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

RESOLUTION NO. 14-067

APPROVING A SUPPLEMENT TO THE WORK AUTHORIZATION WITH ATKINS NORTH AMERICA, INC., TO PROVIDE GENERAL ENGINEERING CONSULTANT SERVICES ON THE BERGSTROM EXPRESSWAY PROJECT.

WHEREAS, Atkins North America, Inc., ("Atkins") serves as a general engineering consultant to the Mobility Authority under the Agreement for General Consulting Civil Engineering Services effective January 1, 2010 (the "GEC Agreement"); and

WHEREAS, Atkins provides general engineering consultant support services to the Mobility Authority for the Bergstrom Expressway Project; and

WHEREAS, the Executive Director and Atkins have discussed and agreed to a proposed supplement to the work authorization for Atkins to provide continued general engineering consultant services for the Bergstrom Expressway Project; and

WHEREAS, the Executive Director recommends approval of the proposed supplement to the work authorization attached as Exhibit 1.

NOW THEREFORE, BE IT RESOLVED that the proposed supplement to the work authorization is hereby approved; and

BE IT FURTHER RESOLVED that the Executive Director may finalize and execute for the Mobility Authority the proposed supplement to the work authorization in the form or substantially the same form as Exhibit 1.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 24th day of September, 2014.

Submitted and reviewed by:

Andrew Martin

General Counsel for the Central Texas Regional Mobility Authority Approved:

James H. Mills, Jr.

Vice Chairman, Board of Directors

Resolution Number: 14-067
Date Passed: 9/24/2014

EXHIBIT 1 TO RESOLUTION 14-067

SUPPLEMENT TO THE WORK AUTHORIZATION WITH ATKINS NORTH AMERICA, INC.

[on the following 16 pages]

EXHIBIT D WORK AUTHORIZATION

Supplement No. 4 to Work Authorization No.2

This Work Authorization is made as of this 1st day of September, 2014, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of January 4th, 2010 (the Agreement), between the Central Texas Regional Mobility Authority (Authority) and Atkins North America, Inc. (GEC). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

Bergstrom Expressway
Oversight Services

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Services to be Provided by the GEC

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.

Not applicable.

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

Please reference Attachment A – Services to be Provided by the GEC

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 ten (10) months from the date this Supplement becomes effective. This Supplement 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 \$4,274,800, based on Attachment B -Fee Estimate. This will increase the not to exceed amount for Work Authorization No. 2 from \$8,169,122 to \$12,443,922. Compensation for Direct Expenses under this Supplement which are incurred as part of normal business operations (i.e., internal document reproduction, internal plotting, travel and parking associated with local

meetings, etc.) will be reimbursed on a Lump-Sum basis in the amount of: \$128,250 (with \$12,825 to be invoiced monthly). Profit will be 12% for all services. Compensation shall be in accordance with the Agreement.

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

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:

Please reference Attachment A - Services to be Provided by the GEC

Section E. - Other Provisions

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

Not applicable.

shall contir	ue in full force and effect.		
Authority:	Central Texas Regional Mobility Authority	GEC:	Atkins North America, Inc.
Ву:	Mike Heiligenstein	Ву:	
Signature:		Signature:	
Title:	Executive Director	Title:	
Data		Data	

Except to the extent expressly modified herein, all terms and conditions of the Agreement

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

SUPPLEMENT NO. 4 TO WORK AUTHORIZATION NO. 2 ATKINS

ATTACHMENT A SERVICES TO BE PROVIDED BY GEC

BERGSTROM EXPRESSWAY (183 SOUTH) PROJECT

1.0 Preliminary Engineering [Code 13110]

Schematics and Exhibits

- 1.1 TxDOT Support: Provide engineering support as directed by the Mobility Authority for the review and updates to the corridor exhibits and schematic.
- 1.2 Design Verification: Provide a cursory review of the current TxDOT Design to ensure that all elements of the schematic conform to current standards. Develop a list of non-conformance elements and provide recommendations to the Mobility Authority. Develop a design notebook which notes the results of the design.
- 1.3 Design Modifications: Update the design schematic incorporating alternative design modifications as directed by the CTRMA. Provide engineering support as directed by the Mobility Authority for changes in design associated NEPA, context sensitive solutions, community and stakeholder input. Address all non-conformance elements as directed by the Mobility Authority.
- 1.4 Shared Use Path: Provide a cursory review of the current TxDOT Design to ensure that a Shared Use Path can be incorporated into the Design. Provide recommendations to the locations of the Shared Use Path. Incorporate the proposed design as directed by the Mobility Authority.
- 1.5 Tree Alternative Design: Evaluate designs that lessen the impacts to specific trees within the corridor.
- 1.6 Mobility Improvements associated with Logical Termini. Evaluate and update the design of the TxDOT proposed Mobility improvement at the south end of the project (SH 71).
- 1.7 Preliminary Cross-sections: Develop cross-sections including limits of construction in order to evaluate the ROW footprint. Provide comments and recommendations to the Mobility Authority.
- 1.8 Design Evaluations/Reference Documents: Provide engineering support as directed by the Mobility Authority to further evaluate existing reference documents in support of the Design-Build Procurement team.

2.0 Final Design Services [Code 13310]

- 2.1 AT&T Design: Prepare civil and cable/conduit print design for AT&T in an effort to advance critical utility relocations.
- 2.2 Review existing utility information for conflicts with preliminary roadway configuration, conduct a utility conflict analysis, and provide a conceptual utility relocation plan.

- 2.3 Represent the Authority in coordination efforts related to utility matters; includes coordination with Utility Companies and TxDOT Utility staff.
- 2.4 Prepare and maintain schedules which will identify utility ownership and include milestones and operations and activities pertinent to each assigned project.

3.0 Right-of-Way Acquisition & Relocation Services [Code 13410]

3.1 Maps & Documents

- 3.1.1 Prepare right-of-way maps and documents.
- 3.1.2 Review completed right-of-way maps and documents to ensure all necessary information is provided prior to initiating acquisition efforts.

3.2 Appraisals

- 3.2.1 Obtain title reports for parcels to be acquired; the title reports will be preliminarily reviewed for accuracy, ownership verification, to determination if there are any existing liens or encumbrances which may prohibit the owner from conveying clear title.
- 3.2.2 Conduct appraisals to determine the fair market value of the property to be acquired; appraisals will contain sufficient documentation, including valuation data and the appraiser's analysis of that data, to support his or her opinion of value.
- 3.2.3 Conduct review appraisals to confirm that the appraisal has been completed in accordance with defined specifications/procedures and follows accepted appraisal principles/techniques; contains information and consideration of all compensable items, damages, and benefits; and includes written approval of the fair market value contained in the appraisal.
- 3.2.4 Conduct environmental site assessments, prior to acquisition of real property, on certain parcels to determine the potential of, and extent of liability for hazardous substances or other environmental remediation or injury. This includes a determination of the absence or presence of hazardous substances, as well as conditions that indicate an existing or past release.

3.3 Negotiations / voluntary settlement

- 3.3.1 Provide written notification, consistent with Federal regulations, to effected property owners stating the Authority's intent to acquire right-of-way; this correspondence will also inform the affected property owners of the basic protections provided to them by law.
- 3.3.2 Develop offer letter and participate in a meeting with the affected property owner to present the offer.
- 3.3.3 Participate in negotiations with the affected property owner; documentation of ALL negotiations will be maintained in writing in a negotiators log.
- 3.3.4 In the event that negotiations result in a voluntary settlement acceptable to both parties, assemble a closing package containing all documents necessary to timely process the acquisition and relocations checks necessary for closing.

3.4 Relocation Assistance Services

3.4.1 Conduct determination of relocation benefits, consistent with the Uniform Relocation Act, for both residential and business relocations.

3.5 Right of Way status Tracking

3.5.1 Track status of Appraisals, Offers, Counter Offers, Condemnation, property management services and relocation assistance in both dollars and schedule.

4.0 Project Oversight - Pre-Construction [Code 13710]

Project Management

- 4.1 Project Management
 - 4.1.1 Provide staff to manage the daily activities of the project.
 - 4.1.2 Serve as the primary contact between the Mobility Authority, TxDOT, design consultants, third party consultants, utility companies, public agencies, and the general public.

4.2 Project Management Plan (PMP)

4.2.1 Develop the corridor specific PMP's in accordance with FHWA published Guidance Documents.

4.3 Document Control

- 4.3.1 Implement document control plan
- 4.3.2 Maintain project files for the length of the project
- 4.3.3 Transfer project files to the Mobility Authority upon completion of the work or as directed by the Mobility Authority
- 4.4 Sub-Consultant Coordination, Work Authorization Management and Invoicing.

4.5 Project Reporting

- 4.5.1 Provide updates to the Mobility Authority on key tasks accomplished during the preceding month, meetings and key activities for the upcoming month, and identify outstanding issues requiring resolution.
- 4.5.2 Provide Project Administrative support staff to track, monitor, evaluate and report on contracts and budgets.
- 4.5.3 Provide Project Administrative support staff to track, monitor, and prepare reports on DBE/HUB utilization by Prime and Segment Designers, and DBE/HUB programs.
- 4.5.4 Prepare a Quarterly Report with an Executive Summary that provides a comprehensive summary of the monthly reports and the overall program progress.

4.6 Project Scheduling

- 4.6.1 Maintain a Master Project Schedule (Primavera format) that will show critical milestones for the performance and coordination of services.
- 4.6.2 Monitor, evaluate, validate, and periodically update all schedules produced by others (Segment Designers, Utility Companies, etc.) that are a subset of the Master Project Schedule.

4.6.3 Provide updates of schedules at the appropriate stages of the project and shall provide an assessment of schedules provided by applicable third parties for integration into the Master Project Schedule.

4.7 Project Development Support

- 4.7.1 Loan and/or Grant Applications: Assist the Authority in the development of loan and/or grant applications (i.e. TIFIA Application).
- 4.7.2 Engineering and Technical Support: Provide various engineering and technical tasks as requested by the Authority including but not limited to engineering assistance, general technology assistance, general environmental coordination reports, research, and presentations.
- 4.7.3 Traffic Modeling: Conduct peer review of the CORSIM and/or VISSIM Traffic Models and provide summary of suggestions.
- 4.7.4 TxDOT Coordination: Provide the appropriate staff as part of the coordination efforts between the Authority and TxDOT, as directed by the Authority.
- 4.7.5 Agency Coordination: Provide the appropriate staff as part of the coordination efforts between the Authority and Agencies, as directed by the Authority.
- 4.7.6 Project Agreements: Assist in the development and review of various agreements necessary such as the Project Development Agreement (PDA), Advance Funding Agreement (AFA), Financial Assistance Agreement (FAA), etc.; generation of agreement exhibits; review of agreement drafts; and TxDOT coordination support, as directed by the Authority.
- 4.7.7 DBE Outreach support as requested by the Authority.

4.8 Financial Planning Support

- 4.8.1 Operation, Maintenance, and Renewal & Replacement Estimates
 - 4.8.1.1 Develop and/or update GEC's opinion of probable operations cost estimates using either a Sketch Level approach (assumed per transaction costs based on average operations cost of similar toll systems) or a Level 1 approach (estimate actual quantities for various elements of toll operations, enforcement and incident management and applying anticipated unit prices to opening year with an escalation over an established periods of time
 - 4.8.1.2 Develop and/or update GEC's opinion of probable annual/routine maintenance cost estimates using either a Sketch level approach (an estimated per centerline mile cost based on facility type which considers the number of lanes, pavement material and location) on a Level 1 approach (estimated quantities for the various elements of the maintenance efforts and applying anticipated unit prices to opening year cost with escalation over an established period of time)
 - 4.8.1.3 Develop and/or update GEC's opinion of probable renewal & replacement budget cost estimates (non-routine estimates) using either a Sketch Level approach (an estimated per mile cost based on renewal & replacement budgets utilized on similar facilities) or a Level 1 approach (identification of long-term, periodic maintenance replacement schedule, estimation of quantities, and apply escalation to the appropriate replacement years.)

- 4.8.2 Project Cost Estimates: Prepare an estimate of probable construction costs which will include quantity/costs for all major components of work. Prepare estimate for total project cost which will include: program management, preliminary engineering, final engineering, right-of-way, environmental compliance/mitigation, construction, toll collection systems, utility relocation, and CE&I, and financing.
- 4.8.3 Cost Estimate Review Workshop: Prepare for and conduct cost estimate review workshop as required by FHWA on "major projects".
- 4.8.4 Initial Finance Plan: Develop an Initial Finance Plan as required by FHWA on "major projects".
- 4.8.5 Engineer's Report: Prepare an Engineer's Report which includes the project scope, schedule and budget to be included in the Official Statement.
- 4.8.6 Financial Advisor Support / Financial Plan Development: Provide financial advisor support necessary for the Authority to conduct financial programming including but not limited to cost estimating, financing techniques, shortfall mitigation techniques, and funding contingency plan.

4.9 Conceptual Operations Plan

4.9.1 Prepare a preliminary draft Conceptual Operations Plan which will establish the basic framework for operations of the facility including a basic definition of systems architecture for ITS and toll collection, incident management, safety and enforcement, maintenance. The plan will include roles and responsibilities of the various agencies.

5.0 Public Involvement / Outreach [Code 13750]

- 5.1 Prepare a comprehensive mailing list of adjacent property owners which may include additional property owners defined by the Mobility Authority
- 5.2 Distribute invitations based on comprehensive mailing lists
- 5.3 Support the Mobility Authority in the development and maintenance of the Project Website.
- 5.4 Support the Mobility Authority in the development of miscellaneous public involvement materials including but not limited to fact sheets, stake holder lists, advertisements, and news letters
- 5.5 Stakeholder and Public Outreach support as requested by the Authority. Facilitate and prepare documents for public and stakeholder outreach including but not limited to meeting notes, sign-in sheets, and plan view exhibits (Scroll type). Provide staff to support as needed for each meeting.
- 5.6 Develop 3D roadway animation incorporating schematic and context sensitive designs as directed by the Mobility Authority.
- 5.7 Public Meetings
 - 5.7.1 Facilitate, prepare documents and provide supporting staff as needed for four (4) Open House meetings. [One (1) TxDOT Public Meeting and Three (3) Context Sensitive Solutions (CSS) Meetings]
 - 5.7.2 Distribute invitations to the additional property owners.

- 5.7.3 Provide supporting staff as needed for the Public Meetings.
- 5.7.4 Provide supporting documentation as directed by the Mobility Authority.
- 5.7.5 Provide website support associated opening and closing comment periods for the NEPA exhibits and voting selections associated with the CSS elements.

5.8 Public Hearing

- 5.8.1 Assist TxDOT with preparation of a comprehensive mailing list of adjacent property owners which may include additional property owners defined by the Mobility Authority.
- 5.8.2 Distribute invitations to the additional property owners.
- 5.8.3 Provide supporting staff as needed for the Public Hearing.
- 5.8.4 Provide supporting documentation as directed by the Mobility Authority.

5.9 Context Sensitive Solutions

- 5.9.1 Provide supporting staff as needed for meetings and workshops.
- 5.9.2 Provide supporting documentation as directed by the Mobility Authority.
- 5.10 Mobility Authority Open House/Workshops
 - 5.10.1 Provide supporting staff as needed for stakeholder meetings and workshops.
 - 5.10.2 Provide Supporting Documentation and materials as directed by the Mobility Authority.

Attachment B - Fee Estimate Summary

CTRMA General Engineering Consultant Atkins - Man-hour Breakdown & Fee Estimate 183 South Project (Bergstrom Expressway)

ATKINS - Supplemental Work Authorization #4 to Work Authorization #2

183 South Project (Bergstrom Expressway)

	TASK	SUBTOTAL Labor + Overhead +		BTOTAL Direct	<u>TOTAL</u>
183 South	Project (Bergstrom Expressway)	Profit	E	xpenses	
1.0	Preliminary Engineering [13110]	\$ 1,002,795	\$	27,500	\$ 1,030,295
2.0	Final Design Services [Code 13310]	\$ 763,883	\$	25,500	\$ 789,383
3.0	Right-of-Way Acquisition & Relocation Services [Code 13410]	\$ 513,401	\$	14,500	\$ 527,901
4.0	Project Oversight - Pre Construction [Code 13710]	\$ 865,695	\$	29,250	\$ 894,945
5.0	Public Involvement / Outreach [Code 13750]	\$ 1,000,770	\$	31,500	\$ 1,032,270
	Subtotals	\$ 4,146,545	\$	128,250	\$ 4,274,795

TOTAL (rounded) \$ 4,274,800

CTRMA General Engineering Consultant Atkins - Man-hour Breakdown & Fee Estimate 183 South Project (Bergstrom Expressway)

183 South Project (Bergstrom Expressway)

		A	В		С	D		E		F	TOTAL
	(Estimated Average Labor Rates) \$	80.00	\$ 70.	00 5	60.00	5 .	15.00	\$ 35.00	\$	25.00	IIRS
TASK/WORK DES	CRIPTION		91K	NV.		190		Sinc. 877/2/	-		3000575W
1.0 Preliminar	y Engineering [13110]										
Sche	matics and Exhibits										
1.1	TxDOT Support	80	800		640	B00);	160		80	2560
1.2	Design Verification	40	300		100	60		120			620
1.3	Design Modifications	80	300		160	160	1	120			820
1.4	Shared Use Path	20	120		480	80		80			780
1.5	Tree Alternative Designs		100		160	80		120			460
1.6	Mobility Improvement associated with logical termini	20	100		60	80					260
1.7	Preliminary Cross Sections	10	80		60	80		120			350
1.8	Design Evaluations/Reference Documents	10	80		60	80					230

TOTAL DIRECT LABOR			260		1880		1720		1420		729		80		6080
	% Total by Classification		4.28%		30.92%		28.29%		23.36%		11.84%		1.32%		
Labor Costa		3	20,800	S	131,600	3	103,200	\$	63,900	\$	25,200	\$	2,000	5	346,700
Overhead Costs	1.5825	5	32,916	\$	208,257	5	163,314	5	101,122	5	39,879	5	3,165	\$	548,653
Profit	12.0%	\$	6,446	5	40,783	5	31,982	5	19,803	5	7,809	5	620	\$	107,442
Total Loaded Labor		5	60,162	\$	380,640	5	298,496	\$	184,824	5	71,889	5	5,785	1	1,002,795

Direct Expenses		
Ploning and Reproduction	5	5,000
Mail and Deliveries	5	500
Misc Expenses	S	10,000
Travel and Field Expenses	\$	12,000
Total Direct Expenses	5	27,500

Total \$ 1,030,295

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CTRMA General Engineering Consultant Atkins - Man-hour Breakdown & Fee Estimate 183 South Project (Bergstrom Expressway)

183 South Project (Bergstrom Expressway)

		d	В		С	D		Ε		F	TOTAL
	(Estimated Average Labor Rates) \$	R0.00	\$ 70.00	S	60.00	\$ 45.00	5	35.00	5	25.00	HRS
ASK/WORK	DESCRIPTION				3237411 314						
2.0 Final	Design Services [Code 13310]										0
2.1	AT&T Design	80	240		1440	2240		540		240	4780
2.2	Conflict Analysis and Conceptual Relocation Plan	20						120			140
2.3	Utility Company and TxDOT Coordination	20						240		3.0	340
2.4	Prepare and Maintain Utility Schedule	20						240		40	300
											0
											0
											0
											0

TOTAL DIRECT LABOR			140		240		1440		2240		1140		360		5560
	% Total by Classification		2.52%		4.32%		25.90%		40.29%		20.50%		6.47%		
Labor Costs		5	11,200	5	16,800	5	86,400	5	100,800	5	39,900	5	9,000	S	264,100
Overhead Costs	1.5825	5	17,724	\$	26,586	5	136,728	5	159,516	\$	63,142	5	14,243	5	417,938
Profit	12.0%	\$	3,471	5	5,206	\$	26,775	5	31,238	\$	12,365	5	2,789	\$	81,845
Total Loaded Labor		5	32,395	5	48.592	5	249.903	\$	291,554	S	115.407	2	26.032		\$763,883

Direct Expenses		
Plotting and Reproduction	5	5,000
Mail and Deliveries	S	500
Misc Expenses	\$	10,000
Travel and Field Expenses	5	10,000
Total Direct Expenses	5	25,500

Total S 789,383

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CTRMA General Engineering Consultant Atkins - Man-hour Breakdown & Fee Estimate 183 South Project (Bergstrom Expressway)

183 South Project (Bergstrom Expressway)

		0/	A		В		C		D		E		F	TO	TAL
		erage Labor Rates) 5	80.00	5	70.90	\$	60.00	S	45.00	5	35.00	S	25.00	Ш	RS
TASK / WORK DESCI	RIPTION						***								107.0
3.0 Right-of-Wa	y Acquisition & Relocation Services [Code 1341	0]													
3.1	Maps & Documents		40				360		840		760		120		2120
3.2	Appraisals				40				220		240		120		620
3.3	Negotiations / Voluntary Settlement						120		240		240		80		680
3.4	Relocation Assistance Services								240		240		80		560
3.5	Right-of-Way Status Tracking		40						120				120		280
															0
															0
															0
	TOTAL DIRECT LABOR		80		40		480		1660		1480		520		4260
	% Tota	l by Classification	1.88%		0.94%		11.27%		38.97%		34.74%		12.21%		
	% Total	\$	1.88% 6,400	9,000	0.94% 2,800	2072	11.27% 28,800	5	38.97% 74,700		34.74% 51,800		12.21% 13,000	S	177,500
	% Total Labor Costs Overhead Costs	\$ 1.5825 \$	6,400 10,128	5	0.94% 2,800 4,431	2072	11.27% 28,800 45,576	5	38.97% 74,700 118,213	\$	34.74% 51,800 81,974	\$	12.21% 13,000 20,573	S	177,500 280,89-
	% Tota Labor Costs Overhead Costs Profit	1.5825 \$ 12.0% \$	1.88% 6,400 10,128 1,983	\$ \$	0.94% 2,800 4,431 868	5	28,800 45,576 8,925	5	38.97% 74,700 118,213 23,150	\$	34.74% 51,800 81,974 16.053	\$	12.21% 13,000 20,573 4,029	5.	177,500 280,89- 55,007
	% Total Labor Costs Overhead Costs	\$ 1.5825 \$	6,400 10,128	\$ \$	0.94% 2,800 4,431	2072	11.27% 28,800 45,576	5	38.97% 74,700 118,213	\$	34.74% 51,800 81,974	\$	12.21% 13,000 20,573	5.	177,500 280,89-
	Labor Costs Overhead Costs Profit Total Loaded Labor	1.5825 \$ 12.0% \$	1.88% 6,400 10,128 1,983	\$ \$	0.94% 2,800 4,431 868	5	28,800 45,576 8,925	5	38.97% 74,700 118,213 23,150	\$	34.74% 51,800 81,974 16.053	\$	12.21% 13,000 20,573 4,029	5.	177,500 280,89- 55,007
	Labor Costs Overhead Costs Profit Total Loaded Labor Direct Expenses	1.5825 \$ 12.0% \$	1 88% 6,400 10,128 1,983 18,511	\$ \$	0.94% 2,800 4,431 868	5	28,800 45,576 8,925	5	38.97% 74,700 118,213 23,150	\$	34.74% 51,800 81,974 16.053	\$	12.21% 13,000 20,573 4,029	5.	177,500 280,89- 55,007
	### Total Labor Costs Overhead Costs Profit Total Loaded Labor Direct Expenses Plotting and Reproduction	1.5825 \$ 12.0% \$	1.88% 6,400 10,128 1,983 18,511	\$ \$	0.94% 2,800 4,431 868	5	28,800 45,576 8,925	5	38.97% 74,700 118,213 23,150	\$	34.74% 51,800 81,974 16.053	\$	12.21% 13,000 20,573 4,029	5.	177,500 280,89- 55,007
	Labor Costs Overhead Costs Profit Total Loaded Labor Direct Expenses Plotting and Reproduction Mail and Deliveries	1.5825 \$ 12.0% \$	1.88% 6,400 10,128 1,983 18,511 4,000 500	\$ \$	0.94% 2,800 4,431 868	5	28,800 45,576 8,925	5	38.97% 74,700 118,213 23,150	\$	34.74% 51,800 81,974 16.053	\$	12.21% 13,000 20,573 4,029	5.	177,500 280,89- 55,007
	Labor Costs Overhead Costs Profit Total Loaded Labor Direct Expenses Plotting and Reproduction Mail and Deliveries Misc Expenses	1.5825 \$ 12.0% \$	1.88% 6,400 10,128 1.983 18,511 4,000 500 4,000	\$ \$	0.94% 2,800 4,431 868	5	28,800 45,576 8,925	5	38.97% 74,700 118,213 23,150	\$	34.74% 51,800 81,974 16.053	\$	12.21% 13,000 20,573 4,029	5.	177,500 280,89- 55,007
	Labor Costs Overhead Costs Profit Total Loaded Labor Direct Expenses Plotting and Reproduction Mail and Deliveries	1.5825 \$ 12.0% \$	1.88% 6,400 10,128 1,983 18,511 4,000 500	\$ \$	0.94% 2,800 4,431 868	5	28,800 45,576 8,925	5	38.97% 74,700 118,213 23,150	\$	34.74% 51,800 81,974 16.053	\$	12.21% 13,000 20,573 4,029	5.	177,500 280,89- 55,007

Total 5 527,901

CTRMA General Engineering Consultant Atkins - Man-hour Breakdown & Fee Estimate 183 South Project (Bergstrom Expressway)

183 South Project (Bergstrom Expressway)

	2.201 95 90	A		В	С		D		E		F	TOTAL
	(Estimated Average Labor Rates) \$	80.00	S	70.00	\$ 60.00	5	45.00	5	35.00	S	25.00	IIRS
ASK/WORK	DESCRIPTION	NR/AX ahlaha		1010000000	 er Samoosem		NECESTRATE .		N-SS-SEGRETOR		200 200 4000	
4.0 Proje	ect Oversight - Pre Construction [Code 13710]											
4.1	Project Management	480		80							80	640
4.2	Project Management Plan	40			120		320		120		80	680
4.3	Document Control	120							120		120	360
4.4	Sub-Consultant Coordination, WA Management and Invoicing	80							120		120	320
4.5	Project Reporting	120		120			120		120		240	720
4.6	Project Scheduling	40		240	120		120					520
4.7	Project Development Support	120		320	240		240		80		80	1080
4.8	Financial Planning Support	180		240	200		120		120		80	940
4.9	Conceptual Operations Plan	40		20			80		20			160
												0
												0
												100

TOTAL DIRECT LABOR	l		1220		1020		680	1000		700		800	5420
	% Total by Classification		22.51%		18.82%		12.55%	18.45%		12.92%		14.76%	
Labor Costs		\$	97,600	5	71,400	\$	40,800	\$ 45,000	5	24,500	3	20,000	\$ 299,300
Overhead Costs	1.5825	5	154,452	S	112,991	5	64,566	\$ 71,213	5	38,771	5	31,650	\$ 473,642
Profit	12.0%	5	30,246	5	22,127	5	12,644	\$ 13,946	5	7,593	S	6,198	\$ 92,753
Total Loaded Labor		3	282,298	S	206,517	\$	118,010	\$ 130,158	5	70,864	S	57,848	\$865,695

Direct Expenses		
Plotting and Reproduction	\$	4,500
Mail and Deliveries	5	250
Misc Expenses	\$	9,500
Travel and Field Expenses	2	15,000
Total Direct Expenses	- 5	29,250

Total \$ 894,945

183 South Project (Bergstrom Expressway)

183 South Project (Bergstrom Expressway)													
and a common a fact for the state of the sta		A		В		С		D		E	-	F	TOTAL
	(Estimated Average Labor Rates)_\$	80.00	\$	70.00	\$	60.00	5	45.00	\$	35.00	5	25.00	HRS
TASK / WORK DESCRIPTION	(Estimated Average Cabor Rates)_s	80.00	3	70.00	,	80.00	,	45.00	3	35.00	•	25.00	111

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CTRMA General Engineering Consultant Atkins - Man-hour Breakdown & Fee Estimate 183 South Project (Bergstrom Expressway)

183 South Project (Bergstrom Expressway)

5.2 Distribute Invitations 20 60 60 80 220 5.3 Website development and maintenance 10 40 80 320 360 810 5.4 Development of Public Involvement materials 20 120 80 360 480 106 5.5 Stakeholder and Public Outreach Support 20 120 80 360 480 106 5.6 Develop 3D Animation 10 60 680 60 810 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 60 420 5.9 Context Sensitive Solutions 20 60 720 240 240 80 80			A	В		C		D	E		F	TOTAL
5.0 Public Involvement / Outreach [Code 13750] 5.1 Prepare Comprehensive Mailing List 20 60 120 80 280 5.2 Distribute Invitations 20 60 60 80 220 5.3 Website development and maintenance 10 40 80 320 360 810 5.4 Development of Public Involvement materials 20 120 80 360 480 106 5.5 Stakeholder and Public Outreach Support 20 120 80 360 480 106 5.6 Develop 3D Animation 10 60 680 60 810 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 60 42 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136		(Estimated Average Labor Rates) \$	80.00	\$ 70.00	2 (60.00	5	45.00	5	35.00	5 25.00	IIRS
5.1 Prepare Comprehensive Mailing List 20 60 120 80 280 5.2 Distribute Invitations 20 60 60 80 220 5.3 Website development and maintenance 10 40 80 320 360 810 5.4 Development of Public Involvement materials 20 120 80 360 480 106 5.5 Stakeholder and Public Outreach Support 20 120 80 360 480 106 5.6 Develop 3D Animation 10 60 680 60 81 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 60 420 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	ASK/WORK	DESCRIPTION			***					V-0	1000000	
5.2 Distribute Invitations 20 60 60 80 22 5.3 Website development and maintenance 10 40 80 320 360 810 5.4 Development of Public Involvement materials 20 120 80 360 480 106 5.5 Stakeholder and Public Outreach Support 20 120 80 360 480 106 5.6 Develop 3D Animation 10 60 680 60 810 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 80 60 42 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.0 Public	c Involvement / Outreach [Code 13750]										
5.3 Website development and maintenance 10 40 80 320 360 810 5.4 Development of Public Involvement materials 20 120 80 360 480 106 5.5 Stakeholder and Public Outreach Support 20 120 80 360 480 106 5.6 Develop 3D Animation 10 60 680 60 810 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 80 60 420 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.1	Prepare Comprehensive Mailing List		20		60	3	120			80	280
5.4 Development of Public Involvement materials 20 120 80 360 480 106 5.5 Stakeholder and Public Outreach Support 20 120 80 360 480 106 5.6 Develop 3D Animation 10 60 680 60 810 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 60 42 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.2	Distribute Invitations		20		60		60			80	220
5.5 Stakeholder and Public Outreach Support 20 120 80 360 480 106 5.6 Develop 3D Animation 10 60 680 60 810 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 60 420 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.3	Website development and maintenance	10	40		80	1	320	36	0		810
5.6 Develop 3D Animation 10 60 680 60 810 5.7 Public Meetings 40 80 80 120 80 60 460 5.8 Public Hearing 40 80 80 80 80 60 420 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.4	Development of Public Involvement materials	20	120		80	1	360	48	0		1060
5.7 Public Meetings 40 80 80 120 80 60 46 5.8 Public Hearing 40 80 80 80 80 80 60 420 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.5	Stakeholder and Public Outreach Support	20	120		80	3	360	48	0		1060
5.8 Public Hearing 40 80 80 80 60 420 5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.6	Develop 3D Animation	10	60	6	580		60				810
5.9 Context Sensitive Solutions 20 60 720 240 240 80 136	5.7	Public Meetings	40	80		80		120	81	0	60	460
	5.8	Public Hearing	40	80		80		80	81	0	60	420
5.10 Open House/Workshops 40 120 80 120 160 80 600	5.9	Context Sensitive Solutions	20	60	7	720	2	140	24	0	80	1360
	5.10	Open House Workshops	40	120		80	1	20	16	0	80	600

TOTAL DIRECT LABOR	100		200		720		2000		1840		1880		440		7080
ARREST MANAGEMENT AND	36 Total by Classification		2.82%		10.17%		28.25%		25.99%		26.53%		6.21%		
Labor Costs		S	16,000	5	50,400	\$	120,000	5	82,800	5	65,800	S	11,000	3	346,000
Overhead Costs	1.5825	\$	25,320	5	79,758	5	189,900	5	131,031	5	104,129	5	17,408	5	547,545
Profit	12.0%	5	4,958	5	15.619	5	37.188	5	25,660	5	20,391	\$	3,409	5	107,225
Total Loaded Labor		\$	46,278	5	145,777	\$	347,088	\$	239,491	S	190,320	S	31.816		\$1,000,770

Direct Expenses		
Plotting and Reproduction	\$	15,000
Mail and Deliveries	5	500
Misc Expenses	5	10,000
Travel and Field Expenses	\$	6,000
Total Direct Expenses	5	31,500

Total \$ 1,032,270

183 South Project (Bergstrom Expressway)

183 South Project (Bergstrom Expressway)											
7 % 800 6 7%	_	A	В	С		D		E		F	TOTAL
	(Estimated Average Labor Rates) \$	80.00	\$ 70.00	\$ 60.00	5	45.00	5	35.00	5	25.00	HRS

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