CITY OF CROSSVILLE

SIGNAL SPECIFICATIONS (Rev. April 4, 2016)

- **Controller Equipment Cabinet:** Controller equipment cabinets shall be eight phase, weatherproof aluminum and shall be installed in accordance with the TDOT Standard Specifications for Road and Bridge Construction Manual January 1, 2015, Section 730.25 and TDOT Standard Drawing T-SG-5. Cabinets shall be concrete pad mounted. An additional concrete pad is required to be placed in front of the cabinet doors which shall be a minimum 64 inches wide by 36 inches long and a minimum thickness of 6 inches. The concrete pad shall be utilized for maintenance and servicing of the cabinets and components.

- **Battery Back-Ups:** Battery back-ups are required for signal installations and shall be Myers MP 2000 (uninterrupted power supply). Battery backups shall be installed in a separate weatherproof aluminum cabinet, adjacent to the controller equipment cabinet.

- **Cantilever Signal Supports:** Cantilever signal supports shall be installed in accordance with the TDOT Standard Specifications for Road and Bridge Construction Manual January 1, 2015, Section 730.32 and TDOT Standard Drawing T-SG-10. Span wiring signal supports may be allowed in certain intersections if cantilever signal supports cannot be utilized, all proposed span wiring must be reviewed and accepted by the City of Crossville Engineering Department prior to installation. Aluminum or steel poles are required on traffic signals for the City of Crossville.

- **Signal Controllers:** Signal controllers are required to be PEEK 3000E controllers with Firmware 8216A 3.6.8 with PEEK Double Diamond Monitors.

- **Vehicle Detection:** Vehicle detection shall be microwave Wavetronix Smartsensor Matrix for stop bar detection and Wavetronix Smartsensor Advance for advanced detection.

- **Signal Heads:** Signal heads shall be black aluminum with L.E.D. lighting, installed in accordance with TDOT Standard Specifications for Road and Bridge Construction Manual January 1, 2015, Section 730.24.

- **Pedestrian Signals:** Pedestrian signals shall be countdown pedestrian signals installed in accordance with TDOT Standard Drawing T-SG-7.

- **Coordination Equipment:** Coordination equipment is required to be PEEK M3000 Master Controller where inter-connect is necessary, where time based coordination is utilized without inter-connect, ELTEC GPS 1000 equipment shall be required. Fiber optics cable shall be utilized for most inter-connects. Where fiber optics cable cannot be utilized, ENCOM 5200 radios shall be installed. Said radios must be reviewed and accepted by the City of Crossville Engineering Department prior to installation.

- **Pull Boxes:** Pull boxes shall be TDOT Type B with traffic rated lids and shall be installed in accordance with TDOT Standard Drawing T-SG-2.

- **Wiring:** Wiring shall be 14 gauge or larger and installed in accordance with TDOT Standard Specifications for Road and Bridge Construction Manual January 1, 2015, Section 730.17.