



MEMORANDUM PORTLAND WATER DISTRICT

TO: Board of Trustees

FROM: Carrie Cote

DATE: October 4, 2023

RE: **Workshop Meeting – Tuesday, October 10, 2023**

There will be a Workshop Meeting of the Board of Trustees of the Portland Water District on Tuesday, October 10, 2023. The meeting will begin at 6:30 p.m. in the Nixon Training Center at the general offices of the District located at 225 Douglass Street, Portland, Maine.

The Workshop will be preceded by meetings of the following Board Committees:

<u>Committee</u>	<u>Room / Location</u>	<u>Time</u>
Pension	General Manager's Conference Room	5:15 p.m.
Administration & Finance	Monie Conference Room	5:30 p.m.
Operations	EOC 2 nd Floor	5:30 p.m.
Planning	Nixon Training Center	5:30 p.m.

AGENDA – WORKSHOP

1. Water Meters and the Meter Reading System

Peter Cutrone, Project Manager – Administration, will provide information on the status of the current meter reading/meter system, need and process to update the system, and general options to replace the system.

2. Other Business

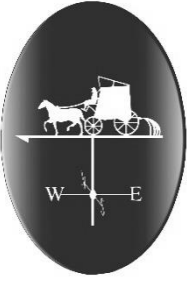
3. Executive Session

Pursuant to 1 M.R.S. §405(6)(A) personnel, the Board will go into Executive Session to discuss a personnel matter related to provisions in the Americans with Disabilities Act (ADA) and the Family and Medical Leave Act (FMLA).

4. Executive Session

Pursuant to 1 M.R.S. §405(6)(A) personnel, the Board will go into Executive Session to conduct the General Manager's annual performance review.

5. Adjourn



MEMORANDUM PORTLAND WATER DISTRICT

TO: Pension Committee/Board of Trustees

FROM: Mary Demers, Director of Employee Services

DATE: October 4, 2023

RE: **Pension Committee Meeting – October 10, 2023**

A meeting of the Pension Committee of the Portland Water District Board of Trustees is scheduled for Tuesday, October 10, 2023, in the General Manager's Conference Room at the District office, 225 Douglass Street, Portland, Maine. The meeting is scheduled to start at 5:15 p.m.

AGENDA

1. **Approval of Pension Distributions**
Staff will present a request to approve benefits for four retirees.
2. **Other Business**



MEMORANDUM PORTLAND WATER DISTRICT

TO: Administration and Finance Committee/Board of Trustees

FROM: David Kane, Executive Director of Administration
Mary Demers, Director of Employee Services

DATE: October 4, 2023

RE: **Administration and Finance Committee Meeting – October 10, 2023**

A meeting of the Administration and Finance Committee of the Portland Water District Board of Trustees will be held on Tuesday, October 10, 2023. The meeting will begin at 5:30 p.m. in the Monie Room of the District, 225 Douglass Street, Portland, Maine.

AGENDA

- 1. Water Terms and Conditions and Non-Tariff Fees**
Mr. Adam Sellick, Project Engineer, and Mr. David Kane, Executive Director of Administration, will review the proposed changes to the District's Terms and Conditions and Non-Tariff Fees. (See attached memo)
- 2. Billing System Testing Software**
Mr. Peter Cutrone, Project Manager - Administration, will present a motion authorizing a contract be executed to purchase software to assist in testing upgrades to the customer billing software. (See attached memo)
- 3. Employee Benefit Program**
Ms. Mary Demers, Director of Employee Services, will give an overview to the updated 2024 employee benefits program and associated costs.
- 4. Other Business**



Portland Water District
From Sebago Lake To Casco Bay

ADMINISTRATION AND FINANCE COMMITTEE / AGENDA ITEM SUMMARY

Agenda Item: 1
Date of Meeting: October 10, 2023
Subject: 2024 Water Terms and Conditions
Presented By: David Kane, Executive Director of Administration

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, that the revisions to the District's Terms & Conditions of water service, attached hereto and incorporated herein by reference, are hereby adopted with an effective date of January 1, 2024. (Note: Propose to present at the November 27, 2023, along with all the other budget-related motions.)

BACKGROUND

The Water Terms and Conditions (T&C) are annually reviewed as part of the budget process with the fees updated to reflect actual costs. The last fee update was approved on November 28, 2022 (Order 22-046). Because the District was granted a waiver from the Public Utilities Commission from rate-related filings, the T&C changes need only Board approval.

The changes being proposed include the following:

- Updating fees to current costs.
- Section 410: New fees for planning and an engineering fee for new service projects; and Department of Transportation (DOT) highway opening and a utility location permit fee
- Section 411: New fee for service line and admin. fee for main extension projects and inspection deposit fee
- Section 410 and 411: Several clarifications on the circumstances when fees will be assessed

FISCAL REVIEW / FUNDING

The changes will result in estimated water revenues and capital fees of \$258,100 and \$162,323, respectively. (See Attachment B for details)

LEGAL REVIEW

Corporate Counsel reviewed the proposed motion and approved it as to form.

CONCLUSION(S)

Staff recommends that the Board approve the proposed motion. The Administration and Finance Committee will review at the October 10, 2023 meeting.

ATTACHMENT(S)

- A. Terms and Conditions - Redlined with changes noted
- B. Summary of Fees with impact of the proposed changes

TERMS & CONDITIONS

Filed at the Office of the Public Utilities Commission
As Amended January 1, 202~~4~~³

PORTLAND WATER DISTRICT

225 Douglass Street, Portland, Maine

TERMS & CONDITIONS

These Terms and Conditions produced by the Portland Water District, and accepted by the Maine Public Utilities Commission will govern and guide the District in the operation of its business.

All District provision of service and credit and collection procedures in these Terms and Conditions will conform and be based upon rules of the Maine Public Utilities Commission except as hereinafter noted.

Except as explicitly provided herein, these Terms and Conditions are not intended to modify any rights or duties of the District or any customer or any authority of the Public Utilities Commission under any provision of Maine law, including Title 35-a of the Maine Revised Statutes Annotated or the rules and regulations of the Maine Public Utilities Commission.

REVISION TABLE

Date	PWD Motion	Sections	Description
4/1/22	Resolution 22-005	Entire Document	Restatement of T&C issued.
1/1/23	Order 22-046	Sheets 2,6,12,15-20	Updating fees to current costs
1/1/24	Order 23-XX		

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SECTION 100 - GENERAL

Section 110. Appeals Process

Disagreements or disputes regarding the application of Terms and Conditions relating to water service standards, water line standards, or water main extension standards shall be decided by the District's Board of Trustees.

Disagreements or disputes regarding the application of Terms and Conditions or relating to Chapter 660 of the Rules of the Public Utilities Commission shall be decided by the Public Utilities Commission.

Section 120. Office Hours, Normal Business Hours, Other Hours and Emergency Hours

Office Hours are 8:00 a.m. to 4:30 p.m. Monday through Friday, excluding holidays. Office hours may change due to training, staffing, weather conditions, etc.

Normal Business Hours, for the purpose of charging disconnection, reconnection and damaged meter fees, are 7:30 a.m. to 4:30 p.m., Monday through Friday, excluding holidays.

Other Hours, for the purpose of charging disconnection, reconnection and damaged meter fees, are 4:30 p.m. to 7:30 a.m. Monday through Friday, holidays, Saturday and Sunday.

Emergency Hours are 24 hours a day, seven days a week.

Section 130. Access to Premises Served by PWD

Employees of the District, shall have free access at all reasonable hours to all premises served by the District by providing proper identification to either the customer or owner. The District's employees, with authority from the customer or the owner, will be permitted to inspect all plumbing and fixtures, to set, remove, or read meters, to ascertain the amount of water used and the manner of use, and to enforce these terms and conditions.

Section 140. Tampering With District Property

There shall be no tampering with District property. No District owned valve, shut-off, hydrant, or standpipe shall be opened, closed, or otherwise operated by any person other than District authorized persons.

Section 150. Unauthorized Use of Water

No customer shall supply water to another customer, nor shall water be used for any other purpose except normal domestic usage and fire protection without District approval. No unauthorized person shall obtain water from a hydrant or other District fixture without prior District consent.

Section 151. Unauthorized use/Theft of service Charge

If District personnel expend time investigating and documenting a diversion of water by a customer, the customer shall be responsible for all documented costs of investigation and adjustment incurred by the District, unless fees are otherwise recovered pursuant to 35-A M.R.S. § 2705. For purposes of this section, Diversion shall mean the diversion of flow around the meter to evade charges as well as the unauthorized reconnection of service by a customer or his/her representative after water has been shut off due to nonpayment.

Section 160. Liability

The District will only be liable for any damages arising from any claim by a customer to the extent liability is expressly provided in the Maine Tort Claims Act as set forth in Title 14, Chapter 741 of the Maine Revised Statutes Annotated. The District makes no representations or warranties about the suitability of any water provided by the District for any particular purpose.

Section 170. Water Supply Emergency

Customers who fail to implement mandatory water conservation and/or utilization restrictions during a District declared water supply will be subject to a fee on the customer's next water bill equal to twice the general reconnection fee, per the Portland Water District Board of Trustees Policy 620. Each 24-hour period for which the customer is not in compliance with the District's water conservation and/or utilization restrictions constitutes a separate violation. The District may disconnect customers for repeated violations of the water company's water conservation and/or utilization restrictions.

SECTION 200 - BILLING

Section 210. Billing and Payment Procedures

The due date of a bill must be at least 25 days after the bill is mailed or otherwise delivered to the customer. A bill is considered “mailed” on the date the bill is postmarked. If there is no postmark (as with an electronic bill) the District will send the electronic notification to the customer no more than 1 day after the bill date.

Bills may be rendered monthly, bimonthly, quarterly, or by the season at the option of the District. Metered minimum charges and private fire service charges, except for seasonal main charges, may be prorated for the exact number of days of service when service is open or closed.

The customer will be responsible for providing a correct billing address or email address if bill notification is received electronically. Failure to receive a bill does not relieve the customer of the obligation of its payment, nor from the consequence of nonpayment.

Applicants or customers may notify the District in writing if they wish to designate a Third Party to receive copies of customer bills and disconnection notices.

When a billing error is discovered, the District will have up to 90 days to correct the error.

Section 211. Seasonal Billing Procedures

A seasonal customer regularly takes service for only a portion of the year from either a surface or deep main. A seasonal customer will be subject to seasonal rules and rates. An initial bill will be generated and no additional charges will be assessed unless the consumption, upon closing the account, exceeds the usage allowed in the seasonal rate. When the account is closed the meter must be removed and the water service must be disconnected. Seasonal customers served by a surface main shall be provided water service between May 1 and October 15.

If a non-seasonal customer on a deep main vacates the premises for 3 months or less, and elects to remain on monthly rates, the District must be notified in writing. The account will be closed. The customer’s meter must be removed and the water service disconnected. Upon request to establish the service again, a reconnection fee pursuant to Section 3 of these Terms and Conditions will be charged.

Section 220. New Customer Activation Fee

The customer shall pay a ~~\$19.21~~00 fee when the customer requests a change to an existing account causing an additional customer account record to be created.

Section 230. Late Payment Charges

Late payment charges are assessed for overdue water bills that are not paid within 25 days from the postmarked date, or 25 days from the e-bill notification date. The interest rate charged will be the interest rate established for delinquent taxes by the State Treasurer.

Section 231. Collection Charge for Past Due Bills

If District personnel visit the customer's premises to disconnect service for nonpayment and in lieu of actual disconnection, the customer pays or makes a payment arrangement for the entire balance due the District will charge a collection fee ~~\$285.00~~.

Section 232. Lien Charges for Multi-Unit Properties

The District may enforce its lien rights in accordance with 35-A M.R.S.A, Section 6111-A to collect a past due water bill. A \$58.00 charge covering lien notification, preparation, filing, and processing will be added to the past due amount, and included as part of the lien filing.

Section 233. Disconnection of Multi-Unit Properties

Before disconnection of a single meter, multi-unit property, for non-payment of basic service, the District will:

- Mail a disconnection notice to the customer in accordance with Chapter 660 of the Maine Public Utilities Commission Rules guidelines.
- Post a disconnection notice at or near the front and rear entrances of the affected building(s), to inform tenants how service can be continued. The disconnection notice will be posted at least 10 days prior to disconnection of the water service.
- In lieu of filing a water lien, the District will notify the appropriate participating sewer municipality, if applicable, of the pending disconnection to provide it an opportunity to solicit payment from the owner. If the bill remains delinquent and the municipality does not relocate the tenants and seeks to have water restored, the District will restore the water either per a court order, or if the municipality pays the District for the delinquent water balance and accepts a transfer of the delinquent sewer balance.

The District may authorize separate metering of each dwelling unit at the landlord's expense, if the dwelling is disconnected for nonpayment of an overdue amount.

Section 234. Disconnection of Leased or Rental Single-Meter, Multi-Unit Dwellings

Pursuant to Chapter 660 of the Maine Public Utilities Commission Rules, before the Utility disconnects service to a leased or rented single meter, multi-unit dwelling, the Utility will:

- a) Apply any existing deposit to the current account balance,
- b) Assess against the landlord a collection fee of \$100.00 at the time the location is posted as required by Chapter 690. This fee is in addition to any applicable reconnection fee set forth in Section 3 of these Terms and Conditions.

Section 235. Disconnection Process for Overdue Combined Water and Municipal Sewer Balances

The following section outlines the Terms and Conditions related to the disconnection process for overdue combined water and municipal sewer balances

Section 235.1. Policy

The District, as sewer billing agent for participating municipalities, will issue a disconnection notice to delinquent customers that may result in the disconnection of water service pursuant to Section 34-D of these Terms and Conditions

Section 235.2. Definitions

- Service Classification - “Service classification” includes water and sewer services billed as residential, commercial, industrial, and governmental accounts.
- Total Amount Due - “Total Amount Due” means the total water and sewer amount owed by a customer that has been properly billed.
- Total Amount Overdue – For the purpose of issuing a disconnection notice, “Total Amount Overdue” means the total water and sewer amount billed to a customer that is greater than \$100.00 and more than 50 days old. For the purpose of assessing a late fee, “Total Amount Overdue” means the water and sewer balance that has not been paid within 25 days of the bill postmark date, or 25 days from the electronic notification date of the e-bill.

Section 235.3. Billing

Bills shall be issued in accordance with applicable sections of Public Utilities Commission Chapters, i.e. Chapters 660 and 870, and the Portland City Code, Section 24.

Section 235.4. Disconnection and Reconnection

A 14-day disconnection notice shall be issued to a delinquent customer when the Total Amount Overdue is greater than \$100.00 and more than 50 days old, the account is not on an active payment arrangement, and the account is not on dispute. A 3 business day disconnection notice shall be issued for the Total Amount Due when a customer does not comply with the terms of the established payment arrangement and the account is not on dispute

When a customer has received a 14 day disconnection notice and makes a partial payment that reduces the Total Amount Overdue to \$100.00 or less, the customer will be subject to disconnection until the Total Amount Overdue is paid in full, or the customer makes a payment arrangement. When a customer has received a 3 business day disconnection notice due to a broken payment arrangement, and makes a partial payment on the installment amount, the customer is subject to disconnection until the installment amount is paid in full.

Section 235.5. Payment Allocation

In the event that a payment is received by the District which does not clearly indicate whether the payment is for water or sewer, the payment shall be applied to the oldest outstanding basic service bills.

Section 235.6. Payment Arrangement

The District shall offer a Regular Payment Arrangement to customers who cannot pay the Total Account Balance in accordance with Chapter 660 of the Maine Public Utilities Commission Rules and these Terms and Conditions.

Section 235.7. Dispute Resolution

Disputes related to Chapter 660 of the Maine Public Utilities Commission Rules shall be resolved in accordance with the Rules of the Public Utilities Commission.

The District shall accept and respond to inquiries and complaints related to the amount or composition of charges. The appropriate municipality shall accept and respond to inquiries and complaints relating to the sewer collector system or the Municipality's Sewer Ordinance.

Section 240. Rebate Policy

The District may rebate a portion of a customer's bill for leakage. The rebate will only be available one time during a five-year period on each account. Proof may be required to substantiate the leakage and repair. The rebate will be based upon deducting one-half of the billing in excess of normal usage. In no event will the rebate apply to leakage that occurred more than one year prior to the time the customer notifies the District of the leakage.

Section 241. Time Period for “Make-Up” Bills for Previously Unbilled Service Due to Unauthorized Use or Fraud

For residential and commercial accounts, the District may issue a “make-up” bill for service that was previously unbilled because of unauthorized use or fraud by the customer for service that occurred up to six (6) years before the issuance of the “make-up” bill”.

Section 242. Charge for Payments Returned

A charge will be made to the account of any customer whose check is returned by the bank for reason of insufficient funds or incorrect bank information. The charge shall be the greater of \$5.00 or an amount equal to the actual bank charges. The utility will furnish the customer with proof of any bank charges in excess of \$5.00.

Section 243. Interruption of Service

The District will provide notice of any shut off to affected customers in accordance with Portland Water District Board of Trustees Policy 620(2)(G) and will make a prorate reduction in the customer’s bill as provided in that subsection.

Section 250. Deposits

The interest rate paid on all deposits will be in accordance with Chapter 870 of the Commission's Rules and Regulations.

The amount of the deposit will be based on the amount of the basic service in accordance with Chapter 660 of the Maine Public Utilities Commission Rules guidelines.

SECTION 300 - SERVICE STANDARDS

Section 310. Maintenance of Plumbing

To prevent leaks and damages, all customers shall maintain at their own expense the plumbing and fixtures within their own premises in good repair and protect them from freezing. In the event of a frozen service, the District will inspect and determine where the service line is frozen. All costs associated with inspecting and thawing a frozen service line on private property shall be borne by the customer. All costs associated with inspecting and thawing a frozen service line in the public right of way shall be borne by the District.

Section 311. Fluctuation of Pressures by Customer's Apparatus

No customer shall install or use a water consumption apparatus that will affect the District's pressure or operating conditions so as to interfere with the service of another customer. If a customer has, or proposes to install an apparatus which requires water in sudden and/or material quantities, the District reserves the right to require the customer to install devices or apparatuses, which will confine such fluctuations of demand or reduction of pressure within reasonable limits as determined by the District.

If the customer, after receiving written notice from the District, fails to present an acceptable remedial plan within a time limit set by the District, service will be discontinued pursuant to provisions of the Chapter 660 of the Maine Public Utilities Commission Rules.

Section 312. Isolation Valve

Every service must be equipped with operable isolation valves, with one valve above and one valve below the meter. The valves and meter shall be protected from freezing either within a building or inside a meter pit. All piping shall be arranged to prevent back siphonage and to permit drainage whenever necessary. The isolation valves shall be owned and maintained by the customer.

Section 313. By-Pass Valve

Effective February 1, 2008 customers desiring a by-pass valve must file an application for such valve with the District. Services shall be equipped with a by-pass valve only if the meter is 1.5-inch or larger, and if the applicant can document a need for business continuity to the satisfaction of the District. A by-pass valve shall be owned and maintained by a customer; it shall only be installed after the approval by the District, and shall be sealed shut. It can only be operated with the consent or approval of the District. In the event that the by-pass valve is unsealed or operated without the consent or approval of the District, the District, in its discretion, may require removal of the by-pass valve at the customer's expense.

Section 314. Safeguarding Direct Pressure Water Devices and Systems Supplied by Automatic Feed Valves

All customers having direct pressure water devices, including but not limited to booster pumps, hot water tanks, or secondary systems supplied by automatic feed valves, shall install and maintain at their own expense appropriate vacuum, temperature, pressure relief valves, and lower water cutouts in their water system to prevent damage., Water service supplied to any customer not providing such protective devices will be strictly at the risk of the customer, and the District will not be held liable for damage resulting from lack of or failure of such protective devices.

Section 315. Cross-Connections

No cross connection between the public water supply and any other supply will be allowed unless properly protected and supervised in accordance with the Department of Human Services rules, the District's formal Cross Connection Control Program, and the Portland Water District Board of Trustees Policy 620.

Section 316. Private Fire Protection

Customers requiring private fire protection should contact the District to determine the availability of fire service at their location. Fire service, if available, will be installed at the customer's expense within the bounds of the public way or right-of-way. The fire service line, after installation, will be owned and maintained in the public way or right-of-way by the District. The District does not guarantee any quantity of water or pressure available through a fire protection service. The owner of such service shall determine the adequacy of supply through the fire service by conducting tests of the private system. The District must be given timely notice so a representative of the District can be present to observe the test.

Section 320. Water Meters and Meter Reading Device

The District will install one meter per service line. Meters must be installed in a safe, clean, dry, warm area at the service entrance and must be readily and safely accessible to District representatives. Maintenance of all District meters is provided at the District's cost. If additional auxiliary, or memo meters are required by the customer for calculating subdivision of water supply, they shall be purchased, installed, and maintained by the customer.

The District shall install meter reading devices for meters owned by the District. The most beneficial location of this device, for efficient and safe meter reading purposes, will be determined by the District.

Section 321. Meter Maintenance and Accuracy

The District has a program that repairs, tests, and replaces(if necessary) all meter sizes on the following service periods:

5/8-inch through 2-inch:	20 Years
3-inch:	4 Years (field)
4-inch:	2 Years (field)
6-inch and larger:	1 Year (field)

Meters are tested in conformance with Section 3G. of the District’s Water Service Standards Policy enacted by the Board of Trustees. Customer requests to test a water meter for accuracy are accommodated by the District without charge once every 18 months. More frequent tests of meters larger than ~~two~~ inch are at the customer’s expense based on the District’s actual costs. More frequent tests of meters ~~two~~- inch or smaller are subject to a \$~~5441~~.00 charge. It is recommended that the customer witness the meter test. If a meter is determined to be malfunctioning, the customer bill shall be adjusted according to the average historical usage.

Section 322. Meter Pit Policy

The District may require the customer of a property to supply, install, and maintain a meter pit(s) to District specifications at the customer’s expense as a condition of service when:

- a. The actual laying length of the service pipe measures over 300-feet from the street line.
- b. The service location makes discovery of a possible leak unlikely.
- c. The use of service pipe deemed by the District to be inferior makes the possibility of a leak likely. (Copper pipe must be type K; plastic pipe must be rated 160 PSI.)
- d. A single service supplies two or more units with no suitable common area (accessible independently of any individual tenant/owner) in which to install the meter.
- e. A property of two or more units is supplied through multiple services, any one of which is located in front of, or enters a unit other than, the one it serves.
- f. The customer does not provide a clean, warm, dry, and safely accessible location for the meter and its appurtenances.
- g. The customer does not furnish an otherwise suitable location for a meter inside the customer’s building.

All meter pits shall be installed on the customer’s property and installed as follows:

- a. In such manner to keep the meter pit clean and dry at all times.
- b. In such manner to allow District representatives to have access to the meter pit.
- c. In such manner that all confined space entry equipment can be safely utilized in accordance with OSHA standards for confined space entry.
- d. In such manner to conform to District Standards and Specifications.

The customer shall be responsible for maintaining the meter pit at its cost such that it can accommodate the District's meter.

Section 330. Application for New Water Service

To qualify for new water service, all applicants must demonstrate a need for water service that meets the conditions contained herein.

The application for a new water service shall include at a minimum:

- A project description (i.e., type of use, project location, project schedule, etc.).
- A site plan showing the location of the proposed service.
- An inventory of all water fixtures in the building to be served.

Section 331. Conditions for Water Service

- (a) All water service lines must conform to Portland Water District Board of Trustees Policy 620. New water service must be established from a water main having direct frontage to the lot or building being served.
- (b) Multiple buildings on a single lot all owned by a single entity may be served by a single water service with a single meter installed in accordance with other provisions herein. When there are multiple detached buildings on one lot served by one service line, PWD may require a covenant to be recorded in the Cumberland County Registry of Deeds affirming that if the lot is ever subdivided, an independent water service shall be installed and operational for each building.
- (c) If a single building is ever split into more than one unit, utilizing a party wall, each unit will be required to have an independent water service at the time that the split occurs and the additional units are created. If the split has occurred prior to service being provided (i.e., duplex construction), an independent water service must be established to each individual unit prior to new service activation.
- (d) If water service to a new building or lot cannot be obtained without crossing the property of another then one or more permanent easements for water facilities, having terms acceptable to the District, must be created and recorded in the Cumberland County Registry of Deeds, for the benefit of the District and all new owners. Granting water service through an easement shall be at the discretion of the District.

(e) The District may require, in its discretion, that customers bring their service into conformance with current District standards if the following occurs:

1. Changes in water demand or use that necessitate a change in service line or meter size changes.
2. The addition of an irrigation system to an existing domestic service lines.
3. The installation or upgrade of a fire sprinkler system or the addition of a private hydrant to an existing service line

(f) Customers shall comply with the Portland Water District Board of Trustees Policy 620. The District reserves the right to suspend water service to a customer until the service line setup meets current District standards.

Section 340. Fire Hydrants

Fire hydrants may not be used for any purpose other than extinguishing fires, training purposes, or for such other purposes as may be agreed upon by the District and the municipality or owner of a private hydrant. In no case shall fire hydrants be operated by a person other than an agent of the District, except when used for fire protection or training purposes.

If the District approves a request for a hydrant meter, unless otherwise authorized, the District will install and will assess a fee of \$~~15700~~.00 if installed and removed during normal business hours and \$~~303465~~.00 if installed during non-business hours.

Section 350. Size of Water Distribution Mains

The District provides water for domestic and fire protection purposes. The District requires all distribution water mains be adequately sized in accordance Portland Water District Board of Trustees Policy 650: Water Main Extension and Service Line Rule enacted by the Board of Trustees.

Section 360. Winter Construction

No new public water mains or services will be installed during winter conditions unless specifically approved by the District. The customer assumes all extra expenses over the ordinary construction expense.

SECTION 400 - SERVICE PROVISIONS

Section 410. New Meter or Service Fees and Deposits

This Section defines the fees and deposits associated to requests for new water services. Fees and deposits are dependent on the scope of the new water service project and shall be determined by the District. Fees and deposits are required to be submitted with a completed Application for New Service. Deposits related to Service Inspection shall be reconciled by the District at the time of service installation, and deposits related to Service Activation shall be reconciled by the District at the time of Service Activation.

- **Service Application-Administration Fee.** All ~~new~~ services in a New Service project shall carry a non-refundable \$~~939~~89.00 application fee.

- **Planning and Engineering Fee (New Service Project).** Applicants for New Service projects shall be responsible for a Planning and Engineering fee equal to \$106.00 per service.

- **Inspection Fee/Deposit.** The Applicant shall provide a deposit for the cost of inspection of the installation of the new service. Depending on the size of the new service, and how many services are be installed in the project, the fee will either be a Flat Rate or Actual Cost.
 - **Flat Rate (Fee).** All new services that are 2-inches or less in diameter and that are the only service installed in a project will carry a Flat Rate fee of \$~~218~~2934.00 for inspection.

 - **Actual Cost (Deposit).** All new services that are greater than 2-inches in diameter and/or those that are one of multiple services installed as part of a project shall be inspected at Actual Cost. Actual cost will be calculated by taking the actual number of hours multiplied by \$ 85. This shall also apply to projects where an existing service must be retired as a condition of service installation.

- **Meter Fee.** The Applicant shall provide the cost of the new meter associated to a new domestic service. The cost of the water meter is defined as the meter cost, ERT (remote reader) cost, typical plumbing fitting costs, and a \$25.00 inventory overhead fee.
 - **Existing Meters.** In a situation where a new domestic service is installed to a Lot, and that Lot has previously had a domestic water service and a meter that has since been recovered in good working condition by the District, the cost of that existing meter shall be accounted for in the Meter Fee for the new service. When determining the cost of the existing meter, current meter prices will be used.

- **Meter Installation Fee/Deposit.** The Applicant shall provide a fee or deposit for the cost of installing the meter for all new domestic services where the meter is not to be installed in a small diameter meter pit. Depending on Tthe size of the new meter shall determine if a fee or deposit is required. ~~, the fee will either be a Flat Rate or Actual Cost.~~
 - **Flat Rate (Fee).** All new meters that are 2-inches and smaller and that are not being installed in a confined space meter pit/vault will carry a Flat Rate fee of \$~~77~~53.00 for installation.
 - **Actual Cost (Deposit).** All new meters that are greater than 2-inches and/or those that are being installed in a confined space meter pit/vault shall be installed at Actual Cost. If the meter is to be installed in a large diameter meter pit or vault, inspection of that pit/vault prior to meter installation shall be included in the Actual Cost time.
- **Water Sample Fee.** New domestic services that are 2-inches or greater in diameter require a water sample. This also applies to domestic services installed in a parent/child configuration (i.e., a new domestic service that takes from a fire service rather than a water main). The cost of that water sample shall be \$~~193~~93.00, to be provided by the Applicant.
- **Small Meter Installation in Small Diameter Meter Pit Fee Inspection Deposit.** All new domestic services that require a small diameter (2-inches and smaller) meter to be installed in a small diameter confined space meter pit shall carry a \$~~12930~~2930.00 fee to install the meter. This fee shall include the inspection of the meter pit prior to installation of the meter. ~~New domestic services that are installed with a meter pit or vault carry an inspection charge to ensure the pit/vault meets District specifications. This inspection time shall be assessed at Actual Cost.~~
- **Fire Service Activation Fee.** All new fire services that are installed carry a \$~~491~~20.00 fee to activate the service.
- **Private Hydrant Inspection Deposit.** New private fire hydrants installed on fire services must be inspected by the District prior to activation of the hydrant. This inspection time shall ~~be assessed at Actual Cost~~carry a fee of \$53.00.
- **Initial Backflow Inspection Fee.** All new Backflow Prevention Devices must be inspected prior to service activation. The District will perform the initial test of the device at the time of service activation and meter set. The inspection shall carry a fee of \$~~102~~53.00 ~~for the first device tested, and carry a fee of \$51.00 for each subsequent device to be tested.~~

- **DOT Highway Opening & Utility Location Permit Fee.** All fees associated to permits required to install a new water service in a State Highway shall be assessed by the District to the Applicant
- **Inspection of new Public Infrastructure Deposit.** Occasionally a new service project will include the installation, removal, or relocation of public infrastructure (e.g., relocation of an existing hydrant). Inspection of this portion of a project is tracked separately and is assessed at Actual Cost. Actual cost will be calculated by taking the actual number of hours multiplied by \$ 85.
- **Installation of Services as Part of a District Renewal Project Fee.** During a District organized water main renewal project, property owners who have frontage on the water main being renewed may request new services to their properties be added to the project. Addition of these services to the project is at the discretion of the District and their Contractor. If these services are added to the project, the cost of installation shall be determined by the District's Contractor and assessed to the Applicant through the Application.
- **Customer Contribution Fee.** As outlined in Portland Water District Board of Trustees Policy 650, new services installed on water mains that are less than 10-years old carry a Customer Contribution Fee. This fee is to be determined by the District per Policy 650 and assessed to the Applicant, to then be conveyed back to the original Developer of the water main.

When submitting an Application for new service, the Applicant shall be considered the owner of the building or Lot to be served. The Application shall be signed and dated by the Applicant.

A deposit for the required fees associated with that Application may be provided by the Applicant or a separate entity in their project team. If an entity other than the Applicant provides the required deposit, that entity must sign the Application as the Depositor. Reconciliation of all deposits will be processed with the Depositor.

Section 411. New Main Extension Application Fees and Deposits

This Section defines the fees and deposits associated with requests for new water main extension projects. Fees and deposits are dependent on the scope of the project and shall be determined by the District. Payment for fees and deposits are required to be submitted with a completed Main Extension Agreement. All deposits shall be reconciled by the District at the time of Final Completion.

- **Main Extension Application-Administration Fee.** All new main extension projects shall carry a non-refundable ~~\$279~~1,177~~8~~.00 application fee.

- **Planning and Engineering Fee (Main Extension Project)**. Applicants for main extension projects shall be responsible for a Planning and Engineering fee equal to ~~\$600~~590~~5~~.00 per work day spent assisting in the design and plan review of the project.
- **Service Line Admin Fee (Main Extension Project)**. All new services in a Main Extension project shall carry a non-refundable \$22.00 admin fee.
- **Inspection Deposit**. The Applicant shall provide a deposit for the cost of inspection of the main extension installation. The deposit shall be assessed against Actual Cost. Actual cost will be calculated by taking the actual number of hours multiplied by \$85.00.
- **Valve Box Deposit**. Applicants shall provide a \$25.00 deposit for each valve box installed as part of a main extension project, to be returned at final inspection if the valve boxes are appropriately raised.
- **Fire Protection Deposit**. Applicants shall provide a Fire Protection Deposit related to the portion of the water main installed without a public hydrant. The Deposit shall be \$8.00 per linear foot in Scarborough and Raymond, and \$4.00 in all other municipalities in the PWD Service Area.

Section 420. Disconnection/Restoration of Service

The District will charge a customer a fee to disconnect or restore service at the customer's premises if service was disconnected for nonpayment of bills, violation of the Terms and Conditions, fraudulent use of water, dangerous conditions on the customer's premises, violation of Commission rules, or at the customer's request, including requests to have the curb stop operated to enable work to be done on private property.

When the District is notified during Normal Business Hours¹ to disconnect or restore service or is requested to restore service during Normal Business Hours, a fee of ~~\$413~~413.00 will be charged.

When the District is notified during Other Hours¹ to disconnect or restore service or is requested to restore service during Other Hours, the charge is ~~\$524~~524.00 per hour with a minimum charge of \$1~~102~~102.00.

The District will make a reasonable effort to reconnect service during Normal Business Hours on the same day the request to reconnect is received. At the latest, reconnection must be made by 5:00 p.m. the following business day after the request.

TERMS & CONDITIONS

¹ - Refer to Section 120 for definition of Normal Business Hours and Other Hours

Section 430. Charges for Replacement of Damaged Water Meters

The charges to customers for costs incurred for the replacement of meter(s) two inch or less damaged due to improper care by customers are as follows:

Meter Size	Charges to Replace During Normal Business Hours ¹	Other Hours ¹²
Meters up to 2 inch		
<u>Not in Pit</u>	\$5377.00 + cost of meter	\$ 16081.00 + cost of meter
<u>In Pit</u>	<u>\$129.00 + cost of meter</u>	<u>\$451.00 + cost of meter</u>

¹ - Refer to Section 120 for definition of Normal Business Hours and Other Hours

² - Reflects minimum three-hour call out and overtime rate.

All meters that are greater than 2-inches and/or those that are being installed in a confined space meter pit/vault shall be installed at Actual Cost.

Section 440. Closing Metered Accounts

To close an account, the District may require the meter to be removed and the service shut at the curb stop.

Upon closing the account, the customer requesting the account be closed shall pay for the cost of removing the meter if no one else is taking responsibility for billing and if the District is not provided access to retrieve the meter or the meter cannot be located on the customer premises. The fee charged shall be the fees noted in section 430 of these Terms and Conditions. If the customer does not have the ability to provide access to the meter, the fee shall not be charged. The fee shall be refunded to the customer if another customer takes responsibility for the account or the meter is retrieved subsequently.

When the customer requests the District to close the account, and there is no new customer taking service, the outgoing customer is responsible to make arrangements for removal of the meter. Failure to obtain the meter will result in billing the outgoing customer the fees noted in Section 430 of these Terms and Conditions. The fee will be refunded if the meter is subsequently obtained and is not damaged.

Section 450. Temporary Water Service

A customer can apply for temporary water service in support of project delivery. Temporary service will be established from the customer's domestic water service line only. The District will supply the temporary service assembly for the customer to install and maintain once service line installation and passing of pressure and purity tests is complete. The customer will be charged for the water consumption in addition to an inspection fee of ~~\$100~~120.00 for each installation of the temporary service assembly. Temporary water service shall be granted on a limited basis depending on the availability of temporary service assemblies and the requested duration of use. Details of the temporary water service can be acquired from Customer Service.

Section 460. Charges to Perform Flow Tests on Hydrants

For a hydrant flow test to generate the static pressure, residual pressure and the water flow for a single hydrant, the charge is ~~\$223~~241.00. For each additional hydrant flow test concurrently administered at the same site, an additional ~~\$46.00~~50.00 will be charged.

Section 480. Low-Income Customer Assistance Program

The following section outlines the District's Low-Income Customer Assistance Program.

Section 480.1. General Program Description

The District is supporting, in conjunction with City of Portland (COP) a program to provide financial assistance to low-income residential customers for the purpose of taking positive steps towards reducing water consumption to make water more affordable.

The District has authorized COP to administer a program to repair, replace or install plumbing fixtures and water saving devices with regard to the following:

- Leaking or broken water pipes
- Toilets
- Hot water tank
- Kitchen faucets
- Bathtub faucets
- Showerheads
- Outside faucets
- Toilet dams
- Low-flow devices

This program will be offered to all qualified residential customers of the District.

Section 480.2. Program Participation Requirements

A qualified residential customer must:

- Own and occupy a year-round residence within the District service area.
- Be low-income qualified, by showing evidence of having an annual household income that is 80% of area median income (AMI) as defined by US HUD.
- Demonstrate through a home audit provided by COP, a need for the program's services.

Section 480.3. General Provisions

The dwelling unit owner must agree to leave in place at the premises any water saving measures installed under this program.

COP will determine customer eligibility, complete a home audit, develop a remediation plan, subcontract work to be completed, and inspect completed work.

Qualified applicants will be assisted on a first come, first served basis up to the allocated amount provided to the program by the District. Exceptions will be made at the discretion of COP for emergency situations that jeopardize health or safety.

The District will fund this program on an annual basis and reserves the right to discontinue program support at any time.

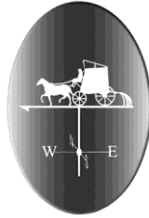
Section 480.4. Miscellaneous

The District along with municipalities, COP Central Intake and Outreach staff, Human Service organizations, and the public at large, will refer homeowners to COP for qualification.

All specific services provided by this program will be delivered to qualified participants at no cost to the participant.

Portland Water District
Terms and Conditions Fee Change

<u>T & C Section</u>	<u>Description</u>		<u>2023</u>		<u>2024</u>
2 - 231	Collection Charge for Past Due Bills	\$	25.00	\$	28.00
2 - 234	Collection Charge for Tenant Postings	\$	100.00	\$	100.00
3a - 420	Restoration of Service: TOBH	\$	38.00	\$	41.00
3b -420	Restoration of Service: TOAH, Other Hours that Exceeds Minimum Charge	\$	48.00	\$	52.00
3b1 - 420	Restoration of Service: TOAH	\$	102.00	\$	111.00
4 - 232	Lien for Multi-unit	\$	58.00	\$	58.00
7 - 242	Charge for Returned Check, including incorrect bank information	\$	5.00	\$	5.00
7 - 242	Incorrect Bank information	\$	5.00	\$	5.00
8a - 410J	Cross Connection Backflow	\$	102.00	\$	53.00
Eliminated		\$	51.00	\$	-
9a - 460	Hydrant Flow Test	\$	223.00	\$	241.00
9b - 460		\$	46.00	\$	50.00
	Replace Meter (admin fee not including meter cost)				
10p - 430 same as 410 E	2 in and less	\$	77.00	\$	53.00
10p - 430 same as 410 E	2 in and less	\$	181.00	\$	160.00
10p - 430 same as 410 G	small meter in pit			\$	129.00
10p - 430 same as 410 G	small meter in pit			\$	451.00
24 - 321	Meter tests <2" meter	\$	141.00	\$	154.00
25	Close meter - same as 10 replace meter				
29 - 340	Hydrant Meter Set - Business Hours	\$	100.00	\$	157.00
29 - 340	Hydrant Meter Set - Non- Business Hours	\$	165.00	\$	303.00
36 - 220	New Customer Activation Fee	\$	19.00	\$	21.00
	<u>Operating Revenue</u>				
New 410B	New Service(s) - Planning & Engineering Fee				
37 - 411	New Main Extension Fee Application	\$	279.00	\$	1,177.00
38 - 410A	New Service Line Application	\$	93.00	\$	98.00
38a	2" and under Service Inspection	\$	218.00	\$	293.00
38d - 410 E	2" and under Meter Admin not inc meter	\$	77.00	\$	53.00
38G - 410	Water Quality Samples	\$	193.00	\$	93.00
41 - 450	Temporary Water Service		100	\$	157.00



Portland Water District
From Sebago Lake To Casco Bay

ADMINISTRATION AND FINANCE COMMITTEE / AGENDA ITEM SUMMARY

Agenda Item: 2
Date of Meeting: October 10, 2023
Subject: Contract for the Billing System Testing Software and Related Implementation Services
Presented By: Peter Cutrone, Project Manager-Administration

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, the General Manager is hereby authorized to execute a contract with E-Source, not to exceed \$178,500, for the purchase of computer system testing software and related implementation services, and

BE IT FURTHER ORDERED, that the 2023 capital improvement plan is hereby amended by increasing it by \$178,500; and that the General Manager, and the Treasurer, each acting singly, are authorized to take such steps as may be necessary to accomplish the intent of the vote.

BACKGROUND ANALYSIS

Software testing is critical when implementing and maintaining core business systems. This is especially true for customer-facing applications such as the Cayenta Billing system. Software is not static but undergoes continual development and improvement by the provider. Staying up to date with versions is an expectation for provider support.

PWD has a very thorough manual testing regimen to ensure no unintended consequences or errors occur for any change to the system. The resources and effort to do the complete testing are significant. Currently, PWD employs four people for an estimated four weeks at a total cost of roughly \$41,072 (labor with benefits). These resources must be taken away from their normal duties, which include customer service and billing functions.

Staff have researched and found a software product that will automate much of the testing effort and provide an opportunity to keep up with the continual updates Cayenta makes to the application. The automated solution is configured around PWD business processes and is repeatable and reusable. Use of the application will result in savings year over year. After implementing the solution for automated testing, the ongoing effort to test Cayenta updates is expected to be approximately one week or \$10,268 resulting in an annual savings of \$30,804.

The return on investment, including the three-year support agreement is seven years. Most importantly, the time savings allows Customer Service staff to focus on their core duties and other projects such as meter replacement, meter reading optimization, or daily routine efficiency gains by assessing business practices and new features in the software.

FISCAL REVIEW/FUNDING

This project will be funded from the water and wastewater renewal and replacement funds. An annual maintenance agreement cost of \$28,500 will be allocated to the Customer Service Department budget and distributed to the appropriate funds.

LEGAL REVIEW

Corporate Counsel has reviewed the proposed order as to form.

CONCLUSION(S)

Staff recommends the contract with E-Source be authorized.

ATTACHMENT(S)

A. Additional Background Information

Additional Background Information

Testing is a critically important practice to ensure and maintain the accuracy of our customer information, billing, payment processing, collections, and customer experience. Too often, utility software implementations and upgrades that fail because of inadequate testing appear in the news.

PWD has always maintained a thorough testing protocol for our core systems. For the Cayenta system, the District currently has 449 defined tests to prove the system for any patches, updates, or version upgrades to the software. These scenarios are specific to PWD and our work processes as well as our regulatory environment. See Figure 1 below for the testing profile.

The commitment to testing requires a significant draw on resources. Past experience of unintended consequences resulting from a “minor” change has led PWD to adopt the approach to test more rather than less. To test the 449 scenarios and prove the software PWD draws on four people for four full weeks. Any work they have is either put on hold or distributed to others.

Finding the time where PWD can coordinate the needed people is exceptionally challenging. PWD has been searching for more efficient ways to complete testing without compromising quality or thoroughness. At a conference PWD staff attended last fall they were introduced to an automated testing solution that was developed for another Cayenta client. PWD staff sat through several demonstrations of the product offered by ESource and feel this is the best option.

Included below (see Table 1) is a list of the various test group features covered by ESource’s NavigateOne testing solution. PWD’s 449 scenarios fit into these. The solution is a collection of programmed scripts that emulates an end user as well as normal scheduled jobs and functions. These scripts can be selected one by one or run as a complete collection. PWD can run on demand or schedule to run overnight and the results are reviewed. This can reduce the effort from a four-week engagement to a one-week engagement. The Return on Investment (ROI) is projected at seven years.

Another value add of this solution is Performance Testing. One of the references talked about how they run this on a regular basis just to make sure the system is healthy. Currently, PWD does not have this ability.

There is some implementation to set the solution up tailored to PWD but after that it is reusable. The scripts are written in Java code and are accessible to PWD staff to edit for any changes in our processes or allow PWD to build new work processes into the testing run.

In addition to the purchase and implementation, PWD has negotiated a 3-year support agreement (annual amount of \$28,500) which will be allocated to the Customer Service Department budget and distributed to the appropriate funds.

Figure 1. Portland Water Testing Profile

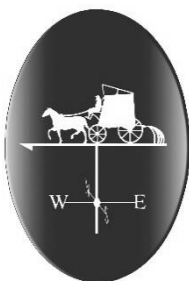
1 - Test Accounts	364
Account Location Person Maintenance (PALS)	9
Adjustments	6
Bankruptcy	1
Bill Hold	1
Bill Print	
Billing	5
CIS Inquiry	1
Claims	1
Collections	5
Comments	1
Dispute & Reminders	2
Estimating	1
HILO - Usage Management	1
Medical Emergency	1
Meter Reading	1
Meters	8
Move In Move Out	5
Payments	9
PWD Request Matrix	1
Rates	1
Refunds	1
Revenue Protection	3
Seasonals	7
Service Lines	3
Sewer Turnover	1
Shuts	2
Submeters	4
Thomas Agency	2
Water Quality	1
Write Offs	1



Table 1. Feature, Advantages, Benefits (FAB) Analysis NavigateOne Automation (Cayenta Focused):

Feature (Definition)	Advantages with NavigateOne Testing	Benefits of NavigateOne Automation
<p>Smoke Testing A set of tests that validates critical functionality of the CIS system is stable</p>	<ul style="list-style-type: none"> □ Exposes issues with the change (integration/build) □ Discover potential issues early □ Instills confidence that the new software version or changes have not adversely impacted core functionality 	<ul style="list-style-type: none"> □ Ease of execution (click and run) □ Ease of result reporting □ Fast execution, saves time and resources
<p>Regression Testing Ensures that a software update does not affect CIS business critical functionality, as determined by the utility</p>	<ul style="list-style-type: none"> □ Increases the product's quality □ Ensures bug fixes or changes did not impact the existing functionality □ It makes sure the issues fixed don't reoccur 	<ul style="list-style-type: none"> □ Tests critical functionality with client configuration □ Eliminates redundancy of effort into repetitive testing □ Provides data for intelligent decision making
<p>Rates Testing Testing rate changes at the account level. Multiple cycles of rate charges are run before, during, and after a rate change period</p>	<ul style="list-style-type: none"> □ Run in conjunction with Regression testing to ensure the rates and bill calculations are stable □ Identifies and helps mitigate potential impacts of rate changes before they reach customers 	<ul style="list-style-type: none"> □ Can test multiple accounts, rates, and cycles with specific data as determined by the users □ Customizable results to identify calculations at DB level
<p>Bill Comparison/Parallel Testing Testing to make sure an entire cycle's bills in the Test system AFTER a build is applied match the same cycle's bills in Production for the same reads</p>	<ul style="list-style-type: none"> □ Charges validated both at account level and DB level □ Validations done at bill print level (number of bills in the XML/PDF file) □ Bill Prints in the PDF (on the print-vendor side) 	<ul style="list-style-type: none"> □ Automated Bill Processing scripts for billing and bill printing can be run overnight □ Charges are automatically validated on the backend (290T, 265T etc. tables) and differences in charges are automatically highlighted in Excel files

<p>Performance Testing Testing approach to validate the performance of an application under load</p>	<ul style="list-style-type: none"> □ Ensures CIS system is performing at the same or better level prior to upgrade □ Ensures response times are captured at UI level 	<ul style="list-style-type: none"> □ Eliminates potential 'human errors' in capturing response times □ Provides quantifiable data and verifiable output with actionable results
<p>Data Staging and Selection Time required to create or modify accounts, run, and update batches for payments, bills, and collections etc.</p>	<ul style="list-style-type: none"> □ Analyze and determine data setup pre-requisites for running test scenarios □ Prepare test plans to optimize data setup effort □ Implement reusability to save time 	<ul style="list-style-type: none"> □ Automated scripts for data setup and generation □ Automation scenarios can be setup to create their own data based on pre-defined criteria
<p>Ease of Defect Reporting NavigateOne framework that supports collecting defects & documentation</p>	<ul style="list-style-type: none"> □ Identifies the best way to recognize, document, track, and close defects □ Implementing industry best practices in defect reporting. □ Use ALM (NavigateOne), a client-preferred tool (SharePoint, DevOps, JIRA), or CayStone with potential integration with Automation Tool 	<ul style="list-style-type: none"> □ Automation tool documents test steps and results without manual intervention: <ul style="list-style-type: none"> • Captures pass/fail results • Captures associated screen shots (user story) • Captures database entries (where necessary) □ Can Integrate with most defect management tools (ALM, CayStone, etc.) to automatically capture testing results



MEMORANDUM PORTLAND WATER DISTRICT

TO: Operations Committee/Board of Trustees

FROM: Scott Firmin, Director of Operations - Wastewater
James Wallace, Director of Operations - Water

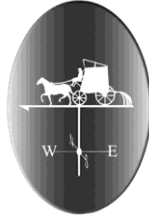
DATE: October 4, 2023

RE: **Operations Committee Meeting – October 10, 2023**

A meeting of the Operations Committee of the Portland Water District Board of Trustees will be held on Tuesday, October 10, 2023, beginning at 5:30 p.m., in the Emergency Operations Center (EOC) Room of the District, 225 Douglass Street, Portland, Maine.

AGENDA

- 1. Comprehensive Infrastructure Asset Management Plan: Professional Services Contract and Engineering Method Approval**
Staff will provide a recommendation to award a professional service contract and amend an Engineering method approval. (See attached memo)
- 2. East End Secondary Clarifiers and Primary Gallery Upgrade Project – Construction Services**
Staff will provide a recommendation to award a construction contract for the East End Secondary Clarifiers and Primary Gallery Upgrade Project and amend an existing Engineering service contract. (See attached memo)
- 3. Other Business**



Portland Water District
From Sebago Lake To Casco Bay

OPERATIONS COMMITTEE / AGENDA ITEM SUMMARY

Agenda Item: 1
Date of Meeting: October 10, 2023
Subject: Comprehensive Infrastructure Asset Management Plan: Professional Services Contract – Selection and Engineering Method Approval
Presented By: Gordon Johnson, Engineering Services Manager

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, the General Manager is authorized to execute a professional services contract with infraPLAN LLC in the amount of \$254,145.00 for engineering services for a Water Main Business Risk Exposure Analysis (WMBRE Analysis) project as a subcomponent of the Comprehensive Infrastructure Asset Management Plan (CIAMP) project (CIP 2023-3/3071); and that the General Manager and the Treasurer, each acting singly, are authorized to take such steps as may be necessary to accomplish the intent of the vote; and

BE IT FURTHERED ORDERED, that the Phased Method is hereby authorized for the procurement of engineering services for the Comprehensive Infrastructure Asset Management Plan (CIAMP) Project, pursuant to the District’s Purchasing Policy; and

BE IT FURTHER ORDERED, that a total subcomponent WMBRE Analysis project budget is hereby authorized, not to exceed \$285,000; and that the General Manager, and the Treasurer, each acting singly, are authorized to take such steps as may be necessary to accomplish the intent of the vote.

BACKGROUND ANALYSIS

In 2003, PWD completed the Comprehensive Water System Strategic Plan (CWSSP), which provided a framework for the future operation of the PWD water system. Twenty years have passed since the plan was developed and, in that time, water main likelihood of failure (LOF) analysis tools have adopted statistical modeling and artificial intelligence-based approaches to help predict water main failures and summarize conditions. PWD has a corporate reliability goal of less than 10 leaks per 100 miles of water main. In recent years, PWD has met this goal; however, it is anticipated that the level of investment will hit an inflection point at some point in the relatively near future and require significantly higher levels of resources to meet this goal. The water main model will consider both the likelihood and consequence of failure (COF) to provide risk-based predictions for the PWD water system piping network that can be utilized for annual and multi-year water main capital planning and budgeting that meet stakeholder level of service expectations.

Staff reviewed and scored four qualification packages from engineering teams and vendors that provided proposed methods for achieving the project goals. Based on the outcome of the review and ranking, infraPLAN partnered with Burgess & Niple, received the best overall score (134). Staff therefore recommends an award to infraPLAN for an amount of \$254,145, with a project contingency of \$30,855, and a total project budget not to exceed \$285,000.

This project includes the following engineering services: (1) Data collection, review, and cleaning, (2) Likelihood and consequence of failure predictions for each pipe, and (3) Detailed replacement and rehabilitation plans guided by level of service objectives and budget constraints.

As approved by Board Order 22-003 on January 24, 2022, the comprehensive method for procuring engineering services was planned for this project, meaning that it was anticipated that the same firm would be utilized for the complete plan development as well as follow-up process refinement and system optimization efforts. The project approach has changed due to refinements in the project approach. Staff is recommending a revision to the engineering method for procuring engineering services from a comprehensive to a phased method. If approved by the Board, the intent of this Order is to procure professional services from firms that are uniquely qualified to complete the individual subcomponent project scope(s).

Project #: 2023-Subprogram 3/ Project 3071

FISCAL REVIEW/FUNDING

The project was included in the 2023 CIP, Subprogram 3, Project 3071. The Board authorized the creation of a reserve to fund the project on January 27, 2020 (order 20-002). The reserve fund contains \$944,548 and is sufficient to fund the project. The 2023 CIAMP budget is \$800,000, the proposed 2024 CIAMP budget is \$400,000, and the project has been awarded a \$375,000 grant from the Drinking Water State Revolving Fund (DWSRF) program. The project costs will be withdrawn from the reserve fund and not have an impact on the operating budget.

The project is creating a model that may need to be updated on an ongoing basis. Updating the model, receiving software training, and/or maintaining a software subscription costs in the range of \$32,000 - \$85,000 and would be added to the AMAP operating budget in future years.

LEGAL REVIEW

Corporate Counsel has reviewed the proposed order as to form.

CONCLUSION(S)

Staff recommends awarding the contract for engineering services for the Water Main Business Risk Exposure Analysis (WM BRE Analysis) project as a subcomponent of the CIAMP project to infraPLAN LLC and Burgess & Niple.

Staff recommends that the phased engineering method be utilized to design and implement this project.

ATTACHMENT(S)

SUPPORTING INFORMATION

SUPPORTING INFORMATION

This project is undertaking the next phase of strategic water main asset management and planning to improve upon PWD's current water main replacement and rehabilitation planning methods. A key outcome of this effort is the likelihood of failure, consequence of failure, and business risk data for each water main that can be used to prioritize recommendations and plan capital improvement projects.

Current water main capital improvement activities are determined largely by partnerships with municipal and state (Maine DOT) entities who are replacing parallel infrastructure to realize project execution and financial efficiencies. This strategy does take into consideration pipe condition to the extent that it can be estimated based on failure (break) history. There have been advancements in statistical analysis and artificial intelligence (AI) that improve capital outlay effectiveness.

This project includes the following engineering services, (1) data collection, data review, data cleaning, and data statistics (2) water main likelihood of failure scores (3) water main consequence of failure scores (4) water main business risk exposure scores (5) water main replacement and rehabilitation recommendation prioritization and project planning. This effort will include establishing a series of memos outlining the components of the analysis, development of a final report with the recommended water main CIP and future project costs, and a software tool that will allow for modifications to update the water main recommendations. The scope of the next CIAMP phase engineering services will be refined based on work sequencing and other project requirements.

Six qualified engineering firms or software vendors were invited to respond to the RFQ: Baseform, Ferguson and voda.ai, Fracta, Infrastructure Data Solutions (IDS), infraPLAN, and Rezatec. Four qualifications packages were received, including a combined team effort from infraPLAN and Burgess & Niple. A selection team of five PWD staff including representation from Water Operations and AMaP was assembled to review each firm's proposal.

Selection team members reviewed proposals independently and several review meetings were held. Each selection team member ranked the proposals based on the four non-fee categories identified in the RFQ; Technical Quality and Clarity (50%), Qualifications & Experience (30%), Project Approach (10%), and References (10%). Each proposal was ranked for each category using a 1-4 scale where a #1 ranking represented the proposal that best met the requirements. The rankings for each firm were averaged for the entire review team. A total of 100 represents a perfect score.

The firms developed proposals that highlighted their software model and proposed methods of addressing the challenges anticipated to achieve success. Based on the outcome of the review and ranking, the infraPLAN/B&N team received the best overall score (134).

Key factors that led to the recommendation of the infraPLAN/Burgess & Niple team include the following:

- A detailed and customized technical response that directly addressed each PWD objective;
- A highly qualified technical project team that focused on engineering solutions and guiding PWD staff through the process so the results can be effectively used to manage ratepayer funds and water main assets;

- Demonstrated grasp of the key drivers for project success being a risk-based decision-making tool that incorporates advanced data analytics, with considerations for configuring this tool to support future or changing goals;

The following table summarizes the results of the selection committee’s evaluation of each respondent, including a scoring breakdown:

Criteria	infraPLAN & B&N	Baseform	Fracta	Ferguson & voda.ai
1. Technical Quality and Clarity				
Weight - 50% (Best Score = 50)				
Methods Score	60	100	160	180
2. Qualifications & Experience				
Weight - 30% (Best Score = 30)				
Qualifications Score	48	42	90	120
3. Project Approach				
Weight - 10% (Best Score = 10)				
Approach Score	10	22	34	34
4. References				
Weight - 10% (Best Score = 10)				
References Score	16	14	36	34
Total Score	134	178	320	368
Rank	1	2	3	4

InfraPLAN and B&N identified three proposed scope items that are considered additional services beyond the minimum requirements established in the RFQ. Consequence of failure modeling of the water mains (\$34,000), project prioritization strategy, and scoring that incorporates non-risk R&R factors (\$2,600) and pipe re-grouping algorithm (\$2,470). The additional scope items were recommended to capitalize on an economy of scale that can be achieved by conducting both the LOF and COF analysis at the same time, as there is an overlap in the engineering skills and data needed to complete each analysis. Additionally, the completion of both LOF and COF analysis results in the most comprehensive risk score for each pipe.

Staff recommends award to infraPLAN for an amount of \$254,145 for completion of the Water Main Business Risk Exposure Analysis based on the ranking shown above, including the additional services identified. Once the design has been completed, a recommendation will be made to amend the contract to include construction phase services.

As approved by Board Order 22-003 on January 24, 2022, the comprehensive method for procuring engineering services was planned for this project, meaning that it was anticipated that the same firm would be utilized for the complete plan development as well as follow-up process refinement and

system optimization efforts. The project approach has changed due to internal PWD resource limitations. A phased method for procuring engineering services is now anticipated to be the best project approach and staff is recommending a revision to the engineering method for procuring engineering services from a comprehensive to a phased method, meaning it is anticipated that the different firms will be utilized for different phases and scopes of the project.



Portland Water District
From Sebago Lake To Casco Bay

OPERATIONS COMMITTEE / AGENDA ITEM SUMMARY

Agenda Item: 2
Date of Meeting: October 10, 2023
Subject: East End Secondary Clarifiers and Primary Gallery Upgrade Project – Construction Services
Presented By: Joel Jones, Project Engineer

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, the General Manager is hereby authorized to execute a professional services contract amendment with Kleinfelder, in the amount of \$951,000.00 for construction services for the East End Secondary Clarifiers and Primary Gallery Upgrade Project (CIP 2021-21/3152 & CIP 2022-21/3147); and

BE IT FURTHER ORDERED, a professional services contract amendment with Woodard & Curran is hereby authorized, in the amount of \$100,000.00 for project management for construction services for the Project; and that the General Manager, and the Treasurer, each acting singly, are authorized to take such steps as may be necessary to accomplish the intent of the vote.

BE IT FURTHER ORDERED, a construction contract with Penta Corporation is hereby authorized, in the amount of \$5,045,100.00 for the Project; and that the General Manager, and the Treasurer, each acting singly, are authorized to take such steps as may be necessary to accomplish the intent of the vote.

BE IT FURTHER ORDERED, that a total project budget is hereby authorized, not to exceed \$10,375,000; and that the General Manager, and the Treasurer, each acting singly, are authorized to take such steps as may be necessary to accomplish the intent of the vote.

BACKGROUND ANALYSIS

The three existing secondary clarifiers at the East End Wastewater Treatment Facility are beyond their useful life and have experienced several failures. PWD hired Kleinfelder to provide design phase engineering services and Woodard & Curran to provide Owners Project Manager (OPM) Services earlier in 2023. Kleinfelder provided design phase engineering services for the Primary Gallery Upgrade Project in 2021 and 2022; therefore, the decision was made to combine the Secondary Clarifier Upgrade Project with the Primary Gallery Upgrade Project for a combined construction project.

The Project was publicly bid on August 31, 2023. Bids were received from two general contractors on September 26, 2023: Penta Corporation and T. Buck Construction. Both of the bids were under budget and were within 0.4% of each other. The bid tabulation for the project is shown in Attachment A.

Kleinfelder performed a due diligence review of the response and has determined that the apparent low bidder has the contracting capacity, relevant project experience, qualifications, and resources to complete the Project. PWD therefore recommends that Penta Corporation be considered the low-responsive and responsible bidder and recommends awarding the contract for \$5,045,100.00.

Pursuant to the Comprehensive Method (approved December 2018), PWD staff recommends a professional services contract amendment with Kleinfelder for engineering services during construction. PWD staff also recommends a professional services contract amendment with Woodard & Curran for project management for engineering services during construction.

Please refer to Attachment A for a summary of contractor bids and a breakdown of the proposed project budget.

FISCAL REVIEW/FUNDING

The Primary Gallery Upgrade Project was awarded \$3,950,000 in Clean Water State Revolving Loan Fund (CWSRF) and will receive a subsidized interest rate of 2% below the market rate. However, the Secondary Clarifier Replacement Project did not receive any CWSRF funding and will be funded by a bond issued with a market-based interest rate. The Project is anticipated to have an estimated operating fund impact of \$870,000 for Portland. The 2024 multi-year financial plan to be provided to the City of Portland later this year will include the project costs.

LEGAL REVIEW

Corporate Counsel has reviewed the proposed order as to form.

CONCLUSION(S)

Staff recommends awarding the contract to the lowest responsive and responsible bidder for the project, Penta Corporation, amendment of the professional services contract with Kleinfelder to reflect the provision of construction services and amendment of the professional services contract with Woodard & Curran to reflect the provision of project management for construction services for the Secondary Clarifier and Primary Gallery Upgrade Project.

ATTACHMENT(S)

Attachment A

ATTACHMENT A

Bid Summary:

Contractor	Item #1 Lump Sum Primary Gallery Upgrades	Item #2 Secondary Clarifier Equipment Replacement	Item #3 Total of All Unit Price Bid Items	TOTAL BID
T. Buck Construction Inc	\$3,315,136.00	\$1,600,000.00	\$150,790.00	\$5,065,926.00
Penta Corporation	\$3,020,000.00	\$1,900,000.00	\$125,100.00	\$5,045,100.00

Proposed Budget:

Item	Amount	Board Approval
Detailed Design and Bidding	\$1,062,217	CIP 2021 – 21/3152; September 2021 CIP 2023 – 21/3147; February 2023
Construction Phase Engineering Services	\$1,051,000	CIP 2022 – 21/3152 CIP 2023 – 21/3147 October 2023 (Proposed)
Pre-Procurement and Pre-Construction	\$2,659,588	
Construction	\$5,045,100	
Project Contingency	\$557,095	
Project Total	\$ 10,375,000	

Project #: CIP 2021 – Subprogram 21, #3152
CIP 2023 – Subprogram 21, #3147



MEMORANDUM PORTLAND WATER DISTRICT

TO: Planning Committee/Board of Trustees

FROM: Christopher Crovo, P.E., Executive Director of Asset Management and Planning

DATE: October 4, 2023

RE: **Planning Committee Meeting – October 10, 2023**

A meeting of the Planning Committee of the Portland Water District Board of Trustees will be held on Tuesday, October 10, 2023, at 5:30 p.m. in the Nixon Room of the District, 225 Douglass Street, Portland, Maine.

AGENDA

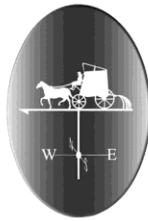
1. **Recommendation to Amend the Capital Improvement Program to Purchase a Vacuum Excavator**

Staff will recommend purchasing a vacuum excavator utilizing a grant award from the Drinking Water Program Lead Copper Compliance Funds. (See attached memo)

2. **Review Proposal from Silver Street to Purchase the Munjoy Hill Reservoir Property**

Executive Session: The Committee will go into executive session pursuant to 1 M.R.S. §405(6)(C) real estate, to discuss negotiations for the disposal of real estate known as the Munjoy Hill Reservoir.

3. **Other Business**



Portland Water District
From Sebago Lake To Casco Bay

PLANNING COMMITTEE / AGENDA ITEM SUMMARY

Agenda Item: 1
Date of Meeting: October 10, 2023
Subject: Purchase of Vacuum Excavator
Presented By: Josh Hudak, Facilities Manager

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, that the sum of \$800,000 is hereby accepted from the Maine Drinking Water Programs SRF Lead Copper Compliance funds, compromised of \$440,000 in principle forgiveness (grant) and a \$360,000 no interest loan; and

BE IT FURTHER ORDERED, that the General Manager is authorized to execute a contract with _____ for the sum of _____ for the purchase of a vacuum excavator; and

BE IT FURTHER ORDERED, that the 2023 Capital Improvement Plan Project 326/3041 is hereby amended and increased by the sum of \$800,000; and the General Manager and Treasurer are authorized each acting singly to take whatever actions necessary to accomplish the intent of this vote.

** Bids Opening is October 16th – PWD staff will insert the bid numbers for the final memo for the business meeting.

BACKGROUND ANALYSIS

The District applied in March 2023 for \$9M for the Maine Drinking Water Program’s State Revolving Loan Lead Copper Loan fund for mitigating lead from the water distribution system. There were three projects that the District applied for and were tentatively approved in August. The three projects are: service line inventory \$1M, replacement of galvanized pipe \$7.2M, and the purchase of vacuum excavation equipment estimated at \$800,000. These projects are designated as 55% Principal Forgiveness at 0 % interest loans for a maximum of 20 years

The District was approved by the Drinking Water Program to put out a Request for Bids (RFB) to purchase a new Hydro Vacuum Excavator to self-perform vacuum excavations for developing a service line material inventory required by the revised Lead & Copper Rule. The RFB was sent to 4 vendors on September 21st with bids due on October 16th. (See attached)

Staff will provide a final recommendation to the full Board to award the Hydro Vacuum Excavator bid to the low bidder meeting the specifications in the final memo to the Board for action at the October 24 business meeting.

FISCAL REVIEW / FUNDING

The Hydro Vacuum Excavator purchase received \$800,000 in Lead Copper funding: \$440,000 in principle forgiveness and a \$360,000 no interest loan. The expected debt service payment for 10 years is \$36,000 per year.

LEGAL REVIEW

Corporate Counsel has reviewed the proposed Motion and has approved as to form.

CONCLUSION(S)

Staff recommends approval of the project allocation.

ATTACHMENT(S)

<i><u>Vac Truck Vendor List</u></i>	
<u>Vendor</u>	<u>Dealer Name</u>
Ditch Witch	JESCO Inc.
TRUVAC and Vactor	CN Wood
Vermeer	Vermeer
Vac-Con	Sanitary Equipment