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April 28, 2010

1008-08-6178

Felix Benavides, P.E. City of Pflugerville 100 E Main St Pflugerville, TX 78691

RE:

Heatherwilde Boulevard Roadway – Phase I Plan Integration

Dear Mr. Benavides:

We are pleased to present the additional scope of services for the integration of Heatherwilde Boulevard Phase I Plan from Kingston Lacy to SH-45 into the Phase 2 plans (from Wilke Lane to Kingston Lacy, for which we are currently contracted). Due to the fact that Phase I will no longer be constructed concurrently with an adjacent development, the previous Phase I design (begun by others) requires certain design modifications, additional design sheets, and additional survey parcels in order to combine with the Phase 2 and provide a consistent level of detail. By constructing the two phases as one project the City will benefit from economies of scale, minimize disruption to the traveling public, and simplify the construction process by having one consistent plan set and one engineer of record. In order to maximize the City's previous investment in engineering, we will re-use as much of the current design and CAD work as possible. The attached scope (Attachment "A") includes a detailed description of all engineering and survey related services needed to incorporate the Phase I design with the Phase II design into one cohesive set of the plans and specifications.

Attachment "B" includes items which are not included in this proposal, but can be provided by Halff Associates, if needed. Attachment "C" includes the total fee proposal for this project and will be honored for up to 90 days from the date of this proposal. Halff proposes the fee as a Lump Sum price that would be billed monthly based on percent complete.

We appreciate the opportunity to be of service to the City of Pflugerville. We are available to meet with you to discuss this scope and answer any questions you may have. Feel free to contact me at 512-252-8184 if I can be of any assistance.

Sincerely,

HALFF ASSOCIATES, INC.

Eric J. Ratzman, P.E.

Project Manager

#### **ATTACHMENT "A"**

# PROPOSED ADDITIONAL SCOPE OF SERVICES

for

# HEATHERWILDE BLVD ROADWAY IMPROVEMENTS – PHASE I CITY OF PFLUGERVILLE, TEXAS

#### **PURPOSE**

The purpose of this Proposed Scope of Services is to delineate the professional services that Halff Associates, Inc. (Engineer) will provide to the City of Pflugerville (City) for the development of PS&E documents and other related services outlined in this document for the Heatherwilde Boulevard Phase I Plan Integration.

#### PROJECT DESCRIPTION

The project includes design of Heatherwilde Boulevard Phase I section from Kingston Lacy to SH 45 in Pflugerville, Texas. Plans for this section have been prepared by Pape-Dawson (PD) and at the request of the City, will be finalized by Halff Associates in order to construct both Phase I and Phase II sections of the roadway at the same time. The general scope of work is to convert the existing 2-lane roadway into a 4-lane divided curb and gutter roadway meeting City of Pflugerville design requirements. Halff's general task is to take the PD design and incorporate into a complete set of PS&E documents. The project will be developed under the following Tasks:

Task 1: Project Coordination

**Task 2:** Survey and Subsurface Utility Engineering (SUE)

Task 3: PS&E Development

**Task 4:** Construction Administration

**Task 5:** Additional Special Services

# PROJECT ASSUMPTIONS

- City/PD to provide complete CADD files of current Phase I design
- City/PD to provide all correspondence with existing utilities
- City/PD to provide most current project construction manual
- All TxDOT permits and approvals have been acquired or will be coordinated by others (City).
- The final deliverable will be one set of PS&E from Wilke Ridge Lane to SH 45 (not separate phases)



#### TASK 1: PROJECT COORDINATION

# 1.1 General Coordination

This task provides the general coordination required to complete the plan integration. This includes meetings with both the City and PD to understand past coordination and information from the project. A total of two (2) meetings have been budgeted.

# 1.2 Utility Coordination

This task provides coordination specific to the relocation of existing utilities within the project area. This includes contacting all affected utilities and providing proposed roadway plans in order to determine relocation requirements. This task does not include relocation design of franchise utilities unless specifically outlined in this proposal.

# TASK 2: SURVEY & SUBSURFACE UTILITY ENGINEERING

# 2.1 Survey Verification

This task will provide survey effort required to verify the existing benchmarks and topographic survey developed by PD. This includes minor effort to integrate the 3D CADD file provided by PD into survey files established by Halff for Phase II improvements. This task does not include time to supplement any missing topographic information. For purposes of budgeting, we approximate less than one (1) week of effort for this task.

#### 2.2 SUE

This task will identify and locate horizontally all existing utilities (SUE) such that the existing known locations established by PD can be verified. Utilities will be located to Quality Level "B" as defined by ASCE 38-02: Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data. Halff will also provide up to four (4) Quality Level "A" test holes for various utility locations. This task does not include significant time to redesignate utility locations from the previous PD survey. For purposes of budgeting, we approximate less than one (1) week of effort for this task.

# TASK 3: PS&E DEVELOPMENT

# 3.1 PS&E Development

This task will require the development of design plans for the Phase I section including roadway plan and profile, utilities and drainage. The design of the roadway will be in compliance with City design criteria and will be produced using MicroStation v8. The following items will be prepared to levels described in the original Phase II contract as part of the Phase II schedule of submittals with the following assumptions:



- 1. Title, general notes, typical sections and horizontal alignment sheets.
  - a. This task requires incorporation of Phase I elements by PD into Phase II sheets that have already been prepared under Halff's original contract. (3 sheets)
- 2. Roadway plan and profile sheets.
  - a. This task is based on using the horizontal and vertical alignments established by PD without modification. Any changes would require substantial plan modification and is excluded from this scope of services. (7 sheets)
- 3. Drainage plan and profile sheets.
  - a. This task assumes that minor drainage modifications will be required for the project. (10 sheets)
- 4. Traffic control and construction phasing plan.
  - a. This task assumes that a detailed traffic control plan will be developed in conjunction with the Phase II plans and will require sheets not previously developed. (8 sheets)
- 5. Signing and striping sheets.
  - a. This task assumes that signing and striping sheets will be developed in conjunction with the Phase II plans and will require sheets not previously developed. (4 sheets)
- 6. Erosion control sheets.
  - a. This task assumes that erosion control sheets will be developed in conjunction with the Phase II plans and will require modification of previously developed PD sheets. (4 sheets)
- 7. Waterline relocation plans and profile sheets.
  - a. This task assumes that waterline plan and profile sheets for Manville will be developed in conjunction with the Phase II plans and will require sheets not previously developed. (4 sheets)
- 8. Cross sections.
  - a. This task includes preparation of new cross sections at 50-foot intervals along roadway improvements (currently do not exist). Sections will include design surface and existing surface data and will be conducted using MicroStation Geopak. From these cross sections, a grading plan will be developed and shown in the roadway plan and profile sheets. (13 sheets)
- 9. Structural details.
  - a. This task assumes that the junction box designated by PD for the northeast outfall will remain. This task provides design of this special junction box with necessary details for construction. Design of one (1) junction box has been budgeted for this task. (1 sheet)



# 10. Estimate of probable construction cost.

a. This task requires quantity take-offs and incorporation of Phase I costs into the Phase II estimate.

# 11. Project construction manual.

a. A project construction manual with the City's boilerplate will be prepared and will include the bid schedule, list of specifications, special specifications and other pertinent documents as necessary for the use of project bidding.

#### TASK 3 Deliverables:

- a. Updated estimate of probable construction costs.
- b. Strip plot of major Phase I changes at 75% complete.
- c. Design plans at 90% complete (11"x17")
- d. Final sealed design plans (11"x17").
- e. Final project construction manual.

# TASK 4: CONSTRUCTION ADMINISTRATION

# 4.1 Bid Phase

- 1. Engineer will provide assistance to the City in responding to questions from contractors and prepare contract addenda as necessary for Phase I design plans.
- 2. Engineer will provide a bid tabulation and evaluation of bids received from contractors along with a written recommendation for 'lowest responsive bidder'.

# 4.2 Construction Support Services

- 1. Attend the pre-construction meeting with the City and Contractor as well as site meetings for construction. (One consultant representative will attend up to 2 meetings at 4 hours per meeting. Preparation and follow up for each site visit is included for 2 hours per meeting).
- 2. Review and approve all shop drawing submittals.
- 3. Review and respond to all design clarifications as necessary.
- 4. Provide 'record drawings' based on red-line mark-ups provided by the contractor (does not include as-built survey). This includes four (4) hard copies and electronic files.

# TASK 4 Deliverables:

- a. Provide correspondence with City and contractors.
- b. Provide addenda support data.
- c. Provide written recommendation of "lowest responsive bidder"



- d. Provide site visit reports.
- e. Perform Final Walk-through and Punch List
- f. Provide 'record drawings' (hard and digital copies)

# **TASK 5: ADDITIONAL SPECIAL SERVICES**

# 5.1 Survey Metes and Bounds

This fee proposal includes the cost of preparing the parcel plats and field notes, to acquire right-of-way from a total of three (3) parcels, and three (3) public utility easements. These will be signed and sealed by a Texas Registered Professional Land Surveyor. Surveyor will also locate sufficient boundary information in order to meet minimum requirements per the Texas Board of Professional Land Surveying for easements.

# TASK 5 Deliverables:

- a. Parcel metes and bounds with field notes.
- b. Deed and research information.



#### **ATTACHMENT "B"**

#### ITEMS EXCLUDED FROM SCOPE OF SERVICES

- 1. Performing forensic pavement analyses (beyond tasks identified above)
- 2. Design of pavement sub-grade drainage systems
- 3. Design of structural retaining walls or junction boxes (beyond tasks identified above)
- 4. Design of water quality or detention ponds
- 5. Design of roadway illumination and electrical (beyond tasks identified above)
- 6. Design of hardscape (enhanced flatwork) facilities
- 7. Design of noise abatement facilities
- 8. Analyzing or simulating water supply networks
- 9. Design of public and franchised utility adjustments (beyond tasks identified above)
- 10. USACE Individual 404 Permit
- 11. Letter of Map Revision (LOMR)
- 12. Performing any environmental services
- 13. Stormwater Pollution Prevention Plan (SWPPP)
- 14. Public Involvement
- 15. Property acquisition or negotiations
- 16. Filing fees, permit fees
- 17. Construction staking
- 18. Quality control and material testing services during construction
- 19. Reviewing and evaluating alternate designs proposed by contractor
- 20. TxDOT Coordination & Permits
- 21. Review of Engineers certificates. The Design Professional shall not be required to execute any documents subsequent to the signing of this Agreement that in any way might, in the sole judgment of the Design Professional, increase the Design Professional's risk or the availability or cost of his or her professional or general liability insurance

Any additional services required beyond those specifically identified in this proposal are beyond the scope of services to be provided under this proposal. Any required additional services will be separately identified and negotiated and such additional scope and commensurate fee will be executed/authorized under a supplemental agreement to this proposal/contract.



# ATTACHMENT 'C' CITY OF PFLUGERVILLE HEATHERWILDE BLVD PHASE I PLAN INTEGRATION - FEE SCHEDULE

AVO: 1008-08-6178

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Project Task Description	Principal	Project Manager	Project Engineer (PE)	Project Engineer (EIT)	Sr. Env Scientist	Env Scientist	Sr. Land Architect	Land Architect	RPLS	Survey Tech	Survey/ SUE Crew	SUE Field Manager	CADD Tech	Admin	Direct Costs	TOTAL
ADDITIONAL SERVICES FEE - HEATHERWILDE BLVD ROAD PHASE I	\$180	\$150	\$125	\$90	\$135	\$90	\$110	\$85	\$125	\$90	\$125	\$95	\$60	\$50		
TASK 1: Project Coordination																
1.1 General Coordination 1.2 Utility Coordination		4	4 24	16										4	\$0 \$100	\$1,100.00 \$4,740.00
TASK 1 SUBTOTAL	0	4	28	16	0	0	0	0	0	0	0	0	0	4	100	\$5,840.00
TASK 2: Survey and SUE																
2.1 Survey Verification & Merging of Data 2.2 SUE (4 Test Holes)			4						4	4	8 12	8	8		\$100 \$200	\$1,960.00 \$3,440.00
TASK 2 SUBTOTAL	0	0	4	0	0	0	0	0	4	4	20	8	8	0	\$300	\$5,400.00
TASK 3: PS&E Development																
3.1 PS&E Development 3.1.1 Title, General Notes, Typical Sections, Horiz. Alignment 3.1.2 Roadway Plan & Profiles	4	40 2 4	126 2 20	236 4 32	0	0	0	0	0	0	0	0	224 4 32	2	\$300 \$25 \$25	<b>\$57,550.00</b> \$1,175.00 \$8,285.00
<ul><li>3.1.3 Drainage Plan &amp; Profiles</li><li>3.1.4 Traffic Control and Construction Phasing</li><li>3.1.5 Signing &amp; Striping</li></ul>	2	4 4 4	20 24 8	32 56 20									32 60 20		\$25 \$25 \$25	\$8,285.00 \$12,265.00 \$4,625.00
3.1.6 Erosion Control 3.1.7 Waterline Relocation Plan & Profiles 3.1.8 Cross Sections		2 4 8	4 8 20	8 12 32									8 12 32 24		\$25 \$25 \$25 \$25	\$2,025.00 \$3,425.00 \$8,525.00
3.1.9 Structural Details 3.1.10 Estimate of Probable Construction Cost 3.1.11 Project Construction Manual		2 2 4	4 4	8 8									24	2	\$25 \$25 \$50	\$5,425.00 \$1,545.00 \$1,970.00
TASK 3 SUBTOTAL	4	40	126	236	0	0	0	0	0	0	0	0	224	2	\$300	\$57,550.00
TASK 4: Construction Administration																
4.1 Bid Phase 4.1.1 Contractor Response & Addenda 4.1.2 Bid Tabulation	0	<b>2</b> 2	<b>2</b> 2	2 2	0	0	0	0	0	0	0	0	0	0	<b>\$100</b> \$100 \$0	<b>\$830.00</b> \$830.00 \$0.00
4.2 Construction Support Services 4.2.1 On-Site Construction Meetings (2 max) 4.2.2 RFI Review	2 2	8	26 6 8	20	0	0	0	0	0	0	0	0	0	0	<b>\$200</b> \$50 \$50	<b>\$6,810.00</b> \$1,160.00 \$1,650.00
4.2.3 Provide Design Clarifications 4.2.4 Provide Record Drawings		4	8 4	8 12											\$0 \$100	\$2,320.00 \$1,680.00
TASK 4 SUBTOTAL	2	10	28	22	0	0	0	0	0	0	0	0	0	0	\$300	\$7,640.00
TASK 5: Additional Special Services  5.1 Survey Metes and Bounds (3 Parcels & 3 Adjacent Easements)									8	24	32				\$50	\$7,210.00
TASK 5 SUBTOTAL	0	0	0	0	0	0	0	0	8	24	32	0	0	0	50	\$7,210.00
HOURLY RATES	\$180	\$150	\$125	\$90	\$135	\$90	\$110	\$85	\$125	\$90	\$125	\$95	\$60	\$50		
TOTAL (ALL TASKS)	6	54	186	274	0	0	0	0	12				232	6	1050	**TOTAL FEE \$83,640.00