MEMORANDUM

TO: CITY COUNCIL

FROM: Greg Springman, Steven Haney and Trish Rice

Public Works

DATE: November 8, 2022

SUBJECT: Mahler WRF Project Update



Public Works staff and our engineering consultant West Yost would like to keep City Council updated on the Mahler WRF Upgrades Project. This update will be provided on a monthly basis and contains the following sections:

Section 1. Project Overview and Current Status

Section 2. Project Schedule Update & City Council Engagement

Section 3. Project Budget Status Update

Section 4. Updates on Key Issues

1. PROJECT OVERVIEW AND CURRENT STATUS

Bids for the MWRF Phase 1 Improvements Project were over 25% above the Engineer's Estimate and the contract was cancelled. Staff propose the following approach for project phasing and construction:

- MWRF Interim Improvements Project (MWRF IIP) would include pre-purchasing mechanical and
 electrical equipment, installing a new solids storage tank, installing new solids dewatering equipment
 sized for future use in a temporary location, and completing site work and piping in the solids area of
 the plant.
 - Proposed Owner-Supplied Mechanical Equipment: Dewatering Screwpress, 100,000-gallon solids storage tank and solids feed pumps.
 - o **Proposed Owner-Supplied Electrical Equipment:** Standby Generator and Main Switchboard to be procured by The Automation Group as the City's Integrator-of-Record.
 - o Engineers Preliminary Opinion of Probable Construction Cost: \$2.5 \$3.0 Million
 - Preliminary Project Schedule
 - Design: Nov. 9, 2022 Jan. 12, 2023
 - City Council Authorization to Bid: Jan. 24, 2023
 - **Bidding:** Jan. 25, 2023 Feb. 15, 2023
 - City Council Bid Award and Contracts Approval: Feb. 28, 2023
 - MWRF IIP Construction Start: March 15, 2023
- With the cancellation of the recently bid MWRF Phase 1 Improvements project, the larger MWRF Improvements Project will now be a single project encompassing all planned treatment plant upgrades. In addition, staff are proposing to include the South Santiam River outfall replacement in the Project based on recent discussions with regulatory agencies. If added, we anticipate developing the outfall replacement as a separate bid package due potential lengthy permitting timelines.
 - Design Status: Completion of 60% Final Design is targeted for January 23, 2023.
 - o **Design Schedule:** 90% Design Completion in June 2023; Final CDs in August 2023.
 - **Estimated Cost:** West Yost will be completing an update of the Engineer's Opinion of Probable Construction Cost (OPCC) in November 2022.
- Future or additional phases for the Mahler WRF upgrades may include:
 - Offsite Class A Biosolids Composting Facility: The City has considered partnering with Albany and Lebanon to construct an offsite biosolids processing facility that would provide better opportunities for reusing the biosolids produced by the Mahler WRF.

2. PROJECT SCHEDULE UPDATE & CITY COUNCIL ENGAGEMENT

Below is a project schedule summarizing the currently anticipated schedule for the MWRF IIP (if authorized) and the larger MWRF Improvements Project. The schedule below is reflective of combining all MWRF upgrades into a single, larger construction contract. Based on the size of the project and long lead times for much of the major systems and equipment, it is anticipated construction of the larger project will take approximately 3 years.

| | 2022 | | | 2023 | | | | 2024 | 2025 | 2026 |
|---|------|----|---------------------|--------|---------|---------|----|--------------|--------------|---------|
| | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 – Q4 | Q1 – Q4 | Q1 – Q4 |
| MWRF Interim Impr. Project (IIP) MWRF Impr. Project | | | | | | | | | | |
| | ign | | | Riddir | ng & Co | ntracts | | | Construction | on. |
| Planning & Design | | | Bidding & Contracts | | | | | Construction | | |

Upcoming Project activities and City Council Requests for Council Action (RCA) include:

3rd Party Special Inspections and Testing Services (RCA): On 9/13, Public Works accepted proposals from two firms to provide 3rd Party Special Inspections and Testing Services on the Project. Proposal scoring is currently being finalized by City staff.

Electronic Construction Document Control System (RCA): On 9/15, Public Works accepted proposals from two firms to an Electronic Construction Document Control System (ECDCS) for the Project. Software demonstrations with each firm have been conducted by City and West Yost staff and proposal scoring is currently being finalized by staff.

MWRF Interim Improvements Project: If authorized by City Council, staff will begin working with West Yost's team to prepare procurement documents for Owner-Supplied Equipment and design documents for bidding the project as soon as possible. This project will help address current MWRF NPDES Permit compliance issues and will contribute to spending the City's \$7M in grant funding that expires on June 30, 2023.

If the MWRF IIP is authorized, staff anticipates the following schedule of City Council actions to meet a very tight project schedule to fully spend the City's \$7M in grant funding from the Oregon Legislature by June 30, 2023:

- RCA TAG Electrical Owner-Supplied Equipment Procurement Contracts (Dec. 13, 2022)
- RCA Mechanical Owner-Supplied Equipment Procurement RFP Documents (Dec. 13, 2022)
- RCA Mechanical Owner-Supplied Equipment Bid Award & Contracts (Jan. 24, 2023)
- RCA MWRF Interim Improvements Project Bid Documents (Jan. 24, 2023)
- RCA MWRF Interim Improvements Project Bid Award & Contracts (Feb. 28, 2023)

3. PROJECT BUDGET STATUS UPDATE

The following budget status updates provide a high-level review of contract amounts and expenditures for engineering services, Owner-supplied electrical equipment, Construction, 3rd Party Special Inspections and Testing and the Electronic Construction Document Control System.

a. Construction

Budget status updates will be provided for the MWRF IIP if the project is authorized to proceed by City council. The MWRF IIP would include a combination of Owner-supplied equipment and onsite construction that would be bid by the City's list of pre-qualified contactors. There is no update on budget or status at this time.

b. Owner-Supplied Electrical Equipment

Budget status updates related to owner-supplied electrical equipment to be provided by TAG serving as the City's Integrator-of-Record will be provided following approval of TAG contracts. If authorized, the MWRF IIP includes pre-purchase of the MWRF Standby Generator and Main Switchgear.

c. 3rd Party Special Inspections and Testing Services

Budget status updates for 3rd Party Special Inspections and testing will be provided once construction activities begin.

d. Electronic Construction Document Control System (ECDCS)

Budget status updates for ECDCS will be provided once construction activities begin.

e. Engineering Services

West Yost anticipates completing 60% final design for the MWRF Improvements Project in January 2023. A letter proposal will be submitted in January 2023 to complete final design and bidding for the project.

| Firm | Dates | Purpose | Contract Amount | % Complete |
|----------------------------|-----------------------------|---|--------------------|------------|
| Murraysmith ⁽¹⁾ | 2018 – 2021 | Preliminary and Final Design | \$2,134,373 | 100% |
| West Yost | Jul 2021 | Final Design Review | \$66,224 | 100% |
| West Yost ⁽²⁾ | Aug 2021 – present | Project Planning. Permitting, Preliminary and Final Design | \$3,428,335 | 76% |
| West Yost ⁽³⁾ | Oct. 2023 thru Oct. 2026 | Engineering Services During Construction (ESDC) | \$879,670 | 0% |

- (1) Contract Amount listed is actual amount paid to Murraysmith by City. This amount is being confirmed.
- (2) West Yost's current Mahler WRF design contract is for completion of Phase 1 final design and Phase 2 60% Design. It is anticipated a contract for completing MWRF Improvements Project final design will be executed in Q1 2023.
- (3) West Yost's current Mahler WRF Engineering Services During Construction (ESDC) contract was for Phase 1 construction. If authorized, a portion of this current contract will be used for MWRF IIP ESDC. The balance would be used for initial ESDC on the larger MWRF Improvements Project.

4. UPDATES ON KEY ISSUES

- MWRF Phase 1 Construction. The lowest Phase 1 bid submitted by Slayden Construction was 28% higher than the Engineer's Estimate, which exceeds the limit of 25% mandating in the City's local contracting rules. Therefore, the City is unable to award the project and City staff are evaluating options.
- Current MWRF Permit Compliance Issues. Recently the MWRF has been experiencing regular
 compliance issues due to unauthorized discharges to the City's sewer collection system that are
 impacting the biological treatment process. Staff are working to identify the source of these
 illegal discharges.
- **Expenditure of Oregon Legislature Funding.** Public Works is working on a plan to spend the \$7M in grant funding awarded to the City by the Oregon Legislature by June 30, 2023.
- Preliminary Engineering Report (PER) Update. Concurrent with Phase 2 design, West Yost's team is also working on updating the Preliminary Engineering Report (PER) required for obtaining USDA funding for the project. The PER will be submitted to USDA and Oregon DEQ for review and approval. The updated project cost estimate included in the PER will be used to secure funding for the project. City staff met with USDA to discuss overall project funding on Thursday, October 6th.
- Outfall Permitting and "Crosscutters". A key issue that has come up in consultation with
 regulatory agencies is the plan for increasing the capacity of the WRF outfall pipeline to the South
 Santiam River. The original plan to install an "overflow" to the river may present permitting
 challenges. The City is currently considering options, but the best long-term solution may be to
 replace the outfall pipeline in the river. This would allow the outfall to be relocated to a deeper
 section of the river where it will have improved mixing and additional capacity.

Cc: Dept. Heads