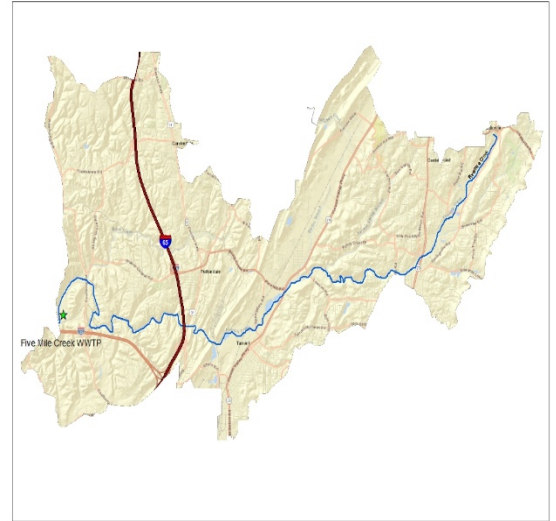




JEFFERSON COUNTY ENVIRONMENTAL SERVICES

FIVE MILE CREEK WATER RECLAMATION FACILITY

CONSTRUCTED: 1978 | PERMITTED AVERAGE CAPACITY: 30MGD | PEAK FLOW CAPACITY: 45MGD
Grade IV Facility



Facility Description:

The Five Mile Creek Water Reclamation Facility (WRF) was built in 1978.

- It is the third largest facility in the ESD WRF System
- It has a National Pollutant Discharge Elimination System Permit (NPDES)
- The facility is permitted for 30MGD, and is listed as a Grade IV, 24hr operational facility
- The facility serves the communities and businesses in Center Point, Fultondale, south Gardendale, Grayson Valley, Inglenook, Lewisburg, Roebuck, south Pinson Valley, and Tarrant City.
- Fivemile Creek is the permitted receiving stream for the facility's effluent discharge
- Fivemile Creek was once known as the most polluted stream in Alabama, because of chemical odors, and was once called Creosote Creek
- Fivemile Creek was entered into the Greenway Partnership and with 200 volunteers and 15 sponsors, removed 14 tons of debris in 2003
- 2004 Green Partnership Project was awarded the "2004 Partnership Project of the Year. Today the stream flows clear, and now has paddling routes
- Five Mile WRF has been successfully upgraded several times since its initial start in 1978
- In 2008 the upgrade in Five Mile WRF ended
- In 2009 B. L. Harbert, repaired sand filters that didn't pass final inspection

3410 Happy Hollow Lane
Fultondale, AL 35068

Projects in Planning

- Weather proofing and specialty coatings to restore and maintain assets
- Modify the flume to handle lower flow measurements and reduce algal growth and buildup
- Generator and Controls replacement and upgrade
- Concrete repair and rehabilitation
-

Budget: \$52,626,900

Director: David Denard | Deputy Director: Margaret Tanner | Plant Manager: Lynn Jones

Capital Improvement Project 2009 – 2010

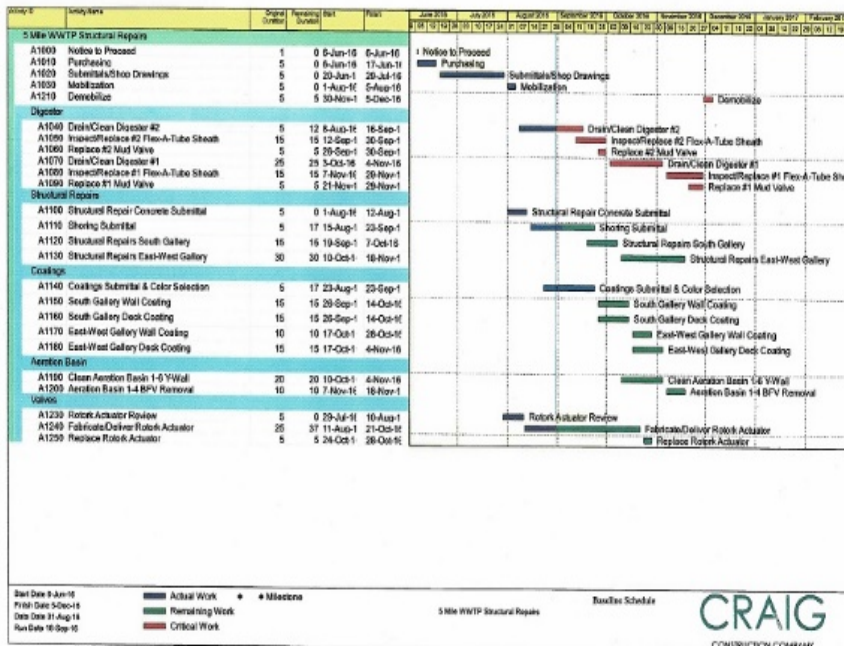
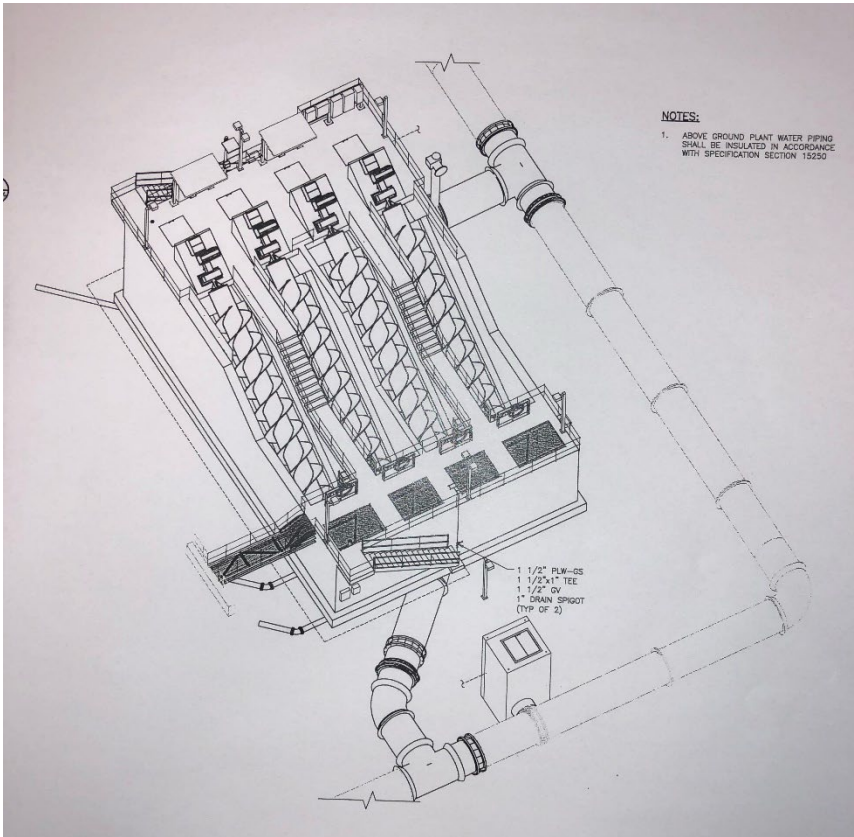
- In 2009 Morgan Contractors began construction on a design by, Camp, Dresser, and McKee (CDM) Inc.'s for the Intermediate Pump Station(IPS)
- The previous Hendon Engineering upgrade left the plant with a pumping capacity lower than it was before the construction upgrade started due to elevation friction loss
- CDM succeeded in its design
- Morgan Construction completed the IPS construction
- The Five Mile Plant, though it did not meet the desired flow rate wanted in the Hendon design, it is close to its initial flow rate
- The Morgan Construction was completed successfully in 2010 & the CDM Design was a success
- by

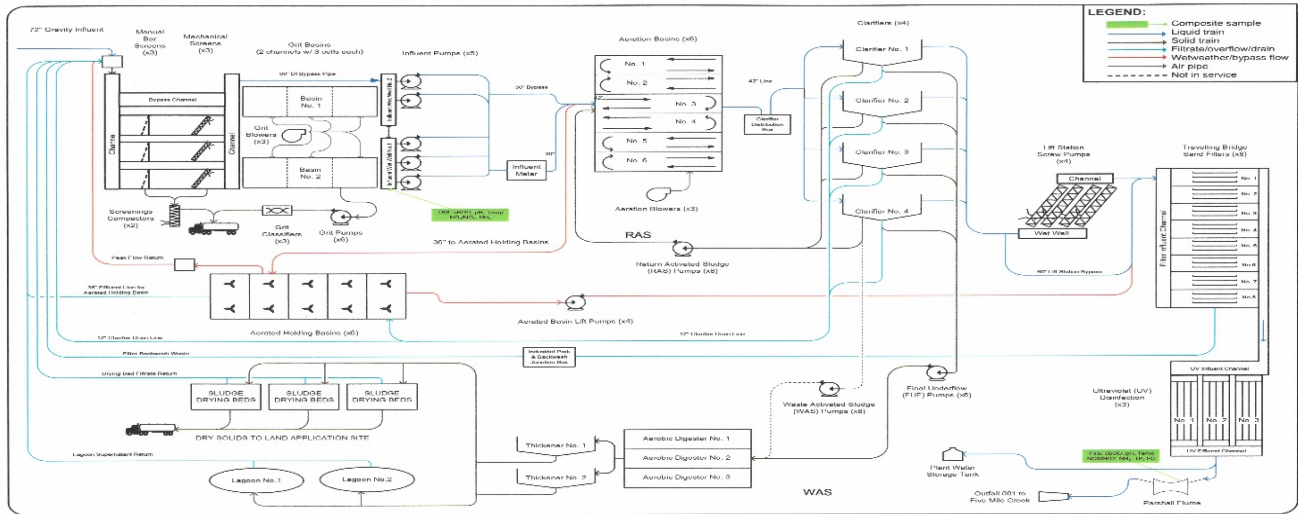
Budget: \$2,821,500

Structural Repairs and Improvements Project Engineer: CH2MHILL, Contractor: B.H. Craig 2016 - 2017

- Digester #1 & 2 Drain & Clean
- Replace Diffuser Sheaths, broken air lines
- Replace 2 Mud Valves
- Structural Repairs Pipe Gallery
- Clean Aeration Basins 1- 6 Y-Walls
- Replace 2 – ROTORK Actuators in Pipe Gallery
- South Pipe Gallery Deck Coating & expansion joints repair
- Aeration Basins 1-4 BFV Removal

Budget: (\$)





CDM
CONSULTANTS AND DESIGNERS

FIVE MILE CREEK WWTP PROCESS FLOW DIAGRAM

Revised 2011/08/00