

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

	REQUISITION NUMBER	DUE DATE	
MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)	
DESCRIPTION			
<b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP  WHITE = REQUIRED GRAY SHADING = OPTIONAL  Check the appropriate Tier in the box below		<b>CONSULTANT:</b> Provide only checked items below in proposal	
<input type="checkbox"/> <b>TIER I</b> (\$25,000-\$99,999)	<input type="checkbox"/> <b>TIER II</b> (\$100,000-\$250,000)	<input type="checkbox"/> <b>TIER III</b> (>\$250,000)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Understanding of Service
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Innovations</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Organizational Chart
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Qualifications of Team
Not required as part of Official RFP	Not required as part of Official RFP	<input type="checkbox"/>	Quality Assurance/Quality Control
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Location:</b> The percentage of work performed in Michigan will be used for all selections unless the project is for on-site p=inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.
N/A	N/A	<input type="checkbox"/>	Presentation
N/A	N/A	<input type="checkbox"/>	Technical Proposal (if Presentation is required)
3 pages (MDOT Forms not counted) ( <b>No Resumes</b> )	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP <b>not including key personnel resumes.</b> Resumes limited to 2 pages per key staff personnel.

**PROPOSAL AND BID SHEET EMAIL ADDRESS** – [mdot-rfp-response@michigan.gov](mailto:mdot-rfp-response@michigan.gov)

### GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least five (5) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

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

### MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

**5100D** – Request for Proposal Cover Sheet

**5100J** – Consultant Data and Signature Sheet (Required only for firms not currently prequalified with MDOT)

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

**REQUEST FOR PROPOSAL**

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

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

**RFP SPECIFIC INFORMATION**

BUREAU OF HIGHWAYS  BUREAU OF TRANSPORTATION PLANNING  OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO  YES DATED \_\_\_\_\_ 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 is required with Proposal for firms not currently prequalified with MDOT**

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

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

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

**Qualification Review / Low Bid** – Use Consultant/Vendor Selection Guidelines. See Bid Sheet instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted. The vendor that has met established qualification threshold and with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

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

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

**BID SHEET INSTRUCTIONS**

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

**NOTIFICATION  
MANDATORY ELECTRONIC SUBMITTAL**

**Proposals submitted for this project must be submitted electronically.**

**The following are changes to the Proposal Submittal Requirements:**

- Eliminated the Following Requirements:
  - Safety Program
  - Communication Plan
  - Past Performance as *a separate section*
  - Separate section for DBE Statement of goals. Include information in Qualification of Team section
  
- Implemented the Following Changes:
  - All proposals require an Organization Chart
  - Resumes must be a maximum of two pages
  - Only Key (lead) staff resumes may be submitted
  - Tier III proposal reduced from 19 to 14 pages
  - Forms 5100D, 5100I, and 5100G combined – 5100D
  - Forms 5100B and 5100H combined – 5100B
  - RFP's will be posted on a weekly basis -- on Mondays

**The following are Requirements for Electronic Submittals:**

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

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

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

**\*\*Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response\*\***

**Required Bookmarking Format:**

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

**2/14/12**

**Michigan Department of Transportation**

**SCOPE OF SERVICE  
FOR  
PRE- DESIGN SERVICES**

**CONTROL SECTION:** 80111

**JOB NUMBER:** 115147

**PROJECT LOCATION:**

M-40 from south village limits of Lawton to the north village limits of Lawton . The project length is 1.75 miles.

**PROJECT DESCRIPTION:** Produce scoping products for a future design project. The future M-40 project includes cold milling and a five inch thick HMA overlay, conversion to 3 lane operation for 3 blocks, culvert replacement, isolated storm sewer upgrades, sidewalk ramp upgrades, public involvement, and local agency coordination of proposed work. Identify and recommend roadway improvements to include in this project for MDOT consideration. Use MDOT feedback to determine all the work that is expected to take place in the future project. Complete geometric concept diagrams that show the limits of the work, a cost estimate, and construction/traffic staging concept for construction of the work. Conduct a M-40 Road Safety Audit. Use MDOT and Village of Lawton input to recommend and estimate items for a streetscape enhancement grant application.

**ANTICIPATED SERVICE START DATE:** November 1, 2012

**ANTICIPATED SERVICE COMPLETION DATE:** September 30, 2013

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):**

Roadway Rehabilitation and Rural Freeways

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Hydraulics  
Safety Studies

**DBE REQUIREMENT:** 0%

**MDOT PROJECT MANAGER:**

Kyle Rudlaff  
MDOT – Coloma TSC  
3880 Red Arrow Highway  
Benton Harbor, MI 49022  
269-849-2347 Office  
269-849-1227 Fax  
rudlaffk@michigan.gov

**REQUIRED MDOT GUIDELINES AND STANDARDS:**

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

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.

**CONSULTANT RESPONSIBILITIES:**

The CONSULTANT shall prepare Preliminary and Final Scoping Packages for the project location as detailed in **Attachment A**. As part of this project, the CONSULTANTS shall prepare and evaluate the proposed treatment for each roadway and determine the extent and cost of all work required for its implementation.

For the project, scoping will include but will not be limited to the following:

- A. Verify the project location, the limits and the extents.
- B. Conduct field reviews to obtain missing or supplement incomplete information.
- C. Establish and detail the proposed scope of road work.
- D. Determine Federal requirements and project conformance.
- E. Prepare design recommendations with 5 inch cold milling and hot mix asphalt resurfacing as the basis for the action being scoped.
- F. Prepare maintenance of traffic and construction staging for the future project with applicable alternative methods provided.
- G. Compute and verify all quantities.

- H. Compute and calculate detailed cost estimate using MDOT Pay Items.
- I. Complete the Project Concept Statement and the Project Scoping Checklist.
- J. Prepare a design hour estimate.
- K. Prepare required documents (to include summary, typical cross sections, photographs, geometric concept diagrams, etc) required to answer all questions relating to the project scope of work (See Attachment A).
- L. Prepare geometric concept diagrams, including detail sketches as necessary to depict of Right of Way impacts.
- M. Identify and provide solutions to any unique problems that may arise during the design of the project or that may affect the constructability.
- N. Identify recommendations and provide solutions for Access Management, Context Sensitive Design, and a streetscape grant application for locations within the project limits.

**DELIVERABLES:**

Work shall conform to current MDOT, FHWA, and ASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.). This will include, but will not be limited to, the following for the preparation of the Preliminary Scoping and the Final Scoping Packages for the project location. Following each item listed is a notation showing in which report (base, preliminary or final) that items will first appear. Please note that items in the Base Report are carried through the Final Report, etc.

**BASE SCOPING REPORT**

This report shall address the items listed under CONSULTANT RESPONSIBILITIES (GENERAL) and Attachment A. Aforementioned items are to be addressed to the extent possible within the limited period of task time available. The CONSULTANT shall make a 20 minute presentation at the Kick-Off meeting that features highlights from the report. The Kick-Off meeting is listed in the Scoping Schedule.

**PRELIMINARY SCOPING REPORT**

A Preliminary Scoping Report shall address all the items listed under CONSULTANT RESPONSIBILITIES (GENERAL) and Attachment A items as noted as being required in the Preliminary Scoping Report. A Preliminary Scope Review Meeting is listed in the Scoping Schedule. In the Preliminary Scoping Report, if there are any items, in the CONSULTANT'S opinion, warrant further review, discussion and/or additional information on which to base a sound design concept, those items shall be clearly listed at the end of report.

## **FINAL SCOPING REPORT**

This report shall address and document all the items listed under CONSULTANT RESPONSIBILITIES (GENERAL) and Attachment A and items as noted as being required in the Final Scoping Report, and incorporate the comments and/or changes received from the Preliminary Scoping Report and the Preliminary Scope Review meetings. A Final Scope Review Meeting will not be held.

## **FINAL DELIVERABLE PACKAGE**

The Final Deliverable Report shall be submitted according to the Scoping Schedule. This report shall include all items under CONSULTANT RESPONSIBILITIES (GENERAL) and all items as required in Attachments A and D.

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.).

## **PROJECT CONSTRUCTION COST:**

A cost estimate shall be developed using year 2012 unit prices. Provide a version of the estimate in \*.csv format with Breakdown ID's matching the below work categories (001-013). Some work categories may be unused. The year 2019 cost estimate shall be reported with an adjustment for inflation (5% annual rate). The following categories the MDOT Project Scoping Checklist and MPINS Concept Statement:

- A. The estimated construction cost shall address:
1. Safety Related Work
  2. Mainline Pavement (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
  9. Permanent Pavement Markings/Signs/Signals
  10. Environmental
  11. Miscellaneous
  12. Aesthetic Opportunities
  13. Municipal Utilities

B. The estimated number of real estate parcels and type (grading permit, easement or fee) and the associated cost for each.

**SCOPING SCHEDULE:**

The scheduled CONSULTANT’S task completion dates are as follows:

<u>Completion Date</u>	<u>Description</u>
12/3/2012	Submittal of Base Scoping Report & Kick-Off Meeting
1/15/2013	Coordination Meeting with Village of Lawton on Streetscape grant application items and project features.
3/15/2013	Follow-Up meeting with Village of Lawton to refine Grant Application items.
4/19/2013	Conduct Road Safety Audit.
5/20/2013	Submit Consultant RSA Report
6/12/2013	Attend Public Open House for 3 Lane Conversion, provide information on project concept, and collect public input
8/15/2013	Submittal of Preliminary Scoping Report
9/6/2013	Preliminary Scope Review Meeting
9/24/2013	Submittal of Final Scoping Report
9/24/2013	*Final Deliverable Report

\*Project obligation expires on 9/30/13. Consultant charges made after 9/30/13 will not be reimbursed.

**MONTHLY PROGRESS REPORT:**

On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to the Project Manager. The monthly progress report shall follow the guidelines in Attachment C.

**FORMAT:**

The Preliminary and Final Scoping Reports (see Attachment A for items that will be included) shall be presented on regular letter size paper (8 ½" x 11") with the exception of geometric concept diagrams, and sketches which shall be on 11" x 17" paper (and folded to match the 8 ½" x 11" paper).

The prime format for any products associated with this service is electronic. No paper documents shall be used in the reports or deliverables that is not contained in the electronic version of the report. There shall be two (2) paper copies each of the Preliminary Scoping Report and two copies of the Final Scoping Report. MDOT shall order reproduction and distribution of reports for review purposes.

Each copy of the Preliminary Scoping Report will be stapled in the upper left hand corner. The cover sheet shall be entitled "Preliminary Scoping Report" and should include the control section, job number, route, and location description. An index shall also be included in each report. If there are any items, in the CONSULTANT'S opinion, that need further review, discussion and/or additional information from MDOT, those items shall be clearly listed at the end of the report. 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. No fewer than 8 and no greater than 24 are to be included.

The Final Scoping Report (see Attachment A for items that will be included) shall be labeled (cover and side to be entitled "Final Scoping Report") and should include the control section, job number, route, and location description. The report shall be presented in a 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 geometric concept diagrams, maps, and sketches. The Final Scoping Report shall replicate the Preliminary Scoping report with comments addressed or additional detail provided.

Two sets of the Final Deliverable Package's information shall be presented in three ring binders, each with an index and tabbed sections. This report shall be labeled cover and side. The hard copies of the summaries shall be presented on either 8 ½" x 11" regular letter size paper or 11" x 17" paper. Four copies of a single CD ROM shall be prepared for all electronic files of the project. The CD ROM shall be contained in a separate envelope labeled with the control section, job number, project location, and the CD contents. The envelope shall be included as part of the report and shall be attached and connected through the three ring binder. The geometric concept diagrams, (as identified in Attachment A) are to be created electronically, from the MDOT provided survey using the latest department approved version of Micro Station design software, and following all MDOT drafting standards and guidelines as can be applied in English units. The geometric concept diagrams for each project location are to be created in English units and placed within approved MDOT sheet borders. All Microstation (Dgn) files shall be delivered in a CD ROM.

Project features shall be located by station according to MDOT Survey provided. Where applicable, stations are allowed to be approximate as additional survey work to obtain accurate stations is not authorized.

All 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 project related items are subject to review and approval by the Project Manager.

### **TRAFFIC CONTROL AND MDOT PERMITS:**

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

The CONSULTANT shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT right-of-way. This information can be obtained through the Coloma Transportation Service Center's Permit Agent, Brett Arrans, at (269) 849-1494.

### **CONSULTANT RESPONSIBILITIES :**

**NOTE: Below items A through F are the major project specific deliverables to be provided in this service and must be the main focus of effort. The MDOT Project Manager will collaborate with the CONSULTANT on planning the expeditious completion of all other described tasks and product items.**

- A. Provide meeting materials for public involvement items listed under "SCOPING SCHEDULE." Participate in events, collect input, and incorporate outcomes of public involvement into scope products. The following public involvements events are expected:
  - a. Coordination Meeting with Village on project features and collection of the concept for Village streetscape grant application items.
  - b. Follow-Up Meeting with Village to refine streetscape grant application items. Collect additional comments through phone, E-mail, or at other project events the Village staff attends, until the grant application concept is completed.
  - c. Public meeting to provide information on the project concept, collect public input, and document comments on proposal for 3 lane conversion.
  
- B. Conduct a Road Safety Audit (RSA).
  - a. The format for the RSA shall be a 24 hour event format as follows:
    - 1. 12:30 P.M: Event start with brief introduction of the project, the purpose of the RSA as being crash reduction, chronology of activities, and the outcomes to be achieved through each step.
    - 2. 1:00 P.M. Crash Maps (Consultant produced) are distributed and open discussion on observed safety issues in the project area. Outcome is general list of crash reduction ideas.
    - 3. 1:45 P.M. participants are broken down into groups to make own list of crash reduction ideas, and depart to the field to observe the sites. Outcome is site photos, and formation of crash reduction ideas.
    - 4. 4:00 P.M each group returns and reports site photos and crash reduction ideas. Open discussion to summarize event progress on crash reduction suggestions. The outcome is a list of top suggestions prioritized to be developed as slides by the Consultant by the next morning. Conclusion of afternoon session.
    - 5. Night Review is made by participants . The outcome will be photographs and listing of safety issues and solutions observed during night review.
    - 6. On the next day, morning review is made by participants.
    - 7. 9:00 a.m.- 11:00 a.m.: Night and morning reviews are discussed by the

group. Remaining slides for night and morning reviews are added. The group then reviews all slides. Each slide has the Frequency, Severity, and Risk prioritized by the group.

8. 11:00 a.m -12:00 p.m. the report is made with slides being shown and described. This marks the end of the on-site RSA event. Outcome is identified crash risks and suggestions for reduction as shown on the slides.
9. The Consultant shall compile attendance lists, notes, and observations during the event to provide written details on the suggestions made to be included in the RSA Final Report. A limited amount of follow-up may be done by the Consultant to better understand a problem and potential solution for the benefit of the final report.

#### C. Identify Drainage Work.

- a. Storm sewer video inspection was conducted in 2010 from Orchard St. northerly to the railroad tracks. MDOT has determined to generally keep the existing trunk storm through this segment. The Consultant shall investigate the video inspection product to make system repair recommendations. MDOT expects to do the following:
    1. Repair pipe that has been fractured by utilities at two locations.
    2. Replace trunk sewer drainage structures constructed of brick.
    3. Replace approximately 150 feet of corroded CMP sewer from Union St. to Second St.
    4. Keep existing M-40 trunk storm pipe and outlet storm sewers the same as existing.
    5. Replace or clean short storm segments that are not functioning properly.
  - b. Develop a concept for sending storm flow collected at the Morrill St. intersection southerly under or along M-40 to reach the natural watercourse located 1000 feet to the southwest.
  - c. Calculate design flow and hydraulic capacity of all existing M-40 culverts. Size and cost estimate culvert replacements as directed by the MDOT PM based on a combination of condition and capacity. The M-40 culvert for Lawton Drain, located 0.35 miles north of the railroad tracks, is expected need replacement, along with the two culverts located within 0.25 miles inside of the south village limits. The results shall be reported on a suitable table.
- D. Produce geometric concept diagrams that outline and label the limits of future project work that includes paving, drainage, sidewalks, sidewalk ramps, geometric improvements or otherwise. The MDOT survey mapping will be available in May 2013 on which to overlay the graphics. Geometric improvements expected in this project include:
- a. Conversion of M-40 from two lane operation to three lane operation from 3<sup>rd</sup> Street to James Street.
  - b. Addition of right turn tapers at 66<sup>th</sup> street.
  - c. M-40 passing flare or other treatment to reduce crashes at White Oak Intersection.
  - d. Analysis of the existing crown and options for the proposed crown for M-40 resurfacing. MDOT Survey data will be available for this task.

- e. Analysis of superelevation rates on first two horizontal curves near the south village limits.
- E. Maintaining traffic concept diagrams.
- F. Total resurfacing project cost estimate and cost estimate for enhancement grant application items are a primary deliverable of the scoping services.
- G. The Project Manager, Kyle Rudlaff, shall be the official MDOT contact person for the CONSULTANT. The CONSULTANT must either address or send copies of all correspondence to the Project Manager. This includes all subcontractor correspondence and verbal contact records. The Project Manager shall be made aware of all communications regarding this project.
- H. Meet with the 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.
- I. Maintain a "Scoping Project Record," which includes a history of significant events (changes, comments, etc.) that influenced the development of the scopes, dates of submittals and receipt of information.
- J. The CONSULTANT shall contact, in writing, the 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.
- K. Attend any project-related meetings as directed by the Project Manager.
- L. The CONSULTANT'S representative shall record and submit typewritten minutes for all project related meetings to the Project Manager within two (2) weeks of the meeting. The CONSULTANT shall also distribute the minutes to all meeting attendees.
- M. The CONSULTANT will be responsible for providing elevation view sketches at both sides of each and every bridge in the project area. All under clearance sketches must be shown looking up station and clearly depict the clear roadway width. The sketch must show the elevation of the roadway at 2 feet inside of the inside edge of metal and 2 feet outside of the outside edge of metal, as well as the interior lane lines, crown point and shoulder edges. The consultant shall use MDOT provided measurements and old plans to make sketches.
- N. The pavement designs will be provided by MDOT.
- O. Determine impacts of the proposed pavement treatment on the existing horizontal and vertical alignments, pavements, curb and gutter, drainage, right of way, etc. Every effort shall be made to minimize ROW impact within the limits of each of the project locations. In

areas of potential ROW impact, the CONSULTANT shall document and identify the potential need for additional ROW, by station or address; type of ROW required (grading permit, easement, or fee); and/or proposed roadside improvements (i.e. fencing, turf establishment, landscaping, non motorized, etc.). ROW impacts shall be documented in terms of potential need (grading permit, easement, or fee). The ROW appraisal will be prepared by MDOT. (P/F)

P. Generate geometric concept diagrams electronically using the Micro Station design software and formatted as described in FORMAT Section, using the MDOT survey, and/or on-site field reviews. The geometric concept diagrams are to graphically depict the existing roadway within the limits of the project. The project limits for each project location for this task shall be defined as the greatest 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 as determined in Attachment E. The detail of the geometric concept diagrams is to include the location of existing roadways, bridges, railroads, and cross roads. They are to show existing features; i.e. edge of pavements, edge of shoulders, curb lines, drainage courses etc., represent existing conditions, and indicate proposed work with labels.

Q. Additional Guidance Items include:

1. Generate geometric concept diagrams for each project location, using the base maps and formatted as described in FORMAT Section, for the entire project limits.
2. Prepare existing and proposed general typical cross sections for each project.
3. For minor drainage improvements, incorporate the fix into the report narrative and cost estimate. For major drainage improvements, document the location, condition, recommended treatment and cost estimate.
4. Perform storm water design calculations, including appropriate outlets and energy dissipation as necessary, as outlined in the MDOT Drainage Manual. All design calculations, drainage maps and proposed profiles shall be included in the Preliminary and Final Scoping Reports under Attachment A.
5. For each project location, document and identify any possible utility conflicts and estimate the cost of relocation and/or adjustment.
6. If water mains and/or sanitary sewers are present within the project limits, the CONSULTANT shall evaluate the necessity for the relocation of water mains and sanitary sewers, in accordance with MDOT Design Division's Informational Memorandum #441B and #402R dated April 13, 1992. Identify the limits, an explanation for the relocation and a cost estimate for each location within the "Utilities" section of the scoping report.
7. MDOT shall solicit existing utility information. The Consultant shall post utility information to the geometric concept diagrams.
8. For each project location, review and document scope conformance to design elements as listed in Attachment B and MDOT's 3R/4R Guidelines.

A Level One Design Criteria Checklist (see Attachment B) will be included in the

Scoping Report (see Attachment A for location within the Report).

Calculations (computer generated or hand calculations) that support review of the existing and proposed condition conformance to the Level One Design Criteria will be submitted as part of the “Supplemental Project Scoping Information”.

Documentation for the Level One Design Criteria shall include Existing Condition, Treatment as per Design Standards, and Proposed Treatment (if required). The Proposed Treatment will be in accordance with the current MDOT design standards unless otherwise determined by MDOT. If needed, identify what is needed to bring the item into conformance with current standards (i.e. additional ROW, utility relocation, etc). (B/P/F for existing; P/F for proposed)

9. 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 Attachment A and shall also be entered into a separate spreadsheet and submitted as part of the Final Deliverable Report. Images and observations shall be recorded on unprotected slope conditions that appear to be steeper than 1:4 front slope and 1:4 back slope. (P/F)
10. For each project location, perform crash analysis and recommend countermeasures. This shall include, but not limited to, the following:
  - a. Performing Crash Analysis (see Attachment I). 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. The CONSULTANT will be furnished three (3) years of data.
  - b. Determine ROW impacts 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 Report and shall be reviewed and approved by MDOT prior to inclusion in the Final Scoping Report. (P/F)
11. For each project location, document and identify locations of possible environmental issues (i.e. wetlands, historic properties, 4f properties, regulated streams, etc.) which may impact the project, and estimate the cost of treatment. This information shall be included in the appropriate area of the Scoping Report (see Attachment A). (P/F)
12. For each project location 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 Scoping Report (see Attachment A). (P/F)
13. For each project location, 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). (P/F)
  14. Develop the Maintaining Traffic Concept as per Attachment E.
  15. For each project location, specifically identify any local participation that is required and/or requested for the project location. Examples where local participation is required are: water, sanitary, storm sewer upgrades, work beyond the spring points on local streets, and/or drainage. For each agency (there may be more than one per project location), individually identify the type of work/improvement, itemize the costs and then separately estimate the amount of the respective agencies participation. (P/F)
  16. For each project location, 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 comply with the meeting and public involvement criteria as outlined in Attachment F. (P/F)
  18. For each project location, incorporate any MDOT identified and/or approved (if approved, include copy of MDOT approval) local needs/requests into project scope. (P/F)
  19. Provide photographs and digital files (.jpg files) of the existing roadway and roadside conditions to document the needs as identified in the project scope.

**MDOT RESPONSIBILITIES:**

- A. Provide the design survey to the Consultant.
- B. Schedule and/or conduct the following:
  1. Project related meetings.
  2. Coordinate all scoping activities that require MDOT personnel.
- C. Furnish prints or electronic files of old plans and a copy of the Control Section Log of the area, if available.
- D. Provide pavement design and supply information on existing pavement structure as necessary/available.
- E. Furnish a list of the utility companies present within the control section(s) of the project.
- F. Furnish ROW maps of the area

- G. Furnish project selection justification data, including Pavement Management System data and Sufficiency Rating data.
- H. Furnish inspection reports for the structures in the area, for information purposes.
- I. For each project location, furnish hard data for Crash Analysis.
- J. Furnish list of people invited to each Scope Review Meeting.
- K. Furnish the Project Area Contamination Study (PACS).

#### **UTILITY COORDINATION:**

The CONSULTANT shall be responsible for requesting the location of all existing utilities within the limits of the project. The CONSULTANT shall make recommendations to resolve potential utility conflicts.

#### **PAYMENT SCHEDULE:**

Compensation for this Scope of Services shall be on an **actual cost plus fixed fee** basis.

#### **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.

## **ATTACHMENT A**

**CS 80111 – JN 115147**

**Pre-Design Services on M-40 from Lawton SVL to NVL**

### **The Preliminary and Final Scoping Reports**

The Base, Preliminary, and Final Scoping Reports shall contain the following, and shall be assembled in the order as listed. Please note these are not tabbing sections, but report sections.

The scoping report is the complete written description and explanation of the entire project scope, as well as a comparison as needed between multiple courses of action where relevant.

A unique scope report is to be written and shall follow the format as described below.

The scope report is to be written using complete sentences and sentence structure. In addition, simple, clear, and concise language is required to ensure that the report is both readable and understandable.

Also the listed format contains many sections, which may or may not apply to the project. Sections, which do not apply, may be omitted from the report as directed by the Project Manager. Information, which has no apparent section, may be placed within a related section, or within a newly created section. Keep the addition of new sections to a minimum.

### **Project Description**

Provide a general statement regarding the project type, length, and nature of work being proposed in the scoping of the project. Average length should be no more than one to three sentences.

### **Project Limits**

Establish the projects limits (roadway name, roadway number, project beginning, project ending, mile points (both Control Section and PR), project length, major cross streets, local municipalities affected, etc.). List also if this roadway is an NHS route, a non-NHS route, or if it registered as a National Historic Highway.

### **Design Speed**

List the following information for each of the major roadways within the project limits:

Posted Speed (mph) = \_\_\_\_\_ Design Speed (mph) = \_\_\_\_\_

If speeds change within the project limits, list all segments and associated mile points.

### **Pavement Treatments**

Address each pavement treatment for each course of action.

### **Cross Section**

A brief description of the existing and proposed cross section (pavement type, lane width, curb and gutter, catch basins, storm sewer location, side slopes, ditch location, setback to existing right of way line, etc.) for each course of action being proposed as potential scope alternatives. Include a statement regarding the impact the proposed pavement treatment will have upon existing, or proposed, curb and gutter. Include a brief statement to establish the presence and location of existing pedestrian sidewalk, and existing sidewalk ramp terminals at sidewalk street intersections. Note: At locations of sidewalk street intersections, if not already present, ramp terminals will be installed.

Discussion of the existing and proposed cross sections through the project length will also address the existing pavement crown and super elevation, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments).

Include a statement addressing the existing slopes and ditches, and the impact that the proposed project will have upon them (include any potential corrections or recommended adjustments).

### **Vertical Alignment**

Address the existing vertical alignment of the roadway and the impact that the proposed project will have upon it (include any potential corrections or recommended adjustments). The basis of any correction should be reflective of existing conditions being substandard (i.e. K value too low, not enough sight distance, etc).

### **Horizontal Alignment**

Address the existing horizontal alignment of the roadway, and the impact that the proposed project will have upon it (include any potential corrections or recommended adjustments).

### **Interchanges**

Include a brief description of the existing interchanges and the impact that the proposed project will have upon them (include any potential corrections or recommended adjustments). Discuss alterations based on analysis of the existing geometric conditions and the existing and future traffic volumes through the intersection. Include any potential economic growth impacts that are expected by local governmental agencies. Include in the intersection analysis and discussion, additional recommended geometric improvements, in particular the recommended countermeasures as identified through the crash analysis, and the impact that these improvements will have on the proposed project.

### **Driveways**

List the number and type of driveways present within the limits of this project. Include a brief description of the type of driveways and the impact that the proposed project will have upon them. Where access management concerns exist, note concerns, and make recommendations (to include any potential corrections or recommended adjustments or closures).

### **Guardrail, Barriers and Attenuators**

Discuss the existing guardrail, barriers and attenuators and the impact that the proposed project will have upon them (include any potential corrections or recommended adjustments). Make note of locations where culvert extensions and/or slope flattening would be recommended to eliminate the need for guardrail.

### **Other Safety Improvements**

Address additional recommended geometric improvements, in particular the recommended countermeasures as identified through the crash analysis, and the impact that these improvements will have on the proposed project. DO NOT reiterate recommendations from crash analysis reflected in other portions of the report (i.e. typical section changes, intersection improvements, etc).

**Bridges**

List all existing bridges within the limits of this project in which the roadway crosses over a bridge. Explain for each bridge how the pavement transition into the bridge deck will be addressed. Provide lane and shoulder widths on bridges.

List all existing bridges within the limits of this project in which the roadway passes under a bridge. List the existing under clearance for each bridge; explain how the pavement will be treated below the bridge; and how the issue of bridge under clearance will be addressed. Provide lane and shoulder widths under bridges.

**Drainage**

Address the existing drainage throughout the project length. Include any potential corrections or recommended adjustments that are required in order to alleviate any existing drainage issues within the project limits. Note drainage issues that need to be addressed and are not specific to any course of action being presented to deal with pavement life span.

**Environmental Issues**

Document existing environmental issues and the impact that the proposed project will have upon them. Include any potential corrections or recommended adjustments to mitigate environmental impacts. Make note of potential permit needs.

**Local Concerns**

Address local concerns or issues that were raised through the public involvement process as outlined in Attachment F. All issues raised do not need to be addressed here as all comments and responses are captured in Appendix C. Discuss only those issues that resulted in scope changes or have potentially significant impact on the proposed project.

**Maintenance of Traffic**

Provide the maintenance of traffic recommendations developed through the process as outlined in Attachment E.

**Right-of-Way Needs**

For the roadway in general for each recommended geometric/safety improvement (include the crash analysis recommended countermeasures, slope flattening recommendations and culvert extensions), each intersection, each commercial and/or residential driveway, each signal and each sign; write a brief statement addressing the existing right-of-way, and the impact that the proposed project will have upon it (include any potential corrections or recommended adjustments). If additional right-of-way is required note the type that will be needed (fee take, grading permit, permit to grade drive, etc.).

**Signage Recommendations**

Address the existing traffic signs and the impact that the proposed project will have upon them

(include any potential corrections or recommended adjustments). Any modifications or replacements of overhead sign structures will be included in this discussion.

### **Utilities**

Address the existing utilities present within the roadway right of way and the impact that the proposed project will have upon them.

### **Detail Cost Summary**

Provide a summary of the estimated construction cost after scoping for each course of action, list the number of lane miles within the project limits, and a price per lane mile.

**Appendix A: Level One Design Criteria Checklists**

Provide the Level One Design Criteria Checklists as shown in Attachment B. Note that there is a checklist for existing and proposed conditions. Design exceptions will not be allowed and all courses of action being presented in the scoping reports must have provisions to eliminate any design exception conditions as determined by the Engineer.

**Appendix B: Final Design Criteria**

Provide a summary of the design criteria utilized to evaluate and constrain the scope for each course of action. Use the format provided in Attachment B.

**Appendix C: Public Involvement Public Comments**

Include comments made at each meeting that solicited public comment. Provide response to each public comment that states how that comment was integrated into the project scope, or how that comment was used to affect the scope in some fashion.

**Appendix D: Detail 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 in spreadsheet format. Individual pay item costs shall be rolled up into a construction cost estimate.

**Appendix E: Detailed Design Hours Estimate**

Estimates are to be as detailed as possible, attempt to breakdown hours per PPMS tasks.

**Appendix F: Crash Analysis Data**

Summary of countermeasure recommendation(s) that shall include each location's crash pattern and countermeasure individually listed along with the associated ROW impacts (area and type) and construction cost estimate.

**Appendix G: Field Notes & 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.

**Appendix H: Base Sheets**

**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, interchanges and local municipalities affected. The Location Map shall be presented on a regular letter size paper (8 ½" x 11")

**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) for each course of action being presented as potential scope alternates.

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. (See Appendix A for an example).

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.

**Base Map:** Generate a single Base Map, created electronically using the Micro Station design software and formatted as described in Section VIII. FORMAT, of the existing roadway using information from old plans, and/or, on site field reviews. The Base 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 greatest 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 as determined in Attachment E. The detail of the Base Map is to include the location of existing roadways, bridges, railroads and cross roads. The Base Map 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 Map is to represent existing conditions without showing proposed work.

An 11" x 17", a reduced size copy, of the electronically created base map, showing the entire project limits, on 1 page, is to be provided. If it is recommended that the project can be designed in log job format, then an 8 ½" x 11", full size copy, of the electronically created base map, showing the entire project limits on one (1) page, is to be provided.

**Maintenance of Traffic Typical Sections and Base Map:** Requirements for these sheets are the same as for the corresponding sheets (typical sections and Base Map). All maintenance of traffic courses of action are to be detailed with sets of typical sections and base maps providing base detail of the course of action. Include narrative bullets on each sheet that describe the work occurring during the construction/traffic stage.

**ATTACHMENT B**  
**CS 80111 – JN 115147**  
**Pre-Design Services on M-40 from Lawton SVL to NVL**

**LEVEL ONE DESIGN CRITERIA CHECKLIST**

Report conformance for existing and proposed conditions for the FHWA’S level one design criteria. Calculations supporting these checklists will be provided in the “Supplemental Project Scoping Information” (see Attachment D).

**DESIGN CRITERIA**

The following example format or another similar format will be utilized to display the design criteria used to constrain the project scoping process. If additional design criteria are needed to fully convey the constraints of the design, they may be added to the table.

Project Information Header: Route, Location Control Section, Job Number, AADT, Design Year.

**Level One Design Criteria Checklist**

Design Criteria (Provide numerical value for project, where indicated)	Reference	Do the existing conditions meet MDOT criteria?		
		Existing	Y/N	Proposed
1. Design Speed: mph Mainline: mph Ramps:	RDM 3.06 Posted	70 mph Posted	Y	75 mph Design
2. Lane Width Mainline: ft Ramps: ft Auxiliary lanes: ft	Design Stand. InterState S. AASHTO	12 feet	Y	12 Feet
3a. Uncurbed Sections – Shoulder Width adjacent to: Mainline: 10’ ft Out ft Mainline: 10’ In ft Ramps: 7 ft Out Ramps: 4 ft In	Design Stand. InterState S. AASHTO	9 ft Outside 5 ft Inside 7 ft Outside TBD	N N Y	13 ft Outside 10 ft Inside 7 ft Outside 4 ft Inside



		863+00C K=7692 887+00S K=3225 914+80S K=400 936+26C K=379	Y Y Y Y	Retain Ex. Retain Ex. Retain Ex. Retain Ex
9. Maximum Long. Grades	RDM 3.09.02 Retain Ex.	Sta 576+00, +1.81% Sta 936+00, -2.74	Y Y	Retain Ex Retain Ex
10. Through Travel Lane Cross Slope	RDM 3.09.02 1.5%-2%	1.5% Crown in Center	No	2% Crown on Outside Lane line
11. Vertical Clearances	16' 0"	S14 Livingston 16' 10" R06 I&M 24' 10" S15 John Beers 16' 4"	Y Y Y	16' 7" 24' 7" 16' 1"
12. Accessibility Criteria for Handicapped Individuals	NA	No Sidewalk Ramps		
13. Ramp Accel/Decl	G. D. Guides	Exit 16 WB Off: Must be extended Exit 22 WB Off: Must be extended	N N	GEO-131 Compliant GEO-131 Compliant
14. Rollover	NA	NA	NA	NA

**ATTACHMENT C**  
**CS 80111 – JN 115147**  
**Pre-Design Services on M-40 from Lawton SVL to NVL**

**MONTHLY PROGRESS REPORTS**

The first two pages of this attachment are the necessary layout of the Monthly progress reports and the last three pages are a completed example.

**Control Section** 00000  
**Job Number** 00000C  
**Structure Number** S00  
**Date** 00/00/00

**MONTHLY PROGRESS REPORT**

- A. Work accomplished during the previous month.
- B. Anticipated work items for the upcoming month.
- C. Real or anticipated problems on the project.
- D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.
- E. Items needed from MDOT.
- F. Copy of Verbal Contact Records for the period (attached).

**CS 80032 - JN 89295**

I-196 BL from M-140 to 73<sup>rd</sup> Street and M-43 from I-196 to I-196 BL in the City of South Haven, and South Haven Township, in Van Buren County

Scoping Schedule as of 00/00/00

<u>Original Authorized Start Date</u>	<u>Original Authorized Finish Date</u>	<u>(Anticipated) or Actual Start Date</u>	<u>(Anticipated) or Actual Finish Date</u>	<u>Task Description</u>
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Initial Project Meeting
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Maintaining Traffic Meeting
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Fieldwork and Documentation
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	First Local Coordination Letters
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Review/Check/Analyze Field Data
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Generate base map, base sheets, cross sections, and maintaining traffic typicals
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Perform crash analysis and determine countermeasures
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Prepare Maintaining Traffic Write Up
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Submit Utility Requests
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Submit Preliminary Scoping Report
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Scope Review Meeting
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Second Local Coordination Letters
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Submit Final Scoping Report
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Third Local Coordination Letters
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Submit Final Deliverable Report

*SAMPLE*

**Control Section** 12345  
**Job Number** 11111C  
**Structure Number** S02  
**Date:**

### **MONTHLY PROGRESS REPORT**

- A. Work accomplished during the previous month.
  - 1. During the last month we completed the Final Right of Way plans and submitted them to Mr. Project Manager on 00/00/00.
- B. Anticipated work items for the upcoming month.
  - 1. Submit the Preliminary Plans and related material on 00/00/00.
  - 2. Attend the meeting regarding the Ameritech lines on the bridge, scheduled for 00/00/00.
- C. Real or anticipated problems on the project.
  - 1. We foresee no problems at this time.
- D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.
  - 1. The design is falling behind schedule because we had problems resolving the geometries of the ramps in relation to the bridge. The Preliminary Plan submittal will be the only task affected by this delay because we will make up the lost time prior to submitting the Final Plans and Specifications.
- E. Items needed from MDOT.
  - 1. Prior to final Plan submittal we will need the latest Special provision and Supplemental Specification checklist.
- F. Copy of Verbal Contact Records for the period (attached).
  - 1. Discussed bridge and ramp geometries with Traffic Safety Eng. of MDOT Traffic and Safety Division on 00-00-00.

## VERBAL CONTACT RECORD

**Control Section**      XXXXX

**Job Number**          XXXXX

**Structure Number**    N/A

**Date**                  00/00/00

Joe Engineer talked to Joe Safety and decided to use a 0.05/ft super on ramp A leading into the bridge.

**ATTACHMENT D**  
**CS 80111 – JN 115147**  
**Pre-Design Services on M-40 from Lawton SVL to NVL**

**SUPPLEMENTAL PROJECT SCOPING INFORMATION**

The following information is to be provided in notebook format after acceptance of the Final Scoping Report by the Project Manager:

1.     **3R/4R Breakdown and Scope Conformance to Design Elements**  
For the Preliminary Scoping Report, documentation shall include existing condition, treatment as per design standards, and 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.
2.     **Project Concept Statement and Project Scoping Checklist**  
Compute and verify all quantities necessary to complete the Project Concept Statement and Project Scoping Checklist for each of the projects (see Attachment I).
3.     **Correspondence** (MDOT, Utility, Local, and Other)  
Actual correspondence sent and received, organized by correspondent, in order of latest date first.
4.     **Quantity Calculations**

**ATTACHMENT E**  
**CS 80111 – JN 115147**  
**Pre-Design Services on M-40 from Lawton SVL to NVL**

**DEVELOP MAINTAINING TRAFFIC CONCEPT**

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 Project Manager and request a meeting with the Coloma TSC Traffic & Safety Engineer and Delivery Engineer (allow a minimum of two (2) weeks for a meeting date to be determined). Review the traffic data and the project site to determine project specific construction zone traffic requirements. Requirements shall be consistent with the constraints identified at the meeting with the Coloma TSC Traffic & Safety Engineer. Any necessary or recommended exceptions shall be clearly identified and justification provided.
  - C. Prepare preliminary written recommendations for maintaining traffic. Items that **WILL** be included in the recommendations at a minimum are:
    - 1) Constraints as identified by the Coloma 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 Coloma 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 widening 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.
  - D. Based on the preliminary written recommendation (developed above), prepare maintaining traffic typical. Typical shall be prepared using the existing typical

cross sections developed in item 11 under Section XI CONSULTANT RESPONSIBILITIES (GENERAL) as a base. Each of the items recommended in Section 2, Task C, of this attachment shall be superimposed onto those typicals.

- E. Submit the written recommendations for maintaining traffic as developed in Section 2, Task C, of this attachment and the maintaining traffic typicals as developed Section 2, Task D, of this attachment with the Preliminary Scoping Report.
- F. Receive any items returned by the Coloma TSC Traffic and Safety Engineer and/or from meetings at which maintaining traffic has been discussed, as incomplete or deficient and make the necessary revisions.
- G. Submit the revised recommendations and maintaining traffic typicals with the Final Scoping Report.

## MAINTAINING TRAFFIC WORK SHEET

Author: \_\_\_\_\_ Return by (date): \_\_\_\_\_

Date Completed: \_\_\_\_\_

Reviewed by: \_\_\_\_\_ *Initials* \_\_\_\_\_ *Date* \_\_\_\_\_

Coloma TSC Development Engineer \_\_\_\_\_

Coloma TSC Traffic/Safety Engineer \_\_\_\_\_

Coloma TSC Manager \_\_\_\_\_

Project Location: \_\_\_\_\_

Job Number: \_\_\_\_\_ Control Section: \_\_\_\_\_

Type of Work: \_\_\_\_\_

Length of Project: \_\_\_\_\_

Number of Lanes: *Existing* \_\_\_\_\_ *Proposed* \_\_\_\_\_

Lane Widths: *Existing* \_\_\_\_\_ *Proposed* \_\_\_\_\_

Number of lanes during construction: \_\_\_\_\_ Lane widths during construction:  
\_\_\_\_\_

Shift traffic to shoulder during construction: *yes no*

Traffic regulator operation required: *yes no*

Length of traffic regulator operation: \_\_\_\_\_

Capacity of traffic regulator operation:  
\_\_\_\_\_

ADT: \_\_\_\_\_ a.m. peak hours: \_\_\_\_\_ p.m. peak hours: \_\_\_\_\_

Is capacity greater than peak hour volumes? *yes no*

Traffic Characterization (commuter, tourist, retail, industrial): \_\_\_\_\_

Load Restrictions: *Height* \_\_\_\_\_ *Weight* \_\_\_\_\_ *Width* \_\_\_\_\_

Other projects in vicinity? *yes no* MDOT \_\_\_ Local \_\_\_ Permits \_\_\_ Maintenance \_\_\_

Coordination clause required? *yes no* Clause written: \_\_\_\_\_

Project Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Traffic Signal Locations	Loops		Temporary/Permanent Modifications Required		Contact Signals Unit	
	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>
_____	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>
_____	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>
_____	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>
_____	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>
_____	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>
_____	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>
_____	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>	<i>yes</i>	<i>no</i>

Railroad Crossings? *yes no*

Locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Railroad flagging special provisions needed? *yes no*

Pedestrians? *yes no* Pedestrian Counts: \_\_\_\_\_

Schools:  
\_\_\_\_\_  
\_\_\_\_\_

Transit Routes/Bus Stops? *yes no* CATA, EATRAN: \_\_\_\_\_

Locations: \_\_\_\_\_

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Jurisdictions Affected (county, city, township, and municipality): \_\_\_\_\_

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Local Contact Person(s): \_\_\_\_\_ Phone: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Local Ordinances: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Adjacent Recreational Facilities?    *yes*    *no*

Locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Major Traffic Generators:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Special Events (event, date, time, work restrictions, lane closure, restrictions, etc.): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Proposed Maintaining Traffic Scheme: \_\_\_\_\_  
\_\_\_\_\_

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Best Practice Maintenance of Traffic Scheme?    *yes*    *no*

Work Restrictions (days/hours of operation): \_\_\_\_\_

Weekend Work?    *yes*    *no*

Staging: \_\_\_\_\_

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Adjacent Alternate Routes Available?    *yes*    *no*

Alternate routes available: \_\_\_\_\_

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Detour Needed:    *yes*    *no*

Proposed detour: \_\_\_\_\_

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Advanced Signing (PCMS, static): \_\_\_\_\_

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Locations of Advanced Signs: \_\_\_\_\_

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Incentive/Disincentive:    *yes*    *no*    Type: \_\_\_\_\_

Details:

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User Delay Calculations Complete?    *yes*    *no*

User Delay Values:

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Other Considerations:

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**ATTACHMENT F**  
**CS 80111 – JN 115147**  
**Pre-Design Services on M-40 from Lawton SVL to NVL**

**Public Involvement Schedule**

Engagement of municipalities, townships, and other stake holders will take place in step with the scheduled review steps shown on the “SCOPING SCHEDULE”. The CONSULTANT will collaborate with MDOT on identifying the appropriate engagement of stakeholders beyond information sharing to be accomplished with review steps.

**ATTACHMENT G**  
**CS 80111 – JN 115147**  
**Pre-Design Services on M-40 from Lawton SVL to NVL**

**Preliminary Utility Information Submittal**

Submittals to all of the utility companies are to include:

1. MDOT shall solicit existing utility information from Utility owners.
2. The Consultant shall post existing utility locations on the geometric concept diagrams.
3. The Consultant shall track and report utility information provided and summarize in the preliminary and final reports the potential utility coordination tasks associated with the future project.

**MDOT Utility Coordinator:** MDOT - Coloma TSC  
Jarrett Burgess, Utility & Permit Engineer  
3880 Red Arrow Highway  
Benton Harbor, MI 49068

Requests for preliminary utility information are to be mailed prior to the delivery of the Final Scoping Report. Receipt of mailing and a copy of the completed MDOT approved form to be included with the Final Scoping Report, along with a list of all of the utility companies contacted.

MDOT is to provide the CONSULTANT with a list of the utility companies present within the control section(s) of the project.

**ATTACHMENT H**  
**CS 11017 - JN 112949**  
**Pre-Design Services on I-94 from I-196 to M-140**

**Project Concept Statement / Project Scoping Checklist**

The MDOT Project Scoping Checklist will be completed as a CONSULTANT task.  
The MDOT form shall be provided to the Consultant.

**ATTACHMENT I**  
**CS 80111 – JN 115147**  
**Pre-Design Services on M-40 from Lawton SVL to NVL**

**Draft and Final Crash Analysis Reports**

The Consultants shall provide MDOT with a Crash Analysis Report which shall detail the safety performance of the project location (includes not only the mainline but all ramps, major and minor intersections and crossovers within the project limits) and provide detailed graphic depiction of countermeasures and cost/benefit analysis for crash concentration locations. The Crash Analysis Report shall at a minimum compare the project location features (mainline, ramps, major intersections, minor intersections and crossovers) to regional averages, identify crash concentration locations, examine crash concentration locations for crash patterns and provide countermeasures for correctable crash patterns. The Consultants shall combine a thorough review of computer-based crash records with field reviews of the roadways characteristics (geometric and operational features shall be specifically noted) to identify crash concentration locations. Crash diagrams shall be provided for the crash concentration locations. The Consultants shall provide a Draft Crash Analysis Report and upon review and comment by MDOT, the Consultants shall make any changes identified and submit a Final Crash Analysis Report.

The Consultants shall review and analyze the most recent five years of MDOT crash data. For the analysis, the Consultants shall stratify the data by location and the crash data shall also be aggregated by similar roadway segment characteristics. The Consultants shall quarry SEMCOG to determine regional crash averages which will provide a normative measure of comparison to aid in the identification of crash concentration locations.

The Consultants shall identify crash concentration locations and determine crash patterns. Based on the crash patterns identified for each crash concentration location the Consultants shall develop proposed crash countermeasures. The countermeasures shall be graphically depicted, to scale, with sufficient detail to determine the countermeasures impact to the existing roadway and the proposed roadway improvement.

The countermeasures may range from simple sign / marking / signal modifications up through substantial reconstruction. The Consultants shall present countermeasures stratified into short and long-term solutions. The Consultants shall provide a construction cost estimate for each countermeasure using MDOT Pay Items and shall clearly identify any right-of-way impacts a countermeasure may have. The Consultants shall provide a full cost/benefit analysis for each countermeasure. The Consultants shall also evaluate the crash impacts on design exceptions sought.

Develop a Time of Return (TOR) analysis for each countermeasure using the MDOT TOR format as provided by the MDOT Region Traffic Safety Engineer.

This information shall be included in the appropriate area of the Attachment A.