### OHIO TURNPIKE COMMISSION

### **REQUEST FOR PROPOSALS ("RFP")** PAVEMENT REPLACEMENT DESIGN SERVICES

Mainline Pavement Reconstruction for Project Sections at Various Locations on the Ohio Turnpike

The Ohio Turnpike Commission ("Commission") will be issuing a RFP to select two (2) qualified firms to provide the professional engineering services necessary to perform design work associated with the Mainline Pavement Reconstruction Program. This work is being done as a result of recommendations presented in the Commission's 2009 "Mainline Pavement Evaluation" documents. The Selected Firm(s) will design and produce Construction Documents for a five (5) to six (6) mile Project Section consisting of both eastbound and westbound roadways. The Commission shall have the option to modify the Scope of Services with the Selected Firm(s) to include additional Project Sections, however any contract executed on the basis of the RFP shall not exceed five (5) Project Sections. See the Draft Scope of Work enclosed as Exhibit A for the required services.

Any firm interested in submitting a Letter of Interest ("LOI") to respond to the RFP is invited to do so by **5:00 p.m. (EDT) on March 14, 2013.** LOI's should include general information as to why the Firm believes it is qualified to perform the services required for a project of this type. (See Page 2 of this Notice for further details on content of the LOI). **One (1) original and three (3) copies of the LOI are required.** Once the Commission has reviewed the LOI's received, it will select several interested and qualified Firms to elicit sufficient responses to the RFP. Those Selected Firms will then be invited to submit a response to the RFP. The deadline for responses to the RFP is **2:00 p.m. (EDT) on April 11, 2013.** 

Interested Firms are advised that, to be considered as a potential respondent to the RFP, a completed "Request For Qualifications" (RFQ) package for calendar years 2013-2014 must be on file with the Commission. The RFQ package may be obtained from the Commission's Procurement Manager, Kevin Golick.

Firms interested in receiving the RFP may request a draft copy from the Commission's Procurement Manager. Interested Firms may submit specific questions regarding the RFP and/or the LOI requirements. Any questions shall be addressed in writing and emailed to: kevin.golick@ohioturnpike.org, or faxed to 440-234-0232, Attn. Kevin Golick. Please do not contact the Commission by phone. Do not address your questions to anyone other than Mr. The Inquiry Deadline is 5:00 p.m. (EDT) on April 4, 2012. Answers to all questions will Golick. be compiled. A copy of each question and the Commission's response will be forwarded to Firms that so request via email (email address must be provided), and will also be posted on the Commission's Website, www.ohioturnpike.org.

Emailed LOI's are not acceptable. LOI's must be submitted to the following address:

Ohio Turnpike Commission Attn.: Kevin Golick, Procurement Manager 682 Prospect Street Berea, Ohio 44017

### LETTER OF INTEREST CONTENT (Not to exceed ten (10) pages)

- 1. List the types/categories of services for which your firm has a current Qualifications Statement on file with the Commission in response to the 2013/2014 RFQ.
- 2. List significant subconsultants, their categories of service and the percentage of work to be performed by each proposed subconsultant.
- 3. List the Project Manager and other key staff members including key subconsultant staff. Address the experience of the key staff members on similar projects. Provide <u>only</u> the résumé of the proposed Project Manager. The proposed Project Manager must be a professional engineer registered in the State of Ohio.
- 4. Provide references from three (3) governmental organizations other than the Ohio Turnpike Commission for similar projects for engineering design and construction administration/inspection services completed in the past five (5) years. For each reference/project listed, provide a contact name and phone number.
- 5. Describe the capacity of your firm's staff and its ability to perform the work in a timely manner relative to present workload and the availability of assigned staff.
- 6. Provide a description of your Project approach, not to exceed two (2) pages. Confirm the firm's proposed technical approach, cost containment practices, innovative ideas for this type of project and any other relevant information concerning your firm's qualifications to perform the services contemplated.

Items 1-6 must be included in the LOI, which should not exceed ten (10) pages on single sided, 8 1/2" x 11" sheets of paper. To be considered, one (1) original and three (3) copies of the LOI must be submitted no later than 5:00 p.m. (EDT) on March 14, 2012.

### <u>Exhibit A</u> Draft Scope of Work Engineering Design Services

# REQUEST FOR PROPOSALS ("RFP") PAVEMENT REPLACEMENT DESIGN SERVICES

Mainline Pavement Reconstruction for Project Sections at Various Locations on the Ohio Turnpike

# I. INTRODUCTION

The Ohio Turnpike Commission ("Commission") initiated the Mainline Pavement Reconstruction program with a project in 2008 to evaluate the existing condition of the original concrete pavement on the Turnpike's 241.2 mile-long mainline roadway. This Project focused on the evaluation of the existing pavement, making recommendations for pavement reconstruction, and prioritizing Turnpike Pavement Replacement Projects into manageable sections based on the severity of the pavement condition. The results of this evaluation are presented in the "Mainline Pavement Evaluation" documents dated September 25, 2009.

To date, the Commission has bid five (5) single year construction projects that replaced only one (1) side, either eastbound or westbound, of a design section. It is the intent of this RFP to utilize the previous design concepts and standards for all future design sections. It is anticipated that the Selected Firm(s) will design a five (5) to six (6) mile section, both Eastbound and Westbound to be incorporated into one (1) Bid Document and the construction will be performed over two (2) construction seasons.

This RFP seeks the Design Services for the reconstruction of the Eastbound and Westbound center lane, right lane and right shoulder pavements at various locations as directed by the Chief Engineer. Once the Pavement Replacement Program is fully implemented, the intent of the Commission is to annually bid two (2) Construction Projects that are each two (2) years in duration, which equates to four (4) single sided, Eastbound or Westbound sections being constructed yearly. The Selected Firm(s) pursuant to this RFP will prepare the first set of Construction Documents for the 2013/2014 bidding cycle.

# II. SCOPE OF SERVICES

This Scope of Services includes engineering design work associated with pavement reconstruction of the Eastbound and Westbound center lane, right lane and right shoulder for a five (5) to six (6) mile section as defined in the overall master plan attached herein. Each section awarded for consideration will be chosen for the Selected Firm(s) by the Chief Engineer. Each Selected Firm will be provided with a different design section, and will be required to provide these services independently of any other section and Firm. The associated tasks in the Scope of Services are as follows:

### Task 1 – Preliminary Engineering

This Task shall include the preliminary work that is needed to determine and recommend types and methods of pavement reconstruction. This Task is subdivided into the following subtasks: evaluating Geotechnical Data as provided by others; conducting a Field Investigation; developing a Recommended Pavement Design; establishing the Project Limits; and performing Preliminary Maintenance of Traffic design.

### Task 1a – Evaluate Geotechnical Data and Develop Recommended Pavement Design:

The Commission will perform geotechnical exploration at selected locations to provide data on subsurface conditions of the pavement subgrade materials. The work will be performed by others in general

accordance with the ODOT Specifications for Geotechnical Explorations and the final geotechnical report will be made available to the Selected Firm(s). Historic geotechnical information from Third Lane Projects will also be available to confirm existing conditions. The geotechnical report provided to the Selected Firm(s) shall include boring logs, test results, soil plan and profile drawings, and the resulting recommended chemically stabilized subgrade mix designs. The Selected Firm(s) shall review the geotechnical report and utilize the geotechnical report in developing a recommended pavement design and final plans.

### Task 1b – Conduct Field Investigations:

All existing and/or as-built plans for the Project limits shall be reviewed. The Selected Firm(s) shall then conduct a field investigation into the existing conditions of the Project including any drainage, roadside safety, utilities and mainline bridge deficiencies that may exist within the Project limits. This information shall be summarized in a report that provides options for work that may be required as part of the Project.

#### Task 1c – Perform Conceptual Preliminary Maintenance of Traffic ("MOT") Design:

The Selected Firm(s) shall review prior MOT plans and knowledge gained from previous mainline pavement reconstruction projects to develop exhibits for the MOT Plans needed for the assigned Project. The Conceptual MOT Plans shall allow for two (2) lanes of traffic to be maintained in each direction along the Turnpike and shall provide for uninterrupted access to service plazas and/or interchanges. The MOT crossover locations shall be evaluated and identified based on the existing conditions such as horizontal and vertical sight distance, drainage facilities and traffic access points.

#### Task 1d – Establish Project Limits:

The Selected Firm(s) shall start with the preliminary limits that are given to them at the start of the project. The Selected Firm(s) shall finalize the pavement removal limits based on the MOT crossovers established in Task 1c.

#### Task 1e – Conduct a Field Survey:

All existing and/or as-built plans for the Project shall be reviewed prior to the field Survey including any utilities that may be in the area. The intent of this survey is to provide the eventual Contractor accurate horizontal monuments and vertical benchmark information to build the Project. Existing horizontal control at centerline monuments that are located in the median shoulder and alternate sides every 500 feet shall be verified by GPS observation. Vertical benchmarks / Fenos from the Third Lane Plans shall be located and verified through the Project by a closed loop level circuit. A brief survey report shall be prepared summarizing the survey results and modifications. All surveys shall be based on State Plane Coordinates and NAVD 88 datum. Data shall be collected using the ODOT CORS network.

#### Task 2 – Final Design and Construction Documents

This Task includes preparation of the Final Design and Construction Documents for reconstruction of the pavement and associated work. This Task is subdivided into the following: preparing Stage 1 Plans, preparing Stage 2 Plans, preparing Stage 3 Plans and preparing a Construction Cost Estimate.

#### Task 2a – Prepare Stage 1 Detail Design Plans:

Stage 1 Plans shall include Title Sheet, Schematic Plan, Typical Sections, Plan and Profile Plans, Preliminary MOT and Preliminary Drainage. The construction work shall be accomplished within the existing Turnpike right of way and, therefore, no right of way plans will be required. Plans shall be submitted to the Commission for review. The Commission's Review Comments on the Plans shall be incorporated into the Stage 1 Plans, which shall become the basis for the preparation of the Stage 2 Plans as listed in Task 2b.

## Task 2b – Prepare Stage 2 Detail Design Plans:

Stage 2 Plans shall include the complete design of each portion of Work to be constructed and all design issues should be resolved. These plans should include the Title Sheet, Schematic Plan, all General and MOT Notes, MOT Plans, Storm Water Pollution Prevention Plan, Plan and Profiles, Pavement Elevation Tables, Miscellaneous Details, Traffic Control Plans, Bridge Maintenance Plans and OTC Specifications. The Commission's Construction Manager will also perform a Constructability Review of the Final Stage 2 Plans.

### Task 2c - Prepare Stage 3 Detail Design Plans:

Stage 3 Plans shall include the complete design and detailing of the Project. These plans shall include all plans, details, quantities, general summaries and Bid Form required for bidding and constructing the proposed work. Plans shall be sequentially numbered and submitted as a complete set in a PDF format. The Commission's Construction Manager will finish its Constructability Review of the quantities to insure the Stage 3 Plans are Complete.

### Task 2d – Final Construction Documents:

Final Construction Documents shall be prepared based on the approved Stage 1 and Stage 2 Plans. In addition to plan sheets grouped by the function of the Sheets, the Construction Documents shall include the following items:

- General including Title Sheet, Typical Sections, Schematic Plan and General Notes.
- MOT Plan sheets shall be developed to maintain two (2) lanes of traffic safely through the work zones, and also to maintain the operation of the service plazas, interchanges and maintenance buildings. This item also includes the development of details for maintaining traffic through crossovers and for restoring those areas to the desired final condition.
- Quantities Quantities for all aspects of the construction project shall be summarized in individual sub-summaries for each element of the work. These sub-summaries shall be spaced throughout the Plans as appropriate. One (1) General Summary shall be compiled for the entire Project and all sub-summary quantities taken to the General Summary. Quantities and pay items shall follow the Turnpike standards.
- Pavement Elements Typical sections shall be developed for the construction project. Additional detail required at specific locations shall be illustrated using super-elevation tables and pavement elevation details in a plan format.
- Plan Sheets Plan Sheets shall be developed to show the areas of the work. These sheets shall be supplemented by the additional pavement details and sheets as described above. Existing and proposed drainage systems shall be shown. The existing drainage and its functionality shall be reviewed and new drainage systems designed where construction elements or a history of drainage issues exists.
- Stormwater Pollution Control Plans Plans sheets shall be developed to direct the Contractor on the proper measures to control stormwater erosion and sediment runoff during construction. The Plans shall be based on the applicable regulations from the OEPA and any other applicable local regulations.
- Traffic Control Traffic Control Plans shall include the pavement marking and changes to signage along the length of the construction project. Signage work may include replacement of old signs, replacement of signs that are disturbed as a result of the planned construction or new signage as directed by the Commission.
- Bridge Approach Slab Details Plan sheets shall be developed to provide the necessary details for the replacement of all mainline bridge approach slabs including the third lane to be consistent.
- Bridge Maintenance Plan sheets shall be developed for any required bridge maintenance elements as identified by the Commission.
- Special Plans Plans shall be developed to address any special conditions identified during the Preliminary Engineering Phase as approved by the Commission.

- Specifications Standard OTC and ODOT Specifications shall be utilized whenever possible. All standard Specifications shall be reviewed to assure they apply to the assigned Project. Unique Specifications shall be developed as needed. A final list of all Specifications used on the assigned Project shall be provided to the Commission.
- Bid Form A Bid Form shall be developed for incorporation into the final Contract Documents, based on the Microsoft Excel template provided by the Commission.

# Task 2e – Construction Cost Estimate:

The Selected Firm(s) shall prepare an itemized construction cost estimate (Engineer's Estimate) for each assigned project upon completion of the Stage 3 Review and Final Construction Document submission. Individual unit costs shall be estimated for each construction item to ultimately deliver a comprehensive Engineer's Estimate of Construction Cost.

### Task 3 - Construction Phase Services

The Selected Firm(s) shall provide Construction Phase Services for each assigned Project. These services will be coordinated with the Commission's Construction Manager for this program, who will have overall responsibility for managing multiple projects. Construction Phase Services will include, but not be limited to, the following:

### Task 3a – Technical support during the Bidding and Construction Phases:

- The Selected Firm(s) shall assist the Commission during the bidding phase. If a pre-bid meeting is scheduled, the Select Firm shall participate by informing the prospective bidders of the construction project scope and requirements and will assist in preparing the meeting minutes. The Selected Firm(s) shall assist in answering pre-bid questions and preparing addendum plan changes as required.
- The Selected Firm(s) shall assist in answering the Contractor's Request for Information and shall consult with the Commission on all engineering design question with regard to the Construction Project.
- The Selected Firm(s) shall attend and participate in the pre-construction meeting and other conferences as requested by the Commission.
- The Selected Firm(s) shall review the Contractor's fabrication plans, material and products submittals, shop drawing submittals and advising the Commission on the acceptability of such submittals.
- The Selected Firm(s) shall assist the Commission in evaluation of change orders or claims, as necessary.
- At the conclusion of the Project, the Selected Firm(s) shall prepare record plans. The red line drawings from the Contractor and field records from the Construction Manager shall be incorporated into the Bidding Documents. These record drawings shall be submitted in accordance with the Commission's current "Record Drawing Process." The Plans shall be prepared in AutoCAD 2010 or newer format. MicroStation format or translating MicroStation to AutoCad shall not be permitted.

### Task 3b – Construction Engineering and Inspection Services

• The Selected Firm(s) may be requested to provide a Construction inspector(s) to assist the Commission's Construction Manager if so designated by the Commission.