RESOLUTION NO. 25-R-003

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING EXPEDITURES WITH KIMLEY-HORN AND ASSOCIATES, INC., TOTALING NO MORE THAN $2,700,000, FOR PROFESSIONAL ENGINEERING-RELATED SERVICES ON THE LOWER SEGUIN ROAD RECONSTRUCTION PROJECT, AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, the City staff of the City of Schertz (the "City") has determined that the City requires professional services relating to engineering and design for the Lower Seguin Road Reconstruction Project; and

WHEREAS, the City Council passed Resolution 23-R-119 on November 14, 2023, retaining Half Associates, Inc. to do the preliminary design and environmental clearance for the Lower Seguin Road Reconstruction Project; and

WHEREAS, the City Council of the City of Schertz wishes to proceed with the final design and right-of-way acquisition for the Lower Seguin Road Reconstruction Project; and

WHEREAS, City staff has determined that Halff Associates, Inc. is uniquely qualified to provide such services for the City; and

WHEREAS, Halff Associates, Inc. is an approved On-Call Engineering Firm for the City of Schertz; and

WHEREAS, pursuant to Section 252.022(a)(4), the City is not required to seek bids or proposals with respect to a procurement for personal, professional, or planning purposes; and

WHEREAS, the City Council has determined that it is in the best interest of the City to contract with Halff Associates, Inc. pursuant to the On-Call Task Order Agreement attached hereto as Exhibit A (the "Agreement") up to a maximum total aggregate amount of $2,700,000.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes the City Manager to execute and deliver the Task Order Agreement with Halff Associates, Inc. in accordance with their approved Master Agreement in substantially the form set forth on Exhibit A in the amount of $2,556,530.54 and authorize the City Manager to execute and deliver the Task Order in a not to exceed total aggregate amount of $2,700,000**.**

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this _____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

(CITY SEAL)

EXHIBIT A

TASK ORDER NO. 1 SERVICES AGREEMENT

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the specific Agreement between Owner and Engineer, and the controlling Laws and Regulations.

EJCDC® E-505, Agreement between Owner and Engineer for Professional Services—Task Order Edition, is published in four parts: (1) the Main Agreement (general provisions governing all Task Orders); (2) the Exhibits to Main Agreement; (3) the Task Order Form (see below); and (4) the Exhibits to Task Order. The Main Agreement contains a Guidelines for Use section that pertains to all four parts of E-505.

AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES— TASK ORDER EDITION

PART 3 OF 4: TASK ORDER FORM

Prepared by

EJCDC®
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

ACEC
AMERICAN COUNCIL OF ENGINEERING COMPANIES

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

NSPE® NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

National Society of Professional Engineers

1420 King Street, Alexandria, VA 22314-2794

(703) 684-2882

www.nspe.org

American Council of Engineering Companies

1015 15th Street N.W., Washington, DC 20005

(202) 347-7474

www.acec.org

American Society of Civil Engineers

1801 Alexander Bell Drive, Reston, VA 20191-4400

(800) 548-2723

www.asce.org

TASK ORDER NO. 1

This is Task Order No. **[_1_]**, consisting of 6 pages.

In accordance with Paragraph 1.01, Main Agreement, of the Agreement Between Owner and Engineer for Professional Services—Task Order Edition dated **[date]**, Owner and Engineer agree as follows:

1. TASK ORDER DATA

a.	Effective Date of Task Order:	**February _____, 2024**
b.	Owner:	**City of Schertz**
c.	Engineer:	**Halff Associates, Inc.**
d.	Specific Project (title)	**Lower Seguin Road PS&E**
e.	Specific Project (description):	**Development of plans, Specifications & Estimates for an approx. 2.52 miles segment of Lower Seguin Road starting at approx. 1,000 ft east of Loop 1604 within the City of Schertz city limits to approx. 2,000 ft west of FM 1518 in the City of Schertz**
f.	Related Task Orders Supplemented by this Task Order: Superseded by this Task Order:	**Related Task Order: Task Order 16 Lower Seguin Road 30% Schematic and Environmental Permitting**

2. BASELINE INFORMATION

Baseline Information. Owner has furnished the following Specific Project information to Engineer as of the Effective Date of the Task Order. Engineer's scope of services has been developed based on this information. As the Specific Project moves forward, some of the information may change or be refined, and additional information will become known, resulting in the possible need to change, refine, or supplement the scope of services.

Specific Project Title:	Lower Seguin Road PS&E
Type and Size of Facility:	2.52 miles of Roadway and Drainage Improvements
Description of Improvements:	Roadway widening, Bridge Construction, and Drainage Improvements
Expected Construction Start:	September 2025
Prior Studies, Reports, Plans:	Lower Seguin Road Schematic Design (30%)
Facility Location(s):	Along Lower Seguin Road from approximately 1,000 linear feet east of Loop 1604 to approximately 2,000 linear feet west of FM 1518.
Current Specific Project Budget:	$29,211,263 (Construction Cost) and $2,556,530.54 (Engineering)
Funding Sources:	Defense Community Infrastracture Program (DCIP) and City of Schertz Bond
Known Design Standards:	City of Schertz and TxDOT Design Standards
Known Specific Project Limitations:	N/A
Specific Project Assumptions:	N/A
Other Pertinent Information:	N/A

3. SERVICES OF ENGINEER ("SCOPE")

A. The specific Basic Services to be provided or furnished by Engineer under this Task Order are:

☐ Exhibit A to Task Order, "Engineer's Services for Task Order," as attached to this specific Task Order.

B. All the services included above comprise Basic Services for purposes of Engineer's compensation under this Task Order, with the exception of Resident Project Representative Services, if any, which are compensated separately.

C. Resident Project Representative (RPR) Services: **(Does not apply)**

1. If the Scope established in Paragraph 2.A above includes RPR services, then Exhibit D to Task Order is expressly incorporated in this Task Order by reference.

D. Additional Services: Services not expressly set forth as Basic Services in Paragraph 3.A above, and necessary services listed as not requiring Owner's written authorization, or requiring additional effort in an immediate, expeditious, or accelerated manner as a result of

unanticipated construction events or Specific Project conditions, are Additional Services, and will be compensated by the method indicated for Additional Services in this Task Order. All other Additional Services require mutual agreement and may be authorized by amending the Task Order as set forth in Paragraph 8.05.B.2 of the Main Agreement, with compensation for such other Additional Services as set forth in the amending instrument.

4. DELIVERABLES SCHEDULE

A. In submitting required Documents and taking other related actions, Engineer and Owner will comply with the schedule below.

Deliverables	Date
60% Submittal	April 14, 2025
90% Submittal	May 30, 2025
100% Submittal	June 30, 2025
Bid Phase	July 2025
Construction Phase	November 2025

5. ADDITIONS TO OWNER'S RESPONSIBILITIES

A. Owner shall have those responsibilities set forth in Article 2 of the Main Agreement, and the following supplemental responsibilities that are specific to this Task Order:

1. The Owner shall provide As-built drawings for public utilities within the ROW, adjacent development plats, and future project utility layouts.

6. TASK ORDER SCHEDULE

A. In addition to any schedule provisions provided in Exhibit B or elsewhere, the parties shall meet the following schedule: **Not Applicable**

7. ENGINEER'S COMPENSATION

A. The terms of payment are set forth in Article 4 of the Main Agreement.

B. Owner shall pay Engineer for services rendered under this Task Order as follows:

Description of Service	Amount	Basis of Compensation
1. Basic Engineering Services	$**1,482,025.00**	**Lump Sum**
a. Project Administration and Coordination	$**101,240.00**	**Lump Sum**
b. Utility Coordination	$**129,980.00**	**Lump Sum**
c. Traffic Control Plan	$**108,600.00**	**Lump Sum**

d. Roadway Design	$**478,485.00**	**Lump Sum**
e. Drainage Design	$**290,965.00**	**Lump Sum**
f. Structural Design	$**154,870.00**	**Lump Sum**
g. Traffic, Signing and Pavement Markings	$**111,120.00**	**Lump Sum**
h. Environmental (SWPPP) and SWMP	$**74,365.00**	**Lump Sum**
i. Bid Phase Services	$**32,400.00**	**Lump Sum**
2. Construction Phase Services	$**128,080.00**	**Lump Sum**
TOTAL COMPENSATION (items 1 and 2)	$**1,610,105.00**	**Lump Sum**
3. Additional Services under Section 3.D above	$**946,425.54**	**Lump Sum**
a. SUE Quality Level A (Up to 18 Test holes)	$**60,931.40.00**	**Lump Sum**
b. CLOMR & FEMA Submittal Fee	$**60,025.00**	**Lump Sum**
c. LOMR & FEMA Submittal Fee	$**48,460.00**	**Lump Sum**
d. Surveying	$**63,101.40**	**Lump Sum**
e. Geotechnical Engineering (Terracon)	$**145,855.74**	**Lump Sum**
f. Right of Way Acquisition	$**472,475.00**	**Lump Sum**
g. Grant Application Development	$**45,577.00**	**Lump Sum**
h. Unspecified Additional Services	$**50,000.00**	**As Needed**

C. Compensation items and totals based in whole or in part on Hourly Rates or Direct Labor are estimates only. Lump sum amounts and estimated totals included in the breakdown by phases incorporate Engineer's labor, overhead, profit, reimbursable expenses (if any), and Subconsultants' charges, if any. For lump sum items, Engineer may alter the distribution of compensation between individual phases (line items) to be consistent with services actually rendered but shall not exceed the total lump sum compensation amount unless approved in writing by the Owner.

8. ENGINEER'S PRIMARY SUBCONSULTANTS FOR TASK ORDER, AS OF THE EFFECTIVE DATE OF THE TASK ORDER:

A. **Terracon** (Geotechnical Engineering)

9. EXHIBITS AND ATTACHMENTS:

A. Exhibit A & A-1 to Task Order—Engineer's Services Under Task Order

B. Exhibit B to Task Order—Task Order Deliverables Schedule **(Schedule provided in Section 4 of this Task Order)**

C. Exhibit D to Task Order—Duties, Responsibilities, and Limitations of Authority of Resident Project Representative Under Task Order **(Does not apply)**

D. Exhibit E to Task Order-EJCDC® C-626, Notice of Acceptability of Work (Form) **(Does not apply)**

E. Other:

Execution of this Task Order by Owner and Engineer makes it subject to the terms and conditions of the Main Agreement and its exhibits and appendices, which Main Agreement, exhibits, and appendices are incorporated by this reference.

OWNER:	ENGINEER:
By:	By:
Print Name:	Print Name: Lamberto J. Balli, PE
Title:	Title: Vice President/ Director of Public Works
	Engineer's License or Firm's F-312
	State of: Texas
DESIGNATED REPRESENTATIVE FOR TASK ORDER:	DESIGNATED REPRESENTATIVE FOR TASK ORDER:
Name:	Name: Luis A. Cardona, PE
Title:	Title: Public Works Team Leader
Address:	Address: 100 NE Loop 410, Suite 701, San Antonio, Texas 78216
E-Mail Address:	E-Mail Address: lcardona@halff.com
Phone:	Phone: 210-704-1379
Date:	Date: February 7, 2024

EXHIBIT A

SERVICES TO BE PROVIDED BY CONSULTANT

CITY OF SCHERTZ ("CITY") is proposing to develop a 2.52 mile segment of Lower Seguin Road starting at approximately 1,000 feet east of Loop 1604 in the City of Schertz to Farm-to-Market (FM) Road 1518 in the City of Schertz. Through a separate City of Schertz Development Agreement, the section of Lower Seguin Road from approximately 400 feet west of Hollering Vine to FM 1518 will be designed and constructed by a private developer.

The work to be performed under this work authorization by **Halff Associates, Inc (Halff)** ("CONSULTANT") will consist of the preparation of Plans, Specifications, and Estimates ("PS&E"), the preparation of Bidding Documents, and performing Construction Phase services.

1.0 PROJECT ADMINISTRATION AND COORDINATION SERVICES

The CONSULTANT Project Manager and Task Leaders will be responsible for project oversight and the daily management of the project. Frequent and appropriate communications will be maintained between the CONSULTANT and CITY in an effort to expedite completion of the PS&E.

Project Administration Services will include the following:

1.1 Prior to the Project Kick-Off Meeting, the CONSULTANT will designate in writing, one (1) Professional Engineer licensed to practice in the State of Texas to be the Project Manager throughout the duration of the project for project management and all communications, including billing. The CONSULTANT will not replace the designated Project Manager without the written approval of CITY;

1.2 The CONSULTANT will submit to CITY its invoices of services performed and compensation due, arranged by tasks. The CONSULTANT will show the budgeted and currently authorized amounts for each task, along with the invoiced and to-date amounts. The invoice must be submitted to CITY by the 10th calendar day of each month;

1.3 Each month, and included with the submission of each invoice, the CONSULTANT will update the Project Schedule and related documents in accordance with the Project Schedule.

1.4 Each month, and included with the submission of each invoice, the CONSULTANT will submit a monthly report of the status of work performed through the end of the previous month. The CONSULTANT will summarize decisions or agreements made, and will outline unresolved or pending issues requiring CITY's involvement or decision.

Project Coordination Services will include the following:

1.5 The CONSULTANT will attend a Project Kick-Off Meeting with CITY. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of the meeting.

1.6 The CONSULTANT will meet with CITY's Representative monthly. The CONSULTANT will prepare and distribute the monthly meeting agenda twenty-four (24) hours before the meeting. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of each meeting.

2.0 PROJECT DESIGN CRITERIA

The Project Design Criteria for the section of Lower Seguin Road from approximately 1000 feet East of Loop 1604 to approximately 400 feet west of Hollering Vine will be as follows:

2.1 All engineering documents released, issued, or submitted by or for a registered

engineering firm, including preliminary documents, must clearly indicate the engineering firm name and registration number. Additionally, all completed documents submitted for final approval or issuance or a permit must bear the seal with signature and date adjacent thereto of a Professional Engineer licensed to practice in the State of Texas;

2.2 The design standards to be used will include but not be limited to the TxDOT Roadway Design Manual, TxDOT Bridge Design Manual – LRFD, TxDOT Hydraulic Design Manual, Highway Capacity Manual, the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets (Green Book), AASHTO LRFD Bridge Design Specifications, Texas Manual on Uniform Traffic Control Devices, ADA Accessibility Guidelines, Texas Pollutant Discharge Elimination System (TPDES) Guidelines, and applicable City of Schertz Design Guidelines.

2.3 Project specifications will be developed using the latest Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges.

3.0 ENVIRONMENTAL SERVICES (included in the Schematic Phase, and no additional Environmental Services will be needed for this Phase of the project.)

4.0 SURVEYING SERVICES

The CONSULTANT will obtain the services of a Registered Professional Land Surveyor to perform field surveys for the Project. All survey services will comply with the latest revision of the Professional Land Surveying Practice Act of the State of Texas and will be accomplished under the direct supervision of a currently licensed State of Texas Registered Professional Land Surveyor.

Surveying Services will include the following:

4.1 Using Bexar County Appraisal District (BCAD) and Bexar County Clerk Websites, the CONSULTANT will gather ownership and deed information for base drawing;

4.2 The CONSULTANT will prepare Right-of-Entry (ROE) agreements for adjacent landowners, obtain CITY signature on ROE agreements, and coordinate with landowners as required to acquire approval of ROE agreements for field work outside of the existing public Right-of-Way (ROW).
CITY will provide the outline of the agreement. The CONSULTANT will submit agreements to CITY for signature and the CONSULTANT will mail the signed agreements to the landowners via regular and certified mail, with a return self-addressed stamped envelope. The CONSULTANT will track receipt of executed agreements. If the initial notice requesting ROE is not returned within one (1) week of delivery, a second notice requesting ROE will be sent by the CONSULTANT. If after one (1) week of delivery of the second notice the property owner is still unresponsive, CITY will be notified, and the process escalated with assistance from CITY. The CONSULTANT will maintain a contact list of the property owners which will be made available to CITY;

4.3 The CONSULTANT will establish control for the site in NAD 83 horizontal datum, Texas State Plane Coordinate System South Central Zone surface coordinates and NAVD 88 vertical datum;

4.4 The CONSULTANT will locate, identify and tag all trees with trunk diameter five inches or greater, to include the trunk diameter, species and spread within the existing ROW. Tree tag will be a permanent round metal disk with tree ID stamped in the tag

4.5 The CONSULTANT will verify existing project control and set and establish additional project control as needed. The CONSULTANT will prepare Survey Control layout sheets in 11"x17" tabloid paper format, including but not limited to illustrating in graphical format the Project Limits to include monument locations, control recovery sketches detailing pertinent physical features, permanent and temporary Horizontal Control/Vertical Control Bench Marks (three point tie details). Survey Control layout sheets must be signed and sealed by the Registered Professional Land Surveyor responsible for the survey. Survey Control layout sheets will become part of the Final Construction Contract Documents.

4.6 The CONSULTANT will perform topographic survey for design of Randolph's South Entry Gate along Golf Road. These limits are from the intersection of the northwest existing ROW line of Lower Seguin Road along Golf Road for a length of 250 feet including from existing ROW to existing ROW of Golf Road.

4.7 Using Bexar County Appraisal District (BCAD) and Bexar County Clerk Websites, the CONSULTANT will verify ownership and deed information and update the base drawing as needed for final ROW mapping;

4.8 The CONSULTANT will perform field surveys of all tracts of land where easement parcel acquisition is anticipated (estimated 19 easement parcels). Boundary analysis will be performed by a Registered Professional Land Surveyor and the ROW base file will be updated to reflect this information.

4.9 The CONSULTANT will prepare easement parcel acquisition documents including a survey exhibit and written legal description for an estimated 19 easement parcels.

5.0 GEOTECHNICAL ENGINEERING SERVICES

Geotechnical Engineering Services will include the following:

5.1 The CONSULTANT will coordinate with Terracon to gather the data outlined in the attached Exhibit A-1 (Terracon – Scope of Services) for the proposed Bridge and Retaining Walls.

6.0 UTILITY COORDINATION SERVICES

Utility Coordination Services will include the following:

6.1 The CONSULTANT will gather utility location information using available records from known local utilities in the area as well as Texas One-Call locates provided by survey. The CONSULTANT will correlate the record information with utility features surveyed to determine any potential conflicts;

6.2 The CONSULTANT will attend one (1) group project meeting and four (4) independent utility coordination meetings with CITY, land and utility owners. Additional utility coordination meetings will be combined with design review meetings/progress meetings. The CONSULTANT will coordinate with the utility owners to determine scope of utility relocations and minimize utility conflicts through design where reasonable and adequate information is provided; The CONSULTANT will also obtain utility verification letters from each utility company stating that the utility information has been reviewed and is correct;

6.3 The CONSULTANT will provide a Utility Tracking Report at the 60 percent design phase submittal and an updated Utility Tracking Report at the 90 percent design phase submittal. The Utility Tracking Report will include the following information:

a. Owner of the facility, including the facility address and the name and telephone number of the contact person at the facility;

b. Location of Conflict, identified by station and offset;

c. Type of Facility;

d. Expected clearance date;

e. Status;

f. Effect on construction; and

g. Type of adjustment required;

6.4 The CONSULTANT will review existing and proposed utility alignments for conflicts and develop a utility tracking report; however, constructability and conformance to utility regulations is the responsibility of each utility company;

6.5 The CONSULTANT will reference in proposed utility lines as background if Microstation V8 files are provided and received prior to the submittal of final construction contract document plan sheets; and

6.6 The CONSULTANT will develop existing utility layouts.

7.0 SUBSURFACE UTILITY ENGINEERING (SUE) SERVICES

SUE Services will include the following:

1. Subsurface Utility Locate (Test Hole) Service (Quality Level A)
   Locate is the process used to obtain precise horizontal and vertical position, material type, condition, size, and other data that may be obtainable about the utility facility and its surrounding environment through exposure by non-destructive excavation techniques that ensures the integrity of the utility facility. Subsurface Utility Locate (Test Hole) Services (Quality Level A) are inclusive of Quality Levels B, C, and D.

   The Consultant must:
   a. Coordinate with utility owner inspectors as may be required by law or utility owner policy.
   b. Place Texas 811 ticket 48 hours prior to excavation.
   c. Neatly cut and remove existing pavement material, such that the cut does not exceed 0.10 square meters (1.076 square feet) unless unusual circumstances exist.
   d. Measure and record the following data on an appropriately formatted test hole data sheet that has been sealed and dated by the Engineer:
      (1) Elevation of top of utility tied to the datum of the furnished plan.
      (2) Minimum of two benchmarks utilized. Elevations must be within an accuracy of 30 mm (1.1811 inches) vertically and 60 mm (2.3622 inches) of utilized benchmarks.
      (3) Elevation of existing grade over utility at test hole location.
      (4) Horizontal location referenced to project coordinate datum.
      (5) Outside diameter of pipe or width of duct banks and configuration of non-encased multi-conduit systems.
      (6) Utility facility materials.
      (7) Utility facility condition.
      (8) Pavement thickness and type.
      (9) Coating/wrapping information and condition.
      (10) Unusual circumstances or field conditions.
   e. Excavate test holes in such a manner as to prevent any damage to wrappings, coatings, cathodic protection, and other protective coverings and features.
   f. Be responsible for any damage to the utility during the locating process. In the event of damage, the Consultant must stop work, notify the appropriate utility facility owner, the County, and appropriate regulatory agencies. The regulatory agencies include:

the Railroad Commission of Texas and the Texas Commission on Environmental Quality. The Consultant shall not resume work until the utility facility owner has determined the corrective action to be taken. The Consultant is liable for all costs involved in the repair or replacement of the utility facility.

g. Back fill all excavations with appropriate material, compact backfill by appropriate mechanical means, and restore pavement and surface material.
h. Provide complete restoration of work site and landscape to equal or better condition than before excavation. If a work site and landscape is not appropriately restored, the Consultant shall return to correct the condition at no extra charge to the County.
i. Plot utility location position information to scale and provide a comprehensive utility plan signed and sealed by the responsible professional engineer. This information must be provided in the latest version of MicroStation and be fully compatible with the Open Roads civil design system used by the State. When requested by the County, the locate information must be over laid on the County's design plans.
j. Return plans, profiles, and test hole data sheets to the Client. If requested, conduct a review of the findings with the Client.
k. Close-out permits as required.

8.0 TRAFFIC CONTROL PLAN SERVICES

8.1 The CONSULTANT will prepare TCP concepts on a roll plot with typical sections during the schematic phase. The CONSULTANT will prepare a Traffic Control Plan (TCP), at a 1"=50' scale double stacked, a Detour Plan if required and a Sequence of Work Narrative. The Traffic Control Plan will be developed in accordance with the most recent version of the Texas Manual of Uniform Traffic Control devices (TMUTCD). The TCP will identify work areas, temporary paving, temporary shoring, signing, detour alignment, barricades, temporary drainage structures, temporary retaining walls and other TCP related items as required;

8.2 The CONSULTANT will prepare TCP Typical Sections for each Phase of construction as required;

8.3 The CONSULTANT will prepare a Sequence of Work Narrative and submit to CITY for review and incorporation into the plans. The narrative will include a phase-by-phase, step-by-step written account of the proposed activities throughout the construction process. This is intended to be a narrative account of the proposed activities shown in the TCP;

8.4 The CONSULTANT will obtain the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;

8.5 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s); and

8.6 The CONSULTANT will coordinate with the applicable joint bid utility companies to determine if their adjustments can be constructed according to the proposed construction sequence. If the joint bid utility adjustments cannot be constructed according to the proposed construction sequence, it will be the responsibility of the utility designer to develop any additional TCP components necessary for the proposed adjustments at the expense of the joint bid utility company.

8.7 The CONSULTANT will review the TCP to confirm there is positive drainage and if required, provide quantities for temporary drainage items;

8.8 The CONSULTANT will identify and quantify any trench protection or temporary special

shoring if required;

8.9 The CONSULTANT will prepare a construction schedule utilizing the Critical path Method (CPM) with appropriate software. The CPM schedule will identify the major items of work for construction of the project with durations based on available production rates for those items. The schedule will indicate tasks, subtasks, critical dates, milestones, will depict the interdependence of the various items, and will be in calendar days; and

9.0 ROADWAY DESIGN SERVICES

The tasks performed for the roadway design will include, but are not limited to the following:

9.1 The CONSULTANT will prepare a Title Sheet which will include pertinent project information;

9.2 The CONSULTANT will prepare a detailed Index of Sheets that shows each sheet's location in the plan set and corresponding sheet number;

9.3 The CONSULTANT will prepare Project Layout Sheets at a 1"=100' scale double stacked that clearly indicate the limits of the entire project;

9.4 The CONSULTANT will prepare Removal Layouts at a 1"=50' scale double stacked. The layouts will indicate pavement, roadway appurtenances, and other pertinent items to be removed with details and descriptions to ensure the intent is clear;

9.5 The CONSULTANT will develop Horizontal Alignment Data Sheets that will include all horizontal alignment data;

9.6 The CONSULTANT will develop Roadway Plan and Profile Sheets at a scale of 1"=50' H and 1"=10' V. The sheets will include coordinates, superelevation data, stations, horizontal curve date, vertical profile data, elevations of key alignment features, drainage features, utilities, and any other items required for the complete construction of the Project;

9.7 The CONSULTANT will develop Intersection Layout Sheets at a 1"=30' scale with spot elevations and proposed grading for the intersections. The following intersections will be included:

a. Citadel Peak;

b. Golf Road (JBSA-R South Gate) ;

c. Greaves Lane;

d. Aranda Lane/Canopy Bend;

9.8 The CONSULTANT will prepare Miscellaneous Roadway Details which will include all necessary details not included in standard TxDOT detail sheets necessary to fully construct all portions of the Project;

9.9 The CONSULTANT will obtain the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;

9.10 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);

9.11 The CONSULTANT will prepare any required special specifications or special provisions and identify the applicable TxDOT general notes;

9.12 The CONSULTANT will prepare a request for any design exceptions, including all information

necessary to support the request, and submit them to CITY for review and approval;

9.13 The CONSULTANT will prepare an Opinion of Probable Construction Cost utilizing calculated quantities, TxDOT San Antonio District average unit prices, and TxDOT Statewide average unit prices as appropriate based on the judgment of the CONSULTANT;

9.14 The CONSULTANT will prepare a Project Manual including standard general provisions, instructions to bidders, bid forms, applicable prevailing wage rates, specifications, special provisions and any other information required for complete construction of the Project. CITY will provide a standard template for use by the CONSULTANT.

9.15 TDLR Registration, Review, Inspection

9.16 Register project with TDLR, coordinate final project review with TDLR and coordinate with TDLR for final project inspection after construction completion

10.0 DRAINAGE DESIGN SERVICES

10.1 The tasks performed for the drainage design will include, but are not limited to the following: The CONSULTANT will prepare Hydraulic Data Sheets for all culvert crossings. For any bridge class culvert crossings the Hydraulic Data Sheet must include the following:

a. Structure Location Map;

b. Hydrologic Data Table;

c. Hydraulic Data Table; and

d. Scour analysis parameters and results;

10.2 The CONSULTANT will prepare Culvert Layouts for all culvert crossings. The layouts must be prepared in a plan and profile layout and include geometrics of the culvert reconstruction or modification. The layouts must also include applicable hydraulic information. The layouts will be prepared at a scale of 1”=20’ H and 1”=10’ V;

10.3 If needed, the CONSULTANT will prepare energy dissipation/erosion protection measures for the culvert outfall points and any associated detail sheets;

10.4 The CONSULTANT will calculate quantities for all culvert crossings;

10.5 The CONSULTANT will prepare a Summary Sheet for all culvert quantities;

10.6 The CONSULTANT will prepare a TxDOT BCS Standard Sheet which must include all culvert crossings;

10.7 The CONSULTANT will prepare interior Drainage Area Maps at a scale of 1”=50’. The maps will depict drainage area boundaries and include flow direction arrows. Each area must be identified with a unique number;

10.8 For any required inlets, the CONSULTANT will prepare runoff and inlet computations for each inlet. Inlet hydraulics will calculated using the Rational Method. Calculated flow rates and related input must be indicated on a Runoff and Inlet Computations Sheet;

10.9 For any required storm sewer design, the CONSULTANT will utilize GEOPAK Drainage or other software acceptable to CITY;

10.10 The CONSULTANT will prepare Drainage Plan and Profile Sheets depicting locations of any inlets, manholes, storm sewers, culverts, utilities, channel improvements, ditch locations, and flow lines as required. The Drainage Plan and Profile Sheets will be prepared at a scale of 1”=50’ H and 1”=10’ V; If required, Storm Sewer Profiles will show pipe size, type, slope, existing ground lines, proposed ground lines above the system, pertinent hydraulic information, locations and sizes of inlets and junctions;

10.11 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);

10.12 The CONSULTANT will select the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data; and

10.13 If needed, the CONSULTANT will prepare special structural drainage details for drainage elements such as but not limited to: culverts, junction boxes, wingwalls, headwalls, curbs, pipes, etc.

10.14 The CONSULTANT will develop a drainage report to include the following: drainage area maps, drainage outfall descriptions, tailwater selection and descriptions, recommendations for mitigation of impacts and scour analysis for proposed bridges. The scour analysis will use State-approved methodology based on site conditions and provide any recommended countermeasures.

10.15 CONSULTANT shall prepare a Conditional Letter of Map Revision (CLOMR) for proposed improvements at Lower Seguin Road and Woman Hollering Creek based the hydraulic model prepared for the Detailed Design Phase. The CLOMR shall be completed and approved by FEMA in accordance with all applicable federal, state, and local requirements. The CLOMR will be prepared based on the Best Available Models provided on the SARA D2MR website and will be compared to the effective models. The City shall submit the CLOMR for approval; Consultant shall assist City with responses to any comments received. Payment of fee for FEMA Submittal review shall be paid for by Halff .

Specific tasks include:

- Provide a written report that details the study intent, data sources, modeling assumptions and methodology, physical changes to the watershed, and changes to the floodplain and base flood elevations.
- The CLOMR application typically includes the following MT-2 forms for floodplain mapping changes. Encroachment analysis will be included since a floodway exists on the effective FIRM.

Form 1	Overview & Occurrence
Form 2	Riverine Hydrology and Hydraulics Form
Form 3	Riverine Structures Form

- Update mapping exhibits including floodplain work maps and FEMA FIRM panel overlay maps based on project grading.
- Provide property owner notifications as required by FEMA.
- Perform final QA/QC of the report narrative, exhibits, profiles, and MT-2 forms. Review forms will be included in the final report submittal.

Halff will respond to 1 round of comments made by the City and 1 round of comments from FEMA on the CLOMR application package. Based on the comments received, Halff will make necessary revisions to the submittal package and provide additional required information to fulfill FEMA requirements for issuance of a CLOMR for this project.

10.16 POST-CONSTRUCTION SERVICES:

CONSULTANT shall prepare a Letter of Map Revision (LOMR) for Lower Seguin Road and Woman Hollering Creek based on the final as-built plans and the hydraulic model prepared during the Detailed Design Phase and CLOMR submittal. The LOMR shall be completed and approved by FEMA in accordance with all applicable federal, state, and local requirements.

The LOMR will be prepared based on the latest DFIRM models considered the effective models. The City shall submit the LOMR for approval; Consultant shall assist City with responses to any comments received. Payment of fee for FEMA Submittal review shall be paid for by Halff.

11.0 STRUCTURAL DESIGN SERVICES

11.1 Engineering design and construction documents for one, prestressed concrete slab beam bridge designed to TxDOT 2014 standards (2024 standards if agreed upon at the beginning of the project).

a. Bridge layout
b. Typical bridge section
c. Summary of bridge quantities and bearing seat elevations
d. Abutment plan, sections, and details
e. Bent cap plan sections and details
f. Foundations designed detailed according to TxDOT FD standard.
g. Single unit framing plan, (prestressed concrete slab beams designed and detailed according to TxDOT standard slab beam designs)
h. Single unit deck plan and deck section (Deck designed and detailed according to TxDOT standards for prestressed concrete slab beam bridge)

11.2 Engineering design coordination and construction documents for a maximum of 600-linear feet of TxDOT standard cast-in-place retaining walls

11.3 Submissions

a. 60%- Bridge Layout and Bridge Typical Section
b. 90%-
    i. Bridge layout
    ii. Typical bridge section
    iii. Summary of bridge quantities and bearing seat elevations
    iv. Abutment plan, sections, details, and foundation details
    v. Bent cap plan sections details, and foundation details
    vi. Single unit framing plan, (prestressed concrete slab beams designed and detailed according to TxDOT standard slab beam designs)
    vii. Single unit deck plan and deck section (Deck designed and detailed according to TxDOT standards for prestressed concrete slab beam bridge)
    viii. Structural retaining wall details
    ix. TxDOT standard details applicable to bridge project
c. 100%- standards and sealed construction drawings

11.4 Assistance with cost estimates at 60%, 90% and 100% submissions

11.5 Construction Services

a. Up to (7) Submittal Reviews
b. Up to (6) Site visits
c. RFI Responses

Exclusions/Add Services:

1. Preparation of drawings for TxDOT review.
2. Additional milestone submissions exceeding (1) at 60%, 90%, and 100%.
3. Custom engineering designs that fall outside TxDOT standards.

12.0 TRAFFIC, SIGNING AND PAVEMENT MARKINGS SERVICES

The tasks performed for the traffic, signing and pavement marking design will include, but are not limited to the following:

12.1 The CONSULTANT will prepare proposed signing layouts, and proposed pavement marking and delineation layouts on the same sheets at a scale of 1"=50'. The layouts will identify the various types of proposed signing, striping, and delineation. Signing and striping will be in accordance with the latest version of the TMUTCD or applicable TxDOT standards;

12.2 The CONSULTANT will assign a unique number to each sign that will relate that sign to the sign summary sheet;

12.3 The CONSULTANT will prepare pavement marking details for instances in which standards do not apply or are not appropriate;

12.4 The CONSULTANT will prepare special sign panel details utilizing SignCAD as needed;

12.5 The CONSULTANT will prepare the Summary of Small Signs table utilizing the most current applicable TxDOT and CITY standards. No large guide signs are anticipated;

12.6 The CONSULTANT will select the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data.

12.7 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s).

12.8 The CONSULTANT will select the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;

12.9 Traffic Signal Design

a. The CONSULTANT will design a traffic signals for the intersection at Lower Seguin Road and the South Entrance to Randolph Air Base & Citadel Peak & Hollering Vine (underground elements only for future signalization. The CONSULTANT will prepare Traffic Signal Design Layouts depicting existing utilities, permanent traffic signal poles and mast arms, pedestrian signal poles, pedestrian signals, push buttons, controller cabinet assemblies, signal heads, street lights, detector loops or other detection systems, conduit ground boxes, power sources with distribution to signal service, communications connections, wiring diagrams, pavement markings, signal phasing plan, conduit and cable chart, pole summary chart, phasing sequence, pole details, pole locations diagram, and all other items required for the complete construction of the signals;

b. The CONSULTANT will prepare a Traffic Signal Timing Study for each intersection; and

c. The CONSULTANT will calculate quantities for all items, prepare a quantity Summary Sheet(s) and opinion of probably construction costs; and

d. The CONSULTANT will select the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;

13.0 ENVIRONMENTAL AND STORM WATER MANAGEMENT PLAN

The tasks performed for the Environmental, Storm Water Management Plan, and Tree Preservation will include, but are not limited to the following:

13.1 The CONSULTANT will prepare the Environmental Permits, Issues, and

Commitments sheet using the latest TxDOT standard form sheet based on required environmental permits and documentation;

13.2 The CONSULTANT will develop a Storm Water Pollution Prevention Plan (SW3P) Narrative sheet that will include information such as the project description, project location, and indicate SW3P structural practices to be provided along the Project. The SW3P will be prepared for the length of the Project;

13.3 The CONSULTANT will prepare SW3P Layouts to include the necessary controls to minimize the runoff of sediment during construction. The layouts will include permanent storm water features as appropriate. The SW3P control measures will be prepared and designed in accordance with the proposed phasing of construction. The layouts will be at a scale of 1"=50' double stacked;

13.4 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);

13.5 The CONSULTANT will obtain the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data; and

13.6 The CONSULTANT will prepare a Storm Water Pollution Prevention Plan (SW3P), SW3P Manual and Best Management Practices Plan in full compliance with the most current TPDES General Permit for control of erosion during and after construction.

14.0 SUBMITTAL REQUIREMENTS

Project Design Services Submittals will include the following:

14.1 Submittal and Review Meetings:

a. 60, 90 and 100 percent submittals will be required; and

b. The CONSULTANT will attend 60, 90 and 100 percent submittal review meetings. Comments and revisions will be incorporated into the deliverables for the next submittal. The CONSULTANT will prepare meeting minutes of each review meeting and submit to CITY within three (3) business days after the meeting date.

14.2 60 Percent Submittal:

a. Provide three (3) paper copies for review of the items listed below and one (1) CD or Storage Device containing electronic copies. Plan sheets and cross-sections will be prepared and submitted in 11"x17" tabloid paper format;

b. The submittal must include the following:

i. Title Sheet;

ii. Index of Sheets;

iii. Project Layout Sheets;

iv. Existing & Proposed Typical Sections;

v. General Notes & Specifications;

vi. Estimate & Quantity Data Sheet;

vii. Summary Sheets;

viii. Sequence of Work;

ix. Traffic Control Plan Sheets;
x. Traffic Control Standards;
xi. Survey Control Data Sheets;
xii. Horizontal Alignment Data Sheets;
xiii. Removal Layouts;
xiv. Roadway Plan & Profile Sheets;
xv. Intersection Layouts;
xvi. Driveway Details;
xvii. Miscellaneous Roadway Details;
xviii. Roadway Standards;
xix. Bridge Details;
xx. Drainage Area Maps;
xxi. Culvert Layouts;
xxii. Hydrologic & Hydraulic Computation Sheets;
xxiii. Storm Sewer Detail Sheet;
xxiv. Miscellaneous Drainage Details;
xxv. Drainage Standards;
xxvi. Bridge Class Culvert Layouts;
xxvii. Estimated Quantities;
xxviii. Signing & Pavement Marking Layouts;
xxix. Signing & Pavement Marking Standards;
xxx. Summary of Small Signs;
xxxi. Small Sign Details;
xxxii. Existing Signal Conditions Layout;
xxxiii. Proposed Signal Layout (if required);
xxxiv. Signal Wiring Diagram;
xxxv. Conduit Schedule, & Charts;
xxxvi. Traffic Signal Standards including the TS-FD, MA & LMA Standards;
xxxvii. SW3P Layouts;
xxxviii. Existing Utility Layouts;
xxxix. Roadway Cross-Sections;
xl. Updated Opinion of Probable Construction Cost;
xli. Updated Construction Schedule;
xlii. Updated Project Design Schedule;
xliii. Utility Tracking Report;
xliv. Draft Geotechnical Engineering and Pavement Design Report;
xlv. Draft Hydrologic and Hydraulic Drainage Report; and

14.3 90 Percent Submittal:

a. Provide three (3) paper copies for review of the items listed below and one (1) CD or Storage Device containing electronic copies. Plan sheets and cross-sections must be prepared and submitted in 11”x17” tabloid paper format;

b. The submittal must include the following:

i. Updated Title Sheet;
ii. Updated Index of Sheets;
iii. Updated Project Layout Sheets;
iv. Updated Existing & Proposed Typical Sections;
v. Updated General Notes & Specifications;
vi. Updated Estimate & Quantity Data Sheet;
vii. Updated Summary Sheets;
viii. Updated Sequence of Work;
ix. Updated Traffic Control Plan Sheets;
x. Updated Traffic Control Standards;
xi. Updated Survey Control Data Sheets;
xii. Updated Horizontal Alignment Data Sheets;
xiii. Updated Removal Layouts;
xiv. Updated Roadway Plan & Profile Sheets;
xv. Updated Intersection Layouts;
xvi. Updated Driveway Details;
xvii. Updated Miscellaneous Roadway Details;
xviii. Updated Roadway Standards;
xix. Updated Drainage Area Maps;
xx. Updated Culvert Layouts;
xxi. Updated Hydrologic & Hydraulic Computation Sheets;
xxii. Updated Storm Sewer Detail Sheet;
xxiii. Updated Miscellaneous Drainage Details;
xxiv. Updated Drainage Standards;
xxv. Updated Bridge Class Culvert Layouts;
xxvi. Updated Estimated Quantities;
xxvii. Updated Signing & Pavement Marking Layouts;
xxviii. Updated Signing & Pavement Marking Standards;
xxix. Updated Summary of Small Signs;
xxx. Updated Small Sign Details;
xxxi. Updated Existing Signal Conditions Layout;

xxxii. Updated Proposed Signal Layout (if required);

xxxiii. Updated Signal Wiring Diagram;

xxxiv. Updated Conduit Schedule & Charts;

xxxv. Updated Traffic Signal Standards including the TS-FD, MA & LMA Standards;

xxxvi. Updated SW3P Layouts;

xxxvii. Updated Existing Utility Layouts;

xli. Updated Roadway Cross-Sections;

xxxviii. Updated Opinion of Probable Construction Cost;

xxxix. Updated Construction Schedule;

xl. Updated Project Design Schedule;

xli. Updated Utility Tracking Report;

xlii. Draft Project Manual; and

xliii. Draft Storm Water Pollution Prevention Plan for Construction;

14.4 100 Percent Submittal:

a. The submittal must include the following:

i. Four (4) original signed (electronic signatures allowed) and sealed 11”x17” tabloid paper sets of the Final Construction Drawings;

ii. Four (4) original Project Manuals and Bid Documentation for advertisement and letting;

iii. Four (4) original Storm Water Pollution Prevention Plan for Construction; and

iv. . One (1) CD or Storage Device containing electronic copies of all files including PDFs of the 100 percent submittal documents, all AutoCAD files.

15.0 BID PHASE SERVICES

Bid Phase Services will include the following:

15.1 The CONSULTANT will attend the Pre-Bid Meeting with CITY and prospective bidders. The CONSULTANT will prepare meeting minutes and submit to CITY within three (3) business days of the meeting;

15.2 The CONSULTANT will respond to Contractor questions raised during the bidding process and develop addenda to the Bid Documentation as required;

15.3 The CONSULTANT will attend the formal bid opening;

15.4 The CONSULTANT will prepare a bid tabulation, analyze Contractor bids, check references and provide a Recommendation to Award to the apparent lowest responsive responsible bidder within five (5) business days of receiving the bid documents from CITY; and

15.5 The CONSULTANT will furnish a set of Final Construction Contract Documents including plan sheets, Project Manual and Storm Water Pollution Prevention Plan (SW3P Manual) to the awarded Contractor.

16.0 CONSTRUCTION PHASE SERVICES

Construction Phase Services will include the following:

16.1 The CONSULTANT will attend the Pre-Construction Meeting with CITY and the awarded Contractor. The CONSULTANT will prepare meeting minutes and submit to CITY within three (3) business days of the meeting;

16.2 The CONSULTANT will provide a one-time staking of the Project control at 100-foot intervals and all inflection points. Limits of Right-of-Way and Easements will also be flagged;

16.3 The CONSULTANT shall provide the necessary number of control points/benchmarks on the ground for the Project and confirm the horizontal and vertical control correspond with the design plans;

16.4 The CONSULTANT will attend monthly status meetings (up to 24 meetings) at the Project location with CITY and the Contractor. The CONSULTANT will prepare meeting minutes and submit to CITY within three (3) business days of the meeting;

16.5 The CONSULTANT will make periodic visits (up to 24 visits) to the site to observe as an experienced and qualified design professional the progress and quality of the executed work, and to determine in general if the work is proceeding in accordance with the plans and specifications and submit brief, monthly written reports relating to such visits. The CONSULTANT will not be required to make continuous on-site inspections to check the quality or quantity of the work. The CONSULTANT will not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor or the safety precautions and programs incident to the work of the Contractor. However, the CONSULTANT will report to CITY any deficiencies in the work actually detected by the CONSULTANT. If more than four (4) visits are required in any one (1) month, compensation may be requested;

16.6 The CONSULTANT will review the Contractor's submittals such as Shop Drawings, Product Data and samples and take appropriate action (no exceptions, exceptions noted, reject, etc.) up to 40 total, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such action will be taken with reasonable promptness to minimize delay. Reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto;

16.7 CITY will require the Contractor to submit to the CONSULTANT any request for additional information (RFI). The CONSULTANT will review and deliver to CITY its written recommendation regarding the RFI. It is anticipated that there will be two (2) RFI's per month during the Project. If additional RFI's are generated above four (4) per month compensation may be requested. RFIs deemed to be due to inconsistencies in the Contract Documents will not be counted in the estimated number of RFI's in the contract;

16.8 The CONSULTANT will receive and review certificates of inspections, testing (to include Field, Laboratory, Shop and Mill testing of materials), and approvals required by laws, rules, regulations, ordinances, codes, orders or the specifications to determine generally that the results certified do substantially comply with the specifications. The CONSULTANT will also recommend to CITY special inspection or testing when deemed necessary to ensure that materials, products, assemblages and equipment conform to the design concept and the specifications;

16.9 The CONSULTANT will evaluate and determine the acceptability of substitute materials and equipment proposed by the Contractor;

16.10 The CONSULTANT will review monthly pay estimates and recommend approval or other

appropriate action on such estimates;

16.11 The CONSULTANT will perform one (1) with CITY representative(s) final inspection of the Project to observe any apparent defects in the completed construction with regard to conformance with the design concept and intent of the specifications, assist CITY in consultation and discussions with the Contractor concerning such deficiencies, and make recommendations as to replacement or correction of the defective work;

16.12 After completion of the work, and before final payment to the Contractor, it will be CITY's responsibility to require a set of "Record Drawings" from the Contractor, who has control of the work and who is in a position to know how the Project was constructed. The CONSULTANT, after receiving this information, will transfer the information to a set of "Record Drawings" or "As-Builts" for CITY's permanent file. The CONSULTANT will also provide the As-Builts in PDF format. CITY will not hold the CONSULTANT responsible for the information provided by the Contractor;

16.13 CITY will require the Contractor to submit to the CONSULTANT who will review and deliver to CITY manufacturer's warranties or bonds on materials and equipment incorporated in the Project for which such warranties or bonds were required by the specifications;

16.14 The CONSULTANT will review and assist in the development at the request of CITY, any changes, alterations or modifications to the Project that appear to be advisable and feasible and in the best interest of CITY. The CONSULTANT must be cognizant that any such change may affect one or more of the various utilities and every effort will be made to avoid creating a conflict because of the change. Such alterations will appear on or be attached to CITY's form "Field Alteration Request." It should be anticipated that there will be no more than four (4) modifications to the Project. Modifications deemed to be due to inconsistencies in the design documents will not be counted in the estimate number of modifications in the contract;

16.15 The CONSULTANT will field verify and develop a letter to certify the permanent BMPs or measures were constructed as designed. This will serve as the certification letter that will be submitted to the TCEQ San Antonio Regional Office within 30 days of site completion; and

17.0 PUBLIC INVOLVEMENT (Included in Schematic Phase)

18.0 Right-of-Way Acquisition Services

18.1 Appraisal Services - provided by Lowery Property Advisors. Mario Caro, MAI, AI-GRS, will prepare complete appraisal report for the parcel to be acquired utilizing forms as applicable. These reports shall conform to City policies and procedures along with the Uniform Standards of Professional Appraisal Practices.

18.2 Appraisal Review Services - will be provided by Valbridge Property Advisors. Paul Grafe, MAI, CCIM, will review appraisal report for the parcel to determine consistency of values, supporting documentation related to the conclusion reached, and compliance with the City of Schertz policies and procedures and the Uniform Standards of Professional Appraisal Practices and prepare and submit to the City the Form "Tabulation of Values," for the appraisal.

18.3 Acquisition Services -

a. Analyze preliminary title commitment report to determine potential title problems, propose and inform the client of methods to cure title decencies. This includes analysis of access easements.

b. Secure title commitment updates in accordance with insurance rules and requirements for parcel payment submissions. There should not be any changes at this point, but if there are changes (such as abstractor fees) these costs must be reimbursed to Halff as pass-through costs.

c. Analyze appraisal and appraisal review reports and confirm the City's approved value prior to making offer for the parcel.

d. Prepare and send the letter transmitting the Landowners' Bill of Rights by Certified Mail-Return Receipt Requested (CMRRR).

e. Prepare the initial offer letter, instruments of conveyance, and any other documents required or requested by the city on applicable forms.

f. The written offer, appraisal report, and required brochures must be sent to the property owner or the property owner's designated representative through CMRRR. Maintain follow-up contacts and secure the necessary instruments upon acceptance of the offer for the closing.

g. Maintain original signed Receipt of Appraisal, (unless property owner refuses to sign it, it will be so noted) and the unsigned CMRRR receipt for billing purposes.

h. Respond to property owner's inquiries verbally and in writing within three business days.

i. Prepare a separate negotiator contact report for the parcel.

j. Maintain parcel file of original documentation related to the purchase of the real property or property interests.

k. Advise property owner on the Administrative Settlement process. Transmit to the City any written counteroffer from property owner including supporting documentation, and provider recommendation, with regard to Administrative Settlements in accordance with the City's policy and procedures.

l. Prepare final offer letter, documents of conveyance as necessary, and provide by CMRRR.

ASSUMPTIONS

Fees do NOT include:

a. Title insurance premiums
b. Title Escrow, Search and Commitment Cost ($50.00-$500.00 per parcel)
c. Title Curative Processing Fees
d. Title Curative Incidental Penalties
e. Real Property Recording Fees
f. Purchase prices
g. Residential move costs or replacement housing supplements. (estimate between $40,000 to $75,000 per displaced family unit)
h. Business relocation move costs, search fees or re-establishment costs. (Business relocations can be as low as $40,000 generally up to $250,000)
i. Relocation incidentals such as, but not limited to mortgage interest

differential expenses
j. Asbestos and Abatement
k. Demolition

19.0 Grant Application Preparation

The proposed scope of services outlines the items that Halff, Inc. (Halff) shall provide to assist the City of Schertz (City) in the development and submission of a grant funding application to the U.S. Department of Defense (USDoD) Defense Community Infrastructure Program (DCIP). The proposed project will consist of roadway widening and the reconstruction of a 2.9-mile segment on Lower Seguin Road

19.1 Kick-Off Meeting

a. Halff will conduct one (1) virtual consultation kickoff meeting with the City to discuss key items such as the scope and parameters for the grant application efforts and schedule.
b. Halff will assist the City, if needed, in coordinating the electronic submission of the application through the Grants.gov portal.

Deliverable: Digital PDF copy of meeting minutes and submission confirmation (if applicable)

19.2 Application Preparation

a. Halff will develop the technical proposal for submission under the USDoD DCIP. Halff will prepare the following elements:
    a. Cover Page
    b. Narrative
        i. Table of Contents
        ii. Installation Need
        iii. Project Description
        iv. Location & Map
        v. Project Engineering Information
        vi. Identification of Project Parties
        vii. Overview of Funding Sources
        viii. Detailed Budget and Cost Estimate
        ix. Project Development Schedule
        x. Environmental Risk and Compliance Summary
        xi. Planning and Permitting Approvals
        xii. Summary of Grants Management Experience
    c. Letter of Support from Installation Commander
    d. Letter of Authorization from the City for Proposal Submission
b. Halff will assist in completing mandatory Federal Forms
    a. City staff will assist in obtaining the required signatures on the Mandatory Federal Forms for technical proposal submission.
c. Submit a draft application to the City for city review and comments. One (1) meeting will be held to discuss comments and outstanding items.
d. Submit the final City application for city review and comments.

Deliverables: Digital Word document of Letters of Support and PDF and Word technical proposal

package.

19.3 Grant Administration

a. Halff will provide grant administration services to the City. Grant administration service task activities include:

    a. Information Management and Coordination

        i. Provide general advice to the City and its staff with respect to the implementation of the project and regulatory matters.

        ii. Furnish forms, policies, and procedures for implementation of the project.

        iii. Provide technical assistance to City personnel who will be directly involved in the program for routine tasks, using guidance provided by USDoD DCIP.

        iv. Serve as liaison for the City during any routine monitoring visits by staff representatives from USDoD.

        v. Assist City in meeting any citizen participation, personnel, and other regulations as may be required for participation in the USDoD DCIP program.

    b. General Administration and Reporting

        i. Assist City in developing a record keeping system consistent with the program guidelines, including the establishment and maintenance of program files.

        ii. Prepare and submit City's required reports to USDoD.

        iii. Assist City in preparing any grant agreement amendments and/or modifications along with related documentation, public notices, etc. as requested by City.

        iv. Other general administrative tasks not listed here that are requested by the City and agreed to in writing by Consultant.

    c. Financial Management

        i. Assist City in proving its ability to manage the USDoD DCIP funds to the agency's audit division.

        ii. Assist City in establishing and maintaining a direct deposit account and/or separate local bank account, journals, and ledgers to document project expenses.

        iii. Assist City in submitting any required direct deposit authorization forms and/or depository/authorized signatory forms to USDoD.

        iv. Assist City in preparation of drawdown/reimbursement requests and disbursement of funds within the allotted time period.

    d. Procurement and Contracting

        i. Review procurement methods used by City ensure construction contractors are procured in compliance with USDoD DCIP program requirements.

        ii. Review construction bid and contract documents for compliance with USDoD DCIP program requirements.

    e. Labor Standards Compliance

i. Assist City in documenting compliance with all federal and state requirements related to equal employment opportunity.
ii. Assist City in documenting compliance with all federal and state requirements related to minimum wage and overtime pay requirements.
iii. Assist or act as local labor standards officer for this project, if required.
iv. Select and verify correct prevailing wage rate with USDoD.
v. Verify construction contractor and subcontractors for eligibility.
vi. Review weekly certified payrolls submitted by construction prime and subcontractors and conduct compliance follow up.
vii. Submit any requests for additional job classifications to USDoD, if necessary.
viii. Coordinate employee interviews to evaluate David-Bacon and Related Acts (DBRA) wage compliance.
ix. Request from project engineer and, upon receipt, process and submit change orders to USDoD, if required.
x. Obtain Certificate of Construction Completion, prepare a Final Labor Compliance Report, and submit to USDoD.

f. Project Monitoring and Closeout
i. Prepare any project completion reports and closeout documentation for City as required by the USDoD DCIP program.
ii. Assist City in responding to any monitoring or audit findings and resolving any third-party claims.
iii. Provide the City's auditor with any USDoD DCIP audit guidelines.

Deliverable: Digital PDF copy of Final Performance Report with digital PDF copy of completed DCIP Grant Administration Project File.

19.4 Post-Application Submission Assistance

a. Once the grant application has been submitted, Halff will assist the City with questions that may arise during the grant review process.

Deliverable: Digital PDF copy of meeting minutes.

EXCLUSIONS AND ASSUMPTIONS

a. Any additional services required beyond those specifically identified in this proposal are beyond the scope of services to be provided under this agreement and will be discussed as an add-on service to this task order.

b. If the City requests significant modifications or changes in the Scope of Services, general scope, extent, or character of the project, Halff's time of performance, compensation, and schedule shall be adjusted equitably.

c. Examples of Additional Services associated with the Project (not all inclusive)

1. Re-staking all destroyed hubs and checking alignment of existing hubs upon authorization by CITY's representative. Elevations of all hubs shall be reestablished. Re-staking shall be done as required, and a cut sheet based on such re-stake shall be prepared.

2. Preparation of applications and supporting documents for governmental grants, loans or advances in connection with the Project other than what's included in the contract.

3. Preparation or review of environmental assessments and impact statements other than what's included in the contract.

4. Review and evaluation of the effect on design requirements of the Project of any assessments, statements, or documents prepared by others other than what's included in the contract.

5. Assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project other than what's included in the contract..

6. Revising previously accepted studies, reports, design documents or contract documents when such revisions are required by changes in laws, rules, regulations, ordinances, or codes enacted subsequent to the preparation of such studies, reports and documents or are due to causes beyond CONSULTANT's control.

7. Preparing documents for alternate bids requested by CITY; and preparing CITY-initiated addenda and delivery expense, when not a part of original bid package.

8. Investigations involving detailed considerations of operations, maintenance and overhead expenses.

9. Providing a Water Pollution Abatement Plan ("WPAP") for projects over the Edwards Aquifer Recharge Zone and following through the TNRCC approval process.

10. Preparation of feasibility studies not required in the base Agreement.

11. Cash flow and economic evaluations, rate schedules and appraisals.

12. Detailed quantity surveys of materials, equipment and labor during or after construction phase.

13. Audits or inventories required in connection with construction performed by CITY.

14. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitutions by CITY proposed by the Contractor; and services after the award of each contract in evaluating and determining the acceptability of an unreasonable or excessive number of substitutions proposed by the Contractor.

15. Services involving out-of-town travel required of CONSULTANT and which are necessary for the advancement and completion of the Project.

16. Additional Services during construction of the Project which are made necessary by a significant amount of defective or neglected work of the Contractor.

17. Preparation of operating and maintenance manuals.

18. Additional or extensive assistance after initial startup in the utilization of any equipment or system such as post initial startup testing, adjusting and balancing.

19. Training personnel for operation and maintenance.

20. Services after the completion of the Construction Phase, such as inspections during any guarantee period and reporting observed discrepancies under guarantee called for in any contract for the Project other than what's included in the contract.

21. Actual performance of test borings and other soil or foundation investigations and related analysis other than what's included in the contract.
22. Detailed mill, shop and/or laboratory inspection of materials or equipment.
23. Additional copies of reports, drawings and specifications over the number specified in the base contract.
24. Providing renderings or models for CITY use.
25. Project aerial mapping if required by CITY beyond requirement of basic contract.
26. Preparation of all documents dealing with 404 permits, highway permits, and railroad agreements other than what's included in the contract.
27. Detailed measurements and surveys for exploration for utilities, if required other than what's included in the contract..
28. Provide a drawing with Metes and Bounds Descriptions that is tied to CITY'S right-of-way strip map for all temporary and permanent easements that may be required other than what's included in the contract.
29. Landscape and irrigation design.
30. Tree planting plan or Urban forestry plan.
31. Design of electrical, telephone, or other utility improvements except as noted herein.
32. City, County or government review fees and taxes other than what's included in the contract.
33. Condemnation Support Services.
34. Any services stated in this proposal are based on project details provided by the city and gathered in the schematic phase. Modification to the project may be considered out of scope. This proposal assumes that the city will provide all pertinent information to complete the stated services and, if applicable, to facilitate direct communication with the project team,

GRANT SCHEDULE

Halff agrees to complete and submit all work required by the city as defined in the contract set forth required to meet the submittal deadline of ***June 6, 2025***, with post-grant assistance expected within six months after grant deadline.

Exhibit B - Scope of Services

Our proposed Scope of Services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

Based on our experience with similar projects, the following boring field exploration is planned for this geotechnical study

New Bridge

Number of Borings[3]	Planned Boring Depth (feet) [1,2]	Planned Location
B-1 through B-3	80	New Bridge
B-4 through B-7	40	Proposed Retaining Walls

1. The planned boring locations are shown on the attached **Anticipated Exploration Plan**.
2. Depth is below existing ground surface
3. TxDOT Cone Penetration Test (TCP) and Standard Penetration Test (SPT)

Boring Layout and Elevations: We will use handheld GPS equipment to locate borehole locations with an estimated horizontal accuracy of +/-20 feet. Field measurements from existing site features may be utilized. If available, approximate elevations of land locations will be obtained by interpolation from a site specific, surveyed topographic map.

Terracon will place labeled wooden stakes at the locations where borings are performed so they can be surveyed by others, if needed. Terracon will provide latitude, longitude, and elevation on the boring locations based on information provided by the surveyor or coordinates collected using our hand-held GPS. The locations may need to be adjusted somewhat based on access conditions at the time of our field activities.

Subsurface Exploration Procedures: Drilling services will be performed using a truck-mounted drill rig for the borings. The TxDOT cone penetration test will be performed in accordance with TxDOT Method Tex-132-E **(TCP).** Samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a Geotechnical Engineer. In addition, we will observe and record groundwater levels during drilling and sampling. If rock is encountered, NX rock coring will be performed. The percent recovery and Rock Quality Designation (RQD) will be recorded.

Sampling for borings will be performed at about 2-foot intervals in the upper 10 feet and at about 5-foot intervals thereafter. We will collect open-tube and/or split-barrel samples. We intend to collect open-tube samples in predominantly cohesive soils in which quality

recovered samples can be obtained. Split-barrel samples will generally be collected in cohesionless soils or in instances where good-quality open-tube samples cannot be recovered.

For the borings, soil samples will generally be collected utilizing either open-tube samplers or the Standard Penetration Test. Sampling will be in general accordance with industry standard procedures wherein Shelby tube samplers will typically be used in clay materials or split-barrel samplers in granular material in general accordance with the standard penetration test (SPT).

Property Disturbance: Terracon will take reasonable efforts to reduce damage to the property. However, it should be understood that in the normal course of our work some disturbance could occur including rutting of the ground surface and damage to landscaping and/or crops.

We will backfill the borings with cement/grout upon completion. Our services do not include repair of the site beyond backfilling our boreholes. Excess auger cuttings will be dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary. We can provide this service or grout the boreholes for additional fees at your request. The boring located in the existing pavement will be patched with asphalt/concrete to match existing pavement.

Our fee is based on the site being accessible to our drill rigs and additional costs may result if the site cannot be accessed. This scope does not include services associated with surveying of boring locations, obtaining permits, location of on-site underground utilities (besides the 811 one-call service), wet/unusually soft ground conditions, site clearing, or repair to damage of landscape. If such conditions are known to exist on the site or for this project, Terracon should be notified so that we may adjust our scope of services and fee, if necessary.

Safety

Terracon is not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our Scope considers only standard personal protective equipment (PPE) consisting of steel-toed boots, hard hat, safety vest, fire resistant clothing, eye protection, hearing protection, and gloves. We further assume that no additional equipment, safety training, or certification will be necessary. If any additional PPE, equipment, safety training, or certifications are necessary, Terracon should be contacted to revise the scope and costs presented in this proposal. Furthermore, our Scope of Services do not include environmental site assessment services, but identification of unusual or unnatural materials observed while drilling will be noted on our logs.

Our budget does not include any safety training besides Terracon's standard safety requirements. If any safety training, certification, and orientation is required for the field exploration, Terracon needs to be notified and additional fees will be required based on the requirement. Additionally, we have not budgeted for any necessary permits required for work at the site. We have assumed any necessary permits will be arranged by others, and an escort will be provided, if required.

Exploration efforts require borings (and possibly excavations) into the subsurface, therefore Terracon will comply with local regulations to request a utility location service Texas811. We will consult with the landowner/client regarding potential utilities or other unmarked underground hazards. Based upon the results of this consultation, we will consider the need for alternative subsurface exploration methods as the safety of our field crew is a priority.

Consultant will be responsible for supervision and site safety measures for its own employees but shall not be responsible for the supervision or health and safety precautions for any third parties, including Client's contractors, subcontractors, or other parties present at the site.

Site Access: Terracon must be granted access to the site by the City of Schertz.

Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. Exact types and number of tests cannot be defined until completion of fieldwork, but we anticipate the following laboratory testing may be performed:

- Tex-103-E Determining Moisture Content in Soil Materials
- Tex-104-E Determining Liquid Limit of Soils
- Tex-105-E Determining Plastic Limit of Soils
- Tex-106-E Calculating the Plasticity Index of Soils
- Tex-111-E Determining the Amount of Materials in Soils Finer than the 75 µm (no. 200) Sieve.
- Tex 145-E Determining Sulfate Content in Soils - Colorimetric Method
- ASTM D-2166 Standard Test Method for Unconfined Compressive Strength of Cohesive Soil (if applicable and soil is recovered with Shelby tube)
- Evaluating Laboratory Corrosion Tests in Soils (ASTM G162-18)
- Tex-110-E Particle Size Analysis of Soils (Hydrometer)
- Unconfined Compressive Strength (UCS)
- Unconsolidated Undrained (UU) triaxial

Our laboratory testing program often includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

The results of our field and laboratory programs will be evaluated, and a geotechnical engineering report will be prepared under the supervision of a licensed professional engineer. The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during, after completion drilling and after 24 hours of drilling
- Site and Boring location plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Subgrade preparation/earthwork recommendations
- LPile parameters
- Recommendation for drilled shaft including Wincore logs and capacity curves
- Estimated settlement of foundations
- Lateral earth pressure for retaining walls
- Global stability analysis for the planned retaining wall and embankment
- Provide embankment recommendations for stability of the embankment and the overlying pavement
- Seismic site classification based on IBC
- Pavement thickness recommendations based on FPS 21 if FWD data is provided
- Parameters for scour analysis

In addition to an emailed report, your project will also be delivered using our **Compass Portal**. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. We welcome the opportunity to have project kickoff conversations with the team to discuss key elements of the project and demonstrate features of the portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan
- Site Characterization – Findings of the site exploration and laboratory results

- Geotechnical Engineering Report

When services are complete, we upload a printable version of our completed Geotechnical Engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration, and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

Additional Services

In addition to the services noted above, the following are often associated with geotechnical engineering services. Fees for services noted above do not include the following:

Review of Plans and Specifications: Our geotechnical report and associated verbal and written communications will be used by others in the design team to develop plans and specifications for construction. Review of project plans and specifications is a vital part of our geotechnical engineering services. This consists of review of project plans and specifications related to site preparation, foundation, and pavement construction. Our review will include a written statement conveying our opinions relating to the plans and specifications' consistency with our geotechnical engineering recommendations.

Observation and Testing of Pertinent Construction Materials: Development of our geotechnical engineering recommendations and report relies on an interpretation of soil conditions. Our assessment is based on widely spaced exploration locations and the assumption that construction methods will be performed in a manner sufficient to meet our expectations and consistent with recommendations made at the time the geotechnical engineering report is issued. We should be retained to conduct construction observations, and perform/document associated materials testing, for site preparation, foundation, and pavement construction. These services allow a more comprehensive understanding of subsurface conditions and necessary documentation of construction to confirm and/or modify (when necessary) the assumptions and recommendations made by our engineers.

Perform Environmental Assessments: Our Scope for this project does not include, either specifically or by implication, an environmental assessment of the site intended to identify or quantify potential site contaminants. If the client/owner is concerned about the potential for such conditions, an environmental site assessment should be conducted. We can provide a proposal for an environmental assessment, if desired.