

Date: June 18, 2025
Project No.: 0050952.01

Mr. Michael Elizalde, MPA, CPM
Director of Grants and Strategic Development
City of Mission
1201 E. 8th Street
Mission, TX 78572

City of Mission Sunset & Astroland Drainage Engineering Design Project FY22 BRIC
City of Mission, Texas

Westwood Professional Services, Inc. is pleased to submit this proposal to provide professional civil engineering, land surveying and grant management services relating to the referenced project. It is our understanding the project consists of BRIC/FMA program development, grant administration, civil engineering, and project management services related to the Sunset and Astroland drainage project as identified in the City of Mission 2020 Comprehensive Storm Drainage Assessment.

Based on our preliminary discussions and the information received to date, our perception of the project is described in the attached documents:

Exhibit A – Scope of Services;

Exhibit B – Compensation and Method of Payment;

Exhibit C – Insurance;

Westwood Professional Services, Inc. is pleased to have this opportunity to submit this proposal and look forward to working with you on this project. If the proposed agreement is acceptable to you as presented, please execute one copy of the agreement form and return one original copy to our office. If you have any questions or would like any additional information, please do not hesitate to call us at your convenience.

Sincerely,

A handwritten signature in blue ink that reads "J.W. Balch". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

J.W. Balch, PE, CFM

Project Manager, Water Resources

EXHIBIT 'A' – SCOPE OF SERVICES
Sunset and Astroland Drainage Engineering Design Project FY22 BRIC
City of Mission, Texas

GRANT APPLICATION 2023

1. Hydrology and Hydraulic Analysis:
 - a. Westwood will develop a preliminary 1D/2D unsteady hydraulics model utilizing XPSTORM software for the design. The model will be an integrated hydrology & hydraulics model incorporating inlet, channel, and storm drain infrastructure and be used to determine capacity of existing and proposed drainage infrastructure. This model will provide greater detail of upstream storage and routing time through the project area. 1D/2D areas will be developed at a minimum for the drainage system upstream of Interstate 2. The hydraulic analysis will verify the capacity for the ultimate conditions flows and optimize capacity of the proposed storm drain system.
 - b. Westwood will identify planning level drainage concepts and develop a preliminary Ultimate Buildout drainage model and utilizing the 1D/2D XPSWMM model developed in the existing model validation phase. During this phase modifications to the proposed project may be made to limit impacts upstream and downstream. Westwood will develop planning level cost estimates for the proposed ultimate buildout projects and identify cost impacts to the Sunset and Astroland project.
 - c. Westwood will prepare an estimate of construction quantities based upon preliminary hydraulic modeling and develop an opinion of probable construction costs.
 - d. A FEMA compliant benefit-cost analysis (BCA) will be provided to determine the eligibility of project for FEMA FMA funding. Benefits will be calculated using the FEMA BCA Toolbox, and project costs will be determined from cost analysis above. Benefit Cost Analysis deliverables will be a completed FEMA BCA Report.
 - e. As part of the FEMA Go Application, the following exhibits will be prepared as supporting information to application:
 - i. Location Map
 - ii. FEMA Floodplain Map
 - iii. FEMA NFIP Policy Holder Map
 - iv. Existing and Proposed Improvements Map
 - v. 10-year Pre-project & Post-Project Topographic Workmap
 - vi. 25-year Pre-project & Post-Project Topographic Workmap
 - vii. 50-year Pre-project & Post-Project Topographic Workmap
 - viii. 100-year Pre-project & Post-Project Topographic Workmap
 - ix. Justice 40 Maps
 - x. SVI Maps
 - xi. Environmental Cultural Resources Map
 - xii. Environmental Wetlands Map
 - f. Grant Compliance and Administration - Westwood will coordinate with the City of Mission floodplain administrator and grants administrator to develop implementation measures required by the application. Westwood will coordinate with the Texas Water Development Board (TWDB) and Federal Emergency Management Agency (FEMA) to provide evidence that the City of Mission is in good standing with the National Flood Insurance Program (NFIP). Westwood

will coordinate submittals, deliverables, cost estimates and narrative writeups with the City of Mission grant administrator and floodplain administrator.

TOPOGRAPHIC SURVEY & RESEARCH

1. Survey (Topographic and Boundary)
 - a. Establish survey control along each street or intersecting streets as necessary. These control points will be established based on and tied to established City horizontal and vertical control points. The horizontal control for each street in the Sunset and Astroland project will be established on the State Plane Coordinate System (NAD'83 Surface Coordinates) from Client monumentation. Control points will be established using 5/8" iron rods, 18" long. These control points will be established using GPS and conventional surveying methods.
 - b. A benchmark circuit will be established, based on the vertical control points provided. These benchmarks will be located outside of the construction limits and put in such a place so that they may be easily found for future use. Benchmarks will be located at about 1,000' intervals and will be referenced. Benchmarks shall be looped in accordance with good surveying practice prior to field surveys. All control leveling work will be performed using appropriate modified second order procedures with closed loops into the Sunset and Astroland project vertical control.
 - c. Existing streets, driveways and right-of-way will be profiled and cross-sectioned at 50' intervals and to a point at least 20' outside of the Right-of-Way line. Low points, high points and other unique features will be noted. Pavement surfacing will be determined by visual inspection only. Intersecting streets will be profiled and cross-sectioned to a point at least 50' beyond the roadway being replaced.
 - d. Existing drainage channels and swales will be profiled and cross sectioned within the immediate vicinity of the Sunset and Astroland project, 100' upstream and downstream. Low points, high points and any other unique features will be noted. Additional surveying may be necessary to verify the limits of drainage areas.
 - e. Existing Underground and/or Overhead Utilities - Utility owner's will be contacted, on an as-needed basis, and requested to assist in locating existing utilities identified for the Sunset and Astroland project. Above ground features of existing utilities within the proposed Right-of-Way for the limits of the Sunset and Astroland project will be field located, including elevations of sanitary and storm sewer manhole flowlines and water/gas valve stems. The location of utilities between above ground features will be determined from visual inspection, utility records, and/or from locations determined by the respective utility companies. The utilities will be tied to the Sunset and Astroland project control points and depths determined in sufficient detail to identify potential conflicts with proposed construction. The excavation and other costs required to expose or probe the underground utilities will be the responsibility of others

H&H MODELING – EXISTING AND PROPOSED CONDITIONS MODELS

1. Hydrology Analysis:
 - a. Westwood will refine the hydrologic analysis provided in the Pre-award Phase by updating topography, drainage areas, land use values, and times of concentration to provide detailed peak flow rates.
2. Existing Conditions Hydraulic Analysis
 - a. Westwood will refine the pre-award phase existing conditions 1D/2D unsteady hydraulics model utilizing XPSTORM software for the design. The topographic survey and existing storm inventory will be re-modeled to match field survey information.
3. Proposed Conditions Hydraulic Analysis
 - a. Westwood will identify detailed drainage improvements matching civil construction plans utilizing the 1D/2D XPSWMM model developed in the pre-award validation phase. During this phase modifications to the proposed project may be made to limit impacts upstream and downstream. Westwood will develop detailed cost estimates for the proposed ultimate buildout projects and identify cost impacts to the Sunset and Astroland project. Westwood will perform a constructability review which include an evaluation of utility relocation, land acquisition, and R.O.W. access.
4. The Conceptual Design shall be submitted to Client per the approved Project Schedule. The purpose of the conceptual design is for Westwood to:
 - a. Study the project.
 - b. Identify and develop alternatives and phasing plan
 - c. Present (through the defined deliverables) these alternatives to the Client.
 - d. Recommend the alternatives that successfully address the design problem.
 - e. Obtain the Client’s endorsement of the selected concept.

SCHEMATIC LEVEL DESIGN

Westwood will develop a schematic level design of the identified next phase of construction for the Sunset and Astroland Project. The schematic will include:

1. Plan and profile of storm drain infrastructure
2. Preliminary grading plan for any proposed detention facilities
3. Preliminary Utility Conflict Matrix
4. Estimate of Quantities

BENEFIT-COST ANALYSIS

1. A FEMA compliant benefit-cost analysis (BCA) will be provided to determine the eligibility of project for FEMA FMA funding. Benefits will be calculated using the FEMA BCA Toolbox, and project costs will be determined from cost analysis above. Benefit Cost Analysis deliverables will be a completed FEMA BCA Report.

GRANT APPLICATION FMA 2025/2026

1. As part of the FEMA Go Application, the following exhibits will be prepared as supporting information to application:
 - a. Location Map
 - b. FEMA Floodplain Map
 - c. FEMA NFIP Policy Holder Map
 - d. Existing and Proposed Improvements Map
 - e. 10-year Pre-project & Post-Project Topographic Workmap
 - f. 25-year Pre-project & Post-Project Topographic Workmap
 - g. 50-year Pre-project & Post-Project Topographic Workmap
 - h. 100-year Pre-project & Post-Project Topographic Workmap
 - i. Justice 40 Maps
 - j. SVI Maps
 - k. Environmental Cultural Resources Map
 - l. Environmental Wetlands Map
2. Grant Compliance and Administration:
 - a. Westwood will coordinate with the City of Mission floodplain administrator and grants administrator to develop implementation measures required by the application. Westwood will coordinate with the Texas Water Development Board (TWDB) and Federal Emergency Management Agency (FEMA) to provide evidence that the City of Mission is in good standing with the National Flood Insurance Program (NFIP). Westwood will coordinate submittals, deliverables, cost estimates and narrative writeups with the City of Mission grant administrator and floodplain administrator.

Services not included in this contract:

- *Construction inspection services*
- *Environmental assessments; this project has been categorically excluded*
- *As-built surveys of constructed improvements*
- *Public hearings or City Council/Commission meetings*
- *Utility coordination meeting(s) to start relocation process with affected franchise utilities*
- *Reset property corner monumentation disturbed or removed during or after construction*
- *Required application and permitting fees (LOMR) or special insurance premiums are not included*
- *Phase II Environmental Site Assessments*
- *Storm Water Pollution Prevention Plans (SWPPP)*
- *Floodplain studies and permitting*
- *Boundary and topographic surveying*
- *Preliminary and final platting*
- *Zoning change assistance*
- *Site Plan layout*

EXHIBIT A to Agreement between the City of Mission, Texas (“Client”) and Westwood Professional Services, Inc., (“Westwood”) for Consulting Services

- *Traffic and parking studies*
- *Demolition Plan*
- *Retaining wall design*
- *Design of screening walls, light pole bases, transformer or generator pads, hardscape features, pavers and/or site signage*
- *Detailed layout of walks and hardscape areas, including scoring patterns*
- *Design of any underfloor drainage systems or grading*
- *Design of french drain systems around the building perimeters*
- *Landscape Plan and Irrigation Plan*
- *Site Lighting Plan*
- *Signage Plan*
- *Off-site roadway, drainage, and utility extensions/improvements*
- *LEED pursuit*
- *Construction staking*

END OF EXHIBIT ‘A’

EXHIBIT ‘B’ – COMPENSATION AND METHOD OF PAYMENT

**Sunset and Astroland Climate Resilient Flood Risk Reduction Project FY22/23 FMA
City of Mission, Texas**

COMPENSATION:

For all professional services included in EXHIBIT ‘A’, Scope of Services, Westwood shall be compensated a lump sum fee of \$404,710.00 as summarized below. Westwood reserves the right to re-negotiate fee given changes throughout the project, if necessary. The total lump sum fee shall be considered full compensation for the services described in EXHIBIT ‘A’, including all labor materials, supplies, and equipment necessary to deliver the services.

Mission 2022 FMA C&CB Grant		Task / Phase Fee
Task 1	Grant Application FMA 2023	\$33,120.00
Task 2	Topographic Survey and Research	\$74,800.00
Task 3	Existing Condition Model	\$62,290.00
Task 4	Proposed Conditions Model	\$93,200.00
Task 5	Schematic Level Design	\$85,100.00
Task 6	Benefit-Cost Analysis	\$26,200.00
Task 7	Grant Application FMA 2025/2026	\$30,000.00
Total		\$404,710.00

METHOD OF PAYMENT:

Westwood shall be paid monthly payments as described in Article 3 of the AGREEMENT. The cumulative sum of such monthly partial fee payments shall not exceed the total current project budget including all approved Amendments. Each invoice shall be verified as to its accuracy and compliance with the terms of this Agreement by an officer of Westwood.

END OF EXHIBIT ‘B’

EXHIBIT C – INSURANCE

A. *Insurance.* Westwood shall, during the life of this Agreement, maintain the following insurances:

1. Commercial General Liability (occurrence form not less than):
 - \$2,000,000 General Liability
 - \$2,000,000 Products and Completed Operations Aggregate
 - \$1,000,000 Personal and Advertising Injury
 - \$1,000,000 Each Occurrence
 - \$10,000 Medical Expense
2. Commercial Automobile Liability (all scheduled auto, hired and non-owned autos):
 - \$1,000,000 Combined Single Limit
3. Umbrella
 - \$5,000,000 Aggregate
 - \$5,000,000 Each Occurrence
4. Workers Compensation
 - \$1,000,000 Each Accident
 - \$1,000,000 Policy Limit
 - \$1,000,000 Each Employee

Professional Liability Errors and Omissions Insurance. Westwood shall carry Professional Liability Errors and Omissions insurance with limited contractual liability in the amount of \$2,000,000 per claim and in the aggregate for the duration of this Agreement.

END OF EXHIBIT 'C'

The Parties hereto have executed this Agreement, effective on the latest date indicated below.

CLIENT:
City of Mission

(Signature)

(Name – Printed)

(Title)

(Date)

Client Address/Contact for giving notices:

City of Mission


C/O Michael Elizalde

1201 E 8th Street

Mission, TX

Melizalde@missiontx.us

WESTWOOD:
Westwood Professional Services, Inc.



(Signature)

Mark Miller, PE

(Name – Printed)

Public Infrastructure Leader, San Antonio

(Title)

6/18/2025

(Date)

Westwood Address/Contact for giving notices:

Westwood Professional Services, Inc.

C/O General Counsel

2805 North Dallas Parkway, Suite 150

Plano, TX 7509355343

Email: legal@westwoodps.com