Michigan Department
Of Transportation
5100B (03/10)

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

Exhibit B

MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Olukayode Adefeso, P.E.	108198	84917

DESCRIPTION
Metro Region - "As-Needed" Routine Bridge Inspection

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*
☐	☑	☐	*Safety Program*
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**

REQUEST FOR PROPOSAL

Clear Form

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 1 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.

Clear Form

PROPOSAL SUBMITTAL INFORMATION

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER	PROPOSAL/BID DUE DATE	TIME DUE
3	7/19/11	noon

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

MDOT Metro Region Office
Olukayode (Kay) Adefeso, P.E.
18101 West Nine Mile Road
Southfield, MI 48075

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/DESIGN SERVICE
"As-Needed" Routine Bridge Safety Inspection

CONTROL SECTION: 84917

JOB NUMBER: 108198

LOCATION: Various - The bridges for this project are situated in various locations within the Metro Region. See Section X, BRIDGE INSPECTION WORK PACKAGE LIST for specific bridge numbers and locations.

PROJECT DESCRIPTION:
To perform in-service safety inspection of MDOT owned bridge structures in accordance with National Bridge Inspection Standards (NBIS). This is termed "Bridge Inspection."

Full time services will not be required on all times. This scope is for "as-needed" services, based on the intermittent needs for the Metro Region. It must be noted that this is not a guarantee of consultant authorized work.

Up to two CONSULTANTS will be selected for this work.

PRIMARY PREQUALIFICATION CLASSIFICATION:
Bridge Safety Inspections

SECONDARY PREQUALIFICATION CLASSIFICATION:
N/A

DBE REQUIREMENT: N/A

MDOT PROJECT MANAGER
Olukayode Adefeso, P.E.
Metro Region Management Bridge Engineer
18101 W. Nine Mile Road
Southfield, Michigan 48075
PM Office: (248) 483-5214
Fax: (248) 569-7718
E-mail adefesoo@michigan.gov

PURPOSE

In accordance with the Code of Federal Regulations 23-CFR-650, subpart C, each bridge under MDOT jurisdiction is periodically inspected following the Federal Highway Administration (FHWA) NBIS. For the bridges identified on the WORK PACKAGE LIST, a "Routine" inspection will be performed by a qualified consultant. There are several steps in the process of this work and there may be a need for follow-up action.

The deliverable will be the "Inspection Report." This report will have several components as noted below and will be attested to be accurate and complete by a professional engineer, registered in the State of Michigan.

DURATION & SCHEDULE

Project Schedule

By submittal of the priced proposal, the CONSULTANT is verifying that they can meet the schedule identified in this scope of work. The CONSULTANT is required to develop a project schedule for the inspection of the bridges shown on the attached WORK PACKAGE LIST. Each bridge must be inspected within the month of the due date, as established by the date of the previous inspection, and the frequency determined by the previous inspector. These dates are shown on the WORK PACKAGE LIST. In no case shall the inspection date exceed 24 months from the previous date. The Project Schedule must be submitted in the form of a Gantt Chart also showing the meeting dates as milestones**.**

Any changes to the schedule must be submitted to the MDOT PM for approval prior to the change. Failure to progress in alignment with the schedule will be considered as failing to meet the terms of this authorization and may result in the cancellation of the contract.

The CONSULTANT must be prepared to begin the field inspection work within one week after receiving the notice to proceed.

Project Dates

The CONSULTANT is required to attend an initial pre-inspection meeting, a series of periodic meetings and, several informational meetings. The expected dates for these meetings are shown below; however, these may be adjusted as mutually agreed to by the MDOT PM and the CONSULTANT.
See Section V-D, Meetings for a description of the CONSULTANT's responsibilities.

Priced Proposal Submission:		**July 26th, 2011**
Anticipated NTP:		**August 8th, 2011**
Pre-Inspection Meeting:		**August 9th, 2011**
Quarterly Progress Meetings:	1st	**February 2nd, 2012**
	2nd	**May 4th, 2012**
	3rd	**August 3rd, 2012**
Project Closeout Meeting:		**October 30th, 2012**

If the QTL(s) that is approved under this authorization is unable to finish the work of the entire project, the authorization may be terminated. The CONSULTANT shall submit a backup QTL(s) for approval with the initial submission of the proposal. However, if any one person identified in the proposal is rejected by MDOT, the entire proposal will be considered non-responsive and rejected.

DESCRIPTION OF THE WORK

Bridge safety inspections are done to insure the safe use of the structures by the motoring public. To accomplish this, the National Bridge Inspection Standards (NBIS), AASHTO, *Manual for Condition Evaluation of Bridges* and, the *Bridge Inspection Reference Manual* are to be used as guidance to complete the inspection and provide necessary information. Additional guidance documents and manuals are listed in the appendix.

For the purposes of this project, bridge inspection is broke into four phases: bridge file review, inspection of the bridge in the field, completion of the reports, and communication of the findings to MDOT. Each of these phases must be completed for successful completion of the project.

Bridge File review

In this phase of the work the CONSULTANT will take several steps to review the documentation for each bridge and register on-line to be assigned the forms to complete.

1. The QTL(s) must register on-line with the MDOT Michigan Bridge Inspection System (MBIS) bridge data collection application, at the "New Consultant / Inspector Registration". This person's name will appear on all inspection documents.
2. Review the bridge files, and become familiar with the documentation for each bridge at the MDOT Metro Region office.
3. Print out paper copies of the previous inspection reports from MBIS for use in the field.

Field Inspection

The CONSULTANT team will visit each bridge site and perform an inspection according to the NBIS and AASHTO manual description for a "Routine" inspection. This will be done with a visual inspection and non-destructive tests (NDT). Several reports, described below, will be completed by the QTL while performing this inspection.

1. Observations

    a. The CONSULTANT QTL will observe all of the bridge components and record their findings ratings in red ink on the appropriate inspection report. This information will be entered into the respective form using the Web based application MBIS. The data can be downloaded to a laptop computer for use in the field, but this is not mandatory.

    b. There must be sufficient comments for each element in the reports to outline its condition and to justify the rating given. Some of the previous reports may not have complete comments. The lack of

previous information does not exempt the CONSULTANT QTL from providing sufficient comments for each element to outline its condition. Follow the rating guidelines provided in the system, unless there are circumstances, particularly if they are safety related, that in the judgment of the QTL do not fit within these guidelines. In this case, the inspector will document the reason for the deviation in the respective comment section.

c. NBIS sets a maximum of 24 months between inspection intervals. However, structures in poor condition or with rapidly changing conditions may require inspection sooner than 24 months. It is the responsibility of the CONSULTANT QTL to determine the inspection frequency and notify the MDOT PM when a frequency is to be changed. The *Bridge Inspection Frequency Guidelines* will assist the CONSULTANT QTL in setting the frequency.

d. The CONSULTANT QTL must render a professional judgment as to the need for structural analysis or loading rating of the given structure. It may also be necessary to recommend temporary load restrictions and/or changes to the inspection frequency. If load rating is required, MDOT Load Rating Engineer will perform the analysis. Load rating is not a part of this scope. (See Section D, "Load Analysis" below.)

e. If there is an area of concern that requires traffic control or special inspection / testing, the CONSULTANT must notify the MDOT PM with a “Request for Action” (RFA) form. See “Notification for Unusual Situations” below. The MDOT PM will schedule an in-depth inspection for the area of concern. Traffic control is not required as a part of this scope.

f. Stream and river bed scour must be evaluated to ensure the foundation for the bridge has adequate support. The CONSULTANT QTL will perform a scour inspection around all structural elements that are located in water up to six feet deep utilizing the wade and probe or the boat and probe methods. Substructure elements in water over six feet will be inspected by a diver under a separate scope.

g. Information on scour must be reported on the Bridge Safety Inspection Report (BSIR). If there is loss of bearing or undermining of a footing that is safety concern, this must be reported to the MDOT PM using the RFA. If the loss of bearing is sufficient to be of immediate concern for the component to structurally support the bridge, the CONSULTANT will notify the MDOT PM on an emergency basis (See Section V-A-2, “Notification for Unusual Situations” below).

h. In addition, for every other routine inspection (maximum of every four years), the elevation of the stream or river bed relative to an established datum must be measured for all structures over water. These measurements must be taken at locations along the length of the bridge spans that are over a stream or river bed, and recorded on the "Stream Cross Section Report" form (See Worksheet Instructions). This information must be compared to the previous data in the form of a graph.

i. The CONSULTANT QTL must determine if the structure has been hit by a vehicle and damaged. The CONSULTANT QTL shall document all high load hit damage not previously recorded on the bridge safety inspection report. This damage must be documented with a description and photographs.

j. During the inspection, the CONSULTANT QTL will evaluate the structure for long and short term maintenance and repairs, and record this information on the "Work Recommendations" form of the BIR.

k. During the inspection, the CONSULTANT QTL will measure and quantify structural deterioration of the CoRe Elements and record this information on the CoRe Element Report. The CONSULTANT QTL will refer to the MDOT Pontis Manual for placement of the correct quantities in their appropriate state. The CONSULTANT QTL shall also add and remove elements that have changed since the last inspection, as well as verify that all smart flags are up to date.

2. Notification for Unusual Situations

One of the primary reasons for bridge inspection is to determine if there are any unusual circumstances or situations that could effect the continued safe operation of the bridge, or where it could be costly if repair action is delayed. The CONSULTANT QTL must determine whether the bridge can safely remain in service until the next inspection date with no further observations required. The CONSULTANT QTL must identify the cause of any unusual circumstances or situations and notify the MDOT PM within a time frame appropriate for the situation. The CONSULTANT QTL will be given a list of all of the 24 hour emergency responders for MDOT at the pre-inspection meeting for use when structural deterioration warrants emergency closure of the structure.

Communication of these situations is accomplished formally by using a RFA. The CONSULTANT must properly complete this form and deliver it to the MDOT PM in a timely manner to ensure this communication takes place.

This form does not preclude advising the MDOT PM immediately by phone, or other means, of imminent circumstances. However, the CONSULTANT is still obligated to complete the form. If the situation warrants, the form should be

delivered on an expedited basis, faxed or e-mailed, and the CONSULTANT must get confirmation of the delivery.

The RFA should not be used to convey the ordinary information that belongs on the BIR. Below are some of the situations that may trigger a RFA:

a. Deficient Structural Conditions

b. If a condition exists on a structural component that warrants a structural analysis (see "Load Analysis" §V-C below) or further investigation to determine if the capacity of the element in question is capable of safely carrying the intended loads, the CONSULTANT is required to inform the MDOT PM with a RFA form. An example is an exposed or broken pre-stressing strand in PCI beams or box beam super-structures.

c. Functional Conditions

d. Situations that exist in and around the structure that are not a part of a structural element, but could require immediate attention are termed functional problems. Some of these are damaged approach guardrail, erosion of the shoulder, settled approach pavement, missing load posting or height restriction signs, damaged or broken light poles and sign supports.

e. Suspect Conditions Requiring Further Consideration or Testing

f. The CONSULTANT QTL will perform the routine inspection in the best manner possible on these structures and document any areas that need further consideration or testing.

g. The CONSULTANT QTL will inform the MDOT PM using a RFA form of the need to perform supplemental in-depth inspections on structures for such things as:

(1) Where a portion of the structure cannot be inspected by routine inspection methods.

(2) Where a portion of the structure cannot be visibly inspected due to false decking.

(3) Where there are many structural members in need of measurement for excessive loss of section, or need NDT for evaluation.

(4) Where there is a need to mechanically remove a lot of scale to get measurements.

(5) Where there is a need to coordinate with others', such as closing a lane, to closely examine the structure.

(6) If there is a crack or suspected crack in a structural steel component, the CONSULTANT must clearly document this on paper with narrative and photographs.

Testing and in-depth inspections are not a part of this scope.

Inspection Reports

As stated in Section II, "PURPOSE", the deliverable for this authorization will be the Inspection Report. The CONSULTANT will be assigned the structures for inspection in MBIS. The assignment will last for 90 days.

A Bridge Inspection Report (BIR) has several components that will vary from bridge to bridge, but that will include at least the "*Bridge Safety Inspection Report*", MDOT form 2502 (BSIR), the "*Culvert Safety Inspection Report*" (CSIR), and the "*CoRe Element Report and Work Recommendations Report*". Additional documents may also be necessary depending on the circumstances at the bridge and its condition. Some of these are the RFA form, the "*Streambed Profile*" form, field notes, sketches, and pictures. The BSIR, CoRe element Report, and the work recommendations are to be completed and the data saved on-line in MBIS. If the field application is used, the data must be submitted back to MDOT using MBIS on-line.

All of the documents created by the inspection will be assembled in a binder and presented under cover of a letter stating that the inspections have been performed in accordance with this scope of services, and that all appropriate procedures and guidelines have been followed. This letter will also have the professional registration seal of the QTL or CONSULTANT PM. An additional unbound black and white copy will be presented with the information separated for each bridge for the bridge owner's bridge files.

The MDOT PM will conduct periodic QC checks on the CONSULTANT's work (approximately ten percent of the structures listed in the work package). If these evaluations, in the judgment of the MDOT PM, show that the CONSULTANT does not adhere to the policies and guidelines noted above the contract can be terminated and the balance of the structures to be inspected will not be paid for.

The following documents are typical for each bridge. Other reports may be necessary as conditions warrant.

1. Bridge Safety Inspection Report (BSIR), MDOT form 2502

This is the primary inspection report form and is incorporated into MBIS. The CONSULTANT QTL must complete this form in the field at the specific bridge site. This is usually done by red-lining a copy of the previous report. MBIS has a "Field Copy" print option that creates white space on the previous report for noting changed conditions at the site. It is recommended that the CONSULTANT retain this copy in their records as backup in case of failure of the electronic copy.

A new inspection record is created in MBIS using the information from the site visit. This can be done in the field using the field application with downloaded data or entered in the office using the on-line application.

2. CoRe Element Report & Work Recommendations Report

The CoRe Element Report and Work Recommendations Report are key elements of the NBI program and MDOT Bridge Management. The key to the Work Recommendations Report is the communication of the inspector's judgment of the need for maintenance or rehabilitation work necessary to keep the structure in service. The key to the CoRe Element Report is tracking the bridge deterioration rates to produce a reliable and predictable future network condition. The CoRe Element Report and Work Recommendations Report are completed in MBIS.

3. Stream Cross Section Report Form

The CONSULTANT will record the elevation of the stream bed with reference to an established datum on this form. The data collected must be entered on the form electronically, and the hard copy and electronic form will be submitted to MDOT.

4. Photographs and Posting Document

Photographs must be taken and submitted as part of the Inspection Report to document the current elevation view of the bridge and any unusual conditions. The photographs must be digital images printed paper and captioned with a description of what the photo is showing. Photos that are over or under exposed so the details in question cannot be seen will be returned to the CONSULTANT, and will have to be taken again until the photos are legible. A copy of the electronic files will also be submitted in jpeg format on CD with the Inspection Report.

Bridges that are load posted must have a picture taken of the load posting sign with the bridge in the background. This picture will be stapled to the SI&A form and submitted to the MDOT PM.

5. Request for Action Report

As noted above, the CONSULTANT will use this report to document communication to MDOT of circumstances that need more urgent attention than otherwise noted in the Work Recommendations. Examples of this are noted in §V-B-2.

Load Analysis

The NBIS requires that all bridges have an initial load rating calculated, and the rating re-evaluated when the condition or loading of the bridge has changed. Deterioration of structural components over time may get to the point where the structure may have to be load restricted. It is the Inspection QTL's responsibility to assess the overall condition of the structure, render a judgment as to need for a re-evaluation, and document his/her judgment in the general comments section of the BSIR.

Load rating analysis is not required at every routine inspection and is dependent on conditions determined during the inspection. Therefore, the MDOT PM will evaluate the inspector's recommendations and decide on the best course of action based on the circumstances. If the MDOT PM determines that a load rating analysis is necessary, the MDOT PM will forward the work to the Lansing Bridge Operations Load Rating Engineer. The CONSULTANT will not be performing any load rating analyses.

CONTRACT ADMINISTRATION

The following meetings are anticipated during this project. Each meeting is expected to take ½ day for the CONSULTANT QTL(s) to attend the meeting, including travel and ½ day to complete the associated paperwork. The meeting location will be at the MDOT Metro Region Office.

For all of the periodic meetings listed below, the CONSULTANT will prepare an agenda and submit it to the MDOT PM prior to the meeting. The CONSULTANT will also keep notes of the meeting and provide "Meeting Minutes" within one week after the meeting.

Pre-Inspection Meeting

This meeting is intended to exchange information regarding the general procedures for communication, review the schedule, discuss emergency procedures and communication, and discuss any open questions to that point before the first inspection begins.

Biweekly Status Meetings

The CONSULTANT QTL(s) will meet with the MDOT PM on a regular basis as determined at the pre-inspection meeting to review the progress of the inspections and to submit the draft inspection reports from the previous period. The CONSULTANT will have all of the documents completed prior to the meeting and will submit them under letter of transmittal. See § III-B, "DURATION & SCHEDULE", for anticipated dates.

The CONSULTANT will include a copy of all the non-emergency Request for Action forms completed during the previous inspection period and will review these in the meeting with the MDOT PM.

The QTL(s) and the MDOT PM will review the QC reports and determine if any changes are necessary to the CONSULTANT's procedures.

Project Closeout Meeting

This meeting is intended as a review of any outstanding contract requirements and final presentation of the deliverables. The completed "Consultant Performance Evaluation" form will be given to the CONSULTANT and reviewed.

Project Quality Control

The CONSULTANT will submit a project quality control plan with their proposal that will accomplish at a minimum the following:

1. Confirm that all QTLs have the required documents and certificates to substantiate their qualifications.
2. Confirm that the inspection process and procedures meet the requirements of the NBIS.

3. Review 10% of the completed work to insure that all reports are complete, accurate, and consistent.

Administrative Reports
In addition to the inspection reports above, the following administrative reports are required.

Inspection Progress Report
CONSULTANT QC reports

These reports must be completed and submitted to the MDOT PM at the Status Meetings. This information will be used by the MDOT PM to compare progress of the inspections with the schedule.

Responsibilities of MDOT
The following activities and information will be provided by the MDOT PM, where applicable, to the CONSULTANT.

1. Assign the structures to be inspected to the CONSULTANT in MBIS
2. Provide access to the hard copy bridge files which have:
   a. Previous stream bed cross section reports.
   b. Previous work recommendations.
3. Blank "Request for Action" form

Provide access for the CONSULTANT to any pertinent information in the MDOT bridge files and database that may be necessary to complete the inspection. See Section VII-D, **Release of Information**, for restrictions on dissemination of the material.

The MDOT PM will perform QC evaluations with the CONSULTANTs on ten percent of the structures inspected.

CONSULTANT PAYMENT:

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.

The hours billed for inspectors will not begin until the inspectors report to the project site or to the project office.

This scope is for "as needed" services. As such, the hours provided are only an estimate. The Consultant will be reimbursed a proportionate share of the fixed fee based on the portion of the authorized total hours in which services have been provided to the Department. The fixed fee allowed for this project will be 11.0%. Fixed fee on "as needed" projects is computed by taking the percent of actual labor hours invoiced to labor hours authorized, then applying that percentage to the total fixed fee authorized.

GENERAL

Personal Safety Equipment

The CONSULTANT will be required to provide all personal safety equipment for those people working in the field. Some of the required items are hardhats, safety shoes, safety vests, gloves, safety harnesses, eye protection, etc.

Any person found to not have the required safety equipment will be asked to leave the MDOT right of way. If there are repeated cases of this, the authorization with the CONSULTANT will be terminated.

Inspection Equipment

The CONSULTANT must provide the following equipment as suitable for the inspection of the bridge. The use of this equipment during the inspection is considered part of the Lump Sum price.

1. Inspection Vehicle

   The CONSULTANT will provide a vehicle with high visibility marking and lighting for use during inspection. This vehicle will provide transportation for the inspection staff and the necessary equipment.

2. Boat

The CONSULTANT is required to have a small boat with a motor available for the purpose of inspecting those bridges which are over water and are too deep to wade. This is typically a small aluminum boat or inflatable Zodiac style of boat with a small motor.

The CONSULTANT will be responsible for insuring the boat is safe for operation and is operated in a safe manner utilizing all required safety equipment.

3. Computer

The CONSULTANT is required to have a computer with internet connection. A laptop computer for use in the field would be helpful but is not required.

The computer must have access to a printer to print the report documents for the field and the final report.

4. Non-Destructive Testing (NDT)

The inspection process does not require a lot of testing but spot checking by sounding concrete for delaminations, checking for suspected cracks in steel, and measuring for section loss in areas of heavy corrosion is required. If Non-Destructive Testing is required over live traffic, the CONSULTANT shall contact the MDOT PM. The MDOT PM will arrange for an in-depth inspection. In-depth inspections and traffic control are not a part of this contract.

The following equipment is necessary to perform these tests:

- Calipers and thickness gauges
- Dye penetrant test kit
- Chain drag or sounding rod or hammer

5. Cell Phone

While in the field, the QTL must have a cellular telephone. The phone numbers must be provided to the MDOT PM at the Pre-Inspection meeting.

6. Camera

The CONSULTANT must have a digital camera that can clearly record images of pertinent items found during the inspection. One color copy of the pictures must be given to MDOT as part of the Inspection Report along with the electronic file.

7. Hand Tools

The CONSULTANT must provide the hand tools necessary to complete the inspection. Some of these are ladders, waders, hammers, lighting, marking paint, measuring tapes, etc.

Traffic Control

Traffic control for closing a lane is not required for this project. The inspection is expected to be done from the shoulders or the median. Some safety equipment for working on the shoulder is necessary such as traffic cones, flashers on the vehicles, flexible roll-up sign for "Men Working Ahead", etc. If the shoulders are too narrow to do the inspection safely, the CONSULTANT is to recommend a supplemental in-depth inspection.

Release of Information

The CONSULTANT may not release any information about the bridge or the Inspection to anyone outside of MDOT. Failure to abide by this stipulation could result in penalties as a result of the Homeland Security Act.

The CONSULTANT is allowed to make copies of only that information in the bridge file as approved during the Pre-Inspection Meeting unless given written approval from the MDOT PM.

References

The CONSULTANT is to have the following reference material and be familiar with their contents.

1. National Bridge Inspection Standards (NBIS) Federal Code of Regulations, 23 CFR 650.

2. AASHTO Manual for Condition Evaluation of Bridges, 1994, and subsequent interim changes or the most recent version.

3. Michigan Structure Inventory and Appraisal Coding Guide, latest edition.

4. Pontis Bridge Inspection Manual, latest edition.

5. FHWA Publications:

    a. Bridge Inspector's Reference Manual (BIRM), latest edition.
    b. Culvert Inspection Manual, Report No. FHWA-IP-86-2.
    c. Inspection of Fracture Critical Bridge Members, Report No. FHWA-IP-86-26.
    d. Recording and Coding Guide for the Structure Inventory and Appraisal of Nation's Bridges, Report No. FHWA-PD-96-001, December 95.

Terms and definitions

The following terms and definitions apply to this Scope of Services

1. Bridge Owner (Owner)
   The person within MDOT responsible for ensuring bridge inspection is completed to the requirements of the Nation Bridge Inspection Standards.

2. MDOT PM (Project Manager)
The person administering the contract for MDOT.

3. CONSULTANT PM (Project Manager)
The person responsible for administration of the contract for the consulting firm.

4. Inspection QTL
Person meeting the qualifications of the NBIS to do bridge inspection.

5. NBIS
National Bridge Inspection Standards, 23-CFR-650

6. MBIS
Michigan Bridge Inspection System, a web site for the entry of bridge inspection reports.

7. MBRS
Michigan Bridge Reporting System, a web site for the retrieval of bridge inspection data.

8. Bridge Inspection
Periodic safety inspection of bridge structures to "Routine" standards of the NBIS.

APPENDICES

Forms

Sample Bridge Safety Inspection Report (BSIR), MDOT form 2502

Sample Structure Inventory & Appraisal (SIA), MDOT form 1717a

Sample Work Recommendation Form

Sample CoRe Element Form

Sample Request for Action Form

The following Publications and Guidelines can be found at the Michigan Department of transportation, Bridge Operations Webpage
http://www.michigan.gov/mdot/0,1607,7-151-9625_24768---,00.html

MDOT Bridge Analysis Guide, including Assumption & Summary Sheets.

MDOT Bridge Inspection advisory notes.

MDOT Bridge Inspection Frequency Guidelines.

MDOT Bridge Deck Repair Matrix.

MDOT Bridge preservation work activity list.

MDOT Bridge Scour Cross Section Worksheet.

WORK PACKAGE LISTING

Attachment 1

WORK PACKAGE LISTINGAND LOCATION

No.	County	Structure Number	Bridge ID / Strno-CS	Bridge Description	Inspection Frequency	Next Inspection
1	Wayne	11138	S32-82022	RAMP FROM US-12EB / I-94	September	2011
2	Wayne	11140	S34-82022	US-12 (MICHIGAN AV / I-94	September	2011
3	Wayne	12664	S56-82022	VINING RD / I-94 INTERCHANGE	September	2011
4	Wayne	11137	S31-82022	MILLER RD / I-94	September	2011
5	Wayne	11139	S33-82022	US-12 (MICHIGAN AV / I-94 RAMP	September	2011
6	Wayne	11141	S35-82022	RAMP TO US-12 / I-94	September	2011
7	Wayne	11143	S37-82022	OZGA RD / I-94	September	2011
8	Wayne	11155	S52-82022	RAMP H TO SB MERRI / N BD MERRIMAN ROAD	September	2011
9	Wayne	11151	S49-82022	I-94 WB / M-39	September	2011
10	Wayne	11142	S36-82022	M-153, WYOMING AVE / I-94	September	2011
11	Wayne	11144	S39-82022	I-94 EB RAMP / GREENFIELD RD	September	2011
12	Wayne	11567	S19-82123	I-96 (JEFFRIES) / M-8	October	2011
13	Wayne	11348	S01-82101	HINES DRIVE / OLD M-14 (ANN ARBOR RD)	October	2011
14	Wayne	11345	B03-82101	OLD M-14 / MIDDLE ROUGE RIVER	October	2011
15	Wayne	11343	B01-82101	OLD M-14 / FELLOWS CREEK	October	2011
16	Wayne	11344	B02-82101	M-14 / WILLOW CREEK	October	2011
17	Wayne	11350	B01-82102	M-14 / ROUGE RIVER	October	2011
18	Wayne	11354	S01-82102	HAGGERTY ROAD / M-14	October	2011
19	Wayne	11353	R03-82102	M-14 EB / CSX RR	October	2011
20	Wayne	11569	S22-82123	I-96 W TO E M-8 / M-8	October	2011
21	Wayne	11570	S23-82123	WB DAV TO EB JEFFR / I-96 (JEFFRIES FRWY)	October	2011
22	Wayne	11219	S12-82024	FRONTENAC AVE / I-94	November	2011
23	Wayne	11221	S14-82024	BURNS AVE / I-94	November	2011
24	Wayne	11186	S18-82023	LINWOOD AVE / I-94	November	2011
25	Wayne	11187	S19-82023	14TH ST / I-94	November	2011
26	Wayne	11188	S20-82023	12TH ST / I-94	November	2011
27	Wayne	11673	B02-82192	M-39 / ROUGE RIVER	November	2011
28	Wayne	11193	S25-82023	I-94EB RMP TO M-10 / I-94 WB & M-10 SB	November	2011
29	Wayne	11190	S22-82023	M-10 EB / I-94 RAMP	November	2011
30	Wayne	11198	S30-82023	THIRD ST / I-94	November	2011
31	Wayne	11218	S11-82024	CONCORD AVE / I-94	November	2011

32	St. Clair	9947	S01-77024	MARTIN ROAD / I-69	March	2012
33	St. Clair	9948	S02-77024	CAPAC ROAD / I-69	March	2012
34	St. Clair	9949	S04-77024	MILLER RD / I-69	March	2012
35	St. Clair	9950	S05-77024	BURT RD / I-69	March	2012
36	St. Clair	9951	S06-77024	RILEY CENTER RD / I-69	March	2012
37	St. Clair	9952	S07-77024	EGLING RD / I-69	March	2012
38	St. Clair	9953	S08-77024	BRAIDWOOD ROAD / I-69	March	2012
39	St. Clair	9954	S09-77024	REEVES RD / I-69	March	2012
40	St. Clair	9933	R05-77023	I-69 EB / GTW RR	March	2012
41	St. Clair	9934	R06-77023	I-69 WB / GTW RR	March	2012
42	St. Clair	9940	S06-77023	STAPLETON RD / I-69	March	2012
43	St. Clair	9942	S08-77023	WALES CENTER RD / I-69	March	2012
44	St. Clair	9943	S09-77023	GOODELLS ROAD / I-69	March	2012
45	St. Clair	9955	S10-77024	M-19 (KINNEY ROAD) / I-69	March	2012
46	Macomb	6044	S01-50021	UTICA RD / M-59	April	2012
47	Macomb	6045	S02-50021	MERRILL RD / M-59	April	2012
48	Macomb	6046	X01-50021	CONRAIL / M-59	April	2012
49	Macomb	6043	B01-50021	M-59 / CLINTON RIVER	April	2012
50	Macomb	6047	B01-50022	M-59 EB / GLOEDE DRAIN	April	2012
51	Macomb	6048	B02-50022	M-59 EB / MIDDLE BR CLINTON RIVER	April	2012
52	Macomb	6049	B03-50022	M-59 WB / N BR CLINTON RIVER	April	2012
53	Macomb	6050	B04-50022	M-59 WB / GLOEDE DRAIN	April	2012
54	Macomb	12653	B05-50022	M-59 WB / MIDDLE BR CLINTON RIVER	April	2012
55	Macomb	12654	B06-50022	M-59 EB / N BR CLINTON RIVER	April	2012
56	Wayne	11531	X02-82122	CSX RR / I-96	May	2012
57	Wayne	11532	X03-82122	CSX RR / I-96	May	2012
58	Wayne	11683	S05-82192	ROTUNDA DRIVE / M-39	May	2012
59	Wayne	11685	S08-82192-3	HUBBARD AV EB / M-39	May	2012
60	Wayne	11686	S08-82192-4	HUBBARD AV WB / M-39	May	2012
61	Wayne	11850	S10-82252	M-102 8 MILE RD / I-75	May	2012
62	Wayne	11851	S10-82252-7	M-102 EB SERV RD / I-75	May	2012
63	Wayne	11852	S10-82252-8	M-102 WB SERV RD / I-75	May	2012
64	Wayne	11854	S12-82252	CANIFF AVE & TURN / I-75	May	2012
65	Wayne	11855	S13-82252	COMMER AVE / I-75	May	2012
66	Wayne	11856	S14-82252	CARPENTER AVE / I-75	May	2012
67	Wayne	11862	S26-82252	DEQUINDRE U-TURN / I-75	May	2012
68	Wayne	11863	S27-82252	MEADE ST / I-75	May	2012
69	Wayne	11875	X06-82252	GTW RR / I-75	May	2012
70	Wayne	11170	S02-82023	ADDISON RD / I-94	June	2012
71	Wayne	11192	S24-82023	M-10 EB / I-94	June	2012
72	Wayne	11195	S27-82023	M-10 WB / I-94	June	2012

73	Wayne	11197	S29-82023	M-10 WB / I-94 RAMP FROM M-10	June	2012
74	Wayne	11191	S23-82023	I-94 EB / I-94 RAMP TO M-10	June	2012
75	Wayne	11196	S28-82023	I-94 WB / I-94 RAMP FROM M-10	June	2012
76	Wayne	11174	S06-82023	MARTIN STREET / I-94	June	2012
77	Wayne	11172	S04-82023	CENTRAL AVE / I-94	June	2012
78	Wayne	11173	S05-82023	CECIL AVE / I-94	June	2012
79	Wayne	11183	S14-82023	NB W GRAND BLVD / I-94	June	2012
80	Wayne	11182	S13-82023-8	I-94 TO W GR BLV R / OPEN AREA	June	2012
81	Wayne	11199	X01-82023	CSX RR / I-94	June	2012
82	Wayne	11390	S01-82111	MONROE AVE / I-375	June	2012
83	Wayne	11391	S02-82111	LAFAYETTE AVE / I-375	June	2012
84	Wayne	11393	S04-82111	JEFFERSON AVE / I-375	June	2012
85	Wayne	11185	S17-82023	GRAND RIVER AVE / I-94	June	2012
86	Wayne	11253	S09-82025-1	OUTER DRIVE NB / I-94	June	2012
87	Wayne	11251	S07-82025	DICKERSON AVE / I-94	June	2012
88	Wayne	11252	S08-82025	CHALMERS AVE / I-94	June	2012
89	Wayne	11254	S09-82025-2	OUTER DRIVE SB / I-94	June	2012
90	Wayne	11666	S23-82191-1	I-75 NB / M-39	July	2012
91	Wayne	11667	S23-82191-2	I-75 SB / M-39	July	2012
92	Wayne	11627	B03-82191-1	I-75 NB / GODDARD RD, SXTN-KIL DRN	July	2012
93	Wayne	11628	B03-82191-2	I-75 SB / GODDARD RD, SXTN-KIL DRN	July	2012
94	Wayne	11651	S09-82191	I-75 CONN NB / I-75	July	2012
95	Wayne	11652	S10-82191	I-75 CONN SB / I-75	July	2012
96	Wayne	11653	S11-82191	SIBLEY RD / I-75	July	2012
97	Wayne	11649	S07-82191	WEST RD / I-75	July	2012
98	Wayne	11650	S08-82191	KING RD / I-75	July	2012
99	Wayne	13443	S01-82191-2	I-75 SB / N HURON RIVER DRIVE	July	2012
100	Wayne	11625	B01-82191	I-75 SB / BLAKELY DRAIN	July	2012
101	Wayne	11626	B02-82191	I-75 NB / BLAKELY DRAIN	July	2012
102	Wayne	11640	R02-82191-1	I-75 NB / GTW RR	July	2012
103	Wayne	11645	S04-82191	GIBRALTAR RD / I-75	July	2012
104	Wayne	11654	S12-82191	PENNSYLVANIA RD / I-75	July	2012
105	Wayne	11655	S13-82191	I-75 SB / US-24 CONN	July	2012
106	Wayne	11657	S14-82191-2	I-75 SB / EUREKA RD	July	2012
107	Wayne	11658	S16-82191-1	I-75 NB / ALLEN RD	July	2012
108	Wayne	11659	S16-82191-2	I-75 SB / ALLEN RD	July	2012
109	Wayne	11660	S17-82191-1	I-75 NB / NORTH LINE RD	July	2012
110	Wayne	11661	S17-82191-2	I-75 SB / NORTH LINE RD	July	2012
111	Wayne	11669	S25-82191	I-75 RAMP D SB / TOLEDO DIX HWY & RAMP C	July	2012
112	Wayne	11276	B01-82052	US-24 / BLAKLEY DRAIN	August	2012
113	Wayne	11281	B04-82052	US-24 SB / FRANK & POET DRAIN	August	2012

114	Wayne	11284	R01-82052	US-24 / CONRAIL	August	2012
115	Wayne	11285	X02-82052	NS RR / US-24	August	2012
116	Wayne	11277	B02-82052-1	US-24 NB / SEXTON KILFOIL DRAIN	August	2012
117	Wayne	11278	B02-82052-2	US-24 SB / SEXTON KILFOIL DRAIN	August	2012
118	Wayne	11286	X03-82052	CONRAIL / US-24	August	2012
119	Wayne	11287	B01-82053	US-24 / ROUGE RIVER	August	2012
120	Wayne	11279	B03-82052-1	US-24 NB / ECORSE CREEK	August	2012
121	Wayne	11280	B03-82052-2	US-24 SB / ECORSE CREEK	August	2012
122	Wayne	11943	S01-82292	HANNAN RD / I-275	September	2012
123	Wayne	11944	S02-82292	TYLER RD. / I-275	September	2012
124	Wayne	11970	S07-82293	I-275 SB / SCHOOLCRAFT RD	September	2012
125	Wayne	11631	C01-82191	I-75 NB / SILVER CREEK	October	2012
126	Wayne	11632	C02-82191	M-85 SB / SMITH CREEK	October	2012
127	Wayne	11633	C03-82191	I-75 NB/SB & M-85 / SMITH CREEK	October	2012
128	Wayne	11638	R01-82191-1	I-75 NB / GTW RR	October	2012
129	Wayne	11639	R01-82191-2	I-75 SB / GTW RR	October	2012
130	Wayne	11642	S01-82191-1	I-75 NB / NORTH HURON RIVER DRIVE	October	2012
131	Wayne	11643	S02-82191	WOODRUFF RD / I-75 & M-85	October	2012
132	Wayne	11647	S06-82191-1	I-75 NB / VAN HORN RD	October	2012
133	Wayne	11648	S06-82191-2	I-75 SB / VAN HORN RD	October	2012
134	Wayne	11656	S14-82191-1	I-75 NB / EUREKA RD	October	2012