Michigan Department
Of Transportation
5100B (03/12)

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

REQUISITION NUMBER	DUE DATE	TIME DUE
919	5/7/2012	noon

MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Steven Brink	107965C	84915

DESCRIPTION
ITS Design Services

MDOT PROJECT MANAGER: Check all items to be included in RFP WHITE = REQUIRED GRAY SHADING = OPTIONAL Check the appropriate Tier in the box below			**CONSULTANT:** Provide only checked items below in proposal
☐ **TIER 1 ($25,000-$99,999)**	☐ **TIER II ($100,000-$250,000)**	☑ **TIER III (>$250,000)**	
☐	☐	☑	Understanding of Service
☐	☐	☑	*Innovations*
☐	☐	☑	Organizational Chart
☐	☐	☑	Qualifications of Team
Not required as part of Official RFP	Not required as part of Official RFP	☐	Quality Assurance/Quality Control
☐	☐	☑	**Location:** The percentage of work performed in Michigan will be used for all selections unless the project is for on-site p=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) **(No Resumes)**	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP **not including key personnel resumes.** Resumes limited to 2 pages per key staff personnel.

PROPOSAL AND BID SHEET EMAIL ADDRESS – mdot-rfp-response@michigan.gov

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 five (5) 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.

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet
5100J – Consultant Data and Signature Sheet (Required only for firms not currently prequalified with MDOT)

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

REQUEST FOR PROPOSAL

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 Services Contracts" and "Guideline for Completing a Low Bid Sheet(S)*, if a low bid is involved as part of the selection process. **Reference 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 12/1/11 THROUGH 3/30/12

☑ **Prequalified Services** – See page 2 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 is required with Proposal for firms not currently prequalified with MDOT**

☑ **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 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.

☐ **Qualification 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. The vendor that has met established qualification threshold and 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

Bid Sheet(s) must be submitted in accordance with the "Guidelines for Completing a Low Bid Sheet(s)* (available on MDOT's website). Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the email address: mdot-rfp-response@michigan.gov. Failure to comply with this procedure may result in your bid being rejected from consideration.

NOTIFICATION
MANDATORY ELECTRONIC SUBMITTAL

Proposals submitted for this project must be submitted electronically.

The following are changes to the Proposal Submittal Requirements:

- Eliminated the Following Requirements:
  - Safety Program
  - Communication Plan
  - Past Performance as *a separate section*
  - Separate section for DBE Statement of goals. Include information in Qualification of Team section

- Implemented the Following Changes:
  - All proposals require an Organization Chart
  - Resumes must be a maximum of two pages
  - Only Key (lead) staff resumes may be submitted
  - Tier III proposal reduced from 19 to 14 pages
  - Forms 5100D, 5100I, and 5100G combined – 5100D
  - Forms 5100B and 5100H combined – 5100B
  - RFP's will be posted on a weekly basis -- on Mondays

The following are Requirements for Electronic Submittals:

- Proposals must be prepared using the most current guidelines
- The proposal must be bookmarked to clearly identify the proposal sections (See Below)
- For any section not required per the RFP, the bookmark must be edited to include "N/A" after the bookmark title.
  Example: Understanding of Service – N/A
- Proposals must be assembled and saved as a single PDF file
- PDF file must be 5 megabytes or smaller
- PDF file must be submitted via e-mail to MDOT-RFP-Response@michigan.gov
- MDOT's requisition number and company name must be included in the subject line of the e-mail. The PDF shall be named using the following format:
  - Requisition#XXX_Company Name.PDF
- MDOT will not accept multiple submittals
- Proposals must be *received* by MDOT on or before the due date and time specified in each RFP

If the submittals do not comply with the requirements, they may be determined unresponsive.

The Consultant's will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time. **Consultants are responsible for ensuring the MDOT receives the proposal on time.**

Required Bookmarking Format:

I. Request for Proposal Cover Sheet Form 5100D
   A. Consultant Data and Signature Sheet, Form 5100J (if applicable)
II. Understanding of Service
   A. Innovations
III. Qualifications of Team
   A. Structure of Project Team
      1. Role of Firms
      2. Role of Key Personnel
   B. Organization Chart
   C. Location
IV. Quality Assurance / Quality Control Plan
V. Resumes of Key Staff
VI. Pricing Documents/Bid Sheet (if applicable)

2/14/12

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Michigan Department of Transportation

SCOPE OF SERVICE
FOR
DESIGN SERVICES
Intelligent Transportation Systems
Revised 4/24/2012

CONTROL SECTION: 84915 (Southwest Regionwide)

JOB NUMBER: 107965C

PROJECT LOCATION:
Various locations in the Southwest Region, mostly along the I-94 Corridor from the Indiana State Line to the East Calhoun County Line. (Southwest Region)

DESCRIPTION OF WORK:
This scope is to provide design for an ITS project, develop a final bid package based on 100% complete plans, provide a cost estimate for construction, serve as the MDOT representative and system manager, through construction phase, if an authorization is written to the consultant to do so.

Twenty (20) CCTV cameras possibly combined with Microwave Vehicle Detector Systems (MVDS) in the Southwest Region focusing on interchanges of I-94 within Berrien, VanBuren, Kalamazoo, and Calhoun counties.

The system shall include, but is not limited to, CCTV, MVDS, communications and power infrastructure of which shall interface with all of the existing ITS monitoring software and equipment and the development of a project specific Conceptual Operations (Con-Ops) plan.

PRIMARY PREQUALIFICATION CLASSIFICATION(S):
Intelligent Transportation System -Design & System Manager

SECONDARY PREQUALIFICATION CLASSIFICATION(S):
Maintaining Traffic Plans & Provisions
Road Design Surveys
Geotechnical Engineering Services
~~Intelligent Transportation System - Integration~~

ANTICIPATED START DATE: June 1, 2012

ANTICIPATED COMPLETION DATE: December 1, 2013

DBE REQUIREMENT: 5%

MDOT PROJECT MANAGER:
Stephen Brink, P.E.
Traffic Safety & Operation Engineer
1501 Kilgore Road
Kalamazoo, MI 49001
Phone: 269-337-3930
BrinkS1@michigan.gov

The Consultant shall contact the Project Manager prior to beginning any work on the project.

The project manager shall be an engineer licensed in the State of Michigan with relevant experience in ITS systems engineering and design services. The project manager shall be an employee of the primary consulting firm responding to the RFP and not a sub-consultant.

REQUIRED MDOT GUIDELINES AND STANDARDS:
Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Bridge Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, the Design Survey Manual, etc.).

GENERAL INFORMATION:
The consultant shall have substantial ITS conception, design background and experience. The consultant should be prepared to demonstrate their background and experience, as this will be a major part of the selection for this RFP.

The consultant will be responsible to scope the project, refine locations of equipment, develop plans to 100% completion, define known or anticipated environmental issues, provide necessary geotechnical information, define known or anticipated utility issues and define known or anticipated traffic concerns. This is a Intelligent Transportation Systems funded project utilizing elements of the Michigan Department of Transportation (MDOT) Southwest Region ITS Architecture and implementation plan and consists of all work related to the design of the following devices:

The Consultant shall furnish all services and labor necessary to conduct and complete the services described herein. The Consultant shall also furnish all materials, equipment, supplies, and incidentals necessary to perform the Services (other than those designated in writing to be furnished by the Department) and check and/or test the materials, equipment, supplies and incidentals as necessary in carrying out this work. The Services shall be performed to the satisfaction of the Department consistent with applicable professional standards.

The Consultant shall comply with all applicable Federal and State laws, rules, and regulations. The Consultant staff shall conduct themselves with professionalism in carrying out their duties.

The Consultant shall notify the Project Manager, 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 Project Manager.

At the request of the Department, the Consultant, during the progress of the Services, shall furnish information or data relating to the Services described herein that may be required by the Department to enable it to carry out or to proceed with related phases of the Project not described herein, or which may be necessary to enable the Department to furnish information to the Consultant upon which to proceed with further Services.

CONSULTANT RESPONSIBILITIES:

Complete a design of this project including, but not limited to the following:

- Provide conceptual layouts for the corridor. This will include seeking stakeholder input on device locations and system functionality.
- The Consultant may be required to develop a Concept of Operations for the ITS devices for this project.
- Perform survey commensurate with the required in this scope of services and as detailed in Attachment A – Survey Scope of Work.
- Perform required design and functional technical specification writing to expand the ITS facilities in the project area. The proposed facilities shall include, but not be limited to CCTV, MVDS, cabinets, and communications infrastructure.
- Prepare required plans 100% complete which would include: typical cross-sections, details, functional requirements and specifications required for construction. MDOT shall provide any existing details and specifications applicable to the proposed work in electronic format.
- Compute and verify all plan quantities for the bid package.
- Prepare staging plans and special provisions for maintaining traffic during construction.
- Provide solutions to any unique problems that may arise during the design of this project.
- Develop component and acceptance tests and work with MDOT to perform all tests.
- Contact all utility companies thru mailings to determine possible conflicts and incorporate the results from their investigation into their proposal.
- Prepare and incorporate all documents for E-Proposal Submittal.

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

STUDY (EARLY PRELIMINARY ENGINEERING)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
		CONSULTANT CONTRACT AUTHORIZATION/EXECUTION	__/__/____
		EPE SCOPING ANALYSIS	
☐	☐	2120 Prepare Traffic Analysis Report	__/__/____
☐	☐	2130 Prepare Project Justification	__/__/____
☐	☐	*213M Concurrence by Regulatory Agencies with the Purpose and Need*	__/__/____
☐	☐	2140 Develop and Review Illustrative Alternatives	__/__/____
☐	☐	2155 Request/Perform Safety Analysis	__/__/____
☐	☐	2160 Prepare and Review EIS Scoping Document	__/__/____
☐	☐	*211M Public Information Meeting*	__/__/____
		EPE DRAFT ANALYSIS	
☐	☐	2310 Conduct Technical SEE Studies	__/__/____
☐	☐	2321 Prepare for Aerial Photography	__/__/____
☐	☐	2322 Finish/Print Aerial Photography	__/__/____
☐	☐	2330 Collect EPE Geotechnical Data	__/__/____
☐	☐	2340 Develop and Review Practical Alternatives	__/__/____
☐	☐	*233M Aerial Photography Flight*	__/__/____
☐	☐	2360 Prepare and Review EA or DEIS	__/__/____
☐	☐	*231M Draft Submission to FHWA*	__/__/____
☐	☐	2380 Circulate EA or DEIS	__/__/____
☐	☐	*232M Public Hearing*	__/__/____
		EPE FINAL ANALYSIS	
☐	☐	2510 Determine and Review Recommended Alternative	__/__/____
☐	☐	*250M Concurrence by Regulatory Agencies with Recommended Alternatives*	__/__/____
☐	☐	2525 Prepare and Review Engineering Report	__/__/____
☐	☐	2530 Prepare and Review Request for FONSI or FEIS	__/__/____
☐	☐	*252M Final Submission to FHWA*	__/__/____
☐	☐	2550 Obtain FONSI or ROD	__/__/____
☒	☐	2570 ITS Concept of Operations	10/23/2012
		CONTAMINATION INVESTIGATION	
☐	☐	2810 Project Area Contamination Survey (PCS)	__/__/____
☐	☐	2820 Preliminary Site Investigation (PSI) for Contamination	__/__/____

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST
PRELIMINARY ENGINEERING - DESIGN

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)
		DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION		
☐	☐	3130	Verify Design Scope of Work and Cost	__/__/____
☐	☐	3310	Prepare Aerial Topographic Mapping	__/__/____
☐	☐	3320	Conduct Photogrammetric Control Survey	__/__/____
☐	☐	3321	Set Aerial Photo Targets	__/__/____
☒	☐	3330	Conduct Design Survey	09/05/2012
☐	☐	3340	Conduct Structure Survey	__/__/____
☐	☐	3350	Conduct Hydraulics Survey	__/__/____
☐	☐	3360	Prepare Base Plans	__/__/____
☐	☐	*331M*	*Utility Notification*	__/__/____
☐	☐	3361	Review and Submit Preliminary ROW Plans	__/__/____
☐	☐	*331M*	*Preliminary ROW Plans Distributed*	__/__/____
☒	☐	3365	Pre-Conceptual ITS Design and Meeting	10/23/2012
☐	☐	3370	Prepare Structure Study	__/__/____
☐	☐	3375	Conduct Value Engineering Study	__/__/____
☐	☐	3380	Review Base Plans	__/__/____
☐	☐	*332M*	*Base Plan Review (Pre-GI Inspection)*	__/__/____
☒	☐	3390	Develop the Maintaining Traffic Concepts	10/23/2012
		PRELIMINARY PLANS PREPARATION		
X	☐	3510	Perform Roadway Geotechnical Investigation	__/__/____
☐	☐	3520	Conduct Hydraulic/Hydrologic and Scour Analysis	__/__/____
☐	☐	3522	Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	__/__/____
☐	☐	3530	Conduct Structure Foundation Investigation	__/__/____
☐	☐	3535	Conduct Structure Review for Architectural and Aesthetic Improvements	__/__/____
☒	☐	3540	Develop the Maintaining Traffic Plan	02/26/2013
☐	☐	3551	Prepare/Review Preliminary Traffic Signal Design Plan	__/__/____
☐	☐	3552	Develop Preliminary Pavement Marking Plan	__/__/____
☐	☐	3553	Develop Preliminary Non-Freeway Signing Plan	__/__/____
☐	☐	3554	Develop Preliminary Freeway Signing Plan	__/__/____
☐	☐	3555	Prepare/Review Preliminary Traffic Signal Operations	__/__/____
☐	☐	3570	Prepare Preliminary Structure Plans	__/__/____
☒	☐	3580	Develop Preliminary Plans	02/26/2013
☐	☐	3581	Review and Submit Final ROW Plans	__/__/____
☐	☐	*351M*	*Final ROW Plans Distributed*	__/__/____
☒	☐	3585	Final ITS Concept Design and Meeting	12/10/2012
☒	☐	3590	Review Preliminary Plans (Hold Plan Review Meeting)	02/19/2013
☒	☐	*352M*	*THE Plan Review (Grade Inspection)*	03/26/2013
☒	☐	3595	Conduct ITS Structure Foundation Investigation	12/11/2012

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST
PRELIMINARY ENGINEERING - DESIGN (cont'd)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)
		UTILITIES		
☐	☐	3610	Compile Utility Information	__/__/____
☒	☐	3615	Compile ITS Utility Information	02/26/2013
☐	☐	3650	Coordinate RR Involvement for Grade Separations	__/__/____
☐	☐	3655	Coordinate RR Involvement for At-Grade Crossings	__/__/____
☐	☐	3660	Resolve Utility Issues	__/__/____
☐	☐	*360M*	*Utility Conflict Resolution Plan Distribution*	__/__/____
☐	☐	*361M*	*Utility Meeting*	__/__/____
☐	☐	3670	Develop Municipal Utility Plans	__/__/____
☐	☐	3672	Develop Special Drainage Structures Plans	__/__/____
☐	☐	3675	Develop Electrical Plans	__/__/____
☒	☐	3680	Preliminary ITS Communication Analysis	02/26/2013
☒	☐	3690	Power Design (Power Drop in Field)	02/26/2013
		MITIGATION/PERMITS		
☐	☐	3710	Develop Required Mitigation	__/__/____
☐	☐	3720	Submit Environmental Permit Applications	__/__/____
☐	☐	3730	Obtain Environmental Permit	__/__/____
		FINAL PLAN PREPARATION		
☐	☐	3821	Prepare/Review Final Traffic Signal Design Plan	__/__/____
☐	☐	3822	Complete Permanent Pavement Marking Plan	__/__/____
☐	☐	3823	Complete Non-Freeway Signing Plan	__/__/____
☐	☐	3824	Complete Freeway Signing Plan	__/__/____
☐	☐	3825	Prepare/Review Final Traffic Signal Operations	__/__/____
☒	☐	3830	Complete the Maintaining Traffic Plan	06/05/2013
☒	☐	3840	Develop Final Plans and Specifications	06/05/2013
☒	☐	*380M*	*Plan Completion*	06/06/2013
☐	☐	3850	Develop Structure Final Plans and Specifications	__/__/____
☒	☐	3870	Hold Omissions/Errors Check (OEC) Meeting	06/20/2013
☒	☐	*387M*	*Omissions/Errors Checks Meeting*	06/20/2013
☒	☐	*389M*	*Plan Turn-In*	10/10/2013
☐	☐	3880	CPM Quality Assurance Review	__/__/____
☒	☐	3890	Final ITS Communication Analysis	06/05/2013

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING – RIGHT OF WAY

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
		EARLY RIGHT OF WAY WORK	
☐	☐	4120 Obtain Preliminary Title Commitments	__/__/____
☐	☐	4130 Prepare Marked Final Right Of Way Plans	__/__/____
☐	☐	*413M Approved Marked Final ROW*	__/__/____
☐	☐	4140 Prepare Property Legal Instruments	__/__/____
		ROW ACQUISITION	
☐	☐	4411 Preliminary Interviews	__/__/____
☐	☐	*441M Post-Decision Meeting*	__/__/____
☐	☐	4412 Real Estate Services Assignment Proposal and Fee Estimate (Form 633s) for Appraisal Work Authorization	__/__/____
☐	☐	4413 Appraisal Reports	__/__/____
☐	☐	4420 Appraisal Review Reports	__/__/____
☐	☐	4430 Acquire Right Of Way Parcels	__/__/____
☐	☐	4510 Conduct Right Of Way Survey & Staking	__/__/____
		ROW RELOCATION	
☐	☐	4710 Relocation Assistance	__/__/____
☐	☐	4720 Prepare Improvement Removal Plan	__/__/____
☐	☐	*442M ROW Certification*	__/__/____

POST LETTING/AWARD TASKS (for reference only)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
☐	☐	4810 Complete Acquisition Process	__/__/____
☐	☐	4820 Manage Excess Real Estate	__/__/____
☐	☐	4830 Provide Post-Certification Relocation Assistance	__/__/____
☐	☐	4910 Conduct ROW Monumentation	__/__/____
X	☐	5010 Construction Phase Engineering and Assistance	__/__/____
☐	☐	5020 Prepare As-Built Drawings	__/__/____

OTHER P/PMS RELATED TASKS

- Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.
- Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.
- The consultant shall identify the locations of any existing water main and/or sanitary sewer on the project.
- If waterman and/or sanitary sewers are present within the project limits, the Consultant shall evaluate vertical elevations and design the depth of any proposed fiber optic facilities so as not to be in conflict with the existing utility.
- The Consultant shall submit a Transportation Management Plan (TMP) that addresses MDOT's current Safety and Mobility policy.
- The Consultant may be required to provide Design Services during the construction phase of this project. This will include System Manager (SM) tasks such as to assist the MDOT Project Delivery Office with review tasks during the construction phase of the project to complete tasks including, review of shop drawing submittals, meeting correspondence, etc. If Construction Assistance is required, then a separate authorization for those services will be issued. The Consultant will not be compensated for performing work due to errors or omissions.
- If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Preliminary Project Assessment (PPA).
- The Consultant shall be required to prepare and submit a CPM network for review and use for preparing the progress schedule for the project.
- The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two days of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Plan Review Meeting.

- Attend any project-related meetings as directed by the MDOT Project Manager.
- The MDOT Project Manager shall be the official MDOT contact person for the Consultant and shall be made aware of all communications regarding this project. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.

- The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.
- The Consultant shall determine all potential utility conflicts with the proposed facility placement. The Consultant shall also define solutions to the various utility conflicts and have them reviewed by MDOT before they are designed and placed on the construction plans.
- The Consultant is also responsible for determining the availability of electric and communication service to the proposed facilities at the locations described previously. Any potential problems with utility electric and communication service shall be brought to MDOT's attention as soon as they are known.
- The MDOT Project Manager shall be the official MDOT contact person for the Consultant and shall be made aware of all communications regarding this project. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.
- All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager.
- All plans, specifications, and other project related items are subject to review and approval by MDOT.

BI-WEEKLY PROGRESS REPORT:

The Consultant shall submit bi-weekly project progress reports to the MDOT Project Manager (or designee)." The reports shall include work accomplished during the previous 2 weeks; anticipated work items for the upcoming 2 weeks; real or anticipated problems on the project; update of previously approved detailed project schedule, including explanations for any delays or changes; items needed from MDOT; copy of Verbal Contact Records for the period.

MDOT RESPONSIBILITIES (GENERAL):

A. Schedule and/or conduct the following:
    1. Project related meetings
    2. The Plan Review
    3. Utility Meetings
    4. Stakeholder engagement meetings
    5. Final item cost estimates, as necessary

B. Make decisions or provide input for the following items:
    1. Resolve political issues
    2. Resolve issues related to funding
    3. Review of Final packaging of the Proposal after the Consultant's review of the final package.
    4. Determine which letting date will be used for the project
    5. Coordinate with local contractor's association (MITA)

MDOT RESPONSIBILITIES (GENERAL): (continued)

C. Furnish existing plans
D. Provide environmental clearance.
E. Coordinate any necessary utility relocation.
F. Safety Reviews for any required design exceptions.
G. Review and approve all external communications.
H. Review and approve all budget, schedule, and design aspects.

DELIVERABLES:

The Consultant shall provide full size (cut size 24" x 36") and half size (cut size 11" x 18") plans in English units.

All plan sheets required for this project shall be completed by the Consultant. These include, but are not limited to:

- Title Sheet
- Note Sheet
- Typical Cross-Sections
- Plan Sheets
- Project specific Special Details
- Construction staging and traffic control plans
- Electronic files for each to be provided.

TRAFFIC CONTROL AND MDOT PERMITS

The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Design Services.

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Pam Sebenick, Utilities/Permits Section, Real Estate Division at (517) 373-7680.

UTILITIES

The Consultant shall be responsible for obtaining from MDOT and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Permits Engineer and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project. The consultant shall provide for the staking of various proposed facilities so as to locate potential utility conflicts and aid in the completion of utility relocation plans for and private utility companies.

SCHEDULE:

Achievement of the project milestones will require a concentrated effort by both the consultant and MDOT. Timely communications, receipt of information, and development and approval of deliverables will be critical to the success of the assigned deliverables.

The schedule will be determined on a task by task basis as set forth in each task.

The start date for the consultant services will be immediately upon notice to proceed (NTP). The duration of the services will be at the discretion of MDOT project manager.

The Consultant shall provide at the kick off meeting a detailed schedule of target dates for each step of the design.

PROJECT MANAGEMENT:

This project will require close interaction and good communication between the consultant and MDOT.

If there are any major deviations from the original scope of this assignment, these changes must be documented and jointly approved by the consultant and MDOT.

The selected consultant shall provide all necessary project management services, including monthly and quarterly progress reports, developing and maintaining a project schedule, and providing invoices in a timely manner.

Consultants should provide a description of their management team for this project and list all key personnel responsible for the deliveries of this RFP.

STATUS REPORTS/ MEETINGS:

There will be periodic, regular meetings between MDOT representatives and the selected consultant to review work product, and to communicate progress, issues, ideas, and expectations.

The selected consultant shall provide copies of all project reports, correspondence, meeting announcements, and meeting minutes which shall be delivered by email to the MDOT Manager. The consultant shall provide the minutes of all meetings attended. These shall be distributed by email to the MDOT Project Manager.

PROJECT DOCUMENTATION:

All documentation and reports shall be delivered in the current version of Microsoft Word or Adobe Acrobat (whichever applies) being used by MDOT. All documentation delivered shall be clear, concise, complete, and in compliance with standards required by the MDOT Project Manager. All CADD files shall be delivered in the current version of MicroStation being used by MDOT.

CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee.

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.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

ATTACHMENT A
April 2011

SURVEY SCOPE OF WORK

Survey Limits: As needed for Design, Right of Way, and Construction. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

NOTES: The Selected Consultant shall discuss the scope of this survey with an MDOT Region Surveyor or an MDOT Lansing Design Surveyor before submitting a priced proposal.

The Selected Consultant surveyor must contact the Region or TSC Traffic and Safety Engineer for work restrictions in the project area prior to submitting a priced proposal.

A **detailed Survey Work Plan <u>must</u>** be included in the project proposal. A **spreadsheet estimate** of hours by specific survey task such as traversing, leveling, mapping, etc., **<u>must</u>** be included in the **priced proposal**.

It is the responsibility of the Professional Surveyor to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.

GENERAL REQUIREMENTS:

1. Surveys must comply with **all Michigan law** relative to land surveying.

2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan, according to Public Act 299 of 1980.

3. Work in any of the following categories of survey: Road Design, Structure, Hydraulic, Right-of-Way, Photogrammetric Ground Control, and/or Geodetic Control must be completed by a survey firm which is pre-qualified by MDOT for that category.

4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2009. Please contact the MDOT Design Survey office to clarify any specific questions regarding these standards.

5. Consultants must obtain all necessary permits required to perform this survey on any

public and/or private property, including an up-to-date permit from the MDOT Utilities
Coordination and Permits Section.

6. Prior to performing the survey, the Consultant must contact all landowners upon whose lands they will enter. The contact may be personal, phone or letter, but must be documented. This notice must include the reasons for the survey on private land, the approximate time the survey is to take place, the extent of the survey including potential brush cutting (which must be minimized), and an MDOT contact person (the MDOT Project Manager or designate).

7. The Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Consultant's priced proposal.

8. The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.

9. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.

10. Measurements, stationing, recorded data, and computations must be in **International Feet**, unless specified otherwise by the MDOT Project Manager.

11. Coordinate values shall be based upon the Michigan State Plane coordinate system NAD83 (NSRS2007). All elevations must be based upon the North American Vertical Datum of 1988 (NAVD88). The datums must be clearly stated in the Survey Work Plan.

12. The survey notes must be submitted to the Design Survey Unit in 10" by 12" divided portfolios with flap covers. As many portfolios should be used as are needed to contain all of the required documents and Compact Discs (CD's) or DVD's. Duplicate CD's must be included in the portfolio, with one set labeled "Region Surveyor". **It is desirable to limit paper documents as much as possible.**

13. Each portfolio and CD must be labeled on the outside as in the following example:
Survey Notes for:
Route, Location and Project Limits [I-94 under Beaubien Street]
Control Section [S06 of 82024] Job Number [45197D] Date [*of submittal*]
By [*Name of Firm*]
Michigan Professional Surveyor [ ]
License # [ ]

14. Each submittal is to be divided into six sections. These sections are to be labeled as follows: **Administrative, Alignment, Control**, **Property**, **Mapping**, and **Miscellaneous**.

15. To be included in the Administrative section shall be a copy of the **Survey Project Portfolio QA/QC Check-off list**, available from the MDOT Design Survey Unit. This document shall be signed and certified by the Professional Surveyor responsible for the project QA/QC. It is highly recommended that the consultant become familiar with this document prior to preparing the proposal and again prior to assembling the final portfolio. **Failure to use and include this document may result in the immediate return of the project portfolio for completion.**

16. **All data**, whether electronic or paper, **must be recorded on non-rewritable Compact Discs (CD's) or DVD's**. All paper files, including MicroStation files, must be scanned and/or converted to Adobe Acrobat .PDF format. It is not necessary to include raw survey data files in the Adobe file. CD's must be organized in the same manner as the portfolio, such as by Administrative section, Control section, etc. A Table of Contents in Adobe Acrobat format is required that has all .PDF pages of the CD bookmarked/linked so each place in the .PDF archive can be accessed with a single click of the computer mouse. Specified format files such as Microsoft Word, CAiCE and MicroStation must have separate access in native format outside of the .PDF file.

17. It is not necessary to label each individual paper page in the portfolio.

18. The MDOT Project Manager is the official contact for the Consultant. The Consultant must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to an MDOT Survey Consultant Project Manager or MDOT Region Surveyor.

At the completion of this survey for this project, legible copies of all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT and **must be sent to** the MDOT, Design Division, Supervising Land Surveyor, P.O. Box 30050, Lansing, MI 48909. Please use MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must also be sent to the MDOT Project Manager for Design.

Acceptance of this survey by the MDOT Supervising Land Surveyor and/or the MDOT Project Manager does not relieve the Consultant of any liability for the content of the survey.

WORK RESTRICTIONS

The Selected Consultant, and the Selected Consultant only, is advised to discuss Traffic Control scenarios with the MDOT Traffic and Safety Engineer at the closest MDOT TSC prior to submitting a priced proposal.

No work shall be performed or lane closures allowed during the Memorial Day, July 4th, or Labor Day holiday periods, as defined by the MDOT Project Manager or representative specifically designated by the Project Manager (the Traffic & Safety Engineer at the MDOT TSC).

Work on weekends, if approved, shall be as directed by the MDOT Project Manager or Designate.

The Consultant must call the MDOT Region or TSC Traffic and Safety Engineer before beginning work to inform him or her of surveying activity in the area. The MDOT Region or TSC must be notified at least two weeks prior to lane closures so advance notice can be posted on the Web site.

Traffic shall be maintained by the Consultant throughout the project in accordance with Sections 812, 922, 103.05 and 103.06 of the *Standard Specifications for Construction,* 2003 edition, www.mdot.state.mi.us/specbook/, and Supplemental Specification 03SS001(2) Errata to the 2003 Standard Specifications and all other supplemental specifications currently in effect against the Standard Specifications for Construction. All traffic control devices shall conform to the current edition, as revised, of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD). All warning signs for maintenance of traffic used on this project shall be fabricated with prismatic retro-reflective sheeting, and shall be set up five feet above ground.

The Consultant shall use MDOT standard "maintaining traffic" typicals for any and all closures.
Typical MDOT traffic control diagrams are available on line at
www.mdot.state.mi.us/tands/plans.cfm

COORDINATION WITH OTHER CONTRACTS IN THE VICINITY

The Consultant shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the CIA. The Maintenance Division of MDOT and/or Contract Maintenance Agency will coordinate their operations with the MDOT Project Manager or Designate to minimize the interference to the Consultant.

The Consultant must contact the Development Engineer at the nearest MDOT TSC for information regarding project coordination.

The Consultant's attention is called to the requirements of cooperation with others as covered in Article 104.07 of the 2003 Standard Specifications for Construction. Other contracts or maintenance operations may occur during the life of the project.

No claim for extra compensation or adjustment in contract unit prices will be allowed on account of delay or failure of others to complete work unit scheduled.

POST SURVEY CLEAN-UP

Once the survey is complete, all stakes must be removed from the MDOT median and ROW to aid the maintenance crews and adjacent property owners. All benchmarks and control points and their witnesses must remain in place.

FINAL REPORT: DELIVERABLES

The final report for this project shall include:

1. In the first pocket of the portfolio, and first directory on the CD, labeled **ADMINISTRATIVE**, the following will appear:
   a. MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL"
   b. The project's Professional Surveyor's Report on company letterhead consisting of:
      i) A comprehensive synopsis of the work performed on this project, signed **and sealed** by the project's Professional Surveyor.
      ii) The source and methods used to establish the project horizontal and vertical control and alignment(s) for this project.
      iii) A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
   c. CD or DVD with all documents scanned or converted into PDF files. Each page must be inserted in a master PDF file and bookmarked for easy retrieval. An example can be provided upon request.
   d. MDOT QA/QC Portfolio Checklist (revised March 2009).

2. In the second pocket of the portfolio, and second directory on the CD, labeled **ALIGNMENT**, the following will appear:
   a. An annotated MicroStation drawing of the alignment(s), showing:
      i) A statement defining the alignment(s) as **survey, as constructed, and/or legal**
      ii) Stationing, source of stationing, and station equation to existing stationing
      iii) Horizontal coordinates of P.I.'s, at a minimum
      iv) Curve data
      v) Alignment points found or set
      vi) Control points
      vii) Reference lines and angles of crossing (if appropriate)
      viii) Government corners and ties to government lines
   b. Witness list for the alignment points found or set, which shows coordinates, stationing and four witnesses for each alignment point. Witness lists must use only uppercase letters.

c. LCRC's for legal alignment points found or set.

3. In the third pocket of the portfolio, and third directory on the CD, labeled **CONTROL**, the following will appear:
   a. Documentation of horizontal and vertical datum sources.
   b. OPUS documentation, long version..
   c. Least squares adjustments for the horizontal and vertical control.
   d. It is not necessary to submit electronic raw survey data in hardcopy form, or in the .PDF file.
   e. Text files which contain the witness lists for the horizontal alignment ties, horizontal control points, benchmarks and government corners. All witness lists must note the datum(s), a combined scale factor for state plane grid-to-ground conversion, and an example thereof. Witness lists must use only uppercase letters.
   f. An MDOT-formatted Microsoft Word file, SurveyInfoSheet.doc, showing the data in e. above, using only upper case letters.

4. In the fourth pocket of the portfolio, and fourth directory on the CD, labeled **PROPERTY**, the following will appear:
   a. Tax maps and descriptions with owner names, addresses and phone numbers, if Right of Way is to be acquired, or if riparian ownerships are required.
   b. Maps, plats, and recorded surveys.
   c. Documents such as plats, Act 132 Certificates and/or tax maps marked with point numbers as property ties, if Right of Way is to be acquired.
   d. Legible **recorded** copies of all Land Corner Recordation Certificates (LCRC) filed for the government corners (PLSS corners and Property Controlling Corners) used for computations and/or in danger of obliteration by impending construction.

5. In the fifth pocket of the portfolio, and fifth directory on the CD, labeled **MAPPING**, the following will appear:
   a. Mapping file in MDOT MicroStation V8 format, and also converted to .PDF format. All point and line descriptions must use only upper case letters.
   b. An archived CAiCE software file.
   c. Geopak files produced from CAiCE.
   d. All field survey notes and electronic mapping data used for the project. It is not necessary to submit electronic raw survey data in hardcopy form, or in the .PDF file.
   e. All supporting and supplemental information or data, such as drainage and utilities, electronically only if possible.

6. In the sixth pocket of the portfolio, and sixth directory on the CD, labeled **MISCELLANEOUS**, the following will appear:
   a. Any photographs taken for clarity of an area
   b. Any newspaper clippings related to the project
   c. Any information not covered in this scope that will be of benefit to the designer or another surveyor