



Madison Water Utility – Madison, Wisconsin

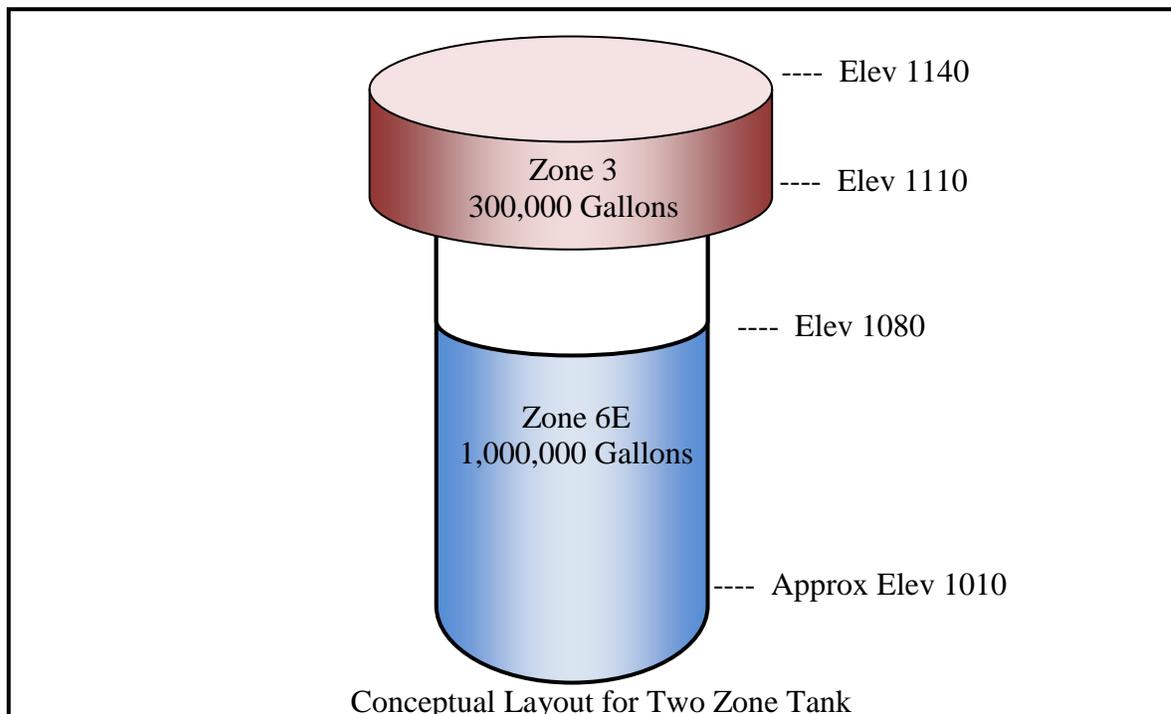
REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

I. INTRODUCTION

Madison Water Utility is soliciting proposals for professional services to include but not be limited to: conceptual and final design of the reconstruction of the Utility's Lakeview Reservoir also known as Reservoir 113. Currently, due to site space constraints, it is proposed that the new reservoir system will provide service to Pressure Zone 5 and to Pressure Zone 6E by providing two separate compartments within a single reservoir structure. The work shall include but certainly shall not be limited to: supporting the Utility's public participation process, permitting, working with the DNR and the PSC, preparation of drawings and specifications, bidding assistance, construction administration and facility startup services.

The Lakeview Reservoir currently is undersized at 55,000 gallons and has reached the end of its useful life. The reservoir was inherited by the Utility when the area was annexed to the City. The 2006 Water Master Plan identified Pressure Zone 5 as an area that does not meet current Utility fire flow capacity standards. The 2006 Master Plan also identified a storage deficiency in the north end of the system within Pressure Zone 6E. This deficiency in Zone 6E was confirmed during the 2011/2012 East Side Water Supply evaluation of the system. It is proposed to provide 300,000 gallons of storage to Zone 5 and 1,000,000 gallons of storage to Zone 6E. A conceptual layout sketch for a possible reservoir configuration is provided below. This layout is similar in shape to a "Hydropillar" style fluted column tank. Other layouts may be more economical or practical.



**REQUEST FOR PROPOSALS
Engineering Services for Conceptual Design,
Final Design, Construction**

Lakeview Reservoir (Res 113) Two Zone System

The existing reservoir sits on a parcel of land leased from Dane County and is adjacent to Lakeview Park. Lakeview Park is in the Dane County park system. It is proposed to site the new reservoir on the existing site in essentially the same place as the existing reservoir. The reservoir is on a high area that makes it attractive to cell phone carriers and the City radio system. Currently the tank has three cell carriers in addition to the City radio system. These systems will be temporarily relocated during construction and then they will be reinstalled on the reservoir following construction. The new reservoir will be designed and constructed to accommodate the cell carrier equipment. With the exception of the Sprint installation, the ground equipment for the cell installations will not be disturbed during construction and reservoir construction shall be staged to accommodate this condition. Coordination with the cell carriers will be critical to project success. Figure 1 is an aerial photo from Google Maps looking from the south toward the reservoir. Figure 2 is an aerial photo of the reservoir site taken from the City mapping system with north to the right. Figure 3 is a photo of the reservoir taken from the parking lot looking generally north northwest.

The Sprint equipment is located at the base of the tank within the reservoir legs and will be relocated by Sprint to a temporary location prior to the start of construction. The City is working to coordinate the relocation of all the cell carriers and the City radio equipment but does not guarantee the schedule of the work.

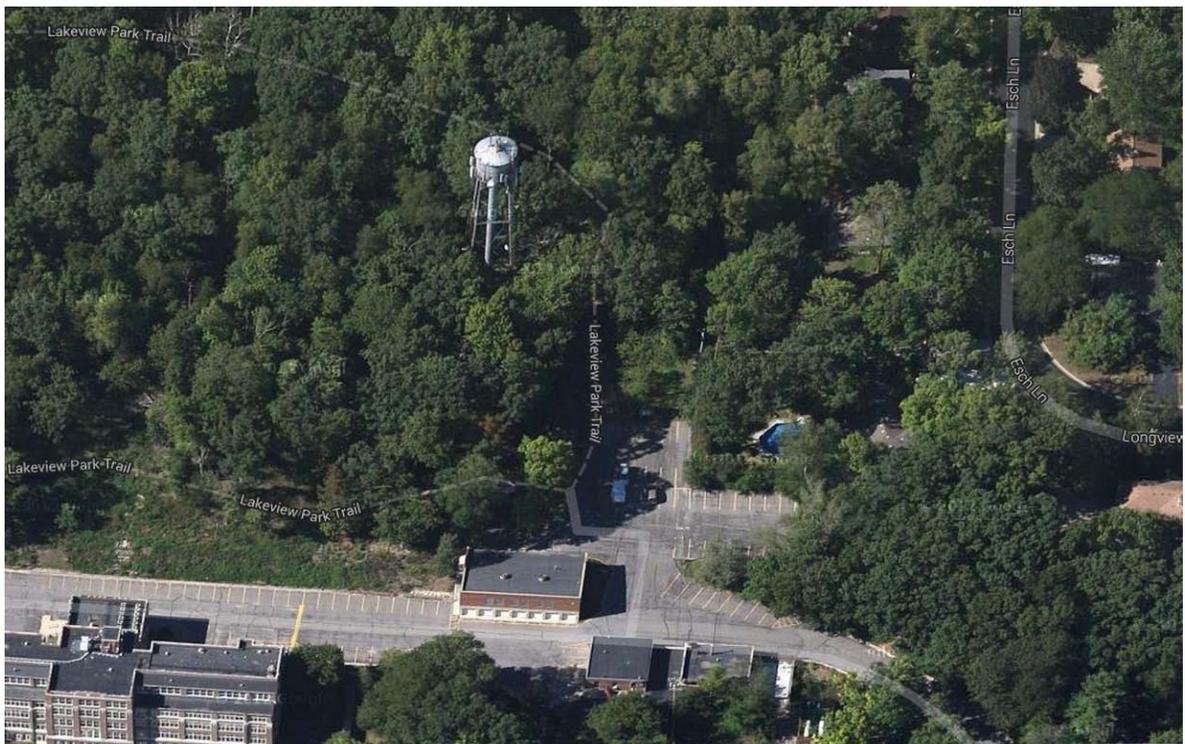


Figure 1 - Aerial from Google Maps

**REQUEST FOR PROPOSALS
Engineering Services for Conceptual Design,
Final Design, Construction**

Lakeview Reservoir (Res 113) Two Zone System

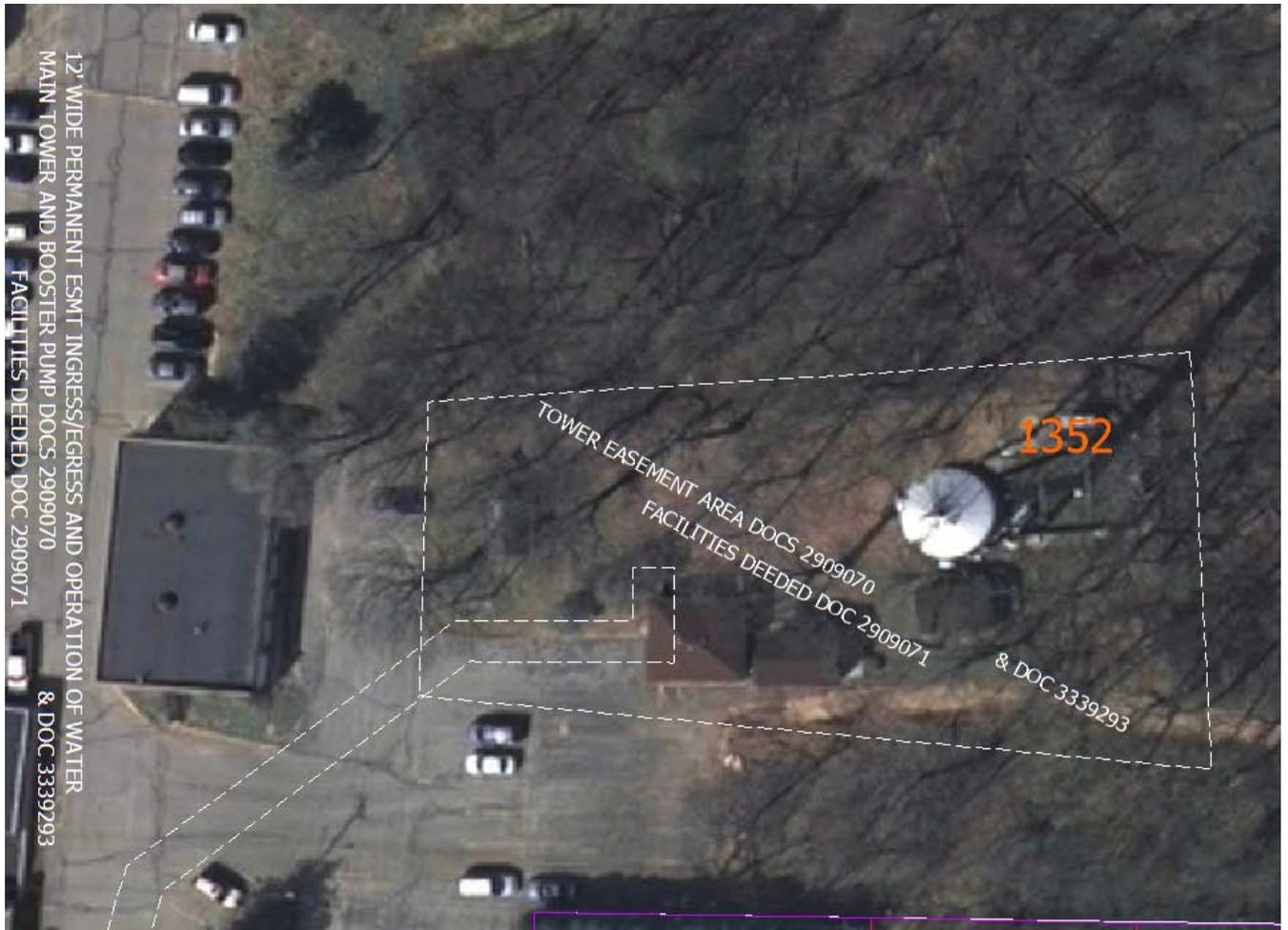


Figure 2 - Aerial Photo (North to the Right)

**REQUEST FOR PROPOSALS
Engineering Services for Conceptual Design,
Final Design, Construction**

Lakeview Reservoir (Res 113) Two Zone System



Figure 3 - Reservoir and Radio Bldg from Parking Lot

A pump station currently fills the Lakeview Reservoir from Zone 6E. The difference in gradient between the two pressure zones is approximately 60 feet. This pump station is budgeted to be upgraded in 2015 following reconstruction of the reservoir. As a part of this project during construction, the pump station will be used to provide service and fire protection to Zone 5. The Utility may elect to temporarily install a variable speed drive at the station to accommodate reservoir reconstruction. As a part of development of alternatives for this project, the consultant will evaluate the feasibility and life cycle costs of other alternatives for improving fire protection to Zone 5. This could involve using a combination of a pumping system and gravity storage to provide service and adequate fire protection to Zone 5. Fire protection within Zone 5 has been deemed to

**REQUEST FOR PROPOSALS
 Engineering Services for Conceptual Design,
 Final Design, Construction**

Lakeview Reservoir (Res 113) Two Zone System

be inadequate in both the residential and the commercial/institutional areas of Zone 5 as noted below. Operational costs, distribution system capacity, pipe improvements, connection requirements, redundancy, reliability, fire flow capacity, system level of service, site configuration, and DNR and PSC requirements shall be considered during the pump option evaluation. A section of the pressure zone map showing Zone 5 is included in Figure 4 below:

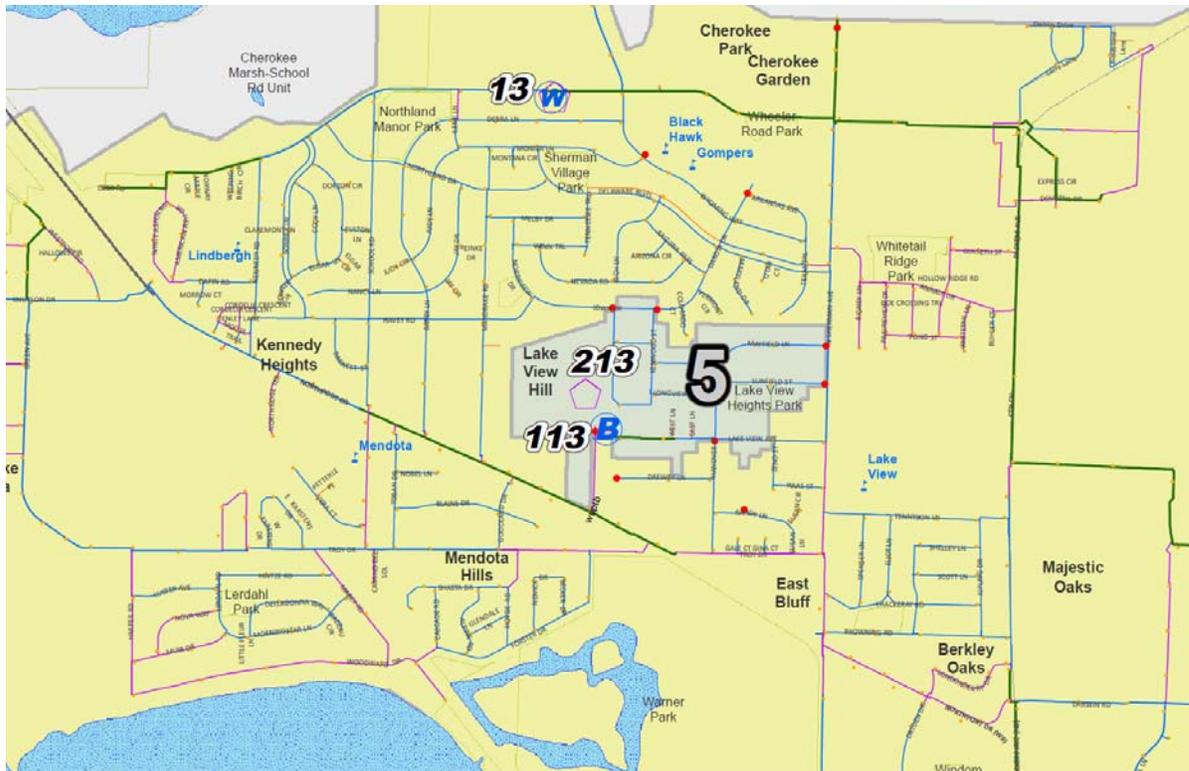


Figure 4 - Pressure Zone Map Zone 5

A fire protection capacity analysis was developed as a part of the master plan update and is included in Figure 5 below. The analysis indicates a fire flow deficiency in the residential area, (<1,000 gpm available) and a deficiency in the area of Dane County Human Services Campus (<3,500 gpm available). Much of this deficiency is due to the 6-inch pipe grid within Pressure Zone 5 and limited pump station capacity.

**REQUEST FOR PROPOSALS
 Engineering Services for Conceptual Design,
 Final Design, Construction**

Lakeview Reservoir (Res 113) Two Zone System

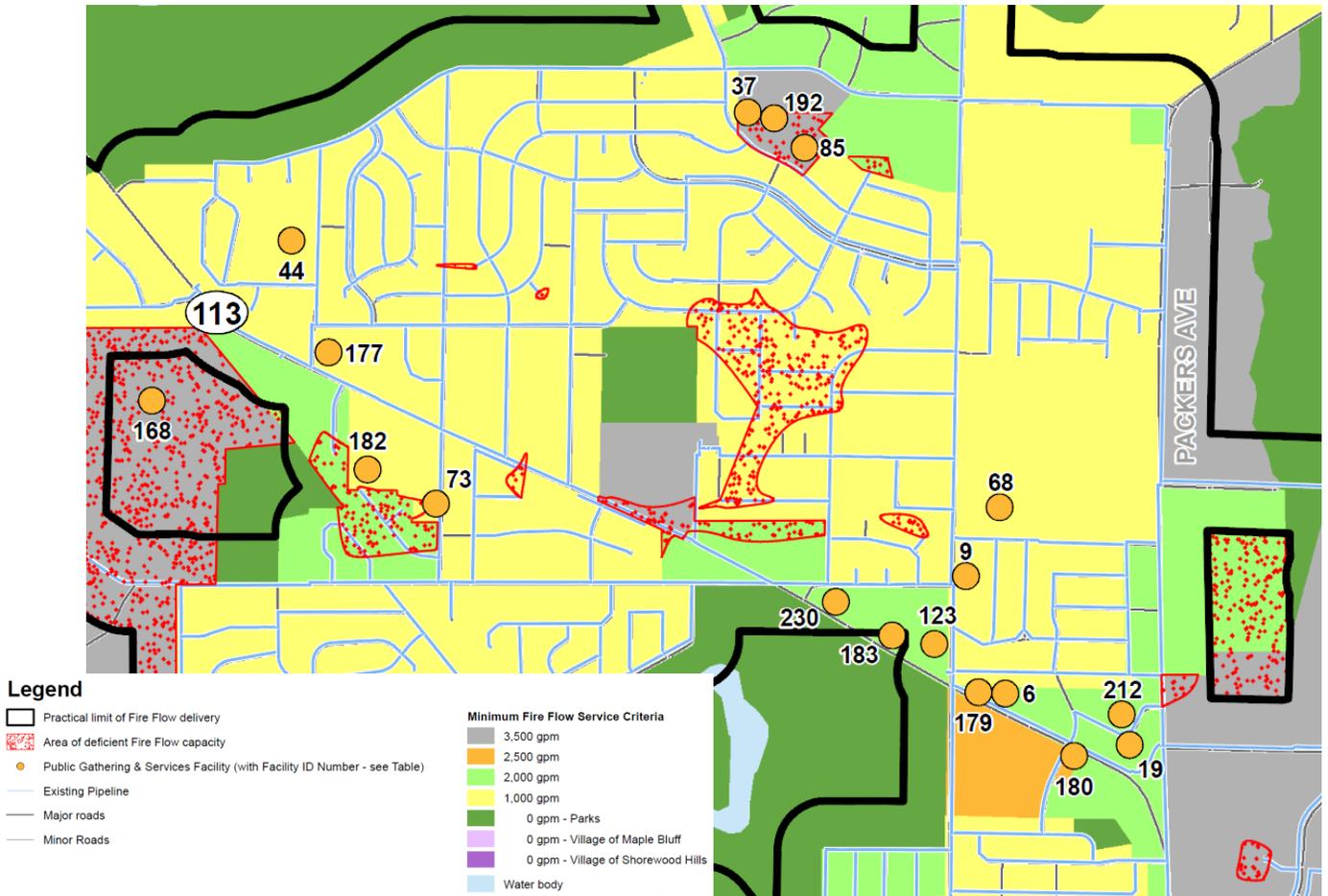


Figure 5 - Fire Flow Evaluation Map

II. PROJECT BACKGROUND

A. Reservoir 113 and Pump Station:

1. The Lakeview Reservoir was constructed in 1938 and inherited by Madison Water Utility when the area was annexed to the City. The reservoir has a capacity of 55,000 gallons and an overflow elevation of 1140.
2. The pump station that fills the reservoir was constructed in 1969. The station has one 300 gpm pump and one 500 gpm pump.

B. Site Conditions: Madison Water Utility leases the property for the reservoir and pump station from Dane County.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 7 of 23

July 26, 2013

- C. Design Criteria: The proposed facility will match and complement the existing neighborhood and Dane County Park to the maximum extent feasible. The Utility is working closely with the neighborhood and the local Alder to meet the aesthetic and community needs of the area with respect to the facility. The Consultant will work closely with Water Utility engineering and operations staff to go over the design requirements following Notice to Proceed. The facility shall be designed to be low maintenance, durable, and functional so it is not a nuisance to area residents.
- D. Objective:
1. The overall objective of this work is to develop a set of clear design documents that will allow the project to be efficiently and economically bid and constructed.
 2. The facility will have an expected life span of 75 to 100 years.
 3. The facility shall meet the site constraints, neighborhood needs, and shall be sensitive to local issues and concerns.
 4. As much as possible the existing mature landscaping and trees on the site shall be protected and preserved.
 5. Site and facility security shall be designed into the facility, without detracting from the area to prevent unauthorized tampering with the facility.
 6. Any site lighting shall be adequate for security and operations yet it shall not create a nuisance condition to area residents. Site lighting shall conform to dark sky standards.
 7. While noise is not expected to be an issue following construction, noise from the facility shall be limited to no more than 45 db at the property line.
 8. Reservoir 113 shall be integrated into the Water Utility's SCADA system.
 9. The facility shall meet all of the operational and maintenance requirements of Madison Water Utility.
 10. The facility shall meet or exceed all DNR and PSC requirements.
 11. The facility shall meet or exceed all building codes, Dane County restrictions, and City of Madison requirements.
 12. The facility will operate un-staffed with only daily checks by Water Utility personnel.
 13. Additional appropriate low maintenance landscaping around the site shall be provided to establish an attractive looking facility.
- E. Proposed Facility Configuration:
1. Zone 5 Reservoir – Upper tank
 - a) Capacity 300,000 gallons
 - b) Overflow elevation 1140
 - c) Fill from local pump station
 2. Zone 6E Reservoir – Lower tank
 - a) Capacity 1,000,000 gallons



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 8 of 23

July 26, 2013

- b) Overflow elevation 1080
 - c) Fill by gravity from Zone 6E
 - 3. General
 - a) Accommodate up to four independent cell carriers
 - b) Accommodate the needs of the City Radio Shop
 - c) Fit into the neighborhood
 - d) Coordinate the temporary location and then relocation of the impacted cell carriers
 - 4. SCADA: Integrate into the Utility PLC based Wonderware system
- F. Budget:
- 1. Madison Water Utility has budgeted approximately \$3,100,000 for the total Lakeview Reservoir project
 - 2. The detailed Scope of Work submitted by the prospective consultant shall take into account the budget for this project.
 - 3. Firms shall develop a budget for the work as a part of the proposal and any budget concerns on the project shall be detailed in the proposal.
- G. Public Participation/Public Information
- 1. Public participation will be a critical part of the project. Keeping the public engaged throughout the project is vital to project success.
 - 2. The public participation effort will be led by Utility staff and supported by the consultant. The process will be guided by the Utility's public participation standards and procedures and City and neighborhood requirements.
 - 3. The consultant shall provide any needed graphics, renderings, reports, and other information necessary to convey the concept and scope of the project to the public. The consultant shall attend meetings, make presentations as needed, and provide support to the Utility in addressing and incorporating feedback into the final design.
 - 4. Assist the Water Utility in preparation of press releases as necessary.
 - 5. The consultant shall provide support for the Utility hosted web page on the project.
 - 6. Assist the Water Utility with up to six (6) Citizen's Advisory Panel meetings.
 - 7. Assist the Water Utility with up to three (3) public meetings.
 - 8. Assist the Water Utility with up to two (2) Water Utility Board meetings.
 - 9. Assist the Water Utility with an open house and dedication at the completion of the project.
 - 10. These presentations and assistance for the public participation process do not include any meetings or presentations required or necessary to obtain the necessary permits for the project.
 - 11. All presentation materials shall become the property of the Utility.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

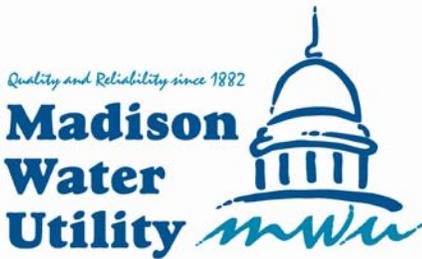
Lakeview Reservoir (Res 113) Two Zone System

Page 9 of 23

July 26, 2013

III. SCOPE OF SERVICES

- A. General: This is a Water Utility project and will be led by Water Utility staff. The Consultant shall be a member of the project team and work closely with Water Utility staff, the public, and other City officials to develop a design for the facility that meets the needs of the Utility. This objective will be accomplished through frequent and routine communication and meetings of the project team, a series of design review workshops, and close coordination with the Water Utility and other City Departments.
- B. Design philosophy: The overall design philosophy for the facility will be toward functionality, durability, minimal maintenance requirements, economy, and the facility shall be aesthetically pleasing while keeping within the context of its function as a municipal water supply facility.
- C. Phase 1 - Conceptual Design:
1. Objective: The conceptual design shall work to develop and refine site layouts, piping, and options for Water Utility review and evaluation. From these concepts, an alternative will be selected and final design will proceed.
 2. Neighborhood involvement: Madison Water Utility will be engaging the public through a series of meetings and will be forming a Citizen's Advisory Panel (CAP) for the project. The consultant shall assist the Utility with presentations, CAP meetings, and public meetings as noted above.
 3. Site plan development will include but will not necessarily be limited to the following components:
 - a) Surveying:
 - (1) Survey the project site and prepare a project base map.
 - (2) The survey shall include all features a minimum distance of 100 feet from the project property line.
 - (3) Site plan shall be plotted at 1" = 10' on a 22" x 34" sheet.
 - (4) The survey shall be prepared and stamped by a licensed surveyor.
 - b) Geotechnical Investigation – Assist the Utility with the procurement of a site geotechnical report. Coordinate all the work of the geotechnical engineer in the development of the report.
 - c) Site Utilities: Coordinate all necessary utility work to include but certainly not be limited to: gas, electric, telephone, storm drain, and sewer.
 - d) Environmental issues - The site design shall be sensitive to and shall protect the surrounding environment and shall comply with all existing environmental laws and regulations.
 - e) Grading and Storm Water – Design an adequate storm drainage system installed to prevent flooding or excessive ponding of surface runoff and any



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 10 of 23

July 26, 2013

- damage to adjacent property. The storm drain design shall meet the requirements of the City of Madison Engineering Department.
- f) Landscape Design: The Consultant shall provide a landscape design that is attractive, low maintenance, and effective in screening the facility.
 - g) Drawings: Develop preliminary drawings that illustrate the design concepts being proposed to allow the Water Utility to review and approve the development plan. Drawings shall include but shall not necessarily be limited to: Site plans (scale 1"=10' full size), landscaping plans, and tank elevations.
4. Reservoir configuration development
- a) Reservoir configuration: Working with reservoir fabrication and construction company's, develop conceptual layouts for review and approval.
 - b) Present design concepts for the reservoir to the CAP and interested neighborhood groups.
 - c) Reservoir to accommodate up to 4 cell carriers and the City Radio equipment.
 - d) Develop sufficient types and numbers of drawings to convey the design concept being proposed.
5. Energy Conservation:
- a) The City is a partner in the Federal Government's Energy Star Program for buildings.
 - b) All designs shall be focused on energy conservation.
6. Sound Control:
- a) Sound from the facility is expected to be minimal
 - b) The maximum sound level emitted from the facility at any time shall be limited to 45 db measured at the property line.
7. Constructability issues:
- a) The Consultant shall be fully responsible for the constructability and phasing of the proposed project.
 - b) Notwithstanding any recommendations or approvals by the City, the Consultant shall not be relieved from responsibility for the workability and suitability of the design and all details.
8. Schedule:
- a) The Consultant shall develop and regularly maintain a project schedule that includes all phases of the project through completion of the construction and takeover of the facility by the Water Utility.
 - (1) It is expected that the project will be bid in late winter 2013/2014 with construction starting in the spring of 2014.
 - (2) The reservoir is expected to be fully functional by no later than the end of June 2015.
 - b) Present the project schedule in a Gantt chart format.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 11 of 23

July 26, 2013

- c) Provide sufficient detail in the schedule to allow tracking of the progress of the work through each phase.
 - d) Provide project schedule in an electronic format that is compatible with MicroSoft Project
 - e) Submit all updates to the Water Utility in MS Project electronic format.
 - f) Keeping the project on schedule shall be a priority and goal for the Consultant throughout the project.
 - g) Promptly communicate any delays in completion of the work to the Water Utility.
9. Cost estimates
- a) Controlling the total project cost is critical to project success.
 - b) Monitor project costs at all times. Be aware of the cost impact of decisions made, and of how to keep project costs within budget.
 - c) Routinely update project estimated costs
 - d) Present the cost impacts of the relative design features of each option during design development.
 - e) Promptly communicate any change in the project cost estimate to the Water Utility.
10. Construction Cost Control:
- a) The Utility has budgeted \$3,100,000 for design and construction.
 - b) Work closely with the Utility to control costs throughout the project.
 - c) Project Budget Adjustment:
 - (1) If an adjustment in the project budget is required to meet the overall objectives of the Water Utility, notify the Utility immediately and provide the necessary supporting documentation to allow the Utility to make a decision.
 - (2) Do not proceed with the modifications to the project without the prior written authorization by the Utility of the budget revision.
 - d) The Consultant shall remain responsible to maintain the project within the budget. If project cost estimates exceed the budget due to the actions or inactions of the Consultant, the Consultant shall redesign the facility at no additional cost to bring the work within budget.
11. Other issues as required to complete the work:
- a) Outline and provide a detailed description in the proposal of any other tasks required to complete the work.
 - b) Failure to account for items that would be considered usual and customary to this project shall not be justification for additional compensation or an extension of contract time.
12. Do not proceed with Final Design until receipt of written approval of the conceptual design from the Water Utility.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 12 of 23

July 26, 2013

- D. Phase 2: Final Design: Upon approval of the conceptual design, proceed with Final Design and the development of documents suitable for bidding.
1. Objective: The final design shall incorporate the approved components of the conceptual design into Drawings and Specifications suitable for public bidding and construction while staying within the established project budget.
 2. Based on the selected alternative developed in Phase 1, prepare final design documents for the work to include but not necessarily be limited to:
 - a) Site plan design (Scale 1"=10' @ full size)
 - b) Reservoir configuration details
 - c) Landscape Design
 - d) Site Utilities (Scale 1"=10' @ full size)
 - e) City Planning Department issues and requirements.
 - f) Mechanical and piping requirements
 - g) Monitoring and security requirements
 - h) SCADA system setup and communications
 - i) Any other component and schedules necessary to complete the work to the satisfaction of Madison Water Utility.
 3. Drawings: Prepare plans, sections, elevations, mechanical and piping plans, lighting plans, structural details, grading plans, standard details, and any other drawings to adequately define the work and allow the project to be competitively bid.
 4. Specifications - Prepare project specifications in CSI format to cover all aspects of the project. The specifications shall be crafted to encourage the competitive bidding for materials and components.
 5. Cell carriers and City Radio:
 - a) Design the reservoir to accommodate 4 cell carriers and the City Radio equipment
 - b) Antenna mounting connections, cables, and other appurtenances shall be hidden in brackets and raceways designed into the system.
 - c) Coordinate design requirements with existing cell carriers and the City Radio system.
 6. Constructability:
 - a) The Consultant shall be fully responsible for the constructability of the final design and bidding documents.
 - b) Notwithstanding any recommendations or approvals by the City, the Consultant shall not be relieved from responsibility for the workability and suitability of the design and all associated details.
 7. Cost Estimating - During final design, routinely update the project cost estimate and keep the Water Utility apprised of any changes to the overall costs of the project.
 8. Construction Cost Limitation:
 - a) The Consultant agrees to adhere to the Construction Cost Limitation established during the Preliminary Design.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 13 of 23

July 26, 2013

- b) If at any time, the projected project costs exceed the approved cost limitation; the Consultant shall notify the Utility immediately.
 - c) The Consultant shall work with the project team to evaluate cost saving alternatives. Incorporation of these cost saving measures into the project shall be at the sole discretion of the Utility.
 - d) Any cost overruns as a direct result of either actions of or inactions of the Consultant that result in a redesign of the facility shall not be the basis for additional compensation or an extension of contract time.
9. Schedule:
- a) The project schedule shall be regularly updated throughout the final design process.
 - b) The schedule shall include design, bidding, and construction work.
 - c) The project schedule shall clearly include the review times required by the Utility, City Planning, Urban Design, Public Works, DNR, the PSC and any other reviewing authority. Failure to include these review periods within the schedule and any delays resulting there from shall not be a basis for additional compensation or an extension of time.
 - d) Any delays in the completion of the work shall be promptly reported to the Water Utility.
10. Review and approval:
- a) The Final Design shall be reviewed and approved by Madison Water Utility and other Departments of the City of Madison.
 - b) In the event that the Final Design is not approved, revise the design at no additional cost to the Water Utility until which time it gains approval.
 - c) No extension of time shall be granted for failure to gain necessary approvals and permits for the projects.
11. Final design shall meet all the requirements of the permitting and reviewing agencies.
12. Other issues as required to complete the work:
- a) Complete any other tasks as needed to meet the facility objectives of the Water Utility.
 - b) Anticipated tasks other than those noted herein, shall be itemized in the proposal submitted to the Water Utility.
 - c) Failure to account for items that would be considered usual and customary to this project shall not be justification for additional compensation or an extension of contract time.
13. Do not proceed to the bidding phase without the prior written approval of the Water Utility.
- E. Quality Assurance/Quality Control
- 1. Prior to starting work, the Consultant shall prepare a project specific Quality Assurance/Quality Control Plan (QA/QC).



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 14 of 23

July 26, 2013

2. The QA/QC Plan shall include but shall not necessarily be limited to:
 - a) Schedule monitoring and compliance
 - b) Project reviews both internal and external
 - c) Project communications
 - d) Project meetings
 - e) Standards to be used
 - f) Cost review and control
 - g) Quality Control methods and criteria
3. Quality Assurance/Quality Control Plans will be required from all major sub-consultants working on the project.

F. Permit requirements

1. Provide all information necessary and complete any required applications to obtain any and all required approvals and permits for the work.
2. Meet all the requirements of the Planning and Zoning Departments and the Board of Public Works of the City of Madison.
3. In the event that the design is not accepted and a building permit or other required approvals cannot be obtained, redesign components of the project at no additional cost to the Water Utility to conform with the requirements such that the necessary permits can be obtained.
4. Make presentations as required for permitting and other approvals to City of Madison review agencies and boards, the Common Council, and to neighborhood groups.
5. Address and incorporate any comments received from review agencies into the final document.

G. Required Quality Control Reviews by the Water Utility:

1. Phase 1 – Preliminary Design
 - a) Alternative development
 - b) 90 percent completion
 - c) Final Draft
2. Phase 2 – Final Design
 - a) 50 percent completion
 - b) 90 percent completion
 - c) Final Draft

H. Communications/Meetings:

1. A project kickoff meeting will be held prior to starting work.
2. Routine communication is expected and required
3. Project meetings shall be held regularly as needed but not less than monthly unless agreed to by all parties
4. Monthly progress reports:



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 15 of 23

July 26, 2013

- a) Progress reports shall be submitted by the first of every month.
- b) No payments will be released to the Consultant without an acceptable monthly report.
- c) Each report shall detail progress made during the previous month, planned work for the coming month and any issues that need to be resolved.
- d) All monthly reports shall include an undated project schedule.
- e) Monthly reports shall not exceed one type written page not including updated schedules, charts or tables.

I. Products:

1. All documents developed as a part of the project become the property of the Utility. Documents shall be delivered in their original file format and shall be editable.
2. Deliver to the Utility at each milestone: Complete pdf files plus 4 paper copies of the project documents unless directed otherwise by the Utility.
3. Permit Submittals: Copies as required.
4. Final Approved Documents:
 - a) All documents in pdf format, drawings shall be to scale
 - b) Specifications shall also be submitted electronically on a compact disk (CD) in MS Word format.
 - c) Drawings shall be submitted electronically on a compact disk (CD) in MicroStation Format. Submittal format shall be coordinated with the Water Utility Engineering Section.
5. Monthly progress reports throughout the project
6. At the completion of the project, all documents shall be submitted in original file format in addition to pdf versions of the documents.

J. Bidding Services:

1. Objective: The project shall be competitively bid through the City's Board of Public Works to engage a qualified contractor at an equitable price with minimal change orders.
2. Consultant Responsibilities for Bidding:
 - a) Provide all necessary personnel, resources, and subconsultants to assist the Water Utility in competitively bidding the work.
 - b) Gather and compile all necessary data required from City and County records and from other sources as the Consultant deems necessary to successfully competitively bid the project.
 - c) Prepare bidding forms, conditions of the Contract, and the form of Agreement between the Contractor and the Water Utility as required by the Madison Board of Public Works.
 - d) Assist the Water Utility in answering questions from prospective bidders.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 16 of 23

July 26, 2013

- e) Participate in a pre-bid meeting with prospective contractors explaining the project concepts and goals and answering questions that come up.
 - f) Prepare Contract Addendums as required
 - g) Assist the Utility in evaluating the bids and recommending an award.
 - h) Cost Limitation on Construction Costs:
 - (1) In the event that the low bid price is higher than the project budget, work with the Water Utility to cut costs.
 - (2) If elements can be removed from the work to bring the total cost in below budget, advise the Water Utility as to the impact of this change.
 - i) Any other work as required in this Request for Qualifications and the project Scope of Work required to successfully bid the project.
3. Water Utility Responsibilities for Bidding:
- a) Print and distribute bid documents
 - b) Host the pre-bid meeting
 - c) Host the bid opening.
 - d) Coordinate Utility staff and other City departments.
 - e) Work with the Consultant to recommend a bidder.
- K. Construction Administration Services:
- 1. Objective: Assist Madison Water Utility in monitoring, recording, and administering construction activities.
 - 2. Consulting Engineer Responsibilities for Construction Administration Services:
 - a) Consultant shall provide all necessary personnel, resources, and sub-consultants to assist the Water Utility in administering construction of the project.
 - b) Construction administration and documentation to include but not necessarily be limited to:
 - (1) Shop drawings
 - (2) Schedule compliance
 - (3) Contract compliance
 - (4) Regular construction meetings
 - (5) Request for information
 - (6) Request for change
 - (7) Change Orders
 - (8) Monthly pay requests
 - (9) Operation and maintenance manuals
 - (10) Test results
 - (11) Final inspection and punch list
 - (12) Contract Closeout
 - (13) Training



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

- (14) Startup and commissioning
 - (15) Other tasks normal to facility construction administration
 - c) Coordination with cell carriers: Consultant shall assist the Utility in coordinating removal and reinstallation of cell equipment and City Radio antennas.
 - d) Construction Inspection Services or Resident Engineer:
 - (1) Full time resident inspection is not anticipated
 - (2) Engineer to provide a reasonable amount of on-site coordination and inspection to adequately protect the Utility's interests and to ensure that the facility is constructed in compliance with project contract documents.
 - (3) Resident inspector/engineer shall provide written site reports to the Utility each time the inspector/engineer is on site.
 - (4) Resident inspector/engineer shall witness and document startup and testing of the facility.
 - e) Any other work noted in this Request for Qualifications and the project Scope of Work required to successfully complete construction, startup and commissioning of the facility.
3. Water Utility Responsibilities for Construction Administration Services:
- a) Accept or reject contract documentation
 - b) Approve pay requests
 - c) Provide direction as necessary
 - d) Accept or reject change orders
 - e) Attend project meetings
 - f) Coordinate and schedule Utility staff and other City departments.
 - g) Work with the Engineer to ensure contract compliance
- L. Consultant Evaluation
- 1. At the completion of the project, the Water Utility may, at its option, conduct a consultant evaluation.
 - 2. The following criteria may be evaluated:
 - a) Ability to meet project schedules and budgets
 - b) Accuracy and completion of contract documents
 - c) Number of Addendum required during bidding
 - d) Constructability of the project
 - e) Construction cost control
 - f) Number of construction change orders and construction disputes
 - g) Responsiveness to Water Utility concerns



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 18 of 23

July 26, 2013

IV. WATER UTILITY PROJECT TEAM

A. Water Utility Project Manager and point of contact:

Dennis Cawley, PE,
119 E. Olin Avenue
Madison, WI 53713
608-261-9243
dcawley@cityofmadison.com

V. PROPOSAL

A. General:

1. The proposal will be limited to no more than **Ten (10) pages** plus resumes of the proposed team members and sample drawings.
2. Font used on all sheets including the schedule shall be no smaller than 11 point and shall not be “narrow”. Print document on both sides of the paper, each side is one page.
3. The use of 11 x 17 paper shall be limited to drawings, schedules and tables. Each 11 x 17 sheet shall be considered one page. Print 11 x 17 pages single sided.
4. Margins shall be a minimum of 0.75 inches on all edges.
5. Submitted resumes shall not exceed one page in length per team member.

B. Statement of project understanding

1. Provide a detailed statement of project understanding
2. Statement shall cover but not be limited to:
 - a) Understanding of need for the project
 - b) Project objectives
 - c) Project challenges
 - d) Permitting
 - e) Public participation

C. Public Participation

1. Document qualifications and experience of the proposed team in public participation and engagement

D. Statement of Qualifications and Work History, to include but not necessarily be limited to:

1. Detailed description of the proposed Project Team
2. Documentation of qualifications of the proposed project team on projects of similar size and complexity.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 19 of 23

July 26, 2013

3. A demonstration of a thorough up to date working knowledge of the applicable City of Madison building and zoning regulations.
4. Demonstration of recent success getting a project through the City of Madison permitting process.
5. Demonstration of working knowledge of Wisconsin DNR permitting requirements
6. Demonstration of working knowledge of Wisconsin PSC requirements
7. Project History:
 - a) List of completed projects within the last 5 years of similar size and complexity. Dates for each project shall be clearly indicated
 - b) Other relevant project design and approval experience
 - c) Include name of Project Manager for each project.
 - d) Client name and phone number.
 - e) Project Design Fee History:
 - (1) Initial design fee dollar value
 - (2) Value of any amendments to the design fee and justification for the change.
 - (3) Provide a breakdown of conceptual design fee, final design and permitting fee, and construction administration fee for each project listed.
 - f) Provide the actual design schedule for the project.
 - g) Provide any public participation activities with the project
 - h) Construction Cost History:
 - (1) List the Engineers opinion of construction cost for each project
 - (2) List the low bid for each project.
 - (3) List the value of all change orders for each project and the reason for the change orders.
 - i) Provide any relevant details, descriptions, or explanations for each project as warranted to allow the City to evaluate the Firms performance history.
8. Proposed Subcontractors with their portion of the work identified and a listing of the appropriate qualifications and references with phone numbers.
9. Project Schedule:
 - a) Include a detailed project schedule
 - b) Schedule shall be a Gantt chart
 - c) Include sufficient detail to demonstrate a thorough understanding of the process to complete the work and obtain the necessary permits through the City of Madison permitting process.
 - d) The quality and detail of the submitted project schedule will provide an indication of the firms experience in completing projects of this type and will be used in the evaluation of the proposal.
10. References: Provide names and phone numbers of a minimum of three references familiar with the proposed Project Manager and other proposed key team members.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 20 of 23

July 26, 2013

Reference should have direct experience with the Project Manager on projects of similar complexity and size.

11. Project Management: Provide documentation of effective project management, project cost control, and project communications on completed projects of similar nature and scope.
12. Projected Hours and Estimated Costs -
 - a) Submit a detailed breakdown of the estimated hours and projected costs by phase of the project, by discipline, and by firm.
 - b) The estimated hours shall provide a demonstration of your understanding of the effort needed to complete the project.
 - c) Submit the estimated hours and associated costs in a separate sealed envelope clearly marked **“Projected Hours and Estimated Costs”**.
 - d) The hour and cost estimate is not included in the page count for the proposal.
 - e) The projected hours and estimated costs will not be used in the initial evaluation of the qualifications of your Firm for this project. The projected hours and estimated costs will be used as part of the evaluation by the selection committee of the short listed Firms.
 - f) Following selection of the successful Firm, these submitted costs will be used as a starting point to negotiate a Contract for the work and complete a detailed Scope of Services.

E. Interview:

1. Madison Water Utility reserves the right to make a selection based solely on the information contained in the submitted proposal.
2. If no clear choice can be made based on the proposals, Madison Water Utility reserves the right to either interview selected Firms or request additional information to help in determining the most qualified Firm.
3. Interview format (if used):
 - a) 30 minute presentation
 - b) 30 minutes for questions and answers
 - c) The proposed Project Manager shall lead the presentation.
 - d) Presentation team shall have a maximum of three (3) people.
4. Presentation: The objective of the interview will be to clearly demonstrate the Firms qualifications to complete the project to the satisfaction of Madison Water Utility. The presentation shall be brief and concise and shall include but shall not be limited to:
 - a) A presentation of details and special features of previous projects completed by members of the proposed Project Team.
 - b) Information should include how the design for the project cited was developed, how the team worked with the Owner, and how the finished product was received.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 21 of 23

July 26, 2013

- c) Cost information should be presented for any project experience used to include design fees and amendments and construction costs and project change orders.
 - d) A description of how the PM and the team proposes to work and communicate with the Utility throughout the project.
 - e) Outline of the public participation process.
 - f) A description on how the team will manage the design and control the costs on this project.
 - g) A presentation on how the team will handle quality control and quality assurance for the project.
 - h) Following a review of the submittals, the Water Utility reserves the right to establish specific requirements and content for the interview to further aid in the determination of the Firms qualifications.
 - i) Extensive and detailed preliminary layouts and designs of the proposed Water Utility project are not necessary for the interview and should not be included in the interview presentation.
 - j) Questions: The selection team may prepare a list of standard questions for the interview. Additional questions may be developed based on the Firm's proposal to clarify information submitted.
- F. Submittal: Submit four (4) bound copies of the proposal to the following address:
- Dennis Cawley, P.E.
Madison Water Utility
119 East Olin Avenue
Madison, Wisconsin 53713
- The submittal shall be clearly marked:
- “Engineering Services proposal for
Lakeview Reservoir (Res 113) Two Zone System”**
- G. Due Date and Time:
1. The submittal is due to the Water Utility no later than **3:00 p.m. Friday August 16, 2013.**
 2. Email or fax submittals are not permitted and will not be accepted.
 3. The Water Utility is not responsible for late deliveries.
 4. Submittals received after the designated time shall be returned unopened.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 22 of 23

July 26, 2013

VI. SELECTION PROCESS

- A. The selection will be based on demonstrated qualifications in the design and construction of projects of similar size and complexity. Demonstrated experience in working closely with and as a highly functioning team with Owner staff toward the successful completion of the project will be critical to project success. A demonstrated ability to successfully work within the City of Madison permitting and contracting process and engage the public in the process will also be crucial.
- B. Selection Committee: The Selection Committee shall be made up of 3 to 5 members of the Water Utility staff and potentially an independent outside individual.
- C. Ranking
 1. Submittals will be ranked based on the following categories:
 - a) Project understanding
 - b) Documented experience with projects of similar size and complexity
 - c) Proposed Project Team
 - d) Proposed Project Schedule and Work Plan
 - e) Demonstrated experience in Public Participation and Engagement
 - f) Understanding of the Madison Permitting process
 - g) Understanding of DNR approval process on projects of similar size and complexity
 - h) Project Cost Estimating and Cost Control History
 2. A short list of 2 to 4 Firms will be developed from the review of the proposals
 3. Estimated hours and costs for the short listed Firms will be evaluated for:
 - a) Demonstration of project understanding
 - b) Indicated effort required by phase and proposed tasks
 - c) Overall Project Budget
 4. Interview (If necessary) - Firms will be judged in the interview based on the following:
 - a) Project Team Presentation and Organization
 - b) Demonstration of Project Understanding and Project approach
 - c) Project Management/Cost Control Plan
 - d) Completed Projects
 - e) Questions and Answers
 5. Final Selection:
 - a) The Firm judged to be the most qualified based on all of the information presented and evaluated will be selected by the committee and recommended to the Water Utility Board.
 - b) The selected Firm shall be notified in writing. No other method shall be considered to be official notification of selection by the Water Utility.
 - c) The selection of the committee shall be final.



Madison Water Utility – Madison, Wisconsin

REQUEST FOR PROPOSALS Engineering Services for Conceptual Design, Final Design, Construction

Lakeview Reservoir (Res 113) Two Zone System

Page 23 of 23

July 26, 2013

6. Projected Schedule assuming no interview (Subject to change)
 - a) August 16, 2013 – submittal due date
 - b) August 23, 2013 – selected Firm recommended to the Water Utility Board for their August 27, 2013 meeting (assuming no interview)
 - c) September 3, 2013 – Selection of the Water Utility Board confirmed by Common Council and contract awarded
 - d) Week of September 9, 2013 – Detailed scope of services and contract finalized and signed
 - e) Week of September 23, 2013 – Estimated start work date

VII. CONTRACT

- A. City Contract:
 1. The Firm that is recommended for award of this Contract will be required to negotiate an equitable contract with the Water Utility based on the approved Scope of Work.
 2. The selected Firm will then enter into a standard City of Madison Contract for Purchase of Services. A copy of this standard contract is attached for your review.

VIII. QUESTIONS

- A. Questions concerning this Request for Proposals should be directed to:

Dennis Cawley, PE
Madison Water Utility
119 East Olin Avenue
Madison, WI 53713
608-261-9243
dcawley@cityofmadison.com
or

Al Larson, PE, BCEE
Madison Water Utility
119 East Olin Avenue
Madison, WI 53713
608-266-4653
allarson@cityofmadison.com