



## MEMORANDUM PORTLAND WATER DISTRICT

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TO: Board of Trustees

FROM: Carrie Cote

DATE: April 5, 2023

RE: **Workshop Meeting – Monday, April 10, 2023**

There will be a Workshop Meeting of the Board of Trustees of the Portland Water District on Monday, April 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, and will be accessible via Zoom Link at:

<https://us06web.zoom.us/j/82418162248?pwd=bFpkWXhYNDA1TFpKMmRaQ0lOM3hYQT09>

The Workshop will be preceded by meetings of the following Board Committees which will occur at 225 Douglass Street:

<b><u>Committee</u></b>	<b><u>Room / Location</u></b>	<b><u>Time</u></b>
Scholarship	General Manager's Conference Room	5:00 p.m.
Administration & Finance	Monie Conference Room	5:30 p.m.
Operations	EOC 2 <sup>nd</sup> Floor	5:30 p.m.
Planning	Nixon Training Center	5:30 p.m.

### **AGENDA – WORKSHOP**

- 1. Wastewater is Changing at PWD to Meet Evolving Needs**  
Scott Firmin, Director of Wastewater – Operations, will explain the changes that have occurred, and that are occurring, in wastewater, interlinking the operating culture, evolving regulations, increasing public awareness, and asset lifecycles.
- 2. North Windham Sewer Project Update**  
Greg Pellerin, Senior Project Engineer, will provide an update on the project.
- 3. Other Business**
- 4. Adjourn**



## MEMORANDUM PORTLAND WATER DISTRICT

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TO: Administration and Finance Committee / Board of Trustees

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

DATE: April 5, 2023

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

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

### **AGENDA**

1. **Election of Chair**

The Committee will elect a chair for 2023-2024.

2. **Portland Wastewater Project – Intent to Bond Motion**

Staff intends to begin the construction phase of two projects at Portland's East End Wastewater Treatment plant this year. To assure all the costs are eligible to be tax-exempt financed, an intent to bond motion is proposed. (See attached memo)

3. **Pension Plans**

The Committee will consider a number of items related to the PWD pension plans including the following:

- PWD Defined Benefit Plans: Review the impact of modifying the annual cost-of-living adjustment on the District's current defined benefit plan that was closed to new participants in 2011. Staff will share information provided by the actuary on the options that were previously reviewed by the Committee.
- PWD 457 Plan: Review the results of the recently completed investment review. Also, review how the plan is impacted by the new SECURE 2.0 federal law.
- Plan Administration & Design: Staff will update the Committee on the investigation into the possibility of consolidating the PWD defined benefit plans and PWD 457 plan administration.
- Preliminary Investigation of New Defined Benefit Options: Staff will update the Committee on research efforts requested by the Board into the possibility of establishing a new defined benefit plan at PWD. The plans would be for employees not eligible for the legacy PWD defined benefits plans which were closed to new participants.

4. **Other Business**



Portland Water District  
*From Sebago Lake To Casco Bay*

## **ADMINISTRATION AND FINANCE COMMITTEE / AGENDA ITEM SUMMARY**

Agenda Item: 2  
Date of Meeting: April 10, 2023  
Subject: Portland Wastewater - Intent to Borrow  
Presented By: David Kane, Director of Administrative Services

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### **RECOMMENDATION**

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

RESOLVED, the Board hereby declares its intent to reimburse costs paid by the District from the Portland Wastewater funds with the proceeds of a future tax-exempt bond. The full form of the resolution is attached hereto and incorporated herein by reference and shall be part of the minutes of this meeting.

### **BACKGROUND**

The approved 2023 Capital Improvement Plan includes the preliminary engineering for the replacement of the East End Treatment Plant's secondary clarifier sludge rake (21/3147). Construction was scheduled to begin in 2024 but has been expedited to begin this year. The project is not expected to cost more than \$8,500,000.

The project above will be bid and constructed at the same time as the primary sludge handling and primary gallery replacement project. The project was previously approved with a budget of \$4,800,000 (CIP 21-3152 Design \$300,000 in 2021 and Construction \$4,800,000 in 2022). The actual costs are expected to exceed \$4,800,000 but not exceed \$6,000,000.

In compliance with Internal Revenue Service (IRS) regulation, an 'intent to borrow' motion must be approved by the Board before expenditures are incurred on a project that may be financed with tax-exempt financing. The Board previously adopted 'intent to borrow' motions for the projects. The current motion supplements the prior motions to account for the increase in estimated project costs. Before a bond is actually authorized or issued, a public hearing will be held. Subsequent to the hearing, the Board will consider authorizing the bond.

### **FISCAL REVIEW / FUNDING**

Tax exempt financing is 20 to 40 percent lower interest cost than conventional taxable bonds.

### **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.

**ATTACHMENT(S)**

A. Full Form of the Motion

**Resolution**  
**DECLARATION OF OFFICIAL INTENT PURSUANT TO**  
**TREASURY REGULATION §1.150-2**

**WHEREAS**, the Portland Water District (the “Issuer”) intends to proceed with the projects described in section 2 below (the “Projects”); and

**WHEREAS**, the Issuer intends to finance some or all of the costs of the Projects through the issuance of tax-exempt bonds or notes in anticipation thereof; and

**WHEREAS**, the Issuer may incur and pay certain of the costs of the Projects prior to the issuance of such bonds or notes and the Issuer expects to reimburse itself for such costs from the proceeds thereof; and

**WHEREAS**, Treasury Regulation §1.150-2 requires that the Issuer declare its official intent to reimburse itself for such expenditures with the proceeds of such bonds or notes.

**NOW, THEREFORE**, the Issuer does hereby declare its official intent as follows:

1. **Declaration of Intent.** The Issuer reasonably expects to reimburse itself for expenditures made on the Projects with the proceeds of tax-exempt bonds or notes in anticipation thereof to be issued by the Issuer to finance the costs of the Projects in the maximum principal amount of \$14,500,000.
2. **General Description of Property to which Reimbursement Relates.** The following is a reasonably accurate general functional description of the type and use of the property with respect to which reimbursements will be made:

**Portland Wastewater Fund CIP Projects**

- Renovation, repair and replacement of machinery and equipment and facilities at the East End Treatment Plant, including but not limited to improvements related to the secondary clarifier sludge rake and primary sludge handling and primary gallery.

3. **Public Availability of Official Intent.** This Declaration of Official Intent shall be maintained as a public record of the Issuer.
4. **Treasury Regulations.** This is a declaration of official intent pursuant to the requirements of Treasury Regulations § 1.150-2.
5. **Authority for Declaration.** This Declaration of Official Intent is adopted pursuant to the following action of the Issuer: Resolution adopted by the Portland Water District Board of Trustees.
6. **Supplement to Prior Declarations.** This Declaration of Official Intent supplements the prior Declarations of Official Intent, comprised of Resolutions 20-016, 21-,018 and 22-15 previously adopted by the Portland Water District Board of Trustees, to account for an increase in estimated project costs.



## MEMORANDUM PORTLAND WATER DISTRICT

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TO: Operations Committee / Board of Trustees

FROM: Scott Firmin, Director of Wastewater Services  
James Wallace, Director of Water Services

DATE: April 5, 2023

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

A meeting of the Operations Committee of the Portland Water District Board of Trustees will be held on Monday, April 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. Election of Chair**  
The Committee will elect a chair for 2023-2024.
- 2. Northeast Pump Station – Pump # 4 Rebuild – CIP 23-70-3135**  
Staff will provide a recommendation to amend the capital plan to provide for the rebuild of pump #4. (See attached memo)
- 3. Recommendation to amend 2023 CIP to include the construction budget for the East End Secondary Clarifier Sludge Rake Replacement -CIP 23-21-3147.**  
Staff will recommend amending the 2023 CIP to include the construction budget programmed for the 2024 CIP. (See attached memo)
- 4. Windham Center Water Storage Tank Replacement Project – CIP 19 Project 307-3004**  
Staff will provide a recommendation to award a construction contract and to amend an engineering services contract for construction services for the Windham Center Water Storage Tank Replacement Project. (See attached memo)
- 5. Other Business**



Portland Water District  
*From Sebago Lake To Casco Bay*

## **OPERATIONS COMMITTEE / AGENDA ITEM SUMMARY**

Agenda Item: 2  
Date of Meeting: April 10, 2023  
Subject: Northeast Pump Station – Pump #4 Rebuild CIP # 23-070-3135  
Presented By: Scott Firmin, Director of Wastewater Services

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### **RECOMMENDATION**

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

ORDERED, that the project budget for the Portland Pump Station Renewal and Replacement (R&R) Fund is amended by increasing it \$86,500 for the complete rebuild of Northeast Pump Station - Pump #4; 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**

On December 6, 2023, PWD personnel responded to Northeast Pump Station for what appeared to be a clogged pump; the Northeast Pump Station is the main pump station feeding the East End Wastewater Treatment Facility (East End WWTF) in Portland. A faulty wear strip from the bottom of the East End WWTF's primary clarifiers had broken and lodged in the pump, causing a catastrophic failure.

PWD personnel disassembled the pump and then contacted several repair vendors for assistance. Corrosion Products and Equipment (CPE) was chosen for the repair due to availability of resources, familiarity with the pumps, and schedule. The complete rebuild will cost \$86,500 and will include a new shaft, impeller (which was shown to be worn), bearing repair, mechanical seals, and rehabilitation. Installation is included in the cost. Given the emergency nature of the event, the work has begun under the authority of the General Manager.

The cause of the wear strip failure in the East End WWTF's primary clarifiers is under investigation. PWD personnel have taken steps to prevent any other broken wear strips from damaging the pumps by closing the drains that lead to the Northeast Pump Station.

**Project #:** 2023-Subprogram 70/ Project 3135

### **FISCAL REVIEW/FUNDING**

The \$86,500 will be paid from a withdrawal from the Portland Wastewater Renewal and Replacement Fund. The fund has \$5.7 million. This project does not impact operational costs but is essential to meet treatment objectives.

**LEGAL REVIEW**

Corporate Counsel has reviewed the proposed order as to form.

**CONCLUSION(S)**

Staff recommends adding \$86,500 to complete this expedited repair.

**SUPPORTING INFORMATION**

None





Portland Water District  
*From Sebago Lake To Casco Bay*

## **OPERATIONS COMMITTEE / AGENDA ITEM SUMMARY**

Agenda Item: 3  
Date of Meeting: April 10, 2023  
Subject: East End Secondary Clarifier Sludge Rake Replacement - Project Budget Amendment  
Presented By: Greg Pellerin, Senior Project Engineer

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### **RECOMMENDATION**

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

ORDERED, that the East End Secondary Clarifier project budget is amended by increasing it by \$7,320,000 and that the total budget for the Project is hereby authorized, not to exceed \$7,820,000; 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 WWTF are beyond their useful life, and both the frequency and severity of issues have increased in recent years. The current state of the clarifiers has created what has been classified as an emergency situation, and this project has been initiated on an accelerated schedule. PWD has hired Kleinfelder to provide design phase engineering services, and Woodard & Curran to provide Owners Project Manager (OPM) Services.

Due to the emergency nature of this project, staff is following an expedited procurement process. Staff have worked with the project team to issue an RFP for new secondary clarifier mechanisms, and have made a vendor selection. The next steps will be to finalize a contract and order the equipment. In order to proceed with the detailed design phase engineering services and procurement, the available 2023 CIP budget will need to be increased.

There is currently \$500,000 available in 2023 for this project intended for design, and another \$7,320,000 available in 2024. Due to the emergency nature of this project, it is recommended that the 2023 budget is increased to 7,820,000, incorporating the 2024 funds into the 2023 budget. This will allow the project to proceed on its critical path and insure stable operating conditions for this plant process.

### **FISCAL REVIEW / FUNDING**

The project will be submitted for consideration for the CWSRF project list for funding through Maine Municipal Bond Bank. The anticipated annual operating fund impact (assuming a 2.0% rate from the CWSRF program) would be \$575,000. If the project does not qualify for the CWSRF program the annual impact is estimated to be \$723,000. The multi-year financial plan

provided to the City of Portland assumed the project qualified for the CWSRF program with a bond issue date in 2026. Given the expedited schedule, the bond and financial impact may occur earlier.

**LEGAL REVIEW**

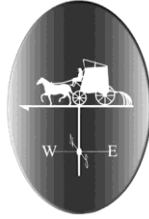
Corporate Counsel reviewed the proposed motion and approved it as to form.

**CONCLUSION(S)**

Staff recommends that the Board approve the proposed motion.

**ATTACHMENT(S)**

None



Portland Water District  
*From Sebago Lake To Casco Bay*

## **OPERATIONS COMMITTEE / AGENDA ITEM SUMMARY**

Agenda Item: 4  
Date of Meeting: April 10, 2023  
Subject: Windham Center Elevated Water Storage Tank Replacement in Pressure Zone 407 North – Construction Services  
Presented By: Adam Sellick, Project Engineer  
Greg Pellerin, Senior Project Engineer

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### **RECOMMENDATION**

The following proposed language is presented for Committee approval:

ORDERED, the General Manager is hereby authorized to execute an engineering service contract amendment with Hazen & Sawyer, in the amount of \$680,000 for construction services for contract 1 and contract 2 the Windham Center Elevated Water Storage Tank Replacement (the “Project”); and

BE IT FURTHER ORDERED, a construction contract with Woods Excavating, LLC is hereby authorized, in the amount of \$1,272,311 for the Project; and

BE IT FURTHER ORDERED, that a project budget for contract 1 is hereby authorized, not to exceed \$2,432,311; 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 existing elevated water storage tank in Windham was constructed and placed in operation in 1957. The tank was targeted for replacement in the 2003 Comprehensive Water System Strategic Plan (CWSSP). The most recent maintenance on the tank was completed in 2019 when two leaks were repaired on the riser. The tank is beyond its useful life and is due for replacement.

After an extensive engineering analysis and land acquisition search, it was determined that a new one-million-gallon ground-level concrete tank be sited on a hill on land off of Falmouth Road near Nash Road would have the best long-term value to serve both Windham Center and the town of Gorham.

Hazen and Sawyer recommended that the Project be bid and constructed in two phases:

- Phase 1 (contract 1) – construction of a new 1,600 ft road and installation of 20” HDPE water main
- Phase 2 (contract 2) – construction of a one-million-gallon concrete water storage tank and associated site work

Contract 1 described above was publicly bid on February 27, 2023. Bids were received from six (6) contractors, Shaw Brothers, Gorham Sand & Gravel, RJ Grondin, Drew Corporation, Woods Excavating, and DLM Property Care, on March 30, 2023. The bids fell within the project budget estimate. PWD performed a due diligence review of the response and has determined that the apparent low bidder has the contracting capacity and resources to complete the Project. PWD, therefore, recommends that Woods Excavating, LLC be awarded the project.

Pursuant to the Comprehensive Method (approved by the Board in December 2018), staff recommends a professional services contract amendment with Hazen & Sawyer for engineering services during construction.

Please refer to Attachment A for a summary of the contractor bid and a breakdown of the proposed project budget. The proposed project budget for contract 1 is \$2,432,311 and carries a contingency of \$80,000.

Contract 2 of the project is expected to be advertised for bid in a few weeks and will come back to the Board with a recommendation in either May or June. A full project budget will be established at that time. Contract 2 is currently estimated at \$4.5 million which would bring the project budget to \$7 million.

### **FISCAL REVIEW/FUNDING**

The CIP 2018 budget approved by the Board of Trustees for engineering design and land acquisition is \$400,000 (Project #: 2018-Subprogram 307/ Project 2658) and the 2019 CIP budget approved was \$2,500,000. (Project #: 2019-Subprogram 307/ Project 1693). The design and land acquisition qualified for the Maine Drinking Water State Revolving Loan Fund (DWSRF) and was awarded principal forgiveness of \$165,000 this past year. Staff applied for DWSRF funds for the construction phase (\$7 million estimated) of the project and did not receive funding. The District will finance the project over a twenty-year period resulting in an estimated annual debt service of \$700,000. The amount was included in the multi-year water fund forecast included in the 2023 budget document.

### **LEGAL REVIEW**

Corporate Counsel has reviewed the proposed order as to form.

### **CONCLUSION(S)**

Staff recommends awarding contract 1 to the low responsible bidder for the project, Woods Excavating, LLC, and the approval of an amendment to the professional services contract with Hazen & Sawyer to reflect the provision of construction services for the Windham Center Elevated Water Storage Tank Replacement Project.

### **ATTACHMENT(S)**

Attachment A

ATTACHMENT A

Bid Summary:

<b>BASE BID</b>	<b>Item #1 Lump Sum General Construction</b>	<b>Item #2 Lump Sum Cash Allowance - Laydown Area</b>	<b>TOTAL BID</b>
<b>SHAW BROTHERS</b>	\$2,230,577.00	\$32,000.00	<b>\$2,262,577.00</b>
<b>GORHAM SAND &amp; GRAVEL</b>	\$1,794,000.00	\$32,000.00	<b>\$1,826,000.00</b>
<b>RJ GRONDIN</b>	\$1,653,613.84	\$32,000.00	<b>\$1,685,613.84</b>
<b>DREW CORPORATION</b>	\$1,515,570.00	\$32,000.00	<b>\$1,547,570.00</b>
<b>WOODS EXCAVATION</b>	\$1,240,311.00	\$32,000.00	<b>\$1,272,311.00</b>
<b>DLM PROPERTY CARE</b>	\$1,499,995.00	\$32,000.00	<b>\$1,531,995.00</b>

Proposed Budget:

<b>Item</b>	<b>Amount</b>	<b>Board Approval</b>
*Design Phase Engineering and land acquisition	\$400,000	CIP #2018-307/2658
Construction Phase Engineering Contract 1&2	\$680,000	April 2023 (Proposed)
Construction – Contract 1	\$1,272,311	
Project Contingency	\$80,000	
<b>Project Total thru Contract 1</b>	<b>\$2,432,311</b>	
(estimated) Construction -Contract 2 –	\$4,500,000 estimated	May/ June 2023 (Proposed)
<b>Total Project cost (estimated)</b>	<b>\$7,000,000</b>	

\*The design and land acquisition qualified for the Maine Drinking Water State Revolving Loan Fund (DWSRF) and was awarded principal forgiveness of \$165,000

**Project #:** CIP 2018 – Subprogram 307, #2658 – \$400,000

**Project #:** CIP 2019-Subprogram 307/ Project 1693) – \$2,500,000



## MEMORANDUM PORTLAND WATER DISTRICT

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TO: Planning Committee / Board of Trustees

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

DATE: April 5, 2023

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

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

### **AGENDA**

1. **Election of Chair**  
The Committee will elect a chair for 2023-2024.
2. **Update on Forest Management Plan**  
The District's Forester will provide an update on the Forest Management Plan.
3. **Standish Beach Management Annual Report**  
Staff will report on the past year's activity at Standish Beach.
4. **Other Business**