

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

	REQUISITION NUMBER	DUE DATE	TIME DUE
MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)	

DESCRIPTION

MDOT PROJECT MANAGER: Check all items to be included in RFP			CONSULTANT: Provide only checked items below in proposal
WHITE = REQUIRED ** = OPTIONAL Check the appropriate Tier in the box below			
<input type="checkbox"/> TIER I (\$50,000 - \$150,000)	<input type="checkbox"/> TIER II (\$150,000-\$1,000,000)	<input type="checkbox"/> TIER III (>\$1,000,000)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<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"/>	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	<input type="checkbox"/>	Presentation **
N/A	N/A	<input type="checkbox"/>	Technical Proposal (if Presentation is required)
3 pages (MDOT Forms not counted)	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP not including key personnel resumes. Resumes limited to 2 pages per key staff personnel.

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

GENERAL INFORMATION

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

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

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet

5100J – Consultant Data and Signature Sheet (Required for all firms performing non-prequalified services on this project.)

(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) **AA**

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RFP SPECIFIC INFORMATION

ENGINEERING SERVICES BUREAU OF TRANSPORTATION PLANNING OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO YES DATED _____ THROUGH _____

Prequalified Services – See 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, 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 all firms performing non-prequalified services on this project.**

Qualification Based Selection - Use Consultant/Vendor Selection Guidelines.

For all Qualifications Based Selections, the selection team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected 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 Based Selection / 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.

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.)

BID SHEET INSTRUCTIONS

Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) with the proposal, to the email address: mdot-rfp-response@michigan.gov. Failure to comply with this procedure may result in your bid being rejected from consideration.

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PARTNERSHIP CHARTER AGREEMENT

MDOT and ACEC created a Partnership Charter Agreement which establishes guidelines to assist MDOT and Consultants in successful partnering. Both the Consultant and MDOT Project Manager are reminded to review the [ACEC-MDOT Partnership Charter Agreement](#) and are asked to follow all communications, issues resolution and other procedures and guidance’s contained therein.

**NOTIFICATION
MANDATORY ELECTRONIC SUBMITTAL**

Proposals submitted for this project must be submitted electronically.

The following are changes to the Proposal Submittal Requirements:

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

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

The following are Requirements for Electronic Submittals:

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

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

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

****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

**NOTIFICATION
E-VERIFY REQUIREMENTS**

E-Verify is an Internet based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring, under Public Act 200 of 2012, Section 381, that as a condition of each contract or subcontract for construction, maintenance, or engineering services that the pre-qualified contractor or subcontractor agree to use the E-Verify system to verify that all persons hired during the contract term by the contractor or subcontractor are legally present and authorized to work in the United States.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: <http://www.dhs.gov/E-Verify>.

The documentation supporting the usage of the E-Verify system must be maintained by each consultant and be made available to MDOT upon request.

It is the responsibility of the prime consultant to include the E-Verify requirement documented in this NOTIFICATION in all tiers of subcontracts.

9/13/12

**NOTIFICATION
SMALL BUSINESS CONSULTANT PROGRAM**

The Michigan Department of Transportation's (MDOT's) Small Business Program (SBP) is a race- and gender-neutral program designed to provide consultant opportunities for small businesses on projects funded in whole or in part by the Federal Aviation Administration (FAA), Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). This program is required by federal regulation 49 CFR Part §26.39.

Vendors proposing on work under this program must meet the same conditions and standards required of all contractors, consultants, suppliers and subcontractors performing work for the department.

Eligibility Criteria

In order to quote as a small business on SBP projects, vendors must:

- Submit an SBP application (Form 4106) at least 30 days prior to the proposal due date. Documentation will be reviewed by the MDOT Office of Business Development (OBD) to ensure only small businesses participate in this program.
- Certified DBE firms submit this documentation as a condition of certification.
- Small Business, including affiliates average gross receipts must fall below the size limits included in the following table:

NAICS Code	NAICS Industry Description	Size Standards in millions of dollars
541310	Architectural Services	\$7.50
541320	Landscape Architectural Services	\$7.50
541330	Engineering Services	\$15.00
541360	Geophysical Surveying and Mapping Services	\$15.00
541370	Surveying and Mapping (except Geophysical) Services	\$15.00
541380	Testing Laboratories	\$15.00

Project Selection

MDOT-let projects will be designated as SBP prime set-aside projects when they meet selection criteria specified below. The MDOT Contract Selection Team (CST) with input from the responsible MDOT Region, using the following criteria, shall select SBP projects:

- a) Projects considered for the SBP must be funded in whole or in part by the FAA, FHWA or the FTA.
- b) There must be at least three small businesses qualifying to quote as a prime on each respective project.

- c) Projects must have small business subcontracting opportunities.
- d) Only projects below \$150k can be deemed eligible as SBP Consultant projects.

Michigan Department of Transportation

**SCOPE OF SERVICE
FOR
PRE- DESIGN SERVICES
Small Business Program**

CONTROL SECTION: 78013(39011)

JOB NUMBER: 122542

PROJECT LOCATION:

US-131 from M-216 to South Street in the village of Schoolcraft. The project length is 5.6 miles.

PROJECT DESCRIPTION: Produce scoping products for a future design project. The scope products include evaluation of pavement treatment alternatives, drainage pipe inspection, drainage improvement concept, evaluation of operational changes for safety improvement, and geotechnical data collection. Provide recommendations, concept illustrations, and cost estimates for all scoping alternatives. Use MDOT feedback to determine the work included in the future project. Provide reports as described in this scope.

ANTICIPATED SERVICE START DATE: May 29, 2015

ANTICIPATED SERVICE COMPLETION DATE: March 1, 2016

PRIMARY PREQUALIFICATION CLASSIFICATION(S):

Roads and Streets

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Hydraulics
Safety Studies
Geotechnical Engineering Services

DBE REQUIREMENT: 0%

MDOT PROJECT MANAGER:

Kyle Rudlaff
MDOT – Southwest Region Office
1501 E. Kilgore Road
Phone: 269-337-3928
E-mail: 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 CONSULTANT shall prepare and evaluate the proposed treatment and determine the extent and cost of all work required for its implementation.

NOTE: Below items A through E 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 managing level of effort and making expeditious completion of all other described tasks and product items.

- A. Identify Drainage Work.
 - a. Provide a hydraulic report that includes tables of all relevant hydraulic information for existing and proposed conditions for each pipe. Additionally provide a diagram for each culvert passing flow under both bounds of US-131 or side roads that depicts the approximate road grade, pipe size, pipe grade, length, and headwater elevation(s). Storm sewer/Culvert cleaning and video inspection will be conducted in this service. See Attachment I for details. The Consultant shall investigate the video inspection product to make drainage treatment recommendations. Implement the following:
 - 1. Display proposed drainage work on geometric concept diagrams.
 - 2. Address pipe that has been fractured by utilities.
 - 3. Replace drainage structures in poor condition.
 - 4. Retain existing pipes in good condition.

5. Use in-place rehabilitation as much as feasible to address pipes in poor or fair condition.
 6. Replace drainage pipes in poor condition that have no feasible in-place rehabilitation option.
 7. Designate pipe lining only on pipes with sufficient hydraulic capacity to pass the design year storm after lining according to the MDOT Drainage Manual.
 8. Incorporate MDOT comments related to drainage treatment.
- b. Determine the existing drainage pattern at US-131 and Michigan Avenue that is not the same as shown on old plans and not identified at this time.
- B. For the pavement treatment selected by MDOT, produce geometric concept diagrams that outline and label the limits of future project work that includes paving, guardrail, drainage, geometric improvements or other work. Overlay aerial images with the graphics if desirable. Geometric improvements expected in this project include but are not limited to:
- a. The pavement treatment to be scoped is either a 5 inch thick hot mix asphalt overlay or a major rehabilitation to be determined later.
 - b. Address the issue of trucks and trailers overhanging US-131 through traffic lanes at intersections while turning left or crossing.
 1. Evaluate concept improvement of prohibiting straight-across movements at intersecting roads and installing indirect Left-Turns.
 2. Evaluate concept solution of widening US-131 by one lane to widen the median width available for traffic movements.
 - c. Evaluation of the issue of traffic stopping on the railroad tracks at Muskrat Road.
 - d. Evaluation of crashes at Michigan Avenue and Flowerfield Road intersections.
- C. Provide maintaining traffic concept diagrams and documentation described in Attachment E.
- D. Provide a project cost estimate broken down by MDOT pay item in *.csv format and geometric concept diagrams with the Preliminary and Final Report. It will be allowable to lump together some of the insignificant individual items into a factor item. General cost estimates may be required earlier for comparing treatment alternatives.
- E. Geotechnical engineering services include collecting at total amount of 24 core samples aligned either in the paved median shoulder, paved outside shoulder, or outside lane. A 5 foot deep soil boring will be taken at each core location. Report information must include layer identification of material and condition for pavement and soils, layer thickness, water table elevation, and sample photographs. Each sample location is to be spaced approximately a half mile to obtain coverage on the project limits. The CONSULTANT must submit a layout plan and have it approved by the Southwest Region Materials Engineer prior to collection. The pavement core layout should be customized to provide coverage on the various HMA caps located along the project. The Consultant

is responsible for providing traffic control.

F. The pavement design concept to apply will be provided by MDOT.

G. Additional Guidance Items include:

1. Generate geometric concept diagrams as described in FORMAT Section, for the entire project limits.
2. Prepare existing and proposed general typical cross sections.
3. Perform storm water design calculations, including appropriate outlets and energy dissipation as necessary, as outlined in the MDOT Drainage Manual. Collaborate with the MDOT Project Manager on completion of the task in absence of detail survey information. Include the hydraulics report with the Preliminary and Final Scoping Reports under Attachment A.
4. For each project location, document and identify any possible utility conflicts and estimate the cost of relocation and/or adjustment.
5. For each project location, review and document scope conformance to design elements as listed in Attachment B and MDOT's 3R/4R Guidelines.
 - a. A Level One Design Criteria Checklist (see Attachment B) will be included in the Scoping Report (see Attachment A for location within the Report).
 - b. 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".
 - c. 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)
6. MDOT shall solicit existing utility information. The Consultant shall post utility information to the geometric concept diagrams. For each project location, document and identify any possible utility conflicts on the standard MDOT tracking spreadsheet and estimate the cost of relocation and/or adjustment.
7. Document the roadside safety related items (i.e. guardrail, barriers, attenuators, etc.) which need to be modified or included in the project. Documentation includes 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)
 - a. Perform crash analysis and recommend countermeasures. This shall include,

but not limited to performing Crash Analysis (see Attachment H). This shall include the last five years of data for the analysis period. If there is a fatality within those five years, the analysis shall include the details of the specific fatality. The CONSULTANT will be furnished five years of data by MDOT.

8. Determine ROW impacts for any geometric or drainage improvements recommended. 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. Provide sketches depicting any ROW impacts. (P/F)
 9. 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. The environmental impact information is provided by MDOT and must be included in the appropriate area of the Scoping Report (see Attachment A). (P/F)
 10. Provide photographs and digital files (.jpg files) of the existing roadway and roadside conditions to document the needs as identified in the project scope.
 11. No public involvement or local agency coordination is requested in this service.
- P. General product and service requirements. The project scoping service includes the following:
1. Verify the project location, the limits and the extents.
 2. Conduct field reviews to obtain site information.
 3. Establish and detail the proposed scope of road work.
 4. Determine Federal requirements and project conformance.
 5. Prepare maintenance of traffic and construction staging concept for the future project with applicable alternative methods provided.
 6. Compute and verify all quantities.
 7. Compute and calculate detailed cost estimate using MDOT Pay Items.
 8. Complete the Project Concept Statement form and the Project Scoping Checklist.
 9. Prepare a design hour estimate.
 10. 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).

11. Identify and provide solutions to any unique problems that may arise during the design of the project or that may affect the constructability.
12. Identify recommendations and provide solutions for access management or any complete streets opportunities.
13. 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.
14. Attend project-related meetings as directed by the Project Manager.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. Generate geometric concept diagrams electronically using the Micro Station design software and formatted as described in FORMAT Section. The geometric concept diagrams are to graphically depict the existing roadway within the limits of the project. The project limits are to be shown plus 200 feet beyond the Point of Beginning (POB) and the Point of Ending (POE). 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.

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 includes evaluation of existing geometric elements, key roadway features, and ideas on the best improvements to consider making in the next improvement project. Briefly describe the approach that will be taken to accomplish the requested service. Detail progress on Geotechnical and drainage video inspection work. The CONSULTANT makes 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

Address all the items listed in Attachment A 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 in this scope and Attachment A 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 described in this scope.

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 2014 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 2022 cost estimate shall be reported with an adjustment for inflation (5% annual rate). The following categories are listed 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>
5/29/2015	Anticipated Consultant Authorization
6/26/2015	Submittal of Base Scoping Report & Kick-Off Meeting
8/20/2015	Pipe Video Inspection Product Submitted
8/20/2015	Draft Hydraulic Report with Design Flow Capacity Chart
8/28/2015	Progress Meeting for launch to Preliminary Scope Step
10/28/2015	Submittal of Preliminary Scoping Report
11/12/2015	Preliminary Scope Review Meeting
1/15/2016	Submittal of Final Scoping Report
2/4/2016	*Final Deliverable Report

*Project authorization expires on 3/01/16. Consultant charges made after 3/1/16 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 12 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. Two copies of a CD's, DVD's, or memory sticks shall be prepared for all electronic files generated in the scoping project. All scoping content will be provided in Electronic format. The electronic storage device must be contained in a separate envelope labeled with the control

section, job number, project location, and the 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, 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 files in produced in Microstation (*.dgn) files shall be included in the deliverables.

Project features shall be located by the station according to the MDOT ROW Map alignment. Where applicable, stations are allowed to be approximate as 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 Kalamazoo Transportation Service Center's Permit Technician, Bryan Meehling, at (269) 375-8676.

MDOT RESPONSIBILITIES:

- A. Schedule and/or conduct the following:
 - 1. Project related meetings.
 - 2. Coordinate all scoping activities that require MDOT personnel.
- B. Furnish old plans in electronic format. Old plans are posted to the MDOT FTP site at: ftp://ftpmidot.state.mi.us/JN%20122542_US-131%20Scoping/
- C. Contact the village of Schoolcraft and affected townships to collect any input on the future project.
- D. Provide pavement design.
- 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. Furnish crash 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 complete line items in a utility conflict tracking sheet to document potential conflicts and any progress made on conflict resolution. Recommend ways to resolve potential utility conflicts and document conflict resolution as directed by MDOT.

PAYMENT SCHEDULE:

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

CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee. The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

All billings for services must be directed to the Department and follow the current guidelines. 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.

MDOT will reimburse the consultant for vehicle expenses and the costs of travel to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Travel_Guidelines_05-01-13_420289_7.pdf?20130509082418. MDOT's travel and vehicle expense reimbursement policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay overtime in accordance with MDOT's Overtime Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Overtime_Guidelines_05-01-13_420286_7.pdf?20130509081848. MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

ATTACHMENT A
CS 78013 – JN 122542
Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

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).

Intersections

Include a brief description of the existing intersections 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.

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 (None for this Consultant Service)

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 the 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 typical section 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 typical section for each standard cross section shall detail the proposed pavement treatments (cold mill, resurface or reconstruct, etc.). The proposed typical section 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 typical sections 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 78013 – JN 122542

Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

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	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

Ramps: 4 ft In				
Auxiliary lanes:				
3b. Curbed Sections – Curb Offset:	NA		Y	
Mainline: ft				
4. Bridge Clear Roadway Widths: 10 ft Outside 5 ft Inside	Design Stand. InterState S. AASHTO	S13 Lake Street: 12' Out 10' In R04 Lost Dunes: 10' Out 5.25' In S16 Puetz Rd 10' Out, 5.25' In	Y Y Y	S13 Lake St: 12' O 10' In R04 L. Dunes: 10' O 5.25' In S16 Puetz Rd 10' O 5.25' In
5. Structural Capacity HS 20	Design Stand. InterState S. AASHTO	S13 Lake Street: HS25 R04 Lost Dunes: HS20 S16 Puetz Rd: HS 20 + Mod	Y Y Y	No Change
6. Horizontal Curvature (minimum Radius) Rmin=2344 ft	Item 7 below For listing.	Sta 915+70 R=2292'	N	Check Radii for WB. File DE for 70mph R=2292'
7. Super Elevation Rate	RDM 3.09.02 1. Straight L. 5.3% Straight L . 2.0% Straight L . 2.1% R-107 7%	Sta 576+20.65R R=2865' e=5.5% Sta 757+21L R=11459' e=2% Sta 875+70L R=7689' e=2% Sta 915+70 R=2292' e=5%	Y Y N N	R=2865'e=5% R=11459'e=2% R=7689'e=2.1% R=2292'E=6% File DE 70mph
8a. Stopping Sight Distance – Horizontal Curves	R=2000' MDOT SSD	Rmin=2292'	Y	All OK, Clear to 40' min.
8b. Stopping Sight Distance – Vertical Curves	75 mph K=206 Sag K=312 Crest MDOT SSD	561+79C K=313 576+00S K=364 592+00C K=750 630+00C K=2222 649+00S K=722	Y Y Y Y Y	Retain Ex. Retain Ex. Retain Ex. Retain Ex. Retain Ex.

	GUIDE	688+00C K=632 718+00S K=1411 776+00S K=6250 824+00S K=5555 863+00C K=7692 887+00S K=3225 914+80S K=400 936+26C K=379	Y Y Y Y Y Y Y Y	Retain Ex. Retain Ex. Retain Ex. Retain Ex. 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 78013 – JN 122542
Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

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 73rd 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>	(Anticipated) or Actual <u>Start Date</u>	(Anticipated) or Actual <u>Finish Date</u>	<u>Task Description</u>
00/00/00	00/00/00	00/00/00	00/00/00	Initial Project Meeting
00/00/00	00/00/00	00/00/00	00/00/00	Maintaining Traffic Meeting
00/00/00	00/00/00	00/00/00	00/00/00	Fieldwork and Documentation
00/00/00	00/00/00	00/00/00	00/00/00	First Local Coordination Letters
00/00/00	00/00/00	00/00/00	00/00/00	Review/Check/Analyze Field Data
00/00/00	00/00/00	00/00/00	00/00/00	Generate base map, base sheets, cross sections, and maintaining traffic typicals
00/00/00	00/00/00	00/00/00	00/00/00	Perform crash analysis and determine countermeasures
00/00/00	00/00/00	00/00/00	00/00/00	Prepare Maintaining Traffic Write Up
00/00/00	00/00/00	00/00/00	00/00/00	Submit Utility Requests
00/00/00	00/00/00	00/00/00	00/00/00	Submit Preliminary Scoping Report
00/00/00	00/00/00	00/00/00	00/00/00	Scope Review Meeting
00/00/00	00/00/00	00/00/00	00/00/00	Second Local Coordination Letters
00/00/00	00/00/00	00/00/00	00/00/00	Submit Final Scoping Report
00/00/00	00/00/00	00/00/00	00/00/00	Third Local Coordination Letters
00/00/00	00/00/00	00/00/00	00/00/00	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 78013 – JN 122542
Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

SUPPLEMENTAL PROJECT SCOPING INFORMATION

The following documentation is required in the Scoping Report (P/F).

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 G).
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 78013 – JN 122542

Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

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. 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 Base Report Meeting with the Kalamazoo TSC Traffic & Safety Engineer. Any necessary or recommended exceptions shall be clearly identified and justification provided.

C. Prepare preliminary written recommendations for maintaining traffic. Included the following pertinent items:

- 1) Constraints as identified by the Kalamazoo 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 Kalamazoo 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 lane 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. Prepare maintaining traffic typical sections using the existing and proposed typical cross sections developed for project work that show traffic lane use and work being constructed.

- E. Submit the written description of traffic stages including a description of the work to be completed and traffic lane use.
- F. Receive any items returned by the Kalamazoo 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 typical section with the Final Scoping Report.

MAINTAINING TRAFFIC WORK SHEET

Author: _____ Return by (date): _____

Date Completed: _____

Reviewed by: _____ *Initials* _____ *Date* _____

Kalamazoo TSC Construction Engineer		
Kalamazoo TSC Traffic/Safety Engineer		
Project 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>

_____ *yes no yes no yes no*
_____ *yes no yes no yes no*
_____ *yes no yes no yes no*

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: _____

Jurisdictions Affected (county, city, township, and municipality): _____

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: _____

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

Work Restrictions (days/hours of operation): _____

Weekend Work? *yes* *no*

Staging: _____

Adjacent Alternate Routes Available? *yes* *no*

Alternate routes available: _____

Detour Needed: *yes* *no*

Proposed detour: _____

Advanced Signing (PCMS, static): _____

Locations of Advanced Signs: _____

Incentive/Disincentive: *yes* *no* Type: _____

Details:

User Delay Calculations Complete? *yes* *no*

User Delay Values:

Other Considerations:

ATTACHMENT F
CS 78013 – JN 122542
Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

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 - Kalamazoo TSC
Dan Roberts, Utility & Permit Engineer
5372 South 9th Street
Kalamazoo, MI 49009

The CONSULTANT will include all solicitation responses in the deliverables. (P/F)

ATTACHMENT G

CS 78013 – JN 122542

Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

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 H
CS 78013 – JN 122542
Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

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.

ATTACHMENT I
CS 78013 – JN 122542
Pre-Design Services on US-131 from M-216 to Village of Schoolcraft

Culvert Cleaning and Video Taping Scope of Work

GENERAL INFORMATION:

The recording and lighting equipment shall be specifically designed for storm water sewer inspections and recoding.

MDOT will not be held liable for the loss or damage to any of the Consultant's equipment or materials.

All videos and reports produced by the Consultant are the property of MDOT.

Culvert locations identifiers must be provided on a plan view diagram corresponding to a culvert table and the video product files. This must be compiled by the CONSULTANT.

SERVICE INFORMATION:

A collection of pipes suggest for video inspection are shown in the Drain Video Layout sketch.pdf located on the MDOT FTP site: ftp://ftpmdot.state.mi.us/JN%20122542_US-131%20Scoping/

The CONSULTANT and the MDOT PM will collaborate to select estimated 1000 feet to 1500 feet of inspection to include in the work plan. The goal is to collect condition information on the cross culverts and obtain a sample of median draining culverts.

CONSULTANT RESPONSIBILITIES:

Provide color video records of storm sewer pipes, 48 inches in diameter, or less, as indicated in the below table.

The video product is to be provided on CD's or DVD's compatible with Windows Media Player.

At the start of each pipe inspection, the video product shall display a table of culvert data overlaid on an image of the pipe inspection at zero feet. The table of data shall include:

1. Culvert ID per the table or appropriate new ID for additional culverts.
2. Route
3. Location
4. Pipe Station Location
5. Origination and Destination Structure for Storm Sewers
6. Survey Direction

7. Flow Direction
8. Pipe Material & Size
9. Date

The video product shall include audio narrative that provides orientation at the start of each pipe survey and description of the features encountered in the pipe. The audio is to be recorded on-site simultaneous to the features being recorded for the pipe report.

The video product is to display a continuous running count of the distance the camera is located from the entrance of the pipe.

The video product shall provide a tab for each pipe and sub-tab for each feature entered into the report. The tabs and sub-tabs will allow the video image to skip forward to the selected item. An example of acceptable use tabs and sub-tabs is available in Attachment B. Features to be entered as sub-tabs include:

1. Survey Start
2. Survey End
3. Standing Water
4. Repair Patches
5. Separated Joints
6. Deposits
7. Infiltration Deposits
8. Longitudinal Cracks
9. Pipe Fractures
10. Voids
11. Blind Taps
12. Roots
13. Material/Size Change
14. Alignment Changes
15. Etc.

Each feature shall have location identified by the number of feet traversed in the pipe when encountered.

The video product shall pan all pipe joints. If the product does not pan each joint, the product will be rejected at the discretion of the MDOT Project Manager.

A report sheet for each pipe run shall include the following data:

1. Route
2. Setup Number
3. Location Description
4. Direction of Survey
5. Direction of Flow

6. Pipe Material
7. Pipe Size
8. Total Length of Pipe
9. Location of Station
10. Date and Time of Inspection
11. Inspector
12. Weather

The report shall include a table that lists features encountered. This table must match the tabs and sub-tabs provided in the video product and include a length count and applicable remarks.

The report shall include a pipe condition rating. There are no MDOT ratings guidelines. Pipe condition ratings are assigned according to the judgment and experience of the inspector.

A report sheet must be provided for each pipe that includes a visual representation (line diagram) of the pipe with the survey start, survey end, remarks posted for each feature encountered, survey direction, and pipe flow labeled.

The Consultant designated video file identifier must use the designations shown on the layout diagram. Any additional pipes encountered and video inspected shall be added to the layout diagram in an orderly and professional manner. Maps and inspection reports must use culvert pipe identifiers. Station locations of the pipes described in the report must match station locations shown in the plan view.

Pipe cleaning is taking place prior to video inspections at all locations.