


CITY OF MARYSVILLE AGENDA BILL

EXECUTIVE SUMMARY FOR ACTION

CITY COUNCIL MEETING DATE: December 10th, 2018

AGENDA ITEM:	
Highway 9 Exploratory Well – Change Order #1: Additional Depth Drilling	
PREPARED BY:	DIRECTOR APPROVAL:
Kyle Hays, Project Engineer	
DEPARTMENT:	
Public Works / Engineering	
ATTACHMENTS:	
Change Order #1	
BUDGET CODE:	AMOUNT: \$X
40220594.563000, W1802	
SUMMARY:	

The Highway 9 Exploratory Well project consists of drilling, constructing and testing of a large-diameter exploratory well up to 1,000 feet in depth with a goal of finding a new aquifer (before reaching bedrock) able to yield up to 1,000 gallons per minute.

Holt Services (the contractor drilling the well) was able to advance 12” drilling to approximately 963 ft without reaching bedrock or finding a new distinct aquifer. Assessment of initial available drilling logs led RH2 Engineering’s hydrogeologist to believe bedrock would be reached at about 1,000 feet depth below the surface. With further evaluation of the extracted soil logs from the current drilling process, the hydrogeologist believes bedrock will more likely be reached at a depth of 1,200-1,300 feet below surface.

The proposed change order will add a maximum of approximately 350 feet of 10 inch well drilling, to allow the well to reach a distinct aquifer before the estimated bedrock depth. This will allow the City to fully explore the potential for drinking water production at this site, at a cost far below trying to find a different site to develop a well.

Original Contract (Includes Sales Tax):	\$ 857,135.06
Original Management Reserve:	\$ 104,544.45
<u>Original Total Allocation:</u>	<u>\$ 961,679.51</u>
Change Order #1:	\$ X
<u>New Total Allocation:</u>	<u>\$ X</u>

RECOMMENDED ACTION:

Staff recommends that Council authorize the Mayor to sign and execute the Change Order #1 with Holt Services, Inc. in the amount of \$X including Washington State Sales Tax.

**CITY OF MARYSVILLE
PUBLIC WORKS DEPARTMENT**

CONTRACT CHANGE ORDER

No. 1

Date: 12/10/2018

Project: Highway 9 Exploratory Well

Job No.: W1802

Job Location: Highway 9 Well Site

Owner: City of Marysville

To: (Contractor) Holt Services, Inc.

cc: (Surety) Great American Insurance Company

YOU ARE HEREBY INSTRUCTED TO:

- | | |
|--|---|
| <input type="checkbox"/> Make changes in plans and specifications as noted below | <input type="checkbox"/> Execute work as noted below |
| <input checked="" type="checkbox"/> Perform extra work as noted below | <input type="checkbox"/> Delete work as noted below |
| | <input type="checkbox"/> Restore areas as noted below |

DESCRIPTION AND/OR SKETCH	QTY	UNIT	UNIT PRICE	TOTAL
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You are ordered to perform the following described work upon receipt of an approved copy of the change order:
The original well design called for an approximately 1,000ft deep well, expecting to find a good aquifer layer somewhere between 300 to 1000 ft. deep. The driller was able to drill to 963 ft. before being unable to continue with our current design. No good aquifer layers were encountered in the course of drilling.

This change order authorizes drilling and advancing 10 in. casing to an approximate depth of 1300 ft. This work will include:

- 11 working days of standby time required to wait for this change order approval
- Mobilization of required casing, additional drill tooling, etc.
- Furnish temporary 10 in. casing and install up to 852 ft
- Drill 10 in. hole up to 350 ft.
- Install 10 in. casing up to 450 ft.

See attached modifications to the Project Special Provisions which are related to this work.

The total cost of this work is estimated to be \$X not including Washington State Sales Tax. The total for this work including sales tax is \$X.

Approved by Council: N/A
(Date)

Presented to Council: 12/10/2018
(Date)

All work, materials, and measurement to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

ORIGINAL CONTRACT AMOUNT \$857,135.06	CONTRACT TOTAL AFTER CHANGE \$X	PERCENT CHANGE THIS ORDER %X	TOTAL PERCENT CHANGE %X
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CONTRACT COMPLETION TIME:

Same (increase) calendar days: X days

RECOMMENDED FOR APPROVAL BY: _____ DATE: _____
(Engineer)

APPROVAL BY: _____ DATE: _____
(Public Works Director)

APPROVAL BY: _____ DATE: _____
(Finance Director)

ENDORSED BY: _____ DATE: _____
(Contractor's Signature)

Change Order #1: Special Provisions Modifications

To the Contract Documents for

City of Marysville
Highway 9 Exploratory Well
40220594.563000.W1802

SP 7-10 WELL CONSTRUCTION

Add the following on page 88 after “12-inch Casing” section:

“10-inch Casing

All 10-inch casings shall have a minimum wall thickness of .365 inches and a weight not less than 40.48 pounds per foot. The casing shall be sufficient to support the loads occurring during drilling and completion depth.”

SP DIVISION 10 – MEASUREMENT AND PAYMENT

Add the following on the bottom of page 106:

“ Change Order #1:

CO#1 Item No. 1 – Mobilization

The lump sum price shall cover the complete cost to mobilize and deliver to the project site all equipment and materials necessary to complete the change order work. Payment shall be made in full on the first payment including any other item from this change order

CO#1 Item No. 2 – Furnish Temporary 10 inch Casing

The linear foot price shall cover the complete cost of all materials, labor, and equipment necessary to provide the temporary 10 inch diameter casing required to install permanent 10 inch casing. Measurement shall be per linear foot of temporary casing utilized.

CO#2 Item No. 3 – 10 inch Diameter Drilling

The linear foot price shown shall cover the complete cost of labor and equipment necessary for drilling a 10-inch diameter boring with simultaneous advance of a 10-inch diameter casing, and collection of representative samples. This bid item includes drilling but does not include the cost of the casing. Payment for sample collection over this depth interval shall be paid in this item. Measurement shall begin at the bottom of the 12-inch diameter boring, from approximately 960 feet to a depth of approximately 1,300 feet (340 feet of drilling) and shall be per linear foot of drilling.

CO#1 Item No. 4 – Furnish and Install 10 inch Diameter Well Casing

The linear foot price shown shall cover the complete cost of all materials, labor, and equipment necessary for the installation of all required permanent 10-inch diameter casing strings, including a new 10 inch diameter casing shoe for protection of the casing during advance and drilling, complete and in place. This bid item includes cleaning, trimming, welding, centralizing, stringing, and cutting and removing excess casing, but does not include drilling. Payment shall be per linear foot of casing utilized during construction, which is estimated to be approximately 440 feet. Measurement shall be per linear foot of casing utilized during construction.

CO#1 Item No. 5 – Standby Time

The per day price shall cover the complete cost for standby time of all equipment during the time waiting for change order #1 to be approved. Payment shall be made based on the actual days that no critical path work could be accomplished as a direct result of waiting for change order #1.