

EXHIBIT "A"
SCOPE OF WORK
CITY OF REDMOND
SE REDMOND TANK PAINTING AND SEISMIC UPGRADE PROJECT

PROJECT OVERVIEW

The City of Redmond owns and operates a water storage tank in SE Redmond. The tank is located at 18609 NE 65th Street, near Redmond Fire Station 16 and Genie Industries. The water tank has a capacity of four and half million-gallon (4.5 MG). The steel tank was constructed in 1996 and is scheduled for exterior and interior paint recoating. The water tank, with no impact to water service, will need to be taken off line and drained to re-coat the interior surfaces. With the tank drained, this lends an opportunity for engineers to evaluate the seismic structural design from 1996.

A contract for preliminary engineering was executed on May 16, 2019 and was recently completed. This phase of work included a comprehensive evaluation of the reservoir, a predesign report summarizing the scope of the project to be constructed, and 30% plans and specifications. The project will include the following improvements, as described in the Pre-Design Report:

- 1) Seismic Upgrade: Retrofit the reservoir with structural improvements as described in the predesign report for the project.
- 2) Recoating: Sandblast and recoat the interior and exterior of the reservoir as described in the predesign report for the project.
- 3) Safety Accessories: Improve/modify access ladders, platforms, handrails, roof vents, overflows, and drains.
- 4) Tank Drain: Make improvements to the connection.
- 5) System Drainage: Improve gutters, stormwater management, and reservoir drainage.
- 6) Cellular Antennae: Improve cellular equipment locations and methods of attachment to reservoir.
- 7) Cathodic Protection System: Maintain existing system.
- 8) Mixing and Water Quality: Make improvements to mixing to maintain water quality.
- 9) Other Improvements: Make improvements to handrails at roof, gutters, additional cable trays, and new level indicator on exterior of tank.

This engineering agreement will include 60%, 90%, and final design documents and construction support services.

SCOPE OF WORK

Gray & Osborne has prepared the following scope of work tasks for engineering design, bidding assistance, and construction support.

Task 1 – Project Management

A. Kickoff Meeting

G&O will prepare an agenda and lead a project kick-off meeting with City and team staff. G&O will develop meeting notes and distribute following the meeting.

B. Schedule and Budget Management

G&O will track the budget and schedule relative to the actual percent complete (earned value tracking) and report this to the City monthly for design activities. Monthly project summaries will be included with monthly billing invoices and will quantify the past month's billings. Anticipated upcoming project activities and milestones will also be documented. The project schedule will be updated by G&O along with coordinating and managing the sub-consultants.

C. Progress/Work Meetings

The G&O team will attend up to five (5) in-person progress meetings during the design phase. It is assumed each in-person meeting will be 2 hours in duration. G&O shall provide agendas for all meetings held. Meeting agendas will be distributed before each meeting. Meeting summaries and action items will be provided after each meeting. The following table lists anticipated meetings during the design phase:

Number of Meetings	Meeting Name
1	60 Percent Design Milestone Review Meeting
1	90 Percent Design Milestone Review Meeting
1	Building Permit Application Submittal Meeting with City
2	Project Status and Design Coordination (Conference Calls)

D. Subconsultant Coordination

The G&O team engages in regular communication with the Subconsultant team throughout the project regarding schedule and expected deliverables. All Subconsultant work will be coordinated and managed through G&O's assistant project manager, overseen by G&O's project manager.

City Responsibilities

- Review meeting minutes for accuracy, provide comments for revision as necessary
- Provide comments on review submittals

- Process monthly invoices
- Provide input and concurrence for project decisions and development
- Provide currently available background information on the existing tank site, related to system operation and piping

Deliverables by G&O

- Monthly invoices and project summaries
- Meeting Agendas and Minutes

Task 2 – Survey Work

Under this task, topographic and boundary surveying will be performed to support the SE Redmond Tank Seismic Upgrade and Recoating project. Gray & Osborne will be responsible for having a private utility locating company mark the locations of existing utilities in the field prior to on-site survey work. It is assumed that one G&O design team member will meet the surveyor on-site to see that the required information is gathered during the field work. It is assumed the City will mark the existing water mains.

Anticipated work includes the following:

- Private utility locating.
- Perform field traverse and establish survey control utilizing North Zone of the State Coordinate System based on NAD 83/91 and a vertical datum in accordance with the NAVD 88 benchmarks.
- Survey visible and apparent utilities.
- Survey visible and apparent improvements.
- Survey trees, 6-inch in diameter at breast height (dbh) and greater.
- Survey fences and debris piles.
- Survey existing storm and sanitary systems including size and invert elevation.
- Obtain grade elevations on a 40-foot (maximum) grid across site for contouring at 1-foot intervals as well as top and toe of slopes or grade line changes.
- Set benchmarks along design corridor.
- Compile AutoCAD map with information obtained from field survey.

City Responsibilities

- Provide access to tank site
- Provide locations of waterlines on the project site

Deliverables by G&O

- Boundary and Topographic Survey in AutoCAD and PDF Format

Task 3 – Design and Final Construction Documents

Complete civil, structural, and electrical engineering design of the SE Redmond Tank Seismic Upgrade and Recoating Project. This task includes completing the engineering analysis and calculations necessary to complete the design. This task also includes preparation of detailed plans, specifications, and cost estimates for public bid.

Subtask 3.1 - Prepare 60% Plans and Specifications

The project team will prepare 60% plans, technical specifications, and a cost estimate. Comments from the 30 percent submittal will be incorporated into this design submittal. Plans will include preliminary civil sheets including site plans, site piping plans, grading plans, storm water, and preliminary tank modification cross sections, elevations, and details. CSI format specifications will be provided and G&O and the City shall work together towards preparing City standard contract provisions. Structural design of tank accessories will be designed utilizing a performance specification. Foundation and tank appurtenance design will be by G&O. G&O will complete QA/QC review of the 60 percent deliverables prior to submittal to the City. 60 percent plans, specifications, and cost estimates will be submitted to the City for review and comment. Gray & Osborne will meet with City staff to complete a facilitated review of the plans.

Subtask 3.2– Prepare 90% Plans and Specifications

Prepare 90 percent plans, specifications, and revise the construction cost estimates. Comments from the 60 percent submittal and permitting agencies will be incorporated into the 90 percent submittal. Specifications will be prepared in CSI format with applicable City standard contract provisions and contract forms. G&O will complete QA/QC review of the 90 percent deliverables prior to submittal to the City. 90 percent plans, specifications, and cost estimates will be submitted to the City for review and comment. Gray & Osborne will meet with City staff to review any comments.

Subtask 3.3 – Prepare Final Stamped Plans and Specifications

Prepare bid ready final plans, specifications, and final construction cost estimate for the project. Plans and specifications will be suitable for public works bid. Specifications will be prepared in CSI format with applicable City standard contract provisions and contract forms. G&O will complete QA/QC review of the final deliverables prior to submittal to the City. Final plans, specifications, and cost estimates will be submitted to the City for distribution to contractors.

Subtask 3.4 – Permitting Assistance

A construction permit may be required with City of Redmond. Applications and supporting materials will be prepared by Gray & Osborne. Gray & Osborne will produce up to (3) graphics to support the City’s public outreach effort.

Deliverables by G&O

- Electronic scalable set of plans (11”x17” PDF format) –60%, 90% and Final Design

- Contract documents including technical specifications (PDF) – 60%, 90% and Final Design

Assumptions

- Plan set will include cover sheet, symbols, notes, details, erosion control, existing site plan, demolition plan, proposed site plan, grading, site drainage and water plans, profiles, seismic upgrades, improvements to accessories and reservoir piping.
- City standard contract front end will be used.
- Technical specifications will follow CSI standard format with special provisions to City standards.
- City will pay for any permit application fees.
- City will lead public outreach effort to the neighborhood.

Task 4 – Bidding Services

G&O will attend an on-site meeting with potential bidders to answer questions and identify potential bid addendum items. City will lead the bidding process. G&O shall assist the City with the bid process for the project. Respond to bidder inquiries over phone and emails. Prepare addenda as necessary.

Task 5 – Construction Support

Provide construction support services during the Construction phase of the SE Redmond Tank Seismic Upgrades and Recoating Project. This task will include coordinating and managing the schedule and budget for the project team, including subconsultants. The City will manage budgeting with the contractor(s) and pay estimates. The City will coordinate with the contractor and regulatory agencies with G&O providing backup support on an on-call basis and attending some progress meetings on call. We understand that the City would like support from an on-site engineer-in-training through the duration of the on-site construction. 10 months of on-site support have been assumed.

Gray & Osborne will assist the City with the construction phase of the project by providing the following services:

A. Review Submittals

Review key equipment, material, shop drawings, and plan submittals from the contractor for conformance with the Plans and Specifications when City staff need assistance. Return submittal review comments to the City.

B. Review and Respond to Requests for Information and Change Orders

Review and respond to requests for information and clarifications from the contractor. Prepare any clarification drawings or design modifications necessary to complete the project. Prepare and distribute responses. Assist the City in preparing change orders requiring CAD drawing revisions and specifications

modification review and assistance. The City will negotiate and approval of all changes.

C. Attend Construction Meetings

Attend the preconstruction meeting and construction meetings to coordinate work activities with the City and the contractor. Provide construction guidance over the phone to the City PM when needed. Conduct site visits as directed by the City. 43 meetings have been assumed.

D. Review Materials Testing and Special Inspection Results

City shall coordinate materials testing and special inspection required during construction with assistance from G&O as backup consultants. Review results of materials testing and special inspection for conformance with the plans and specifications. Materials testing and special inspection for the project will be paid for separately by the City and will include:

- Soil bearing verification
- Soils compaction
- Asphalt compaction
- Reinforced concrete inspection and testing
- Certified welding inspection (CWI)
- Radiographic testing (welding)

E. Provide Tank Coating Inspection

Provide inspection of the coating surface preparation and application by a NACE Certified Level 3 Inspector. Periodic inspection of the tank steel blasting and prime shop coat application is included, and full time inspection is assumed for the field application including abrasive blasting and application of the field prime, stripe, intermediate, and finish coats. Included is dry film thickness testing per SSPC PA-2 requirements and holiday testing through low-voltage testing or visual utilizing optical pigments. 90 working days of coating inspection have been assumed.

Task 6 – Construction Record Drawings

Prepare construction record drawings in CAD format on CD or DVD and full-sized (22x34) prints based upon contractor and field inspector redlines, requests for information, shop drawings, submittals, etc., and provide both to the City. Record drawings will include one review submittal by the City and G&O with three copies of full sized plans on paper with City comments incorporated into the final record drawing prints.

ASSUMPTIONS

- Construction duration is estimated to be 215 Working Days

BUDGET

Based on the Scope of Work described above, the total estimated cost for engineering services is _____ as shown in the attached Exhibit "B."

Project Management Reserve Fund

The project management reserve fund has been established to allow the City to authorize additional work tasks to address unanticipated engineering issues. The City must provide prior written authorization before using any project management reserve funds.

Deliverable: City authorization of funds, justification documents.

ASSUMPTIONS

The following assumptions have been made in developing this scope of work. Preliminary engineering and alternatives analyses will be completed during preliminary design that will further define the improvements to be constructed.

1. The City will provide available record drawings and previous evaluations and inspection reports for the tank.
2. The City will be responsible for public outreach efforts to neighbors around the reservoir.
3. The City does not anticipate receiving Federal Funding for the SE Redmond Tank Painting and Seismic Upgrade Project. As such Gray & Osborne will not have access to the WSDOT Diversity Compliance Program and is exempt from all reporting requirements within the wsdot.diversitycompliance.com program.

BUDGET

Based on the Scope of Work described above, the total estimated cost for engineering services is _____ as shown in the attached Exhibit "B".

DELIVERABLES

Deliverables will be provided in the following format:

Electronic files in PDF format will be supplied for each deliverable.

Final deliverable documents will be in hard copy

PROJECT SCHEDULE

The anticipated project schedule is as follows:

Notice to Proceed

November 8, 2019

Complete 60% Design
Complete 90% Design
Complete Final Design
Construction

January 10, 2020
March 13, 2020
May 1, 2020
July 31, 2019 – May 28, 2020