

**Division of Abandoned Mine Lands AML PILOT Project
Status Report**

Grant Recipient Name: Big Sandy Area Development District

Project Name: Martin Co. Water Systems Controls & Raw Water Modification

Project Manager: Eric Ratliff

Date Submitted: November 7, 2019

Accomplishments:

Pump Purchase Only: Xylem has completed fabrication of the smaller (2 MGD pump). It is currently being stored in their shop awaiting delivery. The 4 MGD pump is being fabricated along with the variable speed drive for the 4 MGD pump. Bell Engineering is answering electrical questions concerning the 4 MGD pump. Pump fabrication should be complete in the next 1.5 to 2 months.

RWI & WTP Improvements: Bell Engineering has refocused design at the WTP to include upgrades to Clarifiers #2, and onsite generator and portable generator to operate booster pump stations, a new roof out to the clarifiers and a new flow meter. This design effort is ongoing and Bell has completed front end bid documents for the project. Bell Engineering presented preliminary plans and specifications for review/discussion. The Water Treatment Plant (WTP) and Raw Water Intake (RWI) sites have been surveyed. The electrical design has commenced. The Environmental Assessment for the Corps of Engineering portion has commenced.

Line Improvements: Locating and marking of existing water lines in the project area has begun in the project area. Front end bid documents for the project have been completed. Bell Engineering presented preliminary plans and specifications for review/discussion.

Hydraulic Modeling: Bell has completed field review of the RWI, WTP, Storage Tanks and PRVs. Bell and the University of Kentucky have met in Martin County to coordinate collection of field data for the calibration of the Hydraulic Model. Flow testing of selected hydrants has been conducted throughout the water system and is being reviewed. Field data has been reviewed. UK has returned to the field in an effort to repeat two tests for the Hazen Williams coefficient that appeared suspect.

Performance outcome data/metrics:

Bell Engineering is continuing with the design of the overall AML Project combined with the COE and ARC funding and the Hydraulic Model for the Water District.

BSADD staff continues to attend Martin County Water District Monthly Progress Meetings.

Problems, issues, variances from plan:

None at this time

Related Projects:

Bell Engineering presented preliminary plans and specifications for review/discussion of the ARC Project to the water main line replacement and other improvements in the community of Lovely. Bell and MCWD staff have been in the field multiple times locating existing lines, surveying existing meters, valves, fire hydrants and determining routing of new water lines.