#### ATTACHMENT C

#### WORK AUTHORIZATION NO.1 AGREEMENT FOR PROFESSIONAL SERVICES

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section XIV of Professional Services Agreement entered into by and between Fort Bend County, and Kimley Horn & Associates, Inc. (the Contractor), on the 23<sup>rd</sup> day of March, 2010.

PART I. The Contractor will perform professional services generally described as Transportation Planning in accordance with the project description attached hereto and made a part of this Work Authorization. The Constructor's Scope of Work, Labor Estimate, and Schedule are further detailed in Exhibits A and C, respectively, which are attached hereto and made a part of the Work Authorization.

PART II. The maximum amount payable under this Work Authorization is \$240,000. This amount is based upon fees set forth in Attachment A.

PART III. Payment to the Contractor for the services established under this Work Authorization shall be made in accordance with Section II of the Agreement.

PART IV. This work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate on March 31, 2011, unless extended by a supplemental Work Authorization as provided in the Agreement.

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

IN WITNESS WHEREOF, this Work Authorization is executed in duplicate counterparts and hereby accepted and acknowledged below.

THE CONTRACTOR	FORT BEND COUNTY, TEXAS
FOCO	Clalley Beleen
(Signature)	(Signature)
BRANDON GUILLORY	Robert Hebert
(Printed Name)	(Printed Name)
ASSOCIATE	County Judge
(Title)	(Title)
04/00/2010	April 13, 2010
(Date)	(Date)

#### LIST OF EXHIBITS

Exhibit A

Scope of Work

Cost/Payment Agreement Exhibit B

Schedule/Milestones Exhibit C

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### Fort Bend County Transportation Planning Services Kimley-Horn Team Exhibit A

#### Work Authorization No. 1 Scope of Services

#### Task 1 Development of Short and Long Range Transportation Improvement Plans

Invoicing: 33.3% Completion -- \$55,000

66.6% Completion -- \$55,000

100.0% Completion -- \$55,000

#### 1.1 Baseline Short Range CIP Document

Conduct a four hour workshop with FBC Transportation Dept. staff and key specialists from the KHA Consultant Team for project team orientation and to exchange requests for information/documentation. The workshop should include as a minimum Paulette Shelton and her designated staff; Sam Lott, Joe Willhite, Lee Anne Dixon; Lucy Ayers of Zarinkelk Engineering; Zina Schwartz of AIA, Nancy Edmonson of Edmonson Transportation Consulting, and a designated person from Klotz Associates.

A specific focus of the workshop will be to assemble a list of projects that will serve as a Baseline Short Range CIP list for immediate use and ongoing reference as the full Long Range and Short Range Transportation Improvement Programs are developed over time. A technical memorandum will be prepared documenting the considerations and the conclusions of the workshop, including an appropriately formatted Baseline Short Range CIP document.

Deliverable: Technical Memorandum: Baseline Short Range CIP Development

#### 1.2 FBC Transit System Inventory

An inventory will be prepared of FBC Transit System equipment, facilities and services, as well as the additional information listed below:

- Operational statistics log and information on forecasts of vehicle mid-life overhauls and end-of-life replacement
- Review and recommendation of current bus service configuration/bus stops and a conversion program from present service
- Inventory of most frequent demand-responsive service trip origins/destinations
- Inventory of contracted services
- Inventory of technology applications, including:
  - o Automated vehicle location (AVL) system
  - o ITS / communication systems
  - o Dispatching/computer systems

The work will also provide an initial assessment of the benefits of more aggressive ITS/AVL technology applications to enhance the current bus services within the existing FBC service limits. All findings will be documented in a technical memorandum. In addition, it will facilitate the preparation of several other documents that describe the specific plan for vehicle replacement and for the implementation of ITS tools/systems.

Deliverables: Technical Memorandum: FBC Transit System Inventory and Technology Overview

Technical Memorandum: Vehicle Replacement Plan

#### 1.3 Agency and Key Stakeholder Preliminary Visioning Exercise

The Consultant will conduct a series of ten meetings with FBC officials and staff, as well as other key stakeholders to listen to their own vision of transit service and service providers required to meet the future mobility needs of Fort Bend. The findings of the meetings will be summarized in a technical memorandum to be used as a directional overlay for development of the Short and Long range transportation plans.

Deliverable: Technical Memorandum: Agency/Key Stakeholder Preliminary Visioning Meeting

Notes

#### 1.4 Changes in Federal Funding Criteria and Impact to Fort Bend County

Prepare a white paper that summarizes information available on the evolving FTA Funding criteria. The white paper will provide an initial set of considerations and guidelines to help identify the most important aspects to consider as the full Long Range and Short Range Transportation Improvement Programs work programs are developed (ref. Task 1.5 below).

Deliverable: Technical Memorandum: Overview of Strategic FTA Funding Considerations

#### 1.5 Long-Range and Short-Range Transportation Improvement Plans

The consultant will develop a Long-Range Transportation Improvement Plan for Fort Bend County (FBC) that will include an Implementation Plan highlighting a phased schedule of implementation that will lead to recommendations of Short, Medium, and Long Range Projects. It is with this phased approach that the consultant will work with FBC staff and stakeholders to derive a series of projects that facilitates mobility, and maintains a long-term view so as to not prohibit future improvements. The proposed outline for this document is below.

- Identify Principal Transportation Corridors, Study Area and Travel Patterns
- Assess Current and Planned Transportation System Needs within Principal Transportation Corridors
- Develop Goals, Objectives and Evaluation Criteria
- Project Future Travel Demand and Transportation Corridor Capacity
- Identification and Preliminary Evaluation of Transit Technologies
- Assessment of High Level Transit Alternatives
- Refinement and Assessment of Initial Transit Alternatives
- Assessment of Transportation Refinements and Finalize Plan
- Phased Short/Medium/Long Range Implementation Plan

Refined Capital Improvement Plan

Financial Plan

• Monitoring Plan

Deliverable: DRAFT Report: Short Range Transportation Improvement Plan

Report: Long-Range Transportation Improvement Plan

#### Task 2 Intelligent Transportation Systems Support

Invoicing: 33.3% Completion -- \$20,000

66.6% Completion -- \$\$20,000

100.0% Completion -- \$\$20,000

#### 2.1 Preparation of an ITS Systems Master Plan

Review, revise and complete the ITS Systems Engineering Design Manual that has been partially assembled by FBC staff, based on the FTA ITS information provided by FBC. Working with FBC Transportation Department staff and other County staff, as required, revise and complete the Manual and the associated draft RFP to a level suitable for the initiation of procurement process of the ITS communications equipment selected and the associated installation in FBC transit vehicles. The Systems Engineering Design Manual addresses Mobile Data Terminals (MDT), Automatic Vehicle Location (AVL), voice and data communications equipment, fare collection equipment and media for transit passenger fare management, and Interactive Voice Response (IVR) equipment to assist in the management of demand responsive and commuter transit service.

In addition to the current draft document describing the process whereby the recommended technology recommendations have been developed, this task work will include the addition to the Manual of a systems level functional diagram with suitable definition of the various subsystem equipment, and a description of how each subsystem will interface with the main office dispatching and scheduling system. The task work will also address the performance requirements of the individual subsystems as well as the performance goals of the complete operating system. The task work will evaluate and quantify the human resources that will be required to install and operate the system equipment for the current FBC operations, once implemented, and the forecasted operations in 2015.

In addition to the Manual document, the work will include the completion of the draft Request for Proposal (RFP) document where by the FBC staff recommended equipment will be procured. The task work will revise and refine the RFP document, based on the experience of the Consultant with the purchase of similar equipment from ITS equipment venders. Where and when needed, staff will participate in pre-bid conference(s), assist with responding to vendor questions, and providing expertise and assistance with requests for approved equals up to a total effort of 260 man-hours under this entire Sub-Task 1.4.

Deliverables: Report: ITS Systems Engineering Master Plan

Updated Draft RFP Document for ITS Equipment

#### 2.2 Support of the TranStar Video Communications Link Implementation Program

The Consultant will support the cooperative project work of Fort Bend County, City of Sugar Land, and TxDOT that will be implementing a communications linkage between the Sugar Land Traffic Management Center, the TranStar Traffic Management Center and Fort Bend County. The task work will provide for 80 man-hours of effort to assist with interagency coordination/communications, technical support, and in particular the review and advisement of FBC concerning the program's appropriate compliance with associated federal funding requirements.

#### Task 3 Development of Texas Medical Center Service Operating Plan

Invoicing: 33.3% Completion -- \$5,000

66.6% Completion -- \$5,000

100.0% Completion -- \$5,000

The Consultant will work with FBC staff, Texas Medical Center staff, and H-GAC staff to develop and prepare a complete program for commuter bus service to Texas Medical Center from Fort Bend County, including routes and schedules. The complete operations plan will be summarized in a technical memorandum that will document the following work elements:

- Provide assistance to FBC staff with confirming the allowable drive times for the bus routes.
- Produce graphical illustrations of the bus stop locations at both the Texas Medical Center and the Fort Bend County ends of the routes.
- Assist FBC staff in the design of the marketing pieces and the marketing distribution plan for the new routes and schedules.

The Consultant will also assist FBC with the preparation of a presentation on the new Fort Bend County services to Texas Medical Center and will assist FBC staff in making contact and presenting the program to Texas Medical Center stakeholder institutions.

Deliverable: Technical Memorandum: Texas Medical Center Service Operating Plan

Presentation Materials: Fort Bend County to Texas Medical Center Commuter Bus

Service

# Fort Bend County Transportation Planning Services Kimley-Horn Team Exhibit B

## Work Authorization No. 1 Cost/Payment Agreement

\$15,000 \$240,000 Fees will be invoiced by Task (i.e., Task 1, Task 2, Task 3) upon completion of 33.3%, 66.6% and 100.0% of each The Kimley-Horn Team will perform the Scope of Services identified within Work Authorization #1 for a lump sum \$165,000 \$60,000 Dollars 1670 114 28 9/ 84 108 270 105 855 Hours 2.2 Support of the TranStar Video Communications Link Implementation Program Task 3 Development of Texas Medical Center Service Operations Plan 3.1 Preparation of a Texas Medical Center Service Operations Plan 1.5 Long and Short Range Transportation Improvement Plans 1.3 Agency and Stakeholder Preliminary Visioning Exercise Task 1 Initializing Long Range Planning Work Program 1.4 Overview of Strategic FTA Funding Considerations Task 2 Intelligent Transportation Systems Support 2.1 Preparation of an ITS Systems Master Plan 1.1 Baseline Short Range CIP Document 1.2 FBC Transit System Inventory Work Authorization #1 fee of \$240,000. **Totals** Task.

#### Exhibit B2 (cont.): Estimate of Hours by Firm

Kimley-Horn Principal Sam Lott Sr. Planner II Lee Anne Dixon Joe Willhite Planner I Analyst / Technician Administrative Staff	Est. Hours  20 195 75 165 223 200 154 94
Klotz Principal Rick Liesse Kevin Tyer Analyst Administrative Staff	Est. Hours  0 58 80 0 0
NR Edmonson Transportation Consulting Nancy Edmonson	Est. Hours 86
AIA Engineers Principal Zina Schwartz Laura Fuller Saritha Padhirae Craig Cook CADD Tech Administrative Staff	Est. Hours  0 20 20 40 0 0 0
Gateway Planning Group Principal Scott Polikov Sr. Planner Planner Administrative Staff	Est. Hours  0 30 20 0 0
Zarinkelk Engineering Services Giti Zarinkelk Lucie Ayer Sobhan Alitavoli Roshan Moayed Tajinzar Rayazi	20 70 100 0

**Estimate of Total Hours** 

1670

#### **Exhibit C**

#### Fort Bend County Transportation Planning Services Kimley-Horn Team Draft Work Authorization No. 1

#### Schedule/Milestones

#### Task 1 Development of Short and Long Range Transportation Improvement Plans

Scope Reference - Milestone	Completion Date
1.1 - Technical Memorandum: Baseline Short Range CIP	May 15, 2010
Development	
1.2 - Technical Memorandum: FBC Transit System Inventory and	April 30, 2010
Technology Overview	
1.2 - Technical Memorandum: Vehicle Replacement Plan	April 30, 2010
1.3 - Technical Memorandum: Agency/Key Stakeholder Preliminary	June 30, 2010
Visioning Meeting Notes	
1.4 - Technical Memorandum: Overview of Strategic FTA Funding	June 15, 2010
Considerations	
1.5 - DRAFT Report - Short Range Transportation Improvement	September 30, 2010
Plan	
1.5 - Report - Long Range Transportation Improvement Plan	January 15, 2011

#### Task 2 Intelligent Transportation Systems Support

Scope Reference - Milestone	Completion Date
2.1 - Technical Memorandum: ITS System	s Master Plan (50% April 30, 2010
Completion Draft)	
2.1 - Technical Memorandum: ITS System	s Master Plan May 31, 2010
2.1 - Updated Draft RFP - ITS Equipment	May 15, 2010

#### Task 3 Development of Texas Medical Center Service Operating Plan

Scope Reference – Milestone	Completion Date
Technical Memorandum: Texas Medical Center Se	ervice Operating April 20, 2010
Presentation Materials: Fort Bend County to Texas Commuter Bus Service	s Medical Center August 30, 2010