# PENNSYLVANIA TURNPIKE COMMISSION

## **RETENTION OF AN ENGINEERING FIRMS**

### **Geotechnical-Engineering Services - Systemwide**

Two (2) Open End Contracts

# Reference No. 3-250

The Pennsylvania Turnpike Commission will retain two (2) engineering firms for Open-End Contracts to provide geotechnical-engineering services on various projects over the entire Turnpike system. Each contract will be for a period of four (4) years or \$900,000.00, whichever occurs first.

For each Contract, the firm may be required to perform, but will not be limited to, the following geotechnical engineering services: review geotechnical work performed by private engineering firms; perform geotechnical design for Commission designed projects; prepare scopes of work; investigate slope movements and other geologic hazards for future programming; install and/or monitor geotechnical instruments; provide geotechnical consultation during and after construction; provide drilling inspection in accordance with PennDOT Design Manual Part 4 / Publication 293 qualifications and criteria; provide emergency response to geologic hazards; review and comment on Commission procedures and documents; investigate stability of retaining systems; develop specifications; prepare cost estimates; using DARWin software, prepare and review pavement designs; respond to requests from construction and maintenance for various types of investigations; perform stability analyses of slopes and retaining structures; prepare erosion and sedimentation plans; perform scour analyses and develop remedial solutions; perform settlement analyses and develop remedial solutions; review contour grading plans; review value engineering proposals; prepare prints and information required for a value engineering review; prepare geotechnical engineering reports; attend field views and prepare minutes; prepare submissions for field view meetings; perform field reconnaissance; plot topography and cross sections; and attend coordination and status meetings with Commission personnel and prepare meeting minutes.

In most cases, the Commission will provide drilling and sampling services through separate open-end drilling contracts. The Consultant may be required to inspect these operations or have a presence in the Commission's office to provide the necessary assistance required. The firm may be required to let separate contracts for drilling and will be required to have soil, rock and water testing capabilities including resilient modulus testing. The soil and rock testing must be performed at an AASHTO Materials Reference Laboratory (AMRL) accredited laboratory and the water testing must be performed at a Pennsylvania Department of Environmental Resources certified laboratory. Some tests may be required to be performed under a HASP.

The firm may be required to provide deep foundation geotechnical consultation services associated with drilled shaft design, construction, and testing. Testing methods should include, but are not limited to, deep foundation load testing, Crosshole Sonic Logging (CSL), and pile integrity testing. Demonstrate the ability to interpret the results of such testing to assist the Commission with identifying anomalies, defining flaws versus defects and make recommendations as to retesting, remediation, replacement, and/or redesign. This includes all aspects of Dynamic Pile Analysis: interpret the results of a Pile Driving Analyzer (PDA) to determine hammer performance and recommend driving criteria in the field. Exhibit a clear understanding of wave propagation theory including wave equation (WEAP) and bearing capacity (CAPWAP) software.

The firm may also be required to provide blast design consulting services focused on the optimization of blasting performance along with the mitigation of the negative impacts of blasting such as ground and air vibration. This work will include, but is not limited to, reviewing contractor's blasting plans, making site visits to areas on and off/adjacent to the Turnpike system, providing recommendations, consultation during construction, preparing legal agreements, and providing meeting documentation/minutes/video recordings when requested and/or required. Specialization is required in liability seismology, instrumentation design and software development. The objective of this service is to optimize blasting designs to mitigate vibration impacts, minimize/eliminate fly rock hazards, enhance rock fragmentation, improve slope stability and increase overall blast performance.

Environmental related work may include, but not be limited to, the following; perform geotechnical investigations under a Health and Safety Plan; develop Health and Safety Plans (HASP) for projects; develop remediation for acid mine drainage (AMD) problems; review preliminary area reconnaissance (PAR'S), initial site assessments (ISA'S), preliminary site investigations (PSI'S), detailed site investigations (DSI'S), and waste management plans.

The format and content of all documents, plans and specifications will be consistent with applicable State and Federal regulations and guidelines.

The geotechnical, geological and engineering services identified above are the general work activities that can be expected under this Open-End Contract. A more specific and project-related scope of work will be outlined for each individual Work Order developed under this Open-End Contract.

### GENERAL REQUIREMENTS AND INFORMATION

Firms interested in providing the above work and services are invited to submit three (3) copies of a Statement of Interest with the required information. The Statements of Interest must include the following:

 One page transmittal letter clearly identifying the project reference number, brief description of the project from the advertisement, the firm's federal identification number, the firm's legal name, contact person or project manager, and address of corporate office and project office (if the firm has multiple offices, the location of the office performing the work must be identified).

- 2. A three (3)-page statement of interest on the advertised project. Each firm should demonstrate its ability to perform the specific requirements indicated for this project and provide explanation of the technical approach including the roles of each subconsultant and the extent that each subconsultant will be utilized.
- 3. An organization chart for the project, identifying key personnel and identifying all subconsultants and their specific assignments. Any deviation from the subconsultants listed in the statement of interest will require written approval from the Commission's Chief Engineer.
- 4. Tabulation or listing of workload for the prime consultant and all subconsultants for all Pennsylvania Department of Transportation and Turnpike Commission projects. Do not graphically represent the firm's workload.
- 5. A Consultant Qualification Package similar to the one submitted to the Pennsylvania Department of Transportation for the current year or one that is best suited for this project. A copy of the Consultant Qualification Package printed directly from the Department's ECMS website is acceptable.

The Consultant Qualification Package should contain, at a minimum, the following information for the prime consultant and all subconsultants and attached to the back of the Statement of Interest (subs to follow primes):

- ECMS General Information and Project Experience Forms or Standard Form (SF) 254/255 or 330 Architect-Engineer and Related Services Questionnaire in its entirety, either not more than one (1) year old as of the date of the advertisement.
- Resumes of key personnel expected to be involved in the project (limit to three (3) 8<sup>1</sup>/<sub>2</sub> x 11 pages, per person). Only resumes of key personnel should be included.
- Copy of the firm's registration to do business in the Commonwealth as provided by the Department of State for firms with out-of-state headquarters or corporations not incorporated in Pennsylvania.
- A copy of the firm's DBE/MBE/WBE Certification, if applicable.

The Turnpike Commission is committed to the inclusion of small, disadvantaged, minority, and woman firms in contracting opportunities. Small, disadvantaged, minority, and woman-owned firms as certified by the Pennsylvania Unified Certification Program (www.paucp.com), and other firms who have not previously performed work for the Commission are encouraged to submit a Statement of Interest.

For guidance regarding Engineering Involvement Restrictions, see PennDOT Publication 93, Section 1.5. If a Joint Venture responds to a project advertisement, the Commission will not accept separate Statements of Interest from joint venture constituents. A firm will not be permitted to submit a Statement of Interest on more than one (1) joint venture for the same project reference number. Also, a firm that responds to a project as a prime may not be included as a designated subconsultant to another firm that responds to the same project advertisement. Multiple responses under any of the forgoing situations will cause the rejection of all responses of the firm or firms involved. This does not preclude a firm from being set forth as

a designated subconsultant to more than one prime consultant responding to the project advertisement.

The following evaluation criteria are listed in relative order of importance and will be considered by the Commission during the evaluation of the firms submitting a Statement of Interest for this project:

- a. Prime consultant's and subconsultants' specialized experience and technical competence in the requested geotechnical services. The Team must clearly demonstrate an ability to analyze available data, make decisions in a timely and cost effective manner.
- b. Specific experience of key staff relevant to the requested services.
- c. Team's ability to meet staffing needs and ability to handle multiple assignments with short delivery schedules.
- d. Team's ability to provide specialized services such as blast design.
- e. Past record of performance with respect to cost control, work quality, ability to meet schedules and previous experience on similar contracts; identify similar contracts managed by the firm as the prime, the magnitude of the contracts, and the clients.
- f. Firm's ability and reasonableness of the firm's strategy to ensure a quality product. Provide discussion on the proposed team's QA/QC program and how the prime consultant will ensure the accuracy and completeness of all deliverables.

Address these items and any necessary further details in a brief yet comprehensive manner in the Statement of Interest.

Questions and inquiries concerning this solicitation should be directed to Mr. Kenneth M. Heirendt, P.G., Pennsylvania Turnpike Commission, Western Regional Office, at 724/755-5187 Contractual questions should be directed to Mr. Donald S. Klingensmith, P.E. at (717) 939–9551, extension 5850; or by e-mail at <u>dklingen@paturnpike.com</u>.

### GENERAL REQUIREMENTS AND INFORMATION

Firms interested in performing the above services are invited to submit three (3) copies of a Statement of Interest and required information to Mr. Donald S. Klingensmith, P.E., Director of Contracts Administration, at the PA Turnpike Commission Administration Building. Our ground address for overnight/next-day deliveries is 700 South Eisenhower Boulevard, Middletown, PA 17057. Our mailing address for U.S. Mail is P. O. Box 67676, Harrisburg, PA 17106-7676. Please note that use of U.S. Mail, FedEx, UPS, or other delivery method does not guarantee delivery to the Contracts Administration Department by the time listed below for submission. Firms mailing a Statement of Interest should allow sufficient delivery time to ensure timely receipt of its Statement of Interest.

The Statement of Interest and required information must be received by the Contracts Administration Department by 12:00 PM (noon), Local Time, **Thursday, September 12, 2013**.

Any Statements of Interest received after this date and time will be time-stamped and returned. A Statement of Interest submission that includes or considers a firm's cost as a factor will be disqualified.

Based on an evaluation of acceptable Statements of Interest received in response to this solicitation, two firms will be selected by the Commission from this advertisement. Technical Proposals will not be requested before the selection. Statements of Interest will be reviewed, evaluated, and rated by a Technical Evaluation Team (TET) of qualified personnel based on the evaluation criteria listed above. The TET will present the evaluations to the Professional Services Procurement Committee (PSPC). The PSPC will review the TET's evaluation and provide the Commission with the firm(s) determined to be highly recommended for this assignment.

The Commission will select the most highly qualified firms for the assignment or the firms whose Statement of Interest is determined to be most advantageous to the Commission by considering the TET's evaluation and the PSPC's determination as to each firm's rating. In making the PSPC's determination and the Commission's decision, additional selection factors may be considered, taking into account the estimated value, scope, complexity and professional nature of the services to be rendered and any other relevant circumstances. Additional selection factors may include, when applicable, the following: geographic location and proximity of the firm, firm's Pennsylvania presence or utilization of Pennsylvania employees for the assignment; equitable distribution of the work; diversity inclusion; and any other relevant factors as determined as appropriate by the Commission.

The Commission may revise a published advertisement. If the Commission revises a published advertisement or posts an addendum to this RFP less than ten days before the Statement of Interest due date, the due date will be extended to maintain the minimum ten-day advertisement duration if the revision or addendum alters the project scope or selection criteria. Firms are responsible to monitor advertisements to assure the Statement of Interest complies with any changes in the published advertisement.

The Commission reserves the right to reject all Statements of Interest, to cancel solicitation requested under this notice, and/or to re-advertise solicitation for the work and services.

William K. Lieberman Chairperson