SECTION 02750

SIGNAL STRUCTURES

02750.01 GENERAL

A. Description

This work shall consist of installation of MSHA furnished signal structures of the sizes shown on the Plans or on the Standard Detail and in accordance with the Contract Documents or as directed by the County Engineer. The anchor bolts, grommets and miscellaneous hardware shall be furnished by the MSHA.

B. Related Work Included Elsewhere

- 1. Structure excavation; Section 02220.
- 2. Electrical conduit and fittings; Section 02731.
- 3. Concrete foundations; Section 02734.

C. Quality Assurance

The County Engineer will inspect all materials and work to ensure compliance with the Contract Documents.

D. Submittals

None.

02750.02 MATERIALS

A. Materials Furnished by the County

The County will not furnish any materials for signal structures and hardware.

B. Contractor's Options

Not applicable.

C. Detailed Material Requirements

Signal structures and hardware will be furnished by the MSHA.

02750.03 EXECUTION

The signal structure shall be installed on a concrete foundation conforming to Section 02734

SPECIFICATIONS - MAY 1996

SIGNAL STRUCTURES 02750-2

and as specified on the Plans and in the Contract Documents. Any finish on the signal structure and mounting hardware damaged during transportation of erection shall be repaired to match the original finish by and at the Contractors expense and approved by the County Engineer. Breakaway base support systems, when specified, shall conform to Section 821 of the "MSHA Standard Specifications for Construction and Materials, (1993)".

02750.04 METHOD OF MEASUREMENT

A. Signal Poles and Mast Arms

RESERVED FOR FUTURE USE

B. Conduit Elbows

RESERVED FOR FUTURE USE

C. Foundations

RESERVED FOR FUTURE USE

02750.05 BASIS OF PAYMENT

A. Signal Poles and Mast Arms

RESERVED FOR FUTURE USE

SECTION 02751

STEEL SPAN WIRE

02751.01 GENERAL

A. Description

Steel span wire shall include, but not necessarily be limited to, furnishing and installing steel span wire for signal head mounting, sign mounting, and inter connect runs and tethering purposes, as shown on the Plans and in accordance with the Contract Documents or as directed by the County Engineer.

B. Related Work Included Elsewhere

- 1. Signal heads; Section 02740.
- 2. Signal Structures; Section 02750.

C. Quality Assurance

The County Engineer will inspect all materials and work to ensure compliance with the Contract Documents.

D. Submittals

Certificates of compliance shall be submitted as specified in the "General Provisions" for the steel span wire stating that it meets the requirements specified in Section 02751.02.

02751.02 MATERIALS

A. Materials Furnished by the County

The County will not furnish any materials for steel span wire.

B. Contractor's Options

Not applicable.

C. Detailed Material Requirements

1. Span Wire

Span wire shall be 1/4-inch or 3/8-inch diameter unless otherwise specified, seven wire strand, galvanized meeting the requirements of ASTM A 475.

2. Steel Messenger Rings

SPECIFICATIONS - MAY 1996

STEEL SPAN WIRE 02751-2

Steel messenger rings, 1 $\frac{1}{2}$ to 3-inch diameter, shall be mechanically or hot-dip galvanized after fabrication. The coating shall meet the requirements of ASTM A 153.

02751.03 EXECUTION

The span wire shall be attached to poles by wrapping two full turns of the span wire around the pole at the specified height.

The free end of the wrapped span wire shall be 2 feet in length and shall be secured to the traversing span wire by three bolt clam and securing sleeve as specified in the contract documents.

Messenger rings shall be installed 8 inches apart.

02751.04 METHOD OF MEASUREMENT

RESERVED FOR FUTURE USE

02751.05 BASIS OF PAYMENT

RESERVED FOR FUTURE USE