

This is **EXHIBIT A**, Engineer's Services, referred to in and part of the Agreement between Owner and Engineer for Study and Report Professional Services dated October 1, 2020.

## **Engineer's Services**

---

Article 1 of the Agreement is supplemented to include the following agreement of the parties:

Engineer shall provide Basic Services as set forth below.

### **PART 1 – BASIC SERVICES**

#### *A1.01 Study and Report Services*

A. Engineer shall:

1. Consult with Owner to define and clarify Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations, and identify available data, information, reports, facilities plans, and site evaluations.
  - a. If Owner has already identified one or more potential solutions to meet its Project requirements, then proceed with the study and evaluation of such potential solutions: See Scope of Work.
  - b. If Owner has not identified specific potential solutions for study and evaluation, then assist Owner in determining whether Owner's requirements, and available data, reports, plans, and evaluations, point to a single potential solution for Engineer's study and evaluation, or are such that it will be necessary for Engineer to identify, study, and evaluate multiple potential solutions.
  - c. If it is necessary for Engineer to identify, study, and evaluate multiple potential solutions, then identify three alternative solutions potentially available to Owner, unless Owner and Engineer mutually agree that some other specific number of alternatives should be identified, studied, and evaluated.
2. Identify potential solution(s) to meet Owner's Project requirements, as needed.
3. Study and evaluate the potential solution(s) to meet Owner's Project requirements.
4. Visit the Site(s) to review existing conditions and facilities, unless Owner and Engineer agree that such visits are not necessary or applicable to meeting the Study and Report objectives.
5. Advise Owner of any need for Owner to obtain, furnish, or otherwise make available to Engineer additional Project-related data and information, for Engineer's use in the study and evaluation of potential solution(s) to Owner's Project requirements, and preparation of a related report.

6. After consultation with Owner, recommend to Owner those solution(s) which in Engineer's judgment meet Owner's requirements for the Project.
7. Advise Owner of any need for Owner to provide data or services of the types described in Article 2 of the Agreement which are not part of Engineer's Basic Services.
8. Identify and analyze relevant requirements of governmental authorities having jurisdiction to review or approve the Report to be prepared by Engineer, or having jurisdiction over the Project; consult with such governmental authorities as necessary.
9. Review any environmental assessments and impact statements furnished by Owner, and analyze the effect of any such environmental documents (including any mitigation measures identified in the documents) on the Project, including the contemplated design and construction.
10. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and Engineer's recommended solution(s). For each recommended solution Engineer will provide the following, which will be separately itemized: opinion of probable Construction Cost; proposed allowances for contingencies; the estimated total costs of design, professional, and related services; and, on the basis of information furnished by Owner, a tabulation of summary of allowances for other items and services included within the definition of Total Project Costs. The Report mentioned in Article 1.01.A.10 of Exhibit A to the Agreement is the Preliminary Engineering Report as defined in RUS Bulletin 1780-2. This document must meet customary professional standards as required by 7 CFR 1780.55.
11. In the Report, advise Owner of any limitations on the use or applicability of the Report.
12. When mutually agreed, assist Owner in evaluating the possible use of building information modeling; civil integrated management; geotechnical baselining of subsurface site conditions; innovative design, contracting, or procurement strategies; or other strategies, technologies, or techniques for assisting in the design, construction, and operation of Owner's facilities. The subject matter of this paragraph is referred to as "Project Strategies, Technologies, and Techniques."
13. If requested to do so by Owner, assist Owner in identifying opportunities for enhancing the sustainability of the Project.
14. Use ASCE 38, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data" as a means to advise the Owner on a recommended scope of work and procedure for the identification and mapping of existing utilities.
15. Develop a scope of work and survey limits for any topographic and other surveys necessary for design.
16. Perform or provide the following other Study and Report Services, if requested by Owner: Provide an Environmental Report as defined under 7 CFR 1970. For project that meet the classification of 7 CFR 1970.54 (Categorical Exclusion with an Environmental Report) or projects that meet the classification of 7 CFR 1970.101 (Environmental Assessment) or other Agency approved format, must be concurred in by the Agency.

---

**Exhibit A – Engineer's Services**

**EJCDC® E-525, Agreement Between Owner and Engineer for Study and Report Professional Services.  
Copyright © 2015 National Society of Professional Engineers, American Council of Engineering Companies,  
and American Society of Civil Engineers. All rights reserved.**

A1.02 *Times for Rendering Services*

- A. Furnish [ ] review copies and one PDF copy of the Report and any other Study and Report Services deliverables to Owner on or before December 1, 2020 and review it with Owner. Within sixty calendar days of receipt, Owner shall submit to Engineer any comments regarding the Report and any other deliverables.
- B. Revise the Report and any other Study and Report Phase deliverables in response to Owner's comments, as appropriate, and furnish [ ] copies and one PDF copy of the revised Report and any other Study and Report Services deliverables to the Owner within [ ] calendar days of receipt of Owner's comments.
- C. Engineer's Study and Report Services will be considered complete on the date when Engineer has delivered to Owner the revised Report and any other Study and Report Phase deliverables and accepted by Owner and concurrence by Agency.

This is **EXHIBIT B**, Scope of Work, referred to in and part of the Agreement between Owner and Engineer for Study and Report Professional Services dated October 1, 2020.

## Scope of Work

---

Subject to the terms and conditions contained in this Agreement, in addition to any other Services provided under this Agreement, Engineer shall provide the following services for and on behalf of Owner:

### GENERAL

The general scope of the project is to provide engineering services to provide technical assistance with regards to updating the necessary documents to secure a USDA loan for WWTP upgrades and system wide sewer improvement recommendations to be included in the overall project.

**Figure 1- Location of Proposed Project**



### TASK 1 PROJECT MANAGEMENT

#### TASKS 1.1 Project Coordination & Management, Quality Management, Schedule Management and Meetings

**Objective:** Management of the contract for services that include but not limited to monthly billings, phone and email correspondence. Management staff will provide an independent review of the plans and specifications prior to release of the information being presented to the City. This review helps limit exposure of liability for our clients and provides verification that the plans and specifications are consistent with City's current engineering standards.

**Activities:**

- Project Management Plan and Health & Safety Plan
- Kickoff meeting (3 days budgeted by 2 Flagline & 2 KJ staff members with 1.5 days on site). Meeting to include review of existing WWTF, UIC site and available WWTF site.

- Project reporting and monthly invoices

**Deliverables:**

- Monthly invoices, Draft and Final Kick-Off meeting agenda

**Assumptions:**

- Project duration 3 months
- Kickoff meeting will be held at the City of John Day

**Sub-Contractor Coordination**—The Project Manager will coordinate with required sub-consultants for fieldwork, billing, and overall project needs for the duration of the project.

Flagline shall provide the following deliverables as part of this task:

- Monthly billings
- QA/QC review of project deliverables

**TASK 2 ENGINEERING SERVICES**

The following subtasks will be completed in performance of this task:

**TASK 2.1 DATA REVIEW**

**Objective:** Review documents to understand service area, basis of design, siting, process selection and cost estimates.

**Activities:**

- Review of Facility Plan, Preliminary Engineering Report and As-Built drawings for the Wastewater Treatment Facility.
- On-site review of existing collection system and review potential options for re-routing facilities to the proposed WWTP.
- Review of recent I/I issues that may have created excess infiltration into the WW collection system.
- Review collection system mapping.

**Assumptions:**

- Documents to be provided by The City in electronic format that include existing collection system maps, GIS data and pdfs as required to accomplish the task.

## TASK 2.2 ENGINEERING EVALUATION AND DESIGN GRADE SURVEY

**Objective:** Review existing conditions, evaluate ingress/egress options if the treatment plant is moved to a new location and provide a design grade survey capable of making critical decisions with regards to options as they relate to changes in the system dynamics.

**Activities:**

- Review of the selected piping, pumping, and constructability options as it pertains to on-site (WWTP existing and potential future locations) and off-site improvements as requested by the City of John Day. Information will be used to update the City's overall plan for funding through USDA and other agencies within a technical memo submitted to the City in Task 6.
- Detail required ingress/egress to the plant and any additional improvements for secondary access around the site with associated communications and power updates that may need to happen in order to service the new facility.
- Provide design grade survey in order to make specific recommendations as it relates to pumping and influent decisions comparing the existing WWTP to the proposed new location and how that will affect project financial decisions on the grant application. The team will utilize control from a base file created by the Oregon Department of Geology and Mineral Industries from 2017 and supplement that data with specific field survey of manholes and inverts to critical facilities. The survey will also include regional data surrounding the proposed WWTP for purposes of access evaluation and design as needed.

## TASK 3 POPULATION AND FLOW DATA EVALUATION

**Objective:** Justification for projected flows and loads for WWTF basis of design.

**Activities:**

- Review population forecast for growth by Portland State University
- Review City plan for available housing areas and commercial properties
- Review of EcoNorthwest's housing market assessment

**Assumptions:**

- City Gateway plan provided in electronic format
- Housing market assessment provide by City  
Projections based on 20 year period

## TASK 4 PERMITTING AND REGULATORY SUPPORT

**Objective:** The City is seeking funding from the United States Department of Agriculture (USDA). Facility plan and PER must be consistent with funding and regulatory requirements. The City's WPCF UIC permit is also up for renewal. Purpose of task is to understand expectations on 2019 Facility Plan and 2020 Preliminary Engineering Report and provide guidance to the City on permit renewal strategies.

**Activities:**

- Meetings: 2 meetings budgeted for USDA and 1 Meeting budgeted for DEQ (conference call or virtual).
- Effluent Management & Permitting Support: Review of existing Water Pollution Control Facility (WPCF) permit and Underground Injection Control

**Assumptions:**

- Permit application for WPCF UIC permit performed by The City
- City to provide updated groundwater recharge memo

## **TASK 5 ALTERNATIVES ANALYSIS**

**Objective:** Wastewater treatment alternatives evaluation for consistency with regulatory and funding requirements

**Activities:**

- Alternatives Development: Evaluation of 3 process alternatives to include rehabilitation of existing WWTF and 2 packaged mechanical treatment alternatives
- Support on Short Lived Asset Evaluation to include review of condition assessment information and draft recommendations review
- Cost Estimates for 3 alternatives to include Capitalization and Operation & Maintenance

**Assumptions:**

- Cost estimates according to AACE class 5 and include operation and maintenance life cycle cost estimates
- City to provide proposals on MBR systems in electronic format
- Preliminary process design based on Metcalf & Eddy industry design practices
- BioWin process modeling not included
- Cost estimates based on historical project information within the Northwest

## **TASK 6 SUMMARY OF FINDINGS WITH TECHNICAL MEMORANDUM**

**Objective:** Technical memorandum that documents flow projections and wastewater treatment alternatives for consistency with USDA and regulatory agency expectations.

**Deliverables:**

- Technical Memorandum: Recommendations on planning document amendments to include alternatives analysis, life cycle costs, population projections and design flows based on 20 year life cycle that addresses all information required to complete the USDA application and alternatives required for final decisions to be made the City of John Day.

#### Level of Effort Estimate

This estimate of service proposes to complete this work as detailed above on a time and expenses basis summarized on the attached Level of Effort estimate. This “not-to-exceed” amount is based on this scope of work and will not be exceeded without approval and written authorization by the City of John Day.

#### **SCHEDULE FOR TASKS –**

**NTP – Oct 1, 2020**

**Kickoff Meeting with USDA – Week of the 12<sup>th</sup> of October** *(Virtual, date TBD)*

**On Site Meetings and Survey – Week of the 26<sup>th</sup> of October** *(Survey will occur within two weeks of the site visit)*

**Completion of Services for this contract – Feb 28, 2021**



**TOTAL FEE ESTIMATE:**

		Flagline Cost Estimate						
<i>Employee Classification</i>		Principal Engineer	Project Manager II	EIT II	Project Coordinator	Kennedy Jenks		
Hourly Rate		\$225.00	\$165.00	\$116.00	\$96.00			
TASK NUMBER	DESCRIPTION					ITEMIZED EXP MARKUP	SUB COST	TASK TOTAL
<b>1</b>	<b>PROJECT MANAGEMENT</b>							
1.1	Project Setup & Management	2	2		4	\$0	\$1,800	\$2,964.00
1.2	Project Coordination	2	8		2	\$0	\$5,660	\$7,622
1.3	QA/QC	4				\$0	\$4,650	\$5,550
1.4	Kick Off Meeting (in John Day)	24	24			\$1,000	\$14,500	\$24,860
<b>2</b>	<b>ENGINEERING SERVICES</b>							
2.1	Data Review		24	40		\$0	\$6,050	\$14,650
2.2	Engineering Evaluation and Design Survey	6	30	60		\$0	\$14,000	\$27,260
<b>3</b>	<b>POPULATION AND FLOW DATA EVALUATION</b>							
3.1	Update of Population Projection and Flows					\$0	\$5,200	\$5,200
3.2	Review of IGA & Flows from Canyon City					\$0	\$1,480	\$1,480
<b>4</b>	<b>PERMITTING AND REGULATORY SUPPORT</b>							
4.1	Virtual Meetings w/ USDA and DEQ	9	9			\$0	\$3,025	\$6,535
4.2	Effluent Management & Permitting Support					\$0	\$4,800	\$4,800
<b>5</b>	<b>ALTERNATIVES ANALYSIS</b>							
5.1	Development of Alternatives	4	20	40		\$0	\$13,100	\$21,940
5.2	Update of Assets (support only)					\$0	\$4,420	\$4,420
5.3	Cost Estimate		6	16		\$0	\$3,300	\$3,300
<b>6</b>	<b>TECHNICAL MEMORANDUM</b>							
6.1	Technical Memorandum	8	40	20		\$0	\$11,740	\$22,460
	<b>Total Manhours</b>	59	163	176	6	0		
	<b>Total Labor Cost</b>	\$13,275	\$26,895	\$20,416	\$576	\$0	\$9,373	\$9,373
						\$1,000		
	<b>Total Cost</b>	\$13,275	\$26,895	\$20,416	\$576	\$0	\$1,000	<b>\$162,414</b>