

needs of the growing population of residents and businesses in the County. The goal of this design is to expand the current plant and increase its permitted capacity.

C&S will assist the County and grant administrator in preparing the application for OPB-ARPA (American Rescue Plan Act) funding to accomplish the project scope described above. At a minimum cost estimate, project schedules, and a project narrative will be developed by C&S for usage in the application. Once funded, C&S will continue to work with the grant administrator in completing the requirements necessary for a successful completion of the project. This includes any special conditions or special requirements of the OPB-ARPA grant program.

2. Engineering Design

C&S will furnish a 2-person survey crew to survey the project areas. Field-run linear and topographic surveying will generate 2 ft. contour data of the project area tied to the Georgia State Plane Coordinate System using NAVD-88 elevation datum and it will locate the existing features including any above ground utilities or below ground utilities that are marked by the utility owner. We will not conduct any boundary surveys unless requested by the Client as an Additional Service or unless included as part of our Basic Services for providing Easement sketches. Prior to beginning surveying, we will contact the Utilities Protection Center and request a design locate. It has been our experience that most non-municipal utility owners like the phone, power and cable companies, do not respond or respond very slowly to design locate requests so it has been our experience that local knowledge from Client's personnel is extremely valuable; therefore, we will work closely with the Client in identifying areas of potential conflict. C&S will not conduct any subsurface investigations or subsurface utility engineering (SUE) to locate existing utilities or determine elevations of subsurface utilities unless requested by the Client as an Additional Service.

After the linear and topographic surveying is completed, C&S will prepare preliminary design documents for the proposed project within 4 months. At approximately 60% completion, we will meet with Client's personnel to present the preliminary design for review. Within 2 months after receipt, we will address any comments the Client has with the preliminary design and then prepare and furnish detailed final design Drawings and Specifications in a 16-division format (100% complete) indicating the scope, extent and character of the work to be performed and furnished by the Contractor during the construction of the project. We will submit the 100% complete Drawings and Specifications to the Client for their review and approval and we will review any comments and recommendations and incorporate needed changes in the final design 100% complete Documents, which will include detailed construction plans and technical specifications of the following general items:

- a. Civil engineering design including site work, yard piping, valves, hydraulic design and soil erosion and sediment control
- b. Electrical engineering design including power, instrumentation and control and SCADA design.
- c. Structural engineering necessary to design structural components of project; including foundations and concrete wall sections.
- d. Geotechnical engineering to determine soil permeability and suitability of area for wastewater discharge.

Contemporaneous with the presentation of each design, C&S will provide the Client with a Preliminary Opinion of Probable Construction Cost and Total Project Costs known to the Engineer for both the preliminary design (60% complete) and final designs (100% complete). This preliminary cost estimate will itemize the quantities and anticipated unit prices for each component needed for the project.