#### Task Order No. 9

#### City of Sweet Home WWTP Phase 1 Final Design

#### West Yost Job Number 936-50-21-09

In accordance with the Contract between the City of Sweet Home (Client) and West Yost Associates, Inc. (Consultant), dated September 2, 2020, Consultant is authorized to complete the work scope defined in this Task Order No. 9 according to the schedule and budget defined herein.

#### **WORK SCOPE**

The Scope of Services includes providing Final Design services for the City of Sweet Home Wastewater Treatment Plant Improvements Project in accordance with the Letter Proposal dated August 25, 2021 (Exhibit A).

#### **COMPENSATION**

Compensation shall be in accordance with the provisions of the Task Order Agreement between Client and Consultant.

The compensation limit for services performed under this task order shall not exceed \$1,137,477. If additional funds are required to complete the services defined herein beyond this limit, Consultant shall notify Client in writing prior to reaching the authorized limit and will not proceed with work in excess of the limit without the prior written approval of Client.

#### **SCHEDULE**

Schedule shall be performed as shown in Exhibit A.

WEST YOST ASSOCIATES, INC.	CITY OF SWEET HOME
Gob Folland Signature	Signature Signature
Robert Ward Printed Name	Printed Name
Vice President Title	City Manger Title
September 8, 2021 Date	28 SEPT 202   Date



5 Centerpointe Drive 503.451.4500 phone Suite 130 Lake Oswego OR 97035 westyost.com

530.756.5991 fax

August 25, 2021

SENT VIA: EMAIL

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

SUBJECT: Proposal for Engineering Services for Sweet Home WWTP Phase 1 Final Design

#### Dear Greg:

This letter proposal summarizes West Yost's proposal for conducting further evaluations of the current WWTP final design building on the high-level design review completed by the West Yost team over a 2week period in July. Following the detailed design evaluation, West Yost will then complete final design for an initial phase of work that will be broken out to assure the City meets timelines for expenditure of project funding provided by the Oregon legislature. This proposal provides an introduction to our project team along with West Yost's proposed Scope of Services, Budget and Schedule for the project.

#### **PROJECT TEAM**

West Yost's project team includes a combination of sub-consultants and staff who participated in the 90% final design review or who have been involved in the project previously who will continue work on final design. West Yost's team includes:

Bob Ward (West Yost) - Principal-in-Charge supporting the City and project team

Preston Van Meter (West Yost) - Project Manager and primary point of contact

Brooke Barry (West Yost) - Deputy Project Manager, Civil Design Lead and alternate point of contact

Anthony Tartaglione (West Yost) - Mechanical Design Lead and alternate point of contact

Walt Meyer and Tim Banyai (West Yost) - QA/QC

Allan Goffe (Ace Engineers) – Structural Design Lead

Alan Armstrong (Strongwork Architecture) - Architectural Design Lead continuing on project

Steve Dacus (Interface Engineering) - MEP/HVAC Design Lead continuing on project

Ben Perry (Landis Consulting) - Electrical, Instrumentation and Controls (El&C) Design Lead

Gary Jenks (The Automation Group) - Controls and Automation Lead and City Integrator-of-Record

#### SCOPE OF SERVICES

Phase 1 WWTP upgrades are intended to fast-track final design for a portion of the project to assure the expenditure of the \$7 Million earmarked for the City by the Oregon State Legislature by June 30, 2023. Phase 1 project elements are anticipated to include the following major elements that are primarily located on the "Upper Plant" portion of the WWTP site:

- New WWTP Headworks;
- New Primary Clarifier and Primary Sludge Pump Station;
- New Solids Dewatering and Covered Cake Storage Area;
- Upper Plant Area Site Improvements and Yard Piping;
- WWTP Electrical and Controls Backbone Systems;
- Administration Building; and
- Maintenance Building

The Scope of Services is including in Attachment A and includes the following tasks:

- Task 1. Project Management
- Task 2. Project Initiation and Detailed Design Evaluation
- Task 3. WWTP Phase 1 Final Design
- Task 4. Contractor Pre-Qualification, Bidding and Contracts

#### PROJECT BUDGET

West Yost's proposed level of effort and budget for each of the tasks described above is summarized in Table 1. West Yost will perform the Scope of Services described above on a time-and-expenses basis, at the billing rates set forth in West Yost's current contract for providing City Engineer-of-Record services, with a not-to-exceed budget of \$1,137,477. For budgeting purposes, West Yost has used our current 2021 rates with a special rate for Preston Van Meter of \$233/hour.

Any additional services not included in this Scope of Services will be performed only after receiving written authorization and a corresponding budget augmentation.

Table 1. Estimated Project Budget		
Task	Budget, \$	
Task 1. Project Management	\$74,709	
Task 2. Project Initiation and Detailed Design Review	\$224,309	
Task 3. WWTP 90% Design Review	\$751,813	
Task 4. Closing Design Review Meeting	\$86,647	
Total Project Budget	\$1,137,477	

**Greg Springman** August 25, 2021 Page 3

#### **SCHEDULE**

West Yost team will fast-track the detailed design evaluation and WWTP Phase 1 final design with a goal of bidding Phase 1 in March 2022. A detailed project schedule will be developed at the start of the project. Below are approximate timelines anticipated for the project:

**Project Start:** 

September 15, 2021

**Detailed Design Evaluation:** 

September – October 2021

WWTP Phase 1 90% Design:

October 2021 - January 2022

**Contractor Pre-Qualification:** 

January 2022

WWTP Final Contract Documents: February 2022

**Bidding and Contracts:** 

February – March 2022

Thank you for providing West Yost the opportunity to be of continued service to the City. We look forward to working with you on this important project. Please call, 503.784.9536, if you have any questions or require additional information.

Sincerely, **WEST YOST** 

Bob Ward, PE Vice President PE# 58810

Preston Van Meter, PE **Principal Engineer** 

PE# 51615

## Attachment A

Scope of Services

# ATTACHMENT A SCOPE OF SERVICES FOR WWTP PHASE 1 IMPROVEMENTS PROJECT

August 19, 2021

Final design for Phase 1 of the Sweet Home WWTP Improvements Project (Project) is anticipated to include the following major elements:

- New WWTP Headworks
- New Primary Clarifier and Primary Sludge Pump Station
- New Solids Dewatering and Covered Cake Storage Area
- Upper Plant Area Site Improvements and Yard Piping
- WWTP Electrical and Controls Backbone Systems
- Administration Building
- Maintenance Building

The following tasks summarize the additional engineering services to be provided by West Yost on the City of Sandy Existing WWTP Condition Assessment Improvements Project:

- Task 1. Project Management
- Task 2. Background Data Collection and Initial Design Activities
- Task 3. Phase 1 Final Design
- Task 4. Phase 1 WWTP Bidding and Construction Contracts

## **Task 1. Project Management**

Project management includes coordination of West Yost's internal team and subconsultants, quality assurance and quality control (QA/QC) activities, and preparation of monthly project updates and invoices.

#### Task 1.01. Contracts and Project Management Plan (PMP)

Coordinate with the City and Owner's Representative to finalize contracts for West Yost and our subconsultants. Prepare a Project Management Plan to guide the completion of the project, summarizing team coordination activities, reporting requirements, project scope, key schedule milestones, staffing plan, contingency planning for unforeseen changes in project scope, and other related project elements.

#### Task 1.02. Monthly Project Status Reports and Invoices

Prepare monthly project updates, including a summary of project status, monthly invoice for services performed, earned value analysis (EVA) assessing project completion versus budget utilized, key upcoming project milestones, and any anticipated issues that may impact project budget or schedule.

#### Task 1.03. Team Coordination Activities

West Yost will conduct bi-weekly project check-in conference calls with City staff to review and discuss design issues, track project budget and schedule status, identify key coordination items such (e.g. permitting) and other elements pertinent to the Phase 1 WWTP Final Design. For budgeting purposes, 12 one-hour bi-weekly team conference calls to be attended virtually by West Yost's Project Manager, Deputy Project Manager and Mechanical Lead are included.

West Yost's full design team will also conduct bi-weekly design team conference calls to discuss final design progress, coordinate discipline design efforts and keep the project on schedule and budget. For budgeting purposes, 12 one-hour bi-weekly team conference calls to be attended by project team are included.

#### **Task 1 Assumptions**

- The project duration is anticipated to be six months, therefor six (6) monthly project progress reports and invoices are budgeted.
- Action items from bi-weekly project check-in conference calls will be sent to attendees via email.

#### **Task 1 Deliverables**

West Yost will provide one electronic (PDF) copy of monthly progress reports with invoices.

## Task 2. Background Data Collection and Detailed Design Evaluation

This task includes collection and review of background information needed to completed final design for the WWTP Phase 1 Improvements as well as initial design activities for elements such as reviewing modeling files (BioWIn, Visual Hydraulics, etc.), reviewing and understanding AutoCAD files, reviewing background spreadsheets and files and other activities needed to allow final design to be completed efficiently and on schedule.

#### Task 2.01. Collect and Review Background Information

Prior to the Project Kickoff Meeting, West Yost will provide a Request for Background Information that will be needed in order to efficiently complete the design and delivery of the City's project. Information including the request may include:

- Current WWTP NPDES Permit and summary of communications with DEQ regarding the NPDES Permit renewal schedule;
- AutoCAD Plant 3D files for the current WWTP final design;
- Design-related spreadsheets (e.g. structural calculations, equipment list, piping schedule, cost estimates, etc.);
- BioWIn© biological process model and input/output files;
- Visual Hydraulics© plant hydraulic profile and input/output files;
- Pump calculations and selection
- Copies of Geotechnical Data and Engineering Reports;
- Meeting agendas and minutes from design workshops and meetings with permitting and funding agencies;
- DEQ correspondence related to the WWTP upgrades;
- Funding agency communications and correspondence;
- Other information determined to be needed as part of the project.

#### Task 2.02. Project Kickoff Meeting and Site Visit

West Yost will conduct a Project Kickoff Meeting with City staff to review the project scope and assumptions, discuss the project schedule and key project milestones/deadlines, review communications procedures and protocols, and discuss other key discussion topics related to the project. The meeting will be attended by West Yost's Project Manager, Deputy Project Manager, Mechanical Lead, Structural Lead, Electrical Lead, Instrumentation and Controls Lead and one staff engineer. This meeting will be conducted at Sweet Home Public Works offices and will be followed by a WWTP site visit.

#### Task 2.03. Biological Process Model Review and Updates

West Yost will conduct a detailed review of the existing WWTP design criteria and BioWIn© biological process model and identify recommended changes to better align with industry design standards. Agreed upon process design modifications will then be incorporated into final design of the planned WWTP upgrades.

#### Task 2.04. Visual Hydraulic Model Review and Updates

West Yost will conduct a detailed review of the existing WWTP Visual Hydraulics© WWTP hydraulic model and identify recommended changes to better align with industry design standards. Agreed upon hydraulic modifications will be incorporated into final design of the planned WWTP upgrades.

#### Task 2.05. Design Calculations and Spreadsheet Reviews

West Yost will review all design spreadsheets and computations, including cost estimates, and identify any deficiencies or areas of concern that need to be address as part of the WWTP final design. Spreadsheets may include flow and load projections, growth projections, structural calculations, equipment list and tag numbers, pump selection, aeration blower and diffuser calculations, equipment sizing spreadsheets, energy consumption calculations and all other spreadsheets and computations provided as part of the current final design information.

#### Task 2.06. Detail Drawing and AutoCAD Files Review

West Yost will review the current final design and identify additional information and annotation that needs to be included on the drawings for all WWTP Phase 1 design elements. Additional drawing details may include more detailed annotations as well as additional design sections and details. As part of this task, all AutoCAD files and 3D model(s) will be reviewed to develop an understanding of what is needed to provide the additional information required on the drawings to finalize the Phase 1 design.

#### Task 2.07. Design Review Workshops and Site Visits

West Yost will conduct two (2) workshops with City staff to review and discuss the current final design for Phase 1 WWTP upgrades. The workshops will be coupled with two WWTP site visits to confirm design details in the field. The goal of these meetings is to discuss the current design, understand the design intent and discuss potential design modifications.

#### Task 2.08. DEQ Detailed Design Evaluation Findings Meeting

Meet with City staff and representatives from Oregon Department of Environmental Quality (DEQ) staff to discuss the design team transition, current design status and key findings, construction phasing approach, overall project schedule, WWTP outfall design concept, NPDES Permit renewal and other items

critical for final permitting of the WWTP Improvements. The meeting will be attended by West Yost's Project Manager, Deputy Project Manager and Mechanical Lead.

#### Task 2.09. Detailed Design Evaluation Findings Technical Memorandum

West Yost will consolidate and summarize all reviews and recommendations, meeting outcomes and other key findings in a Detailed Design Evaluation Findings TM-01 that will establish the path forward for final design. The memo will contain agreed upon final design modifications and overall project completion schedule assuming a phased design and construction approach.

#### **Task 2 Assumptions**

- The Project Kickoff Meeting will be conducted at the City of Sweet Home's office and WWTP.
- All background data will be provided in a useable file format (e.g. MS Excel, AutoCAD, etc.). PDF files will be difficult to utilize for final design by West Yost.
- Design Review Workshops and Site Visits will be conducted at City Public Works offices and the WWTP.
- Biological process evaluations may result in recommended design modifications that could impact
  the current design. For example, the primary clarifier solids removal assumption in the current
  process model is set for 60% removal, which is not considered realistic for normal operations.
- WWTP Site Visits are budget for 6 hours, including travel time.

#### **Task 2 Deliverables**

- One electronic (PDF) copy of the Background Data Collection Request.
- One electronic (PDF) copy of the agenda and minutes from the Project Kickoff Meeting.
- One electronic (PDF) copy of the agenda and minutes from two (2) Design Review Workshops.
- One electronic (PDF) copy of the agenda and minutes from the DEQ Detailed Design Evaluation Findings Meeting.
- One electronic (PDF) copy of the draft and final Detailed Design Evaluation Findings TM-01.

## **Task 3 Final Design**

Final design will carry the design to completion, providing 90% and 100% final design submittals along with City review periods and workshops.

#### Task 3.01. 90% Final Design Drawings and Specifications

Complete 90% final design for WWTP Phase 1 Improvements, including construction drawings and specifications.

**Drawings:** Existing AutoCAD drawings will be utilized to the maximum extent possible. West Yost anticipates drawing development will include a combination of annotating and adding details to drawings in the current design and developing new drawings to further detail the design. The table below summarizes the 200 total drawings anticipated to be included in the WWTP Phase 1 Improvements final design:

Discipline	Annotate, Detail and Enhance Current Phase 1 Design Sheets	Additional Phase 1 Drawings to be developed
General	10	
Civil	23	5
Mechanical	29	10
Architectural	23	2
Structural	37	3
Electrical	23	10
Instrumentation	11	14
Totals	156	44

**Specifications:** A combination of approaches will be utilized for preparing specifications, including bid documents, Contract and General Conditions, Division 1 General Conditions and technical specifications. Existing specifications will be utilized to the maximum extent possible. Where determined to be more efficient, West Yost guide specifications will be utilized. A budget for specifications is included that has been estimated based on the number of current specification sections.

#### Task 3.02. 90% Final Design Submittal

Prepare a 90% Final Design Submittal including all drawings and specifications, Engineer's Opinion of Probable Construction Cost (OPCC) and updated project schedule.

#### Task 3.03. 90% Final Design Review Workshop

Conduct a workshop with City staff at the City's Public Works offices to review the final design submittal. For budgeting purposes, the workshop will be attended by West Yost's Project Manager, Deputy Project Manager, Architect, Mechanical Lead, Electrical Lead and Instrumentation Lead.

#### Task 3.04. Permitting, Regulatory and Funding Agency Meetings and Reviews

Submit the 90% Final Design to DEQ, Building Official and USDA for review. Lead agency meetings as required to obtain regulatory and funding agency approvals to proceed. This task assumes two (2) meetings with USDA, two meetings with Oregon DEQ and one (1) meeting with the City's Building Official.

#### Task 3.05. Prepare Final Contract Documents (CDs)

Incorporate comments from the City, DEQ, funding agencies and building official and prepare final Contract Documents, including the Project Manual and all drawings for bidding. If required, update the Engineer's OPCC and project schedule.

#### Task 3 Assumptions

- No geotechnical investigations, topographical surveying, hazardous materials survey or environmental documentation are anticipated to be required as part of the project or design.
- Drawings will be developed for printing and readability based on 11x17 half-size reductions.

#### Task 3 Deliverables

- Three (3) hard copies and one (1) electronic (PDF) copy of the WWTP Phase 1 90% Final Design Submittal, including drawings, specifications, Engineer's OPCC and Schedule.
- One electronic (PDF) copy of the agenda and minutes from the 90% Final Design Review Workshop.
- One electronic (PDF) copy of the agendas and minutes from all regulatory and funding agency meetings.
- Three (3) hard copies and 1 electronic (PDF) copy of the Final CDs including Project Manual and Drawings in 11x17 format.
- Summaries from the meetings with the permitting, regulatory and funding agencies.

## **Task 4 Bidding and Contracts**

Final design will carry the design to completion, providing 90% and 100% final design submittals along with City review periods and workshops.

#### Task 4.01. General Contractor Pre-Qualification

West Yost will develop a contractor pre-qualification strategy and solicitation to develop a list of qualified contractors. The pre-qualification will evaluate experience with similar projects in size and complexity to establish a bidders list for the improvements.

#### Task 4.02. Bid Support Services

Support City staff throughout the bid process including assisting in advertising the project, responding to Contractor questions and inquiries during bidding and preparing addenda to modify the Final Contract Documents, if required.

#### Task 4.03. Bid Evaluation Support

Support the City in reviewing Contractor Bids and completing due diligence activities for the three lowest apparent Bidders to assure the project is awarded to the lowest responsive and responsible Bidder, as required by Oregon Administrative Rules.

#### Task 4.04. Engineer's Recommendation of Award

West Yost will prepare a Recommendation of Award recommending the City award the project to the lowest responsive and responsible Bidder.

#### Task 4.05. City Council Meetings

West Yost's Project Manager will attend two (2) City Council meetings as part of the bidding period and award.

#### **Task 4 Assumptions**

- General Contractor Pre-Qualification includes one pre-submittal site visit with interested bidders to review the project.
- City staff will lead bidding of the project with support provided by the West Yost team.
- Contract Documents will be distributed to bidders either electronically or hard copy using a thirdparty print shop that will maintain the Plan Holders List.

• Assumptions for Bid Support Services is as follows: (1) 12 Responses to Bidder Inquiries and Questions and (2) 4 Addenda.

#### **Task 2 Deliverables**

- One electronic (PDF) copy of the Prequalified Contractors
- One electronic (PDF) copy of the Pre-bid Meeting Agenda and Responses to Bid Inquiries and Questions.
- One electronic copy (PDF) of the Recommendation of Award