Ohio Department of Transportation
Prebid Questions

Project No. 080279   **Sale Date - 4/23/2008**

Question Submitted: 4/15/2008   *Question Number:* 1

This project contains provisions specifying the procurement of a central based system, which by the requirements set forth in section 1300 of the Ohio Traffic Engineering Manual defines this project as a Major ITS project. In order to control costs and identify the best technological solution for such projects, the TEM requires a Project Level ITS Architecture and Systems Engineering Analysis (SEA) to be provided prior to authorization of construction funds. Has this project been identified as a Major ITS project and have these submissions been made? If so, how is the expense of a central based system as proposed in bid references 88 through 91 justified for the ten (10) signalized intersections that the city of Hubbard would operate? A more economical approach for monitoring a system of this size would be through the use of one (1) or two (2) closed loop systems with software at a remote location capable of monitoring both of these systems. Would consideration be given to eliminate the central based system equipment specification and replacing these with a more economical closed loop system specification?

This project has followed the ODOT process throughout it's design and we are not considering eliminating the central based system equipment. Please bid as shown.

Question Submitted: 4/17/2008   *Question Number:* 2

We are in receipt of Addendum No 1. After receipt of the addendum we now wish to submit a proposal. We would request that additional time, 2 weeks, be permitted to allow our supplier partners adequate time to respond to the Invitation. Thank You

We decline to delay this project.

Question Submitted: 4/17/2008   *Question Number:* 3

In regards to the specifications of the central based system software, we have the following questions: Question #1 – Under the Preempt Control defined on Plan page 116 of 142, it indicates that "The central system shall enable an emergency vehicle preempt sequence and shall monitor and record a preempt phase when a proper input is received." This appears to be a safety issue since you should only be able to monitor a preempted intersection and not be able to create one. Will this requirement be eliminated?Question #2 – Under the Traffic System Log specification on Plan page 117 of 142, it indicates that "Log messages shall be automatically output to the line printers at the central office monitor." Will it be acceptable for the central software to display the log messages on the screen and the operator can print them out as needed instead of automatically?Question #3 – In the System Status Reports Section on Plan page 117 of 142 under Communication Statics, it indicates that "The system shall keep a log of all characters transmitted or received on all channels…" Can this requirement be eliminated? This log file would quickly grow to an unmanageable size.Question #4 – Under the Graphics specification on Plan page 117 of 142, it indicates that "When zooming into a group of intersections, the roadway centerlines would be disabled from view and the roadway curb lines would be enabled." Will a software package be accepted that displays both of these layers at the same time instead of turning them on and off when zooming?

Answer #1 – I do not see a safety issue. It is required to enable the preempt sequence and to monitor and record them. This function was requested by the City of Hubbard. Answer #2 It is acceptable if the software can display messages with out printing them out but MUST be able to automatically output to the line printer (thus meeting the requirement of the plan note).Answer #3 –   The plan does not specify how long the data from the log needs to kept. But the requirement is to keep a log of all characters transmitted or received on all channels which must be met.Answer #4 – The software may be able to display both of the layers at the same time but it MUST meet the requirement to disable the centerline while the curb line is enabled.   These requirements will not be eliminated. Please bid as shown.

Question Submitted: 4/17/2008   *Question Number:* 4

It is our understanding that the ODOT central office is requiring all ITS projects that require centralized system software be specified as NTCIP compliant in order to allow for a standard non-proprietary communications protocol as desired by ITS. This enables components of these systems to be bid equally by all manufacturers and allow for competitive expansion of such systems. However, the controller items and central software specifications on this project do not specify NTCIP communications. Will an addendum be issued to require the controllers and central system to be NTCIP compliant?

Yes, it is the intent for ODOT to move toward specifying NTCIP compliant communications but they have not yet been included in the ODOT standards. Please bid as shown.

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Question Submitted: 4/21/2008   *Question Number:* 5

We have many questions regarding the proposed Central Office Control System Software and Hardware including but not limited to the following: Reference is made to both Ethernet connectivity and serial communications throughout the specification. Which is to be supplied? For video? For controllers?Reference is made to single mode fiber for Video and 850nm fiber for the controller communications. Are two separate communications systems to be supplied? Are different communication links/bandwidths required for the video and control system? If both Video and traffic communications are to be Ethernet may they share the same fiber link? Fiber optic communications modems are required to have RS232 Ports to communicate with the controllers. If Ethernet connectivity is to be used are port servers to be provided with the controllers to interface with the Controller's RS232 port or may controllers with direct Ethernet connectivity be provided? If the system is to be Ethernet are the fiberoptic switches required to have RS232? The Central Communications equipment specification states "No duplex adapters will be accepted". All fiber optic Ethernet switches we are familiar with utilize duplex ports (transmit & receive) Please clarify. The Central Office Monitor specification states that Internet access will be provided by the City of Hubbard. Will internet access be in the form of a City Network or in the form of a separate discreet broadband Internet Access such as DSL or Cable? If access is through the city network will there be IT cooperation to route the VPN/Central System traffic to and from the Internet? If access is through the city network does the city have a preference /requirement for the type of hardware and software used for the proposed VPN connectivity? The Central Hardware specification requires wireless card for internet access for the laptop. Is the wireless requirement for Wifi with access to be provided by others or is the wireless to be cellular broadband for wide area network access?   Cellular broadband access will require the City has a cellular broadband service. Please verify cellular connectivity is required. If required who is the cellular broadband provider? The Central Hardware specification requires 2 flat screen monitors and also 2 sets of keyboards/mouse and 2 sets of extension cables for the keyboard/mouse. Please clarify. How are they to be configured? The Central Hardware specification requires the server & serial port expanders to go in a 17-in rack. Is there an existing 17" rack which must be matched? Please verify the rack is to be 17". We would assume if the rack is to be provided it would be a standard 19". The Central Hardware specification specifies backup hardware to be a DVD+RW drive. Please verify DVD's which are limited to 4 GB are to be primary backup. A tape backup would be recommended. Please clarify. The Central Office Software specifies log messages be automatically output to a printer. Logs may be accumulated and printed in an auto report mode. Would it be acceptable to have logs accumulated and printed or displayed in a report either on demand or in an automatic report? The Central Office Software maintains all event logs in one database. The Paging events are maintained within the event log database as opposed to a separate database. Is this acceptable?The Central Office Software refers to logical zones and associations between zones. We propose an alternate dynamic grouping system. Dynamic grouping provides the ability for an intersection to be maintained by system control rather than through connection to a Master controller or specific zone. Intersections can move between groups at any time, as many times as needed. Dynamic Group Assignments make it simple to change programming and assignments within a group, all from a central location using automated features or manual commands. Is this acceptable?The Central Office Software specifies that the Central System shall enable an Emergency Vehicle Preempt sequence. Is this to be done by intersection or by a logical group? How is the Central Preempt control to interact with the passive vehicle activated preempt system (Light, Sound or Radio) specified for the project? The Video Monitoring system refers to a Video Matrix switcher. If the Video PTZ Cameras are to be monitored and controlled over the Ethernet network how is the video switching equipment to be used. Is the Video Switching equipment required?

A1) Ethernet and serial ports are called out throughout the plan notes but each for a specific function (controllers serial, video see SS 816.02).A2) No. A3) NO   A4) Yes.A5) Either may be provided but the plans specify having an RS-232 port for the modem and that requirement must be met. A6) No.A7) Simplex adapters can be used with single mode fiber.A8) City network. A9) Yes. A10) No.A) Wifi   A) N/AA) Clarify what? Is there a question? A) Per the manufacturers specifications.A) No. A) The plan requires a 17" rack.A) Yes, the DVD drive is the primary backup. A) Thank you for the recommendation, please bid as shown. A) Clarify what?A) It is acceptable to have logs accumulated and printed or displayed in a report but MUST be able to automatically output to the line printer (thus meeting the requirement of the plan note).A) Yes.A) Yes.A) Either, the plan does not have a requirement for this.   A) It would not interact, it would be used like a vehicle activation.A) Yes.

Question Submitted: 4/22/2008   *Question Number:* 6

WHILE LOOKING AT THE INTERCONNECT PLAN IT APPEARS TO ME THAT YOU NEED A MINIMUN OF 23 FIBER CABLE TO DO THE SPLICING REQUIRED. IT ALSO LOOKS LIKE PER THE SPLICING DIAGRAMS YOU NEED 60 FIBERS. 5 TUBES WITH 12 FIBERS EACH. THE NEXT QUESTION IS HOW ARE YOU HANGING THE FIBER CABLE SINCE THIS WIRE DOES NOT APPEAR TO HAVE A MESSENGER WIRE? ARE WE USING SINGLE MODE FIBER?

A1) The fiber is self supporting. A2) Yes.

Question Submitted: 4/22/2008   *Question Number:* 7

1. Page 115, paragraph 6: The fiber optic transceiver described in the specification implies an analog video to fiber transceiver solution. But on page 116, paragraph 5, the specification calls for Ethernet communication to remote PTZ cameras. Is the video from the cameras to be transported by analog over fiber or Ethernet over fiber? 2. Page 115, Digital Control System: The specification calls for a 32 X 8 video switcher. Given the assumed network structure of this design, the need for the analog video switcher is confusing. Are there existing analog cameras in the system that need to be managed as part of the specified system? If so, we need to know if the existing cameras are fixed or PTZ or both and if PTZ who is the manufacturer(s) and model numbers? 3. Given that a switcher is called out, NTSC video monitors are required. Video monitors are not specified. Do video monitors already exist or are video monitors required? If so, how many, what is the required display size and how are they to be mounted (wall or desktop)? 4. Page 115, Digital Control System: The digital control system requires salvo switching. Salvo switching is typically reserved for security systems with large numbers of cameras. Given that there three cameras in the system, Is salvo switching truly required? 5. Page 116. 2nd paragraph: Per the specification, alarm processing is to be supported. What device(s) is generating the alarms in which the cameras are to respond? 6. Page 117. Paragraphs 1 and 4. Are the cameras referenced in these paragraphs traffic detection or surveillance cameras? Error reporting for surveillance cameras include video loss and extensive internal diagnostic reporting via the camera control joystick and associated keyboard.

A1)Ethernet, please see the 2nd paragraph of #6 on page 115.A2) No.   N/A.A3)Required, see the first line of Video Monitoring Equipment on page 115.   Requirements are detailed in Central Office Monitor notes.A4) Yes, it is specified in the plan, please bid as shown.A5) The devices generating the alarms are the cameras.A6) All cameras.