

**PROFESSIONAL SERVICES AGREEMENT
FOR
ENGINEERING DESIGN SERVICES
LOG CABIN ROAD RESERVOIR – PROJECT #1240P**

This Professional Services Agreement ("Agreement") is effective as of the date of the last authorizing signature affixed hereto. The parties ("Parties") to this Agreement are the City of Olympia, a Washington municipal corporation ("City"), and Gray & Osborne, Inc., a Washington corporation ("Contractor").

A. The City seeks the temporary professional services of a skilled independent contractor capable of working without direct supervision, in the capacity of pre-design and design engineering services, construction management services, control programming services, and services supporting reservoir telecommunications policies and standards; and

B. The Contractor has the requisite skill and experience necessary to provide such services.

NOW, THEREFORE, the Parties agree as follows:

1. Services.

Contractor shall provide the services more specifically described in Exhibit "A," attached hereto and incorporated by this reference ("Services"), in a manner consistent with the accepted practices for other similar services, and when and as specified by the City's representative.

2. Term.

The term of this Agreement shall commence upon the effective date of this Agreement and shall continue until the completion of the Services, but in any event no later than December 31, 2016 ("Term"). This Agreement may be extended for additional periods of time upon the mutual written agreement of the City and the Contractor.

3. Termination.

Prior to the expiration of the Term, this Agreement may be terminated immediately, with or without cause by the City.

4. Compensation.

A. Total Compensation. In consideration of the Contractor performing the Services, the City agrees to pay the Contractor an amount not to exceed Eight Hundred Seventy-nine Thousand One Hundred Thirty-eight and No/100 Dollars (\$879,138.00) calculated on the basis of the hourly labor charge rate schedule for Contractor's personnel attached hereto as Exhibit "B".

C. Method of Payment. Payment by the City for the Services will only be made after the Services have been performed, a voucher or invoice is submitted in the form specified by the City, which invoice shall specifically describe the Services performed, the name of Contractor's personnel performing such Services, the hourly labor charge rate for such personnel, and the same is approved by the appropriate City representative. Payment shall be made on a monthly basis, thirty (30) days after receipt of such voucher or invoice.

D. Contractor Responsible for Taxes. The Contractor shall be solely responsible for the payment of any taxes imposed by any lawful jurisdiction as a result of the performance and payment of this Agreement.

5. Compliance with Laws.

Contractor shall comply with and perform the Services in accordance with all applicable federal, state, and City laws including, without limitation, all City codes, ordinances, resolutions, standards and policies, as now existing or hereafter adopted or amended.

6. Assurances.

The Contractor affirms that it has the requisite training, skill and experience necessary to provide the Services and is appropriately accredited and licensed by all applicable agencies and governmental entities, including but not limited to being registered to do business in the City of Olympia by obtaining a City of Olympia business registration.

7. Independent Contractor/Conflict of Interest.

It is the intention and understanding of the Parties that the Contractor is an independent contractor and that the City shall be neither liable nor obligated to pay Contractor sick leave, vacation pay or any other benefit of employment, nor to pay any social security or other tax which may arise as an incident of employment. The Contractor shall pay all income and other taxes due. Industrial or any other insurance that is purchased for the benefit of the City, regardless of whether such may provide a secondary or incidental benefit to the Contractor, shall not be deemed to convert this Agreement to an employment contract. It is recognized that Contractor may be performing professional services during the Term for other parties; provided, however, that such performance of other services shall not conflict with or interfere with Contractor's ability to perform the Services. Contractor agrees to resolve any such conflicts of interest in favor of the City.

8. Equal Opportunity Employer.

A. In all Contractor services, programs or activities, and all Contractor hiring and employment made possible by or resulting from this Agreement, there shall be no unlawful discrimination by Contractor or by Contractor's employees, agents, subcontractors or representatives against any person based on any legally protected class status including but not limited to: sex, age (except minimum age and retirement provisions), race, color, religion, creed, national origin, marital status, veteran status, sexual orientation, gender identity, genetic information or the presence of any disability, including sensory, mental or physical handicaps; provided, however, that the prohibition against discrimination in employment because of disability shall not apply if the particular disability prevents the performance of the essential functions required of the position.

This requirement shall apply, but not be limited to the following: employment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. Contractor shall not violate any of the terms of Chapter 49.60 RCW, Title VII of the Civil Rights Act of 1964, the Americans With Disabilities Act, Section 504 of the Rehabilitation Act of 1973 or any other applicable federal, state or local law or regulation regarding non-discrimination. Any material violation of this provision shall be grounds for termination of this Agreement by the City and, in the case of the Contractor's breach, may result in ineligibility for further City agreements.

B. In the event of Contractor's noncompliance or refusal to comply with the above nondiscrimination plan, this Contract may be rescinded, canceled, or terminated in whole or in part, and the Contractor may be declared ineligible for further contracts with the City. The Contractor, shall, however, be given a reasonable time in which to correct this noncompliance.

C. To assist the City in determining compliance with the foregoing nondiscrimination requirements, Contractor must complete and return the *Statement of Compliance with Non-Discrimination* attached as Exhibit C. If the contract amount is \$50,000 or more, the Contractor shall execute the attached Equal Benefits Declaration - Exhibit D.

9. Confidentiality.

Contractor agrees not to disclose any information and/or documentation obtained by Contractor in performance of this Agreement that has been expressly declared confidential by the City. Breach of confidentiality by the Contractor will be grounds for immediate termination.

10. Indemnification/Insurance.

A. Indemnification / Hold Harmless. Contractor shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of the Contractor in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the City, its officers, officials, employees, and volunteers, the Contractor's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Contractor's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Contractor's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

B. Insurance. The Contractor shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representatives, or employees.

C. No Limitation. Contractor's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

D. Minimum Scope of Insurance. Contractor shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.

2. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an insured under the Contractor's Commercial General Liability insurance policy with respect to the work performed for the City.

3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

4. Professional Liability insurance appropriate to the Contractor's profession.

E. Minimum Amounts of Insurance. Contractor shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.

2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.

3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

F. Other Insurance Provisions. The Contractor's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance as respect the City. Any Insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

G. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

H. Verification of Coverage. Contractor shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Contractor before commencement of the work.

I. Notice of Cancellation. The Contractor shall provide the City with written notice of any policy cancellation, within two (2) business days of their receipt of such notice.

J. Failure to Maintain Insurance. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five (5) business days notice to the Contractor to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Contractor from the City.

11. Work Product.

Any deliverables identified in the Scope of Work or otherwise identified in writing by the City that are produced by Contractor in performing the Services under this Agreement and which are delivered to the City shall belong to the City. Any such work

product shall be delivered to the City by Contractor at the termination or cancellation date of this Agreement, or as soon thereafter as possible. All other documents are owned by the Contractor.

12. Treatment of Assets.

- A. Title to all property furnished by the City shall remain in the name of the City.
- B. Title to all nonexpendable personal property and all real property purchased by the Contractor, the cost of which the Contractor is entitled to be reimbursed as a direct item of cost under this Contract, shall pass to and vest in the City, or if appropriate, the state or federal department supplying funds therefor, upon delivery of such property by the vendor. If the Contractor elects to capitalize and depreciate such nonexpendable personal property in lieu of claiming the acquisition cost as a direct item of cost, title to such property shall remain with the Contractor. An election to capitalize and depreciate or claim acquisition cost as a direct item of cost shall be irrevocable.
- C. Nonexpendable personal property purchased by the Contractor under the terms of this Contract in which title is vested in the City shall not be rented, loaned or otherwise passed to any person, partnership, corporation/association or organization without the prior expressed written approval of the City or its authorized representative, and such property shall, unless otherwise provided herein or approved by the City or its authorized representative, be used only for the performance of this Contract.
- D. As a condition precedent to reimbursement for the purchase of nonexpendable personal property, title to which shall vest in the City, the Contractor agrees to execute such security agreements and other documents as shall be necessary for the City to perfect its interest in such property in accordance with the "Uniform Commercial Code--Secured Transactions" as codified in Article 9 of Title 62A, the Revised Code of Washington.
- E. The Contractor shall be responsible for any loss or damage to the property of the City including expenses entered thereunto which results from negligence, willful misconduct, or lack of good faith on the part of the Contractor, or which results from the failure on the part of the Contractor to maintain and administer in accordance with sound management practices that property, to ensure that the property will be returned to the City in like condition to that in which it was furnished or purchased, fair wear and tear excepted.
- F. Upon the happening of loss or destruction of, or damage to, any City property, the Contractor shall notify the City or its authorized representative and shall take all reasonable steps to protect that property from further damage.

G. The Contractor shall surrender to the City all property of the City within thirty (30) days after rescission, termination or completion of this Contract unless otherwise mutually agreed upon by the parties.

13. Books and Records.

The Contractor agrees to maintain books, records, and documents which sufficiently and properly reflect all direct and indirect costs related to the performance of the Services and maintain such accounting procedures and practices as may be deemed necessary by the City to assure proper accounting of all funds paid pursuant to this Agreement. These records shall be subject, at all reasonable times, to inspection, review or audit by the City, its authorized representative, the State Auditor, or other governmental officials authorized by law to monitor this Agreement.

Records owned, used, or retained by the City that meet the definition of a "public record" pursuant to RCW 42.56.010 are subject to disclosure under Washington's Public Records Act.

14. Non-Appropriation of Funds.

If sufficient funds are not appropriated or allocated for payment under this Agreement for any future fiscal period, the City will not be obligated to continue the Agreement after the end of the current fiscal period, and this Agreement will automatically terminate upon the completion of all remaining Services for which funds are allocated. No penalty or expense shall accrue to the City in the event this provision applies.

15. General Provisions.

A. Entire Agreement. This Agreement contains all of the agreements of the Parties with respect to any matter covered or mentioned in this Agreement and no prior agreements shall be effective for any purpose.

B. Modification. No provision of this Agreement, including this provision, may be amended or modified except by written agreement signed by the Parties.

C. Full Force and Effect; Severability. Any provision of this Agreement that is declared invalid or illegal shall in no way affect or invalidate any other provision hereof and such other provisions shall remain in full force and effect. Further, if it should appear that any provision hereof is in conflict with any statutory provision of the State of Washington, the provision appears to conflict therewith shall be deemed inoperative and null and void insofar as it may be in conflict therewith, and shall be deemed modified to conform to such statutory provision.

D. Assignment. Neither the Contractor nor the City shall have the right to transfer or assign, in whole or in part, any or all of its obligations and rights hereunder without the prior written consent of the other Party.

1. If the Contractor desires to assign this Contract or subcontract any of its work hereunder, the Contractor shall submit a written request to the City for approval not less than fifteen (15) days prior to the commencement date of any proposed assignment or subcontract.

2. Any work or services assigned or subcontracted for hereunder shall be subject to each provision of this Contract.

3. Any technical/professional service subcontract not listed in this Contract, which is to be charged to the Contract, must have prior written approval by the City.

4. The City reserves the right to inspect any assignment or subcontract document.

E. Successors in Interest. Subject to the foregoing Subsection, the rights and obligations of the Parties shall inure to the benefit of and be binding upon their respective successors in interest, heirs and assigns.

F. Attorney Fees. In the event either of the Parties defaults on the performance of any term of this Agreement or either Party places the enforcement of this Agreement in the hands of an attorney, or files a lawsuit, the prevailing party shall be entitled to its reasonable attorneys' fees, costs and expenses to be paid by the other Party.

G. No Waiver. Failure or delay of the City to declare any breach or default immediately upon occurrence shall not waive such breach or default. Failure of the City to declare one breach or default does not act as a waiver of the City's right to declare another breach or default.

H. Governing Law. This Agreement shall be made in and shall be governed by and interpreted in accordance with the laws of the State of Washington.

I. Authority. Each individual executing this Agreement on behalf of the City and Contractor represents and warrants that such individuals are duly authorized to execute and deliver this Agreement on behalf of the Contractor or the City.

J. Notices. Any notices required to be given by the Parties shall be delivered at the addresses set forth below. Any notices may be delivered personally to the addressee of the notice or may be deposited in the United States mail, postage prepaid, to the address set forth below. Any notice so posted in the United States mail shall be deemed received three (3) days after the date of mailing.

K. Captions. The respective captions of the Sections of this Agreement are inserted for convenience of reference only and shall not be deemed to modify or otherwise affect any of the provisions of this Agreement.

L. Performance. Time is of the essence in performance of this Agreement and each and all of its provisions in which performance is a factor. Adherence to completion dates set forth in the description of the Services is essential to the Contractor's performance of this Agreement.

M. Remedies Cumulative. Any remedies provided for under the terms of this Agreement are not intended to be exclusive, but shall be cumulative with all other remedies available to the City at law, in equity or by statute.

N. Counterparts. This Agreement may be executed in any number of counterparts, which counterparts shall collectively constitute the entire Agreement.

O. Equal Opportunity to Draft. The parties have participated and had an equal opportunity to participate in the drafting of this Agreement, and the Exhibits, if any, attached. No ambiguity shall be construed against any party upon a claim that that party drafted the ambiguous language.

P. Venue. All lawsuits or other legal actions whatsoever with regard to this agreement shall be brought in Thurston County, Washington, Superior Court.

Q. Ratification. Any work performed prior to the effective date that falls within the scope of this Agreement and is consistent with its terms is hereby ratified and confirmed.

R. Certification Regarding Debarment, Suspension, and Other Responsibility Matters.

1. By signing the agreement below, the Contractor certifies to the best of its knowledge and belief, that it and its principles:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;

b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission or fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph A.2. of this certification; and

d. Have not within a three (3) year period preceding this application/proposal had one or more public transactions (federal, state, or local) terminated for cause or default.

2. Where the Contractor is unable to certify to any of the statements in this certification, such Contractor shall attach an explanation to this proposal.

S. Early Retirement from the State of Washington- Certification. By signing this form, you certify that no one being directly compensated for their services pursuant to this Agreement has retired from the Washington State Retirement System using the 2008 Early Retirement Factors with restrictions on returning to work.

CITY OF OLYMPIA

By: _____

Steven R. Hall, City Manager

P.O. Box 1967

Olympia WA 98507-1967

Date of Signature: _____

APPROVED AS TO FORM:

Darren Nielsen DCA

City Attorney

I certify that I am authorized to execute this contract on behalf of the Contractor.

GRAY & OSBORNE, INC.

By: TL M. Zerkow
(Signature)

Thomas M. Zerkow
(Name of Person Signing)

President
(Title of Person Signing)

701 DEXTER AVE N.
SEATTLE, WA 98109
(Address)

206-284-0860
(Phone)

Date of Signature: 11/17/2014

EXHIBIT “A”

SCOPE OF WORK

CITY OF OLYMPIA LOG CABIN RESERVOIR PROJECT

PROJECT OVERVIEW

The City of Olympia would like to construct a new reservoir for the City's 417 pressure zone. Construction of this reservoir will increase storage for this zone and will also allow the City to take the Hoffman Reservoir out of service for maintenance once this project is complete. We understand that the City anticipates that this reservoir will be approximately 140-feet tall and 90-feet in diameter and will be constructed of welded steel. The reservoir will be located on an undeveloped site currently owned by the City of Olympia. We understand that the City will be designing the access road, waterline extension, and electrical power service that will serve the reservoir site. Gray & Osborne will incorporate the City's design plans and specifications for these elements into the project bid documents. The project is being funded by a Drinking Water State Revolving Fund loan. We understand that the Log Cabin Reservoir Project will include construction of the following components:

1. A welded steel reservoir approximately 140-feet tall and 90-foot diameter.
2. Site piping to connect the reservoir with the City-designed transmission main.
3. Site improvements including access around the reservoir, parking for maintenance vehicles, stormwater facilities, fencing, and landscaping.
4. Extension of power to the project site including provision of primary power to the reservoir site. This task will include coordination with the City and PSE during design and construction of the transmission main.
5. Construction of security, telemetry, control, and SCADA systems to integrate with the City SCADA system.
6. Construction of an auxiliary power supply generator to power the reservoir control facilities in the event of a loss of primary power.

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. Topographic survey will be provided by the City of Olympia.
2. The City will design the access road and water transmission main to the site.
3. The City of Olympia will provide daily construction inspection.
4. Construction duration is estimated to be 9 months.
5. Gray & Osborne will utilize its web-based Construction Management System for distribution of project documentation, facilitating communication, and archiving project data during construction.

6. The City will review certified payrolls and complete employee wage rate interviews.
7. Gray & Osborne will design and specify programmable logic controller (PLC) hardware to be furnished by the contractor for the project. Gray & Osborne will program the PLC(s).
8. For control programming, the City will provide any required software and licenses and copies of the existing related PLC programs. Any new software and licenses may be procured through the construction contract.
9. The City will provide any necessary modifications to the SCADA system at the Maintenance Shop.

SCOPE OF WORK

Gray & Osborne has prepared the following scope of work for this project.

Task 1 --Pre-Design Services

1. Provide Project Management

Provide comprehensive project management of the Pre-Design phase of the project. This task will include coordinating and managing the schedule and budget for the consultant team, including subconsultants. A project schedule will be developed and the City will be provided with monthly progress updates. This task will also include coordination with other project stakeholders and regulatory agencies and assistance with the City's public communication program.

2. Review Background Information

Review previous reports, water system operating data, and record drawings. This task will also include contacting utility providers and obtaining record information for utilities in the area.

3. Complete Preliminary Design Analysis

Complete an analysis of the reservoir site and complete preliminary design. Gray & Osborne will provide the following services to support completion of this task.

- a. **Coordinate and Evaluate the Results of the Geotechnical and Wetland Investigations and Tree Survey**

Coordinate and schedule the activities of the geotechnical, wetland, and forestry subconsultants. Geotechnical investigation will include borings on the reservoir site and four borings along the access road. Review their draft reports, provide comments, and incorporate design recommendations into the preliminary design plans and permits for the project.

b. Confirm Tank Sizing and Configuration

Review the target effective storage requirements for the project. Review available survey data for the reservoir site and compare to the base and overflow elevations for the Hoffman Reservoir. Identify any dead storage/operational storage components. Identify freeboard requirements. Confirm the optimum diameter and height of the reservoir.

c. Complete Preliminary Seismic Design Calculations

Complete preliminary seismic design calculations for the reservoir. Identify potential reservoir foundation and anchorage alternatives based on the preliminary seismic calculations and the geotechnical report. Identify required freeboard due to sloshing.

d. Complete a Preliminary Stormwater Evaluation

Complete a preliminary stormwater evaluation for the project. Identify proposed impervious surface areas. Evaluate the potential for use of lower impact development techniques such as pervious pavers and infiltration facilities. Complete preliminary sizing calculations for stormwater facilities. Prepare a preliminary stormwater drainage report.

e. Prepare Preliminary Site Plan, Grading Plan and Site Piping Plans

Prepare preliminary site plan, grading plan, and site piping plans for the project.

f. Evaluate Tank Accessories

Evaluate various accessories for the water storage tank including the following:

- Water Quality Tank Mixing Accessories
- Seismic Provisions
- Control Valves
- Access Hatches and Manways
- Stairways, Ladders, and Platforms
- Telecommunications Equipment Provisions

g. Prepare Pre-Design Report

Prepare a Pre-Design Report for the Log Cabin Reservoir Project. The Pre-Design Report will meet the requirements of WAC 246-290-110 for a project report. Incorporate the results of the various alternatives evaluations. Develop preliminary design criteria for the project. Incorporate preliminary site and facility layouts. Prepare a draft of the report for City review. Meet with City and

staff to review the report. Address any review comments and prepare a final Pre-Design Report.

5. Complete QA/QC Review

Conduct Quality Assurance/Quality Control reviews of the Log Cabin Reservoir Pre-Design Report.

6. Attend Meetings and Site Visits

Attend meetings with City staff, regulatory agencies, and project stakeholders during the Pre-Design phase. Complete site visits to review existing conditions, field verify utility locations and record drawings, and coordinate work with regulatory agencies. The following meetings have been anticipated:

- Project Kick-off Meeting
- Project Progress Meetings (2)
- Site Visit to Review Existing Facilities
- Pre-Design Report Review Meeting

Task 2 –Design Engineering Services

1. Provide Project Management

Provide comprehensive project management of the Design phase of the project. This task will include coordinating and managing the schedule and budget for the consultant team and subconsultants. The project schedule will be updated and the City will be provided with monthly progress updates. This task will also include coordination with other project stakeholders and regulatory agencies and assistance with the City's public communication program.

2. Complete Reservoir Design

Complete civil, structural, and electrical engineering design of the Log Cabin Reservoir Project Facility. 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 to adequately describe the work for a public works contractor. Gray & Osborne will provide the following services to complete this task.

a. Prepare 30% Plans, Specifications and Cost Estimate

Prepare 30% plans, specifications, and construction cost estimates for the Log Cabin Reservoir Project. Plans will include preliminary civil sheets including site plans, site piping plans, grading plans, and preliminary tank cross sections and elevations. A specification outline will be submitted. Plans and specifications will be suitable for public works bid. 30% plans 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.

b. Prepare 60% Plans, Specifications, and Cost Estimate

Prepare 60% plans, specifications, and construction cost estimates for the Log Cabin Reservoir Project. Plans and specifications will be suitable for public works bid. Specifications will be prepared in CSI format with applicable City of Olympia General Conditions and contract forms. 60% 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 and specifications.

c. Prepare 90% Plans, Specifications, and Cost Estimate

Prepare 90% plans, specifications, and construction cost estimates for the Log Cabin Reservoir Project. Plans and specifications will be suitable for public works bid. Specifications will be prepared in CSI format with applicable City of Olympia General Conditions and contract forms. 90% 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.

d. Prepare Final Plans, Specifications, and Cost Estimate

Prepare final plans, specifications, and construction cost estimates for the Log Cabin Reservoir Project. Plans and specifications will be suitable for public works bid. Specifications will be prepared in CSI format with applicable City of Olympia General Conditions and contract forms. Final plans, specifications, and cost estimates will be submitted to the City for regulatory approval and distribution to contractors.

e. Provide Permitting Assistance

Assist the City with applying for and obtaining the required permits for the project. It is anticipated that Gray & Osborne will take the lead and will provide engineering support for the following permit applications:

- SEPA Checklist
- Department of Health Project Approval
- City of Olympia Conditional Use Permit
- City of Olympia Tree Removal Permit
- City of Olympia Fill and Grade Permit
- City of Olympia Civil Engineering Permit
- City of Olympia Building Permit for Reservoir Foundation (Tank permit is assumed to be a deferred submittal by the Contractor)
- Ecology Construction Stormwater NPDES Permit
- DNR Land Clearing Permit

- Electrical Permit
- PSE New Power Service Application

Permit application and review fees have not been included in this scope of work. It has been assumed that these will be paid directly by the City.

Since the City of Olympia is receiving funding for the Log Cabin Reservoir Project through the Drinking Water State Revolving Fund (DWSRF) Program, it is anticipated that the City will need to satisfy the Investment Grade Energy Audit requirement of the DWSRF program. Gray & Osborne will work with DWSRF staff to determine the extent of documentation necessary. If required, Gray & Osborne will coordinate with PSE to have an energy efficiency review completed for the project.

3. Complete QA/QC Review

Conduct Quality Assurance/Quality Control reviews of the 30%, 60% submittal, 90% submittal, and final submittal for the Log Cabin Reservoir Project.

4. Attend Meetings and Site Visits

Attend meetings with City staff, stakeholders, and the public during development of the plans and specifications to discuss project issues and review draft deliverables. Complete site visits and meet with regulatory agencies as necessary to coordinate the work. Prepare exhibits for communication with the public and stakeholders.

- Project Progress Meetings (4)
- 30% Design Review Meeting
- 60% Design Review Meeting
- 90% Design Review Meeting
- Final Design Review Meeting
- Pre-Bid Walkthrough
- Bid Result Review Meeting
- Regulatory Agency Meetings (2)
- Site Visits (2)
- Public Meetings (3)

5. Provide Bid and Award Services

Assist the City with the bid and award process for the Log Cabin Reservoir project. Participate in a pre-bid walkthrough. Respond to bidder inquiries. Prepare addenda as necessary. Review bid results and bidder qualifications. Prepare an award recommendation for the City.

6. Cathodic Protection Design (Contingency Task)

If during the design process, the City determines that it would like cathodic protection included in the reservoir design, Gray & Osborne will utilize a cathodic protection subconsultant to design a cathodic protection system for the reservoir.

Task 3 –Construction Management Services

1. Provide Project Management

Provide project management services during the Construction phase of the Log Cabin Reservoir Project. This task will include coordinating and managing the schedule and budget for the project team, including subconsultants. The City will be provided with budget updates on a monthly basis. This task will also include coordination with the contractor and regulatory agencies and assistance with the City's public communication program. This task will also include set-up and management of the CMS project communication system.

2. Provide Construction Management Services

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

a. Review Submittals

Review equipment, material, and plan submittals from the contractor for conformance with the Plans and Specifications. Return submittal review comments to the City.

b. Review Progress Pay Estimates

Review monthly progress pay estimates detailing the amount of work completed by the contractor. Verify unit quantities and progress to date on lump sum items.

c. Review and Respond to Requests for Information

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.

d. Review, Negotiate, and Prepare Change Orders

Review, negotiate and prepare change orders as necessary for review and approval by the City.

e. Attend Construction Meetings

Attend the pre-construction conference and regular project progress meetings to coordinate work activities with the contractor and City. It is anticipated that there will be weekly construction meetings. Conduct site visits as necessary to review project progress and resolve construction issues.

f. Coordinate Materials Testing and Special Inspection and Review Results

Coordinate materials testing and special inspection required during construction. 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 conducted by our subconsultant, MTC.

g. Inspect Structural and Electrical Components

Provide on-site inspection of structural and electrical components of the project as requested by the City.

h. Provide and Coordinate Tank Coating Inspection

Provide and coordinate coating inspection. 50 days of on-site coating inspection have been assumed. Review coating inspection reports.

i. Prepare Record Drawings

Prepare record drawings in AutoCAD format based on contractor and field inspector redlines and deliver to the City.

3. Provide Start-up, Testing, and Training Services

Gray & Osborne will provide the following Start-up, Testing, and Training services for the project:

a. Complete Inspection of Installed Equipment

Inspect installation of equipment installed as part of the project. Observe installed equipment testing. Verify equipment is installed in accordance with the plans and specifications.

b. Review Start-up, Testing, and Commissioning Plans

Review start-up, testing, and commissioning plans prepared by the construction contractor. Provide feedback to the contractor on these plans.

c. Coordinate and Assist with Start-up, Testing, and Training Activities

Coordinate start-up, testing, and training activities with the contractor and City staff. Be on-site to assist with the start-up and testing process.

d. Review Equipment O&M Manuals

Review equipment operations and maintenance manuals submitted by the contractor.

e. Provide Systems Training

Provide training to City staff on operation of the installed pumping and treatment systems. The intent of this training is to supplement the training provided by equipment vendors on individual equipment components.

f. Prepare System O&M Manual

Prepare an operations and maintenance manual describing operations and maintenance of the reservoir and control systems at the facility. Deliver final copies to the City.

Task 4 – Control Programming Services

1. Provide Project Management

Provide project management services during the Control Programming phase of the project. This task will include coordinating and managing the schedule and budget for the project team, including subconsultants. The City will be provided with budget updates on a monthly basis. This task will also include coordination with the contractor and subcontractors.

2. Provide Control Programming Services

Gray & Osborne will provide control programming services for the project. It is anticipated that control programming will include programming of programmable logic controllers (PLC's) at the site. The PLCs will be Rugid PLCs to be compatible with the City's existing systems. PLC hardware and software will be procured through the construction contract. Modifications to the City's Citect-based SCADA system to incorporate data acquisition and display for the Log Cabin Reservoir Project will be completed by the City.

a. Complete Preliminary Control Description

Prepare preliminary control descriptions and algorithms for the project. Control descriptions will include algorithms for reservoir level controls, control valves, and instrumentation.

b. Prepare Preliminary Operator Interface Descriptions

Prepare preliminary operator interface descriptions for the operator interface systems. The operator interface descriptions will include a proposed outline/ of the various screens and proposed layout of the various control screens.

c. Complete PLC Programming

Complete programming of PLCs for the project. Programming will include algorithms for collecting and transmitting data, controlling equipment, and generating alarm conditions at the site.

d. Implement and Test Control Programming

Implement and test control programming. This task includes both shop testing of control programming on PLCs and control panels in the shop and field testing and commissioning of PLC systems.

3. Complete QA/QC Review

Conduct Quality Assurance/Quality Control reviews of the control programming deliverables for the Log Cabin Reservoir Project.

4. Attend Meetings

Attend meetings with City staff during development of control programming to discuss project issues and review draft deliverables.

- Kickoff Meeting
- Preliminary Control / Operator Interface Review Meeting
- 50% Design Review Meeting
- 90% Design Review Meeting

**Task 5 – Reservoir Telecommunications Policies and Standards
(Not Reimbursable under DWSRF Loan)**

1. Provide Project Management

Provide project management services during the Telecommunications Policies and Standards phase of the project. This task will include coordinating and managing the schedule and budget for the project team. The City will be provided with budget updates on a monthly basis.

2. Review Current Installations, Issues, Policies, and Practices

Gray & Osborne will meet with City staff and review examples of the installation of telecommunications facilities at representative existing reservoir sites and discuss current issues and concerns regarding existing and planned telecommunications facilities. We will also review representative existing telecommunications leases and existing City codes, policies, and standards related to installation of telecommunications facilities on City owned reservoirs.

3. Prepare Draft Policies and Standards

Gray & Osborne will research current standards and policies adopted by other jurisdictions and will develop draft policies and standards for telecommunications facilities on reservoirs for the City to consider. Policies and standards will address the following issues:

- a. Maintaining access to the reservoir for operations and maintenance activities.
- b. Location of ground based support facilities.
- c. Location and routing of conductors and cables from ground support facilities to the reservoir.
- d. Location, routing, and attachment of conduits and conductors on the reservoir.
- e. Location and mounting requirements for antennas.
- f. Maintenance of telecommunications facilities.
- g. Service interruption policies to allow reservoir maintenance.
- h. Policies for temporary or permanent removal of equipment.
- i. Site security considerations.
- j. Minimum submittal requirements for City review of proposals.
- k. Minimum design standards.
- l. Standard details.
- m. Details for attachment location and types for antenna mounting.

A draft of the proposed policies and standards will be submitted for the City to review.

4. Prepare Final Standards and Policies

Based on comments and feedback from the City Gray & Osborne will make revisions to the draft policies and standards and will prepare final policies and standards that will be submitted to the City.

5. Complete QA/QC Review

Conduct Quality Assurance/Quality Control reviews of the draft and final policies and standards documents.

6. Attend Meetings

Attend meetings with City staff to discuss project issues and review draft deliverables. The following meetings have been assumed.

- Kickoff Meeting
- Draft Policies and Standards Review Meeting

Task 6 – Project Management Reserve

The project management reserve fund has been established to allow the City to authorize additional work tasks to address unanticipated engineering issues without executing a formal contract amendment. The City must provide prior written authorization before using any project management reserve funds.

BUDGET

Based on the Scope of Work described above, the total estimated cost for engineering services is **\$879,138** as shown in the attached Exhibit “B”.

DELIVERABLES

Deliverables will be provided in the following format:

Reports – 5 paper copies
Plans and Specifications - 5 paper copies of each submittal
Test Reports and Other Project Documentation – 3 paper copies
Record Drawings – 3 paper copies, 1 mylar copy
O&M Manuals – 2 paper copies, 1 pdf

Electronic files will also be supplied for each deliverable.

PROJECT SCHEDULE

The anticipated project schedule is as follows:

Notice to Proceed	December 2014
Complete Engineering Design	December 2014 – July 2015
Construct Reservoir Project	October 2015 – June 2016

EXHIBIT "B"

ESTIMATED PROJECT COST SUMMARY

City of Olympia - Log Cabin Reservoir Project

Task 1 - Pre-Design Services	\$105,551
Task 2 - Design Engineering Services	\$420,890
Task 3 - Construction Management Services	\$230,597
Task 4 - Control Programming Services	\$29,900
Task 5 - Reservoir Telecommunications Standards and Policies	\$17,200
Task 6 - Management Reserve	\$75,000
Total Estimated Cost	\$879,138

Note: Task 5 is not reimbursable under the DWSRF Loan.

EXHIBIT "B-1"

Task 1 - Pre-Design Services Estimated Cost

City of Olympia - Log Cabin Reservoir Project

Tasks	Principal Hours	Project Mgr. Hours	Project Eng. Hours	Civil Eng. Hours	Structural Eng. Hours	Electrical Eng. Hours	Envr. Tech. Hours	CADD Tech. Hours
1. Provide Project Management		16						
2. Review Background Information	1	4	4	4		4	4	
3. Complete Preliminary Design Analysis								
a. Coordinate and Evaluate Results of Geotech and Wetland Investigations	1	8	8	8	8			8
b. Confirm Tank Sizing and Configuration	1	4	8	16	4			
c. Complete Preliminary Seismic Design Calculations	2	4			24			
d. Complete Preliminary Stormwater Evaluation	1	4	8	24				16
e. Prepare Preliminary Site Plan, Grading Plan, and Site Piping Plans	2	8	20	40		4		40
f. Evaluate Tank Accessibility	2	8	12	24	16			
g. Prepare Pre-design Report	2	8	20	40	8	8	4	24
4. Prepare Information for Public Meetings	1	4	4	16				16
5. Complete O&M Review	12	6	6	6	6	6		
6. Attend Meetings and Site Visits	8	12	12	4	8	10		
Hour Estimate:	33	86	102	182	74	48	8	104
Fully Burdened Billing Rate Range:	\$112 to \$182	\$115 to \$178	\$110 to \$139	\$75 to \$120	\$98 to \$158	\$102 to \$172	\$80 to \$105	\$45 to \$90
Estimated Fully Burdened Billing Rate:	\$160	\$145	\$135	\$115	\$140	\$150	\$100	\$70
Fully Burdened Labor Cost:	\$5,280	\$12,470	\$13,770	\$20,930	\$10,360	\$7,200	\$800	\$7,280

Subtotal Labor Cost: \$78,090

Direct Non-Salary Cost

Venue & Expenses (Mileage @ \$0.56/mile)

Printing

\$300

\$125

Subsconsultant:

Geotechnical Investigation (PanGeo, Inc.)

Wetland Assessment and Delineation (SCJ Alliance)

Trace Survey and Plan (W&C)

Subsconsultant Overhead (5%)

\$18,209

\$5,940

\$1,600

\$1,287

TOTAL ESTIMATED COST: \$105,551

EXHIBIT "B-2"

Task 2 - Design Engineering Services Estimated Cost

City of Olympia - Log Cabin Reservoir Project

Tasks	Principal Hours	Project Mgr. Hours	Project Eng. Hours	Civil Eng. Hours	Structural Eng. Hours	Electrical Eng. Hours	Envr. Tech. Hours	CADD Tech. Hours
1. Provide Project Management		32						
2. Complete Reservoir Design								
a. Prepare 30% Plans and Cost Estimate	4	24	80	120	80	40		320
b. Prepare 60% Plans, Specifications, and Cost Estimate	8	40	80	160	100	80		420
c. Prepare 90% Plans, Specifications, and Cost Estimate	8	40	80	160	120	120		480
d. Prepare Final Plans, Specifications and Cost Estimate	4	20	40	80	80	40		240
e. Provide Permitting Assistance	4	20	32	64	40	16	40	40
3. Complete QA/QC Review	40	20	20	20	20	20		
4. Attend Meetings and Site Visits	4	48	24	28	20	16	8	
5. Provide Bid & Award Services	1	8	8	12	4	4		8
Hour Estimate:	73	252	364	644	464	336	48	1508
Fully Burdened Billing Rate Range:*	\$112 to \$182	\$115 to \$178	\$110 to \$139	\$75 to \$120	\$98 to \$158	\$102 to \$172	\$80 to \$105	\$45 to \$90
Estimated Fully Burdened Billing Rate:**	\$160	\$145	\$135	\$115	\$140	\$150	\$100	\$70
Fully Burdened Labor Cost:	\$11,680	\$36,540	\$49,140	\$74,060	\$64,960	\$50,400	\$4,800	\$105,560

Subtotal Labor Cost: \$397,140

Direct Non-Salary Cost:
Mileage & Expenses (Mileage @ \$0.56/mile)
Printing

Subconsultant:
Cahodie Protection (UIRS) - Contingency Task
Subconsultant Overhead (5%)

\$18,000
\$900

TOTAL ESTIMATED COST: \$420,890

EXHIBIT "B-3"

Task 3 - Construction Management Services Estimated Cost

City of Olympia - Log Cabin Reservoir Project

Tasks	Principal Hours	Project Mgr. Hours	Project Eng. Hours	Civil Eng. Hours	Structural Eng. Hours	Electrical Eng. Hours	Envr. Tech. Hours	CADD Tech. Hours
1. Provide Project Management		36	16	24				
2. Provide Construction Management Services								
a. Review Submittals	2	8	16	40	40	24		
b. Review Progress Pay Estimates		9		18				
c. Review and Respond to RFI's	4	24	16	16	24	20		16
d. Review, Negotiate and Prepare Change Orders	2	16	8	8	8	8		
e. Attend Construction Meetings	8	140	24	8	12	12		
f. Coordinate Materials Testing/Special Inspection and Review Results		8			24			
g. Inspect Structural and Electrical Components		16	8		40	20		
h. Prepare Record Drawings	1	4	8	12	4	4		24
3. Provide Start-up, Testing, and Training Services								
a. Complete Inspection of Installed Equipment		16			8	8		
b. Review Start-up, Testing, and Commissioning Plans	1	4		8		4		
c. Coordinate and Assist with Start-up, Testing, and Training Activities	2	16	16	8	16	16		
d. Review Equipment O&M Manuals		2	4	8		8		
e. Provide Systems Training		12	12			8		
f. Prepare System O&M Manual	1	8	16	40		12		24
Hour Estimator:								
Fully Burdened Billing Rate Range:*	21	319	140	190	160	144	0	64
Estimated Fully Burdened Billing Rate**	\$112 to \$182	\$115 to \$178	\$110 to \$139	\$75 to \$120	\$93 to \$158	\$102 to \$172	\$80 to \$105	\$45 to \$90
Fifth Burdened Labor Cost:	\$160	\$145	\$135	\$115	\$140	\$150	\$100	\$70
Fifth Burdened Labor Cost:	\$3,360	\$46,255	\$18,900	\$21,850	\$22,400	\$21,600	\$0	\$4,480

Subtotal Labor Cost: \$138,845

Direct Non-Salary Cost:

Mileage & Expenses (Mileage @ \$0.56/mile)
Printing

\$900
\$600

Subconsultant:

Materials Testing/Special Inspection (MTC)
Coating Inspection (Custom Coating Consultants)
Subconsultant Overhead (5%)

\$49,954
\$36,000
\$4,298

TOTAL ESTIMATED COST:

\$230,597

EXHIBIT "B-4"

Task 4 - Control Programming Services Estimated Cost

City of Olympia - Log Cabin Reservoir Project

Tasks	Principal Hours	Project Mgr. Hours	Project Eng. Hours	Civil Eng. Hours	Structural Eng. Hours	Electrical Eng. Hours	Programmer Hours	Envr. Tech. Hours	CADD Tech. Hours
1. Provide Project Management		8							
2. Provide Control Programming Services									
a. Complete Preliminary Control Description	1	4	8			8	8		
b. Prepare Preliminary Operator Interface Schematics	1	2	4			2	16		
c. Complete PLC Programming		2	4			2	64		
d. Installation and Test Control Programming		4	4			4	24		
3. Complete QA/QC Review	4	4	4			4	4		
e. Attend Meetings		8					16		
Hour Estimate:	6	32	24	0	0	20	132	0	0
Fully Burdened Billing Rate Range:*	\$112 to \$182	\$115 to \$178	\$110 to \$139	\$75 to \$120	\$98 to \$158	\$102 to \$172	\$110 to \$140	\$80 to \$105	\$45 to \$90
Estimated Fully Burdened Billing Rate:*	\$160	\$145	\$135	\$115	\$140	\$150	\$130	\$100	\$70
Fully Burdened Labor Cost:	\$960	\$4,640	\$3,240	\$0	\$0	\$3,000	\$17,160	\$0	\$0

Subtotal Labor Cost:

\$29,000

Direct Non-Salary Cost:

Mileage & Expenses (Mileage @ \$0.56/mile)
Printing

\$900

TOTAL ESTIMATED COST:

\$29,900

EXHIBIT "B-5"

Task 5 - Reservoir Telecommunications Standards and Policies (Not Reimbursable under DWSRF Loan) Estimated Cost

City of Olympia - Log Cabin Reservoir Project

Tasks	Principal Hours	Project Mgr. Hours	Civil Eng. Hours	Structural Eng. Hours	Electrical Eng. Hours	CADD Tech. Hours
1. Provide Project Management		4				
2. Review Current Installations, Issues, Policies, and Preferences	1	4		4	4	
3. Prepare Draft Standards and Policies	2	12	24	8	4	24
4. Prepare Final Standards and Policies	1	4	8	2	2	8
5. Complete QA/QC Review	2	2	2	2	2	
6. Attend Meetings		8	4	4		
Hour Estimate:	6	34	38	20	12	32
Fully Burdened Billing Rate Range:*	\$112 to \$182	\$115 to \$178	\$75 to \$120	\$98 to \$158	\$102 to \$172	\$45 to \$90
Estimated Fully Burdened Billing Rate:*	\$160	\$145	\$115	\$140	\$150	\$70
Fully Burdened Labor Cost:	\$960	\$4,930	\$4,370	\$2,800	\$1,800	\$2,240

Subtotal Labor Cost:

\$17,100

Direct Non-Salary Cost:

Mileage & Expenses (Mileage @ \$0.56/mile)

\$100

TOTAL ESTIMATED COST:

\$17,200



October 16, 2014
File No. P-3425

Mr. Mike Johnson, P.E.
Gray & Osborne, Inc.
2102 Carriage Drive SW
Building I, Suite 102
Olympia, Washington 98502

Subject: Proposal for Geotechnical Engineering Services (Revised)
 Proposed Log Cabin Reservoir
 3355 Morse-Merryman Road SE, Olympia, Washington

Dear Mr. Johnson,

Attached please find our proposed scope of work and cost estimate to assist you with the design of a proposed water reservoir to be constructed on the vacant lot located at 3355 Morse-Merryman Road SE in Olympia, Washington. We understand that the proposed reservoir will be an approximately 140-foot tall and 90-foot diameter steel tank. The reservoir will have an overflow to a new storm pond. We also understand that a second reservoir may also be constructed at the site in the future.

Based on a cursory review of the published geology map, it appears that the proposed reservoir location is likely underlain by very dense glacial till. Glacial till typically consists of dense to very dense soils that are most likely adequate for foundation support, its drainage characteristics are very poor and likely not appropriate for infiltration. However, the area surrounding the proposed reservoir appears underlain by sand and gravel that are likely suitable for infiltration.

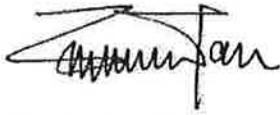
Our proposed scope of work and fee are summarized in Exhibits I and II, respectively. We estimate that a budget of \$18,209 will be needed to complete the proposed geotechnical study. We will not exceed this amount without your prior authorization.

3213 Eastlake Avenue East, Suite B
Seattle, WA 98102
Tel: (206) 262-0370
Fax: (206) 262-0374

Mr. Mike Johnson
October 16, 2014

Please call should you have any questions regarding this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Siew L. Tan", with a stylized flourish at the end.

Siew L. Tan, P.E.
Principal Geotechnical Engineer

Enclosures: Exhibit I: Scope of Work
Exhibit II: Cost Estimate

EXHIBIT I - SCOPE OF WORK

1. **Site Reconnaissance/Geologic Review** – We will perform a site reconnaissance, to observe surface features that may impact the design and construction of the reservoir and the storm water pond. We will also collect and review published geologic information, including geologic maps and/or well logs that may be available.
2. **Subsurface Explorations** – We propose exploring the subsurface conditions with a combination of test pits and test borings. The test pits will be excavated using a track-mounted excavator. The test pits will be excavated to a maximum depth of about 12 feet, at the proposed reservoir location, potential future reservoir location, and the storm water pond location.

Test Borings for Reservoir – We understand that the reservoir foundation may be quite deep in order to resist overturning moment. As a result, we propose drilling two 25-foot deep test borings to supplement the test pits. One of the borings will be drilled at the proposed reservoir location, and the second one at the potential future reservoir location. The test borings will be drilled after the test pits are completed, as we will utilize the excavator for clearing and provide access to the drilling equipment.

Test Borings for Access Road – In addition to the test borings at the reservoir site, we will drill four additional test borings along the proposed access road. We anticipate the test borings will be drilled to about 10 feet deep.

Standard Penetration Tests (SPT) will be conducted in the boreholes at 2½- and 5-foot depth intervals. The test results will be used to estimate relative density and/or consistency of the site soils. Representative soil samples will be collected from the boreholes for laboratory testing.

3. **Laboratory Testing** – We will conduct appropriate laboratory testing on selected samples in accordance with appropriate American Society for Testing and Materials (ASTM) methods, as applicable, such as natural moisture content and grain size analyses. The test results will be used to evaluate soil engineering properties.
4. **Engineering and Report** – We will perform engineering analysis based on the results of our test pits, and prepare a geotechnical report summarizing the results of our study and recommendations. In general, our report will include:

- *Site Plan* – A site plan indicating the approximate test pit locations;
- *Site Descriptions* – Description of surface and subsurface conditions (soil and groundwater) at the site, including summary test boring logs, and geologic setting;
- *Site Stability* – Our opinion regarding the stability of the site and, if needed, recommendations to stabilize the slope;
- *Infiltration* – Our opinion regarding the feasibility of the site soils for infiltration, and design infiltration rates based on grain size characteristics, using the procedure outlined in the 2012 WSDOE stormwater manual. At this time, no in-situ infiltration tests are included in our cost estimate. If needed, PanGEO can provide a separate proposal for conducting pilot infiltration tests at the site.
- *Foundation design recommendations, including:*
 - *Seismic Design* – Seismic design parameters per 2012 IBC, including Site Class and site spectral accelerations (S_s and S_1), seismic risk (i.e. soil liquefaction), and potential measures for mitigation (if needed);
 - *Foundation Design* – Recommendations for appropriate foundation alternatives and geotechnical design parameters for the reservoirs, including the potential use of piles to resist overturning moments;
 - *Below Grade Walls* – Recommendations for active, at rest and passive pressures for static and seismic conditions; drainage provisions; and backfill requirements; and
 - *Earth Works* – Recommendations for floor subgrade preparation, modulus of subgrade reaction, re-use of the on-site soils, and structural fill requirements.
- *Access Road / Utilities Recommendations* – Recommendations for construction of the access road and transmission piping entering the site, including trenching and backfill.
- *Additional Recommendations* – Based on the results of our explorations, other additional recommendations may be provided.

5. **Meeting/Post Report Consultation** – We budget one project meeting at the G&O Olympia office to discuss our findings and recommendations. We will also provide post-report consultation on an as-needed basis.
6. **Construction Support** – For budgeting purposes, we include 2 site visits for this task.

EXHIBIT II - COST ESTIMATE

ESTIMATED LABOR:

WORK TASK DESCRIPTION	PERSONNEL & HOURLY RATE						TOTAL HOURS	TOTAL AMOUNT
	P Grant	S. Tan	Proj. Engr.	Staff Geol.	Staff Engr	Admin.		
	\$165.00	\$142.00	\$110.00	\$92.00	\$92.00	\$60.00		
Site Reconnaissance / Geology Review		5		5			10	\$1,170
Test pit/Clearing				12			12	\$1,104
Observe Test Borings				18			18	\$1,656
Preparing Test Pit and Boring Logs				6			6	\$552
Select soil samples/Review Lab Test Results				2			2	\$184
Engineering Analysis/Report		8		24			32	\$3,344
Project Meeting/Post Report Consultation		4					4	\$568
Construction: 2 Site Visits		8					8	\$1,136
TOTAL LABOR:	0	25	0	67	0	0	92	\$9,714

LABORATORY TEST SUMMARY:

Test	Est. No. Tests	Unit Cost	Total Cost
Moisture Content	8	\$20	\$160
Consolidation Test	0	\$550	\$0
Atterberg Limits	0	\$125	\$0
Grain Size	8	\$105	\$840

LABORATORY TOTAL: \$1,000

ESTIMATED DIRECT EXPENSES:

Mileage 640 mi @ \$0.56/mi.	\$470
Laboratory Testing	\$1,000
Field Supplies	\$20
Report Production	\$20
TOTAL DIRECT EXPENSES:	\$1,510

ESTIMATED EXCAVATOR COSTS:

Excavator Mob/DeMob	\$400
Excavation/Clearing - 8 hrs	\$960
TOTAL SUB. COSTS:	\$1,360

ESTIMATED DRILLER COSTS:

Excavator Mob/DeMob	\$600
Per Diem	\$300
Drilling - 90 ft @ \$36/ft	\$3,240
DOE Filling Fee	\$50
Clean Up, moving, etc - 4 hrs @ \$200	\$800
TOTAL SUB. COSTS:	\$4,990

PROJECT TOTALS AND SUMMARY:

Total Labor Cost	\$9,714
Direct Expenses	\$1,510
Subcontractor (Excavator) Costs+10%	\$1,496
Subcontractor Driller) Costs+10%	\$5,489
TOTAL:	\$18,209



September 24, 2014

Mike Johnson, P.E.
Gray & Osborne, Inc.
2102 Carriage Drive SW, Building I
Olympia, WA 98502

Re: Log Cabin Reservoir Site – Wetland Study
SCJ Project #P1409.01

Dear Mr. Johnson,

Please review the scope of work below for assessing and delineating potential wetlands at the Log Cabin Reservoir parcel as well as for 100 feet on both sides of the proposed access road from the north in SE Olympia, WA (Figure 1 adapted from G&O project drawing). We understand that the City is seeking to build a new water reservoir at this site, and needs to fulfill permit requirements. The property lies within Thurston County Tax Parcel Number 11830420000, and is located in southeast Olympia, WA.



Figure 1. Showing location of future roadway (yellow line) and City 5-acre parcel (red outlined polygon) for reservoir site.

This estimate is limited to reconnaissance, and if needed, delineation, rating, and reporting. It does not include a wetland mitigation proposal, as we have no indication that mitigation will be needed. If additional work is needed once plans are final, we can either provide additional assistance on a Time and Materials basis, or can provide a separate scope of work.



Phase 1 – Field Investigations

Phase 1 – Onsite wetland reconnaissance/ delineation (SCJ Wetland Scientist staff)

Task 1 – Create site base maps in office, to support field work and for later reporting

Task 2 – Onsite wetland assessment, delineation, and required data collection

Total Phase 1A Estimate: \$2,700

Phase 1 Assumptions

- The target study area that will require assessment and delineation is approximately 5 acres at the reservoir site and about 7 acres of land in a 200ft wide swath across the entry road. Figure 1 adequately defines the area and location of the road way and primary site parcel.
- The site is readily accessible; vegetation in areas to be assessed is not dominated by Himalayan blackberry or tall Scots broom;
- Field delineation work can be accomplished in 2 field day (16 hours), including 1 hour travel time.
- Surveyor (if needed) is contracted separately, but will survey flags within 2 weeks of field work

Phase 1 Deliverables

- Verbal feedback after site visit
 - Flagged wetland boundaries that meet regulatory standards
 - Field data sheets and related field notes and photographs
 - Sketch map for surveyor, if needed
-

Phase 2 – Reporting and Documentation

Phase 2 –Wetland delineation report (assuming a full delineation report is needed¹)

This phase includes preparing a wetland delineation report that will meet local, state, and federal regulatory documentation standards, aside from surveying (which is contracted separately, and not included in this scope of work).

Task 1 – Transfer Field Data Forms to report format

Task 2 – Rate wetland to determine the buffer width²

Task 3 – Write wetland report, formatted to meet wetland/mitigation report standards

Total Phase 2 Estimate: \$3,240

Phase 2 Assumptions

- If survey map is required, it will be provided by the surveyor for inclusion in the report;
- A mitigation proposal is not included in the wetlands report, but conceptual mitigation ideas may be provided if deemed necessary;

¹ If no wetlands are found, then the report will be reduced to a letter report, documenting no wetland presence.

² The final, official version of a new wetland rating protocol is expected from Ecology by January 1, 2015. The new rating process requires extra research and several Figures, thus takes 4 times as long as the old protocol for each wetland. Only a preliminary version of the 2014/2015 Rating Protocol is currently available, which allows local jurisdictions time to make edits to their Critical Area Ordinance language and tables. This may result in a different Category rating and buffer width outcome than under the 2004 rating protocol.



Phase 2 Deliverables

- Wetland delineation report with all attachments – Field Data forms; Rating Forms; Scaled maps of delineation area.

Expenses

Expenses will be charged on a time and material basis and include items such as mileage, plan reproduction, copies, etc.

Budget Summary

	<u>Estimate</u>
Phase 1 – Onsite wetland delineation	\$2,700
Phase 2 – Wetland report	\$3,240
Total Estimate	\$5,940

This estimate is based on our current knowledge of the project. If over time, the scope and overall objectives of the project change, this estimate may need to be adjusted to reflect the modified circumstances. The above scope and estimate will expire six months from the date of this letter. If project approval exceeds this timeframe, an updated estimate will be provided upon request.

Additional services requested, but not identified in the scope of work, will be considered "extra services" and will be charged on a time-and-materials basis in accordance with the attached billing rate schedule. Subcontractor fees, if billed through SCJ Alliance, will be marked up 15%.

Acceptance of Proposal

We appreciate the opportunity to be a part of your project team and look forward to getting started. If this scope of work and fee estimate is acceptable, please sign below as your formal acceptance of the terms outlined in this proposal and return a copy to us.

Once we receive the signed acceptance letter, we will prepare our Standard Agreement for Professional Services for final execution of this agreement.

If you have any questions or comments, please call us at 360-352-1465. Thank you.

Respectfully,
SCJ Alliance


Lisa Palazzi, CPSS, PWS

Acceptance of Proposal
Mike Johnson, P.E., Gray & Osborn, Inc.

Date

WASHINGTON FORESTRY CONSULTANTS, INC.
FORESTRY AND VEGETATION MANAGEMENT SPECIALISTS



W F C I

360/943-1723
FAX 360/943-4128

1919 Yelm Hwy SE, Suite C
Olympia, WA 98501

October 28, 2014

Mike Johnson, P.E. | Project Manager
2102 Carriage Drive SW, Building I
Olympia, WA 98502

RE: Proposal for Tree Protection and Replacement Plan and Timber Marketing Assistance - Olympia Reservoir Site

Dear Mike:

I am pleased for the opportunity to provide you with a proposal to provide forestry services for the above project. The following is a brief summary of our proposal:

1. Assess and inventory of existing trees. Determine species composition, size, and numbers of trees on the site.
2. Make recommendations for tree retention around the perimeter of the buildable area. Assess all trees within reach of the new facilities and mark all trees for removal that will be hazardous to property and workers.
3. Prepare a tree protection and replacement plan as per the City of Olympia tree protection ordinance.
4. Assist in identification of log markets for the merchantable timber. Prepare log sort sheet with log specifications and destinations for logs.
5. I propose to do the proposed work at our hourly rate of \$125/hour on a 'Cost Not to Exceed' basis. The Cost Not to Exceed is \$1,600. Work outside this proposal would be at our regular hourly rates plus expenses.
6. This work can be completed by November 14th.

Please give me a call if I have missed anything, or if you have questions.

Respectfully submitted,

Washington Forestry Consultants, Inc.

Galen M. Wright, ACF, ASCA
Certified Forester No. 44
ISA Board Certified Master Arborist PN-129BU
ISA Tree Risk Assessor Qualified

URBAN/RURAL FORESTRY • TREE APPRAISAL • HAZARD TREE ANALYSIS
RIGHT-OF-WAYS • VEGETATION MANAGEMENT • ENVIRONMENTAL STUDIES • CONTRACT FORESTERS
Member of International Society of Arboriculture and Society of American Foresters



UNIVERSAL TECHNICAL RESOURCE SERVICES, INC.

7023 76TH DR NE • Marysville, WA 98270 • (425) 308-2394 • Fax (360) 658-3896

1 October 2014

Mr. Mike Johnson, PE
Gray & Osborne, Inc.
2102 Carriage Dr. SW, Bldg. I
Olympia, WA 98502

Re: Log Cabin Reservoir
Cathodic Protection System

Dear Mr. Johnson:

Enclosed please find our budgetary estimate to provide cathodic specific design services for a cathodic protection (CP) system for the subject reservoir.

Cost The estimated lump sum cost for this work is **\$18,000**, billed on a T&M basis.

SCOPE OF SERVICES

UTRS CORROSION will provide all of the required services to design and activate the cathodic protection system. Services will include:

- Preliminary field reconnaissance to collect necessary data, water chemistry and logistics for anode locations and power availability. \$1500
- Prepare design documents sufficient to allow review by the City for approval of the proposed system. This would include schematics, critical design details and a written description of the system. \$8500
- Cost estimating, preparation of a materials list. \$1000
- Provide engineering support during construction of the system. \$3000
- Commission the cathodic protection system. \$1000
- Test and adjust as necessary. \$2000
- Prepare a final report including system data, operations and maintenance manual, and system commissioning data. \$1000

Engineering

The design, bid documentation, construction support and system commissioning will be provided. This will include adjustment of the rectifier and preparation of a commissioning report with an operations and maintenance manual.

We appreciate the opportunity to provide this information and look forward to helping you with this important project. Should you have any questions regarding this quote or require any further information, please do not hesitate to call.

Sincerely,
UTRS/CORROSION Mitigation

Stuart Jon Ell
Corrosion Engineer/NACE CP Specialist #3625



TIME & MATERIAL RATES FOR SERVICES

Staff Hourly Rate Schedule

Principal Engineer/Expert Witness	\$180.00
Senior/Project Engineer	\$150.00
CP Specialist/Field Engineer/Construction Forman	\$135.00
CP Technician/Coating Inspector/Electrician	\$95.00
Clerical	\$35.00
CADD Drafting	\$65.00

Disbursements

Vehicle	\$0.58/Mi
Per Diem	Federal Rate
Out of Pocket Costs (motel, etc.)	\$ Plus 5%
Equipment Rental	\$ Plus 5%

Terms and Conditions

Payment Terms Net 30 Days
Rates Are Portal to Portal
Progress Invoices Based upon Services Provided

Materials Testing & Consulting, Inc.

Geotechnical Engineering & Consulting • Special Inspection • Materials Testing • Environmental Consulting



October 20, 2014

Mike Johnson
Gray and Osborne
2102 Carriage Drive SW, Building I
Olympia, WA 98502
mjohnson@g-o.com

RE: Log Cabin Reservoir

Dear Mr. Johnson:

Materials Testing & Consulting, Inc. (MTC) thanks you for the opportunity, and respectfully submits the following proposal to provide materials testing and special inspection services during construction of the above-referenced project. All services will be provided on a time and materials basis. Although dependent on the actual construction schedule and sequencing, ***MTC will only bill for actual work performed, regardless of the amounts estimated.*** Our project manager will review weekly budget status reports, and invoices will be sent on a monthly basis. No work will be performed beyond the scope and cost estimate without your prior authorization.

Each of MTC's laboratories are regularly audited by the American Association for Laboratory Accreditation (A2LA) as well as the Washington Association of Building Officials (WABO). We are specifically recognized to meet the requirements of ASTM C1077, D3666, D3740, E329, and AASHTO R-18 standards for agencies engaged in construction materials testing. Our proposed inspection team includes WABO certified senior special inspectors with decades of collective experience and together have worked on thousands of projects throughout the Northwest totaling over \$4 Billion in construction costs.

In order to provide cost reductions and more efficiency to your project, and to reduce our global footprint, MTC provides the advantage of electronic reporting, distribution, and storage of all the inspection reports produced for your project(s) through our secure, online system called the Digital Paper Route (DPR). The DPR is an online report distribution and project management tool which not only enables full-time, web-based access to all of our testing and inspection reports, but also provides daily updates of the project budget allowing our clients to review both overall contract amounts and "drill down" within a project to further evaluate specific inspection or lab tasks. The DPR service is provided free of charge to all our clients and their appointed project team. Additional information and further illustration of this service is included in this proposal.

In closing, our experienced inspection staff will ensure the highest level of quality is brought to your project. We believe that our local staff and vast experience on projects of similar size and scope make MTC the clear team member of choice for this project. We look forward to working with you.

Respectfully Submitted,

Deane Ramsdell
Senior Project Manager

Attachment(s): Bid Form, Bid Assumptions,

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Project Name - Log Cabin Reservoir

Project Location - Olympia, Washington

Bid Form Estimate for Services

Prepared: September 19, 2014 based on theoretical plans

<input checked="" type="checkbox"/> Earthwork & Soils - including visual inspections, nuclear density testing and related work; all associated laboratory testing below is based on WSDOT testing protocols unless otherwise specified in project documents					
Inspection & Laboratory Testing Services	Visits	Units	Quantity	Rate	Cost
Subgrade for Roadway, Ring wall, Slabs	8	Hours	40	\$ 49.00	\$ 1,960.00
Utility Trench Compaction	4	Hours	20	\$ 49.00	\$ 980.00
Roadway Rock Course Compaction	4	Hours	20	\$ 49.00	\$ 980.00
Asphalt Paving	3	Hours	24	\$ 49.00	\$ 1,176.00
Moisture Density Relationship, w/ Sieves (Proctor)	-	Each	5	\$ 225.00	\$ 1,125.00
Sand Equivalency	-	Each	7	\$ 80.00	\$ 560.00
Fracture Face	-	Each	5	\$ 50.00	\$ 250.00
Asphalt Extraction with Gradation	-	Each	3	\$ 225.00	\$ 675.00
Rice Density	-	Each	3	\$ 75.00	\$ 225.00
Subtotal - Earthwork & Soils:					\$ 7,931.00
<input checked="" type="checkbox"/> Reinforced Concrete and Structural Masonry - including inspection of all work, reinforcement, concrete placement observation, sampling and sample picking					
Inspection & Laboratory Testing Services	Visits	Units	Quantity	Rate	Cost
Reinforced Concrete Inspector -Footings/Tank and Bldg.	6	Hours	36	\$ 49.00	\$ 1,764.00
Ring wall	8	Hours	64	\$ 49.00	\$ 3,136.00
Slabs on Grade for Tank and Ops building	3	Hours	24	\$ 49.00	\$ 1,176.00
Ops Building Walls	2	Hours	10	\$ 49.00	\$ 490.00
Grout Samples for Strength Testing	-	Each	8	\$ 22.00	\$ 176.00
Mortar Samples for Compressive Strength	-	Each	8	\$ 22.00	\$ 176.00
Concrete Compression Test Cylinders - Sets of 5	-	Each	120	\$ 18.00	\$ 2,160.00
Subtotal - Reinforced Concrete:					\$ 9,078.00
<input checked="" type="checkbox"/> Structural Steel Welding, Bolting, Metal Decking & Seismic Force Resisting Systems - including verification and documentation of AWS & WJBO certifications, as well as verification and documentation of materials and procedural compliance with AWS D1.1, D1.3, D1.8					
Inspection Service	Visits	Units	Quantity	Rate	Cost
Fabrication - Assumes AISC Approved - CWI Audit Only	1	Hours	4	\$ 65.00	\$ 260.00
Radiography of CJP Welds/First 10ft. And every 100 ft. based on 5 foot tall steel sections(3 shots per ring) 60ft Tall	14	Hours	84	\$ 150.00	\$ 12,600.00
Continuous Inspection of single V grooves(CJP welds)	30	Hours	240	\$ 65.00	\$ 15,600.00
Site Erection & Visual Welding for Tank Stairs	3	Hours	15	\$ 59.00	\$ 885.00
Subtotal - Structural Steel Welding & Bolting:					\$ 29,345.00
<input checked="" type="checkbox"/> Support Services					
Service	Visits	Units	Quantity	Rate	Cost
Project Management	-	Hours	48	\$ 75.00	\$ 3,600.00
Digital Report Production & Distribution	-	Hours	0	No Charge	-
Trip Charge (Based on Round Trip Mileage)	-	Trips	0	No Charge	-
Subtotal - Support Services:					\$ 3,600.00
Budget Estimate for Services - Total:					\$ 49,954.00

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Materials Testing & Consulting, Inc.

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Project Name – Log Cabin Reservoir

Project Location – Olympia, Washington

Estimate Assumptions & Service Agreement - Page 1 of 5

Estimate Assumptions

- 1) The Bid Form Estimate for Services (when applicable), incorporated herein by reference, is provided for Clients use to determine and/or approximate the cost for MTC's services; the document SHALL NOT guarantee a maximum, or not-to exceed (NTE) cost for MTC's services.
- 2) The quantities detailed on the Bid Form Estimate for Services are estimated and compiled from documents provided by Client, which may include project plans, specifications, construction schedules, and other information made available by Client to MTC at the time of proposal preparation. Scheduling, performance, production, and changes are under the sole direction and control of Client or their designee; therefore any additions or alterations will be considered in excess of the Budget Estimate Proposal. The total price does not include re-inspections or additional inspection required due to negative or deficient conditions requiring correction, standby time, show-up time, same-day request for inspection time, overtime or double-time charges.

3) Estimate Basis & Assumptions

This proposal was prepared based on plans from a similar previous project and MTC reserves the right to amend this proposal when documents are issued.

General Terms & Conditions

- 1) Materials Testing & Consulting, Inc. (MTC) will provide professional services to Client, as defined by the scope of work, with that degree of care and skill ordinarily exercised under similar circumstances by members of MTC's profession. This representation is in lieu of any warranties or other representations, either expressed or implied. If conditions differ from what was reported by MTC during inspection, the Client shall immediately contact MTC to make MTC aware of the changes, and authorize further and appropriate evaluation. It is also understood and agreed to that statements made in MTC reports are independent opinions, based on professional judgment, and should not be construed to be conclusive representations of fact.
- 2) Client agrees to indemnify, defend, and hold MTC, its officers, employees, agents, and independent contractors harmless from any and all claims, suits, losses, costs, and expenses, including but not limited to, court costs and reasonable attorneys fees arising or alleging to have risen out of the performance of MTC's work. In the event that Client or a third-party shall bring any suit, cause of action, claim or counterclaim, that shall involve work performed by MTC, the Client shall pay to MTC the costs and expenses incurred by MTC to answer and/or appear in any such suit, cause of action, claim or counterclaim, including reasonable attorneys fees, and the hourly rate of manpower required for response. MTC's limit of liability shall in no event exceed the contract amount.
- 3) Invoices are due and payable upon receipt. Any invoice not paid within thirty (30) days of the date rendered may be assessed a finance charge of one and one-half (1½%) percent per month, for each month beyond thirty (30) days past due. Invoices not paid within sixty (60) days of the date rendered may result in MTC stopping work until such invoices are paid in full. Invoices not paid within ninety (90) days of the date rendered may be referred to an independent company for collection. Client will be responsible for all expenses incurred by MTC for the collection of any unpaid invoice(s), including collection fees, actual attorneys' fees, and costs for legal counsel. Furthermore, Client acknowledges that MTC may elect to withhold a Final Letter of Compliance for the project, and/or place a lien on any real property until all outstanding invoices and/or fees have been paid in full.
- 4) Unless otherwise stated in writing, Client assumes sole responsibility for determining the quantity and nature of required work, and that it is adequate for its intended purpose. Client shall communicate these general conditions to each third-party to whom Client conveys any part of MTC's work. MTC shall have no obligation greater than that set forth in MTC's proposal to any of Client's third parties. Client shall cause all tests and inspection of the site, materials, and work performed by MTC or others, to be timely and properly performed, in accordance with project plans, specifications, contract documents, and Design Professionals' recommendations.
- 5) MTC's work shall not include determining, supervising, or implementing the means, methods, techniques, sequences, or procedures of construction. MTC shall not be responsible for evaluating, reporting, or affecting job conditions concerning health, safety, or welfare. MTC's work, or failure to perform same, shall not in any way excuse the contractor(s), subcontractor(s), and/or supplier(s) from performance of their work in accordance with the contract documents.
- 6) MTC will not provide any manner of recommended solution or 'fix' for any site conditions or installed work that differ from project documents. In such instances, MTC's field report outlining the deviation from project documents will be provided to the Contractor and / or Client for clarification from the appropriate design professional.

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Project Name – Log Cabin Reservoir

Project Location – Olympia, Washington

Estimate Assumptions & Service Agreement – Page 2 of 5

- 7) MTC does not employ any type of craftspeople, tradesmen, mechanics or laborers, and has proposed a scope limited to Quality Control / Quality Assurance testing and inspection. MTC excludes all services pertaining to direct construction, reconstruction, maintenance or repair. As such, MTC assumes itself exempt from prevailing wage requirements and filings described in RCW 39.12.
- 8) MTC carries in-excess of the standard insurance required by law in the State of Washington. If additional insurance is required by Client, the Client agrees to pay a minimum fee of \$250.00, and any additional fees plus 20%, incurred by MTC to fulfill Clients request for such insurance.

Minimums & Travel Charges

- 1) Field inspection services are subject to a four (4) hour minimum charge per call, with services in excess of four (4) hours subject to half hour increments. Professional services are subject to a two (2) hour minimum for "in -house" work, and a four (4) minimum for field work. A premium rate of one and one-half (1 ½) times the regular rate will be charged for all work in excess of eight (8) hours per day, for night work (work prior to 6:00AM, and after 6:00PM), and for Saturday work. Sundays and legal holidays will be charged at two (2) times the regular rate.
- 2) Sample pickup services are subject to a one (1) hour minimum charge, (or actual duration for projects in excess of 50 miles from an MTC location). Services scheduled same-day will be charged at the rate listed on MTC's fee schedule.
- 3) A show-up or cancellation without four (4) hours notice is subject to a four (4) hour minimum charge plus applicable mileage and travel. Remote jobs shall incur additional charges for subsistence, and will be billed to the Client at cost plus 15%; the minimum per diem rate for subsistence is \$100.00. Travel charges for site visits will be charged as quoted on the Bid Form Estimate for Services.
- 4) If onsite parking is not available, MTC will bill costs for parking as a reimbursable expense subject at cost plus 15%.

Geotechnical, Civil & Earthwork Inspection & Testing

- 1) Unless specifically noted otherwise, proposed quantities for earthwork are limited to compaction testing and associated laboratory acceptance testing only, and do not constitute a proposal to provide geotechnical engineering or consulting services, nor are these services intended to relieve the Geotechnical Engineer of Record from Construction Observation and Design Administration services.
- 2) As stated elsewhere in this document, MTC does not propose to provide any manner of recommendation or guidance for issues and problems arising in earthwork construction. All non-conforming work and differing site conditions will be referred to the Geotechnical Engineer of Record for resolution. Upon Client request, MTC will assume the role of Geotechnical Engineer of Record based on the following procedure:
 - a) A Professional Engineer will conduct a review of the project Geotechnical Report, and will issue a letter that either concurs or deviates from the conclusions drawn in the original report.
 - b) Additional field exploration and testing may be required in order to resolve underlying questions if MTC does not agree with the conclusions and recommendations of the original soils report.
 - c) All time and materials related to the review of the original soils report and subsequent investigation and testing will be billed at the unit rates quoted in Exhibit A – Fee Schedule.
- 3) Pile installation observation does not include Pile Driving Analysis services. MTC assumes all PDA and associated testing will be provided by the Geotechnical Engineer of Record. MTC proposes to observe pile driving work and document whether pile driving criteria generated by the Engineer has been met.
- 4) Settlement monitoring services includes installation of monitoring points and production of monthly report only. MTC assumes the Contractor's Surveyor will transmit related data to MTC in a timely fashion for analysis and report preparation.
- 5) When the scope of MTC's services includes excavation of test pits or borings, MTC will contact One-Call Locating to locate public utilities in adjacent public rights-of-way. The client assumes all responsibility for physical and/or monetary damages resulting from the proposed

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Project Name – Log Cabin Reservoir

Project Location – Olympia, Washington

Estimate Assumptions & Service Agreement - Page 3 of 5

exploration activities encountering underground utilities or structures. We assume that the client will provide private utility locate services if public utility locating is not sufficient to meet the needs of the project.

- 6) Unless otherwise noted, MTC assumes footing and slab subgrade suitability will be determined by determining density of structural fill or re-compacted native materials, and / or proof-roll witnessed by MTC personnel.
- 7) Laboratory testing for soil, aggregate and asphalt are quoted using WSDOT acceptance requirements and testing frequencies, unless otherwise noted or specified; refer to WSDOT Construction Manual.
- 8) Most soil, aggregate and asphalt tests are complete within 48 hours of delivery to MTC's laboratory. Additional charges will apply for rush results.
- 9) Unless other arrangements are made, all samples will be disposed of (30) days after MTC's receipt of material.

Reinforced & Site Concrete

- 1) MTC assumes that all precast concrete shall be fabricated by a PCI-approved fabricator, or 'State-Stamped' as appropriate, and precast concrete sampling will not be required.
- 2) Concrete testing for sidewalk and footpath construction is assumed to fall outside of testing requirements. If testing is required, it will be considered an addition to project scope and hours be billed at the rate quoted for Reinforced Concrete and test cylinders at the rate quoted for Concrete Test Cylinders.
- 3) An additional inspection trip for reinforcement has been quoted when the characteristics of the member are such that inspection of reinforcing steel cannot be achieved within the forms. Examples include CIP walls and columns greater than 3 feet in height or elevated slabs with more than one mat of reinforcement.
- 4) Concrete test cylinders are quoted in sets of five (5), with a set to be prepared for the greatest of one set per pour, one set per 150 cubic yards, or 5,000 square feet of member area. MTC shall discard test cylinders immediately after they are broken, except failing test specimens will be retained for thirty (30) days. Upon client request, failing test specimens may be retained for additional time.

Prestressed Concrete

- 1) Post-Tensioned Concrete Inspections includes time required to perform inspection of mild reinforcing steel and prestressing tendons, concrete placement, tendon stressing, and tendon cutting / grout verification. Each level is quoted separately, with a total hours required per level.
 - i) Two trips are quoted for Laydown Inspections; the first day provides time to inspect the bottom mat of reinforcement and the initial layout and count for tendons. At the end of the first visit, MTC's designated inspector will communicate outstanding items to the Ironworker Foreman and Site Superintendent. The second inspection day should be scheduled on the same day as the Structural Engineer's site visit for Structural Observation of the PT Deck. MTC's inspector will be available to walk the deck with the Structural Engineer, and assist in creating a punchlist of any outstanding corrections that must be complete before concrete is placed
 - ii) Post-Tensioned Concrete Placement Inspections require a Prestressed Concrete certified inspector to be present to witness placement and consolidation of concrete on the deck for each concrete pump placing material. A second inspector is required to prepare samples and test physical properties of concrete. This estimate was prepared on the assumption that decks would be split into appropriate sizes that could be managed with a single concrete pump. Additional personnel may be required, based on the General Contractor's actual schedule.
 - iii) The quantity of Concrete Test Cylinders for Post-Tensioned Concrete decks reflects the typical set of five (5) specimens for code-required strength testing plus two (2) field cures to ensure adequate strength prior to tendon stressing.

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Project Name – Log Cabin Reservoir

Project Location – Olympia, Washington

Estimate Assumptions & Service Agreement - Page 4 of 5

- iv) Post-Tensioned Tendon Stressing Inspections require a Prestressed Concrete certified inspector to be present to witness stressing operations for each stressing crew used by the General Contractor or its Subcontractors. Time estimated includes time required to prepare the stressing report, perform required inspections, review and submit report to Structural Engineer of Record

Shotcrete

- 1) MTC assumes all Shotcrete Subcontractor personnel will be currently certified and approved for work in the city jurisdiction without a preconstruction panel shoot.
- 2) MTC assumes Contractor and / or Shotcrete Subcontractor to be responsible for cost of coring test panels and shotcrete-in-place.
- 3) Core evaluations will be provided on site by MTC's Shotcrete Special Inspector. Coring services are available at an additional charge.

Structural Masonry & Brick Veneer

- 1) Unless otherwise noted, MTC assumes CMU wall construction for Trash Enclosures will not require examination and testing.

Structural Steel – Fabrication, Site Erection & Welding

- 1) Off-site fabricators and suppliers are not known at this time. For estimating purposes, a jurisdictionally approved, AISC certified structural steel fabricator is assumed. A single visit has been quoted and will be completed by an AWS Certified Welding Inspector supplied by MTC to verify the Fabricator's participation in the AISC Approved Fabricator's program, as well as weld procedures and personnel qualifications. Once suppliers and fabricators are selected this estimate may require revision.
- 2) MTC assumes all welded connections not explicitly called-out as field welds will be completed by the Fabricator.
- 3) Unless otherwise noted in proposal, MTC proposes WABO-certified welding and bolting inspectors for site erection of structural steel elements.
- 4) MTC assumes acceptability of In-House Certified Non-Destructive Testing personnel qualified by and operating under supervision of an ASNT Level III Technician.

Special Cases

- 1) Any epoxy/expansion anchors included in this quote include only those found in structural drawing details. MTC assumes that if proprietary anchor products are to be used in seismic bracing of mechanical, electrical and/or plumbing elements, these connections will be shown in structural drawings. No inspections are included for anchorages or embedments for contractor's convenience that are not included in project drawings.

Project Management

- 1) Project management charges reflect the background work required to initiate and manage the testing and inspection program required for the project. Such tasks included in project management include the labor required to manage report distribution, as well as for ongoing report and budget review, project meetings and generation of the final inspection report upon closeout. Typically, one (1) hour per sixteen (16) field hours are required, though few projects require less than four (4) hours of Project Management due to set-up and close-out requirements.

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Project Name – Log Cabin Reservoir

Project Location – Olympia, Washington

Estimate Assumptions & Service Agreement - Page 5 of 5

Agreement

Materials Testing & Consulting thanks you for this opportunity. Every effort has been made to ensure that this proposal is consistent with the requirements set forth by the design documents, proposal request and applicable building code. Additionally, where construction schedules are unavailable or incomplete, we have attempted to employ a logical conceptualization for the construction sequence for estimating site visits, inspection durations and required sample quantities. Actual quantities will vary based upon actual construction sequence.

The undersigned accepts this bid proposal and the exclusions and assumptions therein, and agrees to retain Material Testing & Consulting, Inc. for the scope of services outlined in this proposal.

For: Materials Testing & Consulting, Inc.

For: Client

Authorized Rep., Printed Name & Title

Authorized Rep., Printed Name & Title

Name of Company

Signature & Date

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*P.O. BOX 23789, Federal Way, WA 98093
(253)759-4374 Office (253)759-4395 Fax*

September 25, 2014

Mr. Mike Johnson – P.E.
Gray and Osborne

Subject: Rate schedule and payment terms for coatings related inspections & services.

Mr. Johnson,

I respectfully submit the following rate schedule for coatings related inspections/testing services at both shop and field locations for your consideration. I've also included my secondary rate schedule for consulting and specialized testing services for information only.

For periodic/ongoing shop/field inspections, Custom Coating Consultants (CCC) will charge an hourly rate of \$90.00 per/hr with a 4.0 hr minimum per visit. All travel time will be billed at this rate and will be included in the hourly accumulation. Time onsite and the daily creation of our QA report will also be included in the hourly rate and accumulation per visit. This schedule is based on a typical Monday thru Friday workweek, not exceeding 40.0 total hours.

For inspection requests on Saturday/Sunday or that exceed 40.0 hrs per week, CCC will charge an "overtime" rate of \$135.00 per/hr with a 4.0 hr minimum on weekends and per/hr. when the 40.0 threshold is met.

For coatings related consulting, specification writing/review and other project coatings related review/recommendations, CCC will charge a rate of \$150.00 per/hr. with a 1.0 hr. minimum. This rate is also used for condition surveys and specialized testing such as adhesion testing and or high voltage holiday testing.

We require a Net 30 compensation schedule on all outstanding invoices and appreciate timely remittance of payment. Invoices will be e-mailed.

Our daily testing regimen will include the following:

- Monitor ambient conditions
- Observe and confirm visually surface preparation prior to coatings application
- Test for blast/surface profile
- Test Dry Film Thickness – each coat
- Monitor coating mixing, thinning and recoat times
- Daily creation of QA report with digital photographs
- Observe surface cleanliness prior to additional paint coats
- Monitor/ estimate square footage of steel surfaces processed each work day
- Confirm stripe coating application at weld seams and other hard to coat areas.

We will only utilize NACE Certified – Inspectors for this project whom are employed by CCC, no subcontracted inspectors will be used.

We look forward to working with you in the future.

Sincerely,

Mark Ficca

Owner/member

NACE Coating Inspector – Level 3 Certified w/ Bridge #9943

Custom Coating Consultants, L.L.C.

Assuming 50 days of Coating Inspection Estimated Cost =

50 days x 8 hours/day x \$90.00/hour = \$36,000

Exhibit "C"
STATEMENT OF COMPLIANCE WITH
NON-DISCRIMINATION REQUIREMENT

The Olympia City Council has made compliance with the City's *Non-Discrimination in Delivery of City Services or Resources* ordinance (OMC 1.24) a high priority, whether services are provided by City employees or through contract with other entities. It is important that all contract agencies and their employees understand and carry out the City's non-discrimination policy. Accordingly, each City contract for services contains language that requires an agency to agree that it shall not unlawfully discriminate against an employee or client based on any legally protected status, which includes but is not limited to: race, creed, religion, color, national origin, age, sex, marital status, veteran status, sexual orientation, gender identity, genetic information, or the presence of any disability. Indicate below the methods you will employ to ensure that this policy is communicated to employees and clients.

_____ affirms compliance with the City of Olympia's non-discrimination ordinance and contract provision by **two or more of the following actions:**

- ☐ Non-discrimination provisions are posted on printed material with broad distribution (newsletters, brochures, etc.).
What type, and how often? _____
- ☐ Non-discrimination provisions are posted on applications for service.
- ☐ Non-discrimination provisions are posted on the agency's web site.
- ☐ Non-discrimination provisions are included in human resource materials provided to job applicants and new employees.
- ☐ Non-discrimination provisions are shared during meetings.
What type of meeting, and how often? _____
- ☐ If, in addition to two of the above methods, you use other methods of providing notice of non-discrimination, please list:

By signing, I acknowledge compliance with the City of Olympia's non-discrimination ordinance.

Failure to implement the measures specified above constitutes a breach of contract

(Signature)

(Date)

Alternative Section for Sole Proprietor: I am a sole proprietor and have reviewed the statement above. I agree not to discriminate against any client, or any future employees, based on any legally protected status.

(Sole Proprietor Signature)

(Date)

Exhibit D
EQUAL BENEFITS COMPLIANCE DECLARATION

Contractors on City contracts estimated to cost \$50,000 or more are required to comply with Olympia's Equal Benefits Ordinance, Olympia Municipal Code 3.18, and must complete this Equal Benefits Compliance Declaration. Please note: No City contract can be executed until the contractor has completed this Declaration and submitted it to the City.

Contractor Information

Name of Contractor: _____ Contact Person: _____

Phone Number: _____ Fax: _____ Email: _____

Approximate Number of Employees in the U.S.: _____ Project #: _____

I, _____
(Name)

on behalf of _____,
(Contractor Name)

declare that said Contractor complies with City of Olympia Municipal Code 3.18 and does not unlawfully discriminate in providing benefits to Contractor's employees.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct, and that I am authorized to bind this entity contractually.

Executed this _____ day of _____, 20____, at _____,
(City)

(State)

Signature

Name (please print)

Title

Contractor Tax Identification Number

Date

