

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

MDOT PROJECT MANAGER STEVEN C KAHL			JOB NUMBER (JN) 109978	CONTROL SECTION (CS) STATEWIDE
DESCRIPTION IF NO JN/CS STATEWIDE NOISEWALL DESIGN AND INSPECTION SERVICES				
MDOT PROJECT MANAGER: Check all items to be included in RFP. WHITE = REQUIRED GRAY SHADING = OPTIONAL			CONSULTANT: Provide only checked items below in proposal.	
Check the appropriate Tier in the box below				
<input type="checkbox"/> TIER I (\$25,000-\$99,999)	<input type="checkbox"/> TIER II (\$100,000-\$250,000)	<input checked="" type="checkbox"/> TIER III (>\$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 checked="" type="checkbox"/>	<i>Safety Program</i>	
N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Organization 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"/>	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) (No Resumes)	7 pages (MDOT forms not counted)	19 pages (MDOT forms not counted)	Total maximum pages for RFP not including key personnel resumes	

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

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

RFP SPECIFIC INFORMATION

BUREAU OF HIGHWAYS BUREAU OF TRANSPORTATION PLANNING ** OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO YES DATED _____ THROUGH _____

<input type="checkbox"/> Prequalified Services – See page ___ of the attached Scope of Services for required Prequalification Classifications.	<input type="checkbox"/> 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)
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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 3	PROPOSAL/BID DUE DATE 4/5/10	TIME DUE 3:00 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

STEVEN KAHL
CONSTRUCTION AND TECHNOLOGY DIVISION
8885 RICKS ROAD
LANSING MI 48909

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

Lansing Regular Mail**OR****Lansing Overnight Mail**
 Secretary, Contract Services Div - B470
Michigan Department of Transportation
PO Box 30050
Lansing, MI 48909

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

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

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

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

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

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet

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.)

Notification
ARRA MONTHLY EMPLOYMENT REPORTS

Note: This Notification is only applicable for those projects/contracts funded with ARRA funds. If you have questions, please contact MDOT Contract Services Division at (517) 335-0071.

The American Recovery and Reinvestment Act of 2009 (ARRA), requires states receiving stimulus funds for highway projects to provide monthly reports to the Federal Highway Administration (FHWA) regarding the number of employees of the prime contractors, all-tier subcontractors and consultants on ARRA funded projects.

The cost for complying with this Notification must be borne by the prime contractor, and all-tiers of subcontractors and consultants, as part of their overhead and is deemed to be included in the payments made under this contract.

Within 10 days after the end of each month in which work is performed on this contract, all prime contractors and consultants must provide the Engineer a monthly report on MERS at <https://sso.state.mi.us/> providing employment information on each ARRA project, which will include, for work performed in that preceding month:

- The total number of employees who performed work on this contract.
- The total number of hours worked by employees who performed work on this contract.
- The total wages of employees who performed work on this contract.

Prime Consultants are responsible for reporting on all subconsultants' employment information in MERS, as the sub consultants will not have access to do so.

In addition, the prime contractor must provide a total payment amount made to any subcontractor who is a certified DBE in that preceding month.

This Notification shall be included as a part of each subcontract executed by the prime contractor, and all-tiers of subcontractors and consultants.

If necessary to conform to guidance provided by FHWA concerning the ARRA reporting requirements, the prime contractor, and all-tiers of subcontractors and consultants will revise their reporting as directed by the Engineer.

Failure to comply with the reporting requirements under ARRA would jeopardize the Department's continued receipt of ARRA funding.

Accordingly, if a contractor or any-tier of subcontractor or consultant fails to comply with this Notification, the Department may withhold contract payments until compliance is achieved. If the Department is compelled to incur costs because of such a breach, the amount of those costs may be deducted from payments otherwise to be made under this contract. Additional sanctions may include reduction or elimination of prequalification ratings and removal of bidding privileges.

**NOTIFICATION
REQUIRED CONTRACT PROVISIONS TO IMPLEMENT AMERICAN
RECOVERY AND REINVESTMENT ACT (ARRA) SECTIONS 902 AND 1515**

Note: This notification is only applicable for those projects/contracts funded with ARRA funds. If you have questions, please contact MDOT Contract Services Division at (517) 335-0071.

In accordance with requirements under section 902 of the American Recovery and Reinvestment Act of 2009 (ARRA), the following language is made a part of this contract and is to be made a part of all tier subcontracts or consultant contracts:

The U.S. Comptroller General and his representatives have the authority:

- (1) To examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
- (2) To interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

The Comptroller General and his representatives have the authority and rights provided under Section 902 of the ARRA with respect to this contract. As provided in section 902, nothing in section 902 shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

In accordance with the requirements of section 1515(a) of the ARRA any representatives of the Inspector General have the authority:

- (1) To examine any records of the contractor or grantee, any of its subcontractors or sub-grantees, or any State or local agency administering such contract, that pertain to, and involve transactions relating to the contract, subcontract, grant, or sub-grant; and
- (2) To interview any officer or employee of the contractor, grantee, sub-grantee or agency regarding such transactions.

Nothing set forth in section 1515 of the ARRA shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

Michigan Department of Transportation

**SCOPE OF SERVICE
FOR
PRELIMINARY DESIGN SERVICES
Noise Barrier Scoping**

CONTROL SECTIONS: 84900

JOB NUMBER: 109978

PROJECT LOCATION: Statewide

PROJECT DESCRIPTION:

Conduct in-service inspection, condition survey, and quantify amount and type of structural and aesthetic deficiencies of traffic noise barriers located in Michigan. **The noise barrier inspection along I-696 between M-10 and I-75, CS 63102, must be completed prior to all other locations within the project limits and within 45 days of contract award.**

Work involved in the preliminary engineering design of the project consists of obtaining, reviewing, analyzing and incorporating project data and recommendations for all work related to the preparation of the Preliminary Scoping and the Final Scoping Package for the project.

ANTICIPATED SERVICE START DATE: June 1, 2010

ANTICIPATED SERVICE COMPLETION DATE: September 30, 2010

PRIMARY PREQUALIFICATION CLASSIFICATION(S):

Bridge Project Scoping

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Maintaining Traffic Plans and Provisions

DBE REQUIREMENT: 10%

MDOT PROJECT ENGINEER MANAGER:

Steven Kahl, EML 14

Michigan Department of Transportation

Address: 8885 Ricks Road

Phone Number: (517)322-5707

Fax: (517)322-5664 (mailroom)

Email: kahls@michigan.gov

REQUIRED MDOT GUIDELINES AND STANDARDS:

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., AASHTO Guide Specifications for Structural Design of Sound Barriers, 1989, and subsequent interim changes or the most recent version, FHWA Highway Noise Barrier Design Handbook, Report No.FHWA-EP-00-005, February 2000, Michigan Manual of Uniform Traffic Control Devices, etc.).

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

ADDITIONAL INFORMATION:

The CONSULTANT shall prepare a Preliminary and Final Scoping Package for the project location. As part of this contract, the CONSULTANT shall prepare and evaluate proposed treatments for each noise barrier segment within the project location, and shall determine the extent and cost of all work required for its implementation. **The noise barrier inspection along I-696 between M-10 and I-75, CS 63102, must be completed prior to all other locations within the project limits, with a preliminary scoping package of the prioritized locations turned in within 45 days of contract award.**

For the project, complete the Scoping. This will include, but will not be limited to, the following:

- A. Verify the project location and limits.
- B. Conduct field reviews, perform a noise barrier inventory, condition survey, and prepare a log.
- C. Identify noise barrier locations and types (i.e. brick, wood, concrete, metal, berm, concrete block, concrete block faux brick, concrete cast in place, and combinations of these materials).
- D. Label noise barriers using control Sections (example SW01-54041 for walls or EB01-63102 for earth berms). Identify noise barrier segments with GPS coordinates using the MDOT reference datum as stipulated by the MDOT project engineer.
- E. Establish criteria for recommending treatments, to include a description of implementation for each of the treatments. The CONSULTANT shall consult the related institutes (i.e. Masonry, Concrete, timber) regarding treatment options, evaluation criteria and procedures for treatment implementation.
- F. Recommend treatment for each noise barrier segment.
- G. Identify suppliers (a minimum of 3), implementation limitations (i.e. seasonal/temperature limitations, proprietary items, etc), and procedures.

- H. Prepare required documents (to include summary, treatment details, photographs, etc) required to answer all questions relating to the project scope of work (See Attachment A).
- I. Compute and verify all quantities.
- J. Compute and calculate detailed cost estimate.
- K. Identify and provide solutions to any unique problems that may arise during the design of the project or that may affect the constructability including site access.

PRELIMINARY SCOPING PACKAGE

A Preliminary Scoping Package shall be submitted for MDOT review and comment on or before June 15, 2010 for the prioritized locations, and by August 6, 2010 for the remaining locations. The Preliminary Scoping Package shall address all the items listed under Section I. CONSULTANT DUTIES, Attachment A and Section XI. CONSULTANT RESPONSIBILITIES GENERAL (excluding CD's of electronic files to be submitted in Final Deliverable Package).

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

Before the spreadsheets are submitted, a preliminary copy (both hard copy and electronic format) shall be sent to the Project Manager for review and approval as to form and content.

FINAL SCOPING PACKAGE

A Final Scoping Package shall be submitted on or before September 9, 2010. The Final Scoping Package shall address and document all the items listed under Section I. CONSULTANT DUTIES, Attachment A and Section XI. CONSULTANT RESPONSIBILITIES GENERAL (excluding CD's of electronic files to be submitted in Final Deliverable Package). The Final Scoping Packages shall also incorporate the comments and/or changes received from the Preliminary Scoping Package and the Preliminary Scope Review meeting.

FINAL DELIVERABLE PACKAGE

A single Final Deliverable Package shall be submitted on or before September 23, 2010. The Final Deliverable Package shall include the CD's for all items, and all correspondence from items, under Section XI. CONSULTANT RESPONSIBILITIES (GENERAL).

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

For the project location a cost estimate shall be developed. The cost estimate shall include an adjustment for inflation (2% annual rate). The following are the items that shall be considered:

- A. The estimated construction cost shall address:
 - 1. Safety Related Work
 - 2. Noise barrier Repair Items
 - 3. Detours and Maintaining Traffic
 - 4. Miscellaneous
- B. The estimated total cost to design the project.
- C. The estimated number of real estate parcels and type (grading permit, easement or fee).

PROJECT SCHEDULE

The scheduled completion dates for the Preliminary Scoping Package, the Final Scoping Package, and the Final Deliverable Package are shown below. 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. A minimum of 10 working days will be needed for MDOT review of the Preliminary Scoping Package.

<u>Timeframe</u>	<u>Description</u>
June 15, 2010	Submittal of prioritized locations Preliminary Scoping Package
August 6, 2010	Submittal of Preliminary Scoping Packages
August 20, 2010	Preliminary Scope Review Meeting
September 9, 2010	Submittal of Final Scoping Package
September 23, 2010	Final Deliverable Package

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, sub consultant costs, and applied fixed fee.

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

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

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

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

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

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

MONTHLY PROGRESS REPORT

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

FORMAT

The Preliminary and Final Scoping Packages (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 detail sheets, which

may be on 11" x 17" paper (and folded to match the 8 ½" x 11" papers). A cover sheet indicating Control Section, Job Number, Route, and location description and an index shall also be included in each package.

There shall be 4 copies of each Preliminary Scoping Package and Final Scoping Package. One copy of the existing plans used to develop the scope shall also be submitted with the Preliminary and Final Scoping Packages.

The **Preliminary Scoping Package** will each be stapled in the upper left hand corner. If there are any items, in the CONSULTANTS opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package. 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 (physical description and wall segment identification number), direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Packages.

The **Final Scoping Package** will be presented in a labeled (cover and side to list control section, job number, route and location with the paper color to be determined by the Project Manager) three ring binder, with an index and tabbed sections, containing regular letter size paper 8 ½" x 11" for the majority of the documents. 11" x 17" paper may be used for detail sheets. The detail sheets must show the GPS coordinate for each wall section in tabular format using the NAD83 datum reference. 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 (physical description and wall segment identification number), direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Packages.

The **Final Deliverable Package** information shall be presented in a labeled (cover and side to be entitled "JN xxxxxx I-275, I-696, I-75, I-94, I-96, M-6, M-59, US-24, US-127, and US-131 Statewide Noise Barrier Inspection; Correspondence and CD's") three ring binder, with an index and tabbed sections. The hard copies of the correspondence shall be presented on regular letter size paper 8 ½" x 11". For the project, a single CD ROM shall be prepared for the electronic files of the existing wall details and treatment details (.dgn file). A single separate CD ROM shall be prepared for the projects electronic files of the photos (.jpg files) and location map (file type subject to MDOT approval), and GPS coordinate database files. The summary sheets (Word files for text and Excel files for quantity calculations) shall also be presented on a separate CD ROM. Each CD ROM shall be contained in a separate envelope labeled with the control section, job number, project location and the CD contents. Each envelope shall be included as part of the package and shall be attached and connected through the 3 ring binder. Form of connection shall be approved by the Project Manager.

The proposed noise barrier treatment details, as identified in Attachment A, are to be created electronically, using the MicroStation design software, and following all MDOT drafting standards and guidelines. The details are to be created in English units and are to be placed within a single approved MDOT printed sheet. The full size of the MDOT printed sheet is 3ft x 2ft, however, only an 11" x 17", a reduced size copy, needs to be provided.

All spreadsheets for quantity calculations and estimates shall be created using Excel (.xls files). All text summary spreadsheets shall be created using Word (.doc files). Before the spreadsheets are submitted, a preliminary copy (both hard copy and electronic format) shall be sent to the Project Manager for review and approval as to form and content.

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 Project 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 (ROW). This information can be obtained through Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103.

CONSULTANT RESPONSIBILITIES (GENERAL)

1. The Project Manager shall be the official MDOT contact person for the CONSULTANT. The CONSULTANT must either address or send a copy of all correspondence to the Project Manager. This includes all SUBCONTRACTOR correspondence and verbal contact records. The Project Manager shall be made aware of all communications regarding this project.
2. Meet with the Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The CONSULTANT shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the project scoping by the project completion date. Attention shall be given to critical target dates that may require a large lead-time, such as, submittal of the Preliminary Scoping Package, Scope Review Meeting, etc.
3. Maintain a Scoping Project Record that includes a history of significant events (changes, comments, etc.), which influenced the development of the scope, dates of submittals and receipt of information.
4. 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 rights-of-way of the project.
5. Attend any project-related meetings as directed by the Project Manager.

6. The CONSULTANT shall record and submit type-written minutes for all project related meetings to the Project Manager within two weeks of the meeting. The CONSULTANT shall also distribute the minutes to all meeting attendees.
7. The CONSULTANT shall use (SW for walls; EB for earth berms) and control section numbers to label noise structures (example SW01-54041 for walls or EB01-63102 for earth berms).
8. Generate noise barrier details, created electronically (.dgn files) using the MicroStation design software and formatted as described in Section VIII FORMAT, of the existing wall segments for each type of wall using information from old plans, and/or, on site field reviews. The details are to visually describe the existing wall types within the limits of the project. The details are to show existing features of the wall segment.
9. Perform a noise barrier condition survey and prepare a log. The survey shall be completed for each wall segment for the entire wall (each face, both ends and top of each wall segment) within the project limits.

The survey and log shall at a minimum address the following: noise barrier identification, wall location (including GPS points of wall, along with changes in alignment), wall type, wall height, segment length, number of existing joints, location of existing joints, number of joints where limestone cap has lifted if applicable, location of damage, general condition, recommended treatments, and other comments as necessary.

The consultant shall identify noise barrier locations through the use of GPS technology in coordination with MDOT's Planning Division, Asset Management Unit. The GPS coordination shall include creating a data dictionary, transferring and correcting data, and exporting shape files in a format specified by MDOT.

The consultant shall identify locations where private structures have been located directly against or adjacent to the noise barrier.

The consultant shall identify locations where large amounts of rubble and/or large appliances have been located directly against or adjacent to the noise barrier.

The consultant shall identify locations where private fences have been extended directly against or adjacent to the noise barrier.

The consultant shall identify locations where evidence indicates that foundation including sub-grade foundation deficiencies may be located and warrant further investigation.

10. Recommended noise barrier treatments shall have a minimum expected service life of 15 years.
11. The CONSULTANT shall consult the Masonry, Concrete, and Timber Institutes regarding treatment options, evaluation criteria and procedures for treatment implementation. All communications with the Institutes shall be documented and follow XI. CONSULTANT

RESPONSIBILITIES (GENERAL) item #1 and shall be submitted with the Monthly Progress Report.

12. Establish criteria for the evaluation of treatment options from which treatment recommendations will be made. Criteria should be broken down for each of the recommended wall treatments for each existing wall type.
13. Recommend wall treatments for each existing wall segment. Provide detailed materials specifications (i.e. brick color matching, seasonal limitations on material application/installation, etc) for the wall treatments and sources for those materials (a minimum of 3).
14. Develop written procedures for treatment implementation for each of the recommended treatments for each existing wall types. Provide detailed procedures describing how the treatments will be implemented (i.e. construction techniques, access requirements, seasonal limitations, etc).
15. Generate treatment details, created electronically (.dgn files) using the MicroStation design software, and formatted as described in Section VIII FORMAT, for each of the recommended wall treatments, and their implementation, for the wall segments for each existing wall type. The details are to visually describe the proposed treatments and their implementation for each existing wall type within the limits of the project. There may be more than one detail per combination of existing wall type and recommended treatment to completely show treatments and/or implementation procedures (i.e. for the same treatment, implementation procedures may be different due to ROW and/or traffic restrictions).
16. Determine impacts of the proposed wall treatments for each existing wall segment on right of way (ROW). Every effort shall be made to minimize ROW impacts within the limits of the projects. In areas of potential ROW impacts, the CONSULTANT shall request, in writing, copies of ROW maps from the Project Manager (requests may take up to two weeks from the date the request is received to fill) and document and identify the potential need for additional ROW, by station or address, type of ROW required (grading permit, easement or fee), and reason (i.e. temporary access for construction, turf establishment, landscaping, etc.)
17. Document and identify any possible utility conflicts.
18. Review and document the roadside safety related items (i.e. guardrail, barriers, attenuators, etc.) which may need to be modified or included in the project. Documentation to include location, existing type and condition, and the recommended treatment. This information shall be included in the appropriate section of Attachment A.
19. Document and identify (location and who has responsibility for) any existing lighting and/or ITS work which may be impacted.
20. Develop Maintaining Traffic. See Attachment E.

21. Compute and verify all quantities for each segment of wall.
22. Estimates are to be as detailed as possible. Generate a Detailed Cost Estimate, for each type of repair, in spread sheet format.

Costs shall be for each wall segment subtotaled for the total construction cost for each local governmental agency, and totaled to obtain the total construction cost for the project. Cost estimate shall be based on previous or current working knowledge of similar projects. Unit costs shall be derived through direct involvement with masonry/concrete/timber contractors and suppliers.

A separate estimate for Construction Engineering and Preliminary Engineering (Design) shall be developed. The Construction Engineering estimate will be based on a percentage of the Construction Costs, as directed by the Project Manager.

- 23 Identify, contact and coordinate with all affected governmental agencies (County, City and/or Township) within the project limits (and directly abutting if any part of the construction influence area will be within another agencies area). Coordination will involve, at a minimum, an initial letter stating the project and requesting local input, within 30 days, in the development of the detailed scope. A follow up letter, if no response is given, and a final letter stating the process that occurred and what the final scope will be to all affected governmental agencies. There may be the need to attend meetings and receive and return telephone calls from the affected agencies. Any and all local requests with shall be reviewed with MDOT before any commitment to work shall be given to the affected agencies. MDOT shall be informed of any meeting with the affected agencies a minimum of 72 hours in advance of the meeting. All discussions with agencies shall be documented and submitted with the monthly progress reports.
24. Incorporate any MDOT identified and/or approved (if approved, include copy of MDOT approval) local needs/requests into project scope.
25. Provide photographs and digital files (.jpg files) of the existing wall segments, areas of repair and roadside conditions to document the needs as identified in the project scope.
26. Prepare a spreadsheet summary for the project. The spreadsheet shall be prepared as stated in Section VIII FORMAT.
27. Prepare a spreadsheet summary of any local coordination that occurred. The summary shall document the planning/coordination process that occurred with each of the affected local agencies for the project. The summary shall include, at a minimum, specifically what was sent to who and when, what was received from who and when, and what responses were made (and why) to who and when. The spreadsheet shall be prepared as stated in Section VIII FORMAT.

MDOT RESPONSIBILITIES (GENERAL)

- A. Schedule and/or conduct the following:
 - 1. Project related meetings.
 - 2. Coordinate all scoping activities that require MDOT personnel.

- B. Furnish prints of old plans and previous noise barrier inspection reports of the area, if available.

ATTACHMENT A

CS Various – JOB NUMBER

Noise barrier inspection along I-275, I-696, I-75, I-94, I-96, M-6, M-59, US-24, US-127, and US-131

I-275, between I-94 in Romulus and I-96 in Livonia. Approximately 29, 253* linear feet. Control Sections 82292 and 82293.

I-696, between the City of Farmington Hills and the City of St. Clair Shores. Approximately 60,774* linear feet. Control Sections 50061, 50026, 63101, 63102, and 63103. **The noise barrier inspection along I-696 between M-10 and I-75, CS 63102, must be completed prior to all other locations and within 45 days of contract award.**

I-75, between the City of Clarkston in Oakland Co. and the City of Rockwood in Wayne Co. Approximately 49, 349* linear feet. Control Sections 63172, 63174, 82191, and 82194.

I-94 between Kalamazoo and Portage. Approximately 30,390* linear feet. Control Sections 39022 and 39024.

I-94 between Ypsilanti and Ypsilanti Township. Approximately 28,825* linear feet. Control Sections 81041 and 81063.

I-94, between Romulus and St. Clair Shores. Approximately 28,437* linear feet. Control Sections 50111 and 82022.

I-96, between Novi and Farmington Hills. Approximately 4332* linear feet. Control Section 63192.

US-24, between Lone Pine Road and Pine Thistle Lane. Approximately 3200* linear feet. Control Section 63031.

US-127 in Lansing. Approximately 5,000* linear feet. Control Section 33172.

US-131 in Wyoming, North of 54th Street, and from South of 36th Street to M-11 (28th Street). Approximately 7,615* linear feet. Control Section 41131.

M-6 in Byron Center. Approximately 16,203* linear feet. Control Section 41064.

M-59, From Howell Township and between Auburn Hills and Sterling Heights. Approximately 2,973* linear feet. Control Sections 47082, 50023 and 63043.

Total linear feet: 309,104*

Total linear miles: 58.5*

*All linear distances are approximations based on available data. Linear distances may not reflect the entire linear quantity required for inspection.

All non-field work will be done at the Consultant's Office, except project meetings, which shall occur at the Lansing Construction and Technology Building.

ATTACHMENT B

CS Various – JOB NUMBER

Noise barrier inspection along I-275, I-696, I-75, I-94, I-96, M-6, M-59, US-24, US-127, and US-131

The Preliminary and Final Scoping Packages

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

1. Location Map

A location map shall show a map of the project area showing the roadway name, roadway number, project beginning, project ending, project length, major cross streets, interchanges and local municipalities affected.

2. Sign off sheet

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

3. Summary

A project specific Summary (see Attachment C).

4. Detailed Cost Estimate

Estimated are to be as detailed as possible. Generate a Detailed Cost Estimate, for each type of repair, in spread sheet format.

Costs shall be for each wall segment subtotaled and totaled to obtain the total construction cost for the project.

Cost estimate shall be based on previous or current working knowledge of similar projects. Unit costs shall be derived through direct involvement with material contractors and suppliers.

A separate estimate for Construction Engineering and Preliminary Engineering (Design) shall be developed. The Construction Engineering estimate will be based on a percentage of the Construction Costs, as directed by the Project Manager.

5. Evaluation Criteria

Provide criteria developed to evaluate the wall treatments. Criteria should be broken down for each proposed wall treatment for each existing wall type.

6. Proposed Noise barrier Treatment Detail

Generate proposed noise barrier treatment details, for each noise barrier treatment, for each noise barrier type. The treatment details are to visually depict the wall treatments and how they are to be implemented (i.e. need for scaffolding, need for vehicular access, etc.) within the limits of the

project. There may be more than one detail per wall type to completely show treatments and/or implementation procedures (i.e. implementation procedure may be different for the available ROW and/or traffic restrictions).

The MDOT reviewer, by viewing the details, should be able to understand the existing wall types, the proposed wall treatment for the various types of walls, and work that is expected to implement the project. For example, if additional right of way, or scaffolding, will be required, the details should provide a visual explanation as to why so that the MDOT reviewers can evaluate options.

The proposed noise barrier treatment details, as identified in Attachment A, are to be created electronically, using the MicroStation design software, and following all MDOT drafting standards and guidelines. The details are to be created in English units and are to be placed within a single approved MDOT printed sheet. The full size of the MDOT printed sheet is 3ft x 2ft, however, only an 11" x 17", a reduced size copy, needs be provided. The plans are to be folded to match the regular letter size paper 8 ½" x 11".

7. Photographs

Provide photographs and digital files (.jpg files on attached CD ROM) of the existing noise barrier 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 (physical description and wall segment identification number), direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point. A minimum of one photo for each type of repair or fix, for each wall type is required.

8. Materials Specifications & Sources

Provide detailed materials specifications for the major items of work, which may cause problems or complications during construction (i.e. brick color matching, seasonal limitations on material application/installation, etc). Material specifications must include possible sources and suppliers for these materials.

9. MDOT Maintaining Traffic Recommendation

If available, the actual MDOT Maintaining Traffic constraints recommendation (i.e.: meeting minutes, memo, letter, e-mail, etc.).

10. Correspondence

(MDOT, Masonry and Concrete Institutes, Local, etc)

11. Quantity Calculations

12. Condition Survey and Log

13. Scoping Project Record

See Section XI, of the CONSULTANT RESPONSIBILITIES (GENERAL), Item # 3.

ATTACHMENT C

CS Various – JOB NUMBER?

Noise barrier inspection along I-275, I-696, I-75, I-94, I-96, M-6, M-59, US-24, US-127, and US-131

Scope of Work Summary

The Summary is the complete written description and explanation, of the entire project scope.

The Summary shall be written using complete sentences and sentence structure. In addition, simple, clear and concise language is required to ensure that the Summary 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 Summary. Information which has no apparent section may either be placed within a related section or within a newly created section. Keep the addition of new sections to a minimum.

Scope of Work Summary **Date:**

Control Section: **Job Number:** **Route Number:**

Brief Project Description:

Limits of Project

Establish the projects limits (roadway name, roadway number, project beginning, project ending, mile points, project length, major cross streets, local municipalities affected, etc).

Summary of Detailed Cost

A summary of the total estimated construction cost after scoping.

Existing Wall Types

A brief description of each of the existing wall types within the project limits.

For each wall type, include the total wall length, the number of included wall segments, the overall wall condition and the percent of wall segments needing repair.

Proposed Treatment(s)

For each wall type, and for each different type of repair, explain the existing condition, and the recommended treatments.

Implementation Procedure(s)

Provide a detailed written procedure describing how each of the treatments will be implemented (i.e.: construction techniques, access requirements or limitations, seasonal limitations, etc)

Right of Way

A brief statement addressing the existing right of way, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments). If additional right of way is required, note location and type (fee take, grading permit, easement, etc). If there is no impact to right of way, state such.

Maintaining Traffic Issues

A statement addressing how traffic will be maintained during construction.

Construct ability Issues

A statement addressing areas where the scoping team feels needs to be reviewed from a construct ability standpoint.

Guardrail and Attenuators

A brief statement addressing the existing guardrail and attenuators, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Local Concerns

A brief statement addressing local concerns or issues, and the impact that these issues may have on the proposed project

Environmental Issues

Include a brief statement addressing any existing environmental issues, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments). Determine if MDNR permits will be required for the work to proceed.

Utilities

A brief statement addressing the existing utilities present within the area, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Design Exceptions

A brief statement addressing requested or required Design Exceptions needed for this project. Explain where they are needed, why they are needed and the impact to the project if they are not obtained.

Miscellaneous

ATTACHMENT D

CS Various – JOB NUMBER

Noise barrier inspection along I-275, I-696, I-75, I-94, I-96, M-6, M-59, US-24, US-127, and US-131

MONTHLY PROGRESS REPORTS

This shall be the necessary layout of the Monthly progress reports.

Control Section Various

Job Number?

Structure Number SW01/ EB01

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).

ATTACHMENT E

CS Various – JOB NUMBER

Noise barrier inspection along I-275, I-696, I-75, I-94, I-96, M-6, M-59, US-24, US-127, and US-131

DEVELOP MAINTAINING TRAFFIC

1. SCOPE

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

2. WORK STEPS

- A. Review the type of construction task(s) included in the project.
- B. Contact the Project Manager and request a meeting with the Region Traffic & Safety Engineer (allow a minimum of 2 weeks for a meeting date to be determined). Review the traffic data and the project site to determine project specific construction zone traffic requirements. Requirements shall be consistent with the constraints identified at the meeting with the Region Traffic & Safety Engineer. Any necessary or recommended exceptions shall be clearly identified and justification provided.
- C. Prepare preliminary written recommendations for maintaining traffic. Items that SHALL be included in the recommendations at a minimum are:
 - I. Method for maintaining traffic.
 - ii. Need for detour, staging and/or flagging operation.
 - iii. Need for temporary widening and/or shoulder upgrading.
 - iv. Time constraints and laneage requirements.
 - v. Local considerations (school buses, emergency vehicles, large traffic generators, etc.).
 - vi. Need for temporary traffic signals (a minimum of two signal heads in view at all times).
 - vii. Construction zone speed limits.
 - viii. Special events (parades, festivals, etc.).
 - ix. Recommendations for expedited construction.
- D. Submit the recommendations with the Preliminary Scoping Package.
- E. Receive any items returned by the Project Manager and/or from meetings at which maintaining traffic has been discussed, as incomplete or deficient and make the necessary revisions.
- F. Submit the revised recommendations with the Final Scoping Package.