

PUBLIC NOTICE FOR THE
MARYLAND DEPARTMENT OF TRANSPORTATION

2014-11

Structures Hydrology and Hydraulics Engineering Design Services

NOTICE TO ARCHITECTS & ENGINEERS

TRANSPORTATION PROFESSIONAL SERVICES SELECTION BOARD

REQUEST FOR PROFESSIONAL SERVICES

The Secretary of the Maryland Department of Transportation has certified to the Transportation Professional Services Selection Board the need to utilize the services of architects or engineers for the following project(s).

Firms interested in being considered for work on any Project must submit an Expression of Interest for that Project as set forth herein. The Expression of Interest shall be in an envelope marked with the specified contract number for the Project. The letter portion of the Expression of Interest shall indicate the firm's desire to perform services and indicate the specific tasks or areas of expertise, which will be subcontracted, and to whom. Interested firms must submit the material required herein or the interested firm will not be considered for the Project.

Of all the firms expressing interest in a Project, those adjudged most qualified shall be requested to submit Technical Proposals. Additional information will be supplied to the selected firms so that they can prepare such proposals for the Project. The firm that submits the highest rated Technical Proposal will be requested to submit Price Proposals. For projects that are 100% State funded, Price Proposal cost limitations such as, but not limited to, a payroll burden and overhead limitation of 130%, may apply. This project will be federally funded and Price Proposal cost limitations on payroll burden and overhead shall not apply. However, MDOT reserves the right to require that split payroll burden and overhead rates be submitted appropriate for the type of services to be provided (example, Office Rate for planning/design activities and Field Rate for construction inspection). If negotiations with the firm are timely and successful, a contract may be awarded to that firm. If an interested firm is requested to submit proposals, their proposals should substantially reflect the same composition and area of involvement as their Expression of Interest.

If a Joint Venture responds to a project advertisement, the Department of Transportation will not accept separate Expressions of Interest from the Joint Venture constituents. A firm will not be permitted to submit on more than one (1) Joint Venture for the same project advertisement. Also a firm that responds to a project advertisement as a prime or a prime joint

venture constituent may not be included as a designated subcontractor to another firm that responds as a prime to the project advertisement. Multiple responses under any of the foregoing situations may cause the rejection of all responses of the firms involved. The above does not preclude a firm from being set forth as a designated subcontractor to more than one (1) prime responding to the project advertisement.

All questions concerning submissions and procedures must be submitted by email to opcm@sha.state.md.us no later than 4:00 pm one (1) week prior to the due date. The BCS number must be referenced in the email subject line. Problems submitting emails shall be reported to the Consultant Services Division (CSD) telephone number 410-545-0434.

All addendums to this advertisement will be posted only on eMaryland Marketplace and on the Consultant Services Center page of the Maryland State Highway Administration's Webpage (www.roads.maryland.gov).

Consultants shall have the ability to provide background investigation results for Consultant personnel assigned to work on Maryland State Highway Administration (SHA) projects.

Minority business enterprises are encouraged to respond to this solicitation notice.

RESPOND TO:

Norie Calvert
MARYLAND STATE HIGHWAY ADMINISTRATION
OFFICE OF PROCUREMENT AND CONTRACT MANAGEMENT
Fourth Floor, Mail Stop C-405
707 North Calvert Street
Baltimore, Maryland 21202

1. Project Description:

To provide structures hydrologic and hydraulic engineering design services involving bridges, small structures and/or incidental hydraulic structures such as dams, concrete weirs, etc., statewide.

SHA anticipates awarding five (5) contracts, each for a five (5) year duration and not to exceed One Million Dollars (\$1,000,000). SHA reserves the right to modify the number of contracts and the total dollar value as deemed appropriate.

This contract will be administered solely by SHA's Office of Structures (OOS) located at 707 North Calvert Street Baltimore, Maryland 21202, to support the Architectural and Engineering needs of SHA, statewide, and will be funded with both State and Federal Funds. Assignments may be made anywhere in the state to support other SHA Offices with the prior approval of the SHA Deputy Administrator. In addition, this contract may be used to provide services to the Maryland Department of Transportation (MDOT), or any of the MDOT modal administrations, at the direction and with the express prior written authorization of the Secretary of Transportation or the Secretary's designee. Any tasks assigned under this contract must be for services as outlined in the contract scope of work and in conformance with all contract terms and conditions and payment provisions.

2. Consultant Services Required:

Firms with expertise in Hydrology and Hydraulics engineering design to provide the following, but not limited to the services for hydrologic and hydraulic engineering:

- Field investigations and field surveys;
- Development of stream cross sections, comprehensive floodplain studies that may include hydrology, hydraulics, bridge scour;
- Fluvial geomorphology and stream stability studies for structures projects,
- River mechanics, sediment transport investigations;
- Fish passage and Aquatic Organism Passage (AOP) studies;
- Flood investigations;
- Preliminary roadway alignment and profile design for alternative studies;
- Revisions to Federal Emergency Management Agency (FEMA) models, and FEMA coordination;

- Both the FEMA and scour investigations should be performed concurrently with the modeling required to obtain MDE/COE Permits;
- Applied research studies related to procedures and methodologies used by the Structure Hydrology and Hydraulics Division;
- Development and updates of relevant engineering applications for the hydraulic evaluation of new and existing hydraulic structures will be required;
- Water quality improvement work including storm water and sediment control analysis and design;
- Construction inspection services;
- Consultant may be required to provide expert testimony related to governmental regulatory action and/or design details of a controversial nature;
- On-site engineers may be required to work at SHA facilities;
- Provide complete services for a minimum of three projects simultaneously;
- and all other engineering professional services related to Structures Hydrology and Hydraulics.

Some examples of Hydrologic and Hydraulic work include, but are not limited to the following:

- Work assignments under this contract generally include bridges and large culverts. The scope of work may also include small structures and water quality improvements work that may include storm water and sediment control analysis and design.
- Performing the necessary hydrologic, hydraulic and scour analysis;
- Utilization of hydrologic and hydraulics analyses to determine the cause of flooding and make recommendations as to means for correcting, or mitigating the problems;
- Consultant may be required to determine the type, size and location of hydraulic structures;
- Provide recommendations relative to channel stability measures, realignments or modifications where such actions may be deemed necessary;

- The use of computer programs such as HEC-RAS, SRH-2D, , TUFLOW, GIS-Hydro 2000 (the latest version) and/or the next GISHydro generation, ESRI future generation of GIS products, TR-20, WIN TR-20, ABSCOUR, TIDEROUT2, TIDAL PRISM ANALYSIS, MPADD, and possibly HEC-2 if FEMA is involved, and other software applications that may become available over the life of the contract, will generally be required to generate multiple water surface profiles within the stream reaches under investigation;
- Construction inspection for the implementation of channel stability and/or restoration design, floodplain field surveys for the purpose of developing hydraulics models, detailed stream morphology surveys for the development of stream morphology studies, and conceptual, semi-final and final design plans for the stream stability designs at bridges and large culverts;
- Geomorphic surveys and designs performed by qualified and experienced hydraulics engineers with no less than Level Four Rosgen training, an in-depth knowledge of stream morphology, the Rosgen stream classification system and field techniques described in Chapter 14 of the Office of Structures Hydrology and Hydraulics Design Manual (H&H Design Manual);
- Completion of reports in accordance with the latest edition of the OOS H/H Design Manual, and the Maryland Water Management Administration, Corps of Engineers Joint Permit requirements, and Federal Emergency Management Agency (FEMA) regulations.
- Scour analyses and recommendations for various structures to design against scour failure.
- Identifying properties affected by flooding, attending public hearings for permits, and any other work required to perform hydrologic/hydraulic engineering design and drafting for the purpose of preparing maps, plans, profiles, tables, etc.; In general, the work performed by the Consultant will not directly result in an advertised contract, however, there may be instances where this will be necessary;
- and all other engineering professional work related to Structures Hydrology and Hydraulics.

3. Potential Restrictions:

The firm(s) selected for a given Contract will be required to provide engineering services for any SHA design and construction project, including Design/Build projects. This may limit the firm's potential for pursuing work with a contractor on the same Design/Build project after advertisement. State Government Article 15-508 of the Annotated Code of Maryland will dictate the Consultant's eligibility to pursue work on Design/Build projects after advertisement.

As per State Finance & Procurement, State Government Article 17-701 – 17-707 of the Annotated Code of Maryland the firm(s) selected for a given Contract will be required to provide “Certification Regarding Investments in Iran”. See below 4(f.)

4. Required Information: The Consultant shall submit the following per the specified requirements listed below of:
- A Compact Disc (CD) in a protective case labeled with the BCS number, Project Title and Prime/JV’s firm name to include: One (1) full PDF version of the Expression of Interest (EOI) submittal as well as Sub-Folders containing the associated individual PDF files for each Section required herein. Sub-Folders and Sections must be labeled to identify each accordingly. All PDF documents must follow the naming convention of (BCS #-Prime/JV Name-Name Identifying the Document (ie: BCS 2014-11-ABC Firm-Letter of Interest);
 - One (1) original and five (5) copies of the EOI comprised of:
 - a. One (1) Letter of Interest - Limited to one (1) page which must contain the address of the firm’s closest location to 707 North Calvert Street Baltimore, Maryland 21202, information supporting the assertion that the Consultant has the financial capacity to provide the services requested, has measures in place to protect the State against errors and omissions, and provide the names, contact numbers and email addresses of the Primary Liaison, Disadvantaged Business Enterprise (DBE) Consultant Liaison Officer for Minority Affairs, and your firm’s contact person for this procurement process. The Primary Liaison, DBE Liaison Officer, and the firm’s procurement contact may be the same or different individuals.

Note: US Government forms are to be completed with standard size typing and are not to be photo reduced. Computer generated forms are acceptable; however, the format and spacing is to be identical to that of the Standard Forms (SF) 254 and 255 unless directed otherwise.

- a. One (1) SF 254 for each firm, including each subcontractor, proposed.
- b. One (1) SF 255.

The SF 255 must be completed paying special attention to the following:

- i. Item #4, Personnel by Discipline, the Consultant shall document personnel by discipline presently employed at the work location proposed. If more than one (1) location is being proposed by the Consultant, the Consultant must clearly document all locations proposed and show the total number of personnel by discipline for all locations proposed. Subcontractor personnel are not to be included.

- ii. Item #6, Outside Key Consultants (Sub-Consultants): Please follow directions provided in Step 5. Special Requirements – DBE Provisions to complete Item # 6 of the SF 255.

- iii. Item #7, Key Staff. Provide a brief resume for each of the Key Staff individuals outlined below, limited to two (2) Key Staff per page, not to exceed one and one-half (1.5) pages in total. **All Key Staff must possess a Bachelor’s degree in either Civil Engineering, or in a relevant area of water resources or related engineering field. Key Staff individual experience shall be recent experience performed within the past ten (10) years.** The Consultant must document in writing in Item #7 that the Key Staff individuals meet the following requirements:
 - 1. **Key Staff 1:** A Professional Engineer (PE) registered in the State of Maryland with expertise in hydrology, hydraulics and bridge scour with a minimum of 10 years of experience in hydrology, hydraulics, and bridge scour employed by the Prime/JV; who will serve as the Project Manager and the Primary Liaison;

 - 2. **Key Staff 2:** A Professional Engineer (PE) registered in the State of Maryland with expertise in hydrology, hydraulics and bridge scour with a minimum of 10 years of experience in hydrology, hydraulics, and bridge scour employed by Prime/JV; who will serve as the Secondary Liaison; and,

 - 3. **Key Staff 3:** A Professional Engineer (PE) registered in the State of Maryland with expertise in Stream Morphology with a minimum of 10 years of experience in hydrology, hydraulics, bridge scour and geomorphology employed by the Prime/JV or any of the subconsultants. The Key Staff in charge of stream morphology shall ideally combine hydrology/hydraulics, bridge scour and sediment transport knowledge with a proven stream morphology expertise to be responsible for development and review of Applied Stream Morphology studies and conceptual, semi-final and final designs of stream stability measures required to maintain and/or restore channel stability in the area of the waterway crossing.

It is the Prime’s responsibility to clearly and accurately represent all information for Key Staff individuals (ie: education, years experience, licenses/certifications etc.). Maryland Registered and the Maryland License Registration Certificate Number and year initial license issued must be included in the resume for each individual as applicable.

Where Maryland Registrations are required for the professional Key Staff,

the Consultant shall include on line "f" of Item #7 of the SF 255 the words "Maryland Registered" and the Maryland License Registration Certificate Number for the individual. Failure of the Consultant to properly document Key Staff requirements in writing will result in the firm being precluded from further consideration for the Project.

- iv. Item #8, Similar Projects: Limited to five (5) similar projects, one (1) similar project per page for a total of five (5) pages. The columns below the Similar Project Information entered under the Column A-E headers may be removed to create one large block to answer only Column B "Nature of the Firm's Responsibility." Photos are acceptable; however, all photos count in the overall space limitations for the page and are considered illustrations and not rated. The Similar Projects set forth shall be recent experience performed within the past ten (10) years. (Information provided in this section shall become part of the rating/evaluation criteria for this project.)
- v. Item #9 is not required. Any information presented in Item #9 will not be reviewed or considered in the evaluation process.
- vi. Item #10 of the SF 255 shall be limited to four (4) pages and must address the Consultant's specialized expertise in hydrology, hydraulics, bridge scour, flooding, fluvial geomorphology, river mechanics, natural channel design, sediment transport investigations and designs of stream stability measures.
- d. In addition to the Key Staff's brief resumes required in Item #7 of the SF 255, provide a one (1) page resume for each of the three (3) proposed Key Staff, outlined above in Section 4.c.iii. Format is at the firm's discretion. Resumes can either be inserted after the SF 255 or in a separate section created just for the resumes. (NOTE: Please exclude any confidential personal information. If required the business address and phone number may be used)
- e. A copy of the Prime/JV's current certificate(s) of insurance.
- f. As per State Finance and Procurement, State Government Article 17-701 - 17-707 of the Annotated Code of Maryland, a firm engaging in investment activities with companies appearing on the Investment Activities in Iran list is ineligible for bid/proposal/award. The Investment Activities in Iran list is located at www.bpw.state.md.us of the Maryland Board of Public Works (BPW) web site. As per the BPW Advisory No.: 2013-11, Date Issued January 1, 2013, an officer of the Prime/JV firm shall provide a signed original certification as per language listed on the BPW Advisory page.

- g. The Consultant shall comply with the "Requirements" and "Special Requirements" set forth hereinafter when completing the aforesaid documentation.

5. Special Requirements - DBE Provisions:

The Maryland Department of Transportation (MDOT) hereby notifies all proposers that in regard to any contract entered into pursuant to this advertisement, DBEs will be afforded full opportunity to submit expressions of interest in response to this notice and will not be subject to discrimination on the basis of race, color, national origin, age, sex or disability in consideration for an award (23 CFR § 200, 49 CFR § 21 and 26).

It is the goal of MDOT that certified businesses participate in all contracts. Each contract may contain a goal for DBE participation, on a contract-by-contract basis. Consultants interested in submitting an Expression of Interest must comply with the "SPECIAL PROVISIONS, AFFIRMATIVE ACTION REQUIREMENTS, UTILIZATION OF DISADVANTAGED BUSINESSES THE SURFACE TRANSPORTATION AND UNIFORM RELOCATION ASSISTANCE ACT OF 1987, ISTEA OF 1991 AND MAP 21 OF 2012.

To comply with the aforesaid SPECIAL PROVISIONS, Consultants who submit Expressions of Interest must clearly set forth the DBE Prime firm(s) or DBE subcontractor(s) proposed for goal attainment indicating:

- a. The proposed work,
- b. Percentage of total work,
- c. MDOT certification number, and
- d. Applicable NAICS Codes

for each DBE. **Said information shall be shown in Item #6 of the SF 255 form.** Proposed DBE firms must be certified by MDOT to participate on federally funded Projects. If the proposed DBE firm is not certified by MDOT, the Consultant shall indicate the certification status of the proposed DBE firm in lieu of the certification number.

The Consultant's failure to submit all of the required DBE information, in the specified areas, will result in the Consultant being disqualified from further consideration for the Reduced Candidate List on this Project, unless it is in the best interest of the State to seek clarification or additional information from the Consultant.

CONTRACT GOALS

For the purpose of this contract, a goal of **twenty percent (20%)** has been established for DBEs. DBE proposers have to meet the established DBE goal by either their own forces or approved DBE subcontractor(s).

6. Additional Information: SHA reserves the right to develop multiple Reduced Candidate Lists from those firms responding to this advertisement or to make multiple selections from one (1) Reduced Candidate List.
7. Electronic Transfer: By submitting a response to this solicitation, the Consultant agrees to accept payments by electronic funds transfer unless the State Comptroller's Office grants an exemption. The selected Consultant shall register with the EFT Registration, General Accounting Division using the COT/GAD X-10 Vendor Electronic Funds (EFT) Registration Request Form, available at <http://compnet.comp.state.md.us/gad/pdf/GADX-10.pdf> . Any request for exemption must be submitted to the State Comptroller's Office for approval at the address specified on the COT/GAD X-10 form and must include the business identification information as stated on the form and include the reasons for the exemption.
8. Rating Criteria: The major factors/criteria for the establishment of a Reduced Candidate List for this Project, in descending order of importance, will be:
 - a. Key Staff;
 - b. Similar Project Experience;
 - c. Specialized expertise in hydrology, hydraulics, bridge scour, flooding, fluvial geomorphology, river mechanics, natural channel design, sediment transport investigations and design of stream stability measures;
 - d. Past Performance; (Shall be based on the past two (2) years performance rating for work performed for SHA. Firms with no ratings shall be given an average of all the firms rated.)
 - e. Capacity to accomplish proposed work in required time;
 - f. Compatibility of size of firm with size of proposed project;
 - g. Firm's Location;
 - h. Financial Responsibility; and,
 - i. Consultant has measures of protection for the State against errors and omissions.
9. Additional Information: SHA may carry forward Key Staff, Similar Projects and Specialized Expertise submitted at the Expression of Interest (EOI) stage. Changes to Key Staff are allowed at any time. All Key Staff changes must be approved by SHA and substitutions will be evaluated using the same rating criteria.
10. Facsimile/e-mail copies of the Expression of Interest are not acceptable. No response received after 12:00 P.M. (NOON) on the date specified for a Project will be accepted, no matter how transmitted.

The outside of the Expression of Interest submittal envelope/package must include the following:

Expression of Interest Submittal for BCS Number

Expression of Interest Service Title

Expression of Interest Due Date and Time

Firm Name

Firm Address

Respond by: May 6, 2015 prior to 12:00 P.M. (NOON)

RESPOND TO:

Norie A. Calvert

MARYLAND STATE HIGHWAY ADMINISTRATION

OFFICE OF PROCUREMENT AND CONTRACT MANAGEMENT

Fourth Floor, Mail Stop C-405

707 North Calvert Street

Baltimore, Maryland 21202