TxDOT Standard Sheets SMA-80 have been modified.

# THE TRAFFIC SIGNAL INSTALLATION CONSISTS OF THE FOLLOWING PRINCIPAL ITEMS:

- 1. Furnishing and installing a controller, cabinet, digital detectors, and card rack assemblies, as required.
- 2. Furnishing and installing most arm poles, signal heads, and signal cable.
- 3. Furnishing and installing an opticom detector system and a VIVDS detection system.
- 4. Furnishing and installing conduit and ground boxes.
- 5. Furnishing and placing all concrete and reinforcing steel for the signal pole foundations, and controller foundation.
- 6. Modification to the existing traffic signal at Marsh Lane and Brookhaven Club Drive during the multiple phases of construction.
- 7. The CONTRACTOR shall also furnish and install all other items not listed above which are needed to provide the complete traffic signal installation as called for in the plans and specifications.
- 8. Unless directed by the City, the signal shall be placed in full operation between 9:00 A.M. 12:00 P.M. (noon) on Monday, Tuesday, or Wednesday only.

# SIGNAL TECHNICIAN

A signal technician from the Town of Addison shall be present when the new traffic signal at Brookhaven Club Drive and Ponte Avenue is placed in operation. The CONTRACTOR shall notify Ms. Nancy Cline at (972) 450-2871 approximately 48 hours in advance of the turn on.

### TEST PERIOD FOR SIGNALS

Once the new signal equipment has been installed and placed in operation, it shall operate continuously for a minimum of 30 calendar days in a satisfactory manner. Equipment failures during these 30 days will cause the test period to start over.

### PHASES OF SIGNAL OPERATION

The signal installations shall be wired to operate in accoradnce with phase diagrams in these plans. Time intervals shall be adjusted and set as directed by the Town of Addison or the City of Farmers Branch, depending on the intersection.

### EXISTING UTILITIES

The exact location of the underground utilities is not certain. The CONTRACTOR shall contact the Town of Addison and the City of Farmers Branch and utility companies with utilities in the area for exact location prior to drilling for foundations and any other work that might interfere with or damage present utilities. Known utilities include city water and sewer lines, TXU electric lines, SBC telecommunication lines, TXU gas lines, and fiber optic lines. Location of some of these utilities can be determined by calling 1-800-DIG-TESS. No additional payment will be made for relocation of any foundations due to utilities.

Texas State Law, Article 1436C, makes unlawful the operation of equipment or machines within 10 feet of any overhead electrical line unless danger against contact with high voltage lines has been effectively guarded against pursuant to the provisions of the article. When construction operations requires working near an overhead electrical line, the CONTRACTOR shall contact the owner/operator of the overhead electrical line to make adequate arrangements and to take necessary safety precautions to ensure that all laws, electrical line owner/operator requirements and standard industry safety practices are met.

# **ELECTRICAL CONDUCTORS**

All electrical connectors for breakaway poles shall be breakaway (Buchannan 65u, Bussman hebw Littlefuse leb, or equal) in accordance with RID(2). All eletrical connections for neutrals shall be breakaway, shall have a white color marking, and shall have permanently installed solid neutral Buchannan 20u, Bussman het, Littlefuse let, or equal).

Grounding conductors that share the same conduit, ground box, or structure shall be bonded together at every accessible point in accordance with the NEC.

### CONDUIT

Underground conduit for cable shall be PVC. All couplings and connections shall be tight and waterproof.

A continuous bare wire no. 6 or larger shall be installed in every PVC conduit throughout the electrical system in accordance with the electrical detail sheets, and the latest edition of the National Electrical Code.

PVC conduit shall be heavywall schedule 40, unless otherwise approved by the Engineer.

All conduit elbows and extensions required to be installed on PVC conduit systems shall be schedule 40 PVC and will not be paid for seperately, but will be considered subsidiary to various bid items.

Conduit to be placed under existing pavement shall be placed at a minimum depth of 3 feet below the pavement surface. If it is determined by the Engineer that it is impractical to place conduit by jacking or boring, the open trench method may be used, when approved, at no additional expense to the owner. In the event that the open trench method is used, the trench shall be backfilled to a condition acceptable to the Engineer.

### POLE ASSEMBLIES

Critical pole assembly features and dimensions required for this project are shown on the plan detail sheets. Pole shaft/mast arm identification numbers shall be stenciled on pole shafts and mast arms before shipment to insure matching of poles and mast arms during field assembly.

Signal pole assemblies shall be powder coated SILVER.

#### POLE FOUNDATIONS

No mast arm poles shall be placed on the foundations prior to seven (7) days following placement of concrete.

The dimensions shown on the plans for locations of signal foundations, conduit, and other items may be varied to meet local conditions, subject to approval by the Town.

The CONTRACTOR shall notify Ms. Nancy Cline of the Town of Addison at (972) 450-2871 at least 48 hours before placing concrete. Cylinders will be made for testing by a laboratory approved by Town personnel.

All exposed signal pole and controller foundations shall receive a Class C finish as per TxDOT item 427.

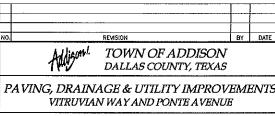
## SIGNAL HEADS

Unless otherwise shown in the plans, all signal heads shall be mounted vertically.

All signal heads shall be covered with burlap or other approved material from the time of installation until the signal is placed in operation.

LED signal lamps shall be used for all signal indications and furnished and installed by the CONTRACTOR.

All new vehicle signal heads shall be polycarbonate with polycarbonate backplates. Pedestrian signal heads shall be aluminum.



GENERAL NOTES
SHEET 1 OF 2

Joseph T. SHORT R. F.

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