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October 31, 2022

Project No.: 936-50-21-09

SENT VIA: EMAIL

Mr. Greg Springman
Public Works Director
City of Sweet Home
1400 24th Avenue
Sweet Home, OR 97386

SUBJECT: Engineer's Recommendation for Mahler WRF Equipment Pre-Purchase and Interim Improvements Project

Dear Mr. Springman:

West Yost is working with the City of Sweet Home (City) Staff and our Mahler WRF (MWRF) design team to identify a path forward to spending the City's \$7 Million (M) in grant funding from the Oregon Legislature by June 30, 2023. Based on City's current tracking spreadsheet, approximately \$3M of these funds are allocated to current contracts leaving approximately \$4M to allocated to other portions of the MWRF Improvements Project.

Expenditure of these remaining grant funds is proposed through three separate elements:

1. Design and Construction of the Mahler WRF Interim Improvements Project (MRWF IIP) with Owner-Supplied Equipment; and
2. Pre-purchasing long-lead electrical equipment; and
3. Completing final design of the MWRF Improvements Project.

This memo summarizes these three elements and next steps for completion by the June 30, 2023 deadline.

ELEMENT 1 - MWRF INTERIM IMPROVEMENTS PROJECT

Ongoing issues with MWRF operation and compliance with the City's National Pollutant Discharge (NPDES) Permit that regulates the quality of water discharged to the South Santiam River have led to the need for an Interim Improvements Project to improve solids storage and processing capacity. While plant staff are doing everything they can to operate the MWRF, there is simply not enough capacity to meet NPDES Permit requirements consistently.

To address the issue of solids storage and processing capacity, West Yost proposes completion of the MWRF Interim Improvements Project. This interim project will utilize tanks, piping and equipment proposed for the larger MWRF Improvements Project so there would be minimal "sunk" cost associated with these near-term upgrades.

Exhibit A is a site plan summarizing the proposed MWRF IIP upgrades, which would include the following elements that will be utilized as part of the larger MWRF Improvements Project to the maximum extent possible:

- Demolition of the existing lime silo and biofilter near the solids building that need to be removed;
- New waste solids storage tank that will ultimately be the Sludge Blend (SB) Tank;
- New solids dewatering equipment sized for future use and housed in a temporary location with cover for near-term operation that will ultimately be relocated to the Solids Dewatering Area on the upper plant site;
- Solids pipelines that will be installed and reused as part of the larger plant expansion; and
- Site work, electrical and controls upgrades that will be needed for temporary system operation by plant staff.

The West Yost preliminary cost estimate for the MWRF IIP is approximately \$2.50M to \$3.00M, which will be confirmed early in design. To meet the tight deadline for spending the City's \$7M in grant funding from the Oregon Legislature, West Yost proposes the City proceed with pre-purchasing the solids dewatering equipment and solids storage tank while final design for the MWRF IIP is completed. Table 1 summarizes the equipment cost and delivery time for proposed MWRF IIP equipment to be pre-purchased by the City.

Table 1. MWRF IIP Equipment Cost and Schedule Summary		
Equipment Item	Estimated Cost ^(a) dollars	Potential Delivery Date ^(b)
Solids Dewatering Screw Press	520,000	April 2023
Solids Storage Tank ^(a)	360,000	TBD
Totals	\$880,000	
(a) Estimated costs are based on preliminary sizing and vendor quotes that need to be confirmed through a competitive bid process.		
(b) Estimated delivery dates are based on preliminary discussions with suppliers.		

West Yost requests authorization to utilize a portion of the Owner-Controlled Contingency for MWRF-IIP design and bidding. An Owner-Controlled Contingency is included in our current design contract in the amount of \$192,652. We estimate the engineering costs for design of the MWRF IIP will be approximately \$143,000. Construction services for the MWRF IIP would utilize the construction services contract previously approved by the City.

ELEMENT 2 - ELECTRICAL EQUIPMENT OWNER PRE-PURCHASE

Major electrical equipment continues to experience abnormally long lead times due to ongoing supply chain issues. West Yost team recommends the City proceed with pre-purchasing the new MWRF Standby Generator and Main Switchgear because the current order lead time for these items is approximately 12-16 months. This equipment would be pre-purchased by The Automation Group (TAG), serving in their capacity as the City's Integrator-of-Record.

MWRF Main Switchgear

The main switchgear is the equipment that receives power from the utility transformer and distributes it to Motor Control Centers (MCCs) located throughout the treatment plant. TAG received two competitive

bids for the main switchgear from Siemens and Eaton. The lowest bid meeting the project requirements was submitted by Siemens for \$497,594. Therefore, West Yost recommends the City proceed with procurement of MWRF main switchgear from Siemens for this amount.

MWRF Standby Generator

A new 900 KW standby generator is required for the MWRF improvements. TAG obtained bids from four companies for the generator, with the lowest responsive bid provided by Cummins for \$327,690. Therefore, West Yost recommends the City proceed with procurement of MWRF Standby Generator from Cummins for this amount.

Due to the long delivery lead time for the MWRF Main Switchgear and Standby Generator, only a portion of the total cost of these items will be required to be expended before June 30, 2023. These estimated costs are summarized in Table 2 below.

Table 2. MWRF IIP TAG Equipment Cost and Schedule Summary		
Equipment Item	Total Cost, dollars	June 30, 2023, Expenditures ^(a)
Main Switchgear	479,594	47,960
Standby Generator	327,690	32,769
Contingency @ 4%	33,011	33,011
Bonds @ 3%	25,750	25,750
Totals	\$866,045	\$139,490
(a) June 30, 2023, expenditures assume 10% down payment for Main Switchgear and Standby Generator.		

ELEMENT 3 - MWRF IMPROVEMENTS FINAL DESIGN AND BIDDING

West Yost is currently under contract with the City to complete final design and bidding for the MWRF Phase 1 Improvements Project as well as 60% Final Design for Phase 2 improvements. Phase 1 final design and bidding was completed as scoped, but bids came in greater than 25% over the Engineer's Opinion of Probable Construction Cost (OPCC). Rather than rebid Phase 1 in hopes of getting lower bids, the City has decided to proceed with the consolidation of Phases 1 and 2 into a single project. West Yost is currently consolidating all Phase 1 and 2 design efforts and completing 60% design for this larger project using the Phase 2 60% design funds included in our contract.

West Yost anticipates submitting a scope and budget to complete final design for the MWRF Improvements Project in January 2023. We estimate the cost for completing final design, bidding and contracting for the larger MWRF Improvements Project will be approximately \$1.25M to \$1.5M. The majority of these funds would be expended by June 30, 2023, allowing the City to utilize a portion of the \$7M grant funds from the Oregon legislature for these additional engineering services.

SUMMARY AND RECOMMENDED NEXT STEPS

Table 3 summarizes the project elements for this proposed plan to spend \$7M in grant funds from the Oregon Legislature by June 30, 2023.

Table 3. Summary of Recommended Steps for Spending \$7M Grant Funding		
Equipment Item	Preliminary Cost Range ^(a) , dollars	June 30, 2023, Expenditures, dollars (Estimated)
Element 1 – Complete MWRF IIP ^(b)	2,500,000 to 3,000,000	2,750,000
Element 2 – Electrical Equipment Pre-Purchase ^(b)	866,845	139,490
Element 3 – Engineering Services for Final Design, Bidding and Contracts	1,250,000 to 1,500,000	1,250,000
Totals	\$4,616,845 to \$5,366,845	\$4,139,490
<i>(a)</i> Preliminary costs and scope of project elements to be confirmed early in MWRF IIP design and adjusted as required to assure expenditure of \$7M in grant funds by June 30, 2023.		
<i>(b)</i> Solids Dewatering, Solids Storage Tank and Electrical Equipment to be bid and pre-purchased immediately.		

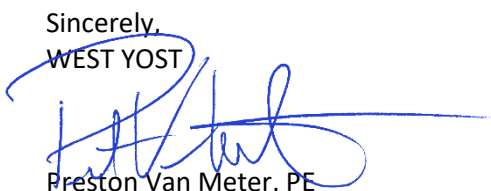
If the City concurs with the approach outlined herein and the use Owner-Controlled Contingency is authorized, West Yost has identified additional staff to assist with MWRF IIP design so that we are able to keep design of the larger MWRF Improvements Project on schedule.

Please contact me at your convenience if you would like to discuss the MWRF Interim Improvements Project, equipment pre-purchase or other project elements.

We appreciate the opportunity to continue serving the City of Sweet Home in this vitally important project for your community.

Sincerely,

WEST YOST

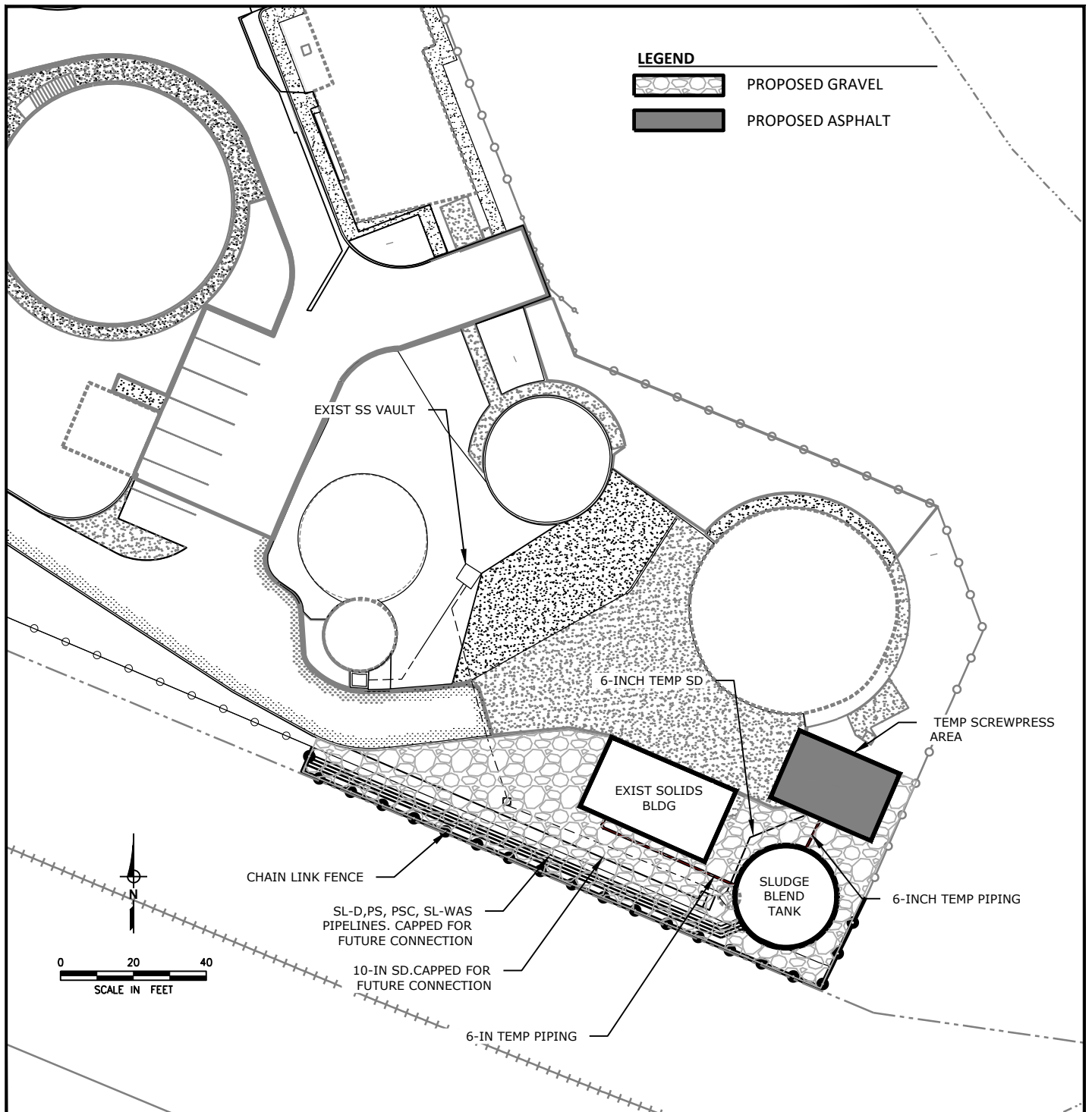

Preston Van Meter, PE
Project Manager
RCE #51615

cc: Steven Haney, City of Sweet Home Utilities Manager
Trish Rice, City of Sweet Home PW Engineering Technician II
Corie Moolenkamp, West Yost Principal-in-Charge
Brooke Barry, West Yost Deputy Project Manager

Attachment A. Exhibit A MWRF IIP Preliminary Site Plan

Attachment A

Exhibit A MWRF IIP Preliminary Site Plan



LOCATION MAP

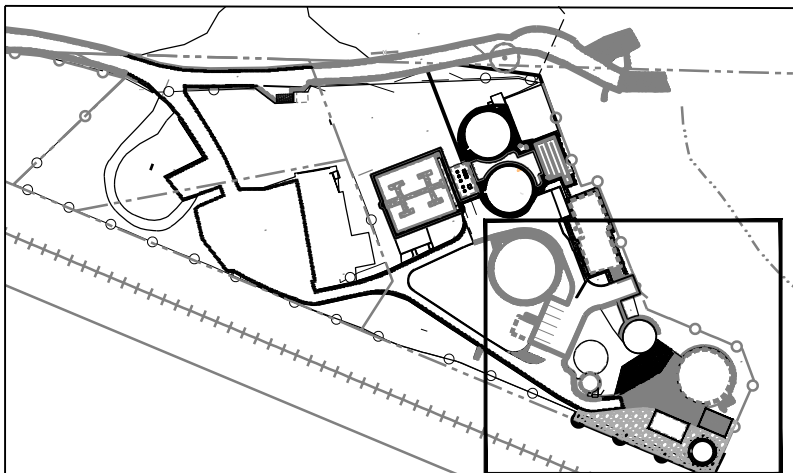


Exhibit A

MWRF IIP

Preliminary Site Plan



City of Sweet Home

Mahler WRF

Interim Improvements Project