

**WATER STORAGE TANK INSPECTION
AND EVALUATION SERVICES**

TITLE: City of: _____ Reservoir: _____

BID NO: _____

CITY PROJECT NO: _____

Sealed bids shall be accepted by _____ until _____ p.m. local time on _____ at which time they shall be opened and read aloud.

The scope of the work under this contract includes, but is not limited to, furnishing all labor, materials, tools, equipment, superintendence, transportation, and performing all work in strict accordance with the solicitation documents for an inspection of the previously mentioned reservoir. This study is to be performed by a consulting engineer to establish a baseline report of the current conditions of the _____ storage facility.

All work shall be performed in strict accordance with the specification as outlined in "Attachment 1".

Plans, specifications and other contract documents for the above project may be obtained at _____.

The Owner reserves the right to reject any or all bids or to accept any bid, or portions thereof, when in their reasoned judgment, the general public will be better served thereby.

Owner

INVITATION FOR PROPOSALS

BID NO. _____

Sealed proposals addressed to the Owner for furnishing and delivering:

TITLE: _____

Proposals will be received at _____ p.m. local time on _____ at which time and place they will be opened and read aloud.

GENERAL INSTRUCTIONS

1. **INSTRUCTIONS, FORMS AND SPECIFICATIONS:** Instructions, forms and specifications may be obtained in person or by mail from _____.
- (a.) All proposals are to be submitted on and in accordance with forms for these purposes which are available at _____.
- (b.) All proposals are to be submitted in sealed, plainly marked envelopes supplied by proposer. Envelopes shall clearly state project title, bid number, bid date, time and name of proposer.
- (c.) Additional information or clarification of any of the instructions or information contained herein may be obtained from _____.
- (d.) Any proposer or proposers finding any discrepancy in or omission from the specifications, in doubt as to their meaning, or feeling that the specifications are discriminatory, shall notify at once the _____ in writing within 5 days of the scheduled opening of proposals. Requests for exceptions in no way obligate the _____ to change, modify or alter the specifications, nor to waive any existing requirements prior to award of contract. The _____ will notify all proposers in writing by addendum duly issued, or any interpretations made to the specifications or instructions.
- (e.) _____ will assume no responsibility for oral instruction or suggestion. All official correspondence in regard to the specifications should be directed to and will be issued by the _____.

2. OWNER CONSULTANT EVALUATION AND SELECTION PROCESS

- A. _____ shall review the qualifications of respondents and shall uniformly evaluate them based on their qualifications, using an objective process. Under the terms of this RFQ document, engineering and inspection services shall be provided only by organizations or individuals who are properly qualified to do the work. Those so qualified are:
- (i) An engineering organization whose principals are registered professional engineers in the state of _____ specializing in engineering; preparation of plans, specifications, and inspection services; and having at least five years experience in the performance of this work on elevated potable water storage reservoirs. The inspectors assigned to the work in the field are required to be NACE Certified Coating Inspectors or a NACE Intermediate Coating Inspector working under the direct supervision of a NACE Certified Coating Inspector and AWS Associate Welding Inspector working under the direction of a Registered Structural Engineer.
 - (ii) All engineering and inspection shall conform to the requirements of AWWA D100-05; NACE International; American National Standards Institute (ANSI); American Society for Testing and Materials (ASTM); American Concrete Institution (ACI); Ten State Standards; State Health Codes; and the Occupation Safety and Health Administration (OSHA) Standards.
 - (iii) Past record of performance on similar contracts, including such factors as control of costs, quality of work, and ability to meet schedules.
 - (iv) Capacity of the respondent to perform the work (including any specialized services) within the time limitations, taking into consideration the current and planned workload of the respondent.
 - (v) The familiarity of the respondent with types of problems applicable to the project.
 - (vi) Avoidance of personal and organization conflicts of interest prohibited under Federal and local law.
 - (vii) Accessibility of consultant for personal or telephone contact.
 - (viii) It is the intent of the Owner to award this contract to one consultant. Therefore, no sub-consulting of this work shall be permitted.

The following excerpt from AWWA MANUAL OF WATER SUPPLY PRACTICES M42 Steel Water Storage Tanks defines organizations or individuals deemed properly qualified to perform the type of inspection proposed by _____.

AWWA Manual M42 Appendix C Inspecting and Repairing Steel Water Tanks and Elevated Tanks for Water Storage (formerly AWWA Standard D101)

Section A-1: General

Section A-1.2: Inspection Services

Under the terms of this recommended practice document, only organizations or individuals who are properly qualified to do such work shall provide inspection services. Those so qualified are:

- (1) An engineering organization whose principals are registered professional engineers, specializing in inspection services and having at least five year's experience in the inspection of steel structures.
- (2) Independent engineers, licensed in the state in which the structure is located, whose practice has included substantial or major attention to steel construction.
- (3) Inspection or safety agencies of the state in which the structure is located, if such agencies are empowered to render inspection services and, further, if such inspection services involve the employment of personnel experienced in steel construction and maintenance.

In all of the above classes of qualified inspection agencies, the inspector(s) assigned to the work in the field shall have been properly trained by the organization so qualified and shall have no interest, other than that of a competent inspector, in the performance of any work under consideration at the time the inspection is made.

The inspection and inspection reports will be performed in accordance with AWWA M 42 Inspecting and Repairing Steel Water Tanks, Standpipes, Reservoirs, and Elevated Tanks, for Water Storage; American Concrete Institute (ACI) 201.1R-95 Guide for Making a Condition Survey of Concrete in Service; and Ten State Standards Recommended Standards for Water Works 2007 Edition.

All bidders must follow the AWWA Manual M42 Appendix C Inspecting and Repairing Steel Water Tanks and Elevated Tanks for Water Storage (formerly AWWA Standard D101)

B. REQUEST FOR QUALIFICATIONS:

- a. All proposals submitted in response to the request for proposals shall uniformly be evaluated by an objective process. Oral (including telephone) or written interviews may be conducted with top rated proposers.
- b. Information obtained in these interviews shall be treated as confidential except when disclosure is required by Federal, State or local law.
- c. At no time during the entire procurement process shall information which would provide an unfair competitive advantage be conveyed to any candidate.
- d. The evaluation of proposals shall be documented.
- e. The evaluation of proposals shall comply with acceptable State and Federal practices for the competition and utilization of small and minority businesses.
- f. The city/utility evaluation must be made solely on the basis of the technical and other evaluation criteria stated in the solicitation. These evaluating factors should include, as appropriate, the following:
 - (i) The quality of the work (or items) to satisfy minimum project needs;
 - (ii) Proposed method to accomplish the work;
 - (iii) Specialized experience and technical competence of key personnel who perform the work;
 - (iv) Prices quoted and consideration of other prices for the same or similar items or work;
 - (v) The business reputation, capabilities, responsibilities, and past performance of the respective persons or firms who submit proposals;
 - (vi) Delivery requirements;
 - (vii) Capacity to perform work within required time limits;
 - (viii) The familiarity of the candidate with the types tanks which may be inspected and of problems applicable to the project;
 - (ix) Requirements for the avoidance of personal and organizational conflicts of interest; and
 - (x) Capability to explore and develop innovative or advanced techniques or designs.

3. AWARD OF CONTRACTS

- A. Following the approval by the _____ the _____ shall award all contracts in accordance with recommendations of the _____ pursuant to the review process described above not earlier than seven (7) days after the public opening of proposals.
- B. Any other considerations for the award will be stated on the specifications and proposal.

4. RESERVATIONS

- a. The _____ reserves the right to reject any or all Proposals when, in his/her reasoned judgement, the public interest will be served thereby.
- b. The _____, with the approval of the _____, may waive formalities or technicalities in proposals as the interest of the Owner may require.
- c. The _____ may waive minor differences in specifications provided these differences do not violate the specification intent nor materially affect the operation for which the item or items are being purchased, nor increase maintenance and repair cost to Owner.
- d. A proposer may withdraw his bid with written notice.

5. DISPUTES

In cases of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the _____ or authorized representatives, shall be final and binding on both parties. The _____ may request in writing, the recommendation of the _____ using the time or materials, or other objective sources.

6. AUTHORITY

Instructions, specifications, and proposals are issued, and all bids, quotations, orders, and purchasers are made pursuant and subject to the authority of _____.

7. EXCEPTION

The submission of a proposal shall be considered an agreement to all the terms, conditions, and specifications provided herein and in the various proposal documents unless specifically noted otherwise in the proposal.

ATTACHMENT 1

STATEMENT OF WORK

I. PROJECT

This project includes thorough evaluation and submittal of a detailed engineering report regarding the ____,000 gallon steel/concrete (Elevated Water Tower, Hydropillar, Single Pedestal, Standpipe, Ground Storage Reservoir, Composite), water storage reservoir, located at _____.

II. SCOPE OF WORK

A. Evaluation Services

1. The work included under this evaluation shall consist of the field examination and a detailed and descriptive evaluation report of the structure. The evaluation should be performed by at least two technicians. The Owner will provide one worker to stay near the reservoir on the ground to operate valves and for safety requirements.
2. Following proper notification, the Owner will prepare the reservoir and system for draining the tank for and/or during the evaluation. A minimum of thirty-six (36) hours notice shall be provided.

OR:

Following proper notification, the Owner will have the tank emptied for evaluation in order that the inside roof, sides and bottom of the tank will be properly exposed for evaluation. A minimum of thirty-six (36) hours notice shall be provided.

3. The engineer shall assume the entire responsibility for accident to himself/herself and his/her employees while evaluating the structure. The engineer shall make such observations of the structure as may be necessary to determine their safety for use in evaluating the structure. The engineering firm shall carry adequate workmen's compensation, property damage, public liability insurance and professional liability insurance, and shall fully protect the Owner against claims arising out of the engineer's negligent performance of the evaluation work.
4. The work shall include proper disinfection, chlorination or sterilization as required during or following the inspection, in order to provide continual use of the reservoir within the water supply system.

B. Examination and Report

1. The tank evaluations shall consist of an examination of the entire reservoir. This includes the site and Owner's surrounding property.
2. The report and its observations shall be of a narrative format and **shall not** be of checklist or fill-in-the-blank type format.
3. Conditions of paint – a report of the condition of the paint as found shall be submitted.
5. The report shall include:
 - a. Existing coating information including age, type, and manufacturer as provided by the Owner, or apparent type of coating if otherwise unknown.
 - b. Adhesion of the paint, if applicable.
 - c. Rough approximation of percent of corroded steel and/or spalled or cracked areas of concrete, expressed in quantitative terms (square feet, lineal feet, etc.).
 - d. Specific location of such areas if segregated or otherwise appropriate.
 - e. Character of such rust areas (blotching, corrosion, loose paint, etc.)
 - f. Recommendations for concrete or steel restoration and coatings.
 - g. Test samples of the interior and exterior coatings, in the areas in which replacement may take place, if applicable. The testing of the existing coatings for lead and chromium content in conformance with current _____ Minnesota Pollution Control Agency (PCA) Requirements or State Department of Health Requirements.
1. Types of repairs – where pitting has penetrated to a depth indicating the necessity for repairs, the report shall so state specifically, describing the location of spots and their size. If they can be repaired by patches, the engineer shall clearly specify the type and extent recommended. The engineer's report shall inform the Owner of the repair work which he/she considers necessary. The report need not be limited to the items specifically outlined herein, but shall include all items of any nature which the engineer considers necessary.
2. Detailed Report – in addition to the descriptive report outlined above, the engineer should include pertinent measurements of all of the tank's structural members and report on the appearance and structural condition of the following items where applicable:

- a. Tower
Interior and Exterior:
- Roof structure (size and style)
 - Vents (size and style)
 - Roof manways (size and style)
 - Ventilation manways (size, style and screen size)
 - Overflow weir and pipe (size, style, air breaks, splash pads, and drainage)
 - Support column (size and style)
 - Capacity level and head range
 - Mud ring
 - Drains
 - Hatches
 - Floor condition (oil canning)
 - Cathodic protection
 - Pitting
 - Girders and sail plates
 - Ladders, cages, platforms, and handrails
 - Painters rigging
 - Reinforcement pads
 - Balcony or stiffening girder
 - Anchor bolts and cotter pins
 - Base pad condition including flexcell and grout
 - Screens on vents and overflows
 - Lighting
 - Site dimensions
- b. Inlet/Outlet piping.
- c. Indications of leakage.
- d. Condition of coated surfaces.
- e. Is the tank welded, riveted or bolted?
- f. Antennas installations. Are they installed properly? Do we have maintenance issues with the antennas? Are they in compliance with standards? Location of buildings.
- g. Safety devices and general compliance of the reservoir with OSHA or ANSI safety standards.
- h. Owner's property.
- i. Site drainage and indications of settlement.
- j. Compliance of the reservoir openings and coatings with sanitary and OSHA, health department requirements.
- k. Condition of all reservoir appurtenances.
- l. Evidence of ice or other damage to the reservoir.
- m. Evidence of vandalism.
- n. Compliance of the reservoir's present condition with current AWWA Standard.
- o. Security
- p. De-icing systems
- q. Gasket size

3. Color photographs and/or video will be used along with the report to document all the observations of the engineer. The photographs shall include captions and be referenced to and support to the engineer's observations.
4. Recommendation for Specifications – the report shall include recommendations for items to be included in the specifications for correcting all deficiencies found during the evaluation. Projected life of the tank and present coatings will also be included.
5. Engineers Cost Estimate – the report will include an engineer's opinion of how much the recommendations will cost to repair the structure. The estimated life of coating recommendations will also be included, as will the expected remaining service life of the reservoir. If appropriate, estimated demolition costs will be included.
6. Disposition of Report – Three (3) copies of the engineering report shall be delivered to the Owner. It is understood between Owner and the engineering firm that copies of the evaluation report may be made available by Owner to painting or tank repair contractors.
7. Cost Comparison Estimate – New tanks vs. reconditioning project will be prepared if deemed appropriate by the engineer.
6. Disinfection methods shall conform to AWWA Standards and agreed with the Owner.
7. Requested professional engineer and NACE III Inspector shall prepare and certify the report.

The engineering firm will be responsible for disinfecting the reservoir after evaluating in accordance with AWWA methods. The Owner will assist the consultant with equipment and water necessary to perform disinfection.

III. TIME LIMIT

The time limit for completing the work is thirty (30) days from the date of Notice to Proceed.

IV. COST PROPOSAL

The cost proposal shall be submitted as lump sum bid including all costs for mobilization, testing, engineering, printing and delivery.

IV. FACTORS FOR EVALUATION AND AWARD OF CONTRACT

Proposals shall be reviewed by _____ for the following items:

1. Approach in adequately addressing the issues described in the SCOPE OF WORK section.
2. Experience of the proposed personnel relative to the scope of work of this RFP, as well as experience of the company as a whole.
3. The timeline the firm proposes to complete the inspection and report.
4. Results of reference checks.
5. Completeness of the proposal.
6. Cost of the project.

ROV inspections will be accepted under the same format as the floatdown inspection.

The Owner does not want divers in the tank. Divers will not be allowed to swim in the reservoir.

The _____ reserves the right, without qualification, to select any proposal, to reject any or all proposals, and to apply its judgement with respect to any proposal submitted. Although cost will not be the overriding criterion in the selection, the cost may be the determining factor if proposals are deemed to be equal in content.

Once an engineering firm has been selected, the _____ will issue an order to proceed. The firm shall not proceed with any work until the order to proceed has been issued.