

ATTACHMENT D

**AUTHORIZATION OF CHANGE IN SERVICES
CITY OF SAN MARCOS, TEXAS**

CONTRACT: Sessom Bike/Ped and Peques Improvements Project

CONSULTANT: Halff Associates, Inc.

AUTHORIZATION NO.: 3

ORIGINAL CONTRACT DATE: November 6, 2013

AUTHORIZATION DATE:

WORK TO BE ADDED TO OR DELETED FROM SCOPE OF SERVICES

Design changes:

Realignment of State Street and removal of culvert extension west of State Street;

Additional erosion controls and measures to protect Sessom Creek;

Additional environmental documentation including archaeology and coordination with TxDOT and USFWS;

Additional SUE field work (test holes of existing utilities);

Traffic signal modification for right turn from Aquarena Springs to Sessom Drive and signal phasing and timing of four intersections and the mid-block pedestrian beacon (HAWK);

Removal of road diet pavement markings and project limits from N LBJ to Comanche Street.

Deletion of sidewalk along Peques St; electrical engineering & illumination of side walk from Peques to Ed JL Green.

Previous Change In Services

#1; 10/27/2014; Environmental services for a Categorical Exclusion, utility coordination, design of a pedestrian hybrid beacon, and additional survey and traffic counts; \$44,948.10

#2 ; 11/14/2014; Additional sidewalks, hydraulic modeling of Sessom Creek and drainage design per Remediation Study, realignment of State Street, and street lighting; \$49,932.50

Previous contract amount:	\$276,603.68
Net increase/decrease in contract amount:	\$184,733.80
Revised contract amount:	\$461,337.48

Requested by:

Halff Associates, Inc.

By: 
Eric J. Ratzman, Project Manager

Date: 4/24/2015

Approved by:

City of San Marcos:

By: _____
Jared Miller, City Manager

Date: _____

PROPOSED SCOPE OF SERVICES FOR CHANGE IN SERVICE #3
For the
Sessom Bike/Ped and Peques Improvements Project
San Marcos, Texas

1. PROJECT MANAGEMENT

- 1.1. Additional Coordination and Meetings: Miscellaneous coordination and meeting to walk the project length with staff to note design revisions.
- 1.2. Administration: Additional administration for extended duration of the project, including monthly invoicing and progress reports.
- 1.3. Subconsultant Management: Manage sub-consultants Blanton and Kimley-Horn for delivery of additional services detailed below.

2. FINAL DESIGN PLANS

- 2.1. Update estimate and quantity sheets for Design revisions
- 2.2. Modify current TxDOT General Notes (to be provided by TxDOT in Word format) for Engineer to modify to be project specific and insert into the plan sheets and project manual.
- 2.3. Delete the “road diet” from the plans from Comanche to N LBJ. This involves updating the typical sections, project layout, and TCP advance signage sheets (as well as deletion of the pavement marking sheets).
- 2.4. Reconfigure the Pleasant Street intersection per city markups to extend curb from west side to physically restrict the illegal left turn from or to Pleasant Street, as well as provide room to grade the sidewalk so that the existing retaining wall can remain (will also delete the proposed retaining wall from the plan set).
- 2.5. Update environmental documents in accordance with the realignment of State Street (see item 2.6 below). Revise technical reports to modify the project description, project maps, and all other applicable sections of the deliverables. The Engineer will complete the required forms and submit to the TxDOT Austin District Environmental Coordinator for review and approval. Due to the discovery of federally-protected Blind salamanders in Sessom Creek at State Street, and the subsequent installation of salamander traps in the bed of the creek, the Engineer will facilitate coordination with the USFWS through the Section 7 consultation process of the Endangered Species Act. TxDOT is the lead agency for coordination. This scope of services includes one meeting with the USFWS, TxDOT, and the City. No direct impacts will be associated with the project; however, information will be prepared by the Engineer for USFWS concurrence that no indirect impacts to the listed species. A letter report will be prepared including: project description, maps, plan sheets, and description of best management practices. It is assumed that *informal* Section 7 consultation will be sufficient for this project.

- 2.6. Design revisions for the realignment of State Street including plan and profile updates, grading plan, driveway 9 revisions, sidewalks, curb ramps, pavement markings, erosion control, and deletion of the culvert extension.
- 2.7. Additional archaeology work required. This item to be provided by subconsultant. See scopes of work from Blanton and Associates attached.
- 2.8. Perform three (3) subsurface utility engineering (SUE) test holes: two on the chilled water line on either side of State Street and one on the gas line at Aquarena Springs and Sessom.
- 2.9. Make changes to erosion control plans to further protect Sessom Creek and in accordance with other design changes herein.
- 2.10. Provide structural design for cantilevered sidewalk in the area of the Hawk mid-block pedestrian crossing to accommodate an ADA/TAS compliant curb ramp on the south side of Sessom. This will replace approximately 22 feet of the existing sidewalk which is cantilevered out over Sessom Creek at this location.
- 2.11. Provide tree mitigation calculations using the city of San Marcos provided spreadsheet. Provide tree planting and irrigation modification (addition of one zone with tree bubblers) on the site.
- 2.12. Signal modifications at State Street due to alignment revision, design of new right turn signal/phasing/signage for Aquarena Springs Drive to Sessom Drive, develop signal phasing and coordinated signal timing plans for four intersections and the mid-block HAWK signal, and fine tuning of timing plan once installed. This item to be provided by subconsultant Kimley-Horn and Associates – see detailed scope of work attached.
- 2.13. Add plan and profile for reconstruction of the driveway to Texas State facilities building on the north side of Sessom at no steeper than existing (20%) slope and with ADA compliant walkway along Sessom.
- 2.14. Provide surveyed metes and bounds with boundary sketch for one (1) drainage easement prepared and signed by a licensed RPLS in Texas.
- 2.15. Engineer will provide line in CAD to city for use by the surveyor (Byrn) and will obtain CAD line work from the city (as determined/prepared by Byrn) of the right-of-way for reference into the plan sheets.
- 2.16. Perform miscellaneous plan revisions including the addition of sidewalk from Peques Street to the retaining wall in front of the facilities building (the existing wall and sidewalk in front of the wall will remain), design of wastewater relocation/adjustment for manhole conflicts in State Street, requested changes to traffic control plans, and various items from the walk-through.
- 2.17. Add two drainage inlets at the northwest corner of Peques Street to accept runoff from the parking lot, as requested by Texas State.
- 2.18. Delete from the plans the sidewalk previously proposed along Peques St.

- 2.19. Provide a handrail detail to closely match existing railing along Sessom Creek, which differs from the Texas State standards.
- 2.20. Provide illumination calculations in accordance with Texas State specifications and electrical engineering for proposed lights for the sidewalk between Peques and Ed JL Green Streets, approximately 700 linear feet of pedestrian walkway. Engineer will attend one site visit to verify existing information, provide documentation illustrating the proposed locations of lighting poles as defined in the Texas State Construction Standards (26 56 00 and 26 56 33), illustrate the electrical distribution and circuiting from an existing utility transformer, and define construction requirements for the contractor's installation. Documentation will include a photometric report of the proposed lighting levels for the illuminated locations.
- 2.21. Address comments from Texas State Arborist for planking, aeration, and tree removal in the plans.
- 2.22. Replace in the plans the lighting, railing, and paver standards with Texas States and modify sheet callouts to reflect these changes. The pavers are only proposed to be used for replacement of spots that have settled between Ed JL Green and Aquarena Springs on the south side of Sessom between the curb and the existing concrete sidewalk.

3. CONSTRUCTION PHASE SERVICES

- 3.1. Attend Progress meetings once per month or as requested by the city (12 meetings have been budgeted).
- 3.2. Review and respond to Requests for Information (RFIs) from the contractor (8 estimated).
- 3.3. Review contractor submittal (18 estimated).
- 3.4. Make sheets updates to plans for field changes, as requested by the city.
- 3.5. Provide miscellaneous on-call support to the city for construction administration, as requested.
- 3.6. Provide record drawings using contractor red-lines and sheets changes made in item 3.4 and provide CAD/GIS files to the city and Texas State.

AVO 29765 (CIS #3)	PRINCIPAL	PROJECT MANAGER	SR. PROJECT ENGR. (PE)	PROJECT ENGR. (PE)	EIT	CADD TECH	SENIOR LANDSCAPE ARCHITECT	JUNIOR LANDSCAPE ARCHITECT	GRADUATE LANDSCAPE ARCHITECT	ENVIRONMENTAL MANAGER	ENVIRONMENTAL SCIENTIST	JUNIOR ENVIRONMENTAL SCIENTIST	GIS SPECIALIST	RPLS	SUE FIELD MGR.	2-MAN CREW	SURVEY TECH	UTILITY COORDINATOR	ADMIN.	EXPENSES	TOTAL
TA01 PROJECT MANAGEMENT																					
1.01 Additional coordination and meetings (and project walk-through)		16																			
1.02 Admin/invoicing/progress reports		12																	24	\$ 184.00	\$3,144.00
1.03 Subconsultant management	2	6																		\$ 26.00	\$3,686.00
SUBTOTAL TA01	2	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	\$ 210.00	\$8,340.00
TA02 FINAL DESIGN PLANS																					
2.01 Update Estimate & Quantity Sheets			4		16																\$2,240.00
2.02 Modify current TxDOT General Notes for project specific pay items		4	16																		\$3,300.00
2.03 Delete road diet from plans (N LBJ to Comanche)			4																		\$640.00
2.04 Reconfigure Pleasant Street intersection		2	8		24																\$4,050.00
2.05 Additional environmental/documentation/coordination related to the salamander traps		1			4					22	32		30								\$9,319.00
2.06 Additional design revisions (realignment of State St) related to the salamander traps		4	8		36																\$5,620.00
2.07 Additional archaeology work PCR (ARCH) and revisions of project limits		2								8									2	\$ 8,974.80	\$10,720.80
2.08 Three (3) SUE test holes - 2 chilled water line at State Street & 1 gas line at Aquarena		1													8	16	8			\$ 92.00	\$3,797.00
2.09 Additional and revised Erosion Control measures requested		4	8		16																\$3,620.00
2.10 Structural design for cantilevered sidewalk	4	4	4	8	34	14															\$7,600.00
2.11 Tree mitigation calculations, landscaping, and irrigation mods	4						12	16	16												\$5,520.00
2.12 Traffic signal design modifications and coordinated phasing/timing plans		4																		\$ 25,700.00	\$26,440.00
2.13 Driveway reconstruction to facilities on north side		2	4		24																\$3,410.00
2.14 Surveyed metes & bounds and sketch of drainage easement on the Centre at San Marcos		1												4		6	12				\$2,615.00
2.15 Provide design linework to and update final ROW linework based on Byrne survey		1	2		8																\$1,305.00
2.16 Misc plan revs: widen sidewalk Peques to ret wall, TCP, add toe walls, curbs, and others		8	8	16	48																\$9,640.00
2.17 Additional inlets/drainage requested by TxState at NW corner of Peques and Sessom		8		40	16																\$8,280.00
2.18 Delete Peques sidewalk from plans			2		8																\$1,120.00
2.19 Handrail detail to match railing along Sessom Creek		2	2		12																\$1,890.00
2.20 Illumination and electrical design, Ed J.L Green to Peques	4	2	40	60	80															\$ 230.00	\$23,600.00
2.21 Address comments from TxState Arborist - planking, aeration, tree removal			4		12			4													\$2,280.00
2.22 Replace lighting, railing, and paver standards with TxState's and mod sheet callouts			4		16																\$2,240.00
SUBTOTAL TA02	12	50	118	124	354	14	12	20	16	30	32	0	30	4	8	22	20	0	2	\$ 34,996.80	\$139,246.80
TA03 CONSTRUCTION PHASE SERVICES																					
3.01 Progress meetings once/month (12 budgeted)			36																	\$ 552.00	\$6,312.00
3.02 RFI review/responses (8 budgeted)	2	4	16																		\$3,700.00
3.03 Review contractor submittals (18 estimated)	4	9	36																		\$8,225.00
3.04 Plan updates for design/field changes, as requested		8		16	24																\$5,960.00
3.05 Miscellaneous construction administration support, as requested		8	24										24							\$ 650.00	\$5,970.00
3.06 Record drawings and CAD/GIS files to city and TxState		4	8		24														4	\$ 400.00	\$6,980.00
SUBTOTAL TA03	6	33	120	16	48	0	0	0	0	0	0	0	24	0	0	0	0	0	4	\$ 1,602.00	\$37,147.00
TOTALS	20	117	238	140	402	14	12	20	16	30	32	0	54	4	8	22	20	0	30	\$ 36,808.80	\$184,733.80
Hourly Rates	\$200	\$185	\$160	\$130	\$100	\$70	\$140	\$110	\$80	\$157	\$90	\$75	\$80	\$150	\$100	\$125	\$90	\$130	\$ 60.00		
SUMMARY																					
SUB-TOTAL HALFF \$ 150,059.00																					
SUB-TOTAL BLANTON \$ 8,974.80																					
SUB-TOTAL KIMLEY-HORN \$ 25,700.00																					
TOTAL CIS#3 FEE \$ 184,733.80																					

Services to be Provided by the Engineer

City: **San Marcos, Texas**
Location(s): **Multiple Intersections**
Signal Reconstruction - Sessom Drive @ Peques Street
HAWK Signal - 1 Midblock Location
Project: **Traffic Signal Reconstruction Plans**
HAWK Signal Design Plans
HAWK Warrant Study

SCOPE OF WORK OVERVIEW

Kimley-Horn and Associates, Inc. (K-H) will revise signal design plans, specifications, and estimates, for a traffic signal design at one intersection, and a Pedestrian Hybrid (HAWK) Signal Design at one midblock location on Sessom Drive in San Marcos, Texas. Signal due to modification to proposed State Street alignment.

TASK 8.0 UPDATE TRAFFIC SIGNAL AND HAWK DESIGN FINAL PLANS, SPECIFICATIONS & ESTIMATES

K-H will obtain modifications to the proposed State Street alignment and associated design files from the Client. K-H will also obtain review comments from the City of San Marcos (City) and TxDOT on the previous plans submittal. K-H will modify the traffic signal and HAWK designs for the project locations to reflect the new street alignment. The following sheets are anticipated to updated:

- (a) General Notes;
- (b) Quantity Estimates
- (c) Signal Layout;
- (d) Signal Elevations;
- (e) Conduit Run and Wiring Summaries;
- (f) Phasing and Detection Schemes;
- (g) Detail sheets

K-H will also determine appropriate phasing and signage for the right-turn lane movement from Aquarena Springs Drive to Sessom Drive. K-H will develop sheet(s) to show proposed signal layout, wiring, phasing, signal head displays & associated signage, and quantity summaries.

Task 8 deliverables will include:

- (a) Plans, Specifications, and Estimate (95%). Three (3) paper copies will be provided to the City and TxDOT. K-H will address one (1) set of review comments each from the City and TxDOT Following receipt of review comments, K-H will incorporate the comments and update the plans.

- (b) Final Plans. K-H will produce final plans, specifications, engineer's opinion of probable construction cost, and bid document package. Three (3) paper copies will be provided to the Client.
- (c) Final Engineer's Opinion of Probable Construction Cost. Three (3) copies will be provided to the Client.

TASK 9.0 DEVELOP SIGNAL PHASING & COORDINATED SIGNAL TIMING PLANS

K-H will determine appropriate signal phasing for all approaches at the intersection of Sessom Drive and Aquarena Springs Drive to improve vehicular and pedestrian movements at the intersection.

K-H will also develop optimized traffic signal timing plans for AM, PM, and Off-Peak periods for the following signalized intersections:

- (a) LBJ Drive at Sessom Drive
- (b) Proposed HAWK Mid-block Signal on Sessom Drive (west of Peques/State St.)
- (c) Peques-State St. at Sessom Drive
- (d) Aquarena Springs Drive at Sessom Drive
- (e) Aquarena Springs Drive at Charles Austin Drive

K-H will:

- (a) Obtain Synchro base models for the above intersections from the City.
- (b) Obtain AM and PM peak-period turning movement counts for the above intersections from the City.
- (c) Obtain existing traffic signal timing for the above intersections from the City.
- (d) Drive through the intersections during AM and PM peak-hour to obtain existing ('Before') travel times.
- (e) Use existing cycle lengths along Aquarena Springs Drive to maintain progression along that corridor.
- (f) Develop optimized splits, offsets, and phase sequences for the above signals to maximize green bands for the AM, PM, and Off Peak period. The green band splits will be based on peak period traffic demand, with larger green bands favoring predominant traffic flows.
- (g) Discuss proposed timing plans with City staff for their review and approval. The Engineer will modify the timing plans based on City's comments.

TASK 10.0 IMPLEMENT AND FINE TUNE SIGNAL TIMING PLANS

K-H will:

- (a) Input the proposed signal timing plans at each signal using new 'pattern' numbers preventing the need to overwrite existing coordination pattern.
- (b) Drive through the intersections during each peak period (AM, Off-Peak, and PM peak) to identify any modifications that need to be made to the splits and or the offsets. Upon completion of the fine tuning, the Engineer will deliver final timing plan sheets to the City.
- (c) Drive through the corridors during AM, Off-Peak, PM peak-hour to obtain 'After' travel times.
- (d) Develop a Technical Memorandum to summarize the analysis and results of developing and implementing signal timing plans for the intersections mentioned in Task 9.0.

March 31, 2015

Ms. Tricia Mosier
Halff Associates, Inc.
4030 West Braker Lane, Suite 450
Austin, Texas 78759-5356
via email

Re: Proposed Scope of Services for Sessom Drive Sidewalks in San Marcos, Texas

Dear Ms. Mosier:

As requested, we have prepared the following scope of services to revise the archeological and historic resources study deliverables previously provided by Blanton & Associates, Inc., (“B&A”) for proposed sidewalk improvements on Sessom Drive in San Marcos, Texas. Under this proposal B&A will perform the tasks outlined herein due to the following anticipated changes in the proposed project design:

- Removal of the road diet portion of the project
- Minor realignment of State Street to the east
- Removal of the culvert work at State Street

Task 1 – Revise Archeology Background Study and Project Coordination Request (PCR) form

B&A will revise the archeological background study and PCR form submitted to Halff Associates, Inc. (Halff) via email on January 15, 2015. The previous deliverables were completed for the above-referenced proposed project in accordance with Texas Department of Transportation (TxDOT)-Environmental Affairs Division (ENV) requirements. The revised deliverables will modify the project description, conclusions (if necessary), project maps, schematics, and all other applicable sections and appendices. The revised background study will define the project’s revised Area of Potential Effects (APE) for archeological sites, outline the previously-identified archeological sites within 1-km of the APE, previous archeological surveys, and a recommendation whether an archeological survey will be necessary. B&A shall participate in coordination with Texas State University (TSU), upon request from Halff.

Task 2 – Revise Historic Resources Project Coordination Request form

B&A will revise the Historic Resources PCR form submitted to Halff via email on November 21, 2014. The previous deliverable was completed for the above-referenced proposed project in accordance with TxDOT-ENV requirements. The revised deliverable will modify the project description, conclusions (if necessary), project maps, schematics, and all other applicable sections and appendices. The revised PCR will define the project’s revised APE for historic properties, outline the previously-identified historic

resources within 1,300 feet of the proposed project, and a recommendation whether a historic resource survey will be necessary.

Assumptions

- Due to the reduced scope of the project activities and limited depth of impacts, it is anticipated that there will be no need for an archeological survey.
- This scope and fee does not include any archeological or historic resource survey efforts. If an archeological survey or historic resources survey is required, such work would be completed under a separate scope and budget.
- This scope and fee does not include any coordination with TxDOT or the Texas Historical Commission.
- This scope and fee includes one in-person meeting with TSU staff, if requested by Halff. Additional in-person meetings with TSU staff would be completed under a separate scope and budget.

Schedule

B&A shall submit an electronic copy of the Tasks 1 and 2 deliverables to Halff for forwarding to the City of San Marcos (the City) and TxDOT, unless otherwise directed by Halff. B&A will complete Task 1 within four weeks of receiving revised engineering files.

Budget

Under this scope of services, B&A proposes to complete Tasks 1 and 2 as described above on a time and materials basis not to exceed **\$3,041.60**. The estimated budget to accomplish this proposed scope of services is attached. Please call if you have any questions, comments, or require additional information. If you agree with the terms of this scope of work, please sign (or have a company officer sign) in the space provided below.

Sincerely,



Maryellen Russo
Senior Historian
Blanton & Associates, Inc.

Attachments

Signature
Halff Associates, Inc.

Date

TASK DESCRIPTION	Senior	Project	ENV	ENV	GIS	GIS	Admin	TOTALS	TOTAL
	PM	Manager	Specialist II	Specialist I	Manager	Tech			COST
Task 1 - Revised Archeological background study and PCR form	1	2	4	8	2	4	1	19	
Task 2 - Revised Historic Resources PCR form		2		8	2	4	1	17	
LABOR SUBTOTAL	1	4	4	16	4	8	2	39	
TOTAL SHEETS									
TOTAL HOURS	1	4	4	16	4	8	2	39	
BASE RATE	\$ 120.00	\$ 110.00	\$ 90.00	\$ 70.00	\$ 85.00	\$ 60.00	\$ 60.00		
TOTAL DIRECT LABOR	\$ 120.00	\$ 440.00	\$ 360.00	\$ 1,120.00	\$ 340.00	\$ 480.00	\$ 120.00	\$ 2,980.00	
PERCENT OF TOTAL	4.0%	14.8%	12.1%	37.6%	11.4%	16.1%	4.0%	100.0%	
DIRECT EXPENSES		UNIT COST							
		UNIT	QTY						
	Mileage	MILE	\$ 0.560	110					\$ 61.60
	8 1/2" X 11" copies (B/W)	SHEET	\$ 0.10	0					\$ -
	11" X 17" copies (B/W)	SHEET	\$ 0.20	0					\$ -
	8 1/2" X 11" copies (Color)	SHEET	\$ 1.00	0					\$ -
	11" X 17" copies (Color)	SHEET	\$ 1.20	0					\$ -
	Overnight Mail - Letter Size	EA	\$ 15.00	0					\$ -
		TOTAL EXPENSES							\$ 61.60
	TOTAL COST							\$ 3,041.60	

December 1, 2014

Ms. Tricia Mosier
Halff Associates, Inc.
4030 West Braker Lane, Suite 450
Austin, Texas 78759-5356
via email

Re: Proposed Scope of Services for Sessom Drive Sidewalks in San Marcos, Texas

Dear Ms. Mosier:

As requested, we have prepared the following scope of services for archeological resource studies to be provided by Blanton & Associates, Inc., ("B&A") for proposed sidewalk improvements on Sessom Drive in San Marcos, Texas. Under this proposal B&A will perform the following task.

Task 1 – Archeology Background Study and Project Coordination Request Form

B&A will complete an archeological background study and a Project Coordination Request (PCR) form for the proposed project in accordance with Texas Department of Transportation (TxDOT)-Environmental Affairs Division (ENV) requirements. The PCR form will define the project's Area of Potential Effect (APE), outline the previously-identified archeological sites within 1-km of the proposed project area, previous archeological surveys, and a recommendation whether an archeological survey will be necessary. B&A shall participate in coordination with Texas State University, upon request from Halff Associates, Inc. (Halff).

B&A shall submit an electronic copy of the background study and the PCR form to the Halff for forwarding to TxDOT, unless otherwise directed by Halff. B&A will complete Task 1 within four weeks of Notice to Proceed.

Assumptions

- This scope and fee does not include any archeological survey efforts. If an archeological survey is required, such work would be completed under a separate scope and budget.
- This scope and fee does not include any coordination with TxDOT or the Texas Historical Commission.

Budget

Under this scope of services, B&A proposes to conduct archeological resource studies as described above on a time and materials basis not to exceed **\$5,933.20**. The estimated budget to accomplish this proposed scope of services is attached. Please call if you have any questions, comments, or require additional information. If you agree with the terms of this scope of work, please sign (or have a company officer sign) in the space provided below.

Sincerely,



Maryellen Russo
Senior Historian
Blanton & Associates, Inc.

Attachments

Signature
Half Associates, Inc.

Date

12 1 2014