

# MAESTAS

October 25, 2018

Sean Reich, PE  
City Engineer  
City of Boerne  
Public Works Department  
402 E. Blanco Road  
Boerne, Texas 78006

Re: Old San Antonio Road Right Turn Lane  
Professional Engineering Services Proposal

Dear Mr. Reich:

Maestas & Associates, LLC is pleased to submit this revised proposal for performing design services for Old San Antonio Road at Herff Road right turn lane.

We look forward to working with you and your staff on this project and I thank you for providing us with the opportunity to be of service to City of Boerne.

The proposed fee for the attached scope of services is:

For a total supplemental fee of \$15,192.00

Sincerely,



Ernest Maestas, PE  
Maestas & Associates, Inc.  
President

## City of Boerne Approval

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# **City of Boerne Public Works Scope of Services for Old San Antonio Road Right Turn Lane**

## **Project Description**

This project proposes to widen Northbound Old San Antonio Road at Herff Road to provide a right turn lane. Construction will include widening existing flexible pavement, signing, striping vegetation. Existing drainage systems. Adjustment and/or relocation of existing water, sewer and gas utilities are not anticipated.

Below is a detailed summary of the engineering and survey services to be provided by Maestas & Associates, LLC. and its team of subconsultants that are required for the design and preparation of final construction documents for this project.

## **Scope of Services**

- 1. Project Management and General Items**
  - 1.1. Site visits
  - 1.2. Gather and analyze existing utility map information
  - 1.3. Project Management
- 2. Right of Way Surveying (Performed by CEC, Inc.)**
  - 2.1. Acquire Ownership information
  - 2.2. Show apparent ROW
- 3. Topographic Surveying/ Base Mapping (Performed by CEC, Inc.)**
  - 3.1. Establish Primary Project Control
  - 3.2. Establish Secondary Project Control
  - 3.3. Set Project centerline or baseline (50' Interval)
  - 3.4. Survey topographic features
  - 3.5. Survey Cross sections / spot elevations to develop DTM/cross sections 5 feet into adjacent property only where ROE can be secured
  - 3.6. Call 811 and coordinate with COB to mark Utilities.
    - 3.6.1. Water
    - 3.6.2. Sanitary Sewer
    - 3.6.3. Natural Gas
    - 3.6.4. Underground Electric
    - 3.6.5. Overhead Electric
    - 3.6.6. Underground Telephone
    - 3.6.7. Overhead Telephone
    - 3.6.8. Underground Cable Television Overhead Cable Television

- 3.7. Utility Survey
  - 3.7.1. Survey Quality Level B paint marks
  - 3.7.2. Water
    - 3.7.2.1. Valve Box elevations
    - 3.7.2.2. Valve Stem elevations
  - 3.7.3. Sanitary Sewer
    - 3.7.3.1. Manhole Rings and Covers elevations
    - 3.7.3.2. Invert elevations and details (sizes, configurations, flow directions, north arrow)
  - 3.7.4. Natural Gas
    - 3.7.4.1. Valve Box elevations
    - 3.7.4.2. Valve Stem elevations
    - 3.7.4.3. Test box elevations
  - 3.7.5. Storm Drainage
    - 3.7.5.1. Manhole rings and covers elevations
    - 3.7.5.2. Invert elevations and details
    - 3.7.5.3. Curb inlets
      - 3.7.5.3.1. Top elevations
      - 3.7.5.3.2. Floor and invert elevations
      - 3.7.5.3.3. lateral details (sizes, configurations, flow directions, north arrow)
    - 3.7.5.4. Outfall elevations
  - 3.7.6. Underground Electric
    - 3.7.6.1. Manhole rings and covers elevations
  - 3.7.7. Telephone
    - 3.7.7.1. Manhole rings and covers elevations
  - 3.7.8. Underground Cable Television
    - 3.7.8.1. Manhole rings and covers elevations
- 3.8. Survey Trees
  - 3.8.1. Perform survey of all trees with trunk diameter > 4".
  - 3.8.2. Tree survey data shall include species, trunk diameter and spread.
  - 3.8.3. Includes tag descriptions of surveyed trees to correlate to the digital survey data.
- 3.9. Prepare Project Layout w/survey control points
- 4. Roadway Design**
  - 4.1. Prepare existing and proposed typical roadway cross sections showing lanes, and clear zone widths, etc.
  - 4.2. Establish proposed horizontal and vertical roadway alignments
  - 4.3. Develop combined roadway/drainage plan and profile sheets at 1" = 40' scale on 11" x 17" format. Plans will include:
    - 4.3.1. Existing ground profiles at centerline and left and right ROW
    - 4.3.2. Proposed Horizontal Roadway alignments showing
      - 4.3.2.1. Centerline geometry (centerline bearings, PI, PC, and PT stations, centerline curve data, curb return radii, etc.)
      - 4.3.2.2. Curb locations and geometry
      - 4.3.2.3. Lane widths

- 4.3.2.4. Sidewalk widths and locations
    - 4.3.2.5. Transitions and extent of construction of intersecting streets
  - 4.3.3. Proposed Roadway vertical alignment showing right and left top of curb profile
- 4.4. Develop Roadway Cross Sections at 50 foot intervals and centerline of all driveways showing existing and proposed utilities.
- 4.5. Identify Roadway Standard Boerne Details
- 5. Drainage**
  - 5.1. Ensure widening does not impact adjacent drainage ditch geometry.
- 6. Pavement Design and Geotechnical Services – Utilize Geotechnical Report and Pavement Design Provided for Herff Road.**
- 7. Utility Coordination**
  - 7.1. Perform Utility Coordination:
    - 7.1.1. Call 811 to have utilities marked, and (included in CEC Survey Scope)
    - 7.1.2. Survey (included in CEC Survey Scope)
    - 7.1.3. Show surveyed utilities on the plan sheets
    - 7.1.4. Conduct conflict assessment and document any conflicts in a conflict matrix.
- 8. Traffic Engineering**
  - 8.1. Prepare Signing and Pavement Marking Plans and Details, including verify signal is placed properly with the added lane.
  - 8.2. No Construction Phasing, to be determined by CoB forces during construction.
- 9. Environmental / Permitting (Coordination, Studies and Design)**
  - 9.1. No SWPPP will be provided, controls to be applied by CoB forces during construction.
- 10. Meetings and Coordination**
  - 10.1. Design Coordination Telephone calls
- 11. Cost Estimating**
  - 11.1. Prepare and/or Update Opinion of Probable Construction Costs for Design Phase:
    - 11.1.1. Verify bid items, descriptions, units of measure and quantities for base plans.
- 12. Design Phase Submittals/Deliverables to City**
  - 12.1. Compute plan quantities and update Summary of Quantities Sheets
  - 12.2. Prepare Written Responses to All Previous Comments
  - 12.3. Perform QA/QC
  - 12.4. Assemble and Submit Plan Deliverables (PDFs and DGNs on CD)
- 13. Exclusions, the following elements are not included in the scope of services or form basis of assumption in the above proposed scope:**

- 13.1. Drainage scope is limited to channel design, drainage area maps and detail drainage design is not included. (Capacity check should be sufficient to address project.)
- 13.2. Tie in of widening will be at Herff road stub out for Old San Antonio Road. Only milling overlaying and striping will occur in the existing intersection.
- 13.3. Vegetation will be sod placed on top of topsoil.
- 13.4. No signal modification will be provided. Possibly adding overhead signs to the master arms limits of signal construction.
- 13.5. ROW will only be established as apparent ROW.

**City of Boerne  
Public Works**

**FEE SUMMARY AND TIMELINE FOR PROFESSIONAL SERVICES**

Project:	Old San Antonio Road Right Turn Lane
Prime Consultant:	Maestas & Associates, LLC
Proposal Date:	10/17/2018
Prepared By:	Maestas & Associates, LLC

ACTIVITY	TIMELINE	
	(CALENDAR DAYS)	FEE
<b>Design Phase</b>	<b>60</b>	<b>\$15,192.00</b>
1. Maestas & Associates, Inc.		\$10,580.00
2. CEC		\$4,612.00
<b>BASE FEE TOTAL</b>	<b>60</b>	<b>\$15,192.00</b>

**ADDITIONAL SERVICES**

**NEGOTIATED AT TIME OF BIDDING IF NEEDED**

# EXHIBIT 1

City of Boerne  
Public works

## Old San Antonio Right Turn Lane (North Bound) at Herff Road.

Project Name:	On-Call Civil Engineering Services
Name of Firm/Subconsultant:	Maestas & Associates, LLC
Date Proposal Submitted:	October 25, 2018
Project Manager:	Jason Scheppers

Position/Personnel Title	Principal	Project Manager	Senior Project Engineer	EIT I	EIT II	EIT III	CADD Tech I / Eng Tech I	CADD Tech II / Eng Tech II	CADD Tech III / Eng Tech III	Admin/Clerical	
Fully-Loaded Hourly Wage Rates * (as defined below)	\$190.00	\$185.00	\$180.00	\$105.00	\$115.00	\$125.00	\$95.00	\$105.00	\$115.00	\$75.00	
Task to be performed/Phase Description (Including Subconsultant work)	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Total Hours
<b>Design Phase</b>											
Project Management and General Items											
1.1 Site visits		3									3
1.2 Gather and analyze existing utility map information			3								3
1.3 Project Management		2								4	6
Right-of-Way Surveying and Mapping											
Apparent ROW only (By CEC)											
Topographic Surveying / Base Mapping (By CEC)											
<b>Roadway Design</b>											
4.1 Prepare roadway typical sections - existing and proposed			2		4			2			8
4.2 Horizontal & vertical roadway alignments					4						4
4.3 Develop combined roadway plan & profile sheets at 1" = 40' scale on 11" x 17" format. Ditch and Drainage elements to be shown on the sheet		1	2		6			8			17
4.4 Develop Roadway Cross Sections at 50 ft Intervals & centerline of all driveways		1	2		3			6			12
4.5 Identify and incorporate Roadway Standard COB Details								1			1
<b>Drainage Design</b>											
5.1 None provided except to ensure widening does not encroach on ditch											
<b>Pavement Design and Geotech Services (Based on Herff Road adjacent to Project)</b>											
<b>Utility Coordination / Management</b>											
7.1.1 Coordinate with COB to mark utilities call 811 for utility locates					1			2		3	6
7.1.2 Survey marked utilities and verify with previous plans (CEC)											
7.1.3 Show Utility mapping based on Survey on Plan Sheet			1		2			2			5
7.1.4 Conduct initial utility conflict analysis and prepare Utility Conflict Matrix			1		2						3
<b>Traffic Engineering</b>											
8.2 Signing and Pavement Marking Layout		1			2			2			5
<b>Environmental/Permitting (Coordination, Studies and Design)</b>											
9.1 SW3P Plans will not be prepared											
<b>Meetings and Coordination</b>											0
11.1 Design Coordination Phone Calls		2									2
<b>Cost Estimating</b>											
12.1 Prepare Cost Estimate			1		3						4

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City of Boerne  
Public works

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Position/Personnel Title	Principal	Project Manager	Senior Project Engineer	EIT I	EIT II	EIT III	CADD Tech I / Eng Tech I	CADD Tech II / Eng Tech II	CADD Tech III / Eng Tech III	Admin/Clerical
Fully-Loaded Hourly Wage Rates * (as defined below)	\$190.00	\$165.00	\$160.00	\$105.00	\$115.00	\$125.00	\$95.00	\$105.00	\$115.00	\$75.00
Design Phase Submittals/Deliverables to City										
13.4 Perform Internal QA/QC and Complete Certification Form		2	2					2		6
13.5 Assemble and Submit Plan Deliverables (PDFs and DGNs on CD)								1		1
Total Hours Design Phase:	0	12	14	0	27	0	0	26	0	7
Total Design Phase Fee (Not to Exceed):	\$0.00	\$1,980.00	\$2,240.00	\$0.00	\$3,105.00	\$0.00	\$0.00	\$2,730.00	\$0.00	\$525.00



### **Fee/Price Proposal Breakdown for Professional Services**

\* A fully-loaded Hourly Wage Rate is defined as an employee's base hourly rate plus labor overhead (including fringe benefits), general and administrative (indirect) expenses, profit and escalation (if applicable).