Water System Improvements
Project Status Update

Martin County Water District

May 12, 2021
Status Report (BSADD/Bell)

- **Funding**
  - AML Pilot NEXUS Grant (2017) - $3,450,000
  - COE 531 Partnership - $1,869,718
  - ARC Grant - $1,200,000
  - AML Pilot NEXUS Grant (2018) - $2,000,000
  - KYTC Bridging Kentucky Funds - Willis Dials / Dan’s Branch Road - $38,357
    - Hunters Lane & Rockhouse Creek - To Be Determined
  - KYTC KY 908 Guardrail Project - To Be Determined

- **Total Grant Funding** - $8,558,075
CONTRACTS 113-19-01 & 113-19-02
RAW WATER INTAKE & WATER TREATMENT PLANT IMPROVEMENTS
AML & USACE FUNDS

CONTRACT 095-19-01
HIGH SCHOOL WATER STORAGE TANK & BOOSTER PUMP STATION TELEMETRY LOCAL FUNDS

CONTRACT 113-20-02
HUNTERS LANE UTILITY RELOCATION KYTC FUNDS

CONTRACT 113-19-03
WARFIELD AREA WATERLINE IMPROVEMENTS
AML & USACE FUNDS

CONTRACT 113-19-04
LOVELY AREA WATERLINE IMPROVEMENTS ARC FUNDS

CONTRACT 113-19-04 AND 113-19-05
USP BIG SANDY, EASTERN KENTUCKY BUSINESS PARK & BIG SANDY AIRPORT WATER IMPROVEMENT PROJECT AML FUNDS

CREATE HYDRAULIC MODEL OF EXISTING MCWD DISTRIBUTION SYSTEM

CONTRACT 113-20-01
WILLIS DIALS ROAD UTILITY RELOCATION KYTC FUNDS

Legend
- CITY LIMITS
- COUNTY LINE
- MARTIN COUNTY

Scale: 1:130,000

MARTIN COUNTY WATER DISTRICT
LOCATION OF ONGOING PROJECTS
MAY 2020
Contract 113-19-01
RWI Improvements Pump Purchase Only

- **Purchase of:**
  - New 2 MG Raw Water Intake Pump with Variable Speed Drive
  - New 4 MG Raw Water Intake Pump with Variable Speed Drive
  - New 4,000 GPM River Screen

- **Budget:** $601,200

- **Funding:** Abandoned Mine Lands 2017 NEXUS

- **Status:**
  - Complete
  - MCWD has use of the 2 MGD Pump.
  - 4 MGD Pump to be placed in service upon completion of the RWI/WTP Project.
Contract 113-19-02
RWI & WTP Improvements

- **Raw Water Intake Improvements:**
  - Concrete Ramp & Winch System for Moving Raw Water Pumps Up & Down Slope
  - Electrical Building Upgrade, Telemetry, Line Reactors and Instrumentation

- **Water Treatment Plant Improvements:**
  - Clarifiers 1 & 3 Rehabilitation with New Valve Vault for Clarifier 1
  - Replace Outside Chlorine Chemical Feed Piping & Roof On Chemical Storage Building
  - Replace Master Meter
  - 500 KVA on-site Backup Generator

- **Project Budget:** Construction Budget: $2,477,850
- **Funding:** Abandoned Mine Lands 2017 NEXUS & Army Corps of Engineers
Contract 113-19-02 (Continued)
RWI & WTP Improvements

**Status:**
- Bids for the project rebid were opened on April 13th.
- **Summary of Bids:**
  - One Bid was received.
  - Base Bid: $3,858,387
  - Base Bid plus Additive Alternates: $4,003,722
- The MCWD has had discussions with AML and USACE the possibility of moving money from the Warfield Line Replacement Project to the RWI/WTP Project to address the overage.
  - The MCWD is entering into negotiations with the low bidder concerning the bid alternates and other potential money saving project modifications.
  - Intent is to award RWI/WTP Project and move forward with construction as soon as negotiations are complete and agency concurrence is obtained.
Contract 113-19-03
Mainline, Service Line, Meter Replacement

- Replace in the Warfield Area:
  - Existing Mainline
  - Existing Meters & Service Line
  - Existing Valves & Hydrants

- Total Construction Budget: $992,000

- Funding: Abandoned Mine Lands 2017 NEXUS & Army Corps of Engineers
Contract 113-19-03 (Continued)
Mainline, Service Line, Meter Replacement

**Status**

- Bids for the project rebid were opened on April 13\textsuperscript{th}.
- Bids:
  - 3 Bids were received
  - Base Bid: $910,463.40
  - Base Bid plus Additive Alternates: $1,736,825.40
- Due to overage on the RWI/WTP Project, the intent is to defer construction of this project to a later date and use the funds associated with this project for construction of the RWI/WTP Project.
- The District is submitting funding requests in an effort to obtain funding to construct this project as soon as possible.
Contract 113-19-04
Mainline, Service Line, Meter Replacement

- Upgrades in the Lovely Area include the Replacement of:
  - Existing Mainline, Meters, Service Line, Valves & Hydrants
- Budget: $1,200,000
- Funding: Appalachian Regional Commission (ARC)
- Status:
  - Project construction is nearing completion.
Contracts 113-19-05 & 113-19-06
USP Big Sandy, Eastern Kentucky Business Park & Big Sandy Airport Water Improvements

- **Upgrades Include:**
  - Construction of 250,000 Gallon Water Storage Tank, New 400 GPM Pump Station and telemetry
  - Upgrade of the Existing Davella Pump Station
  - Master Meter & Booster Chlorination

- **Budget:** $2,000,000

- **Funding:** Abandoned Mine Lands 2018 NEXUS

- **Status:**
  - A previously selected tank site cannot be used.
  - While a new tank site is being finalized, design of the pump station, master meter and chlorination system are ongoing.
Contract 695-19-01
High School Water Storage Tank & Booster Pump Station Telemetry

- **Upgrades Include:**
  - Add telemetry to the Holly Bush Pump Station
  - Add telemetry to the High School Water Storage Tank
- **Budget:** $65,000
- **Funding:** Local Funds (Martin County Fiscal Court)
- **Status:**
  - All equipment installed and operating.
Contract 113-20-01
Willis Dials/Dan’s Branch Road Utility Relocation

- Upgrades Include:
  - Relocation of existing waterline to facilitate construction of a new bridge for the KYTC Bridging Kentucky Program

- Budget: $38,357

- Funding: KYTC

- Status:
  - Project approved by Division of Water August 13, 2020.
  - Relocated line is in operation.
Contracts 113-20-02 and 113-20-03
Hunters Ln. & Rockhouse Creek Utility Relocations

- **Upgrades Include:**
  - Relocation of existing waterline to facilitate construction of two new bridges for the KYTC Bridging Kentucky Program

- **Budget:** To Be Determined

- **Funding:** KYTC

- **Status:**
  - Developing project scope with Bizzack Construction and Alliance Resources. Construction scheduled for later in 2021.
KY 908 Guardrail Project

- **Upgrades Include:**
  - Relocation of existing 14” waterline along Route 908 to facilitate installation of new guardrail.

- **Budget:** To Be Determined

- **Funding:** KYTC

- **Status:**
  - Awaiting additional directive from KYTC.
Martin County Water District Hydraulic Model

- Prepare and Calibrate a Hydraulic Model of the Martin County Water District System
- **Budget:** $100,000
- **Funding:** Abandoned Mine Lands 2017 NEXUS
- **Status:**
  - Lines, tanks and PRVs have been input into the model and location field verified.
  - Line sizes have been verified.
  - Pressure zones have been analyzed.
  - Usage data has been entered into the model.
  - Model has been calibrated with field collected data.
  - Model has been checked against field observations.
  - Bell Model has been shared with University of Kentucky.
  - UK has shared their model with Bell.
Discussion/Questions