Contract Review Sheet

A&E Standard Prof Svcs Agmnt **PW-5069-22 - Am8**

Title: **ARPA - North Santiam Canyon Sewer Project**

Contractor's Name: **Keller Associates, Inc.**

Department: **Public Works Department** Contact: **Alicia Jones**

Analyst: **Kathleen George** Phone #: **(503) 373-4320**

Term - Date From: **Execution** Expires: **December 31, 2026**

Original Contract Amount: **$ 60,960.00** Previous Amendments Amount: **$ 7,418,049.00**

Current Amendment: **$ 2,730,163.00** New Contract Total: **$ 10,148,212.00** Amd% **16547%**

Outgoing Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☑ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **PW1130-22**

Description of Services or Grant Award

The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding. The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.
The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Amendment 8 - adds $2,730,164 for (a) land use and permitting support, (b) final engineering design (PS&E) for the Mill City/Gates wastewater treatment facility, (c) 60% design update for the sewer pipeline from Gates to Mill City, (d) 30% design of the Gates sewer collection system, (e) NEPA compliance support in anticipation of other federal funding sources other than ARPA, and (f) additional support for commercial septic grant applicants in Detroit.

Desired BOC Session Date: **12/4/2024** Contract should be in DocuSign by:

Agenda Planning Date Printed packets due in Finance:

Management Update **11/5/2024** BOC upload / Board Session email:

BOC Session Presenter(s) **Chris Einmo** Code: **Y**

REQUIRED APPROVALS

Finance - Contracts Date

Contract Specialist Date

Legal Counsel Date

Chief Administrative Officer Date

MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date: 12/04/2024

Department: Public Works

Title: Amend No. 8 to PW-5069-22 with Keller Associates for the North Santiam Canyon Sewer Project

Management Update/Work Session Date: 11/05/2024 **Audio/Visual aids** ☐

Time Required: 10 minutes **Contact:** Chris Einmo **Phone:** 503-566-4119

Requested Action:

Approve Amendment No. 8 to Consultant Services Agreement PW-5069-22 with Keller Associates for the ARPA - North Santiam Canyon Sewer (NSCS) Project, increasing the contract not-to-exceed value by $2,730,163.00, from $7,418,049.00 to $10,148,212.00.

Issue, Description & Background:

Under Agreement SR2240, Business Oregon awarded $50M in American Rescue Plan Act (ARPA) funds to Marion County for the purpose of constructing wastewater system improvements in the North Santiam River Canyon. Keller Associates is the prime consultant retained by Marion County to provide engineering and other professional services. Amendment 8 adds the following services: (a) land use permitting, (b) final design and engineering for the Mill City - Gates wastewater treatment facility, (c) 60% engineering and design of the sewer pipeline from Gates to Mill City, (d) 30% engineering and design of the Gates sewer collection system, (e) NEPA compliance support in anticipation of federal funding sources other than ARPA, and (f) additional engineering support for commercial septic grant applicants in Detroit.

Financial Impacts:

Amendment No. 8 increases the contract not-to-exceed value by $2,730,163.00, from $7,418,049.00 to $10,148,214.00. This is a budgeted expense in the current fiscal year and 5-year CIP Plan utilizing ARPA funds.

Impacts to Department & External Agencies:

Approval of Amendment 8 will allow the work described above to proceed without delay, which is essential to achieve the ARPA expenditure deadline of December 31, 2026. The cities of Mill City, Gates and Detroit will benefit from the construction of new municipal wastewater infrastructure.

List of attachments: Amendment 8 to Professional Services Agreement PW-5069-22

Presenter: Chris Einmo, Senior Project Manager, Marion County Public Works

Department Head Signature:



AMENDMENT 8 ~~7~~ to PW-5069-22
the STANDARD PROFESSIONAL SERVICES CONTRACT
between
MARION COUNTY and KELLER ASSOCIATES

This is Amendment No. 8 ~~7~~ to the Standard Professional Services Contract (as amended from time to time, the "Contract"), dated September 30, 2022, between Marion County, a political subdivision of the State of Oregon, hereafter called County or Owner, and Keller Associates, hereafter called Consultant.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by ~~strikethrough~~):

DEFINITIONS

A. CM/GC: Slayden Constructors, Inc., acting as the Owner's Construction Manager/General Contractor under Marion County agreement PW-5569-23 as executed on November 29, 2023.~~November 29, 2023.~~

B. Project Team: the Consultant, acting through its employees, subconsultants and/or contractors, collectively.

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$10,148,212** ~~**$7,418,049**~~ for Phase 1, 2, and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A**, **Statement of Work**.

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT

Task 100.1 – Project Management

Consultant Responsibilities:

100.1.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.

100.1.2 Project Coordination. Consultant may be requested to prepare progress reports or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.

100.1.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates, informational, or technical-based presentations to the board. Consultant will prepare presentation materials and/or handouts as directed. Assist with coordination of similar water pollution control facility site tours.

Owner Responsibilities:

- Administer project funding.

Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes a 30 ~~24~~-month duration for general project administration.

Deliverables:

- Monthly Invoices
- Monthly Progress Reports
- Meeting agenda and minutes

Task 100.2 – County Board of Commissioners Support Services

Consultant Responsibilities:

100.2.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to three occasions. Consultant will prepare presentation materials and/or handouts. The three presentations will tentatively occur in the months of November 2022, December 2022, and March 2023 and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Presentation #3 – Within six months after effective date of contract. Attend and present at a Joint Special Work Session for Marion County and Linn County Commissioners, to provide an introduction and update on the project and answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with subconsultants and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material
- Final presentation material

101 – STRATEGIC PERMITTING PLAN

Task 101.1 – Project Management and Administration

Consultant Responsibilities:

101.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

101.1.2. Consultant Coordination. Coordinate services to complete the Strategic Environmental Permitting Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of the draft Strategic Permitting Plan.

Assumptions:

- Project management budget assumes a task order schedule of up to 3 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

101.2.1. Consultant shall review available project information, including background, concept development and current plan/design information for the North Santiam Canyon Wastewater Master Plan (Master Plan). Consultant will conduct a desktop review of the Master Plan area to identify potential resources affected and locate existing available data. Using this information, Consultant will compile a list of potential issues and data needs for the project. Consultant will check and refine the understanding of those issues by initiating preliminary, informal discussions with the anticipated permitting agencies to understand their concerns and permitting needs for the project. The intent of these discussions will be to identify the agencies' specific resource concerns, to understand permitting requirements and obligations, and discuss options for permitting efficiencies, such as using programmatic agreements. Consultant will also preliminarily identify which federal agencies may have a National Environmental Policy Act (NEPA) requirement for the Master Plan and/or specific projects or phases that are part of the plan (due to their jurisdiction, land ownership, or funding) and whether a single joint NEPA document could be used to support multiple federal decisions.

Task 101.3 – Strategic Permitting Plan

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

Based on information obtained in Task 101.2, Consultant will prepare a draft Strategic Permitting Plan. The draft Strategic Permitting Plan will include:

- Project permitting schedule and general cost estimate.
- Summary of environmental permits and approvals needed
- Summary of initial pre-scoping discussions with agencies
- List of potential resources affected and existing available data
- List of potential permitting issues and data needs (based on desktop analysis and agency discussions)
- List of design needs to complete permitting
- Summary of potential opportunities for permitting efficiencies
- Estimated timeline to complete permitting
- Estimated general cost to complete permitting

Consultant will revise and finalize the Strategic Permitting Plan based on one consolidated review by Consultant and Owner.

Assumptions:

- Consultant will conduct up to three coordination conference calls with Owner to provide updates, receive additional information/clarifications, etc.
- Permitting agencies for informal, pre-scoping coordination will be: US Forest Service, US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Transportation, and Marion County. Outreach to agencies will consist of email or telephone contact. Consultant will make a reasonable effort get information from agencies within the available time and consistent with the level of effort budgeted.
- "Environmental permits and approvals" do not include easements or rights-of-way with utilities, ODOT, or federal agencies.
- Permitting requirements related specifically to wastewater treatment/infiltration requirements will be addressed through a separate task order.
- One review of the draft Strategic Permitting Plan will be conducted. The Strategic Permitting Plan will be revised based on one consolidated set of review comments. Consultant intends for the Strategic Permitting Plan to be a "living document", updated and adapted as the project planning and subsequent design and permitting efforts progress.
- No Owner board meeting presentations

Deliverables:

- Draft Strategic Permitting Plan
- Final Strategic Permitting Plan

Task 101.4 – Environmental Assessment

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

The Owner has applied for funding from the U.S. Department of Housing and Urban Development (HUD), which creates a federal nexus for the Project. Therefore, NEPA compliance will be required

before funds can be committed or spent on the Project. HUD will be the lead federal agency. The lower basin Project will be divided into two sub-projects (phases), each requiring a separate HUD Environmental Assessment (EA). The first phase will involve a HUD EA for the water pollution control facility (WPCF) in Mill City and its associated connections. The second phase will involve a HUD EA for a new collection system in Gates, as well as a 3-mile pressurized force main to transfer waste to the Mill City WPCF. Though both EAs will be started concurrently, Phase 1 will be completed first; the Phase 2 EA will be completed as project details are finalized for that phase.

Consultant Responsibilities:

101.4.1 Phase 1 Mill City WPCF - Environmental Assessment and HUD Environmental Record Review.

101.4.1.1 A complete and informed Environmental Review Record (ERR) will be prepared by Consultant. The following sixteen (16) specific environmental review topics shall be addressed in the HUD EA. The HUD-compliant Broad Review will be based on the following data sources:

RESOURCE	ERR COMPLIANCE REQUIREMENT	TYPICAL DATA SOURCES
Floodplain Management	§58.6 Compliance Checklist §58.5 Statutory Checklist	FEMA Flood Insurance Rate Map Federal Flood Standard Support Tool
Coastal Barrier Improvement Act	§58.6 Compliance Checklist	USFWS Coastal Barrier Resource System Mapper
Runway Clear Zones	§58.6 Compliance Checklist §58.5 Statutory Checklist	Federal Aviation Administration UAS Facility Map USGS Topographic Maps Recent Aerial Imagery Internet Searches
Historic Properties	§58.5 Statutory Checklist	Oregon State Historic Preservation Office
Wetland Protection	§58.5 Statutory Checklist	National Wetlands Inventory Florida Land Use, Cover and Forms Classification System (FLUCCS)
Coastal Zone Management	§58.5 Statutory Checklist	Oregon Department of Land Conservation and Development
Sole Source Aquifer	§58.5 Statutory Checklist	Oregon Water Resources Department
Endangered Species	§58.5 Statutory Checklist	USFWS IPaC: Information for Planning and Consultation Oregon Biodiversity Information Center (ORBIC)
Wild and Scenic Rivers	§58.5 Statutory Checklist	National Wild and Scenic Rivers System
Air Quality	§58.5 Statutory Checklist	Oregon Department of Environmental Quality

Explosive and Flammable Operations and Contamination and Toxic Substances	§58.5 Statutory Checklist	EPA EnviroMapper Oregon State Fire Marshal
Farmland Protection and Land Development	§58.5 Statutory Checklist EA Checklist	National Land Cover Database (NLCD) County/Municipal Websites NRCS Web Soil Survey
Socioeconomics and Environmental Justice	EA Checklist	U.S. Census Data EPA EJSCREEN: Environmental Justice Screening and Mapping Tool County/Municipal Websites
Community Facilities and Noise Control and Abatement	§58.5 Statutory Checklist EA Checklist	USGS Topographic Maps Recent Aerial Imagery Internet Searches
Natural Features	EA Checklist	National Hydrography Dataset National Wetlands Inventory Aerial Imagery
Climate Change Impact Factor	EA Checklist	NOAA Climate.gov Climate Mapping for Resilience and Adaptation Tool

101.4.1.2 Kickoff Meeting.

- Kickoff meeting with Project Team to draft project schedule considering parallel permitting timelines.

101.4.1.3 Project Description.

- Draft project description of sufficient detail to be used in the EA, identify project description information needs.
- Review information from wetland and cultural resources surveys and from typical sources identified in Section 101.4.1.1 to identify information needs related to resources.

101.4.1.4 Agency and Interested Party Scoping.

- Identify permitting agencies, Native American Tribes, and interested stakeholders.
- Draft scoping letters or emails to permitting agencies, Native American Tribes and interested stakeholders to initiate discussion and solicit feedback on the Project. Owner to send the letters or emails.

101.4.1.5 Draft the Initial Public Notice for floodplains (15-to-18-day Public Notice Period).

101.4.1.6 Prepare a draft EA for Owner's review including the resource sections outlined in Section 101.4.1.1.

101.4.1.7 Public Notices.

- Identify and notify Owner of public notice requirements and develop the public notices for the project including 1) Wetlands and Floodplains (Final), and 2) the FONSI and NOI/Request for the Release of Funds (RROF).
- If comments are received, Consultant will make ERR available for public review at a local, public space (typically local library or City Hall).

101.4.1.8 Public Comment Record and Response.

- Review public comments received by the Owner or HUD.
- Prepare responses to public comments for Owner's review.

101.4.1.9 Final EA and FONSI.

- Document revisions and responses to Owner's comments on the draft EA.
- Prepare the Final EA.
- Prepare the draft FONSI for Owner's review.
- Address Owner's comments and finalize FONSI.

101.4.1.10 Notice of Intent (NOI) to Request for the Release of Funds (RROF).

- Prepare draft NOI/RROF for Owner and HUD's review.
- Address Owner and HUD's comments and finalize NOI/RROF.

101.4.1.11 ERR and RROF.

- Prepare completed ERR and Request for the Release of Funds (RROF). The ERR shall contain the following sections:
  - Introduction (background, history, and project purpose and need)
  - HUD Checklists
  - Project Alternatives (including those dismissed from consideration and those retained for analysis)
  - 8-Step Decision Making Process for wetlands and floodplain review
  - Affected Environment and Environmental Consequences
  - Agencies Consulted
  - References
  - List of Preparers
  - Public Notices
  - Attachments with maps for each reviewed environmental topic.

101.4.1.12 Administrative Record.

- Develop and maintain the Administrative Record.

- Provide all materials used to prepare the EA and background for the agency decision.

Deliverables:

- Draft project schedule
- Meeting notes attended by Consultant
- List of data needs for the EA
- Draft project description
- List of interested parties
- Draft scoping letters
- Draft EA and FONSI
- Final EA and FONSI
- Draft NOI and RROF
- Public Notices
- Public Comment Record
- Response to public comments
- Completed ERR and RROF for grant funding
- Final Administrative Record

Assumptions:

- The project descriptions are not final and may be adjusted as the project footprints are finalized by the Project Team.
- This scope of work does not include Section 404 Clean Water Act (wetland) or floodplain permitting. Once the project footprints and descriptions are finalized for the environmental assessments, the need for these permits will be determined and additional scope and fee added.
- An environmental assessment will be required for the Environmental Review Record (ERR) for the Project.
- Public notices consist of 15 to 18-day final wetland and floodplain notices as part of the decision-making process and Executive Orders 11988 and 11990, for the determination that a Finding of No Significant Impact (FONSI) has been made for the program, and for notification to the public of the Owner's intent to request the release of HUD funds for the proposed projects (NOI/RROF). HUD will determine if the final public wetland and floodplain, FONSI, and NOI/RROF notices can be combined and issued together as a single notice.
- No public meetings are included under this subtask.
- No more than ten (10) submittals will be received in response to the public notice, from which there will be no more than five (5) substantive comments for which Consultant will draft responses.
- One action alternative will be analyzed in detail in the EA.
- Project Team will contribute to drafting the project description and provide necessary information pertaining to construction methods, timing, and duration. Consultant will refine project description for use in the EA.
- The final ERR and RROF will be submitted by the Owner to HUD for final approval and issuance of the Authority to Use Grant Funds.

- No in-water work will be required, thus no aquatic Endangered Species Act (ESA) or Magnuson-Stevens Fisheries Conservation Act consultation will be needed.
- Terrestrial informal ESA consultation will be needed for two (2) species: northwestern pond turtle and Fenders blue butterfly.

101.4.2 Phase 1 Mill City WPCF – Endangered Species Act Consultation and Biological Evaluation.

101.4.2.1 Consultant will complete a draft and final Biological Evaluation for informal Section 7 consultation with U.S. Fish and Wildlife Service (USFWS).

Assumptions:

- Informal consultation will be required for two (2) species: northwestern pond turtle and Fenders blue butterfly.
- USFWS has 90 days to reply to the submitted Biological Evaluation. HUD will require concurrence from USFWS prior to issuing an Authority to Use Grant Funds.

Deliverables:

- Pre-consultation call notes with USFWS
- Draft Biological Evaluation
- Final Administrative Record

101.4.3 Phase 2 Force Main and Gates Collection System – Environmental Assessment and HUD Environmental Record Review

101.4.3.1 A complete and informed ERR will be prepared by Consultant. The following sixteen (16) specific environmental review topics shall be addressed in the HUD EA. The HUD-compliant Broad Review will be based on the following data sources:

No.	RESOURCE	ERR COMPLIANCE REQUIREMENT	TYPICAL DATA SOURCES
1	Floodplain Management	§58.6 Compliance Checklist §58.5 Statutory Checklist	FEMA Flood Insurance Rate Map Federal Flood Standard Support Tool
2	Coastal Barrier Improvement Act	§58.6 Compliance Checklist	USFWS Coastal Barrier Resource System Mapper
3	Runway Clear Zones	§58.6 Compliance Checklist §58.5 Statutory Checklist	Federal Aviation Administration UAS Facility Map USGS Topographic Maps Recent Aerial Imagery Internet Searches

4	Historic Properties	§58.5 Statutory Checklist	Oregon State Historic Preservation Office
5	Wetland Protection	§58.5 Statutory Checklist	National Wetlands Inventory Florida Land Use, Cover and Forms Classification System (FLUCCS)
6	Coastal Zone Management	§58.5 Statutory Checklist	Oregon Department of Land Conservation and Development
7	Sole Source Aquifer	§58.5 Statutory Checklist	Oregon Water Resources Department
8	Endangered Species	§58.5 Statutory Checklist	USFWS IPaC: Information for Planning and Consultation Oregon Biodiversity Information Center (ORBIC)
9	Wild and Scenic Rivers	§58.5 Statutory Checklist	National Wild and Scenic Rivers System
10	Air Quality	§58.5 Statutory Checklist	Oregon Department of Environmental Quality
11	Explosive and Flammable Operations and Contamination and Toxic Substances	§58.5 Statutory Checklist	EPA EnviroMapper Oregon State Fire Marshal
12	Farmland Protection and Land Development	§58.5 Statutory Checklist EA Checklist	National Land Cover Database (NLCD) County/Municipal Websites NRCS Web Soil Survey
13	Socioeconomics and Environmental Justice	EA Checklist	U.S. Census Data EPA EJSCREEN: Environmental Justice Screening and Mapping Tool County/Municipal Websites
14	Community Facilities and Noise Control and Abatement	§58.5 Statutory Checklist EA Checklist	USGS Topographic Maps Recent Aerial Imagery Internet Searches
15	Natural Features	EA Checklist	National Hydrography Dataset National Wetlands Inventory Aerial Imagery
16	Climate Change Impact Factor	EA Checklist	NOAA Climate.gov Climate Mapping for Resilience and Adaptation Tool

101.4.3.2 Kickoff Meeting.

- Kickoff meeting with Project Team to draft project schedule considering parallel permitting timelines.

101.4.3.3 Project Description.

- Draft project description of sufficient detail to be used in the EA, identify project description information needs.
- Review information from wetland and cultural resources surveys and from typical sources identified in Section 101.4.3.1 to identify information needs related to resources.

101.4.3.4 Agency and Interested Party Scoping.

- Identify permitting agencies, Native American Tribes, and interested stakeholders.
- Draft scoping letters or emails to permitting agencies, Native American Tribes and interested stakeholders to initiate discussion and solicit feedback on the project. Owner to send the letters or emails.

101.4.3.5 Draft the Initial Public Notice for floodplains (15-to-18-day Public Notice Period).

101.4.3.6 Prepare a draft EA for Owner's review including the resource sections outlined in Section 101.4.1.1.

101.4.3.7 Public Notices.

- Identify and notify Owner of public notice requirements and develop the public notices for the project including 1) Wetlands and Floodplains (Final), and 2) the FONSI and NOI/Request for the Release of Funds (RROF).
- If comments are received, Consultant will make ERR available for public review at a local, public space (typically local library or City Hall).

101.4.3.8 Public Comment Record and Response.

- Review public comments received by the Owner or HUD.
- Prepare responses to public comments for Owner's review.

101.4.3.9 Final EA and FONSI.

- Document revisions and responses to Owner's comments on the draft EA.
- Prepare the Final EA.
- Prepare the draft FONSI for Owner's review.
- Address Owner's comments and finalize FONSI.

101.4.3.10 Notice of Intent (NOI) to Request for the Release of Funds (RROF).

- Prepare draft NOI/RROF for Owner and HUD's review.

101.4.3.11 ERR and RROF.

- Prepare completed ERR and Request for the Release of Funds (RROF). The ERR shall contain the following sections:
  - Introduction (background, history, and project purpose and need).
  - HUD Checklists.
  - Project Alternatives (including those dismissed from consideration and those retained for analysis).
  - 8-Step Decision Making Process for wetlands and floodplain review.
  - Affected Environment and Environmental Consequences.
  - Agencies Consulted.
  - References.
  - List of Preparers.
  - Public Notices.
  - Attachments with maps for each reviewed environmental topic.

101.4.3.12 Administrative Record.

- Develop and maintain the Administrative Record.
- Provide all materials used to prepare the EA and background for the agency decision.

Deliverables:

- Draft project schedule
- Meeting notes attended by Consultant
- List of data needs for the EA
- Draft project description
- List of interested parties
- Draft scoping letters
- Draft EA and FONSI
- Final EA and FONSI
- Draft NOI and RROF
- Public Notices
- Public Comment Record
- Response to public comments
- Completed ERR and RROF for grant funding
- Final Administrative Record

Assumptions:

- The project descriptions are not final and may be adjusted as the project footprints are finalized.
- This scope of work does not include Section 404 Clean Water Act (wetland) or floodplain permitting. Once the project footprints and descriptions are finalized for the environmental assessments, the need for these permits will be determined and additional scope and fee added.

- An environmental assessment will be required for the Environmental Review Record (ERR) for this project.
- Public notices consist of 15 to 18-day final wetland and floodplain notices as part of the decision-making process and Executive Orders 11988 and 11990, for the determination that a FONSI has been made for the program, and for notification to the public of the Owner's intent to request the release of HUD funds for the proposed projects (NOI/RROF). HUD will determine if the final public wetland and floodplain, FONSI, and NOI/RROF notices can be combined and issued together as a single notice.
- No public meetings are included under this subtask.
- No more than ten (10) submittals will be received in response to the public notice. From this there will be no more than five (5) substantive comments for which Consultant will draft responses.
- One action alternative will be analyzed in detail in the EA.
- Project Team will contribute to drafting the project description and provide necessary information pertaining to construction methods, timing, and duration. Consultant will refine project description for use in the EA.
- The final ERR and RROF will be submitted by the Owner to HUD for final approval and issuance of the Authority to Use Grant Funds.
- No in-water work will be required, thus no aquatic Endangered Species Act (ESA) or Magnuson-Stevens Fisheries Conservation Act consultation will be needed.
- Terrestrial informal ESA consultation will be needed for two (2) species: northwestern pond turtle and Fenders blue butterfly.
- There will be no new issues for the Phase 2 EA. Background and effects analysis from Phase 1 EA can be used as a basis for the Phase 2 Biological Evaluation.
- Acres of impacts and site-specific information will be revised and updated once Project Description is finalized for the Phase 2 EA.

101.4.4 Phase 2 Force Main and Gates Collection System – Endangered Species Act Consultation and Biological Evaluation.

101.4.4.1 Consultant will complete a draft and final Biological Evaluation for informal Section 7 consultation with U.S. Fish and Wildlife Service (USFWS).

Assumptions:

- Informal consultation will be required for two (2) species: northwestern pond turtle and Fenders blue butterfly.
- There will be no new issues for the Phase 2 EA. Background and effects analysis from Phase 1 EA can be used as a basis for the Phase 2 Biological Evaluation.
- Acres of impacts and site-specific information will be revised and updated once Project Description is finalized for the Phase 2 EA.
- USFWS has 90 days to reply to the submitted Biological Evaluation. HUD will require concurrence from USFWS prior to issuing an Authority to Use Grant Funds.

Deliverables:

- Pre-consultation call notes with USFWS
- Draft Biological Evaluation
- Final Administrative Record

Task 101.5 – Environmental Project Coordination and Oversight
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

101.5.1 Environmental Project Coordination and Oversight. Participation in Project team's bi-weekly meetings, project check-in calls, and subsequent discussions and tasks over a period of nine (9) months. Consultant will offer environmental oversight and guidance as the project advances.

Assumptions:

- Environmental project coordination and oversight duration is nine (9) months.
- Bi-weekly check-in meetings will be one (1)-hour long and attended by two (2) Consultant staff members.

Deliverables:

- Biweekly meeting agenda items and notes on environmental tasks.
- Ongoing environmental project permit schedule.

102 – SUBSURFACE EXPLORATION

Task 102.1 – Project Management and Administration
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

102.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

102.1.2. Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 102.2 – Subsurface Investigation Program

The purpose of subsurface investigation is to collect soil and groundwater data that can be used to: (1) assess whether a candidate site can infiltrate the required volume of treated wastewater, (2) inform facility predesign, (3) evaluate facility permitting framework (WPCF required), and (4) evaluate compliance with DEQ's groundwater protection rules. The subsurface investigation program involves excavating test pits to measure soil infiltration rates and observe soil types, installing monitoring wells to measure aquifer properties, collecting soil and groundwater samples, and one year of groundwater and surface water level monitoring. This task includes management, planning and execution of the subsurface investigation program comprised of two subtasks:

- Subtask 102.2.1 – Mill City / Gates Subsurface Investigation
- Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation
- Subtask 102.2.3 – Detroit / Idanha Well Decommissioning

Owner Responsibilities:

- This scope of work does not include effort to identify domestic water wells in the vicinity of the proposed infiltration facility (which would likely involve a door-to-door survey and review of households that are connected to City water). Owner is responsible for this effort, if it is needed, and for incorporating the information obtained into the final report.

Assumptions:

- Subsurface investigations will occur on private or public property that is not owned by Owner. Owner and Consultant will work collaboratively to gain access to these sites for the purpose of performing site evaluation work. In general, Owner is responsible for the execution of site access agreements with property owners and Consultant is responsible for coordination with property owners regarding schedule for accessing the property, discussing access routes, and reporting results to the property owner.
- Test pitting and infiltration testing will be limited to four days in the Detroit/Idanha area (up to 10 test pits) and five days in the Gates/Mill City area (up to 18 test pits).
- Monitoring wells and temporary borings will target discrete horizons in the glacial till geologic unit that are related to the depth to groundwater and the contact between glacial till and bedrock. Because there is limited information about the geology and depth to groundwater at the candidate sites, the costs for drilling are based on assumptions about the depths of monitoring wells and temporary borings. Where field conditions differ from those assumed and where such differences result in increased field costs that exceed the established budget for this task, an equitable adjustment to the contract value will be made by contract amendment.
- In the Gates/Mill City area, it is assumed that monitoring wells will be 100 feet deep, one temporary boring will be advanced to the top of the water table at 80 feet below ground surface (bgs), and another temporary boring will be advanced to the top of bedrock at 200 feet bgs.
- In the Detroit/Idanha area, we have assumed that monitoring wells will be 80 feet deep (2 wells) or 200 feet deep (3 wells), and two temporary borings will be advanced to the top of bedrock at 100 feet bgs.
- Drilling costs could change if: (1) driller costs change (quotes are typically only good for 30 days due to "instability of commodity costs") or (2) the assumed construction of wells and borings changes based on the geology of the site. It is assumed that casing advance is not necessary to keep the bedrock hole open during drilling of the monitoring well in the Detroit/Idanha area. An amendment may be necessary if casing must be advanced to keep the hole open at this well and if such costs exceed the agreed upon task budget.
- Subsurface exploration work, including digging of test pits, geotechnical drilling, and installation of subsurface monitoring equipment, is not subject to Davis-Bacon or BOLI prevailing wages.

Subtask 102.2.1 – Mill City / Gates Subsurface Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface investigation in the Gates/Mill City area includes the following activities:

102.2.1.1. Work Plan. Develop a work plan for the subsurface investigation that includes a specific plan for excavating and infiltration testing at up to 18 test pits (at Site 1 through Site 4) and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to eighteen (18) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for deep soil investigation.

102.2.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop three (3) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.1.4. Groundwater Level Monitoring. Equip each well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells quarterly for a year.

102.2.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.1.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum.

Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface characterization in the Detroit/Idanha area includes the following activities:

102.2.2.1. Work Plan. Develop a work plan for the subsurface characterization that includes a specific plan for excavating and infiltration testing at up to 10 test pits (at the McCoy and Detroit Ranger Station sites), and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.2.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to ten (10) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for the deep soil investigation.

102.2.2.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop five (5) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.2.4. Surface Water and Groundwater Level Monitoring at the McCoy Site. Install three (3) stilling wells (in the Santiam River, Unnamed Creek, and McCoy Creek); equip each stilling and monitoring well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells and stilling wells quarterly for a year.

102.2.2.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.2.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum

Subtask 102.2.3 - Detroit/Idanha Well Decommissioning
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Detroit/Idanha well decommissioning includes the following activities: Decommissioning of three 2-inch PVC monitoring wells (MC-MW1, MC-MW2, and MC-MW3) and three stilling wells (SW-1, SW-2, and SW-3) in Idanha, Oregon. Each of the three monitoring wells will be decommissioned by overdrilling to fully remove all structures including the above ground monument, and the stilling wells will be removed along with any associated equipment.

102.2.3.1. Work Plan and Pre-Field Work. Develop a work plan for monitoring well decommissioning that outlines the methods for the decommissioning of the three monitoring wells and removal of the stilling wells.

- Update an existing Health and Safety Plan (HASP) to cover the field work.
- Coordinate with subcontractor to schedule the field work.
- Provide email updates to the Project Team on the status of the project.

Deliverables:

- Well decommissioning work plan

102.2.3.2. Field Activities. Decommission three monitoring wells by overdrilling and removing three stilling wells.

- Develop a subcontract with a driller to conduct the work.
- Download pressure transducer data from monitoring wells and stilling wells, remove all equipment, and remove the three stilling wells.
- Oversee the overdrilling of three 2-inch PVC monitoring wells using sonic drilling methods, including the removal of monuments and bollards, borehole backfilling in accordance with the Oregon Administrative Rules, and site clean-up.

Assumptions:

- PVC casing, PVC screen, steel bollards, and steel monuments will be hauled offsite. Drill cuttings will be spread on-site near the MC-MW3 well.
- Oversight of 2-inch PVC monitoring well decommissioning and site clean-up will occur over one week.
- Field personnel will visit the six sites prior to contractor mobilization to download and collect all pressure transducers and remove all stilling wells.
- Access to the subject property and negotiations with the property owner and/or tenants will be arranged by Consultant.
- All field work can be conducted during normal business hours.
- Unimpeded access to the work locations will be available, including no conflicts with overhead power or underground utilities.
- Field work will be scheduled to avoid significant weather events where possible. However, if weather impacts projected mobilization costs or the overall project schedule, this may result in additional fees. Consultant will communicate potential unanticipated weather delays to Owner and Project Team.
- Ground-disturbing activities will not impact protected natural and cultural resources such as wetlands and waterways, critical habitat, archeological sites, and historic properties and structures based on previously provided information from the U.S. Forest Service.

102.2.3.3. Technical Memorandum. Prepare a Technical Memorandum documenting activities conducted as a part of this scope of work:

- Data collected from pressure transducers will be plotted on hydrographs.
- A summary of field activities and well decommissioning logs will be included.

Deliverables:

- Draft technical memorandum for review by the Project Team.
- Final technical memorandum that incorporates Project Team comments.

Assumptions:

- Deliverable comments can be incorporated over a single review cycle.
- The Department of Environmental Quality will not provide comments on the technical memorandum.
- Deliverables will require only one review cycle.

Subtask 102.2.4 – Detroit/Idanha Well Decommissioning Fees and Direct Expenses

Consultant's Responsibilities:

- This task includes the following fees and direct expenses associated with Task 102.2.3 – Detroit/Idanha Well Decommissioning, including:
  - Driller
  - Travel expenses

Task 102.3 – Groundwater Modeling Evaluation

The purpose of this task is to provide field data and modeling evaluations for submittal to the Oregon Department of Environmental Quality (DEQ) to support a Water Pollution Control Facility (WPCF) permit determination in compliance with DEQ's groundwater protection rules.

Task 102.3 is comprised of two subtasks:

- Subtask 102.3.1 – Gates/Mill City Permitting Evaluation
- Subtask 102.3.2 – Detroit/Idanha Permitting Evaluation

Assumptions:

- It is assumed that the planned location for the infiltration facility in the Gates/Mill City area is further from the Santiam River than the planned location for the infiltration facility in the Detroit/Idanha area (less than 0.25 miles). Therefore, we anticipate that the evaluation to support a permitting determination for the Detroit/Idanha area will be more rigorous.

Subtask 102.3.1 – Mill City / Gates Permitting Evaluation
Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant shall perform the following activities for the infiltration facility in the Gates/Mill City area:

102.3.1.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the selected Gates/Mill City infiltration site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.1.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.1.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.1.4. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the Project Team for review and will finalize the memo based on comments from the Project Team, then submit to DEQ for review.

102.3.1.5. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review

permitting recommendation and demonstration of compliance with the groundwater protection rules, and (3) to discuss DEQ's comments on the memo.

Assumptions:

- Comments from the Project Team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates Project Team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation
Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant shall perform the following activities for the infiltration facility in the Detroit/Idanha area:

102.3.2.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the McCoy site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.2.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.2.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.2.4. Perform a modeling simulation to estimate the maximum recharge volume in the Detroit/Idanha area (additional evaluation of maximum recharge volume is needed in the Detroit/Idanha area due to the anisotropy; a model simulation would be more cost effective than hiring a driller to conduct a pumping test).

102.3.2.5. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels.

Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the Project Team for review and will finalize the memo based on comments from the Project Team, then submit to DEQ for review.

102.3.2.6. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater.

Assumptions:

- Comments from the Project Team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates Project Team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)

Consultant Responsibilities:

102.4.1. Address permitting and other regulatory requirements related to the National Environmental Policy Act (NEPA), which will involve obtaining an agreement to access the properties, excavate test pits, and install monitoring wells. Assumes a level of effort with up to 48 hours.

102.4.2. Coordinate with property owner of "upper deck" private property to obtain permission to install two monitoring wells. Assumes a level of effort with up to 48 hours.

Owner Responsibilities:

- Review and approve permitting applications/letters requesting permission to access the McCoy site, excavate test pits, and install monitoring wells.
- Owner is responsible for costs associated with property owner conditions related to site access and site access agreements.

Task 102.5 – Infiltration Basin Pilot Test

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant will conduct a pilot test (minimum of fourteen (14) days to maximum of twenty-eight (28) days) for proposed infiltration basins at Site GM1 in Mill City, Oregon to further confirm long-term capability of the proposed infiltration basins and support the permitting process.

Assumptions:

- The number of meetings and site visits anticipated are specified in the scope tasks detailed below. If these meetings and technical consultations result in work scope modifications, such modifications are not included or budgeted within this scope.
- Access to the subject property and negotiations with the property owner and/or tenants will be arranged by the Consultant, and all field work can be conducted during normal business hours.
- Unimpeded access to the work locations will be available, including no conflicts with overhead power or underground utilities.
- Consultant assumes field activities can be accomplished within the number of days specified in the scope tasks detailed below. This includes mobilization and field work. Consultant will attempt to schedule field work to avoid significant weather events where possible. However, if weather impacts projected mobilization costs or the overall project schedule, this may result in additional fees. Owner will be kept informed if there are unanticipated weather delays.
- Owner will provide information which they have available regarding the presence of underground utilities within the study area. A public utility locate notification will be conducted, and Consultant will contract a private utility locator in an effort to identify and avoid subsurface utilities at the proposed work locations. Drilling/sampling locations will be considered and modified based on the results of these efforts as described in the work plan. The use of these methods does not guarantee that unidentified conduits/structures will not be encountered during drilling and excavation, but greatly minimizes the risk of doing so. Consultant will not be responsible for damage to subsurface utilities not identified prior to initiating work.
- Ground-disturbing activities will not impact protected natural and cultural resources such as wetlands and waterways, critical habitat, archeological sites, and historic properties and structures. It is the responsibility of Consultant to obtain all required local, state, and federal environmental permits and clearances, including but not limited to the National Environmental Policy Act, Section 404 of the Federal Clean Water Act, Section 401 Water Quality Certification, National Pollutant Discharge Elimination System Permits, Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, Oregon Fish Passage law, Oregon Removal-Fill law, and Oregon Native American Graves and Protected Objects law.
- No unreasonably difficult subsurface conditions will be encountered requiring the use of alternative drilling/excavation equipment than specified above.
- All fieldwork can be performed using standard personal protective equipment and procedures (Level D).
- Other than drilling start card documentation, no other permits are specified or included. If necessary, other permits would be obtained at an additional time and materials basis.
- Consultant has assumed that deliverables will require only one review cycle and the scope of work detailed below will be utilized for the development of the workplan. If significant changes are made to the scope, this may impact costs associated with Task 102.5.1. Following issuance of the final report, if information is subsequently provided to Consultant that warrants report revisions or amendments, the additional work will be charged on a time and materials basis.
- Consultant's work product is intended for use by Owner and is not intended for reliance by third parties unless otherwise specified in this scope of work. If requested by the Owner, a reliance letter will be reviewed and considered by Consultant. Completion of a reliance letter may be subject to an additional fee.

Consultant Responsibilities:

102.5.1. Meetings, Work Plan, Pre-Field Work Preparation. Consultant will develop a work plan for the pilot test that outlines the methods for excavating up to three test pits within the planned footprints of Basin J1 and Basin J2, constructing monitoring well GM1-MW-4, excavating a 50-foot by 50-foot infiltration basin, and conducting the pilot test. A draft Work Plan will be provided to the Project Team for review, and a second draft Work Plan

will be submitted to the Oregon Department of Environmental Quality (DEQ) for review. The final Work Plan will incorporate the Project Team and DEQ comments.

In addition, Consultant will prepare for the pilot test by developing health and safety plans to cover the field work; field-locating the test pits, monitoring well, and test basin at the site; and overseeing a utility locating contractor to clear excavation locations of subsurface utilities. Consultant will coordinate location, design, and schedule of field work and work with the City to obtain water for the infiltration pilot test. Consultant will review and compile data from previous field investigations at the site and refine the work program as needed. This task also includes periodic email updates to the Project Team on the status of the project and meetings between Owner, Consultant, and Subconsultants to discuss pilot test results.

Assumptions:

- Work Plan comments can be incorporated over a single review cycle.
- Five (5) one-hour, virtual meetings will occur during the course of the project to coordinate between Consultant and Subconsultants Project Team. One (1) virtual meeting to discuss pilot test results will occur with the entire Project Team.
- Two field visits will occur to oversee the utility contractor and mark excavation and boring locations.

Deliverables:

- Draft Work Plan for review by the Project Team.
- Draft Work Plan for review by DEQ.
- Final Work Plan that incorporates Project Team and DEQ comments.

102.5.2. Monitoring Well Drilling and Construction Oversight. An additional monitoring well is required as a part of the pilot test to monitor groundwater mounding adjacent to the pilot test basin. Consultant will develop contract with driller to conduct work and oversee construction of a monitoring well using sonic drilling methods (monitoring well GM1-MW4) adjacent to the test basin and will equip the monitoring well with a down-hole pressure transducer and datalogger to record groundwater levels before, during, and after the pilot test. Soils will be logged in general accordance with the Unified Soil Classification System (USCS). Consultant shall oversee development activities, conduct synoptic water level monitoring, and download pressure transducer data from monitoring wells at Site GM1. Consultant shall also verify that well materials meet Oregon Administrative Rule requirements for drilling monitoring wells. After well completion, Consultant will oversee survey of the latitude, longitude, and elevation of the monitoring well.

Assumptions:

- The monitoring well will be constructed of 2-inch schedule 40 PVC, will be 50-feet deep, and will be completed with an above-ground monument with three protective bollards.
- Soil core from the monitoring well boring can be spread on the ground.
- The scope of work does not include monitoring well decommissioning as it may be utilized for long-term monitoring purposes.

- Monitoring well drilling oversight, well construction, and development will occur over three (3) days and will include one (1) site mobilization.

102.5.3. Test Pit Excavation and Infiltration Testing. As the site layout design for GM1 has progressed, infiltration basins J1 and J2 have been preliminarily located at the site in an area where no infiltration testing has occurred. Subsurface exploration is important in this area due to the presence of a former log pond to the east, the extent of which has been identified from aerial photos but has not been confirmed with subsurface exploration. Consultant will coordinate with the CM/GC who will oversee the excavation of three (3) test pits up to fifteen (15) feet below ground surface (bgs) or a depth sufficient to observe unsaturated zone soils in the opinion of the on-site hydrogeologist in the area of proposed basins J1 and J2. Consultant will coordinate with CM/GC to conduct infiltration tests at each pit and oversee placement/installation of an oversized (4-foot diameter x 3-foot) steel cylinder in each test pit by CM/GC for use in infiltration test. Consultant shall log soils from the test pits in general accordance with the USCS, collect soil moisture measurements to estimate the extent of the wetting front, and assess infiltration tests to determine whether additional excavations are recommended at the site. Consultant shall communicate status and results to the Project Team on an on-going basis and oversee backfilling of the test pits.

Assumptions:

- Test pit excavation and geologic logging and infiltration testing will be completed in three (3) days.
- CM/GC will complete the excavation of the test pits.
- CM/GC will provide oversized (4-foot diameter x 3-foot) steel cylinder and coordinate placement/installation in each test pit with Consultant.
- CM/GC will provide a 500-gallon (minimum) water tank, filled with 2-inch diameter hose and flow meter to convey water into the test pit.
-
- Costs for water, permitting, and other City requirements for fire hydrant use to fill the water tank will be the responsibility of the CM/GC.

102.5.4. Test Infiltration Basin Construction. Consultant will coordinate with the CM/GC who will excavate a 50-foot by 50-foot infiltration basin to a depth of one (1)-foot bgs. Consultant will coordinate with the CM/GC who will oversee the placement of an energy diffusion system (rip-rap) at the location where water discharges to the basin to minimize turbidity during the test. and install a temporary shallow piezometer in the center of the basin in an attempt to monitor groundwater mounding directly below the basin during the pilot test.

Consultant will install a temporary stilling well and staff gauge in the basin and equip the stilling well with a pressure transducer and datalogger to monitor the surface water level during the pilot infiltration test. The water level monitoring system will be equipped with remote communication capabilities to detect potential overflow conditions during the test. Consultant will oversee survey of the latitude, longitude, and elevation of the stilling well to facilitate comparison between water levels in the infiltration basin and monitoring well during the pilot infiltration test.

Consultant will download data from transducers immediately before the start of the test and review data and conduct shakedown testing of the remote monitoring system before the start of the test.

Assumptions:

- The infiltration basin will be excavated in three (3) days.
- The anticipated location of the infiltration basin will not require relocation due to utilities or obstructions.
- Excavation of the infiltration basin shall be completed by the CM/GC through an early work amendment (EWA).

102.5.5. 28-Day Infiltration Basin Pilot Test. The infiltration pilot test is planned to consist of discharging potable water from the nearest Mill City fire hydrant into the test basin for a minimum of fourteen (14) days and a maximum of twenty-eight (28) days, as required, at a rate of about 100 gallons per minute (gpm). Consultant will oversee installation of totalizing flow meters, shut off valves, hose ramps, and hosing by CM/GC to convey water from the fire hydrant to the rip-rap area at the infiltration basin. Consultant will measure flow with totalizing flow meters at the hydrant and at the entrance to the basin and measure groundwater levels and surface water levels using pressure transducers and hourly to daily manual measurements (depending on the phase of the test).

Prior to the test, Consultant will measure baseline groundwater elevations and reprogram the pressure transducers in monitoring wells GM1-MW1, GM1-MW2, GM1-MW3, and GM1-MW4 to record aquifer response during the pilot infiltration test.

Consultant will oversee the first twelve (12) hours of the test to observe water level trends and refine the flow rate. For the remainder of the first week, Consultant will conduct a daily field visit to measure the water level in the pilot infiltration basin, the temporary piezometer, and at groundwater monitoring wells GM1-MW1, GM1-MW2, GM1-MW3, and GM1-MW4. Transducer data will be downloaded and reviewed.

For each additional week of testing, Consultant will visit the infiltration basin site three (3) times per week and measure groundwater elevations in monitoring wells GM1-MW-1, GM1-MW2, GM1-MW3, and GM1-MW4, and download and review transducer data. Consultant will recommend duration of test that will allow understanding of the mounding that will occur. Based on mounding simulations, extending the test past fourteen (14) days (Week 2) may be necessary if aquifer permeability is lower than expected. Extending the test will incur additional fees for water use from the City of Mill City, and regular check-ins to manually measure water levels. Consultant estimates that the maximum time the test will need to run is 28 days.

Consultant will check transducer condition (battery and memory) during each site visit and maintain transducers as needed. Consultant will evaluate data and assessment of aquifer response based on the data that are collected on a daily basis.

At the conclusion of the test, Consultant will allow transducers to continue running for two weeks to monitor, assess data, and evaluate recession of the groundwater mound.

Consultant will visit the site two weeks after conclusion of the test and conduct a transducer download. Consultant will support the CM/GC who will oversee backfilling of the infiltration basin with the excavated soils, and the temporary piezometer and stilling well will be removed.

Assumptions:

- Mill City water costs will be included in the CM/GC EWA scope of work and will not exceed $17,085 during Weeks 1 and 2 (Days 1 to 14) of the test and will not exceed $8,500 per week for Weeks 3 and 4 (Days 15 to 28).
- Consultant will conduct site visits three (3) times per week during Weeks 3 and 4 for a total of six (6) visits.
- Consultant will be responsible for obtaining permits required for Infiltration Basin Pilot Testing. Applicable permit fees will be paid by Owner.
- CM/GC will be responsible for coordination with the City, permits, backflow prevention, meters, and other City requirements for using the fire hydrant.
- There will be no constraints on getting meters or approvals for the potable water from the City of Mill City.
- CM/GC will be responsible for turning water on at fire hydrant and monitoring its flow for the duration of the infiltration basin pilot test.

102.5.6. Analysis and Reporting. Consultant will use data collected during the pilot test to calibrate the MOUNDSOLV model to the observed mounding. Specifically, model input parameters will be adjusted to achieve a better match between predicted and observed mounding during infiltration. After the MOUNDSOLV model has been calibrated to the pilot test, the calibrated model will be run under conditions representing the planned infiltration basins design and 2045 effluent generation rate.

Consultant will evaluate implications of the testing results on the recently-issued DEQ guidance for implementation of the U.S. Supreme Court's Maui Decision.
The pilot test methods, results, and MOUNDSOLV simulations will be documented in a technical memorandum. The technical memorandum will include plots of water level versus time in the monitoring wells and stilling well, a detailed narrative of the testing procedure, a figure showing well and infiltration basin locations, comparison of the results to previous work at the site, professionally-drafted boring logs summarizing the soil types that were encountered during test pit and monitoring well drilling, and a groundwater elevation contour map at various times during the infiltration test showing horizontal hydraulic gradient and groundwater flow direction.

Assumptions:

- Technical memorandum comments can be incorporated over a single review cycle.
- The Department of Environmental Quality (DEQ) will not provide comments on the technical memorandum.

Deliverables:

- Draft technical memorandum for review by the Project Team.
- Final technical memorandum that incorporates Project Team comments.

102.5.7 Tracer Test Planning. Consultant will conduct a tracer test to: (1) estimate groundwater travel time between the infiltration basins at Site GM1 and the Santiam River and (2) estimate solute attenuation by dispersion. The objective of this task is to develop a scope of work, schedule, and cost estimate for the tracer test.

Consultant will complete the following as part of this task:

- Conduct three (3) meetings with Project Team, including legal counsel, to confirm tracer test objectives and provide input.
- Evaluate options for tracers and develop a recommendation for a tracer. This task will include a review of tracer tests conducted by the U.S. Geological Survey in Maui.
- Determine construction and locations for downgradient monitoring wells to monitor tracer concentrations and determine the number of wells.
- Develop a list of needs for conducting the tracer test (e.g., water, equipment, staging, power) and develop a schedule for conducting the test. Develop schematic diagrams for the tracer injection system.
- Develop a cost estimate for implementing the tracer test.
- Reporting.

Assumptions:

- Technical memorandum comments can be incorporated over a single review cycle.
- The Department of Environmental Quality (DEQ) will not provide comments on the technical memorandum.
- Meetings with Project Team will be virtual.

Deliverables:

- Draft technical memorandum summarizing the scope of work, schedule, and cost estimate for conducting a tracer test.
- Final technical memorandum that incorporates Project Team comments.

102.5.8 Tracer Test (Contingency Task). Consultant will conduct a tracer test at proposed infiltration basin at Site GM1 in Mill City, Oregon. The proposed tracer study is intended to support ongoing evaluation and analysis for infiltration of advanced treated wastewater from the communities of Mill City and Gates.

Assumptions:

- The number of meetings and site visits anticipated are provided in the tasks below. If these meetings and technical consultations result in work-scope modifications, such modifications are not included or budgeted within this scope.
- Access to the subject property and negotiations with the property owner and/or tenants will be arranged by the Consultant and all fieldwork (except for the seven (7)-day tracer introduction period) can be conducted during normal business hours.

- Unimpeded access to the work locations will be available, including no conflicts with overhead power or underground utilities.
- Consultant assumes field activities can be accomplished within the number of days outlined for each task. This includes mobilization and fieldwork. Consultant will attempt to schedule field work to avoid significant weather events where possible. However, if weather impacts projected mobilization costs or the overall project schedule, this may result in additional fees. Project Team will be kept informed if there are unanticipated weather delays.
- Owner will provide information which they have available regarding the presence of underground utilities within the study area. A public utility locate notification will be conducted, and Consultant will contract a private utility locator to identify and avoid subsurface utilities at the proposed excavation location. Consultant will not be responsible for damage to subsurface utilities not identified prior to initiating work.
- Ground-disturbing activities will not impact protected natural and cultural resources such as wetlands and waterways, critical habitat, archeological sites, and historic properties and structures. Required local, state, and federal environmental permits and clearances will be provided under other sections of this Contract.
- All fieldwork can be performed using standard personal protective equipment and procedures (Level D).
- Deliverables will require only one (1) review cycle, and the scope of work outlined in the tasks below will be utilized for the development of the workplan. If significant changes are made to the scope, this may impact costs. Following issuance of the final technical memorandum, if information is subsequently provided to Consultant that warrants revisions or amendments, the additional work will be charged on a time and materials basis.
- Consultant's work product is intended for use by Owner and is not intended for reliance by third parties unless otherwise specified in this scope of work. If requested by the Owner, a reliance letter will be reviewed and considered by Consultant. Completion of a reliance letter may be subject to an additional fee.

102.5.8.1 Project Management and Pre-Field Work Preparation.

Consultant Responsibilities:

- Develop a work plan for the tracer study that outlines the methods for excavating a tracer solution introduction basin, preparation and introduction of the tracer solution (including diagrams), instrumentation and methodology for monitoring the tracer study, analytical methods, and project schedule.
- Develop a Health and Safety Plan (HASP) to cover the fieldwork.
- Oversee a utility locating contractor to clear excavation locations of subsurface utilities and mark excavation limits.
- Hold three (3) one-hour, virtual meetings during the project to coordinate with Project Team.
- Coordinate field schedule with subcontractors and equipment suppliers, and coordinate with the Mill City to obtain water for the field work.
- Provide periodic email updates to the project team on the status of the tracer study.
- Review and compile data from previous field investigations at the site and refine the tracer monitoring program as needed.

Assumptions:

- Work Plan comments can be incorporated over a single review cycle.

Deliverables:

- Draft Work Plan for review by the Project Team.
- Final Work Plan that incorporates Project Team comments.

102.5.9 Tracer Study Fees and Direct Expenses

Consultant's Responsibilities:

- This task includes the following fees and direct expenses associated with Task 102.5.8 – Tracer Study, including:
  - Tracer study equipment and instrumentation
  - Utility locates
  - Excavator
  - Water charges
  - Travel expenses

102.5.8.2 Basin Construction, Instrumentation, and Tracer Introduction. This task will involve construction of a tracer introduction basin, deploying monitoring instrumentation, and controlled introduction of the tracer solution into the basin.

Consultant Responsibilities:

- Confirm selection of the tracer and solution strength to be used in the tracer study through review of published studies and evaluation of onsite geochemical data. Preliminarily, chloride (in the form of sodium chloride) has been identified as an appropriate tracer with a target concentration of 70 milligrams per liter (mg/L).
- Procure a subcontractor to assist with construction of the tracer introduction basin and mobilization of equipment to the site to conduct the tracer study. Anticipated equipment will include five, 20,000-gallon capacity water storage and tracer mixing tanks, piping and valving, tracer solution and mixing equipment, flow regulation and other necessary equipment.
- Oversee utility locates prior to basin construction.
- Oversee excavation of a 50-foot by 50-foot tracer introduction basin to a depth of 2 foot below ground surface. An energy diffusion system (rip-rap) will be placed at the location where tracer solution discharges to the basin to reduce turbidity during the tracer introduction period.
- Install a temporary stilling well and staff gauge in the basin and equip the stilling well with a Solinst Levelogger 5 Model M10 pressure transducer and datalogger to monitor the surface water level during introduction of the tracer solution. Barometric pressure will be monitored with a Solinst Barologger 5.
- Procure and install InSitu Aquatroll Model 600 down-hole water quality sondes capable of providing continuous measurement of water level and chloride (and/or total dissolved solids [TDS]) in up to six (6) monitoring wells and one surface water location (Santiam River). The instruments will be programmed to record water level and tracer-related parameters to assess solute breakthrough over time.

- Conduct shakedown testing of the tracer introduction equipment and monitoring systems before the start of the test.
- Download data from transducers and water quality sondes immediately before the start of the test and review data to assess background conditions.
- Execute the introduction of the tracer solution into the basin. The tracer solution will be introduced into the basin continuously (24 hours per day) for seven (7) consecutive days. Coordinate full-time oversight by the subcontractor to maintain tracer solution mixing and full-time monitoring during the tracer introduction period. Consultant will conduct daily site visits during the tracer introduction period, and provide frequent updates to the Project Team. The concentration of tracer in discharge from the mixing tanks will be monitored continuously with an InSitu Aquatroll 600 sonde.
- Demobilize equipment associated with the tracer solution introduction and backfill/restore the tracer introduction basin.

Assumptions:

- The tracer introduction basin will be excavated in two (2) days and excavated material can be stockpiled onsite for later use as backfill of the basin.
- The anticipated location of the infiltration basin will not require relocation due to utilities or obstructions.
- Water required for the preparation of the tracer solution can be obtained from a nearby fire hydrant, and the cost of water required to support the testing will not exceed $700.
- There will be no constraints on getting meters or approvals for the potable water from the City of Mill City.
- Infiltration rates in the tracer introduction basin will support delivery of the tracer solution at approximately 12 gallons per minute (gpm) continuously over a seven (7)-day period.

102.5.8.3 Tracer Monitoring.

Consultant Responsibilities:

- For the first four (4) weeks following the tracer introduction period, conduct weekly site visits to download data from the down-hole sonde instruments. The relatively high frequency of initial site visits is intended to confirm that the monitoring instrumentation is working as designed.
- Following the first month, conduct monthly site visits to download data from the down-hole instruments. During each visit, check instrument condition including battery and memory, and maintain monitoring equipment as needed. Following each data collection event, update summaries of tabulated data and provide data updates to the Project team. Based on the preliminary understanding of groundwater flow velocities, we anticipate up to fifteen (15) monthly visits may be required to capture the breakthrough characteristics of the tracer solution as it migrates through the shallow aquifer towards the Santiam River.

- Following completion of the monitoring period, remove instrumentation from the array of monitoring points.

Assumptions:

- Based on observations during the tracer study, Consultant may recommend extending the study to better-understand the nature of solute movement and attenuation at the site. Extending the study will incur additional Consultant labor for periodic site visits (for downloading data).
- The direction of groundwater flow from the tracer introduction basin and the Santiam River is northwesterly, and the array of existing/available monitoring wells are adequately located to characterize solute migration (i.e., the installation of additional monitoring wells is not required to support the tracer study).
- Consultant will conduct daily site visits during the seven (7)-day tracer injection period.
- Consultant will conduct site visits once per week during the first four (4) weeks following introduction of the tracer solution.
- Consultant will conduct site visits once per month for up to fifteen (15) months following introduction of the tracer solution.
- Project meetings for the purpose of tracer study updates will be virtual.

102.5.8.4 Analysis and Reporting Consultant will prepare a technical memorandum documenting the data collected and analysis completed as part of the tracer study.

Consultant Responsibilities:

- A description of the methods and equipment used to introduce the tracer solution, and a discussion of the total mass and concentration of solute introduced.
- Tabulated data, figures, and plots illustrating the measured solute concentration over time in the array of monitoring points used to support the study.
- A discussion of the analytical methods used to evaluate the fate and transport of the tracer solution, and associated attenuation parameters and aquifer parameters.
- Estimates of bulk-scale and pore-scale groundwater flow velocities and dispersivity coefficients based on the data analysis.
- A discussion of the tracer study results in the context of anticipated attenuation of wastewater-related constituents for a full-scale rapid infiltration basin (RIB) at the expanded wastewater facility.

Assumptions:

- Memorandum comments can be incorporated over a single review cycle.
- The Oregon Department of Environmental Quality will not provide comments on the technical memorandum.

Deliverables:

- Draft technical memorandum for review by the Project Team.

- Final technical memorandum that incorporates Project team comments.

Task 102.6 – Response to DEQ Modeling Report Comments

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant shall address the comments from DEQ dated January 16, 2024, made in response to Consultant's technical memorandum titled "Evaluation of the Environmental Fate of Residual Pollutants from an Advance Treated Wastewater Infiltration System, Mill City, Oregon," in accordance with the Consultant's response letter dated February 26, 2024.

Consultant Responsibilities:

102.6.1 Project Management. Prepare for and attend bi-weekly meetings, starting April 2024 and through December 2024. Prepare monthly invoices from April 2024 through December 2024. As needed client communications, staff, subcontractor, and project management. Prepare for and attend two onsite meetings in Mill City, Oregon.

Deliverables:

- Monthly invoices with a cover letter summarizing completed activities.

102.6.2 The Technical memorandum dated November 16, 2023 documents fate and transport simulations for toluene, di(2-ethylhexyl) phthalate (DEHP), and nitrate. The simulations were based on a modeling code (BIOSCREEN) that does not account for background concentrations of pollutants in the aquifer. Therefore, while the BIOSCREEN modeling simulations are accurate for toluene and DEHP (which are not present in background groundwater), the simulations only approximate nitrate concentrations [because nitrate is present at a background concentration of about 1 milligram per liter (mg/L)]. The County would like to conduct additional nitrate attenuation simulations using a modeling code that can account for background nitrate in groundwater and therefore more accurately simulate nitrate attenuation. In addition to using a different modeling code to simulate nitrate attenuation, this task addresses Comment 1 in DEQ's January 16, 2024 email:

"1. *Sensitivity analysis – DEQ would like to see a sensitivity analysis of the hydrogeological modelling between the proposed rapid infiltration basins and the river. For example, what if the highest or lowest measured hydraulic conductivity is more representative than the average? What if the volumes of effluent were half or double, or the nitrate concentration in the effluent is different (e.g., 10 mg/L or 20 mg/L, etc.)?"*

This task involves: (a) conducting additional nitrate fate and transport simulations using the U.S. Geological Survey (USGS) modeling code MODFLOW, (b) performing sensitivity analyses on the MODFLOW nitrate simulations as requested by DEQ, and (c) performing sensitivity analyses on the previous BIOSCREEN simulations for toluene and DEHP as requested by DEQ. This task will consist of the following activities:

102.6.2.1 Consultant will construct a numerical groundwater flow model using MODFLOW, including model grid and layers, assigning model input parameters, model boundary conditions (river, recharge, etc.) determining initial groundwater elevations, and calibration of the model to observed groundwater elevations. Modify the model to simulate the fate and transport of nitrate in groundwater and calculate nitrate

concentrations in groundwater at: (a) the downgradient property boundary and (b) the Santiam River. Conduct sensitivity analyses on hydraulic conductivity, volume of recharge, and concentration.

102.6.2.2 Consultant will conduct a sensitivity analysis on the BIOSCREEN simulations of toluene and DEHP date and transport, including varying the values of hydraulic conductivity, the volumes of effluent, and the concentration of nitrate.

102.6.2.3 Consultant will develop a report documenting the modeling simulations for review and comment by DEQ.

Assumptions:

- Up to twenty-four (24) hours are assumed to address comments from DEQ on the modeling. Additional time required to respond to DEQ will be addressed under a separate amendment.
- The report can be finalized based on a single review cycle from the Owner.

Deliverables:

- Draft modeling report with Project Team comments incorporated for review by Owner.
- Final modeling report with Owner's comments incorporated for review by DEQ.

102.6.3 Beneficial Groundwater Use Elevation. This task addresses Comment 3 in DEQ's January 16, 2024 email:

"3. Investigate beneficial uses downgradient and near the proposed treatment system location. Will the rapid infiltration basin impact water quality in the nearby drinking water wells? Will pumping of nearby wells impact the flow of treated wastewater?"

Consultant will conduct the beneficial water use determination in accordance with DEQ's 1998 guidance document "Guidance for conducting Beneficial Water Use Determinations (BWUDs) at Environmental Cleanup Sites." This task is comprised of the following activities:

102.6.3.1 Assess the "Locality of the Facility" for the groundwater use survey of the BWUD based on the nitrate contaminant fate and transport modeling and hydrogeologic investigation at the site.

102.6.3.2 Evaluate if pumping of nearby wells will impact the flow of treated wastewater after collecting additional data about the types of wells that are present near the infiltration facility.

102.6.3.3 Summarize the hydrogeologic setting of the site, including:

a. Summarize regional geology and hydrogeology, including, if available, background water quality; recharge and discharge mechanisms; available water yield; aquifers and aquitards; and aquifer properties (transmissivity, leakage, storativity, groundwater gradient, groundwater flow direction, and characteristics of surface water bodies).

b. Summarize local geology and hydrogeology, including background water quality; water availability; flow direction; gradient; aquifers and aquitards; and connectivity of the aquifer to surface water.
c. Construct a geologic cross section along the groundwater flowpath showing geology based on monitoring wells and test pits at site GM1.

102.6.3.4 Evaluate the current and reasonable likely future beneficial water uses in the locality of the facility, including:

a. Evaluate existing groundwater uses with a groundwater use survey within the locality of the facility consisting of a door-to-door survey, identification of properties without connection to City water, identification of properties that are suspected to have unregistered water wells, a search of Oregon Water Resources Department water well databases.
b. Complete a surface water use survey for recreational uses of surface water based on conversations with the Oregon Department of Fish and Wildlife and the City of Mill City.
c. Evaluate reasonably likely future beneficial groundwater uses based on land use; current and historic water use (e.g., public connection); trends in water use, water rights considerations and water supply availability; federal and state regulations, and population projections.
d. Develop a report summarizing the Beneficial Water Use Determination (BWUD) for submittal to DEQ.

Assumptions:

- Project team will utilize services of right-of-way agent to conduct the door-knocking survey within the locality of the facility and will provide Consultant with a spreadsheet summarizing the results of the property contacts.
- The City of Mill City will provide information about whether properties within the locality of the facility are connected to City water, and whether there are any properties suspected of having unregistered supply wells.
- DEQ comments on the BWUD report will be addressed under a separate amendment.

Deliverables:

- Draft BWUD report with Project Team Project Team comments incorporated for review by Owner.
- Final BWUD report with Owner's comments incorporated for review by DEQ.

102.6.4 Seasonal Water Level and Nitrate Data Collection. This task addresses Comment 5 in DEQ's January 16, 2024 email:

"5. Continue to collect seasonal water level and nitrate data to better understand the seasonal variability in background groundwater."

This task is comprised of the following activities:

102.6.4.1 Conduct quarterly site visits for a year (from March 2024 through March 2025) to site GM1 to download transducer data from the five (5) site monitoring wells and one (1) barologger.

102.6.4.2 Manage data, develop data tables, update plots, develop groundwater elevation contour maps for each quarter.

102.6.4.3 Develop a brief technical memorandum with water level plots and groundwater elevation contours.

Assumptions:

- The brief technical memorandum will not undergo a review cycle.
- Analytical costs for nitrate are included in the fee for Task 102.6.5.

Deliverables:

- Brief technical memorandum with water level plots and groundwater elevation contours.

102.6.5 Modeling of BOD, pH, TSS, and TDS. This task addresses Comment 4 in DEQ's January 16, 2024 email:

"4. Is it possible to extend the modelling to include Biological Oxygen Demand and pH? What are the likely BOD, pH, TSS, and TDS coming out of the treatment system. Please model what the chemical concentrations will be near the river."

This task is a geochemical characterization program and geochemical modeling evaluation that will be implemented by a sub-consulting firm that specializes in geochemistry. The objective of the evaluation is to distinguish between wastewater quality at the point of discharge and along the groundwater flowpath at: (a) the property boundary and (b) the Santiam River. This task is comprised of the following activities:

102.6.5.1 Manage the project and attend meetings.

102.6.5.2 Review existing project documentation and available groundwater, geological, and wastewater quality datasets.

102.6.5.3 Evaluate soil quality based on the soil samples collected in March 2024 from the monitoring well GM1-MW4 boring. The samples will be analyzed for mineralogy, sequential extraction procedure (SEP), cation exchange capacity (CEC), total metals, and acid base accounting (ABA).

102.6.5.4 Develop an initial geochemical conceptual site model that includes the geochemical factors influencing transformation or dilution of pH, Biological Chemical Demand (BOD), total solids (TS), and total suspended solids (TSS) in treated water. Based on the geochemical conceptual site model, develop a detailed plan for further modeling activities and present it to the Project Team for review and comment.

102.6.5.5 Conduct modeling to evaluate changes in water quality and the geochemical reactions that are expected to occur as groundwater moves from the infiltration area to the property boundary and the discharge point near the Santiam River.

102.6.5.6 Prepare a technical memorandum summarizing a final geochemical conceptual site model and the results of the modeling.

Assumptions:

- The projected treated wastewater composition will be used for the geochemical models. If there are gaps in the projected wastewater composition, then raw wastewater data from Mill City's existing treatment system will be used.
- The Project Team can agree on the detailed plan for further modeling during a meeting, as opposed to a part of a formal review period that occurs outside of the meeting.
- A GIS layer showing the layout of the infiltration basins and future property boundaries will be provided to Consultant.
- A total of ten (10) soil samples and two (2) groundwater samples will be analyzed.

Deliverables:

- Draft modeling report with Project Team comments incorporated for review by Owner.
- Final modeling report with Owner's comments incorporated for review by DEQ.

102.6.6 Compliance Well Locations and Functional Equivalent Form. This task addresses Comments 6 and 7 in DEQ's January 16, 2024 email:

"6. Propose appropriate well location(s) for future compliance sampling. These locations also need to confirm directional flow of groundwater. What concentrations of nitrate (and possibly other parameters) at these locations would indicate a problem (above drinking water maximum contaminant levels [MCL] or above background)."

"7. Complete the functional equivalent form we sent you."

102.6.6.1 Work with the City and County to identify public property where monitoring well(s) could be installed and propose a well location and construction to the Project Team by email.

102.6.6.2 Complete the functional equivalent form based on information collected during earlier phases of the site GM1 investigation.

Assumptions:

- The functional equivalent form will be completed by the Project Team based on information provided by the Consultant.

Task 102.7 – Additional Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

102.7.1 Per- and polyfluoroalkyl substances (PFAS) Sampling. Consultant will assess background concentrations of PFAS in groundwater, surface water and untreated wastewater in association with a rapid infiltration basin (RIB) pilot study at study area GM1 in Mill City, Oregon.

102.7.1.1 Raw Wastewater Sample Collection and Analysis. Consultant will collect one sample of raw (untreated) wastewater from the WPCF located adjacent to the GM1 Site, with the following specific activities:

- Correspond with Mill City staff for coordination and access to the existing WPCF.
- Collect one (1) raw (untreated) composite sample of wastewater influent from the existing WPCF, at the designated manhole location. An average or generally representative wastewater sample will be collected directly into laboratory-supplied containers in accordance with laboratory requirements and analyzed for PFAS using EPA Method 1633.

102.7.1.2 Surface Water Sample Collection and Analysis. Collect two (2) surface water samples from the North Santiam River to support the background PFAS assessment, with the following specific activities:

- Correspond with Mill City staff to coordinate access for the collection of surface water samples at upstream and downstream locations relative to the existing and proposed WPCF.
- Collect two surface water samples from the North Santiam River located upstream and downstream of the current WPCF drain field. These locations are also intended to reflect upstream and downstream locations relative to anticipated groundwater discharge from the proposed future RIB location, which is located relatively further from the river.
- Collect samples directly into laboratory-supplied containers in accordance with laboratory requirements. During sample collection, Consultant will measure and record field parameters at the sampling locations including temperature, pH, specific conductivity, turbidity and ORP using a calibrated field meter. During the sampling event, Consultant will employ equipment and additional measures to prevent cross-contamination of samples in general accordance with standard industry operating procedures.
- Submit the surface water samples for analysis of PFAS using EPA Method 1633.
- Obtain GPS coordinates of each surface water sampling location.

102.7.1.3 Groundwater Sample Collection and Analysis. Collect groundwater samples for PFAS evaluation using selected monitoring wells located (1) around the existing WPCF (Kimmel Park area), and (2) at a recently installed monitoring wells adjacent to the GM1 Site. Specifically, the monitoring wells to be sampled include:

- GM1-MW2 (monitoring well at the GM1 Site).
- GM1-MW3 (monitoring well at the GM1 Site).
- MW-2 (existing monitoring well at the current WPCF).
- MW-3s (existing installed monitoring well at the current WPCF).

- MW-4 (existing installed monitoring well at the current WPCF).

Consultant will perform the following activities for this task:

- Correspond with Mill City staff to coordinate access to the monitoring wells.
- Collect one groundwater sample from each of the five (5) monitoring wells. Consultant will conduct groundwater monitoring and sampling activities in accordance with industry standard operating procedures.
- Submit the surface water samples for analysis of PFAS using EPA Method 1633.

Deliverables:

- Documentation: Document the collection procedures and analytical results of wastewater, surface water and groundwater sampling in a technical memorandum that will be submitted to the project team. The technical memorandum will include a description of sampling activities, chemical analytical results, sampling locations, tabulated chemical analytical data, and other supporting documentation.

Assumptions:

- Laboratory fees for PFAS Sampling are included in Task 102.7.2.

102.7.2. PFAS Sampling Fees and Direct Expenses

Consultant's Responsibilities:

- This task includes the following fees and direct expenses associated with Task 102.7.1 – PFAS Sampling, including:
  - Laboratory fees for water quality sampling
  - Sampling equipment and instrumentation
  - Shipping
  - Travel expenses

102.7.3. Respond to City of Salem Comments:

102.7.3.1 Prepare written responses to the City of Salem's comments, dated April 18, 2024 (internal only).

102.7.3.2 Attend two (2) in-person meetings to discuss the City of Salem's comments, dated April 18, 2024.

102.7.3.3 Virtually attend bi-weekly meetings with the City of Salem from May 2024 through December 2024 (16 meetings)

102.7.4. Seep Sampling.

102.7.4.1 Collect up to nine (9) samples of spring water from the Santiam River riverbank and analyze them for nitrate, BOD, TSS, TDS, and pH.

Deliverables:

- Seep Sampling Technical Memorandum.
- Prepare brief data report summarizing laboratory results.

102.7.5. Seep Sampling Fees and Direct Expenses

Consultant's Responsibilities:

- This task includes the following fees and direct expenses associated with Task 102.7.4 – Seep Sampling, including:
  - Laboratory fees for water quality sampling

103 – LAND ACQUISITION AND RELOCATION SERVICES

Task 103.1 – Project Management and Administration

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

103.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

103.1.2 Coordination. Coordinate services to complete the land acquisition and relocation services task.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management

Task 103.2 – Mill City Land Acquisition and Relocation Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Responsible for the oversight of land acquisition and relocation services for North Santiam Canyon Sewer Project (NSCSP) and the Detroit Downtown Commercial Septic Program as outlined in the tasks below. The subtasks included as part of Task 103.2 are based on the land acquisition and relocation Subconsultant's scope of work. The scope and fee provided are for the acquisition of up to fifteen (15) files.

Consultant Responsibilities:

RIGHT OF WAY (ROW)
Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"

- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.2.1 Project Management and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the Project Team. Consultant shall meet with up to six (6) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.2.7). Consultant Project Manager will QC all deliverables prior to delivery.

103.2.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner and Consultant of any major title encumbrances.

103.2.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner and Consultant for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner and Consultant.

103.2.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.2.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.2.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter,

acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.2.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.
Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there is up to one (1) Personal Property Only Relocation.

Consultant shall, at a minimum, conduct the following relocation activities:

- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment.
- Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.2.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall:

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.2.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to fifteen (15) Preliminary Title Reports and Title Documents.

- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner,
- Provide up to fifteen (15) GINs, one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Up to fifteen (15) appraisal and appraisal review reports, electronically.
- Provide 15-Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Provide Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- Provide the following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to fifteen (15) Draft Offer Packets for review for each file to Owner
- Provide up to fifteen (15) Final Offer Packets sent certified mail or delivered in person for each file.
- Provide up to fifteen (15) Final Report Packets for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval
- Submit Relocation claims electronically to Owner for payment
- Submit Relocation Closing Reports to Owner
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

Task 103.3 – Detroit Land Acquisition and Relocation Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Responsible for the oversight of Acquisition and Relocation services for North Santiam Canyon Sewer Project as outlined in the tasks below. The subtasks included as part of Task 103.3 are from the land acquisition and relocation Subconsultant's scope of work.
Consultant Responsibilities:

Consultant shall conduct the Right-of-Way ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970
- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.3.1 Project Manager and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the Project Team. Consultant shall meet with up to twelve (12) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.3.6). Consultant Project Manager will QC all deliverables prior to delivery.

103.3.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner of any major title encumbrances.

103.3.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land & Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.3.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.3.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section 5.140, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.3.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.3.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed

following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.

Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx). Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there are up to three (3) Personal Property Only Relocations.

- Consultant shall, at a minimum, conduct the following relocation activities:
- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment. Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner.
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.3.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.3.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.

- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices, electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to twelve (12) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner.
- Provide up to twelve (12) GINs, with one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. NOTE: If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Provide up to twelve (12) appraisal and appraisal review reports, electronically.
- Provide 15 Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- The following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to twelve (12) Draft Offer Packet for review for each file to Owner.
- Provide up to twelve (12) Final Offer Packet sent certified mail or delivered in person for each file.
- Provide up to twelve (12) Final Report Packet for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide up to twelve (12) Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval.

- Submit Relocation claims electronically to Owner for payment.
- Submit Relocation Closing Reports to Owner.
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

104 – FINANCIAL ADVISORY SERVICES

Task 104.1 – Project Management and Administration

Consultant Responsibilities:

104.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

104.1.2 Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 104.2 – Financial Advisory Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

104.2.1 Advisory Services. Consultant shall provide, upon request, advisory services related to the North Santiam Canyon Sewer Project. This consultation shall be provided on a time and materials basis, and it shall include attendance at meetings, writing of memos or presentations, or communication via phone or email in support of the project decision-making.

104.2.2 Financial Plan. Consultant shall update rate model and monthly cost per EDU for two project phases and build year-by-year model of costs and revenues. Consultant shall prepare presentations and technical memoranda of business case model and year-by-year model results for meetings with project stakeholders.

Owner Responsibilities:

- Provide meeting space for project meetings.

Assumptions:

- Attendance at project meetings may be virtual.

Deliverables:

- Business Case Technical Memorandum
- Business Case Presentation
- Draft and Final Financial Plan

105 – PUBLIC RELATIONS

Task 105.1 – Project Management and Administration

Consultant Responsibilities:

Consultant will assist in improving Owner's communication and outreach to the community, local governments, residents, businesses, and other key stakeholders regarding the Project.

105.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

105.1.2 Coordination. Coordinate services to prepare and carry out the Communication and Engagement Plan.

105.1.3 Land Use Planning. Provide support and coordination for land use applications.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at internal project meetings may be virtual. Assume participation in meetings approximately three (3) to five (5) times per month, including one (1) standing meeting per month and additional meetings specific to individual project activities. This may include NSSA Board meetings (see Task 105.2)
- Project management budget assumes a public relations campaign of up to 36 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 105.2 – Communications and Engagement Planning and Implementation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)
Consultant Responsibilities:

105.2.1. Communication and Engagement Plan

The Consultant will develop and carry out a Communication and Engagement Plan to track and monitor communications throughout the Project. This plan covers scheduled written and oral communications, responses to unsolicited requests for information, the frequency of the scheduled communications, and the person(s) responsible for providing the information. The Plan will build on information in this Scope of Work and the North Santiam Sewer Authority (NSSA) Communications Plan prepared by the Mid-Willamette Valley Council of Governments. It will be updated as needed to adjust to evolving project needs, audiences, messages, communication channels, outreach tools, and direction from the Project Team and NSSA Board.

Services under the Communication and Engagement Plan shall include the following:

a. Frequent content creation for multi-media and traditional print platforms including but not limited to: news releases, digital releases, event boards, photography, video, talking points, speeches, and Frequently Asked Questions.
b. Multi-media platform management for County and NSSA to include timely uploading of announcements to websites and digital media; videos, articles, and photos of project events; other digital media such as live video streams of construction sites.
c. Training for staff and elected officials in verbal and written communication norms specific to the Project needs.
d. Special public outreach projects and other public relations/communications functions as determined by the County.
e. Services and tasks as outlined in Attachment A of the "North Santiam Sewer Canyon project Communication and Engagement Plan" prepared by the Mid-Willamette Valley Council of Governments.
f. Support the County Board of Commissioners and NSSA Board to enhance communication regarding project related topics.
g. Support as directed by the Council of Governments' NSSA project manager outlined in Attachment B of the "North Santiam Sewer Canyon project Communication and Engagement Plan" prepared by the Mid-Willamette Valley Council of Governments.
h. Staffing of digital events such as webinars, and public body presentations on virtual chat applications and social media platforms.
i. Staffing of in-person events such as town halls, open houses, city council presentation, and kick-off meetings.
j. Assistance with staff and elected officials' efforts to communicate with community members.

Assumptions associated with these services are provided in more detail in the following subsections.

105.2.2 Communications Channels. The Consultant will utilize various formal and informal channels to engage with the community and support the Owner in internal and external communications related to the Project including the following.

a. Status Reports. A variety of status reports will be produced during the project. The status reports will be produced at regular intervals to provide stakeholders with project information on the status and progress of the Project. At a minimum the reports will contain project status on major activities, project schedule, simplified budget and cost tracking, status of action items, if applicable, and a one-month lookahead. The intent of the status reports is to inform stakeholders of the project's progress and keep them actively involved in the project. The information provided will contain enough detail to allow stakeholders to make informed decisions relevant to their role in the Project.
b. External Communication. In addition to the ongoing communications program of the district, the Project will produce information, signage, content for digital and social platforms, webcams on the construction sites, events, and reports to the external stakeholders. The look and feel of these publications will be designed to match the informational materials produced by the NSSA.
c. News and Print Media. Consultant will assist the Owner in reaching out to media outlets to coordinate scheduled and unscheduled informational releases, public notices, and interviews with the appointed Owner spokesperson; and to assist in preparing written and verbal narratives and graphics in support of same. Consultant is not

permitted to communicate directly with the media unless prior approval or direction has been granted from the Owner or designee.

d. Public Inquiries and Public Records Requests. Owner will respond to public records requests made in writing, in accordance with Marion County public records process. Where needed, Consultant will coordinate with and support the Owner by preparing draft narratives in response to these requests.

Owner Responsibilities:

- Provide meeting space for project meetings.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Budget for this item assumes a public relations campaign of up to 36 months.
- Informational materials to include:
  - Document Templates, including the following:
    - MS PowerPoint (PPT) Template: Consultant will design a PPT cover slide, background slide, divider slide, and a standard text-with-imagery slide.
    - Report Template: Consultant will design a project report template in Adobe InDesign. The template will include text, icons, photos, and tables, and be two-to-five pages in length.
    - Flyer Template: Consultant will design an 8.5-inch x 11-inch flyer template in Adobe InDesign. The template will include text, photos, and callout graphics.
    - Event Board Template: The template will be designed as an event board template in Adobe InDesign. It will be approximately 24-inches x 36-inches (or similar). It will include a masthead and possible footer. The board will include the option to insert infographics, spot illustrations, icons, text, graphs, and photos into the template frame.
  - Talking points – address specific project issues, status, and activities; assume monthly preparation of updates.
  - Emails announcements and updates – note progress on specific tasks, upcoming activities within a given community, upcoming NSSA meetings, opportunities to comment on project decisions or recommendations, monthly on average.
  - Meeting Flyers; assume approximately eight (8) flyers.
  - Media Releases: assume quarterly on average twelve (12) media releases.
  - Videos: assume one per year on average three (3) videos.
  - Meeting presentation materials (for approximately eight (8) meetings).
- Virtual attendance at bi-monthly general project meetings to remain up to date on project status.
- Attendance at monthly NSSA meetings which may be virtual or in-person. Support for NSSA meetings to include:
  - Technical advice regarding meeting agendas and communications in preparation for meetings.
  - Attend selected meetings as needed; assume up to six (6) meetings.
  - Provide NSSA Board members with talking points summarizing meeting outcomes.
- Attendance at community meetings or open houses, City Council meetings, or other in-person event including the following:
  - Attend up to six (6) open houses or community meetings – two (2) rounds of meetings in Detroit and Idanha and one (1) round of meetings in Mill City and Gates.
  - Attend up to six (6) City Council meetings, as requested; assume virtual attendance.
  - Prepare presentation materials for the meetings above, in coordination with other consultant team members, County staff, and MWVCOG staff.

- Informal communications consisting of e-mail, conversations, or phone calls will serve to supplement and enhance formal communications. Due to the varied types and ad-hoc nature of informal communications, they are assumed to be incidental to the Communications and Engagement Plan and not specifically outlined by the Plan.
- Additional assumptions regarding work products include the following:
  - Videos – Consultant to produce up to three (3) videos to document specific project milestones; videos will be approximately one (1) to three (3) minutes in length; interviews with video participants will be conducted and recorded via Zoom.
  - Presentation Training – Consultant to conduct up to two (2) rounds of presentation training; training sessions will be conducted online and recorded via Zoom or another online meeting platform; recordings and presentation materials will be available to staff or team members who are unable to attend.
  - Website Updates – Consultant to draft content, approximately monthly/as needed; budget contains an item to undertake a more significant website refresh if needed.
  - Social Media – Consultant to assist in providing draft content; including social posts and artwork for the County to use on their social outlets and share with their partner networks, including NSSA members, County and MVCOG, and other community members.
  - Response to Public Inquiries – Consultant to assist in drafting responses, as needed for communication with media organizations (e.g., Canyon Weekly), as well as local decision-maker communications to constituents; assume an average of 2 to 4 hours per month to draft responses.

Deliverables:

- Communication and Engagement Plan
- Status Reports
- Informational Materials and External Communication (e.g., project information, signage, content for digital and social platforms, webcams on the construction sites, events, and reports to the external stakeholders).

Task 105.3 – Land Use Planning

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

105.3.1 Land Use Planning. Provide support and review of the following land use applications prepared by Project Team and Consultant.

105.3.1.1 Linn County Expanded Partition Application

105.3.1.2 Linn County Conditional Use Permit Application (WPCF)

105.3.1.3 Linn County Conditional Use Permit Application (Road Realignment)

106 – INDEPENDENT COST ESTIMATING

Task 106.1 – Project Management and Administration

Consultant Responsibilities:

106.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

106.1.2 Coordination. Coordinate services to prepare and carry out peer reviewed estimates of the Mill City/Gates Water Pollution Control Facilities (WPCF), Mill City/Gates Force Main, and Gates Collection System projects.

Owner Responsibilities:

- Provide input and review of all draft and final deliverables.

Assumptions:

- Assumes a twelve (12) month duration for general project administration.
- Attendance at internal project meetings will be virtual. Assume participation in meetings approximately one (1) time per month for twelve (12) months.
- Attend one (1) Marion County Board of Commissioners meeting in person.

Task 106.2 – Independent Cost Estimating (ICE)

Consultant Responsibilities:

106.2.1 30% Opinion of Probable Construction Cost (OPCC) ICE Review. Consultant shall provide an independent cost estimate review of the construction management general contractor's (CM/GC) 30% OPCC including the following:

106.2.1.1 Review of sub-tier level (suppliers and subcontractors) solicitation efforts and resulting proposals for work not self-performed by the CM/GC. This will be a review of each proposal for scope coverage, exclusions, assumptions, and responsiveness to the solicitation.

106.2.1.2 Review of the CM/GC's cost estimate worksheets for self-performed work. This review will spot check quantities, labor production rates, craft labor costs, equipment costs, assumptions, and allowances.

106.2.1.3 Review the CM/GC's Risk Register.

106.2.1.4 Review the CM/GC's critical path method (CPM) Construction Schedule.

106.2.2 60% and 90% OPCC ICE Review of Updates. Consultant shall provide an ICE review of updates to the CM/GC's 60% and 90% OPCC (delta changes only).

106.2.2.1 Review of sub-tier level (suppliers and subcontractors) solicitation efforts and resulting proposals for work not self-performed by the CM/GC. This will be a review of each proposal for scope coverage, exclusions, assumptions, and responsiveness to the solicitation.

106.2.2.2 Review of the CM/GC's cost estimate worksheets for self-performed work. This review will spot check quantities, labor production rates, craft labor costs, equipment costs, assumptions, and allowances.

106.2.2.3 Review the CM/GC's Risk Register.

106.2.2.4 Review the CM/GC's critical path method (CPM) Construction Schedule.

Assumptions:

- Consultant has no control over the cost of labor, materials, equipment or services furnished by others, or over Contractor's methods of determining prices, or other competitive bidding or market conditions, practices or bidding strategies. Cost estimates provided by Consultant are based on Consultant's experience and judgment at that time. Consultant cannot and does not guarantee that proposals, bids or actual Project construction costs will not vary from cost estimates prepared by Consultant.

Deliverables:

- 30% OPCC ICE Review
- 60% OPCC ICE Review
- 90% OPCC ICE Review

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM

200 – MILL CITY / GATES FACILITIES PLANNING STUDY

Task 200.1 – Project Management

Consultant Responsibilities:

200.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

200.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Planning criteria will also be reviewed during the Kickoff Meeting. Representatives from the DEQ will be invited to the kickoff meeting.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services, if any.

Assumptions:

- Project management budget assumes a planning schedule of up to 8 months.
- Monthly Board meeting attendance is covered in a separate task order.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

- Funding administration services and funding acquisition support is not included in this scope of work.

Task 200.2 – Data Acquisition & Facility Tours

Consultant Responsibilities:

200.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

Mill City

- Discharge Monitoring Report (DMR), operational, influent monitoring (15-minute intervals), rainfall data (since Jan 2021), and any other water quality sampling results collected outside of DMRs in spreadsheet format
- Update of financial summary records, including current rates, annual expenses, operation, revenues, replacement budgets, number and type of accounts, etc.
- Recent facility inspection reports, if available
- Provide update of any changes to wastewater flows from major seasonal wastewater dischargers, water users with their own wastewater treatment system, major water users that consume the majority of their water.
- Any recently produced planning documents (transportation, wastewater, water conservation, water/waste/energy audits)
- Update on known treatment plant or collection system issues and planned improvements
- Update from Gates and Mill City for winter-time water consumption data summarized by user types in a spreadsheet format
- Known correspondence from federal and state regulatory agencies regarding violations or concerns related to wastewater treatment and disposal

200.2.2. Data Collection and Review. Collection and processing of furnished data, mapping, and reports. Provide a follow-up Request for Information for supplemental data if required.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required.
- Provide access to facilities and records.
- Provide operations and maintenance staff for questions as needed.

Assumptions:

- Consultant will not enter confined spaces. Structural and electrical engineering reviews are not included in the scope of work but could be completed as an additional service.
- Consultant shall be entitled to rely, without liability, on the accuracy and completeness of information provided by Owner, other agencies and stakeholders, and information from public records, without the need for independent verification.

Deliverables:

- Request(s) for Information

Task 200.3 – Project Planning

Consultant Responsibilities:

200.3.1. Location. Incorporate brief description of project location from master plan. Include figure(s) from master plan to establish the project planning area.

200.3.2. Environmental Resources. Incorporate information from master plan to document natural resources in the project area, including land use, flood plains, wetlands, historic, biological, water quality issues, socio-economic, climate, geography, soils, rivers, and air quality. Use master plan figures to summarize natural resources in the project area.

200.3.3. Growth Trends. Update master plan population statistics and projections. For Mill City, coordinate with Mill City and County planners on location, phasing, and type of new growth. The Portland State University Population Research Center historical population data and 40-year growth forecasts will be used to inform the population growth, but it is assumed that non-traditional methods will be required to best account for the decline and near-term growth due to rebuilding after the 2020 wildfire as well as accounting for the new community sewer system in Gates and new treatment facility in Mill City. Growth for non-residential users will be estimated based on input from City and County planners for the 20-year planning period.

200.3.4. Community Engagement. Describe the Owner's approach to engage the community in the planning process.

200.3.5. Design Flow Rates. Update master plan design flow rates based on most recent DMR and water usage data from Mill City and Gates. Update projections based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.6. Design Loading Rates. Update master plan wastewater loadings and project future loadings based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.7. Regulatory Requirements. Review and update summaries from master plan of current regulatory requirements and planning criteria that may influence operation, maintenance, and capital improvements of the existing Mill City wastewater system and the initial project components in Gates.

200.3.8. Cost Estimating. Establish cost estimating methodology to reflect both local and current conditions.

200.3.9. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.3.10. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and approval on growth projections and planning criteria.
- Provide review and comments of this section.
- Provide input on community engagement.

Assumptions:

- The planning criteria will need to be established for the planning study prior to having any supplemental income and population survey data available to inform the population estimates and projections. The best available data will be used for the purposes of this study.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- City staff or Contract City Planner will provide input on the distribution and phasing of new residential and non-residential growth in Gates and Mill City.

- If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.
- The study area will coincide with the North Santiam Sewer Authority Boundary for Gates and Mill City.
- Community engagement included in this scope of work is limited to the public meeting in Task 209. Additional community engagement activities can be provided as additional services or through other identified task orders.

Deliverables:

- Draft Project Planning Facility Plan Section.

Task 200.4 – Existing Facilities Evaluation

Consultant Responsibilities:

200.4.1. Base Map. Update the existing system base map from the master plan, showing location of key facilities, pipelines, and basin boundaries for Mill City. Use the schematic process layout of the existing treatment plant from the master plan showing major process components.

200.4.2. History. Update master plan's documentation of wastewater treatment plant history and system description to reflect current flow and water quality data, recent discharge monitoring records (DMRs), plant improvements that have been completed recently, current condition of plant equipment and facilities, and current operation practices.

200.4.3. Wastewater System Management Classification, Operators and License. Provide a brief writeup of system required licensing and current operator license information.

200.4.4. Conditions Assessment. Update master plan documentation of existing physical conditions deficiencies. Collection system pipe information will be summarized by pipe material and age. Complete pump tests at each pumping facility to evaluate current pump performance and capacities. Incorporate findings from the I/I study that is currently under way at the time this scope was finalized.

200.4.5. Capacity Evaluation. Update master plan's comparison of existing and future projected flows and loadings to the existing capacity of the Mill City wastewater treatment system. Summarize existing capacity deficiencies.

200.4.6. Review pump run time data and flow meter records to assess existing capacity limitations (if any).

200.4.7. System Resiliency. Assess the collection system resiliency for the Mill City lift stations. This is anticipated to include a comparison of firm pumping capacity (i.e. with largest pump off-line) to the peak hour inflow. It also includes an assessment of whether onsite or portable back-up provisions are available and automated, what kind of emergency bypass pumping provisions are provided for the lift station and/or force main (in the event of a line break), and what kind of redundancy is provided in terms of back-up level sensors and alarms. This scope does not include an evaluation of seismic risks, a comprehensive vulnerability assessment, or updates to the Owner's Emergency Response Plans. Consultant will summarize the consequence of failure of critical lift station facilities and identify potential capital improvements and operational strategies that could be completed to mitigate these risks.

200.4.8. Wastewater Collection System Evaluation

200.4.8.1. Wastewater Model Development and Calibration. Use existing base mapping, record drawings, dry weather flows, pump curves, and Owner provided data to develop and calibrate a wastewater system model. The winter-time water consumption data will be used to estimate dry weather

flows. Allocate infiltration and inflow for utilizing wet weather system design flows, available pump run time, and SCADA data.

200.4.8.2. Existing System Evaluation. Exercise computer model to check the Mill City system and evaluate the existing collection system hydraulic capacity. Evaluate system for remaining capacity.

200.4.9. Wastewater Treatment System Evaluation. Update master plan write-up to summarize existing plant deficiencies using updated plant data to compare actual performance to expected performance.

200.4.10. Operations. Update master plan documentation of existing operations and maintenance issues and concerns reported by Owner staff.

200.4.11. Financial Status of Existing Facilities. Document current rate schedules, annual O&M costs, other capital improvement programs, and table of users by monthly usage categories for the previous fiscal year. Document existing debts and required reserve accounts. Budget and capital improvements will be addressed under a separate task.

200.4.12. Water/Energy/Waste Audits. Provide brief write-up discussing variable frequency drive motors and all other applicable energy items for the system. Investigate and summarize the likelihood of incorporating a hydroelectric power generator on the force main from Gates to Mill City. Summarize overall current energy consumption for Mill City's existing system.

200.4.13. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.4.14. Draft Plan Section. Prepare draft section writeup. Address Owner comments on draft document.

Owner Responsibilities:

- Review and comment on draft documents.
- Participate and provide meeting location for workshop meetings.
- Provide field checks if necessary, including surveying.
- Provide access to facilities and records. Test and replace (if needed) suction and discharge pressure gauges ahead of equipment tests.

Assumptions:

- Modeling of the existing Mill City treatment plant will not be completed for this facilities plan.
- The Mill City GIS mapping will not be survey grade and will be carried over from the master planning effort. The mapping will not include rim/invert data. It will only include approximate location as it was digitized from the existing record drawings.
- No additional field work or surveying will be required.
- Collection system conditions assessment will not include a full review of CCTV records or smoke testing with the exception of incorporating the findings from the Mill City I/I study.
- The Mill City collection system model will be developed with the InfoSWMM modeling platform, based on record drawings. Consultant will rely upon the accuracy of available record drawings. This scope does not include any field survey work to check or update pipe slopes.
- If model does not readily calibrate to existing conditions, and additional field work is recommended to troubleshoot the Owner's wastewater system, these services can be completed as an additional service.
- No drain field analysis will be provided.

Deliverables:

- Draft Existing Facilities Evaluation Facility Plan Section.

Task 200.5 – Need for System Improvements

Consultant Responsibilities:

200.5.1. Health, Sanitation, and Security. Summarize concerns and relevant regulations or correspondence from/to state and federal agencies.

200.5.2. Aging Infrastructure. Incorporate summary findings of conditions assessment of assets and summarize available pipeline age/material information. Summarize the following:

- Unit performance issues, deficiencies and useful life.
- Existing system reliability per DEQ and EPA guidelines.
- Ability to meet current and potential future effluent limits and other regulatory requirements.
- I/I calculations to determine if existing I/I is considered "non-excessive".

200.5.3. Reasonable Growth. Using the design flow and loading information, document the reasonable growth capacity that is necessary to meet needs during the planning period.

200.5.4. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and review of this section of the plan.

Deliverables:

- Draft Project Needs Facility Plan Section.

Task 200.6 – Collection System Alternatives Considered and Selection

Consultant Responsibilities:

200.6.1. Future System Evaluation. Build Gates system model and expand Mill City model to include additional pipe and pump station network requirements associated with servicing new growth areas for the planning period. Add flows from new growth. Exercise the model to identify potential system deficiencies attributed to growth within the planning period.

200.6.2. Evaluate alternative improvements to correct existing, and anticipated future deficiencies, sewer new areas, and meet the target planning criteria. Benefits and drawbacks will be summarized for each alternative. A "no action" alternative will also be considered for each category. This alternative evaluation will be based on the master plan collection system alternatives while evaluating Mill City's existing system for collection system capacity deficiencies.

Where improvements are not relatively straightforward, evaluate up to three collection alternatives for the existing Mill City collection system that will service existing and future flows. Additional refinement of pipeline alternatives is anticipated to occur in the predesign tasks associated with the new Gates collection system.

200.6.3. Alternative Cost/Benefit Analysis. This will include life cycle cost analysis on preferred alternatives for up to three viable alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 40-year life cycle evaluation. This alternative evaluation for Gates will be based on the master plan collection system alternatives while evaluating any capacity alternatives for Mill City's collection system.

200.6.4. Phasing/Implementation Plan. Develop a phasing plan of improvements based on initial project, 10-year, 20-year, and 40-year anticipated growth. This plan will include an evaluation of interim recommendations or strategies for property owners who need to address septic system deficiencies or replacement prior to day one of the new Gates collection system and Mill City mechanical treatment plant are constructed.

200.6.5. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives using the master plan's figures with updates/modifications per this scope of work.

200.6.6. Environmental Impacts. A summary of the preliminary environmental screening of the collection system alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.6.7. Land Requirements. Discuss property needed for alternatives.

200.6.8. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.6.9. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.6.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.6.11. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide a review of the alternatives considered and input on selection criteria and ultimate selection of preferred alternative.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4 (planning level cost estimates).

Deliverables:

- Draft Collection System Alternatives Facility Plan Section.

Task 200.7 – Treatment and Disposal System Alternatives Considered and Selection

Consultant Responsibilities:

200.7.1. Develop a list of treatment plant improvement alternatives focused on improving effluent water quality, vulnerability, safety and redundancy. The disposal improvement alternative will be rapid infiltration per the master plan recommendations.

200.7.2. Develop up to three pre-screened alternatives to evaluate, for primary treatment, secondary treatment, tertiary treatment, and solids handling treatment processes. Evaluate the pre-screened alternatives.

200.7.3. Facility Tours. Organize a tour of up to two wastewater treatment facilities with the Owner's staff to investigate alternatives with similar processes. These are anticipated to occur on the same day.

200.7.4. Alternative Cost/Benefit Analysis. Assist in comparing benefits, drawbacks, and costs of up to three viable alternatives. This will include life cycle cost analysis on preferred

alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 20-year life cycle evaluation.

200.7.5. Phasing Plan. Develop a phasing plan of improvements based on initial project, 10-year, and 20-year anticipated growth.

200.7.6. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives.

200.7.7. Environmental Impacts. A summary of the preliminary environmental screening of the treatment system and disposal alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.7.8. Land Requirements. Discuss property needed for alternatives.

200.7.9. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.7.10. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.7.11. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.7.12. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide input on tasks above.
- Provide a review of the alternatives considered section of the plan.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not look at alternatives to upgrade the existing recirculating gravel-bed filter.
- Evaluation of alternatives does not include piloting, bench testing, or fieldwork.
- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4.

Deliverables:

- Draft Treatment System Alternatives Facility Plan Section.

Task 200.8 – Proposed Projects (Recommended Alternatives)

Consultant Responsibilities:

200.8.1. Model day one and future 20-year process and hydraulic conditions of selected alternative for the new mechanical treatment plant.

200.8.2. Capital Improvement Plan.

a. Summarize recommended improvements.
b. Prepare planning level cost estimates for recommended improvements. For future projects anticipated to be developer driven and developer funded, summarize only upsize costs.

c. Estimate the portion of each capital improvement project cost that is attributed to 20-year growth for System Development Charge (SDC) eligibility.

200.8.3. Preliminary Project Schedule. Summarize costs for initial project, 10-year, and 20-year needs. The 6-year CIP for DEQ purposes will be covered by the "initial project" costs.

200.8.4. Permitting Requirements. Summarize WPCF permitting requirements (WPCF permit application, and additional support is covered by a separate task order).

200.8.5. Sustainability Considerations. Summarize how the priority improvement projects will enable the Owner to serve its customers and be able to operate and maintain the system. Discuss how the projects will accommodate green infrastructure and efficiencies.

200.8.6. Future Reuse Consideration. Reuse system impacts will be considered and coordinated, and their potential summarized for selected alternative.

200.8.7. Organization and Staffing Requirements. Summarize recommended staffing requirements as required for regulatory compliance or as reported by the Owner. Summarize up to three options for organizational setup for certified operators for both collections and treatment (i.e. contract operator vs sewer authority staff).

200.8.8. Financing Options. Summarize potential financing options available for initial project. This will be a summary of efforts being undertaken by the Owner, Marion County, and the MWVCOG for funding the project.

200.8.9. Annual Budget Considerations.

a. Summarize Operating Revenues and Expenses. Summarize estimated annual operating expenses and identify recommended budgets dedicated for the initial project.
b. Anticipated User Charges and Other Income. Summarize the business case scenario documented previously by FCS Group and provide a status update on current efforts to implement recommendations.
c. Annual Replacement Budgets. Develop recommended annual replacement budgets for the initial project based on typical replacement values and asset life. This will include a list of short-lived assets and the recommended annual replacement budget.
d. Annual Operations and Maintenance Costs. Estimate the operations and maintenance cost implications for the initial project.

200.8.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review an overall summary of the plan, selected improvements, and budget considerations.

200.8.11. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input on the proposed projects.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.
- Provide review and comments on the plan.

Assumptions:

- Scope excludes a user rate analysis, including evaluation of individual rate structures, cost-of-service evaluations, and service availability fee studies. These services can be provided as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and

does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

Deliverables:

- Capital Improvement Plan (tabular format, organized by initial project, 10-year, and 20-year needs).
- Estimate of SDC eligibility for each capital improvement past the initial project.
- Draft Proposed Project Facility Plan Section.

Task 200.9 – Facility Plan Documentation and Public Meeting

Consultant Responsibilities:

200.9.1. Prepare Facility Plan. Prepare and combine draft documents for a complete facility plan generally following the outline established in the July 2018 guidance document "Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed by Business Oregon, Oregon Department of Environmental Quality, Rural Community Assistance Corporation, and the United States Department of Agriculture". Add executive summary and assemble appendix materials. Appendix materials will include output flow capacities, existing peak hour flows, and future peak hour flows summarized in tabular and graphic format. Draft documents to be updated to address Owner comments. Submit final draft plan for Owner review.

200.9.2. Public Meeting. Prepare materials for and present summary findings in a townhall meeting.

200.9.3. Address Owner Comments. Address final Owner and public comments and submit for agency review.

200.9.4. Address Agency Comments. Address agency comments and finalize document.

Owner Responsibilities:

- Review and comment on final draft plan in a timely manner.
- Pay agency review fees, if applicable.
- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.

Deliverables:

- Public Meeting Presentation Materials.
- Final Facilities Plan, three (3) hard copies (3 ring binders) of the plan and one electronic copy in PDF format.

Task 200.10 – Management Reserve (Contingency Task)
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time, Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of services. For these instances, a time and material budget is established in order for Consultant to complete such additional services. Prior to the use of this contingency budget, Owner's representative will provide written (email) authorization to use the budget for specific tasks.

ADDITIONAL SERVICES (not included in scope of work)

- Bond support
- Public outreach or stakeholder outreach support
- User rate and connection fee study
- Additional field work
- Energy efficiency evaluations
- Concept level design services
- Model training
- Environmental information documents, studies, field investigations, and permitting. Environmental permitting will be addressed by a separate task order.
- Amendments to this facility planning study because of other task orders.

201 - MILL CITY / GATES FACILITIES SITE EVALUATION

Task 201.1 – Project Management

Consultant Responsibilities:

201.1.1 Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

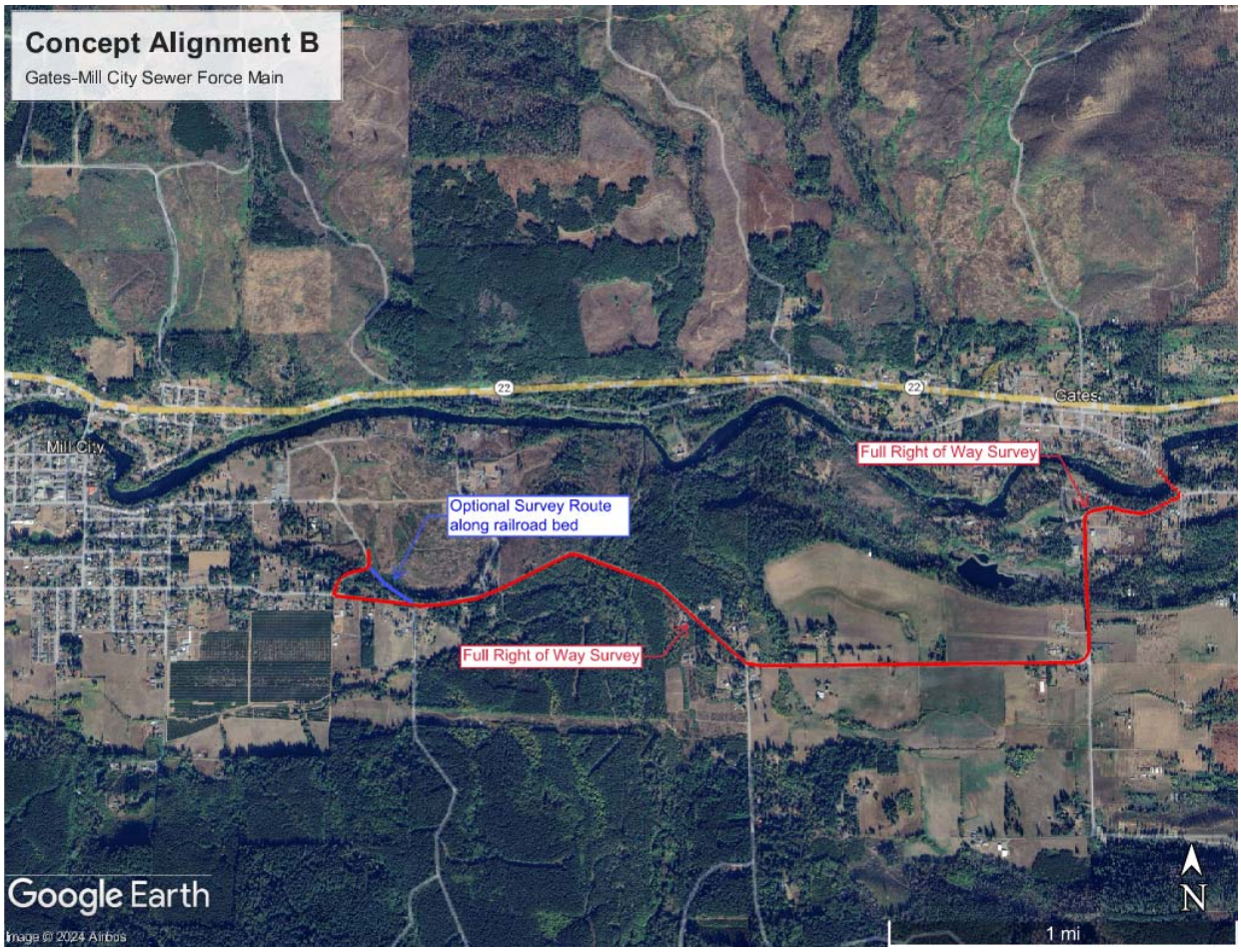
Assumptions:

- Assumes a six (6)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 201.2 – Force Main Alignment Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.2.1 Consultant shall perform a topographic recovery survey along the revised ~~proposed~~ Mill City/Gates Force Main alignment (through Kingwood Avenue). Topographic survey areas are shown in red on the ~~three~~ figure~~s~~ below.



Revised Kingwood Avenue Force Main Alignment

~~Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601.~~ Topographic Survey for the revised Kingwood Avenue Force Main Alignment shall include the following:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Full topographic surface data and underground utilities to the edge of the project boundaries ~~as defined in the attached PDF~~.
c. Obtain spot elevations at a 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter to the nearest 0.01 foot.
d. Additional spot elevations to identify grade breaks and other topographic features.
e. Locate all surface features over surface area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
f. Locate all ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate trees 8-inch in diameter and greater measured at breast height, noting coniferous or deciduous.

h. Tag located trees with a reference number for field identification.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.
k. Survey shall be based on an official benchmark acceptable to the Owner ~~City~~.
l. Establish benchmarks for future design reference.

201.2.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous, do not terminate shortly after a structure, extend to upstream or downstream structure.

Assumptions:

- This task does not include a retracement survey recorded with Marion County Surveyor's Office.
- This task does not include private utility locating services,
- ~~This task does not include preparation of easement legal descriptions and exhibits.~~

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to ten (10) easement areas.

Task 201.3 – Force Main Alignment Geotechnical Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.3.1 Geotechnical Investigation. The project geotechnical scope includes subsurface explorations for the proposed Force Main Alignment between Gates and Mill City, in Oregon. Specific geotechnical design elements include review of access permits/plans (if available), and geotechnical recommendations for a new ~~2.3-mile-long, 4-inch diameter, C900 PVC or HDPE~~ sewer line~~,~~ and ~~a~~ pump station on the western side of Gates. The new proposed alignment will be along East Sorbin Street, Gates School Road, Kingwood Avenue, and SE Fairview Street. Subsurface explorations will be completed using test pits and drilled borings within the roadways. Subsurface explorations will be completed to characterize subsurface soils along the proposed alignment for the proposed improvements.

The scope of work will include the following:

201.3.1.1 Review proposed project plans provided by the Project Team for geotechnical design and construction elements.

201.3.1.2 Provide an exploration work plan detailing the approximate location and proposed depth of explorations.

201.3.1.3 Complete a utility locate request for the site through the public One Call system.

201.3.1.4 Complete a private utility locate at proposed exploration locations.

201.3.1.5 Explore subsurface soil and groundwater conditions at the site by conducting subsurface explorations approximately every 600 ~~200~~ to 800 ~~300~~ feet along the proposed alignment (approximately thirty (30) pavement cores and borings ~~40 to 50 test pits~~; thirteen (13) explorations were completed as part of Phase I in July 2024 and a proposed seventeen (17) explorations will be completed as part of Phase II). Exploratory borings ~~Test pits~~ will be performed by a driller subcontracted to and scheduled by Consultant ~~an excavation subcontractor provided by the Owner~~. ~~Test pits will be performed by an excavation subcontractor provided by the Owner.~~ Borings ~~Test pits~~ will be conducted to a depth of up to eight (8) ~~seven (7)~~ feet below ground surface (bgs) with the intention to identify depth to presence of native rock suspected to be presented in the subsurface ~~depending on material consistency encountered which may limit the depth to which test pits can be advanced.~~ Bottom elevation of utility trench excavation is anticipated to be six (6) feet bgs. Borings ~~Test pits~~ will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

~~201.3.1.6 Explore subsurface soil and groundwater conditions along the alignment by conducting subsurface explorations approximately every 200 to 300 feet along the proposed alignment along NE Wall Street (approximately 2 to 3 borings). The borings will be performed by a driller subcontracted to the Consultant. Borings will be conducted to a depth of up to fifteen (15) feet bgs with the intention of identifying depth to presence of native rock suspected to be present in the subsurface. Borings will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.~~

201.3.1.6 ~~201.3.1.8~~ Provide a general description of existing site conditions.

201.3.1.7 ~~201.3.1.9~~ Maintain a detailed log of subsurface explorations. Collect samples of the subsurface materials encountered.

201.3.1.8 ~~201.3.1.10~~ Conduct laboratory tests using soil samples obtained from the explorations in general conformance with American Society for Testing and Materials (ASTM) including moisture content tests, plasticity index (Atterberg Limits) tests, or fines content analyses as appropriate, depending on the types of materials encountered.

201.3.1.9 ~~201.3.1.11~~ Provide recommendations for trench backfill materials, compaction, and general construction specifications.

201.3.1.10 ~~201.3.1.12~~ Complete a final geotechnical letter report specific to force main alignment and pump house.

Assumptions:

- Fieldwork can be completed during normal working hours (Monday to Friday, 8:00 AM to 5:00 PM) and will not require fieldwork to be completed during nights or weekends.
- It is anticipated that an additional three (3) full field days will be required to complete the remaining seventeen (17) explorations (Phase II).
- ~~The test pits will be excavated by others.~~
- ~~Cleared access, brush clearing, and removal of obstructions to exploration locations along the alignment will be completed prior to test pit explorations by others.~~
- ~~Traffic control will not be required for this project.~~
- Contaminated soil will not be encountered during explorations.
- Permit fees will be waived.
- Site access and right-of-entry will be obtained prior to arrival on site to complete fieldwork.
- ~~Brush clearing along the alignment will be completed prior to the test pit explorations.~~
- Geotechnical construction observation or testing services are not included.
- Project team will coordinate and establish exploration locations that will minimize damage to the existing development.
- ~~Consultant will review ODOT records for existing landslide evaluations along OR22. Consultant will determine if the landslide is shallow or deep. If shallow (less than 10 feet bgs), test pits will be used to collect data to assess the landslide. If deep (greater than 10 feet bgs), a drill rig will be required to collect necessary data to assess the landslide and will be included in a future amendment. Full landslide characterization and recommendations by a licensed geotechnical engineer will be included in a future amendment.~~

Deliverables:

- Final Geotechnical Letter Report Recommendation for trench backfill materials, compaction, and general construction specifications for the Force Main Alignment and Pump House.

Task 201.4 – Force Main Alignment Environmental Due Diligence
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Environmental due diligence shall be completed for the project area between Mill City and Gates on approximately 15 acres and 3.6 ~~2.3~~ linear-mile~~s~~ pipeline (25-foot right-of-way) in Linn and Marion Counties, Oregon. Environmental due diligence will include project management, wetlands and waters delineation, cultural resources investigation, and Phase I environmental site assessments (ESAs). These

Consultant Responsibilities:

201.4.1 Project Management. Consultant will coordinate with Project Team to receive project materials, prepare invoicing, and transmit correspondence. Consultant will maintain project files to include necessary supporting materials, as required. The project manager will monitor task performance, schedule, and budget; approve project expenses; and ensure that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Beyond general coordination and communication, Consultant will provide a monthly email to inform the Project Team about the project's progress. The monthly email will outline which tasks were worked on during the month and the progress of those tasks, as well as what tasks are anticipated to be worked on in the following month. As part of these monthly emails, Consultant shall provide a budget summary and consistent communication to keep projects on track and within their schedules and budgets. Additionally, Consultant's project manager will schedule bi-monthly check-in calls and attend regular check-in meetings with Project Team to provide status updates and discuss action items. Consultant's senior subject matter experts will provide quality reviews and input on overall project approach.

Assumptions:

- Bi-monthly check-in calls will be approximately 30 minutes long.
- There will be eight (8) bi-monthly check-in calls between Consultant and Project Team.

Deliverables:

- Meeting minutes.

201.4.2 Wetlands and Waters Delineation

201.4.2.1 Wetlands and Ordinary High Water Line Delineation. Consultant will survey the project area to evaluate whether wetlands and waters are present. If wetlands or waters are found, Consultant will delineate wetland boundaries in accordance with the methodology of the 1987 U*.S. Army Corps of Engineers Wetlands Delineation Manual* and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Regions (Version 2.0)*, used by the U.S. Army Corps of Engineers and the Oregon Department of State Lands (DSL). Hydrology, soil, and vegetation will be documented at select sample plot locations and recorded on standardized wetland determination data forms.

Streams and other waters would be delineated based on the U.S. Army Corps of Engineers' 2005 *Regulatory Guidance Letter 05-05: Ordinary High Water Mark Identification.* As defined in DSL's Oregon Administrative Rule 141-085-0515, field indicators for the ordinary high water line (OHWL) can include the following: a clear, natural line impressed on the shore or bank; a change in vegetation from riparian (e.g., willows) to upland (e.g., oak or fir); a textural change of depositional sediment or changes in the character of the soil (e.g., from sand /cobble/gravel to upland soils); an elevation below which no fine debris (e.g., needles, leaves, cones, and seeds) occurs; and the presence of litter and debris, water-stained leaves, and water lines on tree trunks.

Wetlands and OHWL boundaries and any sample plot locations will be surveyed using Collector for ArcGIS paired with a tablet and a Juniper Geode GNSS receiver capable of submeter accuracy. These data would be imported into a GIS program to produce a site map showing the delineated wetland and OHWL boundaries.

201.4.2.2 Wetlands and Ordinary High Water Line Delineation Report. Consultant will prepare a summary report of the wetland and OHWL delineations to meet DSL requirements for wetlands and other waters delineation reports. The report will be submitted to Project Team for review prior to submitting to any regulatory agencies. This task includes the preparation of the required DSL wetland report cover form, to be signed by a Project Team representative prior to submitting the report to DLS for review and concurrence.

Assumptions:

- This task includes five (5) hours of agency coordination time (four (4) hours for Project Team and one (1) hour for GIS specialist) but does not include a site visit with the regulatory agencies.
- The 2023 DSL wetland report review fee is $540 and will be paid for directly by the County.
- Access to the area will be arranged by Project Team.
- Natural resources on the site will be accessible by foot. If vegetation such as Himalayan blackberry prevents access to natural resources on the site, clearing must be completed before fieldwork can be done, or an additional site visit will be needed at additional cost.
- This cost estimate does not include a DSL site visit.
- This cost estimate is based on four (4) ~~three (3)~~ days ~~(24 hours)~~ of wetland delineation and OHWL fieldwork for two scientists. Project team will provide one round of comments on the draft delineation report. Any task not expressly described herein is not included in the proposed cost.
- All deliverables will be provided electronically; no hard copies will be provided.
- The delineations will be based on the project area shown by the alignment in the figure below. Any change to the project area after survey will incur additional costs.



- Ideal wetland delineation times are typically from late winter to late spring to capture hydrology and plant phenology. If wetland hydrology and plant indicators are not apparent, another field visit may be needed during optimal conditions to confirm wetland presence.
- Traffic control flagging is not included.
- This scope of work does not include a joint permit application for impacts to wetlands or other waters.

Deliverables:

- Wetlands and OHWL delineation report.

201.4.3 Cultural Resources Investigation

204.4.3.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs to inquire about local historical knowledge of the project area. Consultant will also ask if they have any cultural concerns about the location of the project. All project-related Tribal coordination will be described in the final report.

201.4.3.2 Background Research and Permitting. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant staff will review other available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, historical photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because portions of the project are located on land managed by state and local entities, an archaeological excavation permit must be obtained from SHPO before archaeological testing takes place (per Oregon Revised Statute (ORS) 390.235 and its implementing guidelines). The Consultant project manager will apply for this excavation permit (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 to 40 days for submission and review.

Consultant will submit a detailed permit application outlining possible scenarios should significant cultural resources be found, to avoid applying for multiple excavation permits through SHPO.

201.4.3.3 Field Survey. Consultant will conduct an archaeological survey in areas where ground-disturbing activities will occur to identify potential archaeological resources around the proposed area of disturbance. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 20 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Preliminary research shows no previous cultural resources investigations have overlapped the project according to OARRA. Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources, where project-related ground disturbance will occur, to identify any archaeological resources that may be present within the project site. Consultant proposes to excavate up to 120 shovel probes. Probes will be a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-

inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.
Consultant field staff will collect all cultural material from shovel probes that is clearly not modern per the archaeological permit conditions. The cost of this scope of work does not include curation or laboratory artifact analysis costs. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location GPS data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S. Geological Survey quadrangle map and then georeferenced during post-field processing. All recording procedures will follow SHPO guidelines. Consultant's cost estimate assumes no archaeological resources will be encountered during the survey. If archaeological materials are collected and require curation or analyses, a change order will be requested.

201.4.3.4 Reporting. Consultant will prepare a cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey.

Consultant will provide an electronic version of the draft report to the Project Team for review. After addressing comments from the Project Team, Consultant will provide the draft report to the SHPO and interested Tribal entities for review. Consultant assumes that SHPO and the Tribes will not require more than 30 days for review. Consultant will coordinate with both SHPO and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to Project Team, provided that the private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- All meetings and coordination with Project Team will be conducted via conference calls and email.
- The records search area will not extend farther than one (1) mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- The project location and size will remain as identified in the request for scope and cost (15 acres and 3.6 ~~2.3~~ linear miles).
- Based on a preliminary review of SHPO records, Consultant anticipates no cultural resources will be identified and require documentation in the project area.
- For the purposes of total site count, every site larger than one (1) acre will be considered as an additional site based on every additional acre; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- Consultant's ability to conduct fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, COVID-19-related restrictions, force majeure, or any other factor(s) outside of Consultant's control.

- Consultant will prepare a cultural resources survey report, and the report will require no more than one round of review by Project Team. Comments from the Project Team on the report will not require more than four (4) hours of Consultant labor to address. No comments will be received from SHPO review, and minimal comments (up to four (4) hours of work needed to address comments) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data from cultural resources investigation results.

201.4.4 Phase I Environmental Site Assessments. Consultant will prepare a Phase I Environmental Site Assessment (ESA) report for each of the following areas: 1) the Force Main and Gates Regional LS, 2) the Dogwood LS and Riverview LS, and 3) the WPCF/RIB. The Phase I ESAs will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The Phase I ESAs will be directed by a qualified Environmental Professional, as required by the ASTM standard.

A Phase I ESA conducted in accordance with ASTM Standard E1527-21 constitutes all appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial or customary practice, and will allow the Owner to satisfy one of the requirements for landowner liability protections under the Comprehensive environmental Response, Compensation, and Liability Act (42 United States Code 9601). Each Phase I ESA will consist of the subtasks described below.

201.4.4.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents in order to identify past operations or activities on the subject property or nearby properties that may have caused the release of hazardous substances or petroleum products into the environment. As part of the review process, site location, hydrogeological characteristics, geographic setting, and physiography will also be summarized.

Available state and federal regulatory databases will be reviewed to assess whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM standard.

201.4.4.2 Interviews. Consultant will attempt to interview property owners based on contact data provided by the client. Additionally, reasonable attempts will be made to interview at least one staff member of state or local government agencies regarding information that indicates recognized environmental conditions (RECs) in connection with the subject property. For the force main corridor, Consultant assumes that the city and/or county will be the interviewee for portions within roadway rights-of-way.

201.4.4.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. As is customary for large sites, Consultant will study

aerial photographs and topographic maps in conjunction with other data to identify areas of environmental interest on the subject property that would require in-person observation to identify and/or document. Field staff will visit each of the areas of environmental interest to observe and document them with digital photographs and notes. Field staff will also view the subject property in general for additional observations and take photographs and notes. Access to private, locked, or restricted areas would be arranged by a client representative. This scope of work does not include activities such as collecting or analyzing soil, air, water, or other environmental samples.

201.4.4.4 Owner-Provided Information. Owner-provided information is an essential component of the Phase I ESA and includes items such as copies of previous Phase I ESAs or other relevant environmental documents, a completed ASTM Phase I ESA User Questionnaire, a completed Consultant Initial Data Request, and access to the subject property. Consultant will perform a search of recorded land-title records and judicial records for environmental liens and activity and use limitations.

201.4.4.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report for each of the three areas. Sections within each report will consist of 1) a description of the property, 2) summaries of the site history and interviews, 3) a regulatory database review, 4) a description of the site reconnaissance, 5) report findings and conclusions, and 6) figures and appendices. Each report will include Consultant's professional opinion concerning the environmental disposition of the site regarding the presence of RECs. Report limitations and all literature cited will also be included.

According to the ASTM standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use for Phase I ESA is not within 180 days, an update may be necessary, Non-scope issues identified in the ASTM standard include radon, lead, and asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA reports.

Assumptions:

- The ASTM User Questionnaires and Consultant Initial Data Requests will be returned to Consultant promptly upon commencement of the project.
- This scope of work includes one round of revisions to each report's text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for other resources and will not be an independent mobilization.
- Applicable Marion and Linn County fees ($1,450 per application) will be paid by the County.

Deliverables:

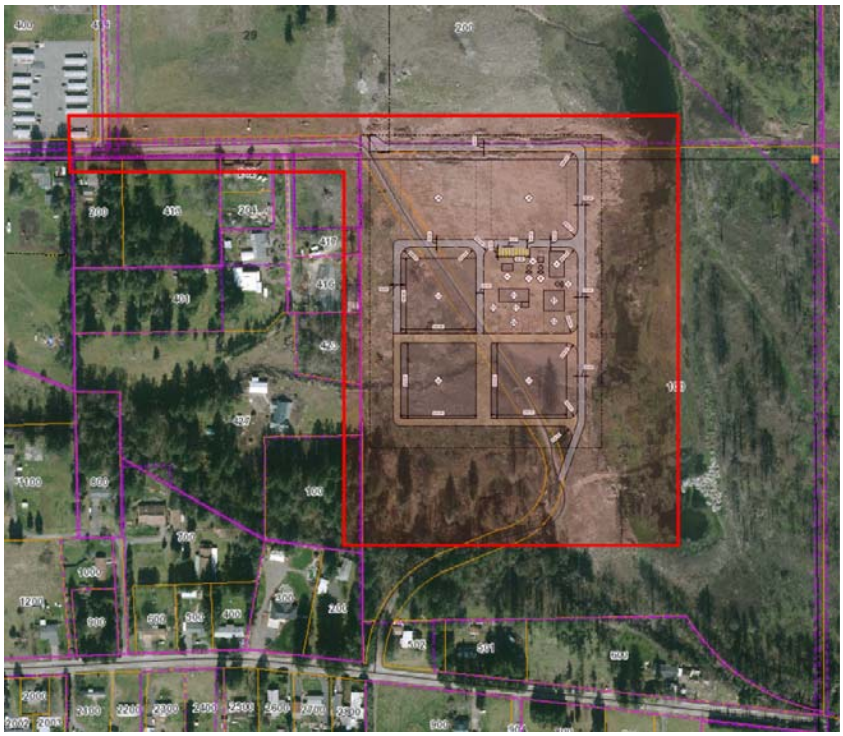
- Draft Phase I ESA report.

Task 201.5 – WPCF/RIB Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.5.1 Topographic Survey. Consultant shall perform a topographic surface survey at the proposed WPCF/RIBs site. Scope of services shall include:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Full topographic surface data and underground utilities to the edge of the project boundaries as shown in red in the figure below (subject area):



Proposed location of WPCF/RIBs in Mill City.

c. Obtain spot elevations at a maximum 50 foot on center spacing, including: along roadway centerlines, top of curb, flowline of curb, lip of gutter to the nearest 0.01 foot.
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
f. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate trees 8-inches diameter at breast height (DBH) and greater, noting coniferous or deciduous.
h. Map existing easements which may affect subject area; Owner to provide all necessary documentation or title information to complete this task.

i. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an xml file.
j. Document information on utilities to the edge of the project boundaries of the subject area, including utility poles, power lines, telecommunications, and identification information.
k. The following information will be documented for storm drain, culverts, and sanitary sewers to the edge of the project boundaries of the subject area:

    i. Rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
    ii. Pipe diameters, pipe material, and direction of pipe.
    iii. Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
    iv. Storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
    v. Show utility lines as continuous, extending to upstream or downstream structure.

l. Prepare legal descriptions and exhibits for the following Linn County land use permit applications:
    i. Expanded Partition Application – Tax Lot 09S03E32 00100.
    ii. Conditional Use Permit Application – WPCF.
    iii. Conditional Use Permit Application – Road Realignment.

Assumptions:

- Survey shall be based in NAVD88 vertical datum derived from the Oregon Real-Time GNSS Network.
- Retracement survey recorded with Marion County Surveyor's Office is not included in this scope.
- Private utility locating services are not included in this scope.
- ~~Easement legal descriptions and exhibits are not included in this scope.~~

Task 201.6 – WPCF/RIB Geotechnical Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Soil and groundwater conditions will be evaluated as a basis for developing geotechnical engineering design criteria for the preferred water pollution control facility (WPCF) and rapid infiltration basins (RIB) site located near the east terminus of SE Fairview Street approximately 900 feet east of the intersection with Remine Road in Mill City, Oregon. Proposed improvements include asphalt concrete and gravel surfaced access drives, ~~three~~ RIB, a lightly loaded administrative support building, an effluent pump station, one sequencing batch reactor (SBR) basin, and a lightly loaded equipment building that will be constructed on approximately 6.25 acres of currently undeveloped land. Future developments at the project site will include an additional SBR basin, ~~two~~ additional RIB, and an expansion to the

Consultant Responsibilities:

201.6.1 Review information regarding subsurface soil and groundwater in the vicinity of the site, including reports in our files, selected geologic maps, and other geotechnical engineering-related information.

201.6.2 Coordinate and manage the field investigation, including public utility notification and scheduling of subcontractors and Consultant's field staff. Public locates will be called in by the Consultant as required by law. Additionally, Consultant will coordinate for a private locate company to access the site.

201.6.3 Complete up to four field infiltration tests at locations to be determined by the Project Team and at depths of the proposed RIB (6 feet below ground surface (bgs) or less). Infiltration testing will be conducted in general accordance with local requirements using the open pit or encased falling head procedures, similar to requirements for City of Salem and Marion County.

201.6.4 Explore subsurface soil and groundwater conditions at the project site by conducting eight (8) to twelve (12) test pits and four (4) to six (6) drilling borings in the area of the proposed paved areas and building footprints. Test pit explorations will be extended to depths of up to 10- to 12-feet bgs in the locations of the proposed buildings and to 6.5-feet bgs in the proposed paved areas. Drilled borings will be conducted to 45- to 50-feet bgs within the footprint of the proposed buildings for the SBR basins. Exploration(s) will be advanced to the depths noted or practical refusal in dense gravels or competent rock, if encountered., whichever is shallower. Borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

201.6.5 Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM International (ASTM) Standard Practices Test Method D 2488. Qualified staff from our office will observe and document field activities.

201.6.6 Complete Dynamic Cone Penetrometer (DCP)r tests at three (3) to four (4) locations to determine subgrade modulus for pavement design.

201.6.7 Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests, one 1-dimensional consolidation test, and percent fines test.

201.6.8 Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology, and subsurface conditions;
b. An opinion as to the adequacy of the proposed development from a geotechnical engineering standpoint;
c. Summary of infiltration testing and a discussion relating to design infiltration rates based on subsurface conditions observed in our explorations;
d. Recommendations for site preparation measures, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction;
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing;
f. Recommendations for earthwork construction, including use of on-site and imported structural fill and fill placement and compaction requirements;
g. Recommendations for foundations to support the proposed structures, including minimum width and embedment, design soil bearing pressures, settlement estimates

(total and differential), coefficient of friction and passive earth pressures for sliding resistance, and recommended minimum setback from existing retaining walls or recommendations for foundation alternatives, as necessary. It is further assumed that shallow foundations can be used to adequately support the structures.

h. Recommendations for supporting on-grade slabs, including base rock, capillary break, and modulus of subgrade reactions.
i. Assessment of existing slope conditions and discussion of slope stability.
j. Seismic design parameters, including soil site class evaluation in accordance with the 2021 international building code (IBC) and the current version of the Oregon State Structural Code including a site-specific seismic hazard evaluation consistent with the requirements of the 2022 OSSC.
k. Recommendations for constructing asphalt concrete and gravel surfaced pavements for proposed on-site parking and drives, including subgrade, drainage, base rock, and pavement sections. Recommendations will be based on estimated traffic loads or loads provided by the Project Team, and on subsurface data obtained as part of this scope.
l. Recommendations for shallow foundations and site preparation measures to mitigate potentially excessive settlement of shallow foundations. It is anticipated that excessive post construction settlements could potentially occur under the assumed design loads. Therefore, preliminary recommendations to mitigate settlement may include discussions relating to ground improvement including preliminary recommendations for crushed aggregate piers.
m. Geotechnical work will be directly supervised by a geotechnical engineer licensed in the state of Oregon who will apply their professional seal to the document.

Assumptions:

- The following loads for the slightly loaded administrative and machinery buildings have been assumed. Revised project loads will be provided by the Project Team prior to completing the geotechnical report for the site if they vary from these assumptions:
  - Up to 60 kips per column
  - 4 kips per lineal foot (klf) wall loads or less
  - Floor loads will be 125 pounds per square foot (psf) or less
  - SBR wall loads of up to 4-kips per lineal foot and SBR areal loads of up to 1500-psf are assumed.
- Shallow spread foundations will be suitable for support of the proposed structures and have not budgeted for providing deep foundation recommendations if they become necessary.
- Right-of-entry or access will be provided to the exploration locations.
- Surface disturbance that will result from exploration activities is acceptable to the site owner and is understood by the Project Team. Consultant will be available to discuss further with the Project Team, site owner, or prospective owner, if needed.
- A truck or track-mounted drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered are not included in this scope of work or cost.
- Excess drill cuttings will be spread discreetly across the site.

- Contaminated soils will not be encountered during the exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), drilling operations will stop and the Project Team will be notified for directions on how to proceed.
- A site response analysis and/or a ground motion hazard analysis is not required and is excluded from this scope and budget. The site-specific seismic hazard analysis included in the scope above does not include the budget for a ground motion hazard analysis or a site response analysis.

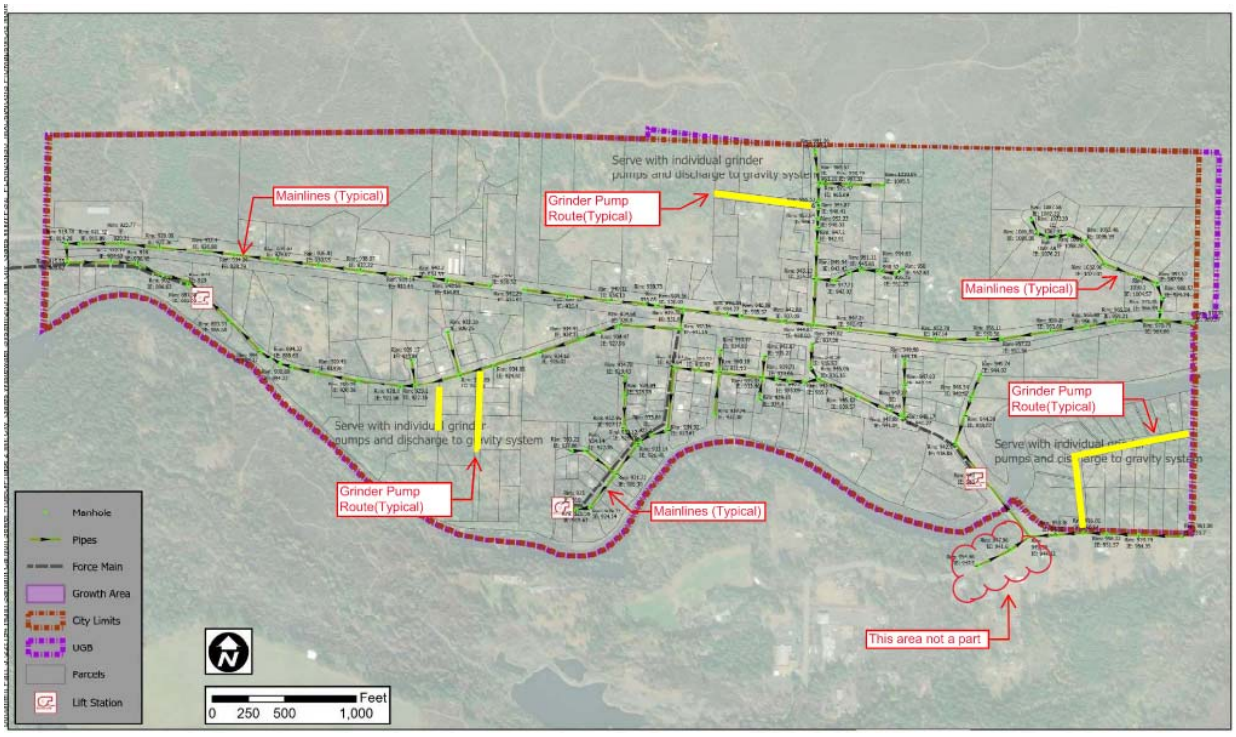
Deliverables:

- Final Geotechnical Investigation Report

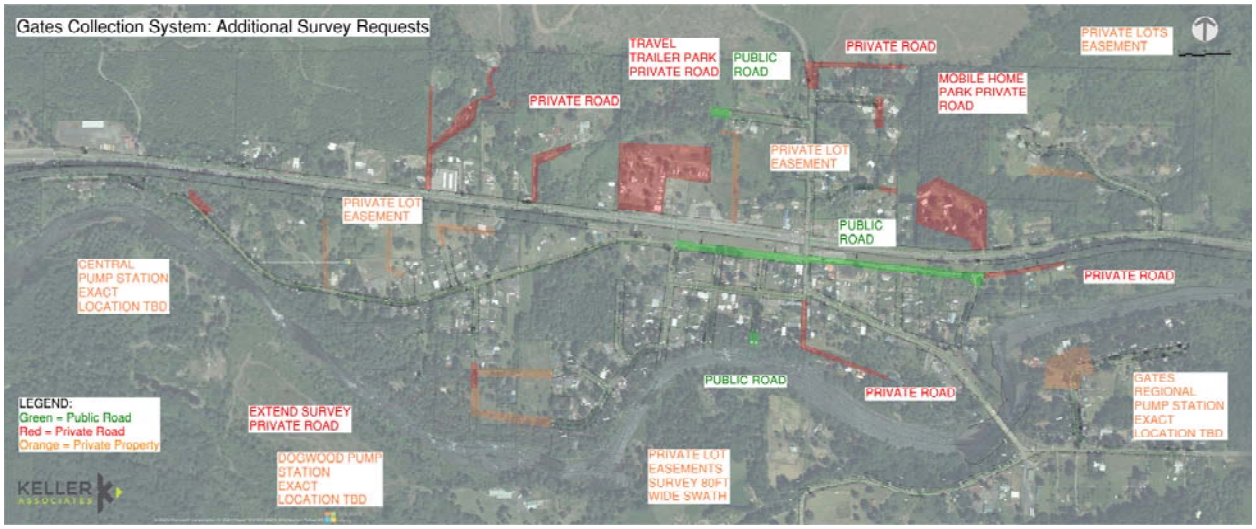
Task 201.7 – Gates Collection System Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.7.1 Topographic Survey. Consultant shall perform a topographic surface survey of the proposed Gates Collection System. This topographic survey will encompass right-of-way surveying along the proposed sewer alignment routes as shown in the figure below (subject area):



Additional Survey required based on 30% Design Alignment:



Tasks shall include administration and coordination, survey research, field monument ties and boundary resolution, field topographic survey of mainlines and grinder pump routes, and survey processing. Field topographic survey efforts include:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Provide topographic surface data, including locations of underground utilities (as marked by utility purveyors) along alignment routes.
c. Obtain spot elevations at approximate 50-foot on center spacing, including roadway centerlines, top of curb, flowline of curb, and lip of gutter.
d. Provide additional spot elevations needed to identify grade breaks and other topographic features.
e. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, and drainage areas.
f. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate all trees 8+ inches diameter at breast height, noting coniferous or deciduous.
h. Surface data to create 1-foot contours and provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an .xml file.
i. Establish site control.
j. Show power lines, and telecommunications including any identification information.
k. For storm drain, culverts, and sanitary sewers:
   - Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (approximate inside dimension).
   - Show pipe diameters, pipe material, and direction of pipe.
   - Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
   - Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.

- Show utility lines as continuous, do not terminate shortly after a structure, extend to upstream or downstream structure.

Assumptions:

- Survey shall be based on an official benchmark for the region.
- Private utility locating services may be recommended should utility purveyors (i.e. communication companies) fail to mark their utility lines on pre-survey projects. If these are not marked, this service will be provided as an additional service.
- The scope of work does not include:
    - Retracement Survey recorded with County Surveyor's Office.
    - Easement retracement~~, legal descriptions, or exhibits.~~
    - Wetland Mapping
    - Title Reports for affected properties.
- For additional survey required based on 30% Design Alignment:
    - Private Property- Survey 50 feet on both sides of property line (total 100-foot width).
    - Private Roads – Survey 10 feet from edge of gravel/pavement, both sides.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to one-hundred (100) easement areas.

Task 201.8 – Gates Collection System Geotechnical Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.8.1 Subsurface explorations will be completed for the proposed sewer collection system in Gates, Oregon. Specific geotechnical design elements include review of access permits/plans (if available) and geotechnical recommendations for approximately 24,700 linear feet of new 8-inch gravity mains, approximately 7,200 linear feet of new pressure sewer, and three (3) new pump stations throughout the City of Gates. Subsurface explorations will be completed using a trailer-mounted drill rig, except for at the three pump stations where a roto-sonic drill rig will be used to acquire subsurface data to sufficient depth in anticipated gravel soils. The intent of the subsurface explorations is to adequately characterize subsurface soils along the proposed alignment and pump stations.

201.8.1.1 Review proposed project plans to be provided by the Project Team for geotechnical design and construction elements.

201.8.1.2 Provide an exploration work plan detailing approximate locations and proposed depth of explorations.

201.8.1.3 Complete an application for Oregon Department of Transportation (ODOT) miscellaneous use permit for fieldwork, if required.

201.8.1.4 Complete a utility locate request for the site through the public one call system.

201.8.1.5 Coordinate with a private utility locate subcontractor to complete utility locates at proposed exploration locations.

201.8.1.6 Explore subsurface soil and groundwater conditions at the site by conducting subsurface explorations with a trailer-mounted drill rig approximately every 300 to 500 feet along the proposed alignment (approximately 67 to 110 borings). The borings will be performed by a driller subcontracted to and scheduled by the Consultant. Borings will be conducted to a depth of up to 10 feet below ground surface (bgs) with the intention to identify depth to presence of native rock suspected to be present in the subsurface. Borings will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.8.1.7 Explore subsurface soil and groundwater conditions at three (3) proposed pump station locations by conducting one subsurface exploration at each location with a roto-sonic drill rig. The borings will be performed by a driller subcontracted to and scheduled by the Consultant. Borings will be conducted to a depth of up to 40 feet bgs with the intention to identify depth to presence of native rock suspected to be present in the subsurface. Borings will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.8.1.8 Provide a general description of existing site conditions.

201.8.1.9 Maintain a general description of existing site conditions.

201.8.1.10 Maintain a detailed log of subsurface explorations. Collect samples of the subsurface materials encountered.

201.8.1.11 Conduct laboratory tests using soil samples obtained from the explorations in general conformance with American Society for Testing and Materials (ASTM) including moisture content tests, plasticity index (Atterberg Limits) tests, or fines content analyses as appropriate, depending on the types of materials encountered.

201.8.1.12 Provide recommendations for trench backfill materials, compaction, and general construction specifications.

201.8.1.13 Complete a final geotechnical letter report specific to the sewer collection system and pump stations.

Assumptions:

- Fieldwork can be completed during normal working hours (Monday to Friday, 8:00 AM to 5:00 PM) and will not require that fieldwork be completed during nights or weekends.
- Brush clearing along the alignment and cleared access to exploration locations will be completed by the Project Team prior to the commencement of fieldwork.
- Traffic control will only be required for 20% of the explorations [four (4) days].
- Contaminated soil will not be encountered during the explorations.
- Permit fees will be waived.
- Site access and right of entry will be facilitated by Project Team.
- This task does not include geotechnical construction observation or testing services,

- Consultant will coordinate with the Project Team to establish exploration locations that will minimize damage to existing development.

Task 201.9 – Gates Collection System Environmental Due Diligence
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Environmental due diligence shall be completed for the proposed Gates Collection System in Linn and Marion Counties, Oregon. The project area will consist of a 50-foot right-of-way along approximately 5-miles of pipeline. The proposed pipelines will be installed with an open trenching method. Environmental due diligence will include project management, wetlands and water delineation, cultural resources investigation, and Phase I environmental site assessments (ESAs). These tasks are intended to inform the project's final design and minimize impacts to existing resources.

Consultant Responsibilities:

201.9.1 Project Management. The Consultant will coordinate with the Project Team to receive project materials, prepare invoicing, and transmit correspondence. The Consultant will maintain project files to include necessary supporting materials as required. The Consultant's project manager will monitor task performance, schedule, and budget; approve project expenses; and ensure that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Beyond general coordination and communication, Consultant will provide a monthly email to inform the Project Team about the project's progress. The monthly email will outline which tasks were worked on during the month and the progress of those tasks, as well as what tasks are anticipated to be worked on in the following month. As part of these monthly emails, Consultant shall provide a budget summary and consistent communication to keep projects on track and within their schedule and budgets. Additionally, Consultant will participate in bi-monthly check-in calls and attend regular check-in meetings with the Project Team to provide status updates and discuss action items. Consultant's senior subject matter experts will provide quality reviews and input on overall project approach.

Assumptions:

- Project duration for this task will be four (4) months.

201.9.2 Wetlands and Waters Delineation

201.9.2.1 Wetlands and Ordinary High Water Line Delineation. Consultant will survey the project area to evaluate whether wetlands and waters are present. If wetlands or waters are found, Consultant will delineate wetland boundaries in accordance with the methodology of the 1987 *U.S. Army Corps of Engineers Wetlands: Delineation Manual* and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0),* used by the U.S. Army Corps of Engineers and the Oregon Department of State Lands (DSL). Hydrology, soils, and vegetation will be documented at select sample plot locations and recorded on standardized wetland determination data forms.

Streams and other waters will be delineated based on the U.S. Army Corps of Engineers' 2005 *Regulatory Guidance Letter 05-05: Ordinary High Water Mark Identification.* As defined in DSL's Oregon Administrative Rule 141-085-0515, field

indicators for the ordinary high water line (OHWL) can include the following: a clear, natural line impressed on the shore or bank; a change in vegetation from riparian (e.g., willows) to upland (e.g., oak or fir); a textural change of depositional sediment or changes in the character of the soil (e.g., from sand/cobble/gravel to upland soils); an elevation below which no fine debris (e.g., needles, leaves, cones, and seeds) occurs; and the presence of litter and debris, water-stained leaves, and water lines on tree trunks.

Wetlands and OHWL boundaries and any sample plot locations will be surveyed using Collector for ArcGIS paired with a computer tablet and a Juniper Geode GNSS receiver capable of submeter accuracy. These data would be imported into a GIS program to produce a site map showing the delineated wetland and OHWL boundaries.

201.9.2.2 Wetlands and Ordinary High Water Line Delineation Report. Consultant will prepare a summary report of the wetland and OHWL delineations to meet DSL requirements for wetlands and other waters delineation reports. The report will be submitted to the Project Team for review prior to submission to any regulatory agencies. This task includes the preparation of the required DSL wetland report cover form, to be signed by Consultant prior to submitting the report to DSL for review and concurrence.

Assumptions:

- Task assumes five (5) hours of agency coordination time but does not include a site visit with the regulatory agencies (i.e. with DSL).
- Budget assumes the DSL wetland report review fee will be paid for directly by the Owner.
- Natural resources on the site will be accessible by foot. If vegetation such as Himalayan blackberry prevents access to natural resources on the site, clearing must be completed before field work can be completed.
- Task assumes five (5) days (40 hours) of wetland delineation and OHWL field work for three (3) scientists.
- Owner will provide one (1) round of comments on the draft delineation report.
- All deliverables will be provided electronically; no hard copies will be provided.
- The delineations will be based on the project area (Gates_Pipe.kmz) in documentation received from the Project Team.
- Ideal wetland delineation times are typically from late winter to late spring to capture hydrology and plant phenology. If wetland hydrology and plant indicators are not apparent, another field visit may be needed during optimal conditions to confirm wetland presence.
- Any on-site flagging required for fieldwork or professional surveying will be incidental to this item without additional measurement or payment for on-site flagging.
- If required, a Joint Permit Application for impacts to wetlands and/or other waters is not included within this task.

Deliverables:

- Wetlands and OHWL delineation report.

201.9.3 Cultural Resources Investigation

201.9.3.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs to inquire about local historical knowledge of the project area or any concerns about the location of the project. All project-related Tribal coordination will be described in the final report.

201.9.3.2 Background Research and Permitting. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) online database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant will review available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, historical photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because portions of the project are located on land managed by state and local entities, an archaeological excavation permit must be obtained from SHPO before archaeological testing takes place (per Oregon Revised Statute [ORS] 390.235 and its implementing guidelines). Consultant will apply for this excavation permit (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 to 40 days for submission and review.

Consultant will submit a detailed permit application covering possible scenarios should significant cultural resources be found, to avoid the need to apply for additional excavation permits through SHPO.

201.9.3.3 Field Survey. Consultant will conduct an archaeological survey in all areas where ground-disturbing activities will occur to identify any archaeological resources that may be present within the project area. Preliminary research shows no previous cultural resources investigations have overlapped the project according to OARRA. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 10 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources, where project-related ground disturbance will occur, to identify any archaeological resources that may be present within the project site. Consultant proposes to excavate up to 40 shovel probes. Probes will be a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample

more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

Consultant field staff will collect all cultural material from shovel probes that is clearly not modern, per the archaeological permit conditions. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location GPS data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S. Geological Survey quadrangle map and then georeferenced during post-field processing. All recording procedures will follow SHPO guidelines.

201.9.3.4 Reporting. Consultant will prepare a cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey.

Consultant will provide an electronic version of the draft report to the Project Team for review. After addressing comments from the Project Team, Consultant will provide the draft report to SHPO and interested Tribal entities for review. Consultant will coordinate with both SHPO and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to the Project Team, provided that any private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- The records search area will not extend farther than one (1) mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- The project location and size will remain as identified in the request for scope and cost (approximately 5 linear miles represented in the map labeled Gates_Pipe.kmz).
- Based on a preliminary review of SHPO records, Consultant anticipates no cultural resources will be identified and require documentation in the project area. If archaeological materials are collected and require curation or analyses, these services will be provided as an additional service.
- Every site larger than one (1) acre will be considered as an additional site; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- Fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, or other factors outside of Consultant's control as identified elsewhere in this Agreement.
- Shovel probes will be placed only within the Mill City proposed pipeline. The proposed pipeline within Gates city limits is within hardscaped areas, which cannot be excavated (subsurface tested) by hand.
- Cultural resources survey report will require no more than one round of review by the Owner. Comments on the report from the Owner will not require more than four (4) hours of Consultant

labor to address. No comments will be received from SHPO review, and minimal comments (up to four [4] hours of work) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data showing cultural resources investigation results.

201.9.4 Phase I Environmental Site Assessments. Consultant will prepare two Phase I ESA reports for the proposed Gates Collection System; one report each for the eastern and western portions of the project, which are separated by approximately 1.4 miles. The Phase I ESAs will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The goal of a Phase I ESA is to assess the subject property, to the extent practical, for the potential presence of recognized environmental conditions (RECs), defined in ASTM Standard E1527-21. This scope of work applies to each Phase I ESA and consists of the following tasks.

201.9.4.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents, to identify past operations or activities at the subject property that may have caused the release of hazardous substances into the environment. As part of the review process, the site location, hydrogeological characteristics, geographic setting, and physiography will also be summarized.

Additionally, available state and federal regulatory databases will be reviewed to determine whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM standard. Consultant assumes that sufficient data will be readily available such that an in-person regulatory file review will not be needed. Due to the nature of the site, Consultant will not obtain and review Sanborn Company Fire Insurance maps or city directory searches.

201.9.4.2 Interviews. Consultant will interview select property owners/managers, as contact information is available. For the Gates Collection System, Consultant assumes that the City of Gates, Marion County, and/or Linn County will be the interviewee for portions within roadway rights-of-way. Additional interviews may be conducted for additional information, such as owners of properties with gas stations or industrial uses. The interviews may be comprised of phone calls, emails, and/or mailings. Consultant will initiate a second attempt to reach non-respondents. This task is subject to the Project Team's approval to interact with property owners.

201.9.4.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. Consultant will study aerial photographs and topographic maps in conjunction with other data to identify areas of environmental interest on the subject property that would require in-person observation to identify and/or document. Field staff will visit each of the areas of environmental interest to

observe and document them with digital photographs and notes. Access to private, locked, or restricted areas will be arranged by the Project Team. This task does not include activities such as collecting or analyzing soil, air, water, or other environmental samples, or addressing asbestos-containing materials, lead-based paint, or radon.

201.9.4.4 User-Provided Information. User-provided information is an essential component of the Phase I ESA and includes items such as relevant environmental documents, a completed Phase I ESA User Questionnaire, a completed Initial Data Request, and access to the subject property. User is responsible for providing Consultant the results of a search of recorded land-title records and judicial records for environmental liens and activity and use limitations (AULs).

201.9.4.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report each for the eastern and western portions of the project. Consultant will submit drafts within 6 to 8 weeks of starting the Phase I ESAs. Consultant will respond to one round of comments and provide the client with final reports within one (1) week of receiving comments.

According to the ASTM standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use of the Phase I ESAs is not within that 180-day period, updated reports may be necessary. Non-scope issues identified in the ASTM standard include radon, lead and asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA reports.

Assumptions:

- The ASTM User Questionnaires and Consultant's Initial Data Requests will be returned to the Consultant promptly upon commencement of the project.
- No provision is included for delays due to land access, coordination, weather issues, or other factors beyond the Consultant's control as identified elsewhere in this contract. Delays are not included in the fee.
- Assume one round of revisions to each report's text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for other resources and will not be an independent mobilization.
- Owner will pay applicable Linn and Marion County fees (approximately $1,450 per application).
- SHPO and Tribes will not require more than 30 days for review.
- A 50-year chain-of-title report, and a search for liens and AULs will not be obtained by Consultant under this task.

Deliverables:

- Draft and final Phase I ESA Reports for the eastern and western portions of the project.

202 MILL CITY/GATES WPCF ~~PRELIMINARY ENGINEERING~~

Previous work includes facility planning to identify treatment and disposal alternatives for wastewater generated and collected from Mill City and Gates as documented in the Mill City/Gates Wastewater Facilities Planning Study (2023 WWFPS). The recommendations from that work have led to this project, which consists of preliminary design for the Water Pollution Control Facility (WPCF) and rapid infiltration basins for disposal. The new WPCF will be designed for 2045 Projected Design Flows discussed in the 2023 WWFPS:

- 0.223 million gallons per day (MGD) annual average daily flow (AADF)
- 0.682 MGD peak hourly flow (PHF).

And will include design of the following improvements for construction:

- Headworks Building that will house the mechanical screen, grit classifier, and dewatering equipment.
- Grit removal system.
- Influent pump station.
- Process Basins (sequencing batch reactor [SBR] and equalization basin).
- Process Building that will house the aeration blowers, chemical feed system, UV disinfection system, utility water system, and electrical motor control center.
- Denitrification filters.
- Solids holding tank.
- Six (6) Rapid Infiltration basins (RIB)
- The preliminary design also includes a new section of force main piping, connecting the existing force main (near the existing WPCF) to the new WPCF.

This task will include a preliminary engineering report (PER) to include sufficient detail intended to demonstrate that the proposed project meets the design criteria identified in the facility planning study. Permit application assistance will also be provided. Drawings and specifications will be produced with sufficient detail to allow the Construction Manager / General Contractor (CM/GC) to develop a guaranteed maximum price (GMP) for the project. The task will also include providing pre-selection documents and evaluation for major equipment and long lead items.

Task 202.1 – Project Management

Consultant Responsibilities:

202.1.1 General Project Management. Provide general project administration services including contract administration, project accounting, scheduling, and internal project administration.

202.1.2 Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to establish Owner's pre-design review team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

202.1.3 Progress Meetings. Conduct monthly progress meetings, including the Owner, Consultant and CM/GC.

202.1.4 Request for Information and Data Review. Prepare initial request for information for data to be used in the pre-design process. Review information requested and provide supplemental request for information if needed.

202.1.5 CM/GC Coordination. Coordinate with the CM/GC for general project efforts, including establishing lines of communication.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed. Coordinate attendance of CM/GC to progress meetings.

Assumptions:

- Assumes an eight (8)-month duration for general project administration.
- Progress meetings will be a combination of in-person and virtual meetings.

Deliverables:

- Monthly invoices.
- Meeting agendas and minutes.
- Request for information.

Task 202.2 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

202.2.1 Design Criteria (Process). Discuss or reference design criteria items already provided in the Mill City/Gates Wastewater Facilities Planning Study (2023 WWFPS). Document additional design criteria that will serve as a basis for design.

202.2.2 New Hydraulic Profile. Prepare a preliminary hydraulic profile based on the selected improvements from the 2023 WWFPS (listed under Task 202).

202.2.3 Preliminary P&IDs. Prepare preliminary piping and instrumentation diagrams (P&IDs) based on City input, processes selected in the 2023 WWFPS (listed under Task 202), and process and control needs.

202.2.4 Preliminary Instrumentation/Controls. Prepare one-line diagram for power and a narrative describing the control strategy and objectives. Coordinate with Owner and power utility to identify power constraints and Owner's SCADA communication preferences.

202.2.5 Preliminary Mechanical Plans. Prepare preliminary mechanical designs based on anticipated major equipment selection.

202.2.6 Design Requirements Summary. Summarize design requirements for civil, structural, heating, ventilation and air conditioning, plumbing, electrical, and instrumentation and controls.

202.2.7 Concept Drawings. Develop concept drawings to address ODEQ PER submittal requirements, including site civil layout and project orientation on the selected site. Drawings to include items 202.2.1 through 202.2.5 above.

202.2.8 Workshop Meeting(s). Budget assumes up to three (3) workshop meetings. Meet with Owner and CM/GC to review draft deliverables.

202.2.9 Prepare PER. Prepare draft PER following the Oregon DEQ guidelines. Submit to Owner for review.

202.2.10 Comment Response and Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments and prepare final PER.

Owner Responsibilities:

- Review concept designs and provide comments.
- Review and comment on the PER.
- Pay for DEQ PER review fees.

Assumptions:

- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Assumes up to three (3) workshop meetings.

Deliverables:

- Agenda and minutes for meetings.
- Draft and Final PER.

Task 202.3 – Permitting Assistance

Consultant Responsibilities:

202.3.1 Permit Application. Assist Owner in preparing a WPCF Permit Application to be submitted to Oregon Department of Environmental Quality (DEQ). Coordinate with other entities to complete this permit application.

Owner Responsibilities:

- Review and comment on permit application.
- Pay permitting fees.

Assumptions:

- Owner to coordinate completion of the Land Use Compatibility Statement with the appropriate agencies.

- No Underground Injection Control registration will be required.

Task 202.4 – GMP Documents (30% Design)

Consultant Responsibilities:

202.4.1 Drawing Preparation. Prepare a set of drawings and limited specifications to aid the CM/GC in developing a GMP. The following preliminary drawings are anticipated as being included: general sheets, civil site, grading and yard piping plans, structural plans and limited sections, plumbing and HVAC plans, process mechanical plans and limited sections, electrical one-lines and site plan, and process and instrumentation diagrams. These plans are to be developed to an approximate 30% design level for the Contractor to develop a GMP. Specifications to be included are limited to major mechanical and process equipment. Other information that may assist the CM/GC in developing a GMP will be provided, including site constraints, permitting requirements, and special inspections.

202.4.2 Pre-Purchase Selection. Prepare bidding documents for the pre-purchase of major process equipment and electrical equipment. This will include evaluation criteria, technical specifications, and limited drawings. Contract documents, including agreements, terms and conditions and so forth, will be provided by the CM/GC. Consultant will assist in evaluating bids received. Major equipment to be pre-purchased is limited to: headworks screen, grit removal system, sequencing batch reactor equipment, denitrification filters, UV disinfection equipment, dewatering system, motor control center (MCC)/switchgear, generator/automatic transfer switch (ATS), and transformers.

202.4.3 Value Engineering. Participate in three (3) value engineering (VE) workshops with the CM/GC and Owner. The purpose of these workshops will be to identify, with the CM/GC, potential cost savings alternatives to the project. Where the Owner elects to include such alternatives, the Consultant will modify the design and drawings as required to incorporate these changes. It is anticipated that these workshops will occur as follows: first workshop shortly after project kickoff, second workshop before pre-purchase equipment selection, third workshop approximately one to two months prior to contract completion.

202.4.4 Cost Estimate Assistance. Provide assistance to CM/GC in their preparation of the cost estimate by answering questions and adding clarity to project requirements.

Owner Responsibilities:

- Review and comment on drawings and specifications.
- Participate in the VE workshops.
- Review and comment on VE alternatives. Make decisions for VE-desired alternatives.

Assumptions:

- Drawings and specifications are limited to those identified in this task.
- Bidding documents for pre-purchased equipment are limited to those identified in this task. Documents for additional pre-purchased equipment will be considered a change to the contract.

- Value engineering efforts assume redesign will not require major modifications to the drawings or engineering calculations. Construction cost estimates will be provided by CM/GC.
- Contract documents for pre-purchase documents will be provided by the CM/GC.
- CM/GC will develop and provide the Guaranteed Maximum Price (GMP).
- Assisting with pre-qualification of subcontractors is not included.
- A single set of design drawings and draft specifications will be provided.

Deliverables:

- 30% drawings and select technical specifications

Task 202.5 – Final Design

Consultant Responsibilities:

202.5.1 Drawing Preparation. Prepare final drawings and specifications including general, site civil, mechanical, electrical, structural, and instrumentation sheets.

202.5.2 Site Visit. Visit the site to assist in preparing the final drawings and specifications. This task assumes one site visit.

202.5.3 Ongoing WPCF Permitting Assistance. Assist Owner in consultations with regulatory agencies in review of WPCF permit application and draft permit review. Task assumes up to six (6) such meetings. Revise the drawings and specifications in response to directives from such authorities, as appropriate. This task excludes National Pollutant Discharge Elimination System (NPDES) permitting.

202.5.4 NPDES Permitting Assistance. Provide assistance in preparation of NPDES permitting application and assist in responding to one (1) round of comments from Oregon Department of Environmental Quality (ODEQ) or other agencies. Task assumes up to six (6) coordination meetings with regulatory agencies.

202.5.5 Construction Cost Estimation Assistance. Advise Owner of recommended adjustments to the opinion of probable constructions cost.

202.5.6 90% Drawings. Submit 90% design review drawings and specifications to the Owner. Package to include drawings and draft technical specifications. Set will include general, civil, architectural, structural, mechanical, HVAC and plumbing, electrical, instrumentation and controls and general detail sheets. Participate in a 90% design review workshop meeting.

202.5.7 100% Design Submittal. Submit stamped/sealed drawings, calculations, and specifications to regulatory agency and Owner. Set will address one (1) round of Owner comments from 90% set. These drawings will be utilized for building permitting and construction. Respond to and address ODEQ comments and resubmit for approval as required.

Owner Responsibilities:

- Complete applicable WPCF and NPDES permit applications.
- Review and comment on drawings and specifications.
- Participate in review workshops.

Assumptions:

- No front-end contract documents will be provided by Consultant.
- Negotiations with CM/GC for final construction contracting and guaranteed maximum price (GMP) are not included.
- This scope task does not include any bidding services.
- Permitting assistance excludes public meetings.
- Design assumes limited changes from value engineering efforts. Where extensive redesign is identified through value engineering efforts, the Consultant will be entitled to seek additional compensation.
- Design assumes final permitting limits issued by regulatory agencies will be comparable to the assumed limits given in the Facility Planning Study and Preliminary Engineering Report. Where actual permitting limits vary significantly from what has been designed, Consultant and Owner will negotiate additional scope of work.
- Building permitting will be by others.
- Cost estimating will be by others.
- Shoring Design (if required) will be by others.
- Extensive architectural features and architectural renderings are not included in the design.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or support above and beyond that described is considered an additional service.
- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

Deliverables:

- 90% Design Submittal (including Drawings and Specifications) in electronic PDF format.
- 100% Design Submittal (including Drawings and Specifications) in electronic PDF format.

Task 202.6 – Services During Bidding

Consultant Responsibilities:

202.6.1 Bid Documents. Distribute bidding documents including addenda to Owner and CM/GC.

202.6.2 Bid Coordination Meetings. Attend up to four (4) pre-bid and/or bid opening meetings with CM/GC, Owner, and sub-contractors interested in the Project and assist in answering questions related to bid documents.

202.6.3 Addenda. If required, respond to bidder questions and prepare up to six (6) addenda during each bidding process to clarify, correct, or change the issued documents.

Owner Responsibilities:

- Attend the pre-bid meetings.
- Award the bid.

Assumptions:

- Three (3) bid packages and three (3) bidding processes are assumed (remaining long-lead equipment, early civil package, and final bid package). If rebidding or addressing bid protests is required, these services will be provided as an additional service.
- Bidding process including advertisement, document management, and distribution of documents to potential bidders to be led by others.
- Consultant's scope of work is limited to attendance at up to four (4) pre-bid meetings and/or bid opening meetings and responding to questions from CM/GC or other contractors during pre-bid meetings (up to twenty (20) hours of time has been included for these tasks). Consultant will respond to bidder questions and prepare up to six (6) addenda during each bidding process.

Deliverables:

- Electronic copy in PDF format of the bidding documents will be delivered to the Owner and CM/GC.

Task 202.7 – Construction Services

Consultant Responsibilities:

202.7.1 Submittals. Review submittals for the following major equipment: headworks screen, grit removal system, influent lift station pumps, SBR equipment package, sand filter package, UV disinfection system, utility water pump system, chemical and sludge storage tanks, chemical pumping systems, sludge tank mixing, pumping, dewatering and conveyance systems, diesel generator, automatic transfer switch, switchgear and motor starters.

Assumptions:

- Review of submittals outside of those noted above will be provided as a future task.
- Budget assumes one (1) resubmittal for each submittal package.
- Additional Construction Service Tasks (i.e. requests for information, field order and change order reviews, construction meetings, etc.) will be authorized once construction is ready to proceed.

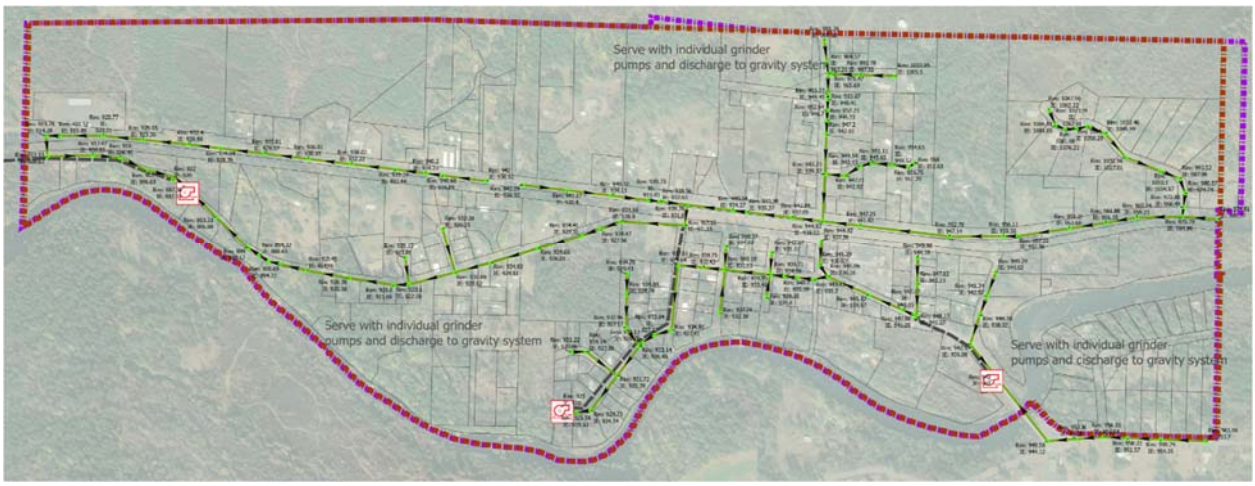
Task 202.8 – Site Visit Fees and Direct Expenses

Consultant's Responsibilities:

- This task includes the following fees and direct expenses associated with Task 202.5 –Final Design, including:
    - Travel expenses

203 GATES COLLECTION SYSTEM/FORCE MAIN PRELIMINARY ENGINEERING

Previous work included facility planning to identify concepts to collect/convey raw wastewater generated from the new Gates collection system to the existing Mill City collection system. The recommendations from that work have led to this project, which consists of preliminary design for the Gates collection system. The preliminary design includes three new lift stations, grinder pumps for those that cannot readily drain by gravity to the new collection system, service lateral concepts, Gates to Mill City force main (approximately 3.1 miles), and gravity collection pipelines and manholes serving the approximately 245 connections within the Gates city limits (see figure below). The gravity collection pipelines are anticipated to include one North Santiam River crossing (attached to an existing structure) and multiple minor creek crossings that will be bored. The force main is anticipated to have one creek crossing (attached to an existing structure) and multiple minor creek crossings that will be bored. It is anticipated that there will be two drawing packages, one for the Gates to Mill City force main, and the second for the lift stations and gravity collection system located within the City of Gates.



The task includes a preliminary engineering report (PER) to include sufficient detail to demonstrate that the proposed project meets the design criteria identified in the facility planning study. Drawings and specifications are anticipated to provide sufficient detail to allow the Construction Manager/General Contractor (CM/GC) to develop a guaranteed maximum price (GMP) for the project. Consultant's services are limited to those services outlined in the following tasks.

Task 203.1 – Project Management

Consultant Responsibilities:

203.1.1 General Project Administration. Provide general project administration services including contract administration, project accounting, scheduling, and internal project administration.

203.1.2 Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to establish Owner's design review team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

203.1.3 Progress Meetings. Conduct monthly progress meetings, including the Owner, Consultant, and CM/GC.

203.1.4 Request for Information and Data Review. Prepare initial request for information for data to be used in the pre-design process. Review information requested and provide supplemental request for information if needed.

203.1.5 CM/GC Coordination. Coordinate with the CM/GC for general project efforts, including establishing lines of communication.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed. Coordinate attendance of CM/GC to progress meetings.

Assumptions:

- Assumes an eight (8)-month duration for general project administration. Work to be completed concurrent to Task 202.
- Progress meetings will be a combination of in-person and virtual meetings.

Deliverables:

- Monthly invoices.
- Meeting agendas and minutes.
- Request for information.

Task 203.2 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

203.2.1 Design Criteria (Process). Discuss or reference design criteria items already provided in the wastewater facilities plan. Document additional design criteria that will serve as a basis for design.

203.2.2 Preliminary P&IDs. Prepare preliminary piping and instrumentation diagrams for the three (3) new lift stations.

203.2.3 Preliminary Electrical, Instrumentation, and Controls. Prepare one-line diagram for power and a narrative describing the control strategy for the three (3) new lift stations. Coordinate with Owner and power utility to identify power constraints and Owner's SCADA communication preferences. Potential SCADA communication strategies may include radio telemetry or cellular.

203.2.4 Preliminary Mechanical Plans. Assist with pump sizing and selection. Prepare preliminary mechanical designs based on anticipated pumping equipment selection.

203.2.5 Design Requirements Summary. Summarize design requirements for civil, structural, heating, ventilation and air conditioning, plumbing, electrical, and instrumentation and controls.

203.2.6 Utility Conflict Analysis and Notification. Complete an initial utility conflict analysis with existing aboveground and buried utilities. Draft initial Utility Notification Letters (First Notice) and distribute to utility providers within the project limits.

203.2.7 Concept Drawings. Develop concept drawings to address ODEQ PER submittal requirements, including site civil layout. Drawings to include items 203.2.1 through 203.2.5 above. Concept drawings for pipelines to include concept main pipeline alignment, general grading concepts at the lift stations, approximate location of manholes and features, major crossing concepts.

- Service concepts – Develop a preliminary list of services that will require a grinder pump system. Provide summary of lateral concepts and the anticipated method for servicing each developed property. The concepts will be developed without the benefit of surveyed finish floors of each home.

203.2.8 Workshop Meeting(s). Meet with Owner and CM/GC to review draft deliverables.

203.2.9 Prepare PER. Prepare draft PER following the Oregon DEQ guidelines. Submit to Owner and DEQ for review.

203.2.10 Comment Response and Final PER. Address Owner input and submit to DEQ for review. Address agency comments and prepare final PER.

Owner Responsibilities:

- Review concept designs and provide comments.
- Review and comment on the PER.
- Pay for DEQ PER review fees.

Assumptions:

- Surveying, geotechnical, utility pot holing, land and easement acquisition, negotiations, and legal descriptions are not included as part of this task.
- A radio path study will not be completed as a part of this scope. If desired, it will be completed by a third-party vendor or will be included as an additional service.
- The lift stations are assumed to include an outdoor generator and a small block structure to house only the electrical. The lift stations are all assumed to be a similar design with a wetwell and submersible pumps. It is assumed that odor control will be incorporated into the lift station pumping the flow to Mill City.
- Budget assumes up to three (3) workshop meetings.

Deliverables:

- Agenda and minutes for meetings.
- Concept drawings (prepared in 22”x34”, reviewed in 11”x17”), no paper copies.
- Draft and Final PER.
- Utility Conflict Analysis and Utility Notification Letters (First Notice)

Task 203.3 – GMP Documents (30% Design)

Consultant Responsibilities:

203.3.1 Drawing Preparation. Prepare a set of drawings and limited specifications to aid the CM/GC in developing a GMP. The following preliminary drawings are anticipated as being included:

- General sheets
- Lift Station Drawings:
  - Civil site, including grading and yard piping plans.
  - Structural plans and limited sections.
  - Plumbing and HVAC plans.
  - Process mechanical plans and limited sections.
  - Electrical one-lines and site plan, including on-site backup power.
  - P&ID with instrumentation list developed to an approximate 50% effort.
- Pipeline Drawings
  - Plan and profile drawings, including pipe size, depth, material, and grade information.
  - Service locations will be shown in concept format only, with final location and depth to be determined by the CM/GC or the construction Contractor.
  - Parcels requiring grinder pumps will be identified.
  - Approximate location and standard details for isolation valves, air release valves, and cleanouts along force mains.
  - Other standard details reflecting Owner preferences (i.e. manholes, service lines, surface restoration).

Specifications to be included are limited to lift station pumping equipment (i.e., pumps, electrical gear, generator) and pipeline materials. Provide other information that may assist the CM/GC in developing a GMP will be provided, including site constraints, permitting requirements, and recommended special inspections.

203.3.2 Value Engineering (VE). Participate in three (3) VE workshops with the CM/GC and client. The purpose of these workshops will be to identify, with the CM/GC, potential cost savings alternatives to the project. Where the Owner elects to include such alternatives, the Consultant will modify the design and drawings to incorporate these changes. It is anticipated that these workshops will occur as follows: first workshop shortly after project kickoff, second workshop before WPCF pre-purchase equipment selection, third workshop approximately one to two months prior to contract completion.

203.3.3 Cost Estimate Assistance. Provide assistance to CM/GC in their preparation of the cost estimate by answering questions and adding clarity to project requirements.

Owner Responsibilities:

- Review and comment on drawings and specifications.
- Participate in the VE workshops.

- Review and comment on VE alternatives. Make decisions for VE desired alternatives.

Assumptions:

- Drawings and specifications to be provided are limited to those identified in this task.
- Documents for pre-purchased equipment, if desired, will be considered a change to the contract.
- Value engineering efforts assume redesign will not require major modifications to the drawings or engineering calculations. Where extensive redesign is identified, the Consultant will be entitled to seek additional compensation.
- Any construction cost estimates are provided by CM/GC. The CM/GC will develop and provide the Guaranteed Maximum Price (GMP).
- Only the two sets of design drawings and draft specifications will be provided. Consultant will not prepare separate packages for CM/GC to solicit quotes from subcontractors/vendors.

Deliverables:

- Drawings and select technical specifications.

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS

400 – COMMERCIAL SEPTIC SYSTEM PLANNING

Task 400.1 – Project Management

Consultant Responsibilities:

400.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

400.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

Assumptions:

- Assumes a twenty-four ~~twelve~~ (24 ~~12~~)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 400.2 – Data Acquisition & Property Tour

Consultant Responsibilities:

400.2.1. Request for Information. A request for information will be prepared by the Consultant

describing the information needed including, but not limited to, the following items:

a. Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b. List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c. Previous collected test pit data for all the properties.
d. Previous studies involving the soil in the city.
e. Provide existing drain field and septic tank locations for each property.
f. Identify available property for consideration for septic tank or drain field placement.
g. Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

400.2.2. Conduct site tour of each property to evaluate potential drain field locations.
400.2.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

Assumptions:

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

Deliverables:

- Request(s) for Information
- Summary tables and figures for existing septic tanks and drain fields status

Task 400.3 – Stakeholder Involvement / Engagement

Consultant Responsibilities:

400.3.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.
400.3.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.
400.3.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.

400.3.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities:

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

Deliverables:

- Public and stakeholder meeting presentation materials.

Task 400.4 – Commercial Septic System Concept

Consultant Responsibilities:

400.4.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.
400.4.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …).

Owner Responsibilities:

- Provide input and approval of septic tank and drain field concepts.
- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Test pits will not be excavated, and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Task 400.5 – Commercial Septic System Design
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.5.1 Develop schedule for overall project delivery and construction.
400.5.2 Oversee excavation of test pits and soil sampling to determine soil characteristics, infiltration rates, and other necessary design criteria for up to twenty-four (24) ~~twelve (12)~~ commercial properties.

400.5.3 Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, etc.) for flow and wastewater strength for up to twenty-four (24) ~~twelve (12)~~ commercial properties and their intended uses.

400.5.4 Prepare Septic System Designs for up to twenty-four (24) ~~twelve (12)~~ commercial properties. Complete designs for each commercial property shall include pre-treatment, septic tanks, drain field, replacement area, and all other appurtenances, as required.

400.5.5 Prepare design drawings (11" x 17", PDF).

400.5.6 Regulatory and Permitting Requirements. Review and summarize current, pending, and future regulatory requirements and permitting criteria that may influence operation and maintenance, and adaptation of the system to the long-term gravity collection system. Prepare permit applications and provide inspection services for systems permitted by DEQ as appropriate.

400.5.7 Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner in an operation and maintenance (O&M) Manual.

400.5.8 Attend up to twenty-four (24) ~~twelve (12)~~ bi-weekly one (1)-hour long meetings and provide updates to Project Team.

Owner Responsibilities:

- Provide input for septic tank and drain field concepts.
- Provide staff input and requirements for septic grant approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Commercial properties will be permitted through either Marion County or Oregon Department of Environmental Quality (DEQ).
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- Conceptual septic system design and drawings.
- Final septic system design and drawings.
- Permit applications.
- O&M Manual.

Task 400.6 – ODOT ROW Commercial Property Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.6.1 Consultant shall perform a topographic recovery survey for up to twelve (12) commercial properties located along the western side of North Santiam Highway between the intersection of Front Street (southern limit) and Detroit Avenue (northern limit) for the purpose of preparing easement agreements including legal descriptions and exhibits for use of the Right-of-Way. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to complete a boundary retracement and side boundary line resolution for up to twelve (12) properties within the project limits described above and as defined in the attached PDF.
b. Topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter, to the nearest 0.01 foot.
d. Additional spot elevations to identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way.
f. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
g. Locate ground and above ground utilities, including utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
h. Locate trees 8-inch diameter and greater measured at breast height, noting coniferous or deciduous.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

400.6.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.

e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twelve (12) easement areas.

Task 400.7 – Detroit Environmental Due Diligence (ODOT ROW Easements)

Consultant shall complete environmental due diligence support as described below for up to twelve (12) commercial properties in Detroit, Oregon.

Subtask 400.7.1 – Project Management
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.7.1.1 Consultant will coordinate with Owner and others to receive project materials, prepare invoicing, and transmit correspondence. As part of Consultant's project management efforts, monthly check-in calls will be scheduled with Consultant to discuss interim survey results and other project-related issues as they arise. Consultant will maintain project files to include supporting materials. Consultant will monitor task performance, schedule, and budget; approve project expenses; and check that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Assumptions:

There will be four (4) monthly check-in calls involving the Consultant team.

- Monthly check-in calls will be approximately one (1)-hour long.

Subtask 400.7.2 – Cultural Clearance Certification
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant will coordinate with the cultural resources department at Oregon Department of Transportation (ODOT) to seek Cultural Clearance Certification for the project.

Consultant Responsibilities:

400.7.2.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs Indian Reservation to inquire about local historical knowledge of the project area. Consultant will also ask if they have any cultural concerns about the location of the project. Project-related Tribal coordination will be described in the final report.

400.7.2.2 Background Research. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) online records

database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant staff will also review other available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because the project is located on land managed by ODOT, an archaeological excavation permit must be obtained from the SHPO before archaeological testing takes place (per ORS 390.235 and its implementing guidelines). The Consultant will apply for this state-issued excavation permit from the SHPO as required by state statutes (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 days for submission and review.

400.7.2.3 Field Survey. Consultant will conduct an archaeological survey in areas where ground-disturbing activities will occur to identify potential archaeological resources in and around the proposed area of disturbance. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 20 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Preliminary research shows there are no cultural resources investigations overlapping the project area according to OARRA. Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources where project-related ground disturbance will occur. Consultant proposes to excavate up to 24 shovel probes. Probes will measure a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

Should archaeological materials be discovered, they will not be collected; rather, the artifacts will be identified as to type, material, function, and cultural and temporal association. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location global positioning system (GPS) data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S> Geological Survey quadrangle map and them georeferenced during post-field processing. All recording procedures will follow SHPO guidelines. The Consultant's cost estimate assumes that no more than one archaeological resource will be encountered during the archaeological survey.

400.7.2.4 Reporting. Consultant will prepare one cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey. The Consultant will provide an electronic version of the draft report to ODOT, SHPO, and interested Tribal entities for review. The Consultant will coordinate with ODOT, SHPO, and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to the Consultant, provided that the private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- All meetings and coordination with Consultant will be conducted via conference calls and email.
- The records search area will not extend farther than one mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- Consultant will obtain up to one archaeological permit.
- The project location and size will remain as identified in the request for scope and cost (less than three acres total).
- Based on a preliminary review of SHPO records, Consultant anticipates that up to one cultural resource site will be identified and require documentation in the project area. If a larger number of sites are identified, additional costs may be incurred, and Consultant will discuss with Consultant on how to proceed.
- No more than four hours of labor for each field staff member will be required to record the cultural resource site. The identification of large and complex cultural resource sites (e.g., homesteads with multiple structures or precontact village sites with more than 500 artifacts) are not included in this scope.
- For the purposes of total site count, every site larger than one acre will be considered as an additional site based on every additional acre; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- **Consultant's ability to conduct fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, COVID-19-related restrictions, force majeure, or any other factor(s) outside of Consultant's control**. Consultant will prepare a cultural resources survey report, and the report will require no more than one round of review by Consultant. Comments from Consultant on each of the survey reports will not require more than four hours of Consultant labor to address. No comments will be received from SHPO review, and minimal comments (up to four hours of work needed to address comments) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data from cultural resources investigations.

Subtask 400.7.3 – Phase I Environmental Site Assessment
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

Consultant will prepare a Phase I Environmental Site Assessment (ESA) report for the project area. The Phase I ESA will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The Phase I ESA will be directed by a qualified Environmental Professional, as required by the ASTM Standard.
A Phase I ESA conducted in accordance with ASTM Standard E1527-21 constitutes appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial or customary practice and will allow the Owner to satisfy one of the requirements for landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (42 United States Code 9601). The Phase I ESA will consist of the subtasks described below:

400.7.3.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents in order to identify past operations or activities on the subject property or nearby properties that may have caused the release of hazardous substances or petroleum products into the environment. As part of the review process, site location, hydrogeological characteristics, geographic setting, and physiography also will be summarized. Available state and federal regulatory databases will be reviewed to determine whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM Standard. Note: Based on the Consultant's initial review, there are eight leaking underground storage tank records and a brownfield site mapped within 0.25 miles of the project site.

400.7.3.2 Interviews. Consultant will attempt to interview property owners or their representative(s) based on contact data provided by Consultant. Additionally, reasonable attempts will be made to interview at least one staff member of state or local government agencies regarding information that indicates recognized environmental conditions (RECs) in connection with the subject property.

400.7.3.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. Access to private, locked, or restricted areas would be arranged by Consultant. This scope of work does not include activities such as collecting or analyzing soil, air, water, or other environmental samples.

400.7.3.4 Owner-Provided Information. Owner-provided information is an essential component of the Phase I ESA and includes items such as copies of previous Phase I ESAs or other relevant environmental documents, a completed ASTM Phase I ESA User Questionnaire, a completed Initial Data Request, and access to the subject property. The Owner is also responsible for providing Consultant with the results of a search of recorded land-title records and judicial records for environmental liens and activity and use limitations.

400.7.3.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report. Sections within the report will include 1) a description of the property, 2) summaries of the site history and interviews, 3) a regulatory database review, 4) a description of the site reconnaissance, 5) findings and conclusions, and 6) figures and appendices. Each report will include Consultant's professional opinion concerning the environmental disposition of the site regarding the presence of RECs. Report limitations and all literature cited will also be included. According to the ASTM Standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use for Phase I ESAs is not within 180 days, an update may be necessary. Non-scope issues identified in the ASTM Standard include radon, lead, asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA report.

Assumptions:

- The ASTM User Questionnaire and Consultant's Initial Data Request will be returned to Consultant promptly upon commencement of the project.
- This scope of work includes one round of revisions to the report text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Phase I ESA reliance letters will be provided for a flat fee of $500.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for cultural and will not be an independent mobilization.

Deliverables:

- Draft and final Phase I ESA report.

Task 400.8 – Detroit Commercial Septic Excavation Contractor

Consultant Responsibilities:

400.8.1 Consultant shall mobilize to Detroit, Oregon to perform sewer video inspections of existing septic systems using appropriate equipment to locate, expose, flag, and prepare septic systems for inspection by Consultant's septic system designer. Consultant shall provide services for up to <u>four (4)</u> ~~fifteen~~ days of sewer video inspections.

400.8.2 Consultant will excavate test pits for onsite sewage evaluations at the direction of Consultant's septic system designer. Test pits will be excavated in accordance with Oregon Department of Environmental Quality recommendations and requirements. The bottom of the test pit shall measure at least 2-feet x 4-feet. Test pits shall be at least 4.5-feet deep but shall not exceed a depth of five feet. One end of the test pit shall be sloped or stepped in order to allow access for Consultant's septic designer and regulatory inspector. All spoils

must be placed a minimum of two feet from the edge of the test pit. Consultant shall

Assumptions:

- Each day includes up to eight hours of site work and mobilization efforts.
- Consultant's septic system designer shall group locations of sewer video inspections and test pit excavations for efficiency.
- Owner recognized that the services provided by the septic system designer include construction-type activities not originally contemplated in the Consultant's scope of services and recognizes that the Owner will rely on the Consultant's licensing and insurance to address any ~~and~~ deficiencies in performance to the standard of care or to address any damages resulting from Consultant's activities.

Task 400.9 – Detroit Commercial Properties Survey
(Consultant may retain a subconsultant to perform this task, however, Co11nsultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant Responsibilities:

400.9.1 Consultant shall perform a property boundary survey for up to twenty (20) commercial properties in Detroit, Oregon for the purpose of verifying property lines prior to field layout, measurements, elevation work, and site plan development of onsite septic systems. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the followings:

a. Locate existing monumentation to complete a boundary retracement and side boundary line resolution for up to twenty (20) properties within the City of Detroit.
b. Calculations and Property Deed research.
c. Initial field monument ties.
d. Boundary Resolution.
e. Set property corners.
f. Record of survey drafting.
g. File survey with Marion County.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twenty (20) easement areas.

Task 400.10 – Detroit Commercial Septic Groundwater Study
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant Responsibilities:

400.10.1 DEQ requires a written assessment of the impact of the proposed septic drainfield on the quality of groundwater ("groundwater study") as part of the water pollution control facility (WPCF) permitting process. The Consultant will perform a groundwater study for one (1) property, located at:

- 200 Detroit Avenue, Detroit, Oregon

Using the Large Onsite Septic System (LOSS) model, developed by the Washington Department of Ecology, to simulate nitrate attenuation due to mixing of septic effluent with groundwater and infiltrating precipitation. Inputs to the LOSS model include certain characteristics of the wastewater, physical dimensions of the site, and subsurface soil properties. Output from the LOSS model will be the nitrate concentration in groundwater at a specified distance, or point-of-compliance (POC), from the septic drainfield. Due to the marginal distance between the proposed septic drainfield and the property boundary, it is assumed that DEQ will accept the POC to be the Detroit Lake shoreline located
Project Team using known site-specific conditions, including:

- Nitrate concentration in precipitation (anticipate using the default model value of 0.24 milligrams per liter [mg/L]).
- Soil denitrification factor (anticipate using the default model value of 10%).
- Aquifer thickness (based on well logs from the Oregon Water Resources Department or the DEQ-required upper limit of 20 feet).
- Aquifer width (based on drainfield width or length).
- Aquifer hydraulic conductivity (based on literature values or well tests reported on
- Horizontal hydraulic gradient (based on literature values or a default value).
- Recharge to the aquifer (based on precipitation measurements and an assumed percentage of infiltration into subsurface soils and/or literature values).
- Nitrate concentration in upgradient groundwater, if available.

Consultant and Project Team will determine:

- Septic drainfield length and width and the distance from the drainfield to the downgradient POC (distance from both Detroit Lake and the property boundary in feet).
- Wastewater volume (in gallons per day). Guidance for the LOSS model defines the wastewater volume as the daily operating capacity of the LOSS (i.e., design flow without a peaking factor).
- Total nitrogen concentration after treatment, should treatment be needed for the system to be compliant with DEQ rules.

Consultant will perform a preliminary run of the LOSS model and summarize the results (i.e., nitrate concentration at the POC) for the Project Team via email. If the model results indicate that nitrate concentrations from the septic system will be attenuated before reaching the downgradient POC, Consultant will document the model results in a technical memorandum. Alternatively, if the model results indicate that nitrate concentrations will not be attenuated before reaching the downgradient POC, the Consultant will hold a virtual meeting with the Project Team to review design changes that would need to occur such that nitrate concentrations would be attenuated before reaching the POC (i.e., nitrogen concentration in groundwater, drainfield configuration, distance between the drainfield and POC, or wastewater volume).

Assumptions:

- No field work will occur as part of this scope of work, and DEQ will not require groundwater sampling for nitrate.

- No modeling of nitrate attenuation in unsaturated soils beneath the septic drainfield is included in this scope of work.
- Consultant will perform up to five model runs as part of an iterative process to develop an acceptable model for DEQ.
- DEQ will not have significant comments on the LOSS model simulations or require additional model runs. Specifically, DEQ comments will be incorporated in eight hours or less.
- Three virtual meetings with DEQ will be held to discuss the POC and appropriate model input parameters.

Deliverables:

- Email with preliminary results of the LOSS model run to Project Team.
- Draft Technical Memorandum documenting the LOSS model for Project Team to review and provide comment.
- Final Technical Memorandum documenting the LOSS model for submittal to DEQ.

401 - KANE'S MARINA SEPTIC SYSTEM

Task 401.1 – Project Management

Consultant Responsibilities:

401.1.1. General Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

401.1.2. Regulatory Coordination. Meet with County and DEQ staff to discuss WPCF and County permit options. The objective of this outreach will be to have a selected permitting process (WPCF or County).

401.1.3. Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to review/establish Owner design team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

401.1.4. Presentation to County Commissioners. The Consultant will present a project update to the County Commissioners at the conclusion of Task 405, Preliminary Design. Consultant will prepare presentation materials and/or handouts. The one presentation will summarize the system layout, opinion of probable cost, permitting, schedule, and next steps.

401.1.5. Request for Information. Prepare initial request for information for data to be used in the design process.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed.
- Provide requested information within two weeks of request.

Assumptions:

- Project management budget assumes a project schedule of up to 4 months.
- Unless otherwise noted, meetings/workshops may include a combination of in person or virtual attendees. This assumption applies to this task as well as subsequent tasks.
- Funding support is not included in this scope of work, including but not limited to American Iron and Steel (AIS) or Build America, Buy America (BABA) tracking, certification, or reporting.

These services can be provided as additional services.

Deliverables:

- Kickoff meeting agenda and minutes.
- Request for Information.
- Presentation materials and/or handouts.

Subtask 401.2.1 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

401.2.1.1 Study Phase Services.

a. Site Visit. Consultant will coordinate with Owner's staff to perform a site visit and document existing site conditions. Evaluation will include documentation of status and condition of existing septic facilities and electrical equipment. This scope does not include inspection of interior spaces or existing facilities.
b. Basin Study. Consultant will review the plan and profile for the gravity sewer system developed through the North Santiam Sewer Authority Master Plan. Consultant will approximate alignment and invert elevation requirements for the future lift station wetwell. Consultant will estimate the operating volume required for the future pump station.
c. Operation and Maintenance Assessment. Consultant will review available data provided by Owner to summarize historic usage, operation strategies, and maintenance considerations. It is anticipated the evaluation will include holding tank storage requirements, hydrogen sulfide and odor control, standby power, instrumentation and controls (alarming), future pump station compatibility, redundancy provisions, emergency response, and preventative maintenance activities.

401.2.1.2 Design Criteria. Document design criteria established from the study phase services that will serve as basis for design. The design criteria will include, emergency storage calculations, anticipated flow conditions for the marina, future basin flow conditions, holding tank (wetwell) storage requirements, odor control strategy, power requirements, alarms.

401.2.1.3 Topographic Surveying. Provide oversight of the services to complete topographic and boundary surveying services for Kane's Marina.

401.2.1.4 Geotechnical Investigation. Provide oversight of the services to complete geotechnical engineering design services for Kane's Marina.

401.2.1.5 Site Layout. Develop 30% concept design showing site civil layout and holding tank(s) orientation on the marina site. Concept to include general grading concepts and reflect considerations for holding tank dimensions, future building and valve vault footprint, generator location, stormwater disposal, yard piping, and access for future maintenance/pump removal. The future footprint assumes that a small electrical building will be required to house the future electrical/controls, including a variable frequency drive (VFD) for the future lift station. Consultant has assumed that the generator will be outdoors with sound attenuation. The pipe network will be limited to 5-feet outside any building footprint.

401.2.1.6 Odor Control Type. Evaluate up to three design alternatives for odor control with the Owner. For each alternative, evaluation to include operations and maintenance considerations, benefits, drawbacks, costs, and consideration of non-cost factors (i.e., future expansion for the lift station). Potential odor control types include chlorine dosing equipment, passive carbon filtration, mixing, chemical, and air-scrubber.

401.2.1.7 Electrical and Controls. Coordinate with Owner to identify SCADA communication preferences. Coordinate with power utility to identify power constraints. Prepare one-line diagram for power and a narrative describing the communication strategy and objectives including a piping and instrumentation diagram (P&ID).

401.2.1.8 Cost Estimate. Provide an AAEC Class 4 opinion of probable cost for the project.

401.2.1.9 Workshop Meeting. Meet with Owner to review concepts and alternatives and select preferred alternative for design.

401.2.1.10 Prepare PER. Prepare draft Preliminary Engineering Report (PER) following the *Oregon DEQ guidelines.* In addition to the minimum regulatory requirements, PER will include concept drawings showing conceptual pipe network layout, one-line diagram, and anticipated permit requirements. Submit to Owner for review.

401.2.1.11 Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments into final PER.

Owner Responsibilities:

- Provide input on holding tank, piping design criteria, and preferred alternatives.
- Obtain or provide information for land parcel for the holding tank site, easements, and rights-of-way.
- Provide overall site plan with enough detail to layout the pipe network.
- Provide all necessary documentation or title information for boundary survey services.
- Secure permission for access for surveying and geotechnical investigations on the two subject properties.
- Provide concurrence on the location of the geotechnical investigation; assist in pre-marking locations for test pits / boring.
- Review and provide one set of consolidated comments on the Draft PER, concept plans, and opinion of probable cost.

Assumptions:

- Consultant shall be entitled to rely, without liability or the need for independent verification, on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.
- Power is readily available and located adjacent to the site.
- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Pavement sections, curbing and other site design is not included in this scope.
- Other assumptions documented for surveying and geotechnical services.

Deliverables:

- Agenda and minutes for Workshop Meeting.
- Draft and Final PER (1 paper copy and 1 PDF)

Consultant Responsibilities:

401.2.2.1 Consultant shall perform a topographic recovery survey of the Kane's Marina property to serve as a basis for design. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to compete a boundary resolution of subject area

b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50 foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, lip of gutter, etc., to the nearest 0.01 foot
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way
f. Locate surface features over subject area, including but not limited to: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas
g. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants
h. Locate trees 8" DBH and greater noting coniferous or deciduous
i. Map existing easements which may affect subject.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

401.2.2.2 Survey will show utility poles, power lines, and telecommunications, etc. including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:
a. Show rim or grate elevations and inverts for all manholes and drainage structures, with structure size (inside dimensions)
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

401.2.2.3 Prepare a Legal Description and Visual Exhibit Map for the holding tank (future wet well).

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Description and Visual Exhibit Map

Subtask 401.2.3 – Geotechnical Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

The purpose of this subtask is to evaluate soil and groundwater conditions as a basis for developing geotechnical engineering design criteria for the Kane's Marina project.

Consultant Responsibilities:

401.2.3.1. Review information regarding subsurface soil and groundwater in the vicinity of the site, including filed reports, selected geologic maps, and other geotechnical engineering-related information.

401.2.3.2. Coordinate and manage the field investigation, including public utility notification and scheduling. Utility locates will be ordered by Consultant.

401.2.3.3. Explore subsurface soil and groundwater conditions at the project site by drilling one (1) drilled boring exploration to a depth between 20 and 25 feet bgs on the south side of the site near proposed holding tank/wetwell location, and four (4) to six (6) boring explorations 5 to 10 feet bgs along the proposed forcemain alignment.

401.2.3.4. Explorations will be advanced to the depths noted or to practical refusal in dense gravels or competent rock, if encountered, whichever is shallower. The borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

401.2.3.5. Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM Standard Practices Test Method D 2488. Field exploration work shall be observed and documented by qualified geotechnical engineering staff.

401.2.3.6. Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests and percent fines tests.

401.2.3.7. Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology and subsurface conditions.
b. Report subsurface conditions and data along the proposed forcemain/collection lines alignment.
c. An opinion as to the adequacy of the proposed development of the holding tank/wetwell from a geotechnical engineering standpoint.
d. Recommendations for preparation measures at the proposed holding tank/wetwell/lift station site, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction.
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing.
f. Recommendations for earthworks, including use of on-site and imported structural fill and fill placement and compaction requirements.
g. Recommendations for foundations to support proposed at-grade and below-grade structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance. Consultant assumes that proposed structures will be lightly loaded and that shallow foundations can be used to adequately support the structures.

h. Recommendations for supporting on-grade slabs, including base rock, capillary break and modulus of subgrade reaction, as appropriate.
i. Seismic design parameters in accordance with the current version of the Oregon Structural Specialty Code. Consultant will also perform a simplified liquefaction settlement analysis.

401.2.3.8. All work under this subtask will be directly supervised by an engineer licensed in the state of Oregon. Engineer will apply their professional seal to the document.

Assumptions:

- Owner will obtain right-of-entry or access to the exploration locations.
- A rubber-tired drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered, are not included in this scope of work or fee.
- Excess drill cuttings can be scattered on site.
- Installation of monitoring wells to measure static water groundwater is excluded.
- Contaminated soils will not be encountered during exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), Consultant-will stop drilling operations, notify Owner and discuss how to proceed.
- If public locators are not allowed to enter or cannot enter the project area to clear specific exploration locations, Consultant may provide the services of a private locate company to access the site, if requested, for an additional fee of $630.

Deliverables:

- Draft and Final Geotechnical Report.

Task 401.3 – Final Design

Consultant Responsibilities:

401.3.1. Plan Sheets. Prepare general, survey, site civil, structural, plumbing, HVAC, mechanical, electrical, and instrumentation and control plan sheets for the site, holding tank, and yard piping. Instrumentation and control final design is anticipated to be a performance spec for a holding tank and odor control monitoring system. Thus, the plan sheets will only include a piping and instrumentation diagram (P&ID). Coordinate location of pumps, piping layout, spacing, electrical equipment, generator, pump removal equipment, building access, overhead door, HVAC equipment, plumbing drains, and other appurtenances for ultimate lift station layout with the Owner. Prepare 90% review sets.

401.3.2. Specifications. Consultant will support the Owner in CM/GC selection with services described in Task 5 of this scope of work. Consultant will prepare technical specifications. Technical specifications will be prepared to detail the materials, processes, and the products that are to be used in the construction of the lift station. Complete draft technical specifications for the 90% review set.

401.3.3. 90% Design and Review Workshop Meeting. Submit 90% design review drawings and specifications to the Owner. Participate in a 90% design review workshop meeting.

401.3.4. Agency Submittal. Agency design checklists will be completed and submitted along with the final plans and specifications to Agency for review.

401.3.5. Final Approval. Upon Owner and Oregon DEQ review, Consultant will incorporate appropriate revisions into a final set of stamped drawings and specifications that will be used for bidding.

401.3.6. Opinion of Probable Costs. Selected CM/GC will provide cost estimating after Task 404. Consultant will review and provide feedback.

Owner Responsibilities:

- Review and provide one set of consolidated comments on the 90% design deliverables.
- Provide legal and risk reviews of the bid documents.
- Pay for any associated permitting fees not assigned to the Contractor.

Assumptions:

- Consultant will prepare the building permit application at 90% design and submit to the Marion County Building Inspection office. Final permits will be obtained by Owner. Owner shall pay all permit fees not assigned to the construction contractor.
- Consultant will prepare and submit the DEQ permit application at 90% design and assist Owner with DEQ consultation.
- Project will not include irrigation or landscaping of the site. Services of a licensed landscape architect is excluded.
- Extensive architectural feature and architectural rendering are not included in the holding tank design.
- Contractor will be required to prepare and implement an erosion and sediment control plan (ESCP), prepare traffic control plans, and secure associated permits.
- Shoring (if required) will be designed by the Contractor.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or project support above and beyond that described herein is considered an additional service requiring a contract amendment and equitable adjustment of the contract amount.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- The following design standards and references are to be followed where relevant during the development of the project:
    - Marion County Standard Specifications and Drawings
    - Oregon Standard Specifications for Construction
    - Owner to provide front end contracting and bidding documents (Div 00)
    - AIS and BABA requirements
- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

Deliverables:

- 90% design drawings and specifications, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- 100% stamped design package, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- Opinion of Probable Cost.

Task 401.4 – Pre-Procurement Support

Consultant Responsibilities:

This task includes consultant services to support the Owner in direct purchase of equipment for the Project using available funds. The objective of the direct purchase of equipment or materials is to account for potential long lead times and still have the equipment or materials on hand when the contractor is ready to move forward with construction. Consultant will provide specifications for the equipment/material to be directly purchased which may be out of sequence or earlier than the final design task.

Owner Responsibilities:

- Owner staff will lead the solicitation effort to either solicit informal bids or select suppliers from pre-approved supplier lists. Owner will receive and store materials prior to the Contractor taking on the equipment/material for installation.

Assumptions:

- Consultant is not responsible if material/equipment must be returned or designated as surplus due to the expedited delivery process for this project.
- Budget assumes up to 40 hours for support services to be provided as requested.

Deliverables:

- Procurement Specifications.

Task 401.5 – Removed

Task 401.6 – WPCF PERMITTING

Consultant Responsibilities:

401.6.1. Prepare draft permit application for a holding tank permit for DEQ review.
401.6.2. Meet with DEQ to discuss the permit applications. For the purpose of this scope, up to two (2) meetings are assumed.
401.6.3. Address DEQ comments in permit application.

Owner Responsibilities:

- Provide input on draft permit application.
- If necessary, pay fee to DEQ for draft permit application.
- Review and comment on draft documents.

Assumptions:

- No field work, environmental studies, cultural resource investigations, or biological assessments are included in this task.
- This scope does not include any additional field gathering or special studies that may be required by the DEQ.
- No other permits will be required. If required, support for these permits can be provided as additional services.

Task 401.7 – Removed

MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of **$10,148,212** ~~**$7,418,049**~~

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

PHASE 1 – GENERAL ENGINEERING SERVICES	Cost	Type
100 – PROJECT MANAGEMENT		
Task 100.1 – Project Management	$ 401,030 ~~$300,230~~	T&M
Task 100.2 – County Board of Commissioners Support Services	$ 15,840	LS
101 – STRATEGIC PERMITTING PLAN		
Task 101.1 – Project Management and Administration	$ 4,825	LS
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	$ 19,090	LS
Task 101.3 – Strategic Permitting Plan	$ 9,540	LS
Task 101.4 – Environmental Assessments		
Subtask 101.4.1 – Phase 1 Mill City WPCF – Environmental Assessment and HUD Environmental Record Review	$ 56,373	LS
Subtask 101.4.2 – Phase 1 Mill City WPCF - Endangered Species Act Consultation and Biological Evaluation	$ 19,955	LS
Subtask 101.4.3 – Phase 2 Force Main and Gates Collection System – Environmental Assessment and HUD Environmental Record Review	$ 40,934	LS
Subtask 101.4.4 – Phase 2 Force Main and Gates Collection System - Endangered Species Act Consultation and Biological Evaluation	$ 9,312	LS
Task 101.5 – Environmental Project Coordination and Oversight	$ 53,698	T&M

102 – SUBSURFACE EXPLORATION		
Task 102.1 – Project Management and Administration	$116,025 ~~$78,105~~	T&M
Task 102.2 – Subsurface Investigation Program	$ 74,200	T&M
Subtask 102.2.1 – Gates / Mill City Subsurface Investigation	$ 555,795 ~~$461,580~~	T&M
Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation	$390,468 ~~$566,780~~	T&M
Subtask 102.2.3 – Detroit / Idanha Well Decommissioning	$ 36,977	LS
Subtask 102.2.4 – Detroit / Idanha Well Decommissioning Fees and Direct Expenses	$ 25,053	T&M
Task 102.3 – Groundwater Modeling Evaluation		
Subtask 102.3.1 – Mill City / Gates Permitting Evaluation	$ 63,600	T&M
Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation	$ 78,700	T&M
Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	$ 18,700	T&M
Task 102.5 – Infiltration Basin Pilot Test		
Subtask 102.5.1 – Meetings, Work Plan, and Pre-Field Work Preparation	$28,734 ~~$28,780~~	LS
Subtask 102.5.2 – Monitoring Well Drilling and Construction Oversight	$34,370 ~~$34,485~~	LS
Subtask 102.5.3 – Test Pit Excavation and Infiltration Testing	$ 18,340	LS
Subtask 102.5.4 – Test Infiltration Basin Construction	$24,067 ~~$24,589~~	LS
Subtask 102.5.5 – 28-Day Infiltration Basin Pilot Test	$ 50,150	LS
Subtask 102.5.6 – Analysis and Reporting	$ 38,742	LS
Subtask 102.5.7 – Tracer Test Planning	$ 24,838	LS
Subtask 102.5.8 – Tracer Study (Contingency)	$ 77,220	LS
Subtask 102.5.9 – Tracer Study Fees and Direct Expenses	$ 119,362	T&M
Task 102.6 – Response to DEQ Modeling Report Comments		
Subtask 102.6.1 – Project Management	$ 72,215	LS
Subtask 102.6.2 – Additional Nitrate, DEHP, and Toluene Modeling	$ 117,337	LS
Subtask 102.6.3 – Beneficial Groundwater Use Elevation	$ 33,880	LS
Subtask 102.6.4 – Seasonal Water Level and Nitrate Data	$ 44,603	LS
Subtask 102.6.5 – Modeling of BOD, pH, TSS, and TDS	$ 157,292	LS

Subtask 102.6.6 – Propose Well Locations and Functional Equivalent Form	$ 7,524	LS
Task 102.7 – Additional Services		
Subtask 102.7.1 - PFAS Sampling	$ 29,123	LS
Subtask 102.7.2 – PFAS Sampling Fees and Direct Expenses	$ 5,548	T&M
Subtask 102.7.3 - Respond to City of Salem Comments	$ 14,333	LS
Subtask 102.7.4 - Seep Sampling	$ 13,525	LS
Subtask 102.7.5 – Seep Sampling Fees and Direct Expenses	$ 3,069	T&M
103 – LAND ACQUISITION AND RELOCATION SERVICES		
Task 103.1 – Project Management and Administration	$ 12,140	T&M
Task 103.2 – Mill City Land Acquisition and Relocation Services	$ 58,817	T&M
Task 103.3 – Detroit Land Acquisition and Relocation Services	$ 177,017	T&M
104 – FINANCIAL ADVISORY SERVICES		
Task 104.1 – Project Management and Administration	$ 23,430	T&M
Task 104.2 – Financial Advisory Services	$ 137,500	T&M
105 – PUBLIC RELATIONS		
Task 105.1 – Project Management and Administration	$21,015 ~~$16,164~~	T&M
Task 105.2 – Communications and Engagement Planning and Implementation	$ 183,684	T&M
Task 105.3 – Land Use and Planning	$11,138	T&M
106 – INDEPENDENT COST ESTIMATING		
Task 106.1 – Project Management and Administration	$ 13,468	T&M
Task 106.2 – Independent Cost Estimating	$ 145,431	T&M
Subtotal	**$3,688,027 ~~$3,111,616~~**	

T&M: Time and Materials, LS: Lump Sum

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	Cost	Type
Task 200.1 – Project Management	$ 12,600	LS
Task 200.2 – Data Acquisition & Facility Tour	$ 6,110	LS
Task 200.3 – Project Planning	$ 26,725	LS
Task 200.4 – Existing Facilities Evaluation	$ 68,680	LS
Task 200.5 – Need for system improvements	$ 3,650	LS
Task 200.6 – Collection System Alternatives Considered & Selection	$ 53,615	LS
Task 200.7 – Treatment System Alternatives Considered & Selection	$ 59,365	LS
Task 200.8 – Proposed Projects (Recommended Alternatives)	$ 70,780	LS
Task 200.9 – Facilities Plan Documentation & Public Meeting	$ 25,830	LS
Task 200.10 –Management Reserve	$ 10,000	T&M
201 – MILL CITY/GATES FACILITIES SITE EVALUATION		
Task 201.1 – Project Management	$81,747 ~~$62,091~~	LS
Task 201.2 – Force Main Alignment Topographic Survey	$91,207 ~~$38,038~~	LS
Task 201.3 – Force Main Alignment Geotechnical Investigation	$105,909 ~~$41,890~~	LS ~~T&M~~
Task 201.4 – Force Main Alignment Environmental Due Diligence		
Subtask 201.4.1 – Project Management	$ 7,956	LS ~~T&M~~
Subtask 201.4.2 – Wetlands and Waters Delineation	$32,057 ~~$23,805~~	LS ~~T&M~~
Subtask 201.4.3 – Cultural Resources Investigation	$45,702 ~~$43,555~~	LS ~~T&M~~
Subtask 201.4.4 – Phase I Environmental Site Assessments	$11,278 ~~$10,838~~	LS ~~T&M~~
Task 201.5 – WPCF/RIB Topographic Survey	$25,828 ~~$12,628~~	LS
Task 201.6 – WPCF/RIB Geotechnical Investigation	$ 29,371	LS
Task 201.7 – Gates Collection System Survey	~~$156,882~~	~~LS~~
Subtask 201.7.1 – Gates Collection System Survey	$ 257,994	LS
Subtask 201.7.2 – Gates Collection System Easements	$ 61,600	T&M
Task 201.8 – Gates Collection System Geotechnical Investigation	$ 151,247	LS
Task 201.9 – Gates Collection System Environmental Due Diligence		
Subtask 201.9.1 – Project Management	$ 7,955	T&M

Subtask 201.9.2 – Wetlands and Waters Delineation	$ 31,735	T&M
Subtask 201.9.3 – Cultural Resources Investigation	$ 32,519	T&M
Subtask 201.9.4 – Phase I Environmental Site Assessments	$ 11,682	T&M
Task 202 – Mill City/Gates WPCF ~~Preliminary Engineering~~		
Subtask 202.1 – Project Management	$215,404 ~~$95,977~~	LS
Subtask 202.2 – Preliminary Engineering Report (PER)	$ 305,729	LS
Subtask 202.3 – Permitting Assistance	$ 22,517	LS
Subtask 202.4 – GMP Documents (30% Design)	$ 1,540,652	LS
Subtask 202.5 – Final Design	$ 1,519,302	LS
Subtask 202.6 – Services During Bidding	$ 71,570	LS
Subtask 202.7 – Construction Services	$ 44,909	LS
Subtask 202.8 – Site Visit Fees and Direct Expenses	$ 12,000	T&M
Task 203 – Gates Collection System/Force Main Preliminary Engineering		
Subtask 203.1 – Project Management	$ 88,295	LS
Subtask 203.2 – Preliminary Engineering Report (PER)	$ 200,558	LS
Subtask 203.3 – GMP Documents (30% Design)	$ 685,739	LS
Subtotal	**$6,029,817** ~~**$3,939,014**~~	

T&M: Time and Materials, LS: Lump Sum

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	Cost	Type
400 – COMMERCIAL SEPTIC SYSTEM PLANNING		
Task 400.1 – Project Management	$25,772 ~~$20,606~~	LS
Task 400.2 – Data Acquisition & Properties Tour	$ 17,770	LS
Task 400.3 – Stakeholder Involvement / Engagement	$ 12,200	LS
Task 400.4 – Commercial Septic System Concept	$ 16,680	LS
Task 400.5 – Commercial Septic System Design	$85,780 ~~$41,670~~	LS
Task 400.6 – ODOT ROW Commercial Properties Topographic Survey	$ 10,560	LS
Task 400.7 – Detroit Environmental Due Diligence (ODOT ROW Easements)	$ 34,032	LS
Task 400.8 – Detroit Commercial Septic Excavation Contractor	$ 60,533	T&M
Task 400.9 – Detroit Commercial Properties Boundary Survey	$ 31,800	T&M
Task 400.10 – Detroit Commercial Septic Groundwater Study	$ 13,673	LS
401 – KANE'S MARINA SEPTIC SYSTEM		
Task 401.1 – Project Management	$ 15,661	LS
Task 401.2 – Preliminary Engineering Report (PER)	$ 28,630	LS
Subtask 401.2.2 – Topographic Survey	$ 18,087	LS
Subtask 401.2.3 – Geotechnical Investigation	$ 17,060	LS
Task 401.3 – Final Design	$ 28,270	LS
Task 401.4 – Pre-Procurement Support	$ 8,000	T&M
Task 401.5 – Removed		
Task 401.6 – WPCF Permitting	$ 5,860	LS
Task 401.7 – Removed		
Subtotal	**$430,368** ~~**$367,419**~~	

T&M: Time and Materials, LS: Lump Sum

TOTAL	**$10,148,212** ~~**$7,418,049**~~

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and Subconsultants for performance of Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed.

Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Chris Einmo
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or

receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

   i. Long distance communications.
   ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.
   iii. Data processing and photographic production techniques when used in connection with Supplemental Services.
   iv. Third-party models and mockups requested by Owner.
   v. The printing of master or reproducible sets of plans and project manuals including specifications.
   vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

   i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 65.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.
   ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect

EXHIBIT E - CRITICAL DATE SCHEDULE
Schedule of Deliverables

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT	
Task 100.1 – Monthly Invoices and Progress Reports	Monthly
Task 100.1 – Meeting agendas and minutes	Weekly
Task 100.2 – Final Presentation Materials	8 weeks after NTP
101 – STRATEGIC PERMITTING PLAN	
Task 101.1 – Project Management and Administration	
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	
Task 101.3 – Draft Strategic Planning Plan	11 weeks after Amend No. 2 NTP
Task 101.3 – Final Strategic Planning Plan	13 weeks after Amend No. 2 NTP
Task 101.4.1 – Phase 1 Mill City WPCF - Environmental Assessment and HUD Environmental Record Review	180 days after Amend No. 8 NTP
Task 101.4.2 - Phase 1 Mill City WPCF - Endangered Species Act Consultation and Biological Evaluation	180 days after Amend No. 8 NTP
Task 101.4.3 - Phase 2 Force Main and Gates Collection System - Environmental Assessment and HUD Environmental Record Review	240 days after Amend No. 8 NTP
Task 101.4.4 - Phase 2 Force Main and Gates Collection System - Endangered Species Act Consultation and Biological Evaluation	240 days after Amend No. 8 NTP
102 – SUBSURFACE EXPLORATION	
Task 102.1 – Project Management and Administration	
Task 102.2.1 – Draft Subsurface Investigation Work Plan	
Task 102.2.1 – Final Subsurface Investigation Work Plan	
Task 102.2.1 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.1 – Draft Subsurface Investigation Memorandum	
Task 102.2.1 – Final Subsurface Investigation Memorandum	
Task 102.2.1 – Groundwater Level Monitoring Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Work Plan	
Task 102.2.2 – Final Subsurface Investigation Work Plan	
Task 102.2.2 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Memorandum	
Task 102.2.2 – Final Subsurface Investigation Memorandum	
Task 102.2.2 – Groundwater Level Monitoring Memorandum	
Task 102.2.3 – Detroit / Idanha Well Decommissioning	90 days after Amend No. 8 NTP
Task 102.2.4 – Detroit / Idanha Well Decommissioning Fees and Direct Expenses	90 days after Amend No. 8 NTP

Task 102.3.1 – Draft WPCF Evaluation Memorandum	
Task 102.3.1 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.1 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum	
Task 102.3.2 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	
Task 102.5 – Infiltration Basin Pilot Test	180 days after Amend. No. 6 NTP
Task 102.5.8 – Tracer Study (Contingency)	16 months after Amend No. 8 NTP
Task 102.5.9 – Tracer Study Fees and Direct Expenses	16 months after Amend No. 8 NTP
Task 102.6 – Response to DEQ Modeling Report Comments	90 days after Amend. No. 7 NTP
Task 102.7.1 – PFAS Sampling	90 days after Amend. No. 8 NTP
Task 102.7.2 – PFAS Sampling Fees and Direct Expenses	90 days after Amend. No. 8 NTP
Task 102.7.3 – Respond to City of Salem Comments	90 days after Amend. No. 8 NTP
Task 102.7.4 – Seep Sampling	90 days after Amend. No. 8 NTP
Task 102.7.5 – Seep Sampling Fees and Direct Expenses	90 days after Amend. No. 8 NTP
103 – LAND ACQUISITION AND RELOCATION SERVICES	
Task 103.1 – Project Management and Administration	
Task 103.2 – Mill City Land Acquisition and Relocation Services	
Task 103.2.3 – Draft ROW Programming Estimate	
Task 103.2.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.2.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.6 – Draft Offer Packets	
Task 103.2.6 – Final Offer Packets	
Task 103.2.6 – Final Report Packet	
Task 103.2.6 – Proposed Counteroffers, if applicable	
Task 103.2.6 – Recommendation for Condemnation, if applicable	
Task 103.2.6 – Report of Personal Interview	
Task 103.2.7 – Submit studies, Move Agreements, and Estimates	
Task 103.2.7 – Submit Relocation Claims	

Task 103.2.7 – Submit Relocation Closing Reports	
Task 103.2.9 – ROW Certification Form	12 weeks prior to Project Bid Date
Task 103.3 – Detroit Land Acquisition and Relocation Services	
Task 103.3.3 – Draft ROW Programming Estimate	
Task 103.3.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.3.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.6 – Draft Offer Packets	
Task 103.3.6 – Final Offer Packets	
Task 103.3.6 – Final Report Packet	
Task 103.3.6 – Proposed Counteroffers, if applicable	
Task 103.3.6 – Recommendation for Condemnation, if applicable	
Task 103.3.6 – Report of Personal Interview	
Task 103.3.7 – Submit studies, Move Agreements, and Estimates	
Task 103.3.7 – Submit Relocation Claims	
Task 103.3.7 – Submit Relocation Closing Reports	
Task 103.3.9 – ROW Certification Form	12 weeks prior to Project Bid Date
104 – FINANCIAL ADVISORY SERVICES	
Task 104.1 – Project Management and Administration	
Task 104.2 – Financial Advisory Services	
105 – PUBLIC OUTREACH	
Task 105.1 – Project Management and Administration	
Task 105.2 – Communications and Engagement Planning and Implementation	
Task 105.3 – Land Use Planning	180 days after Amend No. 8 NTP
106 – INDEPENDENT COST ESTIMATING	
Task 106.1 – Project Management and Administration	
Task 106.2 – Independent Cost Estimating	52 weeks after Amend No. 7 NTP
PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	
200 – MILL CITY / GATES FACILITIES PLANNING STUDY	
Task 200.1 – Project Management	
Task 200.2 – Request(s) for Information	

Task 200.3 – Draft Project Planning Facility Plan Section	
Task 200.4 – Draft Existing Facilities Evaluation Facility Plan Section	
Task 200.5 – Draft Project Need Facilities Plan Section	
Task 200.6 – Draft Collection System Alternatives Facility Plan Section	
Task 200.7 – Draft Treatment System Alternatives Facility Plan Section	
Task 200.8 – Capital Improvement Plan	
Task 200.8 – SDC Eligibility Estimate	
Task 200.8 – Draft Proposed Project Facility Plan Section	
Task 200.9 – Public Meeting Presentation Materials	
Task 200.9 – Final Facilities Plan	
Task 200.10 – Management Reserve	
201 – MILL CITY / GATES FACILITIES SITE EVALUATION	
Task 201.1 – Project Management	
Task 201.2 – Force Main Alignment Topographic Survey	120 ~~180~~ days after Amend No. 8 ~~5~~ NTP
Task 201.3 – Force Main Alignment Geotechnical Investigation	120 ~~180~~ days after Amend No. 8 ~~6~~ NTP
Task 201.4 – Force Main Alignment Environmental Due Diligence	180 days after Amend No. 8 NTP
Task 201.4.1 - Project Management	
Task 201.4.2 – Wetlands and Waters Delineation	90 days after Amend No. 6 NTP
Task 201.4.3 – Cultural Resources Investigation	120 days after Amend No. 6 NTP
Task 201.4.4 – Phase I Environmental Site Assessments	180 days after Amend No. 6 NTP
Task 201.5 – WPCF/RIB Topographic Survey	12 weeks after Amend No. 8 ~~6~~ NTP
Task 201.6 – WPCF/RIB Geotechnical Investigation	12 weeks after Amend No. 6 NTP
Task 201.7 – Gates Collection System Survey	~~120 days after Amend No. 7 NTP~~
Task 201.7.1 – Gates Collection System Survey	120 days after Amend No. 8 NTP
Task 201.7.2 – Gates Collection System Easements	240 days after Amend No. 8 NTP
Task 201.8 – Gates Collection System Geotechnical Investigation	120 days after Amend No. 7 NTP
Task 201.9 – Gates Collection System Environmental Due Diligence	
Task 201.9.1 – Project Management	
Task 201.9.2 – Wetland and Waters Delineation	90 days after Amend No. 7 NTP
Task 201.9.3 – Cultural Resources Investigation	120 days after Amend No. 7 NTP
Task 201.9.4 – Phase I Environmental Site Assessments	180 days after Amend No. 7 NTP
202 – MILL CITY/GATES WPCF PRELIMINARY ENGINEERING	
Task 202.1 – Project Management	

Task 202.2 – Preliminary Engineering Report (PER)	240 days after Amend No. 7 NTP
Task 202.3 – Permitting Assistance	240 days after Amend No. 7 NTP
Task 202.4 – GMP Documents (30% Design)	240 days after Amend No. 7 NTP
Task 202.5 – Final Design	180 days after Amend No. 8 NTP
Task 202.6 – Services During Bidding	240 days after Amend No. 8 NTP
Task 202.7 – Construction Services	2 years after Amend No. 8 NTP
Task 202.8 – Site Visit Fees and Direct Expenses	180 days after Amend No. 8 NTP
203 – GATES COLLECTION SYSTEM/FORCE MAIN PRELIMINARY ENGINEERING	
Task 203.1 – Project Management	
Task 203.2 – Preliminary Engineering Report (PER)	240 days after Amend No. 7 NTP
Task 203.3 – GMP Documents (30% Design)	240 days after Amend No. 7 NTP
PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	
400 – COMMERCIAL SEPTIC SYSTEM PLANNING	
Task 400.1 – Project Management	
Task 400.2 – Requests for Information	
Task 400.2 – Existing Septic and Drain Field Summary Tables and Figures	
Task 400.3 – Presentation Materials	
Task 400.4 – Removed	
Task 400.5 – Conceptual Septic System Design	52 weeks after Amend No. 8 ~~4~~ NTP
Task 400.6 – Basemap in AutoCAD 3D format.	24 weeks after Amend No. 4 NTP
Task 400.6 – Legal Descriptions and Visual Exhibit Maps	52 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Cultural Clearance)	26 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Phase I ESA)	26 weeks after Amend No. 5 NTP
Task 400.8 – Detroit Commercial Septic Excavation Contractor	52 weeks after Amend No. 8 NTP
Task 400.9 – Detroit Commercial Properties Survey	52 ~~26~~ weeks after Amend No. 8 ~~5~~ NTP
Task 400.10 – Detroit Commercial Septic Groundwater Study	60 days after Amend No. 8 NTP
401 – KANE'S MARINA SEPTIC SYSTEM	
Task 401.1 – Kickoff meeting agenda	2 weeks after Amend No. 2 NTP
Task 401.1 – Kickoff meeting minutes	1 week after Kickoff Meeting
Task 401.1 – Request for Information	
Task 401.1 – Presentation Materials	
Task 401.2 – Workshop Meeting Agenda	
Task 401.2 – Workshop Meeting Minutes	

Task 401.2 – Draft Preliminary Engineering Report	5 weeks after Amend No. 2 NTP
Task 401.2 – Final Preliminary Engineering Report	6 weeks after Amend No. 2 NTP
Subtask 401.2.2 – Topographic Basemap	180 days after Amend No. 6 NTP
Subtask 401.2.3 – Geotechnical Report	10 weeks after Amend No. 2 NTP
Task 401.3 – 90% Design Drawings and Specifications	15 weeks after Amend No. 2 NTP
Task 401.3 – Final (Stamped) Drawings and Specifications	17 weeks after Amend No. 2 NTP
Task 401.3 – Opinion of Probably Cost	17 weeks after Amend No. 2 NTP
Task 401.4 – Procurement Specifications	
Task 401.5 - Removed	
Task 401.6 – WPCF Permitting	
Task 401.7 - Removed	

MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT F - RATE SCHEDULE

Keller Associates	Hourly Rate*
Project Engineer I	$137
Project Engineer II	$179
Project Engineer III	$242
Project Manager I/II	$189
Project Manager III	$252
Structural Engineer I/II	$179
Structural Engineer III	$242
Chief Engineer / Chief Structural Engineer	$305
CAD I/II	$137
CAD III	$168
CAD Manager	$200
Electrical Controls I/II	$179
Electrical Controls III	$242
Principal	$315
Surveyor I/II	$158
Surveyor III	$194
Field Representative	$152
Engineering Student	$79
Administration I	$95
Administration II	$131

**Rates reported are for 2024. Rates updated annually in January.*

***Reimbursable Expenses at Cost x 1.05*

SUBCONSULTANT RATE SCHEDULE

Hydrological	Hourly Rate*
Principal Technical Professional	$250
Supervising Technical Professional	$205
Managing Technical Professional	$190
Consulting Technical Professional	$175
Project Technical Professional	$150
Staff Technical Professional	$135
Intern	$90
GIS/Graphics/Database	$160
Editor/Documents	$145
Administration	$105

Permitting	Hourly Rate*
Environmental Consulting Services Specialists: Cultural Resources, Environmental Resources, Paleontology, Scientific Resources, Planning Resources, Graphics/Media Production, GIS/CADD Resources, Technical Writing/Editing, Training/Facilitating, Air Quality	
Specialist I	$77
Specialist II	$91
Specialist III	$104
Specialist IV	$114
Specialist V	$123
Specialist VI	$137
Specialist VII	$147
Specialist VIII	$158
Specialist IX	$169
Specialist X	$189
Specialist XI	$207
Specialist XII	$226
Subject Matter Expert I	$230
Subject Matter Expert II	$242
Subject Matter Expert III	$268

Subject Matter Expert IV	$293
Engineering and Special Services (Tier 1) Specialists:	
Specialist IV	$123
Specialist V	$137
Specialist VI	$147
Specialist VII	$158
Specialist VIII	$169
Specialist IX	$189
Specialist X	$207
Specialist XI	$226
Specialist XII	$242
Subject Matter Expert I	$242
Subject Matter Expert II	$252
Subject Matter Expert III	$278
Subject Matter Expert IV	$305
Administrative III	$104

Land Acquisition and Relocation	Hourly Rate*
Principal/Senior Advisor/Program Manager	$322.00
Senior Project Manager	$298.00
Project Manager/Property Manager	$198.00
Senior Right of Way Agent	$163.00
Right of Way Agent	$132.00
Senior Project Control Specialist/Senior Right of Way Technician	$163.00
Project Control Specialist/Right of Way Technician	$121.00

Financial Advisory	Hourly Rate*
Principals	$295
Project Managers	$235
Consultants	$190
Public Relations	$170
Technical Writer/Graphic Artist	$145
Administrative Support	$95

Surveying	Hourly Rate*
PLS Office Technician	$140
One-Man Field Crew	$140
Project Surveyor	$150
2 Man Field Crew	$170
Survey Technician	$110

Geotechnical Services	Billed	Hourly Rate*
ENGINEERING CONSULTING		
Senior Principal	Hourly	$284.00
Principal Engineer	Hourly	$248.00
Principal Engineering Geologist	Hourly	$238.00
Senior Associate Engineer	Hourly	$227.00
Associate Engineer	Hourly	$217.00
Project Manager II	Hourly	$201.00
Project Manager I	Hourly	$185.00
Engineering/Geological Staff III	Hourly	$159.00
Engineering/Geological Staff II	Hourly	$138.00
Engineering/Geological Staff I	Hourly	$111.00
Senior Technician	Hourly	$127.00
Field Technician II	Hourly	$117.00
Field Technician I	Hourly	$101.00
Senior Administrative Assistant	Hourly	$106.00
Administrative Assistant	Hourly	$95.00
Office Support	Hourly	$90.00
EQUIPMENT/OTHER SERVICES		
Falling Weight Deflectometer	Daily	$2,150.00
Ground Penetrating Radar, Vehicle Mounted	Daily	$1,550.00
Global Positioning System (Differential)	Daily	$115.00
Dynamic Cone Penetrometer	Daily	$120.00
Hand Auger	Daily	$38.00
Drone Flight Services	Hourly	$245.00
Drone Hardware & Flight Fee	Daily	$160.00

Nuclear Densometer	Daily	$85.00
Lab: #200 Wash	Each	$140.00
Lab: Atterberg Limits	Each	$250.00
Lab: In-Situ Dry Density and Moisture Content	Each	$55.00
Lab: Moisture Content	Each	$40.00
Lab: Proctor Moisture-Density	Each	$380.00
Lab: Sieve Analysis ¾-inch to 2-inch Max	Each	$380.00
Lab: Sieve Analysis <3/4-inch Max	Each	$330.00
Lab: Sieve Analysis > 2-inch Max	Each	$560.00
Lab: Soil Classification	Each	$45.00
Lab: Consolidation (Two Rebounds)	Each	$750.00
Lab: Specific Gravity of Coarse Aggregate	Each	$155.00
Specialty Software	Each	$250.00
Vehicle Usage, per mile (or $75/day), Whichever is Greater	Mile	$0.655

Septic	Hourly Rate*
Septic Consultant	$170.00
Septic Consultant Travel Time	$90.00

Septic Excavation Contractor	Hourly Rate*
Power Equipment Operator with Excavator	$225.00 ~~$70.39~~
Laborer for Excavator	$175.00 ~~$54.91~~
Locate, Camera Equipment	$350.00 ~~$250~~
Mobilization	$800.00 ~~$600~~ per trip
Laborer (Office Time)	$175.00

Public Outreach	Hourly Rate*
Principal-in-Charge	$225.00
Project Director	$180.00
Project Manager	$235.00
Project Associate	$120.00
Senior Designer	$205.00
Designer	$115.00

Independent Cost Estimator	Hourly Rate*
Consultant	$195
Electrical Consultant	$195
Off-site Pipeline Consultant	$195

**Rates reported are for 2024. Rates updated annually in January.*

MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

SIGNATURE PAGE FOR
ARPA – NORTH SANTIAM CANYON SEWER PROJECT – PW-5069-22
Between
MARION COUNTY and KELLER ASSOCIATES, INC.

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES
BOARD OF COMMISSIONERS:

_____
Chair Date

_____
Commissioner Date

_____
Commissioner Date

Authorized Signature: _____
Department Director or designee Date

Authorized Signature: _____
Chief Administrative Officer Date

Reviewed by Signature: _____
Marion County Legal Counsel Date

Reviewed by Signature: _____
Marion County Contracts & Procurement Date

KELLER ASSOCIATES SIGNATURE

Authorized Signature: _____
Date

Title: _____

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Marion County OREGON
FINANCE DEPARTMENT

Contract Review Sheet

PW-5069-22 (7)

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: **7**

Contact: **Alicia Jones** Department: **Public Works Department**

Phone #: **503-373-4320** Analyst: **Kathleen George**

Title: **ARPA - North Santiam Canyon Sewer Project**

Contractor's Name: **Keller Associates, Inc.**

Term - Date From: **September 30, 2022** Expires: **December 31, 2026**

Original Contract Amount: **$ 60,960.00** Previous Amendments Amount: **$ 3,194,466.00**

Current Amendment: **$ 4,162,623.00** New Contract Total: **$ 7,418,049.00** Amd% **12069%**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☑ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **PW1130-22**

Description of Services or Grant Award

Amendment 7 - adds $4,162,623.00 for preliminary engineering design (30% PS&E), Independent Cost Estimator (ICE), additional technical consulting in support of project permitting.

Desired BOC Session Date: **4/24/2024** Files submitted in CMS for Approval: **4/3/2024**

Agenda Planning Date **4/11/2024** Printed packets due in Finance: **4/9/2024**

Management Update **4/9/2024** BOC upload / Board Session email: **4/10/2024**

BOC Session Presenter(s) **Chris Einmo**

FOR FINANCE USE

Comments: **Y**

REQUIRED APPROVALS

DocuSigned by: Jeff White D1FCCAAC6DB14C8... 4/17/2024
Finance - Contracts — Date

DocuSigned by: Alicia Jones DA7E9DCC1E7847D... 4/16/2024
Contract Specialist — Date

DocuSigned by: Scott Norris 08C98A0F7062488... 4/17/2024
Legal Counsel — Date

DocuSigned by: Jan Fritz 1E884034565E453... 4/19/2024
Chief Administrative Officer — Date

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MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date: Wednesday, April 24, 2024

Department: Public Works

Title Amendment No. 7 to Consultant Services Agreement PW5069-22 with Keller Associates for the ARPA - North Santiam Canyon Sewer Project.

Agenda Planning Date: Apr 17, 2024 **Management Update/Work Session Date:** Apr 9, 2024 **Audio/Visual aids** ☐

Time Required 10 minutes **Contact:** Chris Einmo **Phone:** 503.566.4119

Requested Action: Approve Amendment No. 7 to Consultant Services Agreement PW-5069-22 with Keller Associates for the ARPA - North Santiam Canyon Sewer Project, increasing the contract not-to-exceed value by $4,162,623.00 from $3,255,426.00 to $7,418,049.00.

Issue, Description & Background: The Project will design, permit, and construct new sanitary sewer infrastructure in the North Santiam River Canyon to serve the cities of Idanha, Detroit, Gates and Mill City. Keller Associates is the prime consultant retained by Public Works to provide engineering, property acquisition and other professional services for this CMGC project. The contract was sequenced in phases, and Amendment 7 will coincide with the beginning of design-level engineering to add the following tasks to Keller Associates' scope of work:
- Prepare Water Pollution Control Facility (WPCF) permit application for the wastewater treatment plant.
- Provide a preliminary (+30%) engineering design (plans, specifications and cost estimate) for the Mill City/Gates WPCF, Rapid Infiltration Basins, sewer pipeline from Gates to Mill City, and Gates sewer collection system and lift stations. The resulting product shall be sufficient for the County to obligate the remaining project funds within the ARPA deadline of December 31, 2024.
-Independent Cost Estimator to analyze cost data provided by the Construction Manager/General Contractor.

Financial Impacts: Amendment No. 7 will increase the contract not-to-exceed value by $4,162,623.00, from $3,255,426.00 to $7,418,049.00. This is a budgeted expense in the current fiscal year utilizing ARPA funds.

Impacts to Department & External Agencies: This amendment does not result in impacts to other departments or external agencies.

List of attachments:
1. Amendment 7 to Consultant Services Agreement PW-5069-22
2. Request for Authorization of Contract PW-5069-22

Presenter: Chris Einmo, Senior Project Manager

Department Head Signature: DocuSigned by: Brian Nicholas 9793BA7ACD6D443...

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REQUEST FOR AUTHORIZATION OF CONTRACT
PW-5069-22

Date: April 16, 2024
To: Chief Administrative Officer
Cc: Contract File
From: Alicia Jones

I. **Subject:** Amendment Exceeds 25%

DIPS CODE: 135-40-42-461-4603-534500-809.002
Budget Authority: ☒ Yes ☐ No
CIP: 23-325/326

The Marion County Public Works Department is requesting approval to amend a contract as described in Section 20-0265, 20-0270, 30-0320, 40-0160, and 40-0910 of the Marion County Public Contracting Rules. The contract is with Keller Associates, Inc. for ARPA - North Santiam Canyon Sewer Project with a value of $3,255,426.00. An additional $4,162,623.00 will be added to the contract for a new contract total of $7,418,049.00 upon approval of Amendment 7.

A. BACKGROUND

Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. This is a large, multi-phase project with aggressive expenditure deadlines driven by ARPA funding requirements. Therefore, for expediency, the full scope of services needed to deliver the full project will be executed in a series of amendments to the original consultant services agreement, ensuring that early critical-path activities begin without delay. On October 7, 2022, the county executed contract PW-5069-22 with Keller and Amendment No. 1 was executed on October 7, 2022. Amendment 2 was executed on December 12, 2022. Amendment 3 was executed on May 31, 2023. Amendment 4 was executed on July 11, 2023. Amendment 5 was executed on October 27, 2023. Amendment 6 was executed on February 8, 2024. Subsequent phases of work will be awarded to the consultant as the project progresses.

B. CURRENT AMENDMENT PURPOSE

Amendment 7 adds an additional $4,162,623.00 in tasks related to Engineering Design as needed to establish a preliminary design sufficient to progress to the next project milestone. The work product of this amendment will provide the basis for obligation of all remaining project funds by December 31, 2024, under subsequent amendments (as required by ARPA).

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JUSTIFICATION

The initial contract consisted of a $60K fast-start contract, which enabled work on this time-sensitive project to begin quickly. Amendment 1 added an additional amount of $67,680, for a contract total of $128,640. Amendment 2 added an additional amount of $1,784,380, for a contract total of $1,913,070, Amendment 3 conforms to the Request for Proposal and awarded contract phased approach and added an additional $182,907, Amendment 4 added additional task to phase 400 (Task 400.5), updated Exhibit B - Consultant Compensation and updated sub consultant rate schedule to include additional tasks. Amendment 5 added an additional $454,132.00, updates subtasks, adds tasks related to Mill City/Gates Facilities Site Evaluation, Detroit Project Areas, Cultural Clearance Certification and updates the language to subconsultants to ensure the project will meet ARPA requirements and deadlines. Amendment 6 adds $705,367.00, update subtasks, adds public relations tasks and expands the scope of project management, infiltration basin pilot testing, geotechnical and additional commercial septic system design tasks previously scoped in Mill City. Amendment 7 adds $4,162,623.00 for preliminary engineering design (30% PS&E), Independent Cost Estimator (ICE), additional technical consulting in support of project permitting. This conforms to the contracting plan for this project.

C. BUDGET IMPACTS

1. Are the expected expenditures for the current fiscal year under the contract, including any additional funds being requested with this action, already included in the current year adopted budget? ☒ Yes ☐ No

2. If yes, amount $5,515,700 Program / Account 461-534500

Submitted by:

DocuSigned by:
Alicia Jones
DA7EBDCC1E7B47D...

Alicia Jones
Public Works Department

Reviewed by:

DocuSigned by:
A3538E7AEC704F4...

Contracts & Procurement

Acknowledged by:

DocuSigned by:
Brian Nicholas
0703BA7ACD6D443...

Department Head

Acknowledged by:

Jan Fritz, CAO

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Marion County
OREGON

AMENDMENT 7 ~~6~~ to PW-5069-22
the ~~CONTRACT FOR~~ STANDARD PROFESSIONAL SERVICES CONTRACT
between
MARION COUNTY and KELLER ASSOCIATES

This is Amendment No. 7 ~~6~~ to the ~~Contract for Services~~ Standard Professional Services Contract (as amended from time to time, the "Contract"), dated September 30, 2022, between Marion County, a political subdivision of the State of Oregon, hereafter called County or Owner, and Keller Associates, hereafter called Consultant.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by ~~strikethrough~~):

DEFINITIONS

A. CM/GC: Slayden Constructors, Inc., acting as the Owner's Construction Manager/General Contractor under Marion County agreement PW-5569-23 as executed on November 29, 2023.November 29, 2023.

B. Project Team: the Consultant, acting through its employees, subconsultants and/or contractors, collectively.

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$7,418,049** ~~$3,255,426~~ for Phase 1, 2, and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A, Statement of Work.**

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

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100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT

Task 100.1 – Project Management

Consultant Responsibilities:

100.1.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.

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100.1.2 Project Coordination. Consultant may be requested to prepare progress reports or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.

100.1.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates, informational, or technical-based presentations to the board. Consultant will prepare presentation materials and/or handouts as directed. Assist with coordination of similar water pollution control facility site tours.

Owner Responsibilities:

- Administer project funding.

Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes a ~~an~~ 2418-month duration for general project administration.

Deliverables:

- Monthly Invoices
- Monthly Progress Reports
- Meeting agenda and minutes

Task 100.2 – County Board of Commissioners Support Services

Consultant Responsibilities:

100.2.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to three occasions. Consultant will prepare presentation materials and/or handouts. The three presentations will tentatively occur in the months of November 2022, December 2022, and March 2023 and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Presentation #3 – Within six months after effective date of contract. Attend and present at a Joint Special Work Session for Marion County and Linn County Commissioners, to provide an introduction and update on the project and answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with subconsultants and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

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Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material
- Final presentation material

101 – STRATEGIC PERMITTING PLAN

Task 101.1 – Project Management and Administration

Consultant Responsibilities:

101.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

101.1.2. Consultant Coordination. Coordinate services to complete the Strategic Environmental Permitting Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of the draft Strategic Permitting Plan.

Assumptions:

- Project management budget assumes a task order schedule of up to 3 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

101.2.1. Consultant shall review available project information, including background, concept development and current plan/design information for the North Santiam Canyon Wastewater Master Plan (Master Plan). Consultant will conduct a desktop review of the Master Plan area to identify potential resources affected and locate existing available data. Using this information, Consultant will compile a list of potential issues and data needs for the project. Consultant will check and refine the understanding of those issues by initiating preliminary, informal discussions with the anticipated permitting agencies to understand their concerns and permitting needs for the project. The intent of these discussions will be to identify the agencies' specific resource concerns, to understand permitting requirements and obligations, and discuss options for permitting efficiencies, such as using programmatic agreements. Consultant will also preliminarily identify which federal agencies may have a National Environmental Policy Act (NEPA) requirement for the Master Plan and/or specific projects or phases that are part of the plan (due to their jurisdiction, land ownership, or funding) and whether a single joint NEPA document could be used to support multiple federal decisions.

Task 101.3 – Strategic Permitting Plan

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(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

Based on information obtained in Task 101.2, Consultant will prepare a draft Strategic Permitting Plan. The draft Strategic Permitting Plan will include:

- Project permitting schedule and general cost estimate.
- Summary of environmental permits and approvals needed
- Summary of initial pre-scoping discussions with agencies
- List of potential resources affected and existing available data
- List of potential permitting issues and data needs (based on desktop analysis and agency discussions)
- List of design needs to complete permitting
- Summary of potential opportunities for permitting efficiencies
- Estimated timeline to complete permitting
- Estimated general cost to complete permitting

Consultant will revise and finalize the Strategic Permitting Plan based on one consolidated review by Consultant and Owner.

Assumptions:

- Consultant will conduct up to three coordination conference calls with Owner to provide updates, receive additional information/clarifications, etc.
- Permitting agencies for informal, pre-scoping coordination will be: US Forest Service, US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Transportation, and Marion County. Outreach to agencies will consist of email or telephone contact. Consultant will make a reasonable effort get information from agencies within the available time and consistent with the level of effort budgeted.
- "Environmental permits and approvals" do not include easements or rights-of-way with utilities, ODOT, or federal agencies.
- Permitting requirements related specifically to wastewater treatment/infiltration requirements will be addressed through a separate task order.
- One review of the draft Strategic Permitting Plan will be conducted. The Strategic Permitting Plan will be revised based on one consolidated set of review comments. Consultant-intends for the Strategic Permitting Plan to be a "living document", updated and adapted as the project planning and subsequent design and permitting efforts progress.
- No Owner board meeting presentations

Deliverables:

- Draft Strategic Permitting Plan
- Final Strategic Permitting Plan

102 – SUBSURFACE EXPLORATION

Task 102.1 – Project Management and Administration

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

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Consultant Responsibilities:

102.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

102.1.2. Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 102.2 – Subsurface Investigation Program

The purpose of subsurface investigation is to collect soil and groundwater data that can be used to: (1) assess whether a candidate site can infiltrate the required volume of treated wastewater, (2) inform facility predesign, (3) evaluate facility permitting framework (WPCF required), and (4) evaluate compliance with DEQ's groundwater protection rules. The subsurface investigation program involves excavating test pits to measure soil infiltration rates and observe soil types, installing monitoring wells to measure aquifer properties, collecting soil and groundwater samples, and one year of groundwater and surface water level monitoring. This task includes management, planning and execution of the subsurface investigation program comprised of two subtasks:

- Subtask 102.2.1 – Mill City / Gates Subsurface Investigation
- Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Owner Responsibilities:

- This scope of work does not include effort to identify domestic water wells in the vicinity of the proposed infiltration facility (which would likely involve a door-to-door survey and review of households that are connected to City water). Owner is responsible for this effort, if it is needed, and for incorporating the information obtained into the final report.

Assumptions:

- Subsurface investigations will occur on private or public property that is not owned by Owner. Owner and Consultant will work collaboratively to gain access to these sites for the purpose of performing site evaluation work. In general, Owner is responsible for the execution of site access agreements with property owners and Consultant is responsible for coordination with property owners regarding schedule for accessing the property, discussing access routes, and reporting results to the property owner.
- Test pitting and infiltration testing will be limited to four days in the Detroit/Idanha area (up to 10 test pits) and five days in the Gates/Mill City area (up to 18 test pits).
- Monitoring wells and temporary borings will target discrete horizons in the glacial till geologic unit that are related to the depth to groundwater and the contact between glacial till and bedrock. Because there is limited information about the geology and depth to groundwater at the candidate sites, the costs for drilling are based on assumptions about the depths of monitoring wells and

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temporary borings. Where field conditions differ from those assumed and where such differences result in increased field costs that exceed the established budget for this task, an equitable adjustment to the contract value will be made by contract amendment.

- In the Gates/Mill City area, it is assumed that monitoring wells will be 100 feet deep, one temporary boring will be advanced to the top of the water table at 80 feet below ground surface (bgs), and another temporary boring will be advanced to the top of bedrock at 200 feet bgs.
- In the Detroit/Idanha area, we have assumed that monitoring wells will be 80 feet deep (2 wells) or 200 feet deep (3 wells), and two temporary borings will be advanced to the top of bedrock at 100 feet bgs.
- Drilling costs could change if: (1) driller costs change (quotes are typically only good for 30 days due to "instability of commodity costs") or (2) the assumed construction of wells and borings changes based on the geology of the site. It is assumed that casing advance is not necessary to keep the bedrock hole open during drilling of the monitoring well in the Detroit/Idanha area. An amendment may be necessary if casing must be advanced to keep the hole open at this well and if such costs exceed the agreed upon task budget.
- Subsurface exploration work, including digging of test pits, geotechnical drilling, and installation of subsurface monitoring equipment, is not subject to Davis-Bacon or BOLI prevailing wages.

Subtask 102.2.1 – Mill City / Gates Subsurface Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface investigation in the Gates/Mill City area includes the following activities:

102.2.1.1. Work Plan. Develop a work plan for the subsurface investigation that includes a specific plan for excavating and infiltration testing at up to 18 test pits (at Site 1 through Site 4) and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to eighteen (18) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for deep soil investigation.

102.2.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop three (3) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log

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soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.1.4. Groundwater Level Monitoring. Equip each well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells quarterly for a year.

102.2.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.1.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum.

Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface characterization in the Detroit/Idanha area includes the following activities:

102.2.2.1. Work Plan. Develop a work plan for the subsurface characterization that includes a specific plan for excavating and infiltration testing at up to 10 test pits (at the McCoy and Detroit Ranger Station sites), and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.2.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to ten (10) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile

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organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for the deep soil investigation.

102.2.2.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop five (5) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.2.4. Surface Water and Groundwater Level Monitoring at the McCoy Site. Install three (3) stilling wells (in the Santiam River, Unnamed Creek, and McCoy Creek); equip each stilling and monitoring well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells and stilling wells quarterly for a year.

102.2.2.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.2.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum

Task 102.3 – Groundwater Modeling Evaluation

The purpose of this task is to provide field data and modeling evaluations for submittal to the Oregon Department of Environmental Quality (DEQ) to support a Water Pollution Control Facility (WPCF) permit determination in compliance with DEQ's groundwater protection rules.

Task 102.3 is comprised of two subtasks:

- Subtask 102.3.1 – Gates/Mill City Permitting Evaluation
- Subtask 102.3.2 – Detroit/Idanha Permitting Evaluation

Assumptions:

- It is assumed that the planned location for the infiltration facility in the Gates/Mill City area is further from the Santiam River than the planned location for the infiltration facility in the

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Detroit/Idanha area (less than 0.25 miles). Therefore, we anticipate that the evaluation to support a permitting determination for the Detroit/Idanha area will be more rigorous.

Subtask 102.3.1 – Mill City / Gates Permitting Evaluation
Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant shall perform the following activities for the infiltration facility in the Gates/Mill City area:

102.3.1.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the selected Gates/Mill City infiltration site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.1.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.1.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.1.4. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the ~~project team~~ Project Team for review and will finalize the memo based on comments from the ~~project team~~ Project Team, then submit to DEQ for review.

102.3.1.5. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater protection rules, and (3) to discuss DEQ's comments on the memo.

Assumptions:

- Comments from the ~~project team~~ Project Team can be incorporated with a single review cycle.

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- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates ~~project team~~ Project Team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation
Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant shall perform the following activities for the infiltration facility in the Detroit/Idanha area:

102.3.2.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the McCoy site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.2.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.2.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.2.4. Perform a modeling simulation to estimate the maximum recharge volume in the Detroit/Idanha area (additional evaluation of maximum recharge volume is needed in the Detroit/Idanha area due to the anisotropy; a model simulation would be more cost effective than hiring a driller to conduct a pumping test).

102.3.2.5. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the ~~project team~~ Project Team for review and will finalize the memo based on comments from the ~~project team~~ Project Team, then submit to DEQ for review.

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102.3.2.6. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater.

Assumptions:

- Comments from the ~~project team~~ Project Team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates ~~project team~~ Project Team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)

Consultant Responsibilities:

102.4.1. Address permitting and other regulatory requirements related to the National Environmental Policy Act (NEPA), which will involve obtaining an agreement to access the properties, excavate test pits, and install monitoring wells. Assumes a level of effort with up to 48 hours.

102.4.2. Coordinate with property owner of "upper deck" private property to obtain permission to install two monitoring wells. Assumes a level of effort with up to 48 hours.

Owner Responsibilities:

- Review and approve permitting applications/letters requesting permission to access the McCoy site, excavate test pits, and install monitoring wells.
- Owner is responsible for costs associated with property owner conditions related to site access and site access agreements.

Task 102.5 – Infiltration Basin Pilot Test

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant will conduct a pilot test (minimum of fourteen (14) days to maximum of twenty-eight (28) days) for proposed infiltration basins at Site GM1 in Mill City, Oregon to further confirm long-term capability of the proposed infiltration basins and support the permitting process.

Assumptions:

- The number of meetings and site visits anticipated are specified in the scope tasks detailed below. If these meetings and technical consultations result in work scope modifications, such modifications are not included or budgeted within this scope.
- Access to the subject property and negotiations with the property owner and/or tenants will be arranged by the Consultant, and all field work can be conducted during normal business hours.

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- Unimpeded access to the work locations will be available, including no conflicts with overhead power or underground utilities.
- Consultant assumes field activities can be accomplished within the number of days specified in the scope tasks detailed below. This includes mobilization and field work. Consultant will attempt to schedule field work to avoid significant weather events where possible. However, if weather impacts projected mobilization costs or the overall project schedule, this may result in additional fees. Owner will be kept informed if there are unanticipated weather delays.
- Owner will provide information which they have available regarding the presence of underground utilities within the study area. A public utility locate notification will be conducted, and Consultant will contract a private utility locator in an effort to identify and avoid subsurface utilities at the proposed work locations. Drilling/sampling locations will be considered and modified based on the results of these efforts as described in the work plan. The use of these methods does not guarantee that unidentified conduits/structures will not be encountered during drilling and excavation, but greatly minimizes the risk of doing so. Consultant will not be responsible for damage to subsurface utilities not identified prior to initiating work.
- Ground-disturbing activities will not impact protected natural and cultural resources such as wetlands and waterways, critical habitat, archeological sites, and historic properties and structures. It is the responsibility of Consultant to obtain all required local, state, and federal environmental permits and clearances, including but not limited to the National Environmental Policy Act, Section 404 of the Federal Clean Water Act, Section 401 Water Quality Certification, National Pollutant Discharge Elimination System Permits, Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, Oregon Fish Passage law, Oregon Removal-Fill law, and Oregon Native American Graves and Protected Objects law.
- No unreasonably difficult subsurface conditions will be encountered requiring the use of alternative drilling/excavation equipment than specified above.
- All fieldwork can be performed using standard personal protective equipment and procedures (Level D).
- Other than drilling start card documentation, no other permits are specified or included. If necessary, other permits would be obtained at an additional time and materials basis.
- Consultant has assumed that deliverables will require only one review cycle and the scope of work detailed below will be utilized for the development of the workplan. If significant changes are made to the scope, this may impact costs associated with Task 102.5.1. Following issuance of the final report, if information is subsequently provided to Consultant that warrants report revisions or amendments, the additional work will be charged on a time and materials basis.
- Consultant's work product is intended for use by Owner and is not intended for reliance by third parties unless otherwise specified in this scope of work. If requested by the Owner, a reliance letter will be reviewed and considered by Consultant. Completion of a reliance letter may be subject to an additional fee.

Consultant Responsibilities:

102.5.1. Meetings, Work Plan, Pre-Field Work Preparation. Consultant will develop a work plan for the pilot test that outlines the methods for excavating up to three test pits within the planned footprints of Basin J1 and Basin J2, constructing monitoring well GM1-MW-4, excavating a 50-foot by 50-foot infiltration basin, and conducting the pilot test. A draft Work Plan will be provided to the ~~project team~~ Project Team for review, and a second draft Work Plan will be submitted to the Oregon Department of Environmental Quality (DEQ) for review. The final Work Plan will incorporate the ~~project team~~ Project Team and DEQ comments.

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In addition, Consultant will prepare for the pilot test by developing health and safety plans to cover the field work; field-locating the test pits, monitoring well, and test basin at the site; and overseeing a utility locating contractor to clear excavation locations of subsurface utilities. Consultant will coordinate location, design, and schedule of field work and work with the City to obtain water for the infiltration pilot test. Consultant will review and compile data from previous field investigations at the site and refine the work program as needed. This task also includes periodic email updates to the ~~project team~~ Project Team on the status of the project and meetings between Owner, Consultant, and Subconsultants to discuss pilot test results.

Assumptions:

- Work Plan comments can be incorporated over a single review cycle.
- Five (5) one-hour, virtual meetings will occur during the course of the project to coordinate between Consultant and Subconsultants ~~project team~~ Project Team. One (1) virtual meeting to discuss pilot test results will occur with the entire ~~project team~~ Project Team.
- Two field visits will occur to oversee the utility contractor and mark excavation and boring locations.

Deliverables:

- Draft Work Plan for review by the ~~project team~~ Project Team.
- Draft Work Plan for review by DEQ.
- Final Work Plan that incorporates ~~project team~~ Project Team and DEQ comments.

102.5.2. Monitoring Well Drilling and Construction Oversight. An additional monitoring well is required as a part of the pilot test to monitor groundwater mounding adjacent to the pilot test basin. Consultant will develop contract with driller to conduct work and oversee construction of a monitoring well using sonic drilling methods (monitoring well GM1-MW4) adjacent to the test basin and will equip the monitoring well with a down-hole pressure transducer and datalogger to record groundwater levels before, during, and after the pilot test. Soils will be logged in general accordance with the Unified Soil Classification System (USCS). Consultant shall oversee development activities, conduct synoptic water level monitoring, and download pressure transducer data from monitoring wells at Site GM1. Consultant shall also verify that well materials meet Oregon Administrative Rule requirements for drilling monitoring wells. After well completion, Consultant will oversee survey of the latitude, longitude, and elevation of the monitoring well.

Assumptions:

- The monitoring well will be constructed of 2-inch schedule 40 PVC, will be 50-feet deep, and will be completed with an above-ground monument with three protective bollards.
- Soil core from the monitoring well boring can be spread on the ground.
- The scope of work does not include monitoring well decommissioning as it may be utilized for long-term monitoring purposes.
- Monitoring well drilling oversight, well construction, and development will occur over three (3) days and will include one (1) site mobilization.

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102.5.3. Test Pit Excavation and Infiltration Testing. As the site layout design for GM1 has progressed, infiltration basins J1 and J2 have been preliminarily located at the site in an area where no infiltration testing has occurred. Subsurface exploration is important in this area due to the presence of a former log pond to the east, the extent of which has been identified from aerial photos but has not been confirmed with subsurface exploration. Consultant will coordinate with the CM/GC who will oversee the excavation of three (3) test pits up to fifteen (15) feet below ground surface (bgs) or a depth sufficient to observe unsaturated zone soils in the opinion of the on-site hydrogeologist in the area of proposed basins J1 and J2. ~~, and will.~~ Consultant will coordinate with CM/GC to conduct infiltration tests at each pit and oversee placement/installation of ~~using~~ an oversized (4-foot diameter x 3-foot) steel cylinder in each test pit by CM/GC for use in infiltration test. Consultant shall log soils from the test pits in general accordance with the USCS, collect soil moisture measurements to estimate the extent of the wetting front, and assess infiltration tests to determine whether additional excavations are recommended at the site. Consultant shall communicate status and results to the ~~project team~~ Project Team on an on-going basis and oversee backfilling of the test pits.

Assumptions:

- Test pit excavation and geologic logging and infiltration testing will be completed in three ~~two~~ (3 ~~2~~) days.
- CM/GC will complete the excavation of the test pits.
- CM/GC will provide oversized (4-foot diameter x 3-foot) steel cylinder and coordinate placement/installation in each test pit with Consultant.
- CM/GC will provide a 500-gallon (minimum) water tank, filled with 2-inch diameter hose and flow meter to convey water into the test pit.
-
- Costs for water, permitting, and other City requirements for fire hydrant use to fill the water tank will be the responsibility of the CM/GC.
- ~~Excavated material can be spread on site and excavation activities can be completed using an excavator.~~

102.5.4. Test Infiltration Basin Construction. Consultant will coordinate with the CM/GC who will excavate a 50-foot by 50-foot infiltration basin to a depth of one (1)-foot bgs. Consultant will coordinate with the CM/GC who will oversee the placement of an ~~An~~ energy diffusion system (rip-rap) ~~will be placed~~ at the location where water discharges to the basin to minimize turbidity during the test~~. Consultant will~~ and install a temporary shallow piezometer in the center of the basin in an attempt to monitor groundwater mounding directly below the basin during the pilot test. ~~Consultant will oversee utility locates prior to basin construction.~~

Consultant will install a temporary stilling well and staff gauge in the basin and equip the stilling well with a pressure transducer and datalogger to monitor the surface water level during the pilot infiltration test. The water level monitoring system will be equipped with remote communication capabilities to detect potential overflow conditions during the test. Consultant will oversee survey of the latitude, longitude, and elevation of the stilling well to facilitate comparison between water levels in the infiltration basin and monitoring well during the pilot infiltration test.

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Consultant will download data from transducers immediately before the start of the test and review data and conduct shakedown testing of the remote monitoring system before the start of the test.

Assumptions:

- The infiltration basin will be excavated in three (3) days.
- The anticipated location of the infiltration basin will not require relocation due to utilities or obstructions.
- Excavation of the infiltration basin shall be completed by the CM/GC through an early work amendment (EWA).

102.5.5. 28-Day Infiltration Basin Pilot Test. The infiltration pilot test is planned to consist of discharging potable water from the nearest Mill City fire hydrant into the test basin for a minimum of fourteen (14) days and a maximum of twenty-eight (28) days, as required, at a rate of about 100 gallons per minute (gpm). Consultant will oversee installation of totalizing flow meters, shut off valves, hose ramps, and hosing by CM/GC to convey water from the fire hydrant to the rip-rap area at the infiltration basin. Consultant will measure flow ~~Flow will be measured~~ with totalizing flow meters at the hydrant and at the entrance to the basin and measure ~~.~~ ~~G~~groundwater levels and surface water levels ~~will be measured~~ using pressure transducers and hourly to daily manual measurements (depending on the phase of the test).

Prior to the test, Consultant will measure baseline groundwater elevations and reprogram the pressure transducers in monitoring wells GM1-MW1, GM1-MW2, GM1-MW3, and GM1-MW4 to record aquifer response during the pilot infiltration test.

Consultant will oversee the first twelve (12) hours of the test to observe water level trends and refine the flow rate. For the remainder of the first week, Consultant will conduct a daily field visit to measure the water level in the pilot infiltration basin, the temporary piezometer, and at groundwater monitoring wells GM1-MW1, GM1-MW2, GM1-MW3, and GM1-MW4. Transducer data will be downloaded and reviewed.

For each additional week of testing, Consultant will visit the infiltration basin site three (3) times per week and measure groundwater elevations in monitoring wells GM1-MW-1, GM1-MW2, GM1-MW3, and GM1-MW4, and download and review transducer data. Consultant will recommend duration of test that will allow understanding of the mounding that will occur. Based on mounding simulations, extending the test past fourteen (14) days (Week 2) may be necessary if aquifer permeability is lower than expected. Extending the test will incur additional fees for water use from the City of Mill City, and regular check-ins to manually measure water levels. Consultant estimates that the maximum time the test will need to run is 28 days.

Consultant will check transducer condition (battery and memory) during each site visit and maintain transducers as needed. Consultant will evaluate data and assessment of aquifer response based on the data that are collected on a daily basis.

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At the conclusion of the test, Consultant will allow transducers to continue running for two weeks to monitor, assess data, and evaluate recession of the groundwater mound. Consultant will visit the site two weeks after conclusion of the test and conduct a transducer download. Consultant will support the CM/GC who will oversee backfilling of the infiltration basin with the excavated soils, and the temporary piezometer and stilling well will be removed.

Assumptions:

- Mill City water costs will be included in the CM/GC EWA scope of work and will not exceed $17,085 during Weeks 1 and 2 (Days 1 to 14) of the test and will not exceed $8,500 per week for Weeks 3 and 4 (Days 15 to 28).
- Consultant will conduct site visits three (3) times per week during Weeks 3 and 4 for a total of six (6) visits.
- Consultant will be responsible for obtaining permits required for Infiltration Basin Pilot Testing. Applicable permit fees will be paid by Owner.
- CM/GC will be responsible for coordination with the City, permits, backflow prevention, meters, and other City requirements for using the fire hydrant.
- There will be no constraints on getting meters or approvals for the potable water from the City of Mill City.
- CM/GC will be responsible for turning water on at fire hydrant and monitoring its flow for the duration of the infiltration basin pilot test.

102.5.6. Analysis and Reporting. Consultant will use data collected during the pilot test to calibrate the MOUNDSOLV model to the observed mounding. Specifically, model input parameters will be adjusted to achieve a better match between predicted and observed mounding during infiltration. After the MOUNDSOLV model has been calibrated to the pilot test, the calibrated model will be run under conditions representing the planned infiltration basins design and 2045 effluent generation rate.

Consultant will evaluate implications of the testing results on the recently-issued DEQ guidance for implementation of the U.S. Supreme Court's Maui Decision.
The pilot test methods, results, and MOUNDSOLV simulations will be documented in a technical memorandum. The technical memorandum will include plots of water level versus time in the monitoring wells and stilling well, a detailed narrative of the testing procedure, a figure showing well and infiltration basin locations, comparison of the results to previous work at the site, professionally-drafted boring logs summarizing the soil types that were encountered during test pit and monitoring well drilling, and a groundwater elevation contour map at various times during the infiltration test showing horizontal hydraulic gradient and groundwater flow direction.

Assumptions:

- Technical memorandum comments can be incorporated over a single review cycle.
- The Department of Environmental Quality (DEQ) will not provide comments on the technical memorandum.

Deliverables:

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- Draft technical memorandum for review by the ~~project team~~ Project Team.
- Final technical memorandum that incorporates ~~project team~~ Project Team comments.

102.5.7 Tracer Test Planning. Consultant will conduct a tracer test to: (1) estimate groundwater travel time between the infiltration basins at Site GM1 and the Santiam River and (2) estimate solute attenuation by dispersion. The objective of this task is to develop a scope of work, schedule, and cost estimate for the tracer test.

Consultant will complete the following as part of this task:

- Conduct three (3) meetings with ~~project team~~ Project Team, including legal counsel, to confirm tracer test objectives and provide input.
- Evaluate options for tracers and develop a recommendation for a tracer. This task will include a review of tracer tests conducted by the U.S. Geological Survey in Maui.
- Determine construction and locations for downgradient monitoring wells to monitor tracer concentrations and determine the number of wells.
- Develop a list of needs for conducting the tracer test (e.g., water, equipment, staging, power) and develop a schedule for conducting the test. Develop schematic diagrams for the tracer injection system.
- Develop a cost estimate for implementing the tracer test.
- Reporting.

Assumptions:

- Technical memorandum comments can be incorporated over a single review cycle.
- The Department of Environmental Quality (DEQ) will not provide comments on the technical memorandum.
- Meetings with ~~project team~~ Project Team will be virtual.

Deliverables:

- Draft technical memorandum summarizing the scope of work, schedule, and cost estimate for conducting a tracer test.
- Final technical memorandum that incorporates ~~project team~~ Project Team comments.

Task 102.6 – Response to DEQ Modeling Report Comments

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant shall address the comments from DEQ dated January 16, 2024, made in response to Consultant's technical memorandum titled "Evaluation of the Environmental Fate of Residual Pollutants from an Advance Treated Wastewater Infiltration System, Mill City, Oregon," in accordance with the Consultant's response letter dated February 26, 2024.

Consultant Responsibilities:

102.6.1 Project Management. Prepare for and attend bi-weekly meetings, starting April 2024 and through December 2024. Prepare monthly invoices from April 2024 through December

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2024. As needed client communications, staff, subcontractor, and project management. Prepare for and attend two onsite meetings in Mill City, Oregon.

Deliverables:

- Monthly invoices with a cover letter summarizing completed activities.

102.6.2 The Technical memorandum dated November 16, 2023 documents fate and transport simulations for toluene, di(2-ethylhexyl) phthalate (DEHP), and nitrate. The simulations were based on a modeling code (BIOSCREEN) that does not account for background concentrations of pollutants in the aquifer. Therefore, while the BIOSCREEN modeling simulations are accurate for toluene and DEHP (which are not present in background groundwater), the simulations only approximate nitrate concentrations [because nitrate is present at a background concentration of about 1 milligram per liter (mg/L)]. The County would like to conduct additional nitrate attenuation simulations using a modeling code that can account for background nitrate in groundwater and therefore more accurately simulate nitrate attenuation. In addition to using a different modeling code to simulate nitrate attenuation, this task addresses Comment 1 in DEQ's January 16, 2024 email:

"1. *Sensitivity analysis – DEQ would like to see a sensitivity analysis of the hydrogeological modelling between the proposed rapid infiltration basins and the river. For example, what if the highest or lowest measured hydraulic conductivity is more representative than the average? What if the volumes of effluent were half or double, or the nitrate concentration in the effluent is different (e.g., 10 mg/L or 20 mg/L, etc.)?"*

This task involves: (a) conducting additional nitrate fate and transport simulations using the U.S. Geological Survey (USGS) modeling code MODFLOW, (b) performing sensitivity analyses on the MODFLOW nitrate simulations as requested by DEQ, and (c) performing sensitivity analyses on the previous BIOSCREEN simulations for toluene and DEHP as requested by DEQ. This task will consist of the following activities:

102.6.2.1 Consultant will construct a numerical groundwater flow model using MODFLOW, including model grid and layers, assigning model input parameters, model boundary conditions (river, recharge, etc.) determining initial groundwater elevations, and calibration of the model to observed groundwater elevations. Modify the model to simulate the fate and transport of nitrate in groundwater and calculate nitrate concentrations in groundwater at: (a) the downgradient property boundary and (b) the Santiam River. Conduct sensitivity analyses on hydraulic conductivity, volume of recharge, and concentration.

102.6.2.2 Consultant will conduct a sensitivity analysis on the BIOSCREEN simulations of toluene and DEHP date and transport, including varying the values of hydraulic conductivity, the volumes of effluent, and the concentration of nitrate.

102.6.2.3 Consultant will develop a report documenting the modeling simulations for review and comment by DEQ.

Assumptions:

- Up to twenty-four (24) hours are assumed to address comments from DEQ on the modeling. Additional time required to respond to DEQ will be addressed under a separate amendment.

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- The report can be finalized based on a single review cycle from the Owner.

Deliverables:

- Draft modeling report with ~~project team~~ Project Team comments incorporated for review by Owner.
- Final modeling report with Owner's comments incorporated for review by DEQ.

102.6.3 Beneficial Groundwater Use Elevation. This task addresses Comment 3 in DEQ's January 16, 2024 email:

"3. Investigate beneficial uses downgradient and near the proposed treatment system location. Will the rapid infiltration basin impact water quality in the nearby drinking water wells? Will pumping of nearby wells impact the flow of treated wastewater?"

Consultant will conduct the beneficial water use determination in accordance with DEQ's 1998 guidance document "Guidance for conducting Beneficial Water Use Determinations (BWUDs) at Environmental Cleanup Sites." This task is comprised of the following activities:

102.6.3.1 Assess the "Locality of the Facility" for the groundwater use survey of the BWUD based on the nitrate contaminant fate and transport modeling and hydrogeologic investigation at the site.

102.6.3.2 Evaluate if pumping of nearby wells will impact the flow of treated wastewater after collecting additional data about the types of wells that are present near the infiltration facility.

102.6.3.3 Summarize the hydrogeologic setting of the site, including:

a. Summarize regional geology and hydrogeology, including, if available, background water quality; recharge and discharge mechanisms; available water yield; aquifers and aquitards; and aquifer properties (transmissivity, leakage, storativity, groundwater gradient, groundwater flow direction, and characteristics of surface water bodies).
b. Summarize local geology and hydrogeology, including background water quality; water availability; flow direction; gradient; aquifers and aquitards; and connectivity of the aquifer to surface water.
c. Construct a geologic cross section along the groundwater flowpath showing geology based on monitoring wells and test pits at site GM1.

102.6.3.4 Evaluate the current and reasonable likely future beneficial water uses in the locality of the facility, including:

a. Evaluate existing groundwater uses with a groundwater use survey within the locality of the facility consisting of a door-to-door survey, identification of properties without connection to City water, identification of properties that are suspected to have unregistered water wells, a search of Oregon Water Resources Department water well databases.

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b. Complete a surface water use survey for recreational uses of surface water based on conversations with the Oregon Department of Fish and Wildlife and the City of Mill City.
c. Evaluate reasonably likely future beneficial groundwater uses based on land use; current and historic water use (e.g., public connection); trends in water use, water rights considerations and water supply availability; federal and state regulations, and population projections.
d. Develop a report summarizing the Beneficial Water Use Determination (BWUD) for submittal to DEQ.

Assumptions:

- Project team will utilize services of right-of-way agent to conduct the door-knocking survey within the locality of the facility and will provide Consultant with a spreadsheet summarizing the results of the property contacts.
- The City of Mill City will provide information about whether properties within the locality of the facility are connected to City water, and whether there are any properties suspected of having unregistered supply wells.
- DEQ comments on the BWUD report will be addressed under a separate amendment.

Deliverables:

- Draft BWUD report with ~~project team~~ Project Team Project Team comments incorporated for review by Owner.
- Final BWUD report with Owner's comments incorporated for review by DEQ.

102.6.4 Seasonal Water Level and Nitrate Data Collection. This task addresses Comment 5 in DEQ's January 16, 2024 email:

"5. Continue to collect seasonal water level and nitrate data to better understand the seasonal variability in background groundwater."

This task is comprised of the following activities:

102.6.4.1 Conduct quarterly site visits for a year (from March 2024 through March 2025) to site GM1 to download transducer data from the five (5) site monitoring wells and one (1) barologger.

102.6.4.2 Manage data, develop data tables, update plots, develop groundwater elevation contour maps for each quarter.

102.6.4.3 Develop a brief technical memorandum with water level plots and groundwater elevation contours.

Assumptions:

- The brief technical memorandum will not undergo a review cycle.

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- Analytical costs for nitrate are included in the fee for Task 102.6.5.

Deliverables:

- Brief technical memorandum with water level plots and groundwater elevation contours.

102.6.5 Modeling of BOD, pH, TSS, and TDS. This task addresses Comment 4 in DEQ's January 16, 2024 email:

"4. Is it possible to extend the modelling to include Biological Oxygen Demand and pH? What are the likely BOD, pH, TSS, and TDS coming out of the treatment system. Please model what the chemical concentrations will be near the river."

This task is a geochemical characterization program and geochemical modeling evaluation that will be implemented by a sub-consulting firm that specializes in geochemistry. The objective of the evaluation is to distinguish between wastewater quality at the point of discharge and along the groundwater flowpath at: (a) the property boundary and (b) the Santiam River. This task is comprised of the following activities:

102.6.5.1 Manage the project and attend meetings.

102.6.5.2 Review existing project documentation and available groundwater, geological, and wastewater quality datasets.

102.6.5.3 Evaluate soil quality based on the soil samples collected in March 2024 from the monitoring well GM1-MW4 boring. The samples will be analyzed for mineralogy, sequential extraction procedure (SEP), cation exchange capacity (CEC), total metals, and acid base accounting (ABA).

102.6.5.4 Develop an initial geochemical conceptual site model that includes the geochemical factors influencing transformation or dilution of pH, Biological Chemical Demand (BOD), total solids (TS), and total suspended solids (TSS) in treated water. Based on the geochemical conceptual site model, develop a detailed plan for further modeling activities and present it to the ~~project team~~ Project Team for review and comment.

102.6.5.5 Conduct modeling to evaluate changes in water quality and the geochemical reactions that are expected to occur as groundwater moves from the infiltration area to the property boundary and the discharge point near the Santiam River.

102.6.5.6 Prepare a technical memorandum summarizing a final geochemical conceptual site model and the results of the modeling.

Assumptions:

- The projected treated wastewater composition will be used for the geochemical models. If there are gaps in the projected wastewater composition, then raw wastewater data from Mill City's existing treatment system will be used.
- The ~~project team~~ Project Team can agree on the detailed plan for further modeling during a meeting, as opposed to a part of a formal review period that occurs outside of the meeting.

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- A GIS layer showing the layout of the infiltration basins and future property boundaries will be provided to Consultant.
- A total of ten (10) soil samples and two (2) groundwater samples will be analyzed.

Deliverables:

- Draft modeling report with ~~project team~~ Project Team comments incorporated for review by Owner.
- Final modeling report with Owner's comments incorporated for review by DEQ.

102.6.6 Compliance Well Locations and Functional Equivalent Form. This task addresses Comments 6 and 7 in DEQ's January 16, 2024 email:

"6. Propose appropriate well location(s) for future compliance sampling. These locations also need to confirm directional flow of groundwater. What concentrations of nitrate (and possibly other parameters) at these locations would indicate a problem (above drinking water maximum contaminant levels [MCL] or above background)."

"7. Complete the functional equivalent form we sent you."

102.6.6.1 Work with the City and County to identify public property where monitoring well(s) could be installed and propose a well location and construction to the ~~project team~~ Project Team by email.

102.6.6.2 Complete the functional equivalent form based on information collected during earlier phases of the site GM1 investigation.

Assumptions:

- The functional equivalent form will be completed by the ~~project team~~ Project Team based on information provided by the Consultant.

103 – LAND ACQUISITION AND RELOCATION SERVICES

Task 103.1 – Project Management and Administration

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

103.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

103.1.2 Coordination. Coordinate services to complete the land acquisition and relocation services task.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

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Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 103.2 – Mill City Land Acquisition and Relocation Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Responsible for the oversight of land acquisition and relocation services for North Santiam Canyon Sewer Project (NSCSP) and the Detroit Downtown Commercial Septic Program as outlined in the tasks below. The subtasks included as part of Task 103.2 are based on the land acquisition and relocation Subconsultant's scope of work. The scope and fee provided are for the acquisition of up to fifteen (15) files.

Consultant Responsibilities:

RIGHT OF WAY (ROW)
Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.2.1 Project Management and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the ~~project team~~ Project Team. Consultant shall meet with up to six (6) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.2.7). Consultant Project Manager will QC all deliverables prior to delivery.

103.2.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner and Consultant of any major title encumbrances.

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103.2.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner and Consultant for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner and Consultant.

103.2.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.2.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

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Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.2.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

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- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.2.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.
Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there is up to one (1) Personal Property Only Relocation.

Consultant shall, at a minimum, conduct the following relocation activities:

- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment.
- Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.2.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall:

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- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.2.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to fifteen (15) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner,
- Provide up to fifteen (15) GINs, one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Up to fifteen (15) appraisal and appraisal review reports, electronically.
- Provide 15-Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Provide Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.

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- Provide the following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to fifteen (15) Draft Offer Packets for review for each file to Owner
- Provide up to fifteen (15) Final Offer Packets sent certified mail or delivered in person for each file.
- Provide up to fifteen (15) Final Report Packets for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval
- Submit Relocation claims electronically to Owner for payment
- Submit Relocation Closing Reports to Owner
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

Task 103.3 – Detroit Land Acquisition and Relocation Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Responsible for the oversight of Acquisition and Relocation services for North Santiam Canyon Sewer Project as outlined in the tasks below. The subtasks included as part of Task 103.3 are from the land acquisition and relocation Subconsultant's scope of work.
Consultant Responsibilities:

Consultant shall conduct the Right-of-Way ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970
- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

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103.3.1 Project Manager and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the ~~project team~~ Project Team. Consultant shall meet with up to twelve (12) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.3.6). Consultant Project Manager will QC all deliverables prior to delivery.

103.3.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner of any major title encumbrances.

103.3.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.3.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.
Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.3.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

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All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section 5.140, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.3.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

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If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.3.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.

Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx). Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there are up to three (3) Personal Property Only Relocations.

- Consultant shall, at a minimum, conduct the following relocation activities:
- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.

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- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment. Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner.
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.3.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.3.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices, electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to twelve (12) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner.

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- Provide up to twelve (12) GINs, with one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. NOTE: If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Provide up to twelve (12) appraisal and appraisal review reports, electronically.
- Provide 15 Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- The following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to twelve (12) Draft Offer Packet for review for each file to Owner.
- Provide up to twelve (12) Final Offer Packet sent certified mail or delivered in person for each file.
- Provide up to twelve (12) Final Report Packet for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide up to twelve (12) Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval.
- Submit Relocation claims electronically to Owner for payment.
- Submit Relocation Closing Reports to Owner.
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

104 – FINANCIAL ADVISORY SERVICES

Task 104.1 – Project Management and Administration

Consultant Responsibilities:

104.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

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104.1.2 Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 104.2 – Financial Advisory Services
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

104.2.1 Advisory Services. Consultant shall provide, upon request, advisory services related to the North Santiam Canyon Sewer Project. This consultation shall be provided on a time and materials basis, and it shall include attendance at meetings, writing of memos or presentations, or communication via phone or email in support of the project decision-making.

104.2.2 Financial Plan. Consultant shall update rate model and monthly cost per EDU for two project phases and build year-by-year model of costs and revenues. Consultant shall prepare presentations and technical memoranda of business case model and year-by-year model results for meetings with project stakeholders.

Owner Responsibilities:

- Provide meeting space for project meetings.

Assumptions:

- Attendance at project meetings may be virtual.

Deliverables:

- Business Case Technical Memorandum
- Business Case Presentation
- Draft and Final Financial Plan

105 – PUBLIC RELATIONS

Task 105.1 – Project Management and Administration

Consultant Responsibilities:

Consultant will assist in improving Owner's communication and outreach to the community, local governments, residents, businesses, and other key stakeholders regarding the Project.

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105.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

105.1.2 Coordination. Coordinate services to prepare and carry out the Communication and Engagement Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at internal project meetings may be virtual. Assume participation in meetings approximately three (3) to five (5) times per month, including one (1) standing meeting per month and additional meetings specific to individual project activities. This may include NSSA Board meetings (see Task 105.2)
- Project management budget assumes a public relations campaign of up to 36 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 105.2 – Communications and Engagement Planning and Implementation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

105.2.1. Communication and Engagement Plan

The Consultant will develop and carry out a Communication and Engagement Plan to track and monitor communications throughout the Project. This plan covers scheduled written and oral communications, responses to unsolicited requests for information, the frequency of the scheduled communications, and the responsible person(s) for providing the information. The Plan will build on information in this Scope of Work and the North Santiam Sewer Authority (NSSA) Communications Plan prepared by the Mid-Willamette Valley Council of Governments. It will be updated as needed to adjust to evolving project needs, audiences, messages, communication channels, outreach tools, and direction from the ~~project team~~ Project Team and NSSA Board.

Services under the Communication and Engagement Plan shall include the following:

a. Frequent content creation for multi-media and traditional print platforms including but not limited to: news releases, digital releases, event boards, photography, video, talking points, speeches, and Frequently Asked Questions.
b. Multi-media platform management for County and NSSA to include timely uploading of announcements to websites and digital media; videos, articles, and photos of project events; other digital media such as live video streams of construction sites.
c. Training for staff and elected officials in verbal and written communication norms specific to the Project needs.
d. Special public outreach projects and other public relations/communications functions as determined by the County.

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e. Services and tasks as outlined in Attachment A of the "North Santiam Sewer Canyon project Communication and Engagement Plan" prepared by the Mid-Willamette Valley Council of Governments.
f. Support the County Board of Commissioners and NSSA Board to enhance communication regarding project related topics.
g. Support as directed by the Council of Governments' NSSA project manager outlined in Attachment B of the "North Santiam Sewer Canyon project Communication and Engagement Plan" prepared by the Mid-Willamette Valley Council of Governments.
h. Staffing of digital events such as webinars, and public body presentations on virtual chat applications and social media platforms.
i. Staffing of in-person events such as town halls, open houses, city council presentation, and kick-off meetings.
j. Assistance with staff and elected officials' efforts to communicate with community members.

Assumptions associated with these services are provided in more detail in the following subsections.

105.2.2 Communications Channels. The Consultant will utilize various formal and informal channels to engage with the community and support the Owner in internal and external communications related to the Project including the following.

a. Status Reports. A variety of status reports will be produced during the project. The status reports will be produced at regular intervals to provide stakeholders with project information on the status and progress of the Project. At a minimum the reports will contain project status on major activities, project schedule, simplified budget and cost tracking, status of action items, if applicable, and a one-month lookahead. The intent of the status reports is to inform stakeholders of the project's progress and keep them actively involved in the project. The information provided will contain enough detail to allow stakeholders to make informed decisions relevant to their role in the Project.
b. External Communication. In addition to the ongoing communications program of the district, the Project will produce information, signage, content for digital and social platforms, webcams on the construction sites, events, and reports to the external stakeholders. The look and feel of these publications will be designed to match the informational materials produced by the NSSA.
c. News and Print Media. Consultant will assist the Owner in reaching out to media outlets to coordinate scheduled and unscheduled informational releases, public notices, and interviews with the appointed Owner spokesperson; and to assist in preparing written and verbal narratives and graphics in support of same. Consultant is not permitted to communicate directly with the media unless prior approval or direction has been granted from the Owner or designee.
d. Public Inquiries and Public Records Requests. Owner will respond to public records requests made in writing, in accordance with Marion County public records process. Where needed, Consultant will coordinate with and support the Owner by preparing draft narratives in response to these requests.

Owner Responsibilities:

- Provide meeting space for project meetings.
- Provide input and review of all draft and final deliverables.

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Assumptions:

- Budget for this item assumes a public relations campaign of up to 36 months.
- Informational materials to include:
  - Document Templates, including the following:
    - MS PowerPoint (PPT) Template: Consultant will design a PPT cover slide, background slide, divider slide, and a standard text-with-imagery slide.
    - Report Template: Consultant will design a project report template in Adobe InDesign. The template will include text, icons, photos, and tables, and be two-to-five pages in length.
    - Flyer Template: Consultant will design an 8.5-inch x 11-inch flyer template in Adobe InDesign. The template will include text, photos, and callout graphics.
    - Event Board Template: The template will be designed as an event board template in Adobe InDesign. It will be approximately 24-inches x 36-inches (or similar). It will include a masthead and possible footer. The board will include the option to insert infographics, spot illustrations, icons, text, graphs, and photos into the template frame.
  - Talking points – address specific project issues, status, and activities; assume monthly preparation of updates.
  - Emails announcements and updates – note progress on specific tasks, upcoming activities within a given community, upcoming NSSA meetings, opportunities to comment on project decisions or recommendations, monthly on average.
  - Meeting Flyers; assume approximately eight (8) flyers.
  - Media Releases: assume quarterly on average twelve (12) media releases.
  - Videos: assume one per year on average three (3) videos.
  - Meeting presentation materials (for approximately eight (8) meetings).
- Virtual attendance at bi-monthly general project meetings to remain up to date on project status.
- Attendance at monthly NSSA meetings which may be virtual or in-person. Support for NSSA meetings to include:
  - Technical advice regarding meeting agendas and communications in preparation for meetings.
  - Attend selected meetings as needed; assume up to six (6) meetings.
  - Provide NSSA Board members with talking points summarizing meeting outcomes.
- Attendance at community meetings or open houses, City Council meetings, or other in-person event including the following:
  - Attend up to six (6) open houses or community meetings – two (2) rounds of meetings in Detroit and Idanha and one (1) round of meetings in Mill City and Gates.
  - Attend up to six (6) City Council meetings, as requested; assume virtual attendance.
  - Prepare presentation materials for the meetings above, in coordination with other consultant team members, County staff, and MWVCOG staff.
- Informal communications consisting of e-mail, conversations, or phone calls will serve to supplement and enhance formal communications. Due to the varied types and ad-hoc nature of informal communications, they are assumed to be incidental to the Communications and Engagement Plan and not specifically outlined by the Plan.
- Additional assumptions regarding work products include the following:
  - Videos – Consultant to produce up to three (3) videos to document specific project milestones; videos will be approximately one (1) to three (3) minutes in length; interviews with video participants will be conducted and recorded via Zoom.
  - Presentation Training – Consultant to conduct up to two (2) rounds of presentation training; training sessions will be conducted online and recorded via Zoom or another online meeting

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platform; recordings and presentation materials will be available to staff or team members who are unable to attend.

- Website Updates – Consultant to draft content, approximately monthly/as needed; budget contains an item to undertake a more significant website refresh if needed.
- Social Media – Consultant to assist in providing draft content; including social posts and artwork for the County to use on their social outlets and share with their partner networks, including NSSA members, County and MVCOG, and other community members.
- Response to Public Inquiries – Consultant to assist in drafting responses, as needed for communication with media organizations (e.g., Canyon Weekly), as well as local decision-maker communications to constituents; assume an average of 2 to 4 hours per month to draft responses.

Deliverables:

- Communication and Engagement Plan
- Status Reports
- Informational Materials and External Communication (e.g., project information, signage, content for digital and social platforms, webcams on the construction sites, events, and reports to the external stakeholders).

106 – INDEPENDENT COST ESTIMATING

Task 106.1 – Project Management and Administration

Consultant Responsibilities:

106.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

106.1.2 Coordination. Coordinate services to prepare and carry out peer reviewed estimates of the Mill City/Gates Water Pollution Control Facilities (WPCF), Mill City/Gates Force Main, and Gates Collection System projects.

Owner Responsibilities:

- Provide input and review of all draft and final deliverables.

Assumptions:

- Assumes a twelve (12) month duration for general project administration.
- Attendance at internal project meetings will be virtual. Assume participation in meetings approximately one (1) time per month for twelve (12) months.
- Attend one (1) Marion County Board of Commissioners meeting in person.

Task 106.2 – Independent Cost Estimating (ICE)

Consultant Responsibilities:

106.2.1 30% Opinion of Probable Construction Cost (OPCC) ICE Review. Consultant shall provide an independent cost estimate review of the construction management general contractor's (CM/GC) 30% OPCC including the following:

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106.2.1.1 Review of sub-tier level (suppliers and subcontractors) solicitation efforts and resulting proposals for work not self-performed by the CM/GC. This will be a review of each proposal for scope coverage, exclusions, assumptions, and responsiveness to the solicitation.

106.2.1.2 Review of the CM/GC's cost estimate worksheets for self-performed work. This review will spot check quantities, labor production rates, craft labor costs, equipment costs, assumptions, and allowances.

106.2.1.3 Review the CM/GC's Risk Register.

106.2.1.4 Review the CM/GC's critical path method (CPM) Construction Schedule.

106.2.2 60% and 90% OPCC ICE Review of Updates. Consultant shall provide an ICE review of updates to the CM/GC's 60% and 90% OPCC (delta changes only).

106.2.2.1 Review of sub-tier level (suppliers and subcontractors) solicitation efforts and resulting proposals for work not self-performed by the CM/GC. This will be a review of each proposal for scope coverage, exclusions, assumptions, and responsiveness to the solicitation.

106.2.2.2 Review of the CM/GC's cost estimate worksheets for self-performed work. This review will spot check quantities, labor production rates, craft labor costs, equipment costs, assumptions, and allowances.

106.2.2.3 Review the CM/GC's Risk Register.

106.2.2.4 Review the CM/GC's critical path method (CPM) Construction Schedule.

Assumptions:

- Consultant has no control over the cost of labor, materials, equipment or services furnished by others, or over Contractor's methods of determining prices, or other competitive bidding or market conditions, practices or bidding strategies. Cost estimates provided by Consultant are based on Consultant's experience and judgment at that time. Consultant cannot and does not guarantee that proposals, bids or actual Project construction costs will not vary from cost estimates prepared by Consultant.

Deliverables:

- 30% OPCC ICE Review
- 60% OPCC ICE Review
- 90% OPCC ICE Review

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PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM

200 – MILL CITY / GATES FACILITIES PLANNING STUDY

Task 200.1 – Project Management

Consultant Responsibilities:

200.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

200.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Planning criteria will also be reviewed during the Kickoff Meeting. Representatives from the DEQ will be invited to the kickoff meeting.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services, if any.

Assumptions:

- Project management budget assumes a planning schedule of up to 8 months.
- Monthly Board meeting attendance is covered in a separate task order.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Funding administration services and funding acquisition support is not included in this scope of work.

Task 200.2 – Data Acquisition & Facility Tours

Consultant Responsibilities:

200.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

Mill City

- Discharge Monitoring Report (DMR), operational, influent monitoring (15-minute intervals), rainfall data (since Jan 2021), and any other water quality sampling results collected outside of DMRs in spreadsheet format
- Update of financial summary records, including current rates, annual expenses, operation, revenues, replacement budgets, number and type of accounts, etc.
- Recent facility inspection reports, if available
- Provide update of any changes to wastewater flows from major seasonal wastewater dischargers, water users with their own wastewater treatment system, major water users that consume the majority of their water.
- Any recently produced planning documents (transportation, wastewater, water conservation, water/waste/energy audits)
- Update on known treatment plant or collection system issues and planned

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improvements
- Update from Gates and Mill City for winter-time water consumption data summarized by user types in a spreadsheet format
- Known correspondence from federal and state regulatory agencies regarding violations or concerns related to wastewater treatment and disposal

200.2.2. Data Collection and Review. Collection and processing of furnished data, mapping, and reports. Provide a follow-up Request for Information for supplemental data if required.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required.
- Provide access to facilities and records.
- Provide operations and maintenance staff for questions as needed.

Assumptions:

- Consultant will not enter confined spaces. Structural and electrical engineering reviews are not included in the scope of work but could be completed as an additional service.
- Consultant shall be entitled to rely, without liability, on the accuracy and completeness of information provided by Owner, other agencies and stakeholders, and information from public records, without the need for independent verification.

Deliverables:

- Request(s) for Information

Task 200.3 – Project Planning

Consultant Responsibilities:

200.3.1. Location. Incorporate brief description of project location from master plan. Include figure(s) from master plan to establish the project planning area.

200.3.2. Environmental Resources. Incorporate information from master plan to document natural resources in the project area, including land use, flood plains, wetlands, historic, biological, water quality issues, socio-economic, climate, geography, soils, rivers, and air quality. Use master plan figures to summarize natural resources in the project area.

200.3.3. Growth Trends. Update master plan population statistics and projections. For Mill City, coordinate with Mill City and County planners on location, phasing, and type of new growth. The Portland State University Population Research Center historical population data and 40-year growth forecasts will be used to inform the population growth, but it is assumed that non-traditional methods will be required to best account for the decline and near-term growth due to rebuilding after the 2020 wildfire as well as accounting for the new community sewer system in Gates and new treatment facility in Mill City. Growth for non-residential users will be estimated based on input from City and County planners for the 20-year planning period.

200.3.4. Community Engagement. Describe the Owner's approach to engage the community in the planning process.

200.3.5. Design Flow Rates. Update master plan design flow rates based on most recent DMR and water usage data from Mill City and Gates. Update projections based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

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200.3.6. Design Loading Rates. Update master plan wastewater loadings and project future loadings based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.7. Regulatory Requirements. Review and update summaries from master plan of current regulatory requirements and planning criteria that may influence operation, maintenance, and capital improvements of the existing Mill City wastewater system and the initial project components in Gates.

200.3.8. Cost Estimating. Establish cost estimating methodology to reflect both local and current conditions.

200.3.9. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.3.10. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and approval on growth projections and planning criteria.
- Provide review and comments of this section.
- Provide input on community engagement.

Assumptions:

- The planning criteria will need to be established for the planning study prior to having any supplemental income and population survey data available to inform the population estimates and projections. The best available data will be used for the purposes of this study.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- City staff or Contract City Planner will provide input on the distribution and phasing of new residential and non-residential growth in Gates and Mill City.
- If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.
- The study area will coincide with the North Santiam Sewer Authority Boundary for Gates and Mill City.
- Community engagement included in this scope of work is limited to the public meeting in Task 209. Additional community engagement activities can be provided as additional services or through other identified task orders.

Deliverables:

- Draft Project Planning Facility Plan Section.

Task 200.4 – Existing Facilities Evaluation

Consultant Responsibilities:

200.4.1. Base Map. Update the existing system base map from the master plan, showing location of key facilities, pipelines, and basin boundaries for Mill City. Use the schematic process layout of the existing treatment plant from the master plan showing major process components.

200.4.2. History. Update master plan's documentation of wastewater treatment plant history and system description to reflect current flow and water quality data, recent discharge

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monitoring records (DMRs), plant improvements that have been completed recently, current condition of plant equipment and facilities, and current operation practices.

200.4.3. Wastewater System Management Classification, Operators and License. Provide a brief writeup of system required licensing and current operator license information.

200.4.4. Conditions Assessment. Update master plan documentation of existing physical conditions deficiencies. Collection system pipe information will be summarized by pipe material and age. Complete pump tests at each pumping facility to evaluate current pump performance and capacities. Incorporate findings from the I/I study that is currently under way at the time this scope was finalized.

200.4.5. Capacity Evaluation. Update master plan's comparison of existing and future projected flows and loadings to the existing capacity of the Mill City wastewater treatment system. Summarize existing capacity deficiencies.

200.4.6. Review pump run time data and flow meter records to assess existing capacity limitations (if any).

200.4.7. System Resiliency. Assess the collection system resiliency for the Mill City lift stations. This is anticipated to include a comparison of firm pumping capacity (i.e. with largest pump off-line) to the peak hour inflow. It also includes an assessment of whether onsite or portable back-up provisions are available and automated, what kind of emergency bypass pumping provisions are provided for the lift station and/or force main (in the event of a line break), and what kind of redundancy is provided in terms of back-up level sensors and alarms. This scope does not include an evaluation of seismic risks, a comprehensive vulnerability assessment, or updates to the Owner's Emergency Response Plans. Consultant will summarize the consequence of failure of critical lift station facilities and identify potential capital improvements and operational strategies that could be completed to mitigate these risks.

200.4.8. Wastewater Collection System Evaluation

200.4.8.1. Wastewater Model Development and Calibration. Use existing base mapping, record drawings, dry weather flows, pump curves, and Owner provided data to develop and calibrate a wastewater system model. The winter-time water consumption data will be used to estimate dry weather flows. Allocate infiltration and inflow for utilizing wet weather system design flows, available pump run time, and SCADA data.

200.4.8.2. Existing System Evaluation. Exercise computer model to check the Mill City system and evaluate the existing collection system hydraulic capacity. Evaluate system for remaining capacity.

200.4.9. Wastewater Treatment System Evaluation. Update master plan write-up to summarize existing plant deficiencies using updated plant data to compare actual performance to expected performance.

200.4.10. Operations. Update master plan documentation of existing operations and maintenance issues and concerns reported by Owner staff.

200.4.11. Financial Status of Existing Facilities. Document current rate schedules, annual O&M costs, other capital improvement programs, and table of users by monthly usage categories for the previous fiscal year. Document existing debts and required reserve accounts. Budget and capital improvements will be addressed under a separate task.

200.4.12. Water/Energy/Waste Audits. Provide brief write-up discussing variable frequency drive motors and all other applicable energy items for the system. Investigate and summarize the likelihood of incorporating a hydroelectric power generator on the force main from Gates

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to Mill City. Summarize overall current energy consumption for Mill City's existing system.

200.4.13. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.4.14. Draft Plan Section. Prepare draft section writeup. Address Owner comments on draft document.

Owner Responsibilities:

- Review and comment on draft documents.
- Participate and provide meeting location for workshop meetings.
- Provide field checks if necessary, including surveying.
- Provide access to facilities and records. Test and replace (if needed) suction and discharge pressure gauges ahead of equipment tests.

Assumptions:

- Modeling of the existing Mill City treatment plant will not be completed for this facilities plan.
- The Mill City GIS mapping will not be survey grade and will be carried over from the master planning effort. The mapping will not include rim/invert data. It will only include approximate location as it was digitized from the existing record drawings.
- No additional field work or surveying will be required.
- Collection system conditions assessment will not include a full review of CCTV records or smoke testing with the exception of incorporating the findings from the Mill City I/I study.
- The Mill City collection system model will be developed with the InfoSWMM modeling platform, based on record drawings. Consultant will rely upon the accuracy of available record drawings. This scope does not include any field survey work to check or update pipe slopes.
- If model does not readily calibrate to existing conditions, and additional field work is recommended to troubleshoot the Owner's wastewater system, these services can be completed as an additional service.
- No drain field analysis will be provided.

Deliverables:

- Draft Existing Facilities Evaluation Facility Plan Section.

Task 200.5 – Need for System Improvements

Consultant Responsibilities:

200.5.1. Health, Sanitation, and Security. Summarize concerns and relevant regulations or correspondence from/to state and federal agencies.

200.5.2. Aging Infrastructure. Incorporate summary findings of conditions assessment of assets and summarize available pipeline age/material information. Summarize the following:

- Unit performance issues, deficiencies and useful life.
- Existing system reliability per DEQ and EPA guidelines.
- Ability to meet current and potential future effluent limits and other regulatory requirements.
- I/I calculations to determine if existing I/I is considered "non-excessive".

200.5.3. Reasonable Growth. Using the design flow and loading information, document the reasonable growth capacity that is necessary to meet needs during the planning period.

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200.5.4. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and review of this section of the plan.

Deliverables:

- Draft Project Needs Facility Plan Section.

Task 200.6 – Collection System Alternatives Considered and Selection

Consultant Responsibilities:

200.6.1. Future System Evaluation. Build Gates system model and expand Mill City model to include additional pipe and pump station network requirements associated with servicing new growth areas for the planning period. Add flows from new growth. Exercise the model to identify potential system deficiencies attributed to growth within the planning period.

200.6.2. Evaluate alternative improvements to correct existing, and anticipated future deficiencies, sewer new areas, and meet the target planning criteria. Benefits and drawbacks will be summarized for each alternative. A "no action" alternative will also be considered for each category. This alternative evaluation will be based on the master plan collection system alternatives while evaluating Mill City's existing system for collection system capacity deficiencies.
Where improvements are not relatively straightforward, evaluate up to three collection alternatives for the existing Mill City collection system that will service existing and future flows. Additional refinement of pipeline alternatives is anticipated to occur in the predesign tasks associated with the new Gates collection system.

200.6.3. Alternative Cost/Benefit Analysis. This will include life cycle cost analysis on preferred alternatives for up to three viable alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 40-year life cycle evaluation. This alternative evaluation for Gates will be based on the master plan collection system alternatives while evaluating any capacity alternatives for Mill City's collection system.

200.6.4. Phasing/Implementation Plan. Develop a phasing plan of improvements based on initial project, 10-year, 20-year, and 40-year anticipated growth. This plan will include an evaluation of interim recommendations or strategies for property owners who need to address septic system deficiencies or replacement prior to day one of the new Gates collection system and Mill City mechanical treatment plant are constructed.

200.6.5. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives using the master plan's figures with updates/modifications per this scope of work.

200.6.6. Environmental Impacts. A summary of the preliminary environmental screening of the collection system alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.6.7. Land Requirements. Discuss property needed for alternatives.

200.6.8. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

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200.6.9. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.
200.6.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.
200.6.11. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide a review of the alternatives considered and input on selection criteria and ultimate selection of preferred alternative.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4 (planning level cost estimates).

Deliverables:

- Draft Collection System Alternatives Facility Plan Section.

Task 200.7 – Treatment and Disposal System Alternatives Considered and Selection

Consultant Responsibilities:

200.7.1. Develop a list of treatment plant improvement alternatives focused on improving effluent water quality, vulnerability, safety and redundancy. The disposal improvement alternative will be rapid infiltration per the master plan recommendations.
200.7.2. Develop up to three pre-screened alternatives to evaluate, for primary treatment, secondary treatment, tertiary treatment, and solids handling treatment processes. Evaluate the pre-screened alternatives.
200.7.3. Facility Tours. Organize a tour of up to two wastewater treatment facilities with the Owner's staff to investigate alternatives with similar processes. These are anticipated to occur on the same day.
200.7.4. Alternative Cost/Benefit Analysis. Assist in comparing benefits, drawbacks, and costs of up to three viable alternatives. This will include life cycle cost analysis on preferred alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 20-year life cycle evaluation.
200.7.5. Phasing Plan. Develop a phasing plan of improvements based on initial project, 10-year, and 20-year anticipated growth.
200.7.6. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives.
200.7.7. Environmental Impacts. A summary of the preliminary environmental screening of the treatment system and disposal alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.
200.7.8. Land Requirements. Discuss property needed for alternatives.
200.7.9. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

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200.7.10. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.
200.7.11. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.
200.7.12. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide input on tasks above.
- Provide a review of the alternatives considered section of the plan.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not look at alternatives to upgrade the existing recirculating gravel-bed filter.
- Evaluation of alternatives does not include piloting, bench testing, or fieldwork.
- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4.

Deliverables:

- Draft Treatment System Alternatives Facility Plan Section.

Task 200.8 – Proposed Projects (Recommended Alternatives)

Consultant Responsibilities:

200.8.1. Model day one and future 20-year process and hydraulic conditions of selected alternative for the new mechanical treatment plant.
200.8.2. Capital Improvement Plan.

a. Summarize recommended improvements.
b. Prepare planning level cost estimates for recommended improvements. For future projects anticipated to be developer driven and developer funded, summarize only upsize costs.
c. Estimate the portion of each capital improvement project cost that is attributed to 20-year growth for System Development Charge (SDC) eligibility.

200.8.3. Preliminary Project Schedule. Summarize costs for initial project, 10-year, and 20-year needs. The 6-year CIP for DEQ purposes will be covered by the "initial project" costs.
200.8.4. Permitting Requirements. Summarize WPCF permitting requirements (WPCF permit application and additional support is covered by a separate task order).
200.8.5. Sustainability Considerations. Summarize how the priority improvement projects will enable the Owner to serve its customers and be able to operate and maintain the system. Discuss how the projects will accommodate green infrastructure and efficiencies.
200.8.6. Future Reuse Consideration. Reuse system impacts will be considered and coordinated, and their potential summarized for selected alternative.
200.8.7. Organization and Staffing Requirements. Summarize recommended staffing requirements as required for regulatory compliance or as reported by the Owner. Summarize up to three options for organizational setup for certified operators for both collections and treatment (i.e. contract operator vs sewer authority staff).

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200.8.8. Financing Options. Summarize potential financing options available for initial project. This will be a summary of efforts being undertaken by the Owner, Marion County, and the MWVCOG for funding the project.

200.8.9. Annual Budget Considerations.

a. Summarize Operating Revenues and Expenses. Summarize estimated annual operating expenses and identify recommended budgets dedicated for the initial project.
b. Anticipated User Charges and Other Income. Summarize the business case scenario documented previously by FCS Group and provide a status update on current efforts to implement recommendations.
c. Annual Replacement Budgets. Develop recommended annual replacement budgets for the initial project based on typical replacement values and asset life. This will include a list of short-lived assets and the recommended annual replacement budget.
d. Annual Operations and Maintenance Costs. Estimate the operations and maintenance cost implications for the initial project.

200.8.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review an overall summary of the plan, selected improvements, and budget considerations.

200.8.11. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input on the proposed projects.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.
- Provide review and comments on the plan.

Assumptions:

- Scope excludes a user rate analysis, including evaluation of individual rate structures, cost-of-service evaluations, and service availability fee studies. These services can be provided as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

Deliverables:

- Capital Improvement Plan (tabular format, organized by initial project, 10-year, and 20-year needs).
- Estimate of SDC eligibility for each capital improvement past the initial project.
- Draft Proposed Project Facility Plan Section.

Task 200.9 – Facility Plan Documentation and Public Meeting

Consultant Responsibilities:

200.9.1. Prepare Facility Plan. Prepare and combine draft documents for a complete facility plan generally following the outline established in the July 2018 guidance document "Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed

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by Business Oregon, Oregon Department of Environmental Quality, Rural Community Assistance Corporation, and the United States Department of Agriculture". Add executive summary and assemble appendix materials. Appendix materials will include output flow capacities, existing peak hour flows, and future peak hour flows summarized in tabular and graphic format. Draft documents to be updated to address Owner comments. Submit final draft plan for Owner review.

200.9.2. Public Meeting. Prepare materials for and present summary findings in a townhall meeting.

200.9.3. Address Owner Comments. Address final Owner and public comments and submit for agency review.

200.9.4. Address Agency Comments. Address agency comments and finalize document.

Owner Responsibilities:

- Review and comment on final draft plan in a timely manner.
- Pay agency review fees, if applicable.
- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.

Deliverables:

- Public Meeting Presentation Materials.
- Final Facilities Plan, three (3) hard copies (3 ring binders) of the plan and one electronic copy in PDF format.

Task 200.10 – Management Reserve (Contingency Task)
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time, Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of services. For these instances, a time and material budget is established in order for Consultant to complete such additional services. Prior to the use of this contingency budget, Owner's representative will provide written (email) authorization to use the budget for specific tasks.

ADDITIONAL SERVICES (not included in scope of work)

- Bond support
- Public outreach or stakeholder outreach support
- User rate and connection fee study
- Additional field work
- Energy efficiency evaluations
- Concept level design services
- Model training
- Environmental information documents, studies, field investigations, and permitting. Environmental permitting will be addressed by a separate task order.
- Amendments to this facility planning study because of other task orders.

201 - MILL CITY / GATES FACILITIES SITE EVALUATION

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Task 201.1 – Project Management

Consultant Responsibilities:

201.1.1 Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

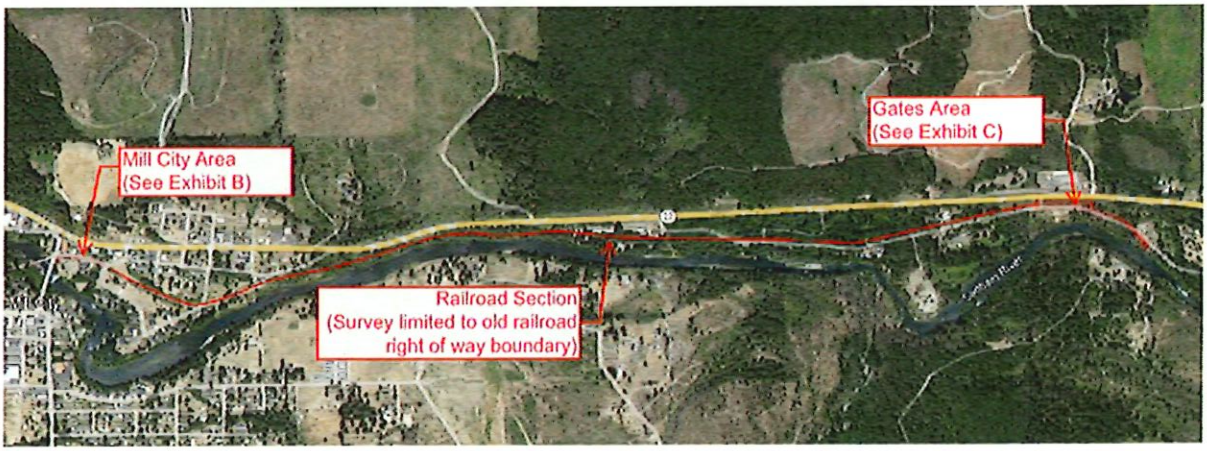
Assumptions:

- Assumes a six ~~three~~ (6 ~~3~~)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 201.2 – Force Main Alignment Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.2.1 Consultant shall perform a topographic recovery survey along the proposed Mill City/Gates Force Main alignment. Topographic survey areas are shown in red on the three figures below.

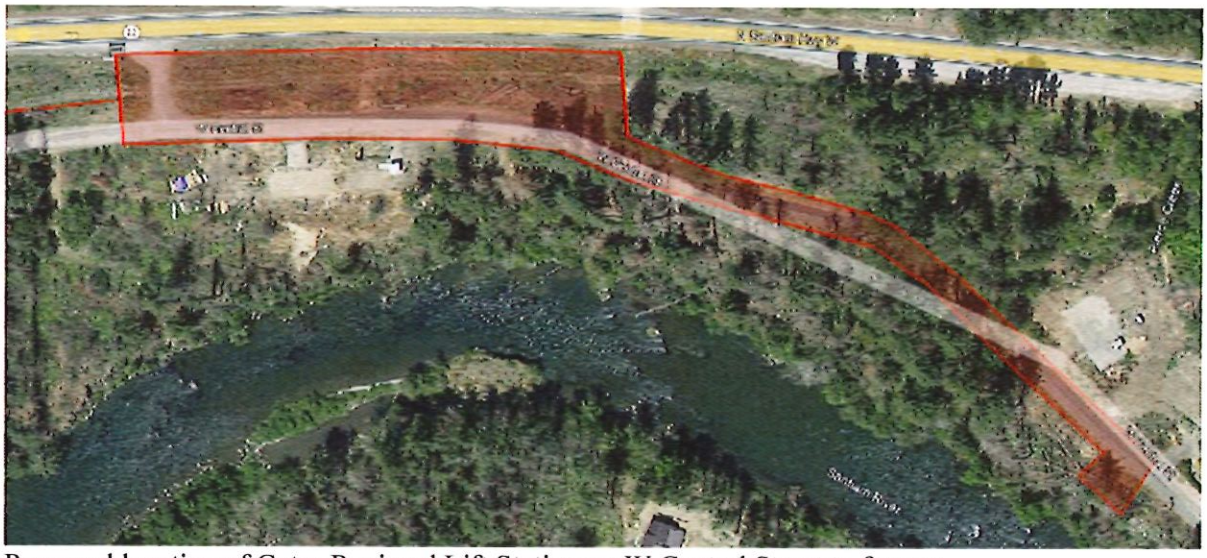


Former railroad right-of-way between Mill City and Gates

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Existing First Ave Lift Station and NE Wall Street between N 1st Ave and Santiam Pointe Loop NE in Mill City



Proposed location of Gates Regional Lift Station on W Central Street to former railroad right-of-way south of N Santiam Highway W

Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter to the nearest 0.01 foot.

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d. Additional spot elevations to identify grade breaks and other topographic features.
e. Locate surface features over surface area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
f. Locate ground and above ground utilities, including utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate trees 8-inch in diameter and greater measured at breast height, noting coniferous or deciduous.
h. Tag located trees with a reference number for field identification.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.
k. Survey shall be based on an official benchmark acceptable to the City.
l. Establish benchmarks for future design reference.

201.2.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Assumptions:

- This task does not include a retracement survey recorded with Marion County Surveyor's Office.
- This task does not include private utility locating services,
- This task does not include preparation of easement legal descriptions and exhibits.

Deliverables:

- Basemap in AutoCAD 3D format.

Task 201.3 – Force Main Alignment Geotechnical Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.3.1 Geotechnical Investigation. The project geotechnical scope includes subsurface explorations for the proposed Force Main Alignment between Gates and Mill City, in

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Oregon. Specific geotechnical design elements include review of access permits/plans (if available), and geotechnical recommendations for a new 2.3-mile-long, 4-inch diameter, C900 PVC or HDPE sewer line, and a pump station on the western side of Gates. Subsurface explorations will be completed using test pits and drilled borings. Subsurface explorations will be completed to characterize subsurface soils along the proposed alignment for the proposed improvements.

The scope of work will include the following:

201.3.1.1 Review proposed project plans provided by the ~~project team~~ Project Team for geotechnical design and construction elements.

201.3.1.2 Provide an exploration work plan detailing the approximate location and proposed depth of explorations.

201.3.1.3 Complete an application for Oregon Department of Transportation (ODOT) miscellaneous use permit for fieldwork, if required.

201.3.1.4 Complete a utility locate request for the site through the public One Call system.

201.3.1.5 Complete a private utility locate at proposed exploration locations.

201.3.1.6 Explore subsurface soil and groundwater conditions at the site by conducting subsurface explorations approximately every 200 to 300 feet along the proposed alignment (approximately 40 to 50 test pits). Test pits will be performed by an excavation subcontractor provided by the Owner. Test pits will be conducted to a depth of up to seven (7) feet below ground surface (bgs) depending on material consistency encountered which may limit the depth to which test pits can be advanced. Test pits will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.3.1.7 Explore subsurface soil and groundwater conditions along the alignment by conducting subsurface explorations approximately every 200 to 300 feet along the proposed alignment along NE Wall Street (approximately 2 to 3 borings). The borings will be performed by a driller subcontracted to the Consultant. Borings will be conducted to a depth of up to fifteen (15) feet bgs with the intention of identifying depth to presence of native rock suspected to be present in the subsurface. Borings will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.3.1.8 Provide a general description of existing site conditions.

201.3.1.9 Maintain a detailed log of subsurface explorations. Collect samples of the subsurface materials encountered.

201.3.1.10 Conduct laboratory tests using soil samples obtained from the explorations in general conformance with American Society for Testing and Materials (ASTM) including moisture content tests, plasticity index (Atterberg Limits) tests, or fines content analyses as appropriate, depending on the types of materials encountered.

201.3.1.11 Provide recommendations for trench backfill materials, compaction, and general construction specifications.

201.3.1.12 Complete a final geotechnical letter report specific to force main alignment and pump house.

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Assumptions:

- Fieldwork can be completed during normal working hours (Monday to Friday, 8:00 AM to 5:00 PM) and will not require fieldwork to be completed during nights or weekends.
- The test pits will be excavated by others.
- Cleared access, brush clearing, and removal of obstructions to exploration locations along the alignment will be completed prior to test pit explorations by others.
- Traffic control will not be required for this project.
- Contaminated soil will not be encountered during explorations.
- Permit fees will be waived.
- Site access and right-of-entry will be obtained prior to arrival on site to complete fieldwork.
- Brush clearing along the alignment will be completed prior to the test pit explorations.
- Geotechnical construction observation or testing services are not included.
- Project team will coordinate and establish exploration locations that will minimize damage to the existing development.
- Consultant will review ODOT records for existing landslide evaluations along OR22. Consultant will determine if the landslide is shallow or deep. If shallow (less than 10 feet bgs), test pits will be used to collect data to assess the landslide. If deep (greater than 10 feet bgs), a drill rig will be required to collect necessary data to assess the landslide and will be included in a future amendment. Full landslide characterization and recommendations by a licensed geotechnical engineer will be included in a future amendment.

Deliverables:

- Final Geotechnical Letter Report Recommendation for trench backfill materials, compaction, and general construction specifications for the Force Main Alignment and Pump House.

Task 201.4 – Force Main Alignment Environmental Due Diligence
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Environmental due diligence shall be completed for the project area between Mill City and Gates on approximately 15 acres and 2.3 linear miles in Linn and Marion Counties, Oregon. Environmental due diligence will include project management, wetlands and waters delineation, cultural resources investigation, and Phase I environmental site assessments (ESAs). These tasks are intended to inform the project's final design and minimize impacts to existing resources.

Consultant Responsibilities:

201.4.1 Project Management. Consultant will coordinate with ~~project team~~ Project Team to receive project materials, prepare invoicing, and transmit correspondence. Consultant will maintain project files to include necessary supporting materials, as required. The project manager will monitor task performance, schedule, and budget; approve project expenses; and ensure that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

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Beyond general coordination and communication, Consultant will provide a monthly email to inform the ~~project team~~ Project Team about the project's progress. The monthly email will outline which tasks were worked on during the month and the progress of those tasks, as well as what tasks are anticipated to be worked on in the following month. As part of these monthly emails, Consultant shall provide a budget summary and consistent communication to keep projects on track and within their schedules and budgets. Additionally, Consultant's project manager will schedule bi-monthly check-in calls and attend regular check-in meetings with ~~project team~~ Project Team to provide status updates and discuss action items. Consultant's senior subject matter experts will provide quality reviews and input on overall project approach.

Assumptions:

- Bi-monthly check-in calls will be approximately 30 minutes long.
- There will be eight (8) bi-monthly check-in calls between Consultant and ~~project team~~ Project Team.

Deliverables:

- Meeting minutes.

201.4.2 Wetlands and Waters Delineation

201.4.2.1 Wetlands and Ordinary High Water Line Delineation. Consultant will survey the project area to evaluate whether wetlands and waters are present. If wetlands or waters are found, Consultant will delineate wetland boundaries in accordance with the methodology of the 1987 U.S. *Army Corps of Engineers Wetlands Delineation Manual* and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Regions (Version 2.0)*, used by the U.S. Army Corps of Engineers and the Oregon Department of State Lands (DSL). Hydrology, soil, and vegetation will be documented at select sample plot locations and recorded on standardized wetland determination data forms.

Streams and other waters would be delineated based on the U.S. Army Corps of Engineers' 2005 *Regulatory Guidance Letter 05-05: Ordinary High Water Mark Identification.* As defined in DSL's Oregon Administrative Rule 141-085-0515, field indicators for the ordinary high water line (OHWL) can include the following: a clear, natural line impressed on the shore or bank; a change in vegetation from riparian (e.g., willows) to upland (e.g., oak or fir); a textural change of depositional sediment or changes in the character of the soil (e.g., from sand /cobble/gravel to upland soils); an elevation below which no fine debris (e.g., needles, leaves, cones, and seeds) occurs; and the presence of litter and debris, water-stained leaves, and water lines on tree trunks.

Wetlands and OHWL boundaries and any sample plot locations will be surveyed using Collector for ArcGIS paired with a tablet and a Juniper Geode GNSS receiver capable of submeter accuracy. These data would be imported into a GIS program to produce a site map showing the delineated wetland and OHWL boundaries.

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201.4.2.2 Wetlands and Ordinary High Water Line Delineation Report. Consultant will prepare a summary report of the wetland and OHWL delineations to meet DSL requirements for wetlands and other waters delineation reports. The report will be submitted to Project Team for review prior to submitting to any regulatory agencies. This task includes the preparation of the required DSL wetland report cover form, to be signed by a ~~project team~~ Project Team representative prior to submitting the report to DLS for review and concurrence.

Assumptions:

- This task includes five (5) hours of agency coordination time (four (4) hours for ~~project team~~ Project Team and one (1) hour for GIS specialist) but does not include a site visit with the regulatory agencies.
- The 2023 DSL wetland report review fee is $540 and will be paid for directly by the County.
- Access to the area will be arranged by ~~project team~~ Project Team.
- Natural resources on the site will be accessible by foot. If vegetation such as Himalayan blackberry prevents access to natural resources on the site, clearing must be completed before fieldwork can be done, or an additional site visit will be needed at additional cost.
- This cost estimate does not include a DSL site visit.
- This cost estimate is based on three (3) days (24 hours) of wetland delineation and OHWL fieldwork for two scientists.
- Project team will provide one round of comments on the draft delineation report.
- Any task not expressly described herein is not included in the proposed cost.
- All deliverables will be provided electronically; no hard copies will be provided.
- The delineations will be based on the project area shown by the alignment in the figure below. Any change to the project area after survey will incur additional costs.



- Ideal wetland delineation times are typically from late winter to late spring to capture hydrology and plant phenology. If wetland hydrology and plant indicators are not apparent, another field visit may be needed during optimal conditions to confirm wetland presence.
- Consultant will not flag, but if flagging is needed an additional cost estimate can be provided.
- This scope of work does not include a joint permit application for impacts to wetlands or other waters.

Deliverables:

- Wetlands and OHWL delineation report.

201.4.3 Cultural Resources Investigation

204.4.3.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of

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Siletz Indians, and Confederated Tribes of Warm Springs to inquire about local historical knowledge of the project area. Consultant will also ask if they have any cultural concerns about the location of the project. All project-related Tribal coordination will be described in the final report.

201.4.3.2 Background Research and Permitting. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant staff will review other available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, historical photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because portions of the project are located on land managed by state and local entities, an archaeological excavation permit must be obtained from SHPO before archaeological testing takes place (per Oregon Revised Statute (ORS) 390.235 and its implementing guidelines). The Consultant project manager will apply for this excavation permit (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 to 40 days for submission and review.

Consultant will submit a detailed permit application outlining possible scenarios should significant cultural resources be found, to avoid applying for multiple excavation permits through SHPO.

201.4.3.3 Field Survey. Consultant will conduct an archaeological survey in areas where ground-disturbing activities will occur to identify potential archaeological resources around the proposed area of disturbance. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 20 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Preliminary research shows no previous cultural resources investigations have overlapped the project according to OARRA. Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources, where project-related ground disturbance will occur, to identify any archaeological resources that may be present within the project site. Consultant proposes to excavate up to 120 shovel probes. Probes will be a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

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Consultant field staff will collect all cultural material from shovel probes that is clearly not modern per the archaeological permit conditions. The cost of this scope of work does not include curation or laboratory artifact analysis costs. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location GPS data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S. Geological Survey quadrangle map and then georeferenced during post-field processing. All recording procedures will follow SHPO guidelines. Consultant's cost estimate assumes no archaeological resources will be encountered during the survey. If archaeological materials are collected and require curation or analyses, a change order will be requested.

201.4.3.4 Reporting. Consultant will prepare a cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey.

Consultant will provide an electronic version of the draft report to the Project Team for review. After addressing comments from the Project Team, Consultant will provide the draft report to the SHPO and interested Tribal entities for review. Consultant assumes that SHPO and the Tribes will not require more than 30 days for review. Consultant will coordinate with both SHPO and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to Project Team, provided that the private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- All meetings and coordination with ~~project team~~ Project Team will be conducted via conference calls and email.
- The records search area will not extend farther than one (1) mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- The project location and size will remain as identified in the request for scope and cost (15 acres and 2.3 linear miles).
- Based on a preliminary review of SHPO records, Consultant anticipates no cultural resources will be identified and require documentation in the project area.
- For the purposes of total site count, every site larger than one (1) acre will be considered as an additional site based on every additional acre; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- Consultant's ability to conduct fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, COVID-19-related restrictions, force majeure, or any other factor(s) outside of Consultant's control.
- Consultant will prepare a cultural resources survey report, and the report will require no more than one round of review by ~~project team~~ Project Team. Comments from the ~~project team~~ Project Team on the report will not require more than four (4) hours of Consultant labor to address. No

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comments will be received from SHPO review, and minimal comments (up to four (4) hours of work needed to address comments) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data from cultural resources investigation results.

201.4.4 Phase I Environmental Site Assessments. Consultant will prepare a Phase I Environmental Site Assessment (ESA) report for each of the following areas: 1) the Force Main and Gates Regional LS, 2) the Dogwood LS and Riverview LS, and 3) the WPCF/RIB. The Phase I ESAs will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The Phase I ESAs will be directed by a qualified Environmental Professional, as required by the ASTM standard.

A Phase I ESA conducted in accordance with ASTM Standard E1527-21 constitutes all appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial or customary practice, and will allow the Owner to satisfy one of the requirements for landowner liability protections under the Comprehensive environmental Response, Compensation, and Liability Act (42 United States Code 9601). Each Phase I ESA will consist of the subtasks described below.

201.4.4.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents in order to identify past operations or activities on the subject property or nearby properties that may have caused the release of hazardous substances or petroleum products into the environment. As part of the review process, site location, hydrogeological characteristics, geographic setting, and physiography will also be summarized.

Available state and federal regulatory databases will be reviewed to assess whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM standard.

201.4.4.2 Interviews. Consultant will attempt to interview property owners based on contact data provided by the client. Additionally, reasonable attempts will be made to interview at least one staff member of state or local government agencies regarding information that indicates recognized environmental conditions (RECs) in connection with the subject property. For the force main corridor, Consultant assumes that the city and/or county will be the interviewee for portions within roadway rights-of-way.

201.4.4.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. As is customary for large sites, Consultant will study aerial photographs and topographic maps in conjunction with other data to identify areas of environmental interest on the subject property that would require in-person observation to identify and/or document. Field staff will visit each of the areas of

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environmental interest to observe and document them with digital photographs and notes. Field staff will also view the subject property in general for additional observations and take photographs and notes. Access to private, locked, or restricted areas would be arranged by a client representative. This scope of work does not include activities such as collecting or analyzing soil, air, water, or other environmental samples.

201.4.4.4 Owner-Provided Information. Owner-provided information is an essential component of the Phase I ESA and includes items such as copies of previous Phase I ESAs or other relevant environmental documents, a completed ASTM Phase I ESA User Questionnaire, a completed Consultant Initial Data Request, and access to the subject property. Consultant will perform a search of recorded land-title records and judicial records for environmental liens and activity and use limitations.

201.4.4.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report for each of the three areas. Sections within each report will consist of 1) a description of the property, 2) summaries of the site history and interviews, 3) a regulatory database review, 4) a description of the site reconnaissance, 5) report findings and conclusions, and 6) figures and appendices. Each report will include Consultant's professional opinion concerning the environmental disposition of the site regarding the presence of RECs. Report limitations and all literature cited will also be included.

According to the ASTM standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use for Phase I ESA is not within 180 days, an update may be necessary, Non-scope issues identified in the ASTM standard include radon, lead, and asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA reports.

Assumptions:

- The ASTM User Questionnaires and Consultant Initial Data Requests will be returned to Consultant promptly upon commencement of the project.
- This scope of work includes one round of revisions to each report's text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for other resources and will not be an independent mobilization.
- Applicable Marion and Linn County fees ($1,450 per application) will be paid by the County.

Deliverables:

- Draft Phase I ESA report.
- Final Phase I ESA report.

Task 201.5 – WPCF/RIB Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

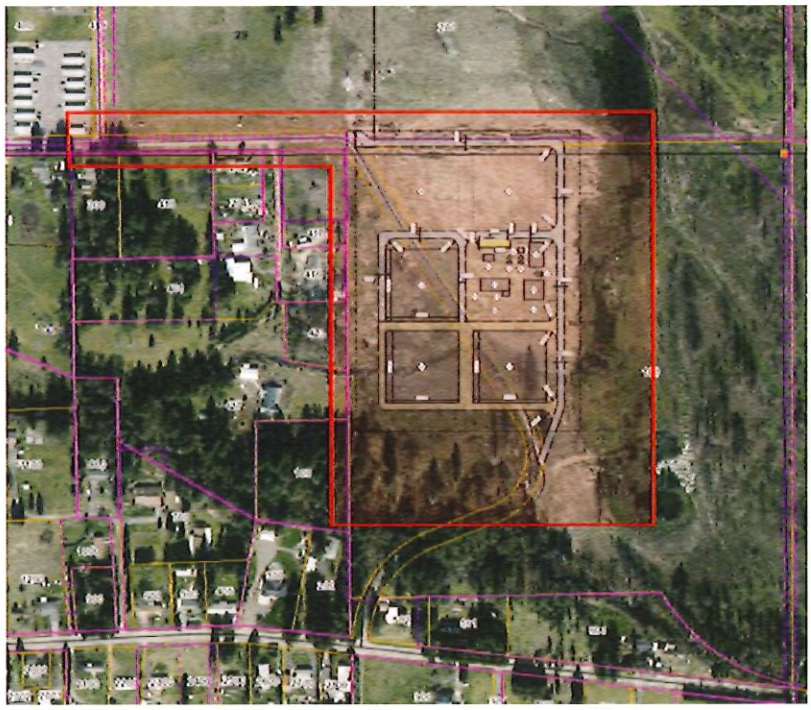
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Consultant Responsibilities:

201.5.1 Topographic Survey. Consultant shall perform a topographic surface survey at the proposed WPCF/RIBs site. Scope of services shall include:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Full topographic surface data and underground utilities to the edge of the project boundaries as shown in red in the figure below (subject area):



Proposed location of WPCF/RIBs in Mill City.

c. Obtain spot elevations at a maximum 50 foot on center spacing, including: along roadway centerlines, top of curb, flowline of curb, lip of gutter to the nearest 0.01 foot.
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
f. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate trees 8-inches diameter at breast height (DBH) and greater, noting coniferous or deciduous.
h. Map existing easements which may affect subject area; Owner to provide all necessary documentation or title information to complete this task.
i. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an xml file.

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j. Document information on utilities to the edge of the project boundaries of the subject area, including utility poles, power lines, telecommunications, and identification information.
k. The following information will be documented for storm drain, culverts, and sanitary sewers to the edge of the project boundaries of the subject area:

   i. Rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
   ii. Pipe diameters, pipe material, and direction of pipe.
   iii. Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
   iv. Storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
   v. Show utility lines as continuous, extending to upstream or downstream structure.

Assumptions:

- Survey shall be based in NAVD88 vertical datum derived from the Oregon Real-Time GNSS Network.
- Retracement survey recorded with Marion County Surveyor's Office is not included in this scope.
- Private utility locating services are not included in this scope.
- Easement legal descriptions and exhibits are not included in this scope.

Task 201.6 – WPCF/RIB Geotechnical Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Soil and groundwater conditions will be evaluated as a basis for developing geotechnical engineering design criteria for the preferred water pollution control facility (WPCF) and rapid infiltration basins (RIB) site located near the east terminus of SE Fairview Street approximately 900 feet east of the intersection with Remine Road in Mill City, Oregon. Proposed improvements include asphalt concrete and gravel surfaced access drives, three RIB, a lightly loaded administrative support building, an effluent pump station, one sequencing batch reactor (SBR) basin, and a lightly loaded equipment building that will be constructed on approximately 6.25 acres of currently undeveloped land. Future developments at the project site will include an additional SBR basin, two additional RIB, and an expansion to the equipment infrastructure.

Consultant Responsibilities:

201.6.1 Review information regarding subsurface soil and groundwater in the vicinity of the site, including reports in our files, selected geologic maps, and other geotechnical engineering-related information.
201.6.2 Coordinate and manage the field investigation, including public utility notification and scheduling of subcontractors and Consultant's field staff. Public locates will be called in by the Consultant as required by law. Additionally, Consultant will coordinate for a private locate company to access the site.

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201.6.3 Complete up to four field infiltration tests at locations to be determined by the ~~project team~~ Project Team and at depths of the proposed RIB (6 feet below ground surface (bgs) or less). Infiltration testing will be conducted in general accordance with local requirements using the open pit or encased falling head procedures, similar to requirements for City of Salem and Marion County.

201.6.4 Explore subsurface soil and groundwater conditions at the project site by conducting eight (8) to twelve (12) test pits and four (4) to six (6) drilling borings in the area of the proposed paved areas and building footprints. Test pit explorations will be extended to depths of up to 10- to 12-feet bgs in the locations of the proposed buildings and to 6.5-feet bgs in the proposed paved areas. Drilled borings will be conducted to 45- to 50-feet bgs within the footprint of the proposed buildings for the SBR basins. Exploration(s) will be advanced to the depths noted or practical refusal in dense gravels or competent rock, if encountered., whichever is shallower. Borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

201.6.5 Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM International (ASTM) Standard Practices Test Method D 2488. Qualified staff from our office will observe and document field activities.

201.6.6 Complete Dynamic Cone Penetrometer (DCP)r tests at three (3) to four (4) locations to determine subgrade modulus for pavement design.

201.6.7 Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests, one 1-dimensional consolidation test, and percent fines test.

201.6.8 Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology, and subsurface conditions;
b. An opinion as to the adequacy of the proposed development from a geotechnical engineering standpoint;
c. Summary of infiltration testing and a discussion relating to design infiltration rates based on subsurface conditions observed in our explorations;
d. Recommendations for site preparation measures, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction;
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing;
f. Recommendations for earthwork construction, including use of on-site and imported structural fill and fill placement and compaction requirements;
g. Recommendations for foundations to support the proposed structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance, and recommended minimum setback from existing retaining walls or recommendations for foundation alternatives, as necessary. It is further assumed that shallow foundations can be used to adequately support the structures.
h. Recommendations for supporting on-grade slabs, including base rock, capillary break, and modulus of subgrade reactions.
i. Assessment of existing slope conditions and discussion of slope stability.

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j. Seismic design parameters, including soil site class evaluation in accordance with the 2021 international building code (IBC) and the current version of the Oregon State Structural Code including a site-specific seismic hazard evaluation consistent with the requirements of the 2022 OSSC.
k. Recommendations for constructing asphalt concrete and gravel surfaced pavements for proposed on-site parking and drives, including subgrade, drainage, base rock, and pavement sections. Recommendations will be based on estimated traffic loads or loads provided by the ~~project team~~ Project Team, and on subsurface data obtained as part of this scope.
l. Recommendations for shallow foundations and site preparation measures to mitigate potentially excessive settlement of shallow foundations. It is anticipated that excessive post construction settlements could potentially occur under the assumed design loads. Therefore, preliminary recommendations to mitigate settlement may include discussions relating to ground improvement including preliminary recommendations for crushed aggregate piers.
m. Geotechnical work will be directly supervised by a geotechnical engineer licensed in the state of Oregon who will apply their professional seal to the document.

Assumptions:

- The following loads for the slightly loaded administrative and machinery buildings have been assumed. Revised project loads will be provided by the ~~project team~~ Project Team prior to completing the geotechnical report for the site if they vary from these assumptions:
  - Up to 60 kips per column
  - 4 kips per lineal foot (klf) wall loads or less
  - Floor loads will be 125 pounds per square foot (psf) or less
  - SBR wall loads of up to 4-kips per lineal foot and SBR areal loads of up to 1500-psf are assumed.
- Shallow spread foundations will be suitable for support of the proposed structures and have not budgeted for providing deep foundation recommendations if they become necessary.
- Right-of-entry or access will be provided to the exploration locations.
- Surface disturbance that will result from exploration activities is acceptable to the site owner and is understood by the ~~project team~~ Project Team. Consultant will be available to discuss further with the ~~project team~~ Project Team, site owner, or prospective owner, if needed.
- A truck or track-mounted drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered are not included in this scope of work or cost.
- Excess drill cuttings will be spread discreetly across the site.
- Contaminated soils will not be encountered during the exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), drilling operations will stop and the ~~project team~~ Project Team will be notified for directions on how to proceed.
- A site response analysis and/or a ground motion hazard analysis is not required and is excluded from this scope and budget. The site-specific seismic hazard analysis included in the scope above does not include the budget for a ground motion hazard analysis or a site response analysis.

Deliverables:

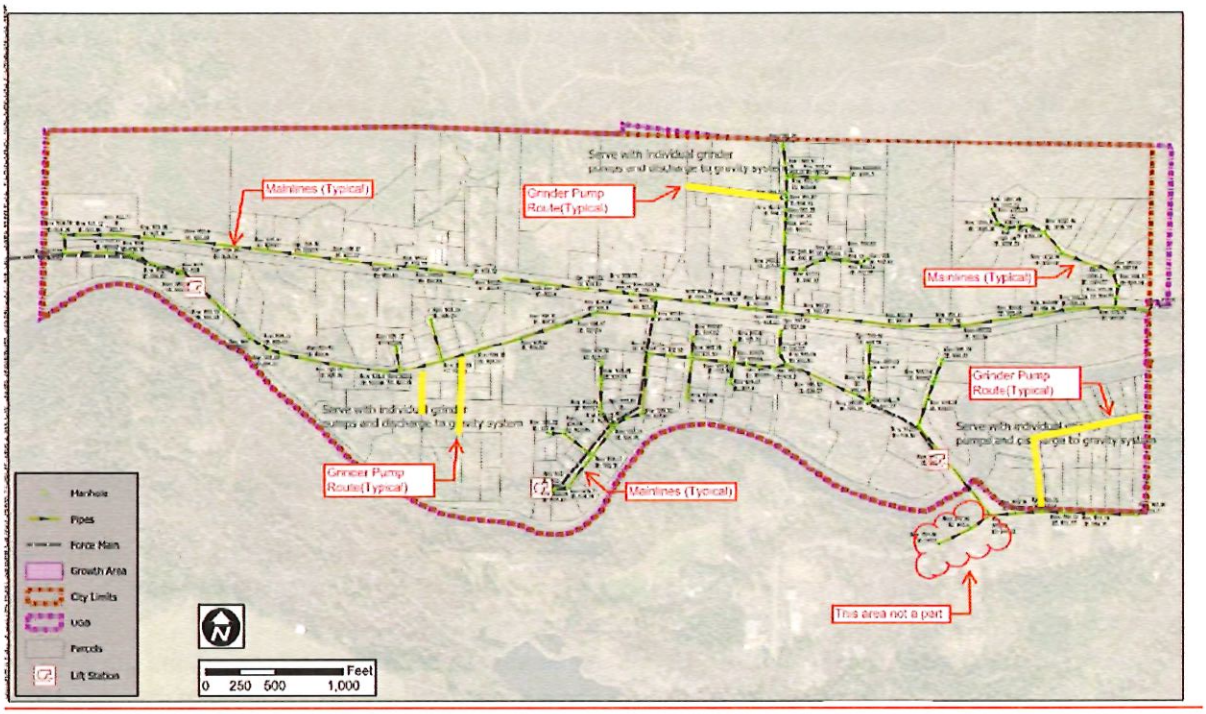
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- Final Geotechnical Investigation Report

Task 201.7 – Gates Collection System Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.7.1 Topographic Survey. Consultant shall perform a topographic surface survey of the proposed Gates Collection System. This topographic survey will encompass right-of-way surveying along the proposed sewer alignment routes as shown in the figure below (subject area):



Tasks shall include administration and coordination, survey research, field monument ties and boundary resolution, field topographic survey of mainlines and grinder pump routes, and survey processing. Field topographic survey efforts include:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Provide topographic surface data, including locations of underground utilities (as marked by utility purveyors) along alignment routes.
c. Obtain spot elevations at approximate 50-foot on center spacing, including roadway centerlines, top of curb, flowline of curb, and lip of gutter.
d. Provide additional spot elevations needed to identify grade breaks and other topographic features.
e. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, and drainage areas.

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f. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate all trees 8+ inches diameter at breast height, noting coniferous or deciduous.
h. Surface data to create 1-foot contours and provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an .xml file.
i. Establish site control.
j. Show power lines, and telecommunications including any identification information.
k. For storm drain, culverts, and sanitary sewers:
   - Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (approximate inside dimension).
   - Show pipe diameters, pipe material, and direction of pipe.
   - Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
   - Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
   - Show utility lines as continuous, do not terminate shortly after a structure, extend to upstream or downstream structure.

Assumptions:

- Survey shall be based on an official benchmark for the region.
- Private utility locating services may be recommended should utility purveyors (i.e. communication companies) fail to mark their utility lines on pre-survey projects. If these are not marked, this service will be provided as an additional service.
- The scope of work does not include:
  - Retracement Survey recorded with County Surveyor's Office.
  - Easement retracement, legal descriptions, or exhibits.
  - Wetland Mapping
  - Title Reports for affected properties.

Task 201.8 – Gates Collection System Geotechnical Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.8.1 Subsurface explorations will be completed for the proposed sewer collection system in Gates, Oregon. Specific geotechnical design elements include review of access permits/plans (if available) and geotechnical recommendations for approximately 24,700 linear feet of new 8-inch gravity mains, approximately 7,200 linear feet of new pressure sewer, and three (3) new pump stations throughout the City of Gates. Subsurface explorations will be completed using a trailer-mounted drill rig, except for at the three pump stations where a roto-sonic drill rig will be used to acquire subsurface data to sufficient depth in anticipated gravel soils. The intent of the subsurface explorations is to adequately characterize subsurface soils along the proposed alignment and pump stations.

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201.8.1.1 Review proposed project plans to be provided by the ~~project team~~ Project Team for geotechnical design and construction elements.

201.8.1.2 Provide an exploration work plan detailing approximate locations and proposed depth of explorations.

201.8.1.3 Complete an application for Oregon Department of Transportation (ODOT) miscellaneous use permit for fieldwork, if required.

201.8.1.4 Complete a utility locate request for the site through the public one call system.

201.8.1.5 Coordinate with a private utility locate subcontractor to complete utility locates at proposed exploration locations.

201.8.1.6 Explore subsurface soil and groundwater conditions at the site by conducting subsurface explorations with a trailer-mounted drill rig approximately every 300 to 500 feet along the proposed alignment (approximately 67 to 110 borings). The borings will be performed by a driller subcontracted to and scheduled by the Consultant. Borings will be conducted to a depth of up to 10 feet below ground surface (bgs) with the intention to identify depth to presence of native rock suspected to be present in the subsurface. Borings will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.8.1.7 Explore subsurface soil and groundwater conditions at three (3) proposed pump station locations by conducting one subsurface exploration at each location with a roto-sonic drill rig. The borings will be performed by a driller subcontracted to and scheduled by the Consultant. Borings will be conducted to a depth of up to 40 feet bgs with the intention to identify depth to presence of native rock suspected to be present in the subsurface. Borings will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.8.1.8 Provide a general description of existing site conditions.

201.8.1.9 Maintain a general description of existing site conditions.

201.8.1.10 Maintain a detailed log of subsurface explorations. Collect samples of the subsurface materials encountered.

201.8.1.11 Conduct laboratory tests using soil samples obtained from the explorations in general conformance with American Society for Testing and Materials (ASTM) including moisture content tests, plasticity index (Atterberg Limits) tests, or fines content analyses as appropriate, depending on the types of materials encountered.

201.8.1.12 Provide recommendations for trench backfill materials, compaction, and general construction specifications.

201.8.1.13 Complete a final geotechnical letter report specific to the sewer collection system and pump stations.

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Assumptions:

- Fieldwork can be completed during normal working hours (Monday to Friday, 8:00 AM to 5:00 PM) and will not require that fieldwork be completed during nights or weekends.
- Brush clearing along the alignment and cleared access to exploration locations will be completed by the ~~project team~~ Project Team prior to the commencement of fieldwork.
- Traffic control will only be required for 20% of the explorations [four (4) days].
- Contaminated soil will not be encountered during the explorations.
- Permit fees will be waived.
- Site access and right of entry will be facilitated by ~~project team~~ Project Team.
- This task does not include geotechnical construction observation or testing services.
- Consultant will coordinate with the ~~project team~~ Project Team to establish exploration locations that will minimize damage to existing development.

Task 201.9 – Gates Collection System Environmental Due Diligence

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Environmental due diligence shall be completed for the proposed Gates Collection System in Linn and Marion Counties, Oregon. The project area will consist of a 50-foot right-of-way along approximately 5-miles of pipeline. The proposed pipelines will be installed with an open trenching method. Environmental due diligence will include project management, wetlands and water delineation, cultural resources investigation, and Phase I environmental site assessments (ESAs). These tasks are intended to inform the project's final design and minimize impacts to existing resources.

Consultant Responsibilities:

201.9.1 Project Management. The Consultant will coordinate with the ~~project team~~ Project Team to receive project materials, prepare invoicing, and transmit correspondence. The Consultant will maintain project files to include necessary supporting materials as required. The Consultant's project manager will monitor task performance, schedule, and budget; approve project expenses; and ensure that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Beyond general coordination and communication, Consultant will provide a monthly email to inform the ~~project team~~ Project Team about the project's progress. The monthly email will outline which tasks were worked on during the month and the progress of those tasks, as well as what tasks are anticipated to be worked on in the following month. As part of these monthly emails, Consultant shall provide a budget summary and consistent communication to keep projects on track and within their schedule and budgets. Additionally, Consultant will participate in bi-monthly check-in calls and attend regular check-in meetings with the ~~project team~~ Project Team to provide status updates and discuss action items. Consultant's senior subject matter experts will provide quality reviews and input on overall project approach.

Assumptions:

- Project duration for this task will be four (4) months.

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201.9.2 Wetlands and Waters Delineation

201.9.2.1 Wetlands and Ordinary High Water Line Delineation. Consultant will survey the project area to evaluate whether wetlands and waters are present. If wetlands or waters are found, Consultant will delineate wetland boundaries in accordance with the methodology of the 1987 *U.S. Army Corps of Engineers Wetlands: Delineation Manual* and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0),* used by the U.S. Army Corps of Engineers and the Oregon Department of State Lands (DSL). Hydrology, soils, and vegetation will be documented at select sample plot locations and recorded on standardized wetland determination data forms.

Streams and other waters will be delineated based on the U.S. Army Corps of Engineers' 2005 *Regulatory Guidance Letter 05-05: Ordinary High Water Mark Identification.* As defined in DSL's Oregon Administrative Rule 141-085-0515, field indicators for the ordinary high water line (OHWL) can include the following: a clear, natural line impressed on the shore or bank; a change in vegetation from riparian (e.g., willows) to upland (e.g., oak or fir); a textural change of depositional sediment or changes in the character of the soil (e.g., from sand/cobble/gravel to upland soils); an elevation below which no fine debris (e.g., needles, leaves, cones, and seeds) occurs; and the presence of litter and debris, water-stained leaves, and water lines on tree trunks.

Wetlands and OHWL boundaries and any sample plot locations will be surveyed using Collector for ArcGIS paired with a computer tablet and a Juniper Geode GNSS receiver capable of submeter accuracy. These data would be imported into a GIS program to produce a site map showing the delineated wetland and OHWL boundaries.

201.9.2.2 Wetlands and Ordinary High Water Line Delineation Report. Consultant will prepare a summary report of the wetland and OHWL delineations to meet DSL requirements for wetlands and other waters delineation reports. The report will be submitted to the ~~project team~~ Project Team for review prior to submission to any regulatory agencies. This task includes the preparation of the required DSL wetland report cover form, to be signed by Consultant prior to submitting the report to DSL for review and concurrence.

Assumptions:

- Task assumes five (5) hours of agency coordination time but does not include a site visit with the regulatory agencies (i.e. with DSL).
- Budget assumes the DSL wetland report review fee will be paid for directly by the Owner.
- Natural resources on the site will be accessible by foot. If vegetation such as Himalayan blackberry prevents access to natural resources on the site, clearing must be completed before field work can be completed.
- Task assumes five (5) days (40 hours) of wetland delineation and OHWL field work for three (3) scientists.
- Owner will provide one (1) round of comments on the draft delineation report.
- All deliverables will be provided electronically; no hard copies will be provided.
- The delineations will be based on the project area (Gates_Pipe.kmz) in documentation received from the ~~project team~~ Project Team.

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- Ideal wetland delineation times are typically from late winter to late spring to capture hydrology and plant phenology. If wetland hydrology and plant indicators are not apparent, another field visit may be needed during optimal conditions to confirm wetland presence.
- Any on-site flagging required for fieldwork or professional surveying will be incidental to this item without additional measurement or payment for on-site flagging.
- If required, a Joint Permit Application for impacts to wetlands and/or other waters is not included within this task.

Deliverables:

- Wetlands and OHWL delineation report.

201.9.3 Cultural Resources Investigation

201.9.3.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs to inquire about local historical knowledge of the project area or any concerns about the location of the project. All project-related Tribal coordination will be described in the final report.

201.9.3.2 Background Research and Permitting. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) online database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant will review available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, historical photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because portions of the project are located on land managed by state and local entities, an archaeological excavation permit must be obtained from SHPO before archaeological testing takes place (per Oregon Revised Statute [ORS] 390.235 and its implementing guidelines). Consultant will apply for this excavation permit (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 to 40 days for submission and review.

Consultant will submit a detailed permit application covering possible scenarios should significant cultural resources be found, to avoid the need to apply for additional excavation permits through SHPO.

201.9.3.3 Field Survey. Consultant will conduct an archaeological survey in all areas where ground-disturbing activities will occur to identify any archaeological resources that may be present within the project area. Preliminary research shows no previous

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cultural resources investigations have overlapped the project according to OARRA. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 10 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources, where project-related ground disturbance will occur, to identify any archaeological resources that may be present within the project site. Consultant proposes to excavate up to 40 shovel probes. Probes will be a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

Consultant field staff will collect all cultural material from shovel probes that is clearly not modern, per the archaeological permit conditions.. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location GPS data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S. Geological Survey quadrangle map and then georeferenced during post-field processing. All recording procedures will follow SHPO guidelines.

201.9.3.4 Reporting. Consultant will prepare a cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey.

Consultant will provide an electronic version of the draft report to the ~~project team~~ Project Team for review. After addressing comments from the ~~project team~~ Project Team, Consultant will provide the draft report to SHPO and interested Tribal entities for review. Consultant will coordinate with both SHPO and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to the ~~project team~~ Project Team, provided that any private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- The records search area will not extend farther than one (1) mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.

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- The project location and size will remain as identified in the request for scope and cost (approximately 5 linear miles represented in the map labeled Gates_Pipe.kmz).
- Based on a preliminary review of SHPO records, Consultant anticipates no cultural resources will be identified and require documentation in the project area. If archaeological materials are collected and require curation or analyses, these services will be provided as an additional service.
- Every site larger than one (1) acre will be considered as an additional site; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- Fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, or other factors outside of Consultant's control as identified elsewhere in this Agreement.
- Shovel probes will be placed only within the Mill City proposed pipeline. The proposed pipeline within Gates city limits is within hardscaped areas, which cannot be excavated (subsurface tested) by hand.
- Cultural resources survey report will require no more than one round of review by the Owner. Comments on the report from the Owner will not require more than four (4) hours of Consultant labor to address. No comments will be received from SHPO review, and minimal comments (up to four [4] hours of work) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data showing cultural resources investigation results.

201.9.4 Phase I Environmental Site Assessments. Consultant will prepare two Phase I ESA reports for the proposed Gates Collection System; one report each for the eastern and western portions of the project, which are separated by approximately 1.4 miles. The Phase I ESAs will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The goal of a Phase I ESA is to assess the subject property, to the extent practical, for the potential presence of recognized environmental conditions (RECs), defined in ASTM Standard E1527-21. This scope of work applies to each Phase I ESA and consists of the following tasks.

201.9.4.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents, to identify past operations or activities at the subject property that may have caused the release of hazardous substances into the environment. As part of the review process, the site location, hydrogeological characteristics, geographic setting, and physiography will also be summarized.

Additionally, available state and federal regulatory databases will be reviewed to determine whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM standard. Consultant assumes that sufficient data will be readily available such that an in-person regulatory file

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review will not be needed. Due to the nature of the site, Consultant will not obtain and review Sanborn Company Fire Insurance maps or city directory searches.

201.9.4.2 Interviews. Consultant will interview select property owners/managers, as contact information is available. For the Gates Collection System, Consultant assumes that the City of Gates, Marion County, and/or Linn County will be the interviewee for portions within roadway rights-of-way. Additional interviews may be conducted for additional information, such as owners of properties with gas stations or industrial uses. The interviews may be comprised of phone calls, emails, and/or mailings. Consultant will initiate a second attempt to reach non-respondents. This task is subject to the ~~project team~~ Project Team's approval to interact with property owners.

201.9.4.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. Consultant will study aerial photographs and topographic maps in conjunction with other data to identify areas of environmental interest on the subject property that would require in-person observation to identify and/or document. Field staff will visit each of the areas of environmental interest to observe and document them with digital photographs and notes. Access to private, locked, or restricted areas will be arranged by the ~~project team~~ Project Team. This task does not include activities such as collecting or analyzing soil, air, water, or other environmental samples, or addressing asbestos-containing materials, lead-based paint, or radon.

201.9.4.4 User-Provided Information. User-provided information is an essential component of the Phase I ESA and includes items such as relevant environmental documents, a completed Phase I ESA User Questionnaire, a completed Initial Data Request, and access to the subject property. User is responsible for providing Consultant the results of a search of recorded land-title records and judicial records for environmental liens and activity and use limitations (AULs).

201.9.4.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report each for the eastern and western portions of the project. Consultant will submit drafts within 6 to 8 weeks of starting the Phase I ESAs. Consultant will respond to one round of comments and provide the client with final reports within one (1) week of receiving comments.

According to the ASTM standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use of the Phase I ESAs is not within that 180-day period, updated reports may be necessary. Non-scope issues identified in the ASTM standard include radon, lead and asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA reports.

Assumptions:

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- The ASTM User Questionnaires and Consultant's Initial Data Requests will be returned to the Consultant promptly upon commencement of the project.
- No provision is included for delays due to land access, coordination, weather issues, or other factors beyond the Consultant's control as identified elsewhere in this contract. Delays are not included in the fee.
- Assume one round of revisions to each report's text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for other resources and will not be an independent mobilization.
- Owner will pay applicable Linn and Marion County fees (approximately $1,450 per application).
- SHPO and Tribes will not require more than 30 days for review.
- A 50-year chain-of-title report, and a search for liens and AULs will not be obtained by Consultant under this task.

Deliverables:

- Draft and final Phase I ESA Reports for the eastern and western portions of the project.

202 MILL CITY/GATES WPCF PRELIMINARY ENGINEERING

Previous work includes facility planning to identify treatment and disposal alternatives for wastewater generated and collected from Mill City and Gates as documented in the Mill City/Gates Wastewater Facilities Planning Study (2023 WWFPS). The recommendations from that work have led to this project, which consists of preliminary design for the Water Pollution Control Facility (WPCF) and rapid infiltration basins for disposal. The new WPCF will be designed for 2045 Projected Design Flows discussed in the 2023 WWFPS:

- 0.223 million gallons per day (MGD) annual average daily flow (AADF)
- 0.682 MGD peak hourly flow (PHF).

And will include design of the following improvements for construction:

- Headworks Building that will house the mechanical screen, grit classifier, and dewatering equipment.
- Grit removal system.
- Influent pump station.
- Process Basins (sequencing batch reactor [SBR] and equalization basin).
- Process Building that will house the aeration blowers, chemical feed system, UV disinfection system, utility water system, and electrical motor control center.
- Denitrification filters.
- Solids holding tank.
- Six (6) Rapid Infiltration basins (RIB)

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- The preliminary design also includes a new section of force main piping, connecting the existing force main (near the existing WPCF) to the new WPCF.

This task will include a preliminary engineering report (PER) to include sufficient detail intended to demonstrate that the proposed project meets the design criteria identified in the facility planning study. Permit application assistance will also be provided. Drawings and specifications will be produced with sufficient detail to allow the Construction Manager / General Contractor (CM/GC) to develop a guaranteed maximum price (GMP) for the project. The task will also include providing pre-selection documents and evaluation for major equipment and long lead items.

Task 202.1 – Project Management

Consultant Responsibilities:

202.1.1 General Project Management. Provide general project administration services including contract administration, project accounting, scheduling, and internal project administration.

202.1.2 Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to establish Owner's pre-design review team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

202.1.3 Progress Meetings. Conduct monthly progress meetings, including the Owner, Consultant and CM/GC.

202.1.4 Request for Information and Data Review. Prepare initial request for information for data to be used in the pre-design process. Review information requested and provide supplemental request for information if needed.

202.1.5 CM/GC Coordination. Coordinate with the CM/GC for general project efforts, including establishing lines of communication.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed. Coordinate attendance of CM/GC to progress meetings.

Assumptions:

- Assumes an eight (8)-month duration for general project administration.
- Progress meetings will be a combination of in-person and virtual meetings.

Deliverables:

- Monthly invoices.
- Meeting agendas and minutes.
- Request for information.

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Task 202.2 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

202.2.1 Design Criteria (Process). Discuss or reference design criteria items already provided in the Mill City/Gates Wastewater Facilities Planning Study (2023 WWFPS). Document additional design criteria that will serve as a basis for design.

202.2.2 New Hydraulic Profile. Prepare a preliminary hydraulic profile based on the selected improvements from the 2023 WWFPS (listed under Task 202).

202.2.3 Preliminary P&IDs. Prepare preliminary piping and instrumentation diagrams (P&IDs) based on City input, processes selected in the 2023 WWFPS (listed under Task 202), and process and control needs.

202.2.4 Preliminary Instrumentation/Controls. Prepare one-line diagram for power and a narrative describing the control strategy and objectives. Coordinate with Owner and power utility to identify power constraints and Owner's SCADA communication preferences.

202.2.5 Preliminary Mechanical Plans. Prepare preliminary mechanical designs based on anticipated major equipment selection.

202.2.6 Design Requirements Summary. Summarize design requirements for civil, structural, heating, ventilation and air conditioning, plumbing, electrical, and instrumentation and controls.

202.2.7 Concept Drawings. Develop concept drawings to address ODEQ PER submittal requirements, including site civil layout and project orientation on the selected site. Drawings to include items 202.2.1 through 202.2.5 above.

202.2.8 Workshop Meeting(s). Budget assumes up to three (3) workshop meetings. Meet with Owner and CM/GC to review draft deliverables.

202.2.9 Prepare PER. Prepare draft PER following the Oregon DEQ guidelines. Submit to Owner for review.

202.2.10 Comment Response and Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments and prepare final PER.

Owner Responsibilities:

- Review concept designs and provide comments.
- Review and comment on the PER.
- Pay for DEQ PER review fees.

Assumptions:

- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Assumes up to three (3) workshop meetings.

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Deliverables:

- Agenda and minutes for meetings.
- Draft and Final PER.

Task 202.3 – Permitting Assistance

Consultant Responsibilities:

202.3.1 Permit Application. Assist Owner in preparing a WPCF Permit Application to be submitted to Oregon Department of Environmental Quality (DEQ). Coordinate with other entities to complete this permit application.

Owner Responsibilities:

- Review and comment on permit application.
- Pay permitting fees.

Assumptions:

- Owner to coordinate completion of the Land Use Compatibility Statement with the appropriate agencies.
- No Underground Injection Control registration will be required.

Task 202.4 – GMP Documents (30% Design)

Consultant Responsibilities:

202.4.1 Drawing Preparation. Prepare a set of drawings and limited specifications to aid the CM/GC in developing a GMP. The following preliminary drawings are anticipated as being included: general sheets, civil site, grading and yard piping plans, structural plans and limited sections, plumbing and HVAC plans, process mechanical plans and limited sections, electrical one-lines and site plan, and process and instrumentation diagrams. These plans are to be developed to an approximate 30% design level for the Contractor to develop a GMP. Specifications to be included are limited to major mechanical and process equipment. Other information that may assist the CM/GC in developing a GMP will be provided, including site constraints, permitting requirements, and special inspections.

202.4.2 Pre-Purchase Selection. Prepare bidding documents for the pre-purchase of major process equipment and electrical equipment. This will include evaluation criteria, technical specifications, and limited drawings. Contract documents, including agreements, terms and conditions and so forth, will be provided by the CM/GC. Consultant will assist in evaluating bids received. Major equipment to be pre-purchased is limited to: headworks screen, grit removal system, sequencing batch reactor equipment, denitrification filters, UV disinfection equipment, dewatering system, motor control center (MCC)/switchgear, generator/automatic transfer switch (ATS), and transformers.

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202.4.3 Value Engineering. Participate in three (3) value engineering (VE) workshops with the CM/GC and Owner. The purpose of these workshops will be to identify, with the CM/GC, potential cost savings alternatives to the project. Where the Owner elects to include such alternatives, the Consultant will modify the design and drawings as required to incorporate these changes. It is anticipated that these workshops will occur as follows: first workshop shortly after project kickoff, second workshop before pre-purchase equipment selection, third workshop approximately one to two months prior to contract completion.

202.4.4 Cost Estimate Assistance. Provide assistance to CM/GC in their preparation of the cost estimate by answering questions and adding clarity to project requirements.

Owner Responsibilities:

- Review and comment on drawings and specifications.
- Participate in the VE workshops.
- Review and comment on VE alternatives. Make decisions for VE-desired alternatives.

Assumptions:

- Drawings and specifications are limited to those identified in this task.
- Bidding documents for pre-purchased equipment are limited to those identified in this task. Documents for additional pre-purchased equipment will be considered a change to the contract.
- Value engineering efforts assume redesign will not require major modifications to the drawings or engineering calculations. Construction cost estimates will be provided by CM/GC.
- Contract documents for pre-purchase documents will be provided by the CM/GC.
- CM/GC will develop and provide the Guaranteed Maximum Price (GMP).
- Assisting with pre-qualification of subcontractors is not included.

A single set of design drawings and draft specifications will be provided.

Deliverables:

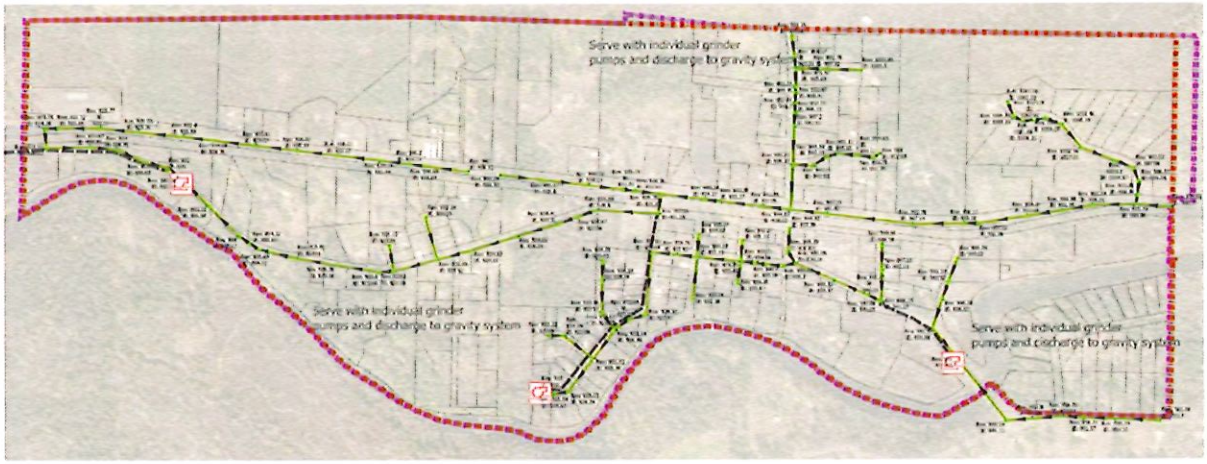
- 30% drawings and select technical specifications

203 GATES COLLECTION SYSTEM PRELIMINARY ENGINEERING

Previous work included facility planning to identify concepts to collect/convey raw wastewater generated from the new Gates collection system to the existing Mill City collection system. The recommendations from that work have led to this project, which consists of preliminary design for the Gates collection system. The preliminary design includes three new lift stations, grinder pumps for those that cannot readily drain by gravity to the new collection system, service lateral concepts, Gates to Mill City force main (approximately 3.1 miles), and gravity collection pipelines and manholes serving the approximately 245 connections within the Gates city limits (see figure below). The gravity collection pipelines are anticipated to include one North Santiam River crossing (attached to an existing structure) and multiple minor creek crossings that will be bored. The force main is anticipated to have one creek crossing (attached to an existing structure) and multiple minor creek crossings that will be bored. It is anticipated that there will be two drawing packages, one for the Gates to Mill City force main, and the second for the lift stations and gravity collection system located within the City of Gates.

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The task includes a preliminary engineering report (PER) to include sufficient detail to demonstrate that the proposed project meets the design criteria identified in the facility planning study. Drawings and specifications are anticipated to provide sufficient detail to allow the Construction Manager/General Contractor (CM/GC) to develop a guaranteed maximum price (GMP) for the project. Consultant's services are limited to those services outlined in the following tasks.

Task 203.1 – Project Management

Consultant Responsibilities:

203.1.1 General Project Administration. Provide general project administration services including contract administration, project accounting, scheduling, and internal project administration.

203.1.2 Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to establish Owner's design review team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

203.1.3 Progress Meetings. Conduct monthly progress meetings, including the Owner, Consultant, and CM/GC.

203.1.4 Request for Information and Data Review. Prepare initial request for information for data to be used in the pre-design process. Review information requested and provide supplemental request for information if needed.

203.1.5 CM/GC Coordination. Coordinate with the CM/GC for general project efforts, including establishing lines of communication.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed. Coordinate attendance of CM/GC to progress meetings.

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Assumptions:

- Assumes an eight (8)-month duration for general project administration. Work to be completed concurrent to Task 202.
- Progress meetings will be a combination of in-person and virtual meetings.

Deliverables:

- Monthly invoices.
- Meeting agendas and minutes.
- Request for information.

Task 203.2 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

203.2.1 Design Criteria (Process). Discuss or reference design criteria items already provided in the wastewater facilities plan. Document additional design criteria that will serve as a basis for design.

203.2.2 Preliminary P&IDs. Prepare preliminary piping and instrumentation diagrams for the three (3) new lift stations.

203.2.3 Preliminary Electrical, Instrumentation, and Controls. Prepare one-line diagram for power and a narrative describing the control strategy for the three (3) new lift stations. Coordinate with Owner and power utility to identify power constraints and Owner's SCADA communication preferences. Potential SCADA communication strategies may include radio telemetry or cellular.

203.2.4 Preliminary Mechanical Plans. Assist with pump sizing and selection. Prepare preliminary mechanical designs based on anticipated pumping equipment selection.

203.2.5 Design Requirements Summary. Summarize design requirements for civil, structural, heating, ventilation and air conditioning, plumbing, electrical, and instrumentation and controls.

203.2.6 Utility Conflict Analysis and Notification. Complete an initial utility conflict analysis with existing aboveground and buried utilities. Draft initial Utility Notification Letters (First Notice) and distribute to utility providers within the project limits.

203.2.7 Concept Drawings. Develop concept drawings to address ODEQ PER submittal requirements, including site civil layout. Drawings to include items 203.2.1 through 203.2.5 above. Concept drawings for pipelines to include concept main pipeline alignment, general grading concepts at the lift stations, approximate location of manholes and features, major crossing concepts.

- Service concepts – Develop a preliminary list of services that will require a grinder pump system. Provide summary of lateral concepts and the anticipated method for servicing each developed property. The concepts will be developed without the benefit of surveyed finish floors of each home.

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203.2.8 Workshop Meeting(s). Meet with Owner and CM/GC to review draft deliverables.

203.2.9 Prepare PER. Prepare draft PER following the Oregon DEQ guidelines. Submit to Owner and DEQ for review.

203.2.10 Comment Response and Final PER. Address Owner input and submit to DEQ for review. Address agency comments and prepare final PER.

Owner Responsibilities:

- Review concept designs and provide comments.
- Review and comment on the PER.
- Pay for DEQ PER review fees.

Assumptions:

- Surveying, geotechnical, utility pot holing, land and easement acquisition, negotiations, and legal descriptions are not included as part of this task.
- A radio path study will not be completed as a part of this scope. If desired, it will be completed by a third-party vendor or will be included as an additional service.
- The lift stations are assumed to include an outdoor generator and a small block structure to house only the electrical. The lift stations are all assumed to be a similar design with a wetwell and submersible pumps. It is assumed that odor control will be incorporated into the lift station pumping the flow to Mill City.
- Budget assumes up to three (3) workshop meetings.

Deliverables:

- Agenda and minutes for meetings.
- Concept drawings (prepared in 22"x34", reviewed in 11"x17"), no paper copies.
- Draft and Final PER.
- Utility Conflict Analysis and Utility Notification Letters (First Notice)

Task 203.3 – GMP Documents (30% Design)

Consultant Responsibilities:

203.3.1 Drawing Preparation. Prepare a set of drawings and limited specifications to aid the CM/GC in developing a GMP. The following preliminary drawings are anticipated as being included:

- General sheets
- Lift Station Drawings:
    - Civil site, including grading and yard piping plans.
    - Structural plans and limited sections.
    - Plumbing and HVAC plans.

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- Process mechanical plans and limited sections.
- Electrical one-lines and site plan, including on-site backup power.
- P&ID with instrumentation list developed to an approximate 50% effort.

- Pipeline Drawings
  - Plan and profile drawings, including pipe size, depth, material, and grade information.
  - Service locations will be shown in concept format only, with final location and depth to be determined by the CM/GC or the construction Contractor.
  - Parcels requiring grinder pumps will be identified.
  - Approximate location and standard details for isolation valves, air release valves, and cleanouts along forcemains.
  - Other standard details reflecting Owner preferences (i.e. manholes, service lines, surface restoration).

Specifications to be included are limited to lift station pumping equipment (i.e., pumps, electrical gear, generator) and pipeline materials. Provide other information that may assist the CM/GC in developing a GMP will be provided, including site constraints, permitting requirements, and recommended special inspections.

203.3.2 Value Engineering (VE). Participate in three (3) VE workshops with the CM/GC and client. The purpose of these workshops will be to identify, with the CM/GC, potential cost savings alternatives to the project. Where the Owner elects to include such alternatives, the Consultant will modify the design and drawings to incorporate these changes. It is anticipated that these workshops will occur as follows: first workshop shortly after project kickoff, second workshop before WPCF pre-purchase equipment selection, third workshop approximately one to two months prior to contract completion.

203.3.3 Cost Estimate Assistance. Provide assistance to CM/GC in their preparation of the cost estimate by answering questions and adding clarity to project requirements.

Owner Responsibilities:

- Review and comment on drawings and specifications.
- Participate in the VE workshops.
- Review and comment on VE alternatives. Make decisions for VE desired alternatives.

Assumptions:

- Drawings and specifications to be provided are limited to those identified in this task.
- Documents for pre-purchased equipment, if desired, will be considered a change to the contract.
- Value engineering efforts assume redesign will not require major modifications to the drawings or engineering calculations. Where extensive redesign is identified, the Consultant will be entitled to seek additional compensation.
- Any construction cost estimates are provided by CM/GC. The CM/GC will develop and provide the Guaranteed Maximum Price (GMP).
- Only the two sets of design drawings and draft specifications will be provided. Consultant will not prepare separate packages for CM/GC to solicit quotes from subcontractors/vendors.

Deliverables:

- Drawings and select technical specifications.

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PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS

400 – COMMERCIAL SEPTIC SYSTEM PLANNING

Task 400.1 – Project Management

Consultant Responsibilities:

400.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

400.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

Assumptions:

- Assumes a twelve (12)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 400.2 – Data Acquisition & Property Tour

Consultant Responsibilities:

400.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

a. Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b. List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c. Previous collected test pit data for all the properties.
d. Previous studies involving the soil in the city.
e. Provide existing drain field and septic tank locations for each property.
f. Identify available property for consideration for septic tank or drain field placement.

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g. Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

400.2.2. Conduct site tour of each property to evaluate potential drain field locations.

400.2.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

Assumptions:

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

Deliverables:

- Request(s) for Information
- Summary tables and figures for existing septic tanks and drain fields status

Task 400.3 – Stakeholder Involvement / Engagement

Consultant Responsibilities:

400.3.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.

400.3.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.

400.3.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.

400.3.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities:

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

Deliverables:

- Public and stakeholder meeting presentation materials.

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Task 400.4 – Commercial Septic System Concept

Consultant Responsibilities:

400.4.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.
400.4.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …).

Owner Responsibilities:

- Provide input and approval of septic tank and drain field concepts.
- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Test pits will not be excavated, and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Task 400.5 – Commercial Septic System Design
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.5.1 Develop schedule for overall project delivery and construction.
400.5.2 Oversee excavation of test pits and soil sampling to determine soil characteristics, infiltration rates, and other necessary design criteria for up to twelve (12) commercial properties.
400.5.3 Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, etc.) for flow and wastewater strength for up to twelve (12) commercial properties and their intended uses.
400.5.4 Prepare Septic System Designs for up to twelve (12) commercial properties. Complete designs for each commercial property shall include pre-treatment, septic tanks, drain field, replacement area, and all other appurtenances, as required.
400.5.5 Prepare design drawings (11" x 17", PDF).
400.5.6 Regulatory and Permitting Requirements. Review and summarize current, pending, and future regulatory requirements and permitting criteria that may influence operation and maintenance, and adaptation of the system to the long-term gravity collection system. Prepare permit applications and provide inspection services for systems permitted by DEQ as appropriate.

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400.5.7 Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner in an operation and maintenance (O&M) Manual.

400.5.8 Attend up to twelve (12) bi-weekly one (1)-hour long meetings and provide updates to ~~project team~~ Project Team.

Owner Responsibilities:

- Provide input for septic tank and drain field concepts.
- Provide staff input and requirements for septic grant approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Commercial properties will be permitted through either Marion County or Oregon Department of Environmental Quality (DEQ).
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- Conceptual septic system design and drawings.
- Final septic system design and drawings.
- Permit applications.
- O&M Manual.

Task 400.6 – ODOT ROW Commercial Property Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.6.1 Consultant shall perform a topographic recovery survey for up to twelve (12) commercial properties located along the western side of North Santiam Highway between the intersection of Front Street (southern limit) and Detroit Avenue (northern limit) for the purpose of preparing easement agreements including legal descriptions and exhibits for use of the Right-of-Way. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to complete a boundary

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retracement and side boundary line resolution for up to twelve (12) properties within the project limits described above and as defined in the attached PDF.

b. Topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter, to the nearest 0.01 foot.
d. Additional spot elevations to identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way.
f. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
g. Locate ground and above ground utilities, including utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
h. Locate trees 8-inch diameter and greater measured at breast height, noting coniferous or deciduous.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

400.6.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twelve (12) easement areas.

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Task 400.7 – Detroit Environmental Due Diligence

Consultant shall complete environmental due diligence support as described below for up to twelve (12) commercial properties in Detroit, Oregon.

Subtask 400.7.1 – Project Management
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.7.1.1 Consultant will coordinate with Owner and others to receive project materials, prepare invoicing, and transmit correspondence. As part of Consultant's project management efforts, monthly check-in calls will be scheduled with Consultant to discuss interim survey results and other project-related issues as they arise. Consultant will maintain project files to include supporting materials. Consultant will monitor task performance, schedule, and budget; approve project expenses; and check that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Assumptions:

There will be four (4) monthly check-in calls involving the Consultant team.

- Monthly check-in calls will be approximately one (1)-hour long.

Subtask 400.7.2 – Cultural Clearance Certification
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant will coordinate with the cultural resources department at Oregon Department of Transportation (ODOT) to seek Cultural Clearance Certification for the project.

Consultant Responsibilities:

400.7.2.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs Indian Reservation to inquire about local historical knowledge of the project area. Consultant will also ask if they have any cultural concerns about the location of the project. Project-related Tribal coordination will be described in the final report.

400.7.2.2 Background Research. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) online records database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant staff will also review other available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, photographs, and other relevant

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research information available from local libraries, historical societies, or informants.

Because the project is located on land managed by ODOT, an archaeological excavation permit must be obtained from the SHPO before archaeological testing takes place (per ORS 390.235 and its implementing guidelines). The Consultant will apply for this state-issued excavation permit from the SHPO as required by state statutes (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 days for submission and review.

400.7.2.3 Field Survey. Consultant will conduct an archaeological survey in areas where ground-disturbing activities will occur to identify potential archaeological resources in and around the proposed area of disturbance. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 20 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Preliminary research shows there are no cultural resources investigations overlapping the project area according to OARRA. Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources where project-related ground disturbance will occur. Consultant proposes to excavate up to 24 shovel probes. Probes will measure a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

Should archaeological materials be discovered, they will not be collected; rather, the artifacts will be identified as to type, material, function, and cultural and temporal association. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location global positioning system (GPS) data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S> Geological Survey quadrangle map and them georeferenced during post-field processing. All recording procedures will follow SHPO guidelines. The Consultant's cost estimate assumes that no more than one archaeological resource will be encountered during the archaeological survey.

400.7.2.4 Reporting. Consultant will prepare one cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey. The Consultant will provide an electronic version of the

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draft report to ODOT, SHPO, and interested Tribal entities for review. The Consultant will coordinate with ODOT, SHPO, and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to the Consultant, provided that the private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- All meetings and coordination with Consultant will be conducted via conference calls and email.
- The records search area will not extend farther than one mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- Consultant will obtain up to one archaeological permit.
- The project location and size will remain as identified in the request for scope and cost (less than three acres total).
- Based on a preliminary review of SHPO records, Consultant anticipates that up to one cultural resource site will be identified and require documentation in the project area. If a larger number of sites are identified, additional costs may be incurred, and Consultant will discuss with Consultant on how to proceed.
- No more than four hours of labor for each field staff member will be required to record the cultural resource site. The identification of large and complex cultural resource sites (e.g., homesteads with multiple structures or precontact village sites with more than 500 artifacts) are not included in this scope.
- For the purposes of total site count, every site larger than one acre will be considered as an additional site based on every additional acre; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- **Consultant's ability to conduct fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, COVID-19-related restrictions, force majeure, or any other factor(s) outside of Consultant's control.** Consultant will prepare a cultural resources survey report, and the report will require no more than one round of review by Consultant. Comments from Consultant on each of the survey reports will not require more than four hours of Consultant labor to address. No comments will be received from SHPO review, and minimal comments (up to four hours of work needed to address comments) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data from cultural resources investigations.

Subtask 400.7.3 – Phase I Environmental Site Assessment
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

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Consultant will prepare a Phase I Environmental Site Assessment (ESA) report for the project area. The Phase I ESA will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The Phase I ESA will be directed by a qualified Environmental Professional, as required by the ASTM Standard.

A Phase I ESA conducted in accordance with ASTM Standard E1527-21 constitutes appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial or customary practice and will allow the Owner to satisfy one of the requirements for landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (42 United States Code 9601). The Phase I ESA will consist of the subtasks described below:

400.7.3.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents in order to identify past operations or activities on the subject property or nearby properties that may have caused the release of hazardous substances or petroleum products into the environment. As part of the review process, site location, hydrogeological characteristics, geographic setting, and physiography also will be summarized. Available state and federal regulatory databases will be reviewed to determine whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM Standard. Note: Based on the Consultant's initial review, there are eight leaking underground storage tank records and a brownfield site mapped within 0.25 miles of the project site.

400.7.3.2 Interviews. Consultant will attempt to interview property owners or their representative(s) based on contact data provided by Consultant. Additionally, reasonable attempts will be made to interview at least one staff member of state or local government agencies regarding information that indicates recognized environmental conditions (RECs) in connection with the subject property.

400.7.3.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. Access to private, locked, or restricted areas would be arranged by Consultant. This scope of work does not include activities such as collecting or analyzing soil, air, water, or other environmental samples.

400.7.3.4 Owner-Provided Information. Owner-provided information is an essential component of the Phase I ESA and includes items such as copies of previous Phase I ESAs or other relevant environmental documents, a completed ASTM Phase I ESA User Questionnaire, a completed Initial Data Request, and access to the subject property. The Owner is also responsible for providing Consultant with the results of a search of recorded land-title records and judicial records for environmental liens and activity and use limitations.

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400.7.3.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report. Sections within the report will include 1) a description of the property, 2) summaries of the site history and interviews, 3) a regulatory database review, 4) a description of the site reconnaissance, 5) findings and conclusions, and 6) figures and appendices. Each report will include Consultant's professional opinion concerning the environmental disposition of the site regarding the presence of RECs. Report limitations and all literature cited will also be included. According to the ASTM Standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use for Phase I ESAs is not within 180 days, an update may be necessary. Non-scope issues identified in the ASTM Standard include radon, lead, asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA report.

Assumptions:

- The ASTM User Questionnaire and Consultant's Initial Data Request will be returned to Consultant promptly upon commencement of the project.
- This scope of work includes one round of revisions to the report text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Phase I ESA reliance letters will be provided for a flat fee of $500.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for cultural and will not be an independent mobilization.

Deliverables:

- Draft and final Phase I ESA report.

Task 400.8 – Detroit Commercial Septic Excavation Contractor

Consultant Responsibilities:

400.8.1 Consultant shall mobilize to Detroit, Oregon to perform sewer video inspections of existing septic systems using appropriate equipment to locate, expose, flag, and prepare septic systems for inspection by Consultant's septic system designer. Consultant shall provide services for up to fifteen ~~five~~ days of sewer video inspections.

400.8.2 Consultant will excavate test pits for onsite sewage evaluations at the direction of Consultant's septic system designer. Test pits will be excavated in accordance with Oregon Department of Environmental Quality recommendations and requirements. The bottom of the test pit shall measure at least 2-feet x 4-feet. Test pits shall be at least 4.5-feet deep but shall not exceed a depth of five feet. One end of the test pit shall be sloped or stepped in order to allow access for Consultant's septic designer and regulatory inspector. All spoils must be placed a minimum of two feet from the edge of the test pit. Consultant shall

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provide services for up to fifteen ~~five~~ days of test pit excavation.

Assumptions:

- Each day includes up to eight hours of site work and mobilization efforts.
- Consultant's septic system designer shall group locations of sewer video inspections and test pit excavations for efficiency.
- Owner recognized that the services provided by the septic system designer include construction-type activities not originally contemplated in the Consultant's scope of services and recognizes that the Owner will rely on the Consultant's licensing and insurance to address and deficiencies in performance to the standard of care or to address any damages resulting from Consultant's activities.

Task 400.9 – Detroit Commercial Properties Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant Responsibilities:

400.9.1 Consultant shall perform a property boundary survey for up to twenty (20) commercial properties in Detroit, Oregon for the purpose of verifying property lines prior to field layout, measurements, elevation work, and site plan development of onsite septic systems. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the followings:

a. Locate existing monumentation to complete a boundary retracement and side boundary line resolution for up to twenty (20) properties within the City of Detroit.
b. Calculations and Property Deed research.
c. Initial field monument ties.
d. Boundary Resolution.
e. Set property corners.
f. Record of survey drafting.
g. File survey with Marion County.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twenty (20) easement areas.

401 - KANE'S MARINA SEPTIC SYSTEM

Task 401.1 – Project Management

Consultant Responsibilities:

401.1.1. General Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

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401.1.2. Regulatory Coordination. Meet with County and DEQ staff to discuss WPCF and County permit options. The objective of this outreach will be to have a selected permitting process (WPCF or County).

401.1.3. Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to review/establish Owner design team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

401.1.4. Presentation to County Commissioners. The Consultant will present a project update to the County Commissioners at the conclusion of Task 405, Preliminary Design. Consultant will prepare presentation materials and/or handouts. The one presentation will summarize the system layout, opinion of probable cost, permitting, schedule, and next steps.

401.1.5. Request for Information. Prepare initial request for information for data to be used in the design process.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed.
- Provide requested information within two weeks of request.

Assumptions:

- Project management budget assumes a project schedule of up to 4 months.
- Unless otherwise noted, meetings/workshops may include a combination of in person or virtual attendees. This assumption applies to this task as well as subsequent tasks.
- Funding support is not included in this scope of work, including but not limited to American Iron and Steel (AIS) or Build America, Buy America (BABA) tracking, certification, or reporting. These services can be provided as additional services.

Deliverables:

- Kickoff meeting agenda and minutes.
- Request for Information.
- Presentation materials and/or handouts.

Task 401.2 – Preliminary Engineering Report (PER)

Subtask 401.2.1 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

401.2.1.1 Study Phase Services.

a. Site Visit. Consultant will coordinate with Owner's staff to perform a site visit and document existing site conditions. Evaluation will include documentation of status and condition of existing septic facilities and electrical equipment. This scope does not include inspection of interior spaces or existing facilities.

b. Basin Study. Consultant will review the plan and profile for the gravity sewer system developed through the North Santiam Sewer Authority Master Plan. Consultant will approximate alignment and invert elevation requirements for the future lift station wetwell. Consultant will estimate the operating volume required for the future pump station.

c. Operation and Maintenance Assessment. Consultant will review available data provided by Owner to summarize historic usage, operation strategies, and

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maintenance considerations. It is anticipated the evaluation will include holding tank storage requirements, hydrogen sulfide and odor control, standby power, instrumentation and controls (alarming), future pump station compatibility, redundancy provisions, emergency response, and preventative maintenance activities.

401.2.1.2 Design Criteria. Document design criteria established from the study phase services that will serve as basis for design. The design criteria will include, emergency storage calculations, anticipated flow conditions for the marina, future basin flow conditions, holding tank (wetwell) storage requirements, odor control strategy, power requirements, alarms.

401.2.1.3 Topographic Surveying. Provide oversight of the services to complete topographic and boundary surveying services for Kane's Marina.

401.2.1.4 Geotechnical Investigation. Provide oversight of the services to complete geotechnical engineering design services for Kane's Marina.

401.2.1.5 Site Layout. Develop 30% concept design showing site civil layout and holding tank(s) orientation on the marina site. Concept to include general grading concepts and reflect considerations for holding tank dimensions, future building and valve vault footprint, generator location, stormwater disposal, yard piping, and access for future maintenance/pump removal. The future footprint assumes that a small electrical building will be required to house the future electrical/controls, including a variable frequency drive (VFD) for the future lift station. Consultant has assumed that the generator will be outdoors with sound attenuation. The pipe network will be limited to 5-feet outside any building footprint.

401.2.1.6 Odor Control Type. Evaluate up to three design alternatives for odor control with the Owner. For each alternative, evaluation to include operations and maintenance considerations, benefits, drawbacks, costs, and consideration of non-cost factors (i.e., future expansion for the lift station). Potential odor control types include chlorine dosing equipment, passive carbon filtration, mixing, chemical, and air-scrubber.

401.2.1.7 Electrical and Controls. Coordinate with Owner to identify SCADA communication preferences. Coordinate with power utility to identify power constraints. Prepare one-line diagram for power and a narrative describing the communication strategy and objectives including a piping and instrumentation diagram (P&ID).

401.2.1.8 Cost Estimate. Provide an AAEC Class 4 opinion of probable cost for the project.

401.2.1.9 Workshop Meeting. Meet with Owner to review concepts and alternatives and select preferred alternative for design.

401.2.1.10 Prepare PER. Prepare draft Preliminary Engineering Report (PER) following the *Oregon DEQ guidelines.* In addition to the minimum regulatory requirements, PER will include concept drawings showing conceptual pipe network layout, one-line diagram, and anticipated permit requirements. Submit to Owner for review.

401.2.1.11 Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments into final PER.

Owner Responsibilities:

- Provide input on holding tank, piping design criteria, and preferred alternatives.
- Obtain or provide information for land parcel for the holding tank site, easements, and rights-of-way.
- Provide overall site plan with enough detail to layout the pipe network.
- Provide all necessary documentation or title information for boundary survey services.
- Secure permission for access for surveying and geotechnical investigations on the two subject properties.

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- Provide concurrence on the location of the geotechnical investigation; assist in pre-marking locations for test pits / boring.
- Review and provide one set of consolidated comments on the Draft PER, concept plans, and opinion of probable cost.

Assumptions:

- Consultant shall be entitled to rely, without liability or the need for independent verification, on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.
- Power is readily available and located adjacent to the site.
- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Pavement sections, curbing and other site design is not included in this scope.
- Other assumptions documented for surveying and geotechnical services.

Deliverables:

- Agenda and minutes for Workshop Meeting.
- Draft and Final PER (1 paper copy and 1 PDF)

Consultant Responsibilities:

401.2.2.1 Consultant shall perform a topographic recovery survey of the Kane's Marina property to serve as a basis for design. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to compete a boundary resolution of subject area
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50 foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, lip of gutter, etc., to the nearest 0.01 foot
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way
f. Locate surface features over subject area, including but not limited to: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas
g. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants
h. Locate trees 8" DBH and greater noting coniferous or deciduous
i. Map existing easements which may affect subject.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

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401.2.2.2 Survey will show utility poles, power lines, and telecommunications, etc. including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for all manholes and drainage structures, with structure size (inside dimensions)
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

401.2.2.3 Prepare a Legal Description and Visual Exhibit Map for the holding tank (future wet well).

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Description and Visual Exhibit Map

Subtask 401.2.3 – Geotechnical Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

The purpose of this subtask is to evaluate soil and groundwater conditions as a basis for developing geotechnical engineering design criteria for the Kane's Marina project.

Consultant Responsibilities:

401.2.3.1. Review information regarding subsurface soil and groundwater in the vicinity of the site, including filed reports, selected geologic maps, and other geotechnical engineering-related information.

401.2.3.2. Coordinate and manage the field investigation, including public utility notification and scheduling. Utility locates will be ordered by Consultant.

401.2.3.3. Explore subsurface soil and groundwater conditions at the project site by drilling one (1) drilled boring exploration to a depth between 20 and 25 feet bgs on the south side of the site near proposed holding tank/wetwell location, and four (4) to six (6) boring explorations 5 to 10 feet bgs along the proposed forcemain alignment.

401.2.3.4. Explorations will be advanced to the depths noted or to practical refusal in dense gravels or competent rock, if encountered, whichever is shallower. The borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

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401.2.3.5. Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM Standard Practices Test Method D 2488. Field exploration work shall be observed and documented by qualified geotechnical engineering staff.

401.2.3.6. Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests and percent fines tests.

401.2.3.7. Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology and subsurface conditions.
b. Report subsurface conditions and data along the proposed forcemain/collection lines alignment.
c. An opinion as to the adequacy of the proposed development of the holding tank/wetwell from a geotechnical engineering standpoint.
d. Recommendations for preparation measures at the proposed holding tank/wetwell/lift station site, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction.
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing.
f. Recommendations for earthworks, including use of on-site and imported structural fill and fill placement and compaction requirements.
g. Recommendations for foundations to support proposed at-grade and below-grade structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance. Consultant assumes that proposed structures will be lightly loaded and that shallow foundations can be used to adequately support the structures.
h. Recommendations for supporting on-grade slabs, including base rock, capillary break and modulus of subgrade reaction, as appropriate.
i. Seismic design parameters in accordance with the current version of the Oregon Structural Specialty Code. Consultant will also perform a simplified liquefaction settlement analysis.

401.2.3.8. All work under this subtask will be directly supervised by an engineer licensed in the state of Oregon. Engineer will apply their professional seal to the document.

Assumptions:

- Owner will obtain right-of-entry or access to the exploration locations.
- A rubber-tired drill rig can adequately access the site.

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- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered, are not included in this scope of work or fee.
- Excess drill cuttings can be scattered on site.
- Installation of monitoring wells to measure static water groundwater is excluded.
- Contaminated soils will not be encountered during exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), Consultant will stop drilling operations, notify Owner and discuss how to proceed.
- If public locators are not allowed to enter or cannot enter the project area to clear specific exploration locations, Consultant may provide the services of a private locate company to access the site, if requested, for an additional fee of $630.

Deliverables:

- Draft and Final Geotechnical Report.

Task 401.3 – Final Design

Consultant Responsibilities:

401.3.1. Plan Sheets. Prepare general, survey, site civil, structural, plumbing, HVAC, mechanical, electrical, and instrumentation and control plan sheets for the site, holding tank, and yard piping. Instrumentation and control final design is anticipated to be a performance spec for a holding tank and odor control monitoring system. Thus, the plan sheets will only include a piping and instrumentation diagram (P&ID). Coordinate location of pumps, piping layout, spacing, electrical equipment, generator, pump removal equipment, building access, overhead door, HVAC equipment, plumbing drains, and other appurtenances for ultimate lift station layout with the Owner. Prepare 90% review sets.

401.3.2. Specifications. Consultant will support the Owner in CM/GC selection with services described in Task 5 of this scope of work. Consultant will prepare technical specifications. Technical specifications will be prepared to detail the materials, processes, and the products that are to be used in the construction of the lift station. Complete draft technical specifications for the 90% review set.

401.3.3. 90% Design and Review Workshop Meeting. Submit 90% design review drawings and specifications to the Owner. Participate in a 90% design review workshop meeting.

401.3.4. Agency Submittal. Agency design checklists will be completed and submitted along with the final plans and specifications to Agency for review.

401.3.5. Final Approval. Upon Owner and Oregon DEQ review, Consultant will incorporate appropriate revisions into a final set of stamped drawings and specifications that will be used for bidding.

401.3.6. Opinion of Probable Costs. Selected CM/GC will provide cost estimating after Task 404. Consultant will review and provide feedback.

Owner Responsibilities:

- Review and provide one set of consolidated comments on the 90% design deliverables.
- Provide legal and risk reviews of the bid documents.
- Pay for any associated permitting fees not assigned to the Contractor.

Assumptions:

- Consultant will prepare the building permit application at 90% design and submit to the Marion County Building Inspection office. Final permits will be obtained by Owner. Owner shall pay all permit fees not assigned to the construction contractor.

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- Consultant will prepare and submit the DEQ permit application at 90% design and assist Owner with DEQ consultation.
- Project will not include irrigation or landscaping of the site. Services of a licensed landscape architect is excluded.
- Extensive architectural feature and architectural rendering are not included in the holding tank design.
- Contractor will be required to prepare and implement an erosion and sediment control plan (ESCP), prepare traffic control plans, and secure associated permits.
- Shoring (if required) will be designed by the Contractor.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or project support above and beyond that described herein is considered an additional service requiring a contract amendment and equitable adjustment of the contract amount..
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- The following design standards and references are to be followed where relevant during the development of the project:
    - Marion County Standard Specifications and Drawings
    - Oregon Standard Specifications for Construction
    - Owner to provide front end contracting and bidding documents (Div 00)
    - AIS and BABA requirements
- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

Deliverables:

- 90% design drawings and specifications, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- 100% stamped design package, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- Opinion of Probable Cost.

Task 401.4 – Pre-Procurement Support

Consultant Responsibilities:

401.4.1. This task includes consultant services to support the Owner in direct purchase of equipment for the Project using available funds. The objective of the direct purchase of equipment or materials is to account for potential long lead times and still have the equipment or materials on hand when the contractor is ready to move forward with construction. Consultant will provide specifications for the equipment/material to be directly purchased which may be out of sequence or earlier than the final design task.

Owner Responsibilities:

- Owner staff will lead the solicitation effort to either solicit informal bids or select suppliers from pre-approved supplier lists. Owner will receive and store materials prior to the Contractor taking on the equipment/material for installation.

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Assumptions:

- Consultant is not responsible if material/equipment must be returned or designated as surplus due to the expedited delivery process for this project.
- Budget assumes up to 40 hours for support services to be provided as requested.

Deliverables:

- Procurement Specifications.

Task 401.5 – Removed

Task 401.6 – WPCF PERMITTING

Consultant Responsibilities:

401.6.1. Prepare draft permit application for a holding tank permit for DEQ review.
401.6.2. Meet with DEQ to discuss the permit applications. For the purpose of this scope, up to two (2) meetings are assumed.
401.6.3. Address DEQ comments in permit application.

Owner Responsibilities:

- Provide input on draft permit application.
- If necessary, pay fee to DEQ for draft permit application.
- Review and comment on draft documents.

Assumptions:

- No field work, environmental studies, cultural resource investigations, or biological assessments are included in this task.
- This scope does not include any additional field gathering or special studies that may be required by the DEQ.
- No other permits will be required. If required, support for these permits can be provided as additional services.

Task 401.7 – Removed

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of **$7,418,049** ~~**$3,255,426**~~

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

PHASE 1 – GENERAL ENGINEERING SERVICES	Cost		Type
100 – PROJECT MANAGEMENT			
Task 100.1 – Project Management	$300,230	~~100,000~~	T&M
Task 100.2 – County Board of Commissioners Support Services	$	15,840	LS
101 – STRATEGIC PERMITTING PLAN			
Task 101.1 – Project Management and Administration	$	4,825	LS
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	$	19,090	LS
Task 101.3 – Strategic Permitting Plan	$	9,540	LS
102 – SUBSURFACE EXPLORATION			
Task 102.1 – Project Management and Administration	$78,105	~~42,840~~	T&M
Task 102.2 – Subsurface Investigation Program	$	74,200	T&M
Subtask 102.2.1 – Gates / Mill City Subsurface Investigation	$	461,580	T&M
Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation	$	566,780	T&M
Task 102.3 – Groundwater Modeling Evaluation			
Subtask 102.3.1 – Mill City / Gates Permitting Evaluation	$	63,600	T&M
Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation	$	78,700	T&M
Task 102.4 – ~~:~~ McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	$	18,700	T&M
Task 102.5 – ~~:~~ Infiltration Basin Pilot Test			

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Subtask 102.5.1 – Meetings, Work Plan, and Pre-Field Work Preparation	$	28,780	LS
Subtask 102.5.2 – Monitoring Well Drilling and Construction Oversight	$	34,485	LS
Subtask 102.5.3 – Test Pit Excavation and Infiltration Testing	$18,340	~~22,762~~	LS
Subtask 102.5.4 – Test Infiltration Basin Construction	$24,589	~~51,618~~	LS
Subtask 102.5.5 – 28-Day Infiltration Basin Pilot Test	$50,150	~~87,737~~	LS
Subtask 102.5.6 – Analysis and Reporting	$	38,742	LS
Subtask 102.5.7 – Tracer Test Planning	$	24,838	LS
Task 102.6 – Response to DEQ Modeling Report Comments			
Subtask 102.6.1 – Project Management	$	72,215	LS
Subtask 102.6.2 – Additional Nitrate, DEHP, and Toluene Modeling	$	117,337	LS
Subtask 102.6.3 – Beneficial Groundwater Use Elevation	$	33,880	LS
Subtask 102.6.4 – Seasonal Water Level and Nitrate Data	$	44,603	LS
Subtask 102.6.5 – Modeling of BOD, pH, TSS, and TDS	$	157,292	LS
Subtask 102.6.6 – Propose Well Locations and Functional Equivalent Form	$	7,524	LS
103 – LAND ACQUISITION AND RELOCATION SERVICES			
Task 103.1 – Project Management and Administration	$	12,140	T&M
Task 103.2 – Mill City Land Acquisition and Relocation Services	$	58,817	T&M
Task 103.3 – Detroit Land Acquisition and Relocation Services	$	177,017	T&M
104 – FINANCIAL ADVISORY SERVICES			
Task 104.1 – Project Management and Administration	$	23,430	T&M
Task 104.2 – Financial Advisory Services	$	137,500	T&M
105 – PUBLIC RELATIONS			
Task 105.1 – Project Management and Administration	$	16,164	T&M
Task 105.2 – Communications and Engagement Planning and Implementation	$	183,684	T&M
106 – INDEPENDENT COST ESTIMATING			
Task 106.1 – Project Management and Administration	$	13,468	T&M
Task 106.2 – Independent Cost Estimating	$	145,431	T&M
Subtotal	**$3,111,616**	**~~2,353,409~~**	

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T&M: Time and Materials, LS: Lump Sum

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	Cost	Type
Task 200.1 – Project Management	$ 12,600	LS
Task 200.2 – Data Acquisition & Facility Tour	$ 6,110	LS
Task 200.3 – Project Planning	$ 26,725	LS
Task 200.4 – Existing Facilities Evaluation	$ 68,680	LS
Task 200.5 – Need for system improvements	$ 3,650	LS
Task 200.6 – Collection System Alternatives Considered & Selection	$ 53,615	LS
Task 200.7 – Treatment System Alternatives Considered & Selection	$ 59,365	LS
Task 200.8 – Proposed Projects (Recommended Alternatives)	$ 70,780	LS
Task 200.9 – Facilities Plan Documentation & Public Meeting	$ 25,830	LS
Task 200.10 –Management Reserve	$ 10,000	T&M
201 – MILL CITY/GATES FACILITIES SITE EVALUATION		
Task 201.1 – Project Management	$62,091 ~~26,571~~	LS
Task 201.2 – Force Main Alignment Topographic Survey	$ 38,038	LS
Task 201.3 – Force Main Alignment Geotechnical Investigation	$ 41,890	T&M
Task 201.4 – Force Main Alignment Environmental Due Diligence		
Subtask 201.4.1 – Project Management	$ 7,956	T&M
Subtask 201.4.2 – Wetlands and Waters Delineation	$ 23,805	T&M
Subtask 201.4.3 – Cultural Resources Investigation	$ 43,555	T&M
Subtask 201.4.4 – Phase I Environmental Site Assessments	$ 10,838	T&M
Task 201.5 – WPCF/RIB Topographic Survey	$ 12,628	LS
Task 201.6 – WPCF/RIB Geotechnical Investigation	$ 29,371	LS
Task 201.7 – Gates Collection System Survey	$ 156,882	LS
Task 201.8 – Gates Collection System Geotechnical Investigation	$ 151,247	LS
Task 201.9 – Gates Collection System Environmental Due Diligence		
Subtask 201.9.1 – Project Management	$ 7,955	T&M
Subtask 201.9.2 – Wetlands and Waters Delineation	$ 31,735	T&M
Subtask 201.9.3 – Cultural Resources Investigation	$ 32,519	T&M
Subtask 201.9.4 – Phase I Environmental Site Assessments	$ 11,682	T&M

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Task 202 – Mill City/Gates WPCF Preliminary Engineering		
Subtask 202.1 – Project Management	$ 95,977	LS
Subtask 202.2 – Preliminary Engineering Report (PER)	$ 305,729	LS
Subtask 202.3 – Permitting Assistance	$ 22,517	LS
Subtask 202.4 – GMP Documents (30% Design)	$ 1,540,652	LS
Task 203 – Gates Collection System/Force Main Preliminary Engineering		
Subtask 203.1 – Project Management	$ 88,295	LS
Subtask 203.2 – Preliminary Engineering Report (PER)	$ 200,558	LS
Subtask 203.3 – GMP Documents (30% Design)	$ 685,739	LS
Subtotal	**$3,939,014** ~~**572,007**~~	

T&M: Time and Materials, LS: Lump Sum

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	**Cost**	**Type**
400 – COMMERCIAL SEPTIC SYSTEM PLANNING		
Task 400.1 – Project Management	$20,606 ~~17,330~~	LS
Task 400.2 – Data Acquisition & Properties Tour	$ 17,770	LS
Task 400.3 – Stakeholder Involvement/Engagement	$ 12,200	LS
Task 400.4 – Commercial Septic System Concept	$ 16,680	LS
Task 400.5 – Commercial Septic System Design	$ 41,670	LS
Task 400.6 – ODOT ROW Commercial Properties Topographic Survey	$ 10,560	LS
Task 400.7 – Detroit Environmental Due Diligence (ODOT ROW Easements)	$ 34,032	LS
Task 400.8 – Detroit Commercial Septic Excavation Contractor	$60,533 ~~26,400~~	T&M
Task 400.9 – Detroit Commercial Properties Boundary Survey	$ 31,800	T&M

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401 – KANE'S MARINA SEPTIC SYSTEM			
Task 401.1 – Project Management	$	15,661	LS
Task 401.2 – Preliminary Engineering Report (PER)	$	28,630	LS
Subtask 401.2.2 – Topographic Survey	$	18,087	LS
Subtask 401.2.3 – Geotechnical Investigation	$	17,060	LS
Task 401.3 – Final Design	$	28,270	LS
Task 401.4 – Pre-Procurement Support	$	8,000	T&M
Task 401.5 – Removed			
Task 401.6 – WPCF Permitting	$	5,860	LS
Task 401.7 – Removed			
Subtotal	**$367,419 ~~330,010~~**		

T&M: Time and Materials, LS: Lump Sum

TOTAL	**$7,418,049 ~~3,255,426~~**

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and Subconsultants for performance of Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before

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Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Chris Einmo
5155 Silverton Road NE, Building 1
Salem, OR 97305

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Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

i. Long distance communications.

ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

iv. Third-party models and mockups requested by Owner.

v. The printing of master or reproducible sets of plans and project manuals including specifications.

vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion

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County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 65.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant's Professional Hourly Rates.

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EXHIBIT E - CRITICAL DATE SCHEDULE
Schedule of Deliverables

PHASE 1 – GENERAL ENGINEERING SERVICES	
100 – PROJECT MANAGEMENT	
Task 100.1 – Monthly Invoices and Progress Reports	Monthly
Task 100.1 – Meeting agendas and minutes	Weekly
Task 100.2 – Final Presentation Materials	8 weeks after NTP
101 – STRATEGIC PERMITTING PLAN	
Task 101.1 – Project Management and Administration	
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	
Task 101.3 – Draft Strategic Planning Plan	11 weeks after Amend No. 2 NTP
Task 101.3 – Final Strategic Planning Plan	13 weeks after Amend No. 2 NTP
102 – SUBSURFACE EXPLORATION	
Task 102.1 – Project Management and Administration	
Task 102.2.1 – Draft Subsurface Investigation Work Plan	
Task 102.2.1 – Final Subsurface Investigation Work Plan	
Task 102.2.1 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.1 – Draft Subsurface Investigation Memorandum	
Task 102.2.1 – Final Subsurface Investigation Memorandum	
Task 102.2.1 – Groundwater Level Monitoring Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Work Plan	
Task 102.2.2 – Final Subsurface Investigation Work Plan	
Task 102.2.2 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Memorandum	
Task 102.2.2 – Final Subsurface Investigation Memorandum	
Task 102.2.2 – Groundwater Level Monitoring Memorandum	
Task 102.3.1 – Draft WPCF Evaluation Memorandum	
Task 102.3.1 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.1 – Draft WPCF Evaluation Memorandum (DEQ Comments)	

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Task 102.3.2 – Draft WPCF Evaluation Memorandum	
Task 102.3.2 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	
Task 102.5 – Infiltration Basin Pilot Test	180 days after Amend. No. 6 NTP
Task 102.6 – Response to DEQ Modeling Report Comments	90 days after Amend. No. 7 NTP
103 – LAND ACQUISITION AND RELOCATION SERVICES	
Task 103.1 – Project Management and Administration	
Task 103.2 – Mill City Land Acquisition and Relocation Services	
Task 103.2.3 – Draft ROW Programming Estimate	
Task 103.2.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.2.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.6 – Draft Offer Packets	
Task 103.2.6 – Final Offer Packets	
Task 103.2.6 – Final Report Packet	
Task 103.2.6 – Proposed Counteroffers, if applicable	
Task 103.2.6 – Recommendation for Condemnation, if applicable	
Task 103.2.6 – Report of Personal Interview	
Task 103.2.7 – Submit studies, Move Agreements, and Estimates	
Task 103.2.7 – Submit Relocation Claims	
Task 103.2.7 – Submit Relocation Closing Reports	
Task 103.2.9 – ROW Certification Form	12 weeks prior to Project Bid Date
Task 103.3 – Detroit Land Acquisition and Relocation Services	
Task 103.3.3 – Draft ROW Programming Estimate	
Task 103.3.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.3.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.6 – Draft Offer Packets	

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Task 103.3.6 – Final Offer Packets	
Task 103.3.6 – Final Report Packet	
Task 103.3.6 – Proposed Counteroffers, if applicable	
Task 103.3.6 – Recommendation for Condemnation, if applicable	
Task 103.3.6 – Report of Personal Interview	
Task 103.3.7 – Submit studies, Move Agreements, and Estimates	
Task 103.3.7 – Submit Relocation Claims	
Task 103.3.7 – Submit Relocation Closing Reports	
Task 103.3.9 – ROW Certification Form	12 weeks prior to Project Bid Date
104 – FINANCIAL ADVISORY SERVICES	
Task 104.1 – Project Management and Administration	
Task 104.2 – Financial Advisory Services	
105 – PUBLIC OUTREACH	
Task 105.1 – Project Management and Administration	
Task 105.2 – Communications and Engagement Planning and Implementation	
106 – INDEPENDENT COST ESTIMATING	
Task 106.1 – Project Management and Administration	
Task 106.2 – Independent Cost Estimating	52 weeks after Amend. No. 7 NTP
PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	
200 – MILL CITY / GATES FACILITIES PLANNING STUDY	
Task 200.1 – Project Management	
Task 200.2 – Request(s) for Information	
Task 200.3 – Draft Project Planning Facility Plan Section	
Task 200.4 – Draft Existing Facilities Evaluation Facility Plan Section	
Task 200.5 – Draft Project Need Facilities Plan Section	
Task 200.6 – Draft Collection System Alternatives Facility Plan Section	
Task 200.7 – Draft Treatment System Alternatives Facility Plan Section	
Task 200.8 – Capital Improvement Plan	
Task 200.8 – SDC Eligibility Estimate	
Task 200.8 – Draft Proposed Project Facility Plan Section	
Task 200.9 – Public Meeting Presentation Materials	
Task 200.9 – Final Facilities Plan	

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Task 200.10 – Management Reserve	
201 – MILL CITY / GATES FACILITIES SITE EVALUATION	
Task 201.1 – Project Management	
Task 201.2 – Force Main Alignment Topographic Survey	180 days after Amend No. 5 NTP
Task 201.3 – Force Main Alignment Geotechnical Investigation	180 days after Amend No. 6 NTP
Task 201.4 – Force Main Alignment Environmental Due Diligence	
Task 201.4.1 - Project Management	
Task 201.4.2 – Wetlands and Waters Delineation	90 days after Amend No. 6 NTP
Task 201.4.3 – Cultural Resources Investigation	120 days after Amend No. 6 NTP
Task 201.4.4 – Phase I Environmental Site Assessments	180 days after Amend No. 6 NTP
Task 201.5 – WPCF/RIB Topographic Survey	12 weeks after Amend No. 6 NTP
Task 201.6 – WPCF/RIB Geotechnical Investigation	12 weeks after Amend No. 6 NTP
Task 201.7 – Gates Collection System Survey	120 days after Amend No. 7 NTP
Task 201.8 – Gates Collection System Geotechnical Investigation	120 days after Amend No. 7 NTP
Task 201.9 – Gates Collection System Environmental Due Diligence	
Task 201.9.1 – Project Management	
Task 201.9.2 – Wetland and Waters Delineation	90 days after Amend No. 7 NTP
Task 201.9.3 – Cultural Resources Investigation	120 days after Amend No. 7 NTP
Task 201.9.4 – Phase I Environmental Site Assessments	180 days after Amend No. 7 NTP
202 – MILL CITY/GATES WPCF PRELIMINARY ENGINEERING	
Task 202.1 – Project Management	
Task 202.2 – Preliminary Engineering Report (PER)	240 days after Amend No 7 NTP
Task 202.3 – Permitting Assistance	240 days after Amend No 7 NTP
Task 202.4 – GMP Documents (30% Design)	240 days after Amend No 7 NTP
203 – GATES COLLECTION SYSTEM/FORCE MAIN PRELIMINARY ENGINEERING	
Task 203.1 – Project Management	
Task 203.2 – Preliminary Engineering Report (PER)	240 days after Amend No 7 NTP
Task 203.3 – GMP Documents (30% Design)	240 days after Amend No 7 NTP
PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	
400 – COMMERCIAL SEPTIC SYSTEM PLANNING	
Task 400.1 – Project Management	
Task 400.2 – Requests for Information	

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Task 400.2 – Existing Septic and Drain Field Summary Tables and Figures	
Task 400.3 – Presentation Materials	
Task 400.4 – Removed	
Task 400.5 – Conceptual Septic System Design	52 weeks after Amend No. 4 NTP
Task 400.6 – Basemap in AutoCAD 3D format.	24 weeks after Amend No. 4 NTP
Task 400.6 – Legal Descriptions and Visual Exhibit Maps	52 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Cultural Clearance)	26 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Phase I ESA)	26 weeks after Amend No. 5 NTP
Task 400.8 – Detroit Commercial Septic Excavation Contractor	
Task 400.9 – Detroit Commercial Properties Survey	26 weeks after Amend No. 5 NTP
401 – KANE'S MARINA SEPTIC SYSTEM	
Task 401.1 – Kickoff meeting agenda	2 weeks after Amend No. 2 NTP
Task 401.1 – Kickoff meeting minutes	1 week after Kickoff Meeting
Task 401.1 – Request for Information	
Task 401.1 – Presentation Materials	
Task 401.2 – Workshop Meeting Agenda	
Task 401.2 – Workshop Meeting Minutes	
Task 401.2 – Draft Preliminary Engineering Report	5 weeks after Amend No. 2 NTP
Task 401.2 – Final Preliminary Engineering Report	6 weeks after Amend No. 2 NTP
Subtask 401.2.2 – Topographic Basemap	180 days after Amend No. 6 NTP
Subtask 401.2.3 – Geotechnical Report	10 weeks after Amend No. 2 NTP
Task 401.3 – 90% Design Drawings and Specifications	15 weeks after Amend No. 2 NTP
Task 401.3 – Final (Stamped) Drawings and Specifications	17 weeks after Amend No. 2 NTP
Task 401.3 – Opinion of Probably Cost	17 weeks after Amend No. 2 NTP
Task 401.4 – Procurement Specifications	
Task 401.5 - Removed	
Task 401.6 – WPCF Permitting	
Task 401.7 - Removed	

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT F - RATE SCHEDULE

Keller Associates	Hourly Rate*
Project Engineer I	$137
Project Engineer II	$179
Project Engineer III	$242
Project Manager I/II	$189
Project Manager III	$252
Structural Engineer I/II	$179
Structural Engineer III	$242
Chief Engineer / Chief Structural Engineer	$305
CAD I/II	$137
CAD III	$168
CAD Manager	$200
Electrical Controls I/II	$179
Electrical Controls III	$242
Principal	$315
Surveyor I/II	$158
Surveyor III	$194
Field Representative	$152
Engineering Student	$79
Administration I	$95
Administration II	$131

**Rates reported are for 2024. Rates updated annually in January.*

***Reimbursable Expenses at Cost x 1.05*

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SUBCONSULTANT RATE SCHEDULE

Hydrological	Hourly Rate*
Principal Technical Professional	$250
Supervising Technical Professional	$205
Managing Technical Professional	$190
Consulting Technical Professional	$175
Project Technical Professional	$150
Staff Technical Professional	$135
Intern	$90
GIS/Graphics/Database	$160
Editor/Documents	$145
Administration	$105

Permitting	Hourly Rate*
Environmental Consulting Services Specialists: Cultural Resources, Environmental Resources, Paleontology, Scientific Resources, Planning Resources, Graphics/Media Production, GIS/CADD Resources, Technical Writing/Editing, Training/Facilitating, Air Quality	
Specialist I	$77
Specialist II	$91
Specialist III	$104
Specialist IV	$114
Specialist V	$123
Specialist VI	$137
Specialist VII	$147
Specialist VIII	$158
Specialist IX	$169
Specialist X	$189
Specialist XI	$207
Specialist XII	$226
Subject Matter Expert I	$230
Subject Matter Expert II	$242

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Subject Matter Expert III	$268
Subject Matter Expert IV	$293
Engineering and Special Services (Tier 1) Specialists:	
Specialist IV	$123
Specialist V	$137
Specialist VI	$147
Specialist VII	$158
Specialist VIII	$169
Specialist IX	$189
Specialist X	$207
Specialist XI	$226
Specialist XII	$242
Subject Matter Expert I	$242
Subject Matter Expert II	$252
Subject Matter Expert III	$278
Subject Matter Expert IV	$305
Administrative III	$104

Land Acquisition and Relocation	Hourly Rate*
Principal/Senior Advisor/Program Manager	$322.00
Senior Project Manager	$298.00
Project Manager/Property Manager	$198.00
Senior Right of Way Agent	$163.00
Right of Way Agent	$132.00
Senior Project Control Specialist/Senior Right of Way Technician	$163.00
Project Control Specialist/Right of Way Technician	$121.00

Financial Advisory	Hourly Rate*
Principals	$295
Project Managers	$235
Consultants	$190
Public Relations	$170
Technical Writer/Graphic Artist	$145
Administrative Support	$95

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Surveying	Hourly Rate*
PLS Office Technician	$140
One-Man Field Crew	$140
Project Surveyor	$150
2 Man Field Crew	$170
Survey Technician	$110

Geotechnical Services	Billed	Hourly Rate*
ENGINEERING CONSULTING		
Senior Principal	Hourly	$284.00
Principal Engineer	Hourly	$248.00
Principal Engineering Geologist	Hourly	$238.00
Senior Associate Engineer	Hourly	$227.00
Associate Engineer	Hourly	$217.00
Project Manager II	Hourly	$201.00
Project Manager I	Hourly	$185.00
Engineering/Geological Staff III	Hourly	$159.00
Engineering/Geological Staff II	Hourly	$138.00
Engineering/Geological Staff I	Hourly	$111.00
Senior Technician	Hourly	$127.00
Field Technician II	Hourly	$117.00
Field Technician I	Hourly	$101.00
Senior Administrative Assistant	Hourly	$106.00
Administrative Assistant	Hourly	$95.00
Office Support	Hourly	$90.00
EQUIPMENT/OTHER SERVICES		
Falling Weight Deflectometer	Daily	$2,150.00
Ground Penetrating Radar, Vehicle Mounted	Daily	$1,550.00
Global Positioning System (Differential)	Daily	$115.00
Dynamic Cone Penetrometer	Daily	$120.00
Hand Auger	Daily	$38.00
Drone Flight Services	Hourly	$245.00

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Drone Hardware & Flight Fee	Daily	$160.00
Nuclear Densometer	Daily	$85.00
Lab: #200 Wash	Each	$140.00
Lab: Atterberg Limits	Each	$250.00
Lab: In-Situ Dry Density and Moisture Content	Each	$55.00
Lab: Moisture Content	Each	$40.00
Lab: Proctor Moisture-Density	Each	$380.00
Lab: Sieve Analysis ¾-inch to 2-inch Max	Each	$380.00
Lab: Sieve Analysis <3/4-inch Max	Each	$330.00
Lab: Sieve Analysis > 2-inch Max	Each	$560.00
Lab: Soil Classification	Each	$45.00
Lab: Consolidation (Two Rebounds)	Each	$750.00
Lab: Specific Gravity of Coarse Aggregate	Each	$155.00
Specialty Software	Each	$250.00
Vehicle Usage, per mile (or $75/day), Whichever is Greater	Mile	$0.655

Septic	Hourly Rate*
Septic Consultant	$170.00
Septic Consultant Travel Time	$90.00

Septic Excavation Contractor	Hourly Rate*
Power Equipment Operator	$70.39
Laborer	$54.91
Locate, Camera Equipment	$250
Mobilization	$600 per trip

Public Outreach	Hourly Rate*
Principal-in-Charge	$225.00
Project Director	$180.00
Project Manager	$235.00
Project Associate	$120.00
Senior Designer	$205.00
Designer	$115.00

**Rates reported are for 2024. Rates updated annually in January.*

***Subconsultant Reimbursable Expenses and Direct Labor at Cost x 1.10*

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

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SIGNATURE PAGE FOR
ARPA – NORTH SANTIAM CANYON SEWER PROJECT – PW-5069-22
Between
MARION COUNTY and KELLER ASSOCIATES, INC.

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES
BOARD OF COMMISSIONERS:

Chair — Date: 4.24.2024

Commissioner — Date: 4-24-2024

Commissioner — Date: 4/24/2024

Authorized Signature: DocuSigned by: Brian Nicholas 0703BA7ACD6D443... — Date: 4/17/2024
Department Director or designee

Authorized Signature: DocuSigned by: Jan Fritz 1E984034585E453... — Date: 4/19/2024
Chief Administrative Officer

Reviewed by Signature: DocuSigned by: Scott Norris 60C98A6F708240B... — Date: 4/17/2024
Marion County Legal Counsel

Reviewed by Signature: DocuSigned by: D1FCCAACCDB14CB... — Date: 4/17/2024
Marion County Contracts & Procurement

KELLER ASSOCIATES SIGNATURE

Authorized Signature: DocuSigned by: BF174523C4C949A... — Date: 4/29/2024

Title: Principal

Marion County
OREGON
FINANCE DEPARTMENT

Contract Review Sheet

PW-5069-22 (6)

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: **6**

Contact: **Alicia Henry** Department: **Public Works Department**

Phone #: **503-373-4320** Date Sent: **Wednesday, January 31, 2024**

Title: **ARPA - North Santiam Canyon Sewer Project**

Contractor's Name: **Keller Associates, Inc.**

Term - Date From: **September 30, 2022** Expires: **December 31, 2026**

Original Contract Amount: **$ 60,960.00** Previous Amendments Amount: **$ 2,550,059.00**

Current Amendment: **$ 705,367.00** New Contract Total: **$ 3,255,426.00** Amd% **5240%**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☑ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **PW1130-22**

Description of Services or Grant Award

Amendment 6 - adds additional funding for Public Relations (task 105), and adds task 102.5, 201.3 through 201.6, updates Exhibit B - Consultant Compensation and Exhibit E - Critical Date Schedule to incorporate additional tasks.

Desired BOC Session Date: **2/7/2024** Files submitted in CMS for Approval: **1/17/2024**

Agenda Planning Date **1/25/2024** Printed packets due in Finance: **1/23/2024**

Management Update **1/23/2024** BOC upload / Board Session email: **1/24/2024**

BOC Session Presenter(s) **Chris Einmo**

FOR FINANCE USE

Date Finance Received: _____ Date Legal Received: _____

Comments: **Y**

REQUIRED APPROVALS

Finance - Contracts — 2/6/24 Date

Contract Specialist — 31 Jan 24 Date

Legal Counsel — 2/6/24 Date

Chief Administrative Officer — 2/6/2024 Date

MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date: Wednesday, February 7, 2024

Department: Public Works

Title Amendment 6 to Consultant Services Agreement PW5069-22 with Keller Associates for the ARPA - North Santiam Canyon Sewer Project.

Agenda Planning Date: Feb 1, 2024 **Management Update/Work Session Date:** Feb 1, 2024 **Audio/Visual aids** ☐

Time Required 10 minutes **Contact:** Chris Einmo **Phone:** 503.566.4119

Requested Action: Approve Amendment 6 to Consultant Services Agreement PW-5069-22 with Keller Associates for the ARPA - North Santiam Canyon Sewer Project, increasing the contract not-to-exceed value by $705,367.00, from $2,550,059.00 to $3,255,426.00.

Issue, Description & Background: The Project will design, permit, and construct new sanitary sewer infrastructure in the North Santiam River Canyon to serve the cities of Idanha, Detroit, Gates and Mill City. Keller Associates is the prime consultant retained by Public Works to provide engineering, property acquisition and other professional services for this CMGC project. Due to the size, complexity, and agressive funding deadlines associated with this project, Keller's scope of services has been developed and implemented in phases to enable early start of the most time critical project activities.

Amendment 6 adds public relations tasks and expands the scope of project management, infiltration basin pilot testing, geotechnical and additional commercial septic system design tasks previously scoped.

Financial Impacts: Amendment 6 will increasing the contract not-to-exceed value by $705,367.00, from $2,550,059.00 to $3,255,426.00. This is a budgeted expense in the current fiscal year budget.

Impacts to Department & External Agencies: This amendment does not result in impacts to other departments or external agencies.

List of attachments:
1. Amendment 6 to Consultant Services Agreement PW-5069-22
2. Request for Authorization of Contract PW-5069-22

Presenter: Chris Einmo, Senior Project Manager

Department Head Signature:

REQUEST FOR AUTHORIZATION OF CONTRACT
PW-5069-22

Date: January 30, 2024
To: Chief Administrative Officer
Cc: Contract File
From: Alicia Henry

I. **Subject:** Amendment Exceeds 25%

DIPS CODE: 135-40-42-461-4603-534500-809.002
Budget Authority: ☒ Yes ☐ No
CIP: 23-325/326

The Marion County Public Works Department is requesting approval to amend a contract as described in Section 20-0265, 20-0270, 30-0320, 40-0160, and 40-0910 of the Marion County Public Contracting Rules. The contract is with Keller Associates, Inc. for ARPA - North Santiam Canyon Sewer Project with a value of $2,550,059.00. An additional $705,367.00 will be added to the contract for a new contract total of $3,255,426.00 upon approval of Amendment 6.

A. BACKGROUND

Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. This is a large, multi-phase project with aggressive expenditure deadlines driven by ARPA funding requirements. Therefore, for expediency, the full scope of services needed to deliver the full project will be executed in a series of amendments to the original consultant services agreement, ensuring that early critical-path activities begin without delay. On October 7, 2022, the county executed contract PW-5069-22 with Keller and Amendment No. 1 was executed on October 7, 2022. Amendment 2 was executed on December 12, 2022. Amendment 3 was executed on May 31, 2023. Amendment 4 was executed on July 11, 2023. Amendment 5 was executed on October 27, 2023. Subsequent phases of work will be awarded to the consultant as the project progresses.

B. CURRENT AMENDMENT PURPOSE

Amendment 6 adds an additional $705,367.00, updated subtasks, adds tasks related to Public Relations and updates the language to reflect subconsultants.

JUSTIFICATION

The initial contract consisted of a $60K fast-start contract, which enabled work on this time-sensitive project to begin quickly. Amendment 1 added an additional amount of $67,680, for

a contract total of $128,640. Amendment 2 added an additional amount of $1,784,380, for a contract total of $1,913,070, Amendment 3 conforms to the Request for Proposal and awarded contract phased approach and added an additional $182,907, Amendment 4 added additional task to phase 400 (Task 400.5), updated Exhibit B - Consultant Compensation and updated sub consultant rate schedule to include additional tasks. Amendment 5 added an additional $454,132.00, updates subtasks, adds tasks related to Mill City/Gates Facilities Site Evaluation, Detroit Project Areas, Cultural Clearance Certification and updates the language to subconsultants to ensure the project will meet ARPA requirements and deadlines. Amendment 6 adds $705,367.00, update subtasks, adds public relations tasks and expands the scope of project management, infiltration basin pilot testing, geotechnical and additional commercial septic system design tasks previously scoped. in Mill City. This conforms to the contracting plan for this project.

C. BUDGET IMPACTS

1. Are the expected expenditures for the current fiscal year under the contract, including any additional funds being requested with this action, already included in the current year adopted budget? ☒ Yes ☐ No

2. If yes, amount $5,515,700 Program / Account 461-534500

Submitted by:

Alicia Henry
Public Works Department

Reviewed by:

Contracts & Procurement

Acknowledged by:

Department Head

Acknowledged by:

Jan Fritz, CAO

Marion County
OREGON

AMENDMENT 6 ~~5~~ to PW-5069-22
the CONTRACT FOR SERVICES
between
MARION COUNTY and KELLER ASSOCIATES

This is Amendment No. 6 ~~5~~ to the Contract for Services (as amended from time to time, the "Contract"), dated September 30, 2022, between Marion County, a political subdivision of the State of Oregon, hereafter called County or Owner, and Keller Associates, hereafter called Consultant.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by ~~strikethrough~~):

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$3,255,426** ~~**$2,550,059**~~ for Phase 1, 2, and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A, Statement of Work**.

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.

400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT

Task 100.1 – Project Management

Consultant Responsibilities:

100.1.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.
100.1.2 Project Coordination. Consultant may be requested to prepare progress reports or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.
100.1.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates, informational, or technical-based presentations to the

board. Consultant will prepare presentation materials and/or handouts as directed. Assist with coordination of similar water pollution control facility site tours.

Owner Responsibilities:

- Administer project funding.

Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes an 18-month duration for general project administration.

Deliverables:

- Monthly Invoices
- Monthly Progress Reports
- Meeting agenda and minutes

Task 100.2 – County Board of Commissioners Support Services

Consultant Responsibilities:

100.2.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to three occasions. Consultant will prepare presentation materials and/or handouts. The three presentations will tentatively occur in the months of November 2022, December 2022, and March 2023 and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Presentation #3 – Within six months after effective date of contract. Attend and present at a Joint Special Work Session for Marion County and Linn County Commissioners, to provide an introduction and update on the project and answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with subconsultants and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material

- Final presentation material

101 – STRATEGIC PERMITTING PLAN

Task 101.1 – Project Management and Administration

Consultant Responsibilities:

101.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

101.1.2. Consultant Coordination. Coordinate services to complete the Strategic Environmental Permitting Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of the draft Strategic Permitting Plan.

Assumptions:

- Project management budget assumes a task order schedule of up to 3 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

101.2.1. Consultant shall review available project information, including background, concept development and current plan/design information for the North Santiam Canyon Wastewater Master Plan (Master Plan). Consultant will conduct a desktop review of the Master Plan area to identify potential resources affected and locate existing available data. Using this information, Consultant will compile a list of potential issues and data needs for the project. Consultant will check and refine the understanding of those issues by initiating preliminary, informal discussions with the anticipated permitting agencies to understand their concerns and permitting needs for the project. The intent of these discussions will be to identify the agencies' specific resource concerns, to understand permitting requirements and obligations, and discuss options for permitting efficiencies, such as using programmatic agreements. Consultant will also preliminarily identify which federal agencies may have a National Environmental Policy Act (NEPA) requirement for the Master Plan and/or specific projects or phases that are part of the plan (due to their jurisdiction, land ownership, or funding) and whether a single joint NEPA document could be used to support multiple federal decisions.

Task 101.3 – Strategic Permitting Plan

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

Based on information obtained in Task 101.2, Consultant will prepare a draft Strategic Permitting Plan. The draft Strategic Permitting Plan will include:

- Project permitting schedule and general cost estimate.
- Summary of environmental permits and approvals needed
- Summary of initial pre-scoping discussions with agencies
- List of potential resources affected and existing available data
- List of potential permitting issues and data needs (based on desktop analysis and agency discussions)
- List of design needs to complete permitting
- Summary of potential opportunities for permitting efficiencies
- Estimated timeline to complete permitting
- Estimated general cost to complete permitting

Consultant will revise and finalize the Strategic Permitting Plan based on one consolidated review by Consultant and Owner.

Assumptions:

- Consultant will conduct up to three coordination conference calls with Owner to provide updates, receive additional information/clarifications, etc.
- Permitting agencies for informal, pre-scoping coordination will be: US Forest Service, US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Transportation, and Marion County. Outreach to agencies will consist of email or telephone contact. Consultant will make a reasonable effort get information from agencies within the available time and consistent with the level of effort budgeted.
- "Environmental permits and approvals" do not include easements or rights-of-way with utilities, ODOT, or federal agencies.
- Permitting requirements related specifically to wastewater treatment/infiltration requirements will be addressed through a separate task order.
- One review of the draft Strategic Permitting Plan will be conducted. The Strategic Permitting Plan will be revised based on one consolidated set of review comments. Consultant-intends for the Strategic Permitting Plan to be a "living document", updated and adapted as the project planning and subsequent design and permitting efforts progress.
- No Owner board meeting presentations

Deliverables:

- Draft Strategic Permitting Plan
- Final Strategic Permitting Plan

102 – SUBSURFACE EXPLORATION

Task 102.1 – Project Management and Administration

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

102.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

102.1.2. Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 102.2 – Subsurface Investigation Program

The purpose of subsurface investigation is to collect soil and groundwater data that can be used to: (1) assess whether a candidate site can infiltrate the required volume of treated wastewater, (2) inform facility predesign, (3) evaluate facility permitting framework (WPCF required), and (4) evaluate compliance with DEQ's groundwater protection rules. The subsurface investigation program involves excavating test pits to measure soil infiltration rates and observe soil types, installing monitoring wells to measure aquifer properties, collecting soil and groundwater samples, and one year of groundwater and surface water level monitoring. This task includes management, planning and execution of the subsurface investigation program comprised of two subtasks:

- Subtask 102.2.1 – Mill City / Gates Subsurface Investigation
- Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Owner Responsibilities:

- This scope of work does not include effort to identify domestic water wells in the vicinity of the proposed infiltration facility (which would likely involve a door-to-door survey and review of households that are connected to City water). Owner is responsible for this effort, if it is needed, and for incorporating the information obtained into the final report.

Assumptions:

- Subsurface investigations will occur on private or public property that is not owned by Owner. Owner and Consultant will work collaboratively to gain access to these sites for the purpose of performing site evaluation work. In general, Owner is responsible for the execution of site access agreements with property owners and Consultant is responsible for coordination with property owners regarding schedule for accessing the property, discussing access routes, and reporting results to the property owner.
- Test pitting and infiltration testing will be limited to four days in the Detroit/Idanha area (up to 10 test pits) and five days in the Gates/Mill City area (up to 18 test pits).
- Monitoring wells and temporary borings will target discrete horizons in the glacial till geologic unit that are related to the depth to groundwater and the contact between glacial till and bedrock. Because there is limited information about the geology and depth to groundwater at the candidate sites, the costs for drilling are based on assumptions about the depths of monitoring wells and temporary borings. Where field conditions differ from those assumed and where such differences result in increased field costs that exceed the established budget for this task, an equitable adjustment to the contract value will be made by contract amendment.

- In the Gates/Mill City area, it is assumed that monitoring wells will be 100 feet deep, one temporary boring will be advanced to the top of the water table at 80 feet below ground surface (bgs), and another temporary boring will be advanced to the top of bedrock at 200 feet bgs.
- In the Detroit/Idanha area, we have assumed that monitoring wells will be 80 feet deep (2 wells) or 200 feet deep (3 wells), and two temporary borings will be advanced to the top of bedrock at 100 feet bgs.
- Drilling costs could change if: (1) driller costs change (quotes are typically only good for 30 days due to "instability of commodity costs") or (2) the assumed construction of wells and borings changes based on the geology of the site. It is assumed that casing advance is not necessary to keep the bedrock hole open during drilling of the monitoring well in the Detroit/Idanha area. An amendment may be necessary if casing must be advanced to keep the hole open at this well and if such costs exceed the agreed upon task budget.
- Subsurface exploration work, including digging of test pits, geotechnical drilling, and installation of subsurface monitoring equipment, is not subject to Davis-Bacon or BOLI prevailing wages.

Subtask 102.2.1 – Mill City / Gates Subsurface Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface investigation in the Gates/Mill City area includes the following activities:

102.2.1.1. Work Plan. Develop a work plan for the subsurface investigation that includes a specific plan for excavating and infiltration testing at up to 18 test pits (at Site 1 through Site 4) and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to eighteen (18) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for deep soil investigation.

102.2.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop three (3) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water

content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.1.4. Groundwater Level Monitoring. Equip each well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells quarterly for a year.

102.2.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.1.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum.

Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface characterization in the Detroit/Idanha area includes the following activities:

102.2.2.1. Work Plan. Develop a work plan for the subsurface characterization that includes a specific plan for excavating and infiltration testing at up to 10 test pits (at the McCoy and Detroit Ranger Station sites), and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.2.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to ten (10) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon);

summarize results in a brief technical memorandum to facilitate site selection for the deep soil investigation.

102.2.2.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop five (5) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.2.4. Surface Water and Groundwater Level Monitoring at the McCoy Site. Install three (3) stilling wells (in the Santiam River, Unnamed Creek, and McCoy Creek); equip each stilling and monitoring well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells and stilling wells quarterly for a year.

102.2.2.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.2.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum

Task 102.3 – Groundwater Modeling Evaluation

The purpose of this task is to provide field data and modeling evaluations for submittal to the Oregon Department of Environmental Quality (DEQ) to support a Water Pollution Control Facility (WPCF) permit determination in compliance with DEQ's groundwater protection rules.

Task 102.3 is comprised of two subtasks:

- Subtask 102.3.1 – Gates/Mill City Permitting Evaluation
- Subtask 102.3.2 – Detroit/Idanha Permitting Evaluation

Assumptions:

- It is assumed that the planned location for the infiltration facility in the Gates/Mill City area is further from the Santiam River than the planned location for the infiltration facility in the Detroit/Idanha area (less than 0.25 miles). Therefore, we anticipate that the evaluation to support a permitting determination for the Detroit/Idanha area will be more rigorous.

Subtask 102.3.1 – Mill City / Gates Permitting Evaluation
Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant shall perform the following activities for the infiltration facility in the Gates/Mill City area:

102.3.1.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the selected Gates/Mill City infiltration site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.1.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.1.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.1.4. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.1.5. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater protection rules, and (3) to discuss DEQ's comments on the memo.

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation
Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant shall perform the following activities for the infiltration facility in the Detroit/Idanha area:

102.3.2.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the McCoy site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.2.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.2.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.2.4. Perform a modeling simulation to estimate the maximum recharge volume in the Detroit/Idanha area (additional evaluation of maximum recharge volume is needed in the Detroit/Idanha area due to the anisotropy; a model simulation would be more cost effective than hiring a driller to conduct a pumping test).

102.3.2.5. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.2.6. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater.

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)

Consultant Responsibilities:

102.4.1. Address permitting and other regulatory requirements related to the National Environmental Policy Act (NEPA), which will involve obtaining an agreement to access the properties, excavate test pits, and install monitoring wells. Assumes a level of effort with up to 48 hours.

102.4.2. Coordinate with property owner of "upper deck" private property to obtain permission to install two monitoring wells. Assumes a level of effort with up to 48 hours.

Owner Responsibilities:

- Review and approve permitting applications/letters requesting permission to access the McCoy site, excavate test pits, and install monitoring wells.
- Owner is responsible for costs associated with property owner conditions related to site access and site access agreements.

Task 102.5 – Infiltration Basin Pilot Test

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant will conduct a pilot test (minimum of fourteen (14) days to maximum of twenty-eight (28) days) for proposed infiltration basins at Site GM1 in Mill City, Oregon to further confirm long-term capability of the proposed infiltration basins and support the permitting process.

Assumptions:

- The number of meetings and site visits anticipated are specified in the scope tasks detailed below. If these meetings and technical consultations result in work scope modifications, such modifications are not included or budgeted within this scope.
- Access to the subject property and negotiations with the property owner and/or tenants will be arranged by the Consultant, and all field work can be conducted during normal business hours.
- Unimpeded access to the work locations will be available, including no conflicts with overhead power or underground utilities.
- Consultant assumes field activities can be accomplished within the number of days specified in the scope tasks detailed below. This includes mobilization and field work. Consultant will attempt

to schedule field work to avoid significant weather events where possible. However, if weather impacts projected mobilization costs or the overall project schedule, this may result in additional fees. Owner will be kept informed if there are unanticipated weather delays.

- Owner will provide information which they have available regarding the presence of underground utilities within the study area. A public utility locate notification will be conducted, and Consultant will contract a private utility locator in an effort to identify and avoid subsurface utilities at the proposed work locations. Drilling/sampling locations will be considered and modified based on the results of these efforts as described in the work plan. The use of these methods does not guarantee that unidentified conduits/structures will not be encountered during drilling and excavation, but greatly minimizes the risk of doing so. Consultant will not be responsible for damage to subsurface utilities not identified prior to initiating work.
- Ground-disturbing activities will not impact protected natural and cultural resources such as wetlands and waterways, critical habitat, archeological sites, and historic properties and structures. It is the responsibility of the Consultant, to obtain all required local, state, and federal environmental permits and clearances, including but not limited to the National Environmental Policy Act, Section 404 of the Federal Clean Water Act, Section 401 Water Quality Certification, National Pollutant Discharge Elimination System Permits, Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, Oregon Fish Passage law, Oregon Removal-Fill law, and Oregon Native American Graves and Protected Objects law.
- No unreasonably difficult subsurface conditions will be encountered requiring the use of alternative drilling/excavation equipment than specified above.
- All fieldwork can be performed using standard personal protective equipment and procedures (Level D).
- Other than drilling start card documentation, no other permits are specified or included. If necessary, other permits would be obtained at an additional time and materials basis.
- Consultant has assumed that deliverables will require only one review cycle and the scope of work detailed below will be utilized for the development of the workplan. If significant changes are made to the scope, this may impact costs associated with Task 102.5.1. Following issuance of the final report, if information is subsequently provided to Consultant that warrants report revisions or amendments, the additional work will be charged on a time and materials basis.
- Consultant's work product is intended for use by Owner and is not intended for reliance by third parties unless otherwise specified in this scope of work. If requested by the Owner, a reliance letter will be reviewed and considered by Consultant. Completion of a reliance letter may be subject to an additional fee.

Consultant Responsibilities:

102.5.1. Meetings, Work Plan, Pre-Field Work Preparation. Consultant will develop a work plan for the pilot test that outlines the methods for excavating up to three test pits within the planned footprints of Basin J1 and Basin J2, constructing monitoring well GM1-MW-4, excavating a 50-foot by 50-foot infiltration basin, and conducting the pilot test. A draft Work Plan will be provided to the project team for review, and a second draft Work Plan will be submitted to the Oregon Department of Environmental Quality (DEQ) for review. The final Work Plan will incorporate the project team and DEQ comments.

In addition, Consultant will prepare for the pilot test by developing health and safety plans to cover the field work; field-locating the test pits, monitoring well, and test basin at the site; and overseeing a utility locating contractor to clear excavation locations of subsurface utilities. Consultant will coordinate location, design, and schedule of field work and work with the City to obtain water for the infiltration pilot test. Consultant will review and compile data from previous field investigations at the site and refine the work program as

needed. This task also includes periodic email updates to the project team on the status of the project and meetings between Owner, Consultant, and Subconsultants to discuss pilot test results.

Assumptions:

- Work Plan comments can be incorporated over a single review cycle.
- Five (5) one-hour, virtual meetings will occur during the course of the project to coordinate between Consultant and Subconsultants project team. One (1) virtual meeting to discuss pilot test results will occur with the entire project team.
- Two field visits will occur to oversee the utility contractor and mark excavation and boring locations.

Deliverables:

- Draft Work Plan for review by the project team.
- Draft Work Plan for review by DEQ.
- Final Work Plan that incorporates project team and DEQ comments.

102.5.2. Monitoring Well Drilling and Construction Oversight. An additional monitoring well is required as a part of the pilot test to monitor groundwater mounding adjacent to the pilot test basin. Consultant will develop contract with driller to conduct work and oversee construction of a monitoring well using sonic drilling methods (monitoring well GM1-MW4) adjacent to the test basin and will equip the monitoring well with a down-hole pressure transducer and datalogger to record groundwater levels before, during, and after the pilot test. Soils will be logged in general accordance with the Unified Soil Classification System (USCS). Consultant shall oversee development activities, conduct synoptic water level monitoring, and download pressure transducer data from monitoring wells at Site GM1. Consultant shall also verify that well materials meet Oregon Administrative Rule requirements for drilling monitoring wells. After well completion, Consultant will oversee survey of the latitude, longitude, and elevation of the monitoring well.

Assumptions:

- The monitoring well will be constructed of 2-inch schedule 40 PVC, will be 50-feet deep, and will be completed with an above-ground monument with three protective bollards.
- Soil core from the monitoring well boring can be spread on the ground.
- The scope of work does not include monitoring well decommissioning as it may be utilized for long-term monitoring purposes.
- Monitoring well drilling oversight, well construction, and development will occur over three (3) days and will include one (1) site mobilization.

102.5.3. Test Pit Excavation and Infiltration Testing. As the site layout design for GM1 has progressed, infiltration basins J1 and J2 have been preliminarily located at the site in an area where no infiltration testing has occurred. Subsurface exploration is important in this area due to the presence of a former log pond to the east, the extent of which has been identified from aerial photos but has not been confirmed with subsurface exploration. Consultant will oversee the excavation of three (3) test pits up to fifteen (15) feet below

ground surface (bgs) or a depth sufficient to observe unsaturated zone soils in the opinion of the on-site hydrogeologist in the area of proposed basins J1 and J2, and will conduct infiltration tests at each pit using an oversized (4-foot diameter) steel cylinder. Consultant shall log soils from the test pits in general accordance with the USCS, collect soil moisture measurements to estimate the extent of the wetting front, and assess infiltration tests to determine whether additional excavations are recommended at the site. Consultant shall communicate status and results to the project team on an on-going basis and oversee backfilling of the test pits.

Assumptions:

- Test pit excavation and geologic logging and infiltration testing will be completed in two (2) days.
- Excavated material can be spread on site and excavation activities can be completed using an excavator.

102.5.4. Test Infiltration Basin Construction. Consultant will oversee the excavation of a 50-foot by 50-foot infiltration basin to a depth of one (1)-foot bgs. An energy diffusion system (rip-rap) will be placed at the location where water discharges to the basin to minimize turbidity during the test. Consultant will install a temporary shallow piezometer in the center of the basin in an attempt to monitor groundwater mounding directly below the basin during the pilot test. Consultant will oversee utility locates prior to basin construction.

Consultant will install a temporary stilling well and staff gauge in the basin and equip the stilling well with a pressure transducer and datalogger to monitor the surface water level during the pilot infiltration test. The water level monitoring system will be equipped with remote communication capabilities to detect potential overflow conditions during the test. Consultant will oversee survey of the latitude, longitude, and elevation of the stilling well to facilitate comparison between water levels in the infiltration basin and monitoring well during the pilot infiltration test.

Consultant will download data from transducers immediately before the start of the test and review data and conduct shakedown testing of the remote monitoring system before the start of the test.

Assumptions:

- The infiltration basin will be excavated in three (3) days.
- The anticipated location of the infiltration basin will not require relocation due to utilities or obstructions.

102.5.5. 28-Day Infiltration Basin Pilot Test. The infiltration pilot test is planned to consist of discharging potable water from a Mill City fire hydrant into the test basin for a minimum of fourteen (14) days and a maximum of twenty-eight (28) days, as required, at a rate of about 100 gallons per minute (gpm). Flow will be measured with totalizing flow meters at the hydrant and at the entrance to the basin. Groundwater levels and surface water levels will be measured using pressure transducers and hourly to daily manual measurements (depending on the phase of the test).

Prior to the test, Consultant will measure baseline groundwater elevations and reprogram the pressure transducers in monitoring wells GM1-MW1, GM1-MW2, GM1-MW3, and GM1-MW4 to record aquifer response during the pilot infiltration test.

Consultant will oversee the first twelve (12) hours of the test to observe water level trends and refine the flow rate. For the remainder of the first week, Consultant will conduct a daily field visit to measure the water level in the pilot infiltration basin, the temporary piezometer, and at groundwater monitoring wells GM1-MW1, GM1-MW2, GM1-MW3, and GM1-MW4. Transducer data will be downloaded and reviewed.

For each additional week of testing, Consultant will visit the infiltration basin site three (3) times per week and measure groundwater elevations in monitoring wells GM1-MW-1, GM1-MW2, GM1-MW3, and GM1-MW4, and download and review transducer data. Consultant will recommend duration of test that will allow understanding of the mounding that will occur. Based on mounding simulations, extending the test past fourteen (14) days (Week 2) may be necessary if aquifer permeability is lower than expected. Extending the test will incur additional fees for water use from the City of Mill City, and regular check-ins to manually measure water levels. Consultant estimates that the maximum time the test will need to run is 28 days.

Consultant will check transducer condition (battery and memory) during each site visit and maintain transducers as needed. Consultant will evaluate data and assessment of aquifer response based on the data that are collected on a daily basis.

At the conclusion of the test, Consultant will allow transducers to continue running for two weeks to monitor, assess data, and evaluate recession of the groundwater mound. Consultant will visit the site two weeks after conclusion of the test and conduct a transducer download. Consultant will oversee backfilling of the infiltration basin with the excavated soils, and the temporary piezometer and stilling well will be removed.

Assumptions:

- Mill City water costs will not exceed $17,085 during Weeks 1 and 2 (Days 1 to 14) of the test and will not exceed $8,500 per week for Weeks 3 and 4 (Days 15 to 28).
- Consultant will conduct site visits three (3) times per week during Weeks 3 and 4 for a total of six (6) visits.
- There will be no constraints on getting meters or approvals for the potable water from the City of Mill City.

102.5.6. Analysis and Reporting. Consultant will use data collected during the pilot test to calibrate the MOUNDSOLV model to the observed mounding. Specifically, model input parameters will be adjusted to achieve a better match between predicted and observed mounding during infiltration. After the MOUNDSOLV model has been calibrated to the pilot test, the calibrated model will be run under conditions representing the planned infiltration basins design and 2045 effluent generation rate.

Consultant will evaluate implications of the testing results on the recently-issued DEQ guidance for implementation of the U.S. Supreme Court's Maui Decision.

The pilot test methods, results, and MOUNDSOLV simulations will be documented in a technical memorandum. The technical memorandum will include plots of water level versus time in the monitoring wells and stilling well, a detailed narrative of the testing procedure, a figure showing well and infiltration basin locations, comparison of the results to previous work at the site, professionally-drafted boring logs summarizing the soil types that were encountered during test pit and monitoring well drilling, and a groundwater elevation contour map at various times during the infiltration test showing horizontal hydraulic gradient and groundwater flow direction.

Assumptions:

- Technical memorandum comments can be incorporated over a single review cycle.
- The Department of Environmental Quality (DEQ) will not provide comments on the technical memorandum.

Deliverables:

- Draft technical memorandum for review by the project team.
- Final technical memorandum that incorporates project team comments.

102.5.7 Tracer Test Planning. Consultant will conduct a tracer test to: (1) estimate groundwater travel time between the infiltration basins at Site GM1 and the Santiam River and (2) estimate solute attenuation by dispersion. The objective of this task is to develop a scope of work, schedule, and cost estimate for the tracer test.

Consultant will complete the following as part of this task:

- Conduct three (3) meetings with project team, including legal counsel, to confirm tracer test objectives and provide input.
- Evaluate options for tracers and develop a recommendation for a tracer. This task will include a review of tracer tests conducted by the U.S. Geological Survey in Maui.
- Determine construction and locations for downgradient monitoring wells to monitor tracer concentrations and determine the number of wells.
- Develop a list of needs for conducting the tracer test (e.g., water, equipment, staging, power) and develop a schedule for conducting the test. Develop schematic diagrams for the tracer injection system.
- Develop a cost estimate for implementing the tracer test.
- Reporting.

Assumptions:

- Technical memorandum comments can be incorporated over a single review cycle.
- The Department of Environmental Quality (DEQ) will not provide comments on the technical memorandum.
- Meetings with project team will be virtual.

Deliverables:

- Draft technical memorandum summarizing the scope of work, schedule, and cost estimate for conducting a tracer test.
- Final technical memorandum that incorporates project team comments.

103 – LAND ACQUISITION AND RELOCATION SERVICES

Task 103.1 – Project Management and Administration

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

103.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

103.1.2 Coordination. Coordinate services to complete the land acquisition and relocation services task.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 103.2 – Mill City Land Acquisition and Relocation Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Responsible for the oversight of land acquisition and relocation services for North Santiam Canyon Sewer Project (NSCSP) and the Detroit Downtown Commercial Septic Program as outlined in the tasks below. The subtasks included as part of Task 103.2 are based on the land acquisition and relocation Subconsultant's scope of work. The scope and fee provided are for the acquisition of up to fifteen (15) files.

Consultant Responsibilities:

RIGHT OF WAY (ROW)
Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"

- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.2.1 Project Management and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to six (6) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.2.7). Consultant Project Manager will QC all deliverables prior to delivery.

103.2.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner and Consultant of any major title encumbrances.

103.2.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner and Consultant for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner and Consultant.

103.2.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.2.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's

Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.2.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and

- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.2.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.
Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there is up to one (1) Personal Property Only Relocation.

Consultant shall, at a minimum, conduct the following relocation activities:

- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment.
- Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.2.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall:

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.2.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices electronically.

- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to fifteen (15) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner,
- Provide up to fifteen (15) GINs, one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Up to fifteen (15) appraisal and appraisal review reports, electronically.
- Provide 15-Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Provide Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- Provide the following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to fifteen (15) Draft Offer Packets for review for each file to Owner
- Provide up to fifteen (15) Final Offer Packets sent certified mail or delivered in person for each file.
- Provide up to fifteen (15) Final Report Packets for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval
- Submit Relocation claims electronically to Owner for payment
- Submit Relocation Closing Reports to Owner
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

Task 103.3 – Detroit Land Acquisition and Relocation Services
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Responsible for the oversight of Acquisition and Relocation services for North Santiam Canyon Sewer Project as outlined in the tasks below. The subtasks included as part of Task 103.3 are from the land acquisition and relocation Subconsultant's scope of work.

Consultant Responsibilities:

Consultant shall conduct the Right-of-Way ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970
- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.3.1 Project Manager and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to twelve (12) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.3.6). Consultant Project Manager will QC all deliverables prior to delivery.

103.3.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner of any major title encumbrances.

103.3.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.3.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.3.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section 5.140, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.3.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.3.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.

Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there are up to three (3) Personal Property Only Relocations.

- Consultant shall, at a minimum, conduct the following relocation activities:
- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment. Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner.
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.3.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.3.9 ROW Certification. Consultant-shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.

- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices, electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to twelve (12) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner.
- Provide up to twelve (12) GINs, with one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. NOTE: If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Provide up to twelve (12) appraisal and appraisal review reports, electronically.
- Provide 15 Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- The following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to twelve (12) Draft Offer Packet for review for each file to Owner.
- Provide up to twelve (12) Final Offer Packet sent certified mail or delivered in person for each file.
- Provide up to twelve (12) Final Report Packet for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.

- If applicable, provide Recommendation for Condemnation to Owner.
- Provide up to twelve (12) Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval.
- Submit Relocation claims electronically to Owner for payment.
- Submit Relocation Closing Reports to Owner.
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

104 – FINANCIAL ADVISORY SERVICES

Task 104.1 – Project Management and Administration

Consultant Responsibilities:

104.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

104.1.2 Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 104.2 – Financial Advisory Services

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

104.2.1 Advisory Services. Consultant shall provide, upon request, advisory services related to the North Santiam Canyon Sewer Project. This consultation shall be provided on a time and materials basis, and it shall include attendance at meetings, writing of memos or presentations, or communication via phone or email in support of the project decision-making.

104.2.2 Financial Plan. Consultant shall update rate model and monthly cost per EDU for two project phases and build year-by-year model of costs and revenues. Consultant shall prepare presentations and technical memoranda of business case model and year-by-year model results for meetings with project stakeholders.

Owner Responsibilities:

- Provide meeting space for project meetings.

Assumptions:

- Attendance at project meetings may be virtual.

Deliverables:

- Business Case Technical Memorandum
- Business Case Presentation
- Draft and Final Financial Plan

105 – PUBLIC RELATIONS

Task 105.1 – Project Management and Administration

Consultant Responsibilities:

Consultant will assist in improving Owner's communication and outreach to the community, local governments, residents, businesses, and other key stakeholders regarding the Project.

105.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

105.1.2 Coordination. Coordinate services to prepare and carry out the Communication and Engagement Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at internal project meetings may be virtual. Assume participation in meetings approximately three (3) to five (5) times per month, including one (1) standing meeting per month and additional meetings specific to individual project activities. This may include NSSA Board meetings (see Task 105.2)
- Project management budget assumes a public relations campaign of up to 36 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 105.2 – Communications and Engagement Planning and Implementation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

105.2.1. Communication and Engagement Plan

The Consultant will develop and carry out a Communication and Engagement Plan to track and monitor communications throughout the Project. This plan covers scheduled written and oral communications, responses to unsolicited requests for information, the frequency of the scheduled communications, and the responsible person(s) for providing the

information. The Plan will build on information in this Scope of Work and the North Santiam Sewer Authority (NSSA) Communications Plan prepared by the Mid-Willamette Valley Council of Governments. It will be updated as needed to adjust to evolving project needs, audiences, messages, communication channels, outreach tools, and direction from the project team and NSSA Board.

Services under the Communication and Engagement Plan shall include the following:

a. Frequent content creation for multi-media and traditional print platforms including but not limited to: news releases, digital releases, event boards, photography, video, talking points, speeches, and Frequently Asked Questions.
b. Multi-media platform management for County and NSSA to include timely uploading of announcements to websites and digital media; videos, articles, and photos of project events; other digital media such as live video streams of construction sites.
c. Training for staff and elected officials in verbal and written communication norms specific to the Project needs.
d. Special public outreach projects and other public relations/communications functions as determined by the County.
e. Services and tasks as outlined in Attachment A of the "North Santiam Sewer Canyon project Communication and Engagement Plan" prepared by the Mid-Willamette Valley Council of Governments.
f. Support the County Board of Commissioners and NSSA Board to enhance communication regarding project related topics.
g. Support as directed by the Council of Governments' NSSA project manager outlined in Attachment B of the "North Santiam Sewer Canyon project Communication and Engagement Plan" prepared by the Mid-Willamette Valley Council of Governments.
h. Staffing of digital events such as webinars, and public body presentations on virtual chat applications and social media platforms.
i. Staffing of in-person events such as town halls, open houses, city council presentation, and kick-off meetings.
j. Assistance with staff and elected officials' efforts to communicate with community members.

Assumptions associated with these services are provided in more detail in the following subsections.

105.2.2 Communications Channels. The Consultant will utilize various formal and informal channels to engage with the community and support the Owner in internal and external communications related to the Project including the following.

a. Status Reports. A variety of status reports will be produced during the project. The status reports will be produced at regular intervals to provide stakeholders with project information on the status and progress of the Project. At a minimum the reports will contain project status on major activities, project schedule, simplified budget and cost tracking, status of action items, if applicable, and a one-month lookahead. The intent of the status reports is to inform stakeholders of the project's progress and keep them actively involved in the project. The information provided will contain enough detail to allow stakeholders to make informed decisions relevant to their role in the Project.
b. External Communication. In addition to the ongoing communications program of the district, the Project will produce information, signage, content for digital and social platforms, webcams on the construction sites, events, and reports to the external

stakeholders. The look and feel of these publications will be designed to match the informational materials produced by the NSSA.

c. News and Print Media. Consultant will assist the Owner in reaching out to media outlets to coordinate scheduled and unscheduled informational releases, public notices, and interviews with the appointed Owner spokesperson; and to assist in preparing written and verbal narratives and graphics in support of same. Consultant is not permitted to communicate directly with the media unless prior approval or direction has been granted from the Owner or designee.

d. Public Inquiries and Public Records Requests. Owner will respond to public records requests made in writing, in accordance with Marion County public records process. Where needed, Consultant will coordinate with and support the Owner by preparing draft narratives in response to these requests.

Owner Responsibilities:

- Provide meeting space for project meetings.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Budget for this item assumes a public relations campaign of up to 36 months.
- Informational materials to include:
  - Document Templates, including the following:
    - MS PowerPoint (PPT) Template: Consultant will design a PPT cover slide, background slide, divider slide, and a standard text-with-imagery slide.
    - Report Template: Consultant will design a project report template in Adobe InDesign. The template will include text, icons, photos, and tables, and be two-to-five pages in length.
    - Flyer Template: Consultant will design an 8.5-inch x 11-inch flyer template in Adobe InDesign. The template will include text, photos, and callout graphics.
    - Event Board Template: The template will be designed as an event board template in Adobe InDesign. It will be approximately 24-inches x 36-inches (or similar). It will include a masthead and possible footer. The board will include the option to insert infographics, spot illustrations, icons, text, graphs, and photos into the template frame.
  - Talking points – address specific project issues, status, and activities; assume monthly preparation of updates.
  - Emails announcements and updates – note progress on specific tasks, upcoming activities within a given community, upcoming NSSA meetings, opportunities to comment on project decisions or recommendations, monthly on average.
  - Meeting Flyers; assume approximately eight (8) flyers.
  - Media Releases: assume quarterly on average twelve (12) media releases.
  - Videos: assume one per year on average three (3) videos.
  - Meeting presentation materials (for approximately eight (8) meetings).
- Virtual attendance at bi-monthly general project meetings to remain up to date on project status.
- Attendance at monthly NSSA meetings which may be virtual or in-person. Support for NSSA meetings to include:
  - Technical advice regarding meeting agendas and communications in preparation for meetings.
  - Attend selected meetings as needed; assume up to six (6) meetings.
  - Provide NSSA Board members with talking points summarizing meeting outcomes.

- Attend up to six (6) open houses or community meetings – two (2) rounds of meetings in Detroit and Idanha and one (1) round of meetings in Mill City and Gates.
- Attend up to six (6) City Council meetings, as requested; assume virtual attendance.
- Prepare presentation materials for the meetings above, in coordination with other consultant team members, County staff, and MWVCOG staff.

- Informal communications consisting of e-mail, conversations, or phone calls will serve to supplement and enhance formal communications. Due to the varied types and ad-hoc nature of informal communications, they are assumed to be incidental to the Communications and Engagement Plan and not specifically outlined by the Plan.
- Additional assumptions regarding work products include the following:
  - Videos – Consultant to produce up to three (3) videos to document specific project milestones; videos will be approximately one (1) to three (3) minutes in length; interviews with video participants will be conducted and recorded via Zoom.
  - Presentation Training – Consultant to conduct up to two (2) rounds of presentation training; training sessions will be conducted online and recorded via Zoom or another online meeting platform; recordings and presentation materials will be available to staff or team members who are unable to attend.
  - Website Updates – Consultant to draft content, approximately monthly/as needed; budget contains an item to undertake a more significant website refresh if needed.
  - Social Media – Consultant to assist in providing draft content; including social posts and artwork for the County to use on their social outlets and share with their partner networks, including NSSA members, County and MVCOG, and other community members.
  - Response to Public Inquiries – Consultant to assist in drafting responses, as needed for communication with media organizations (e.g., Canyon Weekly), as well as local decision-maker communications to constituents; assume an average of 2 to 4 hours per month to draft responses.

Deliverables:

- Communication and Engagement Plan
- Status Reports
- Informational Materials and External Communication (e.g., project information, signage, content for digital and social platforms, webcams on the construction sites, events, and reports to the external stakeholders).

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM

200 – MILL CITY / GATES FACILITIES PLANNING STUDY

Task 200.1 – Project Management

Consultant Responsibilities:

200.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

200.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner,

and review process for deliverables including process for Owner review and approval. Planning criteria will also be reviewed during the Kickoff Meeting. Representatives from the DEQ will be invited to the kickoff meeting.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services, if any.

Assumptions:

- Project management budget assumes a planning schedule of up to 8 months.
- Monthly Board meeting attendance is covered in a separate task order.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Funding administration services and funding acquisition support is not included in this scope of work.

Task 200.2 – Data Acquisition & Facility Tours

Consultant Responsibilities:

200.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

Mill City

- Discharge Monitoring Report (DMR), operational, influent monitoring (15-minute intervals), rainfall data (since Jan 2021), and any other water quality sampling results collected outside of DMRs in spreadsheet format
- Update of financial summary records, including current rates, annual expenses, operation, revenues, replacement budgets, number and type of accounts, etc.
- Recent facility inspection reports, if available
- Provide update of any changes to wastewater flows from major seasonal wastewater dischargers, water users with their own wastewater treatment system, major water users that consume the majority of their water.
- Any recently produced planning documents (transportation, wastewater, water conservation, water/waste/energy audits)
- Update on known treatment plant or collection system issues and planned improvements
- Update from Gates and Mill City for winter-time water consumption data summarized by user types in a spreadsheet format
- Known correspondence from federal and state regulatory agencies regarding violations or concerns related to wastewater treatment and disposal

200.2.2. Data Collection and Review. Collection and processing of furnished data, mapping, and reports. Provide a follow-up Request for Information for supplemental data if required.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required.
- Provide access to facilities and records.
- Provide operations and maintenance staff for questions as needed.

Assumptions:

- Consultant will not enter confined spaces. Structural and electrical engineering reviews are not included in the scope of work but could be completed as an additional service.
- Consultant shall be entitled to rely, without liability, on the accuracy and completeness of information provided by Owner, other agencies and stakeholders, and information from public records, without the need for independent verification.

Deliverables:

- Request(s) for Information

Task 200.3 – Project Planning

Consultant Responsibilities:

200.3.1. Location. Incorporate brief description of project location from master plan. Include figure(s) from master plan to establish the project planning area.

200.3.2. Environmental Resources. Incorporate information from master plan to document natural resources in the project area, including land use, flood plains, wetlands, historic, biological, water quality issues, socio-economic, climate, geography, soils, rivers, and air quality. Use master plan figures to summarize natural resources in the project area.

200.3.3. Growth Trends. Update master plan population statistics and projections. For Mill City, coordinate with Mill City and County planners on location, phasing, and type of new growth. The Portland State University Population Research Center historical population data and 40-year growth forecasts will be used to inform the population growth, but it is assumed that non-traditional methods will be required to best account for the decline and near-term growth due to rebuilding after the 2020 wildfire as well as accounting for the new community sewer system in Gates and new treatment facility in Mill City. Growth for non-residential users will be estimated based on input from City and County planners for the 20-year planning period.

200.3.4. Community Engagement. Describe the Owner's approach to engage the community in the planning process.

200.3.5. Design Flow Rates. Update master plan design flow rates based on most recent DMR and water usage data from Mill City and Gates. Update projections based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.6. Design Loading Rates. Update master plan wastewater loadings and project future loadings based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.7. Regulatory Requirements. Review and update summaries from master plan of current regulatory requirements and planning criteria that may influence operation, maintenance, and capital improvements of the existing Mill City wastewater system and the initial project components in Gates.

200.3.8. Cost Estimating. Establish cost estimating methodology to reflect both local and current conditions.

200.3.9. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.3.10. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and approval on growth projections and planning criteria.

- Provide review and comments of this section.
- Provide input on community engagement.

Assumptions:

- The planning criteria will need to be established for the planning study prior to having any supplemental income and population survey data available to inform the population estimates and projections. The best available data will be used for the purposes of this study.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- City staff or Contract City Planner will provide input on the distribution and phasing of new residential and non-residential growth in Gates and Mill City.
- If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.
- The study area will coincide with the North Santiam Sewer Authority Boundary for Gates and Mill City.
- Community engagement included in this scope of work is limited to the public meeting in Task 209. Additional community engagement activities can be provided as additional services or through other identified task orders.

Deliverables:

- Draft Project Planning Facility Plan Section.

Task 200.4 – Existing Facilities Evaluation

Consultant Responsibilities:

200.4.1. Base Map. Update the existing system base map from the master plan, showing location of key facilities, pipelines, and basin boundaries for Mill City. Use the schematic process layout of the existing treatment plant from the master plan showing major process components.

200.4.2. History. Update master plan's documentation of wastewater treatment plant history and system description to reflect current flow and water quality data, recent discharge monitoring records (DMRs), plant improvements that have been completed recently, current condition of plant equipment and facilities, and current operation practices.

200.4.3. Wastewater System Management Classification, Operators and License. Provide a brief writeup of system required licensing and current operator license information.

200.4.4. Conditions Assessment. Update master plan documentation of existing physical conditions deficiencies. Collection system pipe information will be summarized by pipe material and age. Complete pump tests at each pumping facility to evaluate current pump performance and capacities. Incorporate findings from the I/I study that is currently under way at the time this scope was finalized.

200.4.5. Capacity Evaluation. Update master plan's comparison of existing and future projected flows and loadings to the existing capacity of the Mill City wastewater treatment system. Summarize existing capacity deficiencies.

200.4.6. Review pump run time data and flow meter records to assess existing capacity limitations (if any).

200.4.7. System Resiliency. Assess the collection system resiliency for the Mill City lift stations. This is anticipated to include a comparison of firm pumping capacity (i.e. with largest pump off-line) to the peak hour inflow. It also includes an assessment of whether onsite or portable back-up provisions are available and automated, what kind of emergency bypass pumping provisions are provided for the lift station and/or force main (in the event of a line

break), and what kind of redundancy is provided in terms of back-up level sensors and alarms. This scope does not include an evaluation of seismic risks, a comprehensive vulnerability assessment, or updates to the Owner's Emergency Response Plans. Consultant will summarize the consequence of failure of critical lift station facilities and identify potential capital improvements and operational strategies that could be completed to mitigate these risks.

200.4.8. Wastewater Collection System Evaluation

200.4.8.1. Wastewater Model Development and Calibration. Use existing base mapping, record drawings, dry weather flows, pump curves, and Owner provided data to develop and calibrate a wastewater system model. The winter-time water consumption data will be used to estimate dry weather flows. Allocate infiltration and inflow for utilizing wet weather system design flows, available pump run time, and SCADA data.

200.4.8.2. Existing System Evaluation. Exercise computer model to check the Mill City system and evaluate the existing collection system hydraulic capacity. Evaluate system for remaining capacity.

200.4.9. Wastewater Treatment System Evaluation. Update master plan write-up to summarize existing plant deficiencies using updated plant data to compare actual performance to expected performance.

200.4.10. Operations. Update master plan documentation of existing operations and maintenance issues and concerns reported by Owner staff.

200.4.11. Financial Status of Existing Facilities. Document current rate schedules, annual O&M costs, other capital improvement programs, and table of users by monthly usage categories for the previous fiscal year. Document existing debts and required reserve accounts. Budget and capital improvements will be addressed under a separate task.

200.4.12. Water/Energy/Waste Audits. Provide brief write-up discussing variable frequency drive motors and all other applicable energy items for the system. Investigate and summarize the likelihood of incorporating a hydroelectric power generator on the force main from Gates to Mill City. Summarize overall current energy consumption for Mill City's existing system.

200.4.13. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.4.14. Draft Plan Section. Prepare draft section writeup. Address Owner comments on draft document.

Owner Responsibilities:

- Review and comment on draft documents.
- Participate and provide meeting location for workshop meetings.
- Provide field checks if necessary, including surveying.
- Provide access to facilities and records. Test and replace (if needed) suction and discharge pressure gauges ahead of equipment tests.

Assumptions:

- Modeling of the existing Mill City treatment plant will not be completed for this facilities plan.
- The Mill City GIS mapping will not be survey grade and will be carried over from the master planning effort. The mapping will not include rim/invert data. It will only include approximate location as it was digitized from the existing record drawings.
- No additional field work or surveying will be required.

- Collection system conditions assessment will not include a full review of CCTV records or smoke testing with the exception of incorporating the findings from the Mill City I/I study.
- The Mill City collection system model will be developed with the InfoSWMM modeling platform, based on record drawings. Consultant will rely upon the accuracy of available record drawings. This scope does not include any field survey work to check or update pipe slopes.
- If model does not readily calibrate to existing conditions, and additional field work is recommended to troubleshoot the Owner's wastewater system, these services can be completed as an additional service.
- No drain field analysis will be provided.

Deliverables:

- Draft Existing Facilities Evaluation Facility Plan Section.

Task 200.5 – Need for System Improvements

Consultant Responsibilities:

200.5.1. Health, Sanitation, and Security. Summarize concerns and relevant regulations or correspondence from/to state and federal agencies.

200.5.2. Aging Infrastructure. Incorporate summary findings of conditions assessment of assets and summarize available pipeline age/material information. Summarize the following:

- Unit performance issues, deficiencies and useful life.
- Existing system reliability per DEQ and EPA guidelines.
- Ability to meet current and potential future effluent limits and other regulatory requirements.
- I/I calculations to determine if existing I/I is considered "non-excessive".

200.5.3. Reasonable Growth. Using the design flow and loading information, document the reasonable growth capacity that is necessary to meet needs during the planning period.

200.5.4. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and review of this section of the plan.

Deliverables:

- Draft Project Needs Facility Plan Section.

Task 200.6 – Collection System Alternatives Considered and Selection

Consultant Responsibilities:

200.6.1. Future System Evaluation. Build Gates system model and expand Mill City model to include additional pipe and pump station network requirements associated with servicing new growth areas for the planning period. Add flows from new growth. Exercise the model to identify potential system deficiencies attributed to growth within the planning period.

200.6.2. Evaluate alternative improvements to correct existing, and anticipated future deficiencies, sewer new areas, and meet the target planning criteria. Benefits and drawbacks will be summarized for each alternative. A "no action" alternative will also be considered for each category. This alternative evaluation will be based on the master plan collection system

alternatives while evaluating Mill City's existing system for collection system capacity deficiencies.
Where improvements are not relatively straightforward, evaluate up to three collection alternatives for the existing Mill City collection system that will service existing and future flows. Additional refinement of pipeline alternatives is anticipated to occur in the predesign tasks associated with the new Gates collection system.

200.6.3. Alternative Cost/Benefit Analysis. This will include life cycle cost analysis on preferred alternatives for up to three viable alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 40-year life cycle evaluation. This alternative evaluation for Gates will be based on the master plan collection system alternatives while evaluating any capacity alternatives for Mill City's collection system.

200.6.4. Phasing/Implementation Plan. Develop a phasing plan of improvements based on initial project, 10-year, 20-year, and 40-year anticipated growth. This plan will include an evaluation of interim recommendations or strategies for property owners who need to address septic system deficiencies or replacement prior to day one of the new Gates collection system and Mill City mechanical treatment plant are constructed.

200.6.5. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives using the master plan's figures with updates/modifications per this scope of work.

200.6.6. Environmental Impacts. A summary of the preliminary environmental screening of the collection system alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.6.7. Land Requirements. Discuss property needed for alternatives.

200.6.8. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.6.9. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.6.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.6.11. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide a review of the alternatives considered and input on selection criteria and ultimate selection of preferred alternative.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4 (planning level cost estimates).

Deliverables:

- Draft Collection System Alternatives Facility Plan Section.

Task 200.7 – Treatment and Disposal System Alternatives Considered and Selection

Consultant Responsibilities:

200.7.1. Develop a list of treatment plant improvement alternatives focused on improving effluent water quality, vulnerability, safety and redundancy. The disposal improvement alternative will be rapid infiltration per the master plan recommendations.

200.7.2. Develop up to three pre-screened alternatives to evaluate, for primary treatment, secondary treatment, tertiary treatment, and solids handling treatment processes. Evaluate the pre-screened alternatives.

200.7.3. Facility Tours. Organize a tour of up to two wastewater treatment facilities with the Owner's staff to investigate alternatives with similar processes. These are anticipated to occur on the same day.

200.7.4. Alternative Cost/Benefit Analysis. Assist in comparing benefits, drawbacks, and costs of up to three viable alternatives. This will include life cycle cost analysis on preferred alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 20-year life cycle evaluation.

200.7.5. Phasing Plan. Develop a phasing plan of improvements based on initial project, 10-year, and 20-year anticipated growth.

200.7.6. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives.

200.7.7. Environmental Impacts. A summary of the preliminary environmental screening of the treatment system and disposal alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.7.8. Land Requirements. Discuss property needed for alternatives.

200.7.9. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.7.10. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.7.11. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.7.12. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide input on tasks above.
- Provide a review of the alternatives considered section of the plan.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not look at alternatives to upgrade the existing recirculating gravel-bed filter.
- Evaluation of alternatives does not include piloting, bench testing, or fieldwork.
- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4.

Deliverables:

- Draft Treatment System Alternatives Facility Plan Section.

Task 200.8 – Proposed Projects (Recommended Alternatives)

Consultant Responsibilities:

200.8.1. Model day one and future 20-year process and hydraulic conditions of selected alternative for the new mechanical treatment plant.

200.8.2. Capital Improvement Plan.

a. Summarize recommended improvements.
b. Prepare planning level cost estimates for recommended improvements. For future projects anticipated to be developer driven and developer funded, summarize only upsize costs.
c. Estimate the portion of each capital improvement project cost that is attributed to 20-year growth for System Development Charge (SDC) eligibility.

200.8.3. Preliminary Project Schedule. Summarize costs for initial project, 10-year, and 20-year needs. The 6-year CIP for DEQ purposes will be covered by the "initial project" costs.

200.8.4. Permitting Requirements. Summarize WPCF permitting requirements (WPCF permit application and additional support is covered by a separate task order).

200.8.5. Sustainability Considerations. Summarize how the priority improvement projects will enable the Owner to serve its customers and be able to operate and maintain the system. Discuss how the projects will accommodate green infrastructure and efficiencies.

200.8.6. Future Reuse Consideration. Reuse system impacts will be considered and coordinated, and their potential summarized for selected alternative.

200.8.7. Organization and Staffing Requirements. Summarize recommended staffing requirements as required for regulatory compliance or as reported by the Owner. Summarize up to three options for organizational setup for certified operators for both collections and treatment (i.e. contract operator vs sewer authority staff).

200.8.8. Financing Options. Summarize potential financing options available for initial project. This will be a summary of efforts being undertaken by the Owner, Marion County, and the MWVCOG for funding the project.

200.8.9. Annual Budget Considerations.

a. Summarize Operating Revenues and Expenses. Summarize estimated annual operating expenses and identify recommended budgets dedicated for the initial project.
b. Anticipated User Charges and Other Income. Summarize the business case scenario documented previously by FCS Group and provide a status update on current efforts to implement recommendations.
c. Annual Replacement Budgets. Develop recommended annual replacement budgets for the initial project based on typical replacement values and asset life. This will include a list of short-lived assets and the recommended annual replacement budget.
d. Annual Operations and Maintenance Costs. Estimate the operations and maintenance cost implications for the initial project.

200.8.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review an overall summary of the plan, selected improvements, and budget considerations.

200.8.11. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input on the proposed projects.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.
- Provide review and comments on the plan.

Assumptions:

- Scope excludes a user rate analysis, including evaluation of individual rate structures, cost-of-service evaluations, and service availability fee studies. These services can be provided as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

Deliverables:

- Capital Improvement Plan (tabular format, organized by initial project, 10-year, and 20-year needs).
- Estimate of SDC eligibility for each capital improvement past the initial project.
- Draft Proposed Project Facility Plan Section.

Task 200.9 – Facility Plan Documentation and Public Meeting

Consultant Responsibilities:

200.9.1. Prepare Facility Plan. Prepare and combine draft documents for a complete facility plan generally following the outline established in the July 2018 guidance document "Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed by Business Oregon, Oregon Department of Environmental Quality, Rural Community Assistance Corporation, and the United States Department of Agriculture". Add executive summary and assemble appendix materials. Appendix materials will include output flow capacities, existing peak hour flows, and future peak hour flows summarized in tabular and graphic format. Draft documents to be updated to address Owner comments. Submit final draft plan for Owner review.

200.9.2. Public Meeting. Prepare materials for and present summary findings in a townhall meeting.

200.9.3. Address Owner Comments. Address final Owner and public comments and submit for agency review.

200.9.4. Address Agency Comments. Address agency comments and finalize document.

Owner Responsibilities:

- Review and comment on final draft plan in a timely manner.
- Pay agency review fees, if applicable.
- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.

Deliverables:

- Public Meeting Presentation Materials.

- Final Facilities Plan, three (3) hard copies (3 ring binders) of the plan and one electronic copy in PDF format.

Task 200.10 – Management Reserve (Contingency Task)
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time, Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of services. For these instances, a time and material budget is established in order for Consultant to complete such additional services. Prior to the use of this contingency budget, Owner's representative will provide written (email) authorization to use the budget for specific tasks.

ADDITIONAL SERVICES (not included in scope of work)

- Bond support
- Public outreach or stakeholder outreach support
- User rate and connection fee study
- Additional field work
- Energy efficiency evaluations
- Concept level design services
- Model training
- Environmental information documents, studies, field investigations, and permitting. Environmental permitting will be addressed by a separate task order.
- Amendments to this facility planning study because of other task orders.

201 - MILL CITY / GATES FACILITIES SITE EVALUATION

Task 201.1 – Project Management

Consultant Responsibilities:

201.1.1 Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

Assumptions:

- Assumes a three (3)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 201.2 – Force Main Alignment Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

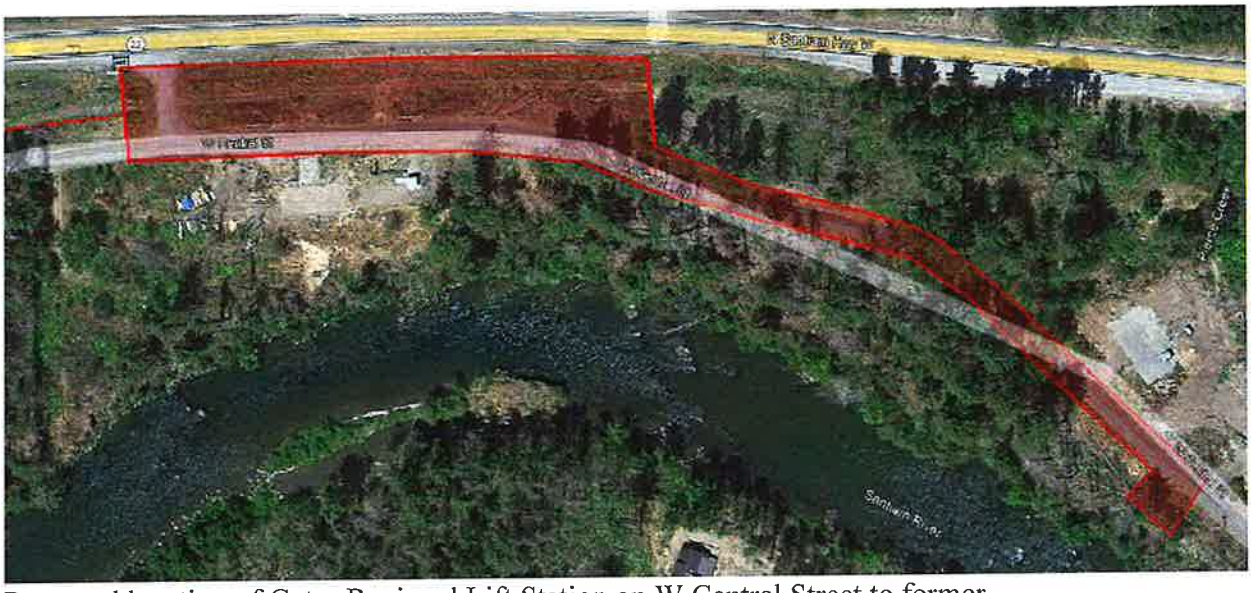
201.2.1 Consultant shall perform a topographic recovery survey along the proposed Mill City/Gates Force Main alignment. Topographic survey areas are shown in red on the three figures below.



Former railroad right-of-way between Mill City and Gates



Existing First Ave Lift Station and NE Wall Street between N 1st Ave and Santiam Pointe Loop NE in Mill City



Proposed location of Gates Regional Lift Station on W Central Street to former railroad right-of-way south of N Santiam Highway W

Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter to the nearest 0.01 foot.
d. Additional spot elevations to identify grade breaks and other topographic features.
e. Locate surface features over surface area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
f. Locate ground and above ground utilities, including utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate trees 8-inch in diameter and greater measured at breast height, noting coniferous or deciduous.
h. Tag located trees with a reference number for field identification.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.
k. Survey shall be based on an official benchmark acceptable to the City.
l. Establish benchmarks for future design reference.

201.2.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Assumptions:

- This task does not include a retracement survey recorded with Marion County Surveyor's Office.
- This task does not include private utility locating services,
- This task does not include preparation of easement legal descriptions and exhibits.

Deliverables:

- Basemap in AutoCAD 3D format.

Task 201.3 – Force Main Alignment Geotechnical Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.3.1 Geotechnical Investigation. The project geotechnical scope includes subsurface explorations for the proposed Force Main Alignment between Gates and Mill City, in Oregon. Specific geotechnical design elements include review of access permits/plans (if available), and geotechnical recommendations for a new 2.3-mile-long, 4-inch diameter, C900 PVC or HDPE sewer line, and a pump station on the western side of Gates. Subsurface explorations will be completed using test pits and drilled borings. Subsurface explorations will be completed to characterize subsurface soils along the proposed alignment for the proposed improvements.

The scope of work will include the following:

201.3.1.1 Review proposed project plans provided by the project team for geotechnical design and construction elements.
201.3.1.2 Provide an exploration work plan detailing the approximate location and proposed depth of explorations.
201.3.1.3 Complete an application for Oregon Department of Transportation (ODOT) miscellaneous use permit for fieldwork, if required.
201.3.1.4 Complete a utility locate request for the site through the public One Call system.
201.3.1.5 Complete a private utility locate at proposed exploration locations.

201.3.1.6 Explore subsurface soil and groundwater conditions at the site by conducting subsurface explorations approximately every 200 to 300 feet along the proposed alignment (approximately 40 to 50 test pits). Test pits will be performed by an excavation subcontractor provided by the Owner. Test pits will be conducted to a depth of up to seven (7) feet below ground surface (bgs) depending on material consistency encountered which may limit the depth to which test pits can be advanced. Test pits will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.3.1.7 Explore subsurface soil and groundwater conditions along the alignment by conducting subsurface explorations approximately every 200 to 300 feet along the proposed alignment along NE Wall Street (approximately 2 to 3 borings). The borings will be performed by a driller subcontracted to the Consultant. Borings will be conducted to a depth of up to fifteen (15) feet bgs with the intention of identifying depth to presence of native rock suspected to be present in the subsurface. Borings will be advanced to the depths noted or to a depth of practical refusal in dense or collapsing materials if encountered, whichever is shallower.

201.3.1.8 Provide a general description of existing site conditions.

201.3.1.9 Maintain a detailed log of subsurface explorations. Collect samples of the subsurface materials encountered.

201.3.1.10 Conduct laboratory tests using soil samples obtained from the explorations in general conformance with American Society for Testing and Materials (ASTM) including moisture content tests, plasticity index (Atterberg Limits) tests, or fines content analyses as appropriate, depending on the types of materials encountered.

201.3.1.11 Provide recommendations for trench backfill materials, compaction, and general construction specifications.

201.3.1.12 Complete a final geotechnical letter report specific to force main alignment and pump house.

Assumptions:

- Fieldwork can be completed during normal working hours (Monday to Friday, 8:00 AM to 5:00 PM) and will not require fieldwork to be completed during nights or weekends.
- The test pits will be excavated by others.
- Cleared access, brush clearing, and removal of obstructions to exploration locations along the alignment will be completed prior to test pit explorations by others.
- Traffic control will not be required for this project.
- Contaminated soil will not be encountered during explorations.
- Permit fees will be waived.
- Site access and right-of-entry will be obtained prior to arrival on site to complete fieldwork.
- Brush clearing along the alignment will be completed prior to the test pit explorations.
- Geotechnical construction observation or testing services are not included.
- Project team will coordinate and establish exploration locations that will minimize damage to the existing development.

- Consultant will review ODOT records for existing landslide evaluations along OR22. Consultant will determine if the landslide is shallow or deep. If shallow (less than 10 feet bgs), test pits will be used to collect data to assess the landslide. If deep (greater than 10 feet bgs), a drill rig will be required to collect necessary data to assess the landslide and will be included in a future amendment. Full landslide characterization and recommendations by a licensed geotechnical engineer will be included in a future amendment.

Deliverables:

- Final Geotechnical Letter Report Recommendation for trench backfill materials, compaction, and general construction specifications for the Force Main Alignment and Pump House.

Task 201.4 – Force Main Alignment Environmental Due Diligence
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Environmental due diligence shall be completed for the project area between Mill City and Gates on approximately 15 acres and 2.3 linear miles in Linn and Marion Counties, Oregon. Environmental due diligence will include project management, wetlands and waters delineation, cultural resources investigation, and Phase I environmental site assessments (ESAs). These tasks are intended to inform the project's final design and minimize impacts to existing resources.

Consultant Responsibilities:

201.4.1 Project Management. Consultant will coordinate with project team to receive project materials, prepare invoicing, and transmit correspondence. Consultant will maintain project files to include necessary supporting materials, as required. The project manager will monitor task performance, schedule, and budget; approve project expenses; and ensure that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Beyond general coordination and communication, Consultant will provide a monthly email to inform the project team about the project's progress. The monthly email will outline which tasks were worked on during the month and the progress of those tasks, as well as what tasks are anticipated to be worked on in the following month. As part of these monthly emails, Consultant shall provide a budget summary and consistent communication to keep projects on track and within their schedules and budgets. Additionally, Consultant's project manager will schedule bi-monthly check-in calls and attend regular check-in meetings with project team to provide status updates and discuss action items. Consultant's senior subject matter experts will provide quality reviews and input on overall project approach.

Assumptions:

- Bi-monthly check-in calls will be approximately 30 minutes long.
- There will be eight (8) bi-monthly check-in calls between Consultant and project team.

Deliverables:

- Meeting minutes.

201.4.2 Wetlands and Waters Delineation

201.4.2.1 Wetlands and Ordinary High Water Line Delineation. Consultant will survey the project area to evaluate whether wetlands and waters are present. If wetlands or waters are found, Consultant will delineate wetland boundaries in accordance with the methodology of the 1987 U.S. *Army Corps of Engineers Wetlands Delineation Manual* and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Regions (Version 2.0)*, used by the U.S. Army Corps of Engineers and the Oregon Department of State Lands (DSL). Hydrology, soil, and vegetation will be documented at select sample plot locations and recorded on standardized wetland determination data forms.

Streams and other waters would be delineated based on the U.S. Army Corps of Engineers' 2005 *Regulatory Guidance Letter 05-05: Ordinary High Water Mark Identification.* As defined in DSL's Oregon Administrative Rule 141-085-0515, field indicators for the ordinary high water line (OHWL) can include the following: a clear, natural line impressed on the shore or bank; a change in vegetation from riparian (e.g., willows) to upland (e.g., oak or fir); a textural change of depositional sediment or changes in the character of the soil (e.g., from sand /cobble/gravel to upland soils); an elevation below which no fine debris (e.g., needles, leaves, cones, and seeds) occurs; and the presence of litter and debris, water-stained leaves, and water lines on tree trunks.

Wetlands and OHWL boundaries and any sample plot locations will be surveyed using Collector for ArcGIS paired with a tablet and a Juniper Geode GNSS receiver capable of submeter accuracy. These data would be imported into a GIS program to produce a site map showing the delineated wetland and OHWL boundaries.

201.4.2.2 Wetlands and Ordinary High Water Line Delineation Report. Consultant will prepare a summary report of the wetland and OHWL delineations to meet DSL requirements for wetlands and other waters delineation reports. The report will be submitted to Project Team for review prior to submitting to any regulatory agencies. This task includes the preparation of the required DSL wetland report cover form, to be signed by a project team representative prior to submitting the report to DLS for review and concurrence.

Assumptions:

- This task includes five (5) hours of agency coordination time (four (4) hours for project team and one (1) hour for GIS specialist) but does not include a site visit with the regulatory agencies.
- The 2023 DSL wetland report review fee is $540 and will be paid for directly by the County.
- Access to the area will be arranged by project team.
- Natural resources on the site will be accessible by foot. If vegetation such as Himalayan blackberry prevents access to natural resources on the site, clearing must be completed before fieldwork can be done, or an additional site visit will be needed at additional cost.
- This cost estimate does not include a DSL site visit.

- This cost estimate is based on three (3) days (24 hours) of wetland delineation and OHWL fieldwork for two scientists.
- Project team will provide one round of comments on the draft delineation report.
- Any task not expressly described herein is not included in the proposed cost.
- All deliverables will be provided electronically; no hard copies will be provided.
- The delineations will be based on the project area shown by the alignment in the figure below. Any change to the project area after survey will incur additional costs.



- Ideal wetland delineation times are typically from late winter to late spring to capture hydrology and plant phenology. If wetland hydrology and plant indicators are not apparent, another field visit may be needed during optimal conditions to confirm wetland presence.
- Consultant will not flag, but if flagging is needed an additional cost estimate can be provided.
- This scope of work does not include a joint permit application for impacts to wetlands or other waters.

Deliverables:

- Wetlands and OHWL delineation report.

201.4.3 Cultural Resources Investigation

204.4.3.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs to inquire about local historical knowledge of the project area. Consultant will also ask if they have any cultural concerns about the location of the project. All project-related Tribal coordination will be described in the final report.

201.4.3.2 Background Research and Permitting. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant staff will review other available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, historical photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because portions of the project are located on land managed by state and local entities, an archaeological excavation permit must be obtained from SHPO before archaeological testing takes place (per Oregon Revised Statute (ORS) 390.235 and its implementing guidelines). The Consultant project manager will apply for this

excavation permit (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 to 40 days for submission and review.

Consultant will submit a detailed permit application outlining possible scenarios should significant cultural resources be found, to avoid applying for multiple excavation permits through SHPO.

201.4.3.3 Field Survey. Consultant will conduct an archaeological survey in areas where ground-disturbing activities will occur to identify potential archaeological resources around the proposed area of disturbance. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 20 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Preliminary research shows no previous cultural resources investigations have overlapped the project according to OARRA. Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources, where project-related ground disturbance will occur, to identify any archaeological resources that may be present within the project site. Consultant proposes to excavate up to 120 shovel probes. Probes will be a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

Consultant field staff will collect all cultural material from shovel probes that is clearly not modern per the archaeological permit conditions. The cost of this scope of work does not include curation or laboratory artifact analysis costs. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location GPS data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S. Geological Survey quadrangle map and then georeferenced during post-field processing. All recording procedures will follow SHPO guidelines. Consultant's cost estimate assumes no archaeological resources will be encountered during the survey. If archaeological materials are collected and require curation or analyses, a change order will be requested.

201.4.3.4 Reporting. Consultant will prepare a cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey.

Consultant will provide an electronic version of the draft report to the Project Team for review. After addressing comments from the Project Team, Consultant will provide the draft report to the SHPO and interested Tribal entities for review. Consultant assumes that SHPO and the Tribes will not require more than 30 days for review. Consultant will coordinate with both SHPO and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to Project Team, provided that the private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- All meetings and coordination with project team will be conducted via conference calls and email.
- The records search area will not extend farther than one (1) mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- The project location and size will remain as identified in the request for scope and cost (15 acres and 2.3 linear miles).
- Based on a preliminary review of SHPO records, Consultant anticipates no cultural resources will be identified and require documentation in the project area.
- For the purposes of total site count, every site larger than one (1) acre will be considered as an additional site based on every additional acre; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- Consultant's ability to conduct fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, COVID-19-related restrictions, force majeure, or any other factor(s) outside of Consultant's control.
- Consultant will prepare a cultural resources survey report, and the report will require no more than one round of review by project team. Comments from the project team on the report will not require more than four (4) hours of Consultant labor to address. No comments will be received from SHPO review, and minimal comments (up to four (4) hours of work needed to address comments) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data from cultural resources investigation results.

201.4.4 Phase I Environmental Site Assessments. Consultant will prepare a Phase I Environmental Site Assessment (ESA) report for each of the following areas: 1) the Force Main and Gates Regional LS, 2) the Dogwood LS and Riverview LS, and 3) the WPCF/RIB. The Phase I ESAs will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The Phase I ESAs will be directed by a qualified Environmental Professional, as required by the ASTM standard.

A Phase I ESA conducted in accordance with ASTM Standard E1527-21 constitutes all appropriate inquiry into the previous ownership and uses of the property, consistent with

good commercial or customary practice, and will allow the Owner to satisfy one of the requirements for landowner liability protections under the Comprehensive environmental Response, Compensation, and Liability Act (42 United States Code 9601). Each Phase I ESA will consist of the subtasks described below.

201.4.4.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents in order to identify past operations or activities on the subject property or nearby properties that may have caused the release of hazardous substances or petroleum products into the environment. As part of the review process, site location, hydrogeological characteristics, geographic setting, and physiography will also be summarized.

Available state and federal regulatory databases will be reviewed to assess whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM standard.

201.4.4.2 Interviews. Consultant will attempt to interview property owners based on contact data provided by the client. Additionally, reasonable attempts will be made to interview at least one staff member of state or local government agencies regarding information that indicates recognized environmental conditions (RECs) in connection with the subject property. For the force main corridor, Consultant assumes that the city and/or county will be the interviewee for portions within roadway rights-of-way.

201.4.4.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. As is customary for large sites, Consultant will study aerial photographs and topographic maps in conjunction with other data to identify areas of environmental interest on the subject property that would require in-person observation to identify and/or document. Field staff will visit each of the areas of environmental interest to observe and document them with digital photographs and notes. Field staff will also view the subject property in general for additional observations and take photographs and notes. Access to private, locked, or restricted areas would be arranged by a client representative. This scope of work does not include activities such as collecting or analyzing soil, air, water, or other environmental samples.

201.4.4.4 Owner-Provided Information. Owner-provided information is an essential component of the Phase I ESA and includes items such as copies of previous Phase I ESAs or other relevant environmental documents, a completed ASTM Phase I ESA User Questionnaire, a completed Consultant Initial Data Request, and access to the subject property. Consultant will perform a search of recorded land-title records and judicial records for environmental liens and activity and use limitations.

201.4.4.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report for each of the three areas. Sections within each report will consist of 1) a description of the property, 2) summaries of the site history and interviews, 3) a regulatory database review, 4) a description of the site reconnaissance, 5) report

findings and conclusions, and 6) figures and appendices. Each report will include Consultant's professional opinion concerning the environmental disposition of the site regarding the presence of RECs. Report limitations and all literature cited will also be included.

According to the ASTM standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use for Phase I ESA is not within 180 days, an update may be necessary. Non-scope issues identified in the ASTM standard include radon, lead, and asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA reports.

Assumptions:

- The ASTM User Questionnaires and Consultant Initial Data Requests will be returned to Consultant promptly upon commencement of the project.
- This scope of work includes one round of revisions to each report's text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for other resources and will not be an independent mobilization.
- Applicable Marion and Linn County fees ($1,450 per application) will be paid by the County.

Deliverables:

- Draft Phase I ESA report.
- Final Phase I ESA report.

Task 201.5 – WPCF/RIB Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

201.5.1 Topographic Survey. Consultant shall perform a topographic surface survey at the proposed WPCF/RIBs site. Scope of services shall include:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Full topographic surface data and underground utilities to the edge of the project boundaries as shown in red in the figure below (subject area):



Proposed location of WPCF/RIBs in Mill City.

c. Obtain spot elevations at a maximum 50 foot on center spacing, including: along roadway centerlines, top of curb, flowline of curb, lip of gutter to the nearest 0.01 foot.
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
f. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate trees 8-inches diameter at breast height (DBH) and greater, noting coniferous or deciduous.
h. Map existing easements which may affect subject area; Owner to provide all necessary documentation or title information to complete this task.
i. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an xml file.
j. Document information on utilities to the edge of the project boundaries of the subject area, including utility poles, power lines, telecommunications, and identification information.
k. The following information will be documented for storm drain, culverts, and sanitary sewers to the edge of the project boundaries of the subject area:

    i. Rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
    ii. Pipe diameters, pipe material, and direction of pipe.
    iii. Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure.

If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.

iv. Storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.

v. Show utility lines as continuous, extending to upstream or downstream structure.

Assumptions:

- Survey shall be based in NAVD88 vertical datum derived from the Oregon Real-Time GNSS Network.
- Retracement survey recorded with Marion County Surveyor's Office is not included in this scope.
- Private utility locating services are not included in this scope.
- Easement legal descriptions and exhibits are not included in this scope.

Task 201.6 – WPCF/RIB Geotechnical Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Soil and groundwater conditions will be evaluated as a basis for developing geotechnical engineering design criteria for the preferred water pollution control facility (WPCF) and rapid infiltration basins (RIB) site located near the east terminus of SE Fairview Street approximately 900 feet east of the intersection with Remine Road in Mill City, Oregon. Proposed improvements include asphalt concrete and gravel surfaced access drives, three RIB, a lightly loaded administrative support building, an effluent pump station, one sequencing batch reactor (SBR) basin, and a lightly loaded equipment building that will be constructed on approximately 6.25 acres of currently undeveloped land. Future developments at the project site will include an additional SBR basin, two additional RIB, and an expansion to the equipment infrastructure.

Consultant Responsibilities:

201.6.1 Review information regarding subsurface soil and groundwater in the vicinity of the site, including reports in our files, selected geologic maps, and other geotechnical engineering-related information.

201.6.2 Coordinate and manage the field investigation, including public utility notification and scheduling of subcontractors and Consultant's field staff. Public locates will be called in by the Consultant as required by law. Additionally, Consultant will coordinate for a private locate company to access the site.

201.6.3 Complete up to four field infiltration tests at locations to be determined by the project team and at depths of the proposed RIB (6 feet below ground surface (bgs) or less). Infiltration testing will be conducted in general accordance with local requirements using the open pit or encased falling head procedures, similar to requirements for City of Salem and Marion County.

201.6.4 Explore subsurface soil and groundwater conditions at the project site by conducting eight (8) to twelve (12) test pits and four (4) to six (6) drilling borings in the area of the proposed paved areas and building footprints. Test pit explorations will be extended to depths of up to 10- to 12-feet bgs in the locations of the proposed buildings and to 6.5-feet bgs in the proposed paved areas. Drilled borings will be conducted to 45- to 50-feet bgs within the footprint of the proposed buildings for the SBR basins. Exploration(s) will be advanced to

the depths noted or practical refusal in dense gravels or competent rock, if encountered., whichever is shallower. Borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

201.6.5 Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM International (ASTM) Standard Practices Test Method D 2488. Qualified staff from our office will observe and document field activities.

201.6.6 Complete Dynamic Cone Penetrometer (DCP)r tests at three (3) to four (4) locations to determine subgrade modulus for pavement design.

201.6.7 Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests, one 1-dimensional consolidation test, and percent fines test.

201.6.8 Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology, and subsurface conditions;
b. An opinion as to the adequacy of the proposed development from a geotechnical engineering standpoint;
c. Summary of infiltration testing and a discussion relating to design infiltration rates based on subsurface conditions observed in our explorations;
d. Recommendations for site preparation measures, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction;
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing;
f. Recommendations for earthwork construction, including use of on-site and imported structural fill and fill placement and compaction requirements;
g. Recommendations for foundations to support the proposed structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance, and recommended minimum setback from existing retaining walls or recommendations for foundation alternatives, as necessary. It is further assumed that shallow foundations can be used to adequately support the structures.
h. Recommendations for supporting on-grade slabs, including base rock, capillary break, and modulus of subgrade reactions.
i. Assessment of existing slope conditions and discussion of slope stability.
j. Seismic design parameters, including soil site class evaluation in accordance with the 2021 international building code (IBC) and the current version of the Oregon State Structural Code including a site-specific seismic hazard evaluation consistent with the requirements of the 2022 OSSC.
k. Recommendations for constructing asphalt concrete and gravel surfaced pavements for proposed on-site parking and drives, including subgrade, drainage, base rock, and pavement sections. Recommendations will be based on estimated traffic loads or loads provided by the project team, and on subsurface data obtained as part of this scope.
l. Recommendations for shallow foundations and site preparation measures to mitigate potentially excessive settlement of shallow foundations. It is anticipated that excessive post construction settlements could potentially occur under the assumed design loads.

Therefore, preliminary recommendations to mitigate settlement may include discussions relating to ground improvement including preliminary recommendations for crushed aggregate piers.

m. Geotechnical work will be directly supervised by a geotechnical engineer licensed in the state of Oregon who will apply their professional seal to the document.

Assumptions:

- The following loads for the slightly loaded administrative and machinery buildings have been assumed. Revised project loads will be provided by the project team prior to completing the geotechnical report for the site if they vary from these assumptions:
  - Up to 60 kips per column
  - 4 kips per lineal foot (klf) wall loads or less
  - Floor loads will be 125 pounds per square foot (psf) or less
  - SBR wall loads of up to 4-kips per lineal foot and SBR areal loads of up to 1500-psf are assumed.
- Shallow spread foundations will be suitable for support of the proposed structures and have not budgeted for providing deep foundation recommendations if they become necessary.
- Right-of-entry or access will be provided to the exploration locations.
- Surface disturbance that will result from exploration activities is acceptable to the site owner and is understood by the project team. Consultant will be available to discuss further with the project team, site owner, or prospective owner, if needed.
- A truck or track-mounted drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered are not included in this scope of work or cost.
- Excess drill cuttings will be spread discreetly across the site.
- Contaminated soils will not be encountered during the exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), drilling operations will stop and the project team will be notified for directions on how to proceed.
- A site response analysis and/or a ground motion hazard analysis is not required and is excluded from this scope and budget. The site-specific seismic hazard analysis included in the scope above does not include the budget for a ground motion hazard analysis or a site response analysis.

Deliverables:

- Final Geotechnical Investigation Report

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS

400 – COMMERCIAL SEPTIC SYSTEM PLANNING

Task 400.1 – Project Management

Consultant Responsibilities:

400.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

400.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

Assumptions:

- Assumes a twelve (12)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 400.2 – Data Acquisition & Property Tour

Consultant Responsibilities:

400.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

a. Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b. List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c. Previous collected test pit data for all the properties.
d. Previous studies involving the soil in the city.
e. Provide existing drain field and septic tank locations for each property.
f. Identify available property for consideration for septic tank or drain field placement.
g. Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

400.2.2. Conduct site tour of each property to evaluate potential drain field locations.

400.2.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

Assumptions:

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

Deliverables:

- Request(s) for Information
- Summary tables and figures for existing septic tanks and drain fields status

Task 400.3 – Stakeholder Involvement / Engagement

Consultant Responsibilities:

400.3.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.
400.3.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.
400.3.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.
400.3.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities:

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

Deliverables:

- Public and stakeholder meeting presentation materials.

Task 400.4 – Commercial Septic System Concept

Consultant Responsibilities:

400.4.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.
400.4.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …).

Owner Responsibilities:

- Provide input and approval of septic tank and drain field concepts.

- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Test pits will not be excavated, and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Task 400.5 – Commercial Septic System Design
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.5.1 Develop schedule for overall project delivery and construction.
400.5.2 Oversee excavation of test pits and soil sampling to determine soil characteristics, infiltration rates, and other necessary design criteria for up to twelve (12) commercial properties.
400.5.3 Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, etc.) for flow and wastewater strength for up to twelve (12) commercial properties and their intended uses.
400.5.4 Prepare Septic System Designs for up to twelve (12) commercial properties. Complete designs for each commercial property shall include pre-treatment, septic tanks, drain field, replacement area, and all other appurtenances, as required.
400.5.5 Prepare design drawings (11" x 17", PDF).
400.5.6 Regulatory and Permitting Requirements. Review and summarize current, pending, and future regulatory requirements and permitting criteria that may influence operation and maintenance, and adaptation of the system to the long-term gravity collection system. Prepare permit applications and provide inspection services for systems permitted by DEQ as appropriate.
400.5.7 Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner in an operation and maintenance (O&M) Manual.
400.5.8 Attend up to twelve (12) bi-weekly one (1)-hour long meetings and provide updates to project team.

Owner Responsibilities:

- Provide input for septic tank and drain field concepts.
- Provide staff input and requirements for septic grant approval.

- Review and comment on draft documents in a timely manner.

Assumptions:

- Commercial properties will be permitted through either Marion County or Oregon Department of Environmental Quality (DEQ).
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- Conceptual septic system design and drawings.
- Final septic system design and drawings.
- Permit applications.
- O&M Manual.

Task 400.6 – ODOT ROW Commercial Property Topographic Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.6.1 Consultant shall perform a topographic recovery survey for up to twelve (12) commercial properties located along the western side of North Santiam Highway between the intersection of Front Street (southern limit) and Detroit Avenue (northern limit) for the purpose of preparing easement agreements including legal descriptions and exhibits for use of the Right-of-Way. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to complete a boundary retracement and side boundary line resolution for up to twelve (12) properties within the project limits described above and as defined in the attached PDF.
b. Topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter, to the nearest 0.01 foot.
d. Additional spot elevations to identify grade breaks and other topographic features.

e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way.
f. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
g. Locate ground and above ground utilities, including utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
h. Locate trees 8-inch diameter and greater measured at breast height, noting coniferous or deciduous.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

400.6.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twelve (12) easement areas.

Task 400.7 – Detroit Environmental Due Diligence

Consultant shall complete environmental due diligence support as described below for up to twelve (12) commercial properties in Detroit, Oregon.

Subtask 400.7.1 – Project Management
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.7.1.1 Consultant will coordinate with Owner and others to receive project materials, prepare invoicing, and transmit correspondence. As part of Consultant's project management efforts, monthly check-in calls will be scheduled with Consultant to discuss interim survey results and other project-related issues as they arise. Consultant will maintain project files to include supporting materials. Consultant will

monitor task performance, schedule, and budget; approve project expenses; and check that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Assumptions:

There will be four (4) monthly check-in calls involving the Consultant team.

- Monthly check-in calls will be approximately one (1)-hour long.

Subtask 400.7.2 – Cultural Clearance Certification
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant will coordinate with the cultural resources department at Oregon Department of Transportation (ODOT) to seek Cultural Clearance Certification for the project.

Consultant Responsibilities:

400.7.2.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs Indian Reservation to inquire about local historical knowledge of the project area. Consultant will also ask if they have any cultural concerns about the location of the project. Project-related Tribal coordination will be described in the final report.

400.7.2.2 Background Research. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) online records database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant staff will also review other available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because the project is located on land managed by ODOT, an archaeological excavation permit must be obtained from the SHPO before archaeological testing takes place (per ORS 390.235 and its implementing guidelines). The Consultant will apply for this state-issued excavation permit from the SHPO as required by state statutes (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 days for submission and review.

400.7.2.3 Field Survey. Consultant will conduct an archaeological survey in areas where ground-disturbing activities will occur to identify potential archaeological resources in and around the proposed area of disturbance. The survey will include

a pedestrian walkover and subsurface shovel probes. The pedestrian survey will involve archaeologists walking along transects spaced no more than 20 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Preliminary research shows there are no cultural resources investigations overlapping the project area according to OARRA. Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources where project-related ground disturbance will occur. Consultant proposes to excavate up to 24 shovel probes. Probes will measure a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

Should archaeological materials be discovered, they will not be collected; rather, the artifacts will be identified as to type, material, function, and cultural and temporal association. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location global positioning system (GPS) data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S> Geological Survey quadrangle map and them georeferenced during post-field processing. All recording procedures will follow SHPO guidelines. The Consultant's cost estimate assumes that no more than one archaeological resource will be encountered during the archaeological survey.

400.7.2.4 Reporting. Consultant will prepare one cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey. The Consultant will provide an electronic version of the draft report to ODOT, SHPO, and interested Tribal entities for review. The Consultant will coordinate with ODOT, SHPO, and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to the Consultant, provided that the private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

- All meetings and coordination with Consultant will be conducted via conference calls and email.
- The records search area will not extend farther than one mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- Consultant will obtain up to one archaeological permit.
- The project location and size will remain as identified in the request for scope and cost

(less than three acres total).

- Based on a preliminary review of SHPO records, Consultant anticipates that up to one cultural resource site will be identified and require documentation in the project area. If a larger number of sites are identified, additional costs may be incurred, and Consultant will discuss with Consultant on how to proceed.
- No more than four hours of labor for each field staff member will be required to record the cultural resource site. The identification of large and complex cultural resource sites (e.g., homesteads with multiple structures or precontact village sites with more than 500 artifacts) are not included in this scope.
- For the purposes of total site count, every site larger than one acre will be considered as an additional site based on every additional acre; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- **Consultant's ability to conduct fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, COVID-19-related restrictions, force majeure, or any other factor(s) outside of Consultant's control.** Consultant will prepare a cultural resources survey report, and the report will require no more than one round of review by Consultant. Comments from Consultant on each of the survey reports will not require more than four hours of Consultant labor to address. No comments will be received from SHPO review, and minimal comments (up to four hours of work needed to address comments) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data from cultural resources investigations.

Subtask 400.7.3 – Phase I Environmental Site Assessment
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

Consultant will prepare a Phase I Environmental Site Assessment (ESA) report for the project area. The Phase I ESA will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The Phase I ESA will be directed by a qualified Environmental Professional, as required by the ASTM Standard.
A Phase I ESA conducted in accordance with ASTM Standard E1527-21 constitutes appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial or customary practice and will allow the Owner to satisfy one of the requirements for landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (42 United States Code 9601). The Phase I ESA will consist of the subtasks described below:

400.7.3.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents in order to identify past operations or activities on the subject property or nearby properties that may have caused the release of hazardous substances or petroleum products into the environment. As part of the review process, site location, hydrogeological characteristics, geographic setting, and physiography also will be summarized. Available state and federal regulatory databases will be reviewed to determine whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM Standard. Note: Based on the Consultant's initial review, there are eight leaking underground storage tank records and a brownfield site mapped within 0.25 miles of the project site.

400.7.3.2 Interviews. Consultant will attempt to interview property owners or their representative(s) based on contact data provided by Consultant. Additionally, reasonable attempts will be made to interview at least one staff member of state or local government agencies regarding information that indicates recognized environmental conditions (RECs) in connection with the subject property.

400.7.3.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. Access to private, locked, or restricted areas would be arranged by Consultant. This scope of work does not include activities such as collecting or analyzing soil, air, water, or other environmental samples.

400.7.3.4 Owner-Provided Information. Owner-provided information is an essential component of the Phase I ESA and includes items such as copies of previous Phase I ESAs or other relevant environmental documents, a completed ASTM Phase I ESA User Questionnaire, a completed Initial Data Request, and access to the subject property. The Owner is also responsible for providing Consultant with the results of a search of recorded land-title records and judicial records for environmental liens and activity and use limitations.

400.7.3.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report. Sections within the report will include 1) a description of the property, 2) summaries of the site history and interviews, 3) a regulatory database review, 4) a description of the site reconnaissance, 5) findings and conclusions, and 6) figures and appendices. Each report will include Consultant's professional opinion concerning the environmental disposition of the site regarding the presence of RECs. Report limitations and all literature cited will also be included. According to the ASTM Standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use for Phase I ESAs is not within 180 days, an update may be necessary. Non-scope issues identified in the ASTM Standard include radon, lead, asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA report.

Assumptions:

- The ASTM User Questionnaire and Consultant's Initial Data Request will be returned to Consultant promptly upon commencement of the project.

- This scope of work includes one round of revisions to the report text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Phase I ESA reliance letters will be provided for a flat fee of $500.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for cultural and will not be an independent mobilization.

Deliverables:

- Draft and final Phase I ESA report.

Task 400.8 – Detroit Commercial Septic Excavation Contractor

Consultant Responsibilities:

400.8.1 Consultant shall mobilize to Detroit, Oregon to perform sewer video inspections of existing septic systems using appropriate equipment to locate, expose, flag, and prepare septic systems for inspection by Consultant's septic system designer. Consultant shall provide services for up to five days of sewer video inspections.

400.8.2 Consultant will excavate test pits for onsite sewage evaluations at the direction of Consultant's septic system designer. Test pits will be excavated in accordance with Oregon Department of Environmental Quality recommendations and requirements. The bottom of the test pit shall measure at least 2-feet x 4-feet. Test pits shall be at least 4.5-feet deep but shall not exceed a depth of five feet. One end of the test pit shall be sloped or stepped in order to allow access for Consultant's septic designer and regulatory inspector. All spoils must be placed a minimum of two feet from the edge of the test pit. Consultant shall provide services for up to five days of test pit excavation.

Assumptions:

- Each day includes up to eight hours of site work and mobilization efforts.
- Consultant's septic system designer shall group locations of sewer video inspections and test pit excavations for efficiency.
- Owner recognized that the services provided by the septic system designer include construction-type activities not originally contemplated in the Consultant's scope of services and recognizes that the Owner will rely on the Consultant's licensing and insurance to address and deficiencies in performance to the standard of care or to address any damages resulting from Consultant's activities.

Task 400.9 – Detroit Commercial Properties Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant Responsibilities:

400.9.1 Consultant shall perform a property boundary survey for up to twenty (20) commercial properties in Detroit, Oregon for the purpose of verifying property lines prior to field layout, measurements, elevation work, and site plan development of onsite septic systems. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the followings:

a. Locate existing monumentation to complete a boundary retracement and side boundary line resolution for up to twenty (20) properties within the City of Detroit.
b. Calculations and Property Deed research.
c. Initial field monument ties.
d. Boundary Resolution.
e. Set property corners.
f. Record of survey drafting.
g. File survey with Marion County.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twenty (20) easement areas.

401 - KANE'S MARINA SEPTIC SYSTEM

Task 401.1 – Project Management

Consultant Responsibilities:

401.1.1. General Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

401.1.2. Regulatory Coordination. Meet with County and DEQ staff to discuss WPCF and County permit options. The objective of this outreach will be to have a selected permitting process (WPCF or County).

401.1.3. Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to review/establish Owner design team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

401.1.4. Presentation to County Commissioners. The Consultant will present a project update to the County Commissioners at the conclusion of Task 405, Preliminary Design. Consultant will prepare presentation materials and/or handouts. The one presentation will summarize the system layout, opinion of probable cost, permitting, schedule, and next steps.

401.1.5. Request for Information. Prepare initial request for information for data to be used in the design process.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed.
- Provide requested information within two weeks of request.

Assumptions:

- Project management budget assumes a project schedule of up to 4 months.
- Unless otherwise noted, meetings/workshops may include a combination of in person or virtual attendees. This assumption applies to this task as well as subsequent tasks.
- Funding support is not included in this scope of work, including but not limited to American Iron and Steel (AIS) or Build America, Buy America (BABA) tracking, certification, or reporting.

These services can be provided as additional services.

Deliverables:

- Kickoff meeting agenda and minutes.
- Request for Information.
- Presentation materials and/or handouts.

Task 401.2 – Preliminary Engineering Report (PER)

Subtask 401.2.1 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

401.2.1.1 Study Phase Services.

a. Site Visit. Consultant will coordinate with Owner's staff to perform a site visit and document existing site conditions. Evaluation will include documentation of status and condition of existing septic facilities and electrical equipment. This scope does not include inspection of interior spaces or existing facilities.

b. Basin Study. Consultant will review the plan and profile for the gravity sewer system developed through the North Santiam Sewer Authority Master Plan. Consultant will approximate alignment and invert elevation requirements for the future lift station wetwell. Consultant will estimate the operating volume required for the future pump station.

c. Operation and Maintenance Assessment. Consultant will review available data provided by Owner to summarize historic usage, operation strategies, and maintenance considerations. It is anticipated the evaluation will include holding tank storage requirements, hydrogen sulfide and odor control, standby power, instrumentation and controls (alarming), future pump station compatibility, redundancy provisions, emergency response, and preventative maintenance activities.

401.2.1.2 Design Criteria. Document design criteria established from the study phase services that will serve as basis for design. The design criteria will include, emergency storage calculations, anticipated flow conditions for the marina, future basin flow conditions, holding tank (wetwell) storage requirements, odor control strategy, power requirements, alarms.

401.2.1.3 Topographic Surveying. Provide oversight of the services to complete topographic and boundary surveying services for Kane's Marina.

401.2.1.4 Geotechnical Investigation. Provide oversight of the services to complete geotechnical engineering design services for Kane's Marina.

401.2.1.5 Site Layout. Develop 30% concept design showing site civil layout and holding tank(s) orientation on the marina site. Concept to include general grading concepts and reflect considerations for holding tank dimensions, future building and valve vault footprint, generator location, stormwater disposal, yard piping, and access for future maintenance/pump removal. The future footprint assumes that a small electrical building will be required to house the future electrical/controls, including a variable frequency drive (VFD) for the future lift station. Consultant has assumed that the generator will be outdoors with sound attenuation. The pipe network will be limited to 5-feet outside any building footprint.

401.2.1.6 Odor Control Type. Evaluate up to three design alternatives for odor control with the Owner. For each alternative, evaluation to include operations and maintenance considerations, benefits, drawbacks, costs, and consideration of non-cost factors (i.e., future expansion for the lift station). Potential odor control types include chlorine dosing equipment, passive carbon filtration, mixing, chemical, and air-scrubber.

401.2.1.7 Electrical and Controls. Coordinate with Owner to identify SCADA communication preferences. Coordinate with power utility to identify power constraints. Prepare one-line diagram for power and a narrative describing the communication strategy and objectives including a piping and instrumentation diagram (P&ID).

401.2.1.8 Cost Estimate. Provide an AAEC Class 4 opinion of probable cost for the project.

401.2.1.9 Workshop Meeting. Meet with Owner to review concepts and alternatives and select preferred alternative for design.

401.2.1.10 Prepare PER. Prepare draft Preliminary Engineering Report (PER) following the *Oregon DEQ guidelines.* In addition to the minimum regulatory requirements, PER will include concept drawings showing conceptual pipe network layout, one-line diagram, and anticipated permit requirements. Submit to Owner for review.

401.2.1.11 Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments into final PER.

Owner Responsibilities:

- Provide input on holding tank, piping design criteria, and preferred alternatives.
- Obtain or provide information for land parcel for the holding tank site, easements, and rights-of-way.
- Provide overall site plan with enough detail to layout the pipe network.
- Provide all necessary documentation or title information for boundary survey services.
- Secure permission for access for surveying and geotechnical investigations on the two subject properties.
- Provide concurrence on the location of the geotechnical investigation; assist in pre-marking locations for test pits / boring.
- Review and provide one set of consolidated comments on the Draft PER, concept plans, and opinion of probable cost.

Assumptions:

- Consultant shall be entitled to rely, without liability or the need for independent verification, on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.
- Power is readily available and located adjacent to the site.
- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Pavement sections, curbing and other site design is not included in this scope.
- Other assumptions documented for surveying and geotechnical services.

Deliverables:

- Agenda and minutes for Workshop Meeting.
- Draft and Final PER (1 paper copy and 1 PDF)

Consultant Responsibilities:

401.2.2.1 Consultant shall perform a topographic recovery survey of the Kane's Marina property to serve as a basis for design. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to compete a boundary resolution of subject area
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50 foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, lip of gutter, etc., to the nearest 0.01 foot
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way
f. Locate surface features over subject area, including but not limited to: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas
g. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants
h. Locate trees 8" DBH and greater noting coniferous or deciduous
i. Map existing easements which may affect subject.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

401.2.2.2 Survey will show utility poles, power lines, and telecommunications, etc. including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for all manholes and drainage structures, with structure size (inside dimensions)
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

401.2.2.3 Prepare a Legal Description and Visual Exhibit Map for the holding tank (future wet well).

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Description and Visual Exhibit Map

Subtask 401.2.3 – Geotechnical Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

The purpose of this subtask is to evaluate soil and groundwater conditions as a basis for developing geotechnical engineering design criteria for the Kane's Marina project.

Consultant Responsibilities:

401.2.3.1. Review information regarding subsurface soil and groundwater in the vicinity of the site, including filed reports, selected geologic maps, and other geotechnical engineering-related information.

401.2.3.2. Coordinate and manage the field investigation, including public utility notification and scheduling. Utility locates will be ordered by Consultant.

401.2.3.3. Explore subsurface soil and groundwater conditions at the project site by drilling one (1) drilled boring exploration to a depth between 20 and 25 feet bgs on the south side of the site near proposed holding tank/wetwell location, and four (4) to six (6) boring explorations 5 to 10 feet bgs along the proposed forcemain alignment.

401.2.3.4. Explorations will be advanced to the depths noted or to practical refusal in dense gravels or competent rock, if encountered, whichever is shallower. The borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

401.2.3.5. Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM Standard Practices Test Method D 2488. Field exploration work shall be observed and documented by qualified geotechnical engineering staff.

401.2.3.6. Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests and percent fines tests.

401.2.3.7. Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology and subsurface conditions.
b. Report subsurface conditions and data along the proposed forcemain/collection lines alignment.
c. An opinion as to the adequacy of the proposed development of the holding tank/wetwell from a geotechnical engineering standpoint.
d. Recommendations for preparation measures at the proposed holding tank/wetwell/lift station site, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction.
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing.

f. Recommendations for earthworks, including use of on-site and imported structural fill and fill placement and compaction requirements.
g. Recommendations for foundations to support proposed at-grade and below-grade structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance. Consultant assumes that proposed structures will be lightly loaded and that shallow foundations can be used to adequately support the structures.
h. Recommendations for supporting on-grade slabs, including base rock, capillary break and modulus of subgrade reaction, as appropriate.
i. Seismic design parameters in accordance with the current version of the Oregon Structural Specialty Code. Consultant will also perform a simplified liquefaction settlement analysis.

401.2.3.8. All work under this subtask will be directly supervised by an engineer licensed in the state of Oregon. Engineer will apply their professional seal to the document.

Assumptions:

- Owner will obtain right-of-entry or access to the exploration locations.
- A rubber-tired drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered, are not included in this scope of work or fee.
- Excess drill cuttings can be scattered on site.
- Installation of monitoring wells to measure static water groundwater is excluded.
- Contaminated soils will not be encountered during exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), Consultant will stop drilling operations, notify Owner and discuss how to proceed.
- If public locators are not allowed to enter or cannot enter the project area to clear specific exploration locations, Consultant may provide the services of a private locate company to access the site, if requested, for an additional fee of $630.

Deliverables:

- Draft and Final Geotechnical Report.

Task 401.3 – Final Design

Consultant Responsibilities:

401.3.1. Plan Sheets. Prepare general, survey, site civil, structural, plumbing, HVAC, mechanical, electrical, and instrumentation and control plan sheets for the site, holding tank, and yard piping. Instrumentation and control final design is anticipated to be a performance spec for a holding tank and odor control monitoring system. Thus, the plan sheets will only include a piping and instrumentation diagram (P&ID). Coordinate location of pumps, piping layout, spacing, electrical equipment, generator, pump removal equipment, building access, overhead door, HVAC equipment, plumbing drains, and other appurtenances for ultimate lift station layout with the Owner. Prepare 90% review sets.

401.3.2. Specifications. Consultant will support the Owner in CM/GC selection with services described in Task 5 of this scope of work. Consultant will prepare technical specifications. Technical specifications will be prepared to detail the materials, processes, and the products that are to be used in the construction of the lift station. Complete draft technical specifications for the 90% review set.

401.3.3. 90% Design and Review Workshop Meeting. Submit 90% design review drawings and specifications to the Owner. Participate in a 90% design review workshop meeting.

401.3.4. Agency Submittal. Agency design checklists will be completed and submitted along with the final plans and specifications to Agency for review.

401.3.5. Final Approval. Upon Owner and Oregon DEQ review, Consultant will incorporate appropriate revisions into a final set of stamped drawings and specifications that will be used for bidding.

401.3.6. Opinion of Probable Costs. Selected CM/GC will provide cost estimating after Task 404. Consultant will review and provide feedback.

Owner Responsibilities:

- Review and provide one set of consolidated comments on the 90% design deliverables.
- Provide legal and risk reviews of the bid documents.
- Pay for any associated permitting fees not assigned to the Contractor.

Assumptions:

- Consultant will prepare the building permit application at 90% design and submit to the Marion County Building Inspection office. Final permits will be obtained by Owner. Owner shall pay all permit fees not assigned to the construction contractor.
- Consultant will prepare and submit the DEQ permit application at 90% design and assist Owner with DEQ consultation.
- Project will not include irrigation or landscaping of the site. Services of a licensed landscape architect is excluded.
- Extensive architectural feature and architectural rendering are not included in the holding tank design.
- Contractor will be required to prepare and implement an erosion and sediment control plan (ESCP), prepare traffic control plans, and secure associated permits.
- Shoring (if required) will be designed by the Contractor.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or project support above and beyond that described herein is considered an additional service requiring a contract amendment and equitable adjustment of the contract amount..
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- The following design standards and references are to be followed where relevant during the development of the project:
    - Marion County Standard Specifications and Drawings
    - Oregon Standard Specifications for Construction
    - Owner to provide front end contracting and bidding documents (Div 00)
    - AIS and BABA requirements

- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

Deliverables:

- 90% design drawings and specifications, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- 100% stamped design package, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- Opinion of Probable Cost.

Task 401.4 – Pre-Procurement Support

Consultant Responsibilities:

401.4.1. This task includes consultant services to support the Owner in direct purchase of equipment for the Project using available funds. The objective of the direct purchase of equipment or materials is to account for potential long lead times and still have the equipment or materials on hand when the contractor is ready to move forward with construction. Consultant will provide specifications for the equipment/material to be directly purchased which may be out of sequence or earlier than the final design task.

Owner Responsibilities:

- Owner staff will lead the solicitation effort to either solicit informal bids or select suppliers from pre-approved supplier lists. Owner will receive and store materials prior to the Contractor taking on the equipment/material for installation.

Assumptions:

- Consultant is not responsible if material/equipment must be returned or designated as surplus due to the expedited delivery process for this project.
- Budget assumes up to 40 hours for support services to be provided as requested.

Deliverables:

- Procurement Specifications.

Task 401.5 – Removed

Task 401.6 – WPCF PERMITTING

Consultant Responsibilities:

401.6.1. Prepare draft permit application for a holding tank permit for DEQ review.
401.6.2. Meet with DEQ to discuss the permit applications. For the purpose of this scope, up to two (2) meetings are assumed.
401.6.3. Address DEQ comments in permit application.

Owner Responsibilities:

- Provide input on draft permit application.
- If necessary, pay fee to DEQ for draft permit application.
- Review and comment on draft documents.

Assumptions:

- No field work, environmental studies, cultural resource investigations, or biological assessments are included in this task.
- This scope does not include any additional field gathering or special studies that may be required by the DEQ.
- No other permits will be required. If required, support for these permits can be provided as additional services.

Task 401.7 – Removed

MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of **$3,255,426** ~~**$2,550,059**~~

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

PHASE 1 – GENERAL ENGINEERING SERVICES	Cost	Type
100 – PROJECT MANAGEMENT		
Task 100.1 – Project Management	$ 100,000	T&M
Task 100.2 – County Board of Commissioners Support Services	$ 15,840	LS
101 – STRATEGIC PERMITTING PLAN		
Task 101.1 – Project Management and Administration	$ 4,825	LS
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	$ 19,090	LS
Task 101.3 – Strategic Permitting Plan	$ 9,540	LS
102 – SUBSURFACE EXPLORATION		
Task 102.1 – Project Management and Administration	$ 42,840 ~~16,400~~	T&M
Task 102.2 – Subsurface Investigation Program	$ 74,200	T&M
Subtask 102.2.1 – Gates / Mill City Subsurface Investigation	$ 461,580	T&M
Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation	$ 566,780	T&M
Task 102.3 – Groundwater Modeling Evaluation		
Subtask 102.3.1 – Mill City / Gates Permitting Evaluation	$ 63,600	T&M
Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation	$ 78,700	T&M
Task 102.4: McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	$ 18,700	T&M
Task 102.5: Infiltration Basin Pilot Test		

Subtask 102.5.1 – Meetings, Work Plan, and Pre-Field Work Preparation	$ 28,780	LS
Subtask 102.5.2 – Monitoring Well Drilling and Construction Oversight	$ 34,485	LS
Subtask 102.5.3 – Test Pit Excavation and Infiltration Testing	$ 22,762	LS
Subtask 102.5.4 – Test Infiltration Basin Construction	$ 51,618	LS
Subtask 102.5.5 – 28-Day Infiltration Basin Pilot Test	$ 87,737	LS
Subtask 102.5.6 – Analysis and Reporting	$ 38,742	LS
Subtask 102.5.7 – Tracer Test Planning	$ 24,838	LS
103 – LAND ACQUISITION AND RELOCATION SERVICES		
Task 103.1 – Project Management and Administration	$ 12,140	T&M
Task 103.2 – Mill City Land Acquisition and Relocation Services	$ 58,817	T&M
Task 103.3 – Detroit Land Acquisition and Relocation Services	$ 177,017	T&M
104 – FINANCIAL ADVISORY SERVICES		
Task 104.1 – Project Management and Administration	$ 23,430	T&M
Task 104.2 – Financial Advisory Services	$ 137,500	T&M
105 – PUBLIC RELATIONS		
Task 105.1 – Project Management and Administration	$ 16,164	T&M
Task 105.2 – Communications and Engagement Planning and Implementation	$ 183,684	T&M
Subtotal	**$ 2,353,409** ~~**$1,838,159**~~	

T&M: Time and Materials, LS: Lump Sum

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	Cost	Type
Task 200.1 – Project Management	$ 12,600	LS
Task 200.2 – Data Acquisition & Facility Tour	$ 6,110	LS
Task 200.3 – Project Planning	$ 26,725	LS
Task 200.4 – Existing Facilities Evaluation	$ 68,680	LS
Task 200.5 – Need for system improvements	$ 3,650	LS
Task 200.6 – Collection System Alternatives Considered & Selection	$ 53,615	LS
Task 200.7 – Treatment System Alternatives Considered & Selection	$ 59,365	LS
Task 200.8 – Proposed Projects (Recommended Alternatives)	$ 70,780	LS
Task 200.9 – Facilities Plan Documentation & Public Meeting	$ 25,830	LS
Task 200.10 –Management Reserve	$ 10,000	T&M
201 – MILL CITY/GATES FACILITIES SITE EVALUATION		
Task 201.1 – Project Management	$26,571 ~~$7,455~~	LS
Task 201.2 – Force Main Alignment Topographic Survey	$ 38,038	LS
Task 201.3 – Force Main Alignment Geotechnical Investigation	$ 41,890	T&M
Task 201.4 – Force Main Alignment Environmental Due Diligence		
Subtask 201.4.1 – Project Management	$ 7,956	T&M
Subtask 201.4.2 – Wetlands and Waters Delineation	$ 23,805	T&M
Subtask 201.4.3 – Cultural Resources Investigation	$ 43,555	T&M
Subtask 201.4.4 – Phase I Environmental Site Assessments	$ 10,838	T&M
Task 201.5 – WPCF/RIB Topographic Survey	$ 12,628	LS
Task 201.6 – WPCF/RIB Geotechnical Investigation	$ 29,371	LS
Subtotal	**$ 572,007 ~~$382,848~~**	

T&M: Time and Materials, LS: Lump Sum

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	Cost	Type
400 – COMMERCIAL SEPTIC SYSTEM PLANNING		
Task 400.1 – Project Management	$ 17,330	LS
Task 400.2 – Data Acquisition & Properties Tour	$ 17,770	LS
Task 400.3 – Stakeholder Involvement/Engagement	$ 12,200	LS
Task 400.4 – Commercial Septic System Concept	$ 16,680	LS
Task 400.5 – Commercial Septic System Design	$ 41,670	LS
Task 400.6 – ODOT ROW Commercial Properties Topographic Survey	$ 10,560	LS
Task 400.7 – Detroit Environmental Due Diligence (ODOT ROW Easements)	$ 34,032	LS
Task 400.8 – Detroit Commercial Septic Excavation Contractor	$ 26,400	T&M
Task 400.9 – Detroit Commercial Properties Boundary Survey	$ 31,800	T&M
401 – KANE'S MARINA SEPTIC SYSTEM		
Task 401.1 – Project Management	$ 15,661 ~~15,550~~	LS
Task 401.2 – Preliminary Engineering Report (PER)	$ 28,630	LS
Subtask 401.2.2 – Topographic Survey	$ 18,087 ~~17,240~~	LS
Subtask 401.2.3 – Geotechnical Investigation	$ 17,060	LS
Task 401.3 – Final Design	$ 28,270	LS
Task 401.4 – Pre-Procurement Support	$ 8,000	T&M
Task 401.5 – Removed		
Task 401.6 – WPCF Permitting	$ 5,860	LS
Task 401.7 – Removed		
Subtotal	**$330,010 ~~$329,052~~**	

T&M: Time and Materials, LS: Lump Sum

TOTAL	**$3,255,426 ~~$2,550,059~~**

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and ~~Sub-consultants~~ Subconsultants for performance of

Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be

for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Chris Einmo
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or

receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

   i. Long distance communications.

   ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

   iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

   iv. Third-party models and mockups requested by Owner.

   v. The printing of master or reproducible sets of plans and project manuals including specifications.

   vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

   i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 65.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

   ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant's Professional Hourly Rates.

MARION COUNTY
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EXHIBIT E - CRITICAL DATE SCHEDULE
Schedule of Deliverables

PHASE 1 – GENERAL ENGINEERING SERVICES	
100 – PROJECT MANAGEMENT	
Task 100.1 – Monthly Invoices and Progress Reports	Monthly
Task 100.1 – Meeting agendas and minutes	Weekly
Task 100.2 – Final Presentation Materials	8 weeks after NTP
101 – STRATEGIC PERMITTING PLAN	
Task 101.1 – Project Management and Administration	
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	
Task 101.3 – Draft Strategic Planning Plan	11 weeks after Amend No. 2 NTP
Task 101.3 – Final Strategic Planning Plan	13 weeks after Amend No. 2 NTP
102 – SUBSURFACE EXPLORATION	
Task 102.1 – Project Management and Administration	
Task 102.2.1 – Draft Subsurface Investigation Work Plan	
Task 102.2.1 – Final Subsurface Investigation Work Plan	
Task 102.2.1 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.1 – Draft Subsurface Investigation Memorandum	
Task 102.2.1 – Final Subsurface Investigation Memorandum	
Task 102.2.1 – Groundwater Level Monitoring Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Work Plan	
Task 102.2.2 – Final Subsurface Investigation Work Plan	
Task 102.2.2 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Memorandum	
Task 102.2.2 – Final Subsurface Investigation Memorandum	
Task 102.2.2 – Groundwater Level Monitoring Memorandum	
Task 102.3.1 – Draft WPCF Evaluation Memorandum	
Task 102.3.1 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.1 – Draft WPCF Evaluation Memorandum (DEQ Comments)	

Task 102.3.2 – Draft WPCF Evaluation Memorandum	
Task 102.3.2 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	
Task 102.5 – Infiltration Basin Pilot Test	180 days after Amend. No. 6 NTP
103 – LAND ACQUISITION AND RELOCATION SERVICES	
Task 103.1 – Project Management and Administration	
Task 103.2 – Mill City Land Acquisition and Relocation Services	
Task 103.2.3 – Draft ROW Programming Estimate	
Task 103.2.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.2.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.6 – Draft Offer Packets	
Task 103.2.6 – Final Offer Packets	
Task 103.2.6 – Final Report Packet	
Task 103.2.6 – Proposed Counteroffers, if applicable	
Task 103.2.6 – Recommendation for Condemnation, if applicable	
Task 103.2.6 – Report of Personal Interview	
Task 103.2.7 – Submit studies, Move Agreements, and Estimates	
Task 103.2.7 – Submit Relocation Claims	
Task 103.2.7 – Submit Relocation Closing Reports	
Task 103.2.9 – ROW Certification Form	12 weeks prior to Project Bid Date
Task 103.3 – Detroit Land Acquisition and Relocation Services	
Task 103.3.3 – Draft ROW Programming Estimate	
Task 103.3.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.3.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.6 – Draft Offer Packets	
Task 103.3.6 – Final Offer Packets	

Task 103.3.6 – Final Report Packet	
Task 103.3.6 – Proposed Counteroffers, if applicable	
Task 103.3.6 – Recommendation for Condemnation, if applicable	
Task 103.3.6 – Report of Personal Interview	
Task 103.3.7 – Submit studies, Move Agreements, and Estimates	
Task 103.3.7 – Submit Relocation Claims	
Task 103.3.7 – Submit Relocation Closing Reports	
Task 103.3.9 – ROW Certification Form	12 weeks prior to Project Bid Date
104 – FINANCIAL ADVISORY SERVICES	
Task 104.1 – Project Management and Administration	
Task 104.2 – Financial Advisory Services	
105 – PUBLIC OUTREACH	
Task 105.1 – Project Management and Administration	
Task 105.2 – Communications and Engagement Planning and Implementation	
PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	
200 – MILL CITY / GATES FACILITIES PLANNING STUDY	
Task 200.1 – Project Management	
Task 200.2 – Request(s) for Information	
Task 200.3 – Draft Project Planning Facility Plan Section	
Task 200.4 – Draft Existing Facilities Evaluation Facility Plan Section	
Task 200.5 – Draft Project Need Facilities Plan Section	
Task 200.6 – Draft Collection System Alternatives Facility Plan Section	
Task 200.7 – Draft Treatment System Alternatives Facility Plan Section	
Task 200.8 – Capital Improvement Plan	
Task 200.8 – SDC Eligibility Estimate	
Task 200.8 – Draft Proposed Project Facility Plan Section	
Task 200.9 – Public Meeting Presentation Materials	
Task 200.9 – Final Facilities Plan	
Task 200.10 – Management Reserve	
201 – MILL CITY / GATES FACILITIES SITE EVALUATION	
Task 201.1 – Project Management	
Task 201.2 – Force Main Alignment Topographic Survey	180 days after Amend No. 5 NTP

Task 201.3 – Force Main Alignment Geotechnical Investigation	180 days after Amend No. 6 NTP
Task 201.4.1 - Project Management	
Task 201.4.2 – Wetlands and Waters Delineation	90 days after Amend No. 6 NTP
Task 201.4.3 – Cultural Resources Investigation	120 days after Amend No. 6 NTP
Task 201.4.4 – Phase I Environmental Site Assessments	180 days after Amend No. 6 NTP
Task 201.5 – WPCF/RIB Topographic Survey	12 weeks after Amend No. 6 NTP
Task 201.6 – WPCF/RIB Geotechnical Investigation	12 weeks after Amend No. 6 NTP
PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	
400 – COMMERCIAL SEPTIC SYSTEM PLANNING	
Task 400.1 – Project Management	
Task 400.2 – Requests for Information	
Task 400.2 – Existing Septic and Drain Field Summary Tables and Figures	
Task 400.3 – Presentation Materials	
Task 400.4 – Removed	
Task 400.5 – Conceptual Septic System Design	52 weeks after Amend No. 4 NTP
Task 400.6 – Basemap in AutoCAD 3D format.	24 weeks after Amend No. 4 NTP
Task 400.6 – Legal Descriptions and Visual Exhibit Maps	52 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Cultural Clearance)	26 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Phase I ESA)	26 weeks after Amend No. 5 NTP
Task 400.8 – Detroit Commercial Septic Excavation Contractor	
Task 400.9 – Detroit Commercial Properties Survey	26 weeks after Amend No. 5 NTP
401 – KANE'S MARINA SEPTIC SYSTEM	
Task 401.1 – Kickoff meeting agenda	2 weeks after Amend No. 2 NTP
Task 401.1 – Kickoff meeting minutes	1 week after Kickoff Meeting
Task 401.1 – Request for Information	
Task 401.1 – Presentation Materials	
Task 401.2 – Workshop Meeting Agenda	
Task 401.2 – Workshop Meeting Minutes	
Task 401.2 – Draft Preliminary Engineering Report	5 weeks after Amend No. 2 NTP
Task 401.2 – Final Preliminary Engineering Report	6 weeks after Amend No. 2 NTP
Subtask 401.2.2 – Topographic Basemap	180 days after Amend No. 6 NTP ~~6 weeks after Amend No. 2 NTP~~

Subtask 401.2.3 – Geotechnical Report	10 weeks after Amend No. 2 NTP
Task 401.3 – 90% Design Drawings and Specifications	15 weeks after Amend No. 2 NTP
Task 401.3 – Final (Stamped) Drawings and Specifications	17 weeks after Amend No. 2 NTP
Task 401.3 – Opinion of Probably Cost	17 weeks after Amend No. 2 NTP
Task 401.4 – Procurement Specifications	
Task 401.5 - Removed	
Task 401.6 – WPCF Permitting	
Task 401.7 - Removed	

MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT F - RATE SCHEDULE

Keller Associates	~~Maximum~~ Hourly Rate*
Project Engineer I	$137 ~~$130~~
Project Engineer II	$179 ~~$170~~
Project Engineer III	$242 ~~$220~~
Project Manager I/II	$189 ~~$170~~
Project Manager III	$252 ~~$225~~
Structural Engineer I/II	$179 ~~$170~~
Structural Engineer III	$242 ~~$220~~
Chief Engineer / Chief Structural Engineer	$305 ~~$270~~
CAD I/II	$137 ~~$130~~
CAD III	$168 ~~$150~~
CAD Manager	$200 ~~$180~~
Electrical Controls I/II	$179 ~~$170~~
Electrical Controls III	$242 ~~$220~~
Principal	$315 ~~$275~~
Surveyor I/II	$158 ~~$145~~
Surveyor III ~~Professional Surveyor PLS~~	$194 ~~$180~~
Field Representative	$152 ~~$140~~
Engineering Student	$79 ~~$75~~
Administration I	$95 ~~$90~~
Administration II	$131 ~~$110~~

**Rates reported are for 2024 ~~2023~~. Rates updated annually in January.*

***Reimbursable Expenses at Cost x 1.05*

SUBCONSULTANT RATE SCHEDULE

~~Hydrological~~	~~Maximum Hourly Rate*~~
~~Administration~~	~~$110~~
~~Project Hydrogeologist~~	~~$120~~
~~Principal Hydrogeologist~~	~~$190~~
~~Staff Geologist~~	~~$120~~
~~GIS/Graphics/Database~~	~~$140~~

Hydrological	~~Maximum~~ Hourly Rate*
Principal Technical Professional	$250
Supervising Technical Professional	$205
Managing Technical Professional	$190
Consulting Technical Professional	$175
Project Technical Professional	$150
Staff Technical Professional	$135
Intern	$90
GIS/Graphics/Database	$160
Editor/Documents	$145
Administration	$105

~~Permitting~~	~~Maximum Hourly Rate*~~
~~Planning Specialist XI~~	~~$197~~
~~Environmental Resources Specialist XI~~	~~$197~~
~~Planning Specialist V~~	~~$117~~
~~Planning Specialist IV~~	~~$107~~

Permitting	~~Maximum~~ Hourly Rate*
Environmental Consulting Services Specialists: Cultural Resources, Environmental Resources, Paleontology, Scientific Resources, Planning Resources, Graphics/Media Production, GIS/CADD Resources, Technical Writing/Editing, Training/Facilitating, Air Quality	

Specialist I	$77
Specialist II	$91
Specialist III	$104
Specialist IV	$114
Specialist V	$123
Specialist VI	$137
Specialist VII	$147
Specialist VIII	$158
Specialist IX	$169
Specialist X	$189
Specialist XI	$207
Specialist XII	$226
Subject Matter Expert I	$230
Subject Matter Expert II	$242
Subject Matter Expert III	$268
Subject Matter Expert IV	$293
Engineering and Special Services (Tier 1) Specialists:	
Specialist IV	$123
Specialist V	$137
Specialist VI	$147
Specialist VII	$158
Specialist VIII	$169
Specialist IX	$189
Specialist X	$207
Specialist XI	$226
Specialist XII	$242
Subject Matter Expert I	$242
Subject Matter Expert II	$252
Subject Matter Expert III	$278
Subject Matter Expert IV	$305
Administrative III	$104
~~Land Acquisition and Relocation~~	~~Maximum Hourly Rate*~~

~~Land Owner Liaison – Dave Hansen~~	~~$81.89~~
~~Land Owner Liaison – Kari Lowe~~	~~$244.98~~
~~Project Management and Administration – Tamisha Schrunk~~	~~$185.00~~
~~Project Management and Administration – Samri Laney~~	~~$42.60~~
~~Land Owner Liaison – Julie Goodrich~~	~~$155.00~~

Land Acquisition and Relocation	~~Maximum~~ Hourly Rate*
Principal/Senior Advisor/Program Manager	$322.00
Senior Project Manager	$298.00
Project Manager/Property Manager	$198.00
Senior Right of Way Agent	$163.00
Right of Way Agent	$132.00
Senior Project Control Specialist/Senior Right of Way Technician	$163.00
Project Control Specialist/Right of Way Technician	$121.00

Financial Advisory	~~Maximum~~ Hourly Rate*
Principals	$295
Project Managers	$235 ~~$230~~
Consultants	$190
Public Relations	$170
Technical Writer/Graphic Artist	$145
Administrative Support	$95

Surveying	~~Maximum~~ Hourly Rate*
PLS Office Technician	$140
One-Man Field Crew	$140
Project Surveyor	$150 ~~$140~~
2 Man Field Crew	$170
Survey Technician	$110

~~Geotechnical Services~~	~~Billed~~	~~Rate*~~
~~ENGINEERING CONSULTING~~		

~~Staff Geotech/Soil Engineer I or Geologist I~~	~~Hourly~~	~~$105.00~~
~~Staff Geotech/Soil Engineer II or Geologist II~~	~~Hourly~~	~~$130.00~~
~~Staff Geotech/Soil Engineer III or Geologist III~~	~~Hourly~~	~~$150.00~~
~~Associate Engineer I~~	~~Hourly~~	~~$155.00~~
~~Associate Engineer II~~	~~Hourly~~	~~$175.00~~
~~Engineering Geologist I~~	~~Hourly~~	~~$175.00~~
~~Engineering Geologist II~~	~~Hourly~~	~~$195.00~~
~~Senior Engineer~~	~~Hourly~~	~~$205.00~~
~~Seismic/Technical Specialist Engineer~~	~~Hourly~~	~~$250.00~~
~~Principal Engineer~~	~~Hourly~~	~~$235.00~~
~~Drone Flight Services~~	~~Hourly~~	~~$245.00~~
~~Drone Hardware & Flight Fee~~	~~Daily~~	~~$160.00~~
~~CADD Technician~~	~~Hourly~~	~~$100.00~~
~~Administrative Assistant~~	~~Hourly~~	~~$85.00~~
~~SPECIAL INSPECTION AND CONSTRUCTION SERVICES~~		
~~Project Manager~~	~~Hourly~~	~~$140.00~~
~~Engineering Technician~~	~~Hourly – 3 hr min~~	~~$100.00~~
~~Senior Engineering Technician~~	~~Hourly – 3 hr min~~	~~$120.00~~
~~Subgrade Evaluation Onsite~~	~~Each~~	~~$385.00~~
~~Nuclear Densometer~~	~~Daily~~	~~$85.00~~
~~Vehicle Fee (Rental/In-house)~~	~~Daily~~	~~$135.00~~
~~Laboratory Technician~~	~~Hourly~~	~~$85.00~~
~~Laboratory Manager~~	~~Hourly~~	~~$140.00~~
~~MATERIALS TESTING SERVICES~~		
~~#200 Wash~~	~~Each~~	~~$140.00~~
~~Atterberg Limits~~	~~Each~~	~~$250.00~~
~~In-Situ Dry Density and Moisture Content~~	~~Each~~	~~$55.00~~
~~Moisture Content~~	~~Each~~	~~$40.00~~
~~One-dimensional Consolidation~~	~~Each~~	~~Quoted~~
~~Proctor Moisture-Density~~	~~Each~~	~~$380.00~~
~~Sieve Analysis ¾ inch to 2 inch max~~	~~Each~~	~~$380.00~~
~~Sieve Analysis < ¾ inch max~~	~~Each~~	~~$330.00~~

~~Sieve Analysis > 2 inch max~~	~~Each~~	~~$560.00~~
~~Soil Classification~~	~~Each~~	~~$45.00~~
~~Specific Gravity of Coarse Aggregate~~	~~Each~~	~~$155.00~~

Geotechnical Services	Billed	Hourly Rate*
ENGINEERING CONSULTING		
Senior Principal	Hourly	$284.00
Principal Engineer	Hourly	$248.00
Principal Engineering Geologist	Hourly	$238.00
Senior Associate Engineer	Hourly	$227.00
Associate Engineer	Hourly	$217.00
Project Manager II	Hourly	$201.00
Project Manager I	Hourly	$185.00
Engineering/Geological Staff III	Hourly	$159.00
Engineering/Geological Staff II	Hourly	$138.00
Engineering/Geological Staff I	Hourly	$111.00
Senior Technician	Hourly	$127.00
Field Technician II	Hourly	$117.00
Field Technician I	Hourly	$101.00
Senior Administrative Assistant	Hourly	$106.00
Administrative Assistant	Hourly	$95.00
Office Support	Hourly	$90.00
EQUIPMENT/OTHER SERVICES		
Falling Weight Deflectometer	Daily	$2,150.00
Ground Penetrating Radar, Vehicle Mounted	Daily	$1,550.00
Global Positioning System (Differential)	Daily	$115.00
Dynamic Cone Penetrometer	Daily	$120.00
Hand Auger	Daily	$38.00
Drone Flight Services	Hourly	$245.00
Drone Hardware & Flight Fee	Daily	$160.00
Nuclear Densometer	Daily	$85.00
Lab: #200 Wash	Each	$140.00

Lab: Atterberg Limits	Each	$250.00
Lab: In-Situ Dry Density and Moisture Content	Each	$55.00
Lab: Moisture Content	Each	$40.00
Lab: Proctor Moisture-Density	Each	$380.00
Lab: Sieve Analysis ¾-inch to 2-inch Max	Each	$380.00
Lab: Sieve Analysis <3/4-inch Max	Each	$330.00
Lab: Sieve Analysis > 2-inch Max	Each	$560.00
Lab: Soil Classification	Each	$45.00
Lab: Consolidation (Two Rebounds)	Each	$750.00
Lab: Specific Gravity of Coarse Aggregate	Each	$155.00
Specialty Software	Each	$250.00
Vehicle Usage, per mile (or $75/day), Whichever is Greater	Mile	$0.655

Septic	~~Maximum~~ Hourly Rate*
Septic Consultant	$170.00
Septic Consultant Travel Time	$90.00

Septic Excavation Contractor	~~Maximum~~ Hourly Rate*
Power Equipment Operator ~~Operator and Laborer with Excavator~~	$70.39 ~~$275~~
Laborer	$54.91
Locate, Camera Equipment	$250
Mobilization	$600 per trip

Public Outreach	Hourly Rate*
Principal-in-Charge	$225.00
Project Director	$180.00
Project Manager	$235.00
Project Associate	$120.00
Senior Designer	$205.00
Designer	$115.00

**Rates reported are for 2024 ~~2023~~. Rates updated annually in January.*

***Subconsultant Reimbursable Expenses and Direct Labor at Cost x 1.10*

MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

SIGNATURE PAGE FOR
ARPA – NORTH SANTIAM CANYON SEWER PROJECT – PW-5069-22
Between
MARION COUNTY and KELLER ASSOCIATES, INC.

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES
BOARD OF COMMISSIONERS:

Not Present At Meeting

Chair — Date

Commissioner — Date: 2/7/2024

Commissioner — Date: 2/7/2024

Authorized Signature: _____ — Department Director or designee — Date: 1/31/2024

Authorized Signature: _____ — Chief Administrative Officer — Date: 2/6/2024

Reviewed by Signature: _____ — Marion County Legal Counsel — Date: 2/6/24

Reviewed by Signature: _____ — Marion County Contracts & Procurement — Date: 2/6/24

KELLER ASSOCIATES SIGNATURE

Authorized Signature: _____ — Date: 2/8/2024

Title: Principal

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Marion County
FINANCE DEPARTMENT

Contract Review Sheet

PW-5069-22 (5)

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: **5**

Contact: **Alicia Henry** Department: **Public Works Department**

Phone #: **503.373.4320** Date Sent: **Monday, October 9, 2023**

Title: **ARPA - North Santiam Canyon Sewer Project**

Contractor's Name: **Keller Associates, Inc.**

Term - Date From: **September 30, 2022** Expires: **December 31, 2026**

Original Contract Amount: **$ 60,960.00** Previous Amendments Amount: **$ 2,034,967.00**

Current Amendment: **$ 454,132.00** New Contract Total: **$ 2,550,059.00** Amd% **22%**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☐ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **1130**

Description of Services or Grant Award

The Project will design, permit, and construct new sanitary sewer infrastructure in the North Santiam River Canyon to serve the cities of Idanha, Detroit, Gates and Mill City. Keller Associates is the prime consultant retained by PW to provide engineering, property acquisition and other professional services for this CMGC project. Due to the size, complexity, and agressive funding deadlines associated with this project, Keller's scope of services has been developed and implemented in phases to enable early start of the most time critical project activities.

Amendment 5 adds topographic surveying, geotechnical engineering, and environmental permitting tasks & expands the scope of project management, property acquisition, and commercial septic system design tasks previously scoped.

Desired BOC Session Date: **10/25/2023** Files submitted in CMS for Approval: **10/20/2023**

Agenda Planning Date **10/12/2023** Printed packets due in Finance:

Management Update **10/10/2023** BOC upload / Board Session email:

BOC Session Presenter(s) **Chris Einmo**

FOR FINANCE USE

Date Finance Received: Date Legal Received:

Comments: **Y**

REQUIRED APPROVALS

DocuSigned by: Jeff D White 10/20/2023
Finance - Contracts Date

DocuSigned by: Alicia Henry 10/20/2023
Contract Specialist Date

DocuSigned by: Jane E Vetto 10/23/2023
Legal Counsel Date

10/20/2023
Chief Administrative Officer Date

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MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date: Wednesday, October 18, 2023

Department: Public Works

Title Amendment 5 to Consultant Services Agreement PW5069-22 with Keller Associates for the ARPA - North Santiam Canyon Sewer Project.

Agenda Planning Date: 10/12/2023 **Management Update/Work Session Date:** 10/10/2023 **Audio/Visual aids** ☐

Time Required 10 minutes **Contact:** Chris Einmo **Phone:** 503.566.4119

Requested Action: Approve Amendment 5 to Consultant Services Agreement PW5069-22 with Keller Associates for the ARPA - North Santiam Canyon Sewer Project, increasing the contract not-to-exceed value by $454,132.00, from $2,095,927.00 to $2,550,059.00.

Issue, Description & Background: The Project will design, permit, and construct new sanitary sewer infrastructure in the North Santiam River Canyon to serve the cities of Idanha, Detroit, Gates and Mill City. Keller Associates is the prime consultant retained by Public Works to provide engineering, property acquisition and other professional services for this CMGC project. Due to the size, complexity, and agressive funding deadlines associated with this project, Keller's scope of services has been developed and implemented in phases to enable early start of the most time critical project activities.

Amendment 5 adds topographic surveying, geotechnical engineering, and environmental permitting tasks and expands the scope of project management, property acquisition, and commercial septic system design tasks previously scoped.

Financial Impacts: Amendment 5 will increase the contract not-to-exceed value by $454,132.00, from $2,095,927.00 to $2,550,059.00. This is a budgeted expense in the current fiscal year budget.

Impacts to Department & External Agencies: This amendment does not result in impacts to other departments or external agencies.

List of attachments:
1. Amendment 5 to Consultant Services Agreement PW5069-22
2. Request for Authorization of Contract PW-5069-22

Presenter: Chris Einmo, Senior Project Manager

Department Head Signature:

Brian Nichols

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REQUEST FOR AUTHORIZATION OF CONTRACT
PW-5069-22

Date: October 6, 2023
To: Chief Administrative Officer
Cc: Contract File
From: Alicia Henry

I. Subject: Amendment Exceeds 25%

DIPS CODE: 135-40-42-461-4603-534500-809.002
Budget Authority: ☒ Yes ☐ No
CIP: 23-325/326

The Marion County Public Works Department is requesting approval to amend a contract as described in Section 20-0265, 20-0270, 30-0320, 40-0160, and 40-0910 of the Marion County Public Contracting Rules. The contract is with Keller Associates, Inc. for ARPA - North Santiam Canyon Sewer Project with a value of $2,034,967.00. An additional $454,132.00 will be added to the contract for a new contract total of $2,550,059.00 upon approval of Amendment 5.

A. BACKGROUND

Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. This is a large, multi-phase project with aggressive expenditure deadlines driven by ARPA funding requirements. Therefore, for expediency, the full scope of services needed to deliver the full project will be executed in a series of amendments to the original consultant services agreement, ensuring that early critical-path activities begin without delay. On October 7, 2022, the county executed contract PW-5069-22 with Keller and Amendment No. 1 was executed on October 7, 2022. Amendment 2 was executed on December 12, 2022. Amendment 3 was executed on May 31, 2023. Amendment 4 was executed on July 11, 2023. Subsequent phases of work will be awarded to the consultant as the project progresses.

B. CURRENT AMENDMENT PURPOSE

Amendment 5 adds an additional $454,132.00, updated subtasks, adds tasks related to Mill City/Gates Facilities Site Evaluation, Detroit Project Areas, Cultural Clearance Certification and updates the language to reflect subconsultants.

JUSTIFICATION

The initial contract consisted of a $60K fast-start contract, which enabled work on this time-sensitive project to begin quickly. Amendment 1 added an additional amount of $67,680, for

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a contract total of $128,640. Amendment 2 added an additional amount of $1,784,380, for a contract total of $1,913,070, Amendment 3 conforms to the Request for Proposal and awarded contract phased approach and added an additional $182,907, Amendment 4 added additional task to phase 400 (Task 400.5), updated Exhibit B - Consultant Compensation and updated sub consultant rate schedule to include additional tasks. Amendment 5 adds an additional $454,132.00, updates subtasks, adds tasks related to Mill City/Gates Facilities Site Evaluation, Detroit Project Areas, Cultural Clearance Certification and updates the language to subconsultants to ensure the project will meet ARPA requirements and deadlines. This conforms to the contracting plan for this project.

C. BUDGET IMPACTS

1. Are the expected expenditures for the current fiscal year under the contract, including any additional funds being requested with this action, already included in the current year adopted budget? ☒ Yes ☐ No

2. If yes, amount $5,515,700 Program / Account 461-534500

3. If no, describe the amount and how the anticipated expenditures will be handled within the budget:

   a. Amount: $_____

   b. Managed with anticipated savings– explain why and from what costing:

   _____

   c. Will require a supplemental budget request – provide the expected funding source and costing:

      i. Funding Source: _____

      ii. Costing: _____

Submitted by:

DocuSigned by:
Alicia Henry
DA7EBDCC1E7B47D...

Alicia Henry
Public Works Department

Reviewed by:

DocuSigned by:
Jeff White
00EC84E244DF43D...

Contracts & Procurement

Acknowledged by:

DocuSigned by:
Brian Nicholas
0793BA7ACD6D443...

Department Head

Acknowledged by:

Jan Fritz, CAO

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Marion County
OREGON

AMENDMENT 5 to PW-5069-22
the CONTRACT FOR SERVICES
between
MARION COUNTY and KELLER ASSOCIATES

This is Amendment No. 5 to the Contract for Services (as amended from time to time, the "Contract"), dated September 30, 2022, between Marion County, a political subdivision of the State of Oregon, hereafter called County or Owner, and Keller Associates, hereafter called Consultant.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by ~~strikethrough~~):

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$2,550,059** ~~**$2,095,927**~~ for Phase 1, 2, and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A, Statement of Work**.

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

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Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT

Task 100.1 – Project Management

Consultant Responsibilities:

100.1.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.
100.1.2 Project Coordination. Consultant may be requested to prepare progress reports or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.
100.1.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates, informational, or technical-based presentations to the board. Consultant will prepare presentation materials and/or handouts as directed. Assist with coordination of similar water pollution control facility site tours.

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Owner Responsibilities:

- Administer project funding.

Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes ~~a 6-~~ an 18-month duration for general project administration.
- ~~Task 1 includes up to 212 hours of project management services.~~

Deliverables:

- Monthly Invoices
- Monthly Progress Reports
- Meeting agenda and minutes

Task 100.2 – County Board of Commissioners Support Services

Consultant Responsibilities:

100.2.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to three occasions. Consultant will prepare presentation materials and/or handouts. The three presentations will tentatively occur in the months of November 2022, December 2022, and March 2023 and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Presentation #3 – Within six months after effective date of contract. Attend and present at a Joint Special Work Session for Marion County and Linn County Commissioners, to provide an introduction and update on the project and answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with ~~sub-consultants~~ subconsultants and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material

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- Final presentation material

101 – STRATEGIC PERMITTING PLAN

Task 101.1 – Project Management and Administration

Consultant Responsibilities:

101.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

101.1.2. Consultant Coordination. Coordinate services to complete the Strategic Environmental Permitting Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of the draft Strategic Permitting Plan.

Assumptions:

- Project management budget assumes a task order schedule of up to 3 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

101.2.1. Consultant shall review available project information, including background, concept development and current plan/design information for the North Santiam Canyon Wastewater Master Plan (Master Plan). Consultant will conduct a desktop review of the Master Plan area to identify potential resources affected and locate existing available data. Using this information, Consultant will compile a list of potential issues and data needs for the project. Consultant will check and refine the understanding of those issues by initiating preliminary, informal discussions with the anticipated permitting agencies to understand their concerns and permitting needs for the project. The intent of these discussions will be to identify the agencies' specific resource concerns, to understand permitting requirements and obligations, and discuss options for permitting efficiencies, such as using programmatic agreements. Consultant will also preliminarily identify which federal agencies may have a National Environmental Policy Act (NEPA) requirement for the Master Plan and/or specific projects or phases that are part of the plan (due to their jurisdiction, land ownership, or funding) and whether a single joint NEPA document could be used to support multiple federal decisions.

Task 101.3 – Strategic Permitting Plan

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

Based on information obtained in Task 101.2, Consultant will prepare a draft Strategic Permitting Plan. The draft Strategic Permitting Plan will include:

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- Project permitting schedule and general cost estimate.
- Summary of environmental permits and approvals needed
- Summary of initial pre-scoping discussions with agencies
- List of potential resources affected and existing available data
- List of potential permitting issues and data needs (based on desktop analysis and agency discussions)
- List of design needs to complete permitting
- Summary of potential opportunities for permitting efficiencies
- Estimated timeline to complete permitting
- Estimated general cost to complete permitting

Consultant will revise and finalize the Strategic Permitting Plan based on one consolidated review by Consultant and Owner.

Assumptions:

- Consultant will conduct up to three coordination conference calls with Owner to provide updates, receive additional information/clarifications, etc.
- Permitting agencies for informal, pre-scoping coordination will be: US Forest Service, US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Transportation, and Marion County. Outreach to agencies will consist of email or telephone contact. Consultant will make a reasonable effort get information from agencies within the available time and consistent with the level of effort budgeted.
- "Environmental permits and approvals" do not include easements or rights-of-way with utilities, ODOT, or federal agencies.
- Permitting requirements related specifically to wastewater treatment/infiltration requirements will be addressed through a separate task order.
- One review of the draft Strategic Permitting Plan will be conducted. The Strategic Permitting Plan will be revised based on one consolidated set of review comments. Consultant intends for the Strategic Permitting Plan to be a "living document", updated and adapted as the project planning and subsequent design and permitting efforts progress.
- No Owner board meeting presentations

Deliverables:

- Draft Strategic Permitting Plan
- Final Strategic Permitting Plan

102 – SUBSURFACE EXPLORATION

Task 102.1 – Project Management and Administration

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

102.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

102.1.2. Coordination. Coordinate services to complete the permitting and subsurface investigations.

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Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 102.2 – Subsurface Investigation Program

The purpose of subsurface investigation is to collect soil and groundwater data that can be used to: (1) assess whether a candidate site can infiltrate the required volume of treated wastewater, (2) inform facility predesign, (3) evaluate facility permitting framework (WPCF required), and (4) evaluate compliance with DEQ's groundwater protection rules. The subsurface investigation program involves excavating test pits to measure soil infiltration rates and observe soil types, installing monitoring wells to measure aquifer properties, collecting soil and groundwater samples, and one year of groundwater and surface water level monitoring. This task includes management, planning and execution of the subsurface investigation program comprised of two subtasks:

- Subtask 102.2.1 – Mill City / Gates Subsurface Investigation
- Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Owner Responsibilities:

- This scope of work does not include effort to identify domestic water wells in the vicinity of the proposed infiltration facility (which would likely involve a door-to-door survey and review of households that are connected to City water). Owner is responsible for this effort, if it is needed, and for incorporating the information obtained into the final report.

Assumptions:

- Subsurface investigations will occur on private or public property that is not owned by Owner. Owner and Consultant will work collaboratively to gain access to these sites for the purpose of performing site evaluation work. In general, Owner is responsible for the execution of site access agreements with property owners and Consultant is responsible for coordination with property owners regarding schedule for accessing the property, discussing access routes, and reporting results to the property owner.
- Test pitting and infiltration testing will be limited to four days in the Detroit/Idanha area (up to 10 test pits) and five days in the Gates/Mill City area (up to 18 test pits).
- Monitoring wells and temporary borings will target discrete horizons in the glacial till geologic unit that are related to the depth to groundwater and the contact between glacial till and bedrock. Because there is limited information about the geology and depth to groundwater at the candidate sites, the costs for drilling are based on assumptions about the depths of monitoring wells and temporary borings. Where field conditions differ from those assumed and where such differences result in increased field costs that exceed the established budget for this task, an equitable adjustment to the contract value will be made by contract amendment.
- In the Gates/Mill City area, it is assumed that monitoring wells will be 100 feet deep, one temporary boring will be advanced to the top of the water table at 80 feet below ground surface (bgs), and another temporary boring will be advanced to the top of bedrock at 200 feet bgs.

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- In the Detroit/Idanha area, we have assumed that monitoring wells will be 80 feet deep (2 wells) or 200 feet deep (3 wells), and two temporary borings will be advanced to the top of bedrock at 100 feet bgs.
- Drilling costs could change if: (1) driller costs change (quotes are typically only good for 30 days due to "instability of commodity costs") or (2) the assumed construction of wells and borings changes based on the geology of the site. It is assumed that casing advance is not necessary to keep the bedrock hole open during drilling of the monitoring well in the Detroit/Idanha area. An amendment may be necessary if casing must be advanced to keep the hole open at this well and if such costs exceed the agreed upon task budget.
- Subsurface exploration work, including digging of test pits, geotechnical drilling, and installation of subsurface monitoring equipment, is not subject to Davis-Bacon or BOLI prevailing wages.

Subtask 102.2.1 – Mill City / Gates Subsurface Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface investigation in the Gates/Mill City area includes the following activities:

102.2.1.1. Work Plan. Develop a work plan for the subsurface investigation that includes a specific plan for excavating and infiltration testing at up to 18 test pits (at Site 1 through Site 4) and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to eighteen (18) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for deep soil investigation.

102.2.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop three (3) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs,

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SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.1.4. Groundwater Level Monitoring. Equip each well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells quarterly for a year.

102.2.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.1.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum.

Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Subsurface characterization in the Detroit/Idanha area includes the following activities:

102.2.2.1. Work Plan. Develop a work plan for the subsurface characterization that includes a specific plan for excavating and infiltration testing at up to 10 test pits (at the McCoy and Detroit Ranger Station sites), and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.2.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to ten (10) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for the deep soil investigation.

102.2.2.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop five (5) groundwater

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monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.2.4. Surface Water and Groundwater Level Monitoring at the McCoy Site. Install three (3) stilling wells (in the Santiam River, Unnamed Creek, and McCoy Creek); equip each stilling and monitoring well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells and stilling wells quarterly for a year.

102.2.2.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.2.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum

Task 102.3 – Groundwater Modeling Evaluation

The purpose of this task is to provide field data and modeling evaluations for submittal to the Oregon Department of Environmental Quality (DEQ) to support a Water Pollution Control Facility (WPCF) permit determination in compliance with DEQ's groundwater protection rules.

Task 102.3 is comprised of two subtasks:

- Subtask 102.3.1 – Gates/Mill City Permitting Evaluation
- Subtask 102.3.2 – Detroit/Idanha Permitting Evaluation

Assumptions:

- It is assumed that the planned location for the infiltration facility in the Gates/Mill City area is further from the Santiam River than the planned location for the infiltration facility in the Detroit/Idanha area (less than 0.25 miles). Therefore, we anticipate that the evaluation to support a permitting determination for the Detroit/Idanha area will be more rigorous.

Subtask 102.3.1 – Mill City / Gates Permitting Evaluation
Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

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Consultant shall perform the following activities for the infiltration facility in the Gates/Mill City area:

102.3.1.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the selected Gates/Mill City infiltration site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.1.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.1.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.1.4. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.1.5. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater protection rules, and (3) to discuss DEQ's comments on the memo.

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

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Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation

Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant shall perform the following activities for the infiltration facility in the Detroit/Idanha area:

102.3.2.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the McCoy site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.2.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.2.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.2.4. Perform a modeling simulation to estimate the maximum recharge volume in the Detroit/Idanha area (additional evaluation of maximum recharge volume is needed in the Detroit/Idanha area due to the anisotropy; a model simulation would be more cost effective than hiring a driller to conduct a pumping test).

102.3.2.5. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.2.6. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater.

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

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- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)

Consultant Responsibilities:

102.4.1. Address permitting and other regulatory requirements related to the National Environmental Policy Act (NEPA), which will involve obtaining an agreement to access the properties, excavate test pits, and install monitoring wells. Assumes a level of effort with up to 48 hours.

102.4.2. Coordinate with property owner of "upper deck" private property to obtain permission to install two monitoring wells. Assumes a level of effort with up to 48 hours.

Owner Responsibilities:

- Review and approve permitting applications/letters requesting permission to access the McCoy site, excavate test pits, and install monitoring wells.
- Owner is responsible for costs associated with property owner conditions related to site access and site access agreements.

103 – LAND ACQUISITION AND RELOCATION SERVICES

Task 103.1 – Project Management and Administration

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

103.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

103.1.2 Coordination. Coordinate services to complete the land acquisition and relocation services task.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 103.2 – Mill City Land Acquisition and Relocation Services
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

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Responsible for the oversight of ~~the services of the~~ land acquisition and relocation ~~sub-consultant to provide Acquisition and Relocation~~ services for North Santiam Canyon Sewer Project (NSCSP) and the Detroit Downtown Commercial Septic Program as outlined in the tasks below. The subtasks included as part of Task 103.2 are based on the land acquisition and relocation ~~sub-consultant's~~ Subconsultant's scope of work. The scope and fee provided are for the acquisition of up to fifteen ~~eight~~ (15 ~~8~~) files.

Consultant Responsibilities:

RIGHT OF WAY (ROW)
Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.2.1 Project Management and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to six (6) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.2.7). Consultant Project Manager will QC all deliverables prior to delivery.

103.2.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner and Consultant of any major title encumbrances.

103.2.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner and Consultant for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner and Consultant.

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103.2.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.2.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

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103.2.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of

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required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.2.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.
Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there is up to one (1) Personal Property Only Relocation.

Consultant shall, at a minimum, conduct the following relocation activities:

- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment.
- Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.2.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall:

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.2.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.

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- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to fifteen (15) ~~three (3)~~ Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner,
- Provide up to fifteen (15) ~~three (3)~~ GINs, one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Up to fifteen (15) ~~three (3)~~ appraisal and appraisal review reports, electronically.
- Provide 15-Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Provide Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- Provide the following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to fifteen (15) ~~three (3)~~ Draft Offer Packets for review for each file to Owner
- Provide up to fifteen (15) ~~three (3)~~ Final Offer Packets sent certified mail or delivered in person for each file.
- Provide up to fifteen (15) ~~three (3)~~ Final Report Packets for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.

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- If applicable, provide Recommendation for Condemnation to Owner.
- Provide Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval
- Submit Relocation claims electronically to Owner for payment
- Submit Relocation Closing Reports to Owner
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

Task 103.3 – Detroit Land Acquisition and Relocation Services
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Responsible for the oversight of ~~the services of the land acquisition and relocation sub-consultant to provide~~ Acquisition and Relocation services for North Santiam Canyon Sewer Project as outlined in the tasks below. The subtasks included as part of Task 103.3 are from the land acquisition and relocation ~~sub-consultant's~~ Subconsultant's scope of work.

Consultant Responsibilities:

~~RIGHT OF WAY (ROW)~~
Consultant shall conduct the Right-of-Way ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970
- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.3.1 Project Manager and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to twelve ~~five~~ (12 ~~5~~) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.3.6). Consultant Project Manager will QC all deliverables prior to delivery.

103.3.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes.

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Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner of any major title encumbrances.

103.3.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.3.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.3.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section 5.140, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

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Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.3.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer

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negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.3.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.

Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there are up to three (3) Personal Property Only Relocations.

- Consultant shall, at a minimum, conduct the following relocation activities:
- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment. Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner.
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.

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- Maintain Report of Personal Interview.

103.3.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.3.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices, electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to twelve ~~five~~ (12 ~~5~~) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner.
- Provide up to twelve ~~five~~ (12 ~~5~~) GINs, with one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. NOTE: If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Provide up to twelve ~~five~~ (12 ~~5~~) appraisal and appraisal review reports, electronically.

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- Provide 15 Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- The following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to twelve ~~five~~ (12 ~~5~~) Draft Offer Packet for review for each file to Owner.
- Provide up to twelve ~~five~~ (12 ~~5~~) Final Offer Packet sent certified mail or delivered in person for each file.
- Provide up to twelve ~~five~~ (12 ~~5~~) Final Report Packet for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide up to twelve ~~five~~ (12 ~~5~~) Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval.
- Submit Relocation claims electronically to Owner for payment.
- Submit Relocation Closing Reports to Owner.
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

104 – FINANCIAL ADVISORY SERVICES

Task 104.1 – Project Management and Administration

Consultant Responsibilities:

104.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

104.1.2 Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.

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- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 104.2 – Financial Advisory Services
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

104.2.1 Advisory Services. Consultant shall provide, upon request, advisory services related to the North Santiam Canyon Sewer Project. This consultation shall be provided on a time and materials basis, and it shall include attendance at meetings, writing of memos or presentations, or communication via phone or email in support of the project decision-making.

104.2.2 Financial Plan. Consultant shall update rate model and monthly cost per EDU for two project phases and build year-by-year model of costs and revenues. Consultant shall prepare presentations and technical memoranda of business case model and year-by-year model results for meetings with project stakeholders.

Owner Responsibilities:

- Provide meeting space for project meetings.

Assumptions:

- Attendance at project meetings may be virtual.

Deliverables:

- Business Case Technical Memorandum
- Business Case Presentation
- Draft and Final Financial Plan

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM

200 – MILL CITY / GATES FACILITIES PLANNING STUDY

Task 200.1 – Project Management

Consultant Responsibilities:

200.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

200.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Planning criteria will also be reviewed during the Kickoff Meeting. Representatives from the DEQ will be invited to the kickoff meeting.

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Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services, if any.

Assumptions:

- Project management budget assumes a planning schedule of up to 8 months.
- Monthly Board meeting attendance is covered in a separate task order.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Funding administration services and funding acquisition support is not included in this scope of work.

Task 200.2 – Data Acquisition & Facility Tours

Consultant Responsibilities:

200.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

Mill City

- Discharge Monitoring Report (DMR), operational, influent monitoring (15-minute intervals), rainfall data (since Jan 2021), and any other water quality sampling results collected outside of DMRs in spreadsheet format
- Update of financial summary records, including current rates, annual expenses, operation, revenues, replacement budgets, number and type of accounts, etc.
- Recent facility inspection reports, if available
- Provide update of any changes to wastewater flows from major seasonal wastewater dischargers, water users with their own wastewater treatment system, major water users that consume the majority of their water.
- Any recently produced planning documents (transportation, wastewater, water conservation, water/waste/energy audits)
- Update on known treatment plant or collection system issues and planned improvements
- Update from Gates and Mill City for winter-time water consumption data summarized by user types in a spreadsheet format
- Known correspondence from federal and state regulatory agencies regarding violations or concerns related to wastewater treatment and disposal

200.2.2. Data Collection and Review. Collection and processing of furnished data, mapping, and reports. Provide a follow-up Request for Information for supplemental data if required.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required.
- Provide access to facilities and records.
- Provide operations and maintenance staff for questions as needed.

Assumptions:

- Consultant will not enter confined spaces. Structural and electrical engineering reviews are not included in the scope of work but could be completed as an additional service.

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- Consultant shall be entitled to rely, without liability, on the accuracy and completeness of information provided by Owner, other agencies and stakeholders, and information from public records, without the need for independent verification.

Deliverables:

- Request(s) for Information

Task 200.3 – Project Planning

Consultant Responsibilities:

200.3.1. Location. Incorporate brief description of project location from master plan. Include figure(s) from master plan to establish the project planning area.

200.3.2. Environmental Resources. Incorporate information from master plan to document natural resources in the project area, including land use, flood plains, wetlands, historic, biological, water quality issues, socio-economic, climate, geography, soils, rivers, and air quality. Use master plan figures to summarize natural resources in the project area.

200.3.3. Growth Trends. Update master plan population statistics and projections. For Mill City, coordinate with Mill City and County planners on location, phasing, and type of new growth. The Portland State University Population Research Center historical population data and 40-year growth forecasts will be used to inform the population growth, but it is assumed that non-traditional methods will be required to best account for the decline and near-term growth due to rebuilding after the 2020 wildfire as well as accounting for the new community sewer system in Gates and new treatment facility in Mill City. Growth for non-residential users will be estimated based on input from City and County planners for the 20-year planning period.

200.3.4. Community Engagement. Describe the Owner's approach to engage the community in the planning process.

200.3.5. Design Flow Rates. Update master plan design flow rates based on most recent DMR and water usage data from Mill City and Gates. Update projections based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.6. Design Loading Rates. Update master plan wastewater loadings and project future loadings based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.7. Regulatory Requirements. Review and update summaries from master plan of current regulatory requirements and planning criteria that may influence operation, maintenance, and capital improvements of the existing Mill City wastewater system and the initial project components in Gates.

200.3.8. Cost Estimating. Establish cost estimating methodology to reflect both local and current conditions.

200.3.9. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.3.10. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and approval on growth projections and planning criteria.
- Provide review and comments of this section.
- Provide input on community engagement.

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Assumptions:

- The planning criteria will need to be established for the planning study prior to having any supplemental income and population survey data available to inform the population estimates and projections. The best available data will be used for the purposes of this study.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- City staff or Contract City Planner will provide input on the distribution and phasing of new residential and non-residential growth in Gates and Mill City.
- If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.
- The study area will coincide with the North Santiam Sewer Authority Boundary for Gates and Mill City.
- Community engagement included in this scope of work is limited to the public meeting in Task 209. Additional community engagement activities can be provided as additional services or through other identified task orders.

Deliverables:

- Draft Project Planning Facility Plan Section.

Task 200.4 – Existing Facilities Evaluation

Consultant Responsibilities:

200.4.1. Base Map. Update the existing system base map from the master plan, showing location of key facilities, pipelines, and basin boundaries for Mill City. Use the schematic process layout of the existing treatment plant from the master plan showing major process components.

200.4.2. History. Update master plan's documentation of wastewater treatment plant history and system description to reflect current flow and water quality data, recent discharge monitoring records (DMRs), plant improvements that have been completed recently, current condition of plant equipment and facilities, and current operation practices.

200.4.3. Wastewater System Management Classification, Operators and License. Provide a brief writeup of system required licensing and current operator license information.

200.4.4. Conditions Assessment. Update master plan documentation of existing physical conditions deficiencies. Collection system pipe information will be summarized by pipe material and age. Complete pump tests at each pumping facility to evaluate current pump performance and capacities. Incorporate findings from the I/I study that is currently under way at the time this scope was finalized.

200.4.5. Capacity Evaluation. Update master plan's comparison of existing and future projected flows and loadings to the existing capacity of the Mill City wastewater treatment system. Summarize existing capacity deficiencies.

200.4.6. Review pump run time data and flow meter records to assess existing capacity limitations (if any).

200.4.7. System Resiliency. Assess the collection system resiliency for the Mill City lift stations. This is anticipated to include a comparison of firm pumping capacity (i.e. with largest pump off-line) to the peak hour inflow. It also includes an assessment of whether onsite or portable back-up provisions are available and automated, what kind of emergency bypass pumping provisions are provided for the lift station and/or force main (in the event of a line break), and what kind of redundancy is provided in terms of back-up level sensors and alarms. This scope does not include an evaluation of seismic risks, a comprehensive

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vulnerability assessment, or updates to the Owner's Emergency Response Plans. Consultant will summarize the consequence of failure of critical lift station facilities and identify potential capital improvements and operational strategies that could be completed to mitigate these risks.

200.4.8. Wastewater Collection System Evaluation

200.4.8.1. Wastewater Model Development and Calibration. Use existing base mapping, record drawings, dry weather flows, pump curves, and Owner provided data to develop and calibrate a wastewater system model. The winter-time water consumption data will be used to estimate dry weather flows. Allocate infiltration and inflow for utilizing wet weather system design flows, available pump run time, and SCADA data.

200.4.8.2. Existing System Evaluation. Exercise computer model to check the Mill City system and evaluate the existing collection system hydraulic capacity. Evaluate system for remaining capacity.

200.4.9. Wastewater Treatment System Evaluation. Update master plan write-up to summarize existing plant deficiencies using updated plant data to compare actual performance to expected performance.

200.4.10. Operations. Update master plan documentation of existing operations and maintenance issues and concerns reported by Owner staff.

200.4.11. Financial Status of Existing Facilities. Document current rate schedules, annual O&M costs, other capital improvement programs, and table of users by monthly usage categories for the previous fiscal year. Document existing debts and required reserve accounts. Budget and capital improvements will be addressed under a separate task.

200.4.12. Water/Energy/Waste Audits. Provide brief write-up discussing variable frequency drive motors and all other applicable energy items for the system. Investigate and summarize the likelihood of incorporating a hydroelectric power generator on the force main from Gates to Mill City. Summarize overall current energy consumption for Mill City's existing system.

200.4.13. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.4.14. Draft Plan Section. Prepare draft section writeup. Address Owner comments on draft document.

Owner Responsibilities:

- Review and comment on draft documents.
- Participate and provide meeting location for workshop meetings.
- Provide field checks if necessary, including surveying.
- Provide access to facilities and records. Test and replace (if needed) suction and discharge pressure gauges ahead of equipment tests.

Assumptions:

- Modeling of the existing Mill City treatment plant will not be completed for this facilities plan.
- The Mill City GIS mapping will not be survey grade and will be carried over from the master planning effort. The mapping will not include rim/invert data. It will only include approximate location as it was digitized from the existing record drawings.
- No additional field work or surveying will be required.
- Collection system conditions assessment will not include a full review of CCTV records or smoke testing with the exception of incorporating the findings from the Mill City I/I study.

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- The Mill City collection system model will be developed with the InfoSWMM modeling platform, based on record drawings. Consultant will rely upon the accuracy of available record drawings. This scope does not include any field survey work to check or update pipe slopes.
- If model does not readily calibrate to existing conditions, and additional field work is recommended to troubleshoot the Owner's wastewater system, these services can be completed as an additional service.
- No drain field analysis will be provided.

Deliverables:

- Draft Existing Facilities Evaluation Facility Plan Section.

Task 200.5 – Need for System Improvements

Consultant Responsibilities:

200.5.1. Health, Sanitation, and Security. Summarize concerns and relevant regulations or correspondence from/to state and federal agencies.

200.5.2. Aging Infrastructure. Incorporate summary findings of conditions assessment of assets and summarize available pipeline age/material information. Summarize the following:

- Unit performance issues, deficiencies and useful life.
- Existing system reliability per DEQ and EPA guidelines.
- Ability to meet current and potential future effluent limits and other regulatory requirements.
- I/I calculations to determine if existing I/I is considered "non-excessive".

200.5.3. Reasonable Growth. Using the design flow and loading information, document the reasonable growth capacity that is necessary to meet needs during the planning period.

200.5.4. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and review of this section of the plan.

Deliverables:

- Draft Project Needs Facility Plan Section.

Task 200.6 – Collection System Alternatives Considered and Selection

Consultant Responsibilities:

200.6.1. Future System Evaluation. Build Gates system model and expand Mill City model to include additional pipe and pump station network requirements associated with servicing new growth areas for the planning period. Add flows from new growth. Exercise the model to identify potential system deficiencies attributed to growth within the planning period.

200.6.2. Evaluate alternative improvements to correct existing, and anticipated future deficiencies, sewer new areas, and meet the target planning criteria. Benefits and drawbacks will be summarized for each alternative. A "no action" alternative will also be considered for each category. This alternative evaluation will be based on the master plan collection system alternatives while evaluating Mill City's existing system for collection system capacity deficiencies.

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Where improvements are not relatively straightforward, evaluate up to three collection alternatives for the existing Mill City collection system that will service existing and future flows. Additional refinement of pipeline alternatives is anticipated to occur in the predesign tasks associated with the new Gates collection system.

200.6.3. Alternative Cost/Benefit Analysis. This will include life cycle cost analysis on preferred alternatives for up to three viable alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 40-year life cycle evaluation. This alternative evaluation for Gates will be based on the master plan collection system alternatives while evaluating any capacity alternatives for Mill City's collection system.

200.6.4. Phasing/Implementation Plan. Develop a phasing plan of improvements based on initial project, 10-year, 20-year, and 40-year anticipated growth. This plan will include an evaluation of interim recommendations or strategies for property owners who need to address septic system deficiencies or replacement prior to day one of the new Gates collection system and Mill City mechanical treatment plant are constructed.

200.6.5. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives using the master plan's figures with updates/modifications per this scope of work.

200.6.6. Environmental Impacts. A summary of the preliminary environmental screening of the collection system alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.6.7. Land Requirements. Discuss property needed for alternatives.

200.6.8. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.6.9. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.6.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.6.11. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide a review of the alternatives considered and input on selection criteria and ultimate selection of preferred alternative.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4 (planning level cost estimates).

Deliverables:

- Draft Collection System Alternatives Facility Plan Section.

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Task 200.7 – Treatment and Disposal System Alternatives Considered and Selection

Consultant Responsibilities:

200.7.1. Develop a list of treatment plant improvement alternatives focused on improving effluent water quality, vulnerability, safety and redundancy. The disposal improvement alternative will be rapid infiltration per the master plan recommendations.
200.7.2. Develop up to three pre-screened alternatives to evaluate, for primary treatment, secondary treatment, tertiary treatment, and solids handling treatment processes. Evaluate the pre-screened alternatives.
200.7.3. Facility Tours. Organize a tour of up to two wastewater treatment facilities with the Owner's staff to investigate alternatives with similar processes. These are anticipated to occur on the same day.
200.7.4. Alternative Cost/Benefit Analysis. Assist in comparing benefits, drawbacks, and costs of up to three viable alternatives. This will include life cycle cost analysis on preferred alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 20-year life cycle evaluation.
200.7.5. Phasing Plan. Develop a phasing plan of improvements based on initial project, 10-year, and 20-year anticipated growth.
200.7.6. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives.
200.7.7. Environmental Impacts. A summary of the preliminary environmental screening of the treatment system and disposal alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.
200.7.8. Land Requirements. Discuss property needed for alternatives.
200.7.9. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.
200.7.10. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.
200.7.11. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.
200.7.12. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide input on tasks above.
- Provide a review of the alternatives considered section of the plan.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not look at alternatives to upgrade the existing recirculating gravel-bed filter.
- Evaluation of alternatives does not include piloting, bench testing, or fieldwork.
- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4.

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Deliverables:

- Draft Treatment System Alternatives Facility Plan Section.

Task 200.8 – Proposed Projects (Recommended Alternatives)

Consultant Responsibilities:

200.8.1. Model day one and future 20-year process and hydraulic conditions of selected alternative for the new mechanical treatment plant.

200.8.2. Capital Improvement Plan.

a. Summarize recommended improvements.
b. Prepare planning level cost estimates for recommended improvements. For future projects anticipated to be developer driven and developer funded, summarize only upsize costs.
c. Estimate the portion of each capital improvement project cost that is attributed to 20-year growth for System Development Charge (SDC) eligibility.

200.8.3. Preliminary Project Schedule. Summarize costs for initial project, 10-year, and 20-year needs. The 6-year CIP for DEQ purposes will be covered by the "initial project" costs.

200.8.4. Permitting Requirements. Summarize WPCF permitting requirements (WPCF permit application and additional support is covered by a separate task order).

200.8.5. Sustainability Considerations. Summarize how the priority improvement projects will enable the Owner to serve its customers and be able to operate and maintain the system. Discuss how the projects will accommodate green infrastructure and efficiencies.

200.8.6. Future Reuse Consideration. Reuse system impacts will be considered and coordinated, and their potential summarized for selected alternative.

200.8.7. Organization and Staffing Requirements. Summarize recommended staffing requirements as required for regulatory compliance or as reported by the Owner. Summarize up to three options for organizational setup for certified operators for both collections and treatment (i.e. contract operator vs sewer authority staff).

200.8.8. Financing Options. Summarize potential financing options available for initial project. This will be a summary of efforts being undertaken by the Owner, Marion County, and the MWVCOG for funding the project.

200.8.9. Annual Budget Considerations.

a. Summarize Operating Revenues and Expenses. Summarize estimated annual operating expenses and identify recommended budgets dedicated for the initial project.
b. Anticipated User Charges and Other Income. Summarize the business case scenario documented previously by FCS Group and provide a status update on current efforts to implement recommendations.
c. Annual Replacement Budgets. Develop recommended annual replacement budgets for the initial project based on typical replacement values and asset life. This will include a list of short-lived assets and the recommended annual replacement budget.
d. Annual Operations and Maintenance Costs. Estimate the operations and maintenance cost implications for the initial project.

200.8.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review an overall summary of the plan, selected improvements, and budget considerations.

200.8.11. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

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Owner Responsibilities:

- Provide input on the prosed projects.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.
- Provide review and comments on the plan.

Assumptions:

- Scope excludes a user rate analysis, including evaluation of individual rate structures, cost-of-service evaluations, and service availability fee studies. These services can be provided as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

Deliverables:

- Capital Improvement Plan (tabular format, organized by initial project, 10-year, and 20-year needs).
- Estimate of SDC eligibility for each capital improvement past the initial project.
- Draft Proposed Project Facility Plan Section.

Task 200.9 – Facility Plan Documentation and Public Meeting

Consultant Responsibilities:

200.9.1. Prepare Facility Plan. Prepare and combine draft documents for a complete facility plan generally following the outline established in the July 2018 guidance document "Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed by Business Oregon, Oregon Department of Environmental Quality, Rural Community Assistance Corporation, and the United States Department of Agriculture". Add executive summary and assemble appendix materials. Appendix materials will include output flow capacities, existing peak hour flows, and future peak hour flows summarized in tabular and graphic format. Draft documents to be updated to address Owner comments. Submit final draft plan for Owner review.

200.9.2. Public Meeting. Prepare materials for and present summary findings in a townhall meeting.

200.9.3. Address Owner Comments. Address final Owner and public comments and submit for agency review.

200.9.4. Address Agency Comments. Address agency comments and finalize document.

Owner Responsibilities:

- Review and comment on final draft plan in a timely manner.
- Pay agency review fees, if applicable.
- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.

Deliverables:

- Public Meeting Presentation Materials.

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- Final Facilities Plan, thre`e (3) hard copies (3 ring binders) of the plan and one electronic copy in PDF format.

Task 200.10 – Management Reserve (Contingency Task)
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time, Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of services. For these instances, a time and material budget is established in order for Consultant to complete such additional services. Prior to the use of this contingency budget, Owner's representative will provide written (email) authorization to use the budget for specific tasks.

ADDITIONAL SERVICES (not included in scope of work)

- Bond support
- Public outreach or stakeholder outreach support
- User rate and connection fee study
- Additional field work
- Energy efficiency evaluations
- Concept level design services
- Model training
- Environmental information documents, studies, field investigations, and permitting. Environmental permitting will be addressed by a separate task order.
- Amendments to this facility planning study because of other task orders.

201 - MILL CITY / GATES FACILITIES SITE EVALUATION

Task 201.1 – Project Management

Consultant Responsibilities:

201.1.1 Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

Assumptions:

- Assumes a three (3)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 201.2 – Topographic Survey

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

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201.2.1 Consultant shall perform a topographic recovery survey along the proposed Mill City/Gates Force Main alignment. Topographic survey areas are shown in red on the three figures below.



Former railroad right-of-way between Mill City and Gates



Existing First Ave Lift Station and NE Wall Street between N 1st Ave and Santiam Pointe Loop NE in Mill City

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Proposed location of Gates Regional Lift Station on W Central Street to former railroad right-of-way south of N Santiam Highway W

Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to complete a boundary resolution for subject area.
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter to the nearest 0.01 foot.
d. Additional spot elevations to identify grade breaks and other topographic features.
e. Locate surface features over surface area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
f. Locate ground and above ground utilities, including utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
g. Locate trees 8-inch in diameter and greater measured at breast height, noting coniferous or deciduous.
h. Tag located trees with a reference number for field identification.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.
k. Survey shall be based on an official benchmark acceptable to the City.
l. Establish benchmarks for future design reference.

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201.2.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Manhole symbols shall be shown at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Assumptions:

- This task does not include a retracement survey recorded with Marion County Surveyor's Office.
- This task does not include private utility locating services,
- This task does not include preparation of easement legal descriptions and exhibits.

Deliverables:

- Basemap in AutoCAD 3D format.

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS

400 – COMMERCIAL SEPTIC SYSTEM PLANNING

Task 400.1 – Project Management

Consultant Responsibilities:

400.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

400.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

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Assumptions:

- Assumes a 4- twelve (12)-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 400.2 – Data Acquisition & Property Tour

Consultant Responsibilities:

400.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

a. Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b. List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c. Previous collected test pit data for all the properties.
d. Previous studies involving the soil in the city.
e. Provide existing drain field and septic tank locations for each property.
f. Identify available property for consideration for septic tank or drain field placement.
g. Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

400.2.2. Conduct site tour of each property to evaluate potential drain field locations.
400.2.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

Assumptions:

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

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Deliverables:

- Request(s) for Information
- Summary tables and figures for existing septic tanks and drain fields status

Task 400.3 – Stakeholder Involvement / Engagement

Consultant Responsibilities:

400.3.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.
400.3.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.
400.3.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.
400.3.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities:

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

Deliverables:

- Public and stakeholder meeting presentation materials.

Task 400.4 – Commercial Septic System Concept

Consultant Responsibilities:

400.4.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.
400.4.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …).

Owner Responsibilities:

- Provide input and approval of septic tank and drain field concepts.
- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Test pits will not be excavated, and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.

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- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Task 400.5 – Commercial Septic System Design
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.5.1 Develop schedule for overall project delivery and construction.

400.5.2 Oversee excavation of test pits and soil sampling to determine soil characteristics, infiltration rates, and other necessary design criteria for up to twelve ~~seven~~ (12 ~~7~~) commercial properties.

400.5.3 Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, etc.) ~~including seasonal variation and 5 to 10 year growth~~ for flow and wastewater strength for up to twelve ~~seven~~ (12 ~~7~~) commercial properties and their intended uses.

400.5.4 Prepare Septic System Designs for up to twelve ~~seven~~ (12 ~~7~~) commercial properties. Complete designs for each commercial property shall include pre-treatment, septic tanks, drain field, replacement area, and all other appurtenances, as required.

~~400.5.5 Prepare cost estimate/proposal as required by Marion County Commercial Septic Grant Program.~~

400.5.5 ~~400.5.6~~ Prepare design drawings (11" x 17", PDF).

400.5.6 ~~400.5.7~~ Regulatory and Permitting Requirements. Review and summarize current, pending, and future regulatory requirements and permitting criteria that may influence operation and maintenance, and adaptation of the system to the long-term gravity collection system. Prepare ~~required~~ permit applications~~,~~ and provide inspection services for systems permitted by DEQ as appropriate ~~coordinate inspections for approval of each system~~.

400.5.7 ~~400.5.8~~ Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner in an operation and maintenance (O&M) Manual.

400.5.8 ~~400.5.9~~ Attend up to twelve (12) bi-weekly one (1)-hour long meetings and provide updates to project team.

Owner Responsibilities:

- Provide input for septic tank and drain field concepts.
- Provide staff input and requirements for septic grant approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

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- Commercial properties will be permitted through either Marion County or Oregon Department of Environmental Quality (DEQ).
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- Conceptual septic system design and drawings.
- Final septic system design and drawings.
- ~~Cost estimate.~~
- Permit applications.
- O&M Manual ~~or guidance document as appropriate~~.

Task 400.6 – Topographic Survey

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.6.1 Consultant shall perform a topographic recovery survey for up to twelve (12) commercial properties located along the western side of North Santiam Highway between the intersection of Front Street (southern limit) and Detroit Avenue (northern limit) for the purpose of preparing easement agreements including legal descriptions and exhibits for use of the Right-of-Way. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to complete a boundary retracement and side boundary line resolution for up to twelve (12) properties within the project limits described above and as defined in the attached PDF.
b. Topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50-foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, and lip of gutter, to the nearest 0.01 foot.
d. Additional spot elevations to identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way.

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f. Locate surface features over subject area, including: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas.
g. Locate ground and above ground utilities, including utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants.
h. Locate trees 8-inch diameter and greater measured at breast height, noting coniferous or deciduous.
i. Map existing easements which may affect subject area.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

400.6.2 Survey will show utility poles, power lines, and telecommunications, including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for manholes and drainage structures, with structure size (inside dimensions).
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twelve (12) easement areas.

Task 400.7 – Detroit Environmental Due Diligence

Consultant shall complete environmental due diligence support as described below for up to twelve (12) commercial properties in Detroit, Oregon.

Subtask 400.7.1 – Project Management
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

Consultant Responsibilities:

400.7.1.1 Consultant will coordinate with Owner and others to receive project materials, prepare invoicing, and transmit correspondence. As part of Consultant's project management efforts, monthly check-in calls will be scheduled with Consultant to discuss interim survey results and other project-related issues as they arise. Consultant will maintain project files to include supporting materials. Consultant will monitor task performance, schedule, and budget; approve project expenses; and

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check that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

Assumptions:

There will be four (4) monthly check-in calls involving the Consultant team.

- Monthly check-in calls will be approximately one (1)-hour long.

Subtask 400.7.2 – Cultural Clearance Certification
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant will coordinate with the cultural resources department at Oregon Department of Transportation (ODOT) to seek Cultural Clearance Certification for the project.

Consultant Responsibilities:

400.7.2.1 Tribal Coordination. Consultant will coordinate with the cultural resources departments of the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Confederated Tribes of Warm Springs Indian Reservation to inquire about local historical knowledge of the project area. Consultant will also ask if they have any cultural concerns about the location of the project. Project-related Tribal coordination will be described in the final report.

400.7.2.2 Background Research. Prior to fieldwork, Consultant will conduct a records search of the Oregon Archaeological Records Remote Access (OARRA) online records database, maintained by the Oregon State Historic Preservation Office (SHPO), for information about previous cultural resource studies and previously identified archaeological sites in the project vicinity. Consultant staff will also review other available background resources pertinent to the history, prehistory, ethnography, and environmental context of the project area. These background resources will include any recent geotechnical reports, ethnographic and historical accounts, General Land Office documents, historical maps, photographs, and other relevant research information available from local libraries, historical societies, or informants.

Because the project is located on land managed by ODOT, an archaeological excavation permit must be obtained from the SHPO before archaeological testing takes place (per ORS 390.235 and its implementing guidelines). The Consultant will apply for this state-issued excavation permit from the SHPO as required by state statutes (ORS 358.905 and 97.740). These statutes require protection of archaeological sites, objects, and human remains on public lands in Oregon. It is required that the permit be obtained prior to the start of archaeological testing or monitoring. Excavation permit applications usually require up to 35 days for submission and review.

400.7.2.3 Field Survey. Consultant will conduct an archaeological survey in areas where ground-disturbing activities will occur to identify potential archaeological resources in and around the proposed area of disturbance. The survey will include a pedestrian walkover and subsurface shovel probes. The pedestrian survey will

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involve archaeologists walking along transects spaced no more than 20 meters apart, systematically examining the ground surface for archaeological materials. Consultant crews will record their observations on standardized field forms and in field notebooks.

Preliminary research shows there are no cultural resources investigations overlapping the project area according to OARRA. Consultant will conduct subsurface testing in locations with a high probability of containing archaeological resources where project-related ground disturbance will occur. Consultant proposes to excavate up to 24 shovel probes. Probes will measure a minimum of 30 centimeters (cm) in diameter and will extend to a minimum of 50 cm below the surface and two culturally sterile 10-cm levels, where possible. All soils will be screened through ¼-inch hardware mesh. A bucket auger will be used to sample more deeply buried sediments up to 200 cm below the surface opportunistically throughout the project area.

Should archaeological materials be discovered, they will not be collected; rather, the artifacts will be identified as to type, material, function, and cultural and temporal association. All diagnostic materials (those that have a clear temporal connection) will be photographed. Resources will be recorded on the appropriate SHPO resource forms. Resource location global positioning system (GPS) data will be collected and submitted as GIS files. If a GPS unit cannot be used to record resources, locations of areas surveyed or resources will be marked on a U.S> Geological Survey quadrangle map and them georeferenced during post-field processing. All recording procedures will follow SHPO guidelines. The Consultant's cost estimate assumes that no more than one archaeological resource will be encountered during the archaeological survey.

400.7.2.4 Reporting. Consultant will prepare one cultural resources survey report detailing the findings of the Tribal coordination, background research, pedestrian field survey, and subsurface testing. The report will include a description of the regulatory context, regional and local background research, methods, expectations, and results of the survey. The Consultant will provide an electronic version of the draft report to ODOT, SHPO, and interested Tribal entities for review. The Consultant will coordinate with ODOT, SHPO, and the Tribes for timely review of the report. After acceptance of the final report, Consultant will provide GIS shapefiles and maps of the areas surveyed and cultural resources identified to the Consultant, provided that the private landowner(s) approve(s) of disclosing information about their properties.

Assumptions:

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- All meetings and coordination with Consultant will be conducted via conference calls and email.
- The records search area will not extend farther than one mile beyond the project area. Consultant will be able to complete the literature review using electronically available resources, and no in-person file searches will be required.
- Consultant will obtain up to one archaeological permit.
- The project location and size will remain as identified in the request for scope and cost (less than three acres total).
- Based on a preliminary review of SHPO records, Consultant anticipates that up to one cultural resource site will be identified and require documentation in the project area. If a larger number of sites are identified, additional costs may be incurred, and Consultant will discuss with Consultant on how to proceed.
- No more than four hours of labor for each field staff member will be required to record the cultural resource site. The identification of large and complex cultural resource sites (e.g., homesteads with multiple structures or precontact village sites with more than 500 artifacts) are not included in this scope.
- For the purposes of total site count, every site larger than one acre will be considered as an additional site based on every additional acre; otherwise, it is assumed that no lithic landscapes or overly dense lithic source areas will be encountered.
- Consultant's ability to conduct fieldwork will be unimpeded by access restrictions (e.g., fences, locked gates, and livestock), weather, road construction, landowner restrictions, COVID-19-related restrictions, force majeure, or any other factor(s) outside of Consultant's control.
- Consultant will prepare a cultural resources survey report, and the report will require no more than one round of review by Consultant. Comments from Consultant on each of the survey reports will not require more than four hours of Consultant labor to address. No comments will be received from SHPO review, and minimal comments (up to four hours of work needed to address comments) will be received from the Tribes.

Deliverables:

- Draft and final cultural resources survey report.
- Draft and final GIS spatial data from cultural resources investigations.

Subtask 400.7.3 – Phase I Environmental Site Assessment

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant Responsibilities:

Consultant will prepare a Phase I Environmental Site Assessment (ESA) report for the project area. The Phase I ESA will be completed in general accordance with the standards described in the current ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (2021). The Phase I ESA will be directed by a qualified Environmental Professional, as required by the ASTM Standard.

A Phase I ESA conducted in accordance with ASTM Standard E1527-21 constitutes appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial or customary practice and will allow the user to satisfy one of the requirements for landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (42 United States Code 9601). The Phase I ESA will consist of the subtasks described below:

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400.7.3.1 Records Review. Consultant will review appropriate documents, including historical aerial photographs, historical topographic maps, and other land-use documents in order to identify past operations or activities on the subject property or nearby properties that may have caused the release of hazardous substances or petroleum products into the environment. As part of the review process, site location, hydrogeological characteristics, geographic setting, and physiography also will be summarized. Available state and federal regulatory databases will be reviewed to determine whether the subject property or nearby facilities have been subject to environmental actions or review. The regulatory database review will, at a minimum, include the databases required to satisfy the ASTM Standard. Note: Based on the Consultant's initial review, there are eight leaking underground storage tank records and a brownfield site mapped within 0.25 miles of the project site.

400.7.3.2 Interviews. Consultant will attempt to interview property owners or their representative(s) based on contact data provided by Consultant. Additionally, reasonable attempts will be made to interview at least one staff member of state or local government agencies regarding information that indicates recognized environmental conditions (RECs) in connection with the subject property.

400.7.3.3 Site Reconnaissance. A Phase I ESA includes a reconnaissance of the subject property and vicinity to observe and photograph areas with potential RECs and to document current conditions. Access to private, locked, or restricted areas would be arranged by Consultant. This scope of work does not include activities such as collecting or analyzing soil, air, water, or other environmental samples.

400.7.3.4 User-Provided Information. User-provided information is an essential component of the Phase I ESA and includes items such as copies of previous Phase I ESAsor other relevant environmental documents, a completed ASTM Phase I ESA User Questionnaire, a completed Initial Data Request, and access to the subject property. The user is also responsible for providing Consultant with the results of a search of recorded land-title records and judicial records for environmental liens and activity and use limitations.

400.7.3.5 Report Generation. The Phase I ESA findings will be summarized and documented in one report. Sections within the report will include 1) a description of the property, 2) summaries of the site history and interviews, 3) a regulatory database review, 4) a description of the site reconnaissance, 5) findings and conclusions, and 6) figures and appendices. Each report will include Consultant's professional opinion concerning the environmental disposition of the site regarding the presence of RECs. Report limitations and all literature cited will also be included. According to the ASTM Standard, the content of a Phase I ESA is valid for 180 days after the first data are collected. If the date of the intended use for Phase I ESAs is not within 180 days, an update may be necessary. Non-scope issues identified in the ASTM Standard include radon, lead, asbestos, radioactivity, regulatory compliance, wetlands, and endangered species. Non-scope issues will not be addressed in the Phase I ESA report.

Assumptions:

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- The ASTM User Questionnaire and Consultant's Initial Data Request will be returned to Consultant promptly upon commencement of the project.
- This scope of work includes one round of revisions to the report text. Substantial revisions, such as a revised scope or project area, will incur additional cost.
- Phase I ESA reliance letters will be provided for a flat fee of $500.
- Fieldwork for the Phase I ESAs will be completed in conjunction with that for cultural and will not be an independent mobilization.

Deliverables:

- Draft and final Phase I ESA report.

Task 400.8 – Detroit Commercial Septic Excavation Contractor

Consultant Responsibilities:

400.8.1 Consultant shall mobilize to Detroit, Oregon to perform sewer video inspections of existing septic systems using appropriate equipment to locate, expose, flag, and prepare septic systems for inspection by Consultant's septic system designer. Consultant shall provide services for up to five days of sewer video inspections.

400.8.2 Consultant will excavate test pits for onsite sewage evaluations at the direction of Consultant's septic system designer. Test pits will be excavated in accordance with Oregon Department of Environmental Quality recommendations and requirements. The bottom of the test pit shall measure at least 2-feet x 4-feet. Test pits shall be at least 4.5-feet deep but shall not exceed a depth of five feet. One end of the test pit shall be sloped or stepped in order to allow access for Consultant's septic designer and regulatory inspector. All spoils must be placed a minimum of two feet from the edge of the test pit. Consultant shall provide services for up to five days of test pit excavation.

Assumptions:

- Each day includes up to eight hours of site work and mobilization efforts.
- Consultant's septic system designer shall group locations of sewer video inspections and test pit excavations for efficiency.
- Owner recognized that the services provided by the septic system designer include construction-type activities not originally contemplated in the Consultant's scope of services and recognizes that the Owner will rely on the Consultant's licensing and insurance to address and deficiencies in performance to the standard of care or to address any damages resulting from Consultant's activities.

Task 400.9 – Detroit Commercial Properties Survey
(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.

Consultant Responsibilities:

400.9.1 Consultant shall perform a property boundary survey for up to twenty (20) commercial properties in Detroit, Oregon for the purpose of verifying property lines prior to field layout, measurements, elevation work, and site plan development of onsite septic systems. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall

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be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the followings:

a. Locate existing monumentation to complete a boundary retracement and side boundary line resolution for up to twenty (20) properties within the City of Detroit.
b. Calculations and Property Deed research.
c. Initial field monument ties.
d. Boundary Resolution.
e. Set property corners.
f. Record of survey drafting.
g. File survey with Marion County.

Deliverables:

- Basemap in AutoCAD 3D format.
- Legal Descriptions and Visual Exhibit Maps for up to twenty (20) easement areas.

401 - KANE'S MARINA SEPTIC SYSTEM

Task 401.1 – Project Management

Consultant Responsibilities:

401.1.1. General Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.
401.1.2. Regulatory Coordination. Meet with County and DEQ staff to discuss WPCF and County permit options. The objective of this outreach will be to have a selected permitting process (WPCF or County).
401.1.3. Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to review/establish Owner design team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.
401.1.4. Presentation to County Commissioners. The Consultant will present a project update to the County Commissioners at the conclusion of Task 405, Preliminary Design. Consultant will prepare presentation materials and/or handouts. The one presentation will summarize the system layout, opinion of probable cost, permitting, schedule, and next steps.
401.1.5. Request for Information. Prepare initial request for information for data to be used in the design process.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed.
- Provide requested information within two weeks of request.

Assumptions:

- Project management budget assumes a project schedule of up to 4 months.
- Unless otherwise noted, meetings/workshops may include a combination of in person or virtual

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attendees. This assumption applies to this task as well as subsequent tasks.

- Funding support is not included in this scope of work, including but not limited to American Iron and Steel (AIS) or Build America, Buy America (BABA) tracking, certification, or reporting. These services can be provided as additional services.

Deliverables:

- Kickoff meeting agenda and minutes.
- Request for Information.
- Presentation materials and/or handouts.

Task 401.2 – Preliminary Engineering Report (PER)

Subtask 401.2.1 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

401.2.1.1 ~~401.2.1~~ Study Phase Services.

a. Site Visit. Consultant will coordinate with Owner's staff to perform a site visit and document existing site conditions. Evaluation will include documentation of status and condition of existing septic facilities and electrical equipment. This scope does not include inspection of interior spaces or existing facilities.
b. Basin Study. Consultant will review the plan and profile for the gravity sewer system developed through the North Santiam Sewer Authority Master Plan. Consultant will approximate alignment and invert elevation requirements for the future lift station wetwell. Consultant will estimate the operating volume required for the future pump station.
c. Operation and Maintenance Assessment. Consultant will review available data provided by Owner to summarize historic usage, operation strategies, and maintenance considerations. It is anticipated the evaluation will include holding tank storage requirements, hydrogen sulfide and odor control, standby power, instrumentation and controls (alarming), future pump station compatibility, redundancy provisions, emergency response, and preventative maintenance activities.

401.2.1.2 ~~401.2.2~~ Design Criteria. Document design criteria established from the study phase services that will serve as basis for design. The design criteria will include, emergency storage calculations, anticipated flow conditions for the marina, future basin flow conditions, holding tank (wetwell) storage requirements, odor control strategy, power requirements, alarms.

401.2.1.3 ~~401.2.3~~ Topographic Surveying. Provide oversight of the services to complete topographic and boundary surveying services for Kane's Marina.

401.2.1.4 ~~401.2.4~~ Geotechnical Investigation. Provide oversight of the services to complete geotechnical engineering design services for Kane's Marina.

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401.2.1.5 ~~401.2.5~~ Site Layout. Develop 30% concept design showing site civil layout and holding tank(s) orientation on the marina site. Concept to include general grading concepts and reflect considerations for holding tank dimensions, future building and valve vault footprint, generator location, stormwater disposal, yard piping, and access for future maintenance/pump removal. The future footprint assumes that a small electrical building will be required to house the future electrical/controls, including a variable frequency drive (VFD) for the future lift station. Consultant has assumed that the generator will be outdoors with sound attenuation. The pipe network will be limited to 5-feet outside any building footprint.

401.2.1.6 ~~401.2.6~~ Odor Control Type. Evaluate up to three design alternatives for odor control with the Owner. For each alternative, evaluation to include operations and maintenance considerations, benefits, drawbacks, costs, and consideration of non-cost factors (i.e., future expansion for the lift station). Potential odor control types include chlorine dosing equipment, passive carbon filtration, mixing, chemical, and air-scrubber.

401.2.1.7 ~~401.2.7~~ Electrical and Controls. Coordinate with Owner to identify SCADA communication preferences. Coordinate with power utility to identify power constraints. Prepare one-line diagram for power and a narrative describing the communication strategy and objectives including a piping and instrumentation diagram (P&ID).

401.2.1.8 ~~401.2.8~~ Cost Estimate. Provide an AAEC Class 4 opinion of probable cost for the project.

401.2.1.9 ~~401.2.9~~ Workshop Meeting. Meet with Owner to review concepts and alternatives and select preferred alternative for design.

401.2.1.10 ~~401.2.10~~ Prepare PER. Prepare draft Preliminary Engineering Report (PER) following the *Oregon DEQ guidelines*. In addition to the minimum regulatory requirements, PER will include concept drawings showing conceptual pipe network layout, one-line diagram, and anticipated permit requirements. Submit to Owner for review.

401.2.1.11 ~~401.2.11~~ Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments into final PER.

Owner Responsibilities:

- Provide input on holding tank, piping design criteria, and preferred alternatives.
- Obtain or provide information for land parcel for the holding tank site, easements, and rights-of-way.
- Provide overall site plan with enough detail to layout the pipe network.
- Provide all necessary documentation or title information for boundary survey services.
- Secure permission for access for surveying and geotechnical investigations on the two subject properties.
- Provide concurrence on the location of the geotechnical investigation; assist in pre-marking locations for test pits / boring.
- Review and provide one set of consolidated comments on the Draft PER, concept plans, and opinion of probable cost.

Assumptions:

- Consultant shall be entitled to rely, without liability or the need for independent verification, on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

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- Power is readily available and located adjacent to the site.
- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Pavement sections, curbing and other site design is not included in this scope.
- Other assumptions documented for surveying and geotechnical services.

Deliverables:

- Agenda and minutes for Workshop Meeting.
- Draft and Final PER (1 paper copy and 1 PDF)

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Subtask 401.2.2 – Topographic Survey

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task..)

~~*Sub-Consultant*~~ *Consultant Responsibilities:*

401.2.2.1 ~~Sub-Consultant~~ Consultant shall perform a topographic recovery survey of the Kane's Marina property to serve as a basis for design. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to compete a boundary resolution of subject area
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50 foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, lip of gutter, etc, to the nearest 0.01 foot
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way
f. Locate surface features over subject area, including but not limited to: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas
g. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants
h. Locate trees 8" DBH and greater noting coniferous or deciduous
i. Map existing easements which may affect subject.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

401.2.2.2 Survey will show utility poles, power lines, and telecommunications, etc. including any identification information. For existing storm drains, culverts, and sanitary sewers, ~~Sub-Consultant~~ Consultant shall:

a. Show rim or grate elevations and inverts for all manholes and drainage structures, with structure size (inside dimensions)
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

~~*Sub-Consultant Deliverables to Consultant*~~ *Deliverables:*

- Basemap in AutoCAD 3D format.

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Subtask 401.2.3 – Geotechnical Investigation

(Consultant may retain a subconsultant to perform this task, however, Consultant's retention of a subconsultant for performance of task does not relieve consultant of responsibility to perform this task.)

The purpose of this subtask is to evaluate soil and groundwater conditions as a basis for developing geotechnical engineering design criteria for the Kane's Marina project.

~~*Sub-Consultant*~~ *Consultant Responsibilities:*

401.2.3.1. Review information regarding subsurface soil and groundwater in the vicinity of the site, including filed reports, selected geologic maps, and other geotechnical engineering-related information.

401.2.3.2. Coordinate and manage the field investigation, including public utility notification and scheduling. Utility locates will be ordered by Consultant.

401.2.3.3. Explore subsurface soil and groundwater conditions at the project site by drilling one (1) drilled boring exploration to a depth between 20 and 25 feet bgs on the south side of the site near proposed holding tank/wetwell location, and four (4) to six (6) boring explorations 5 to 10 feet bgs along the proposed forcemain alignment.

401.2.3.4. Explorations will be advanced to the depths noted or to practical refusal in dense gravels or competent rock, if encountered, whichever is shallower. The borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

401.2.3.5. Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM Standard Practices Test Method D 2488. Field exploration work shall be observed and documented by qualified geotechnical engineering staff.

401.2.3.6. Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests and percent fines tests.

401.2.3.7. Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology and subsurface conditions.
b. Report subsurface conditions and data along the proposed forcemain/collection lines alignment.
c. An opinion as to the adequacy of the proposed development of the holding tank/wetwell from a geotechnical engineering standpoint.
d. Recommendations for preparation measures at the proposed holding tank/wetwell/lift station site, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction.
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing.
f. Recommendations for earthworks, including use of on-site and imported structural fill and fill placement and compaction requirements.

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g. Recommendations for foundations to support proposed at-grade and below-grade structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance. Consultant assumes that proposed structures will be lightly loaded and that shallow foundations can be used to adequately support the structures.
h. Recommendations for supporting on-grade slabs, including base rock, capillary break and modulus of subgrade reaction, as appropriate.
i. Seismic design parameters in accordance with the current version of the Oregon Structural Specialty Code. Consultant will also perform a simplified liquefaction settlement analysis.

401.2.3.8. All work under this subtask will be directly supervised by an engineer licensed in the state of Oregon. Engineer will apply their professional seal to the document.

Assumptions:

- Owner will obtain right-of-entry or access to the exploration locations.
- A rubber-tired drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered, are not included in this scope of work or fee.
- Excess drill cuttings can be scattered on site.
- Installation of monitoring wells to measure static water groundwater is excluded.
- Contaminated soils will not be encountered during exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), Consultant will stop drilling operations, notify Owner and discuss how to proceed.
- If public locators are not allowed to enter or cannot enter the project area to clear specific exploration locations, ~~Sub-Consultant~~ Consultant may provide the services of a private locate company to access the site, if requested, for an additional fee of $630.

~~*Sub-Consultant*~~ *Deliverables:*

- Draft and Final Geotechnical Report.

Task 401.3 – Final Design

Consultant Responsibilities:

401.3.1. Plan Sheets. Prepare general, survey, site civil, structural, plumbing, HVAC, mechanical, electrical, and instrumentation and control plan sheets for the site, holding tank, and yard piping. Instrumentation and control final design is anticipated to be a performance spec for a holding tank and odor control monitoring system. Thus, the plan sheets will only include a piping and instrumentation diagram (P&ID). Coordinate location of pumps, piping layout, spacing, electrical equipment, generator, pump removal equipment, building access, overhead door, HVAC equipment, plumbing drains, and other appurtenances for ultimate lift station layout with the Owner. Prepare 90% review sets.

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401.3.2. Specifications. Consultant will support the Owner in CM/GC selection with services described in Task 5 of this scope of work. Consultant will prepare technical specifications. Technical specifications will be prepared to detail the materials, processes, and the products that are to be used in the construction of the lift station. Complete draft technical specifications for the 90% review set.

401.3.3. 90% Design and Review Workshop Meeting. Submit 90% design review drawings and specifications to the Owner. Participate in a 90% design review workshop meeting.

401.3.4. Agency Submittal. Agency design checklists will be completed and submitted along with the final plans and specifications to Agency for review.

401.3.5. Final Approval. Upon Owner and Oregon DEQ review, Consultant will incorporate appropriate revisions into a final set of stamped drawings and specifications that will be used for bidding.

401.3.6. Opinion of Probable Costs. Selected CM/GC will provide cost estimating after Task 404. Consultant will review and provide feedback.

Owner Responsibilities:

- Review and provide one set of consolidated comments on the 90% design deliverables.
- Provide legal and risk reviews of the bid documents.
- Pay for any associated permitting fees not assigned to the Contractor.

Assumptions:

- Consultant will prepare the building permit application at 90% design and submit to the Marion County Building Inspection office. Final permits will be obtained by Owner. Owner shall pay all permit fees not assigned to the construction contractor.
- Consultant will prepare and submit the DEQ permit application at 90% design and assist Owner with DEQ consultation.
- Project will not include irrigation or landscaping of the site. Services of a licensed landscape architect is excluded.
- Extensive architectural feature and architectural rendering are not included in the holding tank design.
- Contractor will be required to prepare and implement an erosion and sediment control plan (ESCP), prepare traffic control plans, and secure associated permits.
- Shoring (if required) will be designed by the Contractor.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or project support above and beyond that described herein is considered an additional service requiring a contract amendment and equitable adjustment of the contract amount..
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- The following design standards and references are to be followed where relevant during the development of the project:
    - Marion County Standard Specifications and Drawings
    - Oregon Standard Specifications for Construction
    - Owner to provide front end contracting and bidding documents (Div 00)
    - AIS and BABA requirements

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- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

Deliverables:

- 90% design drawings and specifications, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- 100% stamped design package, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- Opinion of Probable Cost.

Task 401.4 – Pre-Procurement Support

Consultant Responsibilities:

401.4.1. This task includes consultant services to support the Owner in direct purchase of equipment for the Project using available funds. The objective of the direct purchase of equipment or materials is to account for potential long lead times and still have the equipment or materials on hand when the contractor is ready to move forward with construction. Consultant will provide specifications for the equipment/material to be directly purchased which may be out of sequence or earlier than the final design task.

Owner Responsibilities:

- Owner staff will lead the solicitation effort to either solicit informal bids or select suppliers from pre-approved supplier lists. Owner will receive and store materials prior to the Contractor taking on the equipment/material for installation.

Assumptions:

- Consultant is not responsible if material/equipment must be returned or designated as surplus due to the expedited delivery process for this project.
- Budget assumes up to 40 hours for support services to be provided as requested.

Deliverables:

- Procurement Specifications.

Task 401.5 – Removed

Task 401.6 – WPCF PERMITTING

Consultant Responsibilities:

401.6.1. Prepare draft permit application for a holding tank permit for DEQ review.
401.6.2. Meet with DEQ to discuss the permit applications. For the purpose of this scope, up to two (2) meetings are assumed.
401.6.3. Address DEQ comments in permit application.

Owner Responsibilities:

- Provide input on draft permit application.
- If necessary, pay fee to DEQ for draft permit application.
- Review and comment on draft documents.

Assumptions:

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- No field work, environmental studies, cultural resource investigations, or biological assessments are included in this task.
- This scope does not include any additional field gathering or special studies that may be required by the DEQ.
- No other permits will be required. If required, support for these permits can be provided as additional services.

Task 401.7 – Removed

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of **$2,550,059** ~~**$2,095,927.**~~

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

PHASE 1 – GENERAL ENGINEERING SERVICES	Cost	Type
100 – PROJECT MANAGEMENT		
Task 100.1 – Project Management	$100,000 ~~$54,520~~	T&M
Task 100.2 – County Board of Commissioners Support Services	$ 15,840	LS
101 – STRATEGIC PERMITTING PLAN		
Task 101.1 – Project Management and Administration	$ 4,825	LS
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	$ 19,090	LS
Task 101.3 – Strategic Permitting Plan	$ 9,540	LS
102 – SUBSURFACE EXPLORATION		
Task 102.1 – Project Management and Administration	$ 16,400	T&M
Task 102.2 – Subsurface Investigation Program	$ 74,200	T&M
Subtask 102.2.1 – Gates / Mill City Subsurface Investigation	$ 461,580	T&M
Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation	$ 566,780	T&M
Task 102.3 – Groundwater Modeling Evaluation		
Subtask 102.3.1 – Mill City / Gates Permitting Evaluation	$ 63,600	T&M
Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation	$ 78,700	T&M
Task 102.4: McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	$ 18,700	T&M

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103 – LAND ACQUISITION AND RELOCATION SERVICES		
Task 103.1 – Project Management and Administration	$ 12,140	T&M
Task 103.2 – Mill City Land Acquisition and Relocation Services	$ 58,817	T&M
Task 103.3 – Detroit Land Acquisition and Relocation Services	$ 177,017 ~~89,120~~	T&M
104 – FINANCIAL ADVISORY SERVICES		
Task 104.1 – Project Management and Administration	$ 23,430 ~~4,930~~	T&M
Task 104.2 – Financial Advisory Services	$ 137,500 ~~16,500~~	T&M
Subtotal	**$ 1,838,159 ~~1,565,282~~**	

T&M: Time and Materials, LS: Lump Sum

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	**Cost**	**Type**
Task 200.1 – Project Management	$ 12,600	LS
Task 200.2 – Data Acquisition & Facility Tour	$ 6,110	LS
Task 200.3 – Project Planning	$ 26,725	LS
Task 200.4 – Existing Facilities Evaluation	$ 68,680	LS
Task 200.5 – Need for system improvements	$ 3,650	LS
Task 200.6 – Collection System Alternatives Considered & Selection	$ 53,615	LS
Task 200.7 – Treatment System Alternatives Considered & Selection	$ 59,365	LS
Task 200.8 – Proposed Projects (Recommended Alternatives)	$ 70,780	LS
Task 200.9 – Facilities Plan Documentation & Public Meeting	$ 25,830	LS
Task 200.10 –Management Reserve	$ 10,000	T&M
201 – MILL CITY/GATES FACILITIES SITE EVALUATION		
Task 201.1 – Project Management	$ 7,455	LS
Task 201.2 – Topographic Survey	$ 38,038	LS
Subtotal	**$ 382,848 ~~337,355~~**	

T&M: Time and Materials, LS: Lump Sum

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PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	Cost	Type
400 – COMMERCIAL SEPTIC SYSTEM PLANNING		
Task 400.1 – Project Management	$17,330 ~~$6,030~~	LS
Task 400.2 – Data Acquisition & Properties Tour	$ 17,770	LS
Task 400.3 – Stakeholder Involvement/Engagement	$ 12,200	LS
Task 400.4 – Commercial Septic System Concept	$ 16,680	LS
Task 400.5 – Commercial Septic System Design	$41,670 ~~$20,000~~	LS
Task 400.6 – Topographic Survey	$ 10,560	LS
Task 400.7 – Detroit Environmental Due Diligence (ODOT ROW Easements)	$ 34,032	LS
Task 400.8 – Detroit Commercial Septic Excavation Contractor	$ 26,400	T&M
Task 400.9 – Detroit Commercial Properties Boundary Survey	$ 31,800	T&M
401 – KANE'S MARINA SEPTIC SYSTEM		
Task 401.1 – Project Management	$ 15,550	LS
Task 401.2 – Preliminary Engineering Report (PER)	$ 28,630	LS
Subtask 401.2.2 – Topographic Survey	$ 17,240	LS
Subtask 401.2.3 – Geotechnical Investigation	$ 17,060	LS
Task 401.3 – Final Design	$ 28,270	LS
Task 401.4 – Pre-Procurement Support	$ 8,000	T&M
Task 401.5 – Removed		
Task 401.6 – WPCF Permitting	$ 5,860	LS
Task 401.7 – Removed		
Subtotal	**$329,052 ~~$193,290~~**	

T&M: Time and Materials, LS: Lump Sum

TOTAL	**$2,550,059 ~~$ 2,095,927~~**

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and ~~Sub-consultants~~ Subconsultants for performance of

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Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be

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for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Chris Einmo
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

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a. General Reimbursable Expenses consist of:

i. Long distance communications.

ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

iv. Third-party models and mockups requested by Owner.

v. The printing of master or reproducible sets of plans and project manuals including specifications.

vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 65.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant's Professional Hourly Rates.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT E - CRITICAL DATE SCHEDULE
Schedule of Deliverables

PHASE 1 – GENERAL ENGINEERING SERVICES	
100 – PROJECT MANAGEMENT	
Task 100.1 – Monthly Invoices and Progress Reports	Monthly
Task 100.1 – Meeting agendas and minutes	Weekly
Task 100.2 – Final Presentation Materials	8 weeks after NTP
101 – STRATEGIC PERMITTING PLAN	
Task 101.3 – Draft Strategic Planning Plan	11 weeks after Amend No. 2 NTP
Task 101.3 – Final Strategic Planning Plan	13 weeks after Amend No. 2 NTP
102 – SUBSURFACE EXPLORATION	
Task 102.2.1 – Draft Subsurface Investigation Work Plan	
Task 102.2.1 – Final Subsurface Investigation Work Plan	
Task 102.2.1 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.1 – Draft Subsurface Investigation Memorandum	
Task 102.2.1 – Final Subsurface Investigation Memorandum	
Task 102.2.1 – Groundwater Level Monitoring Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Work Plan	
Task 102.2.2 – Final Subsurface Investigation Work Plan	
Task 102.2.2 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Memorandum	
Task 102.2.2 – Final Subsurface Investigation Memorandum	
Task 102.2.2 – Groundwater Level Monitoring Memorandum	
Task 102.3.1 – Draft WPCF Evaluation Memorandum	
Task 102.3.1 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.1 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum	
Task 102.3.2 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
103 – LAND ACQUISITION AND RELOCATION SERVICES	

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Task 103.1 – Project Management and Administration	
Task 103.2 – Mill City Land Acquisition and Relocation Services	
Task 103.2.3 – Draft ROW Programming Estimate	
Task 103.2.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.2.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.6 – Draft Offer Packets	
Task 103.2.6 – Final Offer Packets	
Task 103.2.6 – Final Report Packet	
Task 103.2.6 – Proposed Counteroffers, if applicable	
Task 103.2.6 – Recommendation for Condemnation, if applicable	
Task 103.2.6 – Report of Personal Interview	
Task 103.2.7 – Submit studies, Move Agreements, and Estimates	
Task 103.2.7 – Submit Relocation Claims	
Task 103.2.7 – Submit Relocation Closing Reports	
Task 103.2.9 – ROW Certification Form	12 weeks prior to Project Bid Date
Task 103.3 – Detroit Land Acquisition and Relocation Services	
Task 103.3.3 – Draft ROW Programming Estimate	
Task 103.3.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.3.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.6 – Draft Offer Packets	
Task 103.3.6 – Final Offer Packets	
Task 103.3.6 – Final Report Packet	
Task 103.3.6 – Proposed Counteroffers, if applicable	
Task 103.3.6 – Recommendation for Condemnation, if applicable	
Task 103.3.6 – Report of Personal Interview	
Task 103.3.7 – Submit studies, Move Agreements, and Estimates	
Task 103.3.7 – Submit Relocation Claims	
Task 103.3.7 – Submit Relocation Closing Reports	

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Task 103.3.9 – ROW Certification Form	12 weeks prior to Project Bid Date
104 – FINANCIAL ADVISORY SERVICES	
Task 104.1 – Project Management and Administration	
Task 104.2 – Financial Advisory Services	
PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	
200 – MILL CITY / GATES FACILITIES PLANNING STUDY	
Task 200.2 – Request(s) for Information	
Task 200.3 – Draft Project Planning Facility Plan Section	
Task 200.4 – Draft Existing Facilities Evaluation Facility Plan Section	
Task 200.5 – Draft Project Need Facilities Plan Section	
Task 200.6 – Draft Collection System Alternatives Facility Plan Section	
Task 200.7 – Draft Treatment System Alternatives Facility Plan Section	
Task 200.8 – Capital Improvement Plan	
Task 200.8 – SDC Eligibility Estimate	
Task 200.8 – Draft Proposed Project Facility Plan Section	
Task 200.9 – Public Meeting Presentation Materials	
Task 200.9 – Final Facilities Plan	
201 – MILL CITY / GATES FACILITIES SITE EVALUATION	
Task 201.2 – Topographic Survey	180 days after Amend No. 5 NTP
PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	
400 – COMMERCIAL SEPTIC SYSTEM PLANNING	
Task 400.2 – Requests for Information	
Task 400.2 – Existing Septic and Drain Field Summary Tables and Figures	
Task 400.3 – Presentation Materials	
~~**Task 400.4 – Draft Commercial Septic Design Memorandum**~~	
Task 400.5 – Conceptual Septic System Design	52 weeks after Amend No. 4 NTP
Task 400.6 – Basemap in AutoCAD 3D format.	24 weeks after Amend No. 4 NTP
Task 400.6 – Legal Descriptions and Visual Exhibit Maps	52 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Cultural Clearance)	26 weeks after Amend No. 5 NTP
Task 400.7 – Detroit Environmental Due Diligence (Phase I ESA)	26 weeks after Amend No. 5 NTP
Task 400.9 – Detroit Commercial Properties Survey	26 weeks after Amend No. 5 NTP
401 – KANE'S MARINA SEPTIC SYSTEM	
Task 401.1 – Kickoff meeting agenda	2 weeks after Amend No. 2 NTP

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Task 401.1 – Kickoff meeting minutes	1 week after Kickoff Meeting
Task 401.1 – Request for Information	
Task 401.1 – Presentation Materials	
Task 401.2 – Workshop Meeting Agenda	
Task 401.2 – Workshop Meeting Minutes	
Task 401.2 – Draft Preliminary Engineering Report	5 weeks after Amend No. 2 NTP
Task 401.2 – Final Preliminary Engineering Report	6 weeks after Amend No. 2 NTP
Subtask 401.2.2 – Topographic Basemap	6 weeks after Amend No. 2 NTP
Subtask 401.2.3 – Geotechnical Report	10 weeks after Amend No. 2 NTP
Task 401.3 – 90% Design Drawings and Specifications	15 weeks after Amend No. 2 NTP
Task 401.3 – Final (Stamped) Drawings and Specifications	17 weeks after Amend No. 2 NTP
Task 401.3 – Opinion of Probably Cost	17 weeks after Amend No. 2 NTP
Task 401.4 – Procurement Specifications	

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MARION COUNTY
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EXHIBIT F - RATE SCHEDULE

Keller Associates	Maximum Hourly Rate*
Project Engineer I	$130
Project Engineer II	$170
Project Engineer III	$220
Project Manager I/II	$170
Project Manager III	$225
Structural Engineer I/II	$170
Structural Engineer III	$220
Chief Engineer / Chief Structural Engineer	$270
CAD I/II	$130
CAD III	$150
CAD Manager	$180
Electrical Controls I/II	$170
Electrical Controls III	$220
Principal	$275
Surveyor I/II	$145
Professional Surveyor PLS	$180
Field Representative	$140
Engineering Student	$75
Administration I	$90
Administration II	$110

**Rates reported are for 2023. Rates updated annually in January.*

***Reimbursable Expenses at Cost x 1.05*

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SUBCONSULTANT RATE SCHEDULE

Hydrological	Maximum Hourly Rate*
Administration	$110
Project Hydrogeologist	$120
Principal Hydrogeologist	$190
Staff Geologist	$120
GIS/Graphics/Database	$140

Permitting	Maximum Hourly Rate*
Planning-Specialist XI	$197
Environmental Resources-Specialist XI	$197
Planning Specialist V	$117
Planning Specialist IV	$107

Land Acquisition and Relocation	Maximum Hourly Rate*
Land Owner Liaison – Dave Hansen	$81.89
Land Owner Liaison – Kari Lowe	$244.98
Project Management and Administration – Tamisha Schrunk	$185.00
Project Management and Administration – Samri Laney	$42.60
Land Owner Liaison – Julie Goodrich	$155.00

Financial Advisory	Maximum Hourly Rate*
Principals	$295
Project Managers	$230
Consultants	$190
Public Relations	$170
Technical Writer/Graphic Artist	$145
Administrative Support	$95

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Surveying	Maximum Hourly Rate*
PLS Office Technician	$140
One-Man Field Crew	$140
Project Surveyor	$140

Geotechnical Services	Billed	Rate*
ENGINEERING CONSULTING		
Staff Geotech/Soil Engineer I or Geologist I	Hourly	$105.00
Staff Geotech/Soil Engineer II or Geologist II	Hourly	$130.00
Staff Geotech/Soil Engineer III or Geologist III	Hourly	$150.00
Associate Engineer I	Hourly	$155.00
Associate Engineer II	Hourly	$175.00
Engineering Geologist I	Hourly	$175.00
Engineering Geologist II	Hourly	$195.00
Senior Engineer	Hourly	$205.00
Seismic/Technical Specialist Engineer	Hourly	$250.00
Principal Engineer	Hourly	$235.00
Drone Flight Services	Hourly	$245.00
Drone Hardware & Flight Fee	Daily	$160.00
CADD Technician	Hourly	$100.00
Administrative Assistant	Hourly	$85.00
SPECIAL INSPECTION AND CONSTRUCTION SERVICES		
Project Manager	Hourly	$140.00
Engineering Technician	Hourly – 3 hr min	$100.00
Senior Engineering Technician	Hourly – 3 hr min	$120.00
Subgrade Evaluation Onsite	Each	$385.00
Nuclear Densometer	Daily	$85.00
Vehicle Fee (Rental/In-house)	Daily	$135.00
Laboratory Technician	Hourly	$85.00
Laboratory Manager	Hourly	$140.00
MATERIALS TESTING SERVICES		

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#200 Wash	Each	$140.00
Atterberg Limits	Each	$250.00
In-Situ Dry Density and Moisture Content	Each	$55.00
Moisture Content	Each	$40.00
One-dimensional Consolidation	Each	Quoted
Proctor Moisture-Density	Each	$380.00
Sieve Analysis ¾ inch to 2-inch max	Each	$380.00
Sieve Analysis < ¾ inch max	Each	$330.00
Sieve Analysis > 2-inch max	Each	$560.00
Soil Classification	Each	$45.00
Specific Gravity of Coarse Aggregate	Each	$155.00

Septic	Maximum Hourly Rate*
Septic Consultant	$170.00
Septic Consultant Travel Time	$90.00

Septic Excavation Contractor	Maximum Hourly Rate*
Operator and Laborer with Excavator	$275
Locate, Camera Equipment	$250
Mobilization	$600 per trip

**Rates reported are for 2023. Rates updated annually in January.*

***Subconsultant Reimbursable Expenses and Direct Labor at Cost x 1.10*

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

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SIGNATURE PAGE FOR
ARPA – NORTH SANTIAM CANYON SEWER PROJECT – PW-5069-22
Between
MARION COUNTY and KELLER ASSOCIATES, INC.

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES
BOARD OF COMMISSIONERS:

Chair — Date: 10/25/23

Not Present At Meeting

Commissioner — Date

Commissioner — Date: 10/25/23

Authorized Signature: DocuSigned by: Brian Nicholas 0703BA7ACD6D443... — Date: 10/20/2023
Department Director or designee

Authorized Signature: — Date: 10/20/2023
Chief Administrative Officer

Reviewed by Signature: DocuSigned by: Jane E Vetto D0CEC5B04B9E483... — Date: 10/23/2023
Marion County Legal Counsel

Reviewed by Signature: DocuSigned by: Jeff D White 90EC84E244DF43D... — Date: 10/20/2023
Marion County Contracts & Procurement

KELLER ASSOCIATES SIGNATURE

Authorized Signature: DocuSigned by: BF174523C4C949A... — Date: 10/27/2023

Title: Principal

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Contract Review Sheet

PW-5069-22 (4)

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: **4**

Contact: **Alicia Henry** Department: **Public Works Department**

Phone #: **503-373-4320** Date Sent: **Monday, July 10, 2023**

Title: **ARPA - North Santiam Canyon Sewer Project**

Contractor's Name: **Keller Associates, Inc.**

Term - Date From: **September 30, 2022** Expires: **December 31, 2026**

Original Contract Amount: **$60,960.00** Previous Amendments Amount: **$2,034,967.00**

Current Amendment: **$0.00** New Contract Total: **$2,095,927.00** Amd% **0%**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☐ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **1130**

Description of Services or Grant Award

Amendment 4 - adds additional task to phase 400 (400.5), no financial impact, updates Exhibit B - Consultant Compensation and updates sub consultant rate schedule to include additional task. Removed tasks 400.4.3 - 400.4.9, 401.5, 407.1. Updates 100.1 and 100.2 budget table.

Desired BOC Session Date: BOC Planning Date:

Files submitted in CMS: Printed packet & copies due in Finance:

BOC Session Presenter(s)

FOR FINANCE USE

Date Finance Received: Date Legal Received:

Comments: **G**

REQUIRED APPROVALS

DocuSigned by: A3528E7AEC784F4... 7/10/2023
Finance - Contracts — Date

DocuSigned by: Alicia Henry DA7ED9CC1E7847D... 7/11/2023
Contract Specialist — Date

DocuSigned by: Scott Norris 69C90A6F7082408... 7/11/2023
Legal Counsel — Date

DocuSigned by: Jan Fritz DC4805124ADE4EC... 7/11/2023
Chief Administrative Officer — Date

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Marion County
OREGON

AMENDMENT 4 to PW-5069-22
the CONTRACT FOR SERVICES
between
MARION COUNTY and KELLER ASSOCIATES

This is Amendment No. 4 to the Contract for Services (as amended from time to time, the "Contract"), dated September 30, 2022, between Marion County, a political subdivision of the State of Oregon, hereafter called County or Owner, and Keller Associates, hereafter called Consultant.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by brackets):

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$2,095,927** for Phase 1, 2, and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A**, **Statement of Work**.

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

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Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT

Task 100.1 – Project Management

Consultant Responsibilities:

100.1.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.
100.1.2 Project Coordination. Consultant may be requested to prepare progress reports or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.
100.1.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates to the board. Consultant will prepare presentation materials and/or handouts as directed.

Owner Responsibilities:

- Administer project funding.

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Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes a 6-month duration for general project administration.
- Task 1 includes up to 212 hours of project management services.

Deliverables:

- Monthly Invoices
- Monthly Progress Reports
- Meeting agenda and minutes

Task 100.2 – County Board of Commissioners Support Services

Consultant Responsibilities:

100.2.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to three occasions. Consultant will prepare presentation materials and/or handouts. The three presentations will tentatively occur in the months of November 2022, December 2022, and March 2023 and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Presentation #3 – Within six months after effective date of contract. Attend and present at a Joint Special Work Session for Marion County and Linn County Commissioners, to provide an introduction and update on the project and answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with sub-consultants and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material
- Final presentation material

101 – STRATEGIC PERMITTING PLAN

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Task 101.1 – Project Management and Administration

Consultant Responsibilities:

101.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

101.1.2. Consultant Coordination. Coordinate services to complete the Strategic Environmental Permitting Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of the draft Strategic Permitting Plan.

Assumptions:

- Project management budget assumes a task order schedule of up to 3 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification

Consultant Responsibilities:

101.2.1. Consultant shall review available project information, including background, concept development and current plan/design information for the North Santiam Canyon Wastewater Master Plan (Master Plan). Consultant will conduct a desktop review of the Master Plan area to identify potential resources affected and locate existing available data. Using this information, Consultant will compile a list of potential issues and data needs for the project. Consultant will check and refine the understanding of those issues by initiating preliminary, informal discussions with the anticipated permitting agencies to understand their concerns and permitting needs for the project. The intent of these discussions will be to identify the agencies' specific resource concerns, to understand permitting requirements and obligations, and discuss options for permitting efficiencies, such as using programmatic agreements. Consultant will also preliminarily identify which federal agencies may have a National Environmental Policy Act (NEPA) requirement for the Master Plan and/or specific projects or phases that are part of the plan (due to their jurisdiction, land ownership, or funding) and whether a single joint NEPA document could be used to support multiple federal decisions.

Task 101.3 – Strategic Permitting Plan

Consultant Responsibilities:

Based on information obtained in Task 101.2, Consultant will prepare a draft Strategic Permitting Plan. The draft Strategic Permitting Plan will include:

- Project permitting schedule and general cost estimate.
- Summary of environmental permits and approvals needed
- Summary of initial pre-scoping discussions with agencies
- List of potential resources affected and existing available data
- List of potential permitting issues and data needs (based on desktop analysis and agency discussions)
- List of design needs to complete permitting

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- Summary of potential opportunities for permitting efficiencies
- Estimated timeline to complete permitting
- Estimated general cost to complete permitting

Consultant will revise and finalize the Strategic Permitting Plan based on one consolidated review by Consultant and Owner.

Assumptions:

- Consultant will conduct up to three coordination conference calls with Owner to provide updates, receive additional information/clarifications, etc.
- Permitting agencies for informal, pre-scoping coordination will be: US Forest Service, US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Transportation, and Marion County. Outreach to agencies will consist of email or telephone contact. Consultant will make a reasonable effort get information from agencies within the available time and consistent with the level of effort budgeted.
- "Environmental permits and approvals" do not include easements or rights-of-way with utilities, ODOT, or federal agencies.
- Permitting requirements related specifically to wastewater treatment/infiltration requirements will be addressed through a separate task order.
- One review of the draft Strategic Permitting Plan will be conducted. The Strategic Permitting Plan will be revised based on one consolidated set of review comments. Consultant intends for the Strategic Permitting Plan to be a "living document", updated and adapted as the project planning and subsequent design and permitting efforts progress.
- No Owner board meeting presentations

Deliverables:

- Draft Strategic Permitting Plan
- Final Strategic Permitting Plan

102 – SUBSURFACE EXPLORATION

Task 102.1 – Project Management and Administration

Consultant Responsibilities:

102.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

102.1.2. Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.

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- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 102.2 – Subsurface Investigation Program

The purpose of subsurface investigation is to collect soil and groundwater data that can be used to: (1) assess whether a candidate site can infiltrate the required volume of treated wastewater, (2) inform facility predesign, (3) evaluate facility permitting framework (WPCF required), and (4) evaluate compliance with DEQ's groundwater protection rules. The subsurface investigation program involves excavating test pits to measure soil infiltration rates and observe soil types, installing monitoring wells to measure aquifer properties, collecting soil and groundwater samples, and one year of groundwater and surface water level monitoring. This task includes management, planning and execution of the subsurface investigation program comprised of two subtasks:

- Subtask 102.2.1 – Mill City / Gates Subsurface Investigation
- Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Owner Responsibilities:

- This scope of work does not include effort to identify domestic water wells in the vicinity of the proposed infiltration facility (which would likely involve a door-to-door survey and review of households that are connected to City water). Owner is responsible for this effort, if it is needed, and for incorporating the information obtained into the final report.

Assumptions:

- Subsurface investigations will occur on private or public property that is not owned by Owner. Owner and Consultant will work collaboratively to gain access to these sites for the purpose of performing site evaluation work. In general, Owner is responsible for the execution of site access agreements with property owners and Consultant is responsible for coordination with property owners regarding schedule for accessing the property, discussing access routes, and reporting results to the property owner.
- Test pitting and infiltration testing will be limited to four days in the Detroit/Idanha area (up to 10 test pits) and five days in the Gates/Mill City area (up to 18 test pits).
- Monitoring wells and temporary borings will target discrete horizons in the glacial till geologic unit that are related to the depth to groundwater and the contact between glacial till and bedrock. Because there is limited information about the geology and depth to groundwater at the candidate sites, the costs for drilling are based on assumptions about the depths of monitoring wells and temporary borings. Where field conditions differ from those assumed and where such differences result in increased field costs that exceed the established budget for this task, an equitable adjustment to the contract value will be made by contract amendment.
- In the Gates/Mill City area, it is assumed that monitoring wells will be 100 feet deep, one temporary boring will be advanced to the top of the water table at 80 feet below ground surface (bgs), and another temporary boring will be advanced to the top of bedrock at 200 feet bgs.
- In the Detroit/Idanha area, we have assumed that monitoring wells will be 80 feet deep (2 wells) or 200 feet deep (3 wells), and two temporary borings will be advanced to the top of bedrock at 100 feet bgs.
- Drilling costs could change if: (1) driller costs change (quotes are typically only good for 30 days due to "instability of commodity costs") or (2) the assumed construction of wells and borings changes based on the geology of the site. It is assumed that casing advance is not necessary to keep the bedrock hole open during drilling of the monitoring well in the Detroit/Idanha area. An amendment may be necessary if casing must be advanced to keep the hole open at this well and if such costs exceed the agreed upon task budget.

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- Subsurface exploration work, including digging of test pits, geotechnical drilling and installation of subsurface monitoring equipment, is not subject to Davis-Bacon or BOLI prevailing wages.

Subtask 102.2.1 – Mill City / Gates Subsurface Investigation

Subsurface investigation in the Gates/Mill City area includes the following activities:

102.2.1.1. Work Plan. Develop a work plan for the subsurface investigation that includes a specific plan for excavating and infiltration testing at up to 18 test pits (at Site 1 through Site 4) and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to eighteen (18) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for deep soil investigation.

102.2.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop three (3) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.1.4. Groundwater Level Monitoring. Equip each well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells quarterly for a year.

102.2.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

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102.2.1.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum.

Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Subsurface characterization in the Detroit/Idanha area includes the following activities:

102.2.2.1. Work Plan. Develop a work plan for the subsurface characterization that includes a specific plan for excavating and infiltration testing at up to 10 test pits (at the McCoy and Detroit Ranger Station sites), and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.2.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to ten (10) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for the deep soil investigation.

102.2.2.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop five (5) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.2.4. Surface Water and Groundwater Level Monitoring at the McCoy Site. Install three (3) stilling wells (in the Santiam River, Unnamed Creek, and McCoy Creek);

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equip each stilling and monitoring well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells and stilling wells quarterly for a year.

102.2.2.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.2.6. Reporting. Develop technical memoranda documenting the field investigation and results

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum

Task 102.3 – Groundwater Modeling Evaluation

The purpose of this task is to provide field data and modeling evaluations for submittal to the Oregon Department of Environmental Quality (DEQ) to support a Water Pollution Control Facility (WPCF) permit determination in compliance with DEQ's groundwater protection rules.

Task 102.3 is comprised of two subtasks:

- Subtask 102.3.1 – Gates/Mill City Permitting Evaluation
- Subtask 102.3.2 – Detroit/Idanha Permitting Evaluation

Assumptions:

- It is assumed that the planned location for the infiltration facility in the Gates/Mill City area is further from the Santiam River than the planned location for the infiltration facility in the Detroit/Idanha area (less than 0.25 miles). Therefore, we anticipate that the evaluation to support a permitting determination for the Detroit/Idanha area will be more rigorous.

Subtask 102.3.1 – Mill City / Gates Permitting Evaluation

Consultant shall perform the following activities for the infiltration facility in the Gates/Mill City area:

102.3.1.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the selected Gates/Mill City infiltration site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.1.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

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102.3.1.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.1.4. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review, and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.1.5. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater protection rules, and (3) to discuss DEQ's comments on the memo.

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation

Consultant shall perform the following activities for the infiltration facility in the Detroit/Idanha area:

102.3.2.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the McCoy site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.2.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

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102.3.2.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.2.4. Perform a modeling simulation to estimate the maximum recharge volume in the Detroit/Idanha area (additional evaluation of maximum recharge volume is needed in the Detroit/Idanha area due to the anisotropy; a model simulation would be more cost effective than hiring a driller to conduct a pumping test).

102.3.2.5. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review, and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.2.6. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)

Consultant Responsibilities:

102.4.1. Address permitting and other regulatory requirements related to the National Environmental Policy Act (NEPA), which will involve obtaining an agreement to access the properties, excavate test pits, and install monitoring wells. Assumes a level of effort with up to 48 hours.

102.4.2. Coordinate with property owner of "upper deck" private property to obtain permission to install two monitoring wells. Assumes a level of effort with up to 48 hours.

Owner Responsibilities:

- Review and approve permitting applications/letters requesting permission to access the McCoy site, excavate test pits, and install monitoring wells.

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- Owner is responsible for costs associated with property owner conditions related to site access and site access agreements.

103 – LAND ACQUISITION AND RELOCATION SERVICES

Task 103.1 – Project Management and Administration

Consultant Responsibilities:

103.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

103.1.2 Coordination. Coordinate services to complete the land acquisition and relocation services task.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 103.2 – Mill City Land Acquisition and Relocation Services

Responsible for the oversight of the services of the land acquisition and relocation sub-consultant to provide Acquisition and Relocation services for North Santiam Canyon Sewer Project (NSCSP) and the Detroit Downtown Commercial Septic Program as outlined in the tasks below. The subtasks included as part of Task 103.2 are based on the land acquisition and relocation sub-consultant's scope of work. The scope and fee provided are for the acquisition of up to eight (8) files.

Consultant Responsibilities:

RIGHT OF WAY (ROW)
Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970
- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

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Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.2.1 Project Management and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to six (6) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.2.7). Consultant Project Manager will QC all deliverables prior to delivery.

103.2.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner and Consultant of any major title encumbrances.

103.2.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner and Consultant for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.2.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.2.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the

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larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.2.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components

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necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.2.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.
Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there is up to one (1) Personal Property Only Relocation.

Consultant shall, at a minimum, conduct the following relocation activities:

- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.

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- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment.
- Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.2.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall:

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.2.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to three (3) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner,

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- Provide up to three (3) GINs, one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Up to three (3) appraisal and appraisal review reports, electronically.
- Provide 15-Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Provide Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- Provide the following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to three (3) Draft Offer Packets for review for each file to Owner
- Provide up to three (3) Final Offer Packets sent certified mail or delivered in person for each file.
- Provide up to three (3) Final Report Packets for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval
- Submit Relocation claims electronically to Owner for payment
- Submit Relocation Closing Reports to Owner
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

Task 103.3 – Detroit Land Acquisition and Relocation Services

Responsible for the oversight of the services of the land acquisition and relocation sub-consultant to provide Acquisition and Relocation services for North Santiam Canyon Sewer Project as outlined in the tasks below. The subtasks included as part of Task 103.3 are from the land acquisition and relocation sub-consultant's scope of work.

Consultant Responsibilities:

RIGHT OF WAY (ROW)
Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

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- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970
- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.3.1 Project Manager and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to five (5) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.3.6). Consultant Project Manager will QC all deliverables prior to delivery.

103.3.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner of any major title encumbrances.

103.3.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.3.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of

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contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.3.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section 5.140, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.3.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership

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interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.3.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way

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Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.

Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there are up to three (3) Personal Property Only Relocations.

- Consultant shall, at a minimum, conduct the following relocation activities:
- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment. Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner.
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.3.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.3.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.

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- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices, electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to five (5) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner.
- Provide up to five (5) GINs, with one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. NOTE: If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Provide up to five (5) appraisal and appraisal review reports, electronically.
- Provide 15 Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- The following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to five (5) Draft Offer Packet for review for each file to Owner.
- Provide up to five (5) Final Offer Packet sent certified mail or delivered in person for each file.
- Provide up to five (5) Final Report Packet for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide up to five (5) Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval.
- Submit Relocation claims electronically to Owner for payment.

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- Submit Relocation Closing Reports to Owner.
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

104 – FINANCIAL ADVISORY SERVICES

Task 104.1 – Project Management and Administration

Consultant Responsibilities:

104.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

104.1.2 Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 104.2 – Financial Advisory Services

Consultant Responsibilities:

104.2.1 Advisory Services. Consultant shall provide, upon request, advisory services related to the North Santiam Canyon Sewer Project. This consultation shall be provided on a time and materials basis, and it shall include attendance at meetings, writing of memos or presentations, or communication via phone or email in support of the project decision-making.

Owner Responsibilities:

- Provide meeting space for project meetings.

Assumptions:

- Attendance at project meetings may be virtual.

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM

200 - MILL CITY / GATES FACILITIES PLANNING STUDY

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Task 200.1 – Project Management

Consultant Responsibilities:

200.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

200.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Planning criteria will also be reviewed during the Kickoff Meeting. Representatives from the DEQ will be invited to the kickoff meeting.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services, if any.

Assumptions:

- Project management budget assumes a planning schedule of up to 8 months.
- Monthly Board meeting attendance is covered in a separate task order.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Funding administration services and funding acquisition support is not included in this scope of work.

Task 200.2 – Data Acquisition & Facility Tours

Consultant Responsibilities:

200.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

Mill City

- Discharge Monitoring Report (DMR), operational, influent monitoring (15-minute intervals), rainfall data (since Jan 2021), and any other water quality sampling results collected outside of DMRs in spreadsheet format
- Update of financial summary records, including current rates, annual expenses, operation, revenues, replacement budgets, number and type of accounts, etc.
- Recent facility inspection reports, if available
- Provide update of any changes to wastewater flows from major seasonal wastewater dischargers, water users with their own wastewater treatment system, major water users that consume the majority of their water.
- Any recently produced planning documents (transportation, wastewater, water conservation, water/waste/energy audits)
- Update on known treatment plant or collection system issues and planned improvements
- Update from Gates and Mill City for winter-time water consumption data summarized by user types in a spreadsheet format
- Known correspondence from federal and state regulatory agencies regarding violations or concerns related to wastewater treatment and disposal

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200.2.2. Data Collection and Review. Collection and processing of furnished data, mapping, and reports. Provide a follow-up Request for Information for supplemental data if required.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required.
- Provide access to facilities and records.
- Provide operations and maintenance staff for questions as needed.

Assumptions:

- Consultant will not enter confined spaces. Structural and electrical engineering reviews are not included in the scope of work but could be completed as an additional service.
- Consultant shall be entitled to rely, without liability, on the accuracy and completeness of information provided by Owner, other agencies and stakeholders, and information from public records, without the need for independent verification.

Deliverables:

- Request(s) for Information

Task 200.3 – Project Planning

Consultant Responsibilities:

200.3.1. Location. Incorporate brief description of project location from master plan. Include figure(s) from master plan to establish the project planning area.

200.3.2. Environmental Resources. Incorporate information from master plan to document natural resources in the project area, including land use, flood plains, wetlands, historic, biological, water quality issues, socio-economic, climate, geography, soils, rivers, and air quality. Use master plan figures to summarize natural resources in the project area.

200.3.3. Growth Trends. Update master plan population statistics and projections. For Mill City, coordinate with Mill City and County planners on location, phasing, and type of new growth. The Portland State University Population Research Center historical population data and 40-year growth forecasts will be used to inform the population growth, but it is assumed that non-traditional methods will be required to best account for the decline and near-term growth due to rebuilding after the 2020 wildfire as well as accounting for the new community sewer system in Gates and new treatment facility in Mill City. Growth for non-residential users will be estimated based on input from City and County planners for the 20-year planning period.

200.3.4. Community Engagement. Describe the Owner's approach to engage the community in the planning process.

200.3.5. Design Flow Rates. Update master plan design flow rates based on most recent DMR and water usage data from Mill City and Gates. Update projections based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.6. Design Loading Rates. Update master plan wastewater loadings and project future loadings based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.7. Regulatory Requirements. Review and update summaries from master plan of current regulatory requirements and planning criteria that may influence operation, maintenance, and capital improvements of the existing Mill City wastewater system and the initial project components in Gates.

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200.3.8. Cost Estimating. Establish cost estimating methodology to reflect both local and current conditions.
200.3.9. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.
200.3.10. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and approval on growth projections and planning criteria.
- Provide review and comments of this section.
- Provide input on community engagement.

Assumptions:

- The planning criteria will need to be established for the planning study prior to having any supplemental income and population survey data available to inform the population estimates and projections. The best available data will be used for the purposes of this study.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- City staff or Contract City Planner will provide input on the distribution and phasing of new residential and non-residential growth in Gates and Mill City.
- If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.
- The study area will coincide with the North Santiam Sewer Authority Boundary for Gates and Mill City.
- Community engagement included in this scope of work is limited to the public meeting in Task 209. Additional community engagement activities can be provided as additional services or through other identified task orders.

Deliverables:

- Draft Project Planning Facility Plan Section.

Task 200.4 – Existing Facilities Evaluation

Consultant Responsibilities:

200.4.1. Base Map. Update the existing system base map from the master plan, showing location of key facilities, pipelines, and basin boundaries for Mill City. Use the schematic process layout of the existing treatment plant from the master plan showing major process components.
200.4.2. History. Update master plan's documentation of wastewater treatment plant history and system description to reflect current flow and water quality data, recent discharge monitoring records (DMRs), plant improvements that have been completed recently, current condition of plant equipment and facilities, and current operation practices.
200.4.3. Wastewater System Management Classification, Operators and License. Provide a brief writeup of system required licensing and current operator license information.
200.4.4. Conditions Assessment. Update master plan documentation of existing physical conditions deficiencies. Collection system pipe information will be summarized by pipe material and age. Complete pump tests at each pumping facility to evaluate current pump performance

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and capacities. Incorporate findings from the I/I study that is currently under way at the time this scope was finalized.

200.4.5. Capacity Evaluation. Update master plan's comparison of existing and future projected flows and loadings to the existing capacity of the Mill City wastewater treatment system. Summarize existing capacity deficiencies.

200.4.6. Review pump run time data and flow meter records to assess existing capacity limitations (if any).

200.4.7. System Resiliency. Assess the collection system resiliency for the Mill City lift stations. This is anticipated to include a comparison of firm pumping capacity (i.e. with largest pump off-line) to the peak hour inflow. It also includes an assessment of whether onsite or portable back-up provisions are available and automated, what kind of emergency bypass pumping provisions are provided for the lift station and/or force main (in the event of a line break), and what kind of redundancy is provided in terms of back-up level sensors and alarms. This scope does not include an evaluation of seismic risks, a comprehensive vulnerability assessment, or updates to the Owner's Emergency Response Plans. Consultant will summarize the consequence of failure of critical lift station facilities and identify potential capital improvements and operational strategies that could be completed to mitigate these risks.

200.4.8. Wastewater Collection System Evaluation

200.4.8.1. Wastewater Model Development and Calibration. Use existing base mapping, record drawings, dry weather flows, pump curves, and Owner provided data to develop and calibrate a wastewater system model. The winter-time water consumption data will be used to estimate dry weather flows. Allocate infiltration and inflow for utilizing wet weather system design flows, available pump run time, and SCADA data.

200.4.8.2. Existing System Evaluation. Exercise computer model to check the Mill City system and evaluate the existing collection system hydraulic capacity. Evaluate system for remaining capacity.

200.4.9. Wastewater Treatment System Evaluation. Update master plan write-up to summarize existing plant deficiencies using updated plant data to compare actual performance to expected performance.

200.4.10. Operations. Update master plan documentation of existing operations and maintenance issues and concerns reported by Owner staff.

200.4.11. Financial Status of Existing Facilities. Document current rate schedules, annual O&M costs, other capital improvement programs, and table of users by monthly usage categories for the previous fiscal year. Document existing debts and required reserve accounts. Budget and capital improvements will be addressed under a separate task.

200.4.12. Water/Energy/Waste Audits. Provide brief write-up discussing variable frequency drive motors and all other applicable energy items for the system. Investigate and summarize the likelihood of incorporating a hydroelectric power generator on the force main from Gates to Mill City. Summarize overall current energy consumption for Mill City's existing system.

200.4.13. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.4.14. Draft Plan Section. Prepare draft section writeup. Address Owner comments on draft document.

Owner Responsibilities:

- Review and comment on draft documents.
- Participate and provide meeting location for workshop meetings.

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- Provide field checks if necessary, including surveying.
- Provide access to facilities and records. Test and replace (if needed) suction and discharge pressure gauges ahead of equipment tests.

Assumptions:

- Modeling of the existing Mill City treatment plant will not be completed for this facilities plan.
- The Mill City GIS mapping will not be survey grade and will be carried over from the master planning effort. The mapping will not include rim/invert data. It will only include approximate location as it was digitized from the existing record drawings.
- No additional field work or surveying will be required.
- Collection system conditions assessment will not include a full review of CCTV records or smoke testing with the exception of incorporating the findings from the Mill City I/I study.
- The Mill City collection system model will be developed with the InfoSWMM modeling platform, based on record drawings. Consultant will rely upon the accuracy of available record drawings. This scope does not include any field survey work to check or update pipe slopes.
- If model does not readily calibrate to existing conditions, and additional field work is recommended to troubleshoot the Owner's wastewater system, these services can be completed as an additional service.
- No drain field analysis will be provided.

Deliverables:

- Draft Existing Facilities Evaluation Facility Plan Section.

Task 200.5 – Need for System Improvements

Consultant Responsibilities:

200.5.1. Health, Sanitation, and Security. Summarize concerns and relevant regulations or correspondence from/to state and federal agencies.

200.5.2. Aging Infrastructure. Incorporate summary findings of conditions assessment of assets and summarize available pipeline age/material information. Summarize the following:

- Unit performance issues, deficiencies and useful life.
- Existing system reliability per DEQ and EPA guidelines.
- Ability to meet current and potential future effluent limits and other regulatory requirements.
- I/I calculations to determine if existing I/I is considered "non-excessive".

200.5.3. Reasonable Growth. Using the design flow and loading information, document the reasonable growth capacity that is necessary to meet needs during the planning period.

200.5.4. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and review of this section of the plan.

Deliverables:

- Draft Project Needs Facility Plan Section.

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Task 200.6 – Collection System Alternatives Considered and Selection

Consultant Responsibilities:

200.6.1. Future System Evaluation. Build Gates system model and expand Mill City model to include additional pipe and pump station network requirements associated with servicing new growth areas for the planning period. Add flows from new growth. Exercise the model to identify potential system deficiencies attributed to growth within the planning period.

200.6.2. Evaluate alternative improvements to correct existing, and anticipated future deficiencies, sewer new areas, and meet the target planning criteria. Benefits and drawbacks will be summarized for each alternative. A "no action" alternative will also be considered for each category. This alternative evaluation will be based on the master plan collection system alternatives while evaluating Mill City's existing system for collection system capacity deficiencies.
Where improvements are not relatively straightforward, evaluate up to three collection alternatives for the existing Mill City collection system that will service existing and future flows. Additional refinement of pipeline alternatives is anticipated to occur in the predesign tasks associated with the new Gates collection system.

200.6.3. Alternative Cost/Benefit Analysis. This will include life cycle cost analysis on preferred alternatives for up to three viable alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 40-year life cycle evaluation. This alternative evaluation for Gates will be based on the master plan collection system alternatives while evaluating any capacity alternatives for Mill City's collection system.

200.6.4. Phasing/Implementation Plan. Develop a phasing plan of improvements based on initial project, 10-year, 20-year, and 40-year anticipated growth. This plan will include an evaluation of interim recommendations or strategies for property owners who need to address septic system deficiencies or replacement prior to day one of the new Gates collection system and Mill City mechanical treatment plant are constructed.

200.6.5. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives using the master plan's figures with updates/modifications per this scope of work.

200.6.6. Environmental Impacts. A summary of the preliminary environmental screening of the collection system alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.6.7. Land Requirements. Discuss property needed for alternatives.

200.6.8. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.6.9. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.6.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.6.11. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide a review of the alternatives considered and input on selection criteria and ultimate selection of preferred alternative.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

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Assumptions:

- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4 (planning level cost estimates).

Deliverables:

- Draft Collection System Alternatives Facility Plan Section.

Task 200.7 – Treatment and Disposal System Alternatives Considered and Selection

Consultant Responsibilities:

200.7.1. Develop a list of treatment plant improvement alternatives focused on improving effluent water quality, vulnerability, safety and redundancy. The disposal improvement alternative will be rapid infiltration per the master plan recommendations.
200.7.2. Develop up to three pre-screened alternatives to evaluate, for primary treatment, secondary treatment, tertiary treatment, and solids handling treatment processes. Evaluate the pre-screened alternatives.
200.7.3. Facility Tours. Organize a tour of up to two wastewater treatment facilities with the Owner's staff to investigate alternatives with similar processes. These are anticipated to occur on the same day.
200.7.4. Alternative Cost/Benefit Analysis. Assist in comparing benefits, drawbacks, and costs of up to three viable alternatives. This will include life cycle cost analysis on preferred alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 20-year life cycle evaluation.
200.7.5. Phasing Plan. Develop a phasing plan of improvements based on initial project, 10-year, and 20-year anticipated growth.
200.7.6. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives.
200.7.7. Environmental Impacts. A summary of the preliminary environmental screening of the treatment system and disposal alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.
200.7.8. Land Requirements. Discuss property needed for alternatives.
200.7.9. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.
200.7.10. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.
200.7.11. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.
200.7.12. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide input on tasks above.
- Provide a review of the alternatives considered section of the plan.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

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Assumptions:

- The scope of this study does not look at alternatives to upgrade the existing recirculating gravel-bed filter.
- Evaluation of alternatives does not include piloting, bench testing, or fieldwork.
- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4.

Deliverables:

- Draft Treatment System Alternatives Facility Plan Section.

Task 200.8 – Proposed Projects (Recommended Alternatives)

Consultant Responsibilities:

200.8.1. Model day one and future 20-year process and hydraulic conditions of selected alternative for the new mechanical treatment plant.

200.8.2. Capital Improvement Plan.

a. Summarize recommended improvements.
b. Prepare planning level cost estimates for recommended improvements. For future projects anticipated to be developer driven and developer funded, summarize only upsize costs.
c. Estimate the portion of each capital improvement project cost that is attributed to 20-year growth for System Development Charge (SDC) eligibility.

200.8.3. Preliminary Project Schedule. Summarize costs for initial project, 10-year, and 20-year needs. The 6-year CIP for DEQ purposes will be covered by the "initial project" costs.

200.8.4. Permitting Requirements. Summarize WPCF permitting requirements (WPCF permit application and additional support is covered by a separate task order).

200.8.5. Sustainability Considerations. Summarize how the priority improvement projects will enable the Owner to serve its customers and be able to operate and maintain the system. Discuss how the projects will accommodate green infrastructure and efficiencies.

200.8.6. Future Reuse Consideration. Reuse system impacts will be considered and coordinated, and their potential summarized for selected alternative.

200.8.7. Organization and Staffing Requirements. Summarize recommended staffing requirements as required for regulatory compliance or as reported by the Owner. Summarize up to three options for organizational setup for certified operators for both collections and treatment (i.e. contract operator vs sewer authority staff).

200.8.8. Financing Options. Summarize potential financing options available for initial project. This will be a summary of efforts being undertaken by the Owner, Marion County, and the MWVCOG for funding the project.

200.8.9. Annual Budget Considerations.

a. Summarize Operating Revenues and Expenses. Summarize estimated annual operating expenses and identify recommended budgets dedicated for the initial project.
b. Anticipated User Charges and Other Income. Summarize the business case scenario documented previously by FCS Group and provide a status update on current efforts to implement recommendations.

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c. Annual Replacement Budgets. Develop recommended annual replacement budgets for the initial project based on typical replacement values and asset life. This will include a list of short-lived assets and the recommended annual replacement budget.
d. Annual Operations and Maintenance Costs. Estimate the operations and maintenance cost implications for the initial project.

200.8.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review an overall summary of the plan, selected improvements, and budget considerations.

200.8.11. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input on the prosed projects.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.
- Provide review and comments on the plan.

Assumptions:

- Scope excludes a user rate analysis, including evaluation of individual rate structures, cost-of-service evaluations, and service availability fee studies. These services can be provided as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

Deliverables:

- Capital Improvement Plan (tabular format, organized by initial project, 10-year, and 20-year needs).
- Estimate of SDC eligibility for each capital improvement past the initial project.
- Draft Proposed Project Facility Plan Section.

Task 200.9 – Facility Plan Documentation and Public Meeting

Consultant Responsibilities:

200.9.1. Prepare Facility Plan. Prepare and combine draft documents for a complete facility plan generally following the outline established in the July 2018 guidance document "Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed by Business Oregon, Oregon Department of Environmental Quality, Rural Community Assistance Corporation, and the United States Department of Agriculture". Add executive summary and assemble appendix materials. Appendix materials will include output flow capacities, existing peak hour flows, and future peak hour flows summarized in tabular and graphic format. Draft documents to be updated to address Owner comments. Submit final draft plan for Owner review.

200.9.2. Public Meeting. Prepare materials for and present summary findings in a townhall meeting.

200.9.3. Address Owner Comments. Address final Owner and public comments and submit for agency review.

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200.9.4. Address Agency Comments. Address agency comments and finalize document.

Owner Responsibilities:

- Review and comment on final draft plan in a timely manner.
- Pay agency review fees, if applicable.
- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.

Deliverables:

- Public Meeting Presentation Materials.
- Final Facilities Plan, three (3) hard copies (3 ring binders) of the plan and one electronic copy in PDF format.

Task 200.10 – Management Reserve (Contingency Task)
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time, Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of services. For these instances, a time and material budget is established in order for Consultant to complete such additional services. Prior to the use of this contingency budget, Owner's representative will provide written (email) authorization to use the budget for specific tasks.

ADDITIONAL SERVICES (not included in scope of work)

- Bond support
- Public outreach or stakeholder outreach support
- User rate and connection fee study
- Additional field work
- Energy efficiency evaluations
- Concept level design services
- Model training
- Environmental information documents, studies, field investigations, and permitting. Environmental permitting will be addressed by a separate task order.
- Amendments to this facility planning study because of other task orders.

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS

400 – COMMERCIAL SEPTIC SYSTEM PLANNING

Task 400.1 – Project Management

Consultant Responsibilities:

400.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

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400.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

Assumptions:

- Assumes a 4-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 400.2 – Data Acquisition & Property Tour

Consultant Responsibilities:

400.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

a. Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b. List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c. Previous collected test pit data for all the properties.
d. Previous studies involving the soil in the city.
e. Provide existing drain field and septic tank locations for each property.
f. Identify available property for consideration for septic tank or drain field placement.
g. Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

400.2.2. Conduct site tour of each property to evaluate potential drain field locations.

400.2.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

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Assumptions:

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

Deliverables:

- Request(s) for Information
- Summary tables and figures for existing septic tanks and drain fields status

Task 400.3 – Stakeholder Involvement / Engagement

Consultant Responsibilities:

400.3.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.
400.3.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.
400.3.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.
400.3.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities:

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

Deliverables:

- Public and stakeholder meeting presentation materials.

Task 400.4 – Commercial Septic System Concept

Consultant Responsibilities:

400.4.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.
400.4.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …). [Document estimated seasonal variation and 5 to 10 year growth for flow and wastewater strength.]
[400.4.3 Regulatory and Permitting Requirements. Review and summarize current, pending and future regulatory requirements and permitting criteria that may influence operation, maintenance, and adaptation of the system to the long-term gravity collection system.]
[400.4.4 Conceptual Layout of Septic Systems. Provide figures to summarize conceptual layout of septic tanks and drain fields. Figures will be 8.5x11 or 11x17 schematics.]

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[400.4.5 Opinion of Probable Costs. Prepare an AAEC Class 4 opinion of probable cost for the project.]
[400.4.6 Develop Preliminary Project Schedule. Summarize schedule for overall project delivery and construction.]
[400.4.7 Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner.]
[400.4.8 Draft Technical Memorandum. Prepare draft technical memorandum. Final document to have Owner's comments incorporated.]
[400.4.9 Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review with County/City staff the draft technical memorandum.]

Owner Responsibilities:

- Provide input and approval of septic tank and drain field concepts.
- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Test pits will not be excavated and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- [Draft Commercial Septic Design Memorandum]

Task 400.5 – Commercial Septic System Design

Consultant Responsibilities:

400.5.1 Develop schedule for overall project delivery and construction.

400.5.2 Oversee excavation of test pits and soil sampling to determine soil characteristics, infiltration rates, and other necessary design criteria for up to seven (7) commercial properties.

400.5.3 Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, etc.) including seasonal variation and 5 to 10-year growth for flow and wastewater strength for up to seven (7) commercial properties and their intended uses.

400.5.4 Prepare Septic System Designs for up to seven (7) commercial properties. Complete designs for each commercial property shall include pre-treatment, septic tanks, drain field, replacement area, and all other appurtenances, as required.

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400.5.5 Prepare cost estimate/proposal as required by Marion County Commercial Septic Grant Program.

400.5.6 Prepare design drawings (11" x 17", PDF).

400.5.7 Regulatory and Permitting Requirements. Review and summarize current, pending, and future regulatory requirements and permitting criteria that may influence operation and maintenance, and adaptation of the system to the long-term gravity collection system. Prepare required permit applications, and coordinate inspections for approval of each system.

400.5.8 Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner in an operation and maintenance (O&M) Manual.

400.5.9 Attend up to twelve (12) bi-weekly one (1)-hour long meetings and provide updates to project team.

Owner Responsibilities:

- Provide input for septic tank and drain field concepts.
- Provide staff input and requirements for septic grant approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Commercial properties will be permitted through either Marion County or Oregon Department of Environmental Quality (DEQ).
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- Conceptual septic system design and drawings.
- Final septic system design and drawings.
- Cost estimate.
- Permit applications.
- O&M Manual.

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401 - KANE'S MARINA SEPTIC SYSTEM

Task 401.1 – Project Management

Consultant Responsibilities:

401.1.1. General Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

401.1.2. Regulatory Coordination. Meet with County and DEQ staff to discuss WPCF and County permit options. The objective of this outreach will be to have a selected permitting process (WPCF or County).

401.1.3. Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to review/establish Owner design team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

401.1.4. Presentation to County Commissioners. The Consultant will present a project update to the County Commissioners at the conclusion of Task 405, Preliminary Design. Consultant will prepare presentation materials and/or handouts. The one presentation will summarize the system layout, opinion of probable cost, permitting, schedule, and next steps.

401.1.5. Request for Information. Prepare initial request for information for data to be used in the design process.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed.
- Provide requested information within two weeks of request.

Assumptions:

- Project management budget assumes a project schedule of up to 4 months.
- Unless otherwise noted, meetings/workshops may include a combination of in person or virtual attendees. This assumption applies to this task as well as subsequent tasks.
- Funding support is not included in this scope of work, including but not limited to American Iron and Steel (AIS) or Build America, Buy America (BABA) tracking, certification, or reporting. These services can be provided as additional services.

Deliverables:

- Kickoff meeting agenda and minutes.
- Request for Information.
- Presentation materials and/or handouts.

Task 401.2 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

401.2.1. Study Phase Services.

a. Site Visit. Consultant will coordinate with Owner's staff to perform a site visit and document existing site conditions. Evaluation will include documentation of status and condition of existing septic facilities and electrical equipment. This scope does not include inspection of interior spaces or existing facilities.

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b. Basin Study. Consultant will review the plan and profile for the gravity sewer system developed through the North Santiam Sewer Authority Master Plan. Consultant will approximate alignment and invert elevation requirements for the future lift station wetwell. Consultant will estimate the operating volume required for the future pump station.
c. Operation and Maintenance Assessment. Consultant will review available data provided by Owner to summarize historic usage, operation strategies, and maintenance considerations. It is anticipated the evaluation will include holding tank storage requirements, hydrogen sulfide and odor control, standby power, instrumentation and controls (alarming), future pump station compatibility, redundancy provisions, emergency response, and preventative maintenance activities.

401.2.2. Design Criteria. Document design criteria established from the study phase services that will serve as basis for design. The design criteria will include, emergency storage calculations, anticipated flow conditions for the marina, future basin flow conditions, holding tank (wetwell) storage requirements, odor control strategy, power requirements, alarms.

401.2.3. Topographic Surveying. Provide oversight of the services to complete topographic and boundary surveying services for Kane's Marina.

401.2.4. Geotechnical Investigation. Provide oversight of the services to complete geotechnical engineering design services for Kane's Marina.

401.2.5. Site Layout. Develop 30% concept design showing site civil layout and holding tank(s) orientation on the marina site. Concept to include general grading concepts and reflect considerations for holding tank dimensions, future building and valve vault footprint, generator location, stormwater disposal, yard piping, and access for future maintenance/pump removal. The future footprint assumes that a small electrical building will be required to house the future electrical/controls, including a variable frequency drive (VFD) for the future lift station. Consultant has assumed that the generator will be outdoors with sound attenuation. The pipe network will be limited to 5-feet outside any building footprint.

401.2.6. Odor Control Type. Evaluate up to three design alternatives for odor control with the Owner. For each alternative, evaluation to include operations and maintenance considerations, benefits, drawbacks, costs, and consideration of non-cost factors (i.e., future expansion for the lift station). Potential odor control types include chlorine dosing equipment, passive carbon filtration, mixing, chemical, and air-scrubber.

401.2.7. Electrical and Controls. Coordinate with Owner to identify SCADA communication preferences. Coordinate with power utility to identify power constraints. Prepare one-line diagram for power and a narrative describing the communication strategy and objectives including a piping and instrumentation diagram (P&ID).

401.2.8. Cost Estimate. Provide an AAEC Class 4 opinion of probable cost for the project.

401.2.9. Workshop Meeting. Meet with Owner to review concepts and alternatives and select preferred alternative for design.

401.2.10. Prepare PER. Prepare draft Preliminary Engineering Report (PER) following the *Oregon DEQ guidelines.* In addition to the minimum regulatory requirements, PER will include concept drawings showing conceptual pipe network layout, one-line diagram, and anticipated permit requirements. Submit to Owner for review.

401.2.11. Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments into final PER.

Owner Responsibilities:

- Provide input on holding tank, piping design criteria, and preferred alternatives.

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- Obtain or provide information for land parcel for the holding tank site, easements, and rights-of-way.
- Provide overall site plan with enough detail to layout the pipe network.
- Provide all necessary documentation or title information for boundary survey services.
- Secure permission for access for surveying and geotechnical investigations on the two subject properties.
- Provide concurrence on the location of the geotechnical investigation; assist in pre-marking locations for test pits / boring.
- Review and provide one set of consolidated comments on the Draft PER, concept plans, and opinion of probable cost.

Assumptions:

- Consultant shall be entitled to rely, without liability or the need for independent verification, on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.
- Power is readily available and located adjacent to the site.
- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Pavement sections, curbing and other site design is not included in this scope.
- Other assumptions documented for surveying and geotechnical services.

Deliverables:

- Agenda and minutes for Workshop Meeting.
- Draft and Final PER (1 paper copy and 1 PDF)

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Subtask 401.2.2 – Topographic Survey

Sub-Consultant Responsibilities:

401.2.2.1. Sub-Consultant shall perform a topographic recovery survey of the Kane's Marina property to serve as a basis for design. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to compete a boundary resolution of subject area
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50 foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, lip of gutter, etc, to the nearest 0.01 foot
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way
f. Locate surface features over subject area, including but not limited to: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas
g. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants
h. Locate trees 8" DBH and greater noting coniferous or deciduous
i. Map existing easements which may affect subject.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

401.2.2.2. Survey will show utility poles, power lines, and telecommunications, etc. including any identification information. For existing storm drains, culverts, and sanitary sewers, Sub-Consultant shall:

a. Show rim or grate elevations and inverts for all manholes and drainage structures, with structure size (inside dimensions)
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Sub-Consultant Deliverables to Consultant:

- Basemap in AutoCAD 3D format.

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Subtask 401.2.3 – Geotechnical Investigation

The purpose of this subtask is to evaluate soil and groundwater conditions as a basis for developing geotechnical engineering design criteria for the Kane's Marina project.

Sub-Consultant Responsibilities:

401.2.3.1. Review information regarding subsurface soil and groundwater in the vicinity of the site, including filed reports, selected geologic maps, and other geotechnical engineering-related information.

401.2.3.2. Coordinate and manage the field investigation, including public utility notification and scheduling. Utility locates will be ordered by Consultant.

401.2.3.3. Explore subsurface soil and groundwater conditions at the project site by drilling one (1) drilled boring exploration to a depth between 20 and 25 feet bgs on the south side of the site near proposed holding tank/wetwell location, and four (4) to six (6) boring explorations 5 to 10 feet bgs along the proposed forcemain alignment.

401.2.3.4. Explorations will be advanced to the depths noted or to practical refusal in dense gravels or competent rock, if encountered, whichever is shallower. The borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

401.2.3.5. Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM Standard Practices Test Method D 2488. Field exploration work shall be observed and documented by qualified geotechnical engineering staff.

401.2.3.6. Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests and percent fines tests.

401.2.3.7. Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology and subsurface conditions.
b. Report subsurface conditions and data along the proposed forcemain/collection lines alignment.
c. An opinion as to the adequacy of the proposed development of the holding tank/wetwell from a geotechnical engineering standpoint.
d. Recommendations for preparation measures at the proposed holding tank/wetwell/lift station site, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction.
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing.
f. Recommendations for earthworks, including use of on-site and imported structural fill and fill placement and compaction requirements.

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g. Recommendations for foundations to support proposed at-grade and below-grade structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance. Consultant assumes that proposed structures will be lightly loaded and that shallow foundations can be used to adequately support the structures.
h. Recommendations for supporting on-grade slabs, including base rock, capillary break and modulus of subgrade reaction, as appropriate.
i. Seismic design parameters in accordance with the current version of the Oregon Structural Specialty Code. Consultant will also perform a simplified liquefaction settlement analysis.

401.2.3.8. All work under this subtask will be directly supervised by an engineer licensed in the state of Oregon. Engineer will apply their professional seal to the document.

Assumptions:

- Owner will obtain right-of-entry or access to the exploration locations.
- A rubber-tired drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered, are not included in this scope of work or fee.
- Excess drill cuttings can be scattered on site.
- Installation of monitoring wells to measure static water groundwater is excluded.
- Contaminated soils will not be encountered during exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), consultant will stop drilling operations, notify Owner and discuss how to proceed.
- If public locators are not allowed to enter or cannot enter the project area to clear specific exploration locations, Sub-Consultant may provide the services of a private locate company to access the site, if requested, for an additional fee of $630.

Sub-Consultant Deliverables:

- Draft and Final Geotechnical Report.

Task 401.3 – Final Design

Consultant Responsibilities:

401.3.1. Plan Sheets. Prepare general, survey, site civil, structural, plumbing, HVAC, mechanical, electrical, and instrumentation and control plan sheets for the site, holding tank, and yard piping. Instrumentation and control final design is anticipated to be a performance spec for a holding tank and odor control monitoring system. Thus, the plan sheets will only include a piping and instrumentation diagram (P&ID). Coordinate location of pumps, piping layout, spacing, electrical equipment, generator, pump removal equipment, building access, overhead door, HVAC equipment, plumbing drains, and other appurtenances for ultimate lift station layout with the Owner. Prepare 90% review sets.

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401.3.2. Specifications. Consultant will support the Owner in CM/GC selection with services described in Task 5 of this scope of work. Consultant will prepare technical specifications. Technical specifications will be prepared to detail the materials, processes, and the products that are to be used in the construction of the lift station. Complete draft technical specifications for the 90% review set.

401.3.3. 90% Design and Review Workshop Meeting. Submit 90% design review drawings and specifications to the Owner. Participate in a 90% design review workshop meeting.

401.3.4. Agency Submittal. Agency design checklists will be completed and submitted along with the final plans and specifications to Agency for review.

401.3.5. Final Approval. Upon Owner and Oregon DEQ review, Consultant will incorporate appropriate revisions into a final set of stamped drawings and specifications that will be used for bidding.

401.3.6. Opinion of Probable Costs. Selected CM/GC will provide cost estimating after Task 404. Consultant will review and provide feedback.

Owner Responsibilities:

- Review and provide one set of consolidated comments on the 90% design deliverables.
- Provide legal and risk reviews of the bid documents.
- Pay for any associated permitting fees not assigned to the Contractor.

Assumptions:

- Consultant will prepare the building permit application at 90% design and submit to the Marion County Building Inspection office. Final permits will be obtained by Owner. Owner shall pay all permit fees not assigned to the construction contractor.
- Consultant will prepare and submit the DEQ permit application at 90% design and assist Owner with DEQ consultation.
- Project will not include irrigation or landscaping of the site. Services of a licensed landscape architect is excluded.
- Extensive architectural feature and architectural rendering are not included in the holding tank design.
- Contractor will be required to prepare and implement an erosion and sediment control plan (ESCP), prepare traffic control plans, and secure associated permits.
- Shoring (if required) will be designed by the Contractor.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or project support above and beyond that described herein is considered an additional service requiring a contract amendment and equitable adjustment of the contract amount..
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- The following design standards and references are to be followed where relevant during the development of the project:
    - Marion County Standard Specifications and Drawings
    - Oregon Standard Specifications for Construction
    - Owner to provide front end contracting and bidding documents (Div 00)
    - AIS and BABA requirements

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- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

Deliverables:

- 90% design drawings and specifications, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- 100% stamped design package, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- Opinion of Probable Cost.

Task 401.4 – Pre-Procurement Support

Consultant Responsibilities:

401.4.1. This task includes consultant services to support the Owner in direct purchase of equipment for the Project using available funds. The objective of the direct purchase of equipment or materials is to account for potential long lead times and still have the equipment or materials on hand when the contractor is ready to move forward with construction. Consultant will provide specifications for the equipment/material to be directly purchased which may be out of sequence or earlier than the final design task.

Owner Responsibilities:

- Owner staff will lead the solicitation effort to either solicit informal bids or select suppliers from pre-approved supplier lists. Owner will receive and store materials prior to the Contractor taking on the equipment/material for installation.

Assumptions:

- Consultant is not responsible if material/equipment must be returned or designated as surplus due to the expedited delivery process for this project.
- Budget assumes up to 40 hours for support services to be provided as requested.

Deliverables:

- Procurement Specifications.

Task 401.5 – <u>Removed</u> [Alternative Contracting Method Support]

[Owner anticipates engaging a construction contractor for the construction of new project facilities using alternative contracting procedures. The purpose of this task is to support Owner during the contract development and solicitation process.

Consultant Responsibilities:

401.5.1. Support County staff as requested with Board of Commissioners meeting and draft documents in preparation for soliciting BOC approval and developing CM/GC solicitation documents.

Owner Responsibilities:

- Lead the efforts to gain County Board of Commissioners approval for use of alternative project delivery method.
- Lead the efforts to develop contractor solicitation and contract documents.

Assumptions:

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- Budget assumes up to 40 hours for support services to be provided as requested.]

Task 401.6 – WPCF PERMITTING

Consultant Responsibilities:

401.6.1. Prepare draft permit application for a holding tank permit for DEQ review.
401.6.2. Meet with DEQ to discuss the permit applications. For the purpose of this scope, up to two (2) meetings are assumed.
401.6.3. Address DEQ comments in permit application.

Owner Responsibilities:

- Provide input on draft permit application.
- If necessary, pay fee to DEQ for draft permit application.
- Review and comment on draft documents.

Assumptions:

- No field work, environmental studies, cultural resource investigations, or biological assessments are included in this task.
- This scope does not include any additional field gathering or special studies that may be required by the DEQ.
- No other permits will be required. If required, support for these permits can be provided as additional services.

Task 401.7 – <u>Removed</u> [Management Reserve (Contingency Task):
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time the Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of work. For these instances, a time and material budget is established in order for Consultant to complete the additional services. A Management Reserve in the amount of $5,000 is incorporated into this agreement to allow Owner Staff to authorize Additional Services if needed. The scope, schedule and budget for such items will be agreed upon in writing through an executed task order prior to incorporation into the work.

ADDITIONAL SERVICES (not included in scope of work)

- Special use permits, environmental services, or additional permitting beyond those described in the scope of work
- Additional public outreach/meetings or stakeholder outreach support
- Field investigations, including subsurface investigations, to check available record drawings
- Construction phase surveying (quantities, staking, record)
- Funding administration support
- Project site tours
- Easements and right-of-way acquisition support
- Multiple design alternatives (i.e alternative site layouts) for bidding purposes]

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of **$2,095,927.**

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

PHASE 1 – GENERAL ENGINEERING SERVICES	Cost	Type
100 – PROJECT MANAGEMENT		
Task 100.1 – Project Management	$54,520 [35,520]	T&M
Task 100.2 – County Board of Commissioners Support Services	$15,840 [26,840]	LS
101 – STRATEGIC PERMITTING PLAN		
Task 101.1 – Project Management and Administration	$ 4,825	LS
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	$ 19,090	LS
Task 101.3 – Strategic Permitting Plan	$ 9,540	LS
102 – SUBSURFACE EXPLORATION		
Task 102.1 – Project Management and Administration	$ 16,400	T&M
Task 102.2 – Subsurface Investigation Program	$ 74,200	T&M
Subtask 102.2.1 – Gates / Mill City Subsurface Investigation	$ 461,580	T&M
Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation	$ 566,780	T&M
Task 102.3 – Groundwater Modeling Evaluation		
Subtask 102.3.1 – Mill City / Gates Permitting Evaluation	$ 63,600	T&M
Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation	$ 78,700	T&M
Task 102.4: McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	$ 18,700	T&M

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103 – LAND ACQUISITION AND RELOCATION SERVICES			
Task 103.1 – Project Management and Administration	$	12,140	T&M
Task 103.2 – Mill City Land Acquisition and Relocation Services	$	58,817	T&M
Task 103.3 – Detroit Land Acquisition and Relocation Services	$	89,120	T&M
104 – FINANCIAL ADVISORY SERVICES			
Task 104.1 – Project Management and Administration	$	4,930	T&M
Task 104.2 – Financial Advisory Services	$	16,500	T&M
Subtotal	**$**	**<u>1,565,282</u> [1,557,282]**	

T&M: Time and Materials, LS: Lump Sum

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	**Cost**		**Type**
Task 200.1 – Project Management	$	12,600	LS
Task 200.2 – Data Acquisition & Facility Tour	$	6,110	LS
Task 200.3 – Project Planning	$	26,725	LS
Task 200.4 – Existing Facilities Evaluation	$	68,680	LS
Task 200.5 – Need for system improvements	$	3,650	LS
Task 200.6 – Collection System Alternatives Considered & Selection	$	53,615	LS
Task 200.7 – Treatment System Alternatives Considered & Selection	$	59,365	LS
Task 200.8 – Proposed Projects (Recommended Alternatives)	$	70,780	LS
Task 200.9 – Facilities Plan Documentation & Public Meeting	$	25,830	LS
Task 200.10 –Management Reserve	$	10,000	T&M
Subtotal	**$**	**337,355**	

T&M: Time and Materials, LS: Lump Sum

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PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	Cost	Type
400 – COMMERCIAL SEPTIC SYSTEM PLANNING		
Task 400.1 – Project Management	$ 6,030	LS
Task 400.2 – Data Acquisition & Properties Tour	$ 17,770	LS
Task 400.3 – Stakeholder Involvement/Engagement	[$ 17,200] $ 12,200	LS
Task 400.4 – Commercial Septic System Concept	[$ 26,680] $ 16,680	LS
Task 400.5 – Commercial Septic System Design	$ 20,000	LS
401 – KANE'S MARINA SEPTIC SYSTEM		
Task 401.1 – Project Management	$ 15,550	LS
Task 401.2 – Preliminary Engineering Report (PER)	$ 28,630	LS
Subtask 401.2.2 – Topographic Survey	$ 17,240	LS
Subtask 401.2.3 – Geotechnical Investigation	$ 17,060	LS
Task 401.3 – Final Design	$ 28,270	LS
Task 401.4 – Pre-Procurement Support	$ 8,000	T&M
[Task 401.5 – CM/GC Support Services]	[$ 8,000]	[T&M]
Task 401.6 – WPCF Permitting	$ 5,860	LS
[Task 401.7 – Management Reserve (Contingency Task)]	[$ 5,000]	[T&M]
Subtotal	**$193,290 [201,290]**	

T&M: Time and Materials, LS: Lump Sum

TOTAL	**$ 2,095,927**

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and Sub-consultants for performance of Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

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1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current

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invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Chris Einmo
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

i. Long distance communications.

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ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

iv. Third-party models and mockups requested by Owner.

v. The printing of master or reproducible sets of plans and project manuals including specifications.

vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 65.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant's Professional Hourly Rates.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT E - CRITICAL DATE SCHEDULE
Schedule of Deliverables

PHASE 1 – GENERAL ENGINEERING SERVICES	
100 – PROJECT MANAGEMENT	
Task 100.1 – Monthly Invoices and Progress Reports	Monthly
Task 100.1 – Meeting agendas and minutes	Weekly
Task 100.2 – Final Presentation Materials	8 weeks after NTP
101 – STRATEGIC PERMITTING PLAN	
Task 101.3 – Draft Strategic Planning Plan	11 weeks after Amend No. 2 NTP
Task 101.3 – Final Strategic Planning Plan	13 weeks after Amend No. 2 NTP
102 – SUBSURFACE EXPLORATION	
Task 102.2.1 – Draft Subsurface Investigation Work Plan	
Task 102.2.1 – Final Subsurface Investigation Work Plan	
Task 102.2.1 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.1 – Draft Subsurface Investigation Memorandum	
Task 102.2.1 – Final Subsurface Investigation Memorandum	
Task 102.2.1 – Groundwater Level Monitoring Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Work Plan	
Task 102.2.2 – Final Subsurface Investigation Work Plan	
Task 102.2.2 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Memorandum	
Task 102.2.2 – Final Subsurface Investigation Memorandum	
Task 102.2.2 – Groundwater Level Monitoring Memorandum	
Task 102.3.1 – Draft WPCF Evaluation Memorandum	
Task 102.3.1 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.1 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum	
Task 102.3.2 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
103 – LAND ACQUISITION AND RELOCATION SERVICES	

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Task 103.1 – Project Management and Administration	
Task 103.2 – Mill City Land Acquisition and Relocation Services	
Task 103.2.3 – Draft ROW Programming Estimate	
Task 103.2.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.2.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.6 – Draft Offer Packets	
Task 103.2.6 – Final Offer Packets	
Task 103.2.6 – Final Report Packet	
Task 103.2.6 – Proposed Counteroffers, if applicable	
Task 103.2.6 – Recommendation for Condemnation, if applicable	
Task 103.2.6 – Report of Personal Interview	
Task 103.2.7 – Submit studies, Move Agreements, and Estimates	
Task 103.2.7 – Submit Relocation Claims	
Task 103.2.7 – Submit Relocation Closing Reports	
Task 103.2.9 – ROW Certification Form	12 weeks prior to Project Bid Date
Task 103.3 – Detroit Land Acquisition and Relocation Services	
Task 103.3.3 – Draft ROW Programming Estimate	
Task 103.3.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.3.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.6 – Draft Offer Packets	
Task 103.3.6 – Final Offer Packets	
Task 103.3.6 – Final Report Packet	
Task 103.3.6 – Proposed Counteroffers, if applicable	
Task 103.3.6 – Recommendation for Condemnation, if applicable	
Task 103.3.6 – Report of Personal Interview	
Task 103.3.7 – Submit studies, Move Agreements, and Estimates	
Task 103.3.7 – Submit Relocation Claims	
Task 103.3.7 – Submit Relocation Closing Reports	

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Task 103.3.9 – ROW Certification Form	12 weeks prior to Project Bid Date
104 – FINANCIAL ADVISORY SERVICES	
Task 104.1 – Project Management and Administration	
Task 104.2 – Financial Advisory Services	
PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	
200 – MILL CITY / GATES FACILITIES PLANNING STUDY	
Task 200.2 – Request(s) for Information	
Task 200.3 – Draft Project Planning Facility Plan Section	
Task 200.4 – Draft Existing Facilities Evaluation Facility Plan Section	
Task 200.5 – Draft Project Need Facilities Plan Section	
Task 200.6 – Draft Collection System Alternatives Facility Plan Section	
Task 200.7 – Draft Treatment System Alternatives Facility Plan Section	
Task 200.8 – Capital Improvement Plan	
Task 200.8 – SDC Eligibility Estimate	
Task 200.8 – Draft Proposed Project Facility Plan Section	
Task 200.9 – Public Meeting Presentation Materials	
Task 200.9 – Final Facilities Plan	
PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	
400 – COMMERCIAL SEPTIC SYSTEM PLANNING	
Task 400.2 – Requests for Information	
Task 400.2 – Existing Septic and Drain Field Summary Tables and Figures	
Task 400.3 – Presentation Materials	
Task 400.4 – Draft Commercial Septic Design Memorandum	[8 weeks after Amend No. 1 NTP]
Task 400.5 – Conceptual Septic System Design	
401 – KANE'S MARINA SEPTIC SYSTEM	
Task 401.1 – Kickoff meeting agenda	2 weeks after Amend No. 2 NTP
Task 401.1 – Kickoff meeting minutes	1 week after Kickoff Meeting
Task 401.1 – Request for Information	
Task 401.1 – Presentation Materials	
Task 401.2 – Workshop Meeting Agenda	
Task 401.2 – Workshop Meeting Minutes	
Task 401.2 – Draft Preliminary Engineering Report	5 weeks after Amend No. 2 NTP
Task 401.2 – Final Preliminary Engineering Report	6 weeks after Amend No. 2 NTP

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Subtask 401.2.2 – Topographic Basemap	6 weeks after Amend No. 2 NTP
Subtask 401.2.3 – Geotechnical Report	10 weeks after Amend No. 2 NTP
Task 401.3 – 90% Design Drawings and Specifications	15 weeks after Amend No. 2 NTP
Task 401.3 – Final (Stamped) Drawings and Specifications	17 weeks after Amend No. 2 NTP
Task 401.3 – Opinion of Probably Cost	17 weeks after Amend No. 2 NTP
Task 401.4 – Procurement Specifications	

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT F - RATE SCHEDULE

Keller Associates	Maximum Hourly Rate*
Project Engineer I	$130
Project Engineer II	$170
Project Engineer III	$220
Project Manager I/II	$170
Project Manager III	$225
Structural Engineer I/II	$170
Structural Engineer III	$220
Chief Engineer / Chief Structural Engineer	$270
CAD I/II	$130
CAD III	$150
CAD Manager	$180
Electrical Controls I/II	$170
Electrical Controls III	$220
Principal	$275
Surveyor I/II	$145
Professional Surveyor PLS	$180
Field Representative	$140
Engineering Student	$75
Administration I	$90
Administration II	$110

**Rates reported are for 2023. Rates updated annually in January.*

***Reimbursable Expenses at Cost x 1.05*

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SUBCONSULTANT RATE SCHEDULE

Hydrological	Maximum Hourly Rate*
Administration	$110
Project Hydrogeologist	$120
Principal Hydrogeologist	$190
Staff Geologist	$120
GIS/Graphics/Database	$140

Permitting	Maximum Hourly Rate*
Planning-Specialist XI	$197
Environmental Resources-Specialist XI	$197
Planning Specialist V	$117
Planning Specialist IV	$107

Land Acquisition and Relocation	Maximum Hourly Rate*
Land Owner Liaison – Dave Hansen	$81.89
Land Owner Liaison – Kari Lowe	$244.98
Project Management and Administration – Tamisha Schrunk	$185.00
Project Management and Administration – Samri Laney	$42.60
Land Owner Liaison – Julie Goodrich	$155.00

Financial Advisory	Maximum Hourly Rate*
Principals	$295
Project Managers	$230
Consultants	$190
Public Relations	$170
Technical Writer/Graphic Artist	$145
Administrative Support	$95

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Surveying	Maximum Hourly Rate*
PLS Office Technician	$140
One-Man Field Crew	$140
Project Surveyor	$140

Geotechnical Services	Billed	Rate*
ENGINEERING CONSULTING		
Staff Geotech/Soil Engineer I or Geologist I	Hourly	$105.00
Staff Geotech/Soil Engineer II or Geologist II	Hourly	$130.00
Staff Geotech/Soil Engineer III or Geologist III	Hourly	$150.00
Associate Engineer I	Hourly	$155.00
Associate Engineer II	Hourly	$175.00
Engineering Geologist I	Hourly	$175.00
Engineering Geologist II	Hourly	$195.00
Senior Engineer	Hourly	$205.00
Seismic/Technical Specialist Engineer	Hourly	$250.00
Principal Engineer	Hourly	$235.00
Drone Flight Services	Hourly	$245.00
Drone Hardware & Flight Fee	Daily	$160.00
CADD Technician	Hourly	$100.00
Administrative Assistant	Hourly	$85.00
SPECIAL INSPECTION AND CONSTRUCTION SERVICES		
Project Manager	Hourly	$140.00
Engineering Technician	Hourly – 3 hr min	$100.00
Senior Engineering Technician	Hourly – 3 hr min	$120.00
Subgrade Evaluation Onsite	Each	$385.00
Nuclear Densometer	Daily	$85.00
Vehicle Fee (Rental/In-house)	Daily	$135.00
Laboratory Technician	Hourly	$85.00
Laboratory Manager	Hourly	$140.00
MATERIALS TESTING SERVICES		

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#200 Wash	Each	$140.00
Atterberg Limits	Each	$250.00
In-Situ Dry Density and Moisture Content	Each	$55.00
Moisture Content	Each	$40.00
One-dimensional Consolidation	Each	Quoted
Proctor Moisture-Density	Each	$380.00
Sieve Analysis ¾ inch to 2-inch max	Each	$380.00
Sieve Analysis < ¾ inch max	Each	$330.00
Sieve Analysis > 2-inch max	Each	$560.00
Soil Classification	Each	$45.00
Specific Gravity of Coarse Aggregate	Each	$155.00

Commercial Septic Design	Maximum Hourly Rate*
Septic Consultant	$170.00

**Rates reported are for 2023. Rates updated annually in January.*

***Subconsultant Reimbursable Expenses and Direct Labor at Cost x 1.10*

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- *Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.*

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SIGNATURE PAGE FOR
ARPA - NORTH SANTIAM CANYON SEWER PROJECT - PW-5069-22
between
MARION COUNTY and KELLER ASSOCIATES, INC.

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES:

Authorized Signature: DocuSigned by: Brian Nicholas 9793BA7ACD6D443... 7/10/2023
Department Director or designee Date

Authorized Signature: DocuSigned by: Jan Fritz DC16351248DE4EC... 7/11/2023
Chief Administrative Officer Date

Reviewed by Signature: DocuSigned by: Scott Norris 60C98A6F708240B... 7/11/2023
Marion County Legal Counsel Date

Reviewed by Signature: DocuSigned by: A3538E7AEC704F4... 7/10/2023
Marion County Contracts & Procurement Date

KELLER ASSOCIATES SIGNATURE

Authorized Signature: DocuSigned by: Peter Olsen, PE 743A43630E4D48B... 7/11/2023
Date

Title: Principal

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Contract Review Sheet

PW-5069-22 (3)

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: **3**

Contact: **Alicia Henry** Department: **Public Works Department**

Phone #: **503-373-4320** Date Sent: **Tuesday, May 2, 2023**

Title: **ARPA - North Santiam Canyon Sewer Project**

Contractor's Name: **Keller Associates, Inc.**

Term - Date From: **September 30, 2022** Expires: **December 31, 2026**

Original Contract Amount: **$60,960.00** Previous Amendments Amount: **$1,913,020.00**

Current Amendment: **$182,907.00** New Contract Total: **$2,095,927.00** Amd% **3338%**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☑ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **1130**

Description of Services or Grant Award

Amendment 3 - adds $182,907 for additional project management services (Task 100), Land acquisition and Relocation Services (Task 103) and Financial Advisory (Task 104).

Desired BOC Session Date: **5/31/2023** BOC Planning Date: **5/18/2023**

Files submitted in CMS: **5/10/2023** Printed packet & copies due in Finance: **5/16/2023**

BOC Session Presenter(s)

FOR FINANCE USE

Date Finance Received: Date Legal Received:

Comments: **Y**

REQUIRED APPROVALS

DocuSigned by: Camber Schlag C5B2F3DF257F444... 5/11/2023
Finance - Contracts — Date

Contract Specialist — Date

DocuSigned by: Jane E Vetto D0CFC5B04B6F483... 5/12/2023
Legal Counsel — Date

DocuSigned by: Jan Fritz DC16351218DE4EC... 5/12/2023
Chief Administrative Officer — Date

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MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date:	Wednesday, May 31, 2023, at 9:00 am				
Department:	Public Works	Agenda Planning Date:	5/11/2023	Time required:	5 min.
☐ Audio/Visual aids	N/A				
Contact:	Chris Einmo	Phone:	x4119		

Department Head Signature: DocuSigned by: Brian Nicholas 97938A7ACD6D443...

TITLE	Consider Approval of Amendment No. 3 to Professional Service Contract PW-5069-22 with Keller Associates, Inc. for the North Santiam Sewer Project.
Issue, Description & Background	Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. This is a large, multi-phase project with aggressive expenditure deadlines driven by ARPA funding requirements. Therefore, for expediency, the full scope of services needed to deliver the full project will be executed in a series of amendments to the original consultant services agreement, ensuring that early critical-path activities proceed without delay. On October 7, 2022, the county executed contract PW-5069-22 with Keller. Amendment No. 1 was executed on October 7, 2022 and Amendment No. 2 was executed on November 28, 2022. Amendment No. 3 adds property acquisition support, financial analysis services, and additional support for joint Marion-Linn County coordination.
Financial Impacts:	This amendment will increase the contract value by $182,907 from $1,913,020 to $2,095,927, all of which will be paid using federal ARPA funds with no local funding match. This is a budgeted expense in the current fiscal year in the 135 Public Works Grants fund.
Impacts to Department & External Agencies	This amendment results in no impacts to other departments and serves to advance the North Santiam Sewer Project on behalf of the cities of Mill City, Gates, Detroit and Idanha.
Options for Consideration:	1) Approve Amendment No. 3 to contract PW-5069-22, enabling critical-path work to proceed, or 2) Take no action at this time.
Recommendation:	Staff recommends Option 1, approval of Amendment No. 3 to contract PW-5069-22.
List of attachments:	Amendment No. 3 to contract PW-5069-22, the Contract for Services between Marion County and Keller Associates
Presenter:	Chris Einmo; Brian Nicholas

Copies of completed paperwork sent to the following: (Include names and e-mail addresses.)

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DocuSign Envelope ID: 8CCC49AF-82FE-419C-9863-1564C7EB655D

MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Copies to:	Alicia Henry, ahenry@co.marion.or.us

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DocuSign Envelope ID: 8CCC49AF-82FE-419C-9863-1564C7EB655D

REQUEST FOR AUTHORIZATION OF CONTRACT
PW-5069-22

Date: May 2, 2023
To: Chief Administrative Officer
Cc: Contract File
From: Alicia Henry

I. Subject: Amendment Exceeds 25%

DIPS CODE: 135-40-42-461-4603-534500-105830 105831 809.002
Budget Authority: ☒ Yes ☐ No
CIP: 23-325/326

The Marion County Public Works Department is requesting approval to amend a contract as described in Section 20-0265, 20-0270, 30-0320, 40-0160, and 40-0910 of the Marion County Public Contracting Rules. The contract is with Keller Associates, Inc. for ARPA - North Santiam Canyon Sewer Project with a value of $1,913,020.00 and an additional $182,907.00 will be added to the contract for a new contract total of $2,095,927.00 upon approval.

A. BACKGROUND

Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. This is a large, multi-phase project with aggressive expenditure deadlines driven by ARPA funding requirements. Therefore, for expediency, the full scope of services needed to deliver the full project will be executed in a series of amendments to the original consultant services agreement, ensuring that early critical-path activities begin without delay. On October 7, 2022, the county executed contract PW-5069-22 with Keller and Amendment No. 1 was executed on October 7, 2022. Amendment 2 was executed on December 12, 2022. Subsequent phases of work will be awarded to the consultant as the project progresses.

B. CURRENT AMENDMENT PURPOSE

Amendment No. 3 adds additional project management services, land acquisition and relocation services and financial advisory.

JUSTIFICATION

The initial contract consisted of a $60K fast-start contract, which enabled work on this time-sensitive project to begin quickly. Amendment 1 added an additional amount of $67,680, for a contract total of $128,640. Amendment 2 added an additional amount of $1,784,380, for a contract total of $1,913,070 and Amendment 3 conforms to the Request for Proposal and

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awarded contract phased approach and will add an additional $182,907, to ensure the project will meet ARPA requirements and deadlines. This conforms to the contracting plan for this project.

C. BUDGET IMPACTS

1. Are the expected expenditures for the current fiscal year under the contract, including any additional funds being requested with this action, already included in the current year adopted budget? ☒ Yes ☐ No

2. If yes, amount $5,515,700 Program / Account 461-534500

3. If no, describe the amount and how the anticipated expenditures will be handled within the budget:

   a. Amount: $_____

   b. Managed with anticipated savings– explain why and from what costing:

   _____
   _____
   _____
   _____

   c. Will require a supplemental budget request – provide the expected funding source and costing:

      i. Funding Source: _____

      ii. Costing: _____

Submitted by:

DocuSigned by:
Alicia Henry
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Alicia Henry
Public Works Department

Reviewed by:

DocuSigned by:
Camber Schlag
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Contracts & Procurement

Acknowledged by:

DocuSigned by:
Brian Nicholas
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Department Head

Acknowledged by:

DocuSigned by:
Jan Fritz
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Jan Fritz, CAO

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Marion County
OREGON

AMENDMENT 3 to PW-5069-22
the CONTRACT FOR SERVICES
between
MARION COUNTY and KELLER ASSOCIATES

This is Amendment No. 3 to the Contract for Services (as amended from time to time, the "Contract"), dated September 30, 2022, between Marion County, a political subdivision of the State of Oregon, hereafter called County or Owner, and Keller Associates, hereafter called [Contractor]Consultant.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by brackets):

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$2,095,927 [1,913,020.00]** for Phase 1, 2, and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A, Statement of Work.**

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

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Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT

Task 100.1 – Project Management

Consultant Responsibilities:

100.1.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.
100.1.2 Project Coordination. Consultant may be requested to prepare progress reports or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.
100.1.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates to the board. Consultant will prepare presentation materials and/or handouts as directed.

Owner Responsibilities:

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- Administer project funding.

Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes a 6-month duration for general project administration.
- Task 1 includes up to 212 hours of project management services.

Deliverables:

- Monthly Invoices
- Monthly Progress Reports
- Meeting agenda and minutes

Task 100.2 – County Board of Commissioners Support Services

Consultant Responsibilities:

100.2.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to [two] three occasions. Consultant will prepare presentation materials and/or handouts. The [two] three presentations will tentatively occur in the months of November 2022, [and] December 2022, and March 2023 and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Presentation #3 – Within six months after effective date of contract. Attend and present at a Joint Special Work Session for Marion County and Linn County Commissioners, to provide an introduction and update on the project and answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with sub-consultants [(i.e. GSI, SWCA)] and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material
- Final presentation material

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101 – STRATEGIC PERMITTING PLAN

Task 101.1 – Project Management and Administration

Consultant Responsibilities:

101.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

101.1.2. Consultant Coordination. Coordinate services to complete the Strategic Environmental Permitting Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of the draft Strategic Permitting Plan.

Assumptions:

- Project management budget assumes a task order schedule of up to 3 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification

Consultant Responsibilities:

101.2.1. Consultant shall review available project information, including background, concept development and current plan/design information for the North Santiam Canyon Wastewater Master Plan (Master Plan). Consultant will conduct a desktop review of the Master Plan area to identify potential resources affected and locate existing available data. Using this information, Consultant will compile a list of potential issues and data needs for the project. Consultant will check and refine the understanding of those issues by initiating preliminary, informal discussions with the anticipated permitting agencies to understand their concerns and permitting needs for the project. The intent of these discussions will be to identify the agencies' specific resource concerns, to understand permitting requirements and obligations, and discuss options for permitting efficiencies, such as using programmatic agreements. Consultant will also preliminarily identify which federal agencies may have a National Environmental Policy Act (NEPA) requirement for the Master Plan and/or specific projects or phases that are part of the plan (due to their jurisdiction, land ownership, or funding) and whether a single joint NEPA document could be used to support multiple federal decisions.

Task 101.3 – Strategic Permitting Plan

Consultant Responsibilities:

Based on information obtained in Task 101.2, Consultant will prepare a draft Strategic Permitting Plan. The draft Strategic Permitting Plan will include:

- Project permitting schedule and general cost estimate.
- Summary of environmental permits and approvals needed
- Summary of initial pre-scoping discussions with agencies
- List of potential resources affected and existing available data

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- List of potential permitting issues and data needs (based on desktop analysis and agency discussions)
- List of design needs to complete permitting
- Summary of potential opportunities for permitting efficiencies
- Estimated timeline to complete permitting
- Estimated general cost to complete permitting

Consultant will revise and finalize the Strategic Permitting Plan based on one consolidated review by Consultant and Owner.

Assumptions:

- Consultant will conduct up to three coordination conference calls with Owner to provide updates, receive additional information/clarifications, etc.
- Permitting agencies for informal, pre-scoping coordination will be: US Forest Service, US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Transportation, and Marion County. Outreach to agencies will consist of email or telephone contact. Consultant will make a reasonable effort get information from agencies within the available time and consistent with the level of effort budgeted.
- "Environmental permits and approvals" do not include easements or rights-of-way with utilities, ODOT, or federal agencies.
- Permitting requirements related specifically to wastewater treatment/infiltration requirements will be addressed through a separate task order.
- One review of the draft Strategic Permitting Plan will be conducted. The Strategic Permitting Plan will be revised based on one consolidated set of review comments. Consultant intends for the Strategic Permitting Plan to be a "living document", updated and adapted as the project planning and subsequent design and permitting efforts progress.
- No Owner board meeting presentations

Deliverables:

- Draft Strategic Permitting Plan
- Final Strategic Permitting Plan

102 – SUBSURFACE EXPLORATION

Task 102.1 – Project Management and Administration

Consultant Responsibilities:

102.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

102.1.2. Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

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Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 102.2 – Subsurface Investigation Program

The purpose of subsurface investigation is to collect soil and groundwater data that can be used to: (1) assess whether a candidate site can infiltrate the required volume of treated wastewater, (2) inform facility predesign, (3) evaluate facility permitting framework (WPCF required), and (4) evaluate compliance with DEQ's groundwater protection rules. The subsurface investigation program involves excavating test pits to measure soil infiltration rates and observe soil types, installing monitoring wells to measure aquifer properties, collecting soil and groundwater samples, and one year of groundwater and surface water level monitoring. This task includes management, planning and execution of the subsurface investigation program comprised of two subtasks:

- Subtask 102.2.1 – Mill City / Gates Subsurface Investigation
- Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Owner Responsibilities:

- This scope of work does not include effort to identify domestic water wells in the vicinity of the proposed infiltration facility (which would likely involve a door-to-door survey and review of households that are connected to City water). Owner is responsible for this effort, if it is needed, and for incorporating the information obtained into the final report.

Assumptions:

- Subsurface investigations will occur on private or public [i.e., U.S. Forest Service (USFS)] property that is not owned by Owner. Owner and Consultant will work collaboratively to gain access to these sites for the purpose of performing site evaluation work. In general, Owner is responsible for the execution of site access agreements with property owners and Consultant is responsible for coordination with property owners regarding schedule for accessing the property, discussing access routes, and reporting results to the property owner.
- Test pitting and infiltration testing will be limited to four days in the Detroit/Idanha area (up to 10 test pits) and five days in the Gates/Mill City area (up to 18 test pits).
- Monitoring wells and temporary borings will target discrete horizons in the glacial till geologic unit that are related to the depth to groundwater and the contact between glacial till and bedrock. Because there is limited information about the geology and depth to groundwater at the candidate sites, the costs for drilling are based on assumptions about the depths of monitoring wells and temporary borings. Where field conditions differ from those assumed and where such differences result in increased field costs that exceed the established budget for this task, an equitable adjustment to the contract value will be made by contract amendment.
- In the Gates/Mill City area, it is assumed that monitoring wells will be 100 feet deep, one temporary boring will be advanced to the top of the water table at 80 feet below ground surface (bgs), and another temporary boring will be advanced to the top of bedrock at 200 feet bgs.
- In the Detroit/Idanha area, we have assumed that monitoring wells will be 80 feet deep (2 wells) or 200 feet deep (3 wells), and two temporary borings will be advanced to the top of bedrock at 100 feet bgs.
- Drilling costs could change if: (1) driller costs change (quotes are typically only good for 30 days due to "instability of commodity costs") or (2) the assumed construction of wells and borings

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changes based on the geology of the site. It is assumed that casing advance is not necessary to keep the bedrock hole open during drilling of the monitoring well in the Detroit/Idanha area. An amendment may be necessary if casing must be advanced to keep the hole open at this well and if such costs exceed the agreed upon task budget.

- Subsurface exploration work, including digging of test pits, geotechnical drilling and installation of subsurface monitoring equipment, is not subject to Davis-Bacon or BOLI prevailing wages.

Subtask 102.2.1 – Mill City / Gates Subsurface Investigation

Subsurface investigation in the Gates/Mill City area includes the following activities:

102.2.1.1. Work Plan. Develop a work plan for the subsurface investigation that includes a specific plan for excavating and infiltration testing at up to 18 test pits (at Site 1 through Site 4) and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to eighteen (18) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for deep soil investigation.

102.2.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop three (3) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.1.4. Groundwater Level Monitoring. Equip each well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells quarterly for a year.

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102.2.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.1.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum.

Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Subsurface characterization in the Detroit/Idanha area includes the following activities:

102.2.2.1. Work Plan. Develop a work plan for the subsurface characterization that includes a specific plan for excavating and infiltration testing at up to 10 test pits (at the McCoy and Detroit Ranger Station sites), and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.2.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to ten (10) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for the deep soil investigation.

102.2.2.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop five (5) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to

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calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.2.4. Surface Water and Groundwater Level Monitoring at the McCoy Site. Install three (3) stilling wells (in the Santiam River, Unnamed Creek, and McCoy Creek); equip each stilling and monitoring well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells and stilling wells quarterly for a year.

102.2.2.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.2.6. Reporting. Develop technical memoranda documenting the field investigation and results

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum

Task 102.3 – Groundwater Modeling Evaluation

The purpose of this task is to provide field data and modeling evaluations for submittal to the Oregon Department of Environmental Quality (DEQ) to support a Water Pollution Control Facility (WPCF) permit determination in compliance with DEQ's groundwater protection rules.

Task 102.3 is comprised of two subtasks:

- Subtask 102.3.1 – Gates/Mill City Permitting Evaluation
- Subtask 102.3.2 – Detroit/Idanha Permitting Evaluation

Assumptions:

- It is assumed that the planned location for the infiltration facility in the Gates/Mill City area is further from the Santiam River than the planned location for the infiltration facility in the Detroit/Idanha area (less than 0.25 miles). Therefore, we anticipate that the evaluation to support a permitting determination for the Detroit/Idanha area will be more rigorous.

Subtask 102.3.1 – Mill City / Gates Permitting Evaluation

Consultant shall perform the following activities for the infiltration facility in the Gates/Mill City area:

102.3.1.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the selected Gates/Mill City infiltration site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.1.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical

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groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.1.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.1.4. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review, and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.1.5. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater protection rules, and (3) to discuss DEQ's comments on the memo.

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation

Consultant shall perform the following activities for the infiltration facility in the Detroit/Idanha area:

102.3.2.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the McCoy site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.2.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical

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groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.2.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.2.4. Perform a modeling simulation to estimate the maximum recharge volume in the Detroit/Idanha area (additional evaluation of maximum recharge volume is needed in the Detroit/Idanha area due to the anisotropy; a model simulation would be more cost effective than hiring a driller to conduct a pumping test).

102.3.2.5. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review, and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.2.6. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)

Consultant Responsibilities:

[107.1] 102.4.1. Address permitting and other regulatory requirements related to the National Environmental Policy Act (NEPA), which will involve obtaining an agreement to access the properties, excavate test pits, and install monitoring wells. Assumes a level of effort with up to 48 hours.

[107.2] 102.4.2. Coordinate with property owner of "upper deck" private property to obtain permission to install two monitoring wells. Assumes a level of effort with up to 48 hours.

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Owner Responsibilities:

- Review and approve permitting applications/letters requesting permission to access the McCoy site, excavate test pits, and install monitoring wells.
- Owner is responsible for costs associated with property owner conditions related to site access and site access agreements.

103 – LAND ACQUISITION AND RELOCATION SERVICES

Task 103.1 – Project Management and Administration

Consultant Responsibilities:

103.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

103.1.2 Coordination. Coordinate services to complete the land acquisition and relocation services task.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 103.2 – Mill City Land Acquisition and Relocation Services

Responsible for the oversight of the services of the land acquisition and relocation sub-consultant to provide Acquisition and Relocation services for North Santiam Canyon Sewer Project (NSCSP) and the Detroit Downtown Commercial Septic Program as outlined in the tasks below. The subtasks included as part of Task 103.2 are based on the land acquisition and relocation sub-consultant's scope of work. The scope and fee provided are for the acquisition of up to eight (8) files.

Consultant Responsibilities:

RIGHT OF WAY (ROW)
Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970

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- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.2.1 Project Management and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to six (6) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.2.7). Consultant Project Manager will QC all deliverables prior to delivery.

103.2.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner and Consultant of any major title encumbrances.

103.2.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner and Consultant for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.2.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.2.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

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Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.2.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter,

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acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.2.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.
Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there is up to one (1) Personal Property Only Relocation.

Consultant shall, at a minimum, conduct the following relocation activities:

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- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment.
- Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.2.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall:

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.2.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to three (3) Preliminary Title Reports and Title Documents.

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- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner,
- Provide up to three (3) GINs, one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Up to three (3) appraisal and appraisal review reports, electronically.
- Provide 15-Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Provide Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- Provide the following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to three (3) Draft Offer Packets for review for each file to Owner
- Provide up to three (3) Final Offer Packets sent certified mail or delivered in person for each file.
- Provide up to three (3) Final Report Packets for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval
- Submit Relocation claims electronically to Owner for payment
- Submit Relocation Closing Reports to Owner
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

Task 103.3 – Detroit Land Acquisition and Relocation Services

Responsible for the oversight of the services of the land acquisition and relocation sub-consultant to provide Acquisition and Relocation services for North Santiam Canyon Sewer Project as outlined in the tasks below. The subtasks included as part of Task 103.3 are from the land acquisition and relocation sub-consultant's scope of work.

Consultant Responsibilities:

RIGHT OF WAY (ROW)

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Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Right of Way & Rail/Utility Coordination Contractor Services Guide"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970
- (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures, and pamphlets referenced in the "ODOT Right of Way Manual" or as provided by Owner.

103.3.1 Project Manager and Landowner Liaison. Consultant shall track status for parcel files to be acquired for the County and provide weekly updates to the project team. Consultant shall meet with up to five (5) landowners of parcels identified as potential sites to assist with determining the suitability of the site. Consultant shall document all contacts with landowners in Report of Personal Interview (see Task 103.3.6). Consultant Project Manager will QC all deliverables prior to delivery.

103.3.2 Title Reports and Document Requests. Consultant shall prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify Owner of any major title encumbrances.

103.3.3 Right of Way Programming Estimate. Consultant shall prepare a ROW programming estimate for use by Owner to program funds for property acquisition. The ROW programming estimate must include dollar amounts for the following items: Land &Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the Owner for review.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Owner.

103.3.4 Preliminary Activities/Donation Requests. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall set up ROW parcel files and deliver a General Information Notice ("GIN"), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

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Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the GIN, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

103.3.5 Appraisal and Appraisal Review. Consultant shall use appraisers who are licensed or certified in the State of Oregon, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Owner prior to beginning work on this Task.

Appraisals will be full acquisitions. Consultant shall provide one real estate appraisal for each property or properties which constitute the "larger parcel" as described in the ODOT Right of Way Manual from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Owner and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Owner.

Consultant shall require appraisers to provide no less than fifteen calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be done as provided in the ROW manual section 5.140, Opportunity to Accompany, and documented in the parcel file; mailing and delivery of 15-Day Notice must be included in the appraiser Report of Personal Interview.

Consultant shall perform independent desk reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Owner for final approval.

Owner will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of the written notice of appraisal inspection, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the appraisal.

103.3.6 Acquisition Services. All ROW must be acquired in the name of Owner. Consultant shall conduct negotiations, on behalf of Owner, in good faith and in compliance with all federal and state laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the ODOT ROW Manual and all applicable state and federal laws and regulations.

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Consultant is responsible for making the offer subject to clearing title encumbrances identified on the Preliminary Title Report. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Consultant shall prepare and present to Owner the draft Offer Packets. The terms of offer for each property must:

- Be made on Owner letterhead, and
- Include Owner contact information

In addition to the terms of offer document specified above, these Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Owner in order to clear the ROW for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send via certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Consultant shall make every reasonable effort to acquire the ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court, or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to the County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) verbally to the county and if requested a justification letter and owner supplied supporting documentation to the County for approval. If accepted see above.
- If an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

103.3.7 Relocation Services. If authorized, relocations shall take place in a timely manner in accordance with regulatory notification time frames and terms, and are completed

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following the Uniform Act, State law (ORS 35.500-35.530), the ODOT Right-of-Way Manual. If authorized, Consultant shall assess eligibility for up to one (1) residential relocation.

Consultant shall use the forms, formats and brochures in relocation advisory assistance and the preparation of relocation studies, reports and claims available on ODOT's ROW Guidance webpage (https://www.oregon.gov/ODOT/ROW/Pages/ROW.aspx).

Consultant shall inform Owner as soon as schedule issues are known, if applicable.

It is assumed there are no residential nor non-residential relocations. It is further assumed there are up to three (3) Personal Property Only Relocations.

- Consultant shall, at a minimum, conduct the following relocation activities:
- Conduct occupant interviews, provide relocation advisory assistance and determine/present relocation benefits.
- Prepare relocation reports, studies, moving agreements and claims using Owner forms/formats and submit to Owner for review, approval and payment. Relocation studies required for presentation of benefits at the time of offer must be preapproved by Owner.
- A Moving Agreement, pre-approved by Owner, must be on file prior to submission of relocation claims.
- Support and assist Owner with Relocation Appeals according to the Right-of-Way Manual
- Prepare and independently review for accuracy and compliance, relocation claims using Owner forms/formats, and submit claims to Owner for payment.
- Maintain Report of Personal Interview.

103.3.8 Condemnation Process Assistance (CONTINGENCY). After good faith effort has been made to acquire ROW at Marion County's determination of just compensation, if settlement with the property owner(s) is NOT reached, Consultant shall

- Provide information and clarification to County in support of mediation and condemnation proceedings and assist property owner with any relocation according to the Consultant Services Guide.

Note: County will initiate condemnation proceedings if necessary.

For budgeting purposes, it is assumed that condemnation process assistance will be necessary on up to one (1) property.

103.3.9 ROW Certification. Consultant shall certify to County on the approved Certification form that:

- County has legal and physical possession of needed ROW.
- Relocation assistance has been completed for all displaced persons and businesses and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.

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- All acquisition of ROW and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as Oregon state laws, civil rights laws, and other applicable federal and state regulations and policies.

Assumptions:

- Appraisal and appraisal review fees are based upon full acquisition, rural residential zoning. Fees may change due to complexity of the parcel details.

Deliverables:

- Provide monthly invoices, electronically.
- Provide weekly project updates electronically to include notes on contacts with landowners.
- Provide up to five (5) Preliminary Title Reports and Title Documents.
- Provide Clearance Documents from Lenders and/or Lessees, as needed.
- Provide one (1) draft Programming Estimate for delivery electronically to Owner.
- Provide up to five (5) GINs, with one (1) hard copy to each property owner and one (1) electronic copy each to Owner within 20 business days following NTP for the ROW acquisition phase.
- Provide proof of receipt for each GIN sent to each property owner and occupant(s) by sending Owner the return receipt card(s) or USPS tracking printout(s), and documenting delivery information in the Report of Personal Interview. NOTE: If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.
- Provide up to five (5) appraisal and appraisal review reports, electronically.
- Provide 15 Day Notice of Appraisal Inspection to each property owner within 8 weeks of NTP for the ROW acquisition phase.
- Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal. The report must be submitted at the time of appraisal.
- The following Appraisal and Appraisal Review documentation, as applicable, in electronic format for each file to Owner within 20 weeks of NTP for the ROW acquisition phase:
    - Appraisal report
    - Specialty reports, if necessary, prior to incorporation in appraisal reports.
    - 15 Day Notice of Appraisal inspection sent to each property owner.
- Provide up to five (5) Draft Offer Packet for review for each file to Owner.
- Provide up to five (5) Final Offer Packet sent certified mail or delivered in person for each file.
- Provide up to five (5) Final Report Packet for each file for payment, conveyance of title and recording to Owner.
- If applicable, provide proposed counteroffers with justification information for review and approval to Owner.
- If applicable, provide Recommendation for Condemnation to Owner.
- Provide up to five (5) Report of Personal Interview to Owner.
- Submit studies, Move Agreements, and Estimates electronically to Owner for approval.
- Submit Relocation claims electronically to Owner for payment.

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- Submit Relocation Closing Reports to Owner.
- Provide Final Offer letter to property owner(s), with a copy to County as stated in the NTP for this contingency task.
- Provide ROW Certification form, one (1) electronic copy (email acceptable) to Owner no later than 12 weeks prior to Project bid date.

104 – FINANCIAL ADVISORY SERVICES

Task 104.1 – Project Management and Administration

Consultant Responsibilities:

104.1.1 Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

104.1.2 Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 104.2 – Financial Advisory Services

Consultant Responsibilities:

104.2.1 Advisory Services. Consultant shall provide, upon request, advisory services related to the North Santiam Canyon Sewer Project. This consultation shall be provided on a time and materials basis, and it shall include attendance at meetings, writing of memos or presentations, or communication via phone or email in support of the project decision-making.

Owner Responsibilities:

- Provide meeting space for project meetings.

Assumptions:

- Attendance at project meetings may be virtual.

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM

200 - MILL CITY / GATES FACILITIES PLANNING STUDY

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Task 200.1 – Project Management

Consultant Responsibilities:

200.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

200.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Planning criteria will also be reviewed during the Kickoff Meeting. Representatives from the DEQ will be invited to the kickoff meeting.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services, if any.

Assumptions:

- Project management budget assumes a planning schedule of up to 8 months.
- Monthly Board meeting attendance is covered in a separate task order.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Funding administration services and funding acquisition support is not included in this scope of work.

Task 200.2 – Data Acquisition & Facility Tours

Consultant Responsibilities:

200.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

Mill City

- Discharge Monitoring Report (DMR), operational, influent monitoring (15-minute intervals), rainfall data (since Jan 2021), and any other water quality sampling results collected outside of DMRs in spreadsheet format
- Update of financial summary records, including current rates, annual expenses, operation, revenues, replacement budgets, number and type of accounts, etc.
- Recent facility inspection reports, if available
- Provide update of any changes to wastewater flows from major seasonal wastewater dischargers, water users with their own wastewater treatment system, major water users that consume the majority of their water.
- Any recently produced planning documents (transportation, wastewater, water conservation, water/waste/energy audits)
- Update on known treatment plant or collection system issues and planned improvements
- Update from Gates and Mill City for winter-time water consumption data summarized by user types in a spreadsheet format
- Known correspondence from federal and state regulatory agencies regarding violations or concerns related to wastewater treatment and disposal

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200.2.2. Data Collection and Review. Collection and processing of furnished data, mapping, and reports. Provide a follow-up Request for Information for supplemental data if required.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required.
- Provide access to facilities and records.
- Provide operations and maintenance staff for questions as needed.

Assumptions:

- Consultant will not enter confined spaces. Structural and electrical engineering reviews are not included in the scope of work but could be completed as an additional service.
- Consultant shall be entitled to rely, without liability, on the accuracy and completeness of information provided by Owner, other agencies and stakeholders, and information from public records, without the need for independent verification.

Deliverables:

- Request(s) for Information

Task 200.3 – Project Planning

Consultant Responsibilities:

200.3.1. Location. Incorporate brief description of project location from master plan. Include figure(s) from master plan to establish the project planning area.

200.3.2. Environmental Resources. Incorporate information from master plan to document natural resources in the project area, including land use, flood plains, wetlands, historic, biological, water quality issues, socio-economic, climate, geography, soils, rivers, and air quality. Use master plan figures to summarize natural resources in the project area.

200.3.3. Growth Trends. Update master plan population statistics and projections. For Mill City, coordinate with Mill City and County planners on location, phasing, and type of new growth. The Portland State University Population Research Center historical population data and 40-year growth forecasts will be used to inform the population growth, but it is assumed that non-traditional methods will be required to best account for the decline and near-term growth due to rebuilding after the 2020 wildfire as well as accounting for the new community sewer system in Gates and new treatment facility in Mill City. Growth for non-residential users will be estimated based on input from City and County planners for the 20-year planning period.

200.3.4. Community Engagement. Describe the Owner's approach to engage the community in the planning process.

200.3.5. Design Flow Rates. Update master plan design flow rates based on most recent DMR and water usage data from Mill City and Gates. Update projections based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.6. Design Loading Rates. Update master plan wastewater loadings and project future loadings based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.7. Regulatory Requirements. Review and update summaries from master plan of current regulatory requirements and planning criteria that may influence operation, maintenance, and capital improvements of the existing Mill City wastewater system and the initial project components in Gates.

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200.3.8. Cost Estimating. Establish cost estimating methodology to reflect both local and current conditions.

200.3.9. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.3.10. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and approval on growth projections and planning criteria.
- Provide review and comments of this section.
- Provide input on community engagement.

Assumptions:

- The planning criteria will need to be established for the planning study prior to having any supplemental income and population survey data available to inform the population estimates and projections. The best available data will be used for the purposes of this study.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- City staff or Contract City Planner will provide input on the distribution and phasing of new residential and non-residential growth in Gates and Mill City.
- If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.
- The study area will coincide with the North Santiam Sewer Authority Boundary for Gates and Mill City.
- Community engagement included in this scope of work is limited to the public meeting in Task 209. Additional community engagement activities can be provided as additional services or through other identified task orders.

Deliverables:

- Draft Project Planning Facility Plan Section.

Task 200.4 – Existing Facilities Evaluation

Consultant Responsibilities:

200.4.1. Base Map. Update the existing system base map from the master plan, showing location of key facilities, pipelines, and basin boundaries for Mill City. Use the schematic process layout of the existing treatment plant from the master plan showing major process components.

200.4.2. History. Update master plan's documentation of wastewater treatment plant history and system description to reflect current flow and water quality data, recent discharge monitoring records (DMRs), plant improvements that have been completed recently, current condition of plant equipment and facilities, and current operation practices.

200.4.3. Wastewater System Management Classification, Operators and License. Provide a brief writeup of system required licensing and current operator license information.

200.4.4. Conditions Assessment. Update master plan documentation of existing physical conditions deficiencies. Collection system pipe information will be summarized by pipe material and age. Complete pump tests at each pumping facility to evaluate current pump performance

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and capacities. Incorporate findings from the I/I study that is currently under way at the time this scope was finalized.

200.4.5. Capacity Evaluation. Update master plan's comparison of existing and future projected flows and loadings to the existing capacity of the Mill City wastewater treatment system. Summarize existing capacity deficiencies.

200.4.6. Review pump run time data and flow meter records to assess existing capacity limitations (if any).

200.4.7. System Resiliency. Assess the collection system resiliency for the Mill City lift stations. This is anticipated to include a comparison of firm pumping capacity (i.e. with largest pump off-line) to the peak hour inflow. It also includes an assessment of whether onsite or portable back-up provisions are available and automated, what kind of emergency bypass pumping provisions are provided for the lift station and/or force main (in the event of a line break), and what kind of redundancy is provided in terms of back-up level sensors and alarms. This scope does not include an evaluation of seismic risks, a comprehensive vulnerability assessment, or updates to the Owner's Emergency Response Plans. Consultant will summarize the consequence of failure of critical lift station facilities and identify potential capital improvements and operational strategies that could be completed to mitigate these risks.

200.4.8. Wastewater Collection System Evaluation

200.4.8.1. Wastewater Model Development and Calibration. Use existing base mapping, record drawings, dry weather flows, pump curves, and Owner provided data to develop and calibrate a wastewater system model. The winter-time water consumption data will be used to estimate dry weather flows. Allocate infiltration and inflow for utilizing wet weather system design flows, available pump run time, and SCADA data.

200.4.8.2. Existing System Evaluation. Exercise computer model to check the Mill City system and evaluate the existing collection system hydraulic capacity. Evaluate system for remaining capacity.

200.4.9. Wastewater Treatment System Evaluation. Update master plan write-up to summarize existing plant deficiencies using updated plant data to compare actual performance to expected performance.

200.4.10. Operations. Update master plan documentation of existing operations and maintenance issues and concerns reported by Owner staff.

200.4.11. Financial Status of Existing Facilities. Document current rate schedules, annual O&M costs, other capital improvement programs, and table of users by monthly usage categories for the previous fiscal year. Document existing debts and required reserve accounts. Budget and capital improvements will be addressed under a separate task.

200.4.12. Water/Energy/Waste Audits. Provide brief write-up discussing variable frequency drive motors and all other applicable energy items for the system. Investigate and summarize the likelihood of incorporating a hydroelectric power generator on the force main from Gates to Mill City. Summarize overall current energy consumption for Mill City's existing system.

200.4.13. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.4.14. Draft Plan Section. Prepare draft section writeup. Address Owner comments on draft document.

Owner Responsibilities:

- Review and comment on draft documents.
- Participate and provide meeting location for workshop meetings.

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- Provide field checks if necessary, including surveying.
- Provide access to facilities and records. Test and replace (if needed) suction and discharge pressure gauges ahead of equipment tests.

Assumptions:

- Modeling of the existing Mill City treatment plant will not be completed for this facilities plan.
- The Mill City GIS mapping will not be survey grade and will be carried over from the master planning effort. The mapping will not include rim/invert data. It will only include approximate location as it was digitized from the existing record drawings.
- No additional field work or surveying will be required.
- Collection system conditions assessment will not include a full review of CCTV records or smoke testing with the exception of incorporating the findings from the Mill City I/I study.
- The Mill City collection system model will be developed with the InfoSWMM modeling platform, based on record drawings. Consultant will rely upon the accuracy of available record drawings. This scope does not include any field survey work to check or update pipe slopes.
- If model does not readily calibrate to existing conditions, and additional field work is recommended to troubleshoot the Owner's wastewater system, these services can be completed as an additional service.
- No drain field analysis will be provided.

Deliverables:

- Draft Existing Facilities Evaluation Facility Plan Section.

Task 200.5 – Need for System Improvements

Consultant Responsibilities:

200.5.1. Health, Sanitation, and Security. Summarize concerns and relevant regulations or correspondence from/to state and federal agencies.

200.5.2. Aging Infrastructure. Incorporate summary findings of conditions assessment of assets and summarize available pipeline age/material information. Summarize the following:

  - Unit performance issues, deficiencies and useful life.
  - Existing system reliability per DEQ and EPA guidelines.
  - Ability to meet current and potential future effluent limits and other regulatory requirements.
  - I/I calculations to determine if existing I/I is considered "non-excessive".

200.5.3. Reasonable Growth. Using the design flow and loading information, document the reasonable growth capacity that is necessary to meet needs during the planning period.

200.5.4. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and review of this section of the plan.

Deliverables:

- Draft Project Needs Facility Plan Section.

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Task 200.6 – Collection System Alternatives Considered and Selection

Consultant Responsibilities:

200.6.1. Future System Evaluation. Build Gates system model and expand Mill City model to include additional pipe and pump station network requirements associated with servicing new growth areas for the planning period. Add flows from new growth. Exercise the model to identify potential system deficiencies attributed to growth within the planning period.

200.6.2. Evaluate alternative improvements to correct existing, and anticipated future deficiencies, sewer new areas, and meet the target planning criteria. Benefits and drawbacks will be summarized for each alternative. A "no action" alternative will also be considered for each category. This alternative evaluation will be based on the master plan collection system alternatives while evaluating Mill City's existing system for collection system capacity deficiencies.
Where improvements are not relatively straightforward, evaluate up to three collection alternatives for the existing Mill City collection system that will service existing and future flows. Additional refinement of pipeline alternatives is anticipated to occur in the predesign tasks associated with the new Gates collection system.

200.6.3. Alternative Cost/Benefit Analysis. This will include life cycle cost analysis on preferred alternatives for up to three viable alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 40-year life cycle evaluation. This alternative evaluation for Gates will be based on the master plan collection system alternatives while evaluating any capacity alternatives for Mill City's collection system.

200.6.4. Phasing/Implementation Plan. Develop a phasing plan of improvements based on initial project, 10-year, 20-year, and 40-year anticipated growth. This plan will include an evaluation of interim recommendations or strategies for property owners who need to address septic system deficiencies or replacement prior to day one of the new Gates collection system and Mill City mechanical treatment plant are constructed.

200.6.5. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives using the master plan's figures with updates/modifications per this scope of work.

200.6.6. Environmental Impacts. A summary of the preliminary environmental screening of the collection system alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.6.7. Land Requirements. Discuss property needed for alternatives.

200.6.8. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.6.9. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.6.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.6.11. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide a review of the alternatives considered and input on selection criteria and ultimate selection of preferred alternative.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

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Assumptions:

- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4 (planning level cost estimates).

Deliverables:

- Draft Collection System Alternatives Facility Plan Section.

Task 200.7 – Treatment and Disposal System Alternatives Considered and Selection

Consultant Responsibilities:

200.7.1. Develop a list of treatment plant improvement alternatives focused on improving effluent water quality, vulnerability, safety and redundancy. The disposal improvement alternative will be rapid infiltration per the master plan recommendations.

200.7.2. Develop up to three pre-screened alternatives to evaluate, for primary treatment, secondary treatment, tertiary treatment, and solids handling treatment processes. Evaluate the pre-screened alternatives.

200.7.3. Facility Tours. Organize a tour of up to two wastewater treatment facilities with the Owner's staff to investigate alternatives with similar processes. These are anticipated to occur on the same day.

200.7.4. Alternative Cost/Benefit Analysis. Assist in comparing benefits, drawbacks, and costs of up to three viable alternatives. This will include life cycle cost analysis on preferred alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 20-year life cycle evaluation.

200.7.5. Phasing Plan. Develop a phasing plan of improvements based on initial project, 10-year, and 20-year anticipated growth.

200.7.6. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives.

200.7.7. Environmental Impacts. A summary of the preliminary environmental screening of the treatment system and disposal alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.7.8. Land Requirements. Discuss property needed for alternatives.

200.7.9. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

200.7.10. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.7.11. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.7.12. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide input on tasks above.
- Provide a review of the alternatives considered section of the plan.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

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Assumptions:

- The scope of this study does not look at alternatives to upgrade the existing recirculating gravel-bed filter.
- Evaluation of alternatives does not include piloting, bench testing, or fieldwork.
- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4.

Deliverables:

- Draft Treatment System Alternatives Facility Plan Section.

Task 200.8 – Proposed Projects (Recommended Alternatives)

Consultant Responsibilities:

200.8.1. Model day one and future 20-year process and hydraulic conditions of selected alternative for the new mechanical treatment plant.

200.8.2. Capital Improvement Plan.

a. Summarize recommended improvements.
b. Prepare planning level cost estimates for recommended improvements. For future projects anticipated to be developer driven and developer funded, summarize only upsize costs.
c. Estimate the portion of each capital improvement project cost that is attributed to 20-year growth for System Development Charge (SDC) eligibility.

200.8.3. Preliminary Project Schedule. Summarize costs for initial project, 10-year, and 20-year needs. The 6-year CIP for DEQ purposes will be covered by the "initial project" costs.

200.8.4. Permitting Requirements. Summarize WPCF permitting requirements (WPCF permit application and additional support is covered by a separate task order).

200.8.5. Sustainability Considerations. Summarize how the priority improvement projects will enable the Owner to serve its customers and be able to operate and maintain the system. Discuss how the projects will accommodate green infrastructure and efficiencies.

200.8.6. Future Reuse Consideration. Reuse system impacts will be considered and coordinated, and their potential summarized for selected alternative.

200.8.7. Organization and Staffing Requirements. Summarize recommended staffing requirements as required for regulatory compliance or as reported by the Owner. Summarize up to three options for organizational setup for certified operators for both collections and treatment (i.e. contract operator vs sewer authority staff).

200.8.8. Financing Options. Summarize potential financing options available for initial project. This will be a summary of efforts being undertaken by the Owner, Marion County, and the MWVCOG for funding the project.

200.8.9. Annual Budget Considerations.

a. Summarize Operating Revenues and Expenses. Summarize estimated annual operating expenses and identify recommended budgets dedicated for the initial project.
b. Anticipated User Charges and Other Income. Summarize the business case scenario documented previously by FCS Group and provide a status update on current efforts to implement recommendations.

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c. Annual Replacement Budgets. Develop recommended annual replacement budgets for the initial project based on typical replacement values and asset life. This will include a list of short-lived assets and the recommended annual replacement budget.
d. Annual Operations and Maintenance Costs. Estimate the operations and maintenance cost implications for the initial project.

200.8.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review an overall summary of the plan, selected improvements, and budget considerations.

200.8.11. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input on the prosed projects.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.
- Provide review and comments on the plan.

Assumptions:

- Scope excludes a user rate analysis, including evaluation of individual rate structures, cost-of-service evaluations, and service availability fee studies. These services can be provided as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

Deliverables:

- Capital Improvement Plan (tabular format, organized by initial project, 10-year, and 20-year needs).
- Estimate of SDC eligibility for each capital improvement past the initial project.
- Draft Proposed Project Facility Plan Section.

Task 200.9 – Facility Plan Documentation and Public Meeting

Consultant Responsibilities:

200.9.1. Prepare Facility Plan. Prepare and combine draft documents for a complete facility plan generally following the outline established in the July 2018 guidance document "Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed by Business Oregon, Oregon Department of Environmental Quality, Rural Community Assistance Corporation, and the United States Department of Agriculture". Add executive summary and assemble appendix materials. Appendix materials will include output flow capacities, existing peak hour flows, and future peak hour flows summarized in tabular and graphic format. Draft documents to be updated to address Owner comments. Submit final draft plan for Owner review.

200.9.2. Public Meeting. Prepare materials for and present summary findings in a townhall meeting.

200.9.3. Address Owner Comments. Address final Owner and public comments and submit for agency review.

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200.9.4. Address Agency Comments. Address agency comments and finalize document.

Owner Responsibilities:

- Review and comment on final draft plan in a timely manner.
- Pay agency review fees, if applicable.
- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.

Deliverables:

- Public Meeting Presentation Materials.
- Final Facilities Plan, three (3) hard copies (3 ring binders) of the plan and one electronic copy in PDF format.

Task 200.10 – Management Reserve (Contingency Task)
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time, Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of services. For these instances, a time and material budget is established in order for Consultant to complete such additional services. Prior to the use of this contingency budget, Owner's representative will provide written (email) authorization to use the budget for specific tasks.

ADDITIONAL SERVICES (not included in scope of work)

- Bond support
- Public outreach or stakeholder outreach support
- User rate and connection fee study
- Additional field work
- Energy efficiency evaluations
- Concept level design services
- Model training
- Environmental information documents, studies, field investigations, and permitting. Environmental permitting will be addressed by a separate task order.
- Amendments to this facility planning study because of other task orders.

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS

400 – COMMERCIAL SEPTIC SYSTEM PLANNING

Task 400.1 – Project Management

Consultant Responsibilities:

400.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

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400.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

Assumptions:

- Assumes a 4-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 400.2 – Data Acquisition & Property Tour

Consultant Responsibilities:

400.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

a. Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b. List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c. Previous collected test pit data for all the properties.
d. Previous studies involving the soil in the city.
e. Provide existing drain field and septic tank locations for each property.
f. Identify available property for consideration for septic tank or drain field placement.
g. Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

400.2.2. Conduct site tour of each property to evaluate potential drain field locations.
400.2.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

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Assumptions:

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

Deliverables:

- Request(s) for Information
- Summary tables and figures for existing septic tanks and drain fields status

Task 400.3 – Stakeholder Involvement / Engagement

Consultant Responsibilities:

400.3.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.
400.3.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.
400.3.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.
400.3.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities:

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

Deliverables:

- Public and stakeholder meeting presentation materials.

Task 400.4 – Commercial Septic System Concept

Consultant Responsibilities:

400.4.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.
400.4.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …). Document estimated seasonal variation and 5 to 10 year growth for flow and wastewater strength.
400.4.3. Regulatory and Permitting Requirements. Review and summarize current, pending and future regulatory requirements and permitting criteria that may influence operation, maintenance, and adaptation of the system to the long-term gravity collection system.
400.4.4. Conceptual Layout of Septic Systems. Provide figures to summarize conceptual layout of septic tanks and drain fields. Figures will be 8.5x11 or 11x17 schematics.

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400.4.5. Opinion of Probable Costs. Prepare an AAEC Class 4 opinion of probable cost for the project.
400.4.6. Develop Preliminary Project Schedule. Summarize schedule for overall project delivery and construction.
400.4.7. Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner.
400.4.8. Draft Technical Memorandum. Prepare draft technical memorandum. Final document to have Owner's comments incorporated.
400.4.9. Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review with County/City staff the draft technical memorandum.

Owner Responsibilities:

- Provide input and approval of septic tank and drain field concepts.
- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Test pits will not be excavated and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- Draft Commercial Septic Design Memorandum

401 - KANE'S MARINA SEPTIC SYSTEM

Task 401.1 – Project Management

Consultant Responsibilities:

401.1.1. General Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.
401.1.2. Regulatory Coordination. Meet with County and DEQ staff to discuss WPCF and County permit options. The objective []of this outreach will be to have a selected permitting process (WPCF or County).

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401.1.3. Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to review/establish Owner design team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

401.1.4. Presentation to County Commissioners. The Consultant will present a project update to the County Commissioners at the conclusion of Task 405, Preliminary Design. Consultant will prepare presentation materials and/or handouts. The one presentation will summarize the system layout, opinion of probable cost, permitting, schedule, and next steps.

401.1.5. Request for Information. Prepare initial request for information for data to be used in the design process.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed.
- Provide requested information within two weeks of request.

Assumptions:

- Project management budget assumes a project schedule of up to 4 months.
- Unless otherwise noted, meetings/workshops may include a combination of in person or virtual attendees. This assumption applies to this task as well as subsequent tasks.
- Funding support is not included in this scope of work, including but not limited to American Iron and Steel (AIS) or Build America, Buy America (BABA) tracking, certification, or reporting. These services can be provided as additional services.

Deliverables:

- Kickoff meeting agenda and minutes.
- Request for Information.
- Presentation materials and/or handouts.

Task 401.2 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

401.2.1. Study Phase Services.

a. Site Visit. Consultant will coordinate with Owner's staff to perform a site visit and document existing site conditions. Evaluation will include documentation of status and condition of existing septic facilities and electrical equipment. This scope does not include inspection of interior spaces or existing facilities.

b. Basin Study. Consultant will review the plan and profile for the gravity sewer system developed through the North Santiam Sewer Authority Master Plan. Consultant will approximate alignment and invert elevation requirements for the future lift station wetwell. Consultant will estimate the operating volume required for the future pump station.

c. Operation and Maintenance Assessment. Consultant will review available data provided by Owner to summarize historic usage, operation strategies, and maintenance considerations. It is anticipated the evaluation will include holding tank storage requirements, hydrogen sulfide and odor control, standby power, instrumentation and controls (alarming), future pump station compatibility, redundancy provisions, emergency response, and preventative maintenance activities.

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401.2.2. Design Criteria. Document design criteria established from the study phase services that will serve as basis for design. The design criteria will include, emergency storage calculations, anticipated flow conditions for the marina, future basin flow conditions, holding tank (wetwell) storage requirements, odor control strategy, power requirements, alarms.

401.2.3. Topographic Surveying. Provide oversight of the services to complete topographic and boundary surveying services for Kane's Marina.

401.2.4. Geotechnical Investigation. Provide oversight of the services to complete geotechnical engineering design services for Kane's Marina.

401.2.5. Site Layout. Develop 30% concept design showing site civil layout and holding tank(s) orientation on the marina site. Concept to include general grading concepts and reflect considerations for holding tank dimensions, future building and valve vault footprint, generator location, stormwater disposal, yard piping, and access for future maintenance/pump removal. The future footprint assumes that a small electrical building will be required to house the future electrical/controls, including a variable frequency drive (VFD) for the future lift station. Consultant has assumed that the generator will be outdoors with sound attenuation. The pipe network will be limited to 5-feet outside any building footprint.

401.2.6. Odor Control Type. Evaluate up to three design alternatives for odor control with the Owner. For each alternative, evaluation to include operations and maintenance considerations, benefits, drawbacks, costs, and consideration of non-cost factors (i.e., future expansion for the lift station). Potential odor control types include chlorine dosing equipment, passive carbon filtration, mixing, chemical, and air-scrubber.

401.2.7. Electrical and Controls. Coordinate with Owner to identify SCADA communication preferences. Coordinate with power utility to identify power constraints. Prepare one-line diagram for power and a narrative describing the communication strategy and objectives including a piping and instrumentation diagram (P&ID).

401.2.8. Cost Estimate. Provide an AAEC Class 4 opinion of probable cost for the project.

401.2.9. Workshop Meeting. Meet with Owner to review concepts and alternatives and select preferred alternative for design.

401.2.10. Prepare PER. Prepare draft Preliminary Engineering Report (PER) following the *Oregon DEQ guidelines.* In addition to the minimum regulatory requirements, PER will include concept drawings showing conceptual pipe network layout, one-line diagram, and anticipated permit requirements. Submit to Owner for review.

401.2.11. Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments into final PER.

Owner Responsibilities:

- Provide input on holding tank, piping design criteria, and preferred alternatives.
- Obtain or provide information for land parcel for the holding tank site, easements, and rights-of-way.
- Provide overall site plan with enough detail to layout the pipe network.
- Provide all necessary documentation or title information for boundary survey services.
- Secure permission for access for surveying and geotechnical investigations on the two subject properties.
- Provide concurrence on the location of the geotechnical investigation; assist in pre-marking locations for test pits / boring.
- Review and provide one set of consolidated comments on the Draft PER, concept plans, and opinion of probable cost.

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Assumptions:

- Consultant shall be entitled to rely, without liability or the need for independent verification, on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.
- Power is readily available and located adjacent to the site.
- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Pavement sections, curbing and other site design is not included in this scope.
- Other assumptions documented for surveying and geotechnical services.

Deliverables:

- Agenda and minutes for Workshop Meeting.
- Draft and Final PER (1 paper copy and 1 PDF)

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Subtask 401.2.2 – Topographic Survey

Sub-Consultant Responsibilities:

401.2.2.1. Sub-Consultant shall perform a topographic recovery survey of the Kane's Marina property to serve as a basis for design. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to compete a boundary resolution of subject area
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50 foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, lip of gutter, etc, to the nearest 0.01 foot
d. Additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way
f. Locate surface features over subject area, including but not limited to: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas
g. Locate ground and above ground utilities, including: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants
h. Locate trees 8" DBH and greater noting coniferous or deciduous
i. Map existing easements which may affect subject.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

401.2.2.2. Survey will show utility poles, power lines, and telecommunications, etc. including any identification information. For existing storm drains, culverts, and sanitary sewers, Sub-Consultant shall:

a. Show rim or grate elevations and inverts for all manholes and drainage structures, with structure size (inside dimensions)
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Sub-Consultant Deliverables to Consultant:

- Basemap in AutoCAD 3D format.

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Subtask 401.2.3 – Geotechnical Investigation

The purpose of this subtask is to evaluate soil and groundwater conditions as a basis for developing geotechnical engineering design criteria for the Kane's Marina project.

Sub-Consultant Responsibilities:

401.2.3.1. Review information regarding subsurface soil and groundwater in the vicinity of the site, including filed reports, selected geologic maps, and other geotechnical engineering-related information.

401.2.3.2. Coordinate and manage the field investigation, including public utility notification and scheduling. Utility locates will be ordered by Consultant.

401.2.3.3. Explore subsurface soil and groundwater conditions at the project site by drilling one (1) drilled boring exploration to a depth between 20 and 25 feet bgs on the south side of the site near proposed holding tank/wetwell location, and four (4) to six (6) boring explorations 5 to 10 feet bgs along the proposed forcemain alignment.

401.2.3.4. Explorations will be advanced to the depths noted or to practical refusal in dense gravels or competent rock, if encountered, whichever is shallower. The borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

401.2.3.5. Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM Standard Practices Test Method D 2488. Field exploration work shall be observed and documented by qualified geotechnical engineering staff.

401.2.3.6. Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests and percent fines tests.

401.2.3.7. Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology and subsurface conditions.
b. Report subsurface conditions and data along the proposed forcemain/collection lines alignment.
c. An opinion as to the adequacy of the proposed development of the holding tank/wetwell from a geotechnical engineering standpoint.
d. Recommendations for preparation measures at the proposed holding tank/wetwell/lift station site, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction.
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing.
f. Recommendations for earthworks, including use of on-site and imported structural fill and fill placement and compaction requirements.

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g. Recommendations for foundations to support proposed at-grade and below-grade structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance. Consultant assumes that proposed structures will be lightly loaded and that shallow foundations can be used to adequately support the structures.
h. Recommendations for supporting on-grade slabs, including base rock, capillary break and modulus of subgrade reaction, as appropriate.
i. Seismic design parameters in accordance with the current version of the Oregon Structural Specialty Code. Consultant will also perform a simplified liquefaction settlement analysis.

401.2.3.8. All work under this subtask will be directly supervised by an engineer licensed in the state of Oregon. Engineer will apply their professional seal to the document.

Assumptions:

- Owner will obtain right-of-entry or access to the exploration locations.
- A rubber-tired drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered, are not included in this scope of work or fee.
- Excess drill cuttings can be scattered on site.
- Installation of monitoring wells to measure static water groundwater is excluded.
- Contaminated soils will not be encountered during exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), consultant will stop drilling operations, notify Owner and discuss how to proceed.
- If public locators are not allowed to enter or cannot enter the project area to clear specific exploration locations, Sub-Consultant may provide the services of a private locate company to access the site, if requested, for an additional fee of $630.

Sub-Consultant Deliverables:

- Draft and Final Geotechnical Report.

Task 401.3 – Final Design

Consultant Responsibilities:

401.3.1. Plan Sheets. Prepare general, survey, site civil, structural, plumbing, HVAC, mechanical, electrical, and instrumentation and control plan sheets for the site, holding tank, and yard piping. Instrumentation and control final design is anticipated to be a performance spec for a holding tank and odor control monitoring system. Thus, the plan sheets will only include a piping and instrumentation diagram (P&ID). Coordinate location of pumps, piping layout, spacing, electrical equipment, generator, pump removal equipment, building access, overhead door, HVAC equipment, plumbing drains, and other appurtenances for ultimate lift station layout with the Owner. Prepare 90% review sets.

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401.3.2. Specifications. Consultant will support the Owner in CM/GC selection with services described in Task 5 of this scope of work. Consultant will prepare technical specifications. Technical specifications will be prepared to detail the materials, processes, and the products that are to be used in the construction of the lift station. Complete draft technical specifications for the 90% review set.

401.3.3. 90% Design and Review Workshop Meeting. Submit 90% design review drawings and specifications to the Owner. Participate in a 90% design review workshop meeting.

401.3.4. Agency Submittal. Agency design checklists will be completed and submitted along with the final plans and specifications to Agency for review.

401.3.5. Final Approval. Upon Owner and Oregon DEQ review, Consultant will incorporate appropriate revisions into a final set of stamped drawings and specifications that will be used for bidding.

401.3.6. Opinion of Probable Costs. Selected CM/GC will provide cost estimating after Task 404. Consultant will review and provide feedback.

Owner Responsibilities:

- Review and provide one set of consolidated comments on the 90% design deliverables.
- Provide legal and risk reviews of the bid documents.
- Pay for any associated permitting fees not assigned to the Contractor.

Assumptions:

- Consultant will prepare the building permit application at 90% design and submit to the Marion County Building Inspection office. Final permits will be obtained by Owner. Owner shall pay all permit fees not assigned to the construction contractor.
- Consultant will prepare and submit the DEQ permit application at 90% design and assist Owner with DEQ consultation.
- Project will not include irrigation or landscaping of the site. Services of a licensed landscape architect is excluded.
- Extensive architectural feature and architectural rendering are not included in the holding tank design.
- Contractor will be required to prepare and implement an erosion and sediment control plan (ESCP), prepare traffic control plans, and secure associated permits.
- Shoring (if required) will be designed by the Contractor.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or project support above and beyond that described herein is considered an additional service requiring a contract amendment and equitable adjustment of the contract amount..
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- The following design standards and references are to be followed where relevant during the development of the project:
    - Marion County Standard Specifications and Drawings
    - Oregon Standard Specifications for Construction
    - Owner to provide front end contracting and bidding documents (Div 00)
    - AIS and BABA requirements

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- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

Deliverables:

- 90% design drawings and specifications, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- 100% stamped design package, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- Opinion of Probable Cost.

Task 401.4 – Pre-Procurement Support

Consultant Responsibilities:

401.4.1. This task includes consultant services to support the Owner in direct purchase of equipment for the Project using available funds. The objective of the direct purchase of equipment or materials is to account for potential long lead times and still have the equipment or materials on hand when the contractor is ready to move forward with construction. Consultant will provide specifications for the equipment/material to be directly purchased which may be out of sequence or earlier than the final design task.

Owner Responsibilities:

- Owner staff will lead the solicitation effort to either solicit informal bids or select suppliers from pre-approved supplier lists. Owner will receive and store materials prior to the Contractor taking on the equipment/material for installation.

Assumptions:

- Consultant is not responsible if material/equipment must be returned or designated as surplus due to the expedited delivery process for this project.
- Budget assumes up to 40 hours for support services to be provided as requested.

Deliverables:

- Procurement Specifications.

Task 401.5 – Alternative Contracting Method Support

Owner anticipates engaging a construction contractor for the construction of new project facilities using alternative contracting procedures. The purpose of this task is to support Owner during the contract development and solicitation process.

Consultant Responsibilities:

401.5.1. Support County staff as requested with Board of Commissioners meeting and draft documents in preparation for soliciting BOC approval and developing CM/GC solicitation documents.

Owner Responsibilities:

- Lead the efforts to gain County Board of Commissioners approval for use of alternative project delivery method.
- Lead the efforts to develop contractor solicitation and contract documents.

Assumptions:

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- Budget assumes up to 40 hours for support services to be provided as requested.

Task 401.6 – WPCF PERMITTING

Consultant Responsibilities:

401.6.1. Prepare draft permit application for a holding tank permit for DEQ review.
401.6.2. Meet with DEQ to discuss the permit applications. For the purpose of this scope, up to two (2) meetings are assumed.
401.6.3. Address DEQ comments in permit application.

Owner Responsibilities:

- Provide input on draft permit application.
- If necessary, pay fee to DEQ for draft permit application.
- Review and comment on draft documents.

Assumptions:

- No field work, environmental studies, cultural resource investigations, or biological assessments are included in this task.
- This scope does not include any additional field gathering or special studies that may be required by the DEQ.
- No other permits will be required. If required, support for these permits can be provided as additional services.

Task 401.7 – Management Reserve (Contingency Task):
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time the Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of work. For these instances, a time and material budget is established in order for Consultant to complete the additional services. A Management Reserve in the amount of $5,000 is incorporated into this agreement to allow Owner Staff to authorize Additional Services if needed. The scope, schedule and budget for such items will be agreed upon in writing through an executed task order prior to incorporation into the work.

ADDITIONAL SERVICES (not included in scope of work)

- Special use permits, environmental services, or additional permitting beyond those described in the scope of work
- Additional public outreach/meetings or stakeholder outreach support
- Field investigations, including subsurface investigations, to check available record drawings
- Construction phase surveying (quantities, staking, record)
- Funding administration support
- Project site tours
- Easements and right-of-way acquisition support
- Multiple design alternatives (i.e alternative site layouts) for bidding purposes

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of **$2,095,927 [$1,913,020.00]**.

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

PHASE 1 – GENERAL ENGINEERING SERVICES	Cost	Type
100 – PROJECT MANAGEMENT		
Task 100.1 – Project Management	$ 35,520	T&M
Task 100.2 – County Board of Commissioners Support Services	[$ 25,440] $ 26,840	LS
101 – STRATEGIC PERMITTING PLAN		
Task 101.1 – Project Management and Administration	$ 4,825	LS
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	$ 19,090	LS
Task 101.3 – Strategic Permitting Plan	$ 9,540	LS
102 – SUBSURFACE EXPLORATION[INVESTIGATION]		
Task 102.1 – Project Management and Administration	$ 16,400	T&M
Task 102.2 – Subsurface Investigation Program	$ 74,200	T&M
Subtask 102.2.1 – Gates / Mill City Subsurface Investigation	$ 461,580	T&M
Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation	$ 566,780	T&M
Task 102.3 – Groundwater Modeling Evaluation		
Subtask 102.3.1 – Mill City / Gates Permitting Evaluation	$ 63,600	T&M
Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation	$ 78,700	T&M
Task 102.4: McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	$ 18,700	T&M
103 – LAND ACQUISITION AND RELOCATION SERVICES		

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Task 103.1 – Project Management and Administration	$ 12,140	T&M
Task 103.2 – Mill City Land Acquisition and Relocation Services	$ 58,817	T&M
Task 103.3 – Detroit Land Acquisition and Relocation Services	$ 89,120	T&M
104 – FINANCIAL ADVISORY SERVICES		
Task 104.1 – Project Management and Administration	$ 4,930	T&M
Task 104.2 – Financial Advisory Services	$ 16,500	T&M
Subtotal	**$ 1,557,282 [1,374,375]**	

T&M: Time and Materials, LS: Lump Sum

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	**Cost**	**Type**
Task 200.1 – Project Management	$ 12,600	LS
Task 200.2 – Data Acquisition & Facility Tour	$ 6,110	LS
Task 200.3 – Project Planning	$ 26,725	LS
Task 200.4 – Existing Facilities Evaluation	$ 68,680	LS
Task 200.5 – Need for system improvements	$ 3,650	LS
Task 200.6 – Collection System Alternatives Considered & Selection	$ 53,615	LS
Task 200.7 – Treatment System Alternatives Considered & Selection	$ 59,365	LS
Task 200.8 – Proposed Projects (Recommended Alternatives)	$ 70,780	LS
Task 200.9 – Facilities Plan Documentation & Public Meeting	$ 25,830	LS
Task 200.10 –Management Reserve	$ 10,000	T&M
Subtotal	**$ 337,355**	

T&M: Time and Materials, LS: Lump Sum

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PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	Cost	Type
400 – COMMERCIAL SEPTIC SYSTEM PLANNING		
Task 400.1 – Project Management	$ 6,030	LS
Task 400.2 – Data Acquisition & Properties Tour	$ 17,770	LS
Task 400.3 – Stakeholder Involvement/Engagement	$ 17,200	LS
Task 400.4 – Commercial Septic System Concept	$ 26,680	LS
401 – KANE'S MARINA SEPTIC SYSTEM		
Task 401.1 – Project Management	$ 15,550	LS
Task 401.2 – Preliminary Engineering Report (PER)	$ 28,630	LS
Subtask 401.2.2 – Topographic Survey	$ 17,240	LS
Subtask 401.2.3 – Geotechnical Investigation	$ 17,060	LS
Task 401.3 – Final Design	$ 28,270	LS
Task 401.4 – Pre-Procurement Support	$ 8,000	T&M
Task 401.5 – CM/GC Support Services	$ 8,000	T&M
Task 401.6 – WPCF Permitting	$ 5,860	LS
Task 401.7 – Management Reserve (Contingency Task)	$ 5,000	T&M
Subtotal	**$ 201,290**	

T&M: Time and Materials, LS: Lump Sum

TOTAL	**$ 2,095,927** **[$1,913,020]**

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and Sub-consultants for performance of Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

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It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

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Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Chris Einmo
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

i. Long distance communications.

ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

iv. Third-party models and mockups requested by Owner.

v. The printing of master or reproducible sets of plans and project manuals including specifications.

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vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of []65.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant's Professional Hourly Rates.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT E - CRITICAL DATE SCHEDULE
Schedule of Deliverables

PHASE 1 – GENERAL ENGINEERING SERVICES	
100 – PROJECT MANAGEMENT	
Task 100.1 – Monthly Invoices and Progress Reports	Monthly
Task 100.1 – Meeting agendas and minutes	Weekly
Task 100.2 – Final Presentation Materials	8 weeks after NTP
101 – STRATEGIC PERMITTING PLAN	
Task 101.3 – Draft Strategic Planning Plan	11 weeks after Amend No. 2 NTP
Task 101.3 – Final Strategic Planning Plan	13 weeks after Amend No. 2 NTP
102 – SUBSURFACE EXPLORATION	
Task 102.2.1 – Draft Subsurface Investigation Work Plan	
Task 102.2.1 – Final Subsurface Investigation Work Plan	
Task 102.2.1 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.1 – Draft Subsurface Investigation Memorandum	
Task 102.2.1 – Final Subsurface Investigation Memorandum	
Task 102.2.1 – Groundwater Level Monitoring Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Work Plan	
Task 102.2.2 – Final Subsurface Investigation Work Plan	
Task 102.2.2 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Memorandum	
Task 102.2.2 – Final Subsurface Investigation Memorandum	
Task 102.2.2 – Groundwater Level Monitoring Memorandum	
Task 102.3.1 – Draft WPCF Evaluation Memorandum	
Task 102.3.1 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.1 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum	
Task 102.3.2 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
103 – LAND ACQUISITION AND RELOCATION SERVICES	

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Task 103.1 – Project Management and Administration	
Task 103.2 – Mill City Land Acquisition and Relocation Services	
Task 103.2.3 – Draft ROW Programming Estimate	
Task 103.2.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.2.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.2.6 – Draft Offer Packets	
Task 103.2.6 – Final Offer Packets	
Task 103.2.6 – Final Report Packet	
Task 103.2.6 – Proposed Counteroffers, if applicable	
Task 103.2.6 – Recommendation for Condemnation, if applicable	
Task 103.2.6 – Report of Personal Interview	
Task 103.2.7 – Submit studies, Move Agreements, and Estimates	
Task 103.2.7 – Submit Relocation Claims	
Task 103.2.7 – Submit Relocation Closing Reports	
Task 103.2.9 – ROW Certification Form	12 weeks prior to Project Bid Date
Task 103.3 – Detroit Land Acquisition and Relocation Services	
Task 103.3.3 – Draft ROW Programming Estimate	
Task 103.3.4 – General Information Notice (GIN) Delivery	20 days after Amend No. 3 NTP
Task 103.3.5 – 15 Day Notice of Appraisal Inspection	8 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.5 – Appraisal Report, Specialty Report, 15 Day Notice of Appraisal Inspection to each property owner.	20 weeks after Amend No. 3 NTP ROW Acquisition Phase
Task 103.3.6 – Draft Offer Packets	
Task 103.3.6 – Final Offer Packets	
Task 103.3.6 – Final Report Packet	
Task 103.3.6 – Proposed Counteroffers, if applicable	
Task 103.3.6 – Recommendation for Condemnation, if applicable	
Task 103.3.6 – Report of Personal Interview	
Task 103.3.7 – Submit studies, Move Agreements, and Estimates	
Task 103.3.7 – Submit Relocation Claims	
Task 103.3.7 – Submit Relocation Closing Reports	

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Task 103.3.9 – ROW Certification Form	12 weeks prior to Project Bid Date
104 – FINANCIAL ADVISORY SERVICES	
Task 104.1 – Project Management and Administration	
Task 104.2 – Financial Advisory Services	
PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	
200 – MILL CITY / GATES FACILITIES PLANNING STUDY	
Task 200.2 – Request(s) for Information	
Task 200.3 – Draft Project Planning Facility Plan Section	
Task 200.4 – Draft Existing Facilities Evaluation Facility Plan Section	
Task 200.5 – Draft Project Need Facilities Plan Section	
Task 200.6 – Draft Collection System Alternatives Facility Plan Section	
Task 200.7 – Draft Treatment System Alternatives Facility Plan Section	
Task 200.8 – Capital Improvement Plan	
Task 200.8 – SDC Eligibility Estimate	
Task 200.8 – Draft Proposed Project Facility Plan Section	
Task 200.9 – Public Meeting Presentation Materials	
Task 200.9 – Final Facilities Plan	
PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	
400 – COMMERCIAL SEPTIC SYSTEM PLANNING	
Task 400.2 – Requests for Information	
Task 400.2 – Existing Septic and Drain Field Summary Tables and Figures	
Task 400.3 – Presentation Materials	
Task 400.4 – Draft Commercial Septic Design Memorandum	8 weeks after Amend No. 1 NTP
401 – KANE'S MARINA SEPTIC SYSTEM	
Task 401.1 – Kickoff meeting agenda	2 weeks after Amend No. 2 NTP
Task 401.1 – Kickoff meeting minutes	1 week after Kickoff Meeting
Task 401.1 – Request for Information	
Task 401.1 – Presentation Materials	
Task 401.2 – Workshop Meeting Agenda	
Task 401.2 – Workshop Meeting Minutes	
Task 401.2 – Draft Preliminary Engineering Report	5 weeks after Amend No. 2 NTP
Task 401.2 – Final Preliminary Engineering Report	6 weeks after Amend No. 2 NTP
Subtask 401.2.2 – Topographic Basemap	6 weeks after Amend No. 2 NTP

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Subtask 401.2.3 – Geotechnical Report	10 weeks after Amend No. 2 NTP
Task 401.3 – 90% Design Drawings and Specifications	15 weeks after Amend No. 2 NTP
Task 401.3 – Final (Stamped) Drawings and Specifications	17 weeks after Amend No. 2 NTP
Task 401.3 – Opinion of Probably Cost	17 weeks after Amend No. 2 NTP
Task 401.4 – Procurement Specifications	

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT F - RATE SCHEDULE

Keller Associates	Maximum Hourly Rate*
Project Engineer I	$130
Project Engineer II	$170
Project Engineer III	$220
Project Manager I/II	$170
Project Manager III	$225
Structural Engineer I/II	$170
Structural Engineer III	$220
Chief Engineer / Chief Structural Engineer	$270
CAD I/II	$130
CAD III	$150
CAD Manager	$180
Electrical Controls I/II	$170
Electrical Controls III	$220
Principal	$275
Surveyor I/II	$145
Professional Surveyor PLS	$180
Field Representative	$140
Engineering Student	$75
Administration I	$90
Administration II	$110

**Rates reported are for 2023. Rates updated annually in January.*

***Reimbursable Expenses at Cost x 1.05*

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SUBCONSULTANT RATE SCHEDULE

Hydrological	Maximum Hourly Rate*
Administration	$110
Project Hydrogeologist	$120
Principal Hydrogeologist	$190
Staff Geologist	$120
GIS/Graphics/Database	$140

Permitting	Maximum Hourly Rate*
Planning-Specialist XI	$197
Environmental Resources-Specialist XI	$197
Planning Specialist V	$117
Planning Specialist IV	$107

Land Acquisition and Relocation	Maximum Hourly Rate*
Land Owner Liaison – Dave Hansen	$81.89
Land Owner Liaison – Kari Lowe	$244.98
Project Management and Administration – Tamisha Schrunk	$185.00
Project Management and Administration – Samri Laney	$42.60
Land Owner Liaison – Julie Goodrich	$155.00

Financial Advisory	Maximum Hourly Rate*
Principals	$295
Project Managers	$230
Consultants	$190
Public Relations	$170
Technical Writer/Graphic Artist	$145
Administrative Support	$95

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Surveying	Maximum Hourly Rate*
PLS Office Technician	$140
One-Man Field Crew	$140
Project Surveyor	$140

Geotechnical Services	Billed	Rate*
ENGINEERING CONSULTING		
Staff Geotech/Soil Engineer I or Geologist I	Hourly	$ 105.00
Staff Geotech/Soil Engineer II or Geologist II	Hourly	$ 130.00
Staff Geotech/Soil Engineer III or Geologist III	Hourly	$ 150.00
Associate Engineer I	Hourly	$ 155.00
Associate Engineer II	Hourly	$ 175.00
Engineering Geologist I	Hourly	$ 175.00
Engineering Geologist II	Hourly	$ 195.00
Senior Engineer	Hourly	$ 205.00
Seismic/Technical Specialist Engineer	Hourly	$ 250.00
Principal Engineer	Hourly	$ 235.00
Drone Flight Services	Hourly	$ 245.00
Drone Hardware & Flight Fee	Daily	$ 160.00
CADD Technician	Hourly	$ 100.00
Administrative Assistant	Hourly	$ 85.00
SPECIAL INSPECTION AND CONSTRUCTION SERVICES		
Project Manager	Hourly	$ 140.00
Engineering Technician	Hourly – 3 hr min	$ 100.00
Senior Engineering Technician	Hourly – 3 hr min	$ 120.00
Subgrade Evaluation Onsite	Each	$ 385.00
Nuclear Densometer	Daily	$ 85.00
Vehicle Fee (Rental/In-house)	Daily	$ 135.00
Laboratory Technician	Hourly	$ 85.00
Laboratory Manager	Hourly	$ 140.00
MATERIALS TESTING SERVICES		

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#200 Wash	Each	$ 140.00
Atterberg Limits	Each	$ 250.00
In-Situ Dry Density and Moisture Content	Each	$ 55.00
Moisture Content	Each	$ 40.00
One-dimensional Consolidation	Each	Quoted
Proctor Moisture-Density	Each	$ 380.00
Sieve Analysis ¾ inch to 2-inch max	Each	$ 380.00
Sieve Analysis < ¾ inch max	Each	$ 330.00
Sieve Analysis > 2-inch max	Each	$ 560.00
Soil Classification	Each	$ 45.00
Specific Gravity of Coarse Aggregate	Each	$ 155.00

**Rates reported are for 2023. Rates updated annually in January.*

***Subconsultant Reimbursable Expenses and Direct Labor at Cost x 1.10*

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- *Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.*

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SIGNATURE PAGE FOR
ARPA - NORTH SANTIAM CANYON SEWER PROJECT - PW-5069-22
between
MARION COUNTY and KELLER ASSOCIATES, INC.

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES
BOARD OF COMMISSIONERS:

Chair — Date: 5/31/2023

Not Present At Meeting

Commissioner — Date

Commissioner — Date: 5/31/2023

Authorized Signature: DocuSigned by: Brian Nicholas 9793BA7AGD6D443... — Date: 5/11/2023
Department Director or designee

Authorized Signature: DocuSigned by: Jan Fritz DC16351248DE4EC... — Date: 5/12/2023
Chief Administrative Officer

Reviewed by Signature: DocuSigned by: Jane E Vetto D0CFG5B04B9F483... — Date: 5/12/2023
Marion County Legal Counsel

Reviewed by Signature: DocuSigned by: Camber Schlag C5B2F3DF257F444... — Date: 5/11/2023
Marion County Contracts & Procurement

KELLER ASSOCIATES SIGNATURE

Authorized Signature: DocuSigned by: BF174523C4C949A... — Date: 6/5/2023

Title: Principal

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Marion County
FINANCE DEPARTMENT

Contract Review Sheet

PW-5069-22 (2)

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: **2**

Contact: **Alicia Henry** Department: **Public Works Department**

Phone #: **503-373-4320** Date Sent: **Monday, November 28, 2022**

Title: **North Santiam Canyon Sewer Project - ARPA**

Contractor's Name: **Keller Associates**

Term - Date From: **September 30, 2022** Expires: **December 31, 2026**

Original Contract Amount: **$ 60,960.00** Previous Amendments Amount: **$ 128,640.00**

Current Amendment: **$ 1,784,380.00** New Contract Total: **$ 1,913,020.00** Amd% **3038%**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☑ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **1,130**

Description of Services or Grant Award

Amendment 2 - adds environmental permitting services, subsurface exploration and groundwater investigations, facility planning and related essential services in excess of 25%.

Desired BOC Session Date: **12/7/2022** BOC Planning Date: **11/24/2022**

Files submitted in CMS: **11/16/2022** Printed packet & copies due in Finance: **11/22/2022**

BOC Session Presenter(s)

FOR FINANCE USE

Date Finance Received: Date Legal Received:

Comments: **Y**

REQUIRED APPROVALS

Finance - Contracts — Date: 11/28/22

Grant Review

Contract Specialist

Legal Counsel — Date: 11/28/22

Chief Administrative Officer — Date: 11/30/22

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MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date:	December 7, 2022				
Department:	Public Works	Agenda Planning Date:	11/1/2022	Time required:	10 min
☐ Audio/Visual aids	N/A				
Contact:	Brian Nicholas	Phone:	x7943		

Department Head Signature:

Brian Nicholas

TITLE	Consider approval of Amendment No. 2 to professional service contract PW-5069-22 with Keller Associates, Inc. for the North Santiam Sewer Project.
Issue, Description & Background	Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. This is a large, multi-phase project with aggressive expenditure deadlines driven by ARPA funding requirements. Therefore, for expediency, the full scope of services needed to deliver the full project will be executed in a series of amendments to the original consultant services agreement, ensuring that early critical-path activities begin without delay. On October 7, 2022, the county executed contract PW-5069-22 with Keller and Amendment No. 1 was executed on October 19, 2022. This Amendment No. 2 adds environmental permitting services, subsurface exploration, groundwater investigations, facility planning, commercial septic planning and design, and related services.
Financial Impacts:	This amendment will increase the contract value by $1,784,380, from $128,640 to $1,913,020, all of which will be paid using federal ARPA funds with no local funding match. This is a budgeted expense in the current fiscal year in the 135 Public Works Grants fund.
Impacts to Department & External Agencies	This amendment results in no impacts to other departments and serves to advance the North Santiam Sewer Project on behalf of the cities of Mill City, Gates, Detroit and Idanha.
Options for Consideration:	1) Approve Amendment No. 2 to contract PW-5069-22, enabling critical-path work to proceed, or 2) Take no action at this time.
Recommendation:	Staff recommends Option 1, approval of Amendment No. 2 to contract PW-5069-22.
List of attachments:	Amendment No. 2 to contract PW-5069-22, the Contract for Services between Marion County and Keller Associates
Presenter:	Brian Nicholas

Copies of completed paperwork sent to the following: (Include names and e-mail addresses.)

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MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Copies to: Alicia Henry, ahenry@co.marion.or.us

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REQUEST FOR AUTHORIZATION OF CONTRACT
PW-5069-22

Date: November 25, 2022
To: Chief Administrative Officer
Cc: Contract File
From: Alicia Henry

I. Subject: Amendment Exceeds 25%

DIPS CODE: 135-40-42-461-4603-534500-105830 105831 809.002
Budget Authority: ☒ Yes ☐ No
CIP: 23-325/326

The Marion County Public Works Department is requesting approval to amend a contract as described in Section 20-0265, 20-0270, 30-0320, 40-0160, and 40-0910 of the Marion County Public Contracting Rules. The contract is with Keller Associates for North Santiam Canyon Sewer Project - ARPA with a value of 128,640 and an additional 1,784,380 will be added to the contract for a new contract total of $1,913,020.00 upon approval.

A. BACKGROUND

Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. This is a large, multi-phase project with aggressive expenditure deadlines driven by ARPA funding requirements. Therefore, for expediency, the full scope of services needed to deliver the full project will be executed in a series of amendments to the original consultant services agreement, ensuring that early critical-path activities begin without delay. On October 7, 2022, the county executed contract PW-5069-22 with Keller and Amendment No. 1 was executed on October 7, 2022. Subsequent phases of work will be awarded to the consultant as the project progresses.

B. CURRENT AMENDMENT PURPOSE

Amendment No. 2 adds environmental permitting services, subsurface exploration and groundwater investigations, facility planning and related essential services.

C. JUSTIFICATION

The initial contract consisted of a $60K fast-start contract, which enabled work on this time-sensitive project to begin quickly. Amendment 1 added an additional amount of $67,680, for a contract total of $128,640. Amendment 2 conforms to the Request for Proposal and

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awarded contract phased approach and will add an additional $1,784,380, to ensure the project will meet ARPA requirements and deadlines. This conforms to the contracting plan for this project.

D. BUDGET IMPACTS

1. Are the expected expenditures for the current fiscal year under the contract, including any additional funds being requested with this action, already included in the current year adopted budget? ☒ Yes ☐ No

2. If yes, amount $ 5,515,700 Program / Account 461 - 534500

3. If no, describe the amount and how the anticipated expenditures will be handled within the budget:

   a. Amount: $_____

   b. Managed with anticipated savings– explain why and from what costing:

   _____

   _____

   _____

   _____

   c. Will require a supplemental budget request – provide the expected funding source and costing:

      i. Funding Source: _____

      ii. Costing: _____

Submitted by:

Alicia Henry Digitally signed by Alicia Henry Date: 2022.11.28 08:11:38 -08'00'

Alicia Henry
Public Works Department

Reviewed by:

Contracts & Procurement

Acknowledged by:

Department Head

Acknowledged by:

Jan Fritz, CAO 11/30/2022

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Marion County
OREGON

AMENDMENT 2 to PW-5069-22
the CONTRACT FOR SERVICES
between
MARION COUNTY and KELLER ASSOCIATES

This is Amendment No. 2 to the Contract for Services (as amended from time to time, the "Contract"), dated September 30, 2022, between Marion County, a political subdivision of the State of Oregon, hereafter called County, and Keller Associates, hereafter called Contractor.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by brackets):

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$1,913,020.00 [$128,640]** for Phase 1, 2, and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A, Statement of Work**.

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

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Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

PHASE 1 – GENERAL ENGINEERING SERVICES

100 – PROJECT MANAGEMENT

Task 100.1 – Project Management

Consultant Responsibilities:

100.1.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.
100.1.2 Project Coordination. Consultant may be requested to prepare progress reports or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.
100.1.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates to the board. Consultant will prepare presentation materials and/or handouts as directed.

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Owner Responsibilities:

- Administer project funding.

Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes a 6-month duration for general project administration.
- Task 1 includes up to 212 hours of project management services.

Deliverables:

- Monthly Invoices [– electronic copy]
- Monthly Progress Reports
- Meeting agenda and minutes [– electronic copy]

Task 100.2 [1] – County Board of Commissioners Support Services

Consultant Responsibilities:

100.2.1. [1.] Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to two occasions. Consultant will prepare presentation materials and/or handouts. The two presentations will tentatively occur in the months of November and December and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with sub-consultants (i.e. GSI, SWCA) and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material [– electronic copy]
- Final presentation material [– electronic copy]

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101 – STRATEGIC PERMITTING PLAN

Task 101.1 – Project Management and Administration

Consultant Responsibilities:

101.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

101.1.2. Consultant Coordination. Coordinate services to complete the Strategic Environmental Permitting Plan.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of the draft Strategic Permitting Plan.

Assumptions:

- Project management budget assumes a task order schedule of up to 3 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification

Consultant Responsibilities:

101.2.1. Consultant shall review available project information, including background, concept development and current plan/design information for the North Santiam Canyon Wastewater Master Plan (Master Plan). Consultant will conduct a desktop review of the Master Plan area to identify potential resources affected and locate existing available data. Using this information, Consultant will compile a list of potential issues and data needs for the project. Consultant will check and refine the understanding of those issues by initiating preliminary, informal discussions with the anticipated permitting agencies to understand their concerns and permitting needs for the project. The intent of these discussions will be to identify the agencies' specific resource concerns, to understand permitting requirements and obligations, and discuss options for permitting efficiencies, such as using programmatic agreements. Consultant will also preliminarily identify which federal agencies may have a National Environmental Policy Act (NEPA) requirement for the Master Plan and/or specific projects or phases that are part of the plan (due to their jurisdiction, land ownership, or funding) and whether a single joint NEPA document could be used to support multiple federal decisions.

Task 101.3 – Strategic Permitting Plan

Consultant Responsibilities:

Based on information obtained in Task 101.2, Consultant will prepare a draft Strategic Permitting Plan. The draft Strategic Permitting Plan will include:

- Project permitting schedule and general cost estimate.
- Summary of environmental permits and approvals needed
- Summary of initial pre-scoping discussions with agencies
- List of potential resources affected and existing available data

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- List of potential permitting issues and data needs (based on desktop analysis and agency discussions)
- List of design needs to complete permitting
- Summary of potential opportunities for permitting efficiencies
- Estimated timeline to complete permitting
- Estimated general cost to complete permitting

Consultant will revise and finalize the Strategic Permitting Plan based on one consolidated review by Consultant and Owner.

Assumptions:

- Consultant will conduct up to three coordination conference calls with Owner to provide updates, receive additional information/clarifications, etc.
- Permitting agencies for informal, pre-scoping coordination will be: US Forest Service, US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Transportation, and Marion County. Outreach to agencies will consist of email or telephone contact. Consultant will make a reasonable effort get information from agencies within the available time and consistent with the level of effort budgeted.
- "Environmental permits and approvals" do not include easements or rights-of-way with utilities, ODOT, or federal agencies.
- Permitting requirements related specifically to wastewater treatment/infiltration requirements will be addressed through a separate task order.
- One review of the draft Strategic Permitting Plan will be conducted. The Strategic Permitting Plan will be revised based on one consolidated set of review comments. Consultant intends for the Strategic Permitting Plan to be a "living document", updated and adapted as the project planning and subsequent design and permitting efforts progress.
- No Owner board meeting presentations

Deliverables:

- Draft Strategic Planning Plan
- Final Strategic Planning Plan

102 – SUBSURFACE EXPLORATION

Task 102.1 – Project Management and Administration

Consultant Responsibilities:

102.1.1. Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

102.1.2. Coordination. Coordinate services to complete the permitting and subsurface investigations.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide input and review of all draft and final deliverables.

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Assumptions:

- Attendance at project meetings may be virtual.
- Project management budget assumes a task order schedule of up to 24 months.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.

Task 102.2 – Subsurface Investigation Program

The purpose of subsurface investigation is to collect soil and groundwater data that can be used to: (1) determine whether a candidate site can infiltrate the required volume of treated wastewater, (2) inform facility predesign, (3) evaluate facility permitting framework (WPCF required), and (4) evaluate compliance with DEQ's groundwater protection rules. The subsurface investigation program involves excavating test pits to measure soil infiltration rates and observe soil types, installing monitoring wells to measure aquifer properties, collecting soil and groundwater samples, and one year of groundwater and surface water level monitoring. This task includes management, planning and execution of the subsurface investigation program comprised of two subtasks:

- Subtask 102.2.1 – Mill City / Gates Subsurface Investigation
- Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Owner Responsibilities:

- This scope of work does not include effort to identify domestic water wells in the vicinity of the proposed infiltration facility (which would likely involve a door-to-door survey and review of households that are connected to City water). Owner is responsible for this effort, if it is needed, and for incorporating the information obtained into the final report.

Assumptions:

- Subsurface investigations will occur on private or public [i.e., U.S. Forest Service (USFS)] property that is not owned by Owner. Owner and Consultant will work collaboratively to gain access to these sites for the purpose of performing site evaluation work. In general, Owner is responsible for the execution of site access agreements with property owners and Consultant is responsible for coordination with property owners regarding schedule for accessing the property, discussing access routes, and reporting results to the property owner.
- Test pitting and infiltration testing will be limited to four days in the Detroit/Idanha area (up to 10 test pits) and five days in the Gates/Mill City area (up to 18 test pits).
- Monitoring wells and temporary borings will target discrete horizons in the glacial till geologic unit that are related to the depth to groundwater and the contact between glacial till and bedrock. Because there is limited information about the geology and depth to groundwater at the candidate sites, the costs for drilling are based on assumptions about the depths of monitoring wells and temporary borings. Where field conditions differ from those assumed and where such differences result in increased field costs that exceed the established budget for this task, an equitable adjustment to the contract value will be made by contract amendment.
- In the Gates/Mill City area, it is assumed that monitoring wells will be 100 feet deep, one temporary boring will be advanced to the top of the water table at 80 feet below ground surface (bgs), and another temporary boring will be advanced to the top of bedrock at 200 feet bgs.
- In the Detroit/Idanha area, we have assumed that monitoring wells will be 80 feet deep (2 wells) or 200 feet deep (3 wells), and two temporary borings will be advanced to the top of bedrock at 100 feet bgs.
- Drilling costs could change if: (1) driller costs change (quotes are typically only good for 30 days due to "instability of commodity costs") or (2) the assumed construction of wells and borings

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changes based on the geology of the site. It is assumed that casing advance is not necessary to keep the bedrock hole open during drilling of the monitoring well in the Detroit/Idanha area. An amendment may be necessary if casing must be advanced to keep the hole open at this well and if such costs exceed the agreed upon task budget.

- Subsurface exploration work, including digging of test pits, geotechnical drilling and installation of subsurface monitoring equipment, is not subject to Davis-Bacon or BOLI prevailing wages.

Subtask 102.2.1 – Mill City / Gates Subsurface Investigation

Subsurface investigation in the Gates/Mill City area includes the following activities:

102.2.1.1. Work Plan. Develop a work plan for the subsurface investigation that includes a specific plan for excavating and infiltration testing at up to 18 test pits (at Site 1 through Site 4) and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.2.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to eighteen (18) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for deep soil investigation.

102.2.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop three (3) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.2.1.4. Groundwater Level Monitoring. Equip each well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells quarterly for a year.

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102.2.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.2.1.6. Reporting. Develop technical memoranda documenting the field investigation and results.

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum.

Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation

Subsurface characterization in the Detroit/Idanha area includes the following activities:

102.3.1.1. Work Plan. Develop a work plan for the subsurface characterization that includes a specific plan for excavating and infiltration testing at up to 10 test pits (at the McCoy and Detroit Ranger Station sites), and a general plan for installing monitoring wells (which will be refined with an addendum upon selection of a site for the monitoring wells). The Work Plan will include procedures for soil classification, soil/groundwater sampling, infiltration testing, and aquifer testing.

102.3.1.2. Excavate Test Pits and Measure Infiltration Rate. Prepare for the field event, including development of a Health and Safety Plan (HASP) that meets Occupational Safety and Health Administration (OSHA) standards and oversight of a utility locating contractor to clear test pits for subsurface utilities. Oversee excavation of up to ten (10) test pits to a depth of 12 to 15 feet below ground surface (bgs) or refusal by a backhoe; log soils in general accordance with Unified Soil Classification System (USCS) visual-manual procedures; collect soil samples for analysis of physical soil characteristics in a laboratory; conduct infiltration tests in each test pit using a single-ring infiltrometer at depths to be chosen based on the nature of subsurface soils (shallow and deep soil horizons will be targeted); analyze test data to calculate an effective saturated hydraulic conductivity of the soils; collect one soil sample at each site and analyze for soil quality (volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals at Apex Labs, Tigard, Oregon, and multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); summarize results in a brief technical memorandum to facilitate site selection for the deep soil investigation.

102.3.1.3. Temporary Borings and Monitoring Well Construction and Testing. Develop a conceptual design for monitoring wells; install and develop five (5) groundwater monitoring wells and two (2) temporary borings by an Oregon-licensed driller; log soils in general accordance with USCS visual-manual procedures; collect soil samples for analysis in a laboratory; analyze soil samples taken from the borings for particle size distribution (12 samples), particle density testing (6 samples), water content (60 samples), and saturated hydraulic conductivity (9 samples); perform a slug test at each monitoring well to evaluate aquifer properties (hydraulic conductivity and storage); collect a groundwater sample from one well (VOCs, SVOCs, PAHs, PCBs and metals at Apex Labs, Tigard, Oregon, and a multi-residue pesticide screen at Pacific Agricultural Labs, Sherwood, Oregon); analyze test data to

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calculate aquifer parameters; survey and record the coordinates of monitoring wells (latitude, longitude, and vertical elevation).

102.3.1.4. Surface Water and Groundwater Level Monitoring at the McCoy Site. Install three (3) stilling wells (in the Santiam River, Unnamed Creek, and McCoy Creek); equip each stilling and monitoring well with a Solinst pressure transducer and datalogger to continuously monitor water levels (including a single barologger to record barometric pressure); download data from the dataloggers and manually measure water levels at the monitoring wells and stilling wells quarterly for a year.

102.3.1.5. Estimate Infiltration Volume. Use an analytical model such as MOUNDSOLV or other suitable software to estimate the volume of water that can be infiltrated through an infiltration basin.

102.3.1.6. Reporting. Develop technical memoranda documenting the field investigation and results

Deliverables:

- Draft and Final Subsurface Investigation Work Plan.
- Final Infiltration Testing and Test Pit Excavation Technical Memorandum.
- Draft and Final Subsurface Investigation Technical Memorandum.
- Groundwater Level Monitoring Technical Memorandum

Task 102.3 – Groundwater Modeling Evaluation

The purpose of this task is to provide field data and modeling evaluations for submittal to the Oregon Department of Environmental Quality (DEQ) to support a Water Pollution Control Facility (WPCF) permit determination in compliance with DEQ's groundwater protection rules.

Task 102.3 is comprised of two subtasks:

- Subtask 102.3.1 – Gates/Mill City Permitting Evaluation
- Subtask 102.3.2 – Detroit/Idanha Permitting Evaluation

Assumptions:

- It is assumed that the planned location for the infiltration facility in the Gates/Mill City area is further from the Santiam River than the planned location for the infiltration facility in the Detroit/Idanha area (less than 0.25 miles). Therefore, we anticipate that the evaluation to support a permitting determination for the Detroit/Idanha area will be more rigorous.

Subtask 102.3.1 – Mill City / Gates Permitting Evaluation

Consultant shall perform the following activities for the infiltration facility in the Gates/Mill City area:

102.3.1.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the selected Gates/Mill City infiltration site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.1.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical

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groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.1.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.1.4. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review, and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.1.5. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater protection rules, and (3) to discuss DEQ's comments on the memo.

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Subtask 102.3.2 – Detroit / Idahna Permitting Evaluation

Consultant shall perform the following activities for the infiltration facility in the Detroit/Idanha area:

102.3.2.1. Based on the subsurface characterization and publicly available literature references (e.g., U.S. Geological Survey or USGS), develop a hydrogeologic conceptual site model (CSM) for the McCoy site. The hydrogeologic CSM will describe the geologic framework, exchanges between groundwater and surface water, groundwater flow direction, aquifer properties (hydraulic conductivity, storage, aquifer thickness, horizontal hydraulic gradient), and recharge from precipitation.

102.3.2.2. Calculate the transit time for a pollutant to travel from the recharge basin to the nearest surface water body. Transit time in the unsaturated zone will be calculated using Darcy's Law and field-measured hydraulic conductivity values from Task 102.2, and transit time in the saturated zone will be calculated using an analytical

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groundwater flow model (e.g., AquiferWin32). It is anticipated that the transit time calculation will be the primary supporting evidence for a WPCF permit determination, along with the distance between the infiltration facility and surface water, and the nature of the material through which the pollutant travels.

102.3.2.3. Using the numerical groundwater flow modeling code MODFLOW and contaminant fate and transport code MT3D, create a generalized 2-dimensional aquifer model to represent the infiltration site, and run contaminant fate and transport simulations to calculate the dilution and/or chemical transformation of the pollutant during transport. We anticipate that the contaminant fate and transport simulations will be the primary supporting evidence for demonstrating that the infiltration facility is compliant with DEQ's groundwater protection rules.

102.3.2.4. Perform a modeling simulation to estimate the maximum recharge volume in the Detroit/Idanha area (additional evaluation of maximum recharge volume is needed in the Detroit/Idanha area due to the anisotropy; a model simulation would be more cost effective than hiring a driller to conduct a pumping test).

102.3.2.5. Prepare a technical memorandum to document the results of the permitting evaluation. First, the memo will include permitting determination in accordance with the following Maui criteria: (1) transit time in groundwater, (2) the distance a pollutant travels, and (3) the nature of the material through which a pollutant travels. Second, the memo will document the evaluation of compliance with DEQ's groundwater protection rules. Consultant shall submit a draft memo to the project team for review, and will finalize the memo based on comments from the project team, then submit to DEQ for review.

102.3.2.6. Meet three times with DEQ: (1) to review the hydrogeologic conceptual model and agree on a technical approach for making a permitting determination and demonstrating compliance with the groundwater protection rules, (2) to review permitting recommendation and demonstration of compliance with the groundwater

Assumptions:

- Comments from the project team can be incorporated with a single review cycle.
- DEQ comments can be addressed with two hours of a principal hydrogeologist's time and 8 hours of a supervising hydrogeologist's time.
- Meetings with DEQ will be virtual.

Deliverables:

- Draft WPCF Evaluation Memorandum.
- Final WPCF Evaluation Memorandum that incorporates project team comments for submittal to DEQ.
- Final WPCF Evaluation Memorandum that incorporates DEQ comments.

Task 102.4 – McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)

Consultant Responsibilities:

107.1 Address permitting and other regulatory requirements related to the National Environmental Policy Act (NEPA), which will involve obtaining an agreement to access the properties, excavate test pits, and install monitoring wells. Assumes a level of effort with up to 48 hours.

107.2 Coordinate with property owner of "upper deck" private property to obtain permission to install two monitoring wells. Assumes a level of effort with up to 48 hours.

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Owner Responsibilities:

- Review and approve permitting applications/letters requesting permission to access the McCoy site, excavate test pits, and install monitoring wells.
- Owner is responsible for costs associated with property owner conditions related to site access and site access agreements.

PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM

200 - MILL CITY / GATES FACILITIES PLANNING STUDY

Task 200.1 – Project Management

Consultant Responsibilities:

200.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

200.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Planning criteria will also be reviewed during the Kickoff Meeting. Representatives from the DEQ will be invited to the kickoff meeting.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services, if any.

Assumptions:

- Project management budget assumes a planning schedule of up to 8 months.
- Monthly Board meeting attendance is covered in a separate task order.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Funding administration services and funding acquisition support is not included in this scope of work.

Task 200.2 – Data Acquisition & Facility Tours

Consultant Responsibilities:

200.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

Mill City

- Discharge Monitoring Report (DMR), operational, influent monitoring (15-minute intervals), rainfall data (since Jan 2021), and any other water quality sampling results collected outside of DMRs in spreadsheet format
- Update of financial summary records, including current rates, annual expenses, operation, revenues, replacement budgets, number and type of accounts, etc.
- Recent facility inspection reports, if available

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- Provide update of any changes to wastewater flows from major seasonal wastewater dischargers, water users with their own wastewater treatment system, major water users that consume the majority of their water.
- Any recently produced planning documents (transportation, wastewater, water conservation, water/waste/energy audits)
- Update on known treatment plant or collection system issues and planned improvements
- Update from Gates and Mill City for winter-time water consumption data summarized by user types in a spreadsheet format
- Known correspondence from federal and state regulatory agencies regarding violations or concerns related to wastewater treatment and disposal

200.2.2. Data Collection and Review. Collection and processing of furnished data, mapping, and reports. Provide a follow-up Request for Information for supplemental data if required.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required.
- Provide access to facilities and records.
- Provide operations and maintenance staff for questions as needed.

Assumptions:

- Consultant will not enter confined spaces. Structural and electrical engineering reviews are not included in the scope of work but could be completed as an additional service.
- Consultant shall be entitled to rely, without liability, on the accuracy and completeness of information provided by Owner, other agencies and stakeholders, and information from public records, without the need for independent verification.

Deliverables:

- Request(s) for Information

Task 200.3 – Project Planning

Consultant Responsibilities:

200.3.1. Location. Incorporate brief description of project location from master plan. Include figure(s) from master plan to establish the project planning area.

200.3.2. Environmental Resources. Incorporate information from master plan to document natural resources in the project area, including land use, flood plains, wetlands, historic, biological, water quality issues, socio-economic, climate, geography, soils, rivers, and air quality. Use master plan figures to summarize natural resources in the project area.

200.3.3. Growth Trends. Update master plan population statistics and projections. For Mill City, coordinate with Mill City and County planners on location, phasing, and type of new growth. The Portland State University Population Research Center historical population data and 40-year growth forecasts will be used to inform the population growth, but it is assumed that non-traditional methods will be required to best account for the decline and near-term growth due to rebuilding after the 2020 wildfire as well as accounting for the new community sewer system in Gates and new treatment facility in Mill City. Growth for non-residential users will be estimated based on input from City and County planners for the 20-year planning period.

200.3.4. Community Engagement. Describe the Owner's approach to engage the community in the planning process.

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200.3.5. Design Flow Rates. Update master plan design flow rates based on most recent DMR and water usage data from Mill City and Gates. Update projections based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.6. Design Loading Rates. Update master plan wastewater loadings and project future loadings based on growth assumptions and input from Owner, Mill City Planner, and County Planners.

200.3.7. Regulatory Requirements. Review and update summaries from master plan of current regulatory requirements and planning criteria that may influence operation, maintenance, and capital improvements of the existing Mill City wastewater system and the initial project components in Gates.

200.3.8. Cost Estimating. Establish cost estimating methodology to reflect both local and current conditions.

200.3.9. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.3.10. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and approval on growth projections and planning criteria.
- Provide review and comments of this section.
- Provide input on community engagement.

Assumptions:

- The planning criteria will need to be established for the planning study prior to having any supplemental income and population survey data available to inform the population estimates and projections. The best available data will be used for the purposes of this study.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- City staff or Contract City Planner will provide input on the distribution and phasing of new residential and non-residential growth in Gates and Mill City.
- If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.
- The study area will coincide with the North Santiam Sewer Authority Boundary for Gates and Mill City.
- Community engagement included in this scope of work is limited to the public meeting in Task 209. Additional community engagement activities can be provided as additional services or through other identified task orders.

Deliverables:

- Draft Project Planning Facility Plan Section.

Task 200.4 – Existing Facilities Evaluation

Consultant Responsibilities:

200.4.1. Base Map. Update the existing system base map from the master plan, showing location of key facilities, pipelines, and basin boundaries for Mill City. Use the schematic process layout of the existing treatment plant from the master plan showing major process components.

200.4.2. History. Update master plan's documentation of wastewater treatment plant history and system description to reflect current flow and water quality data, recent discharge

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monitoring records (DMRs), plant improvements that have been completed recently, current condition of plant equipment and facilities, and current operation practices.

200.4.3. Wastewater System Management Classification, Operators and License. Provide a brief writeup of system required licensing and current operator license information.

200.4.4. Conditions Assessment. Update master plan documentation of existing physical conditions deficiencies. Collection system pipe information will be summarized by pipe material and age. Complete pump tests at each pumping facility to evaluate current pump performance and capacities. Incorporate findings from the I/I study that is currently under way at the time this scope was finalized.

200.4.5. Capacity Evaluation. Update master plan's comparison of existing and future projected flows and loadings to the existing capacity of the Mill City wastewater treatment system. Summarize existing capacity deficiencies.

200.4.6. Review pump run time data and flow meter records to assess existing capacity limitations (if any).

200.4.7. System Resiliency. Assess the collection system resiliency for the Mill City lift stations. This is anticipated to include a comparison of firm pumping capacity (i.e. with largest pump off-line) to the peak hour inflow. It also includes an assessment of whether onsite or portable back-up provisions are available and automated, what kind of emergency bypass pumping provisions are provided for the lift station and/or force main (in the event of a line break), and what kind of redundancy is provided in terms of back-up level sensors and alarms. This scope does not include an evaluation of seismic risks, a comprehensive vulnerability assessment, or updates to the Owner's Emergency Response Plans. Consultant will summarize the consequence of failure of critical lift station facilities and identify potential capital improvements and operational strategies that could be completed to mitigate these risks.

200.4.8. Wastewater Collection System Evaluation

200.4.8.1. Wastewater Model Development and Calibration. Use existing base mapping, record drawings, dry weather flows, pump curves, and Owner provided data to develop and calibrate a wastewater system model. The winter-time water consumption data will be used to estimate dry weather flows. Allocate infiltration and inflow for utilizing wet weather system design flows, available pump run time, and SCADA data.

200.4.8.2. Existing System Evaluation. Exercise computer model to check the Mill City system and evaluate the existing collection system hydraulic capacity. Evaluate system for remaining capacity.

200.4.9. Wastewater Treatment System Evaluation. Update master plan write-up to summarize existing plant deficiencies using updated plant data to compare actual performance to expected performance.

200.4.10. Operations. Update master plan documentation of existing operations and maintenance issues and concerns reported by Owner staff.

200.4.11. Financial Status of Existing Facilities. Document current rate schedules, annual O&M costs, other capital improvement programs, and table of users by monthly usage categories for the previous fiscal year. Document existing debts and required reserve accounts. Budget and capital improvements will be addressed under a separate task.

200.4.12. Water/Energy/Waste Audits. Provide brief write-up discussing variable frequency drive motors and all other applicable energy items for the system. Investigate and summarize the likelihood of incorporating a hydroelectric power generator on the force main from Gates

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to Mill City. Summarize overall current energy consumption for Mill City's existing system.

200.4.13. Review Meeting Workshops. Lead a workshop meeting with the Owner to review preliminary findings.

200.4.14. Draft Plan Section. Prepare draft section writeup. Address Owner comments on draft document.

Owner Responsibilities:

- Review and comment on draft documents.
- Participate and provide meeting location for workshop meetings.
- Provide field checks if necessary, including surveying.
- Provide access to facilities and records. Test and replace (if needed) suction and discharge pressure gauges ahead of equipment tests.

Assumptions:

- Modeling of the existing Mill City treatment plant will not be completed for this facilities plan.
- The Mill City GIS mapping will not be survey grade and will be carried over from the master planning effort. The mapping will not include rim/invert data. It will only include approximate location as it was digitized from the existing record drawings.
- No additional field work or surveying will be required.
- Collection system conditions assessment will not include a full review of CCTV records or smoke testing with the exception of incorporating the findings from the Mill City I/I study.
- The Mill City collection system model will be developed with the InfoSWMM modeling platform, based on record drawings. Consultant will rely upon the accuracy of available record drawings. This scope does not include any field survey work to check or update pipe slopes.
- If model does not readily calibrate to existing conditions, and additional field work is recommended to troubleshoot the Owner's wastewater system, these services can be completed as an additional service.
- No drain field analysis will be provided.

Deliverables:

- Draft Existing Facilities Evaluation Facility Plan Section.

Task 200.5 – Need for System Improvements

Consultant Responsibilities:

200.5.1. Health, Sanitation, and Security. Summarize concerns and relevant regulations or correspondence from/to state and federal agencies.

200.5.2. Aging Infrastructure. Incorporate summary findings of conditions assessment of assets and summarize available pipeline age/material information. Summarize the following:

- Unit performance issues, deficiencies and useful life.
- Existing system reliability per DEQ and EPA guidelines.
- Ability to meet current and potential future effluent limits and other regulatory requirements.
- I/I calculations to determine if existing I/I is considered "non-excessive".

200.5.3. Reasonable Growth. Using the design flow and loading information, document the reasonable growth capacity that is necessary to meet needs during the planning period.

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200.5.4. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input and review of this section of the plan.

Deliverables:

- Draft Project Needs Facility Plan Section.

Task 200.6 – Collection System Alternatives Considered and Selection

Consultant Responsibilities:

200.6.1. Future System Evaluation. Build Gates system model and expand Mill City model to include additional pipe and pump station network requirements associated with servicing new growth areas for the planning period. Add flows from new growth. Exercise the model to identify potential system deficiencies attributed to growth within the planning period.

200.6.2. Evaluate alternative improvements to correct existing, and anticipated future deficiencies, sewer new areas, and meet the target planning criteria. Benefits and drawbacks will be summarized for each alternative. A "no action" alternative will also be considered for each category. This alternative evaluation will be based on the master plan collection system alternatives while evaluating Mill City's existing system for collection system capacity deficiencies.
Where improvements are not relatively straightforward, evaluate up to three collection alternatives for the existing Mill City collection system that will service existing and future flows. Additional refinement of pipeline alternatives is anticipated to occur in the predesign tasks associated with the new Gates collection system.

200.6.3. Alternative Cost/Benefit Analysis. This will include life cycle cost analysis on preferred alternatives for up to three viable alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 40-year life cycle evaluation. This alternative evaluation for Gates will be based on the master plan collection system alternatives while evaluating any capacity alternatives for Mill City's collection system.

200.6.4. Phasing/Implementation Plan. Develop a phasing plan of improvements based on initial project, 10-year, 20-year, and 40-year anticipated growth. This plan will include an evaluation of interim recommendations or strategies for property owners who need to address septic system deficiencies or replacement prior to day one of the new Gates collection system and Mill City mechanical treatment plant are constructed.

200.6.5. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives using the master plan's figures with updates/modifications per this scope of work.

200.6.6. Environmental Impacts. A summary of the preliminary environmental screening of the collection system alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.6.7. Land Requirements. Discuss property needed for alternatives.

200.6.8. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

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200.6.9. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.6.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.6.11. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide a review of the alternatives considered and input on selection criteria and ultimate selection of preferred alternative.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4 (planning level cost estimates).

Deliverables:

- Draft Collection System Alternatives Facility Plan Section.

Task 200.7 – Treatment and Disposal System Alternatives Considered and Selection

Consultant Responsibilities:

200.7.1. Develop a list of treatment plant improvement alternatives focused on improving effluent water quality, vulnerability, safety and redundancy. The disposal improvement alternative will be rapid infiltration per the master plan recommendations.

200.7.2. Develop up to three pre-screened alternatives to evaluate, for primary treatment, secondary treatment, tertiary treatment, and solids handling treatment processes. Evaluate the pre-screened alternatives.

200.7.3. Facility Tours. Organize a tour of up to two wastewater treatment facilities with the Owner's staff to investigate alternatives with similar processes. These are anticipated to occur on the same day.

200.7.4. Alternative Cost/Benefit Analysis. Assist in comparing benefits, drawbacks, and costs of up to three viable alternatives. This will include life cycle cost analysis on preferred alternatives. Discuss non-monetary factors such as operations, maintenance, sustainability, and impacts to adjoining lands. Life-cycle costs will be provided that include capital cost, operations and maintenance for a 20-year life cycle evaluation.

200.7.5. Phasing Plan. Develop a phasing plan of improvements based on initial project, 10-year, and 20-year anticipated growth.

200.7.6. Site Plan/Schematics. Develop a facility plan concept map and/or figures for selected alternatives.

200.7.7. Environmental Impacts. A summary of the preliminary environmental screening of the treatment system and disposal alternatives will be developed. Improvement projects will address climate, land use, floodplain, wetlands, water quality, rivers, wild, cultural resources, flora and fauna.

200.7.8. Land Requirements. Discuss property needed for alternatives.

200.7.9. Potential Construction Problems. Discuss possible construction challenges for collection system alternatives.

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200.7.10. Sustainable Considerations. Discuss potential water and energy efficiency and green infrastructure elements to be considered during design.

200.7.11. Review Meeting Workshop. Lead a workshop meeting with the Owner to review findings. Outcome of meeting is anticipated to include consensus of recommended improvements.

200.7.12. Draft Plan Section. Prepare draft section writeup. Respond to Owner comments.

Owner Responsibilities:

- Provide input on tasks above.
- Provide a review of the alternatives considered section of the plan.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.

Assumptions:

- The scope of this study does not look at alternatives to upgrade the existing recirculating gravel-bed filter.
- Evaluation of alternatives does not include piloting, bench testing, or fieldwork.
- The scope of this study does not include an Environmental Information Document or associated environmental investigations and field work.
- The chosen alternatives will be prioritized based on need and benefit to the Owner to address existing and 20-year projected needs.
- Cost estimating will be AACE Class 4.

Deliverables:

- Draft Treatment System Alternatives Facility Plan Section.

Task 200.8 – Proposed Projects (Recommended Alternatives)

Consultant Responsibilities:

200.8.1. Model day one and future 20-year process and hydraulic conditions of selected alternative for the new mechanical treatment plant.

200.8.2. Capital Improvement Plan.

a. Summarize recommended improvements.
b. Prepare planning level cost estimates for recommended improvements. For future projects anticipated to be developer driven and developer funded, summarize only upsize costs.
c. Estimate the portion of each capital improvement project cost that is attributed to 20-year growth for System Development Charge (SDC) eligibility.

200.8.3. Preliminary Project Schedule. Summarize costs for initial project, 10-year, and 20-year needs. The 6-year CIP for DEQ purposes will be covered by the "initial project" costs.

200.8.4. Permitting Requirements. Summarize WPCF permitting requirements (WPCF permit application and additional support is covered by a separate task order).

200.8.5. Sustainability Considerations. Summarize how the priority improvement projects will enable the Owner to serve its customers and be able to operate and maintain the system. Discuss how the projects will accommodate green infrastructure and efficiencies.

200.8.6. Future Reuse Consideration. Reuse system impacts will be considered and coordinated, and their potential summarized for selected alternative.

200.8.7. Organization and Staffing Requirements. Summarize recommended staffing requirements as required for regulatory compliance or as reported by the Owner. Summarize up to three options for organizational setup for certified operators for both collections and treatment (i.e. contract operator vs sewer authority staff).

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200.8.8. Financing Options. Summarize potential financing options available for initial project. This will be a summary of efforts being undertaken by the Owner, Marion County, and the MWVCOG for funding the project.

200.8.9. Annual Budget Considerations.

a. Summarize Operating Revenues and Expenses. Summarize estimated annual operating expenses and identify recommended budgets dedicated for the initial project.
b. Anticipated User Charges and Other Income. Summarize the business case scenario documented previously by FCS Group and provide a status update on current efforts to implement recommendations.
c. Annual Replacement Budgets. Develop recommended annual replacement budgets for the initial project based on typical replacement values and asset life. This will include a list of short-lived assets and the recommended annual replacement budget.
d. Annual Operations and Maintenance Costs. Estimate the operations and maintenance cost implications for the initial project.

200.8.10. Review Meeting Workshop. Lead a workshop meeting with the Owner to review an overall summary of the plan, selected improvements, and budget considerations.

200.8.11. Draft Plan Section. Prepare draft section writeup. Final document to have Owner's comments incorporated.

Owner Responsibilities:

- Provide input on the prosed projects.
- Participate and provide facilities for workshop meeting. Provide public notices, if required.
- Provide review and comments on the plan.

Assumptions:

- Scope excludes a user rate analysis, including evaluation of individual rate structures, cost-of-service evaluations, and service availability fee studies. These services can be provided as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

Deliverables:

- Capital Improvement Plan (tabular format, organized by initial project, 10-year, and 20-year needs).
- Estimate of SDC eligibility for each capital improvement past the initial project.
- Draft Proposed Project Facility Plan Section.

Task 200.9 – Facility Plan Documentation and Public Meeting

Consultant Responsibilities:

200.9.1. Prepare Facility Plan. Prepare and combine draft documents for a complete facility plan generally following the outline established in the July 2018 guidance document "Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed

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by Business Oregon, Oregon Department of Environmental Quality, Rural Community Assistance Corporation, and the United States Department of Agriculture". Add executive summary and assemble appendix materials. Appendix materials will include output flow capacities, existing peak hour flows, and future peak hour flows summarized in tabular and graphic format. Draft documents to be updated to address Owner comments. Submit final draft plan for Owner review.

200.9.2. Public Meeting. Prepare materials for and present summary findings in a townhall meeting.

200.9.3. Address Owner Comments. Address final Owner and public comments and submit for agency review.

200.9.4. Address Agency Comments. Address agency comments and finalize document.

Owner Responsibilities:

- Review and comment on final draft plan in a timely manner.
- Pay agency review fees, if applicable.
- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.

Deliverables:

- Public Meeting Presentation Materials.
- Final Facilities Plan, three (3) hard copies (3 ring binders) of the plan and one electronic copy in PDF format.

Task 200.10 – Management Reserve (Contingency Task)

This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time, Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of services. For these instances, a time and material budget is established in order for Consultant to complete such additional services. Prior to the use of this contingency budget, Owner's representative will provide written (email) authorization to use the budget for specific tasks.

ADDITIONAL SERVICES (not included in scope of work)

- Bond support
- Public outreach or stakeholder outreach support
- User rate and connection fee study
- Additional field work
- Energy efficiency evaluations
- Concept level design services
- Model training
- Environmental information documents, studies, field investigations, and permitting. Environmental permitting will be addressed by a separate task order.
- Amendments to this facility planning study because of other task orders.

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS

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400 – COMMERCIAL SEPTIC SYSTEM PLANNING

Task 400.1 – Project Management

Consultant Responsibilities:

400.1.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

400.1.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

Assumptions:

- Assumes a 4-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Task 400.2 [1] – Data Acquisition & Property Tour

Consultant Responsibilities:

400.2.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

a. Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b. List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c. Previous collected test pit data for all the properties.
d. Previous studies involving the soil in the city.
e. Provide existing drain field and septic tank locations for each property.
f. Identify available property for consideration for septic tank or drain field placement.
g. Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

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400.2.2. Conduct site tour of each property to evaluate potential drain field locations.
400.2.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities:

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

Assumptions:

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

Deliverables:

- Request(s) for Information
- Summary tables and figures for existing septic tanks and drain fields status

Task 400.3 [2] – Stakeholder Involvement / Engagement

Consultant Responsibilities:

400.3.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.
400.3.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.
400.3.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.
400.3.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities:

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

Deliverables:

- Public and stakeholder meeting presentation materials.

Task 400.4 [3] – Commercial Septic System Concept

Consultant Responsibilities:

400.4.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.

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400.4.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …). Document estimated seasonal variation and 5 to 10 year growth for flow and wastewater strength.

400.4.3. Regulatory and Permitting Requirements. Review and summarize current, pending and future regulatory requirements and permitting criteria that may influence operation, maintenance, and adaptation of the system to the long-term gravity collection system.

400.4.4. Conceptual Layout of Septic Systems. Provide figures to summarize conceptual layout of septic tanks and drain fields. Figures will be 8.5x11 or 11x17 schematics.

400.4.5. Opinion of Probable Costs. Prepare an AAEC Class 4 opinion of probable cost for the project.

400.4.6. Develop Preliminary Project Schedule. Summarize schedule for overall project delivery and construction.

400.4.7. Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner.

400.4.8. Draft Technical Memorandum. Prepare draft technical memorandum. Final document to have Owner's comments incorporated.

400.4.9. Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review with County/City staff the draft technical memorandum.

Owner Responsibilities:

- Provide input and approval of septic tank and drain field concepts.
- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions:

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- Test pits will not be excavated and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables:

- Draft Commercial Septic Design Memorandum

401 - KANE'S MARINA SEPTIC SYSTEM

Task 401.1 – Project Management

Consultant Responsibilities:

401.1.1. General Project Management. Provide task-level project administration services including task oversight, project accounting, monthly progress reports, scheduling, and internal task administration.

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401.1.2. Regulatory Coordination. Meet with County and DEQ staff to discuss WPCF and County permit options. The objective from this outreach will be to have a selected permitting process (WPCF or County).

401.1.3. Kickoff Meeting. Participate in a project kickoff meeting. Prepare agenda and minutes. The purpose of this meeting will be to review/establish Owner design team, review the overall project schedule including major milestones and meetings, review objectives of the design, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval.

401.1.4. Presentation to County Commissioners. The Consultant will present a project update to the County Commissioners at the conclusion of Task 405, Preliminary Design. Consultant will prepare presentation materials and/or handouts. The one presentation will summarize the system layout, opinion of probable cost, permitting, schedule, and next steps.

401.1.5. Request for Information. Prepare initial request for information for data to be used in the design process.

Owner Responsibilities:

- Provide meeting space for project meetings. Provide advertising as needed.
- Provide requested information within two weeks of request.

Assumptions:

- Project management budget assumes a project schedule of up to 4 months.
- Unless otherwise noted, meetings/workshops may include a combination of in person or virtual attendees. This assumption applies to this task as well as subsequent tasks.
- Funding support is not included in this scope of work, including but not limited to American Iron and Steel (AIS) or Build America, Buy America (BABA) tracking, certification, or reporting. These services can be provided as additional services.

Deliverables:

- Kickoff meeting agenda and minutes.
- Request for Information.
- Presentation materials and/or handouts.

Task 401.2 – Preliminary Engineering Report (PER)

Consultant Responsibilities:

401.2.1. Study Phase Services.

a. Site Visit. Consultant will coordinate with Owner's staff to perform a site visit and document existing site conditions. Evaluation will include documentation of status and condition of existing septic facilities and electrical equipment. This scope does not include inspection of interior spaces or existing facilities.

b. Basin Study. Consultant will review the plan and profile for the gravity sewer system developed through the North Santiam Sewer Authority Master Plan. Consultant will approximate alignment and invert elevation requirements for the future lift station wetwell. Consultant will estimate the operating volume required for the future pump station.

c. Operation and Maintenance Assessment. Consultant will review available data provided by Owner to summarize historic usage, operation strategies, and maintenance considerations. It is anticipated the evaluation will include holding tank storage requirements, hydrogen sulfide and odor control, standby power,

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instrumentation and controls (alarming), future pump station compatibility, redundancy provisions, emergency response, and preventative maintenance activities.

401.2.2. Design Criteria. Document design criteria established from the study phase services that will serve as basis for design. The design criteria will include, emergency storage calculations, anticipated flow conditions for the marina, future basin flow conditions, holding tank (wetwell) storage requirements, odor control strategy, power requirements, alarms.

401.2.3. Topographic Surveying. Provide oversight of the services to complete topographic and boundary surveying services for Kane's Marina.

401.2.4. Geotechnical Investigation. Provide oversight of the services to complete geotechnical engineering design services for Kane's Marina.

401.2.5. Site Layout. Develop 30% concept design showing site civil layout and holding tank(s) orientation on the marina site. Concept to include general grading concepts and reflect considerations for holding tank dimensions, future building and valve vault footprint, generator location, stormwater disposal, yard piping, and access for future maintenance/pump removal. The future footprint assumes that a small electrical building will be required to house the future electrical/controls, including a variable frequency drive (VFD) for the future lift station. Consultant has assumed that the generator will be outdoors with sound attenuation. The pipe network will be limited to 5-feet outside any building footprint.

401.2.6. Odor Control Type. Evaluate up to three design alternatives for odor control with the Owner. For each alternative, evaluation to include operations and maintenance considerations, benefits, drawbacks, costs, and consideration of non-cost factors (i.e., future expansion for the lift station). Potential odor control types include chlorine dosing equipment, passive carbon filtration, mixing, chemical, air-scrubber, etc.

401.2.7. Electrical and Controls. Coordinate with Owner to identify SCADA communication preferences. Coordinate with power utility to identify power constraints. Prepare one-line diagram for power and a narrative describing the communication strategy and objectives including a piping and instrumentation diagram (P&ID).

401.2.8. Cost Estimate. Provide an AAEC Class 4 opinion of probable cost for the project.

401.2.9. Workshop Meeting. Meet with Owner to review concepts and alternatives and select preferred alternative for design.

401.2.10. Prepare PER. Prepare draft Preliminary Engineering Report (PER) following the *Oregon DEQ guidelines*. In addition to the minimum regulatory requirements, PER will include concept drawings showing conceptual pipe network layout, one-line diagram, and anticipated permit requirements. Submit to Owner for review.

401.2.11. Final PER. Incorporate Owner input and submit to DEQ for review. Address agency comments into final PER.

Owner Responsibilities:

- Provide input on holding tank, piping design criteria, and preferred alternatives.
- Obtain or provide information for land parcel for the holding tank site, easements, and rights-of-way.
- Provide overall site plan with enough detail to layout the pipe network.
- Provide all necessary documentation or title information for boundary survey services.
- Secure permission for access for surveying and geotechnical investigations on the two subject properties.
- Provide concurrence on the location of the geotechnical investigation; assist in pre-marking locations for test pits / boring.

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- Review and provide one set of consolidated comments on the Draft PER, concept plans, and opinion of probable cots.

Assumptions:

- Consultant shall be entitled to rely, without liability or the need for independent verification, on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.
- Power is readily available and located adjacent to the site.
- Land and easement acquisition, negotiations, and legal descriptions are not included.
- Pavement sections, curbing and other site design is not included in this scope.
- Other assumptions documented for surveying and geotechnical services.

Deliverables:

- Agenda and minutes for Workshop Meeting.
- Draft and Final PER (1 paper copy and 1 PDF)

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Subtask 401.2.1 – Topographic Survey

Consultant Responsibilities:

401.2.1.1. Consultant shall perform a topographic recovery survey of the Kane's Marina property to serve as a basis for design. Survey shall be based on an official benchmark acceptable to the City of Detroit and shall be based on the NAVD 1988 vertical datum. Horizontal datum shall be in state plane coordinates, Oregon North, 3601. Survey shall include the following:

a. Locate existing monumentation to compete a boundary resolution of subject area
b. Full topographic surface data and underground utilities to the edge of the project boundaries as defined in the attached PDF.
c. Obtain spot elevations at a maximum 50 foot on center spacing, including along roadway centerlines, top of curb, flowline of curb, lip of gutter, etc, to the nearest 0.01 foot
d. Any additional spot elevations needed to adequately identify grade breaks and other topographic features.
e. Order One-Call utility locates for any underground utilities within subject area and adjacent public right of way
f. Locate all surface features over subject area, including but not limited to: accessways, driveways, curbs, structures, fences, poles, disposal areas, drainage areas
g. Locate all ground and above ground utilities, including but not limited to: utility poles, overhead utility wires, manholes, catch basins, cleanouts, meters, valves, vaults, boxes, hydrants
h. Locate all trees 8" DBH and greater noting coniferous or deciduous
i. Map all existing easements which may affect subject.
j. Provide triangulated irregular network (TIN) to be used as a Civil 3D surface via an XML file.

401.2.1.2. Survey will show utility poles, power lines, and telecommunications, etc. including any identification information. For existing storm drains, culverts, and sanitary sewers, Consultant shall:

a. Show rim or grate elevations and inverts for all manholes and drainage structures, with structure size (inside dimensions)
b. Show pipe diameters, pipe material, and direction of pipe.
c. Show manhole symbols at center of the lid with a note defining the manhole diameter and whether the manhole is an eccentric or concentric structure. If eccentric, note to what side of the structure (NW, SE, S, etc.) the eccentric cone is flush with.
d. Survey storm and sewer structures to the next downstream and upstream structures beyond the limits of survey.
e. Show utility lines as continuous; do not terminate shortly after a structure, extend to nearest upstream or downstream structure.

Deliverables:

- Basemap in AutoCAD 3D format.

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Subtask 401.2.2 – Geotechnical Investigation

The purpose of this subtask is to evaluate soil and groundwater conditions as a basis for developing geotechnical engineering design criteria for the Kane's Marina project.

Consultant Responsibilities:

401.2.2.1. Review information regarding subsurface soil and groundwater in the vicinity of the site, including filed reports, selected geologic maps, and other geotechnical engineering-related information.

401.2.2.2. Coordinate and manage the field investigation, including public utility notification and scheduling. Utility locates will be ordered by Consultant.

401.2.2.3. Explore subsurface soil and groundwater conditions at the project site by drilling one (1) drilled boring exploration to a depth between 20 and 25 feet bgs on the south side of the site near proposed holding tank/wetwell location, and four (4) to six (6) boring explorations 5 to 10 feet bgs along the proposed forcemain alignment.

401.2.2.4. Explorations will be advanced to the depths noted or to practical refusal in dense gravels or competent rock, if encountered, whichever is shallower. The borings will be backfilled as required by state law and surface disturbance minimized to the extent practical. Cuttings will be left on site.

401.2.2.5. Obtain samples at representative intervals from the explorations, observe groundwater conditions and maintain detailed logs in general accordance with ASTM Standard Practices Test Method D 2488. Field exploration work shall be observed and documented by qualified geotechnical engineering staff.

401.2.2.6. Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. Specific laboratory tests will depend on soil conditions encountered, but may include moisture/density tests, Atterberg limit tests and percent fines tests.

401.2.2.7. Provide a geotechnical evaluation of the site and provide design recommendations in a geotechnical report that will address the following geotechnical components:

a. A general description of site topography, geology and subsurface conditions.
b. Report subsurface conditions and data along the proposed forcemain/collection lines alignment.
c. An opinion as to the adequacy of the proposed development of the holding tank/wetwell from a geotechnical engineering standpoint.
d. Recommendations for preparation measures at the proposed holding tank/wetwell/lift station site, including disposition of undocumented fill and unsuitable native soils, recommendations for temporary cut slopes and constraints for wet weather construction.
e. Recommendations for temporary excavation and temporary excavation protection, such as excavation sheeting and bracing.
f. Recommendations for earthworks, including use of on-site and imported structural fill and fill placement and compaction requirements.

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g. Recommendations for foundations to support proposed at-grade and below-grade structures, including minimum width and embedment, design soil bearing pressures, settlement estimates (total and differential), coefficient of friction and passive earth pressures for sliding resistance. Consultant assumes that proposed structures will be lightly loaded and that shallow foundations can be used to adequately support the structures.

h. Recommendations for supporting on-grade slabs, including base rock, capillary break and modulus of subgrade reaction, as appropriate.

i. Seismic design parameters in accordance with the current version of the Oregon Structural Specialty Code. Consultant will also perform a simplified liquefaction settlement analysis.

401.2.2.8. All work under this subtask will be directly supervised by an engineer licensed in the state of Oregon. Engineer will apply their professional seal to the document.

Assumptions:

- Owner will obtain right-of-entry or access to the exploration locations.
- A rubber-tired drill rig can adequately access the site.
- Explorations will be extended to the depths described above or to refusal in dense material. Contingency costs for specialized drilling into dense material if dense gravel or rock are encountered, are not included in this scope of work or fee.
- Excess drill cuttings can be scattered on site.
- Installation of monitoring wells to measure static water groundwater is excluded.
- Contaminated soils will not be encountered during exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), consultant will stop drilling operations, notify Owner and discuss how to proceed.
- If public locators are not allowed to enter or cannot enter the project area to clear specific exploration locations, Consultant may provide the services of a private locate company to access the site, if requested, for an additional fee of $630.

Deliverables:

- Draft and Final Geotechnical Report.

Task 401.3 – Final Design

Consultant Responsibilities:

401.3.1. Plan Sheets. Prepare general, survey, site civil, structural, plumbing, HVAC, mechanical, electrical, and instrumentation and control plan sheets for the site, holding tank, and yard piping. Instrumentation and control final design is anticipated to be a performance spec for a holding tank and odor control monitoring system. Thus, the plan sheets will only include a piping and instrumentation diagram (P&ID). Coordinate location of pumps, piping layout, spacing, electrical equipment, generator, pump removal equipment, building access, overhead door, HVAC equipment, plumbing drains, and other appurtenances for ultimate lift station layout with the Owner. Prepare 90% review sets.

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401.3.2. Specifications. Consultant will support the Owner in CM/GC selection with services described in Task 5 of this scope of work. Consultant will prepare technical specifications. Technical specifications will be prepared to detail the materials, processes, and the products that are to be used in the construction of the lift station. Complete draft technical specifications for the 90% review set.

401.3.3. 90% Design and Review Workshop Meeting. Submit 90% design review drawings and specifications to the Owner. Participate in a 90% design review workshop meeting.

401.3.4. Agency Submittal. Agency design checklists will be completed and submitted along with the final plans and specifications to Agency for review.

401.3.5. Final Approval. Upon Owner and Oregon DEQ review, Consultant will incorporate appropriate revisions into a final set of stamped drawings and specifications that will be used for bidding.

401.3.6. Opinion of Probable Costs. Selected CM/GC will provide cost estimating after Task 404. Consultant will review and provide feedback

Owner Responsibilities:

- Review and provide one set of consolidated comments on the 90% design deliverables.
- Provide legal and risk reviews of the bid documents.
- Pay for any associated permitting fees not assigned to the Contractor.

Assumptions:

- Consultant will prepare the building permit application at 90% design and submit to the Marion County Building Inspection office. Final permits will be obtained by Owner. Owner shall pay all permit fees not assigned to the construction contractor.
- Consultant will prepare and submit the DEQ permit application at 90% design and assist Owner with DEQ consultation.
- Project will not include irrigation or landscaping of the site. Services of a licensed landscape architect is excluded.
- Extensive architectural feature and architectural rendering are not included in the holding tank design.
- Contractor will be required to prepare and implement an erosion and sediment control plan (ESCP), prepare traffic control plans, and secure associated permits.
- Shoring (if required) will be designed by the Contractor.
- Additional professional time for correspondence and meetings, due to an Owner initiated change in the project design, and/or project support above and beyond that described herein is considered an additional service requiring a contract amendment and equitable adjustment of the contract amount..
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.
- The following design standards and references are to be followed where relevant during the development of the project:
    - Marion County Standard Specifications and Drawings
    - Oregon Standard Specifications for Construction
    - Owner to provide front end contracting and bidding documents (Div 00)
    - AIS and BABA requirements
- AutoCAD is to be used to prepare drawings and AutoCAD Civil 3D or Revit may be used for the site and building design. Spreadsheets will be prepared in Microsoft Excel and text documents in Microsoft Word.

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Deliverables:

- 90% design drawings and specifications, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- 100% stamped design package, including one PDF submittal (prepared in 22"x34" reviewed in 11"x17").
- Opinion of Probable Cost.

Task 401.4 – Pre-Procurement Support

Consultant Responsibilities:

401.4.1. This task includes consultant services to support the Owner in direct purchase of equipment for the Project using available funds. The objective of the direct purchase of equipment or materials is to account for potential long lead times and still have the equipment or materials on hand when the contractor is ready to move forward with construction. Consultant will provide specifications for the equipment/material to be directly purchased which may be out of sequence or earlier than the final design task.

Owner Responsibilities:

- Owner staff will lead the solicitation effort to either solicit informal bids or select suppliers from pre-approved supplier lists. Owner will receive and store materials prior to the Contractor taking on the equipment/material for installation.

Assumptions:

- Consultant is not responsible if material/equipment must be returned or designated as surplus due to the expedited delivery process for this project.
- Budget assumes up to 40 hours for support services to be provided as requested.

Deliverables:

- Procurement Specifications.

Task 401.5 – Alternative Contracting Method Support

Owner anticipates engaging a construction contractor for the construction of new project facilities using alternative contracting procedures. The purpose of this task is to support Owner during the contract development and solicitation process.

Consultant Responsibilities:

401.5.1. Support County staff as requested with Board of Commissioners meeting and draft documents in preparation for soliciting BOC approval and developing CM/GC solicitation documents.

Owner Responsibilities:

- Lead the efforts to gain County Board of Commissioners approval for use of alternative project delivery method.
- Lead the efforts to develop contractor solicitation and contract documents.

Assumptions:

- Budget assumes up to 40 hours for support services to be provided as requested.

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Task 401.6 – WPCF PERMITTING

Consultant Responsibilities:

401.6.1. Prepare draft permit application for a holding tank permit for DEQ review.
401.6.2. Meet with DEQ to discuss the permit applications. For the purpose of this scope, up to two (2) meetings are assumed.
401.6.3. Address DEQ comments in permit application.

Owner Responsibilities:

- Provide input on draft permit application.
- If necessary, pay fee to DEQ for draft permit application.
- Review and comment on draft documents.

Assumptions:

- No field work, environmental studies, cultural resource investigations, or biological assessments are included in this task.
- This scope does not include any additional field gathering or special studies that may be required by the DEQ.
- No other permits will be required. If required, support for these permits can be provided as additional services.

Task 401.7 – Management Reserve (Contingency Task):
This task identifies prospective services that Owner, at its discretion, may elect to authorize Consultant to produce. Consultant shall perform no work nor incur any costs under this task prior to the issuance of separate authorization-to-proceed (email acceptable) by Owner.

From time to time the Owner may have additional tasks related to the project or additional tasks may be encountered that are not identified in this scope of work. For these instances, a time and material budget is established in order for Consultant to complete the additional services. A Management Reserve in the amount of $10,000 is incorporated into this agreement to allow Owner Staff to authorize Additional Services if needed. The scope, schedule and budget for such items will be agreed upon in writing through an executed task order prior to incorporation into the work.

ADDITIONAL SERVICES (not included in scope of work)

- Special use permits, environmental services, or additional permitting beyond those described in the scope of work
- Additional public outreach/meetings or stakeholder outreach support
- Field investigations, including subsurface investigations, to check available record drawings
- Construction phase surveying (quantities, staking, record)
- Funding administration support
- Project site tours
- Easements and right-of-way acquisition support
- Multiple design alternatives (i.e alternative site layouts) for bidding purposes

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of **$1,913,020.00 [$128,640.00]**.

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

PHASE 1 – GENERAL ENGINEERING SERVICES	Cost	Type
100 – PROJECT MANAGEMENT		
Task 100.1 – Project Management	$ 35,520	T&M
Task 100.2 [1] – County Board of Commissioners Support Services	$ 25,440	LS
101 – STRATEGIC PERMITTING PLAN		
Task 101.1 – Project Management and Administration	$ 4,825	LS
Task 101.2 – Data Review, Preliminary Agency Coordination, and Data Gaps Identification	$ 19,090	LS
Task 101.3 – Strategic Permitting Plan	$ 9,540	LS
102 – SUBSURFACE INVESTIGATION		
Task 102.1 – Project Management & Administration	$ 16,400	T&M
Task 102.2 – Subsurface Investigation Program	$ 74,200	T&M
Subtask 102.2.1 – Gates / Mill City Subsurface Investigation	$ 461,580	T&M
Subtask 102.2.2 – Detroit / Idanha Subsurface Investigation	$ 566,780	T&M
Task 102.3 – Groundwater Modeling Evaluation		
Subtask 102.3.1 – Mill City / Gates Permitting Evaluation	$ 63,600	T&M
Subtask 102.3.2 – Detroit / Idanha Permitting Evaluation	$ 78,700	T&M
Task 102.4: McCoy Site Permitting (USFS) and Private Property Owner Coordination (Upper Deck)	$ 18,700	T&M
Subtotal [Total]	**$ 1,374,375**	**[60,960]**

T&M: Time and Materials, LS: Lump Sum

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PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	Cost	Type
Task 200.1 – Project Management	$ 12,600	LS
Task 200.2 – Data Acquisition & Facility Tour	$ 6,110	LS
Task 200.3 – Project Planning	$ 26,725	LS
Task 200.4 – Existing Facilities Evaluation	$ 68,680	LS
Task 200.5 – Need for system improvements	$ 3,650	LS
Task 200.6 – Collection System Alternatives Considered & Selection	$ 53,615	LS
Task 200.7 – Treatment System Alternatives Considered & Selection	$ 59,365	LS
Task 200.8 – Proposed Projects (Recommended Alternatives)	$ 70,780	LS
Task 200.9 – Facilities Plan Documentation & Public Meeting	$ 25,830	LS
Task 200.10 –Management Reserve	$ 10,000	T&M
Subtotal	**$ 337,355**	

T&M: Time and Materials, LS: Lump Sum

PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	Cost	Type
400 – COMMERCIAL SEPTIC SYSTEM PLANNING		
Task 400.1 – Project Management	$ 6,030	LS
Task 400.2 [1] – Data Acquisition & Properties Tour	$ 17,770	LS
Task 400.3 [2] – Stakeholder Involvement/Engagement	$ 17,200	LS
Task 400.4 [3] – Commercial Septic System Concept	$ 26,680	LS
401 – KANE'S MARINA SEPTIC SYSTEM		
Task 401.1 – Project Management	$ 15,550	LS
Task 401.2 – Preliminary Engineering Report (PER)	$ 28,630	LS
Subtask 401.2.1 – Topographic Survey	$ 17,240	LS
Subtask 401.2.2 – Geotechnical Investigation	$ 17,060	LS
Task 401.3 – Final Design	$ 28,270	LS
Task 401.4 – Pre-Procurement Support	$ 8,000	T&M
Task 401.5 – CM/GC Support Services	$ 8,000	T&M
Task 401.6 – WPCF Permitting	$ 5,860	LS
Task 401.7 – Management Reserve (Contingency Task)	$ 5,000	T&M
Subtotal	**$ 201,290**	**[67,680]**

T&M: Time and Materials, LS: Lump Sum

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TOTAL	**$ 1,913,020 [$ 128,640]**

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and Sub-consultants for performance of Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

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g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Brian Nicholas
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or

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omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

i. Long distance communications.

ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

iv. Third-party models and mockups requested by Owner.

v. The printing of master or reproducible sets of plans and project manuals including specifications.

vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 62.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

ii. Meals. Receipts are required for reimbursement.

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Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant's Professional Hourly Rates.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT E - CRITICAL DATE SCHEDULE
Schedule of Deliverables

PHASE 1 – GENERAL ENGINEERING SERVICES	
100 – PROJECT MANAGEMENT	
Task 100.1 – Monthly Invoices and Progress Reports	Monthly
Task 100.1 – Meeting agendas and minutes	Weekly
Task 100.2 [1]: Final Presentation Materials [County Board of Commissioners Support Services]	8 weeks after NTP [2 Months]
101 – STRATEGIC PERMITTING PLAN	
Task 101.3 – Draft Strategic Planning Plan	11 weeks after Amend No. 2 NTP
Task 101.3 – Final Strategic Planning Plan	13 weeks after Amend No. 2 NTP
102 – SUBSURFACE EXPLORATION	
Task 102.2.1 – Draft Subsurface Investigation Work Plan	
Task 102.2.1 – Final Subsurface Investigation Work Plan	
Task 102.2.1 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.1 – Draft Subsurface Investigation Memorandum	
Task 102.2.1 – Final Subsurface Investigation Memorandum	
Task 102.2.1 – Groundwater Level Monitoring Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Work Plan	
Task 102.2.2 – Final Subsurface Investigation Work Plan	
Task 102.2.2 – Infiltration Testing and Test Pit Excavation Memorandum	
Task 102.2.2 – Draft Subsurface Investigation Memorandum	
Task 102.2.2 – Final Subsurface Investigation Memorandum	
Task 102.2.2 – Groundwater Level Monitoring Memorandum	
Task 102.3.1 – Draft WPCF Evaluation Memorandum	
Task 102.3.1 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.1 – Draft WPCF Evaluation Memorandum (DEQ Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum	
Task 102.3.2 – Final WPCF Evaluation Memorandum (Owner Comments)	
Task 102.3.2 – Draft WPCF Evaluation Memorandum (DEQ Comments)	

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PHASE 2 – MILL CITY / GATES WASTEWATER SEWER SYSTEM	
200 – MILL CITY / GATES FACILITIES PLANNING STUDY	
Task 200.2 – Request(s) for Information	
Task 200.3 – Draft Project Planning Facility Plan Section	
Task 200.4 – Draft Existing Facilities Evaluation Facility Plan Section	
Task 200.5 – Draft Project Need Facilities Plan Section	
Task 200.6 – Draft Collection System Alternatives Facility Plan Section	
Task 200.7 – Draft Treatment System Alternatives Facility Plan Section	
Task 200.8 – Capital Improvement Plan	
Task 200.8 – SDC Eligibility Estimate	
Task 200.8 – Draft Proposed Project Facility Plan Section	
Task 200.9 – Public Meeting Presentation Materials	
Task 200.9 – Final Facilities Plan	
PHASE 4 – DETROIT INTERIM COMMERCIAL SEPTIC SYSTEMS	
400 – COMMERCIAL SEPTIC SYSTEM PLANNING	
Task 400.2 – Requests for Information	
Task 400.2 – Existing Septic and Drain Field Summary Tables and Figures	
Task 400.3 – Presentation Materials	
Task 400.4 [3] – [Provide] Draft Commercial Septic Design Memorandum	8 weeks after Amend No. 1 NTP [2 months]
401 – KANE'S MARINA SEPTIC SYSTEM	
Task 401.1 – Kickoff meeting agenda	2 weeks after Amend No. 2 NTP
Task 401.1 – Kickoff meeting minutes	1 week after Kickoff Meeting
Task 401.1 – Request for Information	
Task 401.1 – Presentation Materials	
Task 401.2 – Workshop Meeting Agenda	
Task 401.2 – Workshop Meeting Minutes	
Task 401.2 – Draft Preliminary Engineering Report	5 weeks after Amend No. 2 NTP
Task 401.2 – Final Preliminary Engineering Report	6 weeks after Amend No. 2 NTP
Subtask 401.2.1 – Topographic Basemap	6 weeks after Amend No. 2 NTP
Subtask 401.2.2 – Geotechnical Report	10 weeks after Amend No. 2 NTP
Task 401.3 – 90% Design Drawings and Specifications	15 weeks after Amend No. 2 NTP
Task 401.3 – Final (Stamped) Drawings and Specifications	17 weeks after Amend No. 2 NTP
Task 401.3 – Opinion of Probably Cost	17 weeks after Amend No. 2 NTP

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Task 401.4 – Procurement Specifications	

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT F - RATE SCHEDULE

	Maximum Hourly Rate
Project Engineer I	$120
Project Engineer II	$160
Project Engineer III	$215
Project Manager I/II	$160
Project Manager III	$215
Structural Engineer I/II	$160
Structural Engineer III	$210
Chief Engineer / Chief Structural Engineer	$250
CAD I/II	$120
CAD III	$140
CAD Manager	$175
Electrical Controls I/II	$160
Electrical Controls III	$200
Principal	$250
Surveyor I/II	$140
Professional Surveyor PLS	$175
Field Representative	$135
Engineering Student	$70
Administration I	$80
Administration II	$100

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- *Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.*

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES
BOARD OF COMMISSIONERS:

Chair	Date: 12/7/2022
Commissioner	Date: 12/7/2022
Commissioner	Date: 12-7-2022
Authorized Signature: Department Director or designee	Date: 11/28/2022
Authorized Signature: Chief Administrative Officer	Date: 11/30/2022

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Reviewed by Signature: _____ 11/28/22
Marion County Legal Counsel Date

Reviewed by Signature: _____ 11/28/22
Marion County Contracts & Procurement Date

KELLER ASSOCIATES SIGNATURE

Authorized Signature: DocuSigned by: _____ 12/8/2022
BF174523C4C949A... Date

Title: Principal

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Marion County
FINANCE DEPARTMENT

Contract Review Sheet

PW-5069-22 (1)

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: **1**

Contact: **Henry, Alicia** Department: **Public Works Department**

Phone #: **503-373-4320** Date Sent: **Tuesday, October 11, 2022**

Title: **North Santiam Canyon Sewer Project - ARPA**

Contractor's Name: **Keller Associates**

Term - Date From: **September 30, 2022** Expires: **December 31, 2026**

Contract Total: **$ 60,960.00** Amendment: **$ 67,680.00** New Total: **$ 128,640.00**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☑ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **1130**

Description of Services or Grant Award

This agreement is for a new sewer structure in North Santiam Cayon. Phase 1 was for consultation and management.

Amendment 1 includes additional statement of work for task 402 (Project Concept), increases contract over 25% (adding$67,680) for a new total of $128,640 and consultant to provide a draft technical memo within 2 months of amendment execution.

Desired BOC Session Date: **10/26/2022** BOC Planning Date: **10/13/2022**

Files submitted in CMS: **10/5/2022** Printed packet & copies due in Finance: **10/11/2022**

BOC Session Presenter(s)

FOR FINANCE USE

Date Finance Received: **10/11/2022** Date Legal Received:

Comments: **Y**

REQUIRED APPROVALS

DocuSigned by: A3538E7AEC704F4... 10/12/2022
Finance - Contracts — Date

DocuSigned by: Alicia Henry DA7E8DCC1E7B47D... 10/12/2022
Contract Specialist — Date

DocuSigned by: Jane E Vetto D0CFC5B04B9F483... 10/12/2022
Legal Counsel — Date

DocuSigned by: Jan Fritz DC16351248DE4EC... 10/12/2022
Chief Administrative Officer — Date

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MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date:	October 26,2022				
Department:	Public Works	Agenda Planning Date:	October 20, 2022	Time required:	10 min
☐ Audio/Visual aids	N/A				
Contact:	Brian Nicholas	Phone:	x7943		

Department Head Signature:

Brian Nicholas

TITLE	Consider approval of Amendment 001 to professional service contract PW-5069-22 with Keller Associates, Inc. for the North Santiam Sewer Project.
Issue, Description & Background	Marion County received $50,000,000 in American Rescue Plan Act (ARPA) funds from the State of Oregon for the design, permitting and construction of the North Santiam Sewer Project. Marion County has agreed to deliver the project on behalf of the North Santiam Sewer Authority (NSSA) and its member cities. On May 20, 2022, the county selected a consultant team led by Keller Associates, Inc. to provide a comprehensive suite of engineering and other professional services to deliver the project. On October 7, 2022, the county executed contract PW-5069-22 with Keller, a "fast-start" contract focused on the expedited completion of a "step-back" assessment of the project delivery plan outlined in the project Master Plan, which was published more than a year ago, and the presentation of an updated strategic delivery plan for board feedback. This Amendment 001 adds additional "fast-start" services associated with the development of interim commercial septic systems to serve the downtown commercial district of the city of Detroit, another time-sensitive initiative under the North Santiam Sewer Project.
Financial Impacts:	This amendment will increase the contract value by $67,680, from $60,960 to $128,640. This is a budgeted expense in the current fiscal year in the 135 Public Works Grants fund.
Impacts to Department & External Agencies	This amendment results in no impacts to other departments and serves to advance the North Santiam Sewer Project on behalf of the cities of Mill City, Gates, Detroit and Idanha.
Options for Consideration:	1) Approve Amendment 001 to contract PW-5069-22, enabling work to begin on the development of interim septic systems for the the Detroit commercial district, or 2) Make no decision now and explore other options.
Recommendation:	Public Works recommends 1) Approving Amendment 001 with Keller Associates, Inc.
List of attachments:	Justification Memo, Amendment 001, Original Contract
Presenter:	Brian Nicholas

Copies of completed paperwork sent to the following: (Include names and e-mail addresses.)

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MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Copies to: Alicia Henry, ahenry@co.marion.or.us

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DocuSign Envelope ID: C25A9460-33DE-4265-840F-7D8BD286A056

REQUEST FOR AUTHORIZATION OF CONTRACT

Date: October 7, 2022

To: Chief Administrative Officer

Cc: Contract File

From: Alicia Henry

1. **Subject:** Amendment Exceeds 25%

The Marion County Public Works Department is requesting approval to amend a contract as described in Section 20-0265, 20-0270, 30-0320, 40-0160, and 40-0910 of the Marion County Public Contracting Rules. The contract is with Keller Associates Inc. for design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha, and interim commercial septic system(s) serving the city of Detroit with a value of $60,960 and an addition $67,680 will be added to the contract for a new contract total of $128,640 upon approval.

The initial contract consisted of a $60K fast-start contract, which enabled work on this time-sensitive project to begin quickly. Subsequent phases of work are awarded to the consultant as the project progresses. This conforms to the contracting plan for this project.

Submitted by:

DocuSigned by:
Alicia Henry
DA7EBDCC1E7B47D...

Alicia Henry

Public Works Department

Acknowledged by:

DocuSigned by:
Brian Nicholas
9793BA7ACD6D443...

Brian Nicholas

Department Head

DocuSign Envelope ID: AB0B9A0F-3CED-4995-9014-7ED973D79B45

Marion County
OREGON

AMENDMENT 001 to PW-5069-22
the CONTRACT FOR SERVICES
between
MARION COUNTY and KELLER ASSOCIATES, INC.

This Amendment No. 001 to the Contract for Services (as amended from time to time, the "Contract"), dated October 7, 2022 between Marion County, a political subdivision of the State of Oregon, hereafter called Owner, and Keller Associates, Inc., hereafter called Consultant.

The Contract is hereby amended as follows (new language is indicated by underlining and deleted language is indicated by brackets):

AGREEMENT

Owner agrees to pay Consultant a sum not to exceed **$128,640.00** **[$60,960]** for Phase 1 and 4 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A, Statement of Work.**

EXHIBIT A
STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.

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400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.
d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

Task 100: Project Management

Consultant Responsibilities:

100.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.
100.2 Project Coordination. Consultant may be requested to prepare progress reports, or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.
100.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates to the board. Consultant will prepare presentation materials and/or handouts as directed.

Owner Responsibilities:

- Administer project funding.

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Assumptions:

- Submit documents electronically, unless directed otherwise.
- Assumes a 6-month duration for general project administration.
- Task 1 includes up to 212 hours of project management services.

Deliverables:

- Monthly invoices – electronic copy
- Meeting agenda and minutes – electronic copy

Task 101: County Board of Commissioners Support Services

Consultant Responsibilities:

101.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to two occasions. Consultant will prepare presentation materials and/or handouts. The two presentations will tentatively occur in the months of November and December and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with sub-consultants (i.e. GSI, SWCA) and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material – electronic copy
- Final presentation material – electronic copy

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TASK 400: PROJECT MANAGEMENT

Consultant Responsibilities

400.1. Project Management. Provide general project administration services including contract administration, project accounting, monthly progress reports, scheduling, and internal project administration.

400.2. Kickoff Meeting. Prepare for and attend a project kickoff meeting with the Owner. The purpose of this meeting will be to establish communication channels, review the overall project schedule including major milestones and meetings, review objectives of the study, discuss available data and published materials that will be made available by the Owner, and review process for deliverables including process for Owner review and approval. Design criteria will also be reviewed during the Kickoff Meeting and assumptions for properties to connect and their flow criteria.

Owner Responsibilities

- Provide meeting space for project meetings. Provide advertising where required.
- Provide funding administration services.

Assumptions

- Assumes a 4-month duration for general project administration.
- Should Owner request additional meetings or require an extended schedule, project management budget will be increased accordingly.
- Unless otherwise noted, meetings/workshops may be held in person or via on-line meeting tools. This assumption applies to this task as well as subsequent tasks.

Deliverables

- Monthly invoices – electronic copy.
- Project meeting agendas and minutes – electronic copy.

TASK 401: DATA ACQUISITION & PROPERTY TOUR

Consultant Responsibilities

401.1. Request for Information. A request for information will be prepared by the Consultant describing the information needed including, but not limited to, the following items:

a) Base mapping, including roadways, parcel lines, political boundaries, land use, topographic contours, current aerial imagery, manholes, and pipelines (along with material, age, and size attributes) to be provided in GIS format. GIS to include survey grade pipe invert data for modeled lines, incorporating recent survey information of collection system as applicable.
b) List of properties to be connected to the commercial septic system.
    1. Provide type of business
    2. Anticipated wastewater flows
c) Previous collected test pit data for all the properties.
d) Previous studies involving the soil in the city.
e) Provide existing drain field and septic tank locations for each property.
f) Identify available property for consideration for septic tank or drain field placement.

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g) Owner to complete additional test pits required to investigate feasibility of drain fields on properties identified by the Consultant.

401.2. Conduct site tour of each property to evaluate potential drain field locations.

401.3. Meet with each property owner/representative to discuss specifics to each property. These meetings are assumed to be virtual to work with individual property owner schedules.

Owner Responsibilities

- Provide requested data within two weeks of request.
- Complete field work and provide sampling/testing, if required for drain field investigations.
- Conduct site tour with Consultant; provide access to facilities and records.

Assumptions

- Site tour is limited to visual observations and is not intended to be a comprehensive inspection. Consultant will not enter confined spaces, nor will a structural or leak test be completed on existing septic tanks.
- Scope assumes up to 20 properties will be participating in the interim commercial septic systems.
- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

Deliverables

- Requests for Information
- Summary tables and figures for existing septic tanks and drain fields status

TASK 402: STAKEHOLDER INVOLVEMENT/ENGAGEMENT

Consultant Responsibilities

402.1. Stakeholder Preliminary Meeting. Review goals and objectives of the project. Owner will distribute communication and notification to stakeholders, city, and County staff.

402.2. City Council Preliminary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review and discuss project objectives.

402.3. Public Meeting. Prepare materials for and present summary findings in a public meeting.

402.4. City Council Summary Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to summarize the technical memorandum deliverable from Task 403.

Owner Responsibilities

- Participate and provide facilities for public meeting. Provide public notice as required. Assist in addressing public comments.
- Distribute communication and notification for stakeholder meeting.

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Deliverables

- Public and stakeholder meeting presentation materials.

TASK 403: COMMERCIAL SEPTIC SYSTEM CONCEPT

Consultant Responsibilities

403.1. Location and Project Impact. Provide brief description of project location and summary of properties including a figure.

403.2. Flow Estimates and Grouping. Estimate the amount of flow and wastewater strength of loading (restaurant, industrial, staff restroom, …). Document estimated seasonal variation and 5 to 10 year growth for flow and wastewater strength.

403.3. Regulatory and Permitting Requirements. Review and summarize current, pending and future regulatory requirements and permitting criteria that may influence operation, maintenance, and adaptation of the system to the long-term gravity collection system.

403.4. Conceptual Layout of Septic Systems. Provide figures to summarize conceptual layout of septic tanks and drain fields. Figures will be 8.5x11 or 11x17 schematics.

403.5. Opinion of Probable Costs. Prepare an AAEC Class 4 opinion of probable cost for the project.

403.6. Develop Preliminary Project Schedule. Summarize schedule for overall project delivery and construction.

403.7. Maintenance Requirements. Summarize recommended maintenance requirements as required for regulatory compliance or as reported by the Owner.

403.8. Draft Technical Memorandum. Prepare draft technical memorandum. Final document to have Owner's comments incorporated.

403.9. Workshop Meeting. Set the project meeting agenda and provide minutes. This meeting will be a workshop to review with County/City staff the draft technical memorandum.

Owner Responsibilities

- Provide input and approval of septic tank and drain field concepts.
- Provide staff input and requirements for septic approval.
- Review and comment on draft documents in a timely manner.

Assumptions

- Project will not require an Oregon DEQ WPCF permit.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Consultant.

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- Test pits will not be excavated and soil characteristics documented with this scope of work. If required, sampling and/or testing will occur with a subsequent task order amendment.
- Scope excludes environmental work. If required, environmental permitting and field work (i.e., wetland delineations/investigations, biological assessments, and cultural resource surveys) will be provided as an additional service.

Deliverables

- Draft Technical Memorandum
- Project meeting agenda and minutes.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of $128,640 [$60,960].

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

100-Level Tasks – Phase 1 Services [TASK 100]	Cost	Type
Task 100 – Project Management	$ 35,520	T&M
Task 101 – County Board of Commissioners Support Services	$ 25,440	LS
Subtotal [Total]	**$ 60,960**	

T&M: Time and Materials, LS: Lump Sum

400-Level Tasks – Phase 4 Services	Cost	Type
Task 400 – Project Management	$ 6,030	LS
Task 401 – Data Acquisition & Properties Tour	$ 17,770	LS
Task 402 – Stakeholder Involvement/Engagement	$ 17,200	LS
Task 403 – Commercial Septic System Concept	$ 26,680	LS
Subtotal	**$ 67,680**	

T&M: Time and Materials, LS: Lump Sum

TOTAL	$ 128,640	

B.1.01 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

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B.1.02 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and Sub-consultants for performance of Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

B.1.03 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.04 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be

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for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Brian Nicholas
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.05 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or

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receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

   i. Long distance communications.

   ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

   iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

   iv. Third-party models and mockups requested by Owner.

   v. The printing of master or reproducible sets of plans and project manuals including specifications.

   vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

   i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 62.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

   ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant's Professional Hourly Rates.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT C - INSURANCE PROVISIONS

A. REQUIRED INSURANCE. Contractor shall obtain at Contractor's expense the insurance specified in this section prior to performing under this Contract and shall maintain it in full force and at its own expense throughout the duration of this Contract and all warranty periods. Contractor shall obtain the following insurance from insurance companies or entities that are authorized to transact the business of insurance and issue coverage in Oregon and that are acceptable to County:

i. WORKERS COMPENSATION. All employers, including Contractor, that employ subject workers, as defined in ORS 656.027, shall comply with ORS 656.017 and shall provide workers' compensation insurance coverage for those workers, unless they meet the requirement for an exemption under ORS 656.126(2). Contractor shall require and ensure that each of its subcontractors complies with these requirements.

ii. PROFESSIONAL LIABILITY. Covering any damages caused by an error, omission or any negligent acts related to the services to be provided under this Contract. Contractor shall provide proof of insurance of not less than the following amounts as determined by the County:

☒ **Required by County** ☐ **Not required by County.**

- ☒ $1,000,000 Per occurrence limit for any single claimant; and
- ☒ $2,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Risk Manager

iii. CYBER LIABILITY. Covering network security, breach of data, and coverage for regulatory fines and fees imposed against County due to failures in products and services provided under this Contract. Cyber Liability coverage must include errors, omissions, negligent acts, denial of service, media liability (including software copyright), dishonesty, fraudulent or criminal acts by a person or persons whether identified or not, intellectual property infringement, computer system attacks, unauthorized access and use of computer system, regulatory actions, and contractual liability.

☐ **Required by County** ☒ **Not required by County.**

- ☐ $2,000,000 Per occurrence limit for any single claimant; and
- ☐ $5,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Information Technology Director and Risk Manager

iv. COMMERCIAL GENERAL LIABILITY. Covering bodily injury, death, and property damage in a form and with coverages that are satisfactory to the County. This insurance shall include personal injury liability, products and completed operations. Coverage shall be written on an occurrence basis. Contractor shall provide proof of insurance of not less than the following amounts as determined by the County:

☒ **Required by County** ☐ **Not required by County.**

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Minimum Limits:

- ☒ $1,000,000 Per occurrence limit for any single claimant; and
- ☒ $2,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Risk Manager
- ☐ $500,000 Per occurrence limit for any single claimant
- ☐ $1,000,000 Per occurrence limit for multiple claimant

v. AUTOMOBILE LIABILITY INSURANCE. Covering all owned, non-owned, or hired vehicles. This coverage may be written in combination with the Commercial General Liability Insurance (with separate limits for "Commercial General Liability" and "Automobile Liability"). Contractor shall provide proof of insurance of not less than the following amounts as determined by the County:

☒ **Required by County** ☐ **Not required by County.**

Minimum Limits:

- ☐ Oregon Financial Responsibility Law, ORS 806.060 ($25,000 property damage/$50,000 bodily injury $5,000 personal injury).
- ☒ $500,000 Per occurrence limit for any single claimant; and
- ☒ $1,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Risk Manager

B. ADDITIONAL INSURED. The Commercial General Liability insurance required under this Contract shall include Marion County, its officers, employees, and agents as Additional Insureds but only with respect to Contractor's activities to be performed under this Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

C. NOTICE OF CANCELLATION OR CHANGE. There shall be no cancellation, material change, potential exhaustion of aggregate limits or non-renewal of insurance coverage(s) without 30 days written notice from this Contractor or its insurer(s) to County. Any failure to comply with the reporting provisions of this clause shall constitute a material breach of Contract and shall be grounds for immediate termination of this Contract by County.

D. CERTIFICATE(S) OF INSURANCE. Contractor shall provide to County Certificate(s) of Insurance for all required insurance before delivering any Goods and performing any Services required under this Contract. The Certificate(s) must specify all entities and individuals who are endorsed on the policy as Additional Insured (or Loss Payees). Contractor shall pay for all deductibles, self-insured retention, and self-insurance, if any.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT D - SPECIAL CONTRACT PROVISIONS

D.1 RESPONSIBILITIES OF OWNER

D.1.01 Owner's Project budget shall include contingencies for design, bidding, changes in the Work during construction, and other costs described below.

D.1.02 Owner, at Owner's sole option, may retain an inspector to inspect the Project in order to protect Owner's interests. The costs of the inspector are to be paid by Owner and the inspector shall serve at the pleasure of Owner. When retained by Owner, the inspector's duties are not to be interpreted as conflicting with the duties of Consultant or relieving Consultant of any responsibility or duty incurred under this Contract, nor may the inspector act as Consultant's agent.

D.1.03 Owner shall be responsible for payment of all plan check fees, review fees, permit fees, taxes, development charges, or any other costs related to obtaining governing bodies' approval for construction of the Project.

D.2 PROJECT RESPONSIBILITIES

D.2.01 Consultant shall prepare a schedule of its activities through all phases of the Project. Consultant shall schedule and prepare agendas for all meetings which involve Consultant's Services. Consultant shall chair such meetings and shall record and distribute minutes, in a format and level of detail acceptable to Owner, of decisions and actions to attendees.

D.2.02 Consultant shall confirm firsthand, through site investigations of the observable circumstances and existing conditions, the critical issues that may impact design criteria and shall not rely solely on furnished As Built documents. Consultant shall practice the standard of care in use of the combination of As Built drawings and field data collection which, if used solely for the design process without confirmation, create conflicts on site.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT E - CRITICAL DATE SCHEDULE

Task 101: County Board of Commissioners Support Services	2 Months
Task 403: Provide Draft Technical Memorandum	2 Months

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT F - RATE SCHEDULE

	Maximum Hourly Rate
Project Engineer I	$120
Project Engineer II	$160
Project Engineer III	$215
Project Manager I/II	$160
Project Manager III	$215
Structural Engineer I/II	$160
Structural Engineer III	$210
Chief Engineer / Chief Structural Engineer	$250
CAD I/II	$120
CAD III	$140
CAD Manager	$175
Electrical Controls I/II	$160
Electrical Controls III	$200
Principal	$250
Surveyor I/II	$140
Professional Surveyor PLS	$175
Field Representative	$135
Engineering Student	$70
Administration I	$80
Administration II	$100

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.

- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.

- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

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DocuSign Envelope ID: C25A9460-33DE-4265-840F-7D8BD286A056

Except as expressly amended above, all other terms and conditions of the original contract are still in full force and effect. Contractor certifies that the representations, warranties and certifications contained in the original Contract are true and correct as of the effective date of this Amendment and with the same effect as though made at the time of this Amendment.

MARION COUNTY SIGNATURES
BOARD OF COMMISSIONERS:

Chair — Date: 10/19/2022

Commissioner — Date: 10/19/2022

Commissioner — Date: 10.19.22

Authorized Signature: DocuSigned by: Brian Nicholas 9793BA7ACD6D443... — Date: 10/12/2022
Department Director or designee

Authorized Signature: DocuSigned by: Jan Fritz DC16351248DE4EC... — Date: 10/12/2022
Chief Administrative Officer

Reviewed by Signature: DocuSigned by: Jane E Vetto D0CFC5B04B9F483... — Date: 10/12/2022
Marion County Legal Counsel

Reviewed by Signature: DocuSigned by: Camber Schlag C5B2F3DF257F444... — Date: 10/12/2022
Marion County Contracts & Procurement

KELLER ASSOCIATES, INC. SIGNATURE

Authorized Signature: DocuSigned by: PETER OLSEN 743A43630E4D48B... — Date: 10/20/2022

Title: Principal

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Marion County OREGON
FINANCE DEPARTMENT

Contract Review Sheet

PW-5069-22

A&E Standard Prof Svcs Agmnt #: **PW-5069-22** Amendment #: ____

Contact: **Henry, Alicia** Department: **Public Works Department**

Phone #: **503-373-4320** Date Sent: **Wednesday, October 5, 2022**

Title: **North Santiam Canyon Sewer Project**

Contractor's Name: **Keller Associates**

Term - Date From: **Execution** Expires: **December 31, 2026**

Contract Total: **$ 60,960.00** Amendment: **$ -** New Total: **$ 60,960.00**

☐ Incoming Funds ☑ Federal Funds ☐ Reinstatement ☐ Retroactive ☐ Amendment greater than 25%

Source Selection Method: **20-0260 Request for Proposal** RFP# **1130**

Description of Services or Grant Award

The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates. The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Desired BOC Session Date: ____ BOC Planning Date: ____

Files submitted in CMS: ____ Printed packet & copies due in Finance: ____

BOC Session Presenter(s) ____

FOR FINANCE USE

Date Finance Received: **10/5/2022** Date Legal Received: ____

Comments: **G**

REQUIRED APPROVALS

DocuSigned by: A3538E7AEC704F4...
10/5/2022
Finance - Contracts — Date

DocuSigned by: Alicia Henry DA7EBDCC1E7B47D...
10/7/2022
Contract Specialist — Date

DocuSigned by: Jane E Vetto D0CFC5B04B9F483...
10/6/2022
Legal Counsel — Date

DocuSigned by: Jan Fritz DC16351248DE4EC...
10/6/2022
Chief Administrative Officer — Date

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

(Architectural, Engineering, Land Surveying and Related Services)

THIS PROFESSIONAL SERVICES CONTRACT (the "Contract") is between Marion County, a political subdivision of the State of Oregon, by and through its Public Works Department, (the "Owner"), and:

Company: Keller Associates, Inc.
Address: 245 Commercial Street SE
City, State Zip: Salem, OR 97301

Contract # PW-5069-22
Phone: 503.364.2002
Email: polsen@kellerassociates.com

(the "Consultant") (collectively Owner and Consultant are referred to as the "Parties"). This Contract is for all Services related to completion of the project more particularly described as follows:

RECITALS

A. On May 20, 2022 Owner issued Request for Proposals RFP PW1130-22 for Projects A and B of a project entitled by Owner the North Santiam Canyon Sewer Project (the "Project").
B. On August 11, 2022, Owner entered into Coronavirus State Fiscal Recovery Fund Grant Agreement SR2240 with the Oregon Business Development Department for development of a project entitled by the state the North Santiam Septic to Sewer Project. The North Santiam Canyon Sewer Project and the North Santiam Septic to Sewer Project are one and the same project.
C. Project will construct new sanitary sewer infrastructure serving the cities of Mill City, Gates, Detroit and Idanha, and interim commercial septic system(s) serving the city of Detroit.
D. Project consists of four (4) phases, which are expected to be performed concurrently. The Project phases are as follows:

    a. **Phase 1** – Management of the overall Project including, but not limited to, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
    b. **Phase 2** – *Mill City / Gates Wastewater Sewer System* – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
    c. **Phase 3** – *Detroit / Idanha Wastewater Sewer System* – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
    d. **Phase 4** – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

AGREEMENT

This Contract shall become effective on the date that the Contract is fully executed by the Parties and all required Marion County approvals have been obtained (the "Effective Date"). No Services shall be performed prior to the Effective Date. The Contract shall expire, unless otherwise terminated or extended, on **December 31, 2026**.

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Generally, the Services to be performed by Consultant on the Project consist of the following (the "Services"):

Civil, mechanical, electrical and environmental engineering analysis and design; environmental and construction permit consultation and acquisition; natural, archaeological and historic resource studies, investigation and reporting; NEPA compliance; property acquisition; public involvement and communications; preparation of construction plans, specifications and estimates; bid support; construction administrative and observation support.

Owner agrees to pay Consultant a sum not to exceed **$60,960.00** for Phase 1 Services, which shall include all allowable expenses, more specifically described in **EXHIBIT A, Statement of Work**. Progress payments shall be made in accordance with **EXHIBIT B, Consultant Compensation**.

A. If specified below, Owner's payments to Contractor under this agreement will be paid in whole or in part with federal funds. If so specified, by signing this agreement, Contractor certifies neither it nor its employees, contractors, subcontractors or subgrantees who will perform the Project activities are currently employed by an agency or department of the federal government. If applicable, Contractor shall comply with Exhibit H: Appendix II To Part 200—Contract Provisions For Non-Federal Entity Contracts Under Federal Awards

In accordance with 2 CFR 200.330, Contractor has been designated:
☐ Subrecipient
☒ Contractor/Vendor
☐ Not applicable – (there are no federal funds tied to the contract)

Assistance Listing #(s) of federal funds to be paid through this Grant: **21.027 American Rescue Plan Act Coronavirus State Fiscal Recovery Fund**

This Contract consists of these introductory provisions and the signature page(s), Section 1-Relationship of the Parties, Section 2-Consultant's Responsibilities; Representations and Warranties, Section 3-Responsibilities of Owner; Special Contract Provisions, Section 4-General Contract Provisions and the following exhibits attached hereto and incorporated herein by this reference:

EXHIBIT A: Statement of Work
EXHIBIT B: Consultant Compensation
EXHIBIT C: Insurance Provisions
EXHIBIT D: Special Contract Provisions
EXHIBIT E: Critical Date Schedule
EXHIBIT F: Rate Schedule
EXHIBIT G: Assumptions and Exclusions
EXHIBIT H: Appendix II

THIS CONTRACT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES ON THE SUBJECT MATTERS ADDRESSED HEREIN. THE TERMS OF THIS CONTRACT CANNOT BE WAIVED, ALTERED, MODIFIED, SUPPLEMENTED OR AMENDED, IN ANY MANNER WHATSOEVER, EXCEPT BY WRITTEN INSTRUMENT SIGNED BY THE PARTIES AND CONTAINING ALL REQUIRED APPROVALS. ANY SUCH WAIVER, ALTERATION, MODIFICATION, SUPPLEMENTATION OR AMENDMENT SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN,

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REGARDING THIS CONTRACT EXCEPT AS CONTAINED, INCORPORATED, OR REFERENCED HEREIN. CONSULTANT, BY THE SIGNATURE BELOW OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT IT HAS READ THIS CONTRACT, UNDERSTANDS THIS CONTRACT, AND AGREES TO BE BOUND BY ALL OF THIS CONTRACT'S TERMS AND CONDITIONS. THIS CONTRACT, AND ANY AMENDMENTS TO IT, MAY BE EXECUTED IN COUNTERPARTS (EACH OF WHICH SHALL BE AN ORIGINAL AND ALL OF WHICH SHALL CONSTITUTE BUT ONE AND THE SAME INSTRUMENT) OR IN MULTIPLE ORIGINALS.

MARION COUNTY SIGNATURES

Authorized Signature: DocuSigned by: Jan Fritz DC16351248DE4EC... 10/6/2022
Chief Administrative Officer Date

Authorized Signature: DocuSigned by: Brian Nicholas 9793BA7ACD6D443... 10/5/2022
Department Director or designee Date

Reviewed by Signature: DocuSigned by: Jane E Vetto D0CEC5B04B9E483... 10/6/2022
Marion County Legal Counsel Date

Reviewed by Signature: DocuSigned by: A3538E7AEC704E4... 10/5/2022
Marion County Contracts & Procurement Date

KELLER ASSOCIATES, INC. SIGNATURE

Authorized Signature: DocuSigned by: Peter Olsen, PE 743A43630E4D48B... 10/7/2022
Date

Title: Principal

DocuSign Envelope ID: 22509325-E707-475D-B7A0-9B73F8AD1BF4

1 RELATIONSHIP OF THE PARTIES

1.1 Consultant shall provide the Services for the Project in accordance with the terms and conditions of this Contract. Consultant's performance of Services shall be as a professional consultant to Owner to carry out the Project and to provide the technical documents and supervision to achieve Owner's Project objectives.

1.2 In administering this Contract, Owner may retain the services of an independent project manager and other consultants as needed to fulfill Owner's objectives.

1.3 Consultant shall provide a list of all sub-consultants which Consultant intends to utilize on the Project (the "Sub-consultants"). This list shall include such information on the qualifications of the Sub-consultants as may be requested by Owner. Owner reserves the right to review the Sub-consultants proposed. Consultant shall not retain a Sub-consultant to which Owner has a reasonable objection.

1.4 Consultant acknowledges that this Contract was awarded on the basis of the unique background and abilities of the key personnel of Consultant and Sub-consultants identified by Consultant (collectively, the "Key Personnel" and individually, the "Key Person"). Therefore, Consultant shall make available Key Personnel as identified in its proposal. Consultant shall provide to Owner a list of the proposed Key Personnel to be assigned to the Project. This list shall include such information on the professional background of each Key Person as may be requested by Owner. If any Key Person becomes unavailable to Consultant, the Parties shall mutually agree upon an appropriate replacement. Without prior notice to, and the written consent of, Owner, Consultant shall not: (i) re-assign or transfer any Key Person to other duties or positions so that the Key Person is unable to fully perform his or her responsibilities under the Contract; (ii) allow any Key Person to delegate to anyone his or her performance of any management authority or other responsibility required under the Contract; or (iii) substitute any Key Person. Any of these actions shall constitute a material breach of the Contract. Consultant shall remove any individual or Sub-consultant from the Project if so directed by Owner in writing following discussion with Consultant, provided that Consultant shall have a reasonable time period within which to find a suitable replacement.

2 CONSULTANT'S RESPONSIBILITIES; REPRESENTATIONS AND WARRANTIES

2.1 Consultant agrees that:

2.1.1 The phrase "Standard of Care" that is used in this Contract is defined as follows: the same professional skill, care, diligence and standards as other professionals performing similar services under similar conditions (the "Standard of Care");

2.1.2 Consultant shall perform all Services in accordance with the Standard of Care;

2.1.3 Consultant shall prepare, in accordance with the Standard of Care, all drawings, specifications, deliverables and other documents so that they accurately reflect, fully comply with and incorporate all applicable laws, rules, and regulations, and so that they are complete and functional for the purposes intended, except as to any deficiencies which are due to causes beyond the control of Consultant;

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2.1.4 Consultant shall be responsible for correcting any inconsistencies, errors or omissions in the drawings, specifications, deliverables and other documents prepared by Consultant at no additional cost to Owner, unless such corrective action is attributable to deficiencies in Owner-furnished information;

2.1.5 Owner's review or acceptance of documents shall not be deemed as approval of the adequacy of the drawings, specifications, deliverables, and other documents. Any review or acceptance by Owner will not relieve Consultant of any responsibility for complying with the Standard of Care;

2.1.6 Except as provided in Supplemental Services addressed within Exhibits A and B, Consultant shall, at no additional cost to Owner, render assistance to Owner in resolving problems or other issues relating to the Project design or to specified materials, unless such assistance is attributable to deficiencies in Owner furnished information;

2.1.7 During the term of the Contract, Consultant shall obtain, hold, maintain and fully pay for all licenses and permits required by law for Consultant to conduct its business and perform the Services. During the term of the Contract, Owner shall pay for, and Consultant shall obtain, hold and maintain all licenses and permits required for the Project, unless otherwise specified in the Contract. Consultant shall review the Project site and the nature of the Services and advise Owner throughout the course of the Project as to the necessity of obtaining all Project permits and licenses, the status of the issuance of any such permits and licenses, and any issues or impediments related to the issuance or continuation of any such permits and licenses; and

2.1.8 Consultant shall pay all Sub-consultants and other subcontractors as required by Consultant's contracts with those Sub-consultants and subcontractors. Consultant agrees that Owner has no direct or indirect contractual obligation or other legal duty whatsoever to pay the Sub-consultants and other subcontractors of Consultant or otherwise ensure that Consultant makes full and timely payment to those Sub-consultants and subcontractors for services performed on the Project.

2.2 Consultant represents and warrants to Owner that:

2.2.1 Consultant has the power and authority to enter into and perform this Contract; the persons executing this Contract on behalf of Consultant have the actual authority to bind Consultant to the terms of this Contract;

2.2.2 When executed and delivered, this Contract shall be a valid and binding obligation of Consultant enforceable in accordance with its terms; the provisions of this Contract do not conflict with or result in a default under any agreement or other instrument binding upon Consultant and do not result in a violation of any law, regulation, court decree or court order or other legal process applicable to Consultant;

2.2.3 Consultant shall, at all times during the term of this Contract, be duly licensed to perform the Services, and if there is no licensing requirement for the profession or Services, be duly qualified and competent;

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2.2.4 Consultant is an experienced firm having the skill, legal capacity, and professional ability necessary to perform all the Services required under this Contract and to design and administer a project having the scope and complexity of the Project;

2.2.5 Consultant has the capabilities and resources necessary to perform Consultant's obligations under this Contract;

2.2.6 Consultant is, or shall become, in a manner consistent with the Standard of Care, familiar with all current laws, rules, and regulations which are applicable to the design and construction of the Project;

2.2.7 All Services shall be performed in accordance with the Standard of Care;

2.2.8 The Project, when completed and if constructed in accordance with the intent established by the drawings, specifications, deliverables and other documents prepared by Consultant pursuant to this Contract, shall be structurally sound and a complete and properly functioning facility suitable for the purposes for which it is intended; and

2.3 Compliance with Coronavirus State Fiscal Recovery Fund. Consultant shall comply with the requirements of the federal American Rescue Plan Act Coronavirus State Fiscal Recovery Fund (codified as 42 U.S.C. 802), including all implementing regulations (31CFR 35.1 et seq.) and other guidance promulgated by the U.S. Department of the Treasury in the execution of the Services.

2.4 Employee Whistleblower Protection. Consultant shall comply with 41 U.S.C. 4712, Program for Enhancement of Employee whistleblower Protection. Refer to 41 U.S.C. 4712 for employee whistleblower rights and protections afforded under this Contract.

2.5 Prevailing Wage Requirements. The prevailing wage rate requirements that may apply to the Project are set forth in ORS 279C.800 through 279C.870, the administrative rules promulgated thereunder (OAR Chapter 839, Division 25) and Oregon Laws 2021, chapter 678, section 17 (collectively, state "PWR"), or, when applicable, 40 U.S.C. 3141 et seq. (federal "Davis-Bacon Act").

2.6 The warranties set forth in this section are in addition to, and not in lieu of, any other warranties provided in this Contract or at law.

3 RESPONSIBILITIES OF OWNER; SPECIAL CONTRACT PROVISIONS

Owner's responsibilities under this Contract, and certain additional responsibilities of Consultant, are set forth in Exhibit D-Special Contract Provisions.

4 GENERAL CONTRACT PROVISIONS

4.1 ***Contract Performance.*** Consultant shall at all times perform the Services diligently and without delay and shall punctually fulfill all Contract requirements consistent with the schedule for the performance of Services set forth in Exhibits A and E. Expiration or termination of the Contract shall not extinguish, prejudice, or limit either party's right to enforce this Contract with respect to any default or defect in performance. Time is of the essence in the performance of this Contract.

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4.2 ***Access to Records.*** For not less than ten (10) years after the Contract's expiration or termination, Owner, the Secretary of State's Office of the State of Oregon, the federal government, and their duly authorized representatives shall have access to the books, documents, papers, and records of Consultant and the Sub-consultants which pertain to the Contract for the purpose of making audits, examination, excerpts, and transcripts. If, for any reason, any part of this Contract, any Project-related consultant contract or any Project-related construction contract(s) is involved in litigation, Consultant shall retain all pertinent records for not less than seven (7) years or until all litigation is resolved, whichever is longer. Consultant shall provide Owner and the other entities referenced above with full access to these records in preparation for and during litigation.

4.3 ***Funds Available and Authorized.*** Owner reasonably believes as of the Effective Date that sufficient funds are available and authorized for expenditure to finance the cost of this Contract within Owner's appropriation or limitation. Consultant understands and agrees that, to the extent that sufficient funds are not available and authorized for expenditure to finance the cost of this Contract, Owner's payment of amounts under this Contract attributable to Services performed after the last day of the current budget cycle is contingent upon County budgeting and appropriating funds or other expenditure authority sufficient to allow County, in the exercise of its reasonable administrative discretion, to continue to make payments under this Contract.

4.4 ***Insurance.*** Consultant shall maintain in effect for the duration of this Contract, or any other time periods required herein, the insurance set forth in Exhibit C-Insurance Provisions.

4.5 ***Indemnity.***

4.5.1 CLAIMS FOR OTHER THAN PROFESSIONAL LIABILITY. CONSULTANT SHALL INDEMNIFY, DEFEND, SAVE, AND HOLD HARMLESS OWNER, THE STATE OF OREGON AND THE OREGON BUSINESS DEVELOPMENT DEPARTMENT, AND THEIR OFFICERS, AGENTS, AND EMPLOYEES, FROM AND AGAINST ALL CLAIMS, SUITS, ACTIONS, LOSSES, DAMAGES, LIABILITIES, COSTS AND EXPENSES TO THE EXTENT RESULTING FROM OR ARISING OUT OF THE NEGLIGENT ACTS OR OMISSIONS OF CONSULTANT OR ITS SUB-CONSULTANTS, SUBCONTRACTORS, AGENTS, OR EMPLOYEES UNDER THIS CONTRACT.

4.5.2 CLAIMS FOR PROFESSIONAL LIABILITY. CONSULTANT SHALL INDEMNIFY, SAVE, AND HOLD HARMLESS OWNER, THE STATE OF OREGON AND THE OREGON BUSINESS DEVELOPMENT DEPARTMENT, AND THEIR OFFICERS, AGENTS, AND EMPLOYEES, FROM AND AGAINST ALL CLAIMS, SUITS, ACTIONS, LOSSES, DAMAGES, LIABILITIES, COSTS AND EXPENSES TO THE EXTENT ARISING OUT OF THE PROFESSIONALLY NEGLIGENT ACTS, ERRORS OR OMISSIONS OF CONSULTANT OR ITS SUB CONSULTANTS, SUBCONTRACTORS, AGENTS, OR EMPLOYEES IN THE PERFORMANCE OF PROFESSIONAL SERVICES UNDER THIS CONTRACT.

4.5.3 Owner Defense Requirements. Notwithstanding the obligations under Sections 4.5.1 and 4.5.2, neither Consultant nor any attorney engaged by Consultant shall defend any claim in the name of Marion County, nor purport to act as legal representative of Marion County or any of its agencies, without the prior written consent of Marion County Legal Counsel. Owner may, at any time and at its election, assume its own defense and settlement of any claims in the event that: it

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determines that Consultant is prohibited from defending Marion County; Consultant is not adequately defending Marion County's interests; an important governmental principle is at issue; or it is in the best interests of Marion County to do so, Marion County reserves all rights to pursue any claims it may have against Consultant if Marion County elects to assume its own defense.

4.5.4 Owner's Actions. This Section 4.5 does not include indemnification by Consultant of Owner or their officers, agents, and employees, for the acts or omissions of the Owner or their officers, agents, and employees, whether within the scope of the Contract or otherwise.

4.6 Consultant's Status.

4.6.1 Consultant shall perform all Services as an independent contractor. Although Owner reserves the right to set the delivery schedule for the Services to be performed and to evaluate the quality of the completed performance, Owner cannot and will not control the means and manner of Consultant's performance. Consultant is responsible for determining the appropriate means and manner of performing the Services. Consultant, Consultant's employees and the Sub-consultants are not "officers, employees, or agents" of Owner, as those terms are used in ORS 30.265.

4.6.2 Consultant shall not have control or charge of, and shall not be responsible for, the acts or omissions of other consultants or contractors under contract with Owner who are performing services or construction work on the Project. However, this provision does not in any way change Consultant's professional responsibility to report to Owner any information, including information on the performance of consultants or contractors outside the control or charge of Consultant, concerning activities or conditions that have or could have an adverse effect on Owner or the Project.

4.6.3 Consultant is not a contributing member of the Public Employee's Retirement System and will be responsible for any federal, state, or other taxes applicable to any compensation or payments paid to Consultant under this Contract. Consultant will not be eligible for any benefits from any payments made under this Contract for federal Social Security, unemployment insurance, or worker's compensation, except as a self-employed individual. If any payment under this Contract is to be charged against federal funds, Consultant certifies that it is not currently employed by the federal government.

4.7 ***Successors & Assignments.*** The provisions of this Contract shall be binding upon and shall insure to the benefit of the Parties and their respective successors and assigns. After the original Contract is executed, Consultant shall not enter into any Sub-consultant agreements for any of the Services or assign or transfer any of its interest in this Contract, without the prior written consent of Owner.

4.8 ***Compliance with Applicable Law.*** Consultant shall comply with all federal, state and local laws, regulations, executive orders and ordinances applicable to the Services. Owner's performance under this Contract is conditioned upon Consultant's compliance with the provisions of ORS 279C.505, 279C.515, 279C.520, and 279C.530, which are hereby incorporated by reference. Consultant, the Sub-consultants, if any, and all employers providing Services, labor or materials under this Contract are subject employers under the Oregon workers' compensation law and shall comply with ORS 656.017.

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4.9 ***Governing Law; Jurisdiction; Venue.*** This Contract shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively "Claim") between Owner and Consultant that arises from or relates to this Contract shall be brought and conducted solely and exclusively within the Circuit Court of Marion County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this "Governing Law; Jurisdiction; Venue" section be construed as a waiver by Marion County of any form of defense or immunity, whether based on sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the United States Constitution or otherwise. CONSULTANT, BY EXECUTION OF THIS CONTRACT, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF SAID COURTS.

4.10 Tax Compliance Certification.

4.10.1 By signature on this Contract, the undersigned certifies under penalty of perjury that the undersigned is authorized to act on behalf of Consultant and that Consultant is, to the best of the undersigned's knowledge, not in violation of any Oregon Tax Laws.

4.10.2 For purposes of this certification, "Oregon Tax Laws" means a state tax imposed by ORS 401.792 to 401.816 (Tax For Emergency Communications), 118 (Inheritance Tax), 314 (Income Tax), 316 (Personal Income Tax), 317 (Corporation Excise Tax), 318 (Corporation Income Tax), 320 (Amusement Device and Transient Lodging Taxes), 321 (Timber and Forestland Tax), 323 (Cigarettes and Tobacco Products Tax), the elderly rental assistance program under ORS 310.630 to 310.706, and any local taxes administered by the Department of Revenue under ORS 305.620.

4.11 ***Severability.*** The Parties agree that if any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the Parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.

4.12 ***Force Majeure.*** Neither party shall be held responsible for delay or default in the performance of its obligations due to a cause beyond its reasonable control, including, but not limited to fire, riot, acts of God, terrorist acts or war where such cause was beyond such party's reasonable control. Each party shall, however, make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under the Contract.

4.13 ***Waiver.*** The failure of Owner to enforce any provision of this Contract shall not constitute a waiver by Owner of that or any other provision.

4.14 ***Third Party Beneficiaries.*** Nothing contained in this Contract shall create a contractual relationship with or a cause of action in favor of a third party against Owner or Consultant. Consultant's Services under this Contract shall be performed solely for Owner's benefit and no other entity or person shall have any claim against Consultant because of this Contract for the performance or nonperformance of Services hereunder.

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4.15 Ownership of Work Product; Confidentiality.

4.15.1 Definitions. As used in this Contract, the following terms have the meanings set forth below:

4.15.1.1 "Consultant Intellectual Property" means any intellectual property that is owned by Consultant and developed independently from this Contract and that is applicable to the Services or included in the Work Product.

4.15.1.2 "Third Party Intellectual Property" means any intellectual property that is owned by parties other than Owner or Consultant and that is applicable to the Services or included in the Work Product.

4.15.1.3 "Work Product" means the Services Consultant delivers or is required to deliver to Owner under this Contract. Work Product includes every invention, discovery, work of authorship, trade secret or other tangible or intangible item and all intellectual property rights therein, and all copies of plans, specifications, reports, and other materials, whether completed, partially completed or in draft form.

4.15.2 Work Product. Except as provided in Sections 4.15.3 and 4.15.4, all Work Product created by Consultant pursuant to this Contract, including derivative works and compilations, and whether or not such Work Product is considered a "work made for hire" or an employment to invent, shall be the exclusive property of Owner. Owner and Consultant agree that such original works of authorship are "work made for hire" of which Owner is the author within the meaning of the United States Copyright Act. To the extent that Owner is not the owner of the intellectual property rights in such Work Product, Consultant hereby irrevocably assigns to Owner any and all of its rights, title, and interest in all original Work Product created pursuant to this Contract, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrine. Upon Owner's reasonable request, Consultant shall execute such further documents and instruments necessary to fully vest such rights in Owner. Consultant forever waives any and all rights relating to original Work Product created pursuant to this Contract, including without limitation, any and all rights arising under 17 USC §106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications.

4.15.3 Consultant Intellectual Property. In the event that Consultant Intellectual Property is necessary for the use of any Work Product, Consultant hereby grants to Owner an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use Consultant Intellectual Property, including the right of Owner to authorize contractors, consultants and others to use Consultant Intellectual Property, for the purposes described in this Contract.

4.15.4 Third Party Intellectual Property. In the event that Third Party Intellectual Property is necessary for the use of any Work Product, Consultant shall secure on Owner's behalf and in the name of Owner, an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use the Third-Party Intellectual Property, including the right of Owner to authorize contractors, consultants and others to use the Third Party Intellectual Property, for the purposes described in this Contract.

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4.15.5 Consultant Intellectual Property-Derivative Work. In the event that Work Product created by Consultant under this Contract is a derivative work based on Consultant Intellectual Property or is a compilation that includes Consultant Intellectual Property, Consultant hereby grants to Owner an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use the pre-existing elements of Consultant Intellectual Property employed in the Work Product, including the right of Owner to authorize contractors, consultants and others to use the pre-existing elements of Consultant Intellectual Property employed in a Work Product, for the purposes described in this Contract.

4.15.6 Third Party Intellectual Property-Derivative Work. In the event that Work Product created by Consultant under this Contract is a derivative work based on Third Party Intellectual Property, or is a compilation that includes Third Party Intellectual Property, Consultant shall secure on Owner's behalf and in the name of Owner an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use the pre-existing elements of the Third Party Intellectual Property employed in a Contract Work Product, including the right to authorize contractors, consultants and others to use the pre-existing elements of the Third Party Intellectual Property employed in a Contract Work Product, for the purposes described in this Contract.

4.15.7 Limited Owner Indemnity. To the extent permitted by the Oregon Constitution, Article XI, Section 7, and by the Oregon Tort Claims Act, ORS 30.260 through 30.397, Consultant shall be indemnified and held harmless by Owner from liability arising out of re-use or alteration of the Work Product by Owner which was not specifically contemplated and agreed to by the Parties in this Contract or under separate contract.

4.15.8 Consultant Use of Work Product. Consultant may refer to the Work Product in its brochures or other literature that Consultant utilizes for advertising purposes and, unless otherwise specified, Consultant may use standard line drawings, specifications, and calculations on other, unrelated projects.

4.15.9 Confidential Information. Consultant acknowledges that it or its employees, Sub-consultants, subcontractors or agents may, in the course of performing their responsibilities under this Contract, be exposed to or acquire information that is the confidential information of Owner or Owner's clients. Any and all information provided by Owner and marked confidential, or identified as confidential in a separate writing, that becomes available to Consultant or its employees, Sub-consultants, subcontractors or agents in the performance of this Contract shall be deemed to be confidential information of Owner ("Confidential Information"). Any reports or other documents or items, including software, that result from Consultant's use of the Confidential Information and any Work Product that Owner designates as confidential are deemed Confidential Information. Confidential Information shall be deemed not to include information that: (a) is or becomes (other than by disclosure by Consultant) publicly known; (b) is furnished by Owner to others without restrictions similar to those imposed by this Contract; (c) is rightfully in Consultant's possession without the obligation of nondisclosure prior to the time of its disclosure under this Contract; (d) is obtained from a source other than Owner without the obligation of confidentiality; (e) is disclosed with the written consent of Owner; or (f) is independently developed by employees or agents of Consultant who can be shown to have had no access to the Confidential Information.

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4.15.10 Non-Disclosure. Consultant agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Consultant uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to Owner under this Contract, and to advise each of its employees, Sub-consultants, subcontractors and agents of their obligations to keep Confidential Information confidential. Consultant shall use its best efforts to assist Owner in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the generality of the foregoing, Consultant shall advise Owner immediately in the event Consultant learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Contract and Consultant will at its expense cooperate with Owner in seeking injunctive or other equitable relief in the name of Owner or Consultant against any such person. Consultant agrees that, except as directed by Owner, Consultant will not at any time during or after the term of this Contract disclose, directly or indirectly, any Confidential Information to any person, except in accordance with this Contract, and that upon termination of this Contract or at Owner's request, Consultant will turn over to Owner all documents, papers, and other matter in Consultant's possession that embody Confidential Information.

4.15.11 Injunctive Relief. Consultant acknowledges that breach of this Section 4.15, including disclosure of any Confidential Information, will give rise to irreparable injury to Owner that is inadequately compensable in damages. Accordingly, Owner may seek and obtain injunctive relief against the breach or threatened breach of this Section 4.15, in addition to any other legal remedies that may be available. Consultant acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interests of Owner and are reasonable in scope and content.

4.15.12 Publicity. Consultant agrees that news releases and other publicity relating to the subject of this Contract will be made only with the prior written consent of Owner.

4.15.13 Security. Consultant shall comply with all virus-protection, access control, back-up, password, and other security and other information technology policies of Owner when using, having access to, or creating systems for any of Owner's computers, data, systems, personnel, or other information resources.

4.16 ***Termination***.

4.16.1 Parties Right to Terminate by Agreement. This Contract may be terminated at any time, in whole or in part, by written mutual consent of the Parties.

4.16.2 Owner's Right to Terminate for Convenience. Owner may, at its sole discretion, terminate this Contract, in whole or in part, by written notice to Consultant specifying the termination date of the Contract.

4.16.3 Owner's Right to Terminate for Cause. Owner may terminate this Contract immediately, in whole or in part, upon written notice to Consultant, or such later date as Owner may establish in such notice, upon the occurrence of any of the following events:

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4.16.3.1 In the event the Board of Commissioners of the COUNTY, in the exercise of its reasonable discretion, reduces, changes, eliminates, or otherwise modifies the funding for any of the services identified, the Consultant agrees to abide by any such decision including termination of service;

4.16.3.2 Federal, state or local laws, regulations or guidelines are modified or interpreted in such a way that either the Services under this Contract are prohibited or Owner is prohibited from paying for such Services from the planned funding source;

4.16.3.3 Consultant no longer holds all licenses or certificates that are required to perform the Services; or

4.16.3.4 Consultant fails to provide Services within the times specified or allowed under this Contract; fails to perform any of the provisions of this Contract; or so fails to perform the Services as to endanger performance of this Contract in accordance with its terms, and after receipt of written notice from Owner, does not correct such failures within the time that Owner specifies (which shall not be less than 10 calendar days, except in the case of emergency).

4.16.4 Cessation of Services. Upon receiving a notice of termination, and except as otherwise directed in writing by Owner, Consultant shall immediately cease all activities related to the Services or the Project.

4.16.5 Consultant's Right to Terminate for Cause.

4.16.5.1 Consultant may terminate this Contract if Owner fails to pay Consultant pursuant to this Contract, provided that Owner has failed to make such payment to Consultant within fifteen (15) calendar days after receiving written notice from Consultant of such failure.

4.16.5.2 Consultant may terminate this Contract, for reasons other than non-payment, if Owner commits any material breach or default of any covenant, warranty, obligation or agreement under this Contract, fails to perform under the Contract within the time specified, or so fails to perform as to endanger Consultant's performance under this Contract, and such breach, default or failure is not cured within thirty (30) calendar days after delivery of Consultant's notice, or such longer period as Consultant may specify in such notice.

4.16.6 Delivery of Work Product/Retained Remedies of Owner. As directed by Owner, Consultant shall, upon termination, promptly deliver to Owner all documents, information, works in progress and other property that are deliverables or would be deliverables if the Contract had been completed. By Consultant's signature on this Contract, Consultant allows Owner to use Work Product and other property for Owner's intended use. The rights and remedies of Owner provided in this Section 4.16 are not exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

4.16.7 Payment upon Termination.

4.16.7.1 In the event of termination pursuant to Sections 4.16.1, 4.16.2, 4.16.3.1, 4.16.3.2 or 4.16.5, Consultant's sole remedy shall be a claim for the sum designated for accomplishing

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the Services multiplied by the percentage of Services completed and accepted by Owner plus Consultant's reasonable Contract close-out costs, less previous amounts paid and any claim(s) which Owner has against Consultant, except in the event of a termination under Section 4.16.3.1, where no payment will be due and payable for Services performed or costs incurred after the last day of the current biennium, consistent with Section 4.3. Within thirty (30) days after termination, Consultant shall submit an itemized invoice for all un-reimbursed Services completed before termination and all Contract close-out costs actually incurred by Consultant. Owner shall not be obligated to pay for any such costs invoiced to and received by Owner later than thirty (30) days after termination. If previous amounts paid to Consultant exceed the amount due to Consultant under this subsection, Consultant shall promptly refund any excess amount upon demand.

4.16.7.2 In the event of termination pursuant to Sections 4.16.3.3 or 4.16.3.4, Owner shall have any remedy available to it in law or equity. Such remedies may be pursued separately, collectively or in any order whatsoever. If it is determined for any reason that Consultant was not in default under Sections 4.16.3.3 or 4.16.3.4, the rights and obligations of the Parties shall be the same as if the Contract was terminated pursuant to Section 4.16.2.

4.17 ***Foreign Contractor***. If Consultant is not domiciled in or registered to do business in the State of Oregon as of the Effective Date, Consultant shall promptly provide to the Oregon Department of Revenue and the Secretary of State's Corporation Division all information required by those agencies relative to this Contract. Consultant shall demonstrate its legal capacity to perform the Services under this Contract in the State of Oregon prior to executing this Contract.

4.18 ***Notice***. Except as otherwise expressly provided in this Contract, any notices to be given hereunder shall be given in writing by personal delivery, facsimile, or mail, postage prepaid, to Consultant or Owner at the address or number set forth on Exhibit A, or to such other address or number as either party may provide pursuant to this "Notice" section. Any notice delivered by mail shall be deemed to be given five (5) calendar days after the date of mailing. Any notice delivered by facsimile shall be deemed to be given when the transmitting machine generates a receipt of the transmission. To be effective against Owner, any facsimile communication or notice must be confirmed by telephone notice to Owner's Representative for the Project as indicated in Exhibit A and shall not be deemed to be given until such confirmation is completed. Any notice by personal delivery shall be deemed to be given when actually delivered. Regular, day-to-day communications between the Parties may be transmitted through one of the methods set forth above, in person, by telephone, by e-mail, or by other similar electronic transmission.

4.19 ***Media Contacts; Confidentiality.*** Consultant shall provide no news release, press release, or any other statement to a member of the news media regarding this Project, without Owner's prior written authorization.

4.20 ***Conflict of Interest.*** Except with Owner's prior written consent, Consultant shall not engage in any activity, or accept any employment, interest or contribution that would, or would reasonably appear to, compromise Consultant's professional judgment with respect to this Project, including, without limitation, concurrent employment on any project in direct competition with the Project.

Exhibits A through H are attached.

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MARION COUNTY
STANDARD PROFESSIONAL SERVICES CONTRACT

EXHIBIT A - STATEMENT OF WORK

Owner and Consultant agree that the following Services shall be provided by Consultant. Additional services may be added by amendment.

PROJECT DESCRIPTION: The Project will construct new sanitary sewer infrastructure in the North Santiam River Canyon of Marion and Linn Counties in Oregon. Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant to serve the cities of Mill City and Gates, including improvements to existing Mill City sewer collection infrastructure, construction of a new sewer main to serve Gates and construction of new sanitary sewer collection infrastructure within Gates. Project will construct the proposed sanitary sewer infrastructure pending the availability of adequate construction funding.

The Project will design, permit, and acquire property for the construction of a new sanitary sewer treatment plant and sewer collection systems to serve the cities of Detroit and Idanha. Project will construct the proposed infrastructure pending adequate availability of construction funding.

The Project will also design, permit, acquire property and construct commercial-scale community septic systems to serve the commercial core of Detroit to support economic recovery of the area.

Tasks within this Statement of Services are organized as follows:

100-Level Tasks – Phase 1 Services – Overall project management, administration and coordination of Consultant Services, meetings, communication, public engagement, general engineering and related Services.
200-Level Tasks – Phase 2 Services – Mill City / Gates Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
300-Level Tasks – Phase 3 Services – Detroit / Idanha Wastewater Sewer System – Engineering studies, design, permitting, property acquisition, bid support and construction oversight.
400-Level Tasks – Phase 4 Services – Detroit Interim Commercial Septic Systems – Engineering, design, permitting, property acquisition, stakeholder engagement, bid support and construction oversight.

Consultant may provide Services for some or all Project components according to the tasks described herein and as later amended. Consultant's role and the Services provided by Consultant for each Project phase may depend on the availability of Project funding.

PROJECT PHILOSOPHY: Consultant shall perform professional services for the Project to obtain the greatest long-term value for Marion County, and to result in the prudent expenditure of public funds within the constraints of the Project program, context, and budget. In pursuing these goals, Consultant, with Owner's assistance, shall:

a. Perform Services that are appropriate for the context of the Project and the nature of its function, both present and future.
b. Avoid aesthetic effects in the Project design that are disproportionate when compared to the additional benefit to the Project as a whole.
c. Help manage the Project so design is completed on time and within budget.

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d. Strive to reduce the construction cost of the Project while keeping life-cycle costs affordable.
e. At design progress meetings, apprise Owner concerning the economic impact of design decisions.
f. Document Project requirements and include requirements in the Construction Documents. Respond to Owner comments on Project requirement location.

Representatives of the Parties for this Contract and the Project are:

Consultant: **Peter Olsen, PE, Project Manager** Telephone: **503.364.2002**
Owner: **Brian Nicholas, PE, PW Director** Telephone: **503.930.8502**

The Services Consultant shall perform for each phase of the Project are described below:

Task 100: Project Management

Consultant Responsibilities:

100.1 General Project Administration. General project administration services include contract administration, monthly invoicing, maintaining project schedule, and internal project administration.
100.2 Project Coordination. Consultant may be requested to prepare progress reports, or attend or lead project related coordination meetings with the County, North Santiam Sewer Authority, or other state agencies.
100.3 Presentations or attendance to North Santiam Sewer Board Meetings. From time to time, Consultant will attend, by invite, the board meetings for the North Santiam Sewer Board. Consultant may present project updates to the board. Consultant will prepare presentation materials and/or handouts as directed.

Owner Responsibilities:
- Administer project funding.

Assumptions:
- Submit documents electronically, unless directed otherwise.
- Assumes a 6-month duration for general project administration.
- Task 1 includes up to 212 hours of project management services.

Deliverables:
- Monthly invoices – electronic copy
- Meeting agenda and minutes – electronic copy

Task 101: County Board of Commissioners Support Services

Consultant Responsibilities:

101.1. Presentations to County Commissioners. Consultant will present to the County Commissioners at a regularly scheduled Board of Commissioners Meeting on up to two

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occasions. Consultant will prepare presentation materials and/or handouts. The two presentations will tentatively occur in the months of November and December and will have the following purpose:

Presentation #1 – Within one month after effective date of contract. Summarize the current status of Mill City's interim sewer improvement project and this Project. Develop an affirmative plan with Consultant's recommendations on how both projects can be advanced as efficiently and economically as possible to serve both the City's and this Project's needs. Summarize next steps and projected schedule.

Presentation #2 – Within two months after effective date of contract. Follow up visit, if necessary, to answer additional questions or present on additional items requested by County/County Commissioners.

Consultant will re-engage with sub-consultants (i.e. GSI, SWCA) and agencies (i.e. Oregon DEQ, US Forest Service) to appropriately summarize current status and update the plan for the three projects for events and information that may be new since the master plan was completed.

Owner Responsibilities:

- Review deliverables in a reasonable time and provide feedback as needed to the Consultant.
- Attend and participate in board meetings.

Assumptions:

- Presentations are in-person at the County offices.

Deliverables:

- Draft presentation material – electronic copy
- Final presentation material – electronic copy

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EXHIBIT B - CONSULTANT COMPENSATION

B.1 BASIS OF COMPENSATION

B.1.01 Owner shall compensate Consultant for the performance of Services set forth in Exhibit A, as follows:

Consultant shall perform the Services for: a maximum, not-to-exceed price of $60,960.

Although individual task budgets may be exceeded, the total authorized budget amount shall not be exceeded without written authorization from Owner. For time and materials tasks, compensation will be according to Keller Associates' standard billing rates updated annually in January.

TASK	Cost	Type
Task 1 – Project Management	$ 35,520	T&M
Task 2 – County Board of Commissioners Support Services	$ 25,440	LS
Total	**$ 60,960**	

T&M: Time and Materials, LS: Lump Sum

B.1.02 Payments for Services and Reimbursable Expenses shall be made monthly, following Owner's review and approval of detailed invoices submitted by Consultant and acceptance of the Services or approval of Reimbursable Expenses by Owner. Owner shall make payments only after Owner's receipt and approval of (i) Consultant's detailed monthly invoice as described in Section B.1.05, and (ii) all reports, designs, certificates, and documents covered by the invoice. Payments are subject to the provisions of ORS 293.462.

B.1.03 Reimbursable Expenses, as described in Section B.2, are defined as the direct costs expended by Consultant, Consultant's employees and Sub-consultants for performance of Services rendered to complete the Project. The estimated dollar amounts for each of the identified Reimbursable Expense items are as follows:

1	Travel Related Expenses	
2	General Reimbursable Expenses	
	Total	

It is understood that the actual total amount payable for each individual Reimbursable Expense item may be more or less than the estimate above, however, the total amount of all Reimbursable Expenses shall not exceed the maximum amount stated in Section B.1.01 for Reimbursable Expenses without a Contract amendment. Payments for Reimbursable Expenses shall be identified and tracked on monthly invoices according to the expense items listed above.

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B.1.04 Consultant shall not submit invoices for, and Owner will not pay, any amount in excess of the maximum, not to exceed amount payable under this Contract set forth in Section B.1.01. If this amount is increased by Contract amendment, the amendment must be effective before Consultant performs Services subject to the amendment. Consultant shall notify Owner's Representative identified in this Contract in writing of the expiration of the Contract, thirty (30) days prior to such expiration. No payment will be made for any Services performed prior to the Effective Date or after the expiration date of the Contract.

B.1.05 Consultant shall submit monthly invoices for Services performed. To be processed for payment by Owner, the invoices shall include the following basic information:

a. The correct name of Owner's authorized representative

b. Invoice date

c. Date range during which the Services being invoiced for were provided

d. The last invoice submitted on the Project must be clearly labeled "Final Invoice"

e. Original Contract total, not to exceed amount broken out by: Basic Services, Supplemental Services released to date by line item, and Reimbursable Expenses separated by two categories of Travel Expenses and General Reimbursables

f. Statement of changes to the original total, not to exceed amount by amendment(s) and broken out in the same way as in item F, showing the revised Contract amounts

g. Paid to date amounts showing the amounts submitted for prior to the current invoice (regardless of payment status) and broken out the same way as in item F

h. Amounts being invoiced for in the current invoice and broken out the same way as in item F, with a roll up of a "Total Amount Billed For This Invoice" line item amount

i. Balances Remaining after receipt of payment for the current invoice broken out the same way as in item F

Consultant shall describe all Services performed with particularity and by whom it was performed and shall itemize and explain all expenses for which reimbursement is claimed. Reimbursable Expenses shall be broken out into to line-item categories, 1) Travel Expenses and 2) General Reimbursable Expenses. Invoices for Basic Services under a specific Phase shall be for completed Basic Services only and shall indicate the percentage of the total Basic Services for that Phase that the amount invoiced represents. Invoice amounts for authorized fixed price Supplemental Services shall indicate the Supplemental Service, its contract reference number, the total amount of the fixed price Supplemental Service, and the total percentage and related dollar amount of the fixed price Supplemental Service completed by the end of the current invoice period, less the total dollar amount previously billed for, with the balance representing the total amount being currently billed for. Invoices for authorized Supplemental Services based on a not to exceed amount shall set forth the number of hours worked by Consultant's personnel on the identified Service, describe the Services performed by each such personnel in detail on a daily basis, and set forth the rate of compensation for each of such personnel as set forth in EXHIBIT F.

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Consultant shall send invoices to Owner's Representative identified in this Contract, using the following address:

Marion County Public Works Department
Attn: Brian Nicholas
5155 Silverton Road NE, Building 1
Salem, OR 97305

Consultant shall not indicate or invoice for any past due amounts in the current invoice. All such notifications of a past due amount must be handled by a separate Statement of Account.

Owner shall have the right to reject any invoice which does not have the proper information as required by this section without incurring penalty liabilities for late payment.

B.1.06 Owner and Consultant agree in accordance with the terms and conditions of this Contract that:

a. If the scope of the Project or the Services are changed materially, Consultant shall request in writing an amendment to the Contract before additional Services are provided and before compensation is adjusted. All legally required approvals must be obtained for any Contract amendment before the amendment is effective and before Services may be performed or payment made under the amendment.

b. Consultant's fee for preparing routine change orders adding or deleting Services from the Project shall be included in the maximum not-to-exceed amount for Basic Services stated in Section B.1.03.

c. Upon Owner's request and without additional compensation, Consultant shall make such revisions to completed Contract Documents as are necessary to correct errors or omissions appearing therein, in accordance with the standard of care described in Section 2.1.1 of Consultant's Responsibilities; Representations and Warranties.

B.2 REIMBURSABLE EXPENSES

B.2.01 Reimbursable Expenses are in addition to compensation for Services and shall not exceed the maximum amount stated in Section B.1.05 without prior authorization by Owner. This amount is separated into two categories, Travel Expenses and General Reimbursable Expenses, as outlined below. Reimbursable Expenses include actual, allowable and reasonable expenditures made by Consultant and Consultant's employees in performing the Services required in Exhibit A. Reimbursable Expenses must be evidenced by copies of actual third-party invoices or receipts delivered to Owner to qualify for reimbursement and are limited to the types of actual expenses listed below.

a. General Reimbursable Expenses consist of:

i. Long distance communications.

ii. Reproductions, postage and handling of drawings and specifications and other documents, excluding reproductions of drawings, specifications and other documents used by Consultant and Consultant's subconsultants.

iii. Data processing and photographic production techniques when used in connection with Supplemental Services.

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iv. Third-party models and mockups requested by Owner.

v. The printing of master or reproducible sets of plans and project manuals including specifications.

vi. Plan check fees.

b. Travel Expenses:

All travel shall be allowed only when the travel is essential to the normal discharge of Consultant's responsibilities under the Contract. All travel shall be conducted in the most efficient and cost-effective manner resulting in the best value to the Owner. The travel must comply with all the requirements set forth in this section and must be for official Marion County business only. Personal expenses shall not be authorized at any time. All expenses are included in the total maximum Contract amount stated in Section B.1.01.

Current approved rates are as follows:

i. Mileage. Mileage for travel in a private automobile, while Consultant is acting within the course and scope of his/her duties under this Contract and driving over the most direct and usually traveled route, will be reimbursed at a rate of 62.5 cents per mile. To qualify for mileage reimbursement, Consultant must hold a valid, current driver's license for the class of vehicle to be driven and carry personal automobile liability insurance in amounts not less than those required by (i) the Oregon Financial Responsibility Law (ORS 806.060) or (ii) the jurisdiction in which the vehicle is being operated, whichever is greater. No mileage reimbursement will be paid for the use of motorcycles or mopeds.

ii. Meals. Receipts are required for reimbursement.

Owner will not pay any mark up over actual allowable reimbursement costs. Any costs associated with recordkeeping or labor to create reproductions of receipts is considered indirect overhead and therefore part of Consultant’s Professional Hourly Rates.

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EXHIBIT C - INSURANCE PROVISIONS

A. REQUIRED INSURANCE. Contractor shall obtain at Contractor's expense the insurance specified in this section prior to performing under this Contract and shall maintain it in full force and at its own expense throughout the duration of this Contract and all warranty periods. Contractor shall obtain the following insurance from insurance companies or entities that are authorized to transact the business of insurance and issue coverage in Oregon and that are acceptable to County:

i. WORKERS COMPENSATION. All employers, including Contractor, that employ subject workers, as defined in ORS 656.027, shall comply with ORS 656.017 and shall provide workers' compensation insurance coverage for those workers, unless they meet the requirement for an exemption under ORS 656.126(2). Contractor shall require and ensure that each of its subcontractors complies with these requirements.

ii. PROFESSIONAL LIABILITY. Covering any damages caused by an error, omission or any negligent acts related to the services to be provided under this Contract. Contractor shall provide proof of insurance of not less than the following amounts as determined by the County:

☒ **Required by County** ☐ **Not required by County.**

- ☒ $1,000,000 Per occurrence limit for any single claimant; and
- ☒ $2,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Risk Manager

iii. CYBER LIABILITY. Covering network security, breach of data, and coverage for regulatory fines and fees imposed against County due to failures in products and services provided under this Contract. Cyber Liability coverage must include errors, omissions, negligent acts, denial of service, media liability (including software copyright), dishonesty, fraudulent or criminal acts by a person or persons whether identified or not, intellectual property infringement, computer system attacks, unauthorized access and use of computer system, regulatory actions, and contractual liability.

☐ **Required by County** ☒ **Not required by County.**

- ☐ $2,000,000 Per occurrence limit for any single claimant; and
- ☐ $5,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Information Technology Director and Risk Manager

iv. COMMERCIAL GENERAL LIABILITY. Covering bodily injury, death, and property damage in a form and with coverages that are satisfactory to the County. This insurance shall include personal injury liability, products and completed operations. Coverage shall be written on an occurrence basis. Contractor shall provide proof of insurance of not less than the following amounts as determined by the County:

☒ **Required by County** ☐ **Not required by County.**

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Minimum Limits:

- ☒ $1,000,000 Per occurrence limit for any single claimant; and
- ☒ $2,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Risk Manager
- ☐ $500,000 Per occurrence limit for any single claimant
- ☐ $1,000,000 Per occurrence limit for multiple claimant

v. AUTOMOBILE LIABILITY INSURANCE. Covering all owned, non-owned, or hired vehicles. This coverage may be written in combination with the Commercial General Liability Insurance (with separate limits for "Commercial General Liability" and "Automobile Liability"). Contractor shall provide proof of insurance of not less than the following amounts as determined by the County:

☒ **Required by County** ☐ **Not required by County.**

Minimum Limits:

- ☐ Oregon Financial Responsibility Law, ORS 806.060 ($25,000 property damage/$50,000 bodily injury $5,000 personal injury).
- ☒ $500,000 Per occurrence limit for any single claimant; and
- ☒ $1,000,000 Per occurrence limit for multiple claimants
- ☐ Exclusion Approved by Risk Manager

B. ADDITIONAL INSURED. The Commercial General Liability insurance required under this Contract shall include Marion County, its officers, employees, and agents as Additional Insureds but only with respect to Contractor's activities to be performed under this Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

C. NOTICE OF CANCELLATION OR CHANGE. There shall be no cancellation, material change, potential exhaustion of aggregate limits or non-renewal of insurance coverage(s) without 30 days written notice from this Contractor or its insurer(s) to County. Any failure to comply with the reporting provisions of this clause shall constitute a material breach of Contract and shall be grounds for immediate termination of this Contract by County.

D. CERTIFICATE(S) OF INSURANCE. Contractor shall provide to County Certificate(s) of Insurance for all required insurance before delivering any Goods and performing any Services required under this Contract. The Certificate(s) must specify all entities and individuals who are endorsed on the policy as Additional Insured (or Loss Payees). Contractor shall pay for all deductibles, self-insured retention, and self-insurance, if any.

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EXHIBIT D - SPECIAL CONTRACT PROVISIONS

D.1 RESPONSIBILITIES OF OWNER

D.1.01 Owner's Project budget shall include contingencies for design, bidding, changes in the Work during construction, and other costs described below.

D.1.02 Owner, at Owner’s sole option, may retain an inspector to inspect the Project in order to protect Owner's interests. The costs of the inspector are to be paid by Owner and the inspector shall serve at the pleasure of Owner. When retained by Owner, the inspector’s duties are not to be interpreted as conflicting with the duties of Consultant or relieving Consultant of any responsibility or duty incurred under this Contract, nor may the inspector act as Consultant's agent.

D.1.03 Owner shall be responsible for payment of all plan check fees, review fees, permit fees, taxes, development charges, or any other costs related to obtaining governing bodies' approval for construction of the Project.

D.2 PROJECT RESPONSIBILITIES

D.2.01 Consultant shall prepare a schedule of its activities through all phases of the Project. Consultant shall schedule and prepare agendas for all meetings which involve Consultant's Services. Consultant shall chair such meetings and shall record and distribute minutes, in a format and level of detail acceptable to Owner, of decisions and actions to attendees.

D.2.02 Consultant shall confirm firsthand, through site investigations of the observable circumstances and existing conditions, the critical issues that may impact design criteria and shall not rely solely on furnished As Built documents. Consultant shall practice the standard of care in use of the combination of As Built drawings and field data collection which, if used solely for the design process without confirmation, create conflicts on site.

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EXHIBIT E - CRITICAL DATE SCHEDULE

Task 101: County Board of Commissioners Support Services	2 Months

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EXHIBIT F - RATE SCHEDULE

	Maximum Hourly Rate
Project Engineer I	$120
Project Engineer II	$160
Project Engineer III	$215
Project Manager I/II	$160
Project Manager III	$215
Structural Engineer I/II	$160
Structural Engineer III	$210
Chief Engineer / Chief Structural Engineer	$250
CAD I/II	$120
CAD III	$140
CAD Manager	$175
Electrical Controls I/II	$160
Electrical Controls III	$200
Principal	$250
Surveyor I/II	$140
Professional Surveyor PLS	$175
Field Representative	$135
Engineering Student	$70
Administration I	$80
Administration II	$100

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EXHIBIT G - ASSUMPTIONS AND EXCLUSIONS

- Consultant shall be entitled to rely on the accuracy and completeness of the information provided by Owner, Owner's consultants and Contractors, information from public records, and information ordinarily or customarily furnished by others, including, but not limited to specialty Contractors, manufacturers, suppliers, and publishers of technical standards. This assumption applies to this task and subsequent tasks.
- Planning criteria will not be changed once established. Changing planning criteria may result in rework which can be completed as an additional service.
- Consultant's opinions of probable cost represent Consultant's judgment as an experienced and qualified design professional. Since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Owner's and other contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable cost prepared by the Consultant.

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EXHIBIT H: APPENDIX II TO PART 200—CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of $10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a

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standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended - Contracts and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689) - A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) - Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(J) See §200.322 Domestic preference for procurements.

(K) Audit Requirements of 2 CFR §200.5XX (Subpart F)

i. Subrecipient must comply, and require any subcontractor to comply, with applicable audit requirements and responsibilities set forth in this Contract and applicable state or federal law.

ii. If Subrecipient expends federal awards in excess of $750,000 in a fiscal year, Subrecipient is subject to audit conducted in accordance with the provisions of 2 CFR part 200, subpart F. Copies of all audits must be submitted to County within 30 days of completion.

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iii. Subrecipient must save, protect and hold harmless County from the cost of any audits or special investigations performed by the Secretary of State with respect to the funds expended under this Contract. Subrecipient acknowledges and agrees that any audit costs incurred by Subrecipient as a result of allegations of fraud, waste or abuse are ineligible for reimbursement under this or any other agreement between Subrecipient and County.

(L) System for Award Management. Subrecipient must comply with applicable requirements regarding the System for Award Management (SAM), currently accessible at https://www.sam.gov. This includes applicable requirements regarding registration with SAM, as well as maintaining current information in SAM. Subrecipient must also comply with applicable restrictions on subawards ("subgrants") to first tier subcontractors (first-tier "Subcontractors"), including restrictions on subawards to entities that do not acquire and provide (to the County) the unique entity identifier required for SAM registration.

(M) Whistleblower Protection Act. Subrecipient must comply and ensure the compliance by subcontractors, with 41U.S.C. 4712, Program for Enhancement of Employee Whistleblower Protection. Subrecipient must inform subcontractors, contractors and employees, in writing, in the predominant language of the workforce, of the employee whistleblower rights and protections under 41 USC § 4712.

(N) See § 200.216 Prohibition on certain telecommunications and video surveillance services or equipment.

(O) See § 200.323 Procurement of recovered materials.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75888, Dec. 19, 2014; 85 FR 49577, Aug. 13,2020]