

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

MDOT PROJECT MANAGER Jason Minkus		JOB NUMBER (JN) 109687 & 110807	CONTROL SECTION (CS) 41131
DESCRIPTION Design Services for the addition of a weave/merge lane in the City of Grand Rapids			
<b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP  WHITE = REQUIRED GRAY SHADING = OPTIONAL		<b>CONSULTANT:</b> Provide only checked items below in proposal	
Check the appropriate Tier in the box below			
<input type="checkbox"/> <b>TIER I</b> (\$25,000-\$99,999)	<input type="checkbox"/> <b>TIER II</b> (\$100,000-\$250,000)	<input checked="" type="checkbox"/> <b>TIER III</b> (>\$250,000)	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>	<i>Safety Program</i>
N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Organizational Chart
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Qualifications of Team
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Past Performance
Not required As part of Official RFP	Not required As part of Official RFP	<input checked="" type="checkbox"/>	Quality Assurance/Quality Control
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 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)	19 pages (MDOT Forms not counted)	<b>Total maximum pages for RFP not including key personnel resumes</b>

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

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

## RFP SPECIFIC INFORMATION

BUREAU OF HIGHWAYS       BUREAU OF TRANSPORTATION PLANNING \*\*       OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO       YES      DATED 10/1/10      THROUGH 12/31/10

**Prequalified Services** – See page 1 of the attached Scope of Services for required Prequalification Classifications.       **Non-Prequalified Services** - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. **(Form 5100J Required with Proposal)**

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

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

**\*\*For RFP's that originate in Bureau of Transportation Planning only**, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (see address list, page 2). The priced proposal must be submitted in a sealed envelope, clearly marked "**PRICE PROPOSAL.**" The vendor's name and return address **MUST** be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

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

**Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

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

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

## BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked "**SEALED BID.**" The vendor's name and return address **MUST** be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

**PROPOSAL SUBMITTAL INFORMATION**

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER 5	PROPOSAL/BID DUE DATE 1/24/11	TIME DUE 12:00 PM
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**PROPOSAL AND BID SHEET MAILING ADDRESSES**

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

MDOT Project Manager  MDOT Other

MDOT Grand Rapids TSC  
Attn: Jason Minkus  
2660 Leonard St, NE  
Grand Rapids, MI 49525

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

**Lansing Regular Mail****OR****Lansing Overnight Mail**

Secretary, Contract Services Div - B470  
Michigan Department of Transportation  
PO Box 30050  
Lansing, MI 48909

Secretary, Contract Services Div - B470  
Michigan Department of Transportation  
425 W. Ottawa  
Lansing, MI 48933

Contract Administrator/Selection Specialist  
Bureau of Transportation Planning B470  
Michigan Department of Transportation  
PO Box 30050  
Lansing, MI 48909

Contract Administrator/Selection Specialist  
Bureau of Transportation Planning B470  
Michigan Department of Transportation  
425 W. Ottawa  
Lansing, MI 48933

**GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

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

The following two American Recovery and Reinvestment Act of 2009 (ARRA) notifications, **ARRA MONTHLY EMPLOYMENT REPORTS** and **REQUIRED CONTRACT PROVISIONS TO IMPLEMENT AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SECTIONS 902 AND 1515**, are attached to this Request For Proposal for your understanding. These two notifications are only applicable for those projects/contracts funded with ARRA funds and will be included in contract Exhibits.

**MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION**

- 5100D** – Request for Proposal Cover Sheet
- 5100G** – Certification of Availability of Key Personnel
- 5100I** – Conflict of Interest Statement
- 5100J** - Consultant Data and Signature Sheet (Required only for Non-Prequalified Work)

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

**Michigan Department of Transportation**

**SCOPE OF SERVICE  
FOR  
DESIGN SERVICES**

**CONTROL SECTION(S):** 41131

**JOB NUMBER(S):** 109687C & 110807C

**PROJECT LOCATION:**

The project is located along US-131 from Leonard Street north to Ann Street in the City of Grand Rapids, Kent County.

The project length is 0.632 miles.

**PROJECT DESCRIPTION:**

Work involved in the design of the project consists of: the addition of a weave merge lane on both northbound and southbound US-131 (I-296) between Leonard Street and Ann Street and structure widening (pedestrian culvert, S17 of 41131, and R09 of 41131) to accommodate the weave/merge lane.

**ANTICIPATED SERVICE START DATE:** 04/25/2011

**ANTICIPATED SERVICE COMPLETION DATE:** 10/15/2012

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):**

Complex Urban Freeway Design

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Short & Medium Span Bridges

Road Design Surveys

Structure Surveys

Hydraulic Surveys

Hydraulics

Specialty Walls/Slopes

Geotechnical Engineering Services

Maintaining Traffic Plans and Provisions

Pavement Marking Plans

Permanent Freeway Traffic Signing Plans

Traffic Capacity Analysis and Studies

Traffic Signal Design (**precautionary for one signal location**)

**DBE REQUIREMENT:** 7%

**MDOT PROJECT ENGINEER MANAGER:**

Jason R. Minkus, Consultant Coordinator  
Grand Region/Grand Rapids TSC  
2660 Leonard St. NE Grand Rapids MI 49525  
616-464-1800  
616-464-1189  
minkusj@michigan.gov

**CONSTRUCTION COST:**

A. The estimated cost of construction is:

1.	Mainline Pavement	\$1,606,000
2.	Geometric Improvement	\$0
3.	Environmental	\$0
4.	Drainage	\$210,000
5.	Safety	\$342,000
6.	Non Motorized	\$0
7.	Maintaining Traffic	\$292,000
8.	Miscellaneous Bridge Cost	\$194,000
9.	Detours and Maintaining Traffic	\$0
10.	Permanent Pavement Markings/Signs/Signals	\$130,000
11.	Miscellaneous	<u>\$1,014,000</u>
	<b>CONSTRUCTION TOTAL</b>	<b>\$3,788,000</b>

B. The estimated cost of real estate is: \$0

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

**If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter to the MDOT Project Manager justifying the changes in the construction cost estimate.**

**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, MDOT Bridge Design Manual, MDOT Bridge Design Guides, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

NOTE: A process change mandated by federal audit of MDOT's design process puts the Omissions and Errors Check Meeting after the Plan Completion. Please keep this in mind

when preparing your schedule. See MDOT Road Design Manual, Chapter 14 – Procedures – Section 14.54 for corroboration. See “For Your Information” contacts at the end of this document for more info or questions.

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:**

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

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department’s Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

- A. Perform design surveys as defined in Attachment A. A Hydraulic Survey will be necessary for this project and the scope of services will be defined and the scope verification meeting.
- B. Prepare required plans, typical cross-sections, details, and specifications required for design and construction. This project will be required to follow the Design Deliverable Enhancement Package (D.D.E.P.) phase one implementation.
- C. Compute and verify all plan quantities.
- D. Provide solutions to any unique problems that may arise during the design of this project.
- E. The consultant shall prepare staging plans and special provisions for Maintaining Traffic. As part of the Maintaining Traffic, conduct a comprehensive mobility analysis and investigate alternative maintenance of traffic schemes. The Consultant will evaluate if the threshold criteria contained in MDOT's Work Zone Safety and Mobility Policy are exceeded, mitigation measures shall be analyzed and recommended. The consultant shall prepare a Transportation Management Plan per the Work Zone Safety and Mobility Manual

- F. Perform and Prepare roadway pavement and soils investigations. The Consultant will be responsible for compiling and preparing the investigation results into report format for the project pavement design and construction information to be developed. The Consultant will be responsible for obtaining any necessary permits to perform this work within MDOT ROW and abide by working hour restrictions and use proper signing per TSC traffic engineer. This includes providing all Traffic Control Devices and Flaggers when needed.

Shoulder borings will be needed in the outside shoulders of NB and SB US-131 from POB to POE every 200 feet. The boring depth will range from 5 feet below pavement surface where there is no proposed retaining wall to a depth at least 10 feet below the proposed piling length where there is a proposed retaining wall. If no piles are proposed for the wall then the boring depth will be 10 feet below the pavement surface. In addition where proposed retaining wall is located behind existing guardrail, obtain hand auger borings at the exact wall location and at the same 200 feet spacing and to a depth of 5 to 10 feet below grade.

Sample and test the existing subbase for Class II material and show the results on the boring logs. Reference all borings by station and offset from the respective US-131 centerlines and by GPS coordinates. If cobbles, boulders or bedrock are encountered in the borings, make note on the boring logs. Record all information on Microstation plan sheets. Fill and patch holes.

Structure borings will be needed for the bridges and pedestrian tunnel widening and for any cantilever, truss or DMS signs per the latest version of Geotechnical Investigations and Analysis Requirements for Structures. Note all cobbles, boulders and bedrock encountered in boring logs. Soil borings of sufficient depth and a geotechnical analysis to perform the foundation design and/or scour analysis. For scope of work statement for geotechnical services see MDOT Bridge Design Manual 5.03.03 A.1.f and/or Consultant Manual for Consultants, Chapter 24 (P/PMS task 3530).

One boring at each foundation location according to P/PMS task 3530 and according to MDOT's Geotechnical Investigations and Analysis Requirements for Structures and current AASTHO LRFD Design Methodologies. . Locate borings by GPS coordinates using Horizontal Datum: Michigan State Plane Coordinates (NAD 1983). All work shall be completed by a vendor pre-qualified for geotechnical engineering services. Prepare a Geotechnical Report and Log of Boring Plan Sheet in Microstation format.

- G. The Consultant is notified that there is potential for contaminated soils on this project, and if encountered they shall be tested, handled and disposed of according to all local, state and federal laws.
- H. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.
- I. The Consultant will be required to complete a design of the structure widening for the pedestrian culvert, US-131 over Richmond Ave. (S17 of 41131), and US-131 over Grand Trunk Western Railroad (R09 of 41131) using applicable standards and current engineering practice.
- J. The Consultant will be responsible for any pickup survey or field measurements to supplement the data provided by MDOT (e.g. Camber in existing beams).
- K. Prepare Design Exception Requests if necessary for road and/or bridge issues (ie: superelevation transition rates, SSD, shoulder widths, under clearance, etc.) a list of possible design exceptions will be required at the Base Plan Review, with final drafts being submitted at the Plan Review Meeting.
- L. The Consultant shall analyze crash data and prepare a crash analysis for the project as a whole as well as for any Design Exceptions for the project specific items/locations and submit them for review by the MDOT GRTSC Traffic and Safety Engineer.
- M. The Consultant will be required to submit in-progress plans for the Plan Review and OEC to the Grand Rapids TSC office for QA review. These plans will be submitted two weeks prior to the scheduled submittal dates, one week for review and one week to allow for changes.
- N. The Consultant will be required to submit final OEC plans to the Region Office for a two week QA review with one week for corrections prior to the scheduling of the OEC. The consultant will be required to perform all changes required from the Region's QA review and then re-submit the package to the Project Manager for distribution to the final OEC attendees for their 2 week review prior to the OEC meeting. The Consultant shall incorporate this time into their design schedule.
- O. Prepare and submit electronically (native format or Adobe PDF) any information, calculations, or drawings required by MDOT for acquiring any R.O.W. (e.g. grading permits, easements, etc.). MDOT will submit permit requests.

- P. Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.
- Q. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Preliminary Project Assessment (PPA).
- R. The Consultant shall be required to prepare and submit a CPM network for the construction of this project.
- S. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Plan Review Meeting.
- T. The Consultant will provide to MDOT at the scheduled submittal dates, copies of the required specifications and plan set materials for distribution by MDOT for all reviews for this project with the exception of The Plan Review. The Consultant shall contact the project manager prior to the submittal dates for the exact number of copies that will be required for submittal. The following is an estimate of the number of copies that will be needed; 5 sets – Plan Review, 5 sets - OEC Review.
- U. Prepare and submit electronically (native format or Adobe PDF) any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.
- V. Attend any project-related meetings as directed by the MDOT Project Manager. Progress meetings will be scheduled on a weekly or bi-weekly basis.
- W. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, power point presentations, etc.
- X. The Consultant shall assist in the review of utility permit requests, incorporate the information in the design plans, and respond within 2 weeks from receipt of the permit.
- Y. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications**

- Z. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.
- AA. The Consultant is notified that the project will be packaged separately to be let as individual projects, and hours should be scheduled to allow for the additional packaging.
- BB. The Consultant is notified that additional structure repairs may be necessary and the scope of work will be identified at the scope verification meeting.

## **UTILITIES**

The Consultant shall be responsible for obtaining existing utility plans from MDOT and showing on the proposed design plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility and Permits Engineer and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities and provide minutes and action item lists from those meetings. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project. The Consultant shall provide for the survey staking of various proposed facilities, and existing ROW so as to locate potential utility conflicts and aid in the completion of utility relocation plans for all municipal and private utility companies. The Consultant shall verify any utility information (location, size, type, etc.) through researching historical as-built information for the project area.

## **TRAFFIC CONTROL**

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

## **MDOT PERMITS**

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103.

## **MONTHLY PROGRESS REPORT**

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

**MDOT RESPONSIBILITIES:**

- A. Schedule and/or conduct the following:
  - 1. Project related meetings.
  - 2. The Plan Review
  - 3. Utility Meetings.
  - 4. Packaging of plans and proposal.
- B. Furnish Special Details and pertinent reference materials.
- C. Furnish prints of an example of a similar project and old plans of the area, if available.
- D. Obtain all permits for the project as outlined in previous section.
- E. Coordinate any necessary utility relocation and lead conflict resolution.
- F. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

**DELIVERABLES:**

The Consultant shall deliver all computer files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, etc.) on DVD, CD or uploaded to ProjectWise, as directed by the MDOT Project Manager. All CADD/GEOPAK files shall be created and identified with standard MDOT file names as shown in Appendix A of the Road Design Manual. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are posted to the bulletin board system. When the use of GEOPAK road design software is necessary to develop plans all pay items shall be placed into the CADD file using GEOPAK's Design and Computation Manager so that Quantity Manager can be used to transfer pay item information to SAPW/Trns\*port. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

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

Plan files shall be submitted in their native dgn format with standard naming conventions as well as plotted into a combined Adobe PDF file. Plan sheets shall be plotted to Adobe PDF

with full text search and level on/off capabilities in half size (11" x 17") formats. A full size title sheet shall be plotted stamped and signed then scanned for inclusion with the Adobe PDF set. The original title sheet will be sent to the MDOT Project Manager.

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

The project construction, removal and profile sheets will require a ratio (scale) of **1:40 (English Units)**.

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

- A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.
- B. Note Sheet.
- C. Typical Cross-Sections.
- D. Project specific Special Details.
- E. Construction staging and traffic control plans.
- F. Detail grade sheets for critical areas.
- G. Pavement marking and signing plan(s).
- H. Witness and benchmark sheet(s).
- I. Soil boring log sheet(s).
- I. Structure plan(s).
- J. Specialty wall or slope plan(s).
- K. Special Details as necessary.

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT.

**PROJECT SCHEDULE:**

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

	<b>MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST</b>	
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Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the [P/PMS Task Manual](#) for more details.

**STUDY (EARLY PRELIMINARY ENGINEERING)**

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY
YES	NO		(mm/dd/yyyy)
		<b><u>EPE SCOPING ANALYSIS</u></b>	
<input type="checkbox"/>	<input type="checkbox"/>	2120 Prepare Traffic Analysis Report	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2130 Prepare Project Justification	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>213M Concurrence by Regulatory Agencies with the Purpose and Need</u></i>	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2140 Develop and Review Illustrative Alternatives	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2155 Request/Perform Safety Analysis	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2160 Prepare and Review EIS Scoping Document	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>211M Public Information Meeting</u></i>	_/_/____
		<b><u>EPE DRAFT ANALYSIS</u></b>	
<input type="checkbox"/>	<input type="checkbox"/>	2310 Conduct Technical SEE Studies	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2321 Prepare for Aerial Photography	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2322 Finish/Print Aerial Photography	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2330 Collect EPE Geotechnical Data	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2340 Develop and Review Practical Alternatives	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>233M Aerial Photography Flight</u></i>	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2360 Prepare and Review EA or DEIS	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>231M Draft Submission to FHWA</u></i>	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2380 Circulate EA or DEIS	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>232M Public Hearing</u></i>	_/_/____
		<b><u>EPE FINAL ANALYSIS</u></b>	
<input type="checkbox"/>	<input type="checkbox"/>	2510 Determine and Review Recommended Alternative	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>250M Concurrence by Regulatory Agencies with Recommended Alternatives</u></i>	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2525 Prepare and Review Engineering Report	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2530 Prepare and Review Request for FONSI or FEIS	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>252M Final Submission to FHWA</u></i>	_/_/____
<input type="checkbox"/>	<input type="checkbox"/>	2550 Obtain FONSI or ROD	_/_/____

		<b><u>CONTAMINATION INVESTIGATION</u></b>	
<input type="checkbox"/>	<input type="checkbox"/>	2810 Project Area Contamination Survey (PCS)	__/__/__
<input type="checkbox"/>	<input type="checkbox"/>	2820 Preliminary Site Investigation (PSI) for Contamination	__/__/__

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

**PRELIMINARY ENGINEERING - DESIGN**

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY
YES	NO		(mm/dd/yyyy)
		<b><u>DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION</u></b>	
<input type="checkbox"/>	<input type="checkbox"/>	3130 Verify Design Scope of Work and Cost	__/__/__
<input type="checkbox"/>	<input type="checkbox"/>	3310 Prepare Aerial Topographic Mapping	__/__/__
<input type="checkbox"/>	<input type="checkbox"/>	3320 Conduct Photogrammetric Control Survey	__/__/__
<input type="checkbox"/>	<input type="checkbox"/>	3321 Set Aerial Photo Targets	__/__/__
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3330 Conduct Design Survey	06/06/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3340 Conduct Structure Survey	06/06/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3350 Conduct Hydraulics Survey	06/06/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3360 Prepare Base Plans	07/25/2011
<input type="checkbox"/>	<input type="checkbox"/>	<i>331M Utility Notification</i>	__/__/__
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3361 Review and Submit Preliminary ROW Plans	07/25/2011
<input type="checkbox"/>	<input type="checkbox"/>	<i>331M Preliminary ROW Plans Distributed</i>	__/__/__
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3370 Prepare Structure Study	07/25/2011
<input type="checkbox"/>	<input type="checkbox"/>	3375 Conduct Value Engineering Study	__/__/__
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3380 Review Base Plans	08/15/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>332M Base Plan Review (Pre-GI Inspection)</i>	08/15/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3390 Develop the Maintaining Traffic Concepts	07/25/2011
		<b><u>PRELIMINARY PLANS PREPARATION</u></b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3510 Perform Roadway Geotechnical Investigation	08/26/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3520 Conduct Hydraulic/Hydrologic and Scour Analysis	09/12/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3522 Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	09/12/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3530 Conduct Structure Foundation Investigation	09/12/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3535 Conduct Structure Review for Architectural and Aesthetic Improvements	05/30/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3540 Develop the Maintaining Traffic Plan	11/09/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3551 Prepare/Review Preliminary Traffic Signal Design Plan	11/09/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3552 Develop Preliminary Pavement Marking Plan	11/09/2011
<input type="checkbox"/>	<input type="checkbox"/>	3553 Develop Preliminary Non-Freeway Signing Plan	__/__/__
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3554 Develop Preliminary Freeway Signing Plan	11/09/2011
<input type="checkbox"/>	<input type="checkbox"/>	3555 Prepare/Review Preliminary Traffic Signal Operations	__/__/__
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3570 Prepare Preliminary Structure Plans	11/09/2011

<input checked="" type="checkbox"/>	<input type="checkbox"/>	3580 Develop Preliminary Plans	11/09/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3581 Review and Submit Final ROW Plans	11/09/2011
<input type="checkbox"/>	<input type="checkbox"/>	<i>351M Final ROW Plans Distributed</i>	<u>  </u> / <u>  </u> / <u>  </u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3590 Review Preliminary Plans (Hold Plan Review Meeting)	11/09/2011
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>352M THE Plan Review (Grade Inspection)</i>	12/06/2011

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

**PRELIMINARY ENGINEERING - DESIGN (cont'd)**

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY
YES	NO		(mm/dd/yyyy)
		<b>UTILITIES</b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3610 Compile Utility Information	11/09/2011
<input type="checkbox"/>	<input type="checkbox"/>	3650 Coordinate RR Involvement for Grade Separations	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input type="checkbox"/>	3655 Coordinate RR Involvement for At-Grade Crossings	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3660 Resolve Utility Issues	
<input type="checkbox"/>	<input type="checkbox"/>	<i>360M Utility Conflict Resolution Plan Distribution</i>	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input type="checkbox"/>	<i>361M Utility Meeting</i>	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input type="checkbox"/>	3670 Develop Municipal Utility Plans	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input type="checkbox"/>	3672 Develop Special Drainage Structures Plans	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input type="checkbox"/>	3675 Develop Electrical Plans	<u>  </u> / <u>  </u> / <u>  </u>
		<b>MITIGATION/PERMITS</b>	
<input type="checkbox"/>	<input type="checkbox"/>	3710 Develop Required Mitigation	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input type="checkbox"/>	3720 Assemble Environmental Permit Applications	<u>  </u> / <u>  </u> / <u>  </u>
<input type="checkbox"/>	<input type="checkbox"/>	3730 Obtain Environmental Permit	<u>  </u> / <u>  </u> / <u>  </u>
		<b>FINAL PLAN PREPARATION</b>	
<input type="checkbox"/>	<input type="checkbox"/>	3821 Prepare/Review Final Traffic Signal Design Plan	<u>  </u> / <u>  </u> / <u>  </u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3822 Complete Permanent Pavement Marking Plan	05/04/2012
<input type="checkbox"/>	<input type="checkbox"/>	3823 Complete Non-Freeway Signing Plan	<u>  </u> / <u>  </u> / <u>  </u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3824 Complete Freeway Signing Plan	05/04/2012
<input type="checkbox"/>	<input type="checkbox"/>	3825 Prepare/Review Final Traffic Signal Operations	<u>  </u> / <u>  </u> / <u>  </u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3830 Complete the Maintaining Traffic Plan	05/04/2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3840 Develop Final Plans and Specifications	05/04/2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>380M Plan Completion</i>	06/06/2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3850 Develop Structure Final Plans and Specifications	05/04/2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3870 Hold Omissions/Errors Check (OEC) Meeting	05/11/2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>387M Omissions/Errors Checks Meeting</i>	06/20/2012
<input type="checkbox"/>	<input type="checkbox"/>	<i>389M Plan Turn-In</i>	<u>  </u> / <u>  </u> / <u>  </u>

<b>MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST</b>
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**PRELIMINARY ENGINEERING – RIGHT OF WAY**

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

## **FOR YOUR INFORMATION**

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

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

**Dennis Kelley: (517) 373-4614**

### **CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:**

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

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

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

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

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

## ATTACHMENT A

### SURVEY SCOPE OF WORK

As of 9/3/08

Survey Limits: The survey requirements listed below are needed to be performed under the direction of a Professional Surveyor working for a prequalified company for Road Design Surveys. General information for the survey must conform to the latest version of the MDOT “Design Survey Standards of Practice.” Questions can be directed to:

Michael C. Barger, PS	Survey Consultant Project Manager	517-241-3431
Bart Franklin, PE	Grand Region Development Manager	616-451-4448
Twila Geiger	Grand Region Survey Technician	616-451-8557

JOB NUMBER: 109687C CONTROL SECTION: 41131  
ROUTE: US-131

TYPE OF SURVEY: Road Design Survey Task 3330

SPECIFIC LIMITS: Northbound: 500 feet South of Leonard Street (Station 900+00) to 1600 feet North of Ann Street (Station 966+00). Southbound: 500 feet South of Leonard Street (Station 900+00) to 2000 feet North of Ann Street (Station 965+00).

PROJECT DESCRIPTION: Topographic mapping along US-131 in Kent County to be used for the addition of a merge lane and structure widening.

**Research:** MDOT will provide the following in digital format when possible and paper if necessary. Some as-built plans may not exist.

- Existing bridge plans
- Existing pedestrian crossing plans
- ROW sheets
- Existing road plans
- Nearby control

Traffic control must be discussed with the MDOT Traffic & Safety Engineer at the Grand Rapids TSC before the price proposal is submitted.

A list of utility providers and as-built information must be provided to the consultant engineer.

**Control:** Control has been established by MDOT forces within 2000 feet of the limits to the North and South of the project. The information will be provided to the successful consultant before the price proposal is developed. The consultant surveyor will need to densify the control for mapping and construction purposes.

**Alignment:** A legal alignment will be required and tied in to the appropriate section corners.

Also, an as-constructed alignment must be developed for the existing roadway. Three alignments total.

**Property:** Accurate ROW must be shown on the plans.

**Mapping:** Topographic mapping is required in the project area. The method of collection is up to the professional surveyor, but scanning should be considered to reduce the need for traffic control to collect hard surface elevations.

- Hard surface observations will be required along US-131 as listed:
  - Lane joint crown (LJC) every 100 feet for the full length of the project
  - Lane joint longitudinal (LJL), edge of shoulder – bit (ESB) and edge of shoulder – gravel (ESG) every 50 feet in horizontal and vertical curves, guardrail sections. All other areas are to be every 100 feet.
- Hard surface observations will be required along all ramps at the Leonard Street & Ann Street Interchanges every 50 feet from the beginning of the taper to a point 50 feet beyond the point of tangency along the streets.
- Other breaklines to be collected between Station 906+00 to 955+00 include bottom of bank (BB), center of ditch (DCH), guardrail (GR) and others as needed. Curb & gutter sections may exist and need to be shown. The topo area stops at the top of curb for Scribner and Turner Avenues closest to US-131.
- The following information is required at all bridges:
  - Cross sections are required at reference lines
  - Bridge seat elevations on East and West ends
  - Underclearances at all lane lines shown on sketches
  - Reference point stationing
  - Abutment footprints
- Bridges exist at the following locations:
  - One bridge at Richmond Street , S17
  - One bridge at GTW RR, X09
  - One bridge at Ann Street, S18
- Utilities are required to be located and the size, inverts and material noted.

**SURVEY PROJECT DURATION:** The above project should take a 2-person crew and one CADD operator with Professional Surveyor oversight roughly 300 total hours to complete.