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CONDUIT GENERAL NOTES:

- 1. Furnish and install approved Conduits and Fittings in accordance with the Specifications, this Standard, and the National Electric Code (NEC) and as directed by the Engineer.
- 2. Furnish Schedule 80 PVC Rigid Nonmetallic Conduits in accordance with NEMA TC-2 and UL Standard 651. Furnish Fittings in accordance with NEMA TC-3 and UL Standard 514b. Conduit and Fittings must have UL labels: Conduit - on each 10-foot length; Fittings - stamped or molded on each Fitting. Connect Conduit and Fittings using solvent cement in accordance with the manufacturer's recommendations.
- 3. Furnish and install Pull Boxes sized in accordance with NEC requirements and the maximum size limits shown. For locations where the superstructure environment is classified as slightly or moderately aggressive, furnish Galvanized Steel or NEMA Type 4X Pull Boxes. Where the superstructure environment is classified as extremely aggressive, furnish NEMA Type 4X non-metallic Pull Boxes. All Pull Boxes shall include weatherproof covers with gaskets. Permanently indicate the utility within the Pull Box by stamping or molding the information using letters and symbols that are a minimum of 1/3" high. Install Pull Boxes adjacent to the Begin and End of Bridges, Begin and End of Retaining Walls, and at other required locations. Omit Pull Boxes at Begin or End of Retaining Walls adjacent to Bridges unless a precast Traffic Railing with junction slab is used. Position Pull Boxes as shown; do not place Pull Box openings on the traffic face of Traffic Railings.
- 4. Furnish and install Expansion Fittings at locations shown in the Plans. Certify that Expansion Fittings used at a given location are rated to accommodate the anticipated movement at that location: along Bridge decks - see Structures Plans, Expansion Joint Data Table; along Retaining Walls and other unspecified locations - 2" minimum.
- 5. Furnish and install Expansion/Deflection Fittings at locations shown in the Plans. Certify that Expansion/Deflection Fittings used at a given location are rated to accommodate a minimum rotation of 30 degrees and the anticipated movement at that location: along Bridge decks- see Structures Plans, Expansion Joint Data Table; along Retaining Walls and other unspecified locations - 0.7" minimum.
- 6. For all Conduit designated for future use, install, and leave in place, #12 AWG Pull Wire along the entire length of Conduit or #12 AWG Pull Wire on each End (from Traffic Railing Pull Box to in-ground Pull Box or capped End) of the Conduit with a polypropylene cord between Bridge Traffic Railing Pull Boxes in accordance with Section 630.
- 7. Stub out and cap the Conduit, and drive a steel pipe at the End of the Conduit as shown in this Standard. If required in the plans or by the Engineer, furnish and install in-ground Pull Boxes in accordance with Index 17700. Show location of stub out with Steel Pipe or in-ground Pull Box on As-Built plans.
- 8. Shift vertical Railing reinforcement symmetrically to provide 2" clearance to Pull Boxes. Space shifted vertical reinforcement at 3" centers minimum. Cut horizontal Railing reinforcement to provide 2" clearance to Pull Boxes and provide supplemental reinforcement as shown. Shift a maximum of 1" but do not cut Railing reinforcement to facilitate Conduit, Expansion Fitting and Expansion/Deflection Fitting placement. Do not bundle Conduits, or Conduits and horizontal
- 9. Unless otherwise shown in the plans, include the cost of furnishing and installing Conduit. Pull Cords and Wires, Pull Boxes, Expansion and Expansion/Deflection Fittings and all associated hardware required to complete the installation in the cost of the Traffic Railing or Pedestrian Railing (Parapet) that the Conduit is installed in.