

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

RESOLUTION NO. 08-14B

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 CTRMA identified the proposed 183-A turnpike as its initial project in the petition filed under the RMA Rules; and

WHEREAS, the CTRMA has approved various work authorizations for its General Engineering Consultant (the "GEC") to pursue work necessary for the development of 183-A; and

WHEREAS, in Resolution No. 03-46, dated September 24, 2003, the CTRMA Board of Directors approved Work Authorization No. 3.1 concerning additional technology services related to project development; and

WHEREAS, in various Resolutions after approval of Work Authorization 3.1, the CTRMA Board of Directors has approved from time to time Supplements numbered 1 through 9 to Work Authorization 3.1; and

WHEREAS, the GEC has requested approval of Supplement 10 to Work Authorization No. 3.1 regarding providing certain oversight services related to the potential implementation of a cashless toll system for 183-A, as well as other services addressed in a separate Resolution No. 08-14A; and

WHEREAS, the GEC has represented to the Board of Directors that the work reflected in Supplement No. 10 to Work Authorization No. 3.1, attached hereto as Attachment "A" related to the potential implementation of a cashless toll system for 183-A, and the cost thereof are necessary and appropriate to the continued safe and efficient use and operation of 183-A.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors approves Supplement No. 10 to Work Authorization No. 3.1, attached hereto as Attachment "A" as it relates to the potential implementation of a cashless toll system for 183-A, provided that any work commenced under Supplement No. 10 to Work Authorization No. 3.1 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 26th day of March, 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 08-14B
Date Passed 03/26/08

ATTACHMENT "A"
TO
RESOLUTION 08-14B
Potential Implementation of a Cashless Toll System for 183-A

Supplement No. 10 to GEC Work Authorization 3.1

*Copy provided
to Wes
11:55 AM
05/25/08*

SCOPE OF WORK OUTLINE

SERVICES TO BE PROVIDED BY THE GEC

This scope of services includes the provision of professor tasks related to the study of tolling projects.

10) SCOTTSDALE DRIVE CONNECTION PROJECT

\$53,521

10.1 Design Services

- 10.1.1 Roadway Design
- 10.1.2 Drainage Design
- 10.1.3 Storm Water Pollution Prevention Plan (SW3P)
- 10.1.4 Signing and Pavement Markings
- 10.1.5 Traffic Control Plan
- 10.1.6 Contract Documents
- 10.1.7 Utility Coordination
- 10.1.8 Landscaping Plan Coordination
- 10.1.9 Provide Quality Control/Quality Assurance

10.2 Construction Phase Services

- 10.2.1 Advertise
- 10.2.2 Distribute Plans and Addenda
- 10.2.3 Pre-bid Meeting
- 10.2.4 Bid Opening and Review
- 10.2.5 Contract Execution
- 10.2.6 Field Inspection Services
- 10.2.7 Walk-Thru and Punch List
- 10.2.8 Project Closeout

11) TRANSITION TO CASHLESS TOLL SYSTEM ON 183A

\$89,604

11.1 Evaluation of Impacts to Operations

11.2 Evaluate Operational and Maintenance Cost Impacts [No Services Req'd at this time]

11.3 Evaluation of Toll Plaza Options [No Services Req'd at this time]

11.4 Design Services

11.5 Construction Phase Services

11.6 Toll System Development & Oversight

11.7 Facilitate Sale of Excess Manual/ACM toll equipment [No Services Req'd at this time]

EXHIBIT B

WORK AUTHORIZATION NO. 3.1 – SUPPLEMENT NO. 10

This Supplement No. 9 to Work Authorization No. 3.1 is made this ___h day of March, 2008, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of September 15th, 2003 (the Agreement), between the Central Texas Regional Mobility Authority (Authority) and HNTB Corporation (GEC). This Supplement Work Authorization is made for the following purpose, consistent with the Services defined in the Agreement:

General Engineering and Administrative Support Services

The following terms and conditions of Work Authorization No. 3.1 are hereby amended, as follows:

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Scope of Work

A.2. The following Services are not included in this Supplement No. 9 to Work Authorization No. 3.1, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

N/A

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

As set forth in 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 shall be complete by December 31, 2008.

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 **\$143,125.00**, based on Attachment B – Fee Estimate. This will increase the not to exceed compensation amount for Work Authorization No. 3.1 from \$7,427,100.00 to **\$7,570,225.00**. Compensation shall be in accordance with the Agreement.

The Authority and the GEC agree that the budget amounts contained in Attachment B-Fee Estimate 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 Owner.

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: _____

Signature: _____

Signature: _____

Title: _____

Title: _____

Date: _____
General
Counsel
Approval: _____

Date: _____

CENTRAL TEXAS RMA

ATTACHMENT A – SCOPE OF WORK

WORK AUTHORIZATION NO. 3.1 – SUPPLEMENT NO. 10

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

This scope of work includes the continuation of those professional services and associated deliverables required by the Authority for September 2007 through December 31, 2009.

This work will include engineering studies and design services for the continuing implementation and development of the 183A Turnpike. The tasks shall include evaluation of the existing 183A toll facilities and implementation of plans to transition toll collection operations to a “cashless” operation, preparation of contract documents for modifications to the existing signing, and administration of a construction contract to effect the signing revisions. The work will also include preliminary and final designs for the construction of a Scottsdale Drive Connection to the 183A Frontage Roads, preparation of contract documents and administration and oversight of the proposed construction.

10) SCOTTSDALE DRIVE CONNECTION PROJECT

This scope of services includes professional services and deliverables in support of CTRMA’s development of the Scottsdale Drive Connection on the 183A Turnpike. Included in this scope are efforts associated with:

- Design Services – Preliminary Design and PS&E design
- Construction Phase Services - Project advertisement and bidding, construction inspection and administration

10.1 Design Services

The GEC will develop plans, specifications, and estimates for the Scottsdale Drive Connection. TxDOT Standard Sheets will be used to minimize plan development work. Develop (or include) the following plan sheets:

- Title Sheet (to include Index of Sheets)
- General Notes and Basis of Estimate
- Estimate and Quantity Sheet
- Summary Sheets
- Project Layout
- Horizontal Alignment Data Sheet
- Typical Sections & Miscellaneous Roadway Details

- Sequence of Construction
- Traffic Control Plan Details
- Roadway Plan & Profiles (1' = 100')
- Drainage Area Map, Hydrologic & Hydraulic Data
- Culvert Layouts & Details
- Signing and Pavement Marking
- Landscaping
- Storm Water Pollution Prevention Plan
- Latest TxDOT Standards

10.1.1 Roadway Design: Design horizontal and vertical alignment for Scottsdale Drive connection to 183A southbound. Develop typical sections and plan & profile sheets for northbound left turn lane, southbound acceleration lane, and the Scottsdale Drive Connection.

10.1.2 Drainage Design: Prepare onsite drainage area map and provide drainage design for swales and one drainage structure to accommodate the surface drainage along the project limits. All designs will be prepared in conformance with TxDOT standards.

10.1.3 Storm Water Pollution Prevention Plan (SW3P): Prepare an SW3P for the project location in accordance with current NEPA requirements and local criteria. Prepare SW3P plans and details as required.

10.1.4 Signing and Pavement Markings: Prepare a signing and pavement marking layout. Prepare a small sign summary sheet and miscellaneous sign details as required.

10.1.5 Traffic Control Plan: Determine the project construction sequence and design a traffic control plan based upon the Texas MUCTD (TxMUTCD) and the latest Austin District traffic control design requirements.

10.1.6 Contract Documents: Provide specifications, special specifications, special provisions, and general notes (as needed) to specify the work required by the contractor. Use TxDOT specifications, when available. Provide bid tab and estimate of construction cost.

10.1.7 Utility Coordination: Review proposed design data for potential conflicts with existing utilities. Coordinate with the appropriate utilities to address solutions to utility conflicts. No utility conflicts are anticipated at this time.

10.1.8 Landscaping Plan: Coordinate with the designer of Block House Creek on the proposed landscape / entry improvements.

10.1.9 Provide Quality Control/Quality Assurance for design activities and plan sheets.

Deliverables

Deliverables will consist of the following:

- One copy of the PS&E at 90% completion for CTRMA review.
- One signed and sealed original and one copy of the PS&E at 100% completion for CTRMA review and approval.

10.2 Construction Phase Services

The GEC will provide construction phase services required to complete construction of the Scottsdale Drive Connection, including project advertisement and bidding, construction inspection, construction administration, and project closeout.

10.2.1 Advertise: Prepare and publish advertisement. Prepare and run up to 6 ads in local newspapers to advertise the project.

10.2.2 Distribute Plans and Addenda: Track and distribute plans to contractors, including addenda, if necessary. Once advertised, serve as the point of contact for all bid inquiries. Respond to inquiries from potential bidders. Respond to all bid inquiries during the bidding phase. Furnish the plans and project manual and maintain the bidder's list. Contact a maximum of 5 contractors that often bid on jobs in this area to notify them of the project, in an effort to generate interest in the project. This will make for a more competitive bid. If applicable, prepare and distribute any/all addenda to the plan holders list.

10.2.3 Pre-bid Meeting: Prepare for and host the pre-bid meeting at the GEC offices for potential bidders to ask questions and for any concerns from the potential bidders to be addressed. Meeting minutes from the pre-bid meeting will be issued to all meeting attendees and plan holders.

10.2.4 Bid Opening and Review: Receive all bids from the contractors and conduct a public bid opening for all contractors. Once bids are opened, review the bids for accuracy and completeness. Review the bids with CTRMA and make a recommendation for award. Once the contractor is selected, the contractor's references will be contacted and insurance and bond requirements will be validated. Prepare Notice of Award to contractor.

10.2.5 Contract Execution: Coordinate the execution of the contract, which includes all of the insurance, bonds, signatures, and other additional documentation with CTRMA and the contractor in order to begin construction.

10.2.6 Field Inspection Services to include:

- general contract administration
- quantity verification for payment purposes
- ensure conformance to plans and specifications

- maintain a construction activity log and photo library
- attend and conduct progress review meetings with CTRMA and contractor
- make recommendations for approval of payment to contractor
- review schedule
- review testing and materials reports for conformance to specifications
- document control
- monitor accuracy of as-built drawings
- verification of horizontal and vertical grades
- record weekly progress reports

10.2.7 Walk-Thru and Punch List: Perform a final walk-thru with CTRMA and the contractor to make sure all aspects of the project meet CTRMA's satisfaction and conform to the final plans and specifications. Review the contractor's punch list submittal with CTRMA and contractor and add to the Punch List other items to be addressed. Verify the contractor response to all items on the Punch List. Issue the certificate of completion once satisfactory completion is achieved.

10.2.8 Project Closeout: Review and submit the final record drawings from the contractor. Submit all electronic files from the project upon completion. Work with the contractor to finalize all closeout documentation. This will include the contractor's affidavit that all bills are paid, clear of any liens, contract bond, and any final payments required by the contractor.

Deliverables

Deliverables will consist of the following:

- Notice of Intent Permit (NOI) for construction
- Copies of construction documents and plans for all potential bidders
- 5 copies of construction documents and plans to the awarded contractor
- Materials and Testing results
- Construction activity log & photo library
- Material tickets and quantity calculations for payment verification
- Final closeout paperwork
- Project records and correspondence

11) TRANSITION TO CASHLESS TOLL SYSTEM ON 183A

11.1 Evaluation of Impacts to Operations

11.1.1 Tolling Locations: Review the existing tolling locations to identify anticipated changes to the current toll location and numbers of toll lanes based on the requirements of cashless tolling. A summary of the proposed/required changes will be prepared for review and approval.

11.1.2 Staffing: [No services required]**11.1.3 Infrastructure / Roadway / Toll Equipment: [No services required]**

11.1.4 Security: Changes to security systems, operations and procedures based on remote control and monitoring of operations; and the physical security requirements for protection for unused existing plaza equipment will be required. Provide technical assistance to effect the required changes, as requested by the CTRMA.

11.2 Evaluate Operational and Maintenance Cost Impacts**11.2.1 [No services required]****11.2.2 [No services required]****11.2.3 [No services required]****11.3 Evaluation of Toll Plaza Options****11.3.1 [No services required]****11.4 Design Services**

The GEC will develop plans, specifications, and estimates for the roadway signing, pavement markings, and traffic control devices to accompany the conversion to cashless tolling. Develop an appropriate system of signage modification -both transitional and permanent – to effectively inform the traveling public of the cashless toll collection. TxDOT Standard Sheets will be used to minimize plan development work. Develop (or include) the following plan sheets:

- Title Sheet (to include Index of Sheets)
- General Notes and Basis of Estimate
- Estimate and Quantity Sheet
- Summary Sheets
- Project Layout
- Toll Gantry and Overhead Sign Bridge Details (if needed)
- Demolition/Removal Plan
- Typical Sections & Miscellaneous Roadway Details (if needed)
- Traffic Control Plan Standards and Details
- Electrical, Communication, & ETC Details
- Signing and Pavement Marking Details
- Latest TxDOT Standards

11.4.1 Toll System Design: [No services required]

11.4.2 Demolition/Removal Plan: Prepare a layout indicating all signs, pavement markings and traffic control devices to be removed or demolished for the conversion to cashless tolling, including stockpile and storage locations for re-usable materials.

11.4.3 Signing and Pavement Markings: Prepare a signing and pavement marking layout. Prepare small and large sign summary sheets and miscellaneous sign details as required. Prepare layouts and elevations for overhead sign bridges as needed.

11.4.4 Traffic Control Plan: Determine the project construction sequence and design a traffic control plan based upon the Texas MUCTD (TxMUTCD) and the latest Austin District traffic control design requirements.

11.4.5 Reuse of Facilities: [No services required]

11.4.6 Contract Documents: Provide plans, specifications, special specifications, special provisions, and general notes (as needed) to specify the work required by the contractor for the proposed signing, pavement markings and traffic control devices. Use TxDOT specifications, when available. Provide bid tab, construction time estimate, and estimate of construction cost.

11.4.7 Provide Quality Control/Quality Assurance for design activities and plan sheets.

Deliverables

Deliverables will consist of the following:

- One copy of the PS&E at 90% completion for CTRMA review.
- One signed and sealed original and one copy of the PS&E at 100% completion for CTRMA review and approval.

11.5 Construction Phase Services

The GEC will provide construction phase services required to complete construction of the signing, pavement markings and traffic control devices, including project advertisement and bidding, construction inspection, construction administration, and project closeout.

11.5.1 Advertise: Prepare and publish advertisement. Prepare and run up to 6 ads in local newspapers to advertise the project.

11.5.2 Distribute Plans and Addenda: Track and distribute plans to contractors, including addenda, if necessary. Once advertised, serve as the point of contract for all bid inquiries. Respond to inquiries from potential bidders. Respond to all bid inquiries during the bidding phase. Furnish the plans and project manual and maintain the bidder's list. Contact a maximum of 5 contractors that often bid on jobs in this area to notify them of the project, in an effort to generate interest in the project. This will make for a more

competitive bid. If applicable, prepare and distribute any/all addenda to the plan holders list.

11.5.3 Pre-bid Meeting (If Required): Prepare for and host the pre-bid meeting at the GEC offices for potential bidders to ask questions and for any concerns from the potential bidders to be addressed. Meeting minutes from the pre-bid meeting will be issued to all meeting attendees and plan holders.

11.5.4 Bid Opening and Review: Receive all bids from the contractors and conduct a public bid opening for all contractors. Once bids are opened, review the bids for accuracy and completeness. Review the bids with CTRMA and make a recommendation for award. Once the contractor is selected, the contractor's references will be contacted and insurance and bond requirements will be validated. Prepare Notice of Award to contractor.

11.5.5 Contract Execution: Coordinate the execution of the contract, which includes all of the insurance, bonds, signatures, and other additional documentation with CTRMA and the contractor in order to begin construction.

11.5.6 Field Inspection Services to include:

- general contract administration
- quantity verification for payment purposes
- ensure conformance to plans and specifications
- maintain a construction activity log and photo library
- attend and conduct progress review meetings with CTRMA and contractor
- make recommendations for approval of payment to contractor
- review schedule
- review testing and materials reports for conformance to specifications
- document control
- prepare as-built drawings
- verification of horizontal and vertical grades for sign clearances
- record weekly progress reports

11.5.7 Walk-Thru and Punch List: Perform a final walk-thru with CTRMA and the contractor to make sure all aspects of the project meet CTRMA's satisfaction and conform to the final plans and specifications. Review the contractor's punch list submittal with CTRMA and contractor and add to the Punch List other items to be addressed. Verify the contractor response to all items on the Punch List. Issue the certificate of completion once satisfactory completion is achieved.

11.5.8 Project Closeout: Review and submit the final record drawings from the contractor. Submit all electronic files from the project upon completion. Work with the contractor to finalize all closeout documentation. This will include the contractor's affidavit that all

bills are paid, clear of any liens, contract bond, and any final payments required by the contractor.

Deliverables

Deliverables will consist of the following:

- Copies of construction documents and plans for all potential bidders
- 5 copies of construction documents and plans to the awarded contractor
- Materials and Testing results
- Construction activity log & photo library
- Final closeout paperwork
- Project records and correspondence

11.6 Toll Systems Development & Oversight

11.6.1 Work Plan & Schedule: [No services required]

11.6.2 Marketing / Communications Plan: [No services required]

11.6.3 Toll Collection System Monitoring & Refinement: [No services required]

11.6.4 Interagency Coordination: Provide assistance to the CTRMA to facilitate interagency coordination meetings, prepare any required documentation, review issues and draft responses, and provide technical assistance, as requested. It is assumed that no more the forty (40) hours will be required for this task.

11.6.5 [No services required]

11.7 Facilitate Sale of Excess Manual/ACM toll equipment

[No services required]

[END OF SECTION]

Attachment B - Fee Estimate

CTRMA GEA
HNTB Corporation - MANHOUR BREAKDOWN

CTRMA
WORK AUTHORIZATION SCOTTSDALE

March 4, 2008

SUMMARY

Task	Fee
Scottsdale Drive Connection	\$53,521
183A Cashless Toll Collection System	\$89,604
TOTAL	\$143,125

Manhours									
A	B1	B	C	D	E	F1	F		
Principal	Technology Expert	Dep. PM	Senior Project Engineer	Project Engineer	Technician	Project Administrator	Clerical Administrative Support		
\$ 82.00	\$ 82.00	\$ 68.00	\$ 57.00	\$ 44.00	\$ 33.00	\$ 33.00	\$ 23.00		

4	0	12	35	128	212	0	47		
0	4	74	112	176	246	0	66		
4	4	86	147	304	458	0	113		

Labor Costs	\$ 328	\$ 328	\$ 5,848	\$ 8,379	\$ 13,376	\$ 15,114	\$ -	\$ 2,599
Overhead Costs	155.59% \$ 510	\$ 510	\$ 9,099	\$ 13,037	\$ 20,812	\$ 23,516	\$ -	\$ 4,044
Profit	15% \$ 126	\$ 126	\$ 2,242	\$ 3,212	\$ 5,128	\$ 5,794	\$ -	\$ 996
Total Loaded Labor Cost	\$ 964	\$ 964	\$ 17,189	\$ 24,628	\$ 39,316	\$ 44,424	\$ -	\$ 7,639
Direct Expenses								
Scottsdale Drive Connection	\$	4,000						
183A Cashless Toll Collection System	\$	4,000						
Total Direct Expenses	\$	8,000						
Total Loaded Labor	\$	135,125						
Total Direct Expenses	\$	8,000						
Total	\$	143,125						

Attachment B - Fee Estimate

CTRMA GEC
 HNTB Corporation - MANHOUR BREAKDOWN
 March 4, 2008

CTRMA
 WORK AUTHORIZATION SCOTTSDALE

Scottsdale Drive Connection

Task	Work Description	MANHOURS								TOTAL HRS
		A	B	C	D	E	F	G	H	
(Labor Rates)		\$ 82.00	\$ 82.00	\$ 68.00	\$ 57.00	\$ 44.00	\$ 33.00	\$ 33.00	\$ 23.00	
1.0	Scottsdale Drive Connection									
1.1	Design Services									
1.1.1	Roadway Design			4	8		28			40
1.1.2	Drainage Design			2	4		10			16
1.1.3	Storm Water Pollution Prevention Plan					2	14			16
1.1.4	Signage & Pavement Markings					4	16			20
1.1.5	Traffic Control Plan					8	16			24
1.1.6	Contract Documents			4	8				8	36
1.1.7	Utility Coordination					12	4			16
1.1.8	Landscape Coordination					16	8			24
1.1.9	QA/QC	4		8	8					20
1.2	Construction Phase Services									
1.2.1	Advertise				1	4			4	9
1.2.2	Distribute Plans & Addenda				1	4	8		2	15
1.2.3	Pre-bid Meeting				1	4			1	6
1.2.4	Bid Opening & Review				2	4			4	10
1.2.5	Contract Execution				4	2			8	14
1.2.6	Field Inspection Services					16	80		8	104
1.2.7	Walk Thru & Punch List					16	16		4	36
1.2.8	Project Closeout			4	8	12			8	32

Assumes 2 month construction schedule

TOTAL GEC TEAM DIRECT LABOR		4	0	0	0	12	35	128	212	0	47	438
% Total by Classification		0.91%	0.00%	2.74%	7.99%	29.22%	46.40%	0.00%	10.73%			
Labor Costs		\$ 328	\$ -	\$ 816	\$ 1,985	\$ 5,622	\$ 6,996	\$ -	\$ 1,081	\$ -	\$ 16,848	
Overhead Costs	155.59%	\$ 510	\$ -	\$ 1,270	\$ 3,104	\$ 8,761	\$ 10,885	\$ -	\$ 1,687	\$ -	\$ 26,214	
Profit	15%	\$ 126	\$ -	\$ 313	\$ 765	\$ 2,159	\$ 2,682	\$ -	\$ 414	\$ -	\$ 6,430	
Total Loaded Labor		\$ 964	\$ -	\$ 2,398	\$ 5,864	\$ 16,554	\$ 20,563	\$ -	\$ 3,177	\$ -	\$ 49,521	
Direct Expenses	Cost											
Printing	\$ 500											
Newspaper Ads	\$ 1,300											
Misc expenses	\$ 500											
Mileage	\$ 1,500											
Total Direct Expenses	\$ 4,000											
Total Loaded Labor	\$ 49,521											
Total Direct Expenses	\$ 4,000											
Total	\$ 53,521											

Attachment B - Fee Estimate

CTRMA GEC
 HNTB Corporation - MANHOOR BREAKDOWN
 March 18, 2008

CTRMA
 WORK AUTHORIZATION - CASHLESS TOLL COLLECTION

11.0 183A Cashless Toll Collection System

Task	Work Description	MANHOORS								TOTAL HRS
		A	B	C	D	E	F	G	H	
(Labor Rates)		\$ 82.00	\$ 82.00	\$ 68.00	\$ 37.00	\$ 44.00	\$ 33.00	\$ 33.00	\$ 23.00	
11.0	183A Cashless Toll Collection System									
11.1	Evaluation of Impacts to Alternatives									
11.1.1	Tolling Locations			5		24		10		48
11.1.2	Staffing									0
11.1.3	Infrastructure/Roadway/Toll Equipment									0
11.1.4	Security				16	8				24
11.2	Evaluate Operational and Maint Cost Impacts									
11.2.1	Analyze Changes to "Back Office" Costs and Ops									0
11.2.2	Maintenance of Infrastructure and Toll Systems									0
11.2.3	Enforcement in Lanes									0
11.3	Evaluation of Toll Plaza Options									
11.3.1	Evaluate Cost/Benefit & Operational Impact									0
11.4	Design Services									
11.4.1	Toll System Design									0
11.4.2	Demolition/Removal Plan				2	2	10			14
11.4.3	Signing & Pavement Markings			4	10	40	40			94
11.4.4	Traffic Control Plan				4	16	24			44
11.4.5	Reuse of Facilities									0
11.4.6	Contract Documents			16	16	24		80		64
11.4.7	QA/QC			8	16					24
11.5	Construction Phase Services									
11.5.1	Advertise				2	8		8		18
11.5.2	Distribute Plans & Addenda				2	8	16	4		30
11.5.3	Pre-bid Meeting				2	6		2		10
11.5.4	Bid Opening & Review				2	4		8		14
11.5.5	Contract Execution			2	8	4		16		30
11.5.6	Field Inspection Services			4		16	120	8		148
11.5.7	Walk Thru & Punch List				8		8	4		20
11.5.8	Project Closeout			8	8		12	8		36
11.6	Toll System Development & Oversight									
11.6.1	Work Plan & Schedule									0
11.6.2	Marketing / Communications Plan									0
11.6.3	Toll Collection System Monitoring & Refinement									0
11.6.4	Interagency Coordination			8	16	16				40
11.6.5	Modify Toll Collection System Maint Contract		4	16						20
11.7	Facilitate Sale of Excess Toll Equipment									
11.7	Facilitate Sale of Excess Toll Equipment									0

Assumes 2 month construction schedule

TOTAL GEC TEAM DIRECT LABOR	0	4	74	112	176	246	0	86	678
% Total by Classification	0.00%	0.59%	10.92%	16.32%	25.96%	36.28%	0.00%	12.70%	100.00%

Labor Costs		\$ -	\$ 328	\$ 5,032	\$ 6,384	\$ 7,744	\$ 8,118	\$ -	\$ 1,518	\$ 29,124
Overhead Costs	155.59%	\$ -	\$ 510	\$ 7,829	\$ 9,933	\$ 12,049	\$ 12,631	\$ -	\$ 2,362	\$ 45,314
Profit	15%	\$ -	\$ 126	\$ 1,929	\$ 2,448	\$ 2,969	\$ 3,112	\$ -	\$ 582	\$ 11,166
Total Loaded Labor		\$ -	\$ 964	\$ 14,790	\$ 18,764	\$ 22,762	\$ 23,861	\$ -	\$ 4,462	\$ 85,604

Direct Expenses	Cost
Printing	\$ 500
Newspaper Ads	\$ 1,500
Misc expenses	\$ 500
Mileage	\$ 1,500
Total Direct Expenses	\$ 4,000
Total Loaded Labor	\$ 85,604
Total Direct Expenses	\$ 4,000
Total	\$ 89,604