



**CENTRAL TEXAS
Regional Mobility Authority**

AGENDA ITEM #7 SUMMARY

Authorize a new work authorization with HNTB Corporation for services related to environmental review of the MoPac South Project.

Strategic Plan Relevance: Regional Mobility
Department: Engineering
Associated Costs: Not to exceed \$3,714,512.00
Funding Source: Reimbursed with Rider 42 funds.
Board Action Required: Yes

Description of Matter:

The GEC will perform project management and administrative tasks; procurement of an environmental development team; coordinate with TxDOT Austin District, Consultants, Resource Agencies, TxDOT's Environmental Affairs Division, and the FHWA as required for permitting and environmental approval; Schematic Design Review; procurement of a final design consultant; public involvement support; and construction contract preparation.

Reference documentation:

Draft Resolution and Work Authorization No. 13

Contact for further information:

Wesley M. Burford, P.E., Director of Engineering

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

RESOLUTION NO. 12-____

**AUTHORIZING A NEW WORK AUTHORIZATION WITH HNTB CORPORATION
FOR SERVICES RELATED TO ENVIRONMENTAL REVIEW AND PROCUREMENT
AND REVIEW OF DESIGN WORK FOR THE MOAPC SOUTH PROJECT.**

WHEREAS, HNTB Corporation (“HNTB”) 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, the Executive Director and HNTB have discussed and agreed to a new work authorization for HNTB to provide project development, environmental oversight, and design oversight services for the development of the MoPac South Express Lanes project; and

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

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

BE IT FURTHER RESOLVED that the Executive Director may finalize and execute for the Mobility Authority the proposed 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 31st day of October, 2012.

Submitted and reviewed by:

Approved:

Andrew Martin
General Counsel for the Central
Texas Regional Mobility Authority

Ray A. Wilkerson
Chairman, Board of Directors
Resolution Number 12-____
Date Passed 10/31/12

Exhibit 1

[on the following 13 pages]

APPENDIX D

WORK AUTHORIZATION

WORK AUTHORIZATION NO. 13

This Work Authorization is made as of this 28th day of September, 2012, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of December 23rd, 2009 (the "Agreement"), between the Central Texas Regional Mobility Authority ("Authority") and **HNTB Corporation** ("GEC"). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

MoPac South - Project Development, Environmental Oversight, Design Oversight

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 Work Authorization, 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:

Please reference 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 expire on December 31, 2014, or when all tasks associated with the Scope of Services are complete as defined by the Authority.

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 **\$3,714,512** based on a Cost Plus fee listed in Attachment B – Fee Estimate. 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 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 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:

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**

By: _____

Name: Mike Heiligenstein

Title: Executive Director

Date: _____

GEC:

HNTB Corporation

By: _____

Name: Richard L. Ridings, P.E.

Title: Vice President

Date: _____

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

ATTACHMENT A – SCOPE OF SERVICES

WORK AUTHORIZATION NO. 13

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

General

The services to be performed by GEC will include, but not be limited to, professional services and deliverables for various tasks related to the study and development of the MoPac South Project, "the Project". The limits of the services are from Cesar Chavez Street south to SH45 South. Because the GEC has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet project schedules, the GEC's opinion of probable costs shall be made on the basis of experience and qualifications as a practitioner of its profession. GEC does not guarantee that proposals, bids, or actual project costs will not vary from GEC's construction cost estimates and/or GEC's projected schedules. No review, coordination or monitoring services by GEC under this Agreement relieve other project participants of their contractual obligations to the Authority or any other party.

1.0 PROJECT MANAGEMENT & ADMINISTRATION

The GEC will perform project management, administrative and coordination duties, including contract administration, project management, reporting, meeting minutes of required meetings, and other related administrative tasks (e.g., direct costs) associated with the Project, including:

1.1. Contract Administration

Prepare contracts, as required, between the GEC and the Authority, GEC and subconsultants, and the Authority and its subconsultants. Provide assistance to the Authority related to Board approval of contracts. Monitor and coordinate subconsultant activities, review all work products prepared by subconsultant, review and approve subconsultant progress reports and invoices.

1.2. Progress Reports

Prepare monthly invoices and progress reports for the work tasks. A monthly progress report will be submitted and will include: activities completed, initiated or ongoing, during the reporting period. This includes preparation of invoices and required backup documentation, quarterly reports and presentations, and preparation and support for monthly Project updates for distribution to stakeholders.

1.3. Record Keeping and File Management

Maintain, and, upload records and files, related to the Project, throughout the duration of GEC Services.

1.4. Correspondence

Prepare written materials, letters, survey forms, etc. used to solicit information or collect data for the project and submit them to the Authority for review and approval prior to its use or distribution. Copies of relevant outgoing correspondence and incoming correspondence will be provided to the Authority on a continuing basis.

1.5. Schedule Preparation and Update

Prepare a detailed, graphic Master Schedule linking work authorization tasks, subtasks, critical dates, milestones, deliverables, and the Authority/Texas Department of Transportation (TxDOT)/ Federal Highway Administration (FHWA) scheduled review requirements. The project schedule will be in a format that depicts the order and interdependence of the various tasks, subtasks, milestones and deliverables for each of the tasks identified therein. Progress will be reviewed periodically, and should these reviews indicate a substantial change in progress, a schedule recovery strategy will be developed collectively with the comprehensive Project team and the schedule will be revised accordingly. Implementation of the recovery schedule may be subject to others (TxDOT).

1.6. Project Reporting / Dashboard Update

Prepare and submit updated project information, including schedule and budget, for the Authority's dashboard on a monthly basis; provide QC review of revised information on website. Assist with the Preparation and, if necessary, submit all documentation related to TxDOT's Local Government Project Procedures, Rider 42 Requirements, and Quarterly Project Reports.

2.0 PROJECT DEVELOPMENT

This scope of services includes professional services and deliverables in support of the Authority's development of the Project from Cesar Chavez Street south to SH45 South.

2.1. Project Development Support

The GEC will provide support to the Authority as required during the Project Development process. Anticipated efforts will include:

- 2.1.1. Loan and/or Grant Applications: Assist the Authority in the development of loan and/or grant applications for the project as required. This will include various elements of the loan and/or grant form and associated documentation for the Authority's review and approval; it will also include participation in the coordination efforts with State and/or Federal agencies as requested by the Authority. (One Application Anticipated)
- 2.1.2. Engineering and Technical Support: Provide various engineering and technical tasks as requested by the Authority including but not limited to: general engineering assistance, general technology assistance, environmental assistance, reports, research, presentations, and meetings.

- 2.1.3. Traffic Modeling: Conduct a peer review of the CORSIM and/or VISSIM Traffic Models and provide summary of review comments. Assist with coordination between consultants.
- 2.1.4. TxDOT, Capital Metro, and FHWA Coordination: Provide appropriate staff as part of coordination efforts between the Authority and TxDOT, Capital Metro, and FHWA. GEC will provide coordination efforts on the Authority's behalf at the direction of the Authority.
- 2.1.5. Traffic and Revenue (T&R) Consultant Coordination: Provide coordination and support to the Authority's T&R Consultant, as directed by the Authority. Conduct peer review and provide summary of review comments.
- 2.1.6. Project Development Agreement (PDA): Assist in the development of the PDA, generation of PDA exhibits, review of PDA drafts, and TxDOT coordination support, as directed by the Authority.
- 2.1.7. CAMPO Coordination: Provide appropriate staff as part of coordination efforts between the Authority and CAMPO. GEC will provide coordination efforts on the Authority's behalf at the direction of the Authority.
- 2.1.8. Provide DBE Outreach as requested by the Authority.
- 2.1.9. Utility and Right-of-Way Support: Support the Authority in its efforts to coordinate future utility relocations and right-of-way acquisitions if needed.

2.2. Financial Planning Support

2.2.1. Project Cost Estimate Updates

GEC will provide opinion of probable total project cost estimate updates for the project. GEC will prepare an estimate of probable construction costs which will include quantity/cost estimates for major components of work such as; roadway paving, roadway earthwork, roadway drainage, bridge structures, retaining walls, other structures, signing and marking, lighting, and signalization. The estimate of probable construction costs will be used to estimate total project costs that will also include program management and oversight, preliminary engineering, final engineering, right-of-way (ROW) acquisition, environmental compliance/mitigation, construction, toll collection systems utility relocation and construction engineering and inspection (CEI), legal, public involvement, and financing costs.

Provide updates to preliminary costs estimate, schedule, financial feasibility analysis necessitated by the on-going project scoping/sizing process.

Incorporate the use of risk-based cost estimating as requested by the Authority.

2.2.2. Operation, Maintenance, and Renewal & Replacement Estimate Updates

- Develop and/or update GEC's opinion of probable operations cost estimates using either a Sketch Level approach (i.e., an assumed per transaction cost based on average operations costs of similar toll systems) or a Level 1 approach (i.e., estimate actual quantities for the various elements of the toll operations, enforcement and incident management and

applying anticipated unit prices to same to develop an opening year cost estimate which can be escalated over time).

- Develop and/or update GEC's opinion of probable annual/routine maintenance cost estimates using either a Sketch Level approach (i.e., an estimated per centerline mile cost based on the facility type which considers the number of lanes, pavement material, and location) or a Level 1 approach (i.e., estimate actual quantities for the various elements of the maintenance efforts and applying anticipated unit prices to same to develop an opening year cost that can be escalated over time).
- Develop and/or update GEC's opinion of probable renewal & replacement budget cost estimates (non-routine maintenance estimates) using either a Sketch Level approach (i.e., an estimated per mile cost based on renewal & replacement budgets utilized on similar facilities) or a Level 1 approach (i.e., includes the identification of a long-term, periodic maintenance/replacement schedule, estimation of quantities for the associated elements, and inflated prices of same to assess the overall cost requirements of the system in the target years).

2.2.3. Toll Feasibility Analysis Updates

GEC will assist the Authority in updating toll feasibility analyses which includes the incorporation of traffic and revenue forecast updates (by others); operations, maintenance, and renewal & replacement estimates; and total project cost estimates to determine the financial feasibility of the project.

2.2.4. Financial Advisor Support/Financial Plan Development

GEC will provide support as requested by the Authority to assist in the financial programming of their system. This will include the development of cash flow analyses which contemplate implementation costs and schedules. GEC will also assist in the identification of priorities for the Project. The tasks will include:

- Assess third party related costs for utility adjustments/relocations.
- If necessary, assist with a system financing plan which may include additional Authority Projects and may require the update and revision of the respective operations and maintenance costs, traffic and revenue studies, and renewal and replacement cost estimates.
- Develop a Funding Contingency Plan should funding for the project as a whole not be provided and determine the impact of various design approaches on estimated project costs and project design life. GEC will:
 - Develop a list of "reasonable" design options for consideration such as project length reductions, ramp reductions, and pavement structure modifications, etc.
 - Meet with the Authority regarding design option concurrence prior to additional analysis.
 - Analyze and document the financial implications of the various design

options considered and include such things as project cost, schedule impact, local economic impact, length of useful life, operations and maintenance, and impact on financing options.

2.3. Toll Systems Support

The GEC will update the guidelines for the toll collection system for the Project, if required. The toll system will utilize an Electronic Toll Collection (ETC) System (cashless). The GEC will prepare toll facilities guidelines sufficient for the final design consultant to prepare the final design, if required. Input from the Authority will be included regarding the design concept(s). Toll Systems/Facilities Guidelines will include:

- Locate toll systems / facilities on Schematic Design plans.
- Include toll system elements in the Schematic Design:
 - Plan view (Structural, Equipment Enclosures, Large Signs, Striping)
 - Elevations
 - General Sections
- Analysis of:
 - Toll Operations
 - Mechanical and Electrical Operations
 - Provisions for local utilities services
 - Facilities for surveillance, communication and control
 - Conceptual ITS interface and infrastructure
- Layouts for toll gantries
- Outline Specifications
- Opinion of Probable Construction Cost

2.4. Conceptual Operations Plan

Update the existing MoPac Operations Plan to include the Project. The operations plan is intended to 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, and maintenance. The plan will include the roles and responsibilities of the various agencies. This living document will identify program goals and specific project operational requirements, infrastructure, personnel, operations and maintenance support efforts, and resource requirements.

This task may include coordination with TxDOT, the City of Austin, Travis County, Hays County, TTI, and the Authority's Toll Systems Integrator. The Conceptual Operations Plan will include the following specific tasks, as necessary:

2.4.1. Operations Plan Development

Based, in part, on the findings of industry research and the development of "Best Practices" for the operation of toll projects, prepare a preliminary Conceptual

Operations Plan which presents the concept for operation of the proposed Project to include:

- Definition of the Operations Concept
- Description of the toll facility
- Description of the Systems Architecture, including
 - Toll Collection System components
 - Communications Infrastructure
 - ITS System and Interface
- Incident Management
- Enforcement
- Facility Maintenance

2.4.2. Interagency Coordination

Assist the Authority in any necessary interagency coordination related to the operations of the Project.

3.0 ENVIRONMENTAL SERVICES

3.1. Consultant Procurement

GEC will prepare the deliverables required to complete the procurement of an Environmental Consultant to provide Professional Services (environmental and preliminary engineering) for the environmental clearance and preliminary design of the project in accordance with TxDOT's Local Government Project Procedures.

Services include those required to assist the Authority in: the preparation of a Request for Qualifications (RFQ); the issuance of the RFQ; and the receipt and assessment of submitted responses (anticipate one (1) solicitation).

- Working jointly with the Authority, the GEC will develop a RFQ for the Project, post the RFQ as required by the Authority, and provide responses to questions/modifications as may be required during the process.
- The GEC will support the development of evaluation criteria for the RFQ and evaluate the measurable qualifications of each component utilizing the evaluation procedures and formulae. Provide summaries of strengths and weaknesses of all respondents for each component. Participate in meetings with the Authority staff to discuss evaluations of Responses.
- Assist and support the Authority in the development of the short-list of consultant teams.
- Assist in the preparation of questions to be asked by the Authority at the interviews of short-listed consultant teams. Assist the Authority in planning and managing the interviews. Assist the Authority in answering technical questions at the interviews.

- Participate with the Authority in discussions and reviews of the respondents' comments and answers to the Authority questions after interviews. Prepare final written synopses of those responses in a style and format suitable for review and evaluation by the Selection Committee.
- Assist the Authority staff in preparing for and presenting the recommendations of the Committee to the Authority Board of Directors (the "Board"). Prepare and organize all documents, exhibits, and visual aids required for the comprehension of the presentation by the Board.
- Assist the Authority in preparation of a contract between the Consultant and the Authority; including Scope of Services and Fee Negotiations.

3.2. Environmental Program Management

3.2.1. Agency Coordination

Support the Authority in coordination activities with TxDOT Austin District, Consultants, Resource Agencies, TxDOT's Environmental Affairs Division, and the FHWA, as required; including meeting preparation, public outreach support and attendance at public meetings, hearings, and associated workshops or preparation meetings.

- Monitor the schedule and provide updates to the Authority on a monthly basis.
- Prepare for and attend technical working group meetings and TxDOT meetings

3.2.2. Document Review

- Review draft and final Environmental Documents and provide written comments on such documents.
- Reviews shall be for general conformance to the applicable requirements of TxDOT, Capital Metro, and FHWA, if required. Sources of materials will include data received from TxDOT and other federal, state and local governmental and quasi-governmental agencies and field investigations.

3.2.3. Schematic Design Review

GEC will provide high level review, for general conformance with the design criteria and overall project goals, of the draft and the final schematic design prepared by the Environmental Consultant as well as a high level constructability review. Written comments will be provided for each review. GEC will also coordinate with the Environmental Consultant during the schematic design.

3.3. Evaluation of Park & Ride Locations / Bicycle and Pedestrian Accommodations

The GEC will evaluate the Project Corridor for potential Park & Ride locations. This effort will include Agency and stakeholder coordination. Support the Authority in its efforts to incorporate safe and feasible pedestrian and bicycling connectivity into the Project.

4.0 PUBLIC INVOLVEMENT SERVICES

4.1. Oversight of Environmental-related Public Involvement

Support the Authority in coordination activities with the Environmental Consultant, as required; including:

- material preparation;
- preparation, coordination, participation, and/or attendance at stakeholder meetings, open houses, public meetings and hearings, and noise workshops
- review of public outreach support materials; and
- review of public outreach documentation and reports.
- review and provide response support to public inquiries.

4.2. Enhanced Public Involvement Activities

Support the Authority in comprehensive services in planning, scheduling, developing, conducting, and documenting enhanced public involvement activities, as required; including:

- “Informed Consent”-driven Open Houses
- Elected Official Outreach
- Stakeholder Outreach and Facilitation
- Website Support
- E-Newsletters
- Rider 42 requirements

Support the Authority in preparation of media outreach/media briefings, as requested by the Authority. It is anticipated that these services will be primarily handled by the Authority and the Authority’s public relations consultant.

4.3. 3D Simulations

Provide a basic computer simulation(s) of the Project, similar to the simulations used for the MoPac Improvement Project, for use in Open House meetings and outreach events as requested by the Authority.

5.0 CONTEXT SENSITIVE DESIGN SUPPORT

Support the Authority in its efforts to provide context sensitive design solutions to the Project including:

- Establish an aesthetics committee and assist in the coordination of all aesthetic committee meetings
- Incorporate concepts from the Green Mobility Challenge, as appropriate, including coordination with TxDOT

6.0 FINAL ENGINEERING CONSULTANT SERVICES

6.1. Consultant Procurement

GEC will prepare the deliverables required to complete the procurement of a Design Consultant (DC) to provide Professional Services for final engineering design of the project in accordance with TxDOT's Local Government Project Procedures.

Services include those required to assist the Authority in: the preparation of a Request for Qualifications (RFQ); the issuance of the RFQ; and the receipt and assessment of submitted RFQs. These support activities will consist of the following specific tasks (anticipate one (1) solicitation):

- Working jointly with the Authority, the GEC will develop a RFQ for the Project, post the RFQ as required by the Authority, and provide responses to questions/modifications as may be required during the process.
- The GEC will support the development of evaluation criteria for the RFQ and evaluate the measurable qualifications of each component utilizing the evaluation procedures and formulae. Provide summaries of strengths and weaknesses of all respondents for each component. Participate in meetings with the Authority staff to discuss evaluations of Responses.
- Assist and support the Authority in the development of the short-list of consultant teams.
- Assist in the preparation of questions to be asked by the Authority at the interviews of short-listed consultant teams. Assist the Authority in planning and managing the interviews. Assist the Authority in answering technical questions at the interviews.
- Participate with the Authority in discussions and reviews of the respondents' comments and answers to the Authority questions after interviews. Prepare final written synopses of those responses in a style and format suitable for review and evaluation by the Selection Committee.
- Assist the Authority staff in preparing for and presenting the recommendations of the Committee to the Authority Board of Directors (the "Board"). Prepare and organize all documents, exhibits, and visual aids required for the comprehension of the presentation by the Board.
- Assist the Authority in preparation of a contract between the Consultant and the Authority; including Scope of Services and Fee Negotiations.

6.2. Final Design Program Management

The work to be performed by the GEC will include coordination with the Authority and the selected DC in the design of the Project. The GEC will provide the overall project supervision, management, scheduling, administration, review and coordination of the DC preparing plans, specifications and estimates (PS&E) for the Project.

- Coordinate with the Authority, TxDOT, CAMPO, Travis County, Capital Metro and other entities as required during Project Design.
- Incorporate the Design Schedule into the Master Schedule. Coordinate with DC to maintain an updated version of the Design Schedule for the Project, including planning activities, design, right-of-way acquisition (if required) and construction phases. Maintain and revise the Master Schedule, as necessary, during the course of this Work Authorization.
- Oversee DC activities including:
 - Conduct a kick-off meeting and bi-weekly progress meetings. (anticipated 36 progress meetings)
 - Review monthly invoices and progress reports.
 - Provide Oversight for the preparation of construction documents including:
 - Provide Quality Assurance by monitoring the DC Quality Control Plan including an assessment of the appropriateness of the elements of the QC Plan. These monitoring activities will occur during the PS&E design at 30, 60, 90, and 100 percent milestones.
 - Reviews will be for general compliance with applicable requirements of TxDOT Specifications, Standards and Manuals, incorporation of findings from the approved environmental document, and appropriate use of context sensitive design.
 - Conduct a detailed review of the DC cost estimate at the 60% and 90% submittals.
 - Conduct high level constructability reviews, including utility relocations, SW3P, drainage, typical sections, time constraints, correct bid items, etc.
 - Oversee DC's submission of plans to TxDOT for review at 30, 60, 90, and 100 percent milestones.
 - Oversee DC's submission of plans and Water Pollution Abatement Plan (WPAP) forms to the Texas Commission on Environmental Quality (TCEQ) at appropriate milestones.

Assemble final PS&E package incorporating the DC supporting contract documents and submit them to the Authority for Final PS&E review and processing for letting in accordance with TxDOT's Local Government Project Procedures. Repackaging of PS&E submittals into different construction or phased packages is not included in the Scope of Services.

[END OF SECTION]

TASK DESCRIPTION	CLASSIFICATION										TOTAL HOURS	LOADED FEE
	Group Director / Program Manager	Department Manager	Sr. Advisor / Project Director	Project Manager II	Engineer III	Trans Planner	Sr. UDLA	Sr. Public Involvement Rep.	Sr. Graphic Designer	Office Tech Specialist II		
1.0 PROJECT MANAGEMENT AND ADMINISTRATION												
1.1 Contract Administration	60	16	80	120						380	656	\$ 97,689
1.2 Progress Reports	139	51	51	89				241		608	1178	\$ 157,808
1.3 Record Keeping and File Management										760	760	\$ 65,475
1.4 Correspondence	8	8	16	8							40	\$ 10,227
1.5 Schedule Preparation and Update	38		380	152							570	\$ 146,051
1.6 Project Reporting / Dashboard Update	152		152	114				152		304	874	\$ 148,057
SUBTOTAL	397	75	679	483	0	0	0	393	0	2052	4,078	\$ 625,306
2.0 PROJECT DEVELOPMENT												
2.1 Project Development Support	500	200	1,200	1,100	720	160	120	240		80	4320	\$ 858,562
2.2 Financial Planning Support	100	24	160	400	240		40				964	\$ 178,716
2.3 Toll Systems Support	16		80	160	80						336	\$ 63,362
2.4 Conceptual Operations Plan	24		80	160							264	\$ 57,471
SUBTOTAL	640	224	1520	1820	1040	160	160	240	0	80	5884	\$ 1,158,110
3.0 ENVIRONMENTAL SERVICES												
3.1 Consultant Procurement	20	80	40					20		20	180	\$ 40,241
3.2 Environmental Program Management	80	800	400	560	900	240	80	80		200	3340	\$ 575,765
3.3 Evaluation of Park & Ride Locations / Bicycle and Pedestrians Accommodations	40	60	160	40	80	40	24	40			484	\$ 97,145
SUBTOTAL	140	940	600	600	980	280	104	140	0	220	4,004	\$ 713,150
4.0 PUBLIC INVOLVEMENT SERVICES												
4.1 Oversight of Environmental-Related Public Involvement	40	40	80	100		50		250	50	5	615	\$ 95,530
4.2 Enhanced Public Involvement Activities	60	80	120	60		120	40	320	120		920	\$ 140,120
4.3 3D Simulations			40	40	40				1,000		1120	\$ 130,838
SUBTOTAL	100	120	240	200	40	170	40	570	1170	5	2655	\$ 366,488
5.0 CONTEXT SENSITIVE DESIGN SUPPORT												
5.0 Context Sensitive Design Support	80	400	160	200	80	360	200			40	1520	\$ 266,678
SUBTOTAL	80	400	160	200	80	360	200	0	0	40	1520	\$ 266,678
6.0 FINAL ENGINEERING CONSULTANT SERVICES												
6.1 Consultant Procurement	20		40	80				20		20	180	\$ 34,683
6.2 Final Design Program Management	80	120	500	840	900		160				2600	\$ 450,096
SUBTOTAL	100	120	540	920	900	0	160	20	0	20	2780	\$ 484,779
TOTAL HOURS	1,457	1,879	3,739	4,223	3,040	970	664	1,363	1,170	2,417	20,921	
BASE RATE	\$ 105.00	\$ 87.00	\$ 103.00	\$ 62.00	\$ 37.00	\$ 33.00	\$ 39.00	\$ 34.00	\$ 39.00	\$ 31.00		
% of Total Hours	7%	9%	18%	20%	15%	5%	3%	7%	6%	12%	Overall Totals	
TOTAL LABOR	\$ 153,020	\$ 163,444	\$ 385,083	\$ 261,805	\$ 112,480	\$ 32,010	\$ 25,896	\$ 46,331	\$ 45,630	\$ 74,927	\$ 1,300,626	\$ 3,614,512
LABOR BURDEN	\$ 272,231	\$ 290,776	\$ 685,084	\$ 465,766	\$ 200,108	\$ 56,948	\$ 46,070	\$ 82,425	\$ 81,178		\$ 2,180,587	
Overhead Rate	148.13%	\$ 226,669	\$ 242,110	\$ 570,423	\$ 387,812	\$ 166,617	\$ 47,416	\$ 38,360	\$ 67,592	\$ 110,989	\$ 1,926,617	
Profit	12.00%	\$ 45,563	\$ 48,666	\$ 114,661	\$ 77,954	\$ 33,492	\$ 9,531	\$ 7,711	\$ 13,795	\$ 13,587	\$ 22,310	\$ 387,269
TOTAL	\$ 425,251	\$ 454,220	\$ 1,070,166	\$ 727,572	\$ 312,588	\$ 88,958	\$ 71,966	\$ 128,756	\$ 126,808	\$ 208,226	\$ 3,614,512	

% of Total Cost 11% 12% 29% 20% 8% 2% 2% 3% 3% 6%

EXPENSES & SUBCONSULTANTS	ITEM	
MISCELLANEOUS EXPENSES		\$ 100,000
MISCELLANEOUS SUBCONSULTANTS	TBD - Fee Included in tasks above	Estimated Subconsultant Fee = \$400,000
		\$ 100,000

SUBTOTALS BY TASK	TOTAL HOURS	TOTAL LABOR	TOTAL BURDENED LABOR
1.0 PROJECT MANAGEMENT AND ADMINISTRATION	4,078	\$ 225,007	\$ 625,306
2.0 PROJECT DEVELOPMENT	5,884	\$ 416,728	\$ 1,158,110
3.0 ENVIRONMENTAL SERVICES	4,004	\$ 256,616	\$ 713,150
4.0 PUBLIC INVOLVEMENT SERVICES	2,655	\$ 131,875	\$ 366,488
5.0 CONTEXT SENSITIVE DESIGN SUPPORT	1,520	\$ 95,960	\$ 266,678
6.0 FINAL ENGINEERING CONSULTANT SERVICES	2,780	\$ 174,440	\$ 484,779
EXPENSES & SUBCONSULTANTS			\$ 100,000
JOB TOTALS	20,921	\$ 1,300,626	\$ 3,714,512