

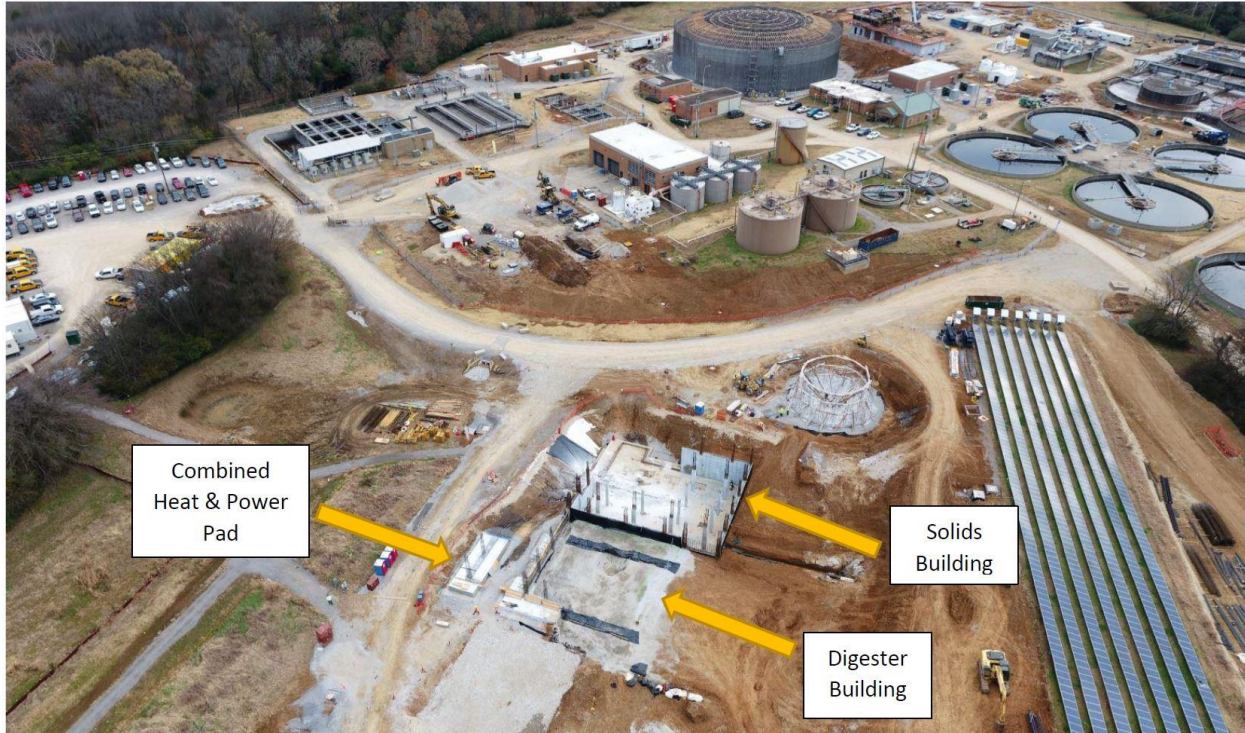
Oxidation Basins Phosphorus Wall: The three oxidation basins that perform the bulk of the nutrient removal are being upgraded to include construction of a wall to allow for the creation of a fermentation zone. The fermentation zone will recycle back digested sludge from the anaerobic digesters which will have an increased content of volatile fatty acids (VFA). These VFAs will remove the soluble phosphorus in anaerobic (without oxygen) conditions before the wastewater moves to the remaining basin for nitrogen removal.

The wall is 30-inches thick with a web of heavy rebar to reinforce the wall from the forces of water on both sides. There are two penetrations that will feed this section, the recycle from the digesters and the influent wastewater.



Equalization Tank: The 10 million gallon (MG) concrete tank will hold untreated wastewater to prevent flow from backing up into the collection system and will reduce the potential for releases and overflows.

The tank walls are XX-inches thick with heavy rebar vertically encapsulated in the concrete. There will be a domed concrete top to prevent fugitive odors from escaping (in addition to an odor control chemical scrubber). The next step in the process is to wire-wrap the tank with steel wires to account for the horizontal support.



Solids Processing Building: You can see the foundations of two buildings at this location. One building will house the pre- and post-dewatering equipment that will create efficiencies with drier solids, resulting in reducing the trucking costs we currently see. The second building, the digester building, will house the pumps and circulation equipment for the new anaerobic digesters (not constructed yet). The equipment pad you can see off to the west of the digester building will house the combined heat and power engine, which will use the biogas produced from the anaerobic digesters and turn that into electricity, heating the steam and powering equipment for the solids process.



Headworks: You can see the progress that's being made on the construction of the headworks structure. This structure will have two main channels, with provisions for bypass channels if needed during high flow events. The headworks is the first physical process of the facility and is vital to operations. The upgraded capacity and more efficient structure will allow for greater flows to pass through to the treatment trains.