CITY COUNCIL AGENDA ITEM COVER SHEET

Meeting Date: September 14, 2020

To: Honorable Mayor and Members of the City Council

From: Wade Seaborn, Interim Director of Public Works

Subject: Award Professional Service Contract for Preliminary Design of the Elevated Sewer Replacement

Background:

The City owns an above-ground sanitary sewer located between Interstate 84 and the Union Pacific Railroad (UPRR) tracks. The sewer line has nearly outlived its useful life and is sited in a virtually inaccessible location. The purpose of this project is to remove the elevated sewer and replace it in a more accessible location. The elevated sewer serves an area bounded roughly by 12th Street to the west, Indian Creek to the South, the Hood River to the east and the railroad tracks to the north. The sewer was constructed with 18" concrete pipe on concrete piers in the 1950's. The sewer was constructed to a grade of 0.12% and likely has sections of reverse slope due to settlement of the piers. The elevated sewer is nearly half a mile long and has no vehicular access. It is also vulnerable to damage from errant vehicles leaving I-84, derailment of train cars and falling trees. In 2011, a truck broke through the guardrail on I-84 and hit one of the piers.

An alternatives analysis for replacement of the elevated sewer was completed in October 2017. The study evaluated five alternative alignments. The preferred alignment involves two pump stations. The main pump station would be located near the Mount Hood Railroad depot. A 10" force main would cross the railroad tracks and Interstate 84 through existing penetrations beneath the 2nd Street bridge deck. It would then follow Riverside Drive to the wastewater treatment plant. A second, smaller pump station would be located north of Industrial Street approximately in line with 6th Street. A 6" force main would run west from here to intersect an existing gravity sewer at 10th Street. This alignment will involve easement and property acquisition but places the majority of the system within City and ODOT right-of-way.

In December 2019, the City was awarded a FEMA Hazard Mitigation Grant Program – Post Fire grant for preliminary design of the elevated sewer replacement. The grant is in the amount of $400,000 and requires a 25% match ($300K FEMA / $100K City). These FEMA funds were left over from the Eagle Creek Fire in 2017.

The City issued a request for proposals (RFP) from qualified firms to provide the preliminary design for the elevated sewer replacement project. The scope of work

includes 30% design plans for the force mains and pump stations, structural and geotechnical investigations, ODOT and UPRR coordination, environmental permitting and land acquisition estimates. The final outcome of the preliminary design phase will be construction and land acquisition cost estimates that the City can use to pursue further funding for final design and construction. Starting June 29, 2020, the RFP was advertised in the Oregon Contractor Plan Center, Daily Journal of Commerce, Tri City Construction Council, Premier Builders Exchange, Salem Contractor Exchange, SW Washington Contractors 7017, Hermiston Plan Center, Central Oregon Builders Association, McGraw-Hill Construction Dodge, Construct Connect and the Columbia Gorge News.

Six firms submitted proposals on July 23, 2020. The six proposals were evaluated by using a 'Content and Evaluation Criteria' set in the RFP. Please see the content and evaluation results below.

Content & Evaluation Criteria	Tetra Tech	WSP	Brown & Caldwell	HDR	Pace	Meier
Intro Letter	x	x	x	x	x	x
Ins. Coverage	x	x	x	x	x	x
Computer Equipment	x	x	x	x	x	x
Consultant Firm Qualifications	59	58	56	57	55	35
Key Personnel Qualifications	78	75	74	72	69	40
Quality of Client Service	45	45	42	45	44	40
Scope of Services	80	80	78	73	55	55
Supporting Information	15	14	14	14	14	13
TOTAL POINTS	**277**	**272**	**264**	**261**	**237**	**183**

City staff has entered scope and fee negotiations with the highest ranked firm, Tetra Tech. Negotiations are currently underway. A draft scope of services is attached. The scope and fee are still under review, but the fee will not exceed $400,000.

Staff Recommendation: Authorize the City Manager to sign a professional services contract with Tetra Tech for preliminary design of the Elevated Sewer Replacement Project.

Suggested Motion: I move that we authorize the City Manager to sign a professional services contract with Tetra Tech for preliminary design of the Elevated Sewer Replacement Project in an amount not to exceed $400,000.

Alternatives: Do not authorize the signing of the professional service contract and provide other direction to staff.

Fiscal Impact:

The Elevated Sewer Replacement Project is currently budgeted in the sewer fund as the Mt. Hood Railroad Lift Station in the amount of $400,000. FEMA will reimburse the City for $300,000 of that amount.

Attachments: Project Map
Scope of Work

ELEVATED SEWER REPLACEMENT PROJECT

City of Hood River

Preliminary Design of the Elevated Sewer Line Replacement Project

City Project No.653

Scope of Work - DRAFT

Task 1: Project Management

1.1 **Invoicing and project controls.** Includes monthly invoices with project status reports, budget and schedule tracking, and setting up file sharing platforms.

1.2 **Kick-Off Meeting.** Review project scope, purpose, schedule, expectations, and deliverables. Draft agenda and submit to the City of Hood River (City) a minimum of two days prior to the meeting.

1.3 **Team Coordination Meetings.** Meetings as needed between consultant team project manager and, discipline leads, and sub-consultants.

1.4 **Quality Assurance and Quality Control (QA/QC).** Includes QA/QC reviews of deliverables prior to submitting to the City. Deliverables include draft and final design reports and preliminary drawings.

Assumptions:

- The project manager will attend the kick-off meeting in Hood River if requested. Other consultant team key members will attend by video conference.
- Team coordination meetings assume a maximum of eight 1-hour meetings for key team members. Meetings will be by video conference.
- The City will provide one consolidated set of review comments for each submittal.
- File sharing will be via Microsoft Teams

Task 2: Preliminary Design

2.1 **Information Review**. Review readily available information and background data pertaining to the project. Existing data will include the soils information and survey obtained for the Waterfront Storm Relocation project (storm project), City GIS data, Wastewater Facility Plan, BergerABAM Alternatives Analysis Study, Oregon Department of Transportation (ODOT) bridge as-built drawings, City Engineering Standards, and state and federal permitting agency provisions. Perform a field reconnaissance to generally confirm environmental conditions, and assistance with identifying opportunities and constraints with respect to permitting.

Assumptions:

- The City will make available readily available information within its possession.
- The consultant team will outreach directly with ODOT to obtain bridge as-built drawings.

2.2 **Utility Coordination.** Coordinate with utility owners including the City for water, sanitary, and storm utilities, NW Natural for gas, Pacific Power for underground electric lines, and Century Link and Charter for buried fiber-optic communication lines. Obtain utility maps prior to conducting topographic survey.

2.3 **Permitting Agency Coordination.** Meet with representatives from Oregon Department of Environmental Quality (DEQ), Oregon Department of State Lands (DSL), US Army Corps of Engineers (USACE), National Marine Fisheries Service (NMFS), Oregon State Historic Preservation Office (SHPO), ODOT, and Union Pacific Railroad (UPRR), Hood River County (HRC), and Port of Hood River (PHR) to discuss the proposed pump stations and sewer lines and identify permitting requirements for improvements within their jurisdictions. Identify conditions and limits on pump station siting and sewer routing. Solicit agency input on permitting constraints, likely requirements, and anticipated review processes for the sewer project. Discuss the sewer project area's overlap with the current Port Waterfront Storm Line Relocation Project (storm project) to ensure the projects are well-coordinated. We will discuss construction timelines, anticipated environmental resource impacts, and potential mitigation options with the permitting agencies and explore opportunities for streamlining permitting and mitigation for the sewer and storm line projects.

<u>Assumptions:</u>

- The City will procure all permits for improvements within its jurisdiction including City Rights-of-Way
- The City will provide contact information for agencies already contacted for this project
- The consultant team will interface with agency contacts assigned to the Waterfront Storm Line Relocation project

2.4 **Topographic Survey.** Perform a topographic survey and develop a base map for the two pump station sites and sewer alignments. The approximate boundaries of the mapped areas will include:

- Port of Hood River properties on the south side of the Union Pacific Railroad directly across from the westerly portion of the existing elevated sewer line. The survey area will include a 50-foot to 100-foot wide strip with the northerly side being the fence on the southerly right of way line of the UPRR. The strip will begin at an existing sanitary manhole and then run southeasterly to the new pump station site.
- Mount Hood Railroad parking lot where a new pump station will be located. From the pump station the survey boundary will extend west on Cascade Avenue to 2nd Street, north on 2nd Street crossing the UPRR and I-84 free way, then west onto Riverside Drive including all of the median area between the I-84 west bound on ramp, 2nd Street and Riverside Drive. The survey area will end directly south of Sheppard's Equipment.

Work tasks will include the following:

- Research of available prior survey and plat records for resolution of property boundary lines and street rights of way. Research of deeds for private land boundaries.

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- Modeling of prior surveys to aid in final boundary resolution and in field recovery of existing survey monuments.
- Fielding marking and call in for utility locates.
- Field review of the anticipated topographic mapping areas.
- Field topographic mapping of both project areas including existing survey monument recovery and location, and field checks to existing mapping.
- Processing of field data to create topographic surface.
- Final resolution of adjoining street and railroad rights of way and private property lines.
- Verification of the horizontal and vertical "fit" of the new data to existing mapping.
- Electronic delivery of the topographic data in ACAD file format.
- Supplement minor additional data requests if/as needed.

Assumptions:

- The survey will not include Riverside Drive west of Sheppard's Equipment. The base map will incorporate the survey completed for the storm project along Riverside Drive west of Sheppard's Equipment.

2.5 **Design Flows.** Obtain design flows from the City for each pump station. Resolve discrepancies between the flows in the Alternatives Study and the Wastewater Master Plan. Estimate design flows for each pump station for the initial period of operation, and the 20-year and build-out planning horizons.

2.6 **Pump Station Siting.** Evaluate sites identified in the Alternatives Study for the two pump stations. Investigate other potentially suitable sites for the pump stations within an approximate 200-foot radius of the locations proposed in the Alternatives Study. Proposed locations will be submitted to the City for review and input from property owners. The site locations will be finalized based on City and property owner comments.

Assumptions:

- One alternative location will be identified for each pump station.

2.7 **Sewer Line Preliminary Alignments.** Develop preliminary sewer alignments following final selection of the pump station sites. Sections of sewer line that should be gravity line will be identified. Submit to the City for review and comment. Incorporate comments to develop the preferred alignments.

Assumptions:

- The general sewer alignments will adhere to those shown in the Alternatives Study. Any adjustments will be minor to fit topography, ROW boundaries, and avoid utility conflicts.
- Assumes one iteration based on City comments.

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2.8 **Refine Design Parameters.** Refine the design parameters for the pump station based on the preliminary sewer alignments and selected sites. Develop system-head-capacity curves and preliminary selections of the new pumps.

2.9 **Geotechnical Field Investigations.** Perform one exploratory boring at each pump station site (two total). Borings will be extended to 30-feet below grade. Obtain soils data and summarize in a Geotechnical Design Report (GDR). The GDR will provide recommended design and construction considerations for new sub-surface structures including wet wells and vaults, and above grade structures and features including buildings, retaining walls, and embankments. A draft GDR will be submitted to the City for review and comment. A final GDR will be prepared incorporating the City's comments.

Assumptions:

- The City will provide any available existing geotechnical data in the vicinity of the pump station sites.
- The City will coordinate access to private properties with the property owners.
- Borings along the sewer alignments will not be conducted. It is assumed the soils information obtained for the storm project will be used for the new sewer line design and construction.
- Petroleum products are not present in the soils at the pump station sites.

2.10 **Acoustic Analysis.** Perform an acoustic analysis to determine the extent of noise abatement measures needed to meet allowable noise levels at the property boundaries. Identify any noise mitigation measures that should be incorporated into the new pump stations.

Assumptions:

- The analysis will be high level and will not include computer modelling.

2.11 **Constructability and Staging.** Perform initial review of proposed pump station layouts, new sewer alignments, and decommissioning the existing elevated sewer line to identify any unique construction challenges. Evaluate alternate construction methods such as directional drilling new sewer line across the Riverside Drive/2nd Avenue intersection and installing the wet wells against retaining walls and embankments. Identify construction staging areas and temporary easements.

2.12 **Permitting and Land Use Assistance.** Identify state and federal environmental permits that will be required to construct the new sewer lines and pump stations. Document the anticipated permitting requirements in a technical memorandum that will identify key considerations including:

- each of the anticipated state and federal permits needed for the project
- the regulatory trigger for each permit as it relates to the project
- the agency leading the review/issuance of each permit
- general application and supporting technical submittal requirements
- approximate level of design needed for application submission

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- key anticipated permit conditions
- a general description of potential mitigation approaches
- approximate schedule for agency reviews
- estimated permitting costs.

The consultant team will prepare Land-Use permit applications to assist the City with obtaining Land-Use Compatibility Statements (LUCs) for each of the two pump stations and sewer lines.

Assumptions:

- State and federal environmental permit applications will not be submitted at the preliminary design phase and are not included in this scope

2.13 **Corrosion Evaluation.** Perform a hydrogen sulfide evaluation to determine if corrosion controls are warranted for the two pump stations. Evaluate options and incorporate into the pump station layouts if necessary. The evaluation will be conducted in accordance with DEQ guidelines.

Assumptions:

- The corrosion evaluation does not include waste water sampling or condition assessments of the downstream receiving sewer manholes.

2.14 **Preliminary Site Plans.** Develop alternative preliminary site layout plans for each pump station. The plans will include wet wells, valve vaults, electrical/controls/telemetry enclosures, retaining walls, and landscaping. Vehicle turning diagrams for site access will be included as separate figure drawings. The site plans and figures will be submitted to the City for review and comment. Comments will be incorporated to develop the preferred site plan layouts for inclusion in the preliminary drawings.

Assumptions:

- Includes a maximum of two alternative site layouts for each pump station.
- Preliminary site plans and figures will be submitted as half-size (11x17) PDF documents.

2.15 **Preliminary Design Drawings.** Develop preliminary plans that illustrate the extent of the improvements. The drawings will be advanced to a 30% level of completion and submitted to the City for review and comment. A preliminary drawing list is included below.

Sheet Number	**Title**
G-1	Cover Sheet, Vicinity Map
G-2	Legend and Abbreviations, Notes
G-3	Sheet Key Map
C-1	Pump Station No.1 Site Plan
C-2	Pump Station No.2 Site Plan
C-3	Sanitary Sewer Plan and Profile – 1
C-4	Sanitary Sewer Plan and Profile – 2

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C-5	Sanitary Sewer Plan and Profile – 3
C-6	Sanitary Sewer Plan and Profile – 4
C-7	Sanitary Sewer Plan and Profile – 5
A-1	Pump Station No.1 Architectural Plan and Elevations
A-2	Pump Station No.2 Architectural Plan and Elevations
M-1	Pump Station No.1 Mechanical Plan and Elevations
M-2	Pump Station No.2 Mechanical Plan and Elevations
E-1	Pump Station No.1 One-Line Diagram
E-2	Pump Station No.2 One-Line Diagram
E-3	Pump Station No.1 Electrical Site Plan
E-4	Pump Station No.2 Electrical Site Plan
L-1	Pump Station No.1 Landscaping Site Plan
L-2	Pump Station No.2 Landscaping Site Plan

Assumptions:

- Drawings will be 11x17 (half-size) and submitted electronically PDF documents
- Sewer line plan and profile drawings will be prepared at 1”=40’ horizontal scale
- Drawings will be prepared in accordance with the City of Hood River Engineering Standards

2.16 Draft Preliminary Design Report. The findings, recommendations, and conclusions of the previous subtasks will be combined into a single draft preliminary design report (PDR) that will present the proposed project in detail. The report will include a preliminary (Class 3) construction cost estimate and schedule for completing the project through startup. The estimate will include property acquisition costs based on real market valuations. A list of technical specifications will be included in the report. Submit to City for review and comment.

Assumptions:

- The report will be prepared in accordance with DEQ guidelines.
- The report will be submitted as a single electronic PDF document.

2.17 Preliminary Design Review Meeting. Attend meeting to discuss and clarify the City’s comments on the preliminary plans and draft PDR.

Assumptions:

- The consultant project manager will attend the meeting in person if requested. Discipline leads will attend by video conference.

2.18 Final Preliminary Design Submittal. Incorporate City comments to finalize the preliminary drawings, PDR, and construction cost estimate.

Assumptions:

- Final preliminary design documents will be submitted electronically in PDF format
- Final drawings files will be submitted in AutoCAD .dwg format

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Task 3: Property Acquisition

3.1 **Property Appraisal.** Conduct property appraisals to estimate the fair market value of real property and easements that will need to be obtained for the new pump stations and sewer lines. Appraisals will be included in the overall project cost.

Assumptions:

- The project will impact a maximum of four properties outside of City owned Right-of-Way. These include the Mount Hood Railroad property, Port of Hood River property, ODOT 2nd Avenue overpass, and ODOT ROW on the north side of the I-84 freeway.

3.2 **Legal Descriptions.** Provide legal descriptions for the real property and permanent easements to be acquired for the new pump stations and sewer lines.

Assumptions:

- A maximum of four legal descriptions will be provided including one for each pump station (two total) and one for each sewer line permanent easement (two total).
- Legal descriptions for temporary construction easements are not included.

3.3 **Property Acquisition (optional service).** Assist the City in negotiating purchase and sale agreements for the pump station parcels and sewer easements if requested to do so. Includes preparing and filing acquisition documents, negotiating with property owners, and obtaining title information. Easement acquisition for easements within the ODOT ROW will be conducted in accordance with ODOT procedures.

Assumptions:

- The City will obtain title reports for the four impacted properties.

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