

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

RESOLUTION NO. 05-62

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, in a minute order approved on August 25, 2005, the Texas Transportation Commission authorized the CTRMA to pursue the development of the 290 East Turnpike Project; and

WHEREAS, the general engineering consultant retained by the CTRMA (the "GEC") has developed a scope of work and a proposed budget to conduct a preliminary feasibility analysis and perform procurement management services for the 290 East Turnpike Project; and

WHEREAS, a copy of that proposed scope of work and budget is contained in the work authorization attached hereto as Attachment "A" ("Work Authorization No. 5.1"); and

WHEREAS, the CTRMA Board of Directors must approve Work Authorization No. 5.1 before the GEC may proceed to work thereunder; and


WHEREAS, the GEC has represented to the Board of Directors that the work reflected in Work Authorization No. 5.1 is necessary and appropriate to pursue the development of the 290 East Turnpike Project.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors approves Work Authorization No. 5.1 in the form attached hereto as Attachment "A"; and

BE IT FURTHER RESOLVED, that all work performed under Work Authorization No. 5.1 shall be subject to the Agreement for General Consulting Civil Engineering Services between the CTRMA and the GEC and that no additional work may be undertaken without the specific approval of the Board of Directors.

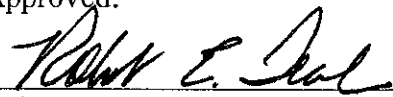
Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 31st day of August, 2005.

Submitted and reviewed by:



C. Brian Cassidy
General Counsel for the Central
Texas Regional Mobility Authority

Approved:



Robert E. Tesch
Chairman, Board of Directors
Resolution Number 05-62
Date Passed 08/31/05

CENTRAL TEXAS RMA

ATTACHMENT A – SCOPE OF WORK

WORK AUTHORIZATION NO. 5.1

SERVICES TO BE PROVIDED BY THE GENERAL ENGINEERING CONSULTANT (GEC)**Part A: Toll Feasibility Study for US 290 East**

This scope of services includes the provision of professional services and deliverables required to determine toll feasibility of the US 290 East reconstruction from US 183 to east of SH 130 (hereinafter referred to as the Project).

US 290 East is an existing 4-lane depressed median roadway with at-grade signalized intersections approximately every mile. The Texas Department of Transportation (TxDOT) has developed a schematic plan for a 6-lane depressed median freeway with 3-lane frontage roads in both directions. The draft Environmental Assessment (EA) for non-tolled option was completed in 1991. A revised EA for tolled mainlane alternatives is currently being developed by TxDOT and should be completed in the next few months. Three alternatives are currently being evaluated: 1) expansion requiring right-of-way acquisition on the north side of the corridor; 2) expansion requiring right-of-way acquisition on the south side of the corridor; 3) expansion requiring right-of-way acquisition on both the north and south sides of the corridor.

The work to be performed by the General Engineering Consultant (GEC) will include coordination with TxDOT and the Traffic and Revenue firm in the development of a toll feasibility study.

1.0 Data Collection/ TxDOT coordination

The GEC will acquire and review relevant Project data from TxDOT and other sources. This will include the following information:

- 1.1 Environmental Assessment (assuming a FONSI) which identifies and defines the preferred alternative.
- 1.2 Existing Survey data (to be provided by TxDOT and SAM INC).
- 1.3 Schematic Plans prepared for the alternatives included in the current EA, including electronic design files in MicroStation and Geopak format (to be provided by TxDOT).
- 1.4 Traffic volume projections (to be provided by TxDOT and CAMPO).
- 1.5 Intermediate (Level 2) toll feasibility analyses (to be provided by TxDOT).
- 1.6 Other data and documents relevant to the Project.

2.0 Preliminary Feasibility Study

The GEC will develop a Preliminary Feasibility Study. Specific tasks will include the following:

- 2.1 Evaluate the schematic plans developed by TxDOT as part of the EA process to identify potential Project phasing or design changes.
- 2.2 For the various design changes and phasing scenarios (assume 3 to 5), the following components will be identified for each:
 - 2.2.1 Typical sections;
 - 2.2.2 Pavement construction limits;
 - 2.2.3 Toll system elements and locations; and
 - 2.2.4 Stick diagrams.
- 2.3 The GEC will review the preliminary phasing scenarios developed in Task 2.2 with the CTRMA to ensure that said scenarios are appropriate for further evaluation. Refinements to the preliminary phasing scenarios will be incorporated based on the input from the CTRMA.
- 2.4 The GEC will conduct and present an evaluation of the preliminary phasing scenarios developed in Task 2.2. Specific tasks to be completed by the GEC will include the following:
 - 2.4.1 Develop preliminary tolling plans for each of the scenarios. This will include the identification of toll collection locations, toll collection types, and lane requirements.
 - 2.4.2 Develop preliminary traffic & revenue (T&R) numbers for each of the scenarios. These preliminary T&R numbers will be developed by manually adjusting the T&R numbers contained in the preliminary toll feasibility analyses (to be provided by TxDOT under Task 1.5) and existing traffic models (to be provided by CAMPO and TxDOT under Task 1.4). These adjustments will be subjective / qualitative in nature and will not include traffic modeling efforts.
 - 2.4.3 Develop preliminary cost estimates for the preliminary phasing scenarios.
 - 2.4.3.1 Preliminary construction cost estimates utilizing estimated quantities and recent construction unit cost information.
 - 2.4.3.2 Preliminary right-of-way cost estimates utilizing estimated takings and recent land acquisition unit cost information.
 - 2.4.3.3 Preliminary utility relocation cost estimates utilizing a conceptual utility conflict resolution plan (based on existing utility records) and recent utility relocation unit cost information.

- 2.4.4 Develop preliminary overall milestone schedules for each of the preliminary phasing scenarios detailing the implementation of each. These preliminary schedules will include the efforts necessary for the complete execution of the Project (i.e., design, financing, procurement, construction, etc.).
- 2.4.5 Develop preliminary annualized cost and revenue figures for each of the preliminary phasing scenarios based on the preliminary T&R numbers developed in Task 2.4.2, the preliminary costs developed in Task 2.4.3, and the preliminary schedules developed in Task 2.5.4. These preliminary annualized cost and revenue figures will include toll revenues, reserve maintenance, operations and maintenance, fare collection, and construction. Net Revenue and Net Present Value figures will also be developed on an annualized basis.
- 2.4.6 Develop a Preliminary Feasibility Study documenting the findings of the evaluation. The Preliminary Feasibility Study will include the following items:
 - 2.4.6.1 Executive Summary briefly describing the evaluation, methodology, and findings
 - 2.4.6.2 Purpose of Study
 - 2.4.6.3 Project Description
 - 2.4.6.4 Description of Implementation Scenarios
 - 2.4.6.5 Design Standards and Criteria
 - 2.4.6.6 Toll Systems Description
 - 2.4.6.7 Toll Collection System Description
 - 2.4.6.8 Traffic & Revenue Information (including base toll schedules, estimated annual revenues at collection sites, and associated assumptions)
 - 2.4.6.9 Cost Analysis Methodology (including capital cost estimates, reserve maintenance estimates, operation and maintenance estimates, and fare collection estimates)
 - 2.4.6.10 Financial Assessment and Screening (including summary of cumulative net revenues and summary of cumulative net present value)
 - 2.4.6.11 Evaluation Summary
- 2.4.7 Present the Preliminary Feasibility Study to the CTRMA to determine which preliminary phasing scenarios are to be considered for further analysis by the CTRMA Traffic & Revenue Consultant.

3.0 Coordination with T&R consultant

Based on the feedback obtained from the CTRMA in response to Task 2.4.7, the GEC will coordinate directly with the CTRMA's Traffic & Revenue consultant to determine the traffic & revenue figures of the preferred scenarios (three scenarios assumed).

Specific tasks will include:

- 3.1 Conduct an initial workshop with representatives of the CTRMA's T&R Consultant to provide background on the Preliminary Feasibility Study work completed by the GEC.
- 3.2 Provide all relevant data and documents to the CTRMA's T&R Consultant required for their work efforts.
- 3.3 Participate in meetings and/or telecons with the CTRMA's T&R Consultant. It is assumed that there will be six (6) meetings / telecons.
- 3.4 Review and comment on preliminary T&R figures developed by the CTRMA's T&R Consultant.

4.0 Final Feasibility Study

Based on the T&R figures developed by the CTRMA's T&R Consultant, the GEC will incorporate same into the overall cost analysis to assess the overall feasibility of the Project. Specific tasks will include:

- 4.1 Revisit the phasing scenarios (three scenarios assumed) to ensure that the typical section, pavement construction limits, and toll system elements and locations are valid.
- 4.2 Refine the preliminary construction cost estimates for the preliminary phasing scenarios (three scenarios assumed).
- 4.3 Refine the preliminary annualized cost and revenue figures for each of the preliminary phasing scenarios (three scenarios assumed), including toll revenues, reserve maintenance, operations and maintenance, fare collection, construction costs, Net Revenue and Net Present Value figures.
- 4.4 Prepare a Pre-final Feasibility Study. This will be accomplished by incorporating the reevaluations / refinements detailed in Tasks 4.1 thru 4.3 above.
- 4.5 Present the Pre-final Feasibility Study to the CTRMA for their review and comment.
- 4.6 Prepare the Final Feasibility Study. This will be accomplished by incorporating any CTRMA comments obtained in Task 4.5.

Part B : US290E Development Procurement Management Services

This scope of work includes professional services and deliverables required to initiate the procurement of a development team to enter into a comprehensive development agreement (CDA) with the Central Texas Regional Mobility Authority (CTRMA) to develop the US290E toll facility.

This scope will entail those services required to assist the CTRMA in: the preparation of a Draft Request of Detailed Proposals (RFDP).

1.0 Pre RFDP Phase

- 1.1 Develop a management plan for the procurement of developers of the US290E toll facility. This will entail working closely with the CTRMA in the preparation of a procurement process / protocol and reasonable time schedule to define progress achievement milestones between the issuance of the RFDP and the issuance of Notice(s) to Proceed to the selected Proposer for the US 290E toll facility. This schedule will allow sufficient time for all elements of the procurement process, including: development of the RFDP by the CTRMA and GEC; preparation of Detailed Proposals by the short listed Proposers; assessment of the Detailed Proposals by the CTRMA / GEC; selection of the "Best Value" proposal; and negotiation of the terms and execution of CDA.
- 1.2 Develop draft versions of the main sections of the RFDP for the US 290E toll facility. These main sections will include:
 - 1.2.1 Draft Instructions to Proposers – This document will contain relevant information to the short listed Proposers regarding the project and their associated submittals, including: an introduction and summary of the project; a procurement schedule defining the major milestone dates to be adhered to during the CDA procurement process; detailed description of the procurement process which the CTRMA will utilize during the review and evaluation of the responses to the RFDP; detailed information pertaining to the Proposal delivery, content and format; Proposal evaluation criteria and weighting; CDA award and approval process; and stipend information and amounts (if applicable).
 - 1.2.2 Draft Comprehensive Development Agreement – This document will contain the actual Agreement to be executed between the CTRMA and successful Proposer. It is anticipated that this section of the RFDP will be prepared by the CTRMA legal counsel and that the GEC will serve in a coordination / review role in the development of same.
 - 1.2.3 Draft Scope of Work – This document will contain detailed information, specifications, and associated guidance intended to apply specifically to the development and implementation of the US 290E toll facility.

- 1.2.4 Draft Technical Provisions – This document will contain detailed information, specifications, and associated guidance intended to apply to the development and implementation of all toll facility projects procured by the CTRMA.
- 1.3 Conduct a series of Risk Allocation Workshops with CTRMA staff, legal counsel, financial advisors, and others to develop a policy and methodology to divide and assign the risks associated with the design, construction, operation, maintenance and financing elements of the US 290E toll facility. A Risk Allocation matrix will be developed which will divide and assign all potential risks associated with the development and implementation of the project, including:
- 1.3.1 Design Process: design defect (damages, third party injury); design defect (Nonconforming Work); system integrator (SI) delays; other cost increases and delays; accuracy of schematics and reference documents; alignment change creating need for additional right-of-way.
 - 1.3.2 Right of Way: right-of-way acquisition costs; right-of-way acquisition delays.
 - 1.3.3 Utility Relocation: delay due to Utility Adjustments, including unidentified utilities; cost of unidentified utilities; failure of Utility Owners to comply with Adjustment Agreements.
 - 1.3.4 Governmental Approvals: governmental approvals; new environmental approvals and changes to CTRMA-Provided Approvals due to changes in Final Design; governmental approvals required due to Force Majeure or CTRMA-Directed Change After NTP
 - 1.3.5 Force Majeure Events: actions of the elements; acts of war; strikes and labor disputes; archaeological, paleontological or cultural resource; threatened or endangered species; changes in law; injunctions against the Project; temporary no-work restrictions resulting from the discovery within the Site of any karst features; hazardous materials (third party spills after proposal date); hazardous materials (existing).
 - 1.3.6 Construction, Supply and Installation: cost increase due to CTRMA-Directed Change or CTRMA-Caused Delay; differing site conditions; delay in completion (other than CTRMA-Caused Delay, Force Majeure and certain uncooperative utility delays); delay in completion due to CTRMA-Caused Delay, Force Majeure and certain uncooperative utility delays; construction defect (damages, third party injury); construction defect (Nonconforming Work); delays in opening Project for revenue service due to System Integrator work.
- 1.4 Prepare a Revised Draft RFDP by incorporating the Risk Allocation assignments agreed to by the CTRMA under Task 1.3 into the Draft RFDP prepared under Task 1.2. An extensive internal review of this Revised Draft RFDP will be completed by senior level GEC staff having experience in CDA processes to ensure completeness. Comments developed / identified during this internal

review process will be discussed with the CTRMA staff, legal counsel, and financial advisers to obtain their approval prior to modifying the Draft RFDP.

- 1.5 Organize Reference Documents for inclusion into the Draft RFDP as attachments. Status assessments will be prepared for inclusion in the RFDP for those documents which have not been fully completed at the time of RFDP issuance to the short listed Proposers.
- 1.6 Coordinate with Texas Department of Transportation (TxDOT) and Federal Highway Administration (FHWA). The GEC will attend meetings with the CTRMA to present the Draft RFDP to TxDOT and FHWA; written comments will be formally requested from both agencies. Comments received from TxDOT and FHWA will be discussed with the CTRMA staff, legal counsel, and financial advisers to obtain their approval prior to modifying the RFDP.

DELIVERABLES FOR THE DRAFT RFDP FOR THE DEVELOPMENT OF US 290E

- Draft policy dividing and assigning physical and fiscal risks.
- Management plan and schedule for the procurement of developers of the US 290E.
- Draft CDA document for the purposes of Industry Review
- Workshop documentation

Part C: Public Involvement

This scope of services includes public involvement efforts to support the CTRMA in communicating information concerning the US 290 East reconstruction from US 183 to east of SH 130.

- 1.1 Organize, attend, and document public meetings and other communication as requested by CTRMA
- 1.2 Provide project graphics, maps, presentation material, flyers as requested by CTRMA.

US 290E
HNTB Corporation - MANHOUR BREAKDOWN
August 23, 2005

CTRMA

DRAFT

Work Authorization 5.1

Summary

Part A --Feasiblity Study	\$	325,132
Part B -- Procurement	\$	227,283
Part C -- Public Involvement	\$	43,129
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	\$	595,544

Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 HNTB Corporation - Man-hour Breakdown & Fee Estimate
 Toll Feasibility Study for US 290 East

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CTRMA
 Work Authorization 5.1
 August 23 2005

PART A- Feasibility Study

TASK / WORK DESCRIPTION	(Labor Rates)	MAN-HOURS						TOTAL HRS
		A	B	C	D	E	F	
1.0 Data Collection / TxDOT Coordination								
1.1 Acquire & review & coordinate completion of Environmental Assessment (EA)		8	40			40		88
1.2 Acquire & review & determine need to supplement survey data (survey not incl)						24		24
1.3 Acquire & review Schematic Plans (including electronic files)		16	40			40		96
1.4 Acquire & review preliminary traffic volumes		8	40			40		88
1.5 Acquire & review intermediate level toll feasibility studies		8	40			40		88
1.6 Acquire & review other relevant data / documents		8	40			40		88
2.0 Preliminary Feasibility Study								
2.1 Identify potential Project phasing & design scenarios		8	80			80		168
2.2 Document preliminary phasing scenarios (3 total)								
2.2.1 Document typical sections		4	40			80		124
2.2.2 Document pavement construction limits		4	80			80		164
2.2.3 Document toll system elements / locations		4	40			80		124
2.2.4 Develop Stick Diagrams		4	40			80		124
2.3 Review preliminary phasing scenarios w/ CTRMA		4	8					12
2.4 Preliminary Feasibility Study Preparation								
2.4.1 Develop preliminary tolling plan for scenarios		4	8			40		52
2.4.2 Develop preliminary T&R numbers for scenarios		4	80			120		204
2.4.3 Develop preliminary cost estimates for scenarios		4	40			160		204
2.4.4 Develop preliminary overall milestone schedules		4	40			24		68
2.4.5 Develop Annualized cost and revenue figures		4	80			40		124
2.4.6 Develop Preliminary Feasibility Study								
2.4.6.1 Executive Summary		4	4					8
2.4.6.2 Purpose of Study			4					4
2.4.6.3 Project Description			4					4
2.4.6.4 Description of Implementation Scenarios			4					4
2.4.6.5 Design Standards & Criteria			4					4
2.4.6.6 Toll Systems Description			4			16		20
2.4.6.7 Toll Collection System Description			4					4
2.4.6.8 T&R Information		2	16			40		58
2.4.6.9 Cost Analysis Methodology		2	16			40		58
2.4.6.10 Financial Assessment & Screening		2	16			40		58
2.4.6.11 Evaluation Summary		2	8					10
2.4.7 Presentation of Preliminary Feasibility Study to CTRMA		4	8					12
3.0 Coordination w/ CTRMA T&R Consultant								
3.1 Conduct initial workshop w/ CTRMA T&R Consultant		4	8			4		16
3.2 Provide information to CTRMA T&R Consultant			8			40		48
3.3 Participate in meetings / telecoms (6 total)		12	24					36
3.4 Review & comment on preliminary T&R figures		4	8					12

Attachment B - Fee Estimate

4.0 Final Feasibility Study

4.1	Reevaluate computability of toll collection elements	4	16		8	28
4.2	Refine preliminary construction cost estimates	4	16		80	100
4.3	Refine preliminary cost & revenue figures	4	40		40	84
4.4	Prepare Pre-final Feasibility Study	4	40		40	84
4.5	Present Pre-final Feasibility Study to CTRMA	4	8			12
4.6	Prepare Final Feasibility Study	4	16		24	44

TOTAL DIRECT LABOR	156	1012	0	0	1380	0	2548
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Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 HNTB Corporation - Man-hour Breakdown & Fee Estimate
 Preliminary Procurement US 290 East

DRAFT

CTRMA
 Work Authorization 5.1
 August 23 2005

PART B -- DRAFT RFDP

TASK / WORK DESCRIPTION	MAN-HOURS						TOTAL HRS
	A	B	C	D	E	F	
1.0 Pre RFDP Phase							
1.1 Develop Procurement Management Plan	8	40	40	40			128
1.2 Develop Draft RFDP							
1.2.1 Draft Instructions to Proposers	40	80	80	80			280
1.2.2 Draft Comprehensive Development Agreement Assist CTRMA Legal Counsel (as required)	40	24					64
1.2.3 Draft Scope of Work	20	100	80	80			280
1.2.4 Draft Technical Provisions	40	80	110	80			310
1.3 Risk Allocation Workshops (incl. preparations)							
1.3.1 Design Process Risks	8	8	8				24
1.3.2 Right of Way Risks	8	8	8				24
1.3.3 Utility Relocation Risks	8	8	8				24
1.3.4 Governmental Approval Risks	8	8	8				24
1.3.5 Force Majeure Event Risks	8	8	8				24
1.3.6 Construction, Supply & Installation Risks	8	8	8				24
1.4 Internal Review Draft RFDP							
Update Draft RFDP (per Risk Allocation Workshops)		20					20
Conduct Internal Review of Revised Draft RFDP	8	20					28
Incorporate Comments from Internal Review			20				20
1.5 Organize Reference Documents			8	16			24
1.6 TxDOT & FHWA Approval Process							
Agency Review Meetings (1 per Agency; 2 total)							
Meeting Preparations	24						24
Meeting Participation	16						16
Meeting Documentation	16						16
Incorporate Comments from Agency Review	8		16				24
TOTAL DIRECT LABOR	268	412	402	296	0	0	1378

Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 HNTB Corporation - Man-hour Breakdown & Fee Estimate
 Public Involvement US 290 East

DRAFT

CTRMA
 Work Authorization 5.1
 August 23 2005

PART C – PUBLIC INVOLVEMENT

TASK / WORK DESCRIPTION	(Labor Rates)	MANHOURS						TOTAL HRS
		A	B	C	D	E	F	
1.0 Public Meetings and Communications		8	20	80	70			178
2.0 Project Graphic Design								
2.1 Graphics design / marketing			8	20				28
2.2 Compile maps (from TxDot, TTA, CAMPO, CTRMA) as needed			8	20				28
2.3 Coordinate w/ TxDOT on presentation materials			8	20				28
2.4 Assist in development of print advertisements / flyers			8	20				28
TOTAL DIRECT LABOR		8	52	160	70	0	0	290