SCOPE OF WORK July 2017

Upon approval by the City of John Day, Oregon (Client) to proceed, Anderson Perry & Associates, Inc. (AP), in cooperation with the Client, shall prepare a Wastewater Facilities Plan (WWFP) Update for a 20-year planning period. The Scope of Work for the WWFP Update shall include the following elements:

- 1. A statement of purpose, background, and need for the WWFP Update.
- 2. A review and update of current wastewater flows and loads, as well as the 20-year projection of future population, wastewater flows, and waste loads. Updated design criteria will be developed.
- 3. A review of the evaluation of the existing wastewater treatment system and an update of identified deficiencies based on the review.
- 4. A review and update of the feasibility evaluation of the improvement alternatives presented in the 2010 WWFP and the addition of two new alternatives. These alternatives include year-round wastewater reuse through a hydroponic or similar consumptive use system and a lagoon treatment storage and agricultural irrigation system. Treatment standards and associated operational requirements for each alternative will be identified. Cost estimates will be developed and a cost effectiveness analysis of the alternatives over a 20-year period will be prepared. AP will work with Sustainable Water, who is developing the hydroponics reuse option to grow crops for human consumption. Sustainable Water will prepare the hydroponics reuse system conceptual design, construction cost estimates and operation and maintenance cost estimate including estimated annual revenue from crop sales.
- 5. An evaluation and detailed description of the Client's preferred improvements alternative.
- 6. An updated analysis of financing options and a review of the financing plan for viability for both construction and long-term operation including projected sewer use charges.
- 7. A preliminary environmental analysis, as required by the Oregon Department of Environmental Quality (DEQ), to be included in a WWFP. Note: This Scope of Work does not include preparation of environmental reports for design and construction, funding applications, biological assessments, wetland delineations, cultural resource evaluations, mitigation plans, environmental permits, or other related environmental documents.
- 8. A written draft summary of the results of the updated planning effort. The draft summary will be presented to the Client and applicable funding and regulatory agencies (Oregon Business Development Department Infrastructure Finance Authority [IFA], United States Department of Agriculture Rural Development [RD], DEQ, etc.) for review and comment.
- 9. Based on the Client's, IFA's, RD's, and DEQ's review comments and input, the draft WWFP Update shall be finalized and presented to the Client, IFA, RD, and the DEQ. Ten copies of the final WWFP Update shall be provided to the Client, and one each to IFA, RD, and DEQ.

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WWFP Update exclusion: The WWFP Update will not include a detailed collection system evaluation or an infiltration and inflow study.

PRELIMINARY COST ESTIMATE

AP proposes to prepare the WWFP Update for an estimated fee of \$40,000. The fees for these services are proposed to be billed on a time and materials basis. This would allow the Client to see the benefit of a cost decrease if AP's work effort is lower than originally estimated. Should a more detailed evaluation of certain aspects of the project be desired by the Client, a written request for a budget amendment will be provided to the Client for approval prior to proceeding with any additional work efforts.

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