

**LAKE WHATCOM WATER AND SEWER DISTRICT**  
**REQUEST FOR PROPOSALS**  
**FOR**  
**MATERIALS TESTING AND SPECIAL INSPECTION SERVICES**  
**APRIL 2015**

**I. INTRODUCTION**

1. This Request for Proposals (“RFP”) outlines the information necessary to understand the consultant selection process and the required documentation a Proposer must submit. After reviewing this RFP, any firm that determines it has the necessary expertise, experience and staffing to successfully perform the required services may submit its Proposal addressing the items set forth herein. A general overview of the selection process is as follows:
  - A. Proposers shall deliver the Proposal to the District no later than **3:00 p.m. on April 21, 2015**, after which time they will be reviewed and evaluated. The Proposal shall be delivered to:

**Lake Whatcom Water and Sewer District**  
**Attn: Kristin Hemenway**  
**1220 Lakeway Drive**  
**Bellingham, WA 98229**
  - B. The designated point of contact for the District is Kristin Hemenway, PE at (360) 734-9224 (email: [kristin.hemenway@lwwsd.org](mailto:kristin.hemenway@lwwsd.org)). Direct comments and questions to the designated point of contact.
2. The purpose of this RFP is to obtain a qualified materials testing and special inspections consultant for two Lake Whatcom Water and Sewer District projects. See attached Scope of Work for more detail.
  - A. **The Geneva AC Water Main Replacement Project.** Replacement of approximately 12,500 feet of 4, 6, and 8-inch asbestos-cement water mains with new 8-inch pipe, replacement of fire hydrants, service lines, and other appurtenances located along the pipe alignment. Most of the work will occur in Whatcom County right-of-way. Construction is scheduled to begin as early as May 2015 and continue through September 2015. The project is funded by a Drinking Water State Revolving Fund (DWSRF) loan with federal requirements.
  - B. **Strawberry Point Sewer Pump Station Improvements.** Replacement of an existing sewer pump station on Lake Whatcom Boulevard between Geneva and Sudden Valley. A concrete

retaining wall will be installed along the edge of the road along with pump station improvements in Whatcom County right of way. Construction is anticipated to begin July 2015 and continue through September 2015. The project is funded by District rates and charges.

## II. PROCUREMENT PROCESS

### 1. General Information

#### A. Compliance with Legal Requirements.

- (1) The procurement of these consultant services will be in accordance with applicable District, Federal, State and Local laws, regulations and procedures. The District reserves the right to reject any and all Proposals received. Any Proposer failing to submit information in accordance with the procedures set forth herein may not be considered responsive and may therefore be subject to disqualification by the District.
- (2) In accordance with the provisions of this RFP, the District will evaluate the Proposals. The final selection, if any, will be the Consultant which, in the opinion of the District provides the best service for the best value.

#### B. Costs borne by Proposers. All costs incurred in the preparation of the Proposal and participation in this RFP and negotiation process shall be borne by the proposing firm.

#### C. Public Disclosure. Once in the District's possession, Proposals shall become property of the District and considered public documents under applicable Washington State laws. All documentation that is provided to the District may be subject to disclosure in accordance with the Washington State public disclosure laws.

### 2. Schedule

#### A. Anticipated Schedule. The selection process is anticipated to proceed as outlined below and is subject to change:

<u>Date</u>	<u>Selection Process</u>
April 5, 2015	Public Announcement of the RFP
April 21, 2015	Proposals Due @ 3:00 p.m.
April 29, 2015	Recommendation to the Board
April 30, 2015	Contract Execution

- B. Addenda. In the event it becomes necessary to revise any part of the RFP, addenda will be provided to all firms still under consideration at the time the addendum is issued. If any firm has reason to doubt whether the District is aware of the firm's interest, it is the responsibility of the firm to notify the District's designated point of contact to be sure that addenda are received.

### 3. Contract Terms and Conditions

- A. A copy of the draft professional services agreement is included in Attachment 1.
- B. By submitting a Proposal, the Consultant represents that it has carefully read the terms and conditions of the agreement and agrees to be bound by them.

## III. INSURANCE REQUIREMENTS

- A. Prior to execution of the Agreement, the Selected Consultant shall file with the District certificates of insurance and endorsements from the insurer(s) certifying to the coverage of all insurance required in accordance with the District's standard agreement. All evidences of insurance must be certified by a properly authorized officer, agent, general agent or qualified representative of the insurer(s) and shall certify the name of the insured, the type and amount of insurance, the location and operations to which the insurance applies, the expiration date, and provides that the District receives notice at least thirty (30) calendar days prior to the effective date of any policy limit or cancellation of required coverages. The Consultant shall notify the District at least thirty (30) calendar days prior to the effective date of any cancellation or reduction in coverage in the policy. The Consultant shall maintain during the entire Contract period, insurance coverage at least as broad as the limits and coverage outlined in the District's standard agreement. The Consultant shall, upon demand of the District, make available to the District at Consultant's local office in all such policies of insurance and the receipts of payment of premiums thereon. Failure to provide such policies of insurance within a time acceptable to the District shall entitle the District to suspend or terminate the Consultant's work hereunder.
- B. The Consultant shall obtain and maintain at a minimum the limits of insurance set forth in the Consultant Agreement. By requiring such minimum insurance, the District shall not be deemed or construed to have assessed the risks that may be applicable to the Consultant under the Agreement. The Consultant shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.
- C. Each insurance policy shall be written on an "occurrence" form; excepting that insurance for professional liability, errors and omissions when required, is acceptable on a "claims made" form.
- D. If coverage is approved and purchased on a "claims made" basis, the Consultant shall continue coverage either through (1) policy renewals for not less than three years from the date of completion of the work which is the subject of this Agreement or (2) the purchase of an extended discovery period for not less than three years from the date of completion of the work which is the subject of this Agreement, if such extended coverage is available.

- E. If in order to meet the insurance requirements the Consultant must rely on the insurance to be provided by one or more subconsultant, then such subconsultant(s) shall be required to meet all of the requirements herein applicable to the insurance they are providing, and shall include District and Consultant as additional insureds on all liability policies except Professional Liability/Errors & Omissions and Workers Compensation. The District will not make any payments on work performed by subconsultants until all insurance documentation from such subconsultants have been received and accepted by the District.
- F. Provided the affected insurance policies permit the following waiver, without voiding coverage, Consultant and District waive all rights against each other to subrogation for damages covered by property insurance.

#### **IV. DOCUMENTATION**

- A. The prime Proposer shall submit either an electronic copy of the Proposal, in PDF format, or two (2) bound copies. The Proposal shall be presented in a clear, comprehensive and concise manner.
- B. Proposers are discouraged from submitting lengthy Proposals. The District requests that Proposals be concise and clearly written containing only essential information. The Letter of Interest and Statement of Qualifications sections shall together total 20 pages or less, including any resumes and cover letter.
- Proposals shall be minimum of 11 font.
  - Sheets with double sided printing will be counted as 2 pages.
  - Sketches, maps and charts printed on 11x17 count as 1 page.
- C. The Proposals shall consist of the following parts:
1. Letter of Interest. The Letter of Interest shall contain the following information:
    - Proposer's name, mailing address, contact person, email, telephone and fax numbers; and
    - UBI and federal tax ID numbers.
    - Stipulation that Proposer accepts all terms of the RFP, especially the terms and conditions of the Professional Services Agreement.
  2. Statement of Qualifications.
    - General information regarding types of services provided, firm history, and financial capacity and stability.
    - List of principals and owner, number of employees, certifications, and licenses.
    - Relevant previous project experience, awards and recognitions.
    - Resumes of proposed project manager and other key personnel that will be assigned to the project(s).
    - Address firm's commitment to availability, flexibility, and responsiveness when called by District to perform onsite tests and special inspections.
    - Provide references for recent projects.
  3. Rates and Charges (Fee Schedule).

- Fully burdened billing rates, which include labor, overhead costs, and profit.
- Charges for special inspections, sampling, testing, and reporting both onsite and in the lab.
- Any minimum hours and/or mileage charged per trip to site.
- Standard working hours. List any surcharges for after-hour work.

4. Estimate of Services.

- An Estimate of Services completed on the form attached to this request for proposals.

## **VI. EVALUATION CRITERIA**

### **A. Experience and Technical Competence**

The District will evaluate the qualifications, experience and technical competence of the Proposer's Key Personnel.

### **B. Availability, Flexibility, and Responsiveness for Field Testing Requests**

The District will evaluate the Proposer's commitment level to be available, flexible, and responsive when called by District for field testing and special inspections. The District intends to schedule tests and special inspections in advance when possible. However, there will be days when testing or special inspection is needed with very short notice.

### **C. Competitive Rates**

The District will evaluate the Proposer's rates and charges as well as the estimate of materials testing and special inspections. The District intends to select the firm that can deliver the best service for the best value. Cost of service will be considered with the other evaluation criteria.

## **VII. ATTACHEMENTS**

- A. Professional Services Agreement (6 Pages)
- B. Scope of Work (5 Pages)
- C. Estimate of Services (1 Page)

# LAKE WHATCOM WATER AND SEWER DISTRICT PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made on Month Day, 2015, between LAKE WHATCOM WATER AND SEWER DISTRICT ("District"), a Washington municipal corporation and Name of Consultant ("Consultant"),

In consideration of the mutual benefit derived by the parties and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree and covenant as follows:

## 1. PROJECT

Consultant shall perform all services and furnish all labor, tools, materials, and equipment for the District's project known as Materials Testing and Inspection for the Geneva AC Mains Replacement Project (District Project #C1402) ("Project") in accordance with and as more fully described in **Attachment A – Scope of Work**. No additional services shall be performed or deemed authorized without the written prior authorization from the District

## 2. PROJECT COST

The District shall pay Consultant for actual services rendered per **Attachment B - Rates and Charges** not to exceed an amount of

(\$\_\_\_\_\_) ("Project Cost"). The Rates and Charges include all costs associated with the Project, including, but not limited to labor, materials, overhead, administrative, and permit and regulatory costs, unless otherwise agreed to by the parties in writing. Prior written approval from the District is required for any services not included in the Scope of Work (Attachment A). Consultant shall have no right or claim for payment for services provided which are not included in the Scope of Work (Attachment A) even if said services were performed in good faith. Any services performed in violation of this paragraph shall be at the sole cost and expense of Consultant.

## 3. AGREEMENT TERM/PERIOD OF PERFORMANCE

Consultant shall commence work under this Agreement upon receipt of notice to proceed from the District. The Scope of Work must be completed no later than December 31, 2015 unless extended or terminated earlier by the District pursuant to the terms and conditions of this Agreement.

## 4. PAYMENT TERMS

The Project Cost shall be payable in the following manner: On or before the 26th day of each month, Consultant shall submit a detailed monthly invoice for all services provided describing in reasonable and understandable detail the services invoiced, the progress of the Scope of Work, and the requested payment amount. The District shall issue a warrant for payment of approved services contained in the invoice within thirty (30) days after approval.

## 5. CHANGE IN THE SCOPE OF WORK

Change in the Scope of Work, Project Cost, or Term shall require execution of a written amendment signed by the Consultant and District. The District may at any time order additions, deletions, revisions, or other written changes in the Scope of Work. The Consultant will prepare and submit a

proposal to the District for consideration that details changes to the Scope of Work, Project Cost or Term, at the request of the District.

## **6. STANDARD OF CARE**

The Consultant shall be responsible for the professional quality, technical adequacy and accuracy, timely completion and coordination of all tests, reports and other services prepared or performed pursuant to this Agreement. The Consultant shall perform its work to conform to generally accepted professional standards applicable to the types of services and work provided hereunder. The Consultant shall be responsible for the professional standards, performance and actions of all persons and firms performing work pursuant to this Agreement. The Consultant shall, without additional compensation, correct or revise any errors, omissions or specific breaches of a contractual obligation in such tests, reports and other services. The District's approval of plans, drawings and specifications shall not relieve Consultant of responsibility for the adequacy or accuracy thereof. Consultant shall remain liable for damages and costs incurred by the District arising from Consultant's errors, omissions or negligent performance of services furnished under this Agreement.

## **7. INDEMNIFICATION**

Consultant and subcontractors of Consultant agree to defend, indemnify, and hold harmless the District, its commissioners, officers, managers, employees, engineers, agents, and volunteers from and against any and all demands, claims, losses, injuries, damages, liabilities, suits, judgment, reasonable attorneys' fees and costs, and other expenses of any kind on account of, relating to, or arising out of Consultant's performance of the Scope of Work under this Agreement, except to the extent such injuries or damages are caused by the negligence of the District. For the purposes of this indemnification, Consultant specifically and expressly waives any immunity granted under the Washington Industrial Insurance Act, Title 51 RCW. This waiver has been mutually negotiated and agreed to by the parties. If a court of competent jurisdiction determines that this agreement is subject to RCW 4.24.115, Consultant's obligation to defend, indemnify, and hold harmless the District, its officers, employees, agents and volunteers shall be limited to the extent of the District's negligence. Consultant shall include this indemnification obligation for the benefit of the District as a subcontractor requirement in any subcontractor agreement which includes performance of services under this Agreement; provided that, Consultant shall remain wholly responsible to the District for performance of the indemnification obligation set forth herein. The provisions of this paragraph shall survive the expiration or termination of this Agreement.

## **8. INSURANCE**

Consultant shall obtain, and keep in force during the term of this Contract, insurance policies as follows:

- a. **Commercial General Liability.** Limits no less than \$1,000,000.00 combined single limit per occurrence and \$2,000,000.00 aggregate for personal injury, bodily injury and property damage. Coverage shall be as broad as Insurance Services Office form number (CG 00 01) covering Commercial General Liability.
- b. **Automobile Liability Insurance.** Limits no less than \$1,000,000.00 combined single limit per accident for bodily injury and property damage. Coverage shall be as broad as Insurance Services Office form number (CA 00 01) covering Business Auto Coverage, symbol 1 "any auto"; or the combination of symbols 2, 8, and 9.

- c. **Workers' Compensation.** Coverage shall be at least as broad as Workers' Compensation coverage, as required by the Industrial Insurance Act of the State of Washington, as well as any similar coverage required for this work by applicable Federal Law.
- d. **Professional Liability.** Professional Liability coverage may be required at the option of the District, in an amount of not less than \$1,000,000 per claim and in the aggregate. Insurance shall have a retroactive date before the commencement of the Term and coverage shall remain in effect for the Term of this Agreement plus three years.
- e. The insurance policies shall specifically name the District, its elected or appointed officials, officers, employees, and volunteers as insureds with regard to damages and defense of claims arising from (1) activities performed by or on behalf of the Consultant; or (2) products and completed operations of the Consultant; or (3) premises owned, leased, or used by the Consultant.
- f. The insurance policies (1) shall state that coverage shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability; (2) shall be primary insurance with regard to the District; and (3) shall state that the District will be given at least 45 days' prior written notice of any cancellation, suspension or material change in coverage.
- g. Before commencing work and services, Consultant shall provide to the District a Certificate of Insurance evidencing the required insurance accompanied by endorsements as are necessary to comply with the requirements of this section. The District reserves the right to request and receive a certified copy of all required insurance policies.
- h. Any payment of deductible or self-insured retention shall be the sole responsibility of Consultant.

## **9. COMPLIANCE WITH CODES AND REGULATIONS**

Consultant is expected to comply with all applicable statutes in performing the Scope of Work, including, but not limited to all state and local laws, regulations, codes and standards that are applicable at the time Consultant performs the services.

## **10. PERMITS, TAXES, TEMPORARY FUNCTIONS**

Consultant shall secure and pay for all permits, fees and licenses necessary for the performance of this Agreement. Consultant shall pay any and all federal, state and municipal taxes, including sales taxes, if any, for which Consultant may be liable in carrying out this Agreement.

## **11. TERMINATION**

This Agreement may be terminated by the District for cause when the District deems continuation to be detrimental to its interests or for failure of the Consultant to adequately perform the services specified in the Agreement. The District may terminate this Agreement for cause by sending a written notice to Consultant that specifies a termination date at least seven (7) days after the date of notice. This Agreement may also be terminated by the District without cause by sending written notice to Consultant that specifies a termination date at least thirty (30) days after the date of notice. Unless terminated for Consultant's material breach, Contractor shall be paid or reimbursed for all



hours worked up to the termination date, less all payments previously made; provided that the work performed after the date of notice must be only that which is reasonably necessary to terminate the work in a professional manner, unless otherwise agreed.

## 12. GENERAL PROVISIONS

- a. **Notices.** Any notice or demand desired or required to be given under this Agreement shall be in writing and deemed given when personally delivered, sent by facsimile machine, or deposited in the United States Mail (or with an express courier), postage prepaid, sent certified or registered mail, and addressed to the parties as set forth below or to such other address as either party shall have previously designated by such a notice:

District:

Attn: General Manager  
Lake Whatcom Water and Sewer District  
1220 Lakeway Drive  
Bellingham, WA 98229

Phone: (360) 734-9224

Fax: (360) 738-8250

Consultant:

Attn: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

- b. **Records and other Tangibles.** Until the expiration of six years after the term of this Agreement, Consultant agrees to maintain accurate records of providing the services specified by the Agreement and to deliver such records to the District as requested by the District.
- c. **Ownership of Work.** The District has ownership rights to the plans, specifications, and other products prepared for the Project by the Consultant. Consultant shall not be responsible for changes made in the plans, specifications or other products by anyone other than the Consultant. Consultant shall have free right to retain, copy and use any tangible materials or information produced but only for its own internal purposes. Use of documents or other materials prepared under this Agreement for promotional purposes shall require the District's prior consent.
- d. **Disclosure.** All information developed by Consultant and all information made available to the Consultant by the District, and all analyses or opinions reached by the Consultant shall be confidential and shall not be disclosed by Consultant without the written consent of the District, unless said information is made publicly available by the District or the City of Bellingham.
- e. **Non Discrimination.** During the term of this Agreement, the Consultant agrees that no person shall, on the grounds of race, creed, color, national origin, sex, marital status, age, religion, or on the presence of any sensory, mental or physical disability, be discriminated against by the Consultant.
- f. **Relationship of the Parties.** Nothing contained herein or any document executed in connection herewith, shall be construed to create an employer-employee relationship or joint venture relationship between the District and Consultant, its employees or subcontractors. The Consultant is an independent contractor. The Consultant is responsible for its acts or omissions and acts or omissions of its agents, employees, servants, subcontractors, or otherwise during the performance of this Agreement.

- g. **Entire Agreement.** This Agreement and its attachments contain the entire understanding between the District and Consultant relating to the Project which is the subject of this Agreement. Subsequent modification or amendment of this Agreement shall be in writing and signed by the parties to this Agreement.
- h. **Waiver.** Waiver of any breach or default hereunder shall not constitute a continuing waiver or a waiver of any subsequent breach either of the same or of another provision of this Agreement.
- i. **Assignment.** The Consultant shall not assign, or transfer any interest in this Agreement in whole or in part to any individual, firm or corporation without the prior written consent of the District. Subject to the provisions of the preceding sentence, this Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of the Consultant. This Agreement is made only for the benefit of the District and the Consultant and successors in interest and no third party or person shall have any rights hereunder whether by agency or as a third party beneficiary.
- j. **Severability.** If any term, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, the remainder of this Agreement shall remain in effect.
- k. **Dispute Resolution.** If any dispute, controversy, or claim (collectively “dispute”) arises out of this Agreement, the parties agree to first try to settle the dispute in non-binding mediation with the assistance of a recognized professional mediation service. The parties shall each designate a representative with full settlement authority who will participate in the mediation. The parties shall bear all expenses associated with the mediation equally, except for attorneys' fees. Any dispute subject to, but not resolved by, mediation shall be subject to a private arbitration which, unless the parties mutually agree otherwise, shall be held in accordance with RCW 7.04A.
- l. **Jurisdiction/Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. Any suit to enforce or relating to this Agreement, including the enforcement of any arbitration award, shall be brought in Whatcom County Superior Court, Whatcom County, Washington.
- m. **Attorneys' Fees.** In the event that any party commences litigation against the other party relating to the performance, enforcement or breach of this Agreement, the prevailing party in such action shall be entitled to all costs, including attorneys' fees, expert witness fees and costs and any such fees or costs incurred on appeal.
- n. **Counterparts.** This Agreement may be executed in counterparts and each shall be deemed an original, but all of which together shall constitute a single instrument.

In Witness Whereof, the parties enter into this Agreement, mutually agree on above terms, are authorized to execute this Agreement and the parties have executed this Agreement on the day and year indicated.

("CONSULTANT")

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(Signature)

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(Printed Name and Title)

Dated: \_\_\_\_\_

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Approved as to form:

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Robert Carmichael  
Attorney for Lake Whatcom Water & Sewer District

Dated: \_\_\_\_\_

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Lake Whatcom Water and Sewer District  
("DISTRICT")

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Patrick Sorensen, General Manager

Dated: \_\_\_\_\_

## **ATTACHMENT A – SCOPE OF WORK**

[attach scope of work ]

## **ATTACHMENT B – RATES AND CHARGES**

[attach rates and charges ]

**LAKE WHATCOM WATER AND SEWER DISTRICT  
MATERIALS TESTING AND SPECIAL INSPECTION SERVICES**

**SCOPE OF WORK**

**1. GENERAL DESCRIPTION**

Provide material testing and special inspection services for two Lake Whatcom and Water District projects: (1) Geneva AC Water Main Replacement Project, and (2) Strawberry Point Sewer Pump Station Improvements.

The Geneva AC Water Main Replacement Project is located in the Geneva neighborhood around 1010 Lakeview Street, Bellingham, WA 98229.

The Strawberry Point Sewer Pump Station Project is located near 2646 Lake Whatcom Boulevard, Bellingham, WA 98229.

**2. LOAN CONTRACT REQUIREMENTS**

The District has secured a Drinking Water State Revolving Fund (DWSRF) loan to fund the Geneva AC Water Main Replacement Project. The District's loan contract requires that several clauses and conditions be included in the scope of work for contracts they enter into for services related to the AC water main project. These are listed below:

- 2.1. Consultant's staff and all sub consultants of Consultant agree to the following:
  - 2.1.1. Hereon the Capital Agreement between Lake Whatcom Water and Sewer District (District) and the Public Works Board for the Geneva Area AC Main Replacement Project, Loan number DM13-952-137 is referred to as the Contract.
  - 2.1.2. In accordance with Section 1.30 of the Contract, Consultant shall comply with all federal and state nondiscrimination laws, including, but not limited to Chapter 49.60 RCW, Washington's Law Against Discrimination, and 42 U.S.C. 12101 et seq, the Americans with Disabilities Act (ADA). AND; Consultant will not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 40 CFR part 33 in the award and administration of contracts awarded under Environmental Protection Agency financial agreements. Failure by the Contractor to carry out these requirements is a material breach of this Contract which may result in termination of this Contract.
  - 2.1.3. In accordance with Section 1.31 of the Contract: Pursuant to Section 106 of the Trafficking Victims Protection Act of 2000, as amended, Consultant will not engage in severe forms of trafficking in persons during the period of time the Contract is in effect, procure a commercial sex act during the time the Contract is in effect, or use forced labor during the performance of this Contract.
- 2.2. Prohibition Statement- You (Consultant) as the recipient, your employees, subrecipients, under the award, and subrecipients employees may not engage in severe forms of trafficking in persons during the period of time the award is in effect; or use forced labor in the performance of the award or subawards under the award.

- 2.3. Compliance by Prime, Sub-Contractors and Professional Service Providers. Consultant shall, at all times while performing services for the District, comply with District's DWSRF Loan Contract financial management and federal requirements and not be on the Federal Excluded Parties list. (DWSRF Handbook, Section 4.11)
- 2.4. Eligible Activities and Costs AND Ineligible Activities and Costs. Consultant shall submit separate invoices with backup documentation to District for eligible and ineligible fees and expenses. (DWSRF Handbook, Section 4, Attachment 4-B and Attachment 4-C)

### **3. PROJECT MANAGEMENT, COORDINATION, AND REPORTING**

- 3.1. Project Management. Organize, manage, and coordinate between the District, its consultants, and construction contractors to accomplish the services required. Perform quality assurance/quality control of all final documents. Maintain and enforce the project schedule, which may require services outside of normal business hours.
- 3.2. Reporting. Prepare and submit written, daily reports on all inspections, field testing and in-lab testing. Reports will summarize all findings, conclusions and recommendations determined during testing procedures, including clear indication of PASS or FAIL testing results. All field reports will be prepared under the supervision of a Professional Engineer registered in the State of Washington. Field reports will be typed and e-mailed to the District or its representative on a weekly basis except for failed tests which requires prompt, same-day, notification. Reports shall, at a minimum, include the following:
  - 3.2.1. Date
  - 3.2.2. Name of Person Performing Tests or Inspections
  - 3.2.3. Time
  - 3.2.4. Weather conditions
  - 3.2.5. Name of the Contractor's crew foreman or superintendent responsible for the work
  - 3.2.6. Location with reference to Station and Plan Page Number
  - 3.2.7. Tests/inspections performed
  - 3.2.8. Test/inspection standard
  - 3.2.9. Test/inspection results
  - 3.2.10. Nuclear Gauge Model and Serial Number
  - 3.2.11. Clear indication of Pass or Fail
- 3.3. Maintain records, including a log of all sampling and testing completed on the projects.
- 3.4. Provide backup documentation of work products as appropriate to adequately record the testing/inspection work.

### **4. SAFETY**

All concerns relating to the performance of the Contractor's work (means and methods, safety, traffic control or other) shall be through the District or the District's representative.

Notwithstanding, it remains the Consultant's responsibility to; remove themselves from any situation in which it deems unsafe and to immediately advise the District of such conditions preventing

execution of the required testing, and to conduct all testing and field work in accordance with the OSHA regulations and accepted safety practices.

## **5. LIMITS OF AUTHORITY**

The scope of work is limited to the testing of materials, special inspections of structural elements required by code or structural engineer, and reporting of results to the District, its design consultants, and contractors. The Consultant is not authorized to direct the Contractor to remove work placed, authorize extra work, or stop work. If material tests indicate that the Contractor's work does not meet the requirements of the Project Plans and Specifications, the Consultant may notify the Contractor of such non-conforming results, but cannot direct the Contractor as to the method of remedial action.

## **6. MATERIALS TESTING**

6.1. **Specifications.** Standard specifications used on District projects include the WSDOT Standard Specifications for Road, Bridge and Municipal Construction 2014 Edition, WSDOT Materials Manual M46-01.20 January 2015 Edition, Lake Whatcom Water and Sewer District Design & Construction Standards Current Edition, Whatcom County Standards for Roadway Construction. Consultant shall refer to the specific plans and specifications included in each project's Project Manual.

6.2. **Personnel.** Personnel shall be certified and qualified in the materials testing and reporting including but not limited to the following:

- 6.2.1. Testing and sampling of soil, aggregate and asphalt concrete, non-destructive materials testing, and visual and onsite nuclear gauge testing.
- 6.2.2. Concrete placement inspection and in-field procurement of concrete test cylinders.
- 6.2.3. Hot Mix Asphalt (HMA) placement inspection and nuclear gauge testing of HMA placement.
- 6.2.4. Verify that aggregate/materials placed for pipe bedding, trench backfill, subgrade and HMA meet the specifications required by the Contract.
- 6.2.5. In-place density and moisture content testing of soil and soil-aggregate by nuclear methods (shallow depth) shall conform to WSDOT Field Operation Procedure (FOP) for AASHTO T 310 and WSDOT Standard Operation Procedure (SOP) 615, as applicable. Nuclear gauges used on the Project must have proof of calibration by manufacturer, with date of calibration not being greater than 8-months from the present date of use on the Project. Calibration records shall be prepared by the manufacturer and clearly show the date of calibration along with the serial and model number(s) of the nuclear gauge unit(s). Field personnel shall hold and provide proof of a current license and registration issued by the Washington State Department of Health (DOH) for possession and use of nuclear portable gauging



devices, i.e., nuclear moisture-density gauges. Meet all requirements of the DOH including, but not limited to employing a Radiation Safety Officer, users, including the assigned personnel, that have been qualified and authorized as users of the nuclear gauges, and personnel monitoring badges (a device measuring the radiation exposure to the user and in compliance with the DOH).

- 6.2.6. Compaction and moisture control tests per WSDOT 2-03.3(14).
- 6.2.7. Compaction and moisture control tests for Hot Mix Asphalt (HMA) per WSDOT 5-04.
- 6.2.8. Compaction and moisture control tests for Pipe Zone Bedding per WSDOT 7-08.3(1)C – Bedding the Pipe and WSDOT 2-03.3(14).
- 6.2.9. In-lab compression testing and field collection of 4-inch concrete cylinder specimens in accordance with WSDOT FOP for AASHTO T 23 (Making and Curing Concrete Test Specimens in the Field). In-lab compression testing of concrete cylinders shall be performed in accordance with WSDOT FOP for AASHTO T 22 (Compressive Strength of Cylindrical Concrete Specimens).
- 6.2.10. Aggregate Testing - Per Specification Section 02315 (Trench Excavation and Backfill), the General Contractor responsible for the construction of the Project (herein referred to as "Contractor") is responsible for providing Gradation analysis for bedding and backfill materials (ref. Section 02315 1.07 B(1)).

**6.3. Anticipated Materials.** Anticipated materials that will be utilized for the projects include:

- 6.3.1. Gravel Backfill for Pipe Zone Bedding – WSDOT 9-03.12(3).
- 6.3.2. Crushed Backfill (5/8" minus, per Whatcom County Standards) for Trench Backfill.
- 6.3.3. Asphalt pavement used for roadway wearing, base and leveling courses shall be Hot Mix Asphalt (HMA) Class ½-inch per WSDOT 5-04. HMA mix design shall comply with and meet the requirements for a non-statistical evaluation per WSDOT Standard Specification 5004.3(7)A2. Asphalt content shall range from 5 to 6 percent of total mix weight.
- 6.3.4. Aggregate materials used for HMA shall be manufactured product complying with WSDOT 9-03.8 for the Class of Asphalt Concrete being specified.
- 6.3.5. Aggregate for gravel base shall be natural or processed granular material conforming to WSDOT 9-03.10.
- 6.3.6. Crushed surfacing top course shall be in accordance with WSDOT 9-03.9(3).
- 6.3.7. Concrete for all thrust blocking and reverse thrust blocks shall develop a minimum compressive strength of 3,000 psi at 28-days (reference Section 02510 2.010 – Concrete for Thrust Blocking, Thrust Ties and Encasement). Mix design to be provided by the Contractor.
- 6.3.8. Reinforced concrete retaining wall at Strawberry Point Sewer Pump Station along Lake Whatcom Boulevard. Plans and specification will be provided by District's design consultant upon completion of design.

6.4. **Testing Frequency.** Testing along the trench backfill operations, backfill of water main appurtenances (such as fire hydrant waterlines and backfill/restoration of pits for pipe bursting and directional drilling) is outlined below. Note: depending on weather, variability of materials, contractor's means and methods, and other factors, testing frequency may be reduced by the District.

6.4.1. One in place density test for every 50 lineal feet of trench for the first 150 lineal feet of trench backfilled on each alignment (1 through 12) and one test for every 250 lineal feet of trench thereafter. The intent is to perform 3 tests at the beginning of the alignments to identify compaction effort required and then test every 250 lineal feet (Reference Geneva AC Main Replacement Specification Section 02315 1.06 B(3)).

6.4.2. One test whenever soil conditions change, per the direction of the District's Inspector, and continuing with tests every 250 lineal feet as described above (Reference Geneva AC Main Replacement Specification Section 02315 1.06 B(4)).

6.4.3. Although testing frequency is defined above, the testing frequency shall be used as a gauge as to the number of tests required for the pipe alignments. In order to obtain meaningful results, actual test locations should be random locations. The method of random sampling shall be generally conforming to the random selection method set forth in WSDOT Test Method T 716 – Method of Random Sampling for Locations of Testing and Sampling Sites, Method B.

## **7. SPECIAL INSPECTIONS**

Provide special inspections for rebar placement, embedments, and structural field welding as requested by District. Personnel performing inspection shall have the applicable certifications (WABO, etc) for the type of inspection requested.

**LAKE WHATCOM WATER AND SEWER DISTRICT  
MATERIALS TESTING AND SPECIAL INSPECTION SERVICES**

**ESTIMATE OF SERVICES**

Based on the Proposer's rates and charges schedule, provide a cost estimate of materials testing and special inspection services assuming the following quantities :

Item	Item Description	Approx. Quantity	Unit	Unit Price	Total Cost
1.	On-site materials testing during normal business hours (compaction tests using nuclear gauge)	120	Hrs		
2.	On-site materials testing outside of normal business hours (compaction tests using nuclear gauge)	10	Hrs		
3.	Surcharge for same day call-out for on-site materials testing.	8	EA		
4.	Project Manager	8	Hrs		
5.	RICE Test	10	EA		
6.	Proctor Test	2	EA		
7.	Gradation Test	4	EA		
8.	Sand Equivalent Test	6	EA		
9.	Fracture Count Test	6	EA		
10.	One set of concrete cylinder collection & compression tests to obtain 7-day, 14-day and 28-day strengths.	2	EA		
11.	Slump and Air Entrainment Test	2	EA		
12.	Mileage costs per round trip from office to site	50	Round Trip		
13.	Amount billed for travel time per round trip from office to site	50	Round Trip		

Notes: Include costs of laboratory reports in materials tests.