

9/9/2020 1:49:05 PM

- GENERAL "ELECTRICAL" NOTES**
- 1 PRIOR TO ROUGH-IN, COORDINATE THE LOCATION AND MOUNTING HEIGHT OF ALL WALL AND CEILING MOUNTED DEVICES WITH THE ARCHITECTURAL ELEVATIONS, MILLWORK SHOP DRAWINGS, AND EXISTING CONDITIONS. IN THE EVENT OF A CONFLICT, NOTIFY THE ARCHITECT. MINOR ADJUSTMENTS IN DEVICE LOCATION, I.E. 5'-0" IN ANY DIRECTION SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
 - 2 PROVIDE FLEXIBLE CONDUIT FOR ALL CONDUITS CROSSING EXPANSION JOINTS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF EXPANSION JOINTS.
 - 3 RACEWAYS SHALL BE INSTALLED CONCEALED IN NEW WALL CONSTRUCTION ABOVE CEILINGS, BELOW FLOOR, AND IN OTHER CAVITIES TO THE GREATEST EXTENT POSSIBLE. WHERE EXPOSED RACEWAYS MUST BE USED, LAYOUT RACEWAYS TO MINIMIZE THE NUMBER OF VERTICAL RUNS.
 - 4 FEEDER CONDUITS, BRANCH CIRCUITS AND CABLE TRAY ROUTING SHALL COMPLY WITH DETAILS ON DRAWINGS AND SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES BEFORE AND DURING CONSTRUCTION.
 - 5 REFER TO THE ARCHITECTURAL DRAWINGS FOR PROJECT PHASING.
 - 6 FEEDER CIRCUITS SHALL BE ROUTED OVERHEAD UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE ARCHITECT AND ENGINEER.
 - 6.1 A GROUND CONDUCTOR SHALL BE PROVIDED IN ALL RACEWAYS UNLESS NOTED OTHERWISE.
 - 7 PROVIDE EXPANSION JOINT COUPLINGS ANYWHERE A CONDUIT PASSES THROUGH A BUILDING EXPANSION JOINT.
 - 8 COORDINATE THE ROUTING OF UNDERGROUND CONDUCTORS/CONDUIT WITH STRUCTURAL FOOTINGS AND UNDERGROUND UTILITIES.
 - 9 THE USE OF MC CABLE IS NOT ALLOWED.
 - 10 SEAL ALL EXISTING AND NEW FIRE RATED WALL AND FLOOR PENETRATIONS IN THE CONSTRUCTION AREA
 - 11 SEE THE ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS OF FIRE RATED WALLS.
 - 12 WHEREVER ON THE ELECTRICAL DRAWINGS THE WORD "PROVIDE" IS USED, IT SHALL BE INFERRED TO MEAN "FURNISH AND INSTALL".
 - 13 ELECTRICAL CONTRACTOR SHALL PROVIDE WATER PROOFING FOR ALL CONDUIT ENTERING BUILDING.

- GENERAL EXISTING CONDITION NOTES**
- 1 AREAS OF WORK EXIST FOR THIS PROJECT WHICH ARE NOT ACCESSIBLE OR HAVE LIMITED ACCESS DURING DESIGN. AS SUCH CONTRACTOR SHALL VERIFY ALL UTILITIES IN AREA OF WORK BEFORE DEMOLITION OF ANY SERVICE. ANY ELECTRICAL COMPONENTS NOT SHOWN SHALL BE IDENTIFIED AND THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED AS SOON AS POSSIBLE. NO ELECTRICAL REWORK SHALL BE COMMENCED WITHOUT COORDINATION OF BOTH ARCHITECT AND ENGINEER.
 - 2 REFER TO ARCHITECTURAL PLANS FOR PHASING OF CONSTRUCTION.
 - 3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A FIRESTOP SYSTEM IN ALL PENETRATIONS OF FIRE-RATED WALLS CREATED BY THE REMOVAL OF EXISTING ELECTRICAL CONDUIT OR CABLES, AS WELL AS THOSE CREATED BY NEWLY INSTALLED CONDUITS AND SLEEVES.
 - 4 WHERE INSTALLATION REQUIRES CUTTING OR DRILLING OF THE EXISTING FLOOR SLAB, THE CONTRACTOR SHALL X-RAY THE EXISTING SLAB PRIOR TO WORK TO ENSURE THAT NO EXISTING UTILITIES OR STRUCTURAL ELEMENTS IN THE SLAB WILL BE COMPROMISED BY THE WORK. NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS THAT WILL REQUIRE RELOCATING THE PROPOSED SLAB WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGED UTILITIES OR STRUCTURAL ELEMENTS CAUSED BY THE SLAB DEMOLITION.
 - 5 WHERE INFORMATION SHOWN ON THESE DRAWINGS CONFLICTS WITH VERIFIED FIELD CONDITIONS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER

- GENERAL "DEMOLITION" NOTES**
- 1 ALL ELECTRICAL EQUIPMENT TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIALS UNTIL RELEASED BY OWNER'S PROJECT MANAGER. MATERIALS THAT OWNER'S PROJECT MANAGER CHOOSES TO RETAIN SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION DESIGNATED BY THE PROJECT MANAGER. ALL OTHER MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

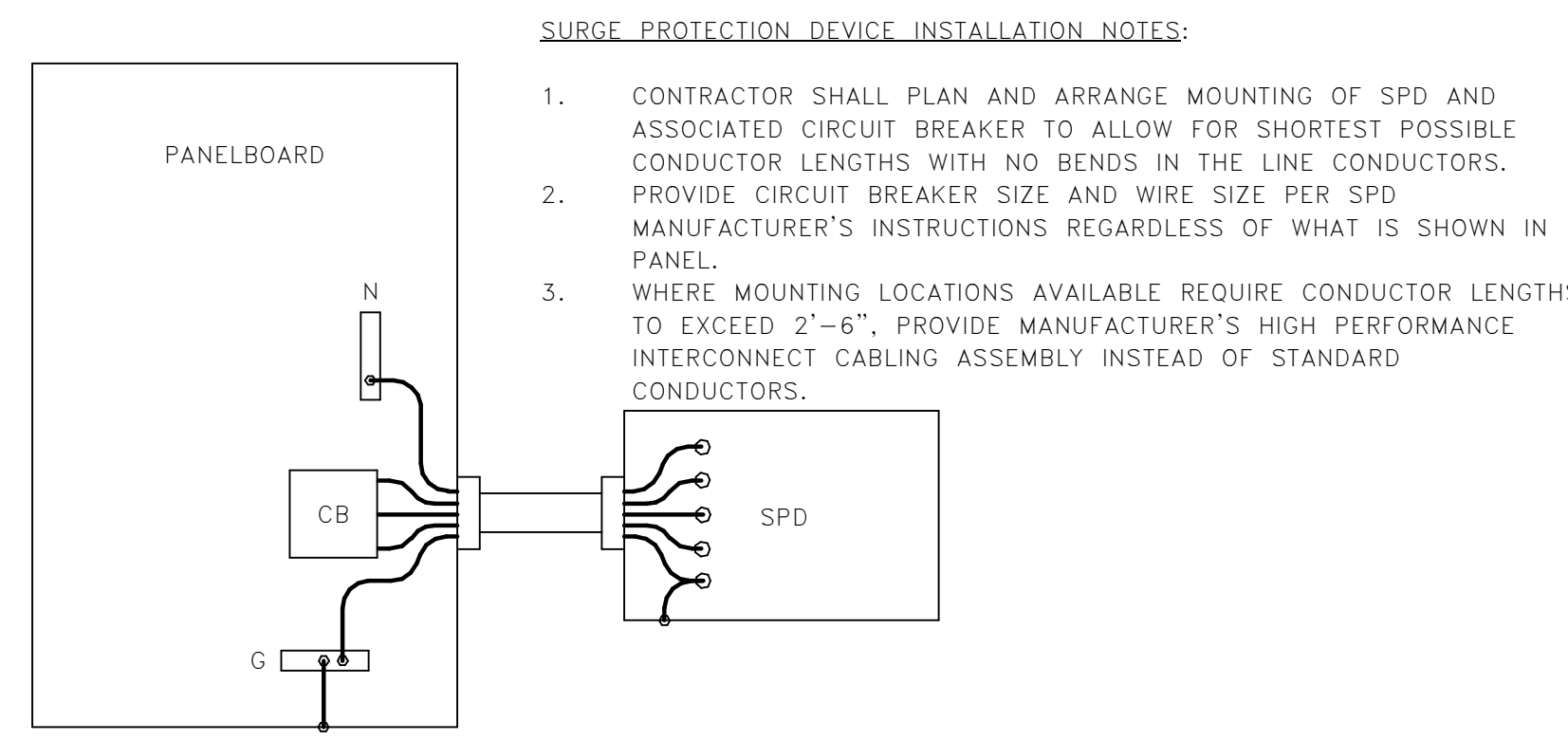
- GENERAL "SIGNAL" NOTES**
- 1 EXTEND 3/4" CONDUIT FROM THE CBB TO THE ELEVATOR CONTROLLER AND THE ELEVATOR CAB.
 - 2 CABLE SHALL BE CONCEALED IN ALL FINISHED AREAS AND ROUTED PARALLEL OR PERPENDICULAR TO THE BUILDING STRUCTURE.
 - 3 FIRE ALARM SYSTEM WILL BE INSTALLED UNDER A SEPARATE CONTRACT. PROVIDE CONDUIT AND EQUIPMENT REQUIRED TO INTERFACE FIRE ALARM SYSTEM WITH ELEVATOR. COORDINATE INSTALLATION WITH FIRE ALARM SYSTEM CONTRACTOR.
 - 4 MAIN COMMUNICATION BACKBOARD SHALL BE INSTALLED UNDER A SEPARATE CONTRACT FOR FIRST FLOOR UFFIT. COORDINATE CONNECTIONS TO CBB WITH FIRST FLOOR UFFIT CONTRACTOR.

- GENERAL "POWER" NOTES**
- 1 PROVIDE UTILITY TRANSFORMER PAD IN ACCORDANCE WITH UTILITY REQUIREMENTS. EXTEND 2-5" CONDUITS 5'-0" FROM TRANSFORMER AND CAP. ALL ELBOWS SHALL BE RGS. COORDINATE THE EXACT LOCATION OF THE PAD-MOUNTED TRANSFORMER IN THE FIELD WITH THE UTILITY COMPANY. COORDINATE WITH UTILITY COMPANY TO PROVIDE METER ON SERVICE. METER SHALL BE LOCATED AS PER UTILITY COMPANY REQUIREMENTS. ALL COSTS ASSOCIATED WITH THE PAD, PRIMARY CONDUIT, METER AND PERMITTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - 2 THE GROUND ROD CLUSTER FOR THE SERVICE GROUND SHALL CONSIST OF THREE 3/4" X 10'-0" COPPER CLAD STEEL GROUND RODS. THEY SHALL BE DRIVEN IN A TRIANGULAR CONFIGURATION APPROXIMATELY 20' APART AND INTER-CONNECTED IN DELTA WITH A NO. 4/0 BARE COPPER CONDUCTOR. TOPS OF THE RODS SHALL BE 12" BFG. CONNECTION TO THE RODS SHALL BE WITH EXOTHERMIC WELDS.
 - 3 STUB OUT AND CAP (2) 4-INCH SPARE CONDUITS FROM THE MAIN SERVICE PANEL TO 5'-0" BEYOND BUILDING SLAB.
 - 4 STUB-UP (6) 3/4-INCH SPARE CONDUITS FROM EACH FLUSH MOUNTED PANELBOARD TO ABOVE FINISHED CEILING.
 - 5 PROVIDE AND INSTALL AN ENGRAVED LAMINATED PLASTIC NAMEPLATE ON EACH ITEM OF ELECTRICAL EQUIPMENT SERVING MECHANICAL EQUIPMENT WHICH MATCH MECHANICAL DESCRIPTIONS, TO INDICATE THE DESIGNATION OF THE UNIT ON THE PLANS & THE BRANCH CIRCUIT SERVING THE EQUIPMENT.

ELECTRICAL SYMBOL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	JUNCTION BOX (WALL MTD)		SURGE PROTECTION DEVICE
	JUNCTION BOX (CEILING)		ELECTRICAL METERING DEVICE
	JUNCTION BOX (FLOOR MOUNTED)		ELECTRICAL UTILITY METER & C/T CABINET
	KEY NOTE CALLOUT (REFER TO KEY NOTES ON SHEET)		PANELBOARD (SURFACE MOUNTED)
	MOTOR CONNECTION (AS NOTED)		PANELBOARD (RECESS MOUNTED)
	HANDHOLE		CONTROL PANEL (SURFACE MOUNTED)
	EXISTING OVERHEAD ELECTRICAL PRIMARY		CONTROL PANEL (RECESS MOUNTED)
			DISCONNECT SWITCH, (REFER TO EQUIPMENT CONNECTION SCHEDULE)
			DISCONNECT SWITCH, (NON PROTECTED)

ABBREVIATIONS

ABR	DESCRIPTION
(E)	EXISTING
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
BAS	BUILDING AUTOMATION SYSTEM
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BOD	BOTTOM OF DEVICE
CBB	COMMUNICATIONS BACK BOARD
cd	CANDELA
CLG	CEILING
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FDS	FUSED DISCONNECT SWITCH
FSD	FIRE/SMOKE DAMPER
GBB	GROUND BUSS BAR
GFCI	GROUND-FAULT CIRCUIT-INTERRUPTING
GFI	GROUND-FAULT INTERRUPTING
GP	GENERAL PURPOSE
HP	HEAT PUMP
ICP	IRRIGATION CONTROL PANEL
IG	ISOLATED GROUND
J-BOX	JUNCTION BOX
LCS	LIGHTING CONTROL SYSTEM
NEC	NATIONAL ELECTRIC CODE
NFDS	NON-FUSED DISCONNECT SWITCH
OC	ON CENTER
RFAP	REMOTE FIRE ALARM ANNUCIATOR PANEL
RTU	ROOF TOP UNIT
SD	SMOKE DETECTOR
SPD	SURGE PROTECTION DEVICE
UNO	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR
VFD	VARIABLE FREQUENCY DRIVE
W/	WITH
WH	WATER HEATER
WP	WEATHERPROOF
XFMR	TRANSFORMER



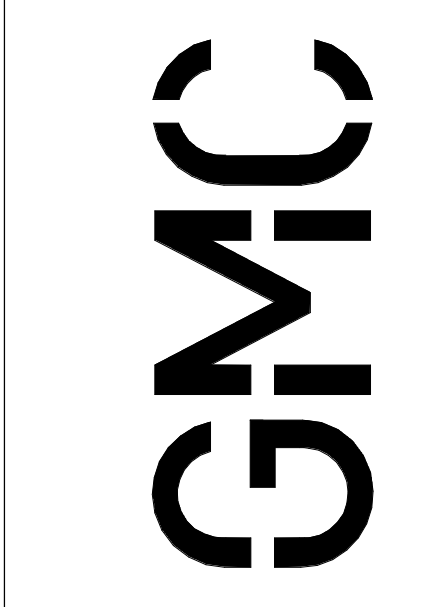
1
E0.01 SURGE PROTECTIVE DEVICE DETAIL
NOT TO SCALE

SURGE PROTECTION DEVICE (SPD) SCHEDULE

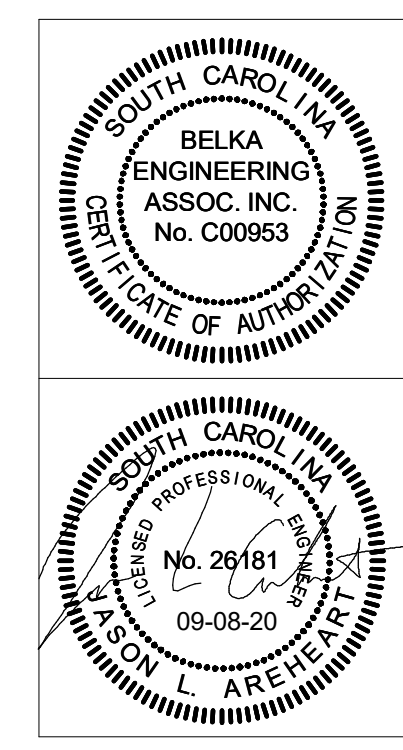
SPD ID	LOCATION TYPE	SURGE CURRENT RATING	SURGE COUNTER	VISUAL & AUDIBLE ALARM	NETWORK MONITORING	ENCLOSURE
SPD-1	TYPE 2	200kA / mode	YES	YES	NO	NEMA 12
SPD-2	TYPE 2	120kA / mode	YES	YES	NO	NEMA 12

ELECTRICAL DRAWING INDEX

#	SHEET NAME
E0.01	ELECTRICAL LEGEND, NOTES & DETAIL
E0.10	ELECTRICAL ONE-LINE DIAGRAM
E0.50	PANEL SCHEDULES 1
E0.51	PANEL SCHEDULES 2
E1.00	ELECTRICAL SITE PLAN
E1.01	LEVEL 1 ELECTRICAL DISTRIBUTION PLAN



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ISSUE DATE

REVISION	DATE	DESCRIPTION
1	09/08/2020	REVISOR: [Name]

REVISOR: [Name]
DRAWN BY: HIT
CHECKED BY: CES

ELECTRICAL SITE PACKAGE
FACILITIES RELOCATION -
BUILDING SYSTEMS RENOVATION
PROJECT
GMC # ACOL180005
STATE #H27-Z400-2
REVISED FLOOR PLAN

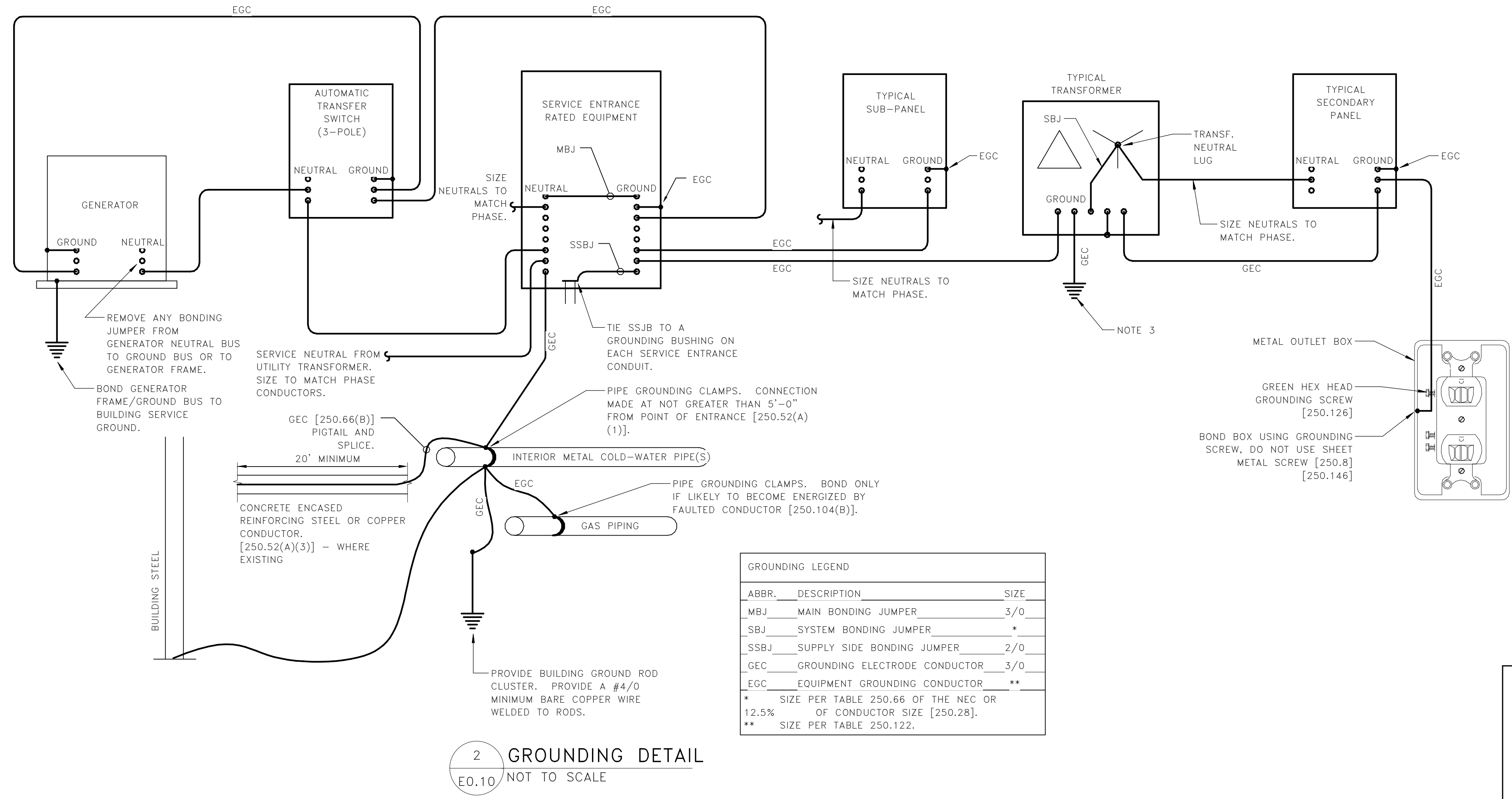
ELECTRICAL LEGEND,
NOTES & DETAIL

E0.01



DRAWINGS BASED ON CONDITIONS AT TIME OF DESIGN, SUBJECT TO CHANGE IN LATER PHASES.

DIAGRAM PROVIDES OVERALL VIEW OF BUILDING GROUNDING SYSTEM. EQUIPMENT SHALL BE GROUNDED BASED ON ITS PORTION OF THIS DIAGRAM.



- GROUNDING NOTES:**
- NUMBERS IN BRACKETS REFER TO SPECIFIC SECTIONS OF THE NATIONAL ELECTRICAL CODE.
 - ALL UNDERGROUND OR OTHERWISE INACCESSIBLE GROUND CONNECTIONS AND SPLICES SHALL BE EXOTHERMICALLY WELDED [250.68].
 - GROUND ELECTRODE FOR SEPARATELY DERIVED SYSTEMS SHALL BE THE NEAREST METAL WATER PIPE OR STRUCTURAL METAL. IF EITHER IS NOT AVAILABLE, PROVIDE GROUNDING CONDUCTOR BACK TO MAIN GROUND BUS AT SERVICE ENTRANCE.
 - PROVIDE A GROUND WIRE IN ALL CONDUITS.
 - LIGHTNING PROTECTION SYSTEM— PROVIDE LIGHTNING PROTECTION GROUND RODS LOOPED TOGETHER WITH COPPER CABLE, OTHERWISE BONDING CONDUCTOR WILL ONLY CONNECT TO ONE DOWN CONDUCTOR ROD. VERIFY THAT LP DOWN CONDUCTORS ARE BONDED TO LOCAL GROUNDED METAL TO PREVENT FLASHOVER. EARTH SHALL NOT BE USED AS THE SOLE GROUND RETURN PATH FOR ANY EQUIPMENT POWERED UNDER THIS PROJECT.
 - NO ALUMINUM SHALL BE USED FOR GROUNDING WORK WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE ENGINEER. EXCEPTION: ALUMINUM BUILDING STRUCTURAL MATERIALS SHALL BE BONDED WITH LISTED ALUMINUM EQUIPMENT WITH ALUMINUM TO COPPER CONNECTORS FOR ROUTING COPPER EGC'S.
 - PROVIDE GROUNDING BUSHING ON BOTH ENDS OF ALL SERVICE ENTRANCE RACEWAYS. SIZE AS A GEC [250.80]. THIS INCLUDES RIGID STEEL ELBOWS ON PVC CONDUIT.
 - ALL METAL ENCLOSURES AND RACEWAYS SHALL BE BONDED TO GROUND [250.86]. FOR CIRCUITS OVER 250V PROVIDE BOND PER [250.97]. STANDARD LOCKNUTS ARE NOT ACCEPTABLE.
 - PROVIDE EGC CONNECTED TO ANY JUNCTION BOX WHERE SPLICE IS MADE [250.148] OR WHERE A DEVICE IS INSTALLED.
 - PROVIDE BOND TO EXPOSED METAL ON ALL MOTORS, PUMPS, AND LIGHTING FIXTURES PER [250.112].
 - DRIVE A GROUND ROD AT GENERATOR AND BOND TO THE GENERATOR FRAME. REMOVE STRAP (SYSTEM BONDING JUMPER) BETWEEN GENERATOR NEUTRAL BUS AND GENERATOR FRAME. NEUTRAL BUS AND CONDUCTORS SHALL BE ISOLATED FROM THE GENERATOR FRAME.

TRANSFORMER SCHEDULE

UNIT I.D.	KVA	# POLES	PRIMARY VOLTAGE	SECONDARY VOLTAGE	SYSTEM BONDING JUMPER SIZE	REMARKS
T1A	150	3	480/277	120/208	#2	
T1B	75	3	480/277	120/208	#8	
T1LS	15	3	480/277	120/208	#8	
T1SB	30	3	480/277	120/208	#8	

GROUNDING LEGEND

ABBR.	DESCRIPTION	SIZE
MBJ	MAIN BONDING JUMPER	3/0
SBJ	SYSTEM BONDING JUMPER	*
SSBJ	SUPPLY SIDE BONDING JUMPER	2/0
GEC	GROUNDING ELECTRODE CONDUCTOR	3/0
EGC	EQUIPMENT GROUNDING CONDUCTOR	**

* SIZE PER TABLE 250.66 OF THE NEC OR 12.5% OF CONDUCTOR SIZE [250.28].
** SIZE PER TABLE 250.122.

ELECTRICAL DISTRIBUTION SYSTEM

PANEL	DISTRIBUTION	PHASE	# OF WIRES	MAINS TYPE	MCB	FED FROM	REMARKS
SB1	480 V/3-0	3	4	225 A	MLO	MDP	
MDP	480 V/3-0	3	4	2000 A	MCB	UTILITY	
LS1	480 V/3-0	3	4	100 A	MLO	MDP	PROVIDE WITH SUB-FEED LUGS FOR FUTURE PANEL LS2.
L1A	480 V/3-0	3	4	125 A	MLO	MDP	
ECB-SB	480 V/3-0	3	4	300 A	MCB	CB1	PROVIDE IN NEMA 3R ENCLOSURE
ECB-LS	480 V/3-0	3	4	100 A	MCB	100 A	CB1
CB1	480 V/3-0	3	4	400 A	MCB	400 A	GENERATOR
RSB1	208 V/3-0	3	4	100 A	MCB	100 A	T1SB
RLS1	208 V/3-0	3	4	100 A	MCB	50 A	T1LS
R1K	208 V/3-0	3	4	150 A	MLO	150 A	T1B
R1C	208 V/3-0	3	4	125 A	MLO	125 A	T1B
R1B	208 V/3-0	3	4	300 A	MCB	300 A	T1B
R1A	208 V/3-0	3	4	400 A	MCB	400 A	T1A
CS	208 V/3-0	3	4	225 A	MLO	225 A	R1A

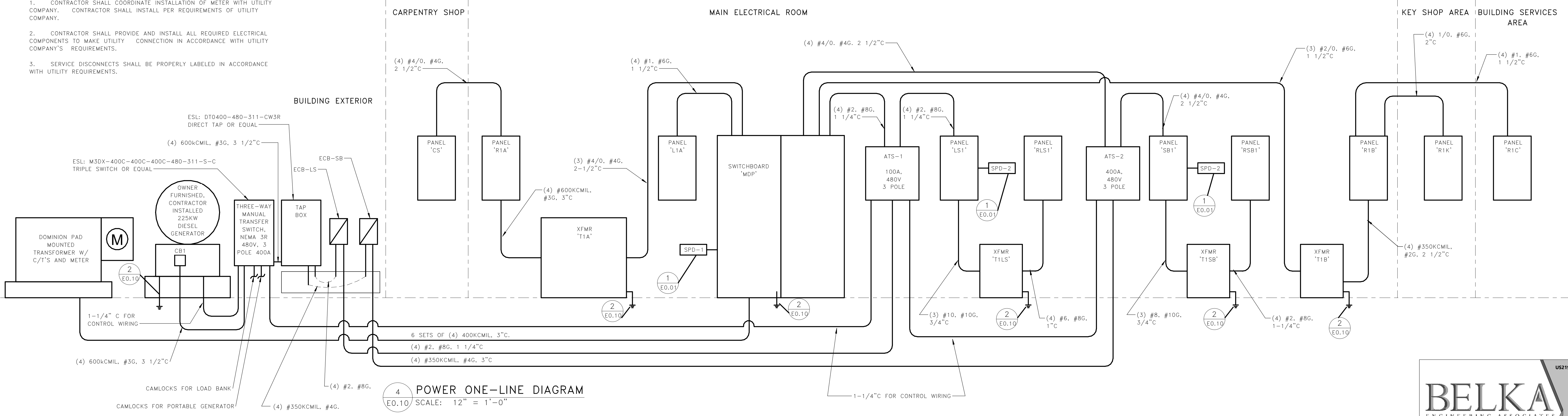
2 GROUNDING DETAIL
E0.10 NOT TO SCALE

AVAILABLE FAULT CURRENT

BASED ON A 1000 KVA, 3.5 %Z UTILITY TRANSFORMER THE MAXIMUM FAULT CURRENT AVAILABLE AT THE SERVICE ENTRANCE DISCONNECT IS CALCULATED TO BE 34,367 AMPS. LABEL THE SERVICE ENTRANCE DISCONNECT WITH THIS MAXIMUM FAULT CURRENT AND THE DATE OF INSTALLATION. CONTACT ENGINEER 2 WEEKS PRIOR TO SUBSTANTIAL COMPLETION TO CONFIRM THE AVAILABLE FAULT CURRENT PRIOR TO LABELING EQUIPMENT.

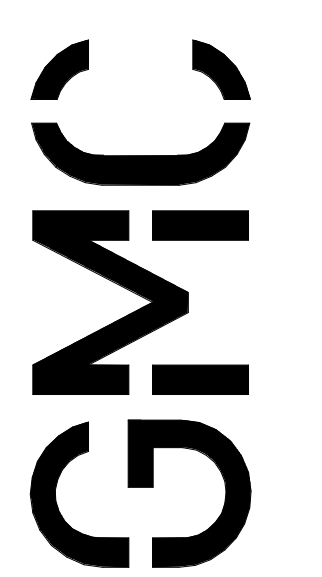
ELECTRICAL SERVICE GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE INSTALLATION OF METER WITH UTILITY COMPANY. CONTRACTOR SHALL INSTALL PER REQUIREMENTS OF UTILITY COMPANY.
- CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED ELECTRICAL COMPONENTS TO MAKE UTILITY CONNECTION IN ACCORDANCE WITH UTILITY COMPANY'S REQUIREMENTS.
- SERVICE DISCONNECTS SHALL BE PROPERLY LABELED IN ACCORDANCE WITH UTILITY REQUIREMENTS.

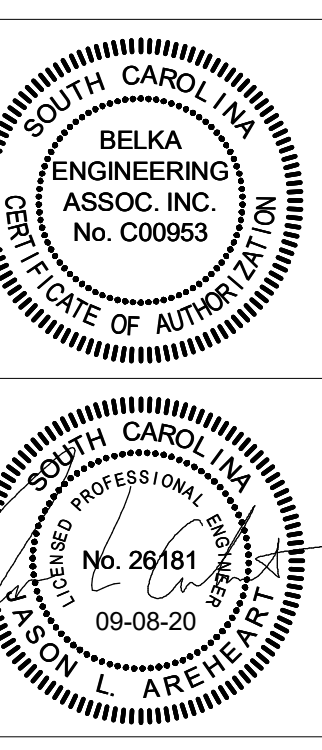


4 POWER ONE-LINE DIAGRAM
E0.10 SCALE: 1/2" = 1'-0"

DRAWINGS BASED ON CONDITIONS AT TIME OF DESIGN, SUBJECT TO CHANGE IN LATER PHASES.



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ISSUE DATE

REVISED FLOOR PLAN	Issue Date
1 ELECTRICAL SITE PACKAGE	09/08/2020

ISSUE DATE: 09-08-20

ELECTRICAL SITE PACKAGE
FACILITIES RELOCATION -
BUILDING SYSTEMS RENOVATION
PROJECT
GMC # ACOL180005
STATE #H27-Z400-2
REVISED FLOOR PLAN

ELECTRICAL ONE-LINE
DIAGRAM

E0.10

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SWITCHBOARD: MDP		VOLTS: 480/277 Wye			A.I.C. RATING: 65,000	
SUPPLY FROM:		PHASES: 3			MAINS TYPE: MCB	
		WIRES: 4			MAINS RATING: 2000 A	
		ENCLOSURE: Type 1			MCB RATING: 2000 A	
CKT	DESCRIPTION	POLES	FRAME	TRIP	Load	COMMENTS
1	PANEL "L2A" (FUTURE)	3	200 A	125 A	6.28	
2	X-FMR "T1A" TO PANEL "R1A"	3	400 A	250 A	46.10	
3	X-FMR "T1B" TO PANELS "R1B" & "R1C"	3	200 A	125 A	42.70	
4	PANEL "L1A"	3	200 A	125 A	24.37	
5	PANEL "DPT" (FUTURE)	3	400 A	400 A	247.12	
6	PANEL "L2E" (FUTURE)	3	225 A	225 A	116.64	
7	PANEL "LS1" VIA ATS-1, PANEL "LS2" (FUTURE)	3	200 A	125 A	2.39	
8	PREPARED SPACE	3	225 A	0 A	0.00	
9	PREPARED SPACE	3	225 A	0 A	0.00	
10	DX-VAV-2	3	100 A	45 A	33.25	
11	VAV-1-1, VAV-1-2, VAV-1-3, VAV-1-4	3	100 A	40 A	24.00	
12	EXISTING ELEVATOR	3	100 A	100 A	66.51	
13	PANEL "SBI" VIA ATS-2	3	300 A	300 A	0.00	
14	SPD	3	---	80 A	0.00	
15	PREPARED SPACE	3	225 A	0 A	0.00	
16	PREPARED SPACE	---	---	---	0.00	
17	PREPARED SPACE	---	---	---	0.00	
18	PREPARED SPACE	---	---	---	0.00	
TOTAL CONNECTED KVA:					609.37	
TOTAL CONNECTED AMPACITY:					733	
LOAD TYPE		CONNECTED KVA		SWITCHBOARD TOTALS:		
LIGHTING:		19.28		TOTAL CONNECTED KVA: 609.37		
RECEPTACLES:		130.1		TOTAL CONNECTED CURRENT: 733		
HVAC:		437.51		SWITCHBOARD CAPACITY %: 37		
MOTORS:		---		---		
KITCHEN:		---		---		
OTHERS:		18.70		---		

* SEE GENERAL NOTE 1.

PANELBOARD: RLS1		DISTRIBUTION: 120/208 Wye			A.I.C. RATING: 10000							
SUPPLIED FROM: T1LS		PHASES: 3			MAINS RATING: 100 A							
		WIRES: 4			MCB RATING: 50 A							
		ENCLOSURE: Type 1										
WIRE SIZE	CKT	DESCRIPTION	BKR	P	A	B	C	P	BKR	DESCRIPTION	CKT	WIRE SIZE
---	1	FUTURE "FACP"	20	1	0.0	0.0				PREPARED SPACE	2	---
---	3	SPARE	20	1		0.0	0.0			PREPARED SPACE	4	---
---	5	SPARE	20	1			0.0	0.0		PREPARED SPACE	6	---
---	7	SPARE	20	1	0.0	0.0				PREPARED SPACE	8	---
---	9	SPARE	20	1			0.0	0.0		PREPARED SPACE	10	---
---	11	SPARE	20	1				0.0	0.0	PREPARED SPACE	12	---
---	13	SPARE	20	1	0.0	0.0				PREPARED SPACE	14	---
---	15	SPARE	20	1			0.0	0.0		PREPARED SPACE	16	---
---	17	SPARE	20	1				0.0	0.0	PREPARED SPACE	18	---
TOTAL PER PHASE KVA:					0.0	0.0	0.0	CONNECTED KVA: 0.0				
TOTAL PER PHASE AMPACITY:					0	0	0	CONNECTED AMPACITY: 0				

NOTES:
* SEE GENERAL NOTE 1

PANELBOARD: L1A		DISTRIBUTION: 480/277 Wye			A.I.C. RATING: 35,000									
SUPPLIED FROM: MDP		PHASES: 3			MAINS RATING: 125 A									
		WIRES: 4			MCB RATING: MAIN LUGS ONLY									
		ENCLOSURE: Type 1												
WIRE SIZE	CKT	DESCRIPTION	BKR	P	A	B	C	P	BKR	DESCRIPTION	CKT	WIRE SIZE		
---	1				4.7	2.3				20	LIGHTING - WEST OFFICE WING	2	1-#12, 1-#10, 1-#12	
---	3	VAV-2-1	25	3		4.7	3.5			20	LIGHTING - CAGE	4	1-#12, 1-#10, 1-#12	
---	5							4.7	2.7	1	LIGHTING - CARPENTRY/LANDSCAPE/EAST...	6	1-#12, 1-#10, 1-#12	
---	7	LIGHTING-EXTERIOR	20	1	0.8	1.1				20	LIGHTING - EXTERIOR	8	1-#12, 1-#10, 1-#12	
---	9	SPARE	20	1		0.0	0.0			20	SPARE	10	---	
---	11	SPARE	20	1				0.0	0.0	1	SPARE	12	---	
---	13	PREPARED SPACE	---	---	0.0	0.0				---	PREPARED SPACE	14	---	
---	15	PREPARED SPACE	---	---			0.0	0.0		---	PREPARED SPACE	16	---	
---	17	PREPARED SPACE	---	---				0.0	0.0	---	PREPARED SPACE	18	---	
---	19	PREPARED SPACE	---	---	0.0	0.0				---	PREPARED SPACE	20	---	
---	21	PREPARED SPACE	---	---			0.0	0.0		---	PREPARED SPACE	22	---	
---	23	PREPARED SPACE	---	---				0.0	0.0	---	PREPARED SPACE	24	---	
---	25	PREPARED SPACE	---	---	0.0	0.0				---	PREPARED SPACE	26	---	
---	27	PREPARED SPACE	---	---				0.0	0.0	---	PREPARED SPACE	28	---	
---	29	PREPARED SPACE	---	---					0.0	0.0	---	PREPARED SPACE	30	---
TOTAL PER PHASE KVA:					8.9	8.2	7.3	CONNECTED KVA: 24.4						
TOTAL PER PHASE AMPACITY:					33	30	26	CONNECTED AMPACITY: 29						

NOTES:
* SEE GENERAL NOTE 1

PANELBOARD: R1A		DISTRIBUTION: 120/208 Wye			A.I.C. RATING: 22,000									
SUPPLIED FROM: T1A		PHASES: 3			MAINS RATING: 400 A									
		WIRES: 4			MCB RATING: 400 A									
		ENCLOSURE: Type 1												
WIRE SIZE	CKT	DESCRIPTION	BKR	P	A	B	C	P	BKR	DESCRIPTION	CKT	WIRE SIZE		
1-#12, 1-#10, 1-#12	1	RECEPT - UNASSIGNED CAGE	20	1	0.7	0.9				20	RECEPT - 1ST FL EAST WING	2	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	3	RECEPT - BLANK CAGE	20	1		0.7	0.7			20	RECEPT - BUILDING SERVICES CAGE	4	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	5	RECEPT - BUILDING SERVICES CAGE	20	1				0.7	0.5	1	RECEPT - HVAC SERVICE REC.	6	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	7	RECEPT - FACILITIES STORAGE CAGE	20	1	0.7	0.7				20	RECEPT - HAZ-MAT CAGE	8	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	9	RECEPT - STEAM CAGE	20	1			0.7	0.7		20	RECEPT - PLUMBING CAGE	10	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	11	RECEPT - HVAC CAGE	20	1				0.7	0.7	1	RECEPT - PM WORK AREA CAGE	12	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	13	RECEPT - PM ROOFING CAGE	20	1	0.7	0.7				20	RECEPT - PM PIPE FITTERS CAGE	14	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	15	RECEPT - STAFF BREAK COFFEE MAKER	20	1		1.0	1.0			20	RECEPT - STAFF BREAK REFRIGERATOR	16	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	17	RECEPT - 1ST FL WEST WING	20	1				0.7	1.2	1	RECEPT - STAFF BREAK MICROWAVE	18	1-#12, 1-#10, 1-#12	
1-#12, 1-#10, 1-#12	19	RECEPT - CUSTODIAL STORAGE CAGE	20	1	0.7	0.0				20	SPARE	20	---	
---	21	SPARE	20	1			0.0	0.0		20	SPARE	22	---	
---	23	SPARE	20	1				0.0	0.0	1	SPARE	24	---	
---	25	SPARE	20	1	0.0	0.0				1	SPARE	26	---	
---	27	SPARE	20	1			0.0	0.0		1	SPARE	28	---	
---	29	SPARE	20	1				0.0	0.0	1	SPARE	30	---	
---	31	SPARE	20	1	0.0	0.0				1	SPARE	32	---	
---	33	SPARE	20	1			0.0	3.4		2	SHP-1	34	2-#10, 1-#10	
---	35	SPARE	20	1				0.0	3.4		38	---		
---	37	SPARE	20	1	0.0	8.9				3	225	PANEL "CS" (CARPENTRY SHOP)	40	**
---	39	SPARE	20	1			0.0	7.7				42	---	
---	41	SPARE	20	1				0.0	7.9				---	
TOTAL PER PHASE KVA:					14.2	16.0	15.9	CONNECTED KVA: 46.1						
TOTAL PER PHASE AMPACITY:					118	136	135	CONNECTED AMPACITY: 128						

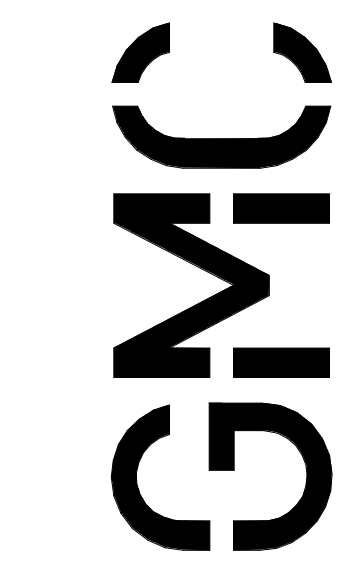
NOTES:
* SEE GENERAL NOTE 1
** COORDINATE FEEDER SIZE WITH SINGLE LINE DIAGRAM

CONDUIT SCHEDULE	
BRANCH CIRCUIT RATING	CONDUIT SIZE
20A-50A	3/4"
55A-80A	1"
85A-125A	1 1/4"
150A	1 1/2"
175A-200A	2"
225A-300A	2 1/2"
350A	3"
400A	3 1/2"



*DRAWINGS BASED ON CONDITIONS AT TIME OF DESIGN, SUBJECT TO CHANGE IN LATER PHASES.

*



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ISSUE DATE	REVISION	DATE
09/08/2020	1	ISSUE DATE
		1 ELECTRICAL SITE PACKAGE

ELECTRICAL SITE PACKAGE
FACILITIES RELOCATION -
BUILDING SYSTEMS RENOVATION
PROJECT
GMC # ACOL180005
STATE #H27-Z400-2
REVISED FLOOR PLAN

PANEL SCHEDULES 1

E0.50

A

B

C

D

F

F

G

H

J

K

9/9/2020 1:52:46 PM

A

B

C

D

E

F

G

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K

1

2

3

4

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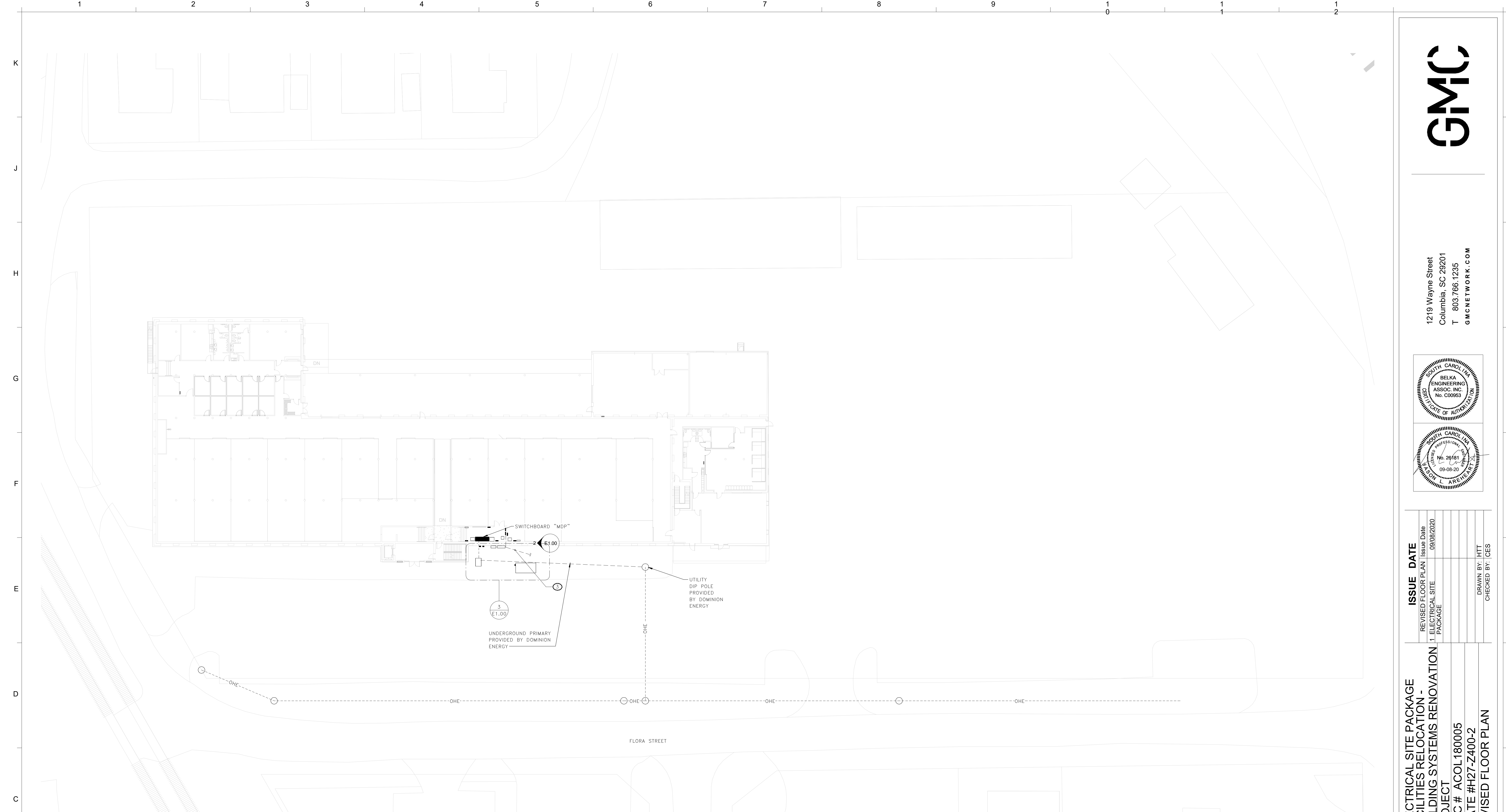
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9

10

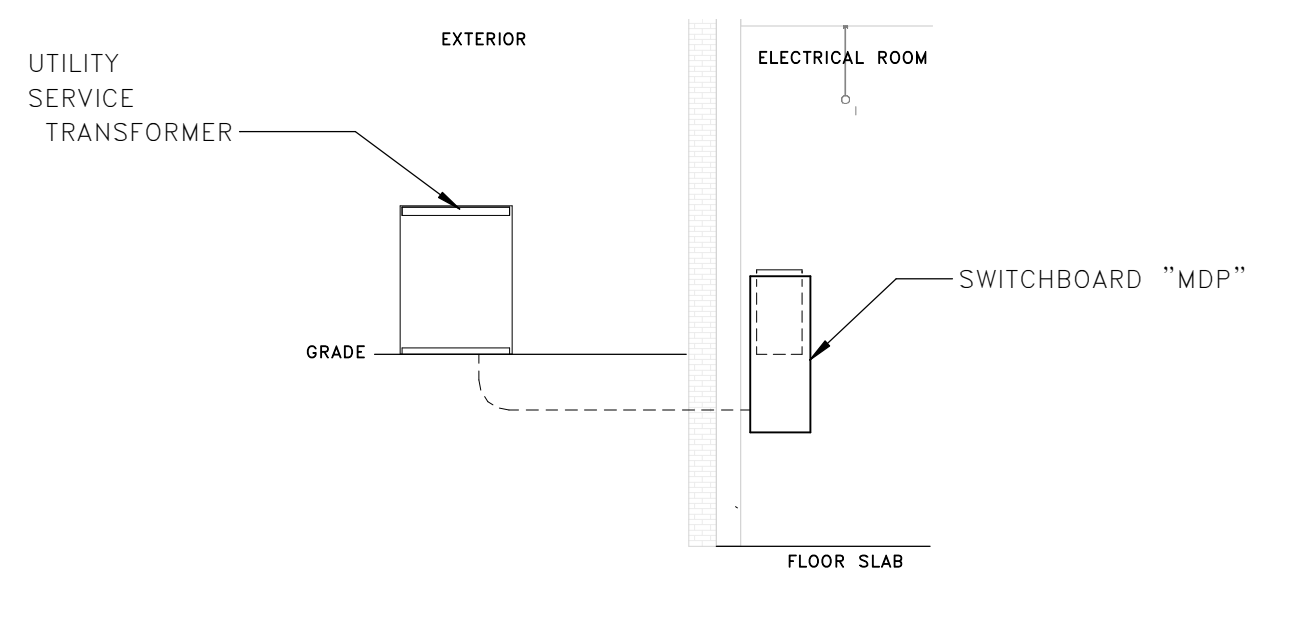
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12

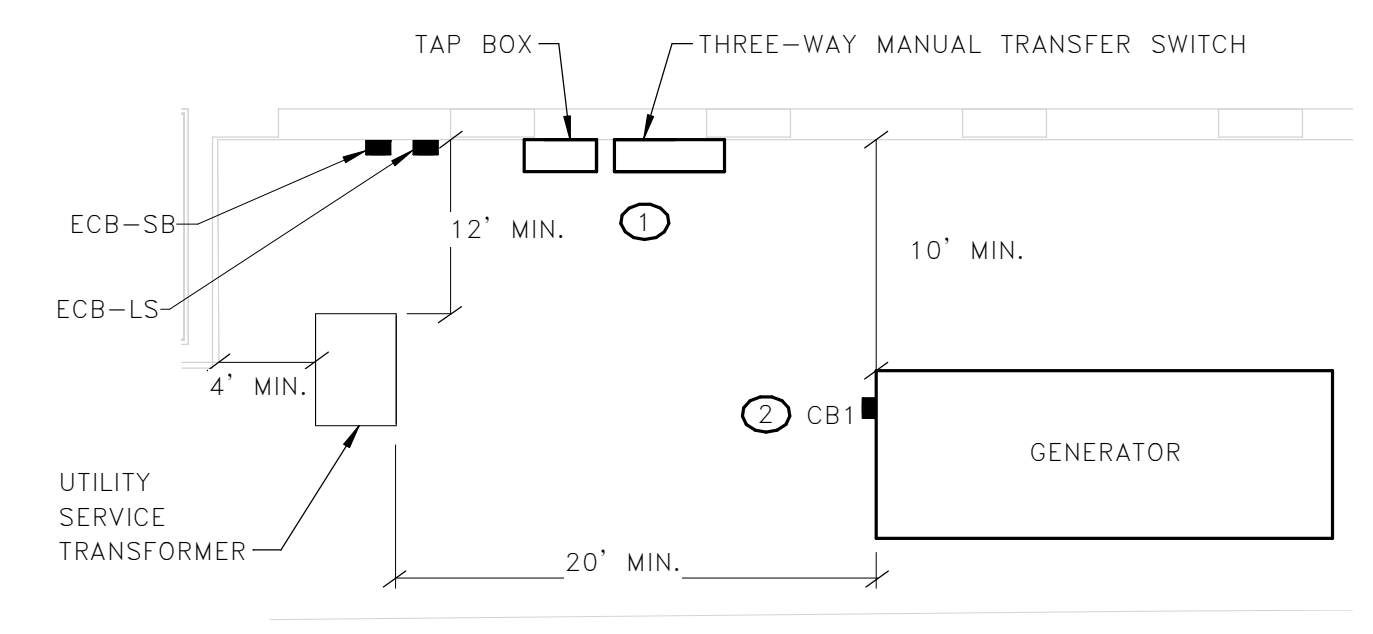


1 ELECTRICAL SITE PLAN
E1.00 SCALE: 3/64" = 1'-0"

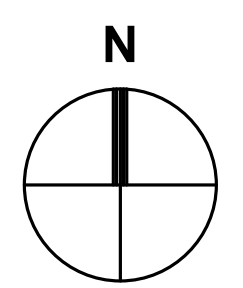
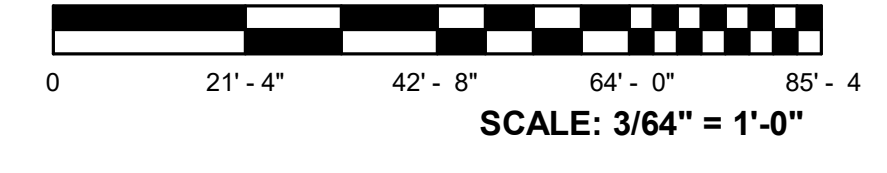
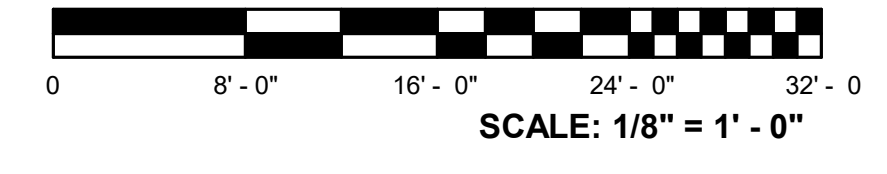
- | KEY NOTES | GENERAL NOTES |
|--|--|
| <ol style="list-style-type: none"> PROVIDE TAP BOX ON EXTERIOR WALL OF BUILDING. PROVIDE IN A NEMA 3R WEATHERPROOF ENCLOSURE. TAP BOX SHALL BE EQUIPPED WITH A POWER DISTRIBUTION BLOCK WITH LUGS ON EACH SIDE TO ACCEPT (2) #6AWG/350KCMIL PER PHASE AND NEUTRAL FOR BOTH LINE AND LOAD. GROUNDING LUGS ON EACH SIDE TO ACCEPT (1) #6AWG-350KCMIL WIRE, AND A PHASE MONITOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN. PROVIDE 3P, 400A, 480V OUTPUT CIRCUIT BREAKER COMPATIBLE WITH OWNER SUPPLIED GENERATOR. COORDINATE INSTALLATION WITH OWNER. PROVIDE TWO 4" CONDUITS FOR FUTURE TELECOM. LOCATE NEAR EAST WALL OF ELECTRICAL ROOM AND STUB-OUT 5' FROM EDGE OF BUILDING. COMMUNICATION BACKBOARD AND DATA INFRASTRUCTURE IS BEING INSTALLED UNDER A SEPARATE CONTRACT. 'BUILDING FIRST FLOOR UPFIT'. COORDINATE FINAL LOCATION OF STUB-UPS WITH 'BUILDING FIRST FLOOR UPFIT' CONTRACTOR. | <ol style="list-style-type: none"> COORDINATE ALL ELECTRICAL SERVICE REQUIREMENTS WITH DOMINION ENERGY. CONTACT SHARON LYNN (803) 217-7341. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED ELECTRICAL COMPONENTS TO MAKE UTILITY CONNECTION IN ACCORDANCE WITH UTILITY COMPANY'S REQUIREMENTS. UTILITY COMPANY SHALL INSPECT WORK PRIOR TO PROVIDING CONNECTION TO UTILITY SERVICE TRANSFORMER. SERVICE DISCONNECTS SHALL BE PROPERLY LABELED IN ACCORDANCE WITH UTILITY REQUIREMENTS. CONTRACTOR SHALL COORDINATE DEMOLITION AND REMOVAL OF EXISTING ELECTRICAL SERVICE EQUIPMENT WITH UTILITY COMPANY. PROVIDE SEAL FITTINGS IN ALL CONDUITS PENETRATING BUILDING EXTERIOR WALL OR FLOOR SLAB. |



2 Elevation 1 - a
E1.00 SCALE: 1/8" = 1'-0"



3 ELECTRICAL YARD ENLARGED PLAN
E1.00 SCALE: 1/8" = 1'-0"



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CSTRINGFIELD@BEA-Consulting.com

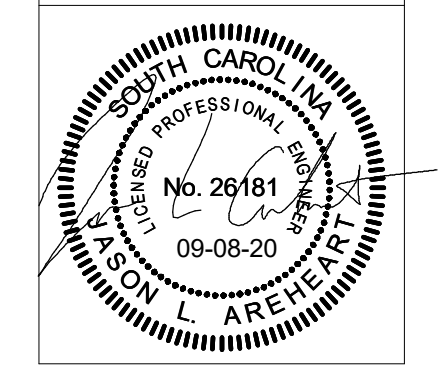
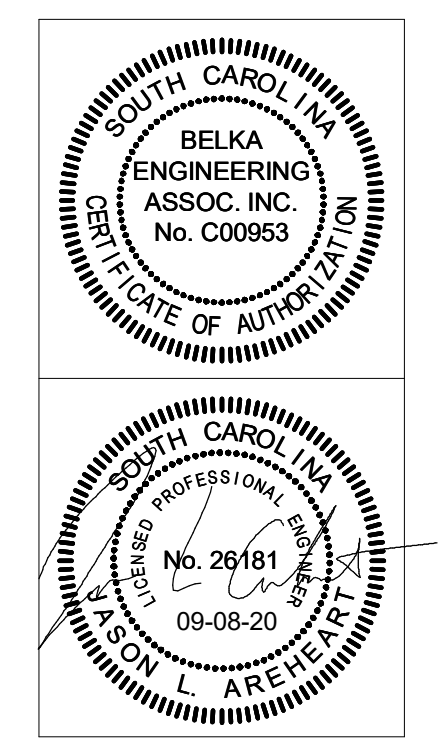
ELECTRICAL SITE PLAN

E1.00

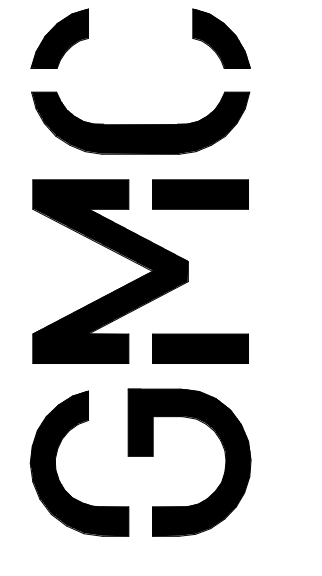
ISSUE DATE	REVISION
09/08/2020	1. ELECTRICAL SITE PACKAGE

ELECTRICAL SITE PACKAGE
FACILITIES RELOCATION -
BUILDING SYSTEMS RENOVATION
PROJECT
GMC # ACOL180005
STATE #H27-Z400-2
REVISED FLOOR PLAN

DRAWN BY: HIT
CHECKED BY: CES

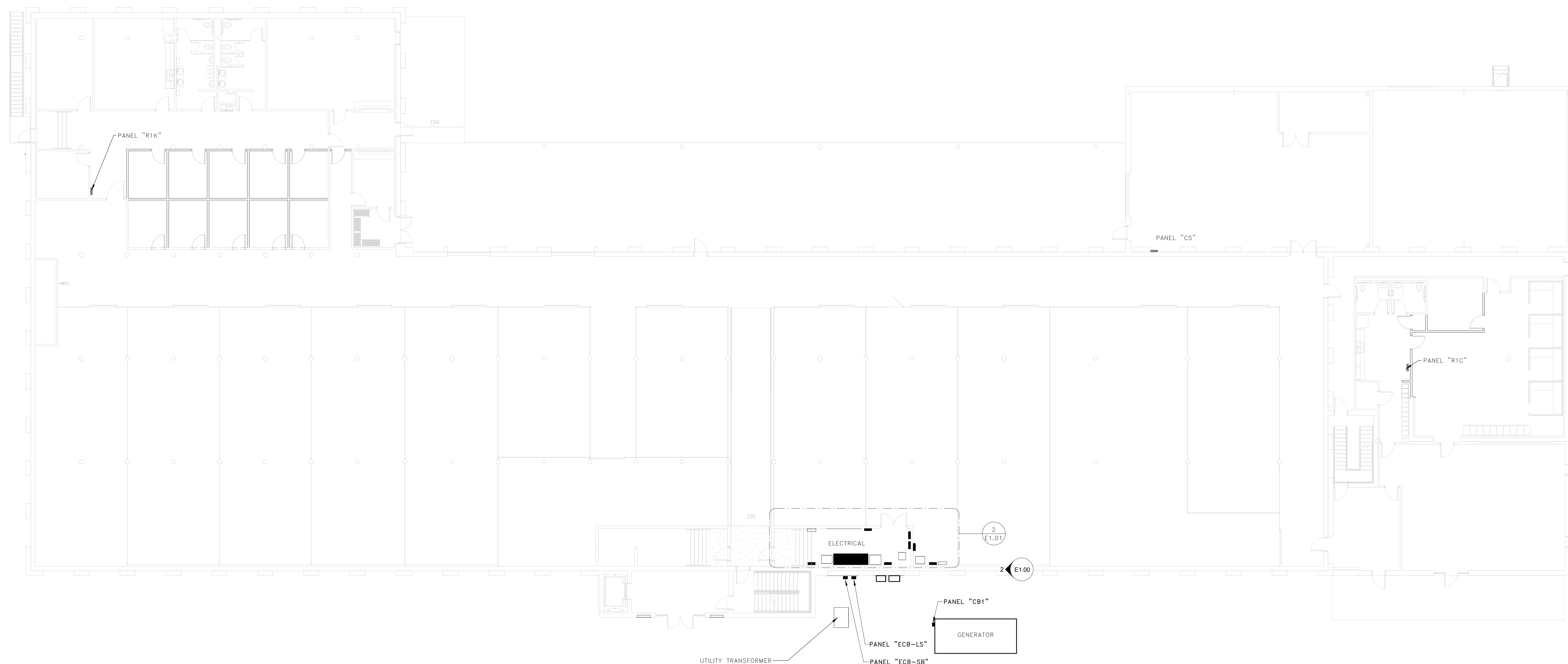


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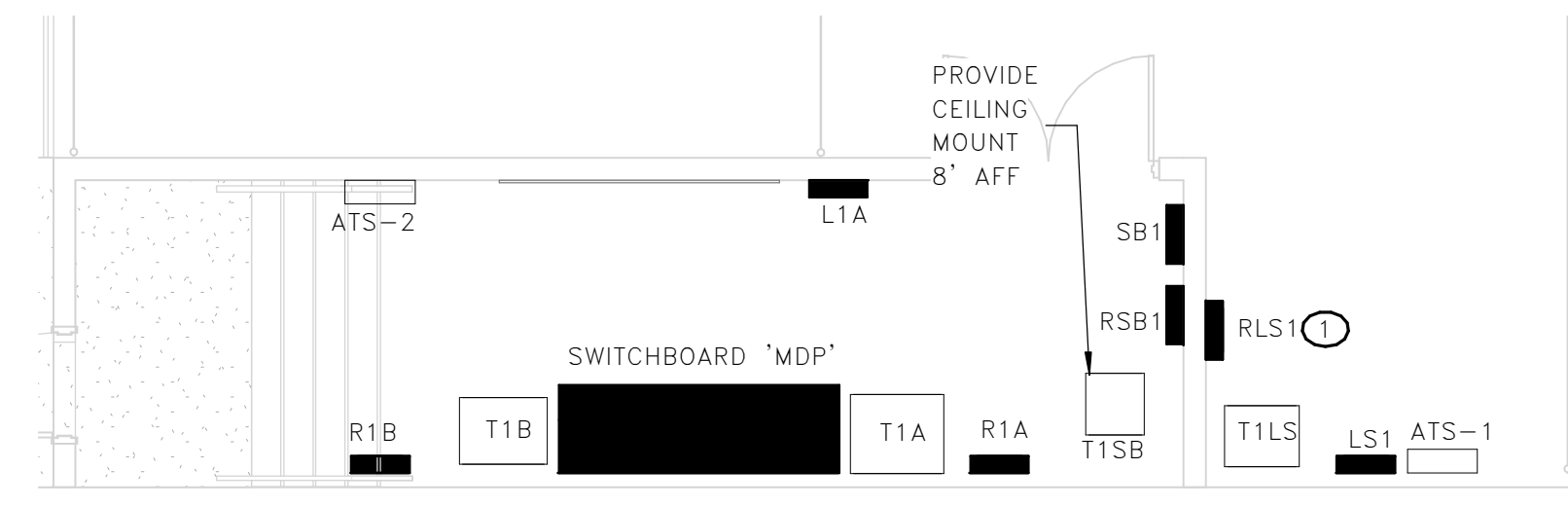


9/9/2020 2:00:21 PM

9/9/2020 1:57:34 PM

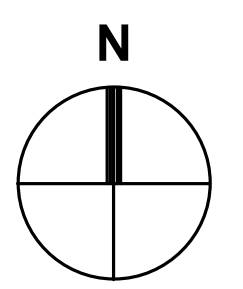
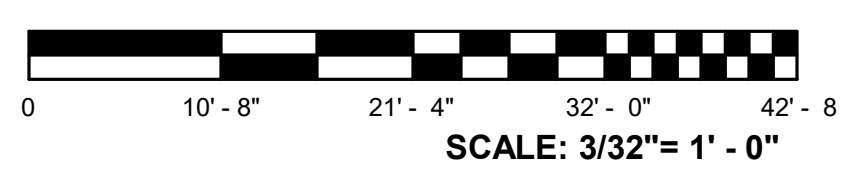
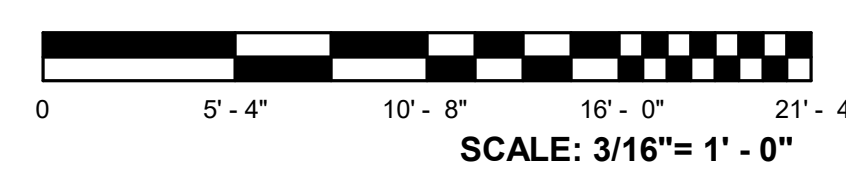


1 LEVEL 1 ELECTRICAL DISTRIBUTION PLAN
 E1.01 SCALE: 3/32" = 1'-0"



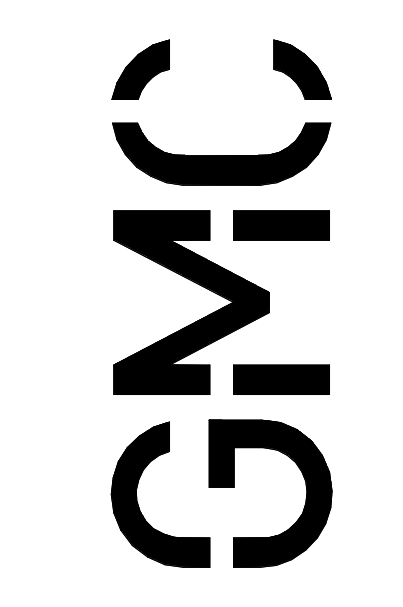
2 ENLARGED ELECTRICAL RM. 101 PLAN
 E1.01 SCALE: 3/16" = 1'-0"

- | KEY NOTES | GENERAL NOTES |
|--|---|
| 1 PROVIDE 20A, 120V SINGLE POLE CIRCUIT BREAKER IN PANEL RLS1 TO SERVE FIRE ALARM CONTROL PANEL. FIRE ALARM CONTROL PANEL IS BEING INSTALLED UNDER A SEPARATE CONTRACT. COORDINATE WITH CONTRACTOR INSTALLING FIRE ALARM SYSTEM. | 1 LIGHTS IN CAGES ARE CONTROLLED BY INDIVIDUAL SWITCH MOUNTED ON COLUMN INSIDE EACH CAGE. |
| | 2 LIGHTS IN EGRESS CORRIDOR ARE CONTROLLED BY DESIGNATED SWITCHES. |

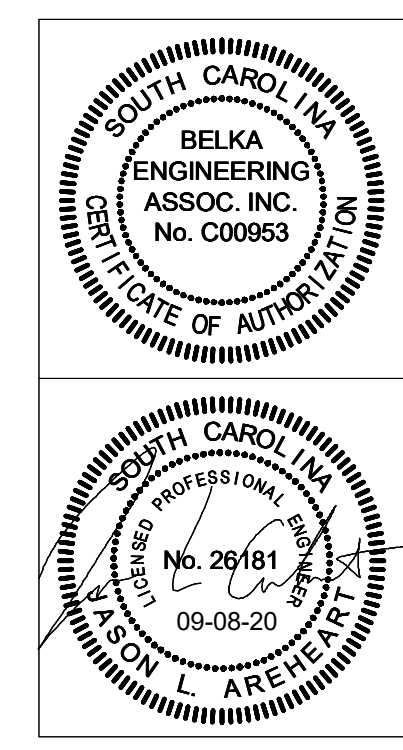


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DRAWINGS BASED ON CONDITIONS AT TIME OF DESIGN, SUBJECT TO CHANGE IN LATER PHASES.



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ISSUE DATE	ISSUE DATE
REVISED FLOOR PLAN PACKAGE	09/08/2020
1.1 ELECTRICAL SITE PACKAGE	

ELECTRICAL SITE PACKAGE
 FACILITIES RELOCATION -
 BUILDING SYSTEMS RENOVATION
 PROJECT
 GMC # ACOL180005
 STATE #H27-Z400-2
 REVISED FLOOR PLAN

LEVEL 1 ELECTRICAL
 DISTRIBUTION PLAN

E1.01