Contract Amendment No. 2

City of Oregon City South End Road, Warner Parrott Road, Lawton Road Waterline Replacement Project Project No. CI 15-012

RH2 Project No. 916.011

In accordance with our Professional Services Agreement for the South End Road/Warner Parrot Road/Lawton Road Waterline Replacement project, dated January 18, 2016, this is an authorization to revise the project Scope of Work, as described below. The work will be performed and invoiced using the terms and conditions listed in the original agreement, plus previous amendments and/or agreements.

Add the following items to the Scope of Work as described in Exhibit A, attached.

Task 6 Final Design – Prepare 100-percent plan sheets, technical specifications, and bid documents.

Task 7 Services During Bidding – Provide engineering services during the bidding phase of the project.

Task 8 Services During Construction – Provide construction contract administration services during project construction to support the City, including performing periodic observations of the construction, reviewing submittals, processing progress payments, preparing the final punch list, and preparing record drawings.

Referenced attached Exhibit A, Exhibit B, and Exhibit C.

The engineering fee authorization will increase by \$89,535 as described in Exhibit B, attached. The total contract authorization amount is increased from \$348,936 to \$438,471.

Please sign this authorization in the space provided below and mail or fax to RH2 Engineering, Inc., 22722 29th Drive SE, Suite 210, Bothell, WA 98021. FAX (425) 951-5401.

RH2 Engineering, Inc.	City of Oregon City
Signature	Signature
Richard L. Ballard, Director Print Name/Title	Print Name/Title
Date	Date

Exhibit A Amendment No. 2 Scope of Work City of Oregon City

South End Road, Warner Parrott Road, Lawton Road Waterline Replacement Project

Project No. CI 15-012 March 2017 RH2 Project No. ORC 916.011

On January 18, 2016, the City of Oregon City (City) entered into a Professional Services Agreement authorizing RH2 Engineering, Inc., (RH2) to provide engineering services for the South End Road, Warner Parrott Road, Lawton Road Waterline Replacement project. This Amendment is an authorization to revise the project scope of work and fee estimate as described below.

Background

The City has requested that RH2 provide additional engineering services for final design, services during bidding, and services during construction for the South End Road, Warner Parrott Road, Lawton Road Waterline Replacement project. This Scope of Work provides additional work not covered for the proposed improvements for the water main along South End Road between Amanda Court and Gentry Way, and along Warner Parrott Road and Lawton Road west to King Road.

The Scope of Work is amended to include the following additional tasks.

Task 6 - Final Design

Objective: Develop 100-percent plan sheets, technical specifications, and bid documents for the proposed improvements.

Approach:

- 6.1 <u>Perform Quality Control Review</u>: Perform internal quality assurance and quality control (QA/QC) review of plans and specifications.
- 6.2 <u>Prepare Final Plans and Specifications</u>: Incorporate QA/QC review comments, potholing information, and City's 90-percent review comments, and prepare final plans and specifications for bidding and construction. Provide one (1) set of final documents in hard copy, half-size (11-inch by 17-inch) format for use in reproduction of bidding documents.

RH2 Deliverables:

- Electronic versions of the complete construction contract bidding documents, including final front-end documents, technical specifications, plans, standard drawings, and cost estimate (PDF, Word, Excel, and AutoCAD).
- Provide one (1) reproducible half-size set of bidding documents.

Task 7 – Services During Bidding

Objective: Provide engineering services during the bidding phase of the project.

Approach:

- 7.1 <u>Respond to Bidder Questions and Prepare Addendum</u>: Respond to questions from bidders and clarify, revise, or change construction plans, technical specifications, or construction contract conditions during the bidding process. Prepare one (1) addendum if determined necessary during the bidding process to plan holders. *It is assumed that up to one (1) addendum may be needed.*
- 7.2 <u>Assist with Bid Opening and Bidder Evaluation</u>: Review contractor prequalification applications as part of the bid review process. Review subcontractors, suppliers, and others proposed by the prime contractor if required by the bidding documents. Develop bid tabulation and provide a letter of recommendation for award.

Assumptions:

• The City will be the main point of contact during bidding, will be responsible for advertising the project for bids, and will produce and distribute the bidding documents.

RH2 Deliverables:

- Up to one (1) addendum.
- Letter of recommendation for award.

Task 8 – Services During Construction

Objective: Provide construction contract administration services during project construction to support the City. As the engineer of record, RH2 will provide periodic observation of the construction to review whether those elements of construction that are observed by RH2 conform to the project plans and specifications.

Approach:

- 8.1 <u>Attend Pre-construction Conference</u>: Prepare for and attend a pre-construction conference with the contractor, City, RH2, special inspector, and impacted or adjacent utilities. Prepare an agenda and meeting minutes for the pre-construction conference.
- 8.2 <u>Provide Clarifications and Change Orders</u>: Review written requests for information (RFIs) and change order proposals and provide written responses to the City.
- 8.3 <u>Review Submittals</u>: Review contractor submittals, shop drawings, and field testing per the project documents. Coordinate with the City regarding substitute and "or-equal" items proposed for use by the contractor.
- 8.4 <u>Perform Periodic Field Observation, Construction Meetings, and Project Closeout</u>: Provide part-time observation of the construction work in progress. *It is assumed that part-time construction observation includes, on average, approximately five (5) hours per day for ten (10) weeks of construction observation. RH2 will coordinate with the contractor and City inspectors to provide construction observation at critical stages of construction and as requested by the City. The contractor will retain and coordinate with testing firm(s) for all special inspections. Meet with the City and contractor weekly to review the contractor's progress. Prepare meeting agendas and*

- minutes. Assist the City with project closeout services, including production of a punch list and review of contractor's punch list completion. Prepare recommendation for project acceptance.
- 8.5 <u>Prepare Record Drawings</u>: Provide record drawings representative of the as-constructed project. Record drawings will be completed based upon contractor and inspector red-lined markups to as-bid drawings. Record drawings will be completed per City standards.
- 8.6 <u>Pre- and Post-construction Monument Survey</u>: Coordinate with AKS Engineering & Forestry to perform a pre- and post-construction monument survey and submit a Record of Survey to the Clackamas County Surveyor's Office.

Assumptions:

- RH2 will provide construction contract administration and observations, including periodic site visits to monitor progress, respond to questions and address issues, confirm pay requests, and other on-call requests from the City. An average of five (5) hours per day for ten (10) weeks has been assumed for field visits and observations.
- Submittal review is assumed to be twenty (20) submittals with 25-percent resubmittal, including the project schedule and schedule updates.
- The contractor will be responsible for providing construction survey and staking for field control and as-built surveying for use in preparing as-built drawings.
- The City will coordinate directly with the contractor for testing, system shut downs, and connections.
- Construction phase services defined in this task are variable in nature and depend in part on the contractor awarded the project. RH2's estimate is based upon an experienced and reasonable contractor being awarded the construction contract. RH2 recommends the City budget the amount shown in the estimate plus a contingency amount. The contingency could cover additional services if a more intensive level of observation and construction support is necessary. Additional work needed beyond this amount will be mutually determined by the City and RH2.

RH2 Deliverables:

- Pre-construction conference administration and documentation, including pre-construction conference meeting agenda and minutes.
- Submittal and shop drawings review and documentation.
- Clarifications and change orders review and documentation, if required.
- Weekly construction meeting agenda and minutes.
- Construction observation and correspondence with the City and contractor, as needed, within the budgeted hours authorized. Construction observation reports from site visits to be provided to the City at progress meetings.
- Punch list following final inspection.
- Letter recommending substantial completion and project acceptance.
- Record drawings in PDF and AutoCAD® DWG format, including external references, prepared in accordance with City standards.

EXHIBIT B

City of Oregon City

South End Road, Warner Parrott Road, Lawton Road Waterline Replacement Project

Amendment No. 2

Project No. CI 15-012

Estimate of Time and Expense

	Description	Principal	Project Manager	Project Engineer	Staff Engineer	Administrative Support	Total Hours	Total Labor	Total Subconsultant	Total Expe	ense	Total Cost
	Classification	Professional VIII	Professional VII	Professional VI	Professional II	Administrative III						
Task 6	Final Design				: \$					L		
6.1	Perform Quality Control Review	2	5	2			9	\$ 1,849	\$ -	\$	59 \$	_,-,
6.2	Prepare Final Plans and Specifications	-	5	10	35	4	54	\$ 8,606	\$ -	\$	607 \$	9,213
	Subtotal	2	10	12	35	4	63	\$ 10,455	\$ -	\$	666 \$	11,121
Task 7	Services During Bidding				1	i i						
7.1	Respond to Bidder Questions and Prepare Addendum	-	2	2	12	6	22	\$ 3,172	\$ -	\$	79 5	3,251
7.2	Assist with Bid Opening and Bidder Evaluation	-	2	2	12	6	22	\$ 3,172		Š	79 \$	3,251
	Subtotal		4	4	24	12	44	\$ 6.344		Ś	159 5	
	54215141			· · · · · · · · · · · · · · · · · · ·		:		ψ 0,011	¥		200	3,505
	Subtotal Final Design & SDB Tasks	2	14	16	59	16	107	\$ 16,799	\$ -	\$	825	\$ 17,624
					:							
Task 8	Services During Construction			į.	1							
8.1	Attend Pre-construction Conference											
			2	2	4	2	10	\$ 1,588	\$ -	\$	53	1,641
8.2	Provide Clarifications and Change Orders		2	2 8	4 16	2 8	34	\$ 5,110	\$ - \$ -	\$	128 \$	5,238
8.3	Review Submittals		2	2 8 12	4 16 24	2 8 12	34 50	\$ 5,110 \$ 7,458	\$ - \$ - \$ -	\$ \$ \$	128 \$ 186 \$	5,238 7,644
8.3 8.4	Review Submittals Perform Periodic Field Observation, Construction Meetings, and Project Closeout	-	2 12	2 8 12	4 16 24 250	2 8 12	34 50 298	\$ 5,110 \$ 7,458 \$ 45,946	\$ - \$ - \$ - \$ -	\$ \$ \$ \$	128 \$ 186 \$ 1,630 \$	5,238 7,644 47,576
8.3 8.4 8.5	Review Submittals Perform Periodic Field Observation, Construction Meetings, and Project Closeout Prepare Record Drawings	- -	2 12	8 12 24	4 16 24 250 24	8 12 12	34 50	\$ 5,110 \$ 7,458 \$ 45,946 \$ 4,006	\$ - \$ - \$ - \$ -	\$	128 \$ 186 \$ 1,630 \$ 293 \$	5,238 7,644 47,576 4,299
8.3 8.4	Review Submittals Perform Periodic Field Observation, Construction Meetings, and Project Closeout		2 12	2 8 12 24	4 16 24 250 24	8 12 12	34 50 298	\$ 5,110 \$ 7,458 \$ 45,946	\$ - \$ - \$ - \$ - \$ - \$ 5,060	\$	128 \$ 186 \$ 1,630 \$	5,238 7,644 47,576
8.3 8.4 8.5	Review Submittals Perform Periodic Field Observation, Construction Meetings, and Project Closeout Prepare Record Drawings		2 12	2 8 12 24	4 16 24 250 24	8 12 12	34 50 298 26	\$ 5,110 \$ 7,458 \$ 45,946 \$ 4,006		\$	128 \$ 186 \$ 1,630 \$ 293 \$	5,238 7,644 47,576 4,299 5,514
8.3 8.4 8.5	Review Submittals Perform Periodic Field Observation, Construction Meetings, and Project Closeout Prepare Record Drawings Pre- and Post-Construction Monument Survey		2 12 - -	2 8 12 24 2 2	4 16 24 250 24	8 12 12	34 50 298 26 2 420	\$ 5,110 \$ 7,458 \$ 45,946 \$ 4,006 \$ 382	\$ 5,060	\$ \$	128 \$ 186 \$ 1,630 \$ 293 \$ 72 \$	5,238 7,644 47,576 4,299 5,514 71,912
8.3 8.4 8.5	Review Submittals Perform Periodic Field Observation, Construction Meetings, and Project Closeout Prepare Record Drawings Pre- and Post-Construction Monument Survey Subtotal		2 12 - - 18	2 8 12 24 2 2 2 50	4 16 24 250 24 - 318	2 8 12 12 - - - 34	34 50 298 26 2 420	\$ 5,110 \$ 7,458 \$ 45,946 \$ 4,006 \$ 382 \$ 64,490	\$ 5,060	\$ \$	128 \$ 186 \$ 1,630 \$ 293 \$ 72 \$ 2,362 \$ \$	5,238 7,644 47,576 4,299 5,514 71,912

EXHIBIT C RH2 ENGINEERING, INC. SCHEDULE OF RATES AND CHARGES

2017 HOURLY RATES

Professional VIII \$216.00 Technician III \$13 Professional VII \$207.00 Technician II \$9 Professional VI \$191.00 Technician I \$9 Professional V \$182.00 Administrative V \$13 Professional IV \$172.00 Administrative IV \$10 Administrative III \$9	Professional VIII \$216.00 Technician III Professional VII \$207.00 Technician II Professional VI \$191.00 Image: Control of the con	\$139.00 \$131.00
Professional VII \$216.00 Technician III \$13 Professional VII \$207.00 Technician II \$9 Professional VI \$191.00 Technician I \$9 Professional V \$182.00 Administrative V \$13 Professional IV \$172.00 Administrative IV \$10 Administrative III \$9	Professional VIII \$216.00 Technician III Professional VII \$207.00 Technician II Professional VI \$191.00 Image: Control of the con	
Professional VII \$207.00 Technician II \$9 Professional VI \$191.00 Technician I \$9 Professional VI \$191.00 V \$182.00 Administrative V \$13 Professional IV \$172.00 Administrative IV \$10 Administrative III \$9	Professional VII \$207.00 Technician II Professional VI \$191.00 Professional V \$182.00 Administrative V Professional IV \$172.00 Administrative IV Administrative III III	
Professional VI \$191.00 Professional V \$182.00 Administrative V \$13 Professional IV \$172.00 Administrative IV \$10 Administrative III \$9	Professional VI \$191.00 Professional V \$182.00 Administrative V Professional IV \$172.00 Administrative IV Administrative III	\$98.00
Professional V \$182.00 Administrative V \$13 Professional IV \$172.00 Administrative IV \$10 Administrative III \$9	Professional V \$182.00 Administrative V Professional IV \$172.00 Administrative IV Administrative III	\$93.00
Professional IV \$172.00 Administrative IV \$10 Administrative III \$9	Professional IV \$172.00 Administrative IV Administrative III	
Professional IV \$172.00 Administrative IV \$10 Administrative III \$9	Professional IV \$172.00 Administrative IV Administrative III	\$130.00
Administrative III \$9	Administrative <u>III</u>	\$109.00
		\$94.00
	Professional III \$162.00 Administrative II	\$78.00
Professional II \$151.00 Administrative I \$6	Professional II \$151.00 Administrative I	\$65.00
Professional I \$139.00	Professional I \$139.00	

IN-HOUSE SERVICES

In-house copies (each)	8.5" X 11"	\$0.09	CAD Plots	Large	\$25.00
In-house copies (each)	8.5" X 14"	\$0.14	CAD Plots	Full Size	\$10.00
In-house copies (each)	11" X 17"	\$0.20	CAD Plots	Half Size	\$2.50
In-house copies (color) (each)	8.5" X 11"	\$0.90	CAD System	Per Hour	\$27.50
In-house copies (color) (each)	8.5" X 14"	\$1.20	GIS System	Per Hour	\$27.50
In-house copies (color) (each)	11 X 17"	\$2.00	Technology Charge	2.5%	of Direct Labor
			Mileage	Cı	ırrent IRS Rate

OUTSIDE SERVICES

Outside direct costs for permit fees, reports, maps, data, reprographics, couriers, postage, and non-mileage related travel expenses that are necessary for the execution of the project and are not specifically identified elsewhere in the contract will be invoiced at cost.

All Subconsultant services are billed at cost plus 15%.

CHANGES IN RATES

Rates listed here are adjusted annually. The current schedule of rates and charges is used for billing purposes. Payment for work accomplished shall be based on the hourly rates and expenses in effect at the time of billing as stated in this Exhibit.