

IMPACT STATEMENT

Legislation title: Amend contract with Brown and Caldwell, Inc. for professional engineering services for the Columbia Boulevard Wastewater Treatment Plant (CBWTP) Waste Gas Burner Replacement, BES Project No. E10649, in the amount of \$338,935 (Ordinance; amend Contract No. 30005983)

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Purpose of proposed legislation and background information:

The purpose of this legislation is to amend Contract No. 30005983 with Brown and Caldwell, Inc. (B&C) for compensation for additional scope of work and extend the term of the contract for the Columbia Boulevard Wastewater Treatment Plant (CBWTP) Waste Gas Burner (WGB) Replacement BES project number E10649. Council authorization is required for amendments to PTE contracts that increase the contract amount by more than 25% of the original contract amount.

Waste gas burners (or flares) are required at the CBWTP to safely burn anaerobic digester gas generated on site that cannot be beneficially used. Digester gas is odorous, flammable, and is a strong greenhouse gas and must be burned in flares rather than discharged directly to the atmosphere.

The initial project scope included replacing the existing WGBs with new WGBs in the same location, and maintaining much of the existing supporting infrastructure, and adding controls and monitoring equipment to existing piping.

Following completion of the predesign phase, B&C submitted a predesign report with a recommendation that the WGBs be relocated after developing multiple alternatives and completing an alternatives analysis. The selected alternative is based on the finding that it is not possible to replace the existing WGBs in the current location and meet code requirements. Also, the proposed additional monitoring and controls cannot be installed on existing gas piping located in the tunnels at CBWTP for safety reasons. Installation of new WGBs at a new location at CBWTP will allow for new, more efficient technology to be installed in a manner that meets all current code and safety requirements and allows the installation of additional monitoring and control equipment.

System reliability will be improved with the installation of instrumentation for management of the biogas system. The addition of new instrumentation and monitoring equipment will provide operations staff with accurate and real time data feedback to improve the operations process and reporting, including ensuring accurate accounting of biogas production and demand.

The relocation of the flares requires additional detailed design work, as well as additional support during construction services associated with a more complex design and additional submittal requirements. This amendment provides B&C with the funds required to complete this additional work.

