GENERAL "ELECTRICAL" NOTES

1. BRANCH CIRCUIT WIRING SHALL BE NO. 12 AWG UNLESS NOTED OTHERWISE. WHERE CONDUCTOR AND RACEWAY SIZE ARE SHOWN AT HOMERUN, SUCH SIZE SHALL BE USED FOR THE ENTIRE CIRCUIT. EXCEPTION: FINAL CONNECTION TO DEVICES, IN OUTLET BOXES, IS NOT REQUIRED TO BE LARGER THAN NO. 12 AWG.
2. 20A/120V BRANCH CIRCUITS EXCEEDING 100' IN LENGTH FROM PANEL TO FARTHEST DEVICE OR FIXTURE SHALL USE NO. 10 CONDUCTORS AND 3/4"C.
3. RACEWAYS SHALL BE INSTALLED CONCEALED IN WALL, ABOVE CEILINGS, BELOW FLOOR, AND IN OTHER CAVITIES TO THE GREATEST EXTENT POSSIBLE WHERE INSIDE BUILDING. WHERE EXPOSED RACEWAYS MUST BE USED, LAYOUT RACEWAYS TO MINIMIZE THE NUMBER OF VERTICAL RUNS.
4. FEEDER CONDUITS, BRANCH CIRCUITS AND CONDUIT ROUTING SHALL COMPLY WITH DETAILS ON DRAWINGS AND SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES BEFORE AND DURING CONSTRUCTION.
5. A GROUND CONDUCTOR SHALL BE PROVIDED IN ALL RACEWAYS UNLESS NOTED OTHERWISE.
6. COORDINATE THE ROUTING OF UNDERGROUND CONDUCTORS/CONDUIT WITH STRUCTURAL FOOTINGS AND UNDERGROUND UTILITIES.
7. THE USE OF MC CABLE IS NOT ALLOWED.
8. WHEREVER ON THE ELECTRICAL DRAWINGS THE WORD "PROVIDE" IS USED, IT SHALL BE INFERRED TO MEAN "FURNISH AND INSTALL".
9. ELECTRICAL CONTRACTOR SHALL PROVIDE WATER PROOFING FOR ALL CONDUIT ENTERING BUILDING.

GENERAL "DEMOLITION" NOTES

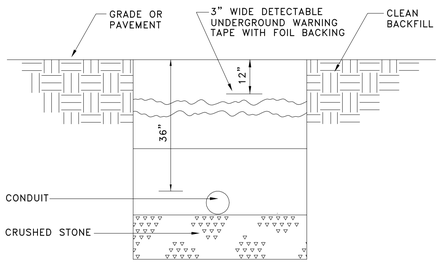
1. ALL ELECTRICAL EQUIPMENT TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIALS UNTIL RELEASED BY OWNER'S PROJECT MANAGER. MATERIALS THAT OWNER'S PROJECT MANAGER CHOOSES TO RETAIN SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION DESIGNATED BY THE PROJECT MANAGER. ALL OTHER MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
2. ELECTRICAL DEVICES NOT SHOWN ON CEILINGS OR WALLS TO REMAIN SHALL REMAIN IN PLACE. PROTECT FROM DAMAGE DURING CONSTRUCTION

GENERAL EXISTING CONDITION NOTES

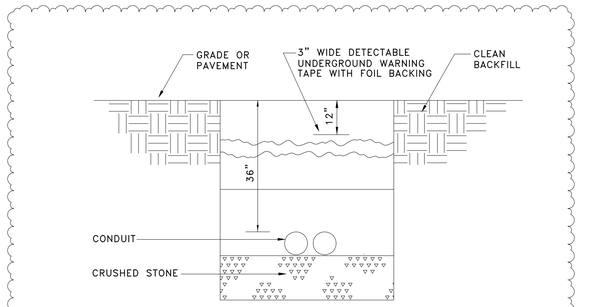
1. AREAS OF WORK EXIST FOR THIS PROJECT WHICH ARE NOT ACCESSIBLE OR HAVE LIMITED ACCESS DURING DESIGN. AS SUCH CONTRACTOR SHALL VERIFY ALL UTILITIES IN AREA OF WORK BEFORE DEMOLITION OF ANY SERVICE. ANY ELECTRICAL COMPONENTS NOT SHOWN SHALL BE IDENTIFIED AND THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED AS SOON AS POSSIBLE. NO ELECTRICAL REWORK SHALL BE COMMENCED WITHOUT COORDINATION OF BOTH ARCHITECT AND ENGINEER.
2. WHERE INSTALLATION REQUIRES CUTTING OR DRILLING OF THE EXISTING 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.
3. SUPPORT ALL EXISTING CONDUITS AND JUNCTION BOXES ABOVE THE CEILING PER NEC IN THE CONSTRUCTION AREA.
4. REMOVE ALL ABANDONED CONDUIT, WIRE, AND COMMUNICATION CABLES ABOVE THE CEILING IN THE CONSTRUCTION AREA.
5. PROVIDE JUNCTION BOX COVER PLATES ON ALL EXISTING JUNCTION BOXES ABOVE THE CEILING IN THE CONSTRUCTION AREA.
6. WHERE INFORMATION SHOWN ON THESE DRAWINGS CONFLICTS WITH VERIFIED FIELD CONDITIONS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER

GENERAL "POWER" NOTES

1. ALL BRANCH CIRCUITS INDICATED ON THESE PLANS TO BE LARGER THAN NO. 12 AWG SHALL BE SIZED AS INDICATED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
2. PROVIDE AND INSTALL AN ENGRAVED LAMINATED PLASTIC NAMEPLATE ON EACH ITEM OF ELECTRICAL EQUIPMENT SERVING MECHANICAL EQUIPMENT WHICH MATCH MECHANICAL DESCIPTIONS, TO INDICATE THE DESIGNATION OF THE UNIT ON THE PLANS & THE BRANCH CIRCUIT SERVING THE EQUIPMENT.



1 E001 UNDERGROUND CONDUIT DETAIL – SINGLE CONDUIT
NOT TO SCALE



3 E001 UNDERGROUND CONDUIT DETAIL – 2 WAY
SCALE: NOT TO SCALE

SITE KEY PLAN
NOT TO SCALE

1

LOADCENTER: SB
SUPPLIED FROM: BRINE
MOUNTING: SURFACE
DISTRIBUTION: 120/240 Single
PHASES: 1
WIRES: 3
ENCLOSURE: NEMA 3R
A.I.C. RATING: 10,000
MAINS RATING: 225 A
MCB RATING: MAIN LUGS ONLY

WIRE SIZE	NTS	CKT	DESCRIPTION	BKR	P	A		B		P	BKR	DESCRIPTION	CKT	NTS	WIRE SIZE
--	1,3	1	EXISTING PERIMETER LIGHTING CIRCUIT	30	2	0.0	0.0			2	30	EXISTING SITE LIGHTING	2	1,3	--
		3						0.0	0.0				4		
--		5	GFI RECEPTACLE	20	1	0.2	0.0			1	20	GENERATOR – BATTERY CHARGER	6		--
--		7	SPARE	20	1			0.0	0.0	1	30	GENERATOR – BLOCK HEATER	8		--
--		9	SPARE	20	1	0.0	--			1	--	PREPARED SPACE	10		--
--		11	SPARE	20	1			0.0	--	1	--	PREPARED SPACE	12		--
--		13	SPARE	20	1	0.0	--			1	--	PREPARED SPACE	14		--
--		15	SPARE	20	1			0.0	--	1	--	PREPARED SPACE	16		--
--		17	SPARE	20	1	0.0	--			1	--	PREPARED SPACE	18		--
--		19	SPARE	20	1			0.0	--	1	--	PREPARED SPACE	20		--
--		21	SPARE	20	1	0.0	--			1	--	PREPARED SPACE	22		--
--		23	SPARE	20	1			0.0	--	1	--	PREPARED SPACE	24		--
--		25	SPARE	20	1	0.0	--			1	--	PREPARED SPACE	26		--
--		27	SPARE	20	1			0.0	--	1	--	PREPARED SPACE	28		--
--		29	SPARE	20	1	0.0	--			1	--	PREPARED SPACE	30		--
--	2	31	PANEL 'BRINE' – (SUB-FEED BREAKER)	200	2			0.0	--	2	--	NOT USED	32		--
		33				0.0							34		
			TOTAL PER PHASE KVA:			0.2		0.0				CONNECTED KVA:	0.2		
			TOTAL PER PHASE AMPACITY:			2		0				CONNECTED AMPACITY:	1		

NOTES (NTS COLUMN):
1) RECONNECT EXISTING PERIMETER LIGHTING CIRCUIT.
2) PROVIDE SUB-FEED TYPE BREAKER
3) CONFIRM LOAD ON TWO LIGHTING CIRCUITS AND MATCH BREAKER SIZE TO LOAD

ABBREVIATIONS

ABR	DESCRIPTION
(E)	EXISTING
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BOD	BOTTOM OF DEVICE
CLG	CEILING
ECB	ENCLOSED CIRCUIT BREAKER
GFCI	GROUND-FAULT CIRCUIT-INTERRUPTING
GP	GENERAL PURPOSE
J-BOX	JUNCTION BOX
NEC	NATIONAL ELECTRIC CODE
NFDS	NON-FUSED DISCONNECT SWITCH
OC	ON CENTER
SPD	SURGE PROTECTION DEVICE
UNO	UNLESS OTHERWISE NOTED
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER

CONDUIT SCHEDULE

BRANCH CIRCUIT RATING	CONDUIT SIZE
20A-40A	3/4"
45A-55A	1"
60A-110A	1 1/4"
125A-150A	1 1/2"
175A-200A	2"
225A-300A	2 1/2"
350A	3"
400A	3 1/2"

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SINGLE RECEPTACLE (WALL MOUNTED @ 18"AFF)	SPD	SURGE PROTECTION DEVICE
	DUPLEX RECEPTACLE (WALL MOUNTED @ 18"AFF)	M	ELECTRICAL UTILITY METER & C/T CABINET
	DUPLEX RECEPTACLE (GFI TYPE @ 18"AFF)		PANELBOARD (SURFACE MOUNTED)
	QUAD RECEPTACLE (WALL MOUNTED @ 18"AFF)		CONTROL PANEL (SURFACE MOUNTED)
	JUNCTION BOX (WALL MTD)		DISCONNECT SWITCH, (REFER TO EQUIPMENT CONNECTION SCHEDULE)
J	JUNCTION BOX (FLOOR MOUNTED)		MOTOR CONNECTION (AS NOTED)
	PHONE OR DATA OUTLET (WALL MOUNTED @ 18"AFF) SEE COMMUNICATIONS RISER FOR ADDITIONAL INFO	HH	HANDHOLE
	LIGHT SWITCH, SINGLE POLE		
#	KEY NOTE CALLOUT (REFER TO KEY NOTES ON SHEET)		

DEMOLITION/RENOVATION NOTATION

*	IF NO ANNOTATION IS SHOWN ASSUME EXISTING TO REMAIN IN PLACE FOR SOLID LINES AND DEMOLISH FOR DASHED LINES.
*	DEVICES AND EQUIPMENT NOT SHOWN SHALL BE ASSUMED TO BE EXISTING TO REMAIN IN PLACE.
E	EXISTING FIXTURE OR DEVICE TO REMAIN IN PLACE.
R	EXISTING FIXTURE OR DEVICE TO BE REMOVED BY THE ELECTRICAL CONTRACTOR. MAINTAIN CONTINUITY OF REMAINING PORTIONS OF BRANCH CIRCUIT.
RE	EXISTING DEVICE TO BE REMOVED BY THE ELECTRICAL CONTRACTOR. EXISTING CIRCUIT SHALL BE RETAINED. PROVIDE NEW DEVICE AS SHOWN ON RENOVATION PLANS.
RN	RELOCATED FIXTURE (NEW LOCATION).
RR	EXISTING FIXTURE TO BE RELOCATED BY THE ELECTRICAL CONTRACTOR TO NEW LOCATION SHOWN ON RENOVATION PLAN.

ELECTRICAL DRAWING INDEX

SOUTH CAROLINA ENGINEERING BELKA ENGINEERING ASSOC. INC. No. C00953 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 26181 JASON L. AREHEART 9-9-26

DT22503

BELKA ENGINEERING ASSOCIATES
2519A PLATT SPRINGS RD | WEST COLUMBIA, SC
(803) 731-0650 Office | (803) 467-7657 Cell
CONTACT: JASON AREHEART
JAREHEART@BEA-Consulting.com

PLOT DATE: Issue Date

SCDOT
FACILITIES PLANNING AND CONSTRUCTION
955 PARK STREET - POST OFFICE BOX 191
COLUMBIA, SOUTH CAROLINA 29202-0191
(803) 737-1299 (803) 737-1719 (FAX)

SCDOT CAMDEN GENERATOR REPLACEMENT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
512 Fair Street
Camden, South Carolina

ELECTRICAL NOTES & LEGENDS

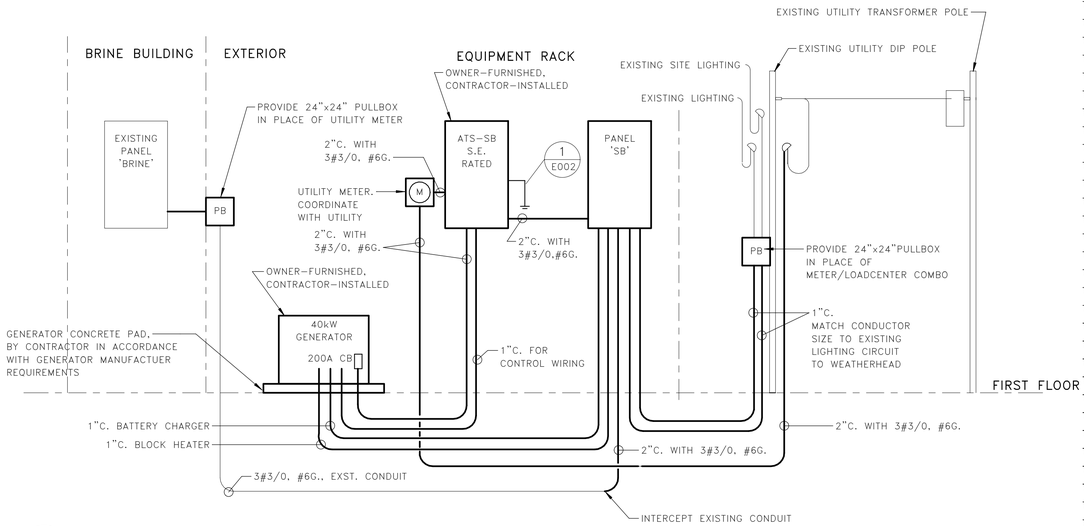
DRAWN BY: HTT CHECK BY: JLA
REVISION: ADDENDUM 1 DATE: 9/9/26
FILE: Project No.: DT22503

E001

07/22/25

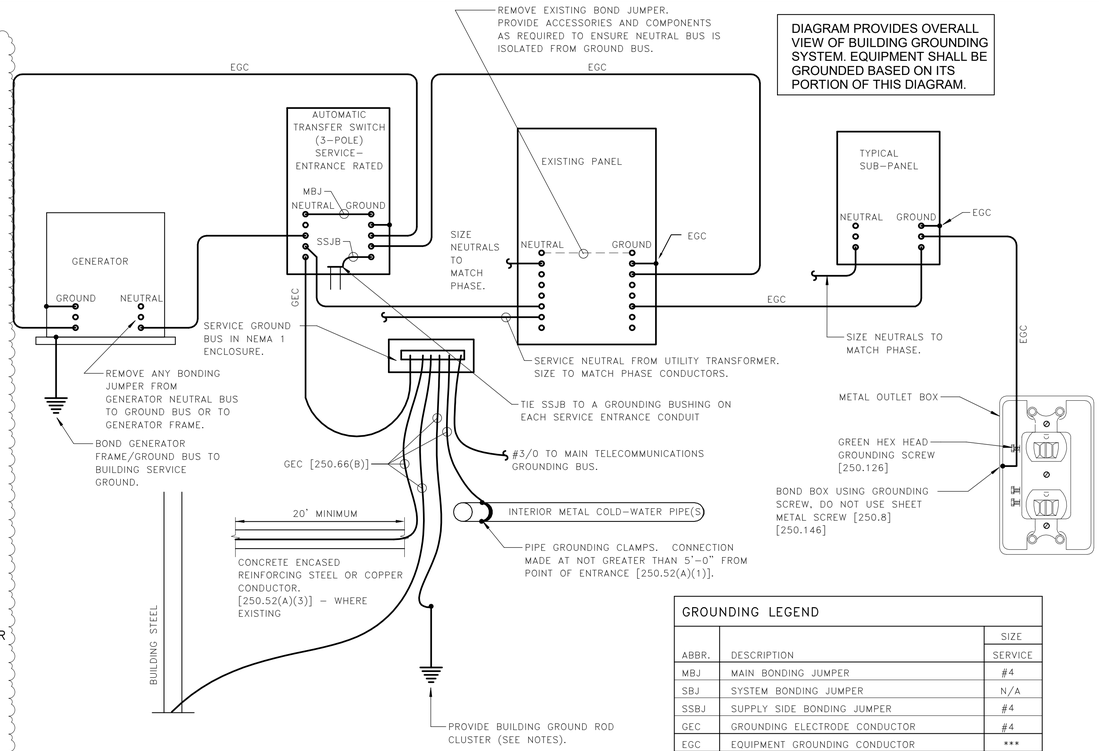
ELECTRICAL SERVICE GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE ALL OUTAGES WITH OWNER AND ENGINEER.
2. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED ELECTRICAL COMPONENTS TO MAKE UTILITY CONNECTION IN ACCORDANCE WITH UTILITY COMPANY'S REQUIREMENTS.
3. CONNECT EXISTING PANEL 'BRINE' TO SUB-FEED BREAKER IN PANEL 'SB'.
4. SERVICE DISCONNECTS SHALL BE PROPERLY LABELED IN ACCORDANCE WITH UTILITY REQUIREMENTS.



3 E002 ONE-LINE DIAGRAM – RENOVATION
NOT TO SCALE

1



GROUNDING LEGEND		
ABBR.	DESCRIPTION	SIZE SERVICE
MBJ	MAIN BONDING JUMPER	#4
SBJ	SYSTEM BONDING JUMPER	N/A
SSBJ	SUPPLY SIDE BONDING JUMPER	#4
GEC	GROUNDING ELECTRODE CONDUCTOR	#4
EGC	EQUIPMENT GROUNDING CONDUCTOR	***
***	SIZE PER TABLE 250.122.	

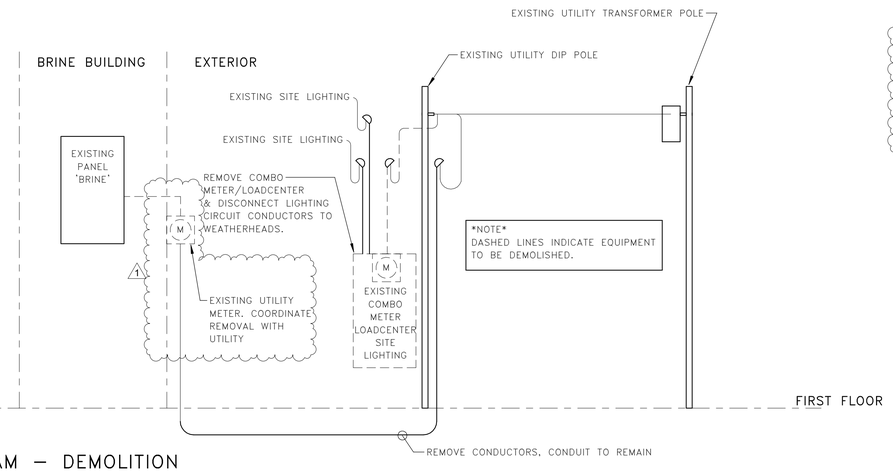
1 E002 GROUNDING DETAIL
NOT TO SCALE

GROUNDING NOTES:

1. NUMBERS IN BRACKETS REFER TO SPECIFIC SECTIONS OF THE NATIONAL ELECTRICAL CODE.
2. ALL UNDERGROUND OR OTHERWISE INACCESSIBLE GROUND CONNECTIONS AND SPLICES SHALL BE EXOTHERMICALLY WELDED [250.68].
3. 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 WELDED TO RODS. TOPS OF THE RODS SHALL BE 12" BFG. CONNECTION TO THE RODS SHALL BE WITH EXOTHERMIC WELDS. PROVIDE TEST WELL COVER AT ALL ROD LOCATIONS.
4. PROVIDE A GROUND WIRE IN ALL CONDUITS.
5. EARTH SHALL NOT BE USED AS THE SOLE GROUND RETURN PATH FOR ANY EQUIPMENT POWERED UNDER THIS PROJECT.
6. 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.
7. 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.
8. 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.
9. PROVIDE EGC CONNECTED TO ANY JUNCTION BOX WHERE SPLICE IS MADE [250.148] OR WHERE A DEVICE IS INSTALLED.
10. PROVIDE BOND TO EXPOSED METAL ON ALL MOTORS, PUMPS, AND LIGHTING FIXTURES PER [250.112].
11. 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.
12. VERIFY ALL NEUTRAL AND GROUND CONNECTIONS IN EXISTING PANELS ARE AS DEPICTED IN GROUNDING DETAIL. VERIFY EXISTING BONDING JUMPERS AND GROUNDING ELECTRODE ARE SIZED PER GROUNDING LEGEND. REPORT ANY DISCREPANCIES TO ENGINEER.

ELECTRICAL SERVICE GENERAL DEMOLITION NOTES:

1 1. CONTRACTOR SHALL COORDINATE REMOVAL OF METER AND EXISTING COMBO METER/LOADCENTER ON POLE WITH UTILITY COMPANY.
2. CONTRACTOR SHALL COORDINATE ALL OUTAGES WITH OWNER AND ENGINEER.
3. ALL ITEMS INDICATED TO BE REMOVED SHALL BE TURNED OVER TO OWNER AND LEFT AT SCDOT YARD..



2 E002 ONE-LINE DIAGRAM – DEMOLITION
NOT TO SCALE

MAIN LUGS DISTRIBUTION SYSTEMS							
PANEL	DISTRIBUTION	PHASE	# OF WIRES	MAINS	SCCR	FED FROM	REMARKS
SB	240 V/2-0	1	3	225 A	10,000	BRINE	

1

AVAILABLE FAULT CURRENT
BASED ON A 25 KVA, 1.2 %Z UTILITY TRANSFORMER THE MAXIMUM FAULT CURRENT AVAILABLE AT THE SERVICE ENTRANCE DISCONNECT IS CALCULATED TO BE 8,553 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.

PLOT DATE: Issue Date

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
FACILITIES PLANNING AND CONSTRUCTION
955 PARK STREET - POST OFFICE BOX 191
COLUMBIA, SOUTH CAROLINA 29202-0191
(803) 737-1299 (803) 737-1719 (FAX)

SCDOT CAMDEN GENERATOR REPLACEMENT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
512 Fair Street
Camden, South Carolina

ELECTRICAL ONE-LINE DIAGRAM

DRAWN BY: HTT CHECK BY: JLA
REVISION: ADDENDUM 1 DATE: 9/9/26
FILE: Project No.: DT22503

E002

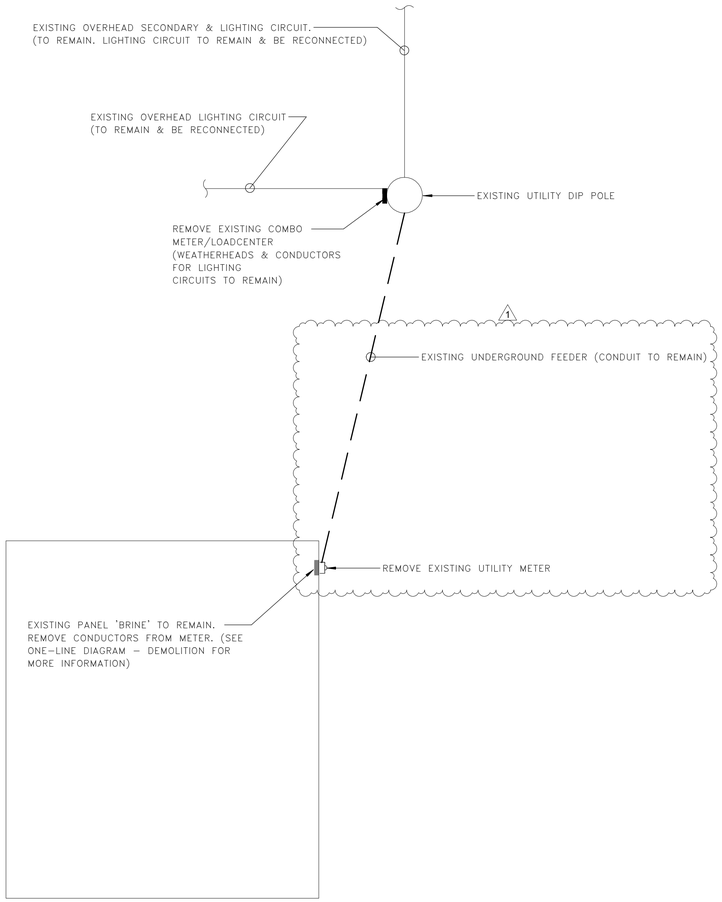
07/22/25

BELKA ENGINEERING ASSOC. INC. No. C00953 – SOUTH CAROLINA – CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 26181 JASON L. AREHEART 9-9-26

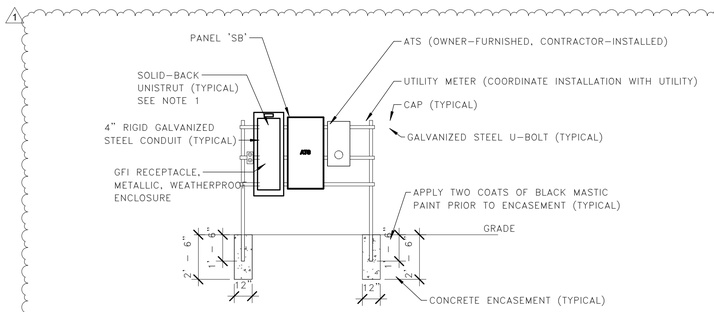
DT22503

BELKA ENGINEERING ASSOCIATES
2519A PLATT SPRINGS RD | WEST COLUMBIA, SC
(803) 731-0650 Office | (803) 467-7657 Cell
CONTACT: JASON AREHEART
JAREHEART@BEA-Consulting.com



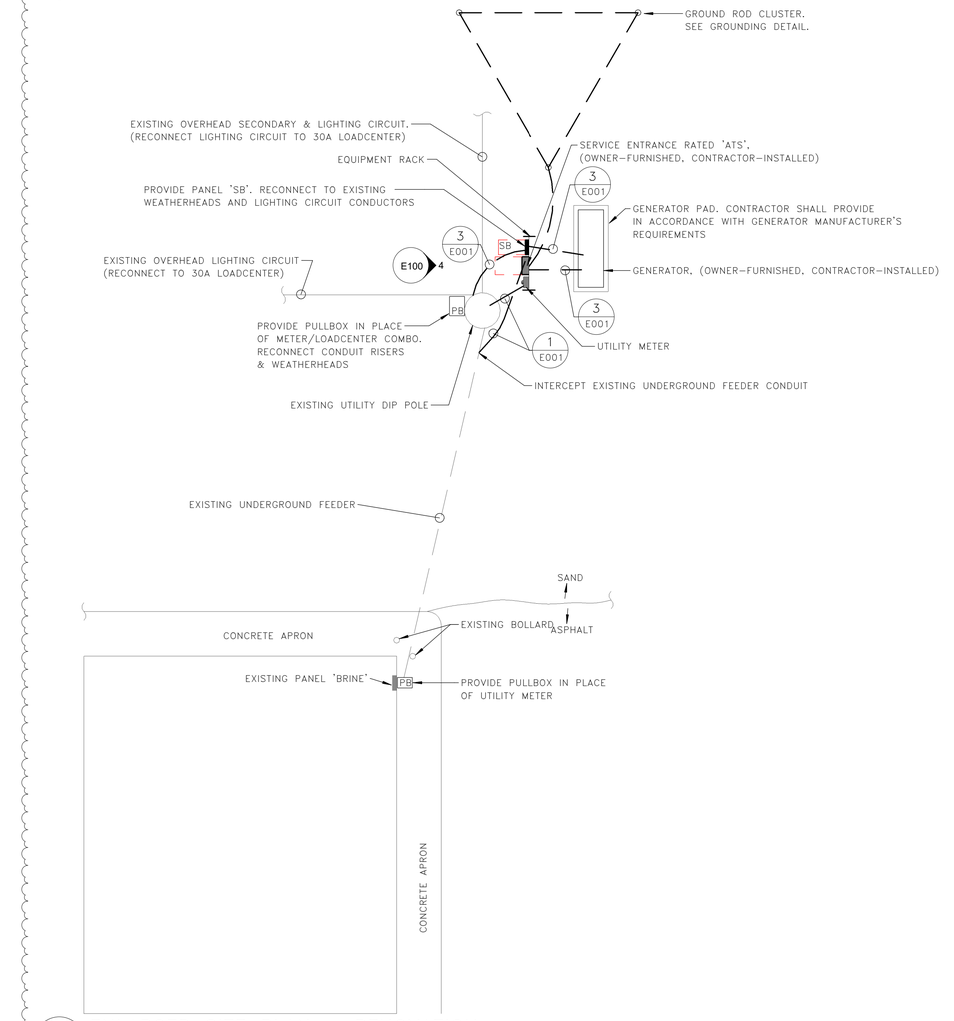
1 / E100 ENLARGED SITE PLAN – DEMOLITION

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



4 / E100 EQUIPMENT RACK – ELEVATION

NOT TO SCALE



2 / E100 ENLARGED SITE PLAN – RENOVATION

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

PLAN NORTH

0 8'-0" 16'-0" 24'-0" 32'-0"

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

SOUTH CAROLINA BELKA ENGINEERING ASSOC. INC. No. C00953 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 26181 JASON L. AREHEART 9-9-26

DT22503

BELKA ENGINEERING ASSOCIATES

2519A PLATT SPRINGS RD | WEST COLUMBIA, SC
(803) 731-0650 Office | (803) 467-7657 Cell

CONTACT: JASON AREHEART
JAREHEART@BEA-Consulting.com

PLOT DATE: Issue Date

SCDOT

FACILITIES PLANNING AND CONSTRUCTION
955 PARK STREET - POST OFFICE BOX 191
COLUMBIA, SOUTH CAROLINA 29202-0191
(803) 737-1299 (803) 737-1719 (FAX)

SCDOT CAMDEN GENERATOR REPLACEMENT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
512 Fair Street
Camden, South Carolina

ELECTRICAL SITE PLAN

DRAWN BY: HTT CHECK BY: JLA
REVISION: ADDENDUM 1 DATE: 9/9/26
FILE: Project No.: DT22503

E100

07/22/25