GENERAL NOTES:
1. Work this Index with Specifications 641.
2. This Index is considered fully detailed and no shop drawings are necessary. Submit Shop Drawings for minor modifications not detailed in the Plans.
3. Install pole plumb.
4. Provide either round or 12-sided Poles.
5. See Index 635-001 for additional details for Pull Boxes.
6. Materials:
   A. Pole: Use Class VI concrete with 6 ksi minimum strength at transfer.
   B. Prestressing Strands: ASTM A416, Grade 270 low relaxation.
   C. Reinforcing Steel: ASTM A615, Grade 60
   D. Spiral Reinforcing: ASTM A193B Cold-Drawn
   E. Bolts: ASTM F1554, Grade 55
   F. Washers: ASTM F2329
   G. Steel plates: ASTM A139 Grade B
   H. Ground Rod: ASTM F2329
   I. Cement: ASTM C150 Type 1

7. Pole Fabrication:
   A. Cut the tip end of the prestressed strand first or simultaneously with the butt end.
   B. For spiral reinforcing, one turn is required for spiral splices and two turns are required at the top and bottom of poles.
   C. For reinforcing steel lap splice to consist of a 3'-0" lap length at each splice. No more than two opposing rebars to be spliced at the same cross-section. Stagger lap splices as needed.
   D. Provide a Class 3 surface finish in accordance with Specification 400.
   E. Provide a 1" minimum cover.
   F. Provide handholes and coupler cover plates made of non-corrosive materials. Attach cover plates to poles using lead anchors or threaded inserts embedded in the poles in conjunction with round headed chrome plated screws.
   G. Provide identification markings on the poles where indicated on the following sheets. Include the following information using inset numerals with 1" height or as approved in the Producer's Quality Control Program:
      Financial Project ID
      Pole Manufacturer
      Pole Length
   H. Tie ground wires to the interior of reinforcing steel to prevent displacement during concreting operations.
   I. Storage, handling and erection locations shown may vary within ± 3".

8. Cabinet Installation:
   A. Splice fiber optic cables in cabinet to preterminater patch panel.
   B. Furnish and install Surge Protection Devices (SPDs) on all cabling in cabinet.
   C. Furnish and install secondary SPDs protection on outlets for equipment in cabinet.
   D. Ensure that all electronic equipment power is protected and conditioned with SPDs.
   E. Ensure that equipment cabinet is bonded to CCTV pole grounding system.
   F. Insure that all electronic equipment is protected.
   G. Sizes and types of conduits and innerducts for network communications between the pull box and cabinet are stated in the Contract Documents.

9. Lowering Device Installation:
   A. Place the lowering cable that moves within the pole in an interior conduit to prevent it from tangling or interfering with any electrical wire that is in the pole. Ensure that any electrical wire within the pole is routed securely and free from slack.
   B. Mount lowering arm perpendicular to the roadway or as shown in the plans. Position CCTV pole so that the camera can be safely lowered without requiring lane closures.
   C. Coordinate all lowering device hardware requirements (including Tenon, Tenon mounting plates, parking stops, etc.) with lowering device manufacturer.

CONCRETE CCTV POLE ASSEMBLY
NOTES:

1. Install all handhole and opening covers prior to shipping.
2. Install 1/2" Ø x 5" long stud with hex nut in insert before shipment.
3. As an alternate, embed 4-1/2" Ø x 18" stainless steel threaded rods with a threaded nut. At top of rod, thread a coupling nut to attach plate w/ 4-1/2" x 1/2" stainless steel bolts.
4. Handhole frame may be Cast Aluminum 356.2.

ASSEMBLY

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