CONTRACT FOR ENGINEERING SERVICES
SUPPLEMENTAL AGREEMENT NO. 2
TO THE PROFESSIONAL SERVICES AGREEMENT

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

THIS SUPPLEMENTAL AGREEMENT to contract for engineering services is by and between Williamson County, Texas, a political subdivision of the State of Texas, *(the "County")* and Halff Associates, Inc. *(the "Engineer")* and becomes effective when fully executed by both parties.

WHEREAS, the *County* and the *Engineer* executed a contract on October 31, 2006;

WHEREAS, the not-to-exceed fee in Exhibit 1, Section 1, Item 1.1 as amended by Supplemental #1 limits the agreement to $1,093,302.98; and,

WHEREAS, the ***"Compensation Cap"*** in Exhibit 1, Section 4, Item 4.3 as amended by Supplemental #1 limits the maximum amount payable under the agreement to $1,110,134.00; and,

WHEREAS, the Hourly Rates in Exhibit II are limited to the rates noted; and,

WHEREAS, it has become necessary to amend the agreement.

AGREEMENT

NOW, THEREFORE, premises considered, the *County* and the *Engineer* agree that said contract is amended as follows:

I. The not-to-exceed fee in Exhibit 1, Section 1, Item 1.1 is hereby increased from $1,093,302.98 to $2,217,272.98.
II. The Compensation Cap in Exhibit 1, Section 4, Item 4.3 is hereby increased from $1,110,134.00 to $2,329,000.00.

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the ***County*** and the ***Engineer*** have executed this supplemental agreement in duplicate,

ENGINEER:

By: Michael A Moya
Signature

Michael A. Moya
Printed Name

Vice-President
Title

7/14/08
Date

COUNTY:

By: _____
Signature

_____
Printed Name

_____
Title

_____
Date

OK
MM 7/13/08

Project Name: BUS 79 Improvements - Roadway PS&E

ATTACHMENT A

WORK AUTHORIZATION NO. 4

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (*the "County"*) and Halff Associates, Inc. (*the "Engineer"*).

Part1. The ***Engineer*** will provide the following engineering services:

BUS 79 Improvements –Roadway PS&E From West Loop 397/US 79 to US 95 (Main Street), in the City of Taylor, Texas.

Part 2. The maximum amount payable for services under this Work Authorization without modification is $1,123,970.00.

Part 3. Payment to the ***Engineer*** for the services established under this Work Authorization shall be made in accordance with the Agreement.

Part 4. This Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate on December 31, 2009, unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

Project Name: BUS 79 Improvements - Roadway PS&E

ATTACHMENT A (con't.)

Part 6. This Work Authorization is hereby accepted and acknowledged below.

ENGINEER:	COUNTY: Williamson County, Texas
By: Michael A Moya	By:
Signature	Signature
Michael A. Moya	
Printed Name	Printed Name
Vice-President	
Title	Title
7/14/08	
Date	Date

LIST OF EXHIBITS

Exhibit A - Services to be Provided by County

Exhibit B - Services to be Provided by Engineer

Exhibit C - Work Schedule

Exhibit D - Fee Schedule

DA 7/15/08

Exhibit A

SERVICES TO BE PROVIDED BY THE COUNTY FOR

ENGINEERING PLANS SPECIFICATIONS & ESTIMATES (PS&E) FOR BUSINESS 79 (2ND STREET) ROADWAY IMPROVEMENTS IN WILLIAMSON COUNTY

Coordination Services by the County

- Coordinate with Utilities
- Advertise and publish legal notices and conduct public or stakeholder meetings.
- Assist Engineer in obtaining property rights-of-entry for environmental and ground surveys.
- Post and maintain project information on the County website.
- Review Engineer work progress, schedules, reports, preliminary/detailed plans, and cost estimates.

Exhibit B

SERVICES TO BE PROVIDED BY THE ENGINEER FOR

ENGINEERING PLANS SPECIFICATIONS & ESTIMATES (PS&E) FOR BUSINESS 79 (2ND STREET) ROADWAY IMPROVEMENTS IN WILLIAMSON COUNTY

Highway : BUS 79 (West 2nd Street)
Limits : From: West Loop 397/US79
To: US 95 (Main Street)
Project Length: Approximately 1.402 Miles

INTRODUCTION

The following scope of work describes the services to be provided by Halff Associates Inc., **The Engineer**, for Williamson County, **The County,** for improvements to 2nd Street, from West Loop 379 to Main Street, in the City of Taylor, Texas. The length of the project is approximately 1.402 miles as shown in the schematic drawing.

Project management services for the County will by provided by the County's "Contract Manager (Prime Strategies, Inc.)", or it's "Designated Representative (HNTB Corporation)." The completion of Services is based upon a twelve (12) month schedule.

The Engineer shall develop plans, specifications and estimates (PS&E) for the reconstruction of Business 79 (2nd Street) from an existing four-lane rural roadway to a four-lane urban facility meeting Williamson County Design Criteria (roadway is to be removed from the State Highway System so TxDOT protocol and criteria will not apply). The proposed improvements will be developed within existing right-of-way limits, except at some offsite locations were drainage improvements easements and driveway construction easements may be needed.

The major elements of the work (PS&E development) include, plans development (title sheet, index of sheets, quantity summary tables, typical sections, project layout, traffic control plans by phase, construction narrative, roadway plan and profile sheets, removal plans driveway design and detail sheets, grading details, miscellaneous details, drainage hydraulic data sheets, drainage area maps, drainage plan and profiles and lateral profiles, culvert layouts, signing and pavement marking sheets, and SW3P sheets). Other services provided by the Engineer include the development of an Engineer' Opinion of Probable Cost, the review and selection of standard Williamson County general notes and the inclusion of project specific general notes or special specifications, and bid phase services.

A project location map is provided on the following page.

Place Holder for Project Location Map

I. PROJECT MANAGEMENT

The Engineer shall designate one Licensed Professional Engineer (Texas) to be responsible for the project plan set, project management, and all communications with the COUNTY and/or its representatives.

1. MONTHLY PROGRESS REPORTS, INVOICES AND BILLINGS

   a. The Engineer will submit monthly, invoices and billing status to the County and/or its representative. Deliver one Progress Report and one invoice per billing.

   b. The Engineer will submit with each monthly invoice a progress status report. Progress reports will include, but will not be limited to: tasks completed, tasks/objectives that are planned for the upcoming periods, lists or descriptions of items or decisions needed from the County and/or its representatives. Progress report will also detail problems encountered and the action plan to remedy them.

   c. Overall Project Status Chart, including a tabulation of TASK percentage complete, will be submitted with each month's invoice and progress report.

   d. Sub-consultant invoices will be submitted to the Contract Manager.

2. PROJECT COORDINATION/ADMINISTRATION.

   a. Coordination: Correspondence and coordination will be handled though and with the concurrence of the Contract Manager.

   b. Administration: The Engineer will manage all Project activities (including documenting emails and phone and conference calls, maintain project files for the length of the project, and scheduled/unscheduled meetings), direct Engineer's team/staff correspondence with County, and assist the County in preparing responses to Project-related internal/external inquiries.

   c. Monthly Project Status Meetings: The Engineer will attend monthly progress meetings with the County and/or its representatives to report project progress, to discuss pending issues and to obtain direction/resolution to design issues. Assume 10 meetings. The Engineer will submit meeting minutes to the County and/or its representatives for review and approval and will revise the minutes, if necessary, based on comments or clarifications. Submit meeting minutes no later that three business days after meeting date.

   d. Project Quality Assurance / Quality Control (QA/QC): The Engineer will provide

quality assurance and quality control (QA/QC). Each scheduled submittal to The County shall receive QA/QC. A senior project manager will perform the QA/QC function.

e. The Engineer will post computer files and project information on the County web-based file transfer system at milestone plan submissions and at the request of the County and/or representatives.

f. Subconsultant Management: The Engineer will engage subconsultant(s) via contract(s), monitor and manage subconsultant activities (staff and schedule), and review and recommend payment of subconsultant invoices/billings.

II. SOCIAL & ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT:

1. Meet with County, State or other stakeholders to coordinate project details. Assume five (5) project meetings. These meetings are independent from the monthly progress meetings listed under Task I (project management).
2. Complete and submit Environmental Compliance documents to the County.
3. Coordination with the Texas Historical Commission (THC) for permit.
4. Jurisdictional Waters of the U.S. determination and summary report.

III. UTILITY ENGINEERING DESIGN:

The Engineer shall perform all Subsurface Utility Engineering (SUE), and Utility Engineering services for approximately seven (7) utilities as listed below:

Underground

- AT&T – Telephone
- AT&T – Fiber Optic Cable
- City of Taylor – Water
- City of Taylor – Wastewater
- Time Warner Cable – Cable TV
- Atmos Energy – Gas
- ONCOR– Electric

The work to be performed by the Engineer under this contract shall consist of providing engineering services required for SUE and Utility Engineering on the Business 79 Roadway PS&E Project. The existing utility file will be referenced into the current roadway design sheets to create a test hole location work plan. Based on the review of existing utilities and proposed roadway design sheets, approximately 30 test holes will be required. A sketch of the area to be included for the proposed test hole locations "Level A" will be provided prior to the start of the work and must be approved by the County.

These services include SUE, utility adjustment coordination activities including but not limited to, meeting and contact with utilities on the project, initial project notifications, preparation of existing utility layouts, providing progress reports, preparation of contact lists, reviewing conflicts between the utilities and the proposed project, resolutions of utility conflicts, creation of a utility conflict list, creating a utility tracking report, review of the proposed utility adjustments, and recommending the proposed locations of the utility adjustments. The above list of services is general in nature and should not be considered inclusive to the engineer's responsibilities, as listed in the following scope.

a. **Subsurface Utility Engineering (SUE)** including utility investigations subsurface and above ground prepared in accordance with AASHTO standards and Utility Quality Levels as follows.
    i. Utility Quality Levels are defined in cumulative order (least to greatest) as follows:
        1. Quality Level D - Existing Records: Utilities are plotted from review of available existing records.
        2. Quality Level C - Surface Visible Feature Survey: Quality level "D" information from existing records is correlated with surveyed surface-visible features. Includes Quality Level D information. If there are variances in the designated work area of Level D then a new schematic or plan layout, if needed, is required showing the limits of the proposed project and limits of the work area required for this work authorization; including highway stations, limits within existing or proposed right of way, additional areas outside the proposed right of way, and distances or areas to be included down existing intersecting roadways.
        3. Quality Level B - Designate: Two-dimensional horizontal mapping. This information is obtained through the application and interpretation of appropriate non-destructive surface geophysical methods. Utility indications are referenced to established survey control. Incorporates quality levels C and D information to produce Quality Level B. If there are variances in the designated work area of Level D then a new schematic or plan layout, if needed, is required showing the limits of the proposed project and limits of the work area required for this work authorization; including highway stations, limits within existing or proposed right of way, additional areas outside the proposed right of way, and distances or areas to be included down existing intersecting roadways.
        4. Quality Level A - Locate (Test Hole): Three-dimensional mapping and other characterization data. This information is obtained through exposing utility facilities through test holes and measuring and recording (to appropriate survey control) utility/environment data. Incorporates quality levels B, C and D information to produce Quality Level A.

ii. Subsurface Utility Locate (Test Hole) Service (Quality Level A), Locate means 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 Engineer shall:

1. Review requested test hole locations and advise Williamson County in the development of an appropriate locate (test hole) work plan relative to the existing utility infrastructure and proposed highway design elements.
2. Coordinate with utility owner inspectors as may be required by law or utility owner policy.
3. Neatly cut and remove existing pavement material, such that the cut not to exceed 0.10 square meters (1.076 square feet) unless unusual circumstances exist.
4. Measure and record the following data on an appropriately formatted test hole data sheet that has been sealed and dated by the Engineer:
    a. Elevation of top and/or bottom of utility tied to the datum of the furnished plan.
    b. Identify a minimum of two benchmarks utilized. Elevations shall be within an accuracy of 15mm (.591 inches) of utilized benchmarks.
    c. Elevation of existing grade over utility at test hole location.
    d. Horizontal location referenced to project coordinate datum.
    e. Outside diameter of pipe or width of duct banks and configuration of non-encased multi-conduit systems.
    f. Utility facility material(s).
    g. Utility facility condition.
    h. Pavement thickness and type.
    i. Coating/Wrapping Information and condition.
    j. Unusual circumstances or field conditions.
5. Excavate test holes in such a manner as to prevent any damage to wrappings, coatings, cathodic protection or other protective coverings and features.
6. Be responsible for any damage to the utility during the locating process. In the event of damage, the Engineer shall stop work, notify the appropriate utility facility owner, Williamson County, and appropriate regulatory agencies. The regulatory agencies include, but are not limited to the Railroad Commission of Texas and the Texas Commission on Environmental Quality. The Engineer will not resume work until the utility facility owner has determined the corrective action to be taken. The Engineer shall be liable for costs involved in the repair or replacement of the utility facility.

7. Back fill excavations with appropriate material, compact backfill by mechanical means, and restore pavement and surface material. The Engineer shall be responsible for the integrity of the backfill and surface restoration for a period of three years. Install a marker ribbon throughout the backfill.
8. Furnish and install a permanent above ground marker directly above center line of the utility facility.
9. 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 Engineer shall return to correct the condition at no extra charge to Williamson County.
10. Plot utility location position information to scale and provide a comprehensive utility plan sign and sealed by the responsible Engineer. This information will be provided in the latest version of Microstation or Geopak format used by Williamson County. The electronic file will be delivered on C.D.

b. **Utility Engineering** including the identification of utility conflicts, compliance with Williamson County's Design Criteria Manual, and resolution of utility conflicts. The Engineer shall coordinate all activities with Williamson County, or their designee, to facilitate the orderly progress and timely completion of the design phase. Coordination of engineering activities include:
    1. Utility Layout: The Engineer shall maintain a utility layout in the latest version of Microstation used by Williamson County. This layout shall include existing utilities which are to remain in place or be abandoned, and adjusted utilities. This layout will be utilized to monitor the necessity and evaluate alternatives. The Engineer's licensed Professional Engineer (P.E.) will utilize the layout of existing utilities as prepared, if available, and make a determination of the following;
        a. Facilities in conflict with the proposed project that are to be relocated.
        b. Facilities to be abandoned in place.
        c. Facilities to remain in service and in place.
        d. The Engineer's P.E. shall be responsible for determining if there are additional facilities, not shown in the Subsurface Utility Engineering (SUE) documents, which require relocation. The Engineer shall coordinate this information with Williamson County immediately upon discovery.
    2. Public & Individual Meetings with Utility Companies and Williamson County Utility Coordination meetings as required, to facilitate utility conflict identification and resolution (approximately 10 public utility meetings and 12 individual utility meetings).
    3. Progress Meetings: Meet with Williamson County periodically to

coordinate the work effort and resolve problems and prepare a written report of such meetings. The meetings will review:

a. Activities completed since the last meeting
b. Problems encountered.
c. Late activities.
d. Activities required by the next progress meeting.
e. Solutions for unresolved and/or anticipated problems.
f. Information or items required from other agencies/consultants.
g. Review of Utility's Proposed Adjustments
h. Evaluate Alternatives: The Engineer's P.E. will evaluate alternatives in the adjustment of utilities balancing the needs of both Williamson County and the Utility.
i. Review Estimates and Schedules: The Engineer's P.E. will review the utility adjustment estimates for reasonableness of cost and the timely scheduling of the adjustment.
j. Review Plans for compliance with Williamson County's Design Criteria Manual and proposed location data. The responsibility for quality and accuracy of Utility adjustment plans will remain with the Utility Company.

4. Prepare a Proposed Utility Layout in the latest version of MicroStation used by Williamson County that can be overlaid on the base file and determine the following;
   a. All facilities conflicts have been resolved.
   b. All stakeholders have concurred with the various alignments.
   c. Establish the sequence of construction for utility relocation work. Determine whether it is included as a part of the project Construction or not.
   d. Determine which utilities will be built as part of the contract.
   e. Determine which facilities will be relocated prior to construction.
5. Review PS&E for utilities including the ones in the construction contract.

Deliverables:

- Existing Utility Layout & electronic files on CD in Microstation format
- Test Hole Data Sheets & electronic files on CD in Microstation format
- Draft Proposed Relocation Utility Layout & electronic files on CD in Microstation format
- Approved Proposed Relocation Utility Layout & electronic files on CD in Microstation format
- Easements of Record Spreadsheet
- Master Utility Contact List

- Utility Tracking Report (UTR)
- Meeting minutes (delivered electronically) for approximately 14 meetings
- Review Comments Forms
- Utility Design Review Submittal Log
- Utility Completion Checklist
- Utility Clearance Certification Letters
- Monthly invoices and progress reports

IV. WATER AND WASTEWATER UTILITY RELOCATION DESIGN:

ENGINEER will perform engineering and surveying services within the described project area to prepare plans, specifications, and estimates for relocation of City of Taylor water and wastewater lines with in the project limits. The following is a general description of the water and wastewater lines to be relocated:

- 875 lf of 12" wastewater from Loop 397 to approx. 700 lf east of Debus St.
- 590 lf of 10" wastewater from 150 lf west of Sloan St. to 400 lf east of Debus St.
- 650 lf of 6" wastewater from Loop 397 to 250 lf west of Travis St.
- 540 lf of 6" wastewater from Sloan St. to the alley between Wyeth St. and Edmond St.
- 1650 lf of 12" wastewater from the alley between Wyeth St. and Edmond St. to Annie St.
- 2170 lf of 12" wastewater from 300 lf east of Annie St. to Branch St.
- 600 lf of 12" wastewater from 100 lf west of Doak St. to the alley between Branch St. and Davis St.
- 1270 lf of 6" wastewater from the alley between Branch St. and Davis St. to Talbot St.
- 1300 lf of 2" water from Loop 397 to Sloan St.
- 650 lf of 2" water from Park St. to Branch St.
- 7160 lf of 6" water from Loop 397 to Talbot St.
- 180 lf of 12" water at Howard St.
- Various crossings and services

PROJECT MANAGEMENT-

i. Meet with Williamson County and City of Taylor to set objectives and finalize design criteria.
ii. Engineer to provide monthly progress reports, updated cost estimates, meeting minutes, and monthly scheduling to City of Taylor
iii. Attend utility coordination meetings representing City of Taylor hosted by Williamson County during the design process (fee charged under Utility Coordination scope)

1. DATA COLLECTION & 30% DESIGN:

a. Initial Meetings/Data Collection.
    1. Kickoff Meeting
    2. Site Reconnaissance
        i. Identify water and wastewater service area.
        ii. Compile photographic record of project area.
    3. Obtain data from CLIENT:
        i. Water and wastewater design criteria
        ii. Studies and correspondence by others
        iii. Water and wastewater plans
        iv. Front end documents
        v. Meet with Williamson County and City of Taylor to set objectives and finalize design criteria.
b. Prepare base map
c. Prepare schematic layout of water and wastewater relocations
d. Review schematic alignments, limits and line sizes for water and wastewater improvements with CLIENT staff for approval.

<u>30% Water & Wastewater PS&E Deliverables:</u>

- Provide hard and digital copies of 30% schematics that show existing info and identifies conflicts
- Provide letter recommending improvements for the project
- Provide cost estimate for relocation of water and wastewater lines

2. 60% Water & Wastewater Replacement Design per City of Taylor General Standards for Water and Wastewater Construction
    a. Dimension control
    b. Utility alignment
    c. Line size determination per the preliminary engineering report or as directed by the City of Taylor
    d. Water and wastewater plan and profile sheets. Profile all waterlines greater than but not including 8". Provide profiles for any size waterline at roadway crossings. Profile all proposed wastewater lines.
    e. Prepare engineers estimate of probable construction cost
    f. Schedule an on the ground walk through with final plans with the City project manager to look at constructability, changes in field conditions since the survey was done, possible problem areas for construction, large trees that need to be protected, removed, trimmed, etc.
    g. Make Revisions Per 30% Review Comments
    h. Subsurface Utility Engineering: "Level A" Subsurface Utility Engineering is anticipated for select utilities in areas where horizontal and vertical locations of existing utilities are critical. (fee charged under Utility Coordination scope)

<u>60% Water & Wastewater PS&E Deliverables:</u>

- Provide plan and profile drawings indicating horizontal and vertical alignment of proposed facilities
- Provide updated cost estimates

3. 90% Water & Wastewater Replacement Design per City of Taylor General Standards for Water and Wastewater Construction:

a. Develop utility details
b. Develop General Notes and Specifications
c. Bid items and quantity take-offs
d. Update engineers estimate of probable construction cost

90% Water & Wastewater PS&E Deliverables:

- Provide final plans and contract documents for use in construction
- Final engineers estimate of probable construction cost

4. 100% Water & Wastewater Replacement Design per City of Taylor General Standards for Water and Wastewater Construction:

a. Revise plans per 90% comments from CLIENT
b. Finalize bid items and revise quantity take-offs as required
c. Finalize General Notes and Specifications
d. Final engineers estimate of probable construction cost
e. Deliver final documents to CLIENT

100% Water & Wastewater PS&E Deliverables:

- Provide final plans and contract documents for use in construction
- Final engineers estimate of probable construction cost

V. RIGHT-OF-WAY DATA:

1. Determine driveway penetration easements, as necessary.
2. Develop driveway penetration construction easement detail sheets to be provided to County officials for use in obtaining driveway construction easement agreements. The detail sheet shall consist of a plan view of the driveway and include existing ROW lines and anticipated width and depth of driveway penetration construction easement.
3. Prepare metes and bounds legal descriptions and exhibits for drainage easements.

No other right-of-way (ROW) acquisition is anticipated. The Engineer will not provide ROW strip maps or other legal instruments.

VI. FIELD SURVEYING AND PHOTOGRAMMETRY

1. The Engineer will perform a topographic survey to supplement the existing survey and DTM information acquired in Work Authorization 1, to establish hard tie points for cross streets, driveways, and other existing roadways, and to tie features down not previously surveyed, including DTM void areas.

2. The Engineer will incorporate additional survey information into 2D and 3D DGN Microstation files.

VII. ROADWAY DESIGN

1. PRELIMINARY ENGINEERING
   a) Develop a Project Design Summary Report (DSR) and attend a Design Concept Conference (DCC) with The County and/or its representatives. Update the DSR document based on comments at the DCC and submit to The County and/or its representatives.
   b) Revise schematic drawing from a five lane to a four lane typical section with left turn lanes at the intersections of Sloan Street and Howard Street as warranted. Coordinate with The County on final approval of revised schematic design.

The Engineer will develop the following roadway construction plan sheets

2. MISCELLANEOUS PLANS.

   a. Project Title Sheet.

   b. Detailed Index of Sheets.

   c. Project Layout sheets at a scale of 1"=200'.

3. ROADWAY PLANS and GEOMETRY

   a. Existing and Proposed Typical Sections.

   b. Roadway Plan and Profile Sheets at 1"=100' Horizontally.

   c. Survey Control Plan Sheets.

   d. Horizontal Alignment Data Sheets.

   e. Superelevation Data Sheets

f. Removal Plans

4. GRADING AND DETAILS.

   a. Develop and plot design cross sections for Business 79 at 50 even foot stations for final pavement conditions. Cross sections will be plotted on plan sheets and included as part of the final plan set.

   b. Intersection layouts for 21 intersections.

   c. Driveway Detail Sheets.

   d. Driveway Profile Sheets.

   e. Miscellaneous Roadway Detail Sheets.

5. UPDATED AND MODIFIED PAVEMENT DESIGN: Perform field testing, laboratory testing and design calculations to revise the Pavement Design performed under Work Order 1 to include the use and rehabilitation of flexible base (in an effort to reduce the proposed pavement section and construction cost if feasible). Provide an addendum to the Pavement Design Report that was performed under Work Authorization No. 1.

VIII. DRAINAGE

The Engineer will produce the following:

1. CULVERT AND CHANNEL DESIGN.

   a. Culvert Hydraulic Data Sheets for the 25-year frequency storm event as detailed in the "Business 79 Improvements Project Drainage Report, Taylor TX" prepared by Halff Associates Inc.

   b. Exterior Drainage Area Maps.

   c. Culvert Layouts.

   d. Produce channel improvement and grading plan sheets for the outfall at Creek 1 (as designated in the preliminary drainage report in WA No.1) and tie channel improvements to the upstream end of channel improvements accomplished with the drainage project in WA No. 2). No other channel design is anticipated or included within this scope.

e. Prepare Box Culvert Supplement (BSC) plan sheet

2. STORM DRAIN DESIGN.

a. Produce Interior Drainage Area Maps.

b. Calculate run-off to each inlet and produce inlet hydraulic information using WINSTORM software and Williamson County Drainage Design Criteria.

c. Produce storm drain calculations using WINSTORM software and Williamson County Drainage Design Criteria.

d. Produce runoff, inlet and storm drain data sheets.

e. Produce drainage plan and profile sheets for the storm sewer system within 2nd Street and design the outfall trunk between 2nd Street and UPRR lines for the East Basin (the East Basin is bounded by Davis Street and Main Street) - other storm systems and laterals on side streets are excluded. For the East Basin, include in the plans the pipes needed across 2nd Street for the future outfall trunk lines (so that 2nd Street pavement does not have to be cut for future drainage projects).

f. Produce lateral profile sheets.

g. Devise temporary drainage facilities for the anticipated phased construction.

h. Trench protection or special shoring plan sheets.

i. Drainage design detail plan sheets

3. SW3P AND EROSION CONTROL.

a. Erosion Control plans with notes (Assume two phased construction).

b. Storm Water Pollution Prevention Plans (SW3P).

c. Erosion Control Details.

IX. SIGNING PAVEMENT MARKINGS AND SIGNALIZATION

The Engineer will design the following plan sheets:

1. PAVEMENT MARKING PLAN SHEETS

2. SMALL SIGN LAYOUTS.

   a. Small sign layout sheets.

   b. Small sign detail sheets.

3. SIGNALIZATION

   a. Obtain traffic data at the intersections of Sloan Street with 2nd Street; Howard Street with 2nd Street; Davis Street with 2nd Street; and Talbot Street with 2nd Street. Traffic data shall be for the signal warrant study.
   b. Conduct Traffic signal warrant studies for the four intersections named above. The warrant studies will be completed as per TMUTCD requirements.
   c. Design mast arm signal at intersection of Talbot Street with 2nd Street to replace existing span wire signal.

X. MISCELLANEOUS ROADWAY

The Engineer will design the following miscellaneous roadway detail sheets:

1. TRAFFIC CONTROL PLAN

   a. Traffic control typical sections.

   b. Narrative overview for each stage of construction.

   c. Advanced warning signs for US 79, SH 95 and cross streets.

   d. Traffic control plans.

   e. Develop conceptual detour layouts for application for side street closures.

2. QUANTITY ESTIMATES, SUMMARY TABLES, CONSTRUCTION COST ESTIMATES, & GENERAL NOTES.

   a. Develop Quantity Estimates for the 30%, 60%, 90% and Final Plan Submittals.

   b. Develop Construction Cost Estimates for 30%, 60%, 90% and Final Plan Submittal.

   c. Develop Summary Quantity Tables for 60%, 90% and Final Plan Submittal. Summary

Table submittal at 60% will be formatted summary sheets without quantities filled in.

d. Develop General Notes from standard notes provided by the County. Edit general notes specific project. Add project specific general notes. Prepare general notes for inclusion in the plans.

3. Select appropriate TXDOT Standard Sheets for inclusion in the plans. Prepare title blocks for summary sheets. Estimated 50 standard sheets.

4. CONSTRUCTION TIMELINE - develop Construction Contract Timeline Determination using critical path methods using Microsoft Project or comparable scheduling program. Submit construction timeline at 90% and final submittal.

5. MISCELLANEOUS STRUCTURAL DETAILS - develop structural details (up to four) for non-standard structures such as special junction boxes.

6. BID PHASE SERVICES.

   a. The Engineer will coordinate with County for determining particular needs for developing applicable special provisions. Accelerated construction strategies in the and/or calculating road user costs is not included in this proposed scope of services

   b. The Engineer will coordinate with County to develop Project Construction Manual (PCM) in accordance with the Williamson County PS&E Road Bond manual

   c. The Engineer will provide assistance to County during the letting process and provide copies of the plans and PCM to bidders

   d. The Engineer will coordinate with the various approving agencies/entities to obtain approval/concurrence signatures on the plans cover sheets. The County will provide assistance with the acquisition of signatures if the Engineer's efforts to acquire signatures is met with opposition

   e. The Engineer will attend one (1) pre-bid meeting and prepare documents required for that meeting

   f. The Engineer will answer contractor questions as needed and issue addendums as required during the bid process

   g. Provide tabulation and review of bids received and submit a letter to the GEC recommending contract award to the lowest qualified bidder

   h. The Engineer will provide four (4) copies of the PCM for signature and execution

   i. The Engineer will provide nine (9) copies of the PCM and seven (7) sets of plans for

the pre-construction conference and the Engineer's project manager and assistant will attend one (1) pre-construction meeting which will be conducted by the GEC

j. Reviews of shop drawings for proposed facilities submitted by the contractor are not included in the proposed scope of services

k. Submittal of project documents to the Texas Department of Licensing and Regulation (TDLR) is included in the proposed scope of services. The Engineer will design proposed pedestrian facilities in compliance with the County and/or TxDOT standards and in compliance with ADA/TDLR regulations

l. The Engineer will coordinate with the County to obtain a sample project which will be used as a model for level of detail and format purposes upon which the subject project will be patterned

7. PLAN SUBMITTAL REQUIREMENTS

a. 30% Submittal: 30% Plan Submittal Checklist, title sheet, project layout, existing and proposed typical sections, general notes, survey data information, preliminary quantity table sheets, preliminary traffic control/construction sequence, roadway plan and profile sheets, drainage area maps, culvert layouts, drainage plan and profile sheets, existing utility sheets, and design submittal supplements.

b. 60% Submittal: 60% Plan Submittal Checklist, title sheet, project layout, existing and proposed typical sections, general notes, survey data information, quantity table sheets, traffic control/construction sequence, roadway plan and profile sheets, drainage area maps, hydraulic data sheets, culvert layouts, drainage plan and profile sheets, existing and proposed utility sheets, signing and pavement marking, erosion control plans, cross sections, and design submittal supplements.

c. 90% Submittal: 90% Plan Submittal Checklist, title sheet, project layout, existing and proposed typical sections, general notes, survey data information, quantity table sheets, traffic control/construction sequence, roadway plan and profile sheets, drainage area maps, hydraulic data sheets, culvert layouts, drainage plan and profile sheets, existing and proposed utility sheets, traffic signals design plans, signing and pavement marking, erosion control plans, cross sections, and design submittal supplements.

d. 100% Submittal: 100% Plan Submittal Checklist, title sheet, project layout, existing and proposed typical sections, general notes, survey data information, quantity table sheets, traffic control/construction sequence, roadway plan and profile sheets, drainage area maps, hydraulic data sheets, culvert layouts, drainage plan and profile sheets, existing and proposed utility sheets, traffic signals design plans, signing and pavement marking, erosion control plans, cross sections, standard detail sheets, and design submittal supplements.

The following items are excluded from the proposed scope of services in this proposal:

1. Attending Value Engineering sessions.
2. Preparing and submitting the notice of intent (NOI) for SW3P activities to TCEQ.
3. Performing public involvement and other NEPA documentation and preliminary engineering services (beyond tasks identified above or provided in WA No. 1).
4. Preparing "as-built" plans or record drawings.
5. Providing construction inspection and construction administration/support, construction staking or materials testing during construction services (beyond tasks identified above).
6. Analyzing or simulating water supply pipe networks.
7. Providing "full size" plots/prints of construction plans.
8. Researching private drainage systems and incorporating same into the proposed design.
9. Bridge or retaining wall design.
10. Developing alternate facilities not shown in the schematic plan.
11. Reviewing and evaluating alternate designs proposed by contractor.
12. Performing forensic pavement analyses (beyond tasks identified above).
13. Performing roadway capacity and level of service analyses (previously analyzed), or Performing traffic impact studies.
14. Roadway illumination and electrical design.
15. Designing landscaping and irrigation/sprinkler facilities.
16. Designing hardscape (enhanced flatwork) facilities.
17. Designing noise abatement facilities.
18. Designing traffic management systems.
19. Developing wetland, tree, etc. mitigation plans/designs.
20. Designing pavement sub-grade drainage systems.
21. Designing storm water detention ponds or pump stations.
22. Coordinating design with FEMA. Preparing LOMR/CLOMR.
23. Designing public and/or franchised utility adjustments (beyond tasks identified above).
24. Preparing and submitting quantity calculation backup/records.
25. Confirming and resetting project control monumentation if disturbed by others (i.e. utility companies, mowing operations, etc.).
26. Providing right-of-way acquisition services (i.e. property valuations, damages assessments, condemnation assistance/services, negotiations, relocation assistance, property management, serving as right-of-way agent, etc.).
27. Design of improvements/modifications to private facilities (i.e. sprinkler systems, security systems, parking facilities, temporary perimeter fences, etc.) to accommodate the proposed improvements.
28. Iterating design tasks, or portions thereof, after a design issue consensus has been reached or due to receipt of instructions or information contrary to previous directives and information or due to revisions in design criteria.

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.

Consultant/Engineer will provide all equipment, material, labor and supplies (except as shown on EXHIBIT A) necessary to accomplish the Project Tasks.

The work will be performed in accordance with, but not limited to, the following manuals and standards:

a. Williamson County Road Bond Program Design Criteria.
b. Standard Specifications for Construction of Highways, Streets, and Bridges, 2004 - TxDOT.
c. Bridges and Structures Hydraulic Manual - TxDOT.
d. Bridges and Structures Design Examples - TxDOT.
e. Standard Specifications for Highway Bridges – AASHTO
f. TxDOT Roadway Design Manual
g. TxDOT Environmental Manual
h. A Policy on Geometric Design of Highways and Streets, 2004 AASHTO
i. Highway Capacity Manual Special Report 209 - Texas Research Board (TRB)
j. Technical Advisory T6640.8A – FHWA
k. Noise Guidelines – TxDOT
l. Air Quality Guidelines – TxDOT
m. Texas Manual on Uniform Traffic Control Devices – TxDOT
n. Standard Highway Sign Designs for Texas – TxDOT
o. Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals – AASHTO
p. Utility Accommodation Policy – TxDOT
q. Utility Manual – TxDOT
r. Code of Federal Regulations, Title 23 - "Highway" - Federal Register
s. Administrative Order No. 5-89 - Signing, Sealing and Dating of Engineering Documents. – TxDOT
t. Administrative Circular No. 26-91 - Minimum Signing, Sealing and Dating Procedures for Department Engineering Documents – TxDOT
u. Guide for the Development of Bicycle Facilities, 2002 – AASHTO
v. Guide for the Design of High Occupancy Vehicle Facilities, 2001 – AASHTO
w. Code of Federal Regulations, Title 49 - "Transportation" - Federal Register
x. Right-of-Way Manual – TxDOT
y. U.S. Army Corps of Engineers Wetland Delineation Manual of 1987

NOTES: (1) All designs shall be in accordance with the above references, except where variances are permitted in writing.

(2) Engineer is responsible for purchasing all reference items/manuals required to complete Project TASKS/Subtasks.

ALLIANCE
Transportation Group, Inc.

EXHIBIT "A"

SCOPE OF WORK
TRAFFIC ENGINEERING SERVICES
Business US 79 (West Second Street)

PROJECT PARAMETERS

The following assumptions pertain to the provision of Basic Services:

A. The PROJECT will consist of the following activities, as requested by the CLIENT:

Task 1.0	Traffic Signal Warrants
Task 2.0	Traffic Signal Design
Task 3.0	Meetings
Task 4.0	Additional Services

B. CLIENT will review approved plans and provide recommendations in a timely manner.

C. PROJECT is located along Business US 79 (West Second Street) in Taylor, Texas.

TASK 1.0 TRAFFIC SIGNAL WARRANTS

1.1 Collect 12-hour turning movement counts at the following intersections:

- 1.1.1 Sloan Street and West Second Street
- 1.1.2 Howard Street and West Second Street
- 1.1.3 Davis Street and West Second Street
- 1.1.4 Talbot Street and West Second Street

1.2 Evaluate traffic data collected in Task 1.1 at each intersection against traffic signal warrant criteria contained in the Texas MUTCD.

1.3 Prepare summary report detailing the results of the analysis of each intersection against the warrant criteria.

TASK 2.0 TRAFFIC SIGNAL DESIGN

2.1 Obtain as-built traffic signal plans for the intersection of Talbot Street and West Second Street.

2.2 Obtain proposed design plans for the intersection of Talbot Street and West Second Street.

2.3 Prepare traffic signal base map sheets from the obtained as-builts and design plans.

2.4 Contact one-call service to locate existing utilities in the area of the intersection.

2.5 Conduct field investigation to identify location of existing utilities, electrical source, and other pertinent information.

2.6 Incorporate utility information into the traffic signal base sheets.

2.7 Develop construction plan sheets showing traffic signal poles, detection zones, conduit runs, wiring diagram, and signal face locations.

2.8 Develop plan view sheet showing elevations of traffic signal indications, poles, and any traffic control signs to be mounted on the traffic signal.

2.9 Develop wiring diagram sheet showing the number and type of electrical wire runs between the signal controller and indications.

2.10 Submit one (1) preliminary copy of the signal layout plans for review by Williamson County representatives.

2.11 Incorporate one (1) time, any revisions to the preliminary plans based on Williamson County comments.

2.12 Provide one (1) set of reproducible mylar final drawings, sealed by a Professional Engineer to Williamson County.

2.13 Develop Quantity estimate sheet

2.14 Insert appropriate specification sheets from the Texas Department of Transportation (TxDOT).

2.15 Prepare packet of construction plans and bid documents.

2.16 Submit one (1) copy of the preliminary .bid documents for review and comment by Williamson County.

2.17 Meet one (1) time with Williamson County representatives (if necessary) to review the preliminary bid documents.

2.18 Incorporate, one (1) time, any changes to the bid documents based on Williamson County comments.

2.19 Provide one (1) set of reproducible bid documents to Williamson County.

2.20 Prepare one (1) time, an Engineer's opinion of probable cost, based on the approved drawings, specifications, and materials.

TASK 3.0 MEETINGS

3.1 Attend up to three (3) meetings with the project team and/or Williamson County representatives to discuss the project and its progress. The estimated budget is based on attendance of up to two (2) Alliance senior staff members at these meetings.

NOTE: Any additional meetings will be at the direction of the Client or the Client's representative(s) and will be performed on an hourly fee basis.

TASK 4.0 ADDITIONAL SERVICES

The tasks stipulated in this section are specifically excluded from the scope of the Transportation Planning Services. In the event these additional services are required, a scope of services and any fee for additional services shall be agreed upon between CLIENT and ENGINEER in advance of services being accomplished; and the Agreement shall be amended. These services include but are not limited to the following:

4.1 Any additional intersection manual turning movement counts or 24-hour intersection tube counts that may be required by the City of Taylor, Williamson County, and/or TxDOT;

4.2 Public involvements and additional meetings with Client, Client's representative and/or neighborhood groups.

4.3 Construction based services, including (but not limited to) assistance in the review of the received bids, field staking of poles, and addressing construction conflicts with the contractor.

ALLIANCE
Transportation Group, Inc.

EXHIBIT "B"

COMPENSATION

1.1 FEE/COMPENSATION FOR SERVICES AND REIMBURSABLE EXPENSES

Direct Labor: A retainer fee is not required prior to the commencement of work on this project. With the exception of Task 1.1, all tasks will be completed on a "Cost Plus" basis. A summary of the project budget is provided below:

Task Number	Description		Budget
Task 1.0	Traffic Signal Warrants	$	6,000.00
Task 1.1	Data Collection (Lump Sum)	$	4,000.00
Task 2.0	Traffic Signal Design	$	13,750.00
Task 3.0	Meetings (3 budgeted)	$	3,200.00
Task 4.0	Additional Services	$	Not Budgeted
Total		$	26,950.00

Reimbursable Items: All supplies, printing, maps, facsimile transmissions and reproduction would be charged at cost plus ten percent (10%); all travel would be reimbursable at $0.48 per mile or at cost for other forms of travel.

1.2 TIMES OF PAYMENT

1.2.1 ENGINEER will submit monthly invoices for work performed under the terms of this agreement. Invoices are due and payable within 20 days receipt of invoice.

EXHIBIT "C"

SERVICES BY THE CLIENT

1.1 In general, the CLIENT and its representatives to their best of their efforts will render services as follows:

1.1.1 Provide full information as to the CLIENT's requirements for the PROJECT.

1.1.2 Assist the ENGINEER by placing at his disposal all available written data pertinent to previous operation, reports and any other data affecting the PROJECT.

1.1.3 Respond promptly in writing to requests by the ENGINEER for authorization to proceed with specific activities deemed desirable.

1.1.4 Examine documents submitted by the ENGINEER and render decisions pertaining thereto, promptly, to avoid unreasonable delay in the progress of the ENGINEER's services.

1.1.5 Furnish information required of him as expeditiously as necessary for the orderly progress of the work.

1.2 The ENGINEER shall be entitled to rely upon the CLIENT's representative, who shall be identified in writing, regarding decisions to be made by CLIENT; further, all notices or information shall be deemed made when conveyed to the representative.

1.3 The services, information, and reports required by Paragraph 1.1 (above) 1.1.1 through 1.1.5 inclusive shall be furnished at the CLIENT's expense, and the ENGINEER shall be entitled to rely upon the accuracy and completeness thereof.

ALLIANCE
Transportation Group, Inc

EXHIBIT "D"

Alliance Transportation Group, Inc.
2008 Standard Rate Schedule

Principal	$90 - $170
Senior Transportation Engineer/Planner	$75 - $150
Transportation Engineer	$70 - $100
CADD Technician	$50 - $65
Transportation Analyst	$55 - $75
Clerical Support	$30 - $45
Reimbursable	Cost + 10%
Mileage	$0.48 / mile

ok
7/15/08

FUGRO CONSULTANTS, INC.

8613 Cross Park Drive
Austin, Texas 78754
Phone: 512-977-1800
Fax: 512-973-9966

Halff Associates, Inc.
4030 West Braker Lane, Suite 450
Austin, Texas 78759

Proposal No. 04.30081092
June 17, 2008

Attention: Mr. Eric J. Ratzman, P.E.

Proposal for Pavement Thickness Design – Addendum 1
Roadway Improvement to Business 79
Highway 95 to West Loop 397
Taylor, Texas

Fugro Consultants, Inc. (Fugro) has submitted a report of Pavement Thickness Design for the above referenced project dated January 24, 2007. Since issuance of that report, the project team has requested pavement thickness design options that would include re-use of the existing pavement section. The proposal included herein presents our proposed scope for obtaining bulk samples of the existing pavement, laboratory testing, analyses, and Addendum 1 report. Our proposed field investigation, laboratory testing, and cost estimate are provided in the following sections.

Field Investigation

We understand that the project team will provide a construction crew that will perform traffic control, excavation, backfill, and patching operations of the existing Business 79 asphalt roadway. Fugro will observe the excavation of the pavement section by others. We request sufficient sample of the existing asphaltic concrete and base material to fill eight (8) 5-gallon buckets with representative bulk sample. We request that this sampling process be performed at two discrete locations along the proposed improvement alignment. Field services to be performed by Fugro will be limited to obtaining bulk soil samples. No insitu testing such as in place density testing will be conducted.

Laboratory Testing

Laboratory tests to be conducted on the bulk sample asphaltic concrete and base material will include:

- Atterberg Limits (ASTM D 4318, TEX-104, TEX-105, TEX-106-E)
- Particle-Size Analyses of Soils (ASTM D 422, D6913)

- Moisture-Density Relationship (Tex-113-E) Compaction Test
- Texas Triaxial Compression Test on Base Material (TEX-117-E Part II)
- Wet Ball Mill (TEX-116-E)
- Resilient Modulus (AASHTO T294)

Report

An Addendum 1 Report will be prepared which will include the following:

OK
7/15/08

1. Site plan showing the bulk sample location
2. Laboratory test procedures and results
3. Flexible pavement thickness design (mechanistically checked) using TxDOT FPS-19, based on traffic loading information provided by others and laboratory strength parameters, where appropriate; and
4. Pavement construction recommendations.

Cost Estimate

Based on the scope of work outlined above and the attached Fee Schedule G-2008, our estimated fee is presented below:

Field Investigation		
Site observation of bulk sample excavation to be performed by others		
Senior Technician ($80 per hour), and mobilization	$	1,400.00
Laboratory Investigation		
Atterberg Limits (2 @ $55 each)	$	110.00
Grain Size (2 @ $55 each)	$	110.00
TEX 113E Compaction Test (2 @ $210 each)	$	420.00
TEX 117E Texas Triaxial Compression Test		
(2 tests with 7 pts each test at $150 per point)	$	2,100.00
TEX 116E Texas Wet Ball Mill (2 @ $150 each)	$	300.00
AASHTO T294 Resilient Modulus Test		
(2 tests @ $700 each)	$	1,400.00

Technical Services	
Drafting and Report Preparation	$ 300.00
Engineering	
Coordination, Recommendations, and Addendum Report	$ 1,400.00
Total Cost Estimate	**$ 7,540.00**

The cost estimate is based on the following:

1. Traffic control to be provided by others.
2. On site excavation and sampling of existing pavement section by others.
3. Sufficient sample consisting of at least eight (8) 5-gallon buckets per sample location.
4. Sample test pit to be backfilled by others.
5. Although test pits will be relatively shallow, underground utility locations to be the responsibility of others.
6. Permits, if needed for the field investigation, will be secured by others.
7. Traffic loading will be provided to Fugro for use in pavement thickness design.

The fee may be exceeded if site conditions are significantly different than anticipated or changes in work are required or requested. However, the estimated maximum fee will not be exceeded without the client's prior authorization. Required additions to the above scope of services would be invoiced in accordance with the attached fee schedule.

Schedule

Upon authorization, Fugro requests at least 48 hours notice to obtain the bulk soil samples. Under normal circumstances, laboratory testing and report preparation will take an additional three to four weeks to complete. We will keep you verbally informed of our findings as they become available.

Terms and Conditions

Fees for field work, laboratory testing, and report preparation are outlined in Schedule G-2008. Schedule 40.01 describes general contractual conditions including identification of client, on-site responsibilities and risks, warranty, invoicing procedures, and record and sample maintenance. Schedules G-2008 and 40.01 are attached to this proposal.

The following statement is required by Fugro's Insurance Company. Fugro's scope of work does not include the investigation, detection, or design related to the presence of any Biological Pollutants. The term "Biological Pollutants" includes, but is not limited to, mold, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

* * *

To indicate acceptance of this proposal, please have the signature block below signed by a duly authorized representative of the client, and return one copy to us for our files. Whoever signs below is identified as our Client as used throughout Schedule 40.01 attached.

We appreciate the opportunity to submit this proposal and look forward to working with you on this project. Please call us if we can be of any additional assistance.

Sincerely,

FUGRO CONSULTANTS, INC.

Rebecca A. Russo, P.E.
Project Manager

Peter H. Bush, P.E.
Vice President

Attachments
Schedule 40.01
Fee Schedule G-2008

CLIENT:

_____
Firm Name

_____
Authorizing Signature

_____
Typed Name & Title

_____
Date

FUGRO CONSULTANTS, INC.
Schedule 40.01 (Rev. Jan. 07)

GENERAL CONDITIONS FOR TECHNICAL SERVICES

1. Parties to This Agreement
CLIENT as used herein is the entity who authorizes performance of services by Fugro Consultants, Inc. (FUGRO) under the conditions stated herein. FUGRO as used herein includes, Fugro Consultants, Inc., its employees and officers, and its subcontractors and sub-consultants (including affiliated corporations).
2. On-site Responsibilities and Risks
2.1 Right-of-Entry. Unless otherwise agreed, CLIENT will furnish unfettered rights-of-entry and obtain permits as required for FUGRO to perform the fieldwork.
2.2 Damage to Property. FUGRO will take reasonable precautions to reduce damage to land and other property caused by FUGRO's operations. However, CLIENT understands that damage may occur and FUGRO's fee does not include the cost of repairing such damage. If CLIENT desires FUGRO to repair and/or pay for damages, FUGRO will undertake the repairs and add the pre-agreed cost to FUGRO's fee.
2.3 Toxic and Hazardous Materials. CLIENT will provide FUGRO with all information within CLIENT's possession or knowledge as to the potential occurrence of toxic or hazardous materials, or Biological Pollutants (as defined in 9. below) at the site being investigated. If unanticipated toxic or hazardous materials, or biological pollutants are encountered, FUGRO reserves the right to demobilize FUGRO's field operations at CLIENT's expense. Remobilization will proceed following consultation with FUGRO's safety coordinator and CLIENT's acceptance of proposed safety measures and fee adjustments.
2.4 Utilities and Pipelines. While performing FUGRO's fieldwork, FUGRO will take reasonable precautions to avoid damage to subterranean and subaqueous structures, pipelines, and utilities. CLIENT agrees to defend, indemnify, and hold FUGRO harmless for any damages to such structures, pipelines, and utilities that are not called to FUGRO's attention and/or correctly shown on plans furnished to FUGRO.
2.5 Site Safety. FUGRO is not responsible for the job site safety of others, nor does FUGRO have stop-work authority over work by others. However, FUGRO will conduct its work in a safe, workman-like manner, and will observe the work-site safety requirements of CLIENT that have been communicated to FUGRO in writing.
3. Standard of Care
3.1 FUGRO will perform its services consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same location.
3.2 CLIENT acknowledges that conditions may vary from those encountered at the location where borings, surveys, or explorations are made and that FUGRO's data, interpretations, and recommendations are based solely on the information available to FUGRO, and FUGRO is not responsible for the interpretation by others of the information developed.
4. Limitation of Remedies
To the greatest extent permitted by law, CLIENT's sole remedy against FUGRO for claims and liabilities in any way arising out of or directly or indirectly related to FUGRO's work for CLIENT will not exceed an aggregate limit of $50,000 or the amount of FUGRO's fee, whichever is greater, regardless of the legal theory under which remedy is sought, whether based on negligence [whether sole or concurrent, active or passive], breach of warranty, breach of contract, strict liability or otherwise. In the event CLIENT does not wish to limit FUGRO's remedy to this sum, and if CLIENT requests in writing prior to acceptance of this Agreement, FUGRO agrees to negotiate a greater remedy amount in exchange for an increase in scope and fee appropriate to the project and remedy risks involved. .
5. Invoices and Payment
At FUGRO's discretion, invoices will be submitted at the completion of task elements, or monthly for services rendered. Payment is due upon presentation of FUGRO's invoice and is past due thirty- (30) days from invoice date. CLIENT agrees to pay a financing charge of one percent (1%) per month (or the maximum rate allowable by law, whichever is less), on past due accounts, and agrees to pay attorney's fees or other costs incurred in collecting any delinquent amount.
6. Data, Records, Work Product and Report(s), and Samples
Data, Records, Work Product and Report(s) are FUGRO's property. All pertinent records relating to FUGRO's services shall be retained for a minimum of two (2) years after completion of the work. CLIENT shall have access to the records at all reasonable times during said period. FUGRO will retain samples of soil and rock for a minimum of 30 days after submission of FUGRO's report unless CLIENT advises FUGRO otherwise. Upon CLIENT's written request, for an agreed charge FUGRO will store or deliver the samples in accordance with CLIENT's instructions.
7. Indemnification
FUGRO and CLIENT shall indemnify each other from any claims, damages, losses, and costs, including, but not limited to, reasonable attorney's fees and litigation costs, to the proportionate extent caused by each party's own negligence, including the negligence of the indemnifying party, and its employees, affiliated corporations, officers, and sub-tier parties in connection with the project.
8. Consequential Damages
Notwithstanding any other provision of this Agreement, CLIENT and FUGRO waive and release any claim against the other for loss of revenue, profit or use of capital, loss of services, business interruption and/or delay, loss of product, production delays, losses resulting from failure to meet other contractual commitments or deadlines, downtime of facilities, or for any special, indirect, delay or consequential damages resulting from or arising out of this Agreement, or as a result of or in connection with the work, and whether based on negligence (whether sole or concurrent, active or passive), breach of warranty, breach of contract, strict liability or otherwise.
9. Biological Pollutants
FUGRO's scope of work does not include the investigation, detection, or design related to the presence of any Biological Pollutants. The term "Biological Pollutants" includes, but is not limited to, mold, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms. CLIENT agrees that FUGRO will have no liability for any claim regarding bodily injury or property damage alleged, arising from, or caused directly or indirectly by the presence of or exposure to any Biological Pollutants. In addition, CLIENT will defend, indemnify, and hold harmless FUGRO from any third party claim for damages alleged to arise from or be caused by the presence of or exposure to any Biological Pollutants. If CLIENT requests in writing prior to acceptance of this Agreement, FUGRO will negotiate a greater limitation amount, and remove CLIENT's responsibilities, in exchange for an increase in fee to develop an expanded scope of work to provide biological pollutant protection.
10. Acceptance of Agreement
These GENERAL CONDITIONS have been established in large measure to allocate certain risks between CLIENT and FUGRO. FUGRO will not initiate service without formal agreement on the terms and conditions set forth in these GENERAL CONDITIONS. Acceptance or authorization to initiate services shall be considered by both parties to constitute formal acceptance of all terms and conditions of these GENERAL CONDITIONS. Furthermore, all preprinted terms and conditions on CLIENT's purchase order or purchase order acknowledgment forms are inapplicable to these GENERAL CONDITIONS and FUGRO's involvement in CLIENT's project.
11. Termination of Contract
CLIENT and FUGRO may terminate services at any time upon ten (10) days written notice. In the event of termination, CLIENT agrees to fully compensate FUGRO for services performed including reimbursable expenses to the termination date, as well as demobilization expenses. FUGRO will terminate services without waiving any claims or incurring any liability.

Fee Schedule CMT-2008

FEES FOR CONSTRUCTION MATERIALS TESTING SERVICES

		Regular Time[1]	Overtime[2]
1.	**Field Technicians**		
1.1	Technician (NICET Level I or equivalent)	$43.00/hr	$ 53.00/hr
1.2	Senior Technician (NICET Level II, TxDOT Level 1A/1B, Associate Welding Inspector, or equivalent)	$48.00/hr	$ 58.00/hr
1.3	Senior Supervising Technician (NICET Level III, TxDOT Level II, or equivalent)	$85.00/hr	$ 95.00/hr
1.4	Certified Welding Inspector	$72.00/hr	$ 82.00/hr
2.	**Field Testing and Equipment**		
2.1	Transportation (Minimum $40.00/trip)		$ 0.505/mile
2.2	Nuclear Density Tests (In addition to technician time)		$ 13.00/test
2.3	Torque Wrench		No Charge
2.4	Dye Penetrant & Magnetic Particle Supplies		Cost + 15%
2.5	Ultrasonic Testing Equipment		$ 20.00/hr
2.6	Asphalt Coring Equipment		$ 20.00/hr
2.7	Concrete Coring Equipment		$ 20.00/hr + bit charge
2.8	Concrete Core Bit Charges		
	2.8.1 3 inch-diameter Core		$ 2.00/inch
	2.8.2 4 inch-diameter Core		$ 3.00/inch
	2.8.3 6 inch-diameter Core		$ 5.00/inch
	(Other sizes quoted upon request)		
2.9	FACE® Dipstick Floor Flatness/Floor Levelness equipment		$200.00/day
2.10	Air Content of fresh concrete		$ 15.00/ea
3.	**Laboratory Testing - Soil**		
3.1	Natural Moisture Content		$ 15.00/ea
3.2	Atterberg Limits		$ 55.00/ea
3.3	Sieve Analysis - Soil (Nos. 4, 40, and 200)		$ 55.00/ea
3.4	Percent Passing No. 200 Sieve		$ 45.00/ea
3.5	Moisture Density Relationship (ASTM D 698)		$210.00/ea
3.6	Moisture Density Relationship (ASTM D 1557)		$210.00/ea
3.7	Moisture Density Relationship (TEX-113-E)		$210.00/ea
3.8	Moisture Density Relationship (TEX-114-E)		$210.00/ea
3.9	Texas Triaxial Compression Test on Base Material (TEX-117-E Part II)		$150.00/specimen
3.10	Wet Ball Mill (TEX-116-E)		$150.00/ea
3.11	Permeability of Silt or Clay (ASTM D 5084)		$250.00/ea
3.12	Sample Remolding		$ 35.00/ea
3.13	Sample Preparation (Soils with P.I. > 25)		$ 40.00/sample
3.14	Soil pH		$ 55.00/ea
3.15	Soil-Lime pH series (6 points)		$195.00/set
4.	**Laboratory Tests - Concrete and Cement**		
4.1	Concrete Mix Design		Quoted on Request

4.2	Aggregate Sieve Analysis	$ 50.00/ea
4.3	Specific Gravity of Aggregate	$ 50.00/ea
4.4	Absorption of Aggregate	$ 50.00/ea
4.5	Unit Weight of Aggregate	$ 50.00/ea
4.6	Concrete Cylinder Compressive Strength (ASTM C 39)	$ 17.00/ea
4.7	Beam Flexural Strength (ASTM C 78)	$ 40.00/ea
4.8	Mortar Cube Compressive Strength (ASTM C780)	$ 17.00/ea
4.9	Grout Specimen Compressive Strength (ASTM C1019)	$ 40.00/ea
4.10	Concrete Masonry Unit Strength (ASTM C780)	$ 75.00/ea
4.11	Concrete Masonry Unit Prism Strength (ASTM C1314)	$ 150.00/ea
4.12	Drilled Core Compressive Strength (ASTM C42)	$ 50.00/ea
5.	**Laboratory Testing - Asphalt and Roofing**	
5.1	Mix Design (Hveem or Marshall Method)	Quoted on Request
5.2	Molding Test Specimens, Bulk Density, and Stability (3 per set)	$110.00/set
5.3	Determine Maximum Theoretical Density	$ 60.00/ea
5.4	Stripping Test	$ 75.00/ea
5.5.	Asphalt Content (Ignition Oven with Correction) and Gradation	$235.00/ea
5.6.	Asphalt Content (Ignition Oven without Correction) and Gradation	$200.00/ea
5.7	Bulk Specific Gravity of Asphalt Core	$ 40.00/ea
5.8	Roof Ballast Sieve Analysis	$ 50.00/ea
5.9	Oven Dried Moisture Content of Roofing Materials	$ 25.00/ea
5.10.	Laboratory Density of Field Cut Fireproofing	$ 40.00/ea
6.	**Laboratory Testing - Structural Steel**	
	Weld Procedure and Welder Qualification Testing Rates	Quoted on Request
7.	**Report Preparation**	
7.1	Word Processing	$ 45.00/hr
7.2	Drafting	$ 75.00/hr
7.3	Reproduction	$ 0.15/copy
7.4	Postage	Cost
8.	**Engineering Consultation**	
8.1	Senior Consultant or Project Principal	$145.00/hr
8.2	Project Manager	$135.00/hr
8.3	Project Engineer	$105.00/hr
8.4	Laboratory Manager	$125.00/hr
9.	**Outside Services**	**Cost + 15%**

Rates for other services quoted on request

Notes: (1) Minimum call-out charge for CMT technician and equipment or sample pick-up is 2 hours. Minimum call-out charge for CWI technician is 4 hours. Charges are accrued portal to portal.

(2) Overtime rates are applicable to time worked in excess of 8 hours per day, Monday through Friday; hours worked before 7:00 am and after 6:00 pm; and all hours worked on Saturdays, Sundays, and holidays.

FEE SCHEDULE FOR GEOTECHNICAL FIELD, LABORATORY AND ENGINEERING SERVICES

1.	**Field Investigation**		
1.1.	Mobilization and demobilization, per mobilization		
1.1.1	Drill truck, water truck, pickup, and crew	$	3.75/mile
1.1.2	All-terrain drill rig, pickup, and crew	$	6.00/mile
1.2.	All-terrain vehicle with drill rig (additional charge)	$	600.00/day
1.3.	Drilling and sampling		
1.3.1	Drilling and sampling with 3-inch, thin-walled tube sampler, continuous to 10.0 ft, 5.0-ft intervals thereafter	$	15.00/foot
1.3.2	Continuous drilling and sampling with 3-inch, thin-walled tube sampler or split-spoon sampler for environmental screening	$	32.00/foot
1.4.	Standard penetration tests	$	20.00/each
1.5.	TxDOT cone penetration tests	$	28.00/each
1.6.	Rock coring, NX or similar core barrel		
1.6.1	Drilling in soft rock (Austin Chalk, Eagle Ford Shale, etc.)	$	21.50/foot
1.6.2	Drilling in hard rock or cavitated rock (Edwards, Buda, Glen Rose, Georgetown, and Walnut Formations)	$	25.50/foot
1.7.	Wash or auger borings drilled and logged from cuttings:		
1.7.1	Soil	$	13.00/foot
1.7.2	Rock	$	19.00/foot
1.8.	Casing of boreholes	$	15.00/foot
1.9.	Hourly charges for boring layout, excessive time spent gaining access to boring locations, backfilling boreholes, cleaning up site, installing piezometers, and for other reasons beyond our control	$	165.00/hour
1.10.	Rental of concrete core drilling equipment or equipment to gain site access, or traffic control devices		Cost + 15%
1.11.	Materials for piezometers, grouting, etc.		Cost + 15%
1.12.	Surveying or other outside contractors		Cost + 15%
1.13.	Traffic control		Upon Request
1.14.	Per diem for out-of-town assignments, per person	$	105.00/night
1.15	High-pressure steam cleaner	$	400.00/day
1.16	OVA meter		Upon Request
1.17	Steel drums for drill cuttings (delivered)	$	65.00/each
1.18	Plugging boreholes with bentonite/concrete slurry	$	8.00/foot
1.19	Cone penetrometer testing	$	3,250.00/day
2.	**Laboratory Tests**		
2.1.	Natural water content and soil classification	$	15.00/each

2.2.	Plastic and liquid limits	$	55.00/each
2.3.	Free swell test	$	95.00/each
2.4.	Pressure swell test	$	135.00/each
2.5.	Uniaxial pressure-strain test	$	60.00/each
2.6.	Sieve analysis (No. 4, 40, and 200 sieves)	$	55.00/each
2.7.	Percent material passing a single sieve	$	45.00/each
2.8.	Minus No. 200 sieve	$	45.00/each
2.9.	Hydrometer analysis	$	200.00/each
2.10.	Unit dry weight determination and natural water content	$	18.00/each
2.11.	Unconfined compression test, soil	$	50.00/each
2.12.	Unconfined compression test, rock	$	55.00/each
2.13.	Unconsolidated-undrained triaxial compression test	$	55.00/each
2.14.	Standard Proctor (ASTM D-698) compaction test	$	210.00/each
2.15.	Modified Proctor (ASTM D-1557) compaction test	$	210.00/each
2.16.	TxDOT (TEX-113-E) compaction test	$	210.00/each
2.17.	California Bearing Ratio (CBR)	$	225.00/point
2.19.	Consolidation test, 7-load increments	$	750.00/each
	Additional load increments	$	100.00/each
2.19.	Permeability of silt or clay	$	250.00/each
2.20.	Specific gravity	$	50.00/each
2.21.	Volumetric shrinkage	$	75.00/each
2.22	Chemical and analytical testing by outside laboratory		Cost + 15%

3. Engineering and Technical Personnel

3.1.	Senior Consultant/Project Principal	$	160.00/hour
3.2.	Senior Project Manager	$	150.00/hour
3.3.	Project Manager	$	135.00/hour
3.4	Project Engineer	$	125.00/hour
3.5	Project Geologist	$	95.00/hour
3.6	Laboratory Manager	$	95.00/hour
3.7.	Graduate Engineer	$	85.00/hour
3.8.	Senior Engineering Technician	$	65.00/hour
3.9.	Technician and Draftsperson	$	60.00/hour
3.10.	Word Processor	$	50.00/hour

4. Report Reproduction and Miscellaneous

4.1.	Outside services, printing, reproduction, etc.		Cost + 15%
4.2.	Outside technical assistance		Cost + 15%
4.3.	Transportation	$	0.55/mile

Rates for other tests and services quoted on request.

Exhibit C

SCHEDULE OF SERVICES PROVIDED BY ENGINEER

For

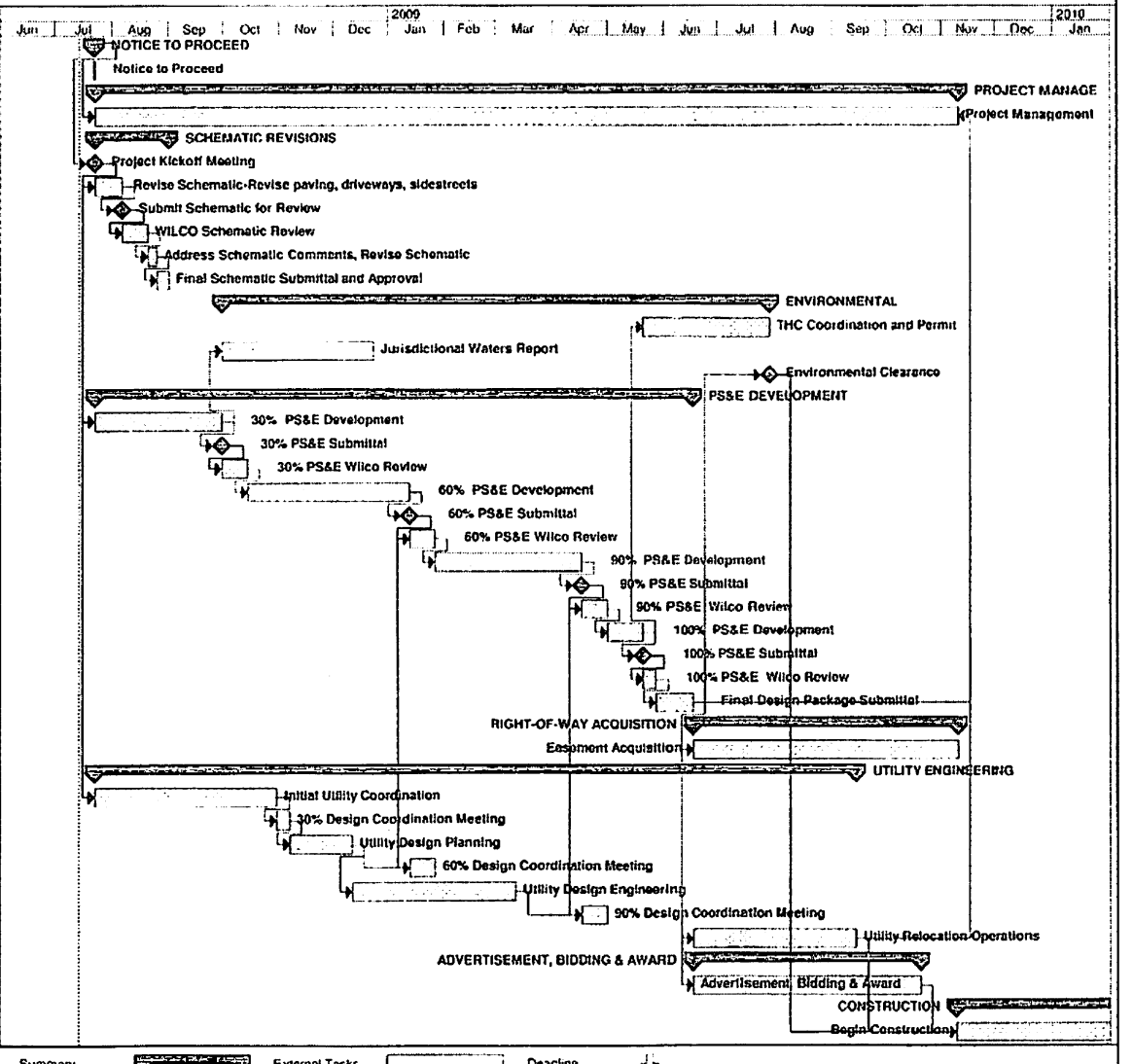
ENGINEERING PLANS, SPECIFICATIONS & ESTIMATES (PS&E)

BUSINESS 79 (2ND STREET) ROADWAY IMPROVEMENTS

IN WILLIAMSON COUNTY

BUS 79 Roadway PS&E — EXHIBIT "C" — WA#4

ID	Text1	Task Name	Duration	Start	Finish
1	NT00	NOTICE TO PROCEED	1 day	Tue 7/22/08	Tue 7/22/08
2	NT00	Notice to Proceed	1 day	Tue 7/22/08	Tue 7/22/08
3	PM00	PROJECT MANAGEMENT	348 days	Wed 7/23/08	Tue 11/10/09
4	PM100	Project Management	348 days	Wed 7/23/08	Tue 11/10/09
5	SR00	SCHEMATIC REVISIONS	29 days	Tue 7/22/08	Mon 9/1/08
6	SR100	Project Kickoff Meeting	0 edays	Tue 7/22/08	Tue 7/22/08
7	SR200	Revise Schematic-Revise paving, driveways, sides	15 edays	Tue 7/22/08	Wed 8/6/08
8	SR300	Submit Schematic for Review	0 edays	Wed 8/6/08	Wed 8/6/08
9	SR400	WILCO Schematic Review	14 edays	Wed 8/6/08	Wed 8/20/08
10	SR500	Address Schematic Comments, Revise Schematic	5 edays	Wed 8/20/08	Mon 8/25/08
11	SR600	Final Schematic Submittal and Approval	7 edays	Mon 8/25/08	Mon 9/1/08
12	EN00	ENVIRONMENTAL	215 days	Wed 10/1/08	Tue 7/28/09
13	EN100	THC Coordination and Permit	69 edays	Wed 5/20/09	Tue 7/28/09
14	EN110	Jurisdictional Waters Report	60 days	Wed 10/1/08	Tue 12/23/08
15	EN170	Environmental Clearance	0 edays	Tue 7/28/09	Tue 7/28/09
16	PS00	PS&E DEVELOPMENT	243 days	Tue 7/22/08	Tue 6/16/09
17	PS100	30% PS&E Development	70 edays	Tue 7/22/08	Tue 9/30/08
18	PS110	30% PS&E Submittal	0 edays	Tue 9/30/08	Tue 9/30/08
19	PS120	30% PS&E Wilco Review	14 edays	Tue 9/30/08	Tue 10/14/08
20	PS140	60% PS&E Development	90 edays	Tue 10/14/08	Mon 1/12/09
21	PS150	60% PS&E Submittal	0 edays	Mon 1/12/09	Mon 1/12/09
22	PS160	60% PS&E Wilco Review	14 edays	Mon 1/12/09	Mon 1/26/09
23	PS180	90% PS&E Development	60 edays	Mon 1/26/09	Thu 4/16/09
24	PS190	90% PS&E Submittal	0 edays	Thu 4/16/09	Thu 4/16/09
25	PS200	90% PS&E Wilco Review	14 edays	Thu 4/16/09	Thu 4/30/09
26	PS220	100% PS&E Development	20 edays	Thu 4/30/09	Wed 5/20/09
27	PS230	100% PS&E Submittal	0 edays	Wed 5/20/09	Wed 5/20/09
28	PS240	100% PS&E Wilco Review	7 edays	Wed 5/20/09	Wed 5/27/09
29	PS250	Final Design Package Submittal	20 edays	Wed 5/27/09	Tue 6/16/09
30	RW00	RIGHT-OF-WAY ACQUISITION	105 days	Wed 6/17/09	Tue 11/10/09
31	RW100	Easement Acquisition	105 days	Wed 6/17/09	Tue 11/10/09
32	UT00	UTILITY ENGINEERING	307 days	Tue 7/22/08	Mon 9/14/09
33	UT100	Initial Utility Coordination	100 edays	Tue 7/22/08	Thu 10/30/08
34	UT110	30% Design Coordination Meeting	7 edays	Thu 10/30/08	Thu 11/6/08
35	UT120	Utility Design Planning	35 edays	Thu 11/6/08	Thu 12/11/08
36	UT130	60% Design Coordination Meeting	14 edays	Mon 1/12/09	Mon 1/26/09
37	UT140	Utility Design Engineering	90 edays	Thu 12/11/08	Wed 3/11/09
38	UT150	90% Design Coordination Meeting	14 edays	Thu 4/16/09	Thu 4/30/09
39	UT160	Utility Relocation Operations	90 edays	Tue 6/16/09	Mon 9/14/09
40	LT00	ADVERTISEMENT, BIDDING & AWARD	90 days	Wed 6/17/09	Tue 10/20/09
41	LT100	Advertisement, Bidding & Award	90 days	Wed 6/17/09	Tue 10/20/09
42	CS00	CONSTRUCTION	550 days	Tue 11/10/09	Mon 12/19/11
43	CS100	Begin Construction	550 days	Tue 11/10/09	Mon 12/19/11



Project: BUS 79
Date: Mon 7/14/08

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

HALFF

Exhibit D

FEE SCHEDULE OF SERVICES PROVIDED BY ENGINEER

For

ENGINEERING PLANS, SPECIFICATIONS & ESTIMATES (PS&E)

BUSINESS 79 (2ND STREET) ROADWAY IMPROVEMENTS

IN WILLIAMSON COUNTY

EXHIBIT " D " - BUS 79 ROADWAY IMPROVEMENTS

Date: 7/7/2008

EXHIBIT D - FEE SCHEDULE

TASK/DESCRIPTION	SHEETS	PRINCIPAL	PROJECT MANAGER	SR PE	PE	E.I.T.	ENV SCIENTIST PM	ENV SCIENTIST SR	ENV SCIENTIST JR	CADD / GIS / VIS/TECH	SURVEY MANAGER RPLS	SURVEY TECH	SURVEY/ SUE CREW	CLERICAL / ADMIN	TOTAL MAN-HOURS	LABOR CHARGES	PRINTING, PLOTTING	DELIV, TRAVEL & MISC	SUB CONSULTANTS	TOTAL COST PER TASK (INCL MULT'S)
I PROJECT MANAGEMENT																				
1 MONTHLY PROGRESS REPORT, INVOICES AND BILLINGS																				
1a SUBMIT MONTHLY INVOICES AND BILLING STATUS		4	12	24										36	76	$8,464				$8,464
1b MONTHLY PROGRESS STATUS REPORTS		4	6	24										4	38	$5,432				$5,432
1c OVERALL PROJECT STATUS CHART			6	24											30	$4,320				$4,320
1d REVIEW, APPROVE AND SUBMIT SUB-CONSULTANT INVOICES		2	6	6										4	18	$2,568				$2,568
2 PROJECT COORDINATION/ADMINISTRATION																				
2a COORDINATION		10	20	10										12	52	$7,852		$900		$8,752
2b ADMINISTRATION		20	32	20										12	84	$13,532	$500			$14,032
2c MONTHLY PROGRESS MEETINGS			20	20										1	41	$6,361				$6,361
2d PROJECT QA/QC		16	40	40										1	97	$16,133				$16,133
2e DATA TRANSFERS			2	4	4	8								1	19	$2,157				$2,157
2f SUBCONSULTANT MANAGEMENT		4	4	8											16	$2,668				$2,668
SUBTOTAL HOURS/COSTS		60	148	180	4	8								71	471	$69,487	$500	$900		$70,887
II. SOCIAL & ENVIRONMENTAL STUDIES and PUBLIC INVOLVEMENT																				
1 PROJECT MEETINGS (TWC MEETINGS)			4				10	10							24	$3,470				$3,470
2 COMPLETE ENV COMPLIANCE QUESTIONNAIRE			2	2			4	2						1	11	$1,615				$1,615
3 COORDINATION WITH THC			4	6			8	16	8					2	44	$5,052				$5,052
4 JURISDICTIONAL WATERS OF THE U.S. DETERMINATION AND REPORT			2			2	8	8	16	8				4	48	$4,508	$500			$5,008
SUBTOTAL HOURS/COSTS			12	8		2	30	36	24	8				7	127	$14,645	$500			$15,145
III UTILITY ENGINEERING																				
1a QUALITY LEVEL A:30 LOCATES (TEST HOLES)			2		8					40			128		178	$20,569		$12,000		$32,569
1b UTILITY ENGINEERING																				
1b1 UTILITY LAYOUT			4	24	32	32									92	$10,712				$10,712
1b2 MEETINGS WITH INDIVIDUAL UTILITIES (2 MTGS PER UTILITY x 7 UTILS = 14 MTGS)			28		56										84	$11,928				$11,928
1b3 MONTHLY PROGRESS MEETINGS WITH WILCO (4)			4	16											20	$2,880				$2,880
1b4 PROPOSED UTILITY LAYOUT			4		20	20				40					84	$7,620				$7,620
1b5 REVIEW PS&E		2	4	30	40	40									116	$13,644				$13,644
SUBTOTAL HOURS/COSTS		2	46	70	156	92				80			128		574	$67,353		$12,000		$79,353
IV. WATER AND WASTEWATER UTILITY RELOCATION DESIGN																				
1 30% WATER & WASTEWATER RELOCATION DESIGN		4	8	40	120	120				80				8	380	$38,876	$500	$500		$39,876
2 60% WATER & WASTEWATER RELOCATION DESIGN		6	16	80	240	280				120				8	750	$77,670	$500	$500		$78,670
3 90% WATER & WASTEWATER RELOCATION DESIGN		4	12	40	120	120				80				6	384	$39,596	$500	$500		$40,596
4 100% WATER & WASTEWATER RELOCATION DESIGN		6	20	40	40	24				24				8	162	$19,430	$500	$500		$20,430
SUBTOTAL HOURS/COSTS		20	56	200	520	544				304				32	1676	$175,572	$2,000	$2,000		$179,572
V. RIGHT-OF-WAY DATA																				
1 DETERMINE DRIVEWAY PENETRATION EASEMENTS			2	5	10	20				20					57	$5,365				$5,365
2 DEVELOP DRIVEWAY EASEMENT EXHIBITS	30		5	10		40				40					95	$8,450				$8,450
3 PREPARATION OF LEGAL DESCRIPTIONS & EXHIBITS FOR TWO (2) EASEMENTS										8	2	4	8	1	23	$2,169	$50	$300		$2,519

EXHIBIT " D " - BUS 79 ROADWAY IMPROVEMENTS

Date: 7/7/2008

EXHIBIT D - FEE SCHEDULE

TASK/DESCRIPTION	SHEETS	PRINCIPAL	PROJECT MANAGER	SR PE	PE	E I T	ENV SCIENTIST PM	ENV SCIENTIST SR	ENV SCIENTIST JR	CADD / GIS / WP/TECH	SURVEY MANAGER RPLS	SURVEY TECH	SURVEY/ SUE CREW	CLERICAL / ADMIN	TOTAL MAN-HOURS	LABOR CHARGES	PRINTING, PLOTTING	DELIV, TRAVEL & MISC	SUB CONSULTANTS	TOTAL COST FOR TASK (INCL MULT'S)
SUBTOTAL HOURS/COSTS			7	15	10	60				68	2	4	8	1	175	$15,984	$50	$300		$16,334
VI. FIELD SURVEYING AND PHOTOGRAMMETRY																				
1 ADDITIONAL TOPOGRAPHIC SURVEY			2	2	4						4	2	16		30	$3,843				$3,843
2 DEVELOP SURVEY DATA INTO MICROSTATION FILES					4						2	8			14	$1,311				$1,311
SUBTOTAL HOURS/COSTS			2	2	8						6	10	16		44	$5,154				$5,154
VII. ROADWAY DESIGN																				
1 PRELIMINARY ENGINEERING																				
1a DEVELOP DSR DOCUMENT AND ATTEND DSR CONFERENCE		4	6	12											22	$3,568				$3,568
1b REVISE SCHEMATIC FOR FOUR LANE SECTION	1	2	8	4	16	24				16					70	$7,566				$7,566
2 MISCELLANEOUS PLANS																				
2a TITLE SHEET	1		2	2	2	24				16					46	$4,060				$4,060
2c DETAILED INDEX OF SHEETS	1		2	2	4	16				24					48	$4,138				$4,138
2c PROJECT LAYOUT @ 1"=200 FEET	3		4	6	12	32				16					70	$6,894				$6,894
3 ROADWAY PLANS AND GEOMETRY																				
3a EXISTING TYPICAL SECTIONS	1		4	4	4	12				8					32	$3,344				$3,344
3a PROPOSED TYPICAL SECTIONS	2		8	12	8	16				16					60	$6,524				$6,524
3b ROADWAY PLAN AND PROFILE SHEETS 1"=100 HORIZONTAL	6		16	56	80	160				40					352	$37,040				$37,040
3c SURVEY CONTROL PLAN SHEETS	3		4	16	20	40				20					100	$10,200				$10,200
3d HORIZONTAL ALIGNMENT DATA SHEETS	2		4	8	8	16				8					44	$4,728				$4,728
3e SUPERELEVATION DATA SHEETS	1		2		4	4				4					14	$1,472				$1,472
3f REMOVAL PLANS	6		4	6	24	40				40					114	$10,682				$10,682
4 GRADING AND DETAILS																				
4a DESIGN CROSS SECTIONS	50		4	10	60	120				20					214	$21,350				$21,350
4b INTERSECTION LAYOUTS	20		4	40	60	120				40					264	$26,740				$26,740
4c DRIVEWAY DETAIL SHEETS	3		4	8	12	20				20					64	$6,376				$6,376
4d DRIVEWAY PROFILE SHEETS	40		4	8	40	80				40					172	$16,440				$16,440
4e MISCELLANEOUS ROADWAY DETAIL SHEETS	2		4	10	20	32				24					90	$8,954				$8,954
5 UPDATED PAVEMENT DESIGN																				
5a FIELD SAMPLES AND PAVEMENT DESIGN UPDATE																			$7,540	$7,540
5b PAVEMENT DESIGN COORDINATION		2	8	4											14	$2,414				$2,414
SUBTOTAL HOURS/COSTS	149	8	92	208	374	756				352					1790	$182,490			$7,540 $7,540	$190,030
VIII. DRAINAGE DESIGN																				
1 CULVERT AND CHANNEL DESIGN																				
1a CULVERT HYDRAULIC DATA SHEETS	2	2	4	10	13	30				12					71	$7,547				$7,547
1b EXTERIOR DRAINAGE AREA MAPS	6		4	4	12	60				16					96	$9,088				$9,088
1c CULVERT LAYOUTS	2		4	12	20	40				10					86	$8,990				$8,990
1d CHANNEL IMPROVEMENT AND GRADING SHEETS	6		4	8	16	32				20					80	$7,924				$7,924
2 STORM DRAIN DESIGN																				
2a INTERIOR DRAINAGE AREA MAPS	15		4	45	60	180				40					329	$32,695				$32,695
2b RUNOFF AND INLET CALCULATIONS		2	10	20	40	200									272	$27,454				$27,454
2c STORM DRAIN CALCULATIONS			10	20	40	200									270	$27,020				$27,020

EXHIBIT " D " - BUS 79 ROADWAY IMPROVEMENTS

Date: 7/7/2008

EXHIBIT D - FEE SCHEDULE

TASK/DESCRIPTION	SHEETS	PRINCIPAL	PROJECT MANAGER	SR PE	PE	EIT	ENV SCIENTIST PM	ENV SCIENTIST SR	ENV SCIENTIST JR	CADD / GIS / WS/TECH	SURVEY MANAGER RPLS	SURVEY TECH	SURVEY SUP CREW	CLERICAL / ADMIN	TOTAL MAN HOURS	LABOR CHARGES	PRINTING, PLOTTING	DELIV, TRAVEL & MISC	SUB CONSULTANTS	TOTAL COST FOR TASK (INCL MULT'S)
2d STORM DRAIN HYDRAULIC DATA SHEETS	20		4	20	30	40									94	$10,630				$10,630
2e DRAINAGE PLAN AND PROFILE SHEETS	20		12	72	240	400				80					804	$81,960				$81,960
2f DRAINAGE LATERAL PROFILE SHEETS	18		0	64	208	400				40					712	$72,560				$72,560
2g TEMPORARY DRAINAGE DESIGN FOR PHASED CONSTRUCTION			8	30	60										98	$12,870				$12,870
2h TRENCH PROTECTION AND TEMPORARY SHORING DETERMINATION			4	10	16	40									70	$7,558				$7,558
2i DRAINAGE DESIGN DETAILS & CUSTOM INLET & JUNCTION BOXES	5		4	14	20	50									88	$9,470				$9,470
3 SW3P AND EROSION CONTROL PLANS																				
3a EROSION CONTROL PLANS (BASED ON A TWO PHASE CONSTRUCTION)	18		16	32	40	80				80					228	$22,760				$22,760
3b SW3P PLAN SHEETS	3		2	8	10	16				8					44	$4,614				$4,614
3c EROSION CONTROL DETAILS	2		2	8	10	16				8					44	$4,614				$4,614
SUBTOTAL HOURS/COSTS	113	4	100	377	827	1764				314					3386	$347,754				$347,754
IX. SIGNING, PAVEMENT MARKINGS, SIGNALIZATION																				
1 PAVEMENT MARKING PLAN SHEETS	8		4	20	24	80				40					168	$16,092				$16,092
2 SMALL SIGNS																				
2a SMALL SIGN LAYOUTS	8		4	20	20	40				20					104	$10,740				$10,740
2b SMALL SIGN DETAILS	2		4	4	6	20				10					44	$4,428				$4,428
3 SIGNALIZATION																				
3a PERFORM SIGNAL WARRANTS AT INTERSECTIONS OF SLOAN AND HOWARD STREETS	1																		$6,000	$6,000
3b PERFORM TRAFFIC COUNTS AT INTERSECTIONS OF SLOAN AND HOWARD STREETS																			$4,000	
3c SIGNAL DESIGN AT DOAK STREET																			$13,750	
3d MEETINGS	2																		$3,200	$3,200
SUBTOTAL HOURS/COSTS	21		12	44	50	140				70					316	$31,260			$26,950	$40,460
X. MISCELLANEOUS ROADWAY																				
1 TRAFFIC CONTROL PLAN																				
1a TRAFFIC CONTROL TYPICAL SECTIONS	8		8	24	32	60				32					156	$16,040				$16,040
1b NARRATIVE OVERVIEW OF EACH PHASE OF CONSTRUCTION	1		2	4	8	4									18	$2,236				$2,236
1c ADVANCED WARNING SIGN LAYOUT	4		2	4	4	20				32					62	$6,296				$6,296
1d TRAFFIC CONTROL PLANS (ASSUME TWO PHASE CONSTRUCTION)	16		8	32	64	80				120					304	$28,712				$28,712
1e CONCEPTUAL DETOUR ROUTING LAYOUT FOR SIDE STREET CLOSURES	2		4	8	16	28									56	$6,232				$6,232
2 QUANTITIES, SUMMARY TABLES, CONSTRUCTION COST ESTIMATE																				
2a QUANTITY ESTIMATES (30%, 60%, 90%, & FINAL SUBMITTALS)			8	32	60	120									220	$23,700				$23,700
2b CONSTRUCTION COST ESTIMATES (30%, 60%, 90%, & FINAL SUBMITTALS)			4	4	12	24									44	$4,040				$4,040
2c SUMMARY QUANTITY TABLES	5		6		20	40				40					106	$9,740				$9,740
2d GENERAL NOTES	5		2	16	12	20				10					60	$6,426				$6,426
3 SELECT AND PREPARE STANDARD DETAIL SHEETS (ESTIMATED 30 SHEETS)	30		2	8	4	20				20					54	$5,032				$5,032
4 DEVELOP CONSTRUCTION TIMELINE (90% AND FINAL SUBMITTAL)			4	32	2	8									46	$5,990				$5,990
5 MISCELLANEOUS STRUCTURAL DETAILS (UP TO FOUR)	2		2	8	60	40				20					130	$13,680				$13,680
6 BID PHASE SERVICES																				
6a DEVELOP APPLICABLE SPECIAL PROVISIONS			2	8	24										34	$4,392				$4,392
6b PREPARE PROJECT MANUAL			4	16	24	24								24	92	$9,408				$9,408
6c PROVIDE PLANS AND PDMs TO BIDDERS														8	8	$488	$2,000			$2,488
6d COORDINATE WITH APPROVAL AGENCIES		4	4	8		8									24	$3,372				$3,372
6e PREPARE FOR AND ATTEND PRE BID MEETING			6	8											14	$2,160				$2,160
6f RESPOND TO CONTRACTOR QUESTIONS AND ISSUE ADDENDUMS			6		24	16									46	$5,440				$5,440
6g PREPARE BID TABULATION AND RECOMMEND AWARD			2	4	8										14	$1,884				$1,884

EXHIBIT " D " - BUS 79 ROADWAY IMPROVEMENTS

Date 7/7/2008

EXHIBIT D - FEE SCHEDULE

TASK/DESCRIPTION	SHEETS	PRINCIPAL	PROJECT MANAGER	SR PE	PE	E.I.T.	ENV SCIENTIST PM	ENV SCIENTIST SR	ENV SCIENTIST JR	CADD / GIS / VIS/TECH	SURVEY MANAGER RPLS	SURVEY TECH	SURVEY/ SUE CREW	CLERICAL / ADMIN	TOTAL MAN-HOURS	LABOR CHARGES	PRINTING, PLOTTING	DELIV, TRAVEL & MISC	SUB CONSULTANTS	TOTAL COST FOR TASK (INCL MULTS)
0A PROVIDE PCM (4) FOR EXECUTION			0	2										4	12	$1,594	$200			$1,794
0I PROVIDE PCM & PLANS AND ATTEND PRE-CONSTRUCTION MEETING			4		4									9	17	$1,761	$900			$2,661
SUBTOTAL HOURS/COSTS	91	4	86	218	370	512				274				45	1517	$158,431	$3,100			$161,531
FEE SUMMARY																				
I PROJECT MANAGEMENT		60	148	160	4	8								71	471	$69,487	500	900		$70,887
II SOCIAL & ENVIRONMENTAL STUDIES			12	8		2	30	36	24	8				7	127	$14,645	500			$15,145
III UTILITY SERVICES		2	46	70	156	92				60			128		574	$67,353		$12,000		$79,353
IV WATER AND WASTEWATER RELOCATION DESIGN		20	56	200	520	544				304				32	1676	$175,572	$2,000	$2,000		$179,572
V RIGHT-OF-WAY DATA			7	15	10	60				68	2	4	8	1	175	$15,984	$50	$300		$16,334
VI FIELD SURVEYING AND PHOTOGRAMMETRY			2	2	8						6	10	16		44	$5,154				$5,154
VII ROADWAY DESIGN CONTROLS	149	8	92	206	374	756				352					1790	$182,490			$7,540	$190,030
VIII DRAINAGE DESIGN	113	4	100	377	827	1764				314					3386	$347,754				$347,754
IX SIGNING, PAVEMENT MARKINGS, SIGNALIZATION	21		12	44	50	140				70					316	$31,260			$26,950	$58,210
X MISCELLANEOUS ROADWAY	91	4	86	218	378	512				274				45	1517	$158,431	3100			$161,531
TOTAL HOURS	374	90	561	1322	2327	3870	30	36	24	1470	8	14	152	156	10070	$1,068,130	$6,150	$15,200	$34,490	$1,123,970
CONTRACT RATES ($)		$217.00	$180.00	$135.00	$123.00	$88.00	$187.00	$98.00	$62.00	$67.00	$120.00	$70.40	$129.20	$61.00						
BASE SALARIES & REMO'S TOTAL		$21,266	$100,960	$178,470	$286,221	$341,264	$5,610	$3,168	$1,488	$98,490	$1,024	$986	$19,648	$9,516		$1,068,130	$6,150	$15,200	$34,490	$1,123,970
TOTAL BY CATEGORY		2%	9%	17%	27%	32%	1%	0%	0%	9%	0%	0%	2%	1%	100%	$1,068,130	$6,150	$15,200	$34,490	$1,123,970
TOTAL FEE																$1,068,130	$6,150	$15,200	$34,490	$1,123,970