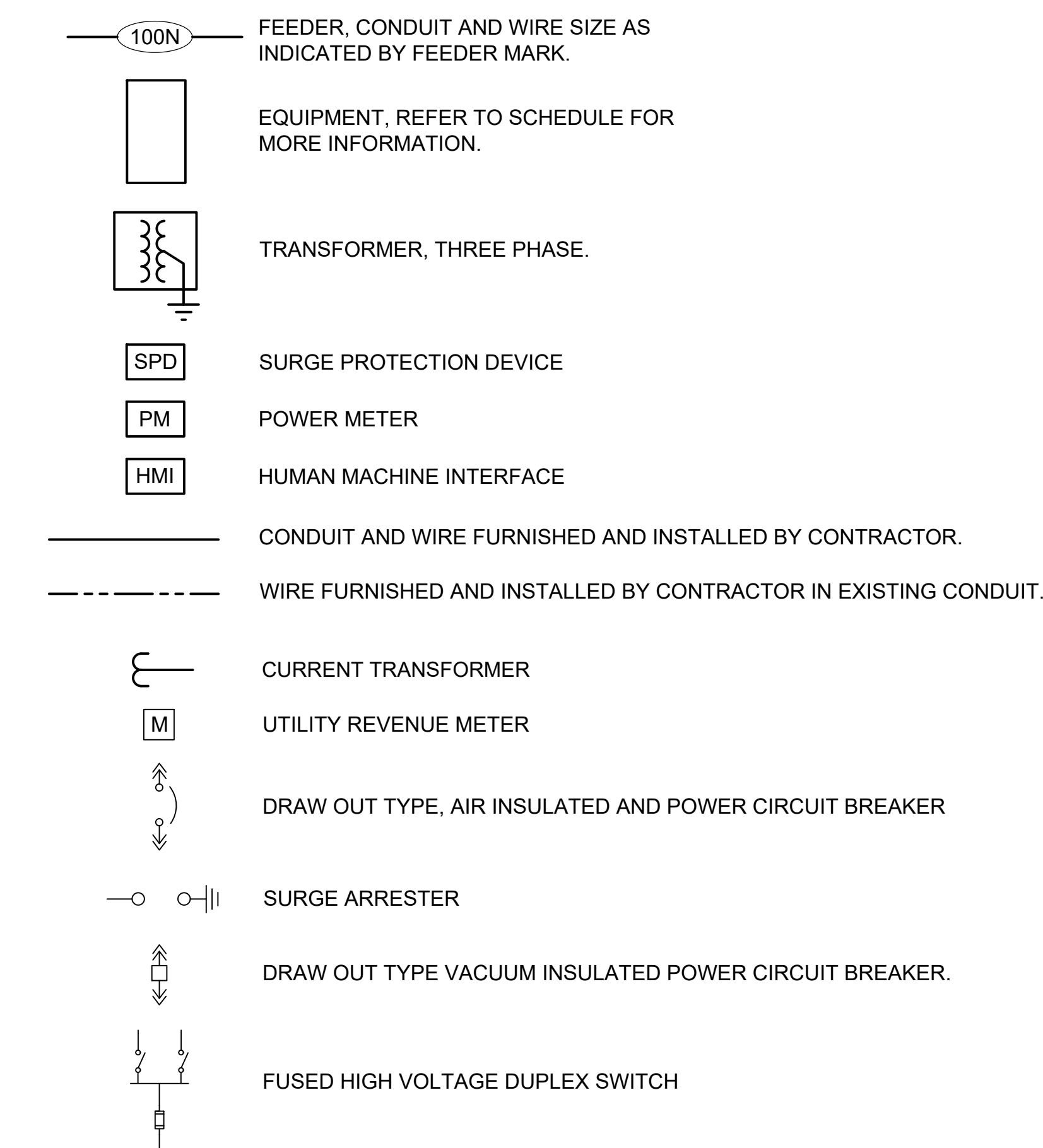
ABBREVIATIONS

A AMPERES	IG ISOLATED GROUND
AC ALTERNATING CURRENT	IP INTERNET PROTOCOL
AFC ABOVE FINISHED COUNTER	K KILO
AFF ABOVE FINISHED FLOOR	KCMIL THOUSAND CIRCULAR MILLS
AFG ABOVE FINISHED GRADE	LRP LIGHTING RELAY PANEL
AHU AIR HANDLING UNIT	MAX MAXIMUM
AIC AMPERES INTERRUPTING CAPACITY	MCB MAIN CIRCUIT BREAKER
ATS AUTOMATIC TRANSFER SWITCH	MCP MOTOR CIRCUIT PROTECTOR
BIL BASIC IMPULSE LEVEL	MLO MAIN LUGS ONLY
BOT BOTTOM OF TRAY	MIN MINIMUM
BMS BUILDING MANAGEMENT SYSTEM	N NEUTRAL
C CONDUIT	NEC NATIONAL ELECTRIC CODE (NFPA 70)
CFCI CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	NIC NOT IN CONTRACT
CM DEVICE LOCATION SHALL BE COORDINATED WITH ARCHITECT AND ARCHITECTURAL ELEVATIONS	NTS NOT TO SCALE
CMU CONCRETE MASONRY UNIT	OC ON CENTER
CPT CONTROL POWER TRANSFORMER	OFCI OWNER FURNISHED, CONTRACTOR INSTALLED
CTL CONTROL	PC PHOTOCELL
DDC DIRECT DIGITAL CONTROL	PNL PANEL
EC EMPTY CONDUIT	PNL BD PANEL BOARD
EF EXHAUST FAN	PVC POLY-VINYL CHLORIDE CONDUIT
EGC EQUIPMENT GROUNDING CONDUCTOR	PV POST INDICATOR VALVE
EM DEVICE OR EQUIPMENT CONNECTED TO EMERGENCY POWER	RGSC GALVANIZED STEEL CONDUIT
EMT ELECTRICAL METALLIC TUBING	REC RECEPTACLE
ETR EXISTING TO REMAIN	RECP RECEPTACLE
FACP FIRE ALARM CONTROL PANEL	RL RELOCATED
FVNR FULL VOLTAGE, NON-REVERSING	RMC RIGID METAL CONDUIT
G GROUND	RMS ROOT MEAN SQUARE
GFI GROUND FAULT INTERRUPTER	RN INSTALL NEW DEVICE IN EXISTING BACK-BOX
GFCI GROUND FAULT INTERRUPTER	SYM SYMMETRICAL
GFP GROUND FAULT PROTECTION	SWBD SWITCHBOARD
GND GROUND	TFMR TRANSFORMER
GRD GROUND	TFTI TENANT FURNISHED, TENANT INSTALLED
GRS GALVANIZED RIGID STEEL CONDUIT	TBD TO BE DETERMINED
H DEVICE MOUNTED HORIZONTALLY	TYP TYPICAL
HID HIGH INTENSITY DISCHARGE	UON UNLESS OTHERWISE NOTED
HP HORSEPOWER	UPS UNINTERRUPTED POWER SUPPLY
HPS HIGH PRESSURE SODIUM	V VOLTS
HVAC HEATING, VENTILATION AND COOLING UNIT	VFD VARIABLE FREQUENCY DRIVE
	WP WEATHERPROOF
	XFMR TRANSFORMER

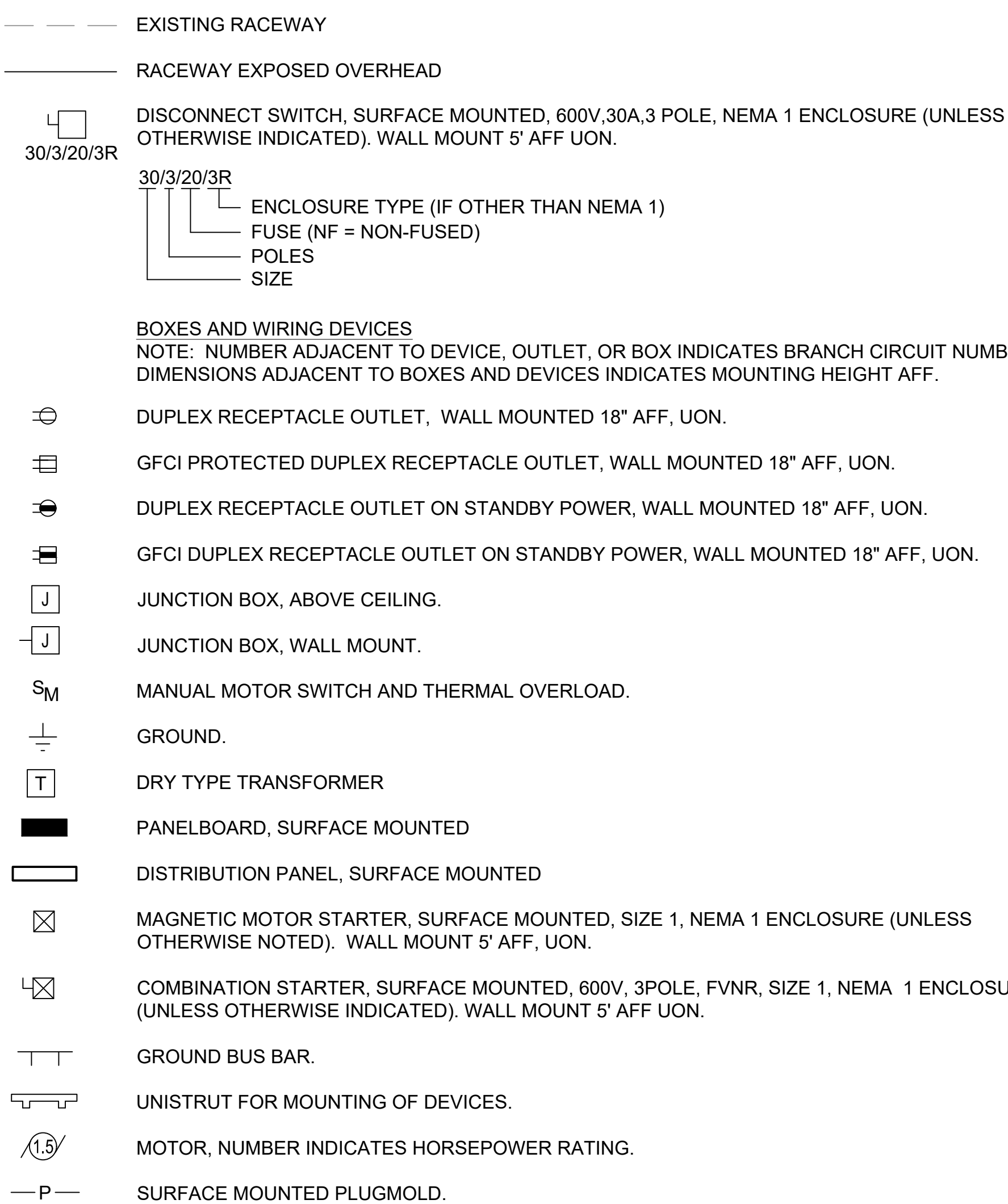
FIRE/SMOKE, BARRIERS, AND PARTITIONS

- SMOKE BARRIER
- 1 HOUR FIRE BARRIER
- 2 HOUR FIRE BARRIER
- 3 HOUR FIRE BARRIER

ONE-LINE DIAGRAM LEGEND



POWER SYMBOLS



PROJECT ELECTRICAL PHASING NARRATIVE

MAJOR PROJECT SCOPE INCLUDES REPLACEMENT OF EXISTING PULLBOXES ASSOCIATED WITH DUCTBANK DB301 AND RE-CIRCUITING TEACHING HOSPITAL LOADS OFF OF THE CCA GENERATOR SYSTEM AND ONTO THE TEACHING HOSPITAL GENERATOR SYSTEM. RECOMMENDED PHASING:

- PHASE 1: PROVIDE TEMPORARY NORMAL POWER SOURCE IN GE08. REMOVE ALL CONDUCTORS CURRENTLY ROUTED THROUGH DUCTBANK DB301, AND DEMOLISH EXISTING PULLBOXES ASSOCIATED WITH DUCTBANK DB301. INCLUDES REMOVAL OF PANELS GL-4, GL-5, GL-6, AND ASSOCIATED PULLBOX IN GASOLINE ALLEY, INSTALLATION OF NEW PANEL CD1-2, AND RE-LOCATION OF EXISTING LIGHTING INVERTERS.
- PHASE 2: PROVIDE NEW PULLBOXES ASSOCIATED WITH DUCTBANK DB301. RE-CIRCUIT FIRE PUMP TO THE TEACHING HOSPITAL GENERATOR PLANT AND PROVIDE TEMPORARY GENERATOR SERVICE TO EXISTING GE08 TRANSFER SWITCHES. REMOVE CCA GENERATOR SERVICE TO GE08.
- PHASE 3: INSTALL PERMANENT SERVICES FROM THE TEACHING HOSPITAL GENERATOR PLANT. REMOVE TEMPORARY GENERATOR SERVICE, AND REMOVE REMAINING TRANSFER SWITCHES IN GE08. RE-CIRCUIT CT 1E-17, HYBRID PANEL MP, PROVIDE NEW CRITICAL DISTRIBUTION TO OR SUITE AND RE-CIRCUIT HALF OF THE OR ISOLATION POWER PANELS.

PROJECT GENERAL NOTES

- PERFORM WORK AT SUCH TIME AND IN SUCH MANNER TO MINIMIZE INCONVENIENCE TO THE OWNER AND AS APPROVED BY THE ENGINEER. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.
- THE OWNER INTENDS TO CONTINUE OPERATIONS THROUGHOUT THE DURATION OF THE PROJECT. UTILITIES SHALL NOT BE INTERRUPTED WITHOUT THE OWNER'S WRITTEN APPROVAL AS TO THE TIME AND DURATION OF THE OUTAGE.
- CONSTRUCTION PHASING IS CRITICAL TO HOSPITAL SERVICES AND THE PROMPT RESTORATION OF ALL SERVICES AFTER SCHEDULED OUTAGES IS REQUIRED.
- ALL UTILITY OUTAGES SHALL BE COORDINATED WITH OWNER NO LESS THAN 10 BUSINESS DAYS IN ADVANCE OF STARTING WORK. OUTAGES SHALL OCCUR DURING OFF HOURS AND NOT DURING ADVERSE WEATHER. OFF HOURS SHALL BE AFTER 10PM AND BEFORE 5AM. OUTAGES SHOULD BE PRIORITIZED DURING WEEKDAYS WHEN POSSIBLE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING THE EXTENT OF OUTAGES OF HOSPITAL SERVICES PRIOR TO SCHEDULING OUTAGES WITH THE HOSPITAL FACILITIES.
- CONTRACTOR IS REQUIRED TO USE THE OWNERS HOT WORK AND UTILITY OUTAGE PERMIT REQUIREMENTS PER OWNER'S HEALTHCARE CONSTRUCTION SAFETY REQUIREMENTS DOCUMENT.
- ALL CIRCUIT CONDUCTORS AND RACEWAYS SHALL BE LABELED IN ACCORDANCE WITH SPECIFICATION 260553.
- LEGEND IS GENERAL IN NATURE AND MAY INDICATE MORE INFORMATION THAN IS APPLICABLE TO PROJECT. SEE PLANS FOR SPECIFIC SYMBOLS AND ABBREVIATIONS.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS AND EQUIPMENT LOCATIONS PRIOR TO BEGINNING ANY WORK. ALL EXISTING CONDUIT, WIRE, EQUIPMENT, DEVICES, ETC. MAY NOT BE SHOWN.
- ALL CONDUIT ROUTING AND CIRCUITING SHOWN IS DIAGRAMMATIC ONLY. EXACT ROUTING MAY VARY AND MAY REQUIRE ADDITIONAL J-BOXES AND/OR SPECIAL FITTINGS. COORDINATE INSTALLATION OF NEW WORK WITH EXISTING CONDITIONS.
- MAINTAIN EXISTING INSTALLATIONS EXCEPT WHERE INDICATED. FURNISH AND INSTALL ALL MATERIALS TO MODIFY EXISTING INSTALLATIONS AS REQUIRED TO CONNECT NEW WORK.
- WHERE EXISTING RACEWAYS AND EQUIPMENT ARE INDICATED ON THE DRAWINGS, EXACT SIZE AND LOCATION SHALL BE FIELD VERIFIED PRIOR TO BIDDING.
- DISCONNECT, REMOVE, RELOCATE AND RECONNECT ALL EXISTING ELECTRICAL COMPONENTS WHERE THE INSTALLATION OF NEW MECHANICAL, PLUMBING AND ELECTRICAL WORK CONFLICTS WITH EXISTING LUMINAIRES, ELECTRICAL DEVICES, RACEWAYS, ETC. MODIFY THE EXISTING INSTALLATION AS REQUIRED TO RESOLVE ALL CONFLICTS AS APPROVED BY THE ENGINEER AND AT NO EXTRA COST TO THE OWNER.
- FURNISH AND INSTALL CONDUIT, WIRE, CABLING, JUNCTION BOXES, ETC. AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY FOR EXISTING WIRING DEVICES AND EQUIPMENT LOCATED OUTSIDE OF THE PROJECT AREA THAT IS SERVED FROM OR THROUGH THE RENOVATION AREA.
- COORDINATE THE INSTALLATION OF NEW WORK WITH ALL NEW AND EXISTING FIELD CONDITIONS. NEW CONDUIT AND CABLE SHALL BE ROUTED AND INSTALLED IN LOCATIONS WHERE BLOCKING SERVICE TO NEW AND EXISTING EQUIPMENT IS AVOIDED.
- CONTRACTOR SHALL COORDINATE EXACT PLACEMENT OF ALL DEVICES AND EQUIPMENT SHOWN ON ELECTRICAL CONSTRUCTION DOCUMENTS WITH ARCHITECTURAL, STRUCTURAL, FIRE PROTECTION AND MECHANICAL DRAWINGS PRIOR TO FINAL PLACEMENT.
- WHERE RACEWAYS PENETRATE RATED FIRE AND SMOKE ASSEMBLIES, SUCH AS WALLS AND FLOORS, THE APPROPRIATE MATERIALS SHALL BE FURNISHED AND INSTALLED TO MAINTAIN THE FIRE AND SMOKE RATINGS. ALL FIRESTOPPING SHALL USE UL LISTED ASSEMBLIES AND BE INSTALLED BY A CERTIFIED FIRESTOPPING CONTRACTOR. SEE SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- A MAXIMUM OF SIX CURRENT-CARRYING CONDUCTORS SHALL BE INSTALLED IN EACH RACEWAY.
- AS PART OF THE GENERAL REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY KNOWN OR SUSPICIOUS ELEMENTS THAT MAY CONTAIN ASBESTOS MATERIALS. THE CONTRACTOR SHALL NOT PERFORM ANY DEMOLITION, DISTURBANCE, REMOVAL, OR PROVIDE CONNECTIONS TO THESE ELEMENTS UNTIL ALL ABATEMENT PROCEDURES HAVE BEEN PERFORMED, CORRECTED, AND VERIFIED.

no.	date	by	ckd	description
0	07/09/21	JMC	RED	ISSUED FOR BID
1	08/12/21	JMC	RED	ADDENDUM #1



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date	11/20/2020	detailed	J. CHASE
designed	R. DEBAUN	checked	R. DEBAUN



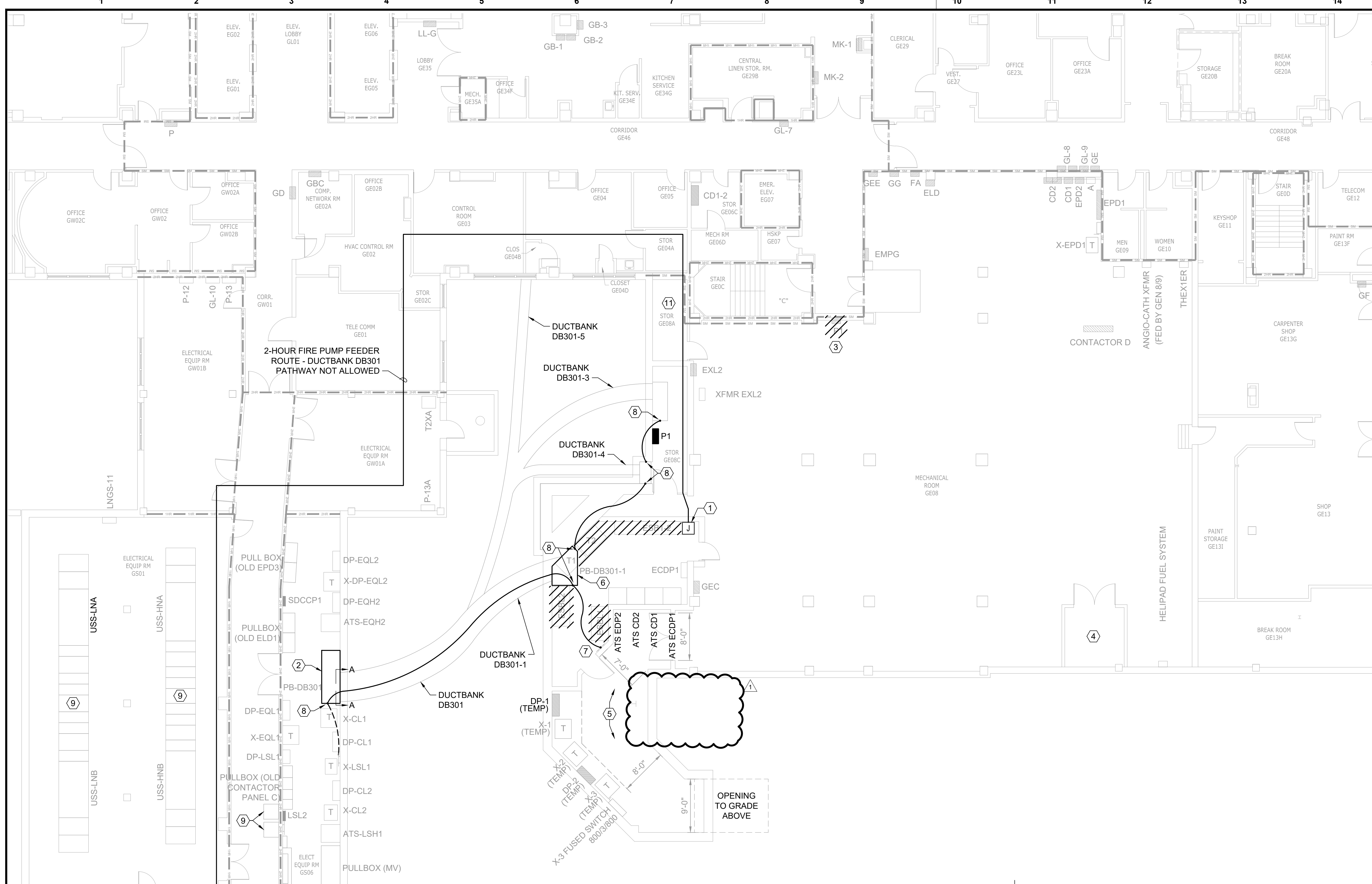
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CCA & TH EMERGENCY
POWER MODIFICATIONS
ELECTRICAL LEGEND



project	128966	contract	CP210961
drawing	E-001	rev.	1
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file	128966	E-001.DWG	

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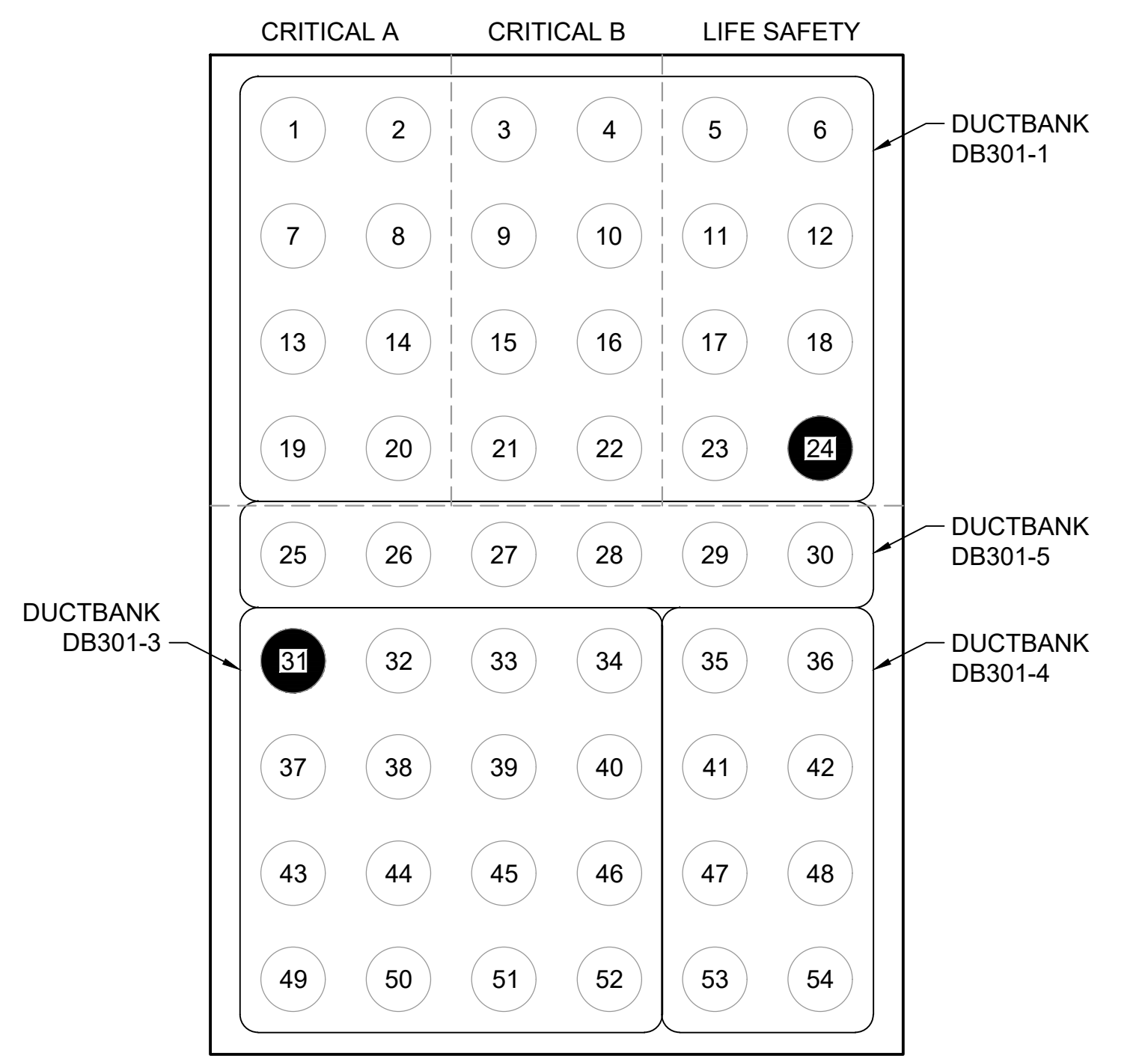
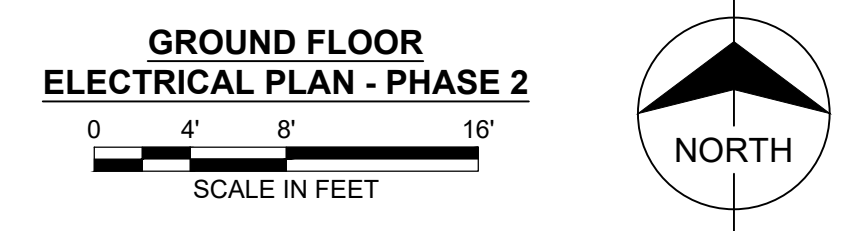


- GENERAL NOTES:**
- REFER TO SHEET E-001 FOR PROJECT GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
 - REFER TO SHEET E-502 FOR PHASE 2 PROJECT ONE-LINE DIAGRAM.
 - CLOSELY COORDINATE ALL SHUTDOWNS WITH THE OWNER PRIOR TO BEGINNING WORK. OBTAIN OWNER APPROVAL NO LESS THAN 10 BUSINESS DAYS IN ADVANCE FOR ALL SHUTDOWNS AND DISRUPTIONS AND FOLLOW ALL OWNER GUIDELINES AND PROCEDURES. REFER TO DIVISION 1 SPECIFICATION.
 - FIELD VERIFY ALL EXISTING CONDITIONS.
 - ALL ELECTRICAL EQUIPMENT SHOWN HALF TONE IS EXISTING TO REMAIN, UNO.
 - FURNISH AND INSTALL CONCRETE EQUIPMENT PADS FOR ALL FLOOR MOUNTED EQUIPMENT. SEE SPECIFICATION 'SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS' FOR REQUIREMENTS.
 - REFER TO SPEC SECTION 260553 FOR RACEWAY IDENTIFICATION REQUIREMENTS.
 - NEW PENETRATIONS THROUGH FIRE-RATED FLOOR AND WALL ASSEMBLIES SHALL BE FIRESTOPPED WITH A UL LISTED ASSEMBLY BY A CERTIFIED FIRESTOPPING CONTRACTOR. SYSTEM SHALL MATCH THE FIRE RATING OF THE ASSEMBLY TO BE PENETRATED.
 - PERFORM CONSTRUCTION RENOVATION MAINTENANCE RISK ASSESSMENT (CRMRA) AND INTERIM LIFE SAFETY MEASURES (ILSM) ANALYSIS PER OWNER'S GUIDELINES AT EACH LOCATION WHERE WORK WILL OCCUR. REFER TO DIVISION 1 SPECIFICATIONS FOR DETAILS. DO NOT PROCEED WITH WORK WITHOUT OWNERS APPROVAL.

- KEYED NOTES: (#)**
- SPlice NEW FEEDER FOR FIRE PUMP IN NEW JUNCTION BOX. SEE RISER DIAGRAM, SHEET E-502 FOR ADDITIONAL INFORMATION.
 - PROVIDE NEW PULLBOX PB-DB301 AS DETAILED ON E-701. BOND EXISTING BARE COPPER DUCTBANK GROUNDING CONDUCTORS TO PULLBOX.
 - CONTRACTOR SHALL RE-CIRCUIT ALL EXISTING FEEDERS IN EXISTING PANEL TO NEW P1 PANEL. SEE PANEL SCHEDULE FOR ADDITIONAL INFORMATION.
 - EXISTING GENERATOR START SIGNAL FROM FIRE PUMP CONTROLLER TO GENERATOR 6 & 7 SHALL BE RE-CIRCUITED TO GENERATOR 4 & 5 PARALLELING SWITCHGEAR CONTROLS. CIRCUIT SHALL BE A LISTED ELECTRICAL CIRCUIT PROTECTIVE SYSTEM WITH MINIMUM 2-HOUR FIRE RATING AS REQUIRED BY THE NEC. FACTORY CERTIFIED TECHNICIAN SHALL INCORPORATE GENERATOR START SIGNAL AND PERFORM FIRE PUMP FIELD ACCEPTANCE TEST PER NFPA 20.
 - CONTRACTOR SHALL MAINTAIN 8'-0" PATHWAY THROUGH AREAWAY.
 - PROVIDE NEW PULLBOX PB-DB301-1 AS DETAILED ON E-701.
 - BOND TO EXISTING GROUND BAR WITH #4/0 IN 0.75" C.
 - BOND PULLBOXES WITH #4/0 IN 0.75" C.
 - UPDATE NAMEPLATES AND GRAPHICS ON SWITCHGEAR AND REMOTE CONTROL CABINET TO INDICATE SPARE AND/OR NEW FEEDER CONNECTIONS. COORDINATE REQUIREMENTS WITH SWITCHGEAR MANUFACTURER.
 - UPDATE NAMEPLATES AND GRAPHICS ON PARALLELING SWITCHGEAR AND REMOTE CONTROL CABINET TO INDICATE NEW FEEDER CONNECTIONS. COORDINATE REQUIREMENTS WITH PARALLELING CONTROLS MANUFACTURER.
 - PIPE INSULATION IN THIS AREA HAS BEEN IDENTIFIED TO CONTAIN ASBESTOS. CONTRACTOR SHALL COORDINATE WITH OWNERS REPRESENTATIVE IF PROPOSED CONSTRUCTION WILL DISTURB EXISTING INSTALLATIONS.

DEMOLITION LEGEND

DISCONNECT AND REMOVE ELECTRICAL EQUIPMENT, CONCRETE PADS, CONDUIT, GROUT IN ABANDONED FLOOR CONDUITS, SUPPORTS, AND CONDUCTORS BACK TO SOURCE. COORDINATE DEMOLITION WITH INSTALLATION OF NEW ELECTRICAL EQUIPMENT. MAINTAIN SERVICE TO DOWNSTREAM EQUIPMENT. COORDINATE ALL SHUTDOWNS WITH OWNER.



PB-DB301 CONDUIT SCHEDULE - PHASE 2

CONDUIT	SERVICE TYPE	DESTINATION	CONDUIT	SERVICE TYPE	DESTINATION
1	SPARE	N/A	28	SPARE	N/A
2	SPARE	N/A	29	SPARE	N/A
3	SPARE	N/A	30	SPARE	N/A
4	SPARE	N/A	31	NORMAL POWER	P1
5	SPARE	N/A	32	SPARE	N/A
6	SPARE	N/A	33	SPARE	N/A
7	SPARE	N/A	34	SPARE	N/A
8	SPARE	N/A	35	SPARE	N/A
9	SPARE	N/A	36	SPARE	N/A
10	SPARE	N/A	37	SPARE	N/A
11	SPARE	N/A	38	SPARE	N/A
12	SPARE	N/A	39	SPARE	N/A
13	SPARE	N/A	40	SPARE	N/A
14	SPARE	N/A	41	SPARE	N/A
15	SPARE	N/A	42	SPARE	N/A
16	SPARE	N/A	43	SPARE	N/A
17	SPARE	N/A	44	SPARE	N/A
18	SPARE	N/A	45	SPARE	N/A
19	SPARE	N/A	46	SPARE	N/A
20	SPARE	N/A	47	SPARE	N/A
21	SPARE	N/A	48	SPARE	N/A
22	SPARE	N/A	49	SPARE	N/A
23	SPARE	N/A	50	SPARE	N/A
24	#4/0 GND	PULLBOX	51	SPARE	N/A
25	SPARE	N/A	52	SPARE	N/A
26	SPARE	N/A	53	SPARE	N/A
27	SPARE	N/A	54	SPARE	N/A

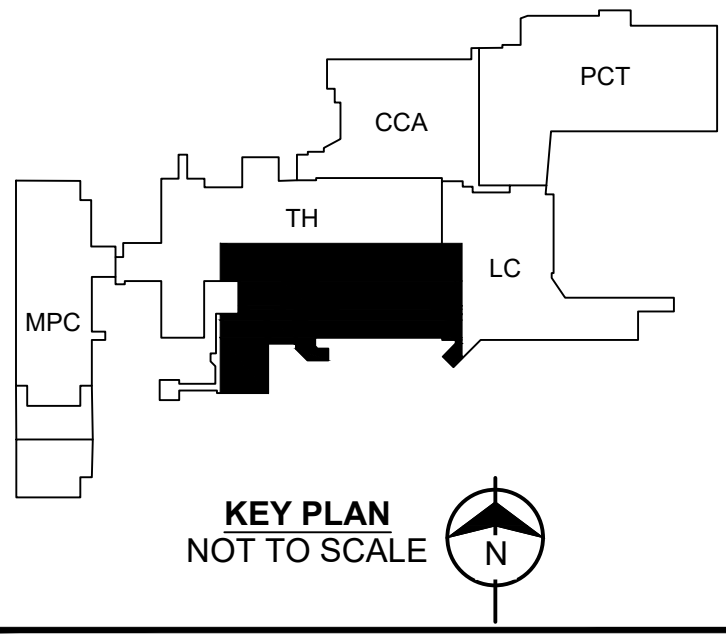
SYMBOL LEGEND

CABLE FILLED CONDUIT SPARE

REFER TO PB-DB301 CONDUIT SCHEDULE

SECTION A-A
PULLBOX PB-DB301 SECTION
NOT TO SCALE

no.	date	by	ckd	description
0	07/09/21	JMC	RED	ISSUED FOR BID
1	08/12/21	JMC	RED	ADDENDUM #1



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date	11/20/2020	detailed	J. CHASE
designed	R. DEBAUN	checked	R. DEBAUN



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COLUMBIA, MISSOURI

CCA & TH EMERGENCY
POWER MODIFICATIONS
GROUND FLOOR
ELECTRICAL PLAN - PHASE 2

project	128966	contract	CP210961
drawing		rev.	
sheet	E-102	of	1
file	128966 E-102.DWG	sheets	



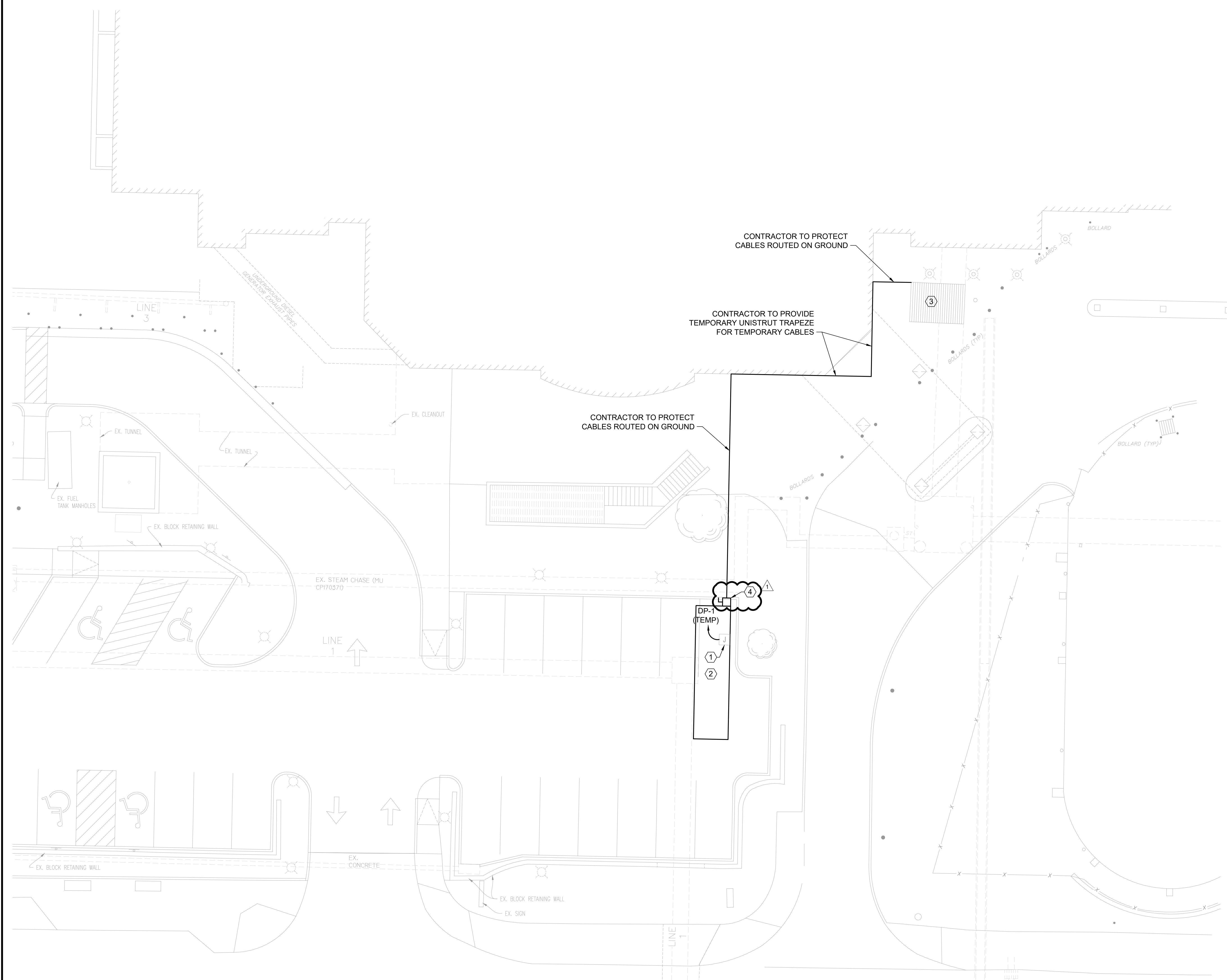
REID E. DEBAUN
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LICENSE NO. PE-2009009323

GENERAL NOTES:

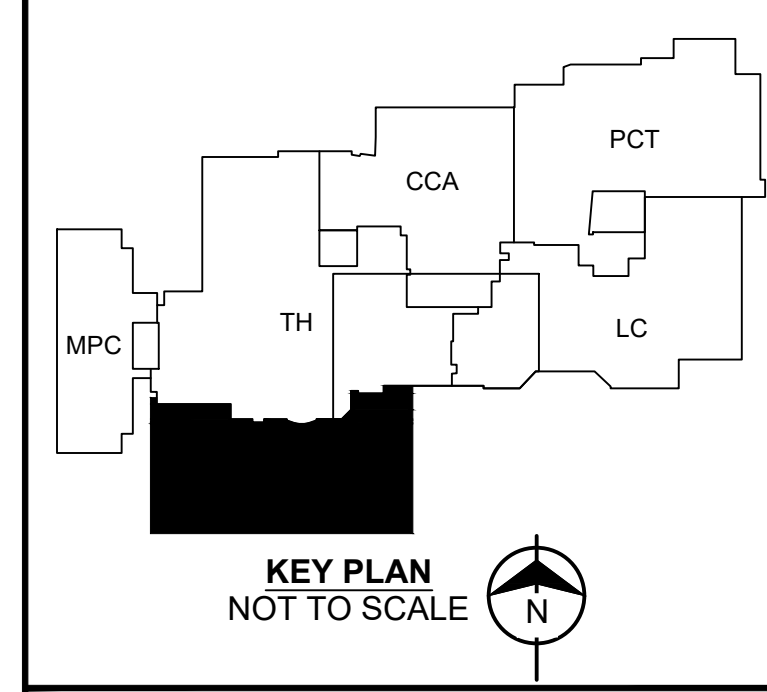
- REFER TO SHEET E-001 FOR PROJECT GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- REFER TO SHEET E-502 FOR PHASE 2 PROJECT ONE-LINE DIAGRAM.
- CLOSELY COORDINATE ALL SHUTDOWNS WITH THE OWNER PRIOR TO BEGINNING WORK. OBTAIN OWNER APPROVAL NO LESS THAN 10 BUSINESS DAYS IN ADVANCE FOR ALL SHUTDOWNS AND DISRUPTIONS AND FOLLOW ALL OWNER GUIDELINES AND PROCEDURES. REFER TO DIVISION 1 SPECIFICATION.
- FIELD VERIFY ALL EXISTING CONDITIONS.
- ALL ELECTRICAL EQUIPMENT SHOWN HALF TONE IS EXISTING TO REMAIN, UNON.
- REFER TO SPEC SECTION 260553 FOR RACEWAY IDENTIFICATION REQUIREMENTS.
- NEW PENETRATIONS THROUGH FIRE-RATED FLOOR AND WALL ASSEMBLIES SHALL BE FIRESTOPPED WITH A UL LISTED ASSEMBLY BY A CERTIFIED FIRESTOPPING CONTRACTOR. SYSTEM SHALL MATCH THE FIRE RATING OF THE ASSEMBLY TO BE PENETRATED.
- PERFORM CONSTRUCTION RENOVATION MAINTENANCE RISK ASSESSMENT (CRMRA) AND INTERIM LIFE SAFETY MEASURES (ILSM) ANALYSIS PER OWNER'S GUIDELINES AT EACH LOCATION WHERE WORK WILL OCCUR. REFER TO DIVISION 1 SPECIFICATIONS FOR DETAILS. DO NOT PROCEED WITH WORK WITHOUT OWNERS APPROVAL.

KEYED NOTES: (#)

- COORDINATE FINAL POWER REQUIREMENTS WITH VENDOR. PROVIDE 3#1, 1#8G -1.25" C TO TEMPORARY GENERATOR LOAD CENTER.
- BOND SEPARATELY DERIVED TEMPORARY GENERATOR SERVICE WITH GROUNDING ELECTRODE CONDUCTOR TO EXISTING GROUND BUS IN ELECTRICAL ROOM GE-08A.
- CIRCUITS SHALL EXTEND THROUGH AREAWAY TO EQUIPMENT LOCATED IN GE-08.
- MOUNT (4) TEMPORARY FUSED SWITCHES ON UNISTRUT. SEE "PARTIAL RISER DIAGRAM - PHASE 2" ON SHEET E-502 FOR DETAILS.



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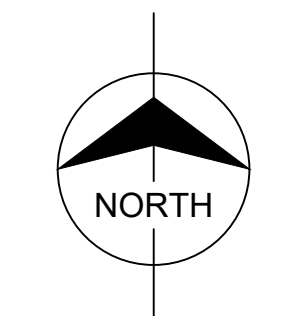
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date	05/12/2021	detailed	J. CHASE
designed	R. DEBAUN	checked	R. DEBAUN

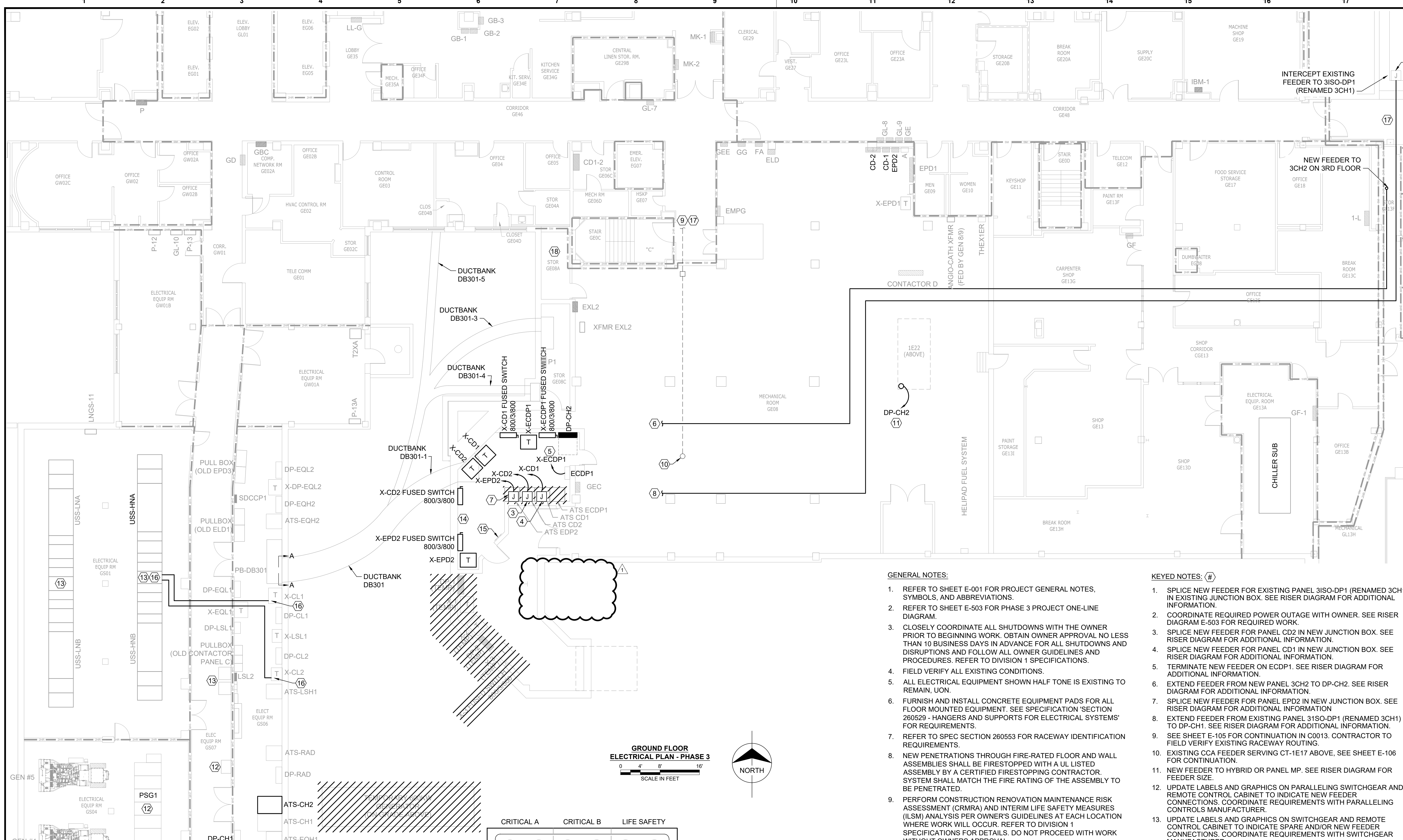
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project 128966		contract CP210961	
drawing E-103		rev. 1	
sheet		of sheets	
file 128966 E-103.DWG			

SITE
 ELECTRICAL PLAN - PHASE 2
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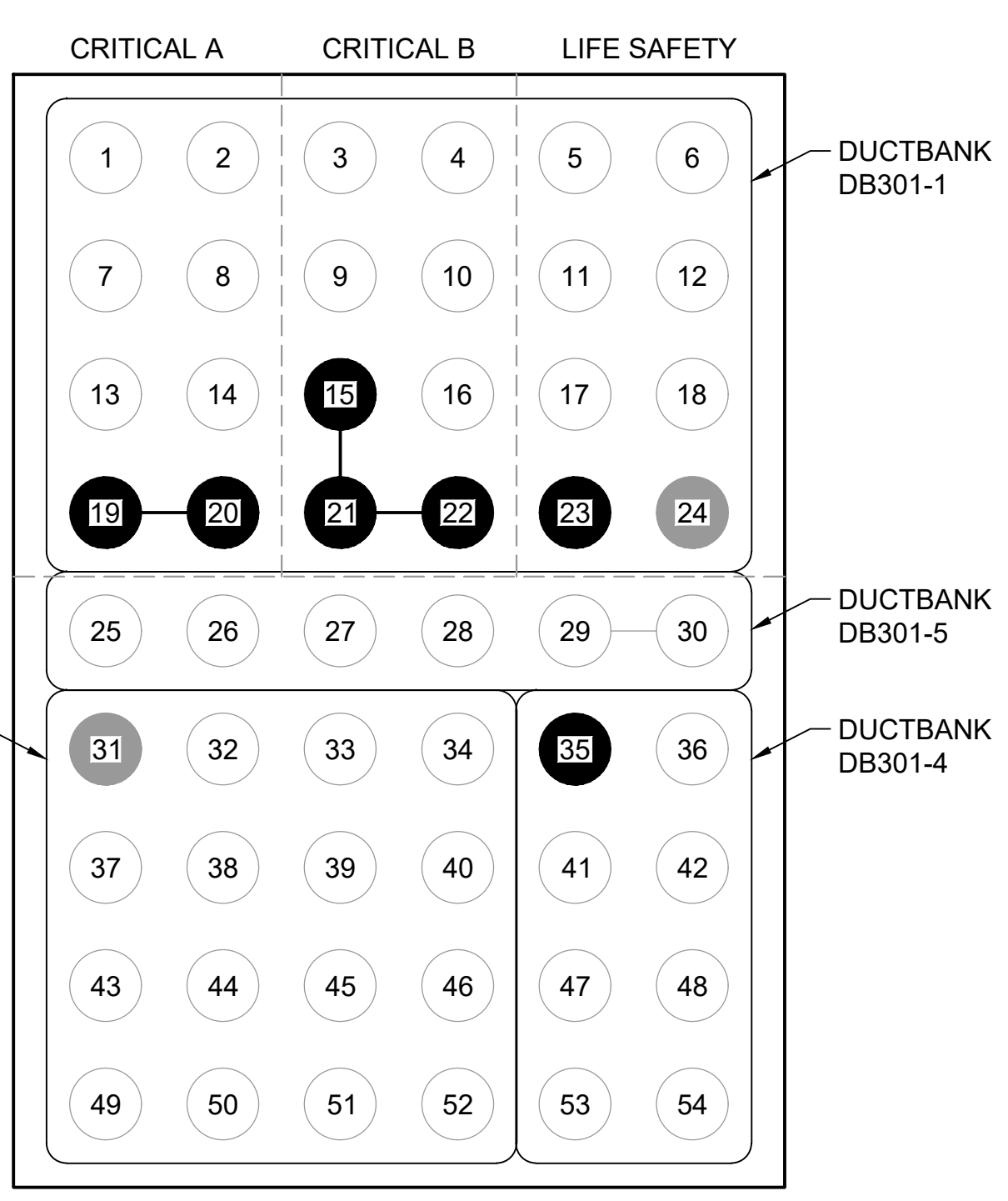
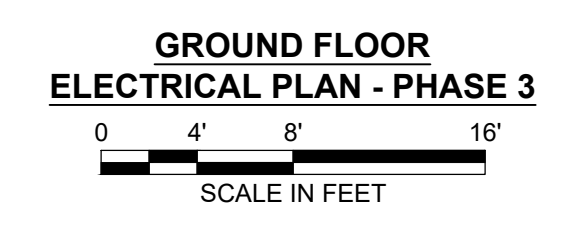


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 PROFESSIONAL ENGINEER
 LICENSE NO. PE-200909323



- GENERAL NOTES:**
- REFER TO SHEET E-001 FOR PROJECT GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
 - REFER TO SHEET E-503 FOR PHASE 3 PROJECT ONE-LINE DIAGRAM.
 - CLOSELY COORDINATE ALL SHUTDOWNS WITH THE OWNER PRIOR TO BEGINNING WORK. OBTAIN OWNER APPROVAL NO LESS THAN 10 BUSINESS DAYS IN ADVANCE FOR ALL SHUTDOWNS AND DISRUPTIONS AND FOLLOW ALL OWNER GUIDELINES AND PROCEDURES. REFER TO DIVISION 1 SPECIFICATIONS.
 - FIELD VERIFY ALL EXISTING CONDITIONS.
 - ALL ELECTRICAL EQUIPMENT SHOWN HALF TONE IS EXISTING TO REMAIN, UON.
 - FURNISH AND INSTALL CONCRETE EQUIPMENT PADS FOR ALL FLOOR MOUNTED EQUIPMENT. SEE SPECIFICATION SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS' FOR REQUIREMENTS.
 - REFER TO SPEC SECTION 260553 FOR RACEWAY IDENTIFICATION REQUIREMENTS.
 - NEW PENETRATIONS THROUGH FIRE-RATED FLOOR AND WALL ASSEMBLIES SHALL BE FIRESTOPPED WITH A UL LISTED ASSEMBLY BY A CERTIFIED FIRESTOPPING CONTRACTOR. SYSTEM SHALL MATCH THE FIRE RATING OF THE ASSEMBLY TO BE PENETRATED.
 - PERFORM CONSTRUCTION RENOVATION MAINTENANCE RISK ASSESSMENT (CRMRA) AND INTERIM LIFE SAFETY MEASURES (LSM) ANALYSIS PER OWNER'S GUIDELINES AT EACH LOCATION WHERE WORK WILL OCCUR. REFER TO DIVISION 1 SPECIFICATIONS FOR DETAILS. DO NOT PROCEED WITH WORK WITHOUT OWNERS APPROVAL.

- KEYED NOTES: (K)**
- SPLICE NEW FEEDER FOR EXISTING PANEL 3ISO-DP1 (RENAMED 3CH1) IN EXISTING JUNCTION BOX. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
 - COORDINATE REQUIRED POWER OUTAGE WITH OWNER. SEE RISER DIAGRAM E-503 FOR REQUIRED WORK.
 - SPLICE NEW FEEDER FOR PANEL CD2 IN NEW JUNCTION BOX. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
 - SPLICE NEW FEEDER FOR PANEL CD1 IN NEW JUNCTION BOX. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
 - TERMINATE NEW FEEDER ON ECDP1. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
 - EXTEND FEEDER FROM NEW PANEL 3CH2 TO DP-CH2. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
 - SPLICE NEW FEEDER FOR PANEL EPD2 IN NEW JUNCTION BOX. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
 - EXTEND FEEDER FROM EXISTING PANEL 3ISO-DP1 (RENAMED 3CH1) TO DP-CH1. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
 - SEE SHEET E-105 FOR CONTINUATION IN C0013. CONTRACTOR TO FIELD VERIFY EXISTING RACEWAY ROUTING.
 - EXISTING CCA FEEDER SERVING CT-1E17 ABOVE. SEE SHEET E-106 FOR CONTINUATION.
 - NEW FEEDER TO HYBRID OR PANEL MP. SEE RISER DIAGRAM FOR FEEDER SIZE.
 - UPDATE LABELS AND GRAPHICS ON PARALLELING SWITCHGEAR AND REMOTE CONTROL CABINET TO INDICATE NEW FEEDER CONNECTIONS. COORDINATE REQUIREMENTS WITH PARALLELING CONTROLS MANUFACTURER.
 - UPDATE LABELS AND GRAPHICS ON SWITCHGEAR AND REMOTE CONTROL CABINET TO INDICATE SPARE AND/OR NEW FEEDER CONNECTIONS. COORDINATE REQUIREMENTS WITH SWITCHGEAR MANUFACTURER.
 - MAINTAIN MINIMUM 4'-0" WALL SPACE FOR FUTURE EQUIPMENT INSTALLATION.
 - BOND TRANSFORMERS TO EXISTING GROUND BAR.
 - CONTRACTOR SHALL PROVIDE TEMPORARY POWER CONNECTION FROM SPARE CIRCUIT BREAKERS IN HNA/HNB DURING ELECTRICAL POWER OUTAGE(S) TO DP-CH1. TEMPORARY FEEDERS SHALL BE 2 SETS OF 3 #4/0 AND 1 #2 G IN 2.5" C PROTECTED BY 450A TRIP. COORDINATE WITH OWNER.
 - WORK IN CORRIDORS SHALL OCCUR DURING NIGHT HOURS.
 - PIPE INSULATION IN THIS AREA HAS BEEN IDENTIFIED TO CONTAIN ASBESTOS. CONTRACTOR SHALL COORDINATE WITH OWNERS REPRESENTATIVE IF PROPOSED CONSTRUCTION WILL DISTURB EXISTING INSTALLATIONS.

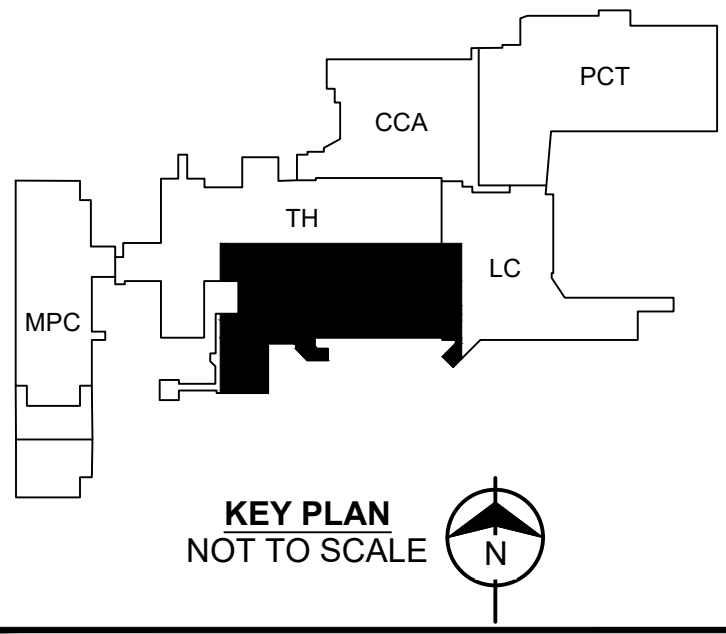


CONDUIT	SERVICE TYPE	DESTINATION	CONDUIT	SERVICE TYPE	DESTINATION
1	SPARE	N/A	28	SPARE	N/A
2	SPARE	N/A	29	SPARE	N/A
3	SPARE	N/A	30	SPARE	N/A
4	SPARE	N/A	31	NORMAL POWER	P1
5	SPARE	N/A	32	SPARE	N/A
6	SPARE	N/A	33	SPARE	N/A
7	SPARE	N/A	34	SPARE	N/A
8	SPARE	N/A	35	EQUIPMENT POWER	X-EPD2
9	SPARE	N/A	36	SPARE	N/A
10	SPARE	N/A	37	SPARE	N/A
11	SPARE	N/A	38	SPARE	N/A
12	SPARE	N/A	39	SPARE	N/A
13	SPARE	N/A	40	SPARE	N/A
14	SPARE	N/A	41	SPARE	N/A
15	CRITICAL POWER	DP-CH2	42	SPARE	N/A
16	SPARE	N/A	43	SPARE	N/A
17	SPARE	N/A	44	SPARE	N/A
18	SPARE	N/A	45	SPARE	N/A
19	CRITICAL POWER	3CH1	46	SPARE	N/A
20	CRITICAL POWER	3CH1	47	SPARE	N/A
21	CRITICAL POWER	DP-CH2	48	SPARE	N/A
22	CRITICAL POWER	DP-CH2	49	SPARE	N/A
23	LIFE SAFETY POWER	X-CD2	50	SPARE	N/A
24	#4/0 GND	N/A	51	SPARE	N/A
25	SPARE	N/A	52	SPARE	N/A
26	SPARE	N/A	53	SPARE	N/A
27	SPARE	N/A	54	SPARE	N/A

DEMOLITION LEGEND

DISCONNECT AND REMOVE ELECTRICAL EQUIPMENT, CONCRETE PADS, CONDUIT, GROUT IN ABANDONED FLOOR CONDUITS, SUPPORTS, AND CONDUCTORS BACK TO SOURCE. COORDINATE DEMOLITION WITH INSTALLATION OF NEW ELECTRICAL EQUIPMENT. MAINTAIN SERVICE TO DOWNSTREAM EQUIPMENT. COORDINATE ALL SHUTDOWNS WITH OWNER.

no.	date	by	ckd	description
0	07/09/21	JMC	RED	ISSUED FOR BID
1	08/12/21	JMC	RED	ADDENDUM #1



BURNS & MCDONNELL

9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	detailed
11/20/2020	J. CHASE
designed	checked
R. DEBAUN	R. DEBAUN

UNIVERSITY HOSPITAL
UNIVERSITY OF MISSOURI HEALTH CARE
COLUMBIA, MISSOURI



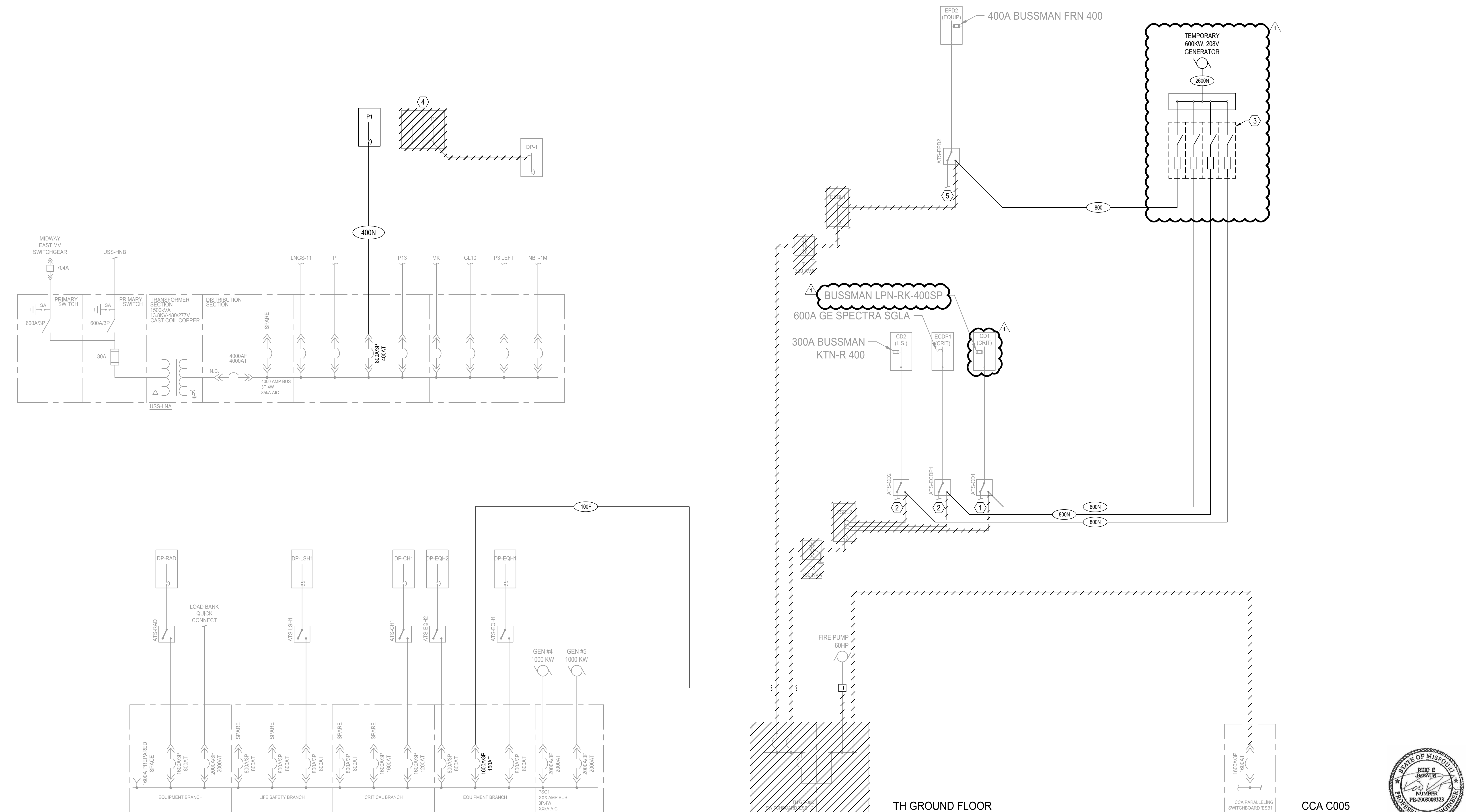
project	contract	
128966	CP210961	
drawing	rev.	
E-104	1	
sheet	of	sheets
128966	E-104	DWG

REID E. DEBAUN
PROFESSIONAL ENGINEER
LICENSE NO. PE-200909323

SECTION A-A
PULLBOX PB-DB301 SECTION
NOT TO SCALE

FEEDER SIZE SCHEDULE	
FEEDER MARK	COPPER CONDUCTOR AND CONDUIT SIZE
100F	DRAKA LIFELINE 2-HOUR FIRE RESISTIVE CABLE 3#1 AND 1#8G -2"C
400N	4-500KCMIL AND #3G -3.5"C
800	2 SETS (3-500KCMIL AND #1/0G -3.5"C)
800N	2 SETS (4-500KCMIL AND #1/0G -3.5"C)
2600N	7 SETS (4-500KCMIL AND 400KCMILG -4"C)

- GENERAL NOTES:**
- REFER TO SHEET E-001 FOR PROJECT GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
 - REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE AS INDICATED.
- KEYED NOTES:** (X)
- NORMAL POWER CONTINUATION TO DP-1 (TEMP). SEE DRAWING E-501 FOR CONTINUATION.
 - NORMAL POWER CONTINUATION TO DP-2 (TEMP). SEE DRAWING E-501 FOR CONTINUATION.
 - 800A FUSED SWITCH (TYPICAL OF 4). OVERCURRENT PROTECTION DEVICES SHALL COORDINATE WITH EXISTING DOWNSTREAM DEVICES.
 - RE-ROUTING ALL LOADS FROM EXISTING PANEL P1 TO NEW PANEL P1. SEE PANEL SCHEDULE FOR ADDITIONAL INFORMATION.
 - NORMAL POWER CONTINUATION TO TRANSFORMER X-3 (TEMP). SEE DRAWING E-501 FOR CONTINUATION.



1 PARTIAL RISER DIAGRAM - PHASE 2
NO SCALE



no.	date	by	ckd	description
0	07/09/21	JMC	RED	ISSUED FOR BID
1	08/12/21	JMC	RED	ADDENDUM #1

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9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	11/20/2020	detailed	J. CHASE
designed	R. DEBAUN	checked	R. DEBAUN

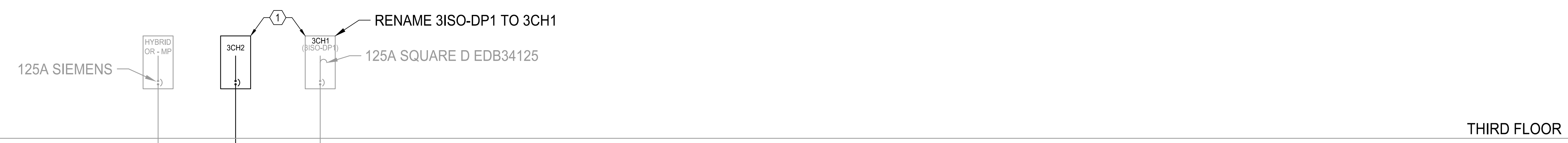
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UNIVERSITY OF MISSOURI HEALTH CARE
COLUMBIA, MISSOURI

CCA & TH EMERGENCY POWER MODIFICATIONS
ELECTRICAL RISER DIAGRAM - PHASE 2

project	128966	contract	CP210961
drawing	E-502	rev.	1
sheet	of	sheets	
file	128966 E-502.DWG		

REID E. DEBAUN
PROFESSIONAL ENGINEER
LICENSE NO. PE-2009009323

no.	date	by	ckd	description
0	07/09/21	JMC	RED	ISSUED FOR BID
1	08/12/21	JMC	RED	ADDENDUM #1



FEEDER SIZE SCHEDULE	
FEEDER MARK	COPPER CONDUCTOR AND CONDUIT SIZE
125N	4-#1 AND #6G -1.5°C
400	3-500KCMIL AND #3G -3°C
400N	4-500KCMIL AND #3G -3.5°C
600A	2 SETS (4-350KCMIL AND #1/0G) (EXIST)
600N	2 SETS (4-350KCMIL AND #1/0G) -3°C
800	2 SETS (3-500KCMIL AND #1/0G -4°C)
800A	2 SETS (4-600KCMIL AND #1/0G) (EXIST)
800B	2 SETS (3-600KCMIL AND #1/0G) (EXIST)
800N	2 SETS (4-500KCMIL AND #1/0G -4°C)
800X	2 SETS (4-600KCMIL AND #3/0 G -4°C)
1200N	3 SETS (4-600KCMIL AND #3/0G -4°C)

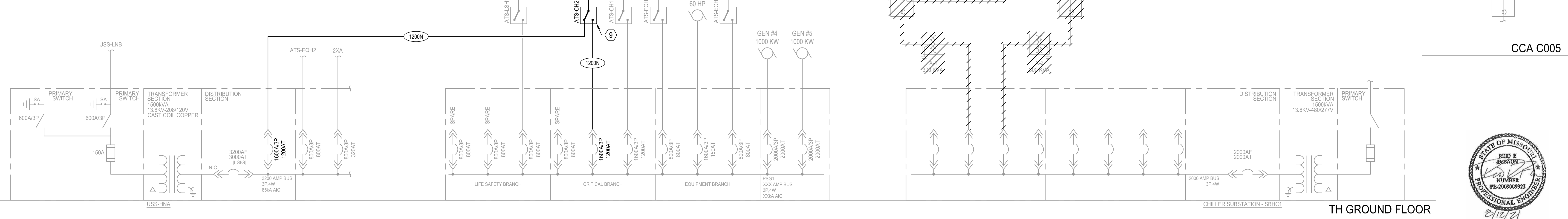
DRY-TYPE TRANSFORMER SCHEDULE				
NO.	KVA	PRIMARY VOLTAGE	SECONDARY VOLTAGE	GROUNDING ELECTRODE CONDUCTOR
X-CD1	225	480	208/120	#3/0
X-CD2	225	480	208/120	#3/0
X-ECDP1	225	480	208/120	#3/0
X-EPD2	225	480	208/120	#3/0

GENERAL NOTES:

- REFER TO SHEET E-001 FOR PROJECT GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE AS INDICATED.

KEYED NOTES: (X)

- BOND THE EQUIPMENT GROUNDING BUSES OF 3CH1 AND 3CH2 WITH A MINIMUM #10AWG.
- PROVIDE AND INSTALL 400A CIRCUIT BREAKER IN EXISTING PANEL. NEW DEVICE SHALL COORDINATE WITH EXISTING UPSTREAM 800A MAIN BREAKER AND EXISTING DOWNSTREAM 208V, 300A FUSE IN PANEL CD2. COORDINATE ALL ELECTRICAL OUTAGES WITH OWNER.
- PROVIDE AND INSTALL 600A CIRCUIT BREAKER IN EXISTING PANEL. NEW DEVICE SHALL COORDINATE WITH EXISTING UPSTREAM 1200A MAIN BREAKER AND EXISTING DOWNSTREAM 125A CIRCUIT BREAKER IN PANEL 3CH1. COORDINATE ALL ELECTRICAL OUTAGES WITH OWNER.
- PROVIDE AND INSTALL 400A CIRCUIT BREAKER IN EXISTING PANEL. NEW DEVICE SHALL COORDINATE WITH EXISTING UPSTREAM 800A MAIN BREAKER AND EXISTING DOWNSTREAM 208V, 400A FUSE IN PANEL EPD2. COORDINATE ALL ELECTRICAL OUTAGES WITH OWNER.
- PROVIDE AND INSTALL 800A FUSED SWITCH. NEW DEVICE SHALL COORDINATE WITH EXISTING UPSTREAM 800A, 480V MAIN BREAKER IN DP-EQH1 AND EXISTING DOWNSTREAM 400A FUSE IN EPD2.
- PROVIDE AND INSTALL 800A FUSED SWITCH. NEW DEVICE SHALL COORDINATE WITH NEW UPSTREAM 1200A, 480V MAIN BREAKER IN DP-CH2 AND EXISTING DOWNSTREAM 600A CIRCUIT BREAKER IN ECDP1.
- PROVIDE AND INSTALL 800A FUSED SWITCH. NEW DEVICE SHALL COORDINATE WITH NEW UPSTREAM 1200A, 480V MAIN BREAKER IN DP-CH2 AND EXISTING DOWNSTREAM 400A FUSE IN CD1.
- PROVIDE AND INSTALL 800A FUSED SWITCH. NEW DEVICE SHALL COORDINATE WITH NEW UPSTREAM 400A, 480V FEEDER BREAKER IN DP-LSH1 AND EXISTING DOWNSTREAM 300A FUSE IN CD2.
- PROVIDE REQUIRED HARDWARE AND WIRING TO INCORPORATE TRANSFER SWITCH MONITORING AT GENERATOR CONTROL CABINET.
- PHASE 1 TRANSFORMER X-4 (TEMP) TO BE RE-USED FOR PHASE 3 PERMANENT INSTALLATION.



1 PARTIAL RISER DIAGRAM - PHASE 3
NO SCALE



date	11/20/2020	detailed	J. CHASE
designed	R. DEBAUN	checked	R. DEBAUN



UNIVERSITY HOSPITAL
UNIVERSITY OF MISSOURI HEALTH CARE
COLUMBIA, MISSOURI

CCA & TH EMERGENCY
POWER MODIFICATIONS
ELECTRICAL RISER DIAGRAM - PHASE 3

project	128966	contract	CP210961
drawing	E-503	rev.	1
sheet	of	sheets	
file	128966 E-503.DWG		



REID E. DEBAUN
PROFESSIONAL ENGINEER
LICENSE NO. PE-200909323

DISTRIBUTION PANEL DP-1 (TEMP) SCHEDULE									
CIRCUIT NUMBER	BREAKERS			EQUIPMENT SERVED	LOAD kVA	DESCRIPTION			REMARKS
	TRIP	FRAME	POLES			WIRE	GROUND	CONDUIT	
1	400A	400A	3	PANEL P1	7.9				SEE RISER DIAGRAM
2	800A	800A	3	ATS-CD1	121.9				SEE RISER DIAGRAM
3	100A	100A	2	TEMPORARY GENERATOR	16.6				SEE FLOOR PLANS
4			3						
5			3						
6			3						
7			3						
8			3						
9			3						
10			3						
11			3						
12			3						
13			3						
14			3						

CONNECTED kVA: 146
DEMAND kVA: 237

CONNECTED AMPS: 406
DEMAND AMPS: 657

NOTES:
1. PROVIDE MINIMUM AMPERES INTERRUPTING CAPACITY (AIC) AND BUS BRACING: 22,000 AMPERES.
2. CHARACTERISTICS:
VOLTS: 208 HERTZ: 60
PHASE: 3 MCB: 1000A
WIRE: 4

DISTRIBUTION PANEL DP-2 (TEMP) SCHEDULE									
CIRCUIT NUMBER	BREAKERS			EQUIPMENT SERVED	LOAD kVA	DESCRIPTION			REMARKS
	TRIP	FRAME	POLES			WIRE	GROUND	CONDUIT	
1	400A	400A	3	ATS-CD2	33.0				SEE RISER DIAGRAM
2	600A	600A	3	ATS-ECDEP1	94.4				SEE RISER DIAGRAM
3			3						
4			3						
5			3						
6			3						
7			3						
8			3						
9			3						
10			3						
11			3						
12			3						
13			3						
14			3						

CONNECTED kVA: 127
DEMAND kVA: 205

CONNECTED AMPS: 354
DEMAND AMPS: 570

NOTES:
1. PROVIDE MINIMUM AMPERES INTERRUPTING CAPACITY (AIC) AND BUS BRACING: 22,000 AMPERES.
2. CHARACTERISTICS:
VOLTS: 208 HERTZ: 60
PHASE: 3 MCB: 800A
WIRE: 4

DISTRIBUTION PANEL CD1 SCHEDULE									
CIRCUIT NUMBER	BREAKERS			EQUIPMENT SERVED	LOAD kVA	DESCRIPTION			REMARKS
	TRIP	FRAME	POLES			WIRE	GROUND	CONDUIT	
1	200A	250A	3	PANELS GD, 1C & 1D	11.8	4#250	1#6	2"	EXISTING FEEDER IN GL-4
2	200A	250A	3	PANELS 4D & 5D	11.8	4#3/0	1#6	2"	EXISTING FEEDER IN GL-4
3	200A	250A	3	PANELS 6D, 7D & 8B	11.8	4#4/0	1#6	2"	EXISTING FEEDER IN GL-4
4	200A	250A	3	PANELS 2L, 2J, 2L1 & 3D	11.8	4#500	1#6	2"	EXISTING FEEDER IN GL-4
5	200A	250A	3	PANELS 4K & 5K	8.9	4#4/0	1#6	2"	EXISTING FEEDER IN GL-5
6	200A	250A	3	PANELS GB1, GB2 & GB3	8.9	4#4/0	1#6	2"	EXISTING FEEDER IN GL-5
7	200A	250A	3	PANEL GBA	8.9	4#3/0	1#6	2"	EXISTING FEEDER IN GL-5
8	200A	250A	3	PANEL MK1	8.9	4#4/0	1#6	2"	EXISTING FEEDER IN GL-5
9	200A	250A	3	PANEL 4G & 5G	11.3	4#4/0	1#6	2"	EXISTING FEEDER IN GL-6
10	350A	400A	3	PANELS 2CE, 4CE, 5CE, 6CE & 7CE	5.6	4#500	1#3	3.5"	EXISTING FEEDER IN CD-1
11	400A	400A	3	TRANSFORMER THEXIER	5.6	3#500	1#3	3"	EXISTING FEEDER IN CD-1
12	150A	250A	3	PANEL LC1EER	5.6	4#1/0	1#6	2"	EXISTING FEEDER IN CD-1
13	200A	250A	3	PANEL 2CC	5.6	4#3/0	1#6	2.5"	EXISTING FEEDER IN CD-1
14	150A	250A	3	PANEL 3CEF	5.6	4#1/0	1#6	2"	EXISTING FEEDER IN CD-1
15		400A	3	SPARE					
16		400A	3	SPARE					
17		400A	3	SPARE					
18		400A	3	SPARE					
19		250A	3	SPARE					
20		250A	3	SPARE					
21		250A	3	SPARE					
22		250A	3	SPARE					
23		400A	3	SPARE					
24		400A	3	SPARE					

CONNECTED kVA: 122
DEMAND kVA: 213

CONNECTED AMPS: 338
DEMAND AMPS: 592

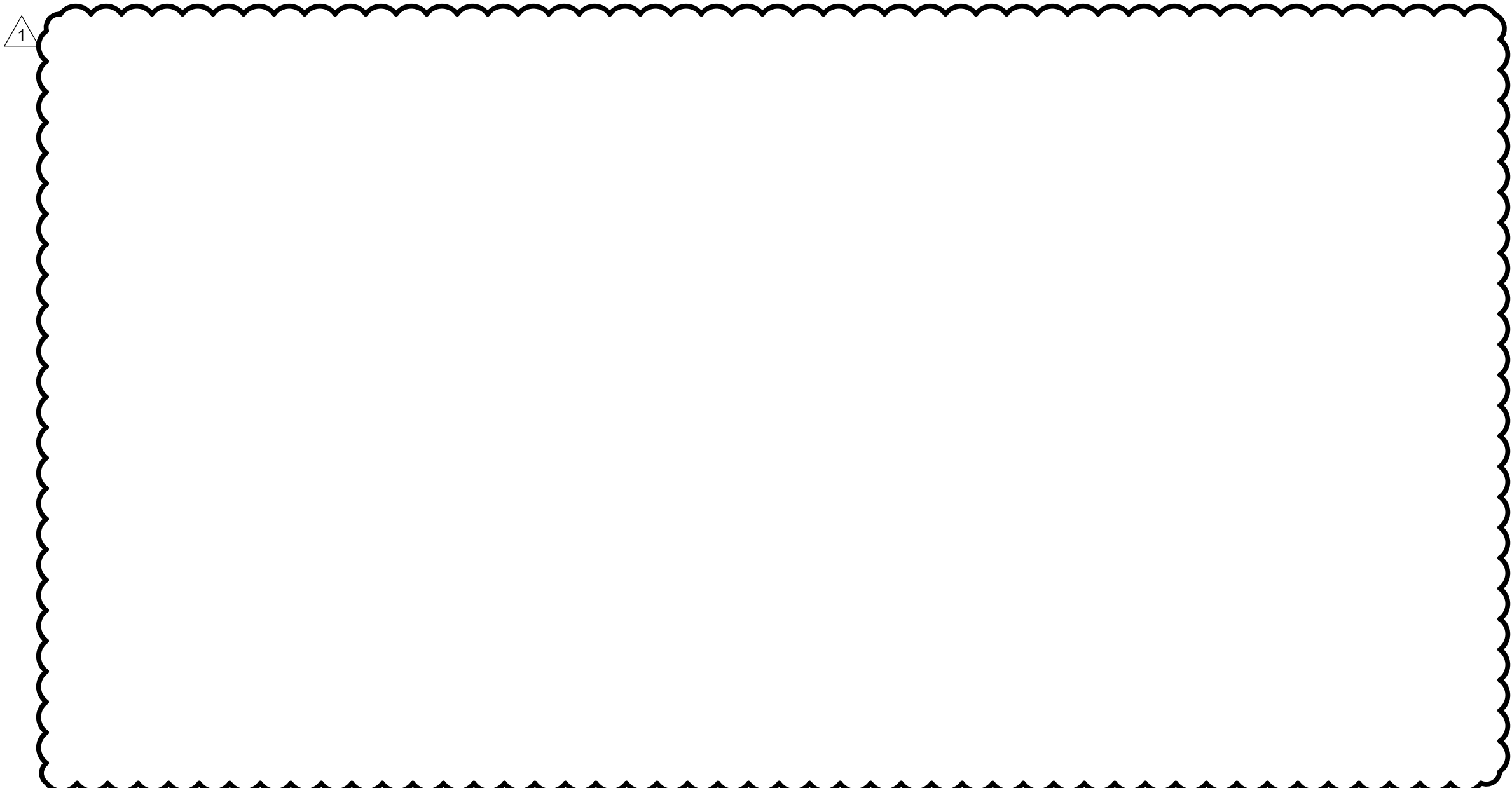
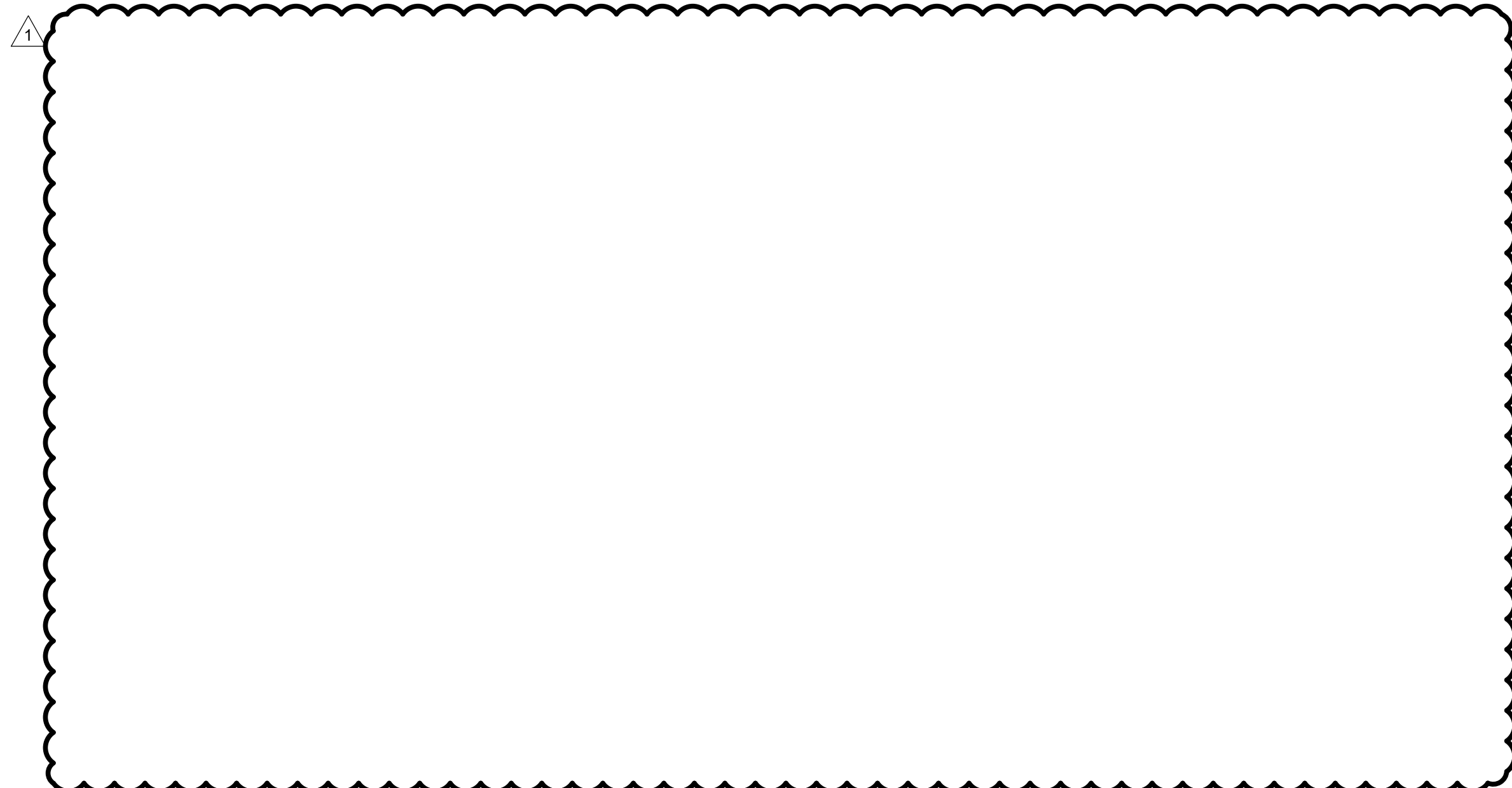
NOTES:
1. PROVIDE MINIMUM AMPERES INTERRUPTING CAPACITY (AIC) AND BUS BRACING: 22,000 AMPERES.
2. CHARACTERISTICS:
VOLTS: 208 HERTZ: 60
PHASE: 3 MCB: 800A
WIRE: 4
3. CONDUCTOR SIZES INDICATED ARE BASED ON FIELD OBSERVATIONS AND AN INTENT TO MATCH EXISTING, WHILE MAINTAINING CODE MINIMUMS. CONTRACTOR SHALL FIELD VERIFY AND SUBMIT EXISTING CONDUCTOR SIZES TO ENGINEER FOR FINAL APPROVAL.
4. PROVIDE WITH FULL HEIGHT BUSSING AND MINIMUM HEIGHT OF 86" TALL.

DISTRIBUTION PANEL PI SCHEDULE									
CIRCUIT NUMBER	BREAKERS			EQUIPMENT SERVED	LOAD kVA	DESCRIPTION			REMARKS
	TRIP	FRAME	POLES			WIRE	GROUND	CONDUIT	
1	30A	100A	3	CONDENSATE PUMP	1.3	4#10	1#10	0.75"	
2	20A	100A	3	HOT WATER #2	1.3	4#12	1#12	0.75"	
3	20A	100A	2	EQUITCH	1.3	3#12	1#12	0.75"	
4	20A	100A	3	HOT WATER #1	1.3	4#12	1#12	0.75"	
5	50A	100A	3	WORKBENCH 50A PLUG	1.3	4#6	1#10	1"	
6	70A	100A	3	PACO CONDENSATE PUMP	1.3	4#4	1#8	1.25"	
7		400A	3	SPARE					
8		400A	3	SPARE					
9		250A	3	SPARE					
10		250A	3	SPARE					
11		250A	3	SPARE					
12		250A	3	SPARE					
13		100A	3	SPARE					
14		100A	3	SPARE					

CONNECTED kVA: 8
DEMAND kVA: 14

CONNECTED AMPS: 22
DEMAND AMPS: 38

NOTES:
1. PROVIDE MINIMUM AMPERES INTERRUPTING CAPACITY (AIC) AND BUS BRACING: 22,000 AMPERES.
2. CHARACTERISTICS:
VOLTS: 208 HERTZ: 60
PHASE: 3 MCB: 400A
WIRE: 4
3. CONDUCTOR SIZES INDICATED ARE BASED ON FIELD OBSERVATIONS AND AN INTENT TO MATCH EXISTING, WHILE MAINTAINING CODE MINIMUMS. CONTRACTOR SHALL FIELD VERIFY AND SUBMIT EXISTING CONDUCTOR SIZES TO ENGINEER FOR FINAL APPROVAL.



no.	date	by	ckd	description
0	07/09/21	JMC	RED	ISSUED FOR BID
1	08/12/21	JMC	RED	ADDENDUM #1

**BURNS
MCDONNELL**
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	11/20/2020	detailed	J. CHASE
designed	R. DEBAUN	checked	R. DEBAUN



UNIVERSITY HOSPITAL
UNIVERSITY OF MISSOURI HEALTH CARE
COLUMBIA, MISSOURI

CCA & TH EMERGENCY
POWER MODIFICATIONS
ELECTRICAL SCHEDULES

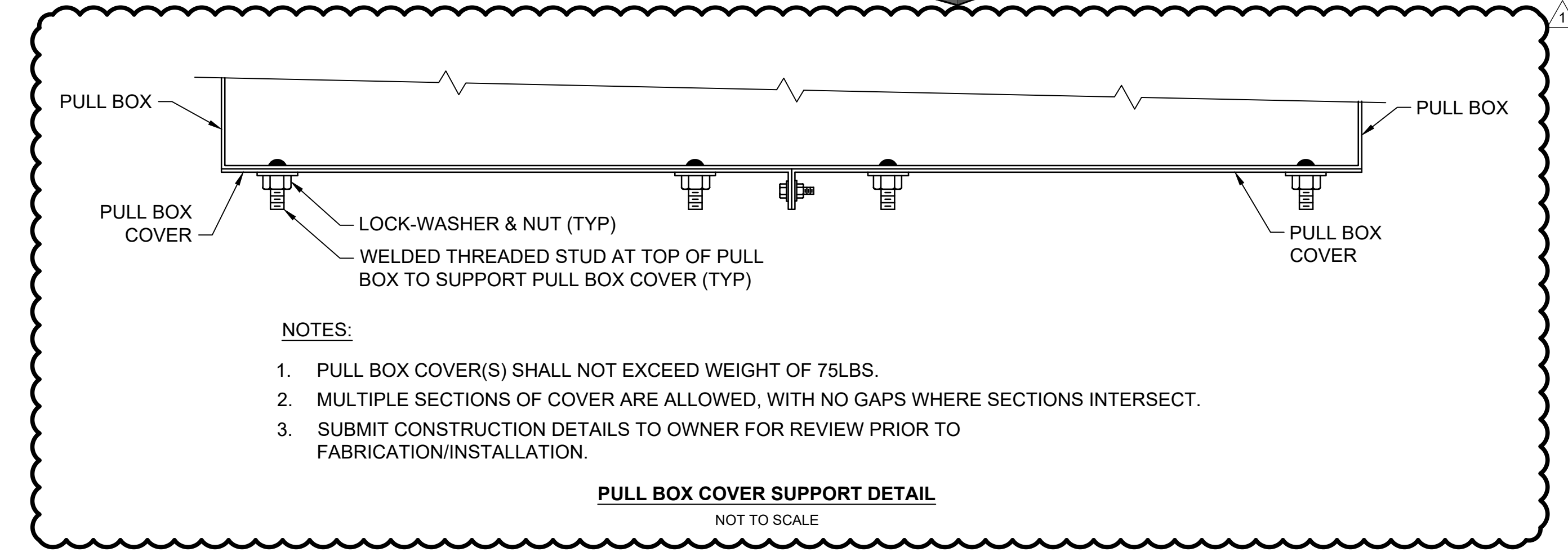
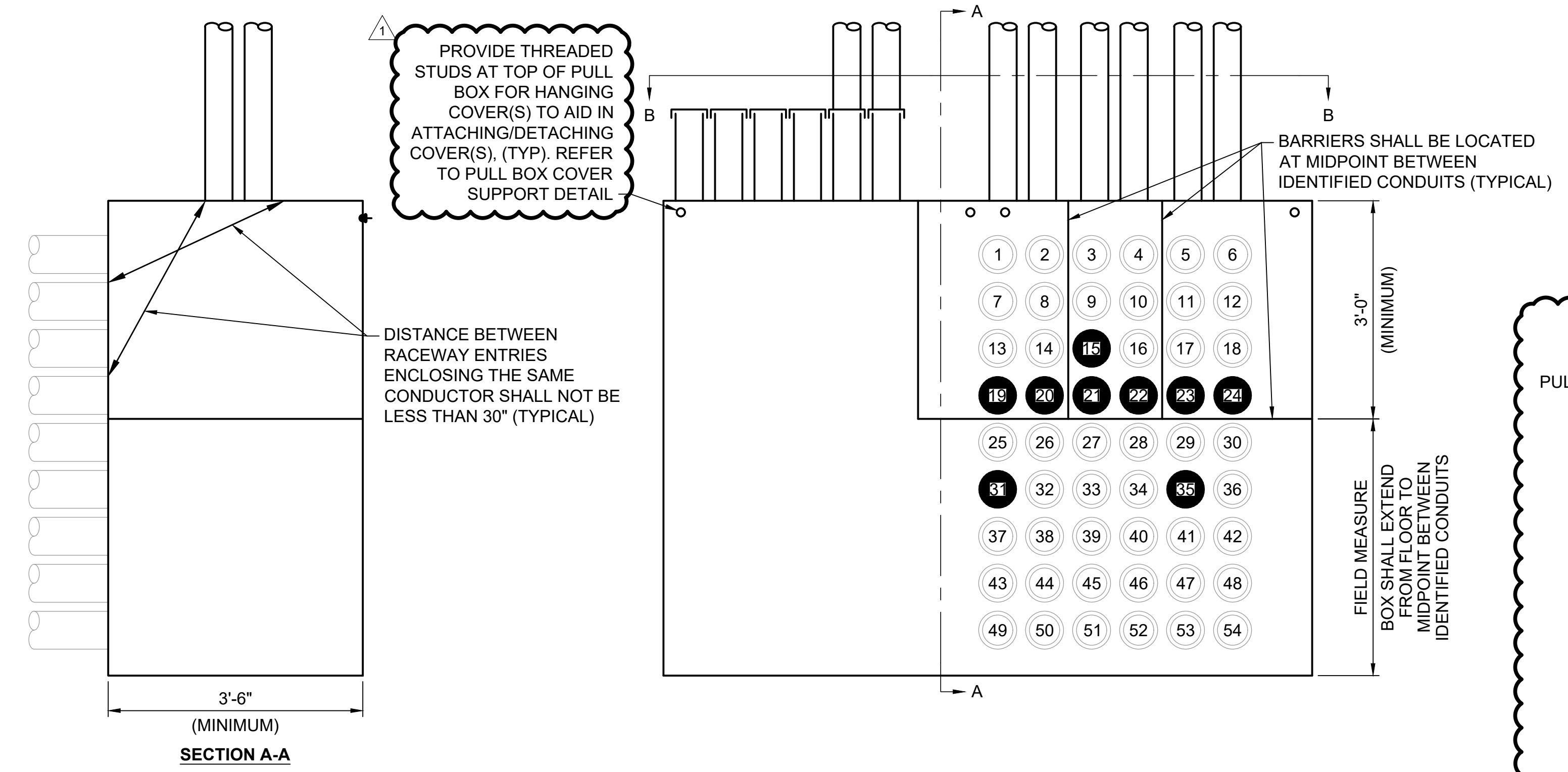
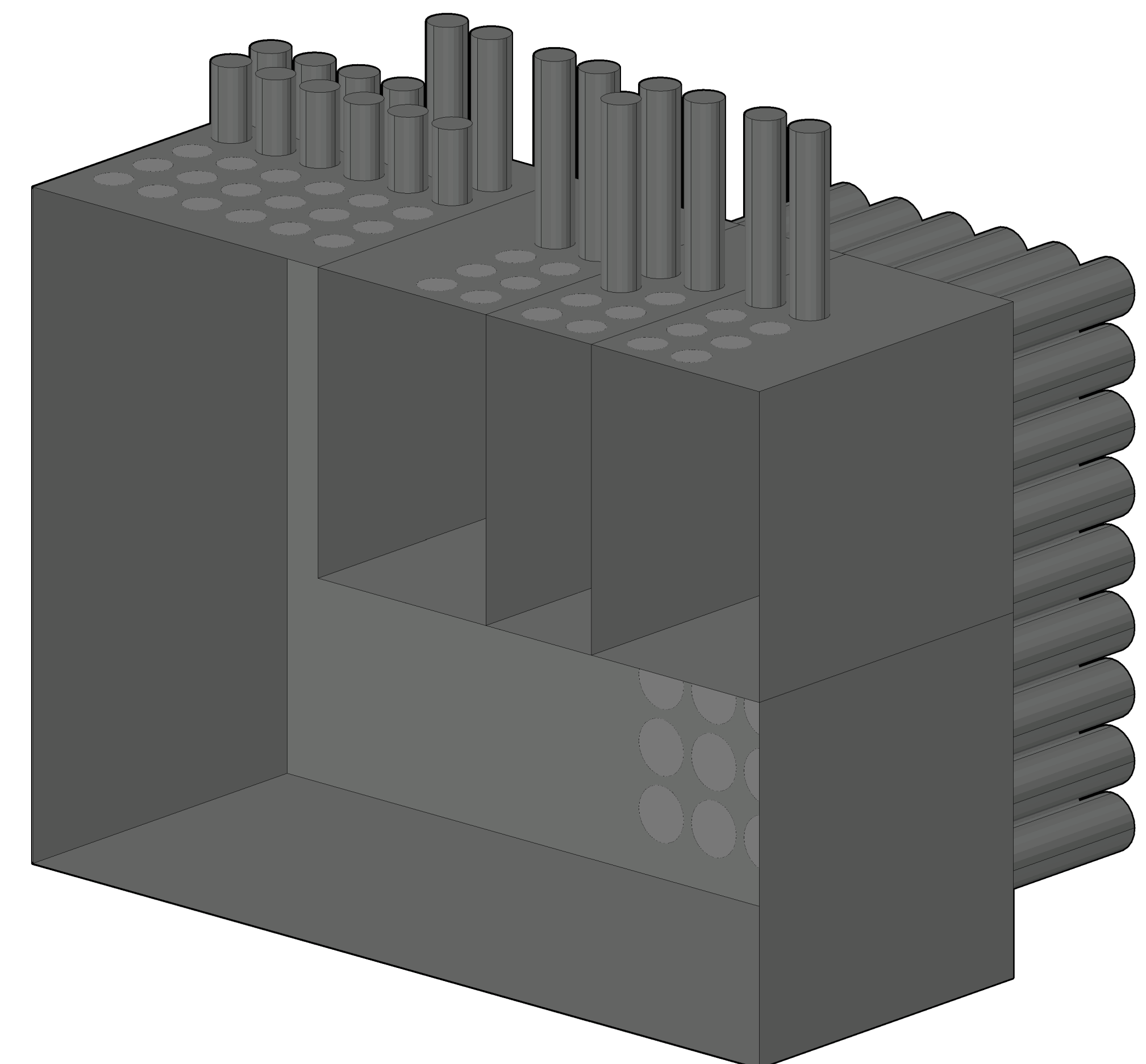
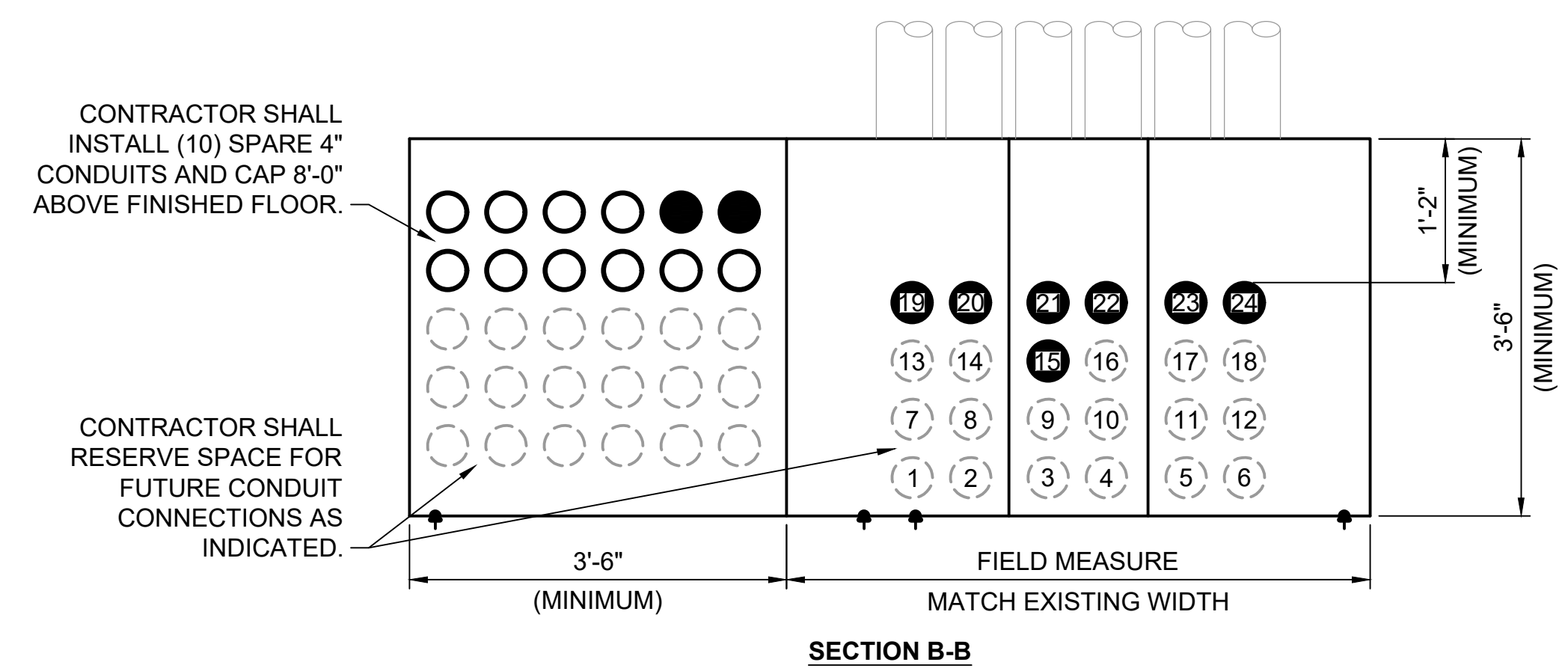
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drawing	E-601	rev.	1
sheet	of	sheet	
file	128966 E-601.DWG		



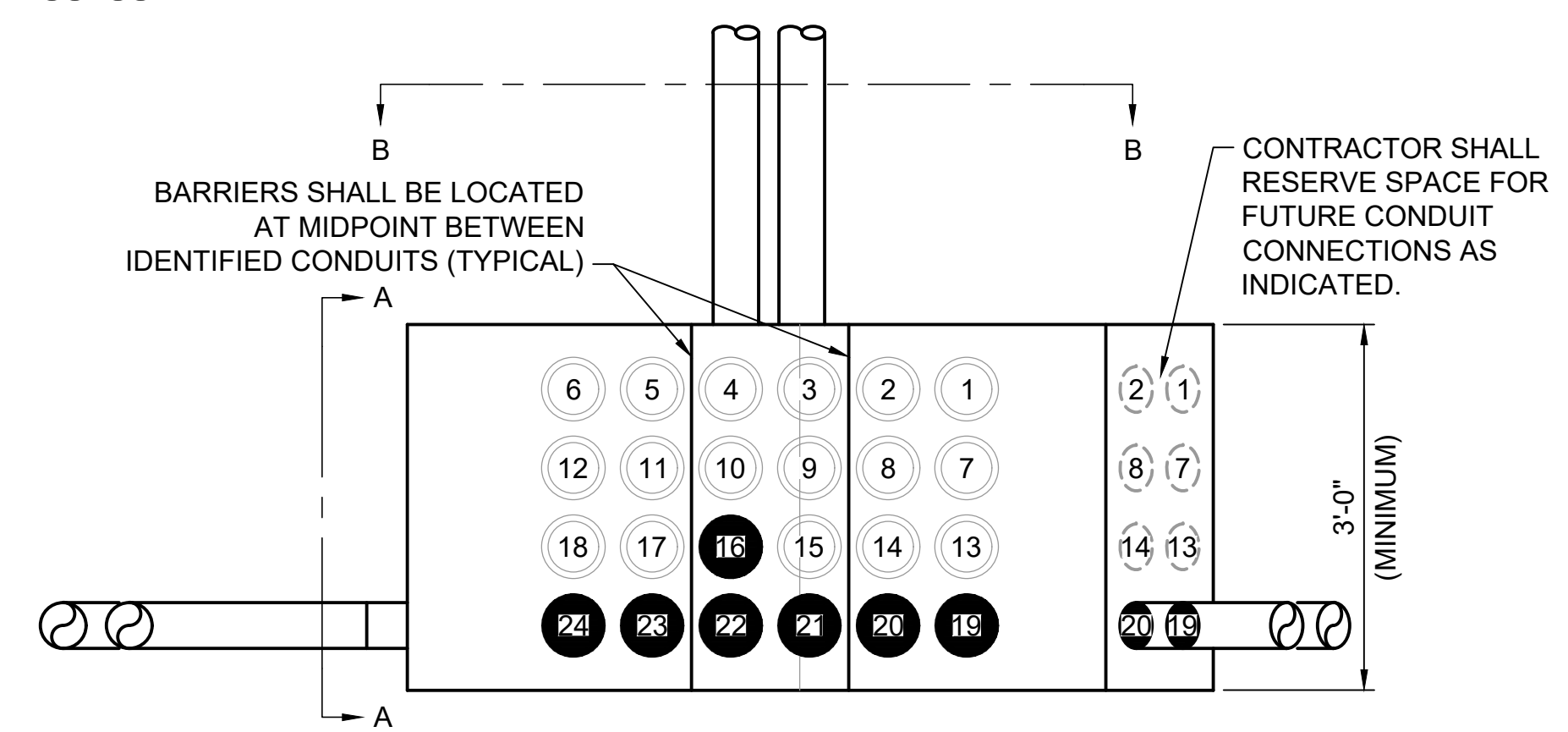
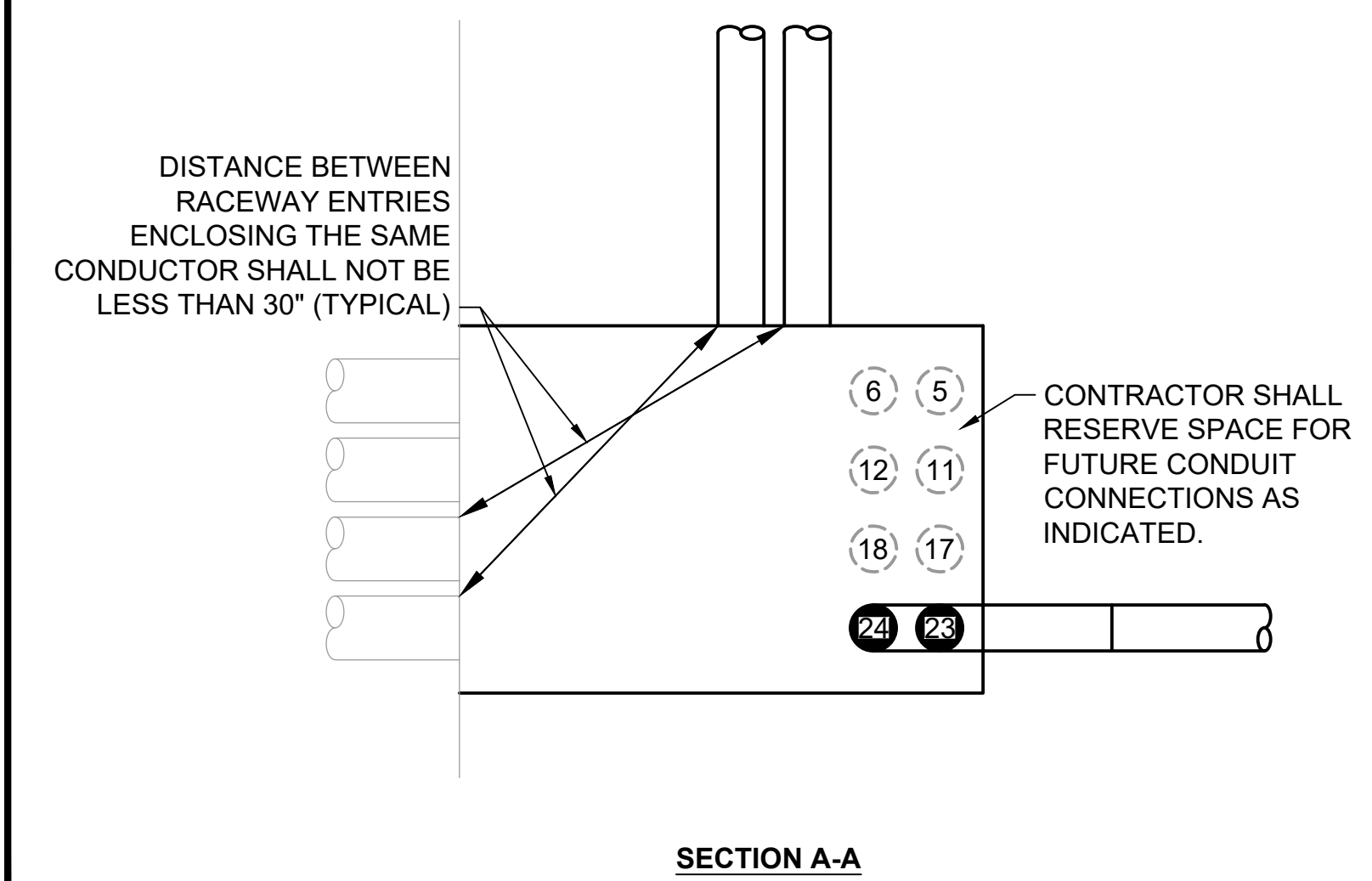
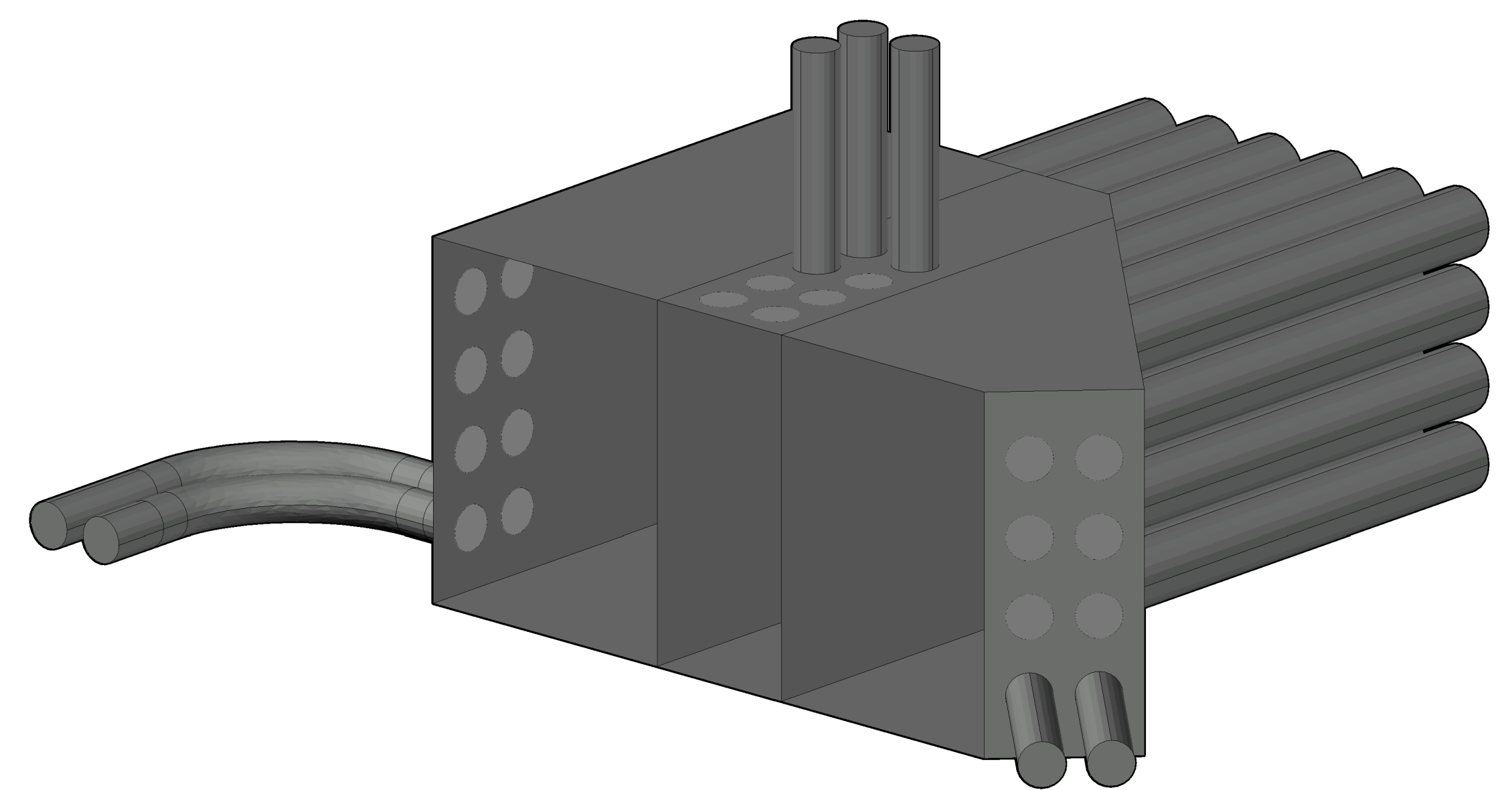
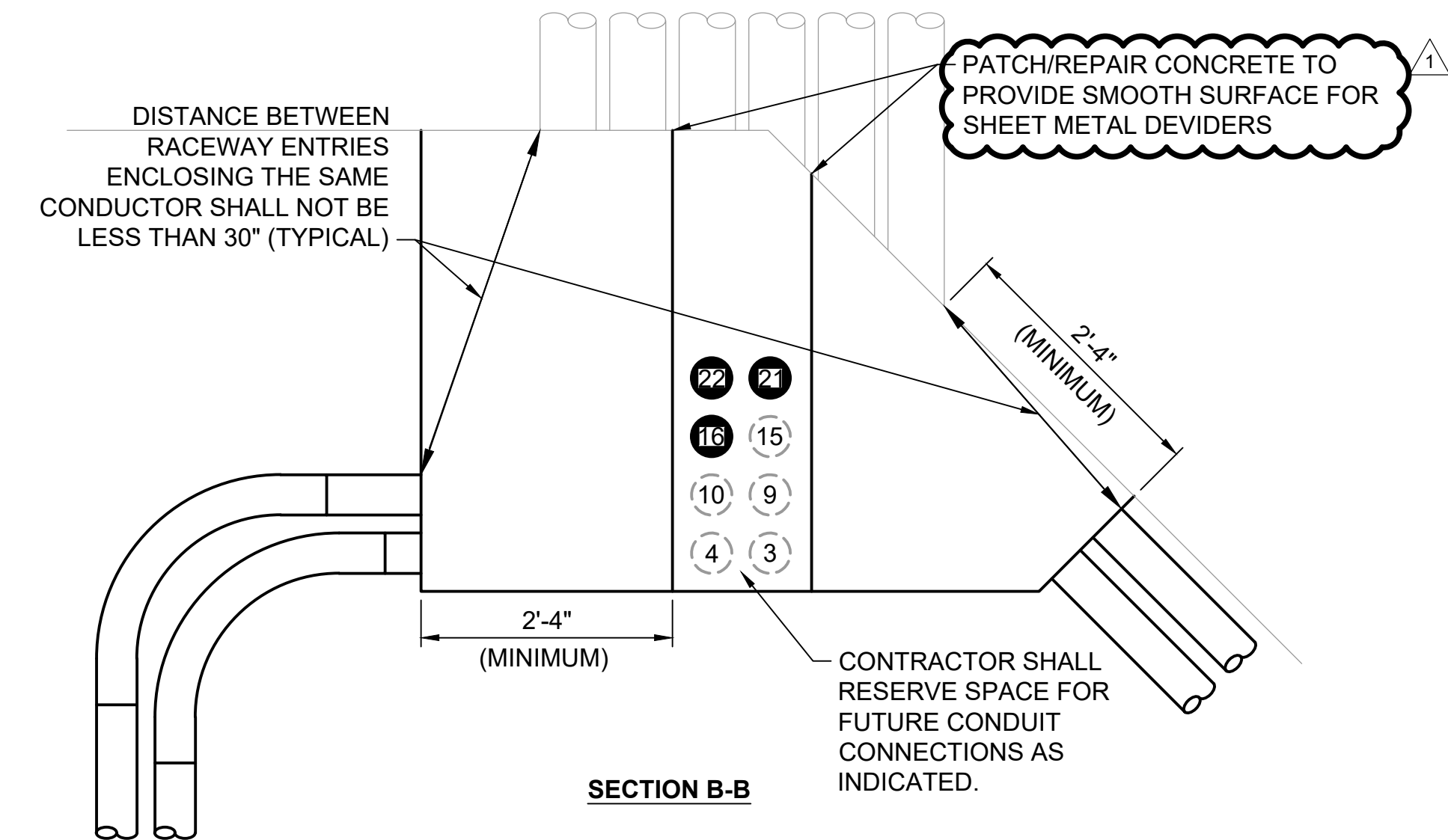
REID E. DEBAUN
PROFESSIONAL ENGINEER
LICENSE NO. PE-200909323

GENERAL NOTES:
 1. PULL BOX SHALL MEET REQUIREMENTS OF NEC ARTICLE 314.

no.	date	by	ckd	description
0	07/09/21	JMC	RED	ISSUED FOR BID
1	08/12/21	JMC	RED	ADDENDUM #1



PULL BOX PB-DB301 DETAIL
NOT TO SCALE



PULL BOX PB-DB301-1 DETAIL
NOT TO SCALE



REID E. DEBAUN
 PROFESSIONAL ENGINEER
 LICENSE NO. PE-200909323

BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
 816-333-9400
 LICENSEE NO. 000165

date	11/20/2020	detailed	J. CHASE
designed	R. DEBAUN	checked	R. DEBAUN



UNIVERSITY HOSPITAL
 UNIVERSITY OF MISSOURI HEALTH CARE
 COLUMBIA, MISSOURI

CCA & TH EMERGENCY
 POWER MODIFICATIONS
 ELECTRICAL DETAILS

project	128966	contract	CP210961
drawing	E-701	rev.	1
sheet	of	sheet	
file	128966	E-701.DWG	