ORDINANCE No. 189431

Amend contract with HDR Engineering, Inc. for additional construction and start up support services for the Columbia Boulevard Wastewater Treatment Plant Renewable Natural Gas Facility Project No. E10033 (Ordinance; amend Contract No. 30003218)

The City of Portland ordains:

- Section 1. The Council finds:
 - The Bureau of Environmental Services (BES) owns and operates the Columbia Boulevard Wastewater Treatment Plant (CBWTP), which treats an average of 28 billion gallons annually of wastewater in accordance with State of Oregon Department of Environmental Quality (DEQ) issued National Pollutant Discharge Elimination System (NPDES) permit requirements.
 - 2. Currently, the CBWTP produces approximately 600 million cubic feet annually of digester gas, or biogas, from its anaerobic digestion process. Approximately 20% of the biogas is used onsite for digester and building heating boilers, 20% is sold to a nearby industrial user, and 40% is used for the cogeneration process (power generation and heat recovery). The remaining 20% is flared through a waste gas burner onsite.
 - 3. In 2013, HDR Engineering, Inc. was retained, through a selection process, to provide predesign engineering services to identify and assess alternatives for beneficial use of the remaining biogas, and to recommend an alternative for the most beneficial use. Ordinance No. 185872 authorized HDR to proceed with the predesign phase, in the amount of \$298,600, and asked that BES report back to the City Council on the findings and recommendations at the conclusion of the predesign phase. The predesign phase was complete and an alternative, to reuse biogas for vehicle fuel, was the recommended alternative.
 - 4. The recommended alternative, treating and utilizing biogas for vehicle fuel, was determined the most beneficial from various aspects, including financial, social and environmental aspects.
 - 5. In 2015, the City Council authorized Ordinance No. 187022, which authorized HDR to further develop the gas treatment for vehicle fuel alternative, and proceed with final design and construction support services, in the amount of \$995,410, for total contract amount of \$1,294,010.
 - 6. During the final design, it was further refined that treated biogas for vehicle fuel be best produced as Renewable Natural Gas (RNG) and transported via the gas utility pipeline network. Furthermore, it was determined that the RNG production capacity be increased to match the current total biogas production at the CBWTP (rather than capacity for only the excess biogas being flared). The increase in design capacity (from 400 standard cubic feet per minute for primarily the flared volume, to 1,100 standard cubic feet per minute) will help BES address the fluctuation issues in the biogas production process, and provide more flexibility to prioritize and distribute the biogas to the highest value and maximize revenue.

- The increase in the RNG production capacity will require additional construction and start up support services by HDR, for the completion and operation of the RNG production facility, which is scheduled for Fall 2019.
- 8. This council item is to obtain the City Council approval to authorize a contract amendment for HDR Engineering, Inc. for the needed additional construction and start up support services.
- The established cost for contract amendment is \$222,800. The percentage of D/M/W/ESB participation is 18.2% of the total amended contract amount. Funds are available in the Sewer System Operating Fund, FY 18-19 Budget, Bureau of Environmental Services, Cost Center, WBS Element E10033.

NOW, THEREFORE, the Council directs:

- a. The Commissioner-in-Charge is authorized to execute a contract amendment for the purposes described in Section 1, in the amount of \$222,800, for a total amended contract amount of \$1,516,810.
- b. The Mayor and City Auditor are hereby authorized to pay for the contract from the Sewer System Operating Fund Budget when demand is presented and approved by the proper authority.

Passed by the Council: MAR 2 0 2019 Commissioner Nick Fish

Prepared by: Paul Suto Date prepared: February 6, 2019

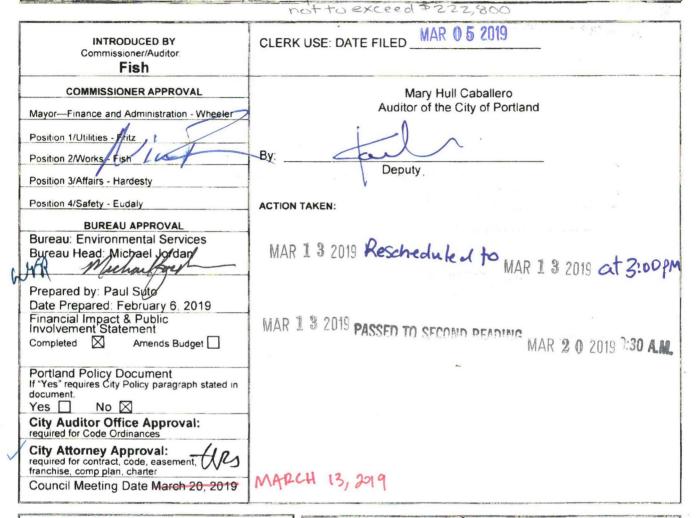
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Mary Hull Caballero Auditor of the City of Portland By Deputy

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Agenda No. ORDINANCE NO. 189431 Title

Ane columbia Boulevard Wastewater Treatment Plant (CBWTP) Renewable Natural Gas Facility (BES Project E10033, (Ordinance; amend Contract No. 30003218)



AGENDA <u>TIME CERTAIN</u> Start time:	FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:		
			YEAS	NAYS
Total amount of time needed: (for presentation, testimony and discussion)	1. Fritz	1. Fritz		
	2. Fish	2. Fish		
	3. Hardesty	3. Hardesty		
REGULAR Total amount of time needed: <u>10 minutes</u> (for presentation, testimony and discussion)	4. Eudaly	4. Eudaly	~	
	Wheeler	Wheeler		

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