ORDINANCE No. 190334

Amend contract with HDR Engineering, Inc. for additional support services for the Columbia Boulevard Wastewater Treatment Plant Renewable Natural Gas Facility Project No. E10033 for \$283,039 (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 January 2013, through Ordinance No. 185872, BES entered into Contract No. 30003218 with HDR Engineering, Inc. (HDR) 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 for the CBWTP Biogas Utilization (Project). The original contract amount was \$298,600 for the pre-design phase only. BES was to report back to City Council with findings and recommendations at the conclusion of the predesign phase to obtain approval through an additional ordinance to proceed with completion of the Project. The predesign phase was completed 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 February 2015, through Ordinance No. 187022 City Council 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.
 - 7. The increase in the RNG production capacity required additional construction and start up support services by HDR, for the completion and operation of the RNG production

facility. In March 2019, City Council authorized Ordinance No. 189431 to increase Contract No. 30003218 by \$228,000, for total contract amount of \$1,516,810, for the required support services.

- 8. The RNG production facility was initially projected to be completed in the fall of 2019. Due to a number of unanticipated design and construction changes, the project completion was rescheduled for the fall of 2020. The changes and schedule delays required additional construction support services from HDR to complete the Project. In March 2020, City Council authorized Ordinance No. 189874, to increase Contract No. 30003218 by \$229,000, for a total contract amount of \$1,745,810.
- 9. In November 2020, during the last stage of the testing and startup phase of the Project, an equipment malfunction resulted in an incident, causing damage to the piping and equipment components of the RNG production system. The system is being assessed, repaired and improved, before resuming with the testing and startup. The project completion is now anticipated for late summer/early fall of 2021.
- 10. This council item is to obtain City Council approval to authorize a contract amendment for HDR Engineering, Inc. for additional support services to complete the Project. The new RNG facility once operational is projected to provide significant revenue, clean air and climate benefits by generating renewable energy to displace dirty diesel in vehicle fuel.
- 11. The current contract provided for \$348,801, or 20.0% of the total contract dollars to State of Oregon certified M/W/ESB subconsultants. This amendment will provide \$399,375, or 19.7% of the total contract dollars to certified M/W/ESB subconsultants.
- 12. The established cost for the contract amendment is \$283,039 for a total amended contract amount of \$2,028,849. The level of confidence in the estimate high. Funds are available in the Bureau of Environmental Services FY 2020-21 Operating Fund Budget, WBS Element E10033.

NOW, THEREFORE, the Council directs:

- a. The Director of the Bureau of Environmental Services, or designee, is authorized to execute a contract amendment for the purposes described in Section 1, in a form similar to the amendment attached as Exhibit A, in the amount of \$283,039, for a total amended contract amount of \$2,028,849 provided the amendment has been approved as to form by the City Attorney.
- 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: March 24, 2021

Commissioner Mingus Mapps Prepared by: Paul Suto Date prepared: February 5, 2021

Cost object - E10033

Mary Hull Caballero

Auditor of the City of Portland

By Megan Lehman

Deputy

182 164 Agenda No. ORDINANCE NO. 190334

Title

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INTRODUCED BY Commissioner/Auditor: Comm Mingus Mapps	CLERK USE: DATE FILED _March 9, 2021	
COMMISSIONER APPROVAL	Mary Hull Caballero Auditor of the City of Portland	
Mayor—Finance & Administration - Wheeler		
Position 1/Utilities - Rubio		
Position 2/Works - R an	By: <u>Megan Lehman</u> Deputy	
Position 3/Affairs - Hardesty	Deputy	
Position 4/Safety - Mapps Mingus Ming	ACTION TAKEN:	
BUREAU APPROVAL	March 17, 2021 Passed to Second Reading March 24, 2021 at 9:30 am	
Bureau: Environmental Services Bureau Head: Dawn Uchiyama		
Paul Suto Prepared by: Date Prepared: 2/5/2021		
Impact Statement Completed Amends Budget		
Portland Policy Document If "Yes" requires City Policy paragraph stated		
in document. Yes No		
City Auditor Office Approval: required for Code Ordinances		
City Attorney Approval: Eric required for contract, code, easemerghaffner 2021. franchise, comp plan, charter	y signed : Shaffner 92 22 43 -08'00'	
Council Meeting Date March 17, 2021		

AGENDA	FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:		
			YEAS	NAYS
Start time: Total amount of time needed: (for presentation, testimony and discussion)	1. Rubio	1. Rubio	\checkmark	
	2. R an	2. R an	\checkmark	
	3. Hardesty	3. Hardesty	\checkmark	
	4. Mapps	4. Mapps	\checkmark	
Total amount of time needed: 5 Minutes (for presentation, testimony and discussion)	Wheeler	Wheeler	\checkmark	