



November 2, 2016

Mr. Paul Holzen, P.E.  
Director of Engineering  
City of Franklin, TN  
109 3<sup>rd</sup> Avenue, South  
Franklin, TN 37064

**Re: Holiday Court Sewer Pump Station Replacement  
Engineering Services Proposal – Revision 1  
Franklin, TN**

Dear Paul:

Thank you for the opportunity to provide this proposal for engineering services for the design of upgrades to the existing Holiday Court sanitary sewer pump station (SPS). The rating of the existing SPS is currently unknown. Based on information provided to us by your office, it appears the usages based on types of development in the service area suggest a peak flow rating of approximately 300 GPM.

Based on the information you provided and with the subsequent meeting with Water Management staff, it appears that the scope of services required is as follows:

**Design Phase Services**

- Verify the hydraulic loading for the pumping station upgrade. This will be done using City water use records.
- Determine hydraulic conditions for the upgraded pump station and the existing force main. The existing 6-inch force main is proposed to be re-used.
- Prepare hydraulic calculations for submittal package to City and the State of Tennessee, Water Resources Division.
- Consult with City Water Management staff as needed to determine the requirements for this pumping station. The City has decided the style of station for this replacement will be a submersible style station utilizing two (2) pumps (brands to be determined by staff) with accompanying valve vault, flow meter and emergency pump connection. Since the old station has to remain in service while the new one is constructed, some type of re-routing of incoming sewer lines (3) may be required and a new wet well will need to be included.
- Contact the local power company to determine electrical capability based on the proposed upgrade resulting from changes to electrical systems.
- Provide topographical surveying of the existing SPS site. This is identified as the area shown on Plat Book 9, Page 101 which defines the PUE area. Topo survey will also include a corridor survey along the route of the old pump station to determine a profile

for engineering design. The existing force main will need to be located by City forces for the surveyor.

- Develop plans and technical specifications to include:
  1. Pumping station and control panel.
  2. Valves and appurtenances.
  3. Downstream manhole lining at force main discharge.
  4. Electrical upgrades including design of manual transfer switch with generator receptacle.
  5. Coordination with Revere Systems (telemetry provider for City) for integration of new station. This will include controls interface of signals for connection to City furnished telemetry.
  6. Conduct one (1) geotechnical bore to the subgrade of the new wet well for purposes of design and contractor bidding information.
  7. Development of a bypass pumping plan to accommodate the replacement of the upgraded pump station equipment on the existing wet well. This includes the addition of a bypass pump connection onto the existing force main. It may also include the introduction of new manholes on the three separate incoming gravity lines to facilitate capture of incoming flows. A second option to this would be the reuse of the existing wet well and conversion of same to a gravity manhole.
  8. Prepare a Final Opinion of Cost for the pump station upgrade.
  9. Attendance of three (3) meetings with City. (assume one kick-off and two design review meetings).
- Assist in development of contract documents in conjunction with City staff for purposes of bidding this project.
- Submit plans and technical specifications to City in electronic format for review followed by submittal to TDEC, Division of Water Resources.
- Prepare up to two (2) permanent or temporary easements as needed for construction or permanent area for the replacement SPS.
- Prepare other appropriate TDEC permits.
- Preparation of appropriate erosion control plan.
- Consult with the City as may otherwise be required.
- Payment of review and permit fees to TDEC. These would be considered as reimbursable expenses.

The following items are excluded from this design portion of this proposal:

- No pump station building is included. It is assumed this will remain as currently configured as a small, stand-alone pumping station with external mounted control panel and telemetry equipment.
- No odor control equipment design.
- No force main drawing preparation. We will verify the force main sizing and prepare an as-built profile of the existing force main.

- Design of specialized landscape screening.
- Design of specialized screening fencing.
- Telemetry package. The City currently has this station slated for new telemetry using Revere Systems. It is recommended that the existing station be delayed for refurbishment of its telemetry and to include new telemetry once the new station is completed with the City furnishing the telemetry package. It would not be included in the bid package for the contractor.

In addition, you have indicated your desire for H&D to continue services through the bid and construction phases of the project. These services are outlined below:

**Bid Phase Services**

- Attend and conduct a pre-bid meeting.
- Vetting of potential bidders as needed.
- Distribution of contract packages to prospective bidders.
- Answer contractor RFI's during bid phase.
- Evaluate requests for equipment substitution.
- Prepare addenda and issue as needed for clarification.
- Attend and conduct the bid opening in support of City Purchasing staff.
- Review bids and make final award recommendation to City including preparation of a Tabulation of Bids.

The following items are excluded from the bid phase portion of this proposal:

- Printing of contract documents. We will issue bid packages in electronic format to the bidders and vendors.

**Construction Phase Services**

- Consult with City and act as City's representative for this project.
- Participate in the pre-construction conference.
- Make visits to the site at intervals appropriate to the various stages of construction as deemed necessary by H&D to review progress of Contractor's executed work.
- Recommend to Owner, when necessary, to reject defective work.
- Accept and issue clarifications and interpretations of the work.
- Issue field orders as required.
- Recommend work change directives and change orders to the City and prepare same.
- Review, approve or take other actions with respect to shop drawings, samples and other contractor submittals but only for conformance with the design concept.
- Review all certificates of inspections, tests and approvals required by the Contract Documents.
- Review and recommend approval for Contractor's applications for payments.
- Attend SPS start-up.
- Issue substantial completion certificate.

- Prepare punch list and make final site visit to determine if work is acceptable for final payment to contractor.

The following items are excluded from the construction phase portion of this proposal:

- A full time resident project representative.
- Preparation of conformed contract documents and issuance of same. We assume City staff will issue these documents.

The following conditions apply for the scope of this project:

- *Standard of Care:* The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer.
- *Technical Accuracy:* Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct deficiencies in technical accuracy without additional compensation, unless such corrective action is directly attributable to deficiencies in Owner-furnished information.
- *Consultants:* Engineer may retain such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner.
- *Reliance on Others:* Subject to the standard of care set forth above, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
- Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a Constructor to comply with Laws and Regulations applicable to that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

Hethcoat & Davis, Inc. proposes to provide the scope of services identified and will make every effort to devote the manpower and resources necessary to insure timely completion of the design within four (4) weeks of delivery of the topographic site survey. Based on the anticipated scope of services, we fees as follows:

❖ Design Phase	\$28,450
❖ Site Topo Survey <sup>1</sup>	\$ 6,810
❖ Geotechnical Bore <sup>2</sup>	\$ 3,500
❖ Bid Phase	\$ 3,500
❖ Construction Phase <sup>3</sup>	\$29,500

<sup>1</sup>Inlcudes centerline topo of existing force main alignment for as-built purposes

<sup>2</sup>Includes 1 bore at center of proposed wet well extending to invert of same

<sup>3</sup>Based on a 6 month construction period

If this proposal is acceptable, please prepare a standard City agreement for our signature and approval. We will provide Certificates of Insurance upon with our signing of the agreement. A Standard Terms and Conditions of the Agreement is attached. We would respectfully request that this exhibit be included in the Contract as an attachment.

We sincerely appreciate the opportunity to work with the City of Franklin and to present this proposal for providing professional services. If you should have any questions or require additional information, please call.

Sincerely,



Keith Davis, PE  
Secretary