Lift Station No. 5 Relocation and Sanitary Sewer Extensions
City of Montgomery

Request: Council Authorization on September 24, 2024

This proposal is submitted pursuant to and in accordance with that certain Professional Services Agreement dated May 25, 2021, by and between Ward, Getz & Associates, LLP and the City of Montgomery (the "City").

WGA understands that the City has defined terms in a Development Agreement (the "Agreement") with Tri Pointe Homes Texas, Inc. for the developer to deposit funds for the sanitary sewer improvements needed to serve the proposed single-family development. Due to the condition, location, and service capacity of the City's existing Lift Station No. 5, we recommend relocating the facility onto the property of the proposed development and modifying the existing sanitary sewer system to allow for a functional lift station. We understand that included in the Agreement will be the dedication of all easements needed for the proposed lift station site and along the gravity sanitary sewer and force main routes. WGA recommends moving forward with the below scope for the lift station relocation and sanitary sewer improvements project to serve the proposed, and adjacent developments.

SCOPE OF WORK

- *Preliminary Phase Services*
  - *Preliminary sizing analysis of proposed lift station and force main facilities.*
  - *WGA will coordinate with the Developer of the single-family development and City staff to determine a suitable Lift Station site.*
  - *WGA will create a preliminary sanitary sewer layout for the proposed gravity sanitary sewer extension and force main, and coordinate with the City' staff and the City's operator Hays Utility Services ("Hays") to delineate the most appropriate alignment.*
  - *Coordinate with adjacent property owners and surveyor to obtain any required easements.*
  - *Coordinate with TxDOT as needed for any utilities and other work performed in the right-of-way of SH105.*
  - *Determine final scope of work with City staff.*
- *Lift Station Design Services*
  - *Conduct monthly progress meetings, up to a maximum of five (5) meetings during the final design phase.*
  - *Perform unit process calculations consistent with TCEQ Chapter 217 requirements for lift station design. Document calculations and any proposed variances to TCEQ rules for regulatory approvals.*
  - *Prepare drawings, specifications, and layouts of improvements to be constructed for design milestone (50% and 100%) submittal and for the final construction contract documents.*
  - *Prepare application for and obtain TCEQ approval for the project.*

- *Final Construction Contract Documents: The plans and specifications will be finalized based on one set of compiled comments from Client. Engineer will seal and sign the completed documents. Engineer shall update plans and specifications with any final comments prior to finalizing for construction.*
- *Prepare revised opinion of probable construction cost for the 50% and 100% design completion levels.*

- *Gravity Sanitary Sewer & Force Main Design Services*
  - *Update scope and engineer's opinion of probable construction cost as needed.*
  - *WGA will develop drawings and specifications for the successful construction of the sanitary sewer extensions and force main. Design changes initiated by the City or the Developer after the design is complete may result in a request for additional authorization. Also, additional authorization may be requested for any TxDOT required design requirements due to work being performed within their right-of-way.*
- *Construction Administration*
  - *Coordinate advertising for bids, hold a pre-bid conference, answer questions from bidders, hold bid opening, prepare bid tabulation, and prepare recommendation of award.*
  - *Prepare construction contracts and coordinate execution of the same.*
  - *Issue notice to proceed and hold pre-construction meeting.*
  - *Review of construction submittals and RFIs.*
  - *Preparation of pay estimates, change orders, and other associated construction documents.*
  - *General oversight and coordination of construction contracts.*
  - *Review and approval of project material submittals.*
- *Field Project Representation*
  - *Onsite inspection by a Field Project Representative for approximately 6 hours per week (including travel time) during active construction for the duration of the projected contract period of performance (270 calendar days.)*
  - *Onsite inspection by the project team throughout the duration to attend periodic site visits, final walkthrough inspections, etc.*
- *Reimbursable Expenses*
  - *Includes surveying services to be performed by a subconsultant.*
  - *Includes geotechnical services to be performed by a subconsultant.*
  - *Includes electrical and structural engineering design services for the Lift Station to be performed by a subconsultant.*
  - *Includes construction materials testing, advertising expenses, and other reimbursable expenses.*

ENGINEERING COST

The cost to perform the scope of services described above is as follows:

Preliminary Phase	$ 9,000	(Lump Sum)
Lift Station Design	$ 45,000	(Lump Sum)
Gravity San. Sewer & Force Main Design	$ 40,000	(Lump Sum)
Bid Phase	$ 6,000	(Lump Sum)
Construction Administration	$ 30,000	(Time and Material)
Field Project Representation	$ 30,000	(Time and Material)
Reimbursable Expenses	$ 93,000	(Time and Material)

WGA requests the City's authorization to proceed with the design of the sanitary sewer project along SH 105 and adjacent developments on a lump sum and time and materials basis, as described above, for a total estimated cost of $253,000.

SCHEDULE

Authorization to Proceed	1 Calendar Day*
Preliminary (Survey, Easement & TxDOT Discussions)	45 Calendar Days
Design	90 Calendar Days
Approvals & Permitting	60 Calendar Days**
Bid Phase	30 Calendar Days
Contracts	21 Calendar Days
Construction	270 Calendar Days
TOTAL DURATION	**487 Calendar Days**

*If approved, the effective start date is the day after authorization is received.
** Timeline is based on projects with similar scope and contingent on TxDOT review time

Accepted by Client

Regards,

Chris Roznovsky

Chris Roznovsky, P.E.
Practice Leader

_____
Signature

_____
Printed Name and Title

_____
Date

Engineer's Opinion of Probable Cost
Lift Station No. 5 Relocation & Sanitary Sewer Extensions

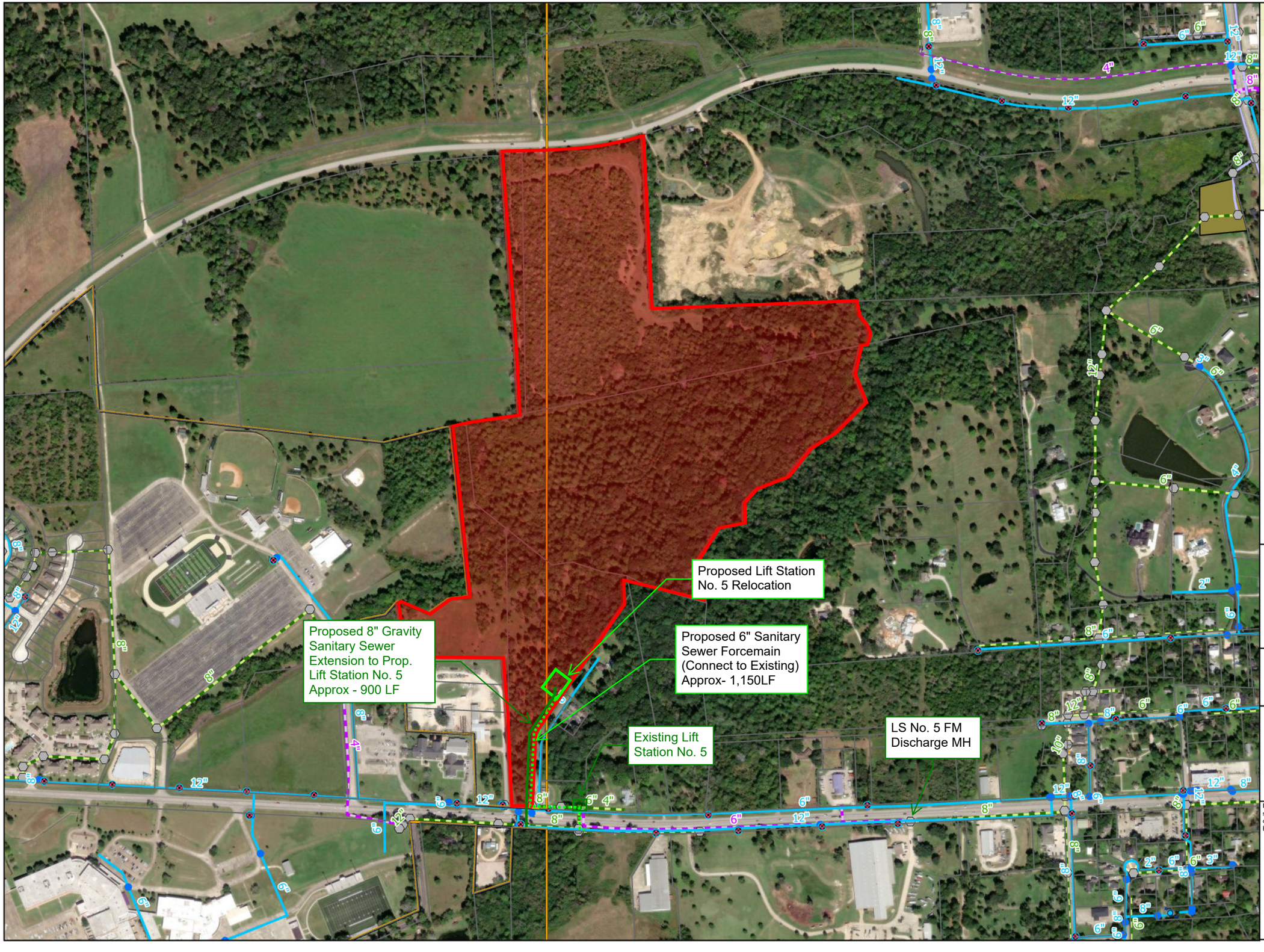
9/19/2024

Item No.	Description	Quantity	Unit	Unit Price	Cost
General					
1	Mobilization, Bonds, and Insurance (5%)	1	LS	$ 45,000	$ 45,000
2	Construction Staking	1	LS	8,000	$ 8,000
3	Site Preparation & Restoration	1	LS	10,000	$ 10,000
4	Trench Safety System	1,230	LF	1	$ 1,200
5	SWPPP	1	LS	7,500	$ 7,500
6	Traffic Control	1	LS	15,000	$ 15,000
7	Demolition & Decommissioning of Exist. Lift Station	1	LS	75,000	$ 75,000
Force Main					
7	6-Inch C900 Sanitary Sewer Force Main (Open Cut)	1,230	LF	50	$ 61,500
8	6-Inch C900 Sanitary Sewer Force Main (Trenchless)	120	LF	120	$ 14,400
9	10-Inch Steel Casing for 6-Inch Force Main	120	LF	150	$ 18,000
10	6-Inch Force Main Wet Connection to Exist Force Main	1	EA	3,000	$ 3,000
Gravity Sanitary Sewer					
11	8-Inch SDR-26 Gravity Sanitary Sewer (Open-Cut)	855	LF	55	$ 47,000
12	8-Inch SDR-26 Gravity Sanitary Sewer (Trenchless)	120	LF	140	$ 16,800
13	12-Inch Steel Casing for 8-Inch Gravity	120	LF	180	$ 21,600
14	4' Sanitary Sewer Manhole	6	EA	7,500	$ 45,000
15	Core & Boot Conn. to Existing Manhole	1	EA	2,000	$ 2,000
Lift Station					
16	Pumps	1	LS	75,000	$ 75,000
17	Piping, Valving, and Meters, Etc.	1	LS	66,000	$ 66,000
18	Wet Well and Misc. Structural	1	LS	220,000	$ 220,000
19	Electrical and Instrumentation	1	LS	77,000	$ 77,000
20	Standby Generator	1	LS	115,000	$ 115,000

Construction Subtotal	$ 944,000
Contingencies (15%)	$ 142,000
Preliminary Design	$ 9,000
Lift Station Design	$ 45,000
Sanitary Sewer Line Design	$ 40,000
Construction Administration and Bid Phase Services	$ 36,000
Field Project Representation	$ 30,000
Reimbursible Expenses (Survey, Geotechnical, Etc.)	$ 93,000
Total	**$ 1,339,000**

Notes:

1 This estimate is based on my best judgement as a design professional familiar with the construction industry. We cannot and do not guarantee that bids will not vary from this cost estimate.



Legend

- Cheatham-Stewart Tract
- City ETJ
- City Limits
- Tax Parcel

Water Infrastructure

- Hydrant
- Water Main Valves
- Water Main
- Water Plant Facility

Sanitary Sewer Infrastructure

- Sanitary Sewer Manhole
- Sanitary Sewer CCTV
- Sanitary Sewer Gravity Main
- Sanitary Sewer Lateral
- Sanitary Sewer Pressurized Main
- Sanitary Sewer Water Treatment Plant

LIFT STATION NO. 5 RELOCATION AND SANITARY SEWER EXTENSIONS

Preliminary Utility Layout

CITY OF MONTGOMERY TEXAS EST 1837 BIRTHPLACE OF THE TEXAS FLAG

WGA