

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 08-31

WHEREAS, the Central Texas Regional Mobility Authority ("CTRMA") was created pursuant to the request of Travis and Williamson Counties and in accordance with provisions of the Transportation Code and the petition and approval process established in 43 Tex. Admin. Code § 26.01, *et. seq.* (the "RMA Rules"); and

WHEREAS, the Board of Directors of the CTRMA has been constituted in accordance with the Transportation Code and the RMA Rules; and

WHEREAS, the CTRMA is charged with funding and developing transportation improvements throughout the region to help solve the current mobility crisis and improve the quality of life for residents of Central Texas; and

WHEREAS, the general engineering consultant retained by the CTRMA (the "GEC") previously developed a scope of work and a proposed budget to conduct traffic simulations and other feasibility work related to various CTMRA projects and potential projects; and

WHEREAS, the Board of Directors in Resolution 06-35, dated June 28, 2006, approved Work Authorization No. 6.0 and found that the scope of work included therein was necessary and appropriate to further assess the feasibility of certain projects and potential projects and has further determined from time to time by appropriate Resolution that various Supplements to Work Authorization No. 6.0 be adopted to fulfill the scope of work; and

WHEREAS, the CTRMA has determined that development of a graphic animation of the ultimate configuration and operation of the 290 East Toll Project (the "Project") would be useful and beneficial to present during various public meetings regarding the Project and that the GEC should develop such an animation under the scope of Work Authorization No. 6.0; and


WHEREAS, the CTRMA staff and the GEC have represented to the Board of Directors that Supplement No. 3 to Work Authorization No. 6.0 in substantially the form attached hereto as Attachment "A" is necessary and appropriate to provide for the development of the graphic animation of the Project to support the CTRMA's efforts to better inform the public.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors of the CTRMA approves Supplement 3 to Work Authorization No. 6.0 in substantially the form attached hereto as Attachment "A"; and

BE IT FURTHER RESOLVED, that all work performed under Supplement 3 to Work Authorization No. 6.0 shall be subject to the Agreement for General Consulting Civil Engineering Services between the CTRMA and the GEC.

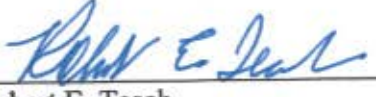
Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 25th day of June, 2008.

Submitted and reviewed by:



Tom Nielson
General Counsel for the Central
Texas Regional Mobility Authority

Approved:



Robert E. Tesch
Chairman, Board of Directors
Resolution Number 08-31
Date Passed 6/25/08

Attachement "A"
To
Resolution No. 08-31
Supplement 3 to Work Authorization No. 6.0

EXHIBIT B

WORK AUTHORIZATION

Work Authorization No. 6.0

Supplement No. 3

This Supplement No. 3 to Work Authorization No. 6.0 is made as of this 18th day of April, 2008, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of September 1st, 2003 (the Agreement), between the Central Texas Regional Mobility Authority (Authority) and HNTB Corporation (GEC). This Supplement No. 3 to Work Authorization 6.0 is made for the following purpose, consistent with the services defined in the Agreement:

290E 3D Animation

The following terms and conditions of Work Authorization No. 6.0 are hereby amended, as follows:

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Refer to Attachment A – Scope of Work

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

Refer to Attachment A – Scope of Work

A.3. In conjunction with the performance of the foregoing Services, GEC shall provide the following submittals/deliverables (Documents) to the Authority:

Refer to Attachment A – Scope of Work

Section B. - Schedule

GEC shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services defined herein are expected to be substantially complete within **two (2) months** from the date this Supplement No. 3 to Work Authorization 6.0 becomes effective. This Supplement to Work Authorization 6.0 will not expire until all tasks associated with the Scope of Services are complete.

Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the GEC the amount not to exceed **\$43,511.00**. This will increase the not to exceed compensation amount for Work Authorization No. 6.0 from **\$4,712,984.00** to **\$4,756,495.00**. Compensation shall be in accordance with the Agreement.

The Authority and the GEC agree that the budget amounts for the various companies and firms composing the GEC are estimates and that these individual figures may be redistributed and/or adjusted as necessary over the duration of this Work Authorization. The GEC may alter the compensation distribution between tasks or work assignments to be consistent with the Services actually rendered within the total Work Authorization amount. The GEC shall not exceed the maximum amount payable without prior written permission by the Authority.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the GEC according to the terms of future Work Authorizations.

Section D. - Authority's Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the GEC. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

N/A

Section E. - Other Provisions

The parties agree to the following provisions with respect to this specific Work Authorization:

N/A

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Authority: Central Texas Regional Mobility
Authority

GEC: HNTB Corporation

By: _____

By: Richard L. Ridings, P.E.

Signature: _____

Signature: _____

Title: _____

Title: Vice President

Date: _____

Date: _____

CENTRAL TEXAS RMA
ATTACHMENT A – SCOPE OF WORK
WORK AUTHORIZATION NO. 6.0
SUPPLEMENT NO. 3

**SERVICES TO BE PROVIDED BY THE GENERAL ENGINEERING CONSULTANT
(GEC)**

Section A. - Scope of Services:

The services described hereunder are for GEC to produce a 3D simulation depicting a portion of the proposed US-290 East corridor. The corridor will start at the US-290 East/ US-183 interchange and terminate at the intersection of US-290 East and East Parmer Lane. In addition to the US-290 East corridor, the US-290 East/ US-183 interchange and the US-290 East/ 130 Tollway interchange will be depicted up to a radius of one-half mile. Cameras used to depict the corridor will include an aerial camera at an approximate elevation of 1000 feet above ground level (AGL.) Major intersections and interchanges will be identified per Authority's request. Buildings adjacent to the corridor will be represented as grey masses. The extent of buildings to be created will be limited to 2000 feet in each direction from the center line of the main lanes, generating an approximate 4000 foot swath of buildings. Existing foliage will be depicted within this 4000 foot swath. Proposed foliage/ landscaping will not be depicted. Vehicles will be animated on the corridor with an average velocity of the posted speed limit (plus or minus up to five miles per hour.) Actual vehicle volumes or data associated with actual traffic simulations i.e. VISSIM will not be used for depicting traffic on the corridor. Traffic volumes will be created to convey an overall amount of vehicles per Authority's direction. The final animation will be rendered at resolution of 1280x720 pixels and will be encoded to HD WMV format, suitable for playback on a PC. The final animations will be provided on five CDs. An explanation of fee estimates for the project may be found on Exhibit B.

A.1. GEC will perform the following Services:

1. Project Management

- 1.1. Provide general administration of contract work, including internal staffing and task assignments
- 1.2. Attend Meetings
- 1.3. Coordinate the collection of project-related data
- 1.4. Manage files and project assets, etc.
- 1.5. Perform Technical QA/QC

2.Pre -Production

- 2.1. Aerial file management
- 2.2. Terrain tile generation
- 2.3. Create Existing Foliage
- 2.4. Create a US-290 East Corridor
- 2.5. Create 3D buildings
- 2.6. Develop Textures and Lighting
- 2.7. Create Secondary Animation (Cars)
- 2.8. Create Cameras

3.Post-Production

- 3.1. Perform Compositing and Editing of final animation (including highlights, titles, and captions)
- 3.2. Perform Final Video QA/QC
- 3.3. Encode to HD WMV format
- 3.4. Burn five CDs

4.CD Label and Cover Art

- 4.1. Design CD Labels and cover art

Section B. - Proposed Deliverables:

- B.1. Five CDs with content encoded as HD WMF format.

Section C. - Additional Services

- C.1. The following Additional Services can be provided to Authority via an addendum to this contract for an additional fee:

1. Additional Roadway modeling
2. Video Services
3. Website Development
4. Kiosk Solutions

Section D. – Schedule and Meetings

D.1. GEC agrees to perform the tasks described above and deliver the related deliverables via web streaming media and teleconference review meetings with an Authority-designated contact person according to the following schedule:

1. Kick-Off Meeting (may be performed via phone conference and web review)
 - 1.1 Designate Authority contact to attend and sign off on all reviews
 - 1.2 Determine additional data and statistics that may be required from Authority
 - 1.3 Determine street identification needed and corridor highlights if applicable
 - 1.4 Determine dates of subsequent review meetings
2. Review Meeting: 50%
 - 2.1 Review current 3D models
 - 2.2 Discuss any updated information
 - 2.3 Obtain final 3D model, comments and approval from Authority-designated contact
3. Final Delivery - Due 8 weeks from NTP and receipt of all Data

Attachment B - Fee Estimate

CTRMA
WORK AUTHORIZATION 6.0 Supplement 3

CTRMA GEC
UNTB Corporation - MANHOUR BREAKDOWN
April 18, 2008

290E 3D Animation

(Labor Rates)	MANHOURS										TOTAL HRS
	A	B1	B	C	D	E	F1	F			
\$	\$ 82.00	\$ 82.00	\$ 68.00	\$ 57.00	\$ 44.00	\$ 33.00	\$ 33.00	\$ 23.00			

Task Work Description

Task	Work Description	A	B1	B	C	D	E	F1	F	TOTAL HRS
1.0	290E 3D Animation									
1.1	Project Management									
1.1.1	General Administration, Project Coordination			4	8			4	5	21
1.1.2	Meetings			4	2					6
1.1.3	Data Collection					16				16
1.1.4	Management of files/ assets			2	2					4
1.1.5	QA/QC			1	4					5
1.2	Pre-Production									
1.2.1	Aerial File Management					5	4			9
1.2.2	Terrain Tile Generation					4	4			8
1.2.3	Existing Foliage						14			14
1.2.4	Creation of US-290 E Corridor					170				170
1.2.5	3D Building Creation						22			22
1.2.6	Texture / Lighting Development						8			8
1.2.7	Secondary Animation (Cars)					20		10		30
1.2.8	Camera Development									10
1.3	Pre-Production				15					15
1.3.1	Compositing and Editing				2					2
1.3.2	Final Video QA/QC				10					10
1.3.3	Encoding to HD WMV format				2					2
1.3.4	Burning of five CDs									2
1.4	Pre-Production							2		2
1.4.1	Design CD Labels and Cover Art									2
TOTAL GEC TEAM DIRECT LABOR					45	215	64	4	5	344

	0	0	0	0	11	0	45	215	64	4	5	344
	% Total by Classification											
	0.00%	0.00%	1.20%	15.00%	62.50%	18.60%	1.16%	1.43%				
Labor Costs	\$ -	\$ -	\$ 748	\$ 2,565	\$ 9,460	\$ 2,112	\$ 132	\$ 115	\$ 15,132			
Overhead Costs	155.50%	\$ -	\$ 1,164	\$ 3,991	\$ 14,719	\$ 3,286	\$ 205	\$ 179	\$ 23,544			
Profit	12%	\$ -	\$ 229	\$ 787	\$ 2,901	\$ 648	\$ 40	\$ 35	\$ 4,641			
Total Loaded Labor		\$ -	\$ 2,141	\$ 7,343	\$ 27,080	\$ 6,040	\$ 378	\$ 329	\$ 43,317			
Cost												
Direct Expenses		\$										
Printing		\$	30									
7.5 min quad Terrain		\$	14									
Misc expenses		\$	150									
Total Direct Expenses		\$	194									
Total Loaded Labor		\$	43,317									
Total Direct Expenses		\$	194									
Total		\$	43,511									



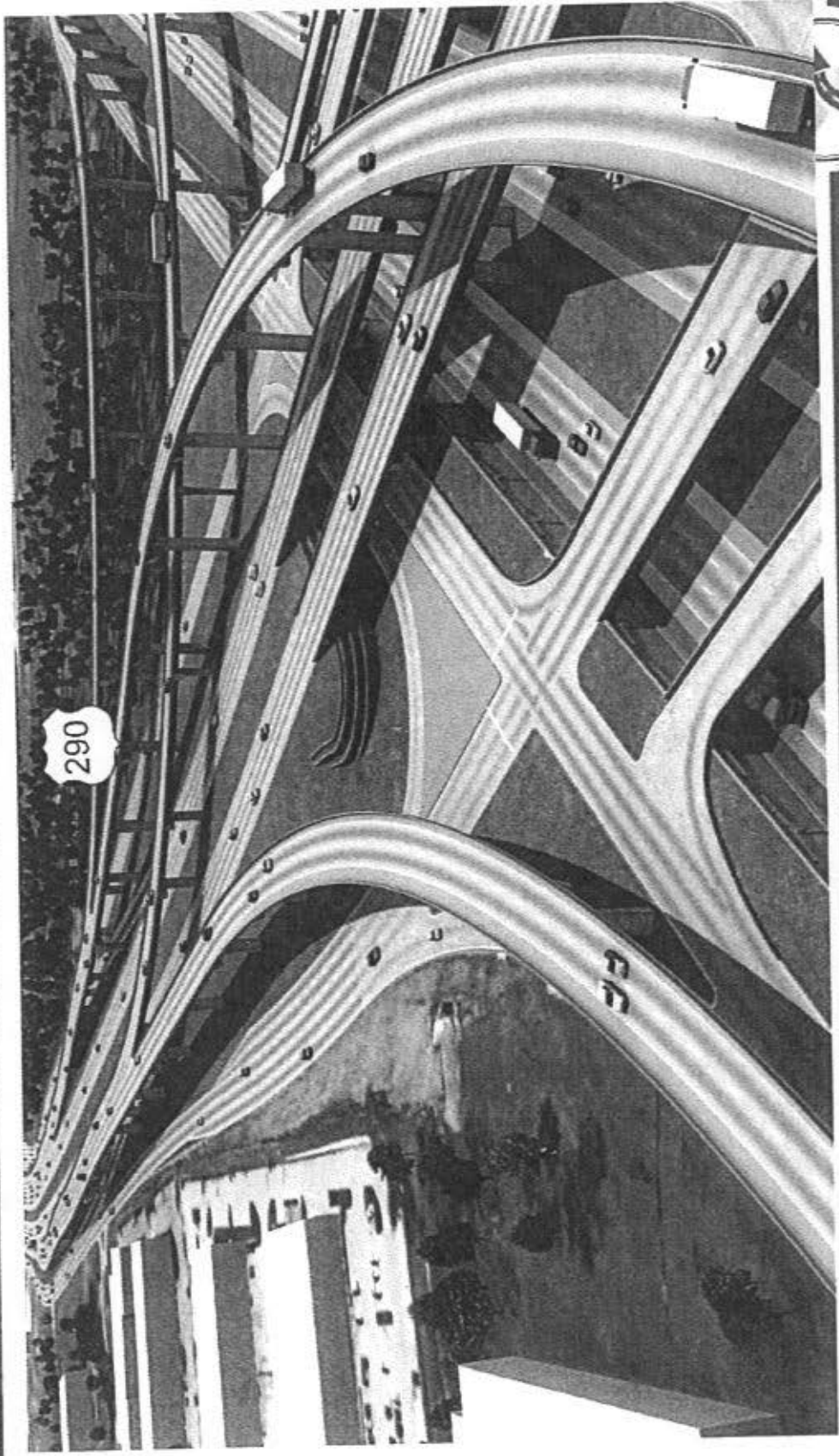
CENTRAL TEXAS
Regional Mobility Authority

Item IV B 1

Supplement No. 3 to GEC Work Authorization No. 6.0



US 290E Intersection with US 183



Eastbound US 290E Approaching Harris Branch Pkwy

