

FLORIDA DEPARTMENT OF TRANSPORTATION

**Florida's Turnpike Enterprise
Design Build Request for Proposal**

For

Broward County Camera Project Part 2

**Contract No. E8K25
FPID No. 417121-2-52-01**

RESPONSE TO QUESTIONS GROUP 2

Question No. 1

Addendum 1 included the following: "Question No. 2 What load should be utilized for voltage drop calculations? Response: The voltage drop calculations shall account for 13 Amps at each local hub and 25 amps at the last local hub on each circuit. The RFP section V:H:1 Submittals states voltage drop shall be no greater than 7% from the service to the device. A 30 Amp circuit breaker is required at each local hub accommodating a maximum load of 25 Amps. However, for the purposes of voltage drop calculations, 12 of the 25 Amps is allocated for the maintenance power outlet and needs only to be accommodated in regards to voltage drop on one local hub within each power circuit: the farthest local hub on the branch circuit. FTE understands the approximate power draw of the proposed equipment is 7 amps or less; the additional 6 amps is to ensure the circuits still meet the voltage drop requirements after future equipment is installed."

Please clarify the following:

- 1-A. Do the power service requirements of the project pertain to new power service only and not the existing power services on the project (assuming no extension of existing services to new locations is proposed)?
- 1-B. If there are no branch circuits by virtue of a separate power service proposed for each new location, what is the load and circuit breaker requirement at the new cabinets; 13 Amps, 25 Amps or 30 Amps?
- 1-C. The National Electric Code (Chapter 2, 210.19) recommends that voltage drop not exceed 5% end to end. National Electric Code compliance is required by the RFP. What is the basis for the 7% voltage drop discussion above?

Response:

1-A: Adding VDS(s) to existing CCTV local hubs will add less than 100 mA per VDS unit and will not require existing power service analysis or modification. The tapping of existing power circuits with conductor wires to feed new local hubs will require

the entire power circuit to be analyzed, designed, and constructed per the response to Addendum 1 question 2.

1-B: Per the response to Addendum 1 question 2, a new power circuit with only one local hub shall be analyzed for a voltage drop experienced by 25 Amps which is 80% of the required 30 Amp breaker (breakers shall be rated for 125% of the proposed current) and includes 13 Amps for the proposed and future equipment as well as 12 Amps for the 15 Amp maintenance power outlet on the farthest local hub in the circuit since it is the only local hub in the circuit.

1-C: Due to the limited amount of power services in the area and the ability of most ITS devices to functionally operate at 110 VAC, the project RFP relaxes the NEC voltage drop requirement in order to reduce the size and costs of power conductor circuits.

Question No. 2

The RFP on Page 1 of 51 states: The proposed VDS shall be installed on proposed CCTV poles and existing CCTV poles if possible. The contractor shall be responsible for providing structural analysis verifying the existing poles' capacity to handle the additional equipment with respect to weight and wind loading. If the existing poles are not capable of handling the additional equipment weight and wind loading or if they are not located so that the VDS requirements can be met, then additional VDS poles shall be required at no additional cost to the Department.

Please clarify the following:

- 2-A. Will the Turnpike Enterprise provide the Structural Design Calculations for the existing poles and foundations in time sufficient for the proposers to evaluate the requirement above?
- 2-B. If the calculations are not available and if our own calculations based on the as-built information provided determine the existing poles to be structurally inadequate to support the additional equipment based on current AASHTO Standards, are new VDS poles the alternative most desired by the Turnpike Enterprise?
- 2-C. If the calculations are not available and if our own calculations based on the as-built information provided determine the existing poles to be structurally inadequate without additional equipment, based on current AASHTO Standards, are there any requirements to remedy the existing poles?
- 2-D. If additional VDS poles are included the proposal, there is a cost to furnish and install these. What is meant by the RFP phrase "at no additional cost to the Department" as it pertains to the proposal and the work?

Response:

2-A: The Department will not be supplying structural design calculations for the existing poles. The Design Build team is responsible for obtaining the information via analysis. The analysis shall be performed as described in 2010 FDOT PPM Section 25.4.27. Design variations will be considered, however, design exceptions will not be considered. The Design Build firm shall utilize their experience with the typical ITS CCTV pole installation and bid accordingly.

2-B: In the possible scenario of potentially structurally inadequate existing poles, the analysis process described in Section 25.4.27 outlines other options besides the installation of new VDS poles for review by the Department but the Department reserves the right to reject any proposal other than new VDS poles.

2-C: If no equipment is being added to the pole, the contractor is not responsible for modifying or replacing potentially structurally inadequate existing poles.

2-D: The phrase “at no additional cost to the Department” means that the cost of any existing poles that need to be replaced must be included in the proposers’ bid price proposal that is submitted, and not be requested by the winning firm to be added at a later date.

Question No. 3

Design Build Specifications, Section 3-1, includes verbiage about Daily Value, Adjusted Score, and Time-Adjusted Price. Will this proposal be graded based on an Time-Adjusted Price as stated below? If so, what is the associated Daily Value?

“(b) Adjusted Score: For the purposes of this Contract, the Daily Value in the pre-established, per day monetary amount stated in the RFP to which the Design-Build Firm is responding. The proposed contract time in days included in the Design-Build Firm’s Price Proposal shall be multiplied times the Daily Value and the product added to the Lump Sum Price Proposal to determine the Time-Adjusted Price. The lowest responsive bid will be determined by the Department as the lowest Time-Adjusted Price. The Time-Adjusted Price will be used for selection purposes only and shall not affect the Department’s liquidated damages schedule or constitute an incentive/disincentive to the Contract.”

Response:

This contract will not be graded utilizing the Time-Adjusted Price method.

Question No. 4 Design Build Specifications, Section 5-1.4.6.1 Contractor Responsibility for Accuracy and Coordination of Shop Drawings, requires a 45 day review period for shop drawings. This appears to be in conflict with the RFP, p.39, 5-1.4.6.1 Contractor Responsibility for Accuracy and Coordination of Shop Drawings, I, which indicates a 15 work day review period. Please clarify which review time is required.

Response: **The 15 day review time stated in the RFP for the Department's review time is included within the 45 day review period stated in Section 5-1.4.6.1 of Division I of the specifications.**