

# Council Communication

## October 18, 2016, Business Meeting

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### Approval of a Change Order in Excess of 25% for Reservoir Sediment Removal

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**FROM:**

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**SUMMARY**

This is a change order in excess of 25% for the dredging of accumulated sediment in the East and West Fork impoundments of Ashland Creek. The change order accounts for a post-contractual requirement of the contractor to use biodegradable hydraulic oil in machinery working within waterways and removal of an additional 756 cubic yards accumulated sediment from the impoundments. Proper sediment management of reservoir impoundments is essential to meeting the total maximum daily load permit requirements and maintaining the water quality of Reeder Reservoir.

**BACKGROUND AND POLICY IMPLICATIONS:**

The City, assisted by an environmental consultant, estimated approximately 700 cubic yards of material had accumulated in each of the reservoirs since they were last dredged in 2013 (East Fork) and 2014 (West Fork). A request for proposal for the removal of 1400 cubic yards of sediment was issued to four contractors on August 31, 2015. KOGAP Enterprises was the only responsive bidder and was awarded a contract for sediment removal. KOGAP began in-water work on September 13, 2016 in the East Fork reservoir. On September 15, the City learned that KOGAP was using an excavator with petroleum-based hydraulic fluids, rather than biodegradable hydraulic fluids, for machinery working within waterways. Although there were no regulatory or contractual stipulations for the use of biodegradable hydraulic fluid, the City determined that the environmental risk to aquatic organisms and the municipal risk to the drinking water supply were too great and halted in-water work until equipment with biodegradable hydraulic fluid could be supplied. KOGAP rented the appropriate machinery for the duration of the project at a cost of \$9600. The rental resulted an increase of 12.5 percent over the original project cost of \$67,200.

A secondary cost increase resulted from the removal of sediment in excess of the estimated 1400 cubic yards. Estimation of sediment removal is inherently difficult, as the majority of the accumulation is under the surface of the water. On September 21, as the deadline for in-water work was nearing, the City learned that an addition 756 cubic yards of sediment would need to be removed to restore the impoundments to their original bathymetry. The removal, hauling, and disposal of the extra 756 cubic yards resulted in a charge of \$18,900, or a 22 percent increase over the original project cost.

The combined costs of the rental equipment and the additional sediment removal require a contract amendment for \$28,500 (29.8 percent of the original project cost).

The East and West Forks of Ashland Creek are impounded by low-level dams immediately upstream of Reeder Reservoir. These small impoundments function to capture mobilized sediment, thereby



reducing accumulation of sediment in Reeder Reservoir. The calculated TMDL for sediment in Reeder Reservoir, as defined by the City's TMDL permit, administered by the Oregon Department of Environmental Quality (DEQ), is approximately 6.4 cubic feet per day. The City has a responsibility to mitigate this accumulation by periodically removing sediment from the reservoirs to maintain water quality and storage capacity in Reeder Reservoir. This project is budgeted every two years to allow the City to effectively manage the reservoirs.

In 2013, the Engineering Division acquired the necessary permits from the Oregon Department of State Lands (DSL) and the US Army Corps of Engineers to remove up to 10,370 cubic yards of accumulated sediment from the East and West Fork Reservoirs. Under the terms of these types of permits, in-water work is restricted to the June 15 through September 15 date range. This period, known as the in-water work window, has been established by Oregon Department of Fish and Wildlife to protect sensitive life stages of aquatic organisms, including spawning, incubation, and emergence of native fish populations. Even so, the regulators have the authority to renew permits and extend the in-water work period for individual projects under certain justifiable circumstances. This year, the City was granted an extension until September 30, 2016, after which the permit would expire with no opportunity for renewal or further extension. As such, it was imperative that the City complete maintenance dredging by September 30.

**FISCAL IMPLICATIONS:**

The additional funds will come from monies budgeted in the current biennium within the water supply and SDC improvement funds.

**COUNCIL GOALS:**

N/A

**STAFF RECOMMENDATION AND REQUESTED ACTION:**

Staff recommends approval of the contract amendment with KOGAP for \$28,500.

**SUGGESTED MOTIONS:**

I move approval of a change order with KOGAP for \$28,500.

**ATTACHMENTS:**

Change Order from KOGAP





**Ashland Reservoir Sediment Removal Pay Request**  
**City of Ashland**  
**WO 2749**

Payment Request 1  
 Application Date \_\_\_\_\_

Date of Work	Amount	Retainage 5%	95% Due
Sept '16	95,700.00	4,785.00	90,915.00
		0.00	0.00
		0.00	0.00
		0.00	0.00
<b>Total</b>	<b>95,700.00</b>	<b>4,785.00</b>	<b>90,915.00</b>

A Item No.	B DESCRIPTION OF WORK	C Unit	D Quantity	E Unit Price	F Item Total	G Previous Quantity	H WORK COMPLETED		I Current Quantity	J Current Amount	K Total Quantity To Date	L Total Amount To Date
							Previous Amount	Current Amount				
1	Mobe and De-Mobe	LS	1	14,000.00	14,000.00		0.00	1.00	14,000.00	1.00	14,000.00	14,000.00
2	Clear and Grub Access, Staging Area and Disposal Site	LS	1	1,000.00	1,000.00		0.00	1.00	1,000.00	1.00	1,000.00	1,000.00
3	Dewatering - coffer dams, pumps, piping	LS	1	12,500.00	12,500.00		0.00	1.00	12,500.00	1.00	12,500.00	12,500.00
4	Installation of erosion control measures	LS	1	1,200.00	1,200.00		0.00	1.00	1,200.00	1.00	1,200.00	1,200.00
5	Construct access to East and West Fork sites	LS	1	1,500.00	1,500.00		0.00	1.00	1,500.00	1.00	1,500.00	1,500.00
6	Excavation of Sediment	CY	1,400	8.00	11,200.00		0.00	2156.00	17,248.00	2156.00	17,248.00	17,248.00
7	Hauling of Sediment to disposal site	CY	1,400	17.00	23,800.00		0.00	2156.00	36,652.00	2156.00	36,652.00	36,652.00
8	Final Stabilization of sites, hydroseeding	LS	1	2,000.00	2,000.00		0.00	1.00	2,000.00	1.00	2,000.00	2,000.00
<b>Total</b>					<b>67,200.00</b>		<b>0.00</b>		<b>86,100.00</b>		<b>86,100.00</b>	
<b>CHANGE ORDERS/EXTRAS</b>												
CO #1	Rental of Environmental Green Machine	LS	1	9,600.00	9,600.00			1	9,600.00			9,600.00
	<b>Total of Contract and C.O.'s</b>				<b>76,800.00</b>		<b>0.00</b>		<b>95,700.00</b>		<b>95,700.00</b>	

Removal of 1400  
CY was bid

2156 CY was  
actually removed