

ELECTRICAL SPECIFICATIONS

WIRING METHODS

- SECTION REQUIREMENTS
 - Summary: Building wires and cables and associated splices, connectors, and terminations for wiring systems rated 600 V and less, and twisted-pair cable, and raceways and boxes.
- WIRES AND CABLES
 - Building Wires and Cables: Type THHN/HHW copper conductor rated for operation at 90° C.
 - Connectors and Splices: Wiring connectors of size, ampacity rating, material, and type and class for application and for service indicated. Terminals to be rated for operation at 75° C.
 - Use of type MC Cable is permitted in accordance with NEC.
- RACEWAYS
 - Conduit: Comply with the following:
 - Rigid Steel Conduit: ANSI C80.1.
 - Intermediate Metal Conduit: ANSI C80.6.
 - Electrical Metallic Tubing: ANSI C80.3.
 - Rigid Nonmetallic Conduit: NEMA TC 2, Schedule 40.
 - Wireways: Hinged type, with manufacturer's standard finish.
 - Floor Boxes: Concrete, fully adjustable, rectangular.
 - Pull and Junction Boxes: Small sheet metal boxes.
- INSTALLATION
 - Install wires and cables according to the NECA's "Standard of Installation."
 - Wiring at Outlets: Install with at least 12 inches of slack conductor at each outlet.
 - Outdoors Wiring Methods: As follows:
 - Exposed: Rigid or intermediate metal conduit.
 - Concealed: Rigid or intermediate metal conduit.
 - Underground, Single Run: Rigid nonmetallic conduit.
 - Underground, Grouped: Rigid nonmetallic conduit.
 - Use Raceway fittings compatible with raceway and suitable for use and location. For intermediate steel conduit, use threaded rigid steel conduit fittings, unless otherwise indicated.
 - Raceways Embedded in Slabs: Install in middle third of the slab thickness where practical, and leave at least 1-inch concrete cover.
 - Install exposed raceways parallel to or at right angles to nearby surfaces or structural members, and follow the surface contours as much as practical.
 - Join raceways with fittings designed and approved for the purpose and make joints tight. Use bonding bushings or wedges at connections subject to vibration. Use bonding jumpers where joints cannot be made tight. Use insulating bushings to protect conductors.
 - Install pull wires in empty raceways. Use No. 14 AWG zinc-coated steel or monofilament plastic line having not less than 200-lb tensile strength. Leave not less than 12 inches of c slack at each end of the pull wire.
 - Stub-up Connections: Extend conductors to equipment with rigid steel conduit; flexible metal conduit may be used 6 inches above the floor.
 - Install a separate green ground conductor in all raceways.

WIRING DEVICES

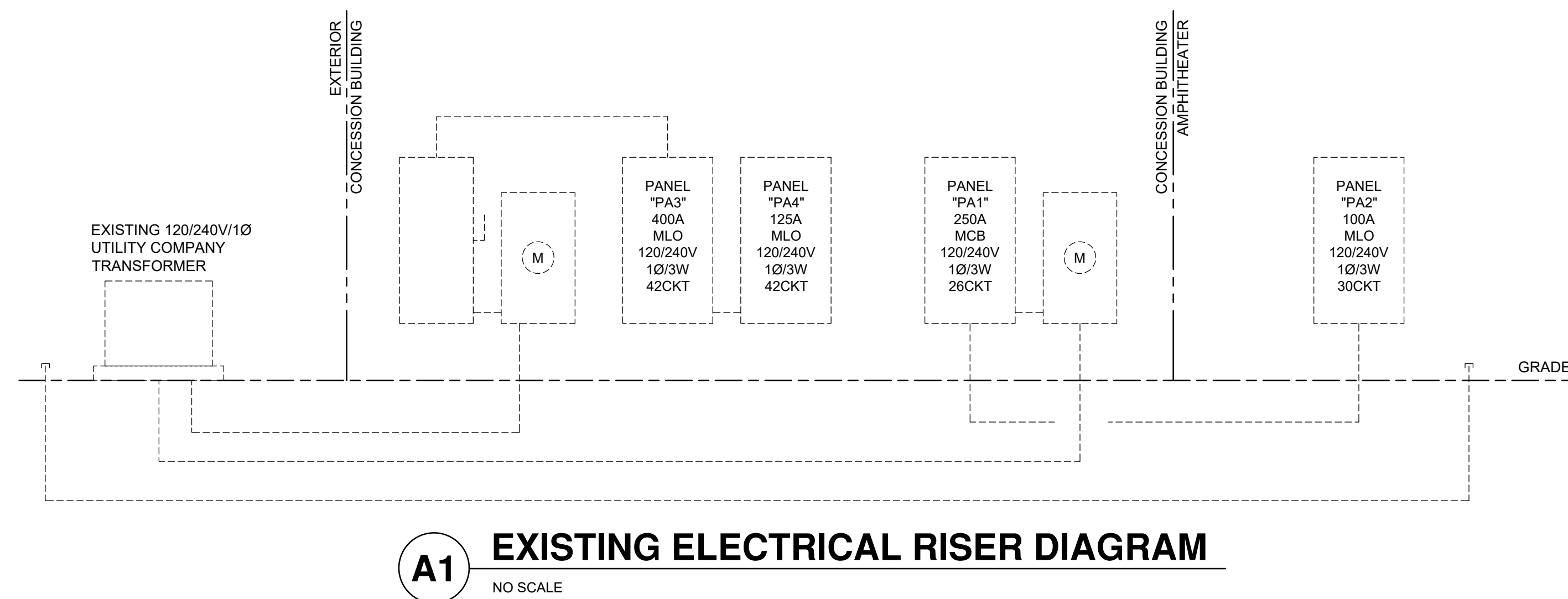
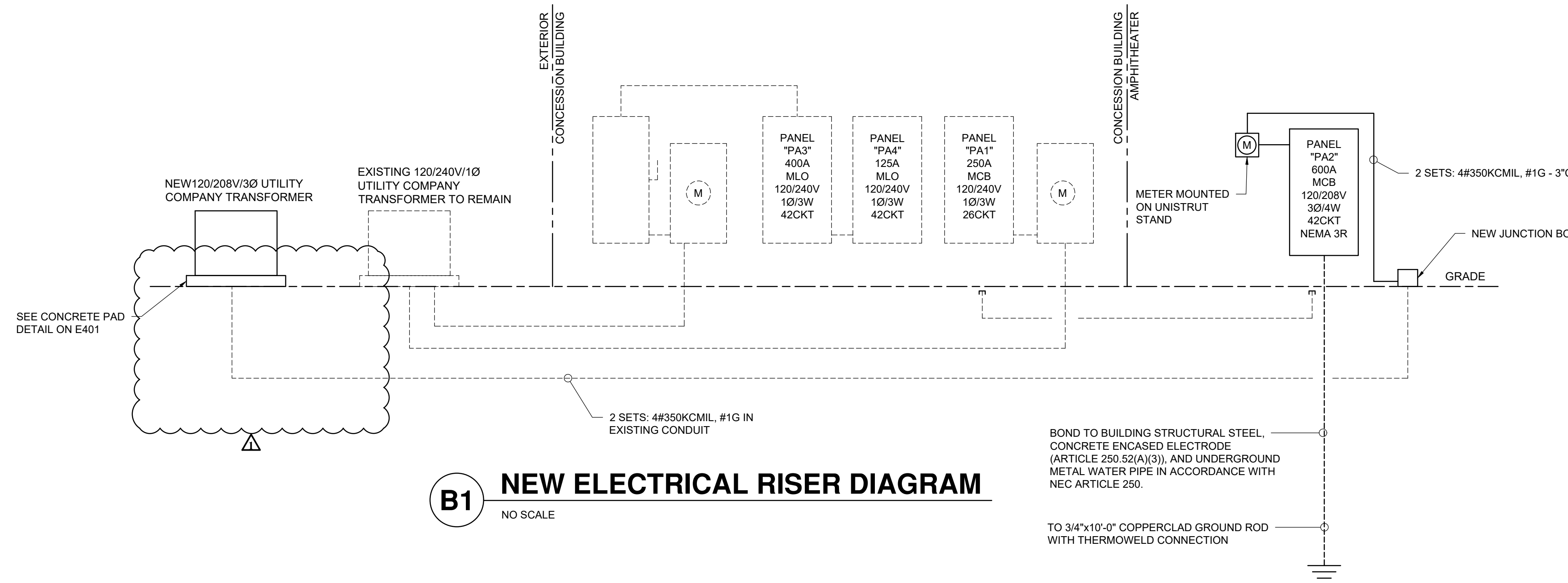
- SECTION REQUIREMENTS
 - Submit Product Data
- DEVICES
 - General Purpose Wiring Devices: Comply with NEMA WD1.
 - Color: White.
 - Receptacles: UL 498, general-use grade except as indicated otherwise.
- INSTALLATION
 - Install devices and assemblies plumb and secure.
 - Mount devices flush, with long dimension vertical, and grounding terminal of receptacles on top.
 - Protect devices and assemblies during painting.

PANELBOARDS

- SECTION REQUIREMENTS
 - Submit Product Data.
- PANELBOARDS AND LOAD CENTERS
 - Surface-mounted, NEMA PB 1, Type 3R.
 - Front: Secured to box (with concealed) trim clamps.
 - Bus: Hard drawn copper of 88 percent conductivity.
 - Molded-Case Circuit Breaker: NEMA AB 1; no tandem circuit breakers; single handle for multiple circuit breakers.
- INSTALLATION
 - Install panelboards and accessory items according to NEMA PB 1.1. Indicate installed circuit loads on a typed circuit directory, after balancing panelboard loads, showing as-built conditions.
 - Wiring in Panelboard Gutters: Arrange conductors into groups, bundle and wrap with wire ties.

ELECTRICAL PANEL "PA2" SCHEDULE (NEW)*														
VOLTS/PHASE/WIRE:		PANEL SIZE & TYPE:	MAIN SIZE & TYPE:			CABINET:			MIN SCC:	FED FROM:	NOTES:			
120-208/3/4		600A	600A MCB			SURFACE			22KAIC	XFMR	NEMA 3R, BOTTOM FEED, SERVICE ENTRANCE RATED			
NO	TRIP	AREA SERVED	A	B	C	A	B	C	AREA SERVED	TRIP	NO			
1	20	EXISTING	1920			1920			EXISTING	20	2			
3	20	EXISTING		1920			1920		EXISTING	20	4			
5	20	EXISTING			1920			1920	EXISTING	20	6			
7	20	EXISTING	1920			1920			EXISTING	20	8			
9	20	EXISTING		1920			1920		EXISTING	20	10			
11	20	EXISTING			1920			1920	EXISTING	20	12			
13	20	EXISTING	1920			1920			EXISTING	20	14			
15	20	EXISTING		1920			1920		EXISTING	20	16			
17	20	EXISTING			1920			1920	EXISTING	20	18			
19	20	EXISTING	1920			1920			EXISTING	20	20			
21	20	EXISTING		1920			1920		EXISTING	20	22			
23	20	EXISTING			1920			1920	EXISTING	20	24			
25	20	SPARE	X			19200					26			
27	30	EXISTING		2496			19200		CAM-LOCK BOX	200	28			
29					2496			19200			30			
31	50	TOUR BUS PEDESTAL	4160			19200					32			
33				4160			19200		CAM-LOCK BOX	200	34			
35					4160			19200			36			
37	50	TOUR BUS PEDESTAL	4160			X			SPARE	20	38			
39	20	SPARE		X			X		SPARE	20	40			
41	20	SPARE			X			X	SPARE	20	42			
TOTAL CONNECTED LOAD =			182912	VA	TOTAL DEMAND =			182912	VA	TOTAL DEMAND =		508	AMPS	

* EXISTING BRANCH CIRCUITS SHALL BE RECONNECTED IN NEW PANEL TO THE SAME CIRCUIT NUMBER AS CURRENTLY INSTALLED. ALL BREAKERS ARE NEW. MAXIMUM LOADS PER BRANCH CIRCUIT ARE SHOWN FOR REFERENCE ONLY.



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HANAHAN RECREATION CENTER
3100 MABELINE ROAD
HANAHAN, SC 29410
SITE PLAN ELECTRICAL

REVISIONS:	DATE	BY	CLM
REVISION 1	10/24/19		

DESIGNED BY: JPC
DRAWN BY: JPC
CHECKED BY: CJC
DATE: 10/08/19

JOB NUMBER
19-080

SHEET NUMBER
E301