



May 3, 2022

The Honorable Mayor and City Council  
City of Montgomery  
101 Old Plantersville Road  
Montgomery, Texas 77316

RE: Proposal for Civil Engineering Services  
City of Montgomery Downtown District Master Drainage Plan  
Project type: Hydrology & Hydraulics  
WGA Project No. 00574-004-00

Dear Mayor and Council:

Ward, Getz & Associates, PLLC (Consultant) is pleased to submit this proposal to the City of Montgomery (Client) to provide Civil Engineering Design Services for the above referenced project. We understand the Client wishes to have a drainage study prepared of the downtown district to identify a master drainage plan to serve future improvement projects in the area. The analysis will follow the criteria as referenced in the Montgomery County Drainage Criteria Manual.

Our project understanding, scope of services and fee are below.

### **Project Understanding**

Based on the information from the Client on the subject site, we assume the following to be true:

#### Assumptions and Exclusions

1. This proposal does not include municipal agency review fees or impact fees.
2. According to the Federal Emergency Management Agency (FEMA) FIRM panel 48339C0200G effective date August 18, 2014, the study area is in Unshaded Zone X.
3. The study area is generally bound by Clepper Drive to the north, Liberty Street to the west, Eva Street to the south and Prairie Street to the east.
4. The existing drainage infrastructure consists of roadside ditch, storm sewer, and driveway culverts which drain south, where flows are picked up in a storm sewer trunkline that runs under Eva Street.
5. There are planned street improvements in the downtown district.
6. The city intends to make infrastructure improvements to the study area including roadway improvement and upgrades to the existing drainage infrastructure.
7. This proposal does not include the preparation of detailed construction plans, specifications, or cost estimates.
8. The preparation of engineer's estimate of probable construction costs are not included in this proposal.
9. The drainage report is anticipated to be used by the City to help guide the future drainage improvements.
10. This proposed excludes routing out flows through the existing detention pond and outfall system. Mitigation volumes will be computed based on Small Watershed Method to identify additional volume that needs to be excavated in the detention pond.

## **Basic Services**

### **I. Master Drainage Plan:**

A Master Drainage Plan will be prepared identifying recommendation for storm sewer upgrades/ replacement needed to convey the design flows. The tasks associated with preparing the mater drainage plan include the following:

1. **Data Collection & Review**

Research and review existing record drawings, drainage reports, calculations, correspondence, and available topographic survey related to the study area. The information will be collected from the City of Montgomery. The information will be reviewed for completeness and will be used to help guide the overall drainage plan.

2. **Existing Conditions Analysis**

Hydrologic Analysis:

- Using the collected data, WGA will delineate the drainage boundaries contributing to flows drained by the existing storm sewer line conveying flows to the detention pond
- Hydrologic parameters will be computed for the watershed and a HEC-HMS model will be prepared using Atlas 14 precipitation data to determine the peak runoff for the 10% (10-year), 4% (25-year), and 1% (100-year) storm event.

Hydraulic Analysis:

- WGA will prepare hydraulic model of the existing roadside ditch and storm sewer outfall

3. **Proposed Conditions Analysis**

The models prepared for existing conditions will be updated to reflect anticipated development based on the site plan provided to WGA by the Client. Sizing of the proposed drainage infrastructure and detention volume requirements will be identified. Infrastructure will be sized to convey design flows for the ultimate development condition. Preliminary cost estimate will be prepared for the drainage features identified.

4. **Prepare Summary Report:** A text report will be prepared summarizing the approach used in, and results of the master drainage study. Appropriate tables and exhibits will be included in the report, along with the digital information associated with any modeling efforts.

## **Optional Additional**

### **Alternative Drainage Plan Analysis**

WGA will prepare an analysis of an alternative drainage plan for the study area and a preliminary cost estimate.

**Fee Summary**

The services will be provided at a Lump Sum (LS) as follows:

<u>Civil Engineering Design Services</u>	
I. Master Drainage Plan	\$ 65,000
<u>Optional Additional</u>	
Alternative Conditions Analysis (Hourly)	\$ TBD
Reimbursable Expenses (reproduction, mileage, etc)	\$ 2,000

This proposal is subject to the terms and conditions of the Professional Services Agreement between The City of Montgomery, Texas and Ward, Getz, & Associates, PLLC dated May 25, 2021. This proposal is good for a period of up to 90 days from the date of the proposal. Our receipt of the executed document will serve as authorization to proceed.

**Closure**

If additional services are required and authorized by Client, they will be invoiced hourly per the attached rate schedule. Reimbursable expenses will be invoiced at cost plus 10%.

If this proposal is acceptable, please have it signed and return an executed copy to me via email at croznovsky@wga-llp.com. Our receipt of the executed document will serve as authorization to proceed.

We appreciate the opportunity to submit this proposal and look forward to working with you in the future.

If there are any questions, please feel free to contact me at 713-789-1900. Thank you for the opportunity and we look forward to working with you on this project.

Regards,



Chris Roznovsky, P.E  
Department Manager

Accepted by Client

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
Date