

Special Provision to Item 2

Instructions to Bidders



Item 2, "Instructions to Bidders," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 2.2., "Eligibility of Bidders," is supplemented by the following:

- 2.3. **Technical Qualification.** The Department will not accept bids from Bidders that have not met the technical qualifications established by the Traffic Operations Division. Technical qualification is required for certain categories of Intelligent Transportation Systems (ITS) work. This technical qualification is in addition to all other Bidder qualifications required by the Department.

Electronically submit ITS Technical Qualification Forms and supporting documentation demonstrating the capability of the Bidder or the Bidder's proposed subcontractors to successfully perform the categories of work described in Articles 2.3.1. through 2.3.7. Utilize the ITS Technical Qualification Form applicable to each work category. Submit the forms and supporting documentation by 12:00 P.M. (CST), 10 calendar days prior to bid opening to ITS_Tech_Qual@txdot.gov. Incomplete submittals or submittals that do not meet the technical qualifications will be rejected and additional information will be required. Failure to submit the qualification forms and supporting documentation by the deadline will be sufficient reason for declaring the bid nonresponsive in accordance with Article 2.7., "Nonresponsive Bid." The categories of work that apply to this contract are listed in "Important Notice to Contractors" Special Provisions in the contract.

ITS Technical Qualification Forms and additional information on becoming a qualified Bidder may be found on the Department's website or by contacting the Traffic Operations Division by email at ITS_Tech_Qual@txdot.gov or by calling 512/416-3118.

Once a Bidder or the Bidder's proposed subcontractor has been approved as having met the requirements of this provision, any substitutions or replacement contractors must be submitted to the Traffic Operations Division for approval prior to performing work on the applicable work category.

A Bidder or the Bidder's proposed subcontractor must have the level of expertise needed to successfully complete the work. The experience requirements for each work category listed below include 3 completed projects, 1 of which must have been completed within the past 5 years. Vendor reference statements for equipment experience are required under certain work categories, but may be waived if the Bidder has acceptable documentation from a vendor demonstrating their experience installing the particular equipment without on-site assistance.

- 2.3.1. **Category A. Pulling Fiber Optic Cable.** Meet the following experience requirements:
- Minimum Experience. Three years continuous existence offering services in the installation of fiber optic cable through an outdoor conduit system and terminating in ground boxes, field cabinets or enclosures, or buildings; and
 - Completed Projects. Three completed projects where the personnel pulled fiber optic cable, minimum 5-mile in length, through an outdoor conduit system for each project. The completed fiber optic cable systems must have been in continuous satisfactory operation for a minimum of 1 year.
- 2.3.2. **Category B. Splicing and Testing of Fiber Optic Cable.** Meet the following experience requirements:

- Minimum Experience. Three years continuous existence offering services in the fields of fusion splicing and testing of fiber optic cable installed through a conduit system and terminating in ground boxes, field cabinets or enclosures, or buildings. Experience must include the following:
 - termination of a minimum of 48 fibers within a fiber distribution frame,
 - optical time-domain reflectometer (OTDR) testing and measurement of end to end attenuation of single mode and multimode fibers,
 - system troubleshooting and maintenance,
 - training of personnel in system maintenance,
 - use of water-tight splice enclosures, and
 - fusion splicing of fiber optic cable which meet the tolerable dB losses listed in Table 1 below; and

Table 1
Sample Table

Mode	dB Loss Range
Single mode	0.05–0.10
Multimode	0.20–0.30

- Completed Projects. Three completed projects where the personnel performed fiber optic cable splicing and terminations, system testing, system troubleshooting and maintenance during the course of the project and provided training on system maintenance. Each project must have consisted of a minimum 5-mile length of fiber optic cable. The completed fiber optic cable systems must have been in continuous satisfactory operation for a minimum of 1 year.

2.3.3. **Category C. System Integration.** Meet the following experience requirements:

- Minimum Experience. Three years of providing system integration on wire line and wireless projects including, but not limited to, programming of layer-2 Ethernet switches, integrating into existing systems and coordination with traffic management centers; and
- Completed Projects. Three completed projects requiring system integration and configuration of hardware including but not limited to Ethernet switches, video encoders and decoders, and radios.

2.3.4. **Category D. Dynamic Message Sign (DMS) Installation.** Meet the following experience requirements:

- Minimum Experience. Three years continuous existence offering services in the installation of DMS signs; and
- Completed Projects. Three completed projects consisting of a minimum of 2 signs in each project where the personnel installed, integrated, and tested DMS on outdoor, permanently mounted overhead structure(s) and related sign control equipment. The completed sign system installations must have been in continuous satisfactory operation for a minimum of 1 year; and
- Equipment Experience. One project (may be 1 of the 3 projects in the preceding paragraph) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform the installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier who was referenced in the qualification documentation.

2.3.5. **Category E. Closed Circuit Television (CCTV) Equipment Installation.** Meet the following experience requirements:

- Minimum Experience. Three years continuous existence offering services in the installation of CCTV camera systems;
- Completed Projects. Three completed projects consisting of a minimum of 5 cameras in each project where the personnel installed, tested, and integrated CCTV cameras on outdoor, permanently mounted

structure(s) and related camera control and transmission equipment. The completed CCTV camera system installations must have been in continuous satisfactory operation for a minimum of 1 year; and

- Equipment Experience. One project (may be 1 of the 3 projects in the preceding paragraph) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier who was referenced in the qualification documentation.

2.3.6.

Category F. Wireless Communications. Meet the following experience requirements:

- Minimum Experience. Three years continuous existence offering services in the installation of wireless communications. Experience must include the following:
 - Conducting radio installation studies, which include signal noise studies, spectrum analysis, antenna gain and radio power calculations, system attenuation, and measurement of standing wave ratios;
 - Installation, troubleshooting, and repair of broadband radio systems, which include equipment installation, configuration of radios, antenna calibration, and cabling; and
 - Installation, troubleshooting, and repair of interconnected Ethernet networks (LAN and WAN), which include cabling, switch or router configuration, and network analysis; and
- Completed Projects. Three projects consisting of wireless communications installation, troubleshooting, and repair. Each project must include transmitting signals over a minimum of 1-mile distance and installation of a minimum of 3 devices; and
- Equipment Experience. One project (may be 1 of the 3 projects in the preceding paragraph) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier who was referenced in the qualification documentation.

2.3.7.

Category G. Radar Detection Systems. Meet the following experience requirements:

- Minimum Experience. Three years continuous existence offering services in the installation of radar detection systems. Experience must include the following:
 - freeway and arterial management,
 - forward fire and side fire applications,
 - single zone and dual beam detection, and
 - equipment setup, testing, and troubleshooting; and
- Completed Projects. Three projects consisting of installation, configuration, and setup of radar detection systems; and
- Equipment Experience. One project (may be 1 of the 3 projects in the preceding paragraph) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier who was referenced in the qualification documentation.