



STATE OF WEST VIRGINIA  
DEPARTMENT OF HEALTH AND HUMAN RESOURCES  
Bureau for Public Health  
Office of Environmental Health Service

Bill J. Crouch  
Cabinet Secretary

Ayne Amjad, MD, MPH  
Commissioner & State Health Officer

**MEMORANDUM**

**TO:** Marie Prezioso, Chairman, Funding Committee  
WV Infrastructure and Jobs Development Council

**FROM:** Stephanie Hickerson, P.E. *SDH*  
Water Technical Review Committee

**DATE:** September 28, 2021

**RE:** City of Ravenswood Request for Bid Underrun  
System Improvements Project  
IJDC Preliminary Application: **2020W-1860**  
Jackson County

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**REQUEST:**

The City of Ravenswood is requesting to utilize \$925,977.50 in bid underrun funds. The City would like to utilize these underrun funds to add the additional scope items described below.

The City of Ravenswood opened bids for 3 contracts on August 26, 2021. The received bids were below the engineer's estimate for the project resulting in a bid underrun of \$925,977.50. The City had previously moved the water meters contract to direct purchase using City funds. The PSD is proposing to utilize bid underrun funds to upgrade lines and provide fire flow to Hillcrest Drive and to purchase an emergency generator for the WTP.

Adequate fire service is not currently available to approximately 15 homes along Hillcrest Drive because they are located above the elevation of the City's three existing 500,000 gallon storage tanks and 5 homes are served by the small hydro-pneumatic booster pumping station at the Hillcrest tank site. The proposed new 60,000-gallon tank and 2,250 LF of 6-inch main will provide potable water and fire protection to the highest reaches of Hillcrest Drive. The hydro-pneumatic booster pump station (which was to be upgraded as part of the base project) will be modified to become a conventional booster station (without the hydro-pneumatic tanks). Tank turnover will be accomplished through a solenoid controlled valve in the booster station that will return approximately 12,000 gpd to the large tanks (5-day turnover). The new tank will eliminate the need for an emergency generator at the Hillcrest tank site. This work will be added to the contract by change order. Prior to approval of this change order the additional project scope will need a BPH permit, additional easements (Title Opinion) and may require an updated environmental review/report.

The bid project included the installation of an emergency transfer switch for the water treatment plant; the proposed generator will allow water service to continue even during large, extended power interruptions.

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**RECOMMENDATION:**

The Technical Review Committee believes there are no technical issues related to this request and therefore recommends review and approval by the IJDC Funding Committee.

**CITY OF RAVENSWOOD  
WATER SYSTEM IMPROVEMENTS  
IJDC # 2020W-1860  
USE OF BID UNDER-RUN (REVISED PROPOSAL)**

- **Bid Under-run ..... \$925,977.50**
- **Proposed Use - New Hillcrest Drive Tank & Water Treatment Plant Emergency Generator**

CONSTRUCTION ITEM	QTY	UNIT	UNIT COST	TOTAL COST
6" Waterline Installation, Including Trench Replacement	2,250	LF	\$100	\$225,000
Fire Hydrant (Installed)	3	EA	\$5,000	\$15,000
14' Dia. x 60' Tall Tank & Associated Piping & Appurtenances	1	LS	\$330,000	\$330,000
Telemetry	1	LS	\$20,000	\$20,000
Site Work, Access Road, & Fencing	1	LS	\$60,000	\$60,000
Pre-Construction Video	1	LS	\$3,000	\$3,000
Erosion Control	1	LS	\$2,000	\$2,000
Emergency Generator for WTP	1	LS	\$100,000	\$100,000
<b>SUBTOTAL CONSTRUCTION</b>				<b>\$755,000</b>
Construction Contingency @ 5%				\$37,750
Engineering - Design				\$43,000
Engineering - Construction Administration				\$10,000
Engineering - Resident Project Representative (2 Months)				\$30,000
Engineering - Special Services (Surveying & Geotech.)				\$20,000
Additional Property and Easements (Legal / Acquisition)				\$30,000
<b>TOTAL ESTIMATED COSTS</b>				<b>\$925,750</b>

■ **Justification**

Adequate fire service is not currently available to approximately 15 homes along Hillcrest Drive because they are located above the elevation of the City’s three 500,000 gallon storage tanks and 5 homes are served by the small hydro-pneumatic booster pumping station at the Hillcrest tank site.

The proposed 60,000 gallon tank and 2,250 LF of 6-inch main will provide potable water and fire protection to the highest reaches of Hillcrest Drive. The hydro-pneumatic booster pump station (which was to be upgraded as part of the base project) will be modified to become a conventional booster station (i.e. without the hydro-pneumatic tanks). Tank turnover will be accomplished through a solenoid controlled valve in the booster station that will return approximately 12,000 gpd to the large tanks (5-day turnover). The new tank will eliminate the need for an emergency generator at the Hillcrest tank site.

The bid project included the installation of an emergency transfer switch for the water treatment plant; the proposed generator will allow water service to continue even during large, extended power interruptions.