SCOPE OF SERVICES

Solicitation Number: CLMP167
Project Name: Engineering Services for Peer Review of Barton Springs Road Bridge over Barton Creek

PROJECT FOR:

City of Austin, Public Works, through its Contract Management Department

PROJECT TITLE:

Peer Review: Barton Springs Road Bridge over Barton Creek

OBJECTIVES OF THE PROJECT:

The City of Austin (City) anticipates selecting a professional services Engineering Firm to perform a Peer Review of structural functions only associated with the design and construction for the rehabilitation or replacement of the Barton Springs Road Bridge over Barton Creek (Barton Creek Bridge).

BACKGROUND:

The primary purpose of the Barton Creek Bridge rehabilitation or replacement project is to provide a bridge that provides safe and efficient access for people, goods, and vehicles across Barton Creek. The bridge must serve for 100 years if replaced and 40 years if rehabilitated, and meet current design standards for cars, trucks, pedestrians, and bicycles. The bridge is critical to the welfare of the daily commuters because it provides connection for vehicular access to several major roads and communities.

The Barton Creek Bridge is located near the intersection of Robert E Lee Road. The 3-span open spandrel concrete arch bridge on concrete bents was originally built in 1925 and was expanded on one side in 1946. The current bridge is 212’ long and 58’-8” wide. Structurally it appears to be in fair condition; however, the deck width and geometry are extremely obsolete. The bridge is currently a bottle-neck for the enhancement of all modes of travel on Barton Springs Road approaching Zilker Park from the east. The preliminary design concept approximately doubles the width of the bridge deck to accommodate 2-6’ sidewalks, 2-5’ bicycle lanes, 4-10’ travel lanes and a 15’ median thus matching the new cross section of Barton Springs Road established by the reconstruction of that roadway east of Robert E Lee Rd.

The Barton Creek Bridge area is very sensitive in several respects. The area is considered highly environmentally sensitive, surrounded by critical urban park property on all sides. It crosses the most sensitive urban watershed in Austin, Barton Creek, and is a frequently congested gateway to the southeast corner of the core of downtown Austin when special events are held.
There are a large number of interrelated improvement needs at the intersection of Barton Springs Road and Robert E Lee with a fairly complex bridge geometry including an immediate

adjacent "T" intersection, realignment of traffic lanes to match new Barton Springs cross section east of Robert E Lee, structural sidewalk and bridge class railing along west side of Robert E Lee, expansion of the bicycle lanes across the bridge and through the intersection, a large retaining wall and slope stabilization along the Umlauf property, sidewalk connectivity on the southeast corner, redesign of signalized traffic intersection, street drainage design, environmental protection of Zilker Park (Zilker Park is listed on the National Register of Historic Places) and Barton Creek, protection of the creek and trailside amenities below the bridge, hike and bike trail, terraced slopes and plantings along the trails, maintaining access for the Zilker Park Train, and multiple public and private utilities attached to the bridge. Water and wastewater mains are to remain in service during the construction phase. Coordination of upsizing existing utilities will be required during the design phase.

ANTICIPATED SERVICES:

The Peer Review Consultant shall coordinate closely with the consultant selected to perform the Engineering Services for the Design of the Barton Creek Bridge, also known as, Bridge Designer and the City's Project Management staff, from the beginning of the Bridge Conceptual Engineering Report (BCER) until approvap. The Peer Review coordination with the Bridge Designer will occur in both formal day to day contacts and via formal project meetings and reviews. The information process will include Over the Shoulder Reviews (OSR) or work in progress to identify and resolve issues early in design. The City expects that the Bridge Designer and Peer Review Consultant will generally resolve issues where they may initially differ. It is anticipated City project staff will be involved in discussions between the Bridge Designer and Peer Review Consultant. All correspondence between the Bridge Designer and Peer Review Consultant will include the City's Project Management staff.

For each of the stages of the design listed below, the Peer Review Consultant will submit a Summary of Review Comments and Comment Log to the Bridge Designer, with a copy to the City. The Peer Review Consultant will verify that the design is feasible and adequately incorporates the design and load rating criteria and concept design parameters. Peer Review Consultant may recommend modifications that improve cost-effectiveness or constructability of the design when submitting Summaries of Review Comments for Design and Load Rating criteria and Concept Design. The submittals shall be made according to the schedule outlined in each submittal summary below

The following stages of design will be reviewed by the Peer Review Consultant:

1. Bridge Conceptual Engineering Report
    - The Bridge Conceptual Engineering Report is intended to establish all the basic parameters that will affect the work done in the Design and Plans preparation phase. It will contain sufficient detail for the justification of the proposed bridge type. The 30% Structures Plans will be included as an appendix with the Bridge Conceptual Engineering Report.

- Deliverable Schedule: Peer Review Consultant will submit no later than four weeks after receipt from the City. Peer Review Consultant will include report of findings.

2. 30% Milestone and Engineer's Opinion of Probable Construction Costs (EOPCC)
   - The 30% Plans will be submitted with the Bridge Conceptual Engineering Report. The 30% Design will include the Type, Size, and Location (TS&L) from the selection phase and other structural, architectural, and electrical sheets as needed to describe the periphery of the bridge and provide detail required for a 30% EOPCC.
   - Plan Reviewer will review the 30% Plan submitted by the Bridge Designer. The 30% Plan will provide an early review of the final plan preparation for conformance with the Bridge Conceptual Engineering Report (BCER), aesthetic guidelines, and key design specifications. The intent of this peer review is to identify design discrepancies at an early stage and avoid major plan modifications resulting from future reviews. At this stage, consideration will be given to potential revisions to the design criteria and project standard details.
   - Deliverable Schedule: Peer Review Consultant will submit no later than two weeks after receipt of the 30% Plan from the City. Peer Review Consultant will include report of findings from 30% Constructability Study Review.
3. 60% Milestone and Engineer's Opinion of Probable Construction Costs
   - This submission is only a partial plans set. Its purpose is to communicate essential project information to the Geotechnical and Hydraulic Engineers so that all remaining calculations can be performed using actual structural shapes, loads, and dimensions. Plans sheets required for this submittal include: Plan & Elevation, Bridge Hydraulics Recommendation Sheet, Boring Logs, Foundation layout, Substructure Plans, and draft technical specifications.
   - Deliverable Schedule: Peer Review Consultant will submit no later than four weeks after receipt of the 60% Plan from the City. Peer Review Consultant will include report of findings from 60% Constructability Study Review.
4. 90% Milestone and EOPCC
   - Upon approval of the 60% Structures Plans, 90% Structures Plans shall begin. At this stage of development, the Bridge Designer shall have resolved the 30% and 60% Structures Plans review comments and developed plans for completion. The design and plan production shall be 100% complete. This submittal shall include prints of the completed plans, Summary of Pay Items (complete with quantities), design calculations, Final Phase II Geotechnical Report, Addenda to Hydraulic Report, and if appropriate, Technical Special Provisions. No sheet or detail should be missing at this state.
   - Deliverable Schedule: Peer Review Consultant will submit no later than three weeks after receipt of 90% Plan from City. Peer Review Consultant will include report of findings from 90% Constructability Study Review.

5. Bid Documents and EOPCC
    - After resolution of the 90% Structures Plan comments, the Bridge Designer shall make all authorized changes necessary to complete the plans and Technical Special Provisions.

The Peer Review Consultant may have the need to request items that do not appear in the reports, such as design notebooks, calculations, etc.

Project Management

The Peer Review Consultant must have experience in the following: design of projects similar in scope to the project; relevant experience in the disciplines required for this project; a minimum of 15 years' experience and responsible charge of engineering work in the appropriate disciplines; relevant experience on multi-million dollar projects verifying the constructability of the proposed designs; must not have a conflict of interest arising from investments, agency, employer, and business affiliations; and grants, contracts, and consulting income. The Peer Review Consultant must conduct reviews in a manner that respects confidential business information and intellectual property.

Contract Administration

a. The City will provide a Project Manager to give direction to the Peer Review Consultant activities.
b. The Peer Review Consultant will conduct the administration of the project, which will include communication with the City, invoicing, supplemental agreements, cost and schedule updates, billing preparation, and other non-technical work, for the Peer Review portion of the project.
c. No changes in Peer Review Consultant, project management or lead review personnel will be made without written notification and agreement from the City of Austin. The City will notify the Peer Review Consultant if there are changes to the City's project management personnel.

Project Meetings

a. Kick-off Meeting – The Peer Review Consultant will attend the project kick-off meeting to establish communication protocol for the project, discuss known project issues, review the project schedule, and obtain other available project information from the City of Austin.
b. Plan Review Meetings – The Peer Review Consultant will attend plan submittal review meetings and perform reviews at the BCER, 30%, 60%, and 90% completion stages using independent design computations.
c. Additional Project Meetings (as necessary) – At the direction of the City's Project Manager, the Peer Review Consultant will attend up to ten (10) additional project meetings to address issues not covered during other scheduled meetings.

PROPOSED SCHEDULE:

Interviews, if required, for this RFQ will be conducted in February 2015 and staff recommendation to Council is April 2015.

Anticipated duration for Tasks 1-6 combined is no more than 26 months. The Bridge Designer will submit a deliverable schedule for the bridge that incorporates all Tasks within the allotted duration of 26 months. The Peer Review Consultant will base their schedule on the schedule submitted by the Bridge Designer and accepted by the City.

Task 1 - Project Development and Environmental Process (PD&E)
Task 2 –Bridge Conceptual Engineering Report
Task 3 –30% Plan Documents (for the selected design configuration)
Task 4 –60% Plan Documents
Task 5 - 90% Plan Documents
Task 6 –100% Bid Documents

SELECTION OF CONSULTANT:

The Request for Qualification for this scope of services will run concurrently with the Request for Qualification for Design: Barton Springs Road Bridge over Barton Creek (CLMP166); Request for Qualifications for Design: Redbud Trail Bridge over Lady Bird Lake (CLMP168); and Request for Qualifications for the Peer Review: Redbud Trail Bridge over Lady Bird Lake (CLMP169). Consultants may submit statements of qualifications for any and all solicitations; but it is the City's intent that the firm selected as the Bridge Designer will not be able to serve as the Peer Review Consultant of either bridge. The same consultant may be selected for the design services of both bridges. The recommendation for the consultant for the Design Services for the Barton Springs Bridge over Barton Creek and the Redbud trail Bridge over Lady Bird Lake will occur first. The recommendation for the Consultant for the Peer Review Services of Barton Springs Road Bridge over Barton Creek and Redbud Trail Bridge over Lady Bird Lake will occur second.

COST ESTIMATE:

The estimated total cost for professional services is $200,000 and the estimated total construction cost for the bridge is $3,200,000.

POTENTIAL SUBCONSULTANT/VENDOR OPPORTUNITIES:

Below is a list of the major scopes of work that the City has identified for this project. There must be representation for all major scopes of work listed in the prime's statement of qualifications. The experience of the firms listed to perform the Major Scopes of Work, whether a subconsultant or prime firm, will be evaluated under Consideration Item 6 – Major Scopes of Work – Comparable Project Experience. In addition, the City has identified Other

Scopes of work that MAY materialize during the course of the project. The City does not guarantee that the scopes listed under Other Scopes of work will materialize on this contract. If the prime consultant intends to enter into a subconsulting agreement on a scope of work not listed below, the prime consultant is required to contact SMBR and request an updated availability list of certified firms in each of the scopes of work for which the prime consultant intends to utilize a subconsultant.

Major Scopes of Work

Structural Engineer
Civil Engineer

Other Scopes of Work

Not applicable

Notes:

- **Deadlines for questions** - Any questions relating to this RFQ should be emailed to the authorized contact person no later than November 12, 2014.

- Participation at the prime or subconsultant level may create a conflict of interest and thus necessitate exclusion from any contracts resulting from the work performed in the design phase.

- If the City determines that a conflict of interest exists at the prime or subconsultant level, the City reserves the right to replace/remove the prime or instruct the prime consultant to remove the subconsultant with the conflict of interest and to instruct the prime consultant to seek a post-award change to the prime consultant's compliance plan as described in City Code § 2-9B-23. Such substitutions will be dealt with on a case-by-case basis and will be considered for approval by Small and Minority Business Resources (SMBR) in the usual course of business. The City's decision to remove a prime or subconsultant because of a conflict of interest shall be final.

- Construction Inspection and Public Information and Communications are NOT a subconsultant opportunity for this project. These services will be performed in-house or under a separate contract, if needed.

- A consultant performance evaluation will be performed on all professional services contracts. This evaluation will be conducted at the end of each Preliminary, Design, and Construction phase.