

CITY OF PORTLAND  
AGREEMENT FOR PROFESSIONAL, TECHNICAL, OR EXPERT SERVICES

CONTRACT NUMBER 30003222

TITLE OF WORK PROJECT  
Water Quality Corrosion Study

This contract is between the City of Portland ("City," or "Bureau") and Black & Veatch Corporation, hereafter called Consultant. The City's Project Manager for this contract is Michelle Cheek.

**Effective Date and Duration**

This contract shall become effective on April 14, 2014. This contract shall expire, unless otherwise terminated or extended, on December 1, 2015.

**Consideration**

- (a) City agrees to pay Consultant a sum not to exceed \$240,000 for accomplishment of the work.
- (b) Interim payments shall be made to Consultant according to the schedule identified in the STATEMENT OF THE WORK AND PAYMENT SCHEDULE.

**CONSULTANT DATA AND CERTIFICATION**

Name (print full legal name): Black & Veatch Corporation

Address: 5885 Meadows Road, Suite 700, Lake Oswego, OR 97035

Employer Identification Number (EIN): 431833073

[INDEPENDENT CONTRACTORS: DO NOT PROVIDE SOCIAL SECURITY NUMBER (SSN) – LEAVE BLANK IF NO EIN]

City of Portland Business Tax Registration Number: 652440

Citizenship: Nonresident alien ☐ Yes ☒ No

Business Designation (check one): ☐ Individual ☐ Sole Proprietorship ☐ Partnership ☒ Corporation  
☐ Limited Liability Co (LLC) ☐ Estate/Trust ☐ Public Service Corp. ☐ Government/Nonprofit

Payment information will be reported to the IRS under the name and taxpayer I.D. number provided above. Information must be provided prior to contract approval.

**TERMS AND CONDITIONS**

**1. Standard of Care**

Consultant shall perform all services under this contract using that care, skill, and diligence that would ordinarily be used by similar professionals in this community in similar circumstances.

**2. Effect of Expiration**

Passage of the contract expiration date shall not extinguish, prejudice, or limit either party's right to enforce this Contract with respect to any default or defect in performance that has not been corrected.

**3. Order of Precedence**

This contract consists of these Terms and Conditions, the Statement of Work and Payment Schedule, and any exhibits that are attached. Any apparent or alleged conflict between these items will be resolved by using the following order of precedence: a) these Terms and Conditions; b) Statement of Work and Payment Schedule; and c) any exhibits attached to the contract.

**4. Early Termination of Contract**

- (a) The City may terminate this Contract for convenience at any time for any reason deemed appropriate in its sole discretion. Termination is effective immediately upon notice of termination given by the City.
- (b) Either party may terminate this Contract in the event of a material breach by the other party that is not cured. Before termination is permitted, the party seeking termination shall give the other party written notice of the breach, its intent to terminate, and fifteen (15) calendar days to cure the breach. If the breach is not cured within 15 days, the party seeking termination may terminate immediately by giving written notice that the Contract is terminated.

**5. Remedies and Payment on Early Termination**

- (a) If the City terminates pursuant to 4(a) above, the City shall pay the Consultant for work performed in accordance with the Contract prior to the termination date. No other costs or loss of anticipated profits shall be paid.
- (b) If the City terminates pursuant to 4(b) above, the City is entitled all remedies available at law or equity. In addition, Consultant shall pay the City all damages, costs, and sums incurred by the City as a result of the breach.
- (c) If the Consultant justifiably terminates the contract pursuant to subsection 4(b), the Consultant's only remedy is payment for work prior to the termination. No other costs or loss of anticipated profits shall be paid.
- (d) If the City's termination under Section 4(b) was wrongful, the termination shall be automatically converted to one for convenience and the Consultant shall be paid as if the Contract was terminated under Section 4(a).
- (e) In the event of early termination the Consultant's work product before the date of termination becomes property of the City.

**6. Assignment**

Consultant shall not subcontract, assign, or transfer any of the work scheduled under this agreement, without the prior written consent of the City. Notwithstanding City approval of a subconsultant, the Consultant shall remain obligated for full performance hereunder, and the City shall incur no obligation other than its obligations to the Consultant hereunder. The Consultant agrees that if subconsultants are employed in the performance of this Agreement, the Consultant and its subconsultants are subject to the requirements and sanctions of ORS Chapter 656, Workers' Compensation.

**7. Compliance with Applicable Law**

Consultant shall comply with all applicable federal, state, and local laws and regulations. Consultant agrees it currently is in compliance with all tax laws. Consultant shall comply with Title VI of the Civil Rights Act of 1964 and its corresponding regulations as further described at: <http://www.portlandoregon.gov/bibs/article/446806>.

**8. Indemnification for Property Damage and Personal Injury**

Consultant shall indemnify, defend, and hold harmless the City, its officers, agents, and employees, from all claims, losses, damages, and costs (including reasonable attorney fees) for personal injury and property damage arising out of the intentional or negligent acts or omissions of the Consultant, its Subconsultants, suppliers, employees or agents in the performance of its services. Nothing in this paragraph requires the Consultant or its insurer to indemnify the City for claims of personal injury or property damage caused by the negligence of the City. This duty shall survive the expiration or termination of this contract.

**9. Insurance**

Consultant shall obtain and maintain in full force at Consultant expense, throughout the duration of the Contract and any warranty or extension periods, the required insurance identified below. The City reserves the right to require additional insurance coverage as required by statutory or legal changes to the maximum liability that may be imposed on Oregon cities during the term of the Contract.

- (a) Workers' compensation insurance as required by ORS Chapter 656 and as it may be amended. Unless exempt under ORS Chapter 656, the Consultant and all subconsultants shall maintain coverage for all subject workers.

☒ Required and attached or ☐ Proof of exemption (i.e., completion of Workers' Compensation Insurance Statement)

- (b) General commercial liability (CGL) insurance covering bodily injury, personal injury, property damage, including coverage for independent contractor's protection (required if any work will be subcontracted), premises/operations, contractual liability, products and completed operations, in per occurrence limit of not less than \$1,000,000, and aggregate limit of not less than \$2,000,000.

☒ Required and attached or ☐ waived by Bureau Director or designee

- (c) Automobile liability insurance with coverage of not less than \$1,000,000 each accident, and an umbrella or excess liability coverage of \$2,000,000. The insurance shall include coverage for any auto or all owned, scheduled, hired and non-owned auto. This coverage may be combined with the commercial general liability insurance policy.

☒ Required and attached or ☐ waived by Bureau Director or designee

- (d) Professional Liability and/or Errors & Omissions insurance to cover damages caused by negligent acts, errors or omissions related to the professional services, and performance of duties and responsibilities of the Consultant under this contract in an amount with a combined single limit of not less than \$1,000,000 per occurrence and aggregate of \$3,000,000 for all claims per occurrence. In lieu of an occurrence based policy, Consultant may have claims-made policy in an amount not less than \$1,000,000 per claim and \$3,000,000 annual aggregate, if the Consultant obtains an extended reporting period or tail coverage for not less than three (3) years following the termination or expiration of the Contract.

☒ Required and attached or ☐ waived by Bureau Director or designee

Continuous Coverage; Notice of Cancellation: The Consultant agrees to maintain continuous, uninterrupted coverage for the duration of the Contract. There shall be no termination, cancellation, material change, potential exhaustion of aggregate limits or non renewal of coverage without thirty (30) days written notice from Consultant to the City. If the insurance is canceled or

terminated prior to completion of the Contract, Consultant shall immediately notify the City and provide a new policy with the same terms. Any failure to comply with this clause shall constitute a material breach of Contract and shall be grounds for immediate termination of this Contract.

**Additional Insured:** The liability insurance coverages, except Professional Liability, Errors and Omissions, or Workers' Compensation, shall be without prejudice to coverage otherwise existing, and shall name the City of Portland and its bureaus/divisions, officers, agents and employees as Additional Insureds, with respect to the Consultant's activities to be performed, or products or services to be provided. Coverage shall be primary and non-contributory with any other insurance and self-insurance. Notwithstanding the naming of additional insureds, the insurance shall protect each additional insured in the same manner as though a separate policy had been issued to each, but nothing herein shall operate to increase the insurer's liability as set forth elsewhere in the policy beyond the amount or amounts for which the insurer would have been liable if only one person or interest had been named as insured.

**Certificate(s) of Insurance:** Consultant shall provide proof of insurance through acceptable certificate(s) of insurance, including additional insured endorsement form(s) and all other relevant endorsements, to the City prior to the award of the Contract if required by the procurement documents (e.g., request for proposal), or at execution of Contract and prior to any commencement of work or delivery of goods or services under the Contract. The Certificate(s) will specify all of the parties who are endorsed on the policy as Additional Insureds (or Loss Payees). Insurance coverages required under this Contract shall be obtained from insurance companies acceptable to the City of Portland. The Consultant shall pay for all deductibles and premium. The City reserves the right to require, at any time, complete, certified copies of required insurance policies, including endorsements evidencing the coverage the required.

**Subconsultant(s):** Consultant shall provide evidence that any subconsultant, if any, performing work or providing goods or service under the Contract has the same types and amounts of coverages as required herein or that the subconsultant is included under Consultant's policy.

#### **10. Ownership of Work Product**

All work product produced by the Consultant under this contract is the exclusive property of the City. "Work Product" includes, but is not limited to: research, reports, computer programs, manuals, drawings, recordings, photographs, artwork and any data or information in any form. The Consultant and the City intend that such Work Product shall be deemed "work made for hire" of which the City shall be deemed the author. If for any reason a Work Product is deemed not to be a "work made for hire," the Consultant hereby irrevocably assigns and transfers to the City all right, title and interest in such work product, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrines. Consultant shall obtain such interests and execute all documents necessary to fully vest such rights in the City. Consultant waives all rights relating to work product, including any rights arising under 17 USC 106A, or any other rights of authorship, identification or approval, restriction or limitation on use or subsequent modifications. If the Consultant is an architect, the Work Product is the property of the Consultant-Architect, and by execution of this contract, the Consultant-Architect grants the City an exclusive and irrevocable license to use that Work Product.

Notwithstanding the above, all pre-existing trademarks, services marks, patents, copyrights, trade secrets, and other proprietary rights of Consultant are and will remain the exclusive property of Consultant.

#### **11. EEO Certification**

In the event Consultant provides in excess of \$2,500.00 for services to the City in any fiscal year, Consultant shall obtain EEO certification from the City.

#### **12. Equal Benefits**

Consultant must comply with the City's Equal Benefits program as prescribed by Chapter 3.100 of the Code of the City of Portland. The required documentation must be filed with Procurement Services, City of Portland, prior to contract execution.

#### **13. Successors in Interest**

The provisions of this contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and approved assigns.

#### **14. Severability**

The parties agree that if any term or provision of this contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular term or provision held to be invalid.

#### **15. Waiver**

The failure of the City to enforce any provision of this contract shall not constitute a waiver by the City of that or any other provision.

#### **16. Errors**

The Consultant shall promptly perform such additional services as may be necessary to correct errors in the services required by this contract without undue delays and without additional cost.

**17. Governing Law/Venue**

The provisions of this contract shall be interpreted, construed and enforced in accordance with, and governed by, the laws of the State of Oregon without reference to its conflict of laws provisions that might otherwise require the application of the law of any other jurisdiction. Any action or suits involving any question arising under this contract must be brought in the appropriate court in Multnomah County Oregon.

**18. Amendments**

All changes to this contract, including changes to the scope of work and contract amount, must be made by written amendment and approved by the Chief Procurement Officer to be valid. Any amendment that increases the original contract amount by more than 25% must be approved by the City Council to be valid.

**19. Business Tax Registration**

The Consultant shall obtain a City of Portland business tax registration number as required by PCC 7.02 prior to beginning work under this Contract.

**20. Prohibited Conduct**

The Consultant shall not hire any City employee who evaluated the proposals or authorized the award of this Contract for two years after the date the contract was authorized without the express written permission of the City and provided the hiring is permitted by state law.

**21. Payment to Vendors and Subconsultants**

The Consultant shall timely pay all subconsultants and suppliers providing services or goods for this Contract.

**22. Access to Records**

The Consultant shall maintain all records relating to this Contract for three (3) years after final payment. The City may examine, audit and copy the Consultant's books, documents, papers, and records relating to this contract at any time during this period upon reasonable notice. Copies of these records shall be made available upon request. Payment for the reasonable cost of requested copies shall be made by the City.

**23. Audits**

(a) The City may conduct financial and performance audits of the billings and services specified in this agreement at any time in the course of the agreement and during the three (3) year period established by paragraph 22. Audits will be conducted in accordance with generally accepted auditing standards as promulgated in Government Auditing Standards by the Comptroller General of the United States Government Accountability Office.

(b) If an audit discloses that payments to the Consultant exceed the amount to which the Consultant was entitled, the Consultant shall repay the amount of the excess to the City.

**24. Electronic Signatures**

The City and Consultant may conduct this transaction, including any contract amendments, by electronic means, including the use of electronic signatures.

**25. Merger Clause**

This Contract encompasses the entire agreement of the parties, and supersedes all previous understandings and agreements between the parties, whether verbal or written.

**26. Dispute Resolution/Work regardless of disputes**

The parties shall participate in mediation to resolve disputes before conducting litigation. The mediation shall occur at a reasonable time after the conclusion of the Contract with a mediator jointly selected by the parties. Notwithstanding any dispute under this Contract, the Consultant shall continue to perform its work pending resolution of a dispute, and the City shall make payments as required by the Contract for undisputed portions of the work. In the event of litigation no attorney fees are recoverable. No different dispute resolution paragraph(s) in this contract or any attachment hereto shall supersede or take precedence over this provision.

**27. Progress Reports: / X / Applicable / \_\_\_ / Not Applicable**

If applicable, the Consultant shall provide monthly progress reports to the Project Manager as described in the Statement of the Work and Payment Schedule.

**28. Consultant's Personnel: / X / Applicable / \_\_\_ / Not Applicable**

If applicable, the Consultant shall assign the personnel listed in the Statement of the Work and Payment Schedule for the work required by the Contract and shall not change personnel without the prior written consent of the City, which shall not be unreasonably withheld.

**29. Subconsultants**

The Consultant shall use the subconsultants identified in its proposals. The Consultant shall not change subconsultant assignments without the prior written consent of the Chief Procurement Officer. The City will enforce all social equity contracting and Minority, Women and Emerging Small Business (M/W/ESB) subcontracting commitments submitted by the

Consultant in its proposals. Failure to use the identified M/W/ESB subconsultants without prior written consent is a material breach of contract.

For contracts valued \$50,000 or more, the Consultant shall submit a Monthly Subconsultant Payment and Utilization Report (MUR), made part of this contract by reference, reporting ALL subconsultants employed in the performance of this agreement. An electronic copy of the MUR may be obtained at: <http://www.portlandoregon.gov/bibs/45475>.

### 30. Third Party Beneficiaries

There are no third party beneficiaries to this contract. Enforcement of this contract is reserved to the parties.

## STATEMENT OF THE WORK AND PAYMENT SCHEDULE

### PROJECT GOALS

The current water quality and lead corrosion study is designed to meet the following goals and objectives:

1. Document existing baseline distribution system water quality as it relates to lead release.
2. Identify data gaps and additional distribution system sampling required to better understand the role of pH, alkalinity, nitrification, groundwater operations, the open reservoirs, and other water quality parameters on lead release.
3. Identify causes of lead release in the distribution system and whether the causes are uniform or localized.
4. Assess the location, extent, and impact of nitrification on lead release in the distribution system.
5. Assess the impact of the open reservoirs on water quality and lead release in the distribution system.

For the purposes of this study, the words "distribution system" refers to both the City of Portland Water Bureau (PWB) and its wholesale customers' distribution systems.

### PROJECT PHASING

The project shall be structured in two phases:

1. Base Tasks.
2. Mitigation Services. **Mitigation Services, described in further detail in Task 800 below, shall only be performed upon execution of a signed amendment to this Contract which clearly identifies the statement of work, schedule, and budget for said services.**

### TASKS TO BE COMPLETED

This statement of work describes the base tasks, Phase 1. Optional tasks, if authorized by the PWB Project Manager (PM), shall be performed as described under Task 800 – Mitigation Services, which is Phase 2.

#### TASK 100 – Project Management

Task 101: Management

The Consultant shall perform the following services:

Provide overall management for the project. Prepare budget, schedule, and quality assurance and quality control plan. Review ongoing activities. Monitor schedule and budget. Manage technical resources, including work performed by subcontractors and outside laboratories. Prepare monthly invoices, including a status report covering work completed during the current billing period and work anticipated for the upcoming period. Review progress with PWB on a regular basis.

Task 102: Project Kickoff Meeting

The Consultant shall perform the following services:

Conduct a project initiation meeting with PWB PM; discuss pertinent available data, review project staffing (including selection of up to two additional Technical Advisory Committee (TAC) members) and organization, present initial work plan and initial work schedule. Once selected, the TAC members will be added to this contract via a written amendment.

Task 103: Monthly Progress Meetings

The Consultant shall perform the following services:

Conduct monthly review meetings with PWB PM to discuss current project status and to solicit input from PWB staff regarding current work activities. One person from the Prime Consultant Staff shall attend the meetings in person, others shall call in as required. Provide the PWB PM with written summaries of each meeting.

Consultant Deliverables for Task 100 – Project Management:

- Monthly invoice and status report.
- Quality Assurance / Quality Control plan.
- Project Schedule.
- Monthly Meeting Notes. Notes shall be provided to the PWB PM within 10 business days. Business days are defined as Monday – Friday, 8:00 am -5:00 pm.

Work Performed by PWB for Task 100 – Project Management:

- Review monthly invoice and status report.
- Participate in monthly progress meetings.
- Review and comment on meeting notes. The PWB PM shall provide comments to the Consultant within five business days.

TASK 200 – Existing Information Review

Task 201: Data Request

The Consultant shall perform the following services:

Prepare water quality data request, including for wholesale customers. Data and reports shall be available electronically in Microsoft (MS) Excel format for evaluation and processing.

Task 202: Data Review

The Consultant shall perform the following services:

Review available water quality data. Specifically, the following shall be reviewed:

- Relevant historical distribution system water quality data;
- Lead profiling data from customer homes;
- All available nitrification data;
- Past corrosion control studies, reports, memorandums;
- Maps and other information indicating distribution system materials, components and operations if available. It is anticipated that gathering this information shall involve up to 8 hours of in-person meetings with PWB Operations staff to gain a better understanding of the distribution system layout and operations;
- Water quality data related to the open reservoirs; and,
- The components of the lead hazard reduction program.

Consultant Deliverables for Task 200 – Existing Information Review:

- Water quality data request specifying the data needed from the PWB PM.

Work Performed by PWB for Task 200 – Existing Information Review:

- Provide all requested water quality data in MS Excel format; and,
- Contact wholesale customers and obtain requested water quality data.

TASK 300 – Pipe Loop Evaluation

Task 301: Evaluation of Existing PWB Pipe Loops

The Consultant shall perform the following services:

PWB has two copper pipe loops and up to five brass blocks located in the distribution system. Their suitability for use in this study shall be evaluated. The evaluation shall consider at a minimum the pipe loop design, materials of construction, physical condition, and available water quality data.

Task 302: Evaluation of Other Available Pipe Loops

The Consultant shall perform the following services:

The Process Research Solutions (PRS) Monitoring Stations shall be evaluated for their suitability for this study. A literature search shall be conducted to determine if additional pipe loops are available which would be suitable for use in this study.

Work Performed by PWB for Task 300 – Pipe Loop Evaluation:

- Complete recommended modifications to PWB's existing pipe loops or brass blocks.
- Purchase and install additional pipe loops or monitoring stations as recommended by the Consultant.

TASK 400 – Technical Memorandum #1

Task 401: Prepare Technical Memorandum #1

The Consultant shall perform the following services:

Prepare a draft technical memorandum summarizing at a minimum the following information:

- The relevant historical and distribution system information and water quality data;
- The findings of the pipe loop evaluation; and,
- A preliminary set of conclusions and observations based upon existing information.

The Technical Memorandum shall be reviewed by the TAC members and by the PWB. Comments shall be incorporated and a final Technical Memorandum shall be prepared by the Consultant. This technical memorandum shall serve as the basis for development of the Distribution System Sampling Plan. Five hard copies and one electronic Portable Document Format (.PDF) of the draft and final Technical Memorandum shall be delivered to the PWB PM.

Consultant Deliverables for Task 400 – Technical Memorandum #1:

- Draft and Final Technical Memorandum #1. Technical Memorandum shall be delivered to PWB PM per schedule attached as Exhibit B.

Work Performed by PWB for Task 400 – Technical Memorandum #1:

- Provide one set of reconciled review comments on Technical Memorandum #1.

TASK 500 – Technical Advisory Committee

Task 501: Assembly and Management of Technical Advisory Committee (TAC)

The Consultant shall perform the following services:

Assemble a TAC panel. The TAC shall consist of a maximum of five individuals. Optional subconsultants for this task are included to this contract. If any TAC members are required that are not included to this contract, they shall be added via a written amendment. At this time, potential added TAC members shall consist of Public Utilities or Universities.

The time and expenses for the review of materials as outlined in Tasks 602, 603, 604, and 703 and attendance at two workshops by TAC members shall be covered under this scope and budget. TAC members shall be reviewed and agreed upon with PWB as an initial task. Once the TAC members are identified, a work order shall be issued listing the TAC members and including a budget detail identifying the work to be performed, the hours to perform the work, the total cost of each of the work tasks, and the overall work tasks. This information shall be provided to the PWB Contract Administration Branch to issue the work order. The final documentation to support the work order shall be e-mailed to Andrew Urdahl at [Andrew.urdahl@portlandoregon.gov](mailto:Andrew.urdahl@portlandoregon.gov) and the PWB PM at [Michelle.Check@portlandoregon.gov](mailto:Michelle.Check@portlandoregon.gov)

The work order shall be substantially in accordance with the sample attached to this contract as Exhibit C. Any changes must be agreed to by the Consultant and the City in writing as an amendment to the work order. Work orders require each party's approval in writing to proceed. PWB's approving authority is the Engineering Services Group Director.

Work Performed by PWB for Task 500 – Technical Advisory Committee:

- Provide input and make final decision on TAC members.

TASK 600 – Distribution System Sampling Plan

Task 601: Definition of Objectives

The Consultant shall perform the following services:

Define objectives of sampling plan. Develop an outline of the sampling plan to be discussed at Workshop #1.

TASK 602: Workshop #1

The Consultant shall perform the following services:

Organize and conduct a full-day workshop at PWB facilities in Portland, OR to discuss the historical information and the Distribution System Sampling Plan. The goal of the workshop is to develop the framework required to finalize preparation of the Distribution System Sampling Plan. The TAC members, as well as key Consultant and PWB project team members, will be present in person. Others may phone in as necessary. A written log of decision and action items shall be provided to the PWB PM by the Consultant within ten business days after the conclusion of the workshop.

## TASK 603: Technical Memorandum #2

The Consultant shall perform the following services:

Prepare a draft Technical Memorandum which defines the Distribution System Sampling Plan and summarizes the information developed from Workshop #1. The Technical Memorandum shall be reviewed by the TAC members and by the PWB PM. Comments provided by the PWB and TAC shall be incorporated by the Consultant and a final Technical Memorandum shall be prepared. Five hard copies and one electronic .PDF of the draft and final Technical Memorandum shall be delivered to the PWB PM. The Technical Memorandum shall be due and provided to the PWB PM per the attached Exhibit B, Project Schedule.

## TASK 604: Sample and Data Analysis

The Consultant shall perform the following services:

Data collected by PWB (as recommended in the Distribution System Sampling Plan) shall be provided electronically to the Consultant. A 12-month sampling effort has been budgeted in the Contract. Data shall be reviewed, evaluated, and presented to PWB on a monthly basis at the monthly progress meetings. Quarterly progress reports shall be prepared and submitted to the TAC. The TAC shall provide review and analysis of the quarterly data and progress report, recommend changes to the sampling plan or execution of the sampling plan if needed, and summarize their observations, review, and analysis in written form to the Consultant on a quarterly basis. TAC comments shall be compiled by the Consultant, submitted to the PWB PM and reviewed with PWB at a monthly progress meeting. Monthly and quarterly data reports shall be presented in electronic format.

There will be identified sample analyses conducted by the PWB laboratory. The specialized sample analysis that shall be conducted and the responsibility of the Consultant have been identified on Exhibit A, Budget Detail as "Specialized Laboratory" services.

Consultant Deliverables for Task 600 – Distribution System Sampling Plan:

- Meeting notes from Workshop #1 including log of decision and action items;
- Draft and Final Technical Memorandum #2;
- Monthly and quarterly data reports in MS Excel format; and,
- TAC comments on quarterly progress reports.

All deliverables shall be due and provided to the PWB PM per the attached Exhibit B, Project Schedule.

Work Performed by PWB for Task 600 – Distribution System Sampling Plan:

- Participate in Workshop #1;
- Provide one set of reconciled review comments on Technical Memorandum #2;
- Conduct recommended water quality sampling with direction and training provided by the Consultant;
- Perform recommended laboratory analyses at PWB Water Quality lab with the exception of specialized laboratory analyses identified in Task 604; and,
- Provide collected water quality data in MS Excel format.

TASK 700 – Water Quality Summary Report

## Task 701: Data Analysis and System Investigation

The Consultant shall perform the following services:

Evaluate trends in the data to identify problem areas and specific water quality concerns. Review associations between water quality and distribution system components and layout.

## Task 702: Preparation of Water Quality Summary Report

The Consultant shall perform the following services:

A draft Water Quality Summary Report shall be prepared which summarizes the data collected during the 12-month Distribution System Sampling Plan. The report shall include at a minimum:

- Summary of historical water quality data;
- Summary of data collected as part of the Distribution System Sampling Plan; and,
- Conclusions regarding the identification of water quality issues and problem areas that affect lead release in Portland's system. Recommendations for continuation of sampling or initiation of further (optional) tasks.



The Water Quality Summary Report shall be reviewed by the TAC members and by the PWB. Comments shall be incorporated by the Consultant and a final report prepared. Five hard copies and one electronic .PDF of the draft and final Water Quality Summary Report shall be delivered by the Consultant to the PWB in accordance with the schedule attached as Exhibit B, Project Schedule.

**TASK 703: Workshop #2**

The Consultant shall perform the following services:

Organize and conduct a full-day workshop at PWB facilities in Portland, OR to discuss the Water Quality Summary Report. Discuss recommendations for continuation of sampling or initiation of further tasks. Coordinate on schedule of the workshop with PWB PM. Comments from workshop shall be incorporated into Water Quality Summary Report. The TAC members, as well as key Consultant and PWB project team members, will be present in person. Others may phone in as necessary. A written log of decision and action items shall be provided to the PWB PM by the Consultant within ten business days after the conclusion of the workshop.

Consultant Deliverables for Task 700 – Water Quality Summary Report:

- Meeting notes from Workshop #2 including log of decision and action items; and,
- Draft and Final Water Quality Summary Report.

All deliverables shall be provided to the PWB PM per the attached Exhibit B, Project Schedule.

Work Performed by PWB for Task 700 – Water Quality Summary Report:

- Schedule PWB personnel and facility for Workshop #2;
- Participate in Workshop #2; and,
- Provide one set of reconciled review comments on the Water Quality Summary Report.

**TASK 800 – Mitigation Services - OPTIONAL**

Identified mitigation services and/or funds shall only be performed by the Consultant under the direction of the PWB Project Manager and via written amendment to the Contract approved by both parties. Authorization to complete any of the mitigation services work tasks shall be issued via an amendment to the Contract. At the time that the work task is issued the Consultant shall provide the PWB Project Manager with a budget detail identifying the work to be performed, the hours to perform the work along with the total cost of each of the work tasks and the overall work tasks. This information shall be provided to the Contract Administration Branch to implement an amendment. The amendment will include revised Budget Details, attached to this contract as Exhibit A, that reflect the distribution of Task 800 funds. The final documentation to support the amendment shall be e-mailed to Andrew Urdahl at [Andrew.urdahl@portlandoregon.gov](mailto:Andrew.urdahl@portlandoregon.gov) and the PWB PM at [Michelle.Check@portlandoregon.gov](mailto:Michelle.Check@portlandoregon.gov)

As directed by the PWB PM the Consultant shall perform additional services and work tasks that are identified during the course of the project, including but not limited to, a similar system review, operational and/or treatment evaluations, bench scale studies, pilot scale studies, or any unanticipated tasks that may arise as the project progresses. This work shall be completed after receiving a written amendment to the contract.

All work shall be performed and deliverables received in accordance with the schedule attached to this Contract as Exhibit B, Project Schedule unless otherwise directed in writing by the PWB PM.

All deliverables shall be in a Microsoft Office compatible format unless otherwise noted or directed in writing by the PWB PM.

**CONSULTANT PERSONNEL**

The Consultant shall assign the following personnel to do the work in the capacities designated:

NAME	ROLE ON PROJECT
Dave Carlson	Project Director
Pat Van Duser	Project Manager
Cathy DiPietro	Quality Control
Sunny Wang	Technical Lead
Jamie DuBois	Staff Engineer
Theresa Jones	Administrative Support

**SUBCONSULTANTS**

The Consultant shall assign the following subconsultants to perform work in the capacities designated:

NAME	ROLE ON PROJECT	SUBCONTRACT AMOUNT
Montana State University	Distribution System / Water Quality	\$10,712
Process Research Solutions, LLC	Corrosion Control Monitoring Programs	\$25,235
Andrew Jacque	Specialty Laboratory	\$7,725
Barry Maynard	Specialty Laboratory	\$7,725
San Francisco Public Utilities Commission; New York City Department of Environmental Protection; Washington University in St. Louis	Technical Advisory Committee	\$37,492 to be distributed among the three listed subconsultants via Work Order.

The City will enforce all social equity contracting and Minority, Women and Emerging Small Business (M/W/ESB) subcontracting commitments submitted by the Consultant in its Proposal. For contracts valued \$50,000 or more, the Consultant shall submit a Monthly Subconsultant Payment and Utilization Report (MUR), made part of this contract by reference, reporting ALL subconsultants employed in the performance of this agreement. An electronic copy of the MUR may be obtained at: <http://www.portlandoregon.gov/bibs/45475>.

**COMPENSATION**

The maximum that the Contractor shall be paid on this contract is **\$240,000** (hereafter the "not to exceed" amount.) as described in the attached Exhibit A – Budget Detail. The "not to exceed" amount includes all payments to be made pursuant to this contract, including reimbursable expenses, if any. Nothing in this contract requires the City to pay for work that does not meet the Standard of Care or other requirements of the Contract. The actual amount to be paid Contractor may be less than that amount.

The City shall pay Consultant based on submitted invoices for acceptable work performed and approved until the "not to exceed" amount is reached thereafter, Consultant must complete work based on the Contract without additional compensation.

Any estimate of the hours necessary to perform the work is not binding on the City. The Contractor remains responsible if the estimate proves to be incorrect. Exceeding the number of estimated hours of work does not impose any liability on the City for additional payment.

If work is completed before the "not to exceed" amount is reached, the Contractor's compensation shall be based on the Contractor's bills previously submitted for acceptable work performed and approved.

**PAYMENT TERMS: Net 30 Days****Hourly Rates**

The billing rates shall not exceed those set forth below:

Prime Consultant Staff:

Project Director: \$309 / hour

Project Manager: \$185 / hour

Technical Lead: \$149 / hour

Quality Control: \$165 / hour

Staff Engineer: \$113 / hour

Administrative Support: \$85 / hour

Subconsultants:

Montana State University: \$210 / hour

Process Research Solutions, LLC: \$131.25 / hour

Andrew Jacque: Price per sample – estimate to be \$1,545 per sample

Barry Maynard: Price per sample – estimate to be \$1,545 per sample

Compensation for subconsultants shall be limited to the same restrictions imposed on the Contractor. The maximum markup on subconsultant services shall not exceed 5% for the total term of the Contract.

**Billing rates shall remain constant throughout the duration of this Contract.**

### Hourly Rate Multiplier

Direct labor shall be charged as staff salary times a multiplier, using a multiplier no greater than 3.1. This multiplier shall include profit and overhead expenses, including but not limited to: employee benefits, bonuses, autos and other perquisites; parking fees; local delivery/courier services and postage, telecommunications and facsimile services; licensing fees; business and other taxes; general business and professional liability insurance; accounting and advertising costs; leasing of office space; leased or owned office and information technology equipment (including use of computers, CAD workstations, plotters, printers, and related equipment); travel costs within a 100-mile radius of Portland; and all other direct costs not identified below as reimbursable.

### Reimbursable Costs

All allowable reimbursable direct costs, with the exception of subconsultant costs, shall be billed with no mark-up. Reimbursable direct costs include pre-approved travel beyond a 100-mile radius of Portland, document reproduction costs requiring outsourcing (for example, printing of drawings and specifications), and the purchase, rental or leasing of specialized field equipment and the cost of disposable field equipment. All reimbursable costs shall be subject to prior authorization and approval by the City.

### Travel Costs

Any travel must comply with all the requirements set forth in this section and must be for official City business only. Personal expenses shall not be authorized at any time. Travel expenses shall be reimbursed for airfare and rental vehicles only if the Consultant is acting within the course and scope of his/her duties under this contract. Receipts shall be required for all travel expenses. The Consultant and any subconsultants shall fly "coach class," unless the Consultant personally pays the difference. The Consultant and any subconsultants shall be limited to economy or compact size rental vehicles, unless the Consultant personally pays the difference. Any Travel (transportation, lodging and per diem), for the Consultant as requested by PWB to a location outside a 100 mile radius of the Consultant's Project office shall be reimbursed. The approved mileage rate follows the current United States General Services Administration (GSA) federal rate. Meal per diem is based on the GSA per diem rates. Per Diem Rates for Oregon may be found at the GSA website. That website address is: <http://www.gsa.gov/perdiem>. All travel must be pre-authorized by the City's PM in writing prior to conducting that travel.

### Progress Payments

On or before the 15th of each month, the Consultant shall submit to the **Water Bureau's Accounts Payable department** an invoice for work performed by the Consultant during the preceding month. The invoice shall contain the City's Contract Number, City of Portland Bureau Name, City Project Manager and set out all items for payment including, but not limited to: Task number/subtask completed, the name of the individual, labor category, direct labor rate, hours worked during the period, deliverable/worked performed, the percentage of work successfully completed for the task, and the percentage of work still required with remaining dollars available. The Consultant shall also attach photocopies of claimed reimbursable expenses. The Consultant shall stamp and approve all subconsultant invoices and note on the subconsultant invoice what they are approving as "billable" under the contract. The billing from the Consultant must clearly roll up labor and reimbursable costs for the Consultant and subconsultants— matching the subconsultant invoices.

Invoices shall be e-mailed to: [wbaps@portlandoregon.gov](mailto:wbaps@portlandoregon.gov).

The City shall pay all amounts to which no dispute exists within 30 days of receipt of the invoice. Payment of any bill, however, does not preclude the City from later determining that an error in payment was made and from withholding the disputed sum from the next progress payment until the dispute is resolved.

The Consultant shall make full payment to its subcontractors within 10 business days following receipt of any payment made by the Bureau to Consultant.

### ACH Payments

It is the City's policy to pay its Consultant invoices via electronic funds transfers through the automated clearing house (ACH) network. To initiate payment of invoices, Consultants shall execute the City's standard ACH Vendor Payment Authorization Agreement which is available on the City's website at <http://www.portlandoregon.gov/bfs/article/409834?>.

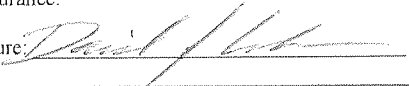
Upon verification of the data provided, the Payment Authorization Agreement will authorize the City to deposit payment for services rendered directly into Consultant accounts with financial institutions. All payments shall be in United States currency.

## WORKERS' COMPENSATION INSURANCE STATEMENT

IF YOUR FIRM HAS CURRENT WORKERS' COMPENSATION INSURANCE, CONTRACTOR MUST SIGN HERE:

I, undersigned, am authorized to act on behalf of entity designated below, and I hereby certify that this entity has current Workers' Compensation Insurance.

Contractor Signature:

Date: 2-13-14Entity: Black & Veatch CorporationIF YOUR FIRM DOES NOT HAVE CURRENT WORKERS' COMPENSATION INSURANCE, CONTRACTOR MUST COMPLETE THE FOLLOWING INDEPENDENT CONTRACTOR CERTIFICATION STATEMENT:

As an independent contractor, I certify that I meet the following standards:

1. The individual or business entity providing labor or services is registered under ORS Chapter 701, if the individual or business entity provides labor or services for which such registration is required;
2. Federal and state income tax returns in the name of the business or a business Schedule C or form Schedule F as part of the personal income tax return were filed for the previous year if the individual or business entity performed labor or services as an independent contractor in the previous year; and
3. The individual or business entity represents to the public that the labor or services are to be provided by an independently established business. Except when an individual or business entity files a Schedule F as part of the personal income tax returns and the individual or business entity performs farm labor or services that are reportable on Schedule C, an individual or business entity is considered to be engaged in an independently established business when four or more of the following circumstances exist.

Contractor: check four or more of the following:

- ☐ A. The labor or services are primarily carried out at a location that is separate from the residence of an individual who performs the labor or services, or are primarily carried out in a specific portion of the residence, which portion is set aside as the location of the business;
- ☐ B. Commercial advertising or business cards as is customary in operating similar businesses are purchased for the business, or the individual or business entity has a trade association membership;
- ☐ C. Telephone listing and service are used for the business that is separate from the personal residence listing and service used by an individual who performs the labor or services;
- ☐ D. Labor or services are performed only pursuant to written contracts;
- ☐ E. Labor or services are performed for two or more different persons within a period of one year; or
- ☐ F. The individual or business entity assumes financial responsibility for defective workmanship or for service not provided as evidenced by the ownership of performance bonds, warranties, errors and omission insurance or liability insurance relating to the labor or services to be provided.

Contractor Signature

Date

**FOR CITY USE ONLY**

**PROJECT MANAGER-COMplete ONLY IF CONTRACTOR DOES NOT HAVE WORKER'S COMPENSATION INSURANCE**  
 ORS 670.600 Independent contractor standards. As used in various provisions of ORS Chapters 316, 656, 657, and 701, an individual or business entity that performs labor or services for remuneration shall be considered to perform the labor or services as an "independent contractor" if the standards of this section are met. The contracted work meets the following standards:

1. The individual or business entity providing the labor or services is free from direction and control over the means and manner of providing the labor or services, subject only to the right of the person for whom the labor or services are provided to specify the desired results;
2. The individual or business entity providing labor or services is responsible for obtaining all assumed business registrations or professional occupation licenses required by state law or local government ordinances for the individual or business entity to conduct the business;
3. The individual or business entity providing labor or services furnishes the tools or equipment necessary for performance of the contracted labor or services;
4. The individual or business entity providing labor or services has the authority to hire and fire employees to perform the labor or services;
5. Payment for the labor or services is made upon completion of the performance of specific portions of the project or is made on the basis of an annual or periodic retainer.

City Project Manager Signature

Date

**CONSULTANT SIGNATURE:**

This contract may be signed in two (2) or more counterparts, each of which shall be deemed an original, and which, when taken together, shall constitute one and the same Agreement.

The parties agree the City and Consultant may conduct this transaction, including any contract amendments, by electronic means, including the use of electronic signatures.

I, the undersigned, agree to perform work outlined in this contract in accordance to the STANDARD CONTRACT PROVISIONS, the terms and conditions, made part of this contract by reference, and the STATEMENT OF THE WORK made part of this contract by reference; hereby certify under penalty of perjury that I/my business am not/is not in violation of any Oregon tax laws; hereby certify that my business is certified as an Equal Employment Opportunity Affirmative Action Employer and is in compliance with the Equal Benefits Program as prescribed by Chapter 3.100 of Code of the City of Portland; and hereby certify I am an independent contractor as defined in ORS 670.600.

**Black & Veatch Corporation**

BY: David J. Carlson Date: 2-13-19

Name: David J. Carlson

Title: Vice President

CONTRACT NUMBER: 30003222CONTRACT TITLE: Water Quality Corrosion Study

## CITY OF PORTLAND SIGNATURES:

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Bureau DirectorBy: \_\_\_\_\_ Date: \_\_\_\_\_  
Chief Procurement OfficerBy: \_\_\_\_\_ Date: \_\_\_\_\_  
Elected Official

Approved:

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Office of City Auditor

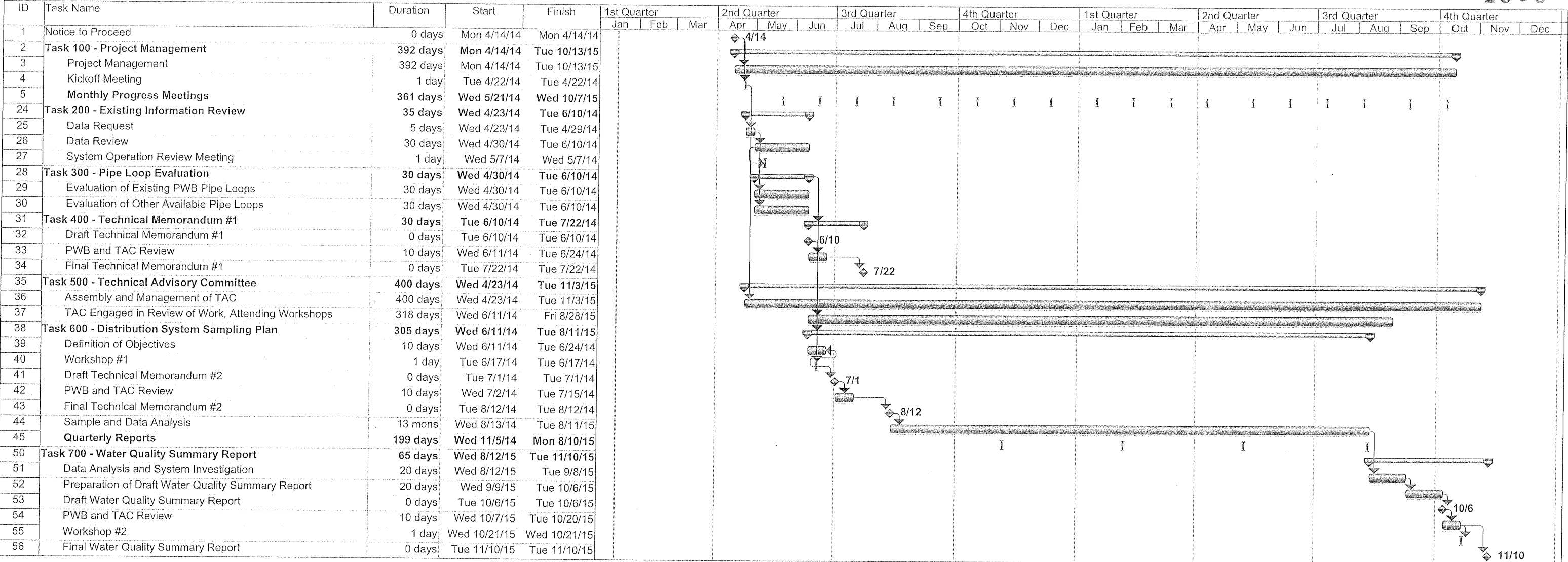
Approved as to Form:

APPROVED AS TO FORM

By: \_\_\_\_\_ Date: 2/18/14  
Office of City Attorney

CITY ATTORNEY

TASK DESCRIPTION	BLACK & VEATCH KEY TEAM MEMBER / GROUP LABOUR HOURS									SUBCONSULTANTS						TOTAL CONTRACT COSTS
	Dave Carlson Project Director	Pat Van Duser Project Manager	Sunny Wang Technical Lead	Cathy DiPietro Quality Control	Jamie DuBois Staff Engineer	Theresa Jones Admin Support	Total B&V Labor Hours	Total B&V Labor Costs	Expenses As Incurred	Montana State University Anne Camper Specialist	Process Research Solutions Abigail Cantor Specialist	TAC Panel	Dr. Andrew Jacque Specialized Laboratory	Dr. Barry Maynard Specialized Laboratory	Subconsultant markup	
Rate	309	185	149	165	113	85									5%	
Base Services - Task A through Task F																
100 Project Management	10	64	48	0	0	34	156	\$24,972	\$300	\$	\$	\$	\$	\$	\$	\$25,272
101 Management / Invoicing	10	36				32	78	\$12,470	\$100						\$ -	\$12,570
102 Project Kickoff Meeting		4	8			2	14	\$2,102	\$100						\$ -	\$2,202
103 Monthly Progress Meetings		24	40				64	\$10,400	\$100						\$ -	\$10,500
200 Existing Information Review	0	0	100	4	16	2	122	\$18,740	\$200	\$ 1,236	\$ 1,487	\$	\$	\$	\$ 125	\$19,574
201 Data Request			12	2		2	16	\$2,288	\$100	\$ 412	\$ 257				\$ 33	\$3,090
202 Data Review			96	2	16		114	\$16,442	\$100	\$ 824	\$ 1,030				\$ 93	\$18,489
300 Pipe Loop Evaluation	0	0	24	0	0	0	24	\$4,286	\$200	\$	\$ 5,150	\$	\$	\$	\$ 150	\$5,944
301 Evaluation Existing PWB Pipe Loops			16	2			18	\$2,714	\$100	\$ -	\$ 2,060	\$ -			\$ 103	\$4,977
302 Evaluation of Other Available Pipe Loops			8	2			10	\$1,522	\$100	\$ -	\$ 3,090	\$ -			\$ 155	\$4,867
400 TM 1 - Summary of Tasks 200-300 and 400	0	2	80	8	16	8	114	\$16,098	\$250	\$ 824	\$ 5,150	\$		\$	\$ 299	\$22,621
401 Preparation of TM 1		2	80	8	16	8	114	\$16,098	\$250	\$ 824	\$ 5,150				\$ 299	\$22,621
500 Technical Advisory Committee	0	2	8	0	0	4	14	\$1,902	\$100	\$	\$	\$ 37,492		\$	\$ 1,875	\$41,369
501 Assembly and Management of TAC		2	8			4	14	\$1,902	\$100			\$ 37,492			\$ 1,875	\$41,369
600 Distribution System Sampling Plan	0	10	144	22	32	12	220	\$34,572	\$1,500	\$ 4,748	\$ 5,406	\$	\$ 7,725	\$ 7,725	\$ 1,230	\$53,469
601 Definition of objectives			16	2			18	\$2,714		\$ 618	\$ 515	\$ -			\$ 57	\$3,904
602 Workshop #1		8	8	8	8	4	36	\$5,236	\$1,250	\$ 1,648	\$ 1,030				\$ 134	\$9,298
603 Technical Memorandum #2		2	40	8	8	8	66	\$9,234	\$250	\$ 1,236	\$ 2,575				\$ 191	\$13,486
604 Sample and Data Analysis			80	4	16		100	\$14,388		\$ 1,236	\$ 1,288		\$ 7,725	\$ 7,725	\$ 899	\$33,261
700 Water Quality Summary Report	0	0	128	8	40	12	188	\$27,742	\$800	\$ 3,916	\$ 5,210	\$			\$ 610	\$34,774
701 Data Analysis and System Investigation			24		8		32	\$4,480	\$100	\$ 1,236	\$ 2,575	\$ -			\$ 191	\$8,582
702 Preparation of water quality summary report			96	8	24	8	136	\$19,016	\$250	\$ 1,030	\$ 4,635				\$ 283	\$25,214
703 Workshop 2 - WQ Summary & Next Steps		8	8		8	4	28	\$3,916	\$250	\$ 1,648	\$ 1,030				\$ 134	\$6,978
800 Mitigation Services	0	0	0	0	0	0	0	\$0	\$0	\$	\$				\$	\$0
Grand Total	10	86	540	46	104	72	858	\$ 124,922	\$ 3,150	\$ 10,712	\$ 25,235	\$ 37,492	\$ 7,725	\$ 7,725	\$ 4,444	\$ 240,000



Project: PWB Water Quality Schedule.  
Date: Wed 1/15/14

Task

Split

Progress

Milestone

Summary

Project Summary

External Tasks

External Milestone

Deadline



AGREEMENT FOR PROFESSIONAL, TECHNICAL OR EXPERT SERVICES  
WORK ORDER # (insert work order number)  
Contract (insert contract number)

The Contract between the City of Portland Water Bureau (PWB) and (insert Consultant name) provides for assistance of the undersigned firm on (insert project type) projects.

This Work Order shall require the Consultant to perform (insert type of work) as directed in the Contract. The specific scope of tasks to be performed by Consultant, including schedule and budget, are outlined below.

**Scope of Work:** The Consultant shall (insert detailed scope of work).

**Deliverables:** The Consultant shall provide the PWB Project Manager with (insert detailed deliverables).

**Schedule:** The work described in this Work Order shall be completed no later than MM/DD/YYYY, absent any unanticipated issues.

**Budget:** The maximum compensation relating to these services shall not exceed \$XXX and as referenced in Exhibit XX Budget Detail, attached to this Work Order. Unless authorized by a written Amendment to the Work Order no additions or changes shall be made to this Work Order. The hourly rates shall be as indicated in the Contract. The Water Bureau's Engineering Services Group Director shall approve all Work Orders and Work Order amendments when amending the Work Order to increase compensation is greater than 25% of the original Work Order amount.

The hourly rates for this work order shall be as directed in the Contract.

All provisions of the Contract shall remain in full force and effect.

In witness hereof, the parties have duly executed this Work Order as of the date written below.

Consultant:

By: \_\_\_\_\_ Date: \_\_\_\_\_

City of Portland:

By: \_\_\_\_\_ Date: \_\_\_\_\_