SECTION 26 27 26.13

LOW-VOLTAGE RECEPTACLES

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

1. CONTRACTOR shall provide all labor, materials, equipment, and incidentals as shown, specified, and required to furnish and install low-voltage receptacles.

B. Related Sections:

- 1. Section 26 05 05, General Provisions for Electrical Systems.
- 2. Section 26 05 53, Identification for Electrical Systems.
- 3. Section 26 05 33.36, Outlet Boxes.

1.2 REFERENCES

- A. Standards referenced in this Section are:
 - 1. UL 498, Standard for Attachment Plugs and Receptacles.
 - 2. UL 514D, Cover Plates for Flush-Mounted Wiring Devices.
 - 3. UL 943, Standard for Ground-Fault Circuit-Interrupters.
 - 4. UL 1010, Standard for Receptacle-Plug Combinations for Use in Hazardous (Classified) Locations.

1.3 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with the following:
 - 1. Americans with Disabilities Act.
 - 2. NEC Article 406, Receptacles, Cord Connectors, and Attachment Plugs (Caps).

1.4 SUBMITTALS

- A. Action Submittals: Submit the following:
 - 1. Product Data: Manufacturer's technical information for receptacles and cover plates proposed for use.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Receptacles:

1. Grounding receptacle, two-pole, three-wire, NEMA 5-20R configuration, ivory color.

- a. Single:
 - 1) Products and Manufacturers: Provide one of the following:
 - a) HBL5361I by Hubbell, Inc.
 - b) 5361-I by Pass & Seymour.
 - c) Approved equivalent.
- b. Duplex:
 - 1) Products and Manufacturers: Provide one of the following:
 - a) HBL5362I by Hubbell, Inc.
 - b) PS5362-I by Pass & Seymour.
 - c) Approved equivalent.
- c. Weather-resistant Duplex:
 - 1) UL-listed as weather-resistant.
 - 2) Products and Manufacturers: Provide one of the following:
 - a) HBL5362IWR by Hubbell, Inc.
 - b) WR5362-I by Pass & Seymour.
 - c) Approved equivalent.
- 2. Corrosion-resistant grounding receptacle, two-pole, three-wire, yellow color.
 - a. Single, 125-volt, 20 ampere, NEMA 5-20R configuration:
 - 1) Products and Manufacturers: Provide one of the following:
 - a) HBL53CM61 by Hubbell, Inc.
 - b) CR6301 by Pass & Seymour.
 - c) Approved equivalent.
 - b. Duplex, 125-volt, 20 ampere, NEMA 5-20R configuration:
 - 1) Products and Manufacturers: Provide one of the following:
 - a) HBL53CM62 by Hubbell, Inc.
 - b) CR6300 by Pass & Seymour.
 - c) Approved equivalent.
 - c. Single, 125-volt, 30 ampere, NEMA 5-30 configuration:
 - 1) Products and Manufacturers: Provide one of the following:
 - a) HBL9308 by Hubbell, Inc.
 - b) 3802 by Pass & Seymour.
 - c) Approved equivalent.
- 3. Grounding receptacle, two-pole, three-wire, 250-volt, 20 ampere, NEMA 6-20 configuration, brown color.
 - a. Single:
 - 1) Products and Manufacturers: Provide one of the following:
 - a) HBL5461 by Hubbell, Inc.
 - b) 5871 by Pass & Seymour.
 - c) Approved equivalent.
 - b. Duplex:
 - 1) Products and Manufacturers: Provide one of the following:
 - a) HBL5462 by Hubbell, Inc.
 - b) 5862 by Pass & Seymour.
 - c) Approved equivalent.
- 4. Provide Type 302 stainless steel cover-plate conforming to UL 514D. Provide weatherproof-while-in-use cover where shown on the Drawings as "WP" or "WPU", and provide where receptacles are located in wet or corrosive location.
- 5. Receptacles shall comply with UL 498.

B. Receptacles for Hazardous Locations:

- 1. Material: Factory-sealed receptacle suitable for installation in Class I, Group D hazardous locations. Copper-free aluminum receptacle and cover with cast gray iron alloy or cast malleable iron mounting box with zinc electroplate finish. Receptacle rated at 20 amperes, 125 to 250 volts AC, two-wire, and three-pole. Provide matching plug for each receptacle.
- 2. Receptacles for hazardous locations shall conform to UL 1010.
- 3. Products and Manufacturers: Provide one of the following:
 - a. Series CPS by Crouse-Hinds Company.
 - b. Type CPS by Appleton Electric Company.
 - c. Approved equivalent.

C. Ground Fault Interrupting Receptacles:

- 1. Duplex grounding receptacle, two-pole, three-wire, NEMA 5-20R configuration, 125-volt AC, 20 amperes, gray color with ground fault circuit interrupting (GFCI) protection.
- 2. Ground fault interrupting receptacles shall comply with UL 943.
- 3. Provide Type 302 stainless steel cover-plate conforming to UL 514D. Provide weatherproof-while-in-use cover where shown on the Drawings as "WP" or "WPU", and provide where located in wet or corrosive location.
- 4. Products and Manufacturers: Provide one of the following:
 - a. GFR5362SGY by Hubbell, Inc.
 - b. 2091-GRY by Pass & Seymour.
 - c. Approved equivalent.
- 5. Weather-resistant Ground Fault Interrupting Receptacles
 - a. Products and Manufacturers: Provide one of the following:
 - 1) 2095TRWRGRY by Pass & Seymour.
 - 2) Approved equivalent.

D. Surge Suppression Receptacles:

- 1. Duplex grounding, surge suppression receptacle, two-pole, three-wire, NEMA 5-20R configuration 125-volt AC, 20 amperes, blue color, capable of absorbing transient surge of 6,000 volts minimum. Receptacle shall include power-on indicator light.
- 2. Surge suppression receptacles shall comply with UL 1449.
- 3. Provide Type 302 stainless steel cover-plate conforming to UL 514D. Provide weatherproof-while-in-use cover when shown on the Drawings as "WP" or "WPU", and provide where located in a wet or corrosive location.
- 4. Products and Manufacturers: Provide one of the following:
 - a. HBL5362SA by Hubbell, Inc.
 - b. 5362BLSP by Pass & Seymour.
 - c. 5380-GY by Leviton Manufacturing Company.
 - d. Approved equivalent.

E. Weatherproof Covers:

1. Where receptacles are installed in damp locations as defined in area classification portion of Section 26 05 05, General Provisions for Electrical

- Systems, provide receptacles as specified in Paragraphs 2.1.A through 2.1.D of this Section, as applicable, with weatherproof covers as specified below. The cover shall retain the rating while in use.
- 2. Provide covers that are UL-listed weatherproof and suitable for use in damp locations in accordance with NEC 406.
- 3. Material:
 - a. Gasketed spring door type for wet and corrosive locations. Plates in corrosive locations shall have factory-applied 40-mil PVC coating.
 - b. Stainless steel screws and hardware.
- 4. Products and Manufacturers: Provide one of the following:
 - a. Hubbell, Inc.
 - b. Crouse-Hinds Company.
 - c. Appleton Electric Company.
 - d. Approved equivalent.

F. Weatherproof-While-in-Use Covers:

- 1. Where receptacles are shown on the Drawings as "WP", and where receptacles are installed in wet locations as defined in area classification portion of Section 26 05 05, General Provisions for Electrical Systems, provide receptacles as specified in Paragraphs 2.1.A through 2.1.D of this Section, as applicable, with weatherproof-while-in-use covers as specified below.
- 2. Provide covers that are UL-listed, weatherproof while receptacle is in use, and are of ultraviolet-resistant construction suitable for outdoor use in accordance with NEC 406.
- 3. Material:
 - a. Non-metallic box with hinged, non-metallic cover.
 - b. Sealing gaskets between box and cover.
 - c. Stainless steel screws and hardware.
 - d. Color: Gray finish
- 4. Products and Manufacturers: Provide one of the following:
 - a. TayMac Corporation.
 - b. Pass and Seymour Type WIU
 - c. Approved equivalent.
- G. Power and Special Receptacles: Provide receptacles with number of poles and voltage and current rating as shown or indicated. Coordinate with equipment plugs. Provide matching plug for each receptacle.

PART 3 – EXECUTION

3.1 INSPECTION

A. Examine conditions under which the Work is to be installed and notify ENGINEER in writing of conditions detrimental to proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions are corrected.

3.2 INSTALLATION

- A. Non-hazardous Locations: Install receptacles at locations shown, in outlet or device boxes in accordance with Section 26 05 33.36, Outlet Boxes.
- B. Hazardous Locations: Install receptacles in rigid metallic conduit systems.
- C. Install receptacles with ground pole in the down position.
- D. Mount receptacles 18 inches above finished floor in non-hazardous locations and 54 inches above finished floor in hazardous locations, in accordance with the Americans with Disability Act, unless otherwise shown or indicated in the Contract Documents.
- D. Mount receptacles 18 inches above finished floor in non-hazardous locations and 54 inches above finished floor in hazardous locations, unless otherwise shown or indicated in the Contract Documents.
- E. Install in conformance with Laws and Regulations.

F. Identification:

- 1. Identify each conductor with circuit number and lighting panel number in accordance with Section 26 05 53, Identification for Electrical Systems.
- 2. Identify each receptacle with permanent phenolic tag. Tags shall include circuit number and lighting panel number.

+ + END OF SECTION + +