

## CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

MDOT PROJECT MANAGER			JOB NUMBER (JN)	CONTROL SECTION (CS)
DESCRIPTION				
<b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP  WHITE = REQUIRED GRAY SHADING = OPTIONAL			<b>CONSULTANT:</b> Provide only checked items below in proposal	
Check the appropriate Tier in the box below				
<b>TIER I (\$25,000-\$99,999)</b>	<b>TIER II (\$100,000-\$250,000)</b>	<b>TIER III (&gt;\$250,000)</b>		
			Understanding of Service	
			<i>Innovations</i>	
			<i>Safety Program</i>	
N/A			Organizational Chart	
			Qualifications of Team	
			Past Performance	
Not required As part of Official RFP	Not required As part of Official RFP		Quality Assurance/Quality Control	
			<b>Location:</b> The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.	
N/A	N/A		Presentation	
N/A	N/A		Technical Proposal (if Presentation is required)	
3 pages (MDOT Forms not counted) <b>(No Resumes)</b>	7 pages (MDOT Forms not counted)	19 pages (MDOT Forms not counted)	<b>Total maximum pages for RFP not including key personnel resumes</b>	

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. **Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.**

## RFP SPECIFIC INFORMATION

BUREAU OF HIGHWAYS

BUREAU OF TRANSPORTATION PLANNING \*\*

OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO

YES

DATED \_\_\_\_\_

THROUGH \_\_\_\_\_

**Prequalified Services** – See page \_\_\_ of the attached Scope of Services for required Prequalification Classifications.

**Non-Prequalified Services** - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. **(Form 5100J Required with Proposal)**

**Qualifications Based Selection** – Use Consultant/Vendor Selection Guidelines

**For all Qualifications Based Selections**, the section team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

**\*\*For RFP's that originate in Bureau of Transportation Planning only**, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (see address list, page 2). The priced proposal must be submitted in a sealed envelope, clearly marked "**PRICE PROPOSAL.**" The vendor's name and return address **MUST** be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

**For a cost plus fixed fee contract**, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

**Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

**Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

**Low Bid** (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

## BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked "**SEALED BID.**" The vendor's name and return address **MUST** be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

**PROPOSAL SUBMITTAL INFORMATION**

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER	PROPOSAL/BID DUE DATE	TIME DUE
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**PROPOSAL AND BID SHEET MAILING ADDRESSES**

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

MDOT Project Manager

MDOT Other

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

<b>Lansing Regular Mail</b>	<b>OR</b>	<b>Lansing Overnight Mail</b>
Secretary, Contract Services Div - B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Secretary, Contract Services Div - B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933
Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933

**GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT’s Office of Equal Opportunity, shall be listed in the Proposal

The following two American Recovery and Reinvestment Act of 2009 (ARRA) notifications, **ARRA MONTHLY EMPLOYMENT REPORTS** and **REQUIRED CONTRACT PROVISIONS TO IMPLEMENT AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SECTIONS 902 AND 1515**, are attached to this Request For Proposal for your understanding. These two notifications are only applicable for those projects/contracts funded with ARRA funds and will be included in contract Exhibits.

**MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION**

- 5100D** – Request for Proposal Cover Sheet
- 5100G** – Certification of Availability of Key Personnel
- 5100I** – Conflict of Interest Statement
- 5100J** - Consultant Data and Signature Sheet (Required only for Non-Prequalified Work)

**(These forms are not included in the proposal maximum page count.)**

**Michigan Department of Transportation**

**SCOPE OF SERVICE  
FOR  
TRAFFIC & SAFETY SERVICES**

Adaptive Closed Loop (ACS-Lite) Signal System Installation and Training

**CONTROL SECTION(S):** 84900

**JOB NUMBER(S):** 113628

**PROJECT LOCATIONS:**

1. **M-43 (Saginaw Hwy) from Marketplace Blvd to Rosemary, Eaton & Ingham counties**

M-43(Saginaw Hwy) in Delta Township of the Lansing area is a major arterial that has a total of 9 signals through a mix of residential and commercial properties. All intersections have Eagle type MOD50 signal controllers that will require software upgrade for communication. There is existing radio interconnect along the corridor that is compatible with ACS-Lite system. This system is to be in place and running by fall/early winter 2011.

2. **M84 (Bay Rd) from Walmart Drive to Weiss Street, Saginaw County**

M-84 (Bay Rd) is a major arterial in the City of Saginaw that has a total of 8 signals. All intersections have Eagle type MOD50 traffic signal controllers that will require software upgrade for communication. There is existing radio interconnect along the corridor that is compatible with ACS-Lite system. This system is to be in place and running by fall/winter 2012.

**PROJECT DESCRIPTION:**

To provide knowledgeable and experienced personnel in the implementation and training of an adaptive closed loop (ACS-Lite) traffic control signal system to be used on two signal corridors listed above.

**This project will provide assistance and training in the implementation and use of two ACS-Lite signal systems. This work includes site selection for supplemental detection between intersections, training MDOT personnel on the programming of an ACS-Lite field processor and troubleshooting of the ACS-Lite systems with final acceptance of two traffic signal systems that work independent of oversight.** Equipment to be used must be compatible with existing on street traffic signal equipment. There will be classroom and field training required as part of this project. Any software upgrades over the next five years will be included as part of this project. This work will require on-site evaluations along with on-site integration.

**CONSULTANT QUALIFICATION REQUIREMENTS:**

- The Consultant must have completed up to 4 previous projects where the ACS-Lite system was successfully installed. Please include number of signals integrated, city and contract information.
- Consultant must have working knowledge and experience in programming traffic signal controllers used by MDOT
- Consultant must have understanding of MDOT traffic signal special provisions and construction details.

**ANTICIPATED SERVICE START DATE:** August 8, 2011

**ANTICIPATED SERVICE COMPLETION DATE:** December 31, 2012

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):** N/A

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):** N/A

**DBE REQUIREMENT:** N/A

**PROJECT MANAGER:**

Paula Corlett  
Traffic Signal Operations Section  
Division of Operations  
Michigan Department of Transportation  
Murray D. Van Wagoner Building  
P.O. Box 30050  
Lansing, MI 48909  
Ph: 517- 373-2324  
Fax: 517- 373-2330  
E-mail: corlettp@michigan.gov

**BACKGROUND:**

Adaptive Signal Control (ASC) technology is on-street traffic signal equipment that provides for the coordination of traffic signal systems with minimal oversight. One version of this adaptive technology is ACS-Lite. ASC-Lite deploys an on street master field processor with supplemental detection along a signalized corridor which continuously monitors traffic patterns and makes adjustments to signal timing that maximizes coordination of the signal system. MDOT personnel have minimal experience with the ACS-Lite system so assistance in the **development, deployment, programming and troubleshooting of these systems is required. These deployments will serve as pilot studies to evaluate ACS-Lite for potential future installations.**

## **OBJECTIVES AND TASKS:**

### **Task 1: Assessment of existing conditions**

- The Consultant must conduct an evaluation of each of two signalized corridors.
- This review must identify number and location(s) of advance detection sites necessary for the successful implementation of ACS-Lite systems.
- Recommendations must include type of detection and location of each advance detection site.
- Identify site conditions that must be addressed and how to improve on those conditions for each ACS-lite system to work effectively.

#### **Deliverables:**

- Provide written documentation of recommendations for M-43 (Saginaw Hwy) system
- Provide written documentation of recommendations for M-84 (Bay Road) system.

### **Task 2: System Integration**

- The Consultant must upgrade current M50 series traffic signal controllers to Siemens SEPAC version 4.01F NTCIP or latest version.
- Consultant must convert current time of day plans for NTCIP.
- The Consultant must discuss their plans for future enhancements to the ACS-Lite system, including the possibility of cycle lengths adapting to changes in traffic flow
- The Consultant must supervise and coordinate the installation, configuration and testing of all system components.
- Consultant must troubleshoot installations to provide final working system at completion.

#### **Deliverables:**

- Provide timing plans in NTCIP format for M-43 (Saginaw Hwy) ASC-Lite system
- Update traffic signal controllers' communication software for M-43.
- Field adjust components of M43 system to provide optimum operation.
- Provide timing plans in NTCIP format for M-84 (Bay Road) ASC-Lite system.
- Update traffic signal controllers' communication software for M-84.
- Field adjust components of M84 system to provide optimum operation

### **Task 3: Training**

- Training must consist of providing qualified instructors and all materials for training MDOT personnel in the operation and maintenance of the equipment and components of the ACS-Lite.
- This training must be a minimum of 4 hours of formal classroom training at an MDOT training facility that takes place during implementation and installation of all equipment. The training must provide a basic understanding of the equipment and subsystems and their operation and maintenance, including theory of operation, integration and detection; explanation of the ACS-Lite theoretical structure and procedures for installing and expanding the system; and how to turn the system on/off.
- Minimum of 16 hours of "hand-on" training that may involve up to 10 field personnel. At a minimum, the training shall provide initial set up of the controller, software configuration procedures; changing the setting in the controller to accommodate, adjust and troubleshoot the ACS-Lite.

**Deliverables:**

- In-house training of MDOT personnel of ASC-Lite systems
- On-street training for field troubleshooting for each system.

**Task 4: Final Acceptance**

- The Consultant must complete and submit all documentation for the system(s) including operation and maintenance manuals, test plans and procedures and any other material required to fully define an operational system.

**Deliverables:**

- Final acceptance of working ACS-Lite system for M-43.
- Final acceptance of working ACS-Lite system for M-84
- Documents for each system including operation and maintenance manuals, test plans and procedures.

It is estimated that this project provide services for the 18 months length of the project. The estimated amount of time per week will vary based on meeting schedule demands of the project(s).

Overtime will not be necessary for these services. All work supports personnel in the Traffic Signal Operations Section which includes the Design, Signal Operations and Field Services Units of the Traffic Signal Operations Section, Division of Operations in Lansing.

**CONSULTANT RESPONSIBILITIES:**

- A. The MDOT Project Manager (PM) will be the first point of contact when determining need for Consultant personnel to aid MDOT in providing services for state jurisdictional work.
- B. Consultant must furnish all services and labor necessary to conduct and complete the ACS-Lite work, described herein.
- C. The Consultant must also furnish all materials, equipment, supplies and incidental necessary to perform the Services (other than those designated in writing to be furnished by the Department) consistence in supplying this work. The services must be performed to the satisfaction of the Department consistent with applicable professional standards.
- D. Services described herein are financed with public funds. The Consultant must comply with all Federal and State laws, rules and regulations.
- E. The Consultant must notify the MDOT PM in writing, prior to any personnel changes from those specified in the Consultant's original approved proposal. Any personnel substitutions are subject to review and approval of the MDOT PM.
- F. The Consultant must provide the necessary personnel to adequately perform the requirements of this Agreement, and that his/her employees must possess the experience, knowledge, and character to qualify them for the particular duties each is to perform.
- G. The Consultant must provide a written Monthly Progress Report to MDOT PM detailing hourly charges and appropriate MDOT job number that Consultant personnel has conducted during time period.

**MDOT RESPONSIBILITIES:**

*Final Posted Scope: 5/26/2011*

MDOT will provide timing plans, design plans, aeriels and any relevant information needed for the ACS-Lite implementation and training.

### **SELECTION CRITERIA**

A team of MDOT staff will be used to evaluate responses to the RFP based upon the following factors as presented in the Consultant's proposal. These are listed in order of importance and a scoring factor has been provided for each category, with a total of 100 points possible.

#### Understanding of the Project Needs (30 pts)

- Describe understanding of the project needs, innovation and/or product to be proposed.
- Ability to demonstrate a viable plan for the development, installation and troubleshooting of an ACS-Lite system
- Provide a schedule outlining the proposed work and milestone dates.

#### Past Performance in Implementation of ASC-Lite Signal Systems (25 pts)

- List of a minimum of four (4) previous projects where the ACS-Lite system was successfully installed. Please include number of signals integrated, city and contract information.

#### Project Cost (30 pts)

- Total cost of development, implementation and training of MDOT staff on the ACS-Lite systems

#### Key Staff (10 pts)

- Capability and qualification of key individuals, including previous work on similar projects, technical expertise and training
- Describe roles for key personnel and sub-consultants

#### Location (5 pts)

- A Consultant with a business presence in Michigan. The Consultant is required to provide the location of where the work will be performed.

### **CONSULTANT PAYMENT:**

Compensation for this project shall be on a **milestone** basis. Compensation shall be divided into payments for the completion of a portion of the services (deliverables).

The MDOT Project Manager may authorize payment if a milestone is delayed due to circumstances by the Consultant's control.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for Services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

## CONSULTANT BID SHEET - MILESTONE

It is required that this bid sheet be completed and submitted with the response to the Request for Proposal. All entries on this page must be handwritten in ink or computer generated. When price is a component of the selection process it will be considered along with several other selection criterion for determining overall score. Priced proposal costs will be required after selection, in accordance with the MDOT Priced Proposal Guidelines ([Guidelines](#)) (See page 2 of 2).

**Note:** MDOT reserves the right to reject any or all bids.

**PROJECT DESCRIPTION:**

MILESTONE/DELIVERABLES	PRICE
Milestone/Deliverables	Price

Milestone/Deliverable, Task 1 (15%) Task 1 Total: \$ \_\_\_\_\_

Milestone/Deliverable, Task 2 (45%) Task 2 Total: \$ \_\_\_\_\_

Milestone/Deliverable, Task 3 (30%) Task 3 Total: \$ \_\_\_\_\_

Milestone/Deliverable, Task 4 (10%) Task 4 Total: \$ \_\_\_\_\_

**TOTAL BID PRICE: \$ \_\_\_\_\_**  
**(All Milestones/Deliverables of the Project)**

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<b>Consultant Name:</b>	
<b>Consultants Authorized Legal Signer:</b>	
<b>Consultant Address:</b>	
<b>Date:</b>	