

**REQUEST FOR PROPOSALS  
FOR  
PROFESSIONAL ENGINEERING DESIGN  
SERVICES RELATED TO  
LAKES A/C DAM AND SPILLWAY OUTLET WORKS**

**June 2010**

**Carrollwood Lakes Home Owners Association.**

The Board of Directors of the Carrollwood Lakes Home Owners Association (BCWLHOA) seeks to retain the services of a professional engineering consulting firm to provide various engineering services related to the design and reconstruction of Lakes A/C Dam and Spillway Outlet Works. The consulting firm will be responsible for developing construction plans and specifications along with various environmental documents necessary for the reconstruction of Lakes A/C Dam and Spillway Outlet Works. Lakes A/C is located on a tributary of Fletcher Creek south of Highway 64 and along the west side of Lake Edge Drive and Oak Springs Drive. The Carrollwood Lakes Home Owners Association will be the owner of this project. All contractual agreements will be with BCWLHOA. All proposals shall be mailed to the following address: Mr. Larry Jordan, 890 Willow Tree Circle #1, Cordova, Tn 38018 prior to 5:00 p.m. on June 18, 2010.

**History and Present Conditions**

For over thirty years, the Carrollwood Lakes Homeowners Association has had the responsibility and care of common open space in the Carrollwood Subdivision. This included the common open space on the banks of two lakes referred to as Lakes A/C on an unnamed tributary of Fletcher Creek. Lakes A and C are contiguous and the water level is regulated by a single elevated concrete dam with a spillway outlet works. The spillway is approximately 25 feet in width and approximately 10 feet in depth. The crest of the spillway is elevated approximately eight feet above the bottom of Lake A which establishes the normal depth of the two upstream lakes. A map is attached for location information.

Soil piping at the spillway was observed through a field inspection by the Tennessee Department of Environment and Conservation on April 26<sup>th</sup> 2010. This spillway problem was conveyed to the CWLHOA on May 6<sup>th</sup>. Heavy rains and high surface water runoff due to storms on May 1st accelerated the soil piping beneath the deck of the concrete spillway. On Friday May 7, 2010 the elevated spillway failed through a soil piping breach beneath the crest of the spillway channel. Undocumented failure of the dam and spillway was from the uncontrolled flow of water beneath the outlet dam and spillway structure as well as soil eroding from beneath the structure through cracks in the concrete surfacing along the face of the spillway. . On Friday May 7th, the concrete spillway structure was undermined by lake water thereby causing all lake water to be drawn down to a dead pool level. Currently, all surface water running through Lakes A/C flow beneath the concrete spillway and into Fletcher Creek. Lakes A/C are currently dry except when precipitation occurs and water

flows into the two lakes from storm sewer inlets along streets that run parallel to the lakes and the upper reaches of the Fletcher Creek tributary.

### **Project Summary**

The consultant shall provide services defining the design, and construction as well as preparing documentation necessary to replace the dam and concrete spillway at the lower end of Lake A. These services are listed below as a minimum. The consultant should provide additional work activities if they believe they are crucial in completing the goals of the client.

For a further detailed scope of services, the consultant may outline those services in their proposal. For additional information on the Project, please contact Mr. Philip Stuckert, P.E. at 901-573-8162 or by email at prs7097@msn.com.

### **Minimum Scope of Services**

The project shall include the following minimum services:

1. Developing construction plans and specifications for the reconstruction of the concrete spillway and Outlet Works on Lake A. Design of the spillway and outlet works will be dependent on a number of factors including site conditions (geology and topography), hydrologic and hydraulic conditions, seismic conditions, construction/constructability considerations, and operation and maintenance considerations.
2. Reviewing, evaluating and select material types and associated properties for spillway materials that could include concrete (reinforced, conventional mass, roller compacted, and precast), steel, and plastic such as high-density polyethylene (HDPE).
3. Preparing draft environmental documents for review and approval by the Tennessee Department of Environment and Conservation.
4. Preparing a storm water pollution prevent plan for work at the spillway site.
5. Engaging the services of subconsultant(s) as necessary to prepare an Aquatic Resources Alteration Permit, site surveys, and geological surveys.
6. Submitting Plans to the Tennessee Department of Environment and Conservation (Division of Water Supply) to comply with the Safe Dams Act.
7. Preparing the necessary documentation to comply with the Corp of Engineer's 404 permit.
8. Providing a set of construction documents and record drawings to the City of Memphis Engineering Department. Work with the City to ensure that no conflicts exist with their utilities or infrastructure.
9. Attending three meetings with a subcommittee established by the Board of the Carrollwood Lake Home Owners Association (BCWLHOA) to seek input and answer questions on the proposed design improvements.
10. Developing the necessary bidding documents and bid schedules in order to bid the project out to a list of pre-qualified contractors. The consultant shall provide the subcommittee established by the BCWLHOA a list of those pre-qualifications for the Board to review and approve.

11. Attend the bid opening. Assemble the bid results and make a recommendation to the subcommittee established by the BCWLHOA for which contractor shall be engaged to perform the work.
12. Develop construction and project cost estimates for the CWLHOA to review at 10%, 25%, 75% and 90% completion of bidding documents.
13. Issuing bidding construction plans and specifications to prospective bidders interested in bidding the project.
14. Answering and documenting questions from contractors during the bidding phase.
15. Review bid results and provide a recommendation to the subcommittee of the BCWLHOA on the lowest and most responsible bidder.

Other future phases of the work may follow and include the following:

1. Perform construction engineering and inspection during the course of construction.
2. Review construction submittals on products and materials
3. Engage the services of a subconsultant(s) for material testing and construction surveying during construction.
4. Review monthly progress payments from the contractor for reimbursement of completed work.
5. Develop and provide to the Owner Record Drawings of the Improvements.
6. Report to the Board monthly to report on the progress of the work.
7. The consultant may be asked to develop engineered drawings and specifications to two different types of seawalls to be constructed along adjacent lake shores where there are no bank protection and/or where existing seawalls are failing. The two types of walls will be a segmental block wall and the other type of wall will be posts and fencing with deadman tie backs. Should the Owners wish to have this scope of work done, the consultant will include this work into the original bid specifications for the dam and spillway outlet works so as to solicit bids from contractors to do the work. Work done by the contractor for this work should be bid separately and outside of the bidding documents for the dam and spillway outlet works.

These additional services may be covered in separate contract(s) or amendment(s) to the original contract with the firm at a later date.

### **Proposals**

Firms requesting consideration for this work shall submit a written proposal to the BCWLHOA, who will act as the Owner. All proposals must be received by the BCWLHOA on or before 5:00 p.m. local time Friday, June 18, 2010. Proposals shall not contain more than 25 pages. The proposal shall include a separate attached sealed envelope indicating the fee for the services to be provided for items 1 through 15. This envelope will be opened by the CWLHOA after proposals are opened and three firms are selected based on their qualifications. The final selection of consulting firm for this work may include the cost of services as outlined in their fee proposal. Five proposals must be submitted by each consulting firm.

Proposals shall include as a minimum the following information.

- a. Past experience in the required disciplines dealing with outlet dams and spillway outlet works.
- b. Qualification and availability of staff.
- c. Demonstrated ability to meet schedules without compromising sound engineering practice.
- d. Prior work with TDEC, the Corp of Engineers, completing ARAP Permits, and SWPP.
- e. Ability to work with clients such as Home Owner Associations.

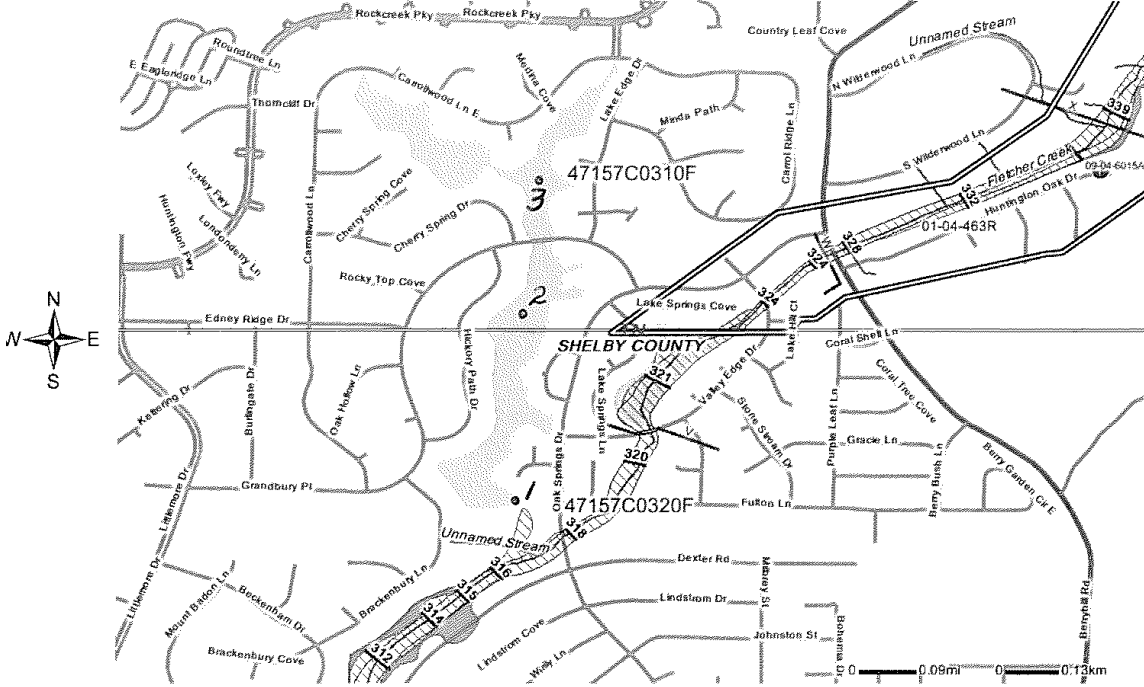
The selection process for the consulting firm will be outlined as follows:

1. Proposals will be submitted by the Consulting Engineers to the Owner's agent who will then distribute the proposals to members of the interview panel. Proposals shall not exceed twenty five pages.
2. Proposals will be read and reviewed by an interview panel. The makeup of the interview panel has not been decided at this time.
3. Once all proposals are read, the interview committee established by the BCWLHOA shall short list the firms down to the most qualified three firms based on the information contained in each proposal. The subcommittee shall then submit the proposals to the BCWLHOA will then open the sealed envelopes to make the final choice in choosing a firm to perform the work. .
4. If the panel cannot make a determination on which consulting firm they wish to use for these services, the final three firms may be asked to present their experience and qualification to the BCWLHOA at a pre-determined interview time. The BCWLHOA will then choose the most qualified firm based on experience and fee.
5. Should the interview panel not wish to conduct further interviews after they receive all proposals, they may select the firm based on the information contained within the proposal and the sealed fee. The BCWLHOA will provide the contract to the consultant for the work to be completed.

All consultants will be advised when a selection has been made. All proposals shall remain the property of the BCWLHOA once they are submitted. The BCWLHOA will not reimburse the consulting firm for preparation of the proposal. All work products developed by the consultant under this proposal will be owned by the BCWLHOA.

Mapping  
Information Platform

This Map Is For Advisory Purposes Only



NOTES:

1. LOCATION OF DAM AND SPILLWAY OUTLET WORKS.
2. LAKE A.
3. LAKE C.

Wednesday, 12 May 2010 22:52



FEMA