#### GREGORY L. GEIST | DIRECTOR



Water Quality Protection Surface Water Management Wastewater Collection & Treatment

August 10, 2023

BCC Agenda Date/Item: \_\_\_\_\_

Board of County Commissioners Acting as the governing body of Water Environment Services Clackamas County

Approval of Amendment #1 with Century West Engineering Corporation, for Phase 2 work to be performed on the Mt. Talbert MTA Pipe Realignment Project. Amendment value is \$163,560 increasing total contract value to \$213,805.00 through 12/31/2024. Funding is through Water Environment Services Sanitary Sewer Construction Fund. No County General Funds are involved.

Previous Board Action/Review	Presented at Issues – August 8, 2023.								
Performance Clackamas	Enterprise Resilier Performance and 2. This project support a strong infrastruct	<ol> <li>This project supports the WES Strategic Plan to provide Enterprise Resiliency, infrastructure Strategy and Performance and Operational Optimization.</li> <li>This project supports the County's Strategic Plan of building a strong infrastructure that delivers services to customers and honors, utilizes, promotes and invest in our natural resources.</li> </ol>							
Counsel Review	Yes	Procurement Review	Yes						
Contact Person	Jeff Stallard	Contact Phone	503-278-2311						

**EXECUTIVE SUMMARY**: The Mt. Talbert sanitary sewer interceptor was constructed in 1974 and conveys flows from portions of Happy Valley to WES' Kellogg Creek Water Resource Recovery Facility. Near the intersection of SE Sunnybrook Blvd. and SE 97<sup>th</sup> Ave., an existing sanitary sewer pipe, constructed in 1980, crosses Mt. Scott Creek and connects to the Mt. Talbert interceptor. Mt. Scott Creek has eroded and shifted the channel over the years such that a manhole and a significant portion of the sanitary sewer pipe have been exposed, and in 2022, a short section of the pipe broke allowing untreated sewerage to enter the creek. WES implemented an emergency repair to the pipe at that time via separate contract. The emergency repair was a stopgap solution until WES could design and construct a permanent solution to mitigate the risk of future pipe breaks due to ongoing creek movement and erosion.

WES contracted with Century West Engineering Corporation for Phase 1 of this project to evaluate options to mitigate or eliminate risks of future pipe breaks due to creek erosion and to improve maintenance access. Several options were evaluated based on costs, constructability, access, and environmental impacts, and an alignment



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to the south of Mt. Scott Creek, which eliminates the creek crossing, was identified as the best option. This contract amendment for Phase 2 covers the scope to advance the selected option to a final design, including geotechnical, environmental permitting, survey, engineering services, and to provide engineering support during construction.

**RECOMMENDATION:** Staff recommends the Board approve Amendment #1 for Contract #7562 with Century West Engineering Corporation for the Mt. Talbert MTA Pipe Realignment Project.

Respectfully submitted,

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Greg Geist Director, WES

Attachment: Contract 7562



GREGORY L. GEIST | DIRECTOR

Water Quality Protection Surface Water Management Wastewater Collection & Treatment

#### **AMENDMENT #1** TO THE CONTRACT DOCUMENTS WITH CENTURY WEST ENGINEERING **CORPORATION FOR ENGINEERING NECESSARY TO DESIGN MT. TALBERT MTA PIPE REALIGNMENT PROJECT** Contract #7562

This Amendment #1 is entered into between Century West Engineering Corporation ("Contractor") and Water Environment Services ("District") and shall become part of the Contract documents entered into between both parties on February 7, 2023 ("Contract").

The Purpose of this Amendment #1 is to make the following changes to the Contract:

- ARTICLE I, Section 2. Scope of Work is hereby amended as follows: 1. District has authorized an increase to Scope of Work for Contractor to begin Phase II Work on the Mt. Talbert MTA Pipe Realignment Project, which was contemplated in the original RFP and Scope of Work for the Contract. Phase II Work shall include the following Tasks: Project Management/Administration, Data Collection for Final Design, Design Services, and Construction Services. The supplemental Scope of Work for Phase II is hereby attached and incorporated by reference as Exhibit C.
- 2. ARTICLE I, Section 3. Consideration is hereby amended as follows: District is authorizing an additional \$163,560.00 for Phase II Work to be performed. Contractor's Fee Schedule for Phase II Work is hereby attached and incorporated by reference as Exhibit D. The maximum compensation authorized under this Contract shall not exceed \$213,805.00.

ORIGINAL CONTRACT	\$ 50,245.00
AMENDMENT #1	\$ 163,560.00
TOTAL AMENDED CONTRACT	\$ 213,805.00

Except as expressly amended above, all other terms and conditions of the Contract shall remain in full force and effect. By signature below, the parties agree to this Amendment #1, effective upon the date of the last signature below.

**Century West Engineering Corporation** 

Authorized Signature

Date MacRostie

Printed Name

Water Environment Services

Chair

**Recording Secretary** 

Date

Approved as to form

**County** Counsel

# Exhibit C Scope of Work for Phase II

# **Project Descriptions: -**

This phase, Phase 2, of the Mt. Talbert MTA Pipe Realignment Project will include Preliminary/Final Design efforts for the selected alternative recommended to install a new sewer to the south of Mt. Scott Creek using open cut methods and abandon a segment of 8" sewer pipe (between MTA1-2 and MT229B) and one manhole (MTA1-1).

The detailed scope of work for Phase 2 of the Project includes the following general tasks:

# Task 1: Project Management/Administration

The work will be accomplished under the following subtasks:

## 100 Meetings, Misc.

- Attend kickoff meeting for project to establish clear lines of communication and confirm understanding of project scope and schedule
- Monthly invoices
- Monthly status reports
- Miscellaneous meetings Assume 3 additional

# Task 2: Data Collection and Special Services for Final Design

The work will be accomplished under the following subtasks:

## 205 Final Topographic Survey

- Update and expand upon existing topographic survey for the selected alternative (Option 1/1a) that was completed during Phase 1 efforts utilizing the established Horizontal and Vertical control throughout the site. Horizontal datum to be OCRS Portland Zone- NAD83(2011) EPOCH2010-IFT, Vertical datum to be based on NAVD88, unless otherwise specified.
- Traffic control to complete efforts within SE 97<sup>th</sup> Avenue is included.
- Limits of tie outs will be an approximate 50-foot wide strip from MT232 to SE 97<sup>th</sup> Avenue. Extend approximately 100 feet northerly on SE 97<sup>th</sup> Avenue on both sides from the driveway entrance into School District property. Finally, the connection point on east side of SE 97<sup>th</sup> that lines up with MTA1-2-1 for 8" pipe from apartments.
- Prepare mapping of subject topographic features at an appropriate scale (1" = 20' or 30') in AutoCAD Civil 3D 2022.dwg format.

## 210 Assist with easement acquisitions

Provide land acquisition services for the procurement of Right of Way (ROW), and temporary construction easements for installation of the new sanitary sewer (temporary and permanent) across property owned by Clackamas Education Service District – 22E0400203 on west side of SE 97<sup>th</sup> and Townhomes with a View Condo Association – 22E04ADS1 on the east side of SE 97<sup>th</sup>. All work shall conform to the standards contained in the Uniform Act of 1970 and amendments, Oregon State Law and County policies and procedures.

- Show all easements on the construction drawings
- Prepare separate legal descriptions and 8-1/2" X 11" easement sketches for each easement required
- Stake centerline and offset stakes every 50 feet once in order to provide property owner a visual location where the new sanitary sewer is to be installed.

## Subtask A Preliminary Right of Way Services

Prepare and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW for each impacted property. This shall include obtaining preliminary title reports for each impacted property.

Prepare, negotiate, and obtain property owner signatures for temporary right-of-entry documents for the purposes of constructing the new sanitary sewer pipe for 2 parcels.

Preliminary meetings will be held with the impacted property owners to explain the project, right of way process and gather information on their questions and concerns.

# Subtask B Valuation of Proposed Acquisition Areas

Oregon state-certified appraisers shall be used to provide one (1) real estate appraisal for each ownership property from which a property interest is to be acquired. Real estate appraisals shall conform to the standards contained in the USPAP (Uniform Standards of Professional Appraisal Practice) and Oregon State Laws. Subconsultant shall provide not fewer than 15 days 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 any inspection of the property for appraisal purposes. It is assumed that up to two (2) appraisals will be required with an appraisal review for each appraisal. The appraisal review will be conducted by another certified appraiser.

## Subtask C Negotiations

This task will include assembling negotiation packages, contacting property owners to schedule an appointment to begin negotiations, and advising them of the process. Absentee owners will be contacted and negotiations conducted by telephone. The District will be notified of those owners with whom contact could not be made and request direction on how to proceed.

At the first negotiation meeting or phone conversation with each property owner or their agent, the Consultant will explain the purpose and need for the project, identify what is needed from each owner's property for the project, attempt to receive a commitment from the owner to accept the District's offer, and make record of all information needed to prepare closing documents.

All negotiations are to be performed only to the limit of authority delineated by the title reports, project maps, determined fair market value, procedures manual, acquisition schedule, or written instructions issued by the District.

Up to three contacts will be made with the owner or owner's representative in order to acquire valid title to the needed property rights as shown on the project right-of-way plans or as instructed in writing by the District. If property owner requires more time than budgeted, the budget will be revisited.

Following a successful negotiation, all closing documents will be presented to the owner for signature. When all documents are signed, they will be delivered to the District for review and signing. The District will pay for all recording fees, title reports, and typical closing costs.

## 215 Final Geotechnical Investigation

Following selection of the final pipeline alignment during the Preliminary Design Phase, supplemental subsurface exploration will be performed at key sections along the alignment. Major items to accomplish this include:

- Conduct three (3) soil borings using a truck-mounted drill rig and mud rotary drilling techniques and HQ-Wireline drilling techniques installed to 25 feet below ground surface or refusal on rock and one test pit to refusal on rock or to a maximum depth of 15 feet. The test pit will be performed on the slope near MTA232 and the borings will be performed along the driveway of the Clackamas Education Services District property.
- Install one groundwater observation well to measure the depth to groundwater. If the groundwater is more than 3 feet above the design pipe invert, a constant rate pump test will be performed in the well.
- Laboratory testing will include up to two (2) sieve analyses, two (2) Atterberg limits and up to four (4) unconfined compressive strength tests of rock.
- The data collected will be reviewed and analyzed as needed to support the geotechnical conclusions and recommendations related to the pipeline installation. The conclusions and recommendations will be summarized in a geotechnical engineering report. This report will be submitted for comments and questions. After receiving comments, the report will be updated and sent out as final with the following:
  - A summary of site geology and subsurface conditions encountered in our exploration program.
  - Evaluate potential for other seismic hazards and their effects, such as liquefaction, fault rupture, liquefaction-induced lateral spreading, loss of bearing resistance, slope stability, increased lateral earth pressures;
  - Discuss conceptual dewatering, shoring systems, rock excavation, and trench backfill recommendations, as appropriate; and
  - Provide earthwork recommendations, including those for subgrade preparation, excavation, backfill, and fill placement and compaction;

## Assumptions:

- Site access and right of entry will be required and will be performed by others and provided to us.
- Permits will not be required for the explorations.
- No environmental sampling will be performed.
- Contaminated soils will not be encountered and the spoils can be disposed of at a location that accepts clean fill.
- The test pit exploration will be backfilled with the excavation spoils with minimal compactive effort.
- The monitoring wells will be read once during the dry season, from July to October, and once during the wet season (November to May) unless the project schedule does not allow for a wet weather reading.
- The borings will be restored with cold patch AC, except for the one monitoring well which will be completed with a traffic rated flush mount monument. We assume the piezometer will stay in place until construction and the contractor will abandon them during construction.
- No slope stability analysis will be performed and no factor of safety for seismic or static slope-stability will be computed using limit equilibrium methods.

# 220 Environmental Documentation

• Re-Flag Mt. Scott Creek and Stormwater Channel Supplement efforts already completed during Phase 1 will have to be reflagged due to the dense canopy and steep slopes prohibiting accuracy of GPS data. As such, our resource boundary flagging of ordinary high water of Mt Scott Creek adjacent to MTA-1 and a stormwater channel near MT232will need to be surveyed to include on permit plans.

• Obtain Local Permits and Approvals

The riparian area of Mt. Scott Creek is Habitat Conservation Area (HCA) subject to the development standards of Clackamas County Zoning and Development Ordinance (CCZDO) Section 706. Clackamas County Service District No. 1 (CCSD#1) also regulates the riparian area of Mt. Scott Creek, and requires that the zone contiguous with the stream channel be maintained as an undisturbed buffer (buffer) for the continued maintenance, function, and structural stability of the stream.

The project will include impacts within the HCA and CCSD#1 buffer from installation of a new pipe alignment and may include temporary disturbance necessary for access to Mt. Scott Creek for manhole removal. This requires the need to address Section 706 of the CCZDO and the CCSD#1 buffer requirements. To accomplish this task several submittals including an HCA Map Verification, HCA Development Permit, Construction Management Plan, and a Landscape (Mitigation) Plan, to address each of the applicable standards of Section 706. The package will contain information on the proposed site plan, proposed impacts, as well as proposed onsite mitigation. We assume that onsite mitigation will include the restoration of temporary impact areas and additional native plantings within the HCA.

It is assumed that CCSD#1 will consider the project a permitted use within the buffer per Section 4.2.3.2 (utility construction) and Section 4.2.3.5 (measures to abate hazards or nuisances). CCSD#1 will require that the buffer be restored and will review the restoration plan to ensure compliance with CCSD#1 Stormwater Standards. Site access and right of entry will be required and will be performed by others and provided to us.

## 225 Environmental Documentation (Contingency)

• Contingency to Obtain Corps and DSL Permits for Manhole Removal in Mt. Scott Creek Work within Mt. Scott is regulated by the US Army Corps of Engineers (Corps) and the Oregon Department of State Lands (DSL). Mt. Scott Creek, a perennial stream, is known to support Endangered Species Act-listed fish under the jurisdiction of the National Marine Fisheries Service and has been designated as Essential Salmonid Habitat (ESH) by DSL. Because construction activities for the project that are within Mt. Scott Creek are limited to the removal of a decommissioned manhole, it is assumed that the project will be authorized by the Corps under Nationwide Permit (NWP) #27 for aquatic habitat restoration and by DSL under a General Authorization (GA) for waterway habitat restoration. It is assumed that that Individual Permits from the Corps and DSL will not be required and that additional coordination with NMFS and the Oregon Department of Fish and Wildlife will not be required.

# Task 3 – Design Services

The work will be accomplished under the following subtasks:

# **305 Prepare CAD base mapping**

CAD base mapping tasks will include:

- Prepare mapping of subject topographic features at an appropriate scale (1" = 20' or 30') in AutoCAD Civil 3D 2022.dwg format. Plan views will be plotted above profiles. Property line locations will be drawn from Assessors maps and any recent local boundary surveys. Efforts to resolve line and distant discrepancies are beyond the scope of services for this work.
- Plan views are to be plotted above the profile.
- Profiles will be plotted at 1" = 5' vertical scale.

# 310 Preliminary Design – 60%

- Layout proposed alignment for 8" sanitary sewer based upon original corridor shown in Phase 1 efforts from the connection into MT232 and extending approximately 550 feet from the east side of SE 97<sup>th</sup> Avenue intercepting an existing pipe from Townhomes with a View and extending westerly to eventually connect into MT232. The alignment will include work within SE 97<sup>th</sup> Avenue and a new easement within the north driveway of property owned by the Clackamas Education School District.
- Prepare engineers estimate of the project construction cost based upon the 60% design
- Prepare Right-of-Way Permit for DTD to construct sanitary sewer in SE 97th Avenue
- Prepare Traffic Control plans for work on SE 97<sup>th</sup> Avenue to meet DTD requirements.
- Submit electronic 60% plans and draft specifications (Section heading only) to District for review and comments
- Participate in 60% review meeting with District staff

## **320 – Final Design - 90%**

- Incorporate any review comments received on the 60% submittal, include the necessary QA/QC processes, as well as bidability and constructability reviews.
- Submit electronic 90% plans (11 x 17) and specifications to District for review and comments.
- Participate in 90% review meeting with District staff.
- Prepare engineer's estimate of the project construction at the 90% design stages.
- Prepare Draft technical specifications

## **330 - Final Design – 100%**

- Incorporate any review comments received on the 90% submittal, include the necessary QA/QC processes, as well as bidability and constructability reviews.
- Submit Final technical specifications to District.
- Prepare final engineer's construction cost estimate.
- Prepare bid form including quantities for unit pricing by the contractors.
- Contract drawings shall include up to six (6) estimated sheets (excluding cover):
- Furnish electronic copy of contract documents to the District for printing and distribution to bidders. Drawings will be 11X17 capable of binding with the specifications.

## 340 - Prepare Construction Bidding Documents

- Provide draft and final specifications covering Division 1 and Division 2 requirements. District to provide all remaining front end documentation.
- Division 1 General Requirements
  - 01010 Summary of Work
    - 01025 Measurement and Payment
    - 01040 Coordination and Project Requirements
    - 01062 Permits and Easements
    - 01195 Protection and Maintenance of Work and Property
    - 01300 Submittals Procedure
    - 01560 Environmental Controls

## Division 2 - Sitework

02160	Sheeting, Shoring and Bracing
02221	Trenching, Backfilling and Compacting
02500	Street Restoration
02720	Sanitary Sewer Pipe and Manholes
02935	Restoration of Landscaping

## Task 4: Construction Administration

#### **400 Bid Period Services**

Provide the District with the necessary support during the approximate 4 week bidding period.

- Attend Pre-Bid conference.
- District to respond to contractor's requests for information and complete addendums with assistance of Engineer when requested.

#### **410** Construction Management

Engineer shall not be responsible for the means, methods, technique sequences, or procedures of construction selected by the contractor, or the safety precautions and programs incident to the work of the contractor. Engineer's efforts will be directed toward providing a greater degree of confidence for the District that the completed work will conform to the drawings and specifications, but Engineer will not be responsible for the failure of the contractor to perform work in accordance with such drawings and technical specifications. The District will be responsible for daily observation activities and notify the Engineer of any services required to clarify design intent and modify the design drawings. The following efforts will be limited to the number of hours shown in the estimated Fee Schedule;

- Respond to Contractor questions
- Occasional field visits to confirm intent of design
- Respond to District initiated clarification of design intent or substantial changes in the overall project
- Review submittal (shop drawings, materials, etc.) up to 3 submittals are included.

#### 420 Record Drawings

Revise the contract drawings to incorporate all changes made during construction

#### SCHEDULE

Preliminary schedule for the Conceptual Design of the sanitary sewer is shown below. Major milestones are based upon a Notice to Proceed dated June 9, 2023

## <u>Task</u>

205 -225 (Subconsultant Efforts)

305-310 (60% Design)

**Completion** 

---Varies ---Mid-August through October depending upon task

October 6, 2023

#### **District Review**

320 (90% Design)

**District Review** 

330-340 (Final Design)

**2 weeks** November 11, 2023 **2 weeks** January 12, 2024 Exhibit D Fee Schedule

#### MT TALBERT PIPE REHABILITATION "DESIGN ENGINEERING FEES"

EXHIBIT 'B'

May	30,	2023
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	Senior Project Manager	Project Engineer	Senior Technician	Project Assistant	Shannon & Wilson (SW)	Westlake Consultants (WCI)	Universal Field Services (UFS)	Pacific Habitat (PHS)	CWE Expenses	CWE Total	Total
	\$205/hr	\$150/hr	\$135/hr	\$75/hr						Hours	Fees
Task 1: Project Management											
100- Meetings, Misc	32	0	0	6					\$200	38	\$7,210
Subtotal Fees	\$6,560	\$0	\$0	\$450	\$0	\$0	\$0	\$0	\$200	38	\$7,210
Task 2: Data Collection for Final Design											
205- Topographic Survey	0	0	4	0		\$8,575				4	\$9,115
210- Assist with Easement Acquisitions	8	0	0	2		\$4,500	\$22,750			10	\$29,040
215- Final Geotechnical Investigation	0	2	0	0	\$28,500					2	\$28,800
220- Environmental Documentation	0	2	0	0				\$12,000		2	\$12,300
225- Environmental Documentation (Contingent- See Note 1)	0	2	0	0				\$11,500		2	\$11,800
Subtotal Fees	\$1,640	\$900	\$540	\$150	\$28,500	\$13,075	\$22,750	\$23,500	\$0	20	\$91,055
Task 3: Design Services											
305- Prepare CADD Base Mapping	0	0	16	0						16	\$2,160
310- Preliminary Design - 60%	32	24	44	0					\$100	100	\$16,200
320- Preliminary Design - 90%	24	16	32	0					\$100	72	\$11,740
330- Final Design - 100%	24	16	24	0					\$100	64	\$10,660
340- Prepare Construction Bidding Documents	16	2	0	6					\$125	24	\$4,155
Subtotal Fees	\$19,680	\$8,700	\$15,660	\$450	\$0	\$0	\$0	\$0	\$425	276	\$44,915
Task 4: Construction Services											
400- Bid Period Services	8	2	0	0						10	\$1,940
410- Construction Management	32	16	8	2					\$225	58	\$10,415
420- Record Drawings	16	2	32	0					\$125	50	\$8,025
Subtotal Fees	\$11,480	\$3,000	\$5,400	\$150	\$0	\$0	\$0	\$0	\$350	118	\$20,380
Total Hours Total Fees	192 \$39,360	84 \$12,600	160 \$21,600	16 \$1,200	 \$28,500	\$13,075	\$22,750	 \$23,500	\$975	452 	 \$163,560
NOTE 1. Task 225 will depend upon extent of removal of MTA1-1 within Mt. Scott stream channel											
SUBTOTALS CENTURY WEST ENGINEERING- DESIGN CENTURY WEST ENGINEERING- CONSTRUCTION SERVICES SUBCONSULTANT - DESIGN FEES	\$27,880 \$11,480 	\$9,600 \$3,000 	\$16,200 \$5,400 	\$1,050 \$150 	  \$28,500	  \$13,075	 \$22,750	  \$23,500	\$625 \$350 	334 118 452	\$55,355 \$20,380 \$87,825 \$163,560