

SPECIAL PROVISIONS FOR SECTION 750-F: ITS CAMERA POLE

The 2014 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

1.0 DESCRIPTION.

1.01 This work shall consist of constructing a Camera Pole complete. It will be used to support a closed circuit television camera and a lowering device and vehicle detection systems if required per plans.

A Camera Pole shall be composed of a pole, foundation, and grounding system.

2.0 MATERIALS.

2.01 General. A list of materials which the Contractor proposes to install for the Camera Pole together with the drawings and other data shall be submitted to the Project Engineer for approval by the ITS Bureau chief and or the ITS Engineer or their designees.

All items furnished, assembled, fabricated or installed under this item shall be new.

2.02 POLE. Supplied poles shall be specified by NMDOT (Concrete or metal). The pole shall be designed to support the specified camera, camera lowering device and accessories.

All poles up to 75' shall be designed to have a top deflection not greater than one inch in a 30 mph (non-gust) wind. All poles over 75' shall be designed to have a top deflection not greater than 1.62" inch in a 30 mph (non-gust) wind.

All poles shall be designed to withstand a constant wind speed of 90 mph with 1.14 gust factor.

All poles shall be provided with a fish wire to facilitate cable installation.

2.02.1 Winch Hand hole. The pole shall have a winch hand hole opening with minimum outside dimensions of 6"w X 27"h. the hand hole opening shall be reinforced with a minimum 2" wide hot rolled steel rim. The hand hole shall have a tapped hole for mounting the portable winch. The bottom lip of this hand hole shall be a minimum of 30" from the grade unless otherwise required.

2.02.2 Pole Top/Tenon. The pole shall have a custom plate mounted pole top that allows the field modification of the arm/camera orientation up to 360 degrees. The tenon shall have mounting holes and slot as required for the mounting of the camera lowering device. The pole top/tenon shall be of dimensions necessary to facilitate camera lowering device component installation.

2.02.3 Cabinet Mounting Fittings. The pole shall have cabinet mounting fittings, plates, or brackets as needed. It also requires to have reinforced couplings for wire entrances to the cabinet.

2.02.4 Cable Supports. Cable guides and supports shall be provided in the poles in coordination with the camera lowering device manufacturer.

2.02.5 Conduits. The Contractor shall supply internal conduit in the pole as directed by the lowering device provider. The prefabricated components of the lift unit support system shall be designed to preclude the lifting cable from contacting the power or video cabling. The lowering device manufacturer shall provide a conduit mount adapter for housing the lowering cable.

2.03 FOUNDATION. The pole foundation is typically a drilled shaft, which is specified in the plans as per pole height.

2.04 GROUNDING. A copper clad ground rod, ground wire and fittings shall be installed as specified in the plans. The ground system shall be electrically connected to the grounding terminal on the pole or cabinet.

3.0 CONSTRUCTION REQUIREMENTS.

3.01 General. The hardware and support services specified herein are intended to describe the minimum configuration that will be acceptable for a camera pole. All changes to this special provision are subject to approval by the ITS Engineer or designee. The Contractor shall provide all drawings, schematics, material lists, fabrication details and specifications to the ITS Engineer or designee for approval 30 days prior to procurement of the equipment.

The contractor shall stake-out the camera pole locations for approval by the ITS Engineer prior to construction. Pole and camera locations shown on the contract plans shall be field checked for any condition that may affect their placement.

The contractor will ensure the poles to be installed per Manufacturer's requirements and applicable certifications.

4.0 Documentation. Provide manufacturer's cut sheets and product specifications to the NMDOT ITS Engineer or designee for review and approval at least 30 days prior to ordering the materials.

4.01 Data Collection. Contractor shall provide following data included in GPS shape file of the system installed. GPS data shall be collected in WGS84 and decimal degrees format. In addition, the Contractor shall contact ITS Engineer to obtain the excel file template of documenting required data.

Project CN, Lat, Long, Pole Type, Material, Height, Device Type

5.0 METHOD OF MEASUREMENTS.

Camera Pole will be measured by the unit per each.

6.0 BASIS OF PAYMENT.

6.01 The accepted quantities of a Camera Pole will be paid for at the contract unit price per each upon full completion of work as described in Section 5.02.

<u>Pay Item</u>	<u>Pay Unit</u>
ITS Camera Pole	Each

6.02 Work Included in Payment. When a Camera Pole is called for in the Contract, the accepted quantity complete in place will be considered full compensation for furnishing all materials, labor, tools, equipment, testing, and appurtenances necessary to complete the work as directed by the ITS Engineer or designee. Materials shall be considered to include a pole (as specified by plans), the specified foundation and grounding system and miscellaneous hardware required.

The documentation of the system shall be provided by and at the expense of the Contractor. All documents shall be provided to the ITS Engineer or designee at least 30 days in advance of final acceptance. The documentation shall be approved by the ITS Engineer or designee prior to final acceptance of the system.