

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

MDOT PROJECT MANAGER			JOB NUMBER (JN)	CONTROL SECTION (CS)
DESCRIPTION				
MDOT PROJECT MANAGER: Check all items to be included in RFP WHITE = REQUIRED GRAY SHADING = OPTIONAL			CONSULTANT: Provide only checked items below in proposal	
Check the appropriate Tier in the box below				
TIER I (\$25,000-\$99,999)	TIER II (\$100,000-\$250,000)	TIER III (>\$250,000)		
			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	
			Location: 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) (No Resumes)	7 pages (MDOT Forms not counted)	19 pages (MDOT Forms not counted)	Total maximum pages for RFP not including key personnel resumes	

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.

Lansing Regular Mail	OR	Lansing Overnight Mail
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

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet

5100J - Consultant Data and Signature Sheet (Required only for Non-Prequalified Work)

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

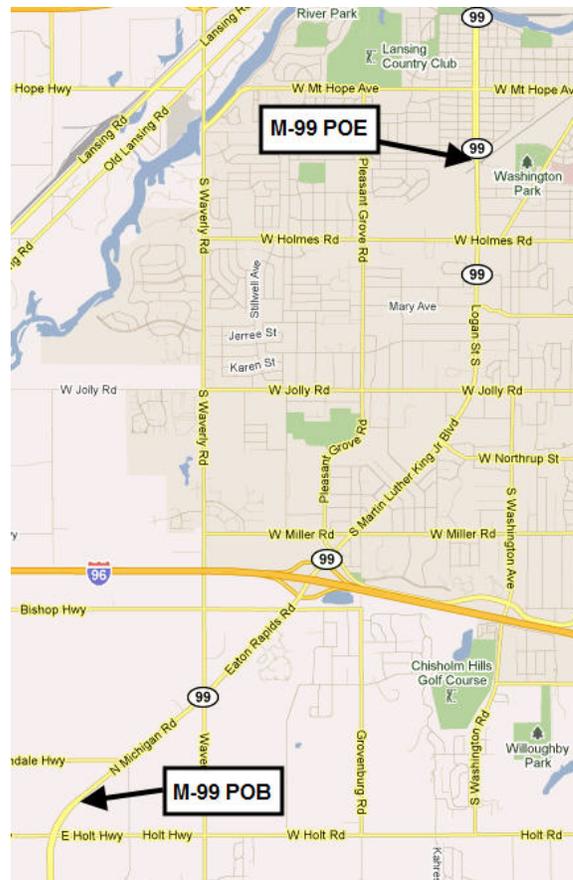
Michigan Department of Transportation

**SCOPE OF SERVICE
FOR
EARLY PRELIMINARY ENGINEERING SERVICES
Roadway Scoping**

CONTROL SECTION(S): 23092 & 33011

JOB NUMBER(S): 108221

PROJECT LOCATION:



M-99 from approximately 1,700 feet north of Holt Highway (CS 23092 m.p. 9.53) northerly to Victor Avenue (CS 33011 m.p. 4.23), located in Windsor & Delhi Townships and the City of Lansing, in Eaton and Ingham Counties. The project length is 5.29 miles.

PROJECT DESCRIPTION

Prepare preliminary and final road scoping packages for a 3R/4R fix on the above noted roadway project as defined in Attachment A. Due to the size and complexity of the project it will need to be broken into 2 jobs, exact location to be determined during scoping process. The pavement fix will be subject to change until conclusion of the preliminary scope review meeting. The preliminary 3R/4R proposed fix is as follows:

Cold milling, joint repairs and 2-course HMA resurfacing of all lanes from the POB to Waverly Road. Cold milling, joint repairs and 2-course HMA resurfacing on the inside composite lanes and reconstruction of the outside lanes from Waverly Road to Victor Road.

In addition to analyzing the above fix, the consultant is also required to prepare a cost estimate for total reconstruction of all the lanes.

ANTICIPATED SERVICE START DATE: September 15, 2011

ANTICIPATED SERVICE COMPLETION DATE: August 1, 2012

PRIMARY PREQUALIFICATION CLASSIFICATION:

Roads & Streets

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Maintaining Traffic Plans & Provisions

Safety Studies

Traffic Capacity Analysis and Geometric Studies

Geotechnical Engineering Services

DBE REQUIREMENT: NA

MDOT PROJECT MANAGER:

Name: Erin Chelotti - Cost and Scheduling Engineer

Address: Lansing Transportation Service Center

3101 Technology Blvd., Suite H

Lansing, Michigan 48910

Phone: (517) 324-2273

Fax: (517) 324-0294

E-mail: chelottie@michigan.gov

ESTIMATED PROJECT CONSTRUCTION COST:

A cost estimate shall be developed for each project location. Each cost estimate shall include 2011 costs and 2017 costs (5% annual inflation). The following are the items that shall be considered:

- A. The estimated construction cost shall address:
 - 1. Safety Related Work
 - 2. Base, Surface and Shoulder
 - 3. Non-Motorized
 - 4. Geometric Improvements
 - 5. Improve Alignment (Vertical/Horizontal)
 - 6. Drainage Adjustment and Improvement
 - 7. Joint Repair and Pavement Patching
 - 8. Detours and Maintaining Traffic (separated from other items of work)
 - 9. Permanent Pavement Markings/Signs/Signals
 - 10. Environmental
 - 11. Miscellaneous

- B. For each project location, identify the estimated number of real estate parcels and type (grading permit, easement or fee). The ROW appraisal will be prepared by MDOT.

REQUIRED MDOT GUIDELINES AND STANDARDS:

The scoping documents shall be developed in accordance with the current MDOT Project Scoping Manual.

In addition, work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards including, but not limited to, MDOT Road Design Manual, MDOT Standard Plans, MDOT Drainage Manual, MDOT Work Zone Safety and Mobility Manual, AASHTO Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, A Policy on Design Standards Interstate System, and Michigan Manual of Uniform Traffic Control Devices.

Consultant is required to use MDOT's current version of Bentley MicroStation for CADD applications and Bentley GEOPAK for road design. Consultant shall comply with all MDOT CADD standards and file naming conventions.

GENERAL INFORMATION:

All general information shall be field verified by the consultant.

CONSULTANT RESPONSIBILITIES:

Complete the scoping package for the design of these projects including, but not limited to the following as described in the current MDOT Scoping Manual:

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 and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

- A. The MDOT Project Manager shall be the official MDOT contact person for the Consultant. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all sub consultant correspondence and verbal contact records.
- B. 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 project scoping by the project completion date. Attention shall be given to critical target dates that may require a large lead time, such as scope review meetings, etc.
- C. Maintain a detailed Scoping Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the scopes, dates of submittals and receipt of information.
- D. The Consultant shall contact, in writing, the MDOT Project Manager whenever discoveries or design alternatives have the potential to require significant changes in the limits, quantities, costs, or right-of-way of the project.
- E. Attend any project-related meetings as directed by the MDOT Project Manager.
- F. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall bring an additional person to all meetings whose sole responsibility will be to take notes/minutes. The Consultant shall also distribute the minutes to all meeting attendees.
- G. For each project location, determine impacts of the proposed pavement treatment on the existing horizontal and vertical alignments, pavements, curb and gutter, drainage, right of way (ROW), etc. Every effort shall be made to minimize ROW impacts within the limits of the project. In areas of potential ROW impacts, the Vendor shall document and identify the potential need for additional ROW, by station or address, type of ROW required (grading permit, easement or fee) and roadside improvements proposed (i.e. fencing, turf establishment, landscaping, non motorized, etc.). ROW impacts shall be documented in terms area of potential need (grading permit, easement, or fee). The ROW appraisal will be prepared by MDOT.

- H. Generate Base Sheets for each project location, using the Base Map and formatted as described in REQUIRED MDOT FORMAT, for the entire project limits.
- I. Prepare existing and proposed general typical cross sections for each project location as described in REQUIRED MDOT FORMAT. The pavement fix type for each project location is subject to change until the conclusion of the Preliminary Scope Review Meeting.
- J. Compute and verify all quantities necessary to complete the Project Concept Statement and the Project Scoping Checklist, and calculate a detailed cost estimate using the Scoping estimator Tool (Trns-port).
- K. Complete the Statewide Scoping Package Master Checklist – ROAD, Road Scoping Report & Details Worksheet, Culvert Scope Inspection Forms as needed, and Constructability Checklist per the MDOT Scoping Manual.
- L. Review and document the existing drainage system, open or enclosed, and identify areas of possible improvements. A portion of the existing storm sewer will be video recorded as part of the scoping contract. This shall be done as per Attachment D. For minor drainage improvements, incorporate the fix into the estimates. For areas of possible major drainage improvements, document the location, condition, recommended treatment and cost estimate. With approval from MDOT, incorporate the fixes into the estimates, and incorporate information into Road Scoping Report & Details Worksheet. Complete Culvert Scope Inspection Form for all culverts over 36” and under 10’.
- M. If waterman and/or sanitary sewers are present within the project limits, the Consultant shall evaluate the necessity for the relocation of waterman and sanitary sewers, in accordance with MDOT Design Division’s Informational Memorandum #441B and #402R dated April 13, 1992. Send a letter to the MDOT Project Manager identifying where waterman and/or sanitary sewer relocation is needed/recommended. Provide the limits, an explanation for the relocation and a cost estimate for each location.
- N. Submit requests to applicable utility owners for preliminary utility information. Submittals to the utility company shall include: a completed MDOT approved form, and a minimum of two (2) copies of location map, Base Map and Base Sheets. Document and identify any possible utility conflicts and estimate the cost of relocation and/or adjustment.
- O. For each project location, review and document the roadside safety related items (i.e. guardrail, barriers, attenuators, etc.) which need to be modified or included in the project. Documentation to include location, existing type and condition, and the

recommended treatment. This information shall be included in the appropriate area of the Road Scoping Report & Detailed Worksheet.

- P. Perform crash analysis and recommend countermeasures. This shall include, but not limited to, the following:
 - a. Performing Crash Analysis. This shall include the last three (3) years of reliable data for the analysis period. If there is a fatality within those three (3) years, the analysis shall include the details of the specific fatality. MDOT will furnish three (3) years of data.
 - b. Determine Countermeasures based on the Crash Analysis. Determine ROW impacts for each countermeasure identified. Determine the construction cost estimate for each countermeasure. Summarize countermeasures which shall include each crash pattern and countermeasure individually listed, along with their associated ROW impacts and construction cost estimate. ROW impacts shall be documented in terms area of potential need along with the type of ROW required (grading permit, easement, or fee). The ROW appraisal will be prepared by MDOT. The construction cost estimate for each countermeasure recommendation shall be presented in the Preliminary Scoping Package and shall be reviewed and approved by MDOT prior to inclusion in the Final Scoping Package.
- Q. Document and identify locations of possible environmental issues which may impact the project, and estimate the cost of treatment. This information shall be included in the appropriate area of the Road Scoping Report & Detailed Worksheet and shall also be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package.
- R. Perform PACS according PPMS task 2810.
- S. If excavation is required, submit the excavation locations (list them by street address) which may contain contamination. This information shall be included in the appropriate area of the Attachment A and shall also be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package.
- T. Document and identify (location and who has responsibility for) any existing lighting that has potential for being impacted, or should be included, in the project. Incorporate work into the estimate. (Lighting on Non-Freeway roads is the responsibility of the local jurisdiction).
- U. Develop the Maintaining Traffic Concept as per Attachment B.
- V. Identify and provide solutions to any unique problems that may arise during the design of the project or that may affect the constructability.

- W. Identify, contact and coordinate with all affected governmental agencies (County, and/or city, township) within the project limits (and directly abutting, if any part of the construction influence area will be within another agencies area). Coordination will involve, at a minimum, an initial letter stating the project and its scope and requesting local input, within 30 days, in the development of the detailed scope. A follow up letter, if no response is given, and a final letter stating the process that occurred and what the final scope will be to all affected governmental agencies. There may be the need to attend meetings and receive and return telephone calls from the affected agencies. Any and all local requests shall be reviewed with MDOT before any commitment to work shall be given to the affected agencies. MDOT shall be informed of any meeting with the affected agencies a minimum of 72 hours in advance of the meeting. All discussions with agencies shall be documented and submitted with the monthly progress reports.

Prepare a spreadsheet summary of the local coordination that occurred. The summary shall document the planning/coordination process that occurred with each of the affected local agencies. The summary shall include, at a minimum, specifically what was sent to who and when, what was received from who and when and what responses were made (and why) to who and when. The information shall be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package. The spreadsheet shall be prepared as stated in REQUIRED MDOT FORMAT.

- X. Incorporate any MDOT identified and/or approved (if approved, include copy of MDOT approval) local needs/requests into project scope.
- Y. Conduct field reviews, provide photographs, and digital files (.jpg files) of the existing roadway and roadside conditions to document the needs as identified in the project scope.
- Z. Review and document scope conformance to design elements for design exceptions and MDOT's 3R/4R Guidelines for non freeway jobs.

Prepare a table of the values used for the evaluation of the elements listed in the Road Scoping Report & Details Worksheet. The table shall, at a minimum, contain the following: Existing Condition, Minimum Values per Design Standards for the associated design element, Proposed Treatment. If the Proposed Treatment is not in accordance with the Treatment as per Design Standard, an additional section shall be added entitled Reason for not Meeting Design Standards. This section shall provide documentation for the justification for not being in conformance.

For the Final Scoping Package, complete a Design Exception Request for all potential formal design exception needs. Note that cost alone will not be sufficient justification for not bringing the features up to standard.

- AA. Provide soil borings/pavement coring for plan development and pavement design that will be completed by MDOT as per ATTACHMENT C.

UTILITIES

The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of gathering utility conflicts, the Consultant shall make note of the conflict so that they may be included on the base plans and design details and provide assistance as directed by the MDOT Utility Permits Engineer and/or Project Manager.

TRAFFIC CONTROL

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

MDOT PERMITS

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 Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103.

MONTHLY PROGRESS REPORT

On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to the Project Manager.

MDOT RESPONSIBILITIES:

1. For each project location, schedule and/or conduct the following:
 1. Project related meetings.
 2. Coordinate all scoping activities that require MDOT personnel.
2. Furnish prints or electronic files of old plans and a copy of the Control Section Log of the area, if available.
3. Perform pavement designs and geotechnical recommendations based on consultant supplied soil borings and pavement cores.
4. Furnish a list of the utility companies present within the control section(s) of the project.
5. Furnish ROW maps of the area.

6. Furnish project selection justification data, including Pavement Management System data and Sufficiency Rating data.
7. Furnish inspection reports for the structures in the area, for information purposes.
8. Furnish current crash history data.
9. Furnish list of people invited to each Scope Review Meeting.
10. Furnish traffic data.

DELIVERABLES:

The Consultant shall deliver all computer files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, etc.) on DVD, CD or uploaded to ProjectWise, as directed by the MDOT Project Manager. All CADD/GEOPAK files shall be created and identified with standard MDOT file names as shown in Appendix A of the Road Design Manual.

It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are posted to the bulletin board system. When the use of GEOPAK road design software is necessary to develop plans all pay items shall be placed into the CADD file using GEOPAK's Design and Computation Manager so that Quantity Manager can be used to transfer pay item information to SAPW/Trns*port. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Scoping documents shall be submitted in their native format with standard naming conventions as well as combined into one Adobe PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capturing a legally signed document or a hard copy version of a document is all that exists.

Plan files shall be submitted in their native dgn format with standard naming conventions as well as plotted into a combined Adobe PDF file. Plan sheets shall be plotted to Adobe PDF with full text search and level on/off capabilities in half size (11" x 17") formats.

Stand Alone Proposal Estimator's Worksheet (SAPW) shall be used to generate the txt and csv files necessary for import into the Trns*port bid letting software. The SAPW files shall be transmitted electronically by the method specified by the MDOT Project Manager.

The project base map sheets will require a ratio (scale) of **1:100 (English Units)**.

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

- A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.
- B. Base Plans
- C. Typical Cross-Sections.
- D. Preliminary construction staging and traffic control plans if necessary.
- E. Locations of critical areas on the Base Plans.

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.

PROJECT SCHEDULE:

The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant’s Monthly Progress Reports.

<u>Milestone Date</u>	<u>Description</u>
September 15, 2011	Tentative Scope/Kick Off Meeting
December 15, 2011	Submittal of Preliminary Scoping Packages
January 5, 2012	Preliminary Scope Review Meeting with MDOT Staff
May 1, 2012	Submittal of Final Scoping Package
May 29, 2012	Final Scope Review Meeting with MDOT Staff
June 26, 2012	Final Deliverable Package

FOR YOUR INFORMATION

For questions on specific tasks, refer to the P/PMS Task Manual located on the MDOT Bulletin Board System.

For assistance in accessing this manual, please contact one of following:

Dennis Kelley: (517) 373-4614

PAYMENT SCHEDULE

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
CS 23092 & 33011 - JN 108221
Road Scoping on M-99 from Holt Highway to Victor Road in Eaton & Ingham Counties

REQUIRED MDOT FORMAT

PRELIMINARY SCOPING PACKAGE

The Preliminary Scoping Package shall be presented in electric format, shown on letter size paper (8 ½" x 11") with the exception of Base Maps, sketches and diagrams which shall be on 11" x 17" paper. The Consultant shall submit one (1) copy of the Preliminary Scoping Package. The electronic document shall utilize bookmarks to direct readers to each individual section of the package.

The Preliminary Scoping Package will have a cover sheet that shall be entitled "Preliminary Scoping Package" and should also include the Control Section, Job Number, Route, and location description.

An index shall also be included in the package. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Package. No fewer than 8 and no greater than 24 photos per project location are required.

The preliminary Scoping Package shall be submitted on or before **December 15, 2011** for MDOT review and comment. The Preliminary Scoping Package shall address all the items listed under CONSULTANT RESPONSIBILITIES. If any of the aforementioned items are not included or not sufficiently complete as determined by the MDOT Project Manager, the Preliminary Scoping Package will be rejected. The Consultant will have up to five (5) working days to make the changes. No additional compensation will be given to the Consultant for costs associated with making the changes directed by the MDOT Project Manager.

At the time of Preliminary Scoping Package submittal, if there are any items, in the Consultant's opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package.

FINAL SCOPING PACKAGE

The Final Scoping Package shall be presented in an electronic format. The electronic document shall utilize bookmarks to direct readers to each individual section of the package. In addition to the electronic document, the Vendor shall submit two (2) copies of the Final Scoping Package presented in a labeled (cover and side to be entitled Final Scoping Package and should also include the Control Section, Job Number, Route, and location description.) three ring binder, with an index and tabbed sections, containing 8 ½" x 11" regular letter size paper for the majority of the documents. 11" x 17" paper may be used for Base Maps, sketches and diagrams. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the

location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Package. No fewer than 8 and no greater than 24 photos per project location are required.

A Final Scoping Package shall be submitted on or before **May 1, 2012**. The Final Scoping Package shall address and document all the items listed under CONSULTANT RESPONSIBILITIES and incorporate the comments and/or changes received from the Preliminary Scoping Package and the Preliminary Scope Review meetings. If any of the aforementioned items are not included or not sufficiently complete as determined by the MDOT Project Manager, the Final Scoping Package will be rejected. The Consultant will have up to five (5) working days to make the changes. No additional compensation will be given to the Consultant for costs associated with making the changes directed by the MDOT Project Manager.

Before the final spreadsheets are submitted as part of the Final Scoping Packages, a preliminary copy for each project location (both hard copy and electronic format) shall be submitted to the MDOT Project Manager for review and approval as to form and content.

FINAL DELIVERABLE PACKAGE

For each project location, the Final Deliverable Package shall include an updated electronic document addressing all comments received from the Final Scoping Package review. In addition, submit two (2) paper copies in a labeled three ring binder, each with an index and tabbed sections. For each project location, a single CD ROM shall be prepared for the electronic files of the Base Map (.dgn file), Base Sheets (.dgn files), cross sections (.dgn files), photos (.jpg files), location map (file type subject to MDOT approval), and the summary sheet(s) (.doc files).

All spreadsheets shall be created using Excel (.xls files). Before the final spreadsheets are submitted, as part of each of the Final Deliverable Packages, a preliminary copy (both hard copy and electronic format) shall be submitted to the MDOT Project Manager for review and approval as to form and content.

The Final Deliverable Package shall be submitted on or before **June 26, 2012**. The Final Deliverable Package shall include all items under CONSULTANT RESPONSIBILITIES.

All work shall conform to current applicable MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e. Roadside Design Guide, AASHTO Road Side Design Guide, AASHTO A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

THE PRELIMINARY AND FINAL SCOPING PACKAGES

The Preliminary and Final Scoping Packages shall contain the following, and shall be assembled in the order as listed.

1. Location Map

A location map shall show a map of the project area showing the roadway name, roadway number, project beginning, project ending, project length, major cross streets, design speed, interchanges and local municipalities affected. The Location Map shall be presented on a regular letter size paper (8 ½" x 11").

2. Executive Summary/Details/Checklist

Include in this section a summary of and the completed Statewide Scoping Package Master Checklist – Road (MDOT Scoping Manual), Road Scoping Report & Details Worksheet (MDOT Scoping Manual), Constructability Checklist (MDOT Scoping Manual), MPINS Project Concept Statement (provided by MDOT), Program Revision Request (provided by MDOT),.

3. Detailed Cost Estimate

Estimates are to be as detailed as possible. They shall be developed using the most recent MDOT Pay Items and are to be provided as detailed in the Statewide Scoping Package Master Checklist. Individual Pay Item costs shall be rolled up into a Construction Cost. Also included in this location are all hand calculations and assumptions. Also include estimates for any additional option analyzed.

4. Safety

The written recommendation for maintaining traffic and the maintaining traffic typicals, Mobility Analysis, and all required documentation as detailed under CONSULTANT RESPONSIBILITIES. Traffic analysis and safety review with a summary of countermeasure recommendation(s) which shall include each location's crash pattern and countermeasure individually listed along with the associated ROW impacts (area and type) and construction cost estimate. All required information for any anticipated design exceptions.

5. MDOT Pavement, Soils Information and Recommendations

The actual pavement and soils information and recommendation as provided by MDOT (ie: memo, letter, e-mail, etc.).

6. General Items & Information

As-Builts/Old Plans, current sufficiency report, condition reports of existing sewers and culverts if available, maintenance log sheets if available, Pavement Historical Data (PHD) Data is available, ROW sheets with impacts highlighted, and existing utility information.

7. Field Notes

8. Supporting Photographs

Provide actual photographs and digital files (.jpg files on attached CD ROM) of the existing

roadway and roadside conditions to document the needs as identified in the project scope. The photographs included in the documents shall be 4" x 6", in color, labeled with the location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point. No fewer than 8 and no greater than 24 photos per project location are required.

9. **Correspondence** (MDOT, Utility, Local and Other)

Actual correspondence sent and received, organized by correspondent, in order of latest date.

10. **Miscellaneous and Additional Information**

Information which is available, but does not fit into any of the previously mentioned section.

11. **Existing and Proposed Typical Cross Sections**

Prepare existing typical cross sections and proposed typical cross sections - generally one per standard cross section area (i.e. if the road changes from a three lane to a five lane section, a cross section for the three lane and for the five lane sections will be needed).

The typical cross sections, for each standard cross section area, are to be created on 8 ½" x 11" sheets, with the existing typical cross section for the standard cross section area, drawn above the proposed typical cross section for the same standard cross section area.

The existing typicals for each standard cross section shall detail the existing conditions (pavement type, lane width, curb and gutter, shoulders, side slopes, ditch locations, setback to existing right of way limits, storm sewer/drainage structure locations, etc.). The proposed typicals for each standard cross section shall detail the proposed pavement treatments (cold mill, resurface or reconstruct, etc.).

The proposed typicals shall also show new lane widths, curb and gutter/shoulders, drainage structures (new, adjusted or tapped into existing), storm sewers and ditches, etc..

The MDOT reviewer, by viewing the typical cross sections, should be able to understand the existing pavement section, the proposed pavement section, and all of the work that is expected to implement the project. For example, if additional right of way will be required, the typicals should provide a visual explanation as to why so that the MDOT reviewers can evaluate options.

12. **Base Plans**

Generate a single Base Map, created electronically using the MicroStation design software and formatted as described in DELIVERABLES, of the existing roadway using information from old plans, and/or, on site field reviews. The Strip Map is used to visually describe the existing roadway within the limits of the project on one page. The project limits for this task shall be defined as the greater of either 400 feet beyond the Point of Beginning (POB) and the Point of Ending (POE) or the limits needed to fully accommodate the maintaining traffic limits. The detail of the Base Plans is to include the location of existing roadways, bridges, railroads and cross roads. The Base Plans is to show all existing features; i.e. edge of pavements, edge of shoulders, curb lines, drainage courses etc. and label all roads, railroads and drainage features. The Base Plans is to represent existing conditions without showing proposed work.

13. **Table of Values for Determination of Scope Conformance to 3R/4R and Design Elements**

Prepare a table of the values used for the evaluation of the elements listed the Road Scoping Report

& Details Worksheet, and 3R/4R Guidelines for non-freeway jobs. The table shall, at a minimum, contain the following: minimum values as per design standards for the associated design element, reference where the minimum value as per design standards were derived from, all values used to determine conformance, where values used for conformance were derived from and all formulas used for the calculation of values.

14. Minutes from Scope Review Meeting

Project specific notes from the Scope Review Meeting.

15. List of Invitees and Sign In Sheet for Scope Review Meeting

The list of people invited to the Scope Review Meeting (to be supplied by the MDOT Project Manager) and the actual sign-in sheet from the Scope Review Meeting.

A sheet listing the members of the CONSULTANT's Scoping Team (the members name, members signature and area of contribution). Also on this sheet, the CONSULTANT is to list all the sources used in establishing existing information (old plans used, date of on site visits, etc.)

ATTACHMENT B
CS 23092 & 33011 - JN 108221

Road Scoping on M-99 from Holt Highway to Victor Road in Eaton & Ingham Counties

DEVELOP MAINTAINING TRAFFIC CONCEPT FOR EACH PROJECT LOCATION INCLUDING REQUIRED INFORMATION FOR MOBILITY AND SAFETY REVIEW.

1. SCOPE

This procedure covers the development of a concept to maintain and control traffic during construction.

2. WORK STEPS

- A. Review the type of construction task(s) included in the project.
- B. Contact the MDOT Project Manager and request a meeting with the Lansing TSC Traffic & Safety Engineer (allow a minimum of two (2) weeks for a meeting date to be determined) to review the traffic data and the project site to determine project specific construction zone traffic constraints. Any necessary or recommended exceptions shall be clearly identified and justification provided.
- C. Using the given project specific constraints, develop alternatives for preliminary maintaining traffic concepts.
- D. Submit preliminary alternatives to the MDOT Project Manager and Lansing TSC Traffic & Safety Engineer for review and recommendations on which concepts to proceed with further analysis.
- E. For each selected concept
 - Evaluate the mobility impacts using the procedures outlined in the MDOT Work Zone Safety and Mobility Manual.
 - Determine whether or not the concept is significant per the MDOT Work Zone Safety and Mobility Manual.
 - Prepare a preliminary cost estimate for traffic control.
- F. Submit a summary of the concepts with a preferred alternative identified to the MDOT Project Manager and Lansing TSC Traffic & Safety Engineer for review and selection.
- G. For the selected alternative, create a preliminary Transportation Management Plan (TMP) including a Temporary Traffic Control Plan (TTCP), Transportation Operations Plan (TOP), and Public Information Plan (PIP) as outlined in the MDOT Work Zone Safety and Mobility Manual. Items that **SHALL** be included in the preliminary TMP at a minimum are:

1. Constraints as identified by the Lansing TSC Traffic and Safety Engineer.
 2. Method for maintaining traffic. Typical and non-typical areas shall be addressed. All areas where the pavement widths are narrower than typical shall be clearly noted and the recommendations for maintaining traffic shall address these areas.
 3. Exceptions to constraints as identified by the Lansing TSC Traffic and Safety Engineer. Justification shall be required for any exceptions.
 4. Need for detour, staging and/or flagging operation.
 5. Need for temporary widenings and/or shoulder upgrading.
 6. Time constraints and laneage requirements (number and width).
 7. Method for maintaining traffic at cross streets.
 8. Local considerations (school buses, emergency vehicles, large traffic generators, etc.).
 9. Need for temporary traffic signals (a minimum of two signal heads in view at all times).
 10. Construction zone speed limits.
 11. Special events (parades, festivals, etc.).
 12. Recommendations for expedited construction.
 13. Statement regarding the cost of maintaining traffic as a percent of total project cost.
- H. For the selected alternative prepare maintaining traffic typicals. Typicals shall be prepared using the existing typical cross sections developed in item I under CONSULTANT RESPONSIBILITIES as a base.
- I. Submit the final preliminary TMP and maintaining traffic typicals with the Final Scoping Package.
- J. Verify and include the cost for maintaining traffic in cost estimate as detailed in MDOT Scoping Manual.

ATTACHMENT C
CS 23092 & 33011 - JN 108221
Road Scoping on M-99 from Holt Highway to Victor Road in Eaton & Ingham Counties

SCOPE OF SERVICE
FOR
GEOTECHNICAL SERVICES
Coring and Testing Services

DESCRIPTION OF WORK:

The work performed by the consultant geotechnical engineer under these requirements shall consist of pavement coring and soil borings using hollow or solid stem augers, geoprobe or hand augers. A total of 10 cores shall be taken in each through lane with borings through each core hole. (40 total). The borings in the outside lane shall be to a depth of 15 feet while the borings in the center lanes shall be to a depth of 5 feet. SPT testing and soil sampling are not required for this contract. Soil descriptions contained on exploration logs shall be consistent with ASTM D 2487. All Pavement cores and soil borings will be performed during normal working hours and off-peak traffic hours such as weekends and nights are not anticipated.

PRIMARY PREQUALIFICATION CLASSIFICATION: Geotechnical Engineering Services

CONSULTANT RESPONSIBILITIES:

- A. The Consultant is responsible for contacting MISS DIG. The consultant is also responsible for location of other utilities not on the MISS DIG system.
- B. The consultant is responsible for traffic control during all operations. The Project Manager will supply the consultant with appropriate traffic control typicals to use for each specific project. In most cases the typicals will be drawn from the "MDOT Maintenance Work Zone Traffic Control Guidelines" available on the MDOT website.
- C. The Consultant shall perform field operations in accordance with the Department's Personal Protective Equipment (PPE) Policy as stated in the MDOT Guidance Document #10118. A current copy of MDOT's PPE Policy is available on the Bulletin Board System. The Consultant shall perform field operations in accordance with MIOSHA regulations and accepted safety practices.
- D. Borings drilled through existing pavement should be suitably patched. Backfilling and plugging of all borings shall be in accordance with all Department of Natural Resources Regulations.
- E. The consultant is responsible for preparing a summary of all cores and borings. The summary shall consist of plan sheet(s) in Microstation and pdf formats graphically listing all

core and boring logs. Core and boring locations shall include lateral and longitudinal offsets referencing lanes and cross streets. In addition, the consultant will provide GPS coordinates in latitude/longitude format for all core and boring locations.

MDOT RESPONSIBILITIES

- A. The Project Manager will provide the consultant with the appropriate traffic control scheme to use for each project. Traffic control may be changed during the work in response to unforeseen conditions, or as dictated by emergency or other events. MDOT will review traffic control measures being used at random times during performance of the contract.

ATTACHMENT D
CS 23092 & 33011 – JN 108221
Road Scoping on M-99 from Holt Highway to Victor Rd in Eaton & Ingham Counties

VIDEO PHOTOGRAPHY SCOPE OF WORK

NOTES: The Vendor shall discuss the scope of this video photography with the MDOT Project Manager before initiating any work on this project. A detailed work plan and cost estimate **must** be included in the project proposal.

Limits of videotaping storm sewer

Approximately 20% of the existing storm sewer on M-99 from Holt Highway to Victor Rd is to be video recorded. The lateral limits of videotaping shall be from R.O.W. to R.O.W. At Street approaches, the limits shall be to the first structure down the approach street, or to the throat of the approach, whichever is further. Exact locations of recording will be determined prior to the submittal of the price proposal.

**GENERAL CONDITIONS AND SPECIFICATIONS FOR VIDEO RECORDING
STORM SEWERS:**

1. Approximately 20% of the storm sewers within the limits stated above will be video recorded. Although not limited to the following, the majority of storm sewers range in size from 12 inches to 30 inches in diameter.
2. Video recordings shall be performed during minimal storm water flow periods in order to maximize picture quality. The television camera and lighting shall be specifically designed for storm sewer inspection and recording. All video recordings shall be in DVD format.
3. The Vendor or contractor shall provide labor, equipment, and material to clean each storm sewer necessary in order to video record a clear, precise picture of the storm sewer conditions. For the disposal of the waste generated from the cleaning refer to the Standard Specifications subsection 403.03.G. The labor, equipment, and materials necessary for the cleaning shall be include removal, transportation, and disposal of the debris at no extra cost. **The Department shall not be held liable for the loss or damage to any of the contractor's labor, equipment, or materials.**
4. The camera shall be moved through the line, in either direction, at a rate no greater than 30-feet per minute. Stopping may be necessary to properly document the sewer's condition. Winches, TV Cable, rewind, and other devices must not obstruct the camera view or interfere with proper documentation. If during the inspection, the camera will not pass through an entire section, the contractor shall set up his equipment to enter from the opposite opening. If again, the camera fails to pass through, the inspection shall be

considered complete. The camera shall be capable of rotating from side to side to provide views of joint openings.

5. All traffic control and traffic control devices to videotape shall be provided by the Vendor or its contractor.
6. The contractor shall observe good housekeeping practices at all times during his operations at no extra cost.
7. In the event hazardous materials become an issue; testing and disposal fees will be negotiated separated to this agreement.

FINAL DELIVERABLES

The Vendor shall provide the Department **two (2)** copies of the video recording and written reports (listing location, condition, recommended treatment). Measurements of the total sewer length recorded and locations as well as any noted sewer defects shall be recorded on the video tape **and** on the written report describing the findings. **The Vendor shall include in the written report recommendations of storm sewer areas that need to be reconstructed. Based on these findings, MDOT will determine at which location storm sewers will be reconstructed and included in the final estimate.**

Video recordings and reports shall be submitted to the MDOT Project Manager at least 1 month prior to the submittal of the final scoping package. Video recordings shall be edited and have audio production. Once submitted, title to the recordings shall become the property of the Department.