#### PROFESSIONAL SERVICES SUPPLEMENTAL AGREEMENT # 1 FOR PAVEMENT AND INFRASTRUCTURE MAINTENANCE -BLACK LOCUST DRIVE REHABILITATION PROJECT

# STATE OF TEXAS § SCOUNTY OF TRAVIS §

This Supplemental Agreement No. 1 to a contract for Professional Services is made by and between the City of Pflugerville, Texas ("City") and Halff Associates, Inc. ("Consultant"). City and Consultant may be referred to herein singularly as "Party" or collectively as the "Parties."

WHEREAS, the City and Consultant executed an Agreement for Professional Services ("Agreement") on the <u>14</u> day of March, 2018 for the <u>Pavement and Infrastructure Maintenance</u> project ("Project") in the amount of \$<u>149,934.00</u>; and

WHEREAS, the City and Consultant desire to enter into a Supplemental Agreement No. 1 for Professional Services for the Project in the amount of <u>\$120,064.00</u> to add additional services for the <u>Black Locust Drive Rehabilitation Project</u> to the Agreement; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Scope of Services and Compensation; and

WHEREAS, it is necessary for the City to amend its agreements from time to time to comply with changes in state law relating to contracts of municipalities.

NOW, THEREFORE, premises considered, the City and the Consultant agree that said Agreement is amended as follows:

I.

Article III. Scope of Services and Exhibit A, shall be amended and supplemented as set forth in the attached addendum to Exhibit A providing for additional services.

Article IV. Compensation to Consultant and Exhibit C (Fee Schedule), shall be amended by increasing by \$120,064.00 the amount payable under the Agreement for a total of \$269,998.00.

Except as amended hereby and as previously amended as indicated above, the terms of the Agreement shall remain unchanged and in full force and effect.

**EXECUTED** and **AGREED** to as of the dates indicated below.

CITY OF PFLUGERVILLE

#### HALFF ASSOCIATES, INC.

>

| (1            | Signature)       | J             | )on-<br>(Signature |             | ry   |
|---------------|------------------|---------------|--------------------|-------------|------|
| Printed Name: | Sereniah Breland | Printed Name: | Dan Fra            | nz, P.E,, C | CFM  |
| Title:        | City Manager     | Title:        | Public<br>Leader   | Works       | Team |
| Date:         |                  | Date:         | 1)                 | 30/18       |      |

APPROVED AS TO FORM:

Charles E. Zech City Attorney Denton Navarro Rocha Bernal & Zech, P.C.

#### EXHIBIT "A"

#### PROPOSED SCOPE OF SERVICES For BLACK LOCUST DRIVE REHABILITATION – CITY OF PFLUGERVILLE, TEXAS

#### **PROJECT DESCRIPTION**

The proposed Scope of Services delineates the items that Halff Associates, Inc. (Engineer) will provide to the City of Pflugerville (City) for the rehabilitation of Black Locust Drive from Heatherwilde Blvd to Grand Avenue Pkwy including Plans, Specification, and Estimates (PS&E). Additionally, the Engineer will provide PS&E for Railroad Avenue from E. Pecan Street to Wilbarger Street consisting of a mill and/or edge mill and overlay and proposed striping improvements. The services are separated into the following Tasks and described in more detail below:

- Task 1:
   Project Management and Coordination
- Task 2: Data Acquisition
- Task 3:
   Design Plans and Construction Documents
- Task 4:Utility Coordination
- Task 5:Public Involvement
- Task 6:Construction Phase Services

#### **TASK 1: PROJECT MANAGEMENT & COORDINATION**

#### 1.1 Progress Meetings, Reports, and Monthly Invoicing

For the work performed, Engineer will prepare Monthly Progress Reports and advise the City as to the progress of the work. These Reports will include:

- Tasks completed during the reporting period.
- Tasks planned for upcoming periods.
- Issues encountered and recommended actions to address them.
- Overall Project status and development progress, including a tabulation of Tasks showing percentage complete, and supporting documentation



### **1.2** Coordination and administration of work products

- Coordination Engineer shall designate one Texas Registered Professional Engineer as the Project Manager responsible for Project management, coordination, and communications
- Administration Engineer will manage Project activities (including subconsultants), direct the project team/staff, attend monthly meetings with City staff, handle deliverables, and keep records of project communications / files.

### TASK 1 Deliverables:

• Monthly progress reports and invoices

### TASK 2: DATA ACQUISITION

#### 2.1 Geotechnical

Geotechnical services to be performed by Raba Kistner Consultants Inc. (see attached scope). Geotechnical services will be limited to the Black Locust project limits.

#### 2.2 Surveying

2.2.1 Survey Control

- Halff shall assure compliance and adherence to all rules, regulations and policies as set forth by the Texas Board of Professional Land Surveyors and Texas Society of Professional Surveyors Manual of Practice for Surveying.
- Halff will recover existing, or establish new survey control sufficient to complete the project. Final Horizontal coordinates will be provided in the Texas State Plane Coordinate System, Central Zone (4203) in US Survey Feet on the NAD83 (2011) datum.
- Vertical positions should be provided on NAVD88 datum
- Determine apparent right-of-way based on plat research. *Legal lot lines will not be established.*
- 2.2.2 Topographic Survey (from Heatherwilde Blvd to Grand Avenue Parkway, ROW to ROW)
  - Perform field survey of the streets, will include top back of curb, gutter elevation, and centerline of street.
  - Obtain spot elevations on driveways at the first joint back from the street edge.
  - Obtain break lines and spot elevations sufficient for 1-ft contour intervals.
  - Obtain line and grade on handicap ramps, crosswalks, and sidewalks.
  - Field tie above ground visible improvements.



- Behind curbs, tie visible utility locations, including ties to above-ground features, such as power poles, valves, and other features to the right-of-way line (i.e. edges of pavement, curbs and gutter, sidewalks every 50 feet, building corners etc.) either found by our surveyors or located for us by utility companies and/or other agencies. One-call will be notified prior to acquisition of survey. Halff shall not be liable for utilities not identified as part of the one-call at the time of survey. *Note: does NOT include tying irrigation heads; irrigation heads are often below the grass and not readily visible/locatable.*
- Provide spot elevations at center point of manhole covers and access vaults outside of pavement.
- Process field collected data for field survey.
- Perform quality control for survey requirements.
- Extract spot elevations and break lines into DTM.
- Extract and prepare triangulated irregular network into DTM.
- Load 1-foot contour information.

### 2.3 Subsurface Utility Engineering (SUE)

• Provide SUE quality level 'C' and 'D' for the limits of the project along Black Locust Drive and Railroad Avenue.

# TASK 2 Deliverables:

- CAD files of topographic survey
- CAD reference file of utility locations

# **TASK 3: DESIGN PLANS / CONSTRUCTION DOCUMENTS**

Design shall be in accordance with Pflugerville Engineering Design Guidelines. The scope of the project is anticipated to consist of mill & overlay and full-depth repair (based on Geotechnical recommendations), including repair of localized curb and street failures, replacing non-compliant sidewalks and curb ramps, and driveways that intersect non-compliant sidewalks. PS&E limits for Black Locust Drive are from Heatherwilde Blvd to Grand Avenue Pkwy; limits for the Railroad Avenue mill/overlay and/or edge mill and overlay are from Wilbarger Street to E. Pecan.

### 3.1 Roadway Typical Sections

• Typical sections: showing pavement widths, typical sections, curb and gutter, normal cross-slope, side slopes, right-of-way and construction limits

### 3.2 Roadway Plans

• Roadway plans with limits of mill & overlay versus full depth reconstruction based on the geotechnical recommendations; plans will specify which driveways, sidewalks, curb ramps, and curb & gutters are to



be replaced or added; driveways will be numbered and profiled; plans will show limits of construction / temporary construction easement lines for driveways or other work outside of the ROW (with simple dimensions, not individual parcels); will denote adjustments to valves covers and manhole lids on paving sheets. Drainage calculations are excluded from this scope. The existing drainage system will remain in place. Any drainage items replaced will match the lines, grades, and sizes of the existing system design. Erosion Control items will be shown on roadway plan sheets).

### 3.3 Pavement Marking and Signage Layout

• Prepare pavement marking plan for Black Locust Drive and Railroad Ave. for the limits of the project. Proposed striping is anticipated to match existing conditions. Plans will also include any proposed sign relocations and utilize an overall sign summary sheet.

### 3.4 Traffic Control Plans

- Prepare TCP sequence in narrative format
- Utilize TxDOT standards for lane closures to perform street rehabilitation
- Sidewalks may be closed during reconstruction; plans will indicate temporary closure but will not include pedestrian detour plans

### 3.5 Sidewalk Detail Sheet

• Detailed grading of sidewalk ramps at the public street intersections to achieve TAS compliant slopes may require a small-scale detail sheet

# 3.6 City Standard Sheets

• Select and include the appropriate city standard detail sheets in the bid set

# 3.7 Quantity Tabulations and Summaries

• Tabulate bid quantities for estimates, summary sheets, sign summary sheet, and bid form

### **3.8 Project Manual, Bid form, and Specifications**

- Prepare bid manual using city specifications as appropriate, TxDOT specs if city specs do not exist, and drafting a single specification for the use of chemically treated subgrade. Drafting of special specification shall be in coordination with the City and City selected chemical subgrade supplier.
- Prepare up to two (2) bid alternates in preparation of the project bid documents. Anticipated that Railroad Avenue may be selected as a bid alternate by the City and chemical treatment of subgrade as an alternate to cement treatment on Black Locust.

# TASK 3 Deliverables:

- 30% Schematic Layout (color roll plot) and Estimate
- 90% PS&E (11x17 plan sheets), Project Manual and updated Estimate
- Final Bid Set (11x17 plan sheets), Project Manual, Final Engineer's Estimate



## TASK 4: UTILITY COORDINATION

It is anticipated that there will be a limited amount of areas where excavation over twelve (12) inches in depth occurs during construction. Therefore, it is assumed that utility relocations will be limited to relocating surface features such as light poles. The following scope assumes there will be twenty (20) or less conflicts between existing utilities and proposed improvements.

### 4.1 Utility Conflict Analysis

- Review Project design information for existing and potential utility conflicts
- Identify potential conflicts on plan sheets (adjustments to city valve covers and manhole rims are anticipated and will be coordinated with the city and included in the roadway construction plans)

# TASK 4 Deliverables:

• Conflict Analysis Spreadsheet

### TASK 5: PUBLIC INVOLVEMENT

### 5.1 Public Meetings

- Attend one (1) public open house with the residents
- Halff will provide three (3) color (11x17) display boards for the open house Formal presentation or public outreach to be handled by the city (not engineer)

# TASK 5 Deliverables:

• Presentation boards for public meeting

# TASK 6: CONSTRUCTION PHASE SERVICES

### 6.1 Bid Phase

- Attend pre-bid meeting at City and answer bidder questions
- Provide assistance to the City in responding to questions from contractors and prepare contract addenda as necessary
- Attend bid opening at City
- Develop bid tabulation, evaluation, and award recommendation

### 6.2 Construction Phase

- Monthly meetings Engineer will attend pre-construction, monthly construction, field meetings, and final walk-through (7 meetings budgeted)
- Submittal Reviews Review Contractor submittals and shop drawings. Shop drawings will be reviewed for general conformance with the plans and



specifications and will include providing stamped concurrence, exceptions or resubmittal notations to the Contractor (3 submittals budgeted).

- Requests for Information (RFI) Respond to Contractor RFIs and provide design clarifications, additional information, and additional data to the City as required (3 RFIs budgeted)
- General coordination and minor drawing revisions, as needed.

### 6.3 Construction Materials Testing (CMT)

Engineer will provide quality control testing of materials during construction. See attached scope of services to be provided by Raba Kistner Consultants, Inc.

# TASK 6 Deliverables:

- Bid tabulation and recommendation for award
- CMT Test reports during construction
- Record Drawings Two (2) CDs of electronic and two (2) sets of 11x17 record drawings. Electronic files will include Microstation files, geopak files, and GIS files with individual components (pavement, utilities, etc) separated into individual levels.
- Engineer's concurrence letter of final completion



### ITEMS EXCLUDED FROM THE SCOPE OF SERVICES

- 1. Performing forensic pavement analyses
- 2. Design of pavement sub-grade drainage systems
- 3. Analysis or design of drainage
- 4. Design of water quality or detention ponds
- 5. Design of roadway illumination and electrical
- 6. Roadway cross section sheets by station (no earthwork is anticipated)
- 7. Design of landscaping, irrigation, or hardscape (enhanced flatwork) facilities
- 8. Environmental services or permitting
- 9. Traffic counts, LOS analysis, signal timing plans
- 10. Design of noise abatement facilities
- 11. Analyzing or simulating water supply networks
- 12. Design of public and franchised utility relocations
- 13. Preparing/submitting a Stormwater Pollution Prevention Plan (SWPPP)
- 14. Preparing property parcels for acquisition
- 15. Property acquisition or negotiations
- 16. Filing fees, permit fees
- 17. Construction staking
- 18. Reviewing and evaluating alternate designs proposed by contractor
- 19. Coordination with individual property owners (beyond the Public Involvement scope above)

Any additional services required beyond those specifically identified in this proposal are beyond the scope of services to be provided under this agreement. A scope and commensurate fee for any required additional services would be negotiated and provided under a separate supplemental agreement to this contract.



| City  | of Pflugerville        |                      |          |              |                    |              | Black Locus<br>Pavement |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
|-------|------------------------|----------------------|----------|--------------|--------------------|--------------|-------------------------|-------------------|-----------|----------|---------------------|-----------|-------|-----------------|--------------|---------------|------------------|------|----|-----|
| ID    | Task Name              |                      | Duration | Start        | Finish             | Predecessors | Resource Names          | Qtr 4, 201<br>Oct | 8<br>  No | ov De    | Qtr 1, 202<br>c Jan | 19<br>Feb | Mar   | Qtr 2, 2<br>Apr |              | Jun           | Qtr 3, 20<br>Jul |      | ug | Sep |
| 1     | Design Contract at Cit | y Council            | 1 day    | Tue 12/11/18 | Tue 12/11/18       |              |                         |                   |           |          |                     | Feb       | Ividi | Арі             | Iviay        | Jun           |                  |      | ug |     |
| 2     | Anticipated NTP        |                      | 0 days   | Tue 12/11/18 | Tue 12/11/18       | 1            |                         |                   |           | 12/11    | Anticipated NTF     | )         |       |                 |              |               |                  |      |    |     |
| 3     | Field Surveying        |                      | 15 days  | Thu 12/13/18 | Wed 1/2/19         | 2            |                         |                   |           | Ť        |                     |           |       |                 |              |               |                  |      |    |     |
| 4     | Geotechnical Field We  | ork & Memo           | 20 days  | Wed 12/5/18  | Tue 1/1/19         | 2FS+1 day    |                         |                   |           | <b>)</b> |                     |           |       |                 |              |               |                  |      |    |     |
| 5     | 30% PS&E               |                      | 27 days  | Wed 12/12/1  | 8 Thu 1/17/19      | 3            |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 6     | City Review            |                      | 5 days   | Thu 1/17/19  | Wed 1/23/19        | 5            |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 7     | 90% PS&E               |                      | 14 days  | Fri 1/18/19  | Wed 2/6/19         | 6            |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 8     | City Review            |                      | 5 days   | Thu 2/7/19   | Wed 2/13/19        | 7            |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 9     | Final PS&E Bid Docum   | ients                | 9 days   | Thu 2/14/19  | Tue 2/26/19        | 8            |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 10    | Advertise for Bids     |                      | 17 days  | Wed 3/6/19   | Thu 3/28/19        | 9            |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 11    | Open Bids (2pm)        |                      | 0 days   | Thu 3/28/19  | Thu 3/28/19        | 10FS-1 day   |                         |                   |           |          |                     |           | 3/28  | Open B          | ids (2pm)    |               |                  |      |    |     |
| 12    | Evaluate Bids          |                      | 2 days   | Fri 3/29/19  | Mon 4/1/19         | 11           |                         |                   |           |          |                     |           |       | <b>Š</b>        |              |               |                  |      |    |     |
| 13    | Get on Council Agend   | а                    | 7 days   | Mon 4/1/19   | Tue 4/9/19         | 12FS-1 day   |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 14    | Council approval of Co | onstruction Contrac  | 0 days   | Tue 4/9/19   | Tue 4/9/19         | 13           |                         |                   |           |          |                     |           |       | 4/9 🔨 Co        | uncil approv | al of Constru | uction Cont      | ract |    |     |
| 15    | Precon, Bonds, Permi   | ts, and Mobilizatior | 10 days  | Wed 4/10/19  | Tue 4/23/19        | 14           |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
| 16    | Construction           |                      | 78 days  | Wed 4/24/19  | Fri 8/9/19         | 15           |                         |                   |           |          |                     |           |       |                 | •            |               |                  |      |    |     |
| 17    | Close Out              |                      | 48 days  | Wed 7/17/19  | Fri 9/20/19        | 16           |                         |                   |           |          |                     |           |       |                 |              |               |                  |      |    |     |
|       |                        |                      | ·        |              |                    |              |                         |                   |           | 1        |                     |           |       |                 |              |               |                  |      |    |     |
|       |                        | Task                 |          | F            | Project Summary    |              | Inactive                | Milestone         | \$        |          | Manual Su           | ummary R  | ollup |                 | Deadline     |               | Ŷ                |      |    |     |
|       | ct: Black Locust Drive | Split                |          | E            | External Tasks     |              | Inactive                | Summary           |           |          | Manual Su           | ummary    |       |                 | Progress     |               |                  |      | -  |     |
| Date: | : Thu 11/29/18         | Milestone            | •        | E            | External Milestone | \$           | Manual                  | Task              |           |          | Start-only          |           | E     |                 | Manual P     | rogress       |                  |      | -  |     |
|       |                        | Summary              |          | 1            | nactive Task       |              | Duration                | n-only            |           |          | Finish-onl          | У         | Э     |                 |              |               |                  |      |    |     |
| Half  | f Associates, Inc.     |                      |          |              |                    |              | F                       | age 1             |           |          |                     |           |       |                 |              |               |                  |      |    |     |

[Delivered by E-mail to: dFranz@Halff.com] PAD18-156-00 November 28, 2018 – Revision No. 1

Halff Associates, Inc. 9500 Amberglen Blvd., Bldg. F, Suite 125 Austin, Texas 78729

#### Re: Construction Materials Testing Services W. Black Locust Drive & N. Railroad Ave Pflugerville, TX

**Sterner Building Better Tomorrows** 8100 Cameron Road Ste. B-150 Austin, TX 78754

> P 512.339.1745 F 512.339.6174 TBPE Firm F-3257

www.rkci.com

**RABA KISTNER Consultants, Inc.** (RKCI) is pleased to submit our confirming proposal to provide the construction materials observation and testing services on the above-referenced projects.

We propose an estimated budget of **\$15,900** for testing and observation services for the referenced project. This budget is based on our understanding of the project, an estimate of quantities, and past experience with similar projects. A cost estimate breakdown is presented in the attached spreadsheet. Construction sequencing, delays, and the number of times that the client or their representative requests our services will affect the suggested budget. Services will be provided on a call-out basis for the unit fees attached to this proposal. The scope of work includes the observation and testing of the following construction materials:

- Soils laboratory and field testing observations, and
- Asphalt

This proposal may serve as RKCI's work agreement for the referenced project. Please sign this proposal, initial every page of each attachment, fill out the Report Distribution List, and return one signed original to our office as authorization for RKCI to provide these services. If you choose to issue your own purchase order or work agreement, please reference our proposal number.

Thank you for allowing RKCI the opportunity to submit our proposal for the construction materials observation and testing services. We have a fully equipped AASHTO Accredited laboratory and we look forward to providing these services to you during the construction of this project. If you have any questions concerning our proposal or need any additional information, please call us at (512) 339-1745.

#### RABA KISTNER CONSULTANTS, INC.

(Signature) Approved By:  $\bigcirc a$ (Printed or Typed Name) Gabriel Ornelas, Jr., PE, PMP Senior Vice President (Title) GO: cr Attachments: Cost Estimate Breakdown Scope of Work (Company Name) Report Distribution Terms and Conditions (Date)

PAD18-156-00

| COST ESTIMATE BREAKDOWN                            |                      |  |           |  |  |  |  |  |  |  |  |
|--|----------------------|--|-----------|--|--|--|--|--|--|--|--|
| Project Name:                                      | Pflugerville Pavemer | t Rehab Project  |           |  |  |  |  |  |  |  |  |
| Project Location:                                  |                      | W. Black Locust Drive & N. Railroad Ave, Pflugerville, Texas |           |  |  |  |  |  |  |  |  |
| Contact Name:                                      |                      | Dan Franz, PE, CFM   |           |  |  |  |  |  |  |  |  |
|  |                      | Halff Associates, Inc  |           |  |  |  |  |  |  |  |  |
| Client:  | ,                    |  |           |  |  |  |  |  |  |  |  |
| Address:   | 9500 Amberglen Blvo  | I., Bldg. F, Suite 125                                       |           |  |  |  |  |  |  |  |  |
| City/State /Zip                                    | Austin/Texas/78729   |  |           |  |  |  |  |  |  |  |  |
| Phone Number:                                      | 512-777-4606         |  |           |  |  |  |  |  |  |  |  |
| E-Mail:  | dFranz@Halff.com     |  |           |  |  |  |  |  |  |  |  |
| TESTING/OBSERVATION ITEM                           | UNIT COST            | UNIT   | ESTIMATED | COST   |  |  |  |  |  |  |  |
|  |                      |  | QUANTITY  | EXTENSION                                      |  |  |  |  |  |  |  |
| SOILS  |                      | <u>.</u>   |           |  |  |  |  |  |  |  |  |
| Laboratory Testing                                 |                      |  |           |  |  |  |  |  |  |  |  |
| Moisture Density Relationship, TxDOT or ASTM       | \$445.00             | each   | 1         | \$445.00                                       |  |  |  |  |  |  |  |
| (Includes Atterberg Limits and Sieve Analysis)     |                      |  |           | ·  |  |  |  |  |  |  |  |
| Moisture Density Relationship, TxDOT 120-E, Part I | \$445.00             | each   | 2         | \$890.0  |  |  |  |  |  |  |  |
| (Includes Atterberg Limits and Sieve Analysis)     |                      |  |           | ·  |  |  |  |  |  |  |  |
| Unconfined Compression, TxDOT 120-E, Part I        | \$70.00              | each   | 12        | \$840.0  |  |  |  |  |  |  |  |
| Sample Molding Preparation                         | \$60.00              | hour   | 4         | \$240.0  |  |  |  |  |  |  |  |
| Field Testing/Observation                          |                      |  |           |  |  |  |  |  |  |  |  |
| In-Place Nuclear Densities                         | \$27.00              | each   | 36        | \$972.0  |  |  |  |  |  |  |  |
| Field Gradation                                    | \$8.00               | each   | 24        | \$192.0  |  |  |  |  |  |  |  |
| Materials Technician                               | \$54.00              | hour   | 52        | \$2,808.0                                      |  |  |  |  |  |  |  |
| Vehicle Travel Charge                              | \$20.00              | trip   | 13        | \$260.0  |  |  |  |  |  |  |  |
| Subtotal   |                      |  |           | \$6,647.0                                      |  |  |  |  |  |  |  |
| ASPHALT  |                      |  |           |  |  |  |  |  |  |  |  |
| Laboratory Testing                                 |                      |  |           |  |  |  |  |  |  |  |  |
| Bag Sample (Extraction, Gradation, A/C content,    | \$496.00             | each   | 8         | \$3,968.0                                      |  |  |  |  |  |  |  |
| Molding Specimens, Laboratory Density of Molded    | \$450.00             |  | 0         | Ş3,300.0                                       |  |  |  |  |  |  |  |
| Specimens, Stability Test, Hveem, Maximum          |                      |  |           |  |  |  |  |  |  |  |  |
| Theoretical Specific Gravity)                      |                      |  |           |  |  |  |  |  |  |  |  |
| Density of Asphalt Cores                           | \$65.00              | each   | 16        | \$1,040.0                                      |  |  |  |  |  |  |  |
| Field Testing/Observation                          | ç 33100              |  |           | <i>+_,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |  |  |  |  |  |  |
| Materials Technician                               | \$54.00              | hour   | 32        | \$1,728.0                                      |  |  |  |  |  |  |  |
| Vehicle Travel Charge                              | \$20.00              |  | 8         | \$160.0  |  |  |  |  |  |  |  |
| Subtotal   |                      |  |           | \$6,896.0                                      |  |  |  |  |  |  |  |
| PROJECT ADMINISTRATION                             |                      |  |           |  |  |  |  |  |  |  |  |
| Project Coordinator                                | \$65.00              | hour   | 4         | \$260.0  |  |  |  |  |  |  |  |
| Project Engineer                                   | \$178.00             |  | 2         | \$356.0  |  |  |  |  |  |  |  |
| Subtotal   |                      |  |           | \$616.0  |  |  |  |  |  |  |  |
|  |                      |  |           | 7-2010   |  |  |  |  |  |  |  |

| Reporting, Engineer Review, and Report Distribution |  | \$1,722.70  |  |             |
|---|--|-------------|--|-------------|
|   |  | GRAND TOTAL |  | \$15,881.70 |

RABAKISTNER

#### SCOPE OF WORK Construction Materials Testing Services W. Black Locust Drive & Railroad Ave. Pflugerville, Texas

#### General:

- 1. We understand that Halff Associates, Inc. will require the services of experienced engineering technicians as scheduled by you or your representatives. Client will incur a 3-hour minimum charge per each site visit. We request twenty-four (24) hour notification to properly schedule our work.
- 2. Service charges are based on the hourly rates stated herein and will be assessed from the time the Engineer or Technician leaves our office until he returns from the project.
- 3. A vehicle travel charge will be assessed for round-trip travel from our office to the project site, material supplier, etc. and back to our office. The charges from our office to the project site will be as follows:

| Travel Time (Round Trip) | 1.0 Hour  |
|--------------------------|-----------|
| Vehicle Travel Charge    | \$20 Trip |

- 4. Our total cost of services is based upon the assumption that this project will require a technician on site during normal work hours. Services requested during days and/or hours requiring overtime rates may significantly increase the total cost of services shown herein. Normal work hours are defined as Monday through Friday, 7:00 am to 5:00 pm. Overtime rates will be assessed for services performed outside of normal work hours and/or after eight (8) hours of work per day.
- 5. Invoices will be submitted monthly for work in progress in our standard format. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Dallas County, Texas 75397-1037. All parties hereby agree that this agreement upon acceptance will be performable in Bexar County, Texas. In the event that the State of Texas legislates a sales tax on professional services, the amount of tax applicable will be added to the appropriate service rate charged by Raba-Kistner Consultants, Inc.
- 6. A 10 percent project engineer review, administration, and report distribution cost will be added to all invoices.
- 7. Raba-Kistner will utilize the on-site initial field curing facilities provided by the contractor. The cost of providing and maintaining these initial curing facilities is not included in our proposal.

#### **REPORT DISTRIBUTION LIST**

Please provide RKCI with project distribution for our submittal of reports on this project. Unless otherwise indicated, testing and observation reports will be distributed via email.

| Client:     |            |        |
|-------------|------------|--------|
|             |            |        |
|             | Attention: |        |
|             | Phone No.: | Email: |
| Architect:  |            |        |
|             |            |        |
|             | Attention: |        |
|             | Phone No.: | Email: |
| Engineer:   |            |        |
| Ligneen     |            |        |
|             | Attention: |        |
|             | Phone No.: | Email: |
| Contractor: |            |        |
| contractor. |            |        |
|             | Attention: |        |
|             | Phone No.: | Email: |
| Other:      |            |        |
| Other:      |            |        |
|             | Attention: |        |
|             | Phone No.: | Email: |
|             |            |        |

Please return this Attachment via fax or mail with signed Authorization.

#### Fee Estimate for Professional Services for Black Locust Drive Rehabilitation - Fixed Fee (not hourly) Basis to be Billed on Monthly as a Percentage of Services Completed

| PRINCIPAL         PROJECT         SR         PE         JR         E.I.T.         CADD /         SURVEY         SURVEY         SURVEY           TASK/DESCRIPTION         MANAGER         PE         PE         PE         PE         GIS         MANAGER         / SUE         CREW           Sheets         V         V         V         V         V         V         CREW   | CONTRACT   | 01 5516 11 |               |                     |                       |                 |             |                      |
|---|------------|------------|---------------|---------------------|-----------------------|-----------------|-------------|----------------------|
|   | ADMIN      | CLERICAL   | TOTAL         | LABOR<br>CHARGES    | PRINTING              | DELIV,          | SUB         | COST<br>FOR TASK     |
|   | ADMIN      | SUPPORT    | MAN-<br>HOURS | CHARGES             | PRINTING,<br>PLOTTING | TRAVEL<br>& SUE | CONSULTANTS | FOR TASK             |
|   |            |            |               |                     |                       |                 |             |                      |
| TASK 1         PROJECT MANAGEMENT & COORDINATION         Image: Coordination  |            |            |               |                     |                       |                 |             |                      |
| 1.1     PROGRESS MEETINGS, REPORTS, AND MONTHLY INVOICING     16     16   | 16         | 8          | 40            | \$5,240             | \$18                  | \$107           |             | \$5,365              |
| 1.2 COORDINATION, SUB MGMT, AND ADMINISTRATION OF WORK PRODUCTS     2     12  |            |            | 14            | \$3,070             |                       |                 |             | \$3,070              |
|   |            |            |               |                     |                       |                 |             |                      |
| SUBTOTAL HOURS/COSTS 2 28   | 16         | 8          | 54            | \$8,310             | \$18                  | \$107           |             | \$8,435              |
| TASK 2 DATA ACQUISITION   |            |            |               |                     |                       |                 | _           |                      |
| 2.1 GEOTECHNICAL INVESTIGATION & REPORT         2         4   |            |            | 6             | \$920               |                       | \$20F           | \$9,450     | \$10,370<br>\$18,075 |
| 2.2 FIELD SURVEYING         6         30         76           2.3 SUE - LV 'C' and 'D' PLANS FOR REMAINDER OF RAILROAD         10         2         20  |            |            | 112<br>32     | \$17,870<br>\$4,750 |                       | \$205           |             | \$18,075<br>\$4,750  |
|   |            |            |               | + .,                |                       |                 |             | ÷ ,                  |
| SUBTOTAL HOURS/COSTS 2 4 10 8 30 96   |            |            | 150           | \$23,540            |                       | \$205           | \$9,450     | \$33,195             |
|   |            |            |               |                     |                       |                 | _           |                      |
| TASK 3 DESIGN PLANS AND CONSTRUCTION DOCUMENTS  |            |            |               |                     | \$90                  |                 |             | \$90                 |
|   |            |            |               |                     | \$90                  | 1               |             | \$90<br>\$1          |
| 3.1 ROADWAY TYPICAL SECTIONS         2         4         8         12   |            |            | 24            | \$3,220             | \$2                   |                 |             | \$3,222              |
| 3.2 ROADWAY PLANS         6         4         12         16         16         40         24  | <b>↓</b> ⊺ |            | 112           | \$13,940            | \$6                   |                 |             | \$13,946             |
| 3.3 PAVEMENT MARKING AND SIGNAGE LAYOUTS     4     4     8     24     16  |            |            | 52            | \$5,820             | \$4                   |                 |             | \$5,824              |
| 3.4         TRAFFIC CONTROL PLANS         2         2         8         16         8         9           3.5         SIDEWALK DETAIL SHEETS         1         2         8         16         8         6         6         8         6         6         7  |            |            | 34<br>34      | \$4,620<br>\$3,850  | \$2<br>\$1            |                 |             | \$4,622<br>\$3,851   |
| 3.5 SIDEWAR VETAL SHEETS         1         2         0         10         0 <td></td> <td></td> <td>12</td> <td>\$1,300</td> <td>\$1</td> <td></td> <td></td> <td>\$1,301</td>  |            |            | 12            | \$1,300             | \$1                   |                 |             | \$1,301              |
| 3.7 QUANTITY TABULATIONS AND SUMMARIES         4         4         32         8   |            |            | 44            | \$4,980             | \$2                   |                 |             | \$4,982              |
| 3.8 PROJECT MANUAL, BID FORM, AND SPECIFICATIONS     2     6     24   |            |            | 32            | \$5,010             |                       |                 |             | \$5,010              |
|   |            |            |               |                     |                       |                 |             |                      |
|   |            |            |               |                     |                       |                 |             |                      |
| SUBTOTAL HOURS/COSTS 21 8 40 52 48 124 72   |            |            | 344           | \$42,740            | \$108                 |                 |             | \$42,848             |
|   |            |            |               |                     | _                     |                 |             |                      |
| TASK 4         UTILITY COORDINATION         Coordinatio  |            |            | 24            | \$3,000             |                       |                 |             | \$3,000              |
|   |            |            | 24            | \$0,000             |                       |                 |             | \$0,000              |
|   |            |            |               |                     |                       |                 |             |                      |
| SUBTOTAL HOURS/COSTS 24   |            |            | 24            | \$3,000             |                       |                 |             | \$3,000              |
| TASK 5         PUBLIC INVOLVEMENT         Image: Control of the second se |            |            |               |                     |                       |                 |             |                      |
| 5.1         PUBLIC OPEN HOUSE         2         4         8         16  |            |            | 30            | \$4,080             | \$45                  | \$27            |             | \$4,152              |
|   |            |            |               |                     |                       |                 |             |                      |
| SUBTOTAL HOURS/COSTS 2 4 8 16   |            |            | 30            | \$4,080             | \$45                  | \$27            |             | \$4,152              |
|   |            |            |               |                     |                       |                 |             |                      |
| TASK 6 CONSTRUCTION PHASE SERVICES  |            |            |               | L                   | <u> </u>              |                 |             |                      |
| 6.1 BID PHASE 8 4 .   | <u> </u>   |            | 12            | \$1,920             | \$40                  | \$35            | -           | \$1,995              |
| 6.2 CONSTRUCTION PHASE         8         16         60           6.3 CONSTRUCTION MATERIALS TESTING (CMT)   | + +        |            | 84            | \$10,400            | \$11                  | \$129           | \$15,900    | \$10,540<br>\$15,900 |
|   |            |            |               |                     |                       |                 | ,           |                      |
| SUBTOTAL HOURS/COSTS 16 16 64   |            |            | 96            | \$12,320            | \$51                  | \$163           | \$15,900    | \$28,434             |
|   |            |            |               |                     |                       |                 |             |                      |
| FEE SUMMARY   | T          |            |               |                     |                       |                 |             |                      |
| TASK 1         PROJECT MANAGEMENT & COORDINATION         2         28   <   | 16         | 8          | 54            | \$8,310             | \$18                  | ¢107            |             | \$9.42F              |
| TASK 1         PROJECT MANAGEMENT & COORDINATION         2         28         4         10         8         30         96           TASK 2         DATA ACQUISITION         2         4         10         8         30         96   | 16         | Ø          | 54<br>150     | \$8,310<br>\$23,540 | \$10                  | \$107<br>\$205  | \$9,450     | \$8,435<br>\$33,195  |
| TASK 3         DESIGN PLANS AND CONSTRUCTION DOCUMENTS         21         8         40         52         48         124         72         0   |            |            | 344           | \$42,740            | \$108                 | +200            | +1,100      | \$42,848             |
| TASK 4 UTILITY COORDINATION 24 24 24 24 24 24 24 24 24 24 24 24 24  |            |            | 24            | \$3,000             |                       |                 |             | \$3,000              |
| TASK 5         PUBLIC INVOLVEMENT         2         4         8         16  | +          |            | 30            | \$4,080             | \$45                  | \$27            |             | \$4,152              |
| TASK 6         CONSTRUCTION PHASE SERVICES         16         16         64   | ┥          | -          | 96            | \$12,320            | \$51                  | \$163           | \$15,900    | \$28,434             |
| TOTAL HOURS 21 2 40 60 76 76 204 82 8 30 96   | 16         | 8          | 698           |                     |                       |                 |             |                      |
| CONTRACT RATES (\$)         \$275.00         \$210.00         \$185.00         \$145.00         \$125.00         \$110.00         \$90.00         \$225.00         \$120.00         \$170.00  |            | \$65.00    |               | 1                   |                       |                 |             |                      |
|   |            |            |               |                     |                       |                 |             |                      |
| BASE SALARIES & REIMB'S TOTAL         \$550         \$8,400         \$11,100         \$9,500         \$22,440         \$7,380         \$1,800         \$3,600         \$16,320  | \$1,360    | \$520      |               | \$93,990            | \$222                 | \$502           | \$25,350    | \$120,064            |
|   |            |            |               | l                   |                       |                 |             |                      |
| TOTAL BY CATEGORY 1% 9% 12% 12% 10% 24% 8% 2% 4% 17%  | 1%         | 1%         | 100%          | \$93,990            | \$222                 | \$502           | \$25,350    | \$120,064            |
|   |            |            |               | ¢02.000             | ¢000                  | ¢500            | \$05 050    | \$400 0C4            |
| TOTAL FEE   |            |            |               | \$93,990            | \$222                 | \$502           | \$25,350    | \$120,064            |