MICHIGAN DEPARTMENT OF TRANSPORTATION

THE CORRADINO GROUP OF MICHIGAN, INC.

AMENDMENT

THIS AMENDATORY CONTRACT is made and entered into this date of SEP 2 0 20 by and between the Michigan Department of Transportation, hereinafter referred to as the "DEPARTMENT," and The Corradino Group of Michigan, Inc., hereinafter referred to as the "CONSULTANT," for the purpose of amending Contract No. 2004-0808, dated December 27, 2004, as amended, hereinafter referred to as the "CONTRACT."

WITNESSETH:

WHEREAS, the CONTRACT provides for the CONSULTANT to perform professional planning, environmental, and engineering services for the Detroit River International Crossing Study; and

WHEREAS, the parties desire to amend the CONTRACT to provide for the performance of additional services, to increase the amount accordingly, and to extend the CONTRACT term to provide sufficient time for the CONSULTANT to perform the additional services; and

WHEREAS, the parties also desire to address ownership of any software and/or hardware purchased by the CONSULTANT in support of the services under the CONTRACT;

NOW, THEREFORE, the parties agree that the CONTRACT be and that the same is amended as follows:

- 1. In order to set forth the additional services and the additional costs, Exhibit A of the CONTRACT, dated December 10, 2004, as supplemented with Exhibit A-1, dated October 17, 2005, is supplemented with Exhibit A-2, dated May 19, 2006, pages 1 through 111, attached hereto and made a part hereof, and all references in the CONTRACT to Exhibit A will be construed to mean as supplemented with Exhibit A-1, dated October 17, 2005, and with Exhibit A-2, dated May 19, 2006.
- 2. In order to increase the amount of the CONTRACT by One Million Nine Hundred Forty-One Thousand Three Hundred Ninety-One Dollars (\$1,941,391.00), for a revised total CONTRACT amount of Twenty-One Million Four Hundred Seventy-Five Thousand Seven Hundred Sixty-Five Dollars (\$21,475,765.00), Section 15a of the CONTRACT is amended to read as follows:

- "a. Compensation for the SERVICES will be on the basis of actual cost and a fixed fee for profit and, except as provided for in Section 40, will not exceed the maximum amount of Twenty-One Million Four Hundred Seventy-Five Thousand Seven Hundred Sixty-Five Dollars (\$21,475,765.00), which amount includes a fixed fee for profit of One Million Six Hundred Thirty-Four Thousand Thirty-Seven Dollars (\$1,634,037.00)."
- 3. In order to extend the CONTRACT term by approximately six (6) months, Section 45 of the CONTRACT is amended to read as follows:
 - "45. This contract will be in effect from December 27, 2004, through December 31, 2008."
- 4. In order to address ownership of any software and/or hardware purchased by the CONSULTANT in support of the services under the CONTRACT, a new second paragraph is added to Section 7 of the CONTRACT as follows:
 - "Upon completion of the SERVICES, the CONSULTANT will also deliver to the DEPARTMENT any software and/or hardware purchased by the CONSULTANT in support of the SERVICES. Any such software and/or hardware will be the property of the DEPARTMENT."
- 5. All other provisions of the CONTRACT, except as herein amended, remain in full force and effect as originally set forth.
- 6. The CONSULTANT agrees that the compensation noted above represents payment in full for all services requested by the DEPARTMENT and waives any and all claims it has or may have against the DEPARTMENT that arise out of the need to amend and/or extend the CONTRACT.
- 7. In the event of any discrepancies between the provisions of this Amendment and any exhibit(s) hereto, the provisions of the Amendment will govern.

8. This Amendatory Contract will become binding on the parties and of full force and effect upon signing by the duly authorized representatives of the CONSULTANT and the DEPARTMENT and upon adoption of a resolution approving said Amendatory Contract and authorizing the signature(s) thereto of the respective representative(s) of the CONSULTANT, a certified copy of which resolution will be sent to the DEPARTMENT with this Amendatory Contract, as applicable.

IN WITNESS WHEREOF, the parties have caused this Amendatory Contract to be awarded.

THE CORRADINO GROUP OF MICHIGAN, INC.

By: Mile Chairman, CB

MICHIGAN DEPARTMENT OF TRANSPORTATION

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Title: Department Director

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Administ vavo Board

Detroit River International Crossing Study Work Plan Amendment #2

1. Introduction

The consultant team led by The Corradino Group of Michigan, Inc. (Corradino) submits this work plan in response to the RFP issued by the Michigan Department of Transportation for work in the following areas:

- Geotechnical Analysis Prior to Drilling
- Additional Public Involvement
- 17 Workshops and Context Sensitive Solutions (CSS) Public Meetings
- Delray Display
- Additional Equipment Rentals/Materials/Accommodations
- Work of Governance Specialist
- Engagement of Rail Specialist
- Additional Coordination with Canadian Team

A series of attachments provide information supporting this proposal. Attachment A includes letters from the firms indicating their commitment to the project, statements regarding conflict of interest, and anticipated payment type. Attachment B provides additional information on Fletcher & Sippel LLC. Attachment C is new resumes of new people. Attachment D is the Derivation of Cost Proposal.

2. Geotechnical Analysis Prior to Drilling

The MDOT-approved contract amendment (November 2005) for brine well investigation includes the drilling of four 1,500-foot-deep test borings, combined with crosswell seismic imaging and evaluating the resulting data. While MDOT is considering approval of a more intensive investigation be performed at two crossing corridors (X-10 and X-11) to more fully investigate the deep rock profile that will ultimately support the envisioned primary and secondary foundations for a new bridge across the Detroit River, preparatory work will begin with Forward Modeling and engaging an international panel of experts to review the geotechnical analysis as it proceeds.

The Border Transportation Partnership has identified two crossing corridors – X-10 and X-11 – for a new bridge between Detroit and Windsor. Both of the proposed alternatives along the U.S. shore are near historically identified or suspected solution mining wells. MDOT has adopted a bridge foundation policy that requires the foundations to be located outside of the influence of any rock cavities such as those produced by solution mining activities. NTH, subconsultant to The Corradino Group, has an approved but limited work scope to investigate the possible solution mining areas and the potential impact of the cavities created by the wells on the bedrock's capacity to support bridge foundations. But, prior to that and possibly additional work beginning, Forward Modeling will be conducted and a Geotechnical Issues Advisory Group will be convened.

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2.1 Work Plan

2.1.1 Forward Modeling

Forward modeling will be performed in two areas: rock mechanics and geophysics. Each are described below. The modeling will consist of a geophysical element to estimate expected signal configurations for the crosswell seismic imaging along with a rock mechanics element to analyze for future collapse potential of solution mined voids. All efforts will be directed and coordinated by NTH Consultants. As the first step of the forward modeling, a decision tree will be developed to examine the proposed program, the various outcomes, and the appropriate decisions that should be made based on these outcomes. This decision tree will be maintained, modified, and expanded as appropriate along the course of the forward modeling and field program. The decision tree will consider the current view of the MDOT, that a void of any size will not be acceptable, and will be modified, should the results of the forward modeling change that view. In any case, the geotechnical and geophysical program will be developed and carried out accordingly.

Rock Mechanics Modeling Task

The outcome of the Rock Mechanics Forward Modeling effort is prediction of the size, geometry, and location of brine well cavities of concern. Step 1 will be the evaluation of the stability above solution mined cavities using existing data and assumed rock mass-over-void conditions, similar to those known for coal mining. Parametric analysis and logic will be the basis of this effort. Step 2 will advance the work of Step 1 by using 2-D finite-element analysis. Step 3 will involve applying the model 3DEC to define rock fractures, movements, etc. The analysis will be calibrated with known stable and unstable conditions for the brine well cavities in the Detroit area.

Based on the results of the first three steps combined with input from the MDOT, the parameters that the geophysical investigation must consider will be determined (i.e., size of the void that must be detected, angle of draw, and other factors). On this basis, the field investigation method – crosswell seismic imaging – will be reviewed and, if necessary, additional forward modeling conducted to advance the fieldwork.

Geophysical Modeling Task

The desired outcome of the Geophysical Forward Modeling effort is to predict image quality of brine well cavities of concern and to provide models for use in developing an approach to seismic imaging data acquisition. The first step will incorporate the modeled cavity dimensions and characteristics from the Rock Mechanics Forward Modeling program, described above. Based on 2-D models of velocity and density representing six possible formation states (cavity/no cavity for the three proposed geophysical methods); 2-D images will be produced to represent the capability of 3-D surface seismic, VSP/RVSP, and crosswell seismic imaging for each of the six models. At each offset in the model, a synthetic amplitude-versus-angle (AVA) gather will be produced showing seismic reflectivity as a function of angle for the assumed bandwidth of the imaging method. The AVA gathers will then be stacked over a range of incidence angles typical for the imaging method to produce a seismic reflection trace for that offset. The traces produced for all offsets will be displayed as a 2-D seismic section. The wavelet will be assumed to have an effective bandwidth based on the propagation paths for each imaging method and the characteristics of data in the local area. The surface seismic will be assumed to have an upper frequency of 55 Hz; the VSP will be assumed to have an upper frequency of 100 Hz; and, the crosswell seismic imaging, an upper frequency of 2,000 Hz. The 2-D reflection sections for the three methods and the six models will be compiled to include reflection displays in addition to reflection displays overlaid on the colorized input model.

The next steps will encompass the modeling of a cavity and/or absence of a cavity, respectively, in two (2-D) dimensions, relevant to field data acquisition procedures. A 2-D finite difference model with five or more model cells per wavelength, to avoid dispersion effects, will be created. For 2kHz data at 18,000 feet per second (a nine-foot wavelength), as anticipated in the DRIC project corridors, each cell will be two feet by two feet. For the crosswell program, with borings spaced 1,000 feet apart and about 60 percent padding to avoid edge effects, an 800 by 800 cell model is anticipated. A crosswell data set and process to produce velocity / reflection images for use in data acquisition will be generated.

The final step in the Geophysical Forward Modeling program will consist of a 3-D model of a cavity outside the image plane but within the first Fresnel zone in the crosswell seismic imaging. The number of cells will be limited to reduce the size of the model in the 3rd dimension, by reducing the upper frequency below 2kHz, or allowing greater dispersion of the data. Several common shot gathers will be generated from the 3-D model and the data inspected by hand because the computer resources to generate a complete crosswell data set in a reasonable timeframe are not feasible to obtain.

2.1.2 Geotechnical Issues Advisory Group

MDOT wishes to establish a panel of geophysical/geotechnical experts (see attached resumes) to formulate protocol by which data collected in the field will be analyzed by the U.S. and Canadian consulting teams and the process by which the recommendation from the team will be reviewed, modified, and, eventually, confirmed.

The Advisory Group will provide objective expert opinion, advice and direction regarding the investigation program, which will ultimately determine the suitability of bedrock conditions for siting the proposed international bridge and approach structures. It is expected the Advisory Group will meet four times.

The mandate of the Advisory Group is to work as a team to provide direction and written reviews regarding:

- i. The investigation program.
- ii. The geophysics/geotechnical field investigation program including data analysis protocol and interpretation procedure(s).
- iii. Findings presented by the U.S. and Canadian consulting teams, including modifications to the investigation program and analysis protocol to draw conclusion regarding the soundness of the bedrock for purposes of siting long-span bridge and approach structures.

The Advisory Group members will consist of experts in geophysics and geotechnical areas from the Michigan Department of Transportation, the Federal Highway Administration, the Ontario Ministry of Transportation and the Transport Canada. They will be joined by outside experts from academia and the private sector as approved by the Partnership agencies. An Advisory Group of 12 members is expected.

The Scope of Work involves providing direction and written reviews on the geophysical/geotechnical program (as approved by the Partnership agencies) used to evaluate the alternatives as defined by the Partnership for the proposed international crossing. It is expected that this work will be undertaken between May 2006 and February 2007 and will consist of:

• Familiarization with the Area of Continued Analysis in the vicinity of the Detroit River, particularly the geotechnical and bedrock conditions.

- Familiarization with the alternatives as defined by the Partnership.
- Study of the geophysical/geotechnical investigation program with direction and written review including any revisions.
- Progress review of field results and data from the investigation program and direction regarding modifications.
- Review of the draft recommendations and advice to the Partnership's Working Group so that final recommendations can be formulated and offered to the Partnership's Steering Committee for final action.

It is expected that the Advisory Group will meet four times between May 2006 and February 2007. Budgets should be based on six days for meetings and 14 days for preparation, familiarization, review and reporting. It is anticipated that the Advisory Group will meet as follows:

Meeting #1: Kickoff in June, 2006 for 2.5 days

Info required: Background (NTH Advantages/Disadvantages Paper plus SOMAT

Review Paper plus past NTH reports, background materials, as

needed, from files).

Meeting #2: Review of drilling to date in Fall 2006 for one day

Info required: Results of drilling program that is produced as normal course of

business.

Meeting #3: Review drilling program final report in Spring 2007 for one day

Info required: Drilling Program Final Report that is produced as normal course of

business.

Meeting #4: Make recommendations to Steering Committee in Summer 2007

for one day

Info required: Response to questions on Drilling Program Final Report.

3. Additional Public Involvement

3.1 Additional Workshops and Public Meetings

Additional work is also required of the consultant in the conduct of 17 public workshops to conduct land-use-related planning in the focused analysis area of Delray, both with and without the proposed new bridge. This includes equipment rental, printed materials and other meeting accommodations, as well as services to conduct them. A part of this public engagement is the set of Context Sensitive Solutions workshops, including:

August 2006-- will focus on potential themes that could be expressed by materials, textures, images, colors, etc. for the components of the system other than the main river crossing. Prior to the meeting, community and regional images – historical and modern – will be assembled to determine

the possibilities of aesthetic treatments for interchange bridge types, walls, streetscape elements, etc. The Hamilton/Anderson exhibits/ideas for Delray's future and vision will be incorporated into the possible images for structural aesthetics and landscape designs. The community participants will indicate their preferences of themes, materials, textures, images, colors, etc. This would give the team an indication of what the participants are favoring and what can be focused on for developing alternatives. Also at this meeting there will be a demonstration of the noise levels one could expect at a new crossing and plaza. A noise simulation based on noise measurements at the existing Ambassador Bridge will be set up in a separate room from the main meeting.

- November 2006-- will present to the public examples and simulations of the crossing system
 based on the work produced by the community at a September 2006 set of public meetings
 already included in the scope. Another part of this November workshop will involve the U.S.
 consultant preparing much of the computer software infrastructure for the Canadian version of the
 workshop. The Consultant Team will also support and participate in this Canadian workshop.
- February 2007-- will build on the October 2006 interactive bridge workshop, which will express community preferences for themes, materials, textures, images, colors, etc. At this workshop the results of the Bridge Type Study and its affect on the development of bridge options will be presented. In addition, the community will be given an opportunity to view simulations of the ways in which the architects and engineers have interpreted their preferences in the continued development of the Plazas and Interchanges.
- April 2007 CSS -- will also build on the October 2006 and February 2007 workshops, as the Bridge Type Study technical work and early Conceptual Design will be incorporated into the simulations of the main bridge and its approaches. The community will be given an opportunity to view simulations of the ways in which the architects and engineers have interpreted their preferences in the continued development of the main bridge and its approaches.
- August 2007 -- will build on the April 2007 CSS meeting by presenting final Conceptual Designs
 of the main river bridge and approaches with input/ feedback on incorporation of design themes.
 The result will be final bridge treatment preferences.
- October 2007-- will provide final guidelines/requirements for the interchange bridges, retaining
 and sound/security walls, gateway element(s), landscape design theme based upon the
 preferences provided at earlier meetings.

3.2 Portable Display

MDOT requests the consultant develop a movable/portable display to depict the past, present and foreseeable future of the focused analysis area. This includes acquiring appropriate equipment (display panels), which will become the property of MDOT.

3.3 Governance Specialist

A part of the communications program has been the engagement of a governance specialist to address issues with U.S. agencies, such as the Department of Homeland Security and Canadian governmental agencies in Ottawa and Toronto. Because this work was to end in December 2007, and it is now expected the drilling program will cause that schedule to be extended an additional eight months, extension of the services of the Governance Specialist (James Blanchard) is needed.

4. Engagement of Rail Specialists

The U.S. Department of Homeland Security, Customs and Border Protection Agency, has made it clear the railroad line crossing through the entirety of the focused analysis area is a threat to the development of the new border crossing plaza. To address this issue, the rail line may need to be relocated or abandoned. In the latter case, MDOT requires the assistance of a specialist in rail line abandonment including work with the federal Surface Transportation Board (STB). This includes research, involvement with the affected shippers/customers along the rail line, and meetings/briefings of MDOT, FHWA and the STB including filing of appropriate materials with each of these federal agencies.

In response, William Sippel, Janet Gilbert, T.J. Litwiler and Michael Barion, Jr. of the firm of Fletcher & Sippel, LLC will provide rail abandonment special services. Fletcher & Sippel (F&S) is a firm of national experts in rail issues, including rail line abandonments. The firm has handled dozens of exempt and fully-regulated line abandonment cases before the STB and its predecessor agency, the Interstate Commerce Commission. F&S has also advised and represented clients in several "Offer of Financial Assistance" (OFA) proceedings before the STB. This is the procedure under which an interested party can require the abandoning railroad to sell the line to it for continued rail service.

The F&S expertise in OFA matters includes representation of the City of Cincinnati in the lead case that established the test for when an exemption from the OFA procedures (i.e., a determination that the OFA procedures should not be invoked) is appropriate. In that matter, the firm recommended to the abandoning railroad that, as part of its abandonment petition, it seek (with the support of the public authorities supporting a redevelopment project) an exemption from the OFA procedures. The City's riverfront redevelopment project included a new Cincinnati Bengals' football stadium, a possible Cincinnati Reds' baseball stadium, a multimodal passenger transportation center and a museum and theater complex – most of which is unrelated to the provisions of rail service. The STB found the parties sufficiently demonstrated that the right-of-way was needed for a valid public purpose and that, even though the unused rail line was part of a potentially important rail bypass route, there was no overriding public need for continued rail service. The STB allowed the line to be abandoned and the redevelopment project proceeded as planned. The test established in the Cincinnati case is still the test used by the STB.

The scope of work in this area includes the following:

4.1 Conduct Investigation/Draft Petition for Exemption

- Factual investigation: Obtain information required by STB regulations for the abandonment petition. This includes information on the applicant, a description of the line, mileposts, length, width of ROW, whether line contains any federally-granted ROW, type, weight and condition of the rail, ties, bridges, Federal Railroad Administration (FRA) class, stations and zip codes on the line, number of industries (active and inactive), traffic volumes and commodities handled over past two calendar years and 2006 to date, availability of transportation alternatives, net liquidation value of the line, number of grade crossings and how equipped, frequency of service on the line and other pertinent information.
- Legal research: Research case law supporting STB's authority to exempt OFA process, legal
 and factual bases for doing so, STB cases where proposed new on-line facility with claimed
 public benefits is weighed against public benefits of abandonment.
- Meetings: Make at least two trips (five days total) to Michigan for meetings to review status, obtain information and discuss strategy. The initial visit will include an inspection of the line to confirm location, condition, industry spurs, etc. and to view the proposed bridge site. Another visit

will include meetings with on-line shippers/receivers to discuss the planned abandonment and, if possible, obtain a statement of support or non-opposition. Another trip (two days) is included to discuss status, strategy, and obtain an MDOT support statement. In addition, one pre-filing trip is planned to meet with the STB in Washington in order to brief STB staff and/or Commissioners regarding the DRIC Study and proposed rail strategy and, separately, meetings with Homeland Security and any other pertinent federal agencies to secure support statements (two days). Finally, one trip (one day) is included with CSXT and NS in Michigan to outline strategy, discuss plans to possibly relocate CSX Transflo facility and discuss the possibility of a proposed new connection to facilitate continued rail movements to Zug Island.

• <u>Drafting of Petition to STB</u>: As appropriate, the petition to the STB for an exemption will be drafted for the owning railroad to abandon the line. The owning railroad will handle the required environmental and historic notification letters and prepare the environmental/historic report to be attached to the petition.

4.2 STB Filings with Anticipated Opposition and Related Matters

Upon written authorization from the MDOT DRIC Project Manager, the following services will be undertaken.

- Replies to challenges: Obtain and draft verified statements for project support, including
 verified statements from Michigan DOT, shippers, federal government agencies involved, other
 supporting groups or agencies and any special experts that are appropriate (these statements will
 also include focused responses to arguments made by the opposition).
- <u>Discovery</u>: Draft responses to interrogatories and document production requests, drafting of a response to a motion to compel, etc.
- STB Filings: Draft all rebuttal evidence and argument in response to protests, opposition evidence and/or a motion to dismiss, including developing factual information/evidence for rebuttal statements from MDOT, Homeland Security, Canadian authorities, and others, as appropriate, discussing the public benefits of the DRIC Study, the effect of abandonment/non-abandonment on the international bridge project, Port of Detroit, legal research on issues raised by the opponents, etc. Oral argument, if necessary.
- <u>Meetings</u>: Three additional trips to Detroit or Washington D.C. for meetings with witnesses (not included in Phase I above), including with MDOT, Homeland Security and other supporting parties to discuss status and strategy and obtain information for support/rebuttal statements.

5. Additional Coordination with Canadian Team

The Border Transportation Partnership has engaged in a detailed examination of the steps towards project implementation of the proposed new crossing. It involves: 1) developing a financial model to serve as a benchmark for the Partnership to assess and evaluate various governance options and funding scenarios; 2) methods to construct the facility; 3) development of a public-private partnership, etc. The consultant will provide support in these areas from its Project Manager (Joe Corradino) and other qualified specialists in the area from key members of the consultant team. (See resumes of Burt Deutsch, President of Corradino; Fred P'Pool, COO of Corradino; Stephen Mayer, Market Development Manager–P3, Parsons; and, Jeffrey Squires, Market Development Manager, Parsons.)

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Attachment A

Letters from firms indicating:

- commitment to the project
- statements of conflict of interest
- anticipated payment type

May 19, 2006

Mr. Mohammed Alghurabi, PE Michigan Department of Transportation 425 West Ottawa Street Lansing, Michigan 48933

Re: Detroit River International Crossing Study Amendment 2

Dear Mohammed:

1. Commitment to the Project

The Corradino Group of Michigan, Inc. is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

2. Conflict of Interest

Neither The Corradino Group of Michigan, Inc. personnel nor The Corradino Group of Michigan, Inc. as a firm has a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

3. Basis of Payment

The Corradino Group of Michigan, Inc understands it will be compensated on a cost-plus-fixed fee basis.

Joe . Corradino, PE

Chief Executive Officer

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CULTURAL RESOURCES GROUP, INC.

August 28, 2006

Mr. Ted Stone, Vice President The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, Kentucky 40202

Dear Mr. Stone:

Commonwealth Cultural Resources Group, Inc. (CCRG) states the following:

Commitment to the Project

<u>Commonwealth Cultural Resources Group, Inc. (CCRG)</u> is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

Conflict of Interest

Neither <u>Commonwealth Cultural Resources Group</u> personnel or <u>Commonwealth Cultural Resources</u> <u>Group, Inc.</u> as a firm has a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

Basis of Payment

<u>Commonwealth Cultural Resources Group, Inc.</u> understands it will be compensated on a cost-plus-fixed fee basis.

Sincerely,

Donald J. Weir, RPA

President

ATTORNEYS AT LAW

29 North Wacker Drive Suite 920 Chicago, Illinois 60606-2832

JANET H. GILBERT (312) 252-1507 jgilbert@fletcher-sippel.com Phone: (312) 252-1500 Fax: (312) 252-2400 www.fletcher-sippel.com

August 29, 2006

VIA FEDERAL EXPRESS

CONFIDENTIAL-PRIVILEGED
ATTORNEY-CLIENT COMMUNICATION/ATTORNEY WORK PRODUCT

Ted Stone Vice President The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, KY 40202

Re: Federal Regulatory Consulting Services

Dear Mr. Stone:

1. Commitment to the Project

Fletcher & Sippel LLC is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

2. Conflict of Interest

Neither Fletcher & Sippel LLC personnel nor Fletcher & Sippel LLC as a firm believes there is any conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The firm previously disclosed that in November of 2000, one member of the firm wrote a second opinion letter for Mr. Blashfield and Mr. Lindley of Centra. The letter involved a question of the application of federal preemption to the Jefferson Terminal Railroad and a condemnation issue Jefferson Terminal had with the City of Detroit by Jefferson and Freud Avenues near the Chrysler plaint. We were not retained for any purpose other than a second opinion letter and did not represent nor have we represented Centra since. We do represent Canadian National and its U.S. subsidiaries whose interests in the past have been adverse to Riverview-Trenton Railroad.

The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

Ted Stone August 29, 2006 Page 2

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

3. Basis of Payment

Fletcher & Sippel LLC understands it will be compensated on a unit cost plus directs basis.

Very truly yours.

Janet H. Gilbert

JHG:kb



480 Ford Field 2000 Brush Street Detroit, MI 48225 313.237.3900 313.237.3909 Fax

Mr. Ted Stone Vice President The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, KY 40202 May 18, 2006 Project No. 15-050014-01

RE: Detroit River International Crossing Detroit, Michigan

1. Commitment to the Project

NTH Consultants, Ltd. is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

2. Conflict of Interest

Neither, NTH Consultants, Ltd.'s personnel or NTH Consultants, Ltd. as a firm has a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

3. Basis of Payment

NTH Consultants, Ltd. understands it will be compensated on a cost-plus-fixed fee basis.

Sincerely,

NTH Consultants, Ltd.

Fritz J. Klingler, P.E. Vice President

FJK/lg/lh

19977 Central Pork Soutovard - Sidte 276 / Scriptifield, VE. Fight (1976-1928) 160 000 - Free 1948) 160 0000 - www.gsruciis.com

May 18, 2006

Mr. Joseph Corradino The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, KY 40202

Mr. Corradino:

Parsons Transportation Group Inc. of Michigan (Parsons) is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

Neither Parsons personnel nor Parsons as a firm has a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. Parsons warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership;
- The Work/Services to be performed under future contractual agreements;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

Parsons understands it will be compensated on a cost-plus-fixed fee basis.

Sincerely,

Mark C. Fialkowski, PE

Vice President



May 17, 2006

Mr. Ted Stone, Vice President The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, KY 40202

Dear Mr. Stone:

Herein are statements in regards to the following:

1. Commitment to the Project

SOMAT Engineering, Inc. is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

2. Conflict of Interest

Neither SOMAT Engineering, Inc. personnel nor SOMAT Engineering, Inc. as a firm has a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed, or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

3. Basis of Payment

SOMAT Engineering, Inc. understands it will be compensated on a cost-plus-fixed fee basis.

Sincerely,

SOMAT Engineering, Inc.

G. Ramanujam, P.E. (Ram)

President



DLA Piper Rudnick Gray Cary US LLP 1200 Nineteenth Street, N.W. Washington, D.C. 20036-2412 T 202.861.3900 F 202.223.2085 W www.dlapiper.com

GOVERNOR JAMES J. BLANCHARD james.blanchard@dlapiper.com T 202.861.6415 F 202.689.8565

September 1, 2006

Mr. Ted Stone Vice President The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, Kentucky 40202

Dear Mr. Stone:

DLA Piper Rudnick Gray Cary US LLP ("DLA Piper") is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

Neither DLA Piper personnel nor DLA Piper as a firm has a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership;
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

DLA Piper understands it will be compensated on a unit cost plus directs basis.

Sincerely,

James J. Blanchard

Edward J. Cording Geotechnical Consultant P. 0. Box 125 4 College Park Court Savoy, IL 61874 Phone 217 351 8709 Fax 217 351 8700

May 19, 2006

Ted Stone Vice President The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, KY 40202 Cell: 502.396.2131

Phone: 502.587.7221

Dear Mr. Stone:

Edward J. Cording is pleased to be part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

Neither Edward J. Cording, as an individual, nor Edward J. Cording (sole proprietor) as a firm, has a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

Edward J. Cording understands he will be compensated on a unit cost plus directs basis.

Sincerely yours,

Edward J. Cording

1. Commitment to the Project

<u>Rick Miller</u> is pleased to be a part of the consultant team working on the Detroit River International Crossing Project and is committed to working on the project.

2. Conflict of Interest

<u>Rick Miller</u> has not conflict of interest or potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. The consultant warrants that it does not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- · Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request for Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

3. Basis of Payment

Rick Miller understands he is to be compensated on a unit cost plus directs basis.

RICHARD D. WOODS, Ph.D., P.E., NAE, Hon.M. ASCE 7436 Lake Street Dexter, Michigan 48130

May 19, 2006

Ted Stone Vice President The Corradino Group 200 S. Fifth Street, Suite 300N Louisville, KY 40202

RE: Commitment to Project

I, Richard D. Woods, am pleased to be a part of the consultant team working on the Detroit River International Crossing Project and I am committed to working on the project.

I do not have a conflict of interest or a potential conflict of interest as defined in the Letter of Interest request issued by the Michigan Department of Transportation for the Detroit River International Crossing Project. I warrant that I do not have any special knowledge of or exceptional access to confidential information concerning:

- The Ontario-Michigan Border Transportation Partnership,
- The Work/Services to be performed under future contractual agreement;
- Pricing of the Work/Services to be performed; or
- The Letter of Interest evaluation process and/or Request or Proposal evaluation process, where such special knowledge of or exceptional access to confidential information may prejudice the Michigan Department of Transportation or constitute an unfair advantage to the consultant.

I, Richard D. Woods, understand I will be compensated on a <u>unit cost plus directs</u> <u>basis.</u>

Sincerely Yours,
Fisheral Al. Woods

Richard D. Woods

Attachment B

Additional Information on Fletcher & Sippel, LLC

ATTORNEYS AT LAW

29 North Wacker Drive Suite 920 Chicago, Illinois 60606-2832 Phone: (312) 252-1500 Fax: (312) 252-2400 www.fletcher-sippel.com

JANET H. GILBERT (312) 252-1507 (CILBERT WELLECTHIR SEPPELL COM

April 4, 2006

CONFIDENTIAL-PRIVILEGED ATTORNEY-CLIENT COMMUNICATION/ ATTORNEY WORK PRODUCT

Mr. Joe Corradino
DRIC Project Manager
The Corradino Group
535 Griswold Street Buhl Building
Suite 918
Detroit, Michigan 48226-3688

Re: Federal Regulatory Consulting Services

Dear Mr. Corradino:

We appreciate the opportunity to advise and assist The Corradino Group and the Detroit River International Crossing Project (DRIC) in its efforts to resolve rail-related issues involved in Project, most specifically issues relating to the Surface Transportation Board's (STB) jurisdiction over rail matters, rail line abandonments and federal preemption.

As we discussed at our recent meeting, Fletcher & Sippel are national experts in rail issues, including rail line abandonments. The firm has handled dozens of exempt and fully regulated line abandonment cases before the STB and its predecessor agency, the Interstate Commerce Commission. We have also advised and represented clients in several "Offer of Financial Assistance" (OFA) proceedings before the STB. This is the procedure under which an interested party can require the abandoning railroad to sell the line to it for continued rail service.

Our expertise in OFA matters includes representation of the City of Cincinnati in the lead case that established the test for when an exemption from the OFA procedures (i.e., a determination that the OFA procedures should not be invoked) is appropriate. In that matter, our firm recommended to the abandoning railroad that, as part of its abandonment petition, it seek (with the support of the public authorities supporting the redevelopment project) an exemption from the OFA procedures. The City's riverfront development project included a new Cincinnati

Mr. Joe Corradino April 4, 2006 Page 2

Bengals' football stadium, a possible Cincinnati Reds' baseball stadium, a multimodal passenger transportation center and a museum and theater complex -- most of which is unrelated to the provisions of rail service. The STB found the parties sufficiently demonstrated that the right-of-way was needed for a valid public purpose and that, even though the unused rail line was part of a potentially important rail bypass route, there was no overriding public need for continued rail service. The STB allowed the line to be abandoned and the redevelopment project proceeded as planned. The test established in the Cincinnati case is still the test used by the STB. A copy of the decision is attached.

You asked that we outline the possible costs involved in assisting you with the DRIC Project. For legal consulting services rendered to you on this matter, the following individuals would be involved in varying degrees depending on the complexity of the proceedings:

William C. Sippel: \$285/hour Janet H. Gilbert: \$250/hour T.J. Litwiler: \$235/hour Michael J. Barron, Jr.: \$200/hour

The above rates are the current hourly rates we charge for work performed for State Departments of Transportation and are below our standard hourly rates charged to non-public clients for such matters.

Unlike most law firms, we do not charge for routine, ordinary office expenses (i.e., on-site copies, faxes, local and long-distance telephone charges, basic computer research, postage and letter-sized Federal Express packages). We have chosen to treat these expenses as normal overhead and cover them in our hourly rates. Any large copying projects would be handled through an off-site copy service with the cost billed to the client. Similarly, the cost of any Federal Express package larger than letter-size (or weighing over one pound) and any out-of-pocket or extraordinary expense that we incur (such as travel or retrieval of documents from the Surface Transportation Board files) would be billed to the client and itemized on our statement. As a matter of policy, we strive to keep such expenses to the minimum and, where feasible, discuss them with the client in advance.

Also, we understand that our clients work within budgets and that controlling costs is important. As such, we have outlined below an estimate of potential fees for the project you outlined to us at our recent meeting. The estimates assume the project will take place in phases and, since at this stage there are a number of unknowns, we have provided a range:

FLETCHER & SIPPELUC

Mr. Joe Corradino April 4, 2006 Page 3

Phase I: Conduct investigation/Draft Petition for Exemption

<u>Factual investigation</u>: Obtain information required by STB regulations for the abandonment petition. This includes information on the applicant, a description of the line, mileposts, length, width of ROW, whether line contains any federally-granted ROW, type, weight and condition of the rail, ties, bridges, FRA class, stations and zip codes on the line, number of industries (active and inactive), traffic volumes and commodities handled over past two calendar years and 2006 to date, availability of transportation alternatives, net liquidation value of the line, number of grade crossings and how equipped, frequency of service on the line and other pertinent information.

Legal research: Research case law supporting STB's authority to exempt OFA process, legal and factual bases for doing so, STB cases where proposed new on-line facility with claimed public benefits is weighed against public benefits of abandonment.

Meetings: Make at least two trips (5 days total) to Detroit for meetings with Corradino in Detroit to review status, obtain information, and discuss strategy. The initial visit will include an inspection of the line to confirm location, condition, industry spurs, etc. and to view the proposed bridge site. Another visit would include meetings with on-line shippers/receivers to discuss the planned abandonment and, if possible, obtain a statement of support or non-opposition. We have assumed one trip (2 days) to MDOT in Lansing or Detroit to discuss status, strategy, and obtain an MDOT support statement. In addition, we assume one pre-filing trip to meet with the STB in Washington to brief STB staff and/or Commissioners regarding proposed bridge project and proposed abandonment and, separately, meetings with Homeland Security and any other pertinent federal agencies to secure support statements (2 days). Finally, we have assumed one trip (1 day) with CSXT and NS in Detroit to outline strategy, confirm plans to relocate CSX Transflo facility and discuss the proposed new connection to facilitate continued rail movements to Zug Island.

<u>Drafting of Petition to STB</u>: Draft the petition to the STB for an exemption for the owning railroad to abandon the line. The owning railroad will handle the required environmental and historic notification letters and prepare the environmental/historic report to be attached to the petition.

Mr. Joe Corradino April 4, 2006 Page 4

Phase I:

Cost Estimate

Fees:

PERSON	ACTIVITY	RATE	EST. HRS.	TOTAL
Sippel	Attend some or all interviews, attend meeting with STB, obtain and draft statements, review final drafts of STB filing	\$285/hr	70	\$19,950
Gilbert	Project coordination, attend some or all of interviews, draft statements, draft portions of STB filing	\$250/hr	60	\$15,000
Litwiler	Draft legal/factual analysis for STB filing	\$235/hr	21	\$ 4,935
Barron	Research, gather technical information needed for and draft portions of STB filing	\$200/hr	45	\$ 9,000
TOTAL			196	\$48,885

Expenses:

ITEM	DESCRIPTION	TOT	AL
Air travel to	Estimate four trips, three of which will	\$	1,750
Michigan	involve two people		
(primarily Detroit)			
Lodging - Detroit	Estimate seven days, of which five	\$	2,000
area	involve two people		
Meals	Average \$35/day, two people for five days	\$	420
Taxis	To/from airport	\$	240
Rental Car in Detroit	Estimate seven days at \$40/day plus gas	\$	450
Air travel to D.C.	Estimate one 2-day trip involving one	\$	350
	person		
Lodging - DC area	Estimate two nights, one person	\$	350
Taxis	To/from airport and around DC, estimate	\$	75
	six		
Meals	Estimate \$35/day	\$	70

Mr. Joe Corradino April 4, 2006 Page 5

Filing Fees (exempt)	Fees depend on type of application but range from \$5,300 to \$18,700		\$ 18,700	
Printing	Major projects not included in fee	\$	500	
Other	Miscellaneous	\$	500	
Total		\$ 2	5,405	

Note: The above assumes preparation of a petition for exemption. If it is confirmed that no traffic has originated or terminated on the line for at least two years (which we understand is not the case), a somewhat simpler filing (a Notice of Exemption) may be made. The estimate does not include the cost of preparing a full abandonment application should the STB require that. Such a circumstance would be included in Phase II.

Subtotal:

Estimated Fees and Expenses - Phase I: \$74,290

Phase II: STB Filings with Anticipated Opposition and Related Matters

Replies to challenges: Obtain and draft verified statements for project support, including verified statements from Michigan DOT, shippers, federal government agencies involved, other supporting groups or agencies and any special experts that are appropriate (these statements will also include focused responses to arguments made by the opposition)

<u>Discovery</u>: Draft responses to interrogatories and document production requests, drafting of a response to a motion to compel, etc.

STB Filings: Draft all rebuttal evidence and argument in response to protests, opposition evidence and/or a motion to dismiss, including developing factual information/evidence for rebuttal statements from MDOT, Homeland Security, Canadian authorities, and others, as appropriate, discussing the public benefits of the bridge project, the effect of non-abandonment on the bridge project, the effect of abandonment on the proposed port project, legal research on issues raised by the opponents, etc. Oral argument, if necessary.

Meetings: Three additional trips to Detroit or Washington D.C. for meetings with witnesses (not included in Phase I above), including Corradino Group, MDOT, Homeland Security and other supporting parties to discuss status and strategy and obtain information for support/rebuttal statements.

Mr. Joe Corradino April 4, 2006 Page 6

Phase II:

Cost Estimate

Fees:

PERSON	ACTIVITY	RATE	EST. HRS.	TOTAL
Sippel	Draft and/or review verified statements with focus on shippers, Ports and expert analysis, if any; review response to discovery; draft and/or respond to motions to compel; attend possible oral argument before STB	\$285/hr	75	\$21,375
Gilbert	Draft and/or review verified statements with focus on government agencies and expert analysis, prepare response to discovery, retain any necessary experts and draft statements	\$250/hr	50	\$12,500
Litwiler	Draft legal/factual analysis for STB filing, focusing on opposition theories, assist in drafting verified statements	\$235/hr	25	\$5,875
Barron	Research, follow-up on verified statements, assist in drafting verified statements and responses to discovery; draft portions of STB filing;	\$200/hr	55	\$11,000
TOTAL			205	\$50,750

Expenses:

ITEM	DESCRIPTION	TOTAL
Air travel to	Estimate six trips, three of which will	\$2,070
Michigan	involve two people	
(primarily Detroit)		
Lodging	Estimate seven days, of which five involve two people	\$1,800

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Mr. Joe Corradino April 4, 2006 Page 7

Meals	Estimate seven days, average \$35/day, two people for five days	\$420
Taxis	To/from airport	\$320
Rental Car in Detroit	Estimate seven days at \$40/day plus gas	\$450
Air travel to D.C.	Estimate two 1-day trips involving one person	\$700
Taxis	To/from airport and around DC, estimate six	\$75
Meals	Estimate \$35/day 2	\$70
Retained Experts	If necessary to refute arguments of public necessity or geographic rail port competition; average \$200/hr. for 50 hours of time	\$10,000
Printing	Major projects not included in fee	\$1,000
Other	Miscellaneous	\$1,000
Total		\$17,905

Note: Estimate does not include cost of any appeals of the STB's decision, Motions to Stay or other procedural motions before and during appeal. It also does not assume the STB would require an abandonment application, the additional fees for which would range from \$75-000 to \$85,000.

Subtotal: Estimated Fees and Expenses - Phase II: \$68,655

TOTAL: Phase I and II: Estimated Fees: \$ 99,635
Estimated Exp. Estimated Expenses: 43,310
\$142,945

We issue our statements on a monthly basis and request that payment be made within 30 days. Our statements identify the attorney performing the work, the date and description of the work performed, the amount of time spent (in tenths of an hour), and the applicable hourly rate. Any chargeable expenses are shown separately.

Mr. Joe Corradino April 4, 2006 Page 8

Please let me know what additional information you may need. We look forward to working with you on this matter.

Very truly yours,

Janet H. Gilbert

JHG Enclosure

<u>AFFIDAVIT</u>

I, WILLIAM C. SIPPEL, am a partner in the law firm of Fletcher & Sippel LLC, 29 N. Wacker Drive, Suite 920, Chicago, IL 60606 and do hereby state as follows:

- 1. I have the authority to enter into contracts for the provision of legal services by the firm of Fletcher & Sippel and to commit to the terms and conditions therefor.
- 2. The firm does business with state entities, including state transportation departments, and offers its services to such entities at reduced rates.
- 3. Attached hereto as Exhibit 1 to this Affidavit is a document entitled "Attachment 1 to Exhibit A." This document is an Exhibit to a service contract recently entered into by me on behalf of Fletcher & Sippel with a state transportation department and sets forth the rates agreed upon.
- 4. Attached hereto as Exhibit 2 to this Affidavit is the last page of the most recent bill submitted to the state transportation department referenced in 3. above, which sets forth actual hours billed and rates charged pursuant to the service contract.

I certify that the above statement is true and accurate.

William C. Sippel, Partner Fletcher & Sippel LLC

4-4-06

P29

226-065-08 GEHERAL COUNSEL CIGC - 07/04 Page 8 of 9

ATTACHMENT 1 TO EXHIBIT A

CONTRACTOR shall adhere to the schedule set below, as services are rendered for:

The legal services to be provided include primarily federal and state rail counsel and representation pertaining to the central rail confider. Negotiations of contractual matters involving a railroad are contemplated. Legal matters will include freight and commuter rail, shared use confiders, acquisitions and contract issues, transit systems, and labor law, in particular railroad labor law, as well as other related matters.

CONTRACTOR'S attorney and paralegal staff to be used under this contract include the following individuate at the hourly rates indicated:

Name	Hourly Rate
William C. Slppel	\$ 285.00
T, J, Litwiler	\$ 235,00
Michael J. Barron	\$ 200. 0 0
Ronald A. Lane	\$ 285.00
Myles L. Tobin	\$ 285.00
Jamet H. Gilbert	\$ 275.00

The above listed schedule of rates are guaranteed through the duration of this Agreement. Adjustment by the parties shall be documented in writing by amendment to this Agreement.

The total Contract amount shell not exceed \$ inclusive of costs, without written approval.

Depa	rlment of Transportation
01131-001	

Page

3

Date Init	Description.	Haurs	Amount
02/28/06 WCS	Review NJT and Puget Sound SUA's regarding states issues; continue review of Feasibility Study information.	4.20	1;197.00
		•	•
Total for profession	onal services rendered	63.40	\$17,969.00
Costs:			
. Date	Description		
2/12/2006	meetings with 2/12-2/15.		1,182.32
Total costs		•	\$1,182.32
÷			
Moune	Timekeeper Summary	0-4-	f en b
Name Ronald A. Lane	Hours 2,30	Rate 285,00	Amount \$655.50
Thomas J. Litwie		235.00	\$470.00
William C. Sippel	59.10	285.00	\$16,843.50
Total amount of the	nis bill	•	\$19,151.32
,	•		

I certify that all costs and fees claimed for payment are accurate and were performed in furtherance of the Agreement between Fletcher & Sippel LLC, Attorneys at Law, 29 North Wacker Drive, Suite 920, Chicago, Illinois and the Department of Transportation.

Partner

05-19-06

12:06pm

From-Fletcher & Sippel LLC

312 252 2400

T-384 P.002/013 F-731

FLETCHER & SIPPEL LLC

ATTORNEYS AT LAW

29 North Wacker Drive Suite 920 Chicago, Illinois 60606-2832 Phone: (312) 252-1500 Fax: (312) 252-2400 www.fletcher-sippel.com

JANET H. GILBERT (3) 2) 252-1507 igilberr@fletcher-sippel.com

May 19, 2006

CONFIDENTIAL-PRIVILEGED ATTORNEY-CLIENT COMMUNICATION/ATTORNEY WORK PRODUCT

VIA FACSIMILE (248/799-0146) AND U.S. MAIL

Mr. Joe Corradino
DRIC Project Manager
The Corradino Group
20300 Civic Center Drive
Suite 410
Southfield, MI 48076

Re: Federal Regulatory Consulting Services

Dear Mr. Corradino:

Per our recent conversation, you requested additional explanation of the following items discussed in our letter to you of April 4, 2006 (copy attached). I was not sure if you wanted me to redo the April 4 letter to incorporate explanations of the items or we should provide a separate letter. If the explanations below are satisfactory, they can easily be incorporated into a revised version of the April 4 letter in footnote fashion:

- 1. Filing Fees: In Phase I summary of expenses, we reference filing fees for various types of abandonments ranging from \$5300 for a simple exempt abandonment to \$18,700 for a fully regulated abandonment. These fees are set by the Surface Transportation Board and they are published in the Code of Federal Regulations. I've attached a copy of the STB's current filing fees related to abandonment proceedings.
- 2. Copying charges: It is our firm policy to absorb most routine copying costs; however, if there is a major printing project beyond what our internal capacity can reasonably handle, such as a project involving special binding, color copying, oversize exhibits or maps or a significant number of pages, we will send the

05-19-06

12:06pm From-Fletcher & Sippel LLC

312 252 2400

T-384 P.003/013 F-731

FLETCHER & SIPPEL LLC

Mr. Joe Corradino May 19, 2006 Page 2

project to an outside copying firm. The outside copy firm we currently uses charges \$.12/copy for black & white copies, \$1.25/page for color and \$1.25/square foot for oversized items such as maps. Assuming the abandonment application is an exempt filing, our past experience suggests we will be able to handle most or all of the printing in house. We are also amenable to prior consultation with your firm to assess whether certain printing jobs could be more efficiently and cost effectively printed by your firm.

- Experts: In our expense summary, we referenced the possible need for experts. Experts would not normally be anticipated in exempt abandonment filings but, in this matter we anticipate strong opposition and a possible Offer of Financial Assistance (OFA) filing to gain control of the rail line. In the event of an OFA, the client may opt to bolster the application with outside experts, such as a public policy or transportation expert, to refute an argument that the line is necessary for rail service or that it serves any valid public purpose. Before outside experts would be used, we would consult with you, the Michigan Department of Transportation and other agencies which might be able to provide appropriate supporting affidavits without the need to use outside help. No outside experts would be retained without your prior approval.
- 4. Rental cars/taxis: Reference was made in our expense estimates of costs for both use of rental cars and taxis when in Detroit. Please be assured that we will chose the most reasonable and cost effective use of those options. We included the use of rental cars because we anticipated being in Detroit for consecutive days at a time traveling to several different locations for interviews. If we were to travel to one location and back, the use of taxis would likely be the most cost efficient means of transportation and we would opt for that choice.

Please let me know if the above satisfactorily answers the questions raised by MDOT and, if so, whether you would like me to submit the above information in a revised version of our letter of April 4.

Very truly yours,

Janet H. Gilbert

JHG:kb

12:06pm From-fletcher & Sippel LLC

312 252 2400

T-384 P.004/013 F-731

STB Ex Parte No. 542 (Sub-No. 13)

	(ii) Notice of exemption under 49. CFR 1150.41 - 1150.45	 \$1,500.
	(iii) Petition for exemption under 49 U.S.C. 10502 relating to an exemption from the provisions of 49 U.S.C. 10902	 \$5,60 0 .
(15)	A notice of a modified certificate of public convenience and necessity under 49 CFR 1150.21-1150.24	 \$1,400.
(16)-(20) [Reserved]	

PART Trans		
(21)	(i) An application for authority to abandon all or a portion of a line of railroad or discontinue operation thereof filed by a railroad (except applications filed by Consolidated Rail Corporation pursuant to the Northeast Rail Service Act [Subtitle E of Title XI of Pub. L. 97-35], bankrupt railroads, or exempt abandonments)	\$18,700.
· .	(ii) Notice of an exempt abandonment or discontinuance under 49 CFR 1152.50	\$3,100.
	(iii) A petition for exemption under 49 U.S.C. 10502	\$5,300.
(22)	An application for authority to abandon all or a portion of a line of a railroad or operation thereof filed by Consolidated Rail Corporation pursuant to Northeast Rail Service Act.	\$400.
(23)	Abandonments filed by bankrupt railroads	\$1,600.
(24)	A request for waiver of filing requirements for abandonment application proceedings	\$1,500
(25)	An offer of financial assistance under 49 U.S.C. 10904 relating to the purchase of or subsidy for a rail line proposed for abandonment	\$1,300
(26)	A request to set terms and conditions for the sale of or subsidy for a rail line proposed to be abandoned	\$19,100
(27)	(i) Request for a trail use condition in an abandonment proceeding under 16 U.S.C.1247(d)	\$200

Attachment C

Resumes

Resumes

Geophysical Advisory Group

RĖSUMĖ

Richard D. Woods Professor Emeritus of Civil Engineering Department of Civil and Environmental Engineering University of Michigan

EDUCATION

B.S. Civil Engineering, University of Notre Dame, 1957M.S. Civil Engineering, University of Notre Dame, 1962Ph.D. Civil Engineering, University of Michigan, 1967

EMPLOYMENT (full time)

July 2002	Professor Emeritus, Civil Engineering, University of Michigan
2002 (Jan) to June 2002	Melchor Distinguished Visiting Professor of Civil Engineering, University of Notre Dame
2001 (Oct) to June 2002	Professor of Civil Engineering, Department of Civil & Environmental Engineering, University of Michigan
1996 (July) thru Sept. 2001	Professor and Chairman, Department of Civil & Environmental Engineering, University of Michigan.
1994 (Nov.) (June) 1996	<u>Professor and Interim Chairman</u> , Department of Civil & Environmental Engineering, University of Michigan.
1987 to (Nov.) 1994	Professor and Associate Chairman, Department of Civil Engineering, University of Michigan.
1976 to 1987	Professor, Civil Engineering, University of Michigan.
1971 to 1976	Associate Professor, Civil Engineering, University of Michigan.
1973 to present	Registered Professional Engineer, Michigan # 21080

1967 to 1971 Assistant Professor, Civil Engineering, University of Michigan. 1965 to 1967 Graduate Student, University of Michigan; supported on NSF Traineeship. 1963 to 1964 Instructor, Civil Engineering, Michigan Technological University, Houghton, Michigan. 1962 to 1963 <u>Project Engineer</u>, (GS-11), Air Force Weapons Laboratory, Kirkland, AFB, Albuquerque, New Mexico; supervised contracts which were directed at determining engineering properties of soils under dynamic loads. 1960 to 1962 Graduate Student, University of Notre Dame, teaching assistantship; taught surveying including camp. 1957 to 1960 Lieutenant, U.S. Marine Corps., Camp Pendelton, California; six months as platoon leader, movable bridge 1960 company; remainder of service as hydraulic engineering officer preparing evidence for water rights litigation.

ORGANIZATIONS

American Society of Civil Engineers
American Society of Testing and Materials
American Society for Engineering Education
International Society for Soil Mechanics and Foundation Engineering
National Society of Professional Engineers
Society for Exploration Geophysics
Chi Epsilon
Society of the Sigma Xi
ADAC, International Association of Drilled Shaft Contractors
Deep Foundations Institute
Environmental and Engineering Geophysical Society (EEGS)
American Underground-Space Association
ASFE
NAE

AWARDS

Collingwood Prize American Society of Civil Engineers, 1969 ASCE News Correspondent Award, 1983 Outstanding Civil Engineer Award, Michigan Section, ASCE, 1985 Excellence in Teaching Award, University of Michigan, College of Engineering, 1987

Outstanding Civil Engineer Award, Ann Arbor Branch, ASCE, 1995 Terzaghi Lecturer, ASCE Geotechnical Engineering Division, 1997 Distinguished Scientist Award, 8th Great Lakes Geotechnical and Geoenvironmental Conference.

Fellow, ASCE 1998

Life Member ASCE, 2000

The Civil and Environmental Engineering Award for Outstanding Accomplishment, Department and College of Engineering. February 2002.

Distinguished Engineering Alumni, College of Engineering, Notre Dame University, April 2002

Distinguished Faculty Achievement Award, 2001-2002, Univ. of Michigan Member of National Academy of Engineers, (NAE), elected February 2003

OTHER EMPLOYMENT AND SPECIAL APPOINTMENTS

1969 1970	Staff Engineer, Woodward-Clyde Consultants, Orange, California; summer employment to gain experience in consulting engineering practice. Rock Tunneling – Tahachapi Pass
1971	<u>Visiting Professor</u> , Indian Institute of Technology, Kanpur, India; advised in establishing basic soil dynamics laboratory and course on dynamic soil properties.
1972	<u>Visiting Professor</u> , Institute for Soil and Rock Mechanics, University of Karlsruhe, Germany; taught Soil Dynamics and advised in establishing soil dynamics laboratory. Performed research on Propagation of Rayleigh Waves in region of obstacles.
1976	Fugro Fellow, University of Florida; on sabbatical leave from University of Michigan; investigated use of static one penetrometer with built-in pore pressure transducer to predict liquefaction potential of sands.
1977	Invited Principal Lecturer, NATO sponsored International Symposium on Dynamical Methods in Soil and Rock Mechanics, Karlsruhe, Germany.
1979 to 1984	<u>Chairman</u> , Policy Board of National Geotechnical Centrifuge Facility (NSF Funded).
1980 to	Newsletter Correspondent, Geotechnical Engineering

1986	Division ASCE News Correspondent.
1983	<u>Visiting Research Professor</u> , Zhejiang University, Hangzhou, China.
1986	Appointed to four year term on Geotechnical Engineering Division Executive Committee, ASCE.
1989	<u>Chairman</u> , ASCE Geotechnical Engineering Division Executive Committee.
1987	Secretary, United States Universities Council on Geotechnical Engineering Research (USUCGER).
1989	<u>President</u> , United States Universities Council on Geotechnical Engineering Research (USUCGER).
1990	<u>Visiting Professor of Civil Engineering</u> , University of Florida, Gainesville, Florida; application of centrifuge to modeling of pile groups under dynamic loads.
1990	<u>Invited NATO Lecturer</u> , Shear Waves in Sea Floor Materials, La Spazia, Italy.
1992	<u>United Nations Lead Evaluator</u> , Central Materials Testing Station, Lahore, Pakistan.
1992 to 1994	<u>Visiting Professor of Earthquake Engineering</u> , American University of Armenia, Yerevan, Armenia.
1994	<u>Invited Special Lecturer</u> , Brazilian National Society of Geotechnical Engineers, Annual Convention.
1996	External Reviewer, College of Engineering, University of Colorado, Denver.
2000	Special Advisor for Formation of new Department of Civil Engineering, Petronas University, Kuala Lumpur, Malaysia
2002	Melchor Distinguished Visiting Professor, Department of Civil Engineering and Geological Sciences, Notre Dame University, Winter Term, 2002

TEACHING

Courses taught:

University of Notre Dame -

Plane Surveying & Route Surveying (1960-1961) Geotechnical Earthquake Engineering (2002) Engineering Properties of Soils (2002)

Michigan Technological University -

Basic Soil Mechanics Foundation Engineering Reinforced Concrete Structures Design

University of Michigan -

Engineering Properties of Soils

*Foundation Engineering

*Field Sampling and Lab Testing of Soils

Foundations of Marine Structures

*Tunneling And Underground Construction

Theoretical Soil Mechanics

Soil Dynamics

*Civil Engineering Vibrations Laboratory

Surveying for Architects

Engineering Surveying

Applied Mechanics, Strength of Materials & Statics

Applied Mechanics, Dynamics

*Professional Issues in Civil & Environmental Engineering

*Geophysical Techniques in Environmental Geotechnology

Coordinator in development of Master's of Engineering (M.ENG.) Degree Program in Environmental Geotechnology, 1994

*Capstone Design Course for Civil and Environmental Engineering, 2000

RESEARCH

University of Notre Dame -

^{*}Courses which I developed.

Preliminary Design of Dynamic Direct Shear Device

Michigan Technological University -

<u>Mechanics of Slide Dams</u>: Investigation of creation of dams by blasting material from canyon walls.

University of Michigan -

<u>Isolation of Vibrations by Barriers</u>: Full scale and model studies of parameters affecting effectiveness of slit trenches and cylindrical holes as barriers to seismic surface waves.

<u>Field Measurement of Dynamic Soil Properties</u>: Adoption of cross-hole seismic method from seismology for use in geotechnical engineering.

<u>Holographic Interferometry</u>: First application of holographic interferometry to investigation of basic wave propagation and surface wave propagation in region of barriers.

<u>Response of Pile Foundations to Dynamic Loads</u>: Full scale and model tests on both single piles and pile groups in both sand and clay.

<u>Dynamic Properties of Soils</u>: Laboratory and field measurement of compression and shear wave velocity and shear modulus of soils at both low and high amplitudes.

<u>Development of SASW Method</u>: Applications of FFT to evaluate shear modulus of layered media, method known as Spectral-Analysis-of-Surface-Waves (SASW).

<u>Cone Penetrometer & Dilatometer</u>: Study of use of penetrometer for identification of soils, and dilatometer for determination of Ko.

Grouting of Soils for Liquefaction Mitigation: Measurement of properties of grouted soils and development of economical methods of grouting to prevent liquefaction during earthquakes.

<u>Foam Grouting to Remediate Wastes in the Ground</u>: Discovery and development of surfactant foam grouting techniques which cleanses 99% of NAPLS and DNAPLS from contaminated soils.

<u>Applications of Geophysics to Geoenvironmental Engineering</u>: Selection of geophysical techniques which can be effectively applied in environmental problems.

System Director, Development of National Geotechnical Experimentation Sites: These sites are intended to reduce the site characterization costs for in situ experimentation in geotechnical engineering and geophysics.

SERVICE

Department -

Chairman and Interim Dept. Chairman, 1994-2001

Department ABET Review Coordinator, 1993.

Associate Chairman, Civil & Environmental Engineering_1987-1994.

Department Executive Committee, twice elected to four-year terms, Ex. Officio Member as Assoc. Chairman.

Department Research Committee, Member 1978-1992, Chairman for twelve years.

Department Research and Safety Committee, Member and <u>Chairman</u>, 1992-1994

Chairman, Materials Faculty Member Search Committee, 1989-1990.

Department Honors Committee, Member 1986-1987.

Chairman, Geotechnical Engineering Faculty Search Committee, 1985.

Department Technician Coordinator, 1977-present.

Department Foreign Teaching Assistants (TA's) English Language Screening Coordinator, 1987-2001..

Department Metrication Committee, Member, 1972-1973.

Department Scholarship and Loan Coordinator, 1972-1974.

ASCE Student Chapter Faculty Advisor, 1968-1971.

College -

College of Engineering (CoE), Safety Committee, Member, 1994-1995.

Minority Engineering Program Faculty Advisory Committee, Member, 1982 to 1998.

CoE Graduate Advisory Committee, 1994 to 1996.

CoE Awards Committee, Member, 1988.

CoE Awards Committee, Chairman, 1989.

CoE Nominating Committee, Member, 1978, 1983, and 1986.

CoE Curriculum Committee, Member, 1982-1985; Chairman, 1984-1985.

CoE Scholarship Committee, Member, 1973-1975;

Chairman, 1974-1975.

University -

Military Officers Education Committee, Member, 1992 - 1999.

University Faculty Senate Assembly, CoE Representative, 1989-1992.

University Financial Aid Advisory Committee, Member, 1969-1971.

University Classified Research Review Panel, 1986-1988.

Nominator, University Honorary Doctorate Recipient, Dr. George Housner, 1990.

Local, State and National Professional Activities -

Member, Southeast Michigan Branch, ASCE, 1967-1975.

Chairman, Southeast Michigan Branch, Geotechnical Group, 1974-1975.

Member, Ann Arbor Branch, ASCE, 1976-present.

Member, ASCE Geotechnical Engineering Division Executive Committee, 1985-1990, Chairman, 1989.

ASCE, Soil Dynamics Committee, Member 1972-1980, Control Group Member, 1984-1992.

ASCE, Engineering Geophysics Committee, Control Group Member, 1990-present, Chairman, 1993-1997

ASCE, Member Geotechnical Division Awards Committee, 1992-1998

ASCE, Member Technical Communication Council (TCC), 2001-present.

ASTM, Member Committee D-18, Soils, and member of three subcommittees: Soil Dynamics, Static Cone Penetrometer, and Dilatometer.

International Society for Soil Mechanics and Foundation Engineering, Technical Committee #10, Geophysical Site Characterization, <u>Chairman</u> 1989-1997.

Environmental and Engineering Geophysical Society, <u>Vice President</u>, 1993-1994, <u>President</u>, 1994-1995

<u>Vice President</u> for North America, International Society for Soil Mechanics and Geotechnical Engineering, 2001-2005

CONSULTING EXPERIENCE

Areas of Consulting -

Vibration mitigation

Vibration Measurements on machines, in soils, on structures

Measurement of Dynamic Soil Properties, in lab and in field

Design of Foundations for Dynamic Loads

Design of Foundations for Sensitive Instruments Stability of Soil Slopes

Site Investigations with Dutch Cone Penetrometer

Blasting Damage Evaluations

Blasting Code Drafting

Geophysical Site Investigations Marina Pier Design and Rehabilitation Tunnel Stability Evaluation (soft ground) Toronto, Ontario

Principal Clients -

Nuclen (Nuclear Brazil), four nuclear plants in Brazil Bechtel Power Corporation, Ann Arbor, Michigan Attorney General, State of Michigan, (Reserve Mining Asbestos Case) Giffels and Associates, Detroit, Michigan Cities of Ann Arbor and Harbor Springs, Michigan Ford, General Motors, and Chrysler Honeywell Corporation, Minneapolis, Minnesota Woodward-Clyde Consultants, Orange, California, Oakland, California, and Philadelphia, Pennsylvania Eaton Corporation, Detroit Michigan, Milwaukee Wisconsin, Cleveland Ohio Tippetts-Abbett-McCarthy-Stratton, New York (Tarbela Dam, Pakistan) Rockwell International Corning Incorporated, Corning, New York and worldwide Day and Zimmermann, Philadelphia, Pennsylvania Albert Kahn Associates, Detroit, Michigan Gilbert/Commonwealth, Jackson, Michigan, Reading, Pennsylvania Transportation Research Board, National Academy of Engineering Michigan Bell Telephone Company Soil & Material Engineers NTH Consultants, Ltd. Stoll, Evans, Woods, and Associates, Former Principal Geo Consultants, Inc., Former Principal SOMAT Engineering, Inc. Arvin/Meritor

PUBLICATIONS (recent 16 years) [54 previous peer reviewed publications]

Chang, T.S. and Woods, R.D. (1987), "Effect of Confining Pressure on Shear Modulus of Cemented Sand," *Developments in Geotechnical Engineering Vol. 43, Soil-Structure Interaction*, Elsevier, Amsterdam, pp. 193-208.

- Li, N. and Woods, R.D. (1987), "Dynamic Behavior of Grouted Sand," Developments in Geotechnical Engineering Vol. 43, Soil-Structure Interaction, Elsevier, Amsterdam, pp. 221-242.
- Wu, S.M. and Woods, R.D. (1987), "Time Effects on Shear Modulus of Unsaturated Cohesionless Soils," *Developments in Geotechnical Engineering Vol. 43, Soil-Structure Interaction*, Elsevier, Amsterdam, pp. 243-256.
- Chang, T.S. and Woods, R.D. (1992), "Effect of Particle Contact Bond on Shear Modulus," *Journal of Geotechnical Engineering, ASCE*, Vol. 118, No. 8, August, pp. 1216-1235.
- Gucunski, N. and Woods, R.D. (1992), "Numerical Simulation of the SASW Test," *Soil Dynamics and Earthquake Engineering*, Vol. 11, No. 4, Aug., pp. 1216-1233.
- Krstulovic-Opara, N. and Woods, R.D. (1992), "Non-Destructive Testing of Concrete Structures Using the Rayleigh Wave Dispersion Technique," Proceedings of Society of Experimental Mechanics Conference, November.
- Qian, X., Gray, D.H. and Woods, R.D. (1993), "Voids and Granulometry: Effects on Shear Modulus of Unsaturated Sands," *Journal of Geotechnical Engineering*, ASCE, Vol. 119, No. 2, Feb., pp. 295-314.
- Woods, R.D. (1994) *Geophysical Characterization of Sites*, Editor, Oxford & IBH Publishing, New Delhi, 141 pp.
- Woods, R.D. (1994), "Borehole Methods in Shallow Seismic Exploration," *Geophysical Characterization of Sites*, R.D. Woods editor, Oxford & IBH Publishing, New Delhi, pp. 91-100.
- Woods, R.D. and Tseng, C-C. (1994), "Annotated Bibliography of Proceedings of: Symposia on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), 1-5 (1989-1993)," *Geophysical Characterization of Sites*, R.D. Woods editor, Oxford & IBH Publishing, New Delhi, pp. 101-141.
- Setareh, M. and Woods, R.D. (1994), "Machine-Induced Vibrations on Reinforced Concrete Structures," *Concrete International*, Vol. 16, No. 1, Jan., pp. 43-47.
- Al-Shayea, N., Woods, R.D. and Gilmore, P. (1994), "SASW and GPR to Detect Buried Objects," *Proceedings of the Symposium on the Application*

- of Geophysics to Engineering and Environmental Problems (SAGEEP), Vol. 1, pp. 543-560.
- Al-Shayea, N., Woods, R.D. and Gilmore, P. (1994), "Detection of Buried Objects by the GPR Method," *Proceedings of GPR '94*, Waterloo, Ontario, June 12-16.
- Woods, R.D. (1994), "Topic Overview Paper Laboratory Measurement of Dynamic Soil Properties," *Symposium on Dynamic Geotechnical Testing II, ASTM STP 1213*, San Francisco, Jan. 28, pp. 25-43.
- Woods, R.D. (1994), "National Geotechnical Experimentation Sites," *Geotechnical News*, Vol. 12, No. 1, pp. 39-44, Mar.
- Chuanromanee, O., Hanson, R.D. and Woods, R.D.(1994), "The Influence of Soil-Structure Interaction on the Natural Frequencies of Structures with High Damping," *Proceedings of 5th U.S. National Conference on Earthquake Engineering*, Vol. 4, Chicago, July, pp. 45-52.
- Chuanromanee, O., Hanson, R.D. and Woods, R.D.(1995), "The Influence of Soil-Structure Interaction on the Overall Damping of Structures with High Damping," *Proceeding of the Conference, Soil Dynamics and Earthquake_Engineering* '95, Greece.
- Chu, H-S., Woods, R.D. and Demond, A.H. (1995), "Foam Displacement of Organic Liquids from Saturated Sands,"_Proceedings of the Conference on Industrial Hazardous Wastes, Pittsburgh, PA, July, sponsored by the Water Environment Federation.
- Krstulovic-Opara, N. Woods, R.D. and Al-Shayea, N.(1996), "Use of Rayleigh Wave Dispersion Technique for Non-Destructive Testing of Concrete Structures," *ACI Materials Journal*, Vol. 93, No. 1, Jan-Feb., p. 75-86.
- Chu, H.S., Woods, R. D. (1996), "Remediation with Surfactant Foams," Proceedings of Fourth Great Lakes Geotechnical Geoenvironmental Conference, University of Illinois, Chicago, May 17.
- Chu, H-S., Salehzadreh, A. and Demond, A. H. and Woods, R.D. (1996), "Mechanisms of Removal of Residual Dodecane Using Surfactant Foam," Proceedings of the Conference on Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Environmental Engineering Division, ASCE, Washington, DC, Nov. 12-14.

- Woods, R. D. (1997), "Dynamic Effects of Pile Installation on Adjacent Structures," *TRB SYNTHESIS*, *Topic 26-16*, Transportation Research Board, NCHRP Project 20-5.
- Svinkin, M. and Woods, R.D. (1998), "Accuracy of Determining Pile Capacity by Dynamic Methods," Proceedings of the Deep Foundation Institute, 98 Conference, Vienna, Austria, June 15-17.
- Al-Shayea, N. and Woods, R.D. (1998), "SASW to Detect Underground Cavities and Inclusions," submitted to ASCE Geo Institute Journal.
- Alshunnar, Ibraheem S., Afifi, Sherif S. and Woods, R.D. (1998), "Engineered Filling of Landfills," presented in San Antonio, Texas, February 1.
- Hayakawa, K. and Woods, R. D. (1998), "PC Piles to Isolate Vibrations," Fourth International Conference on Case Histories in Geotechnical Engineering, March, 9-12, St. Louis, Mo.
- Alshunar, I. S., Afifi, S.S., and Woods, R.D. (1998) "Engineered Filling of Landfills," presented in San Antonio, Texas 2-1-98,...
- Hayakawa, K, Kani, Y., Matsubara, N, Tamotsu, M, and Woods, R.D. (1998) "Isolation by PC Wall-Piles," Fourth Inter. Conf. on Case Histories in Geotechnical Engineering, March 9-12, St. Louis, Mo., pp 672-677.
- Hayakawa, K., Kani, Y., Matsubara, N, and Woods, R.D. (1998) "The Effectiveness of Pre-Cast Wall-Piles in Reducing Ground Vibrations," *Journal of Building Acoustics*, Vol. 5, No. 3, Multi-Science Publishing Co. Ltd., 5 Wates Way, Brentwood, Essex CM 15 9TB, UK.
- Matsubara, N., Kani, Y., Hayakawa, K, and Woods, R.D. (1998) "Isolation effects of ground vibration due to PC wall-piles on several sites," *Proceedings, Earthquake Geotechnical Engineering*, Seco e Pinto (editor), Balkema, Rotterdam, pp 427-432.
- Woods, R.D. (editor) (1999), "Decades of Technology Advancing into the Future," Deep Foundations Institute, 24th Annual Members' Conference Proceedings, Oct. 14-16, Dearborn, Michigan, 299 p.
- Woods, R.D. (editor) (1999), *Distinct Element Modelling in Geomechanics*, Oxford and IBH Publishing, Co. Pvt.Ltd, New Delhi, 222p. with V.M. Sharma and K.R. Saxena
- Woods, R.D.(2000), "Applications of Small Strain Seismic Velocities to Static Design in Geotechnical Engineering," *Proceedings of the 3rd International Workshop on the Application of Geophysics to Rock and Soil Engineering*, Nov. 18, 2000, Melbourne, Australia, pp. 13-18.

- Woods, R.D. (2001), *A Look Back for Future Geotechnics*, Editor, Oxford/IBF Publishers, New Delhi, 426p.
- Woods, R.D (2001), "Vibration Screening with Wave Barriers," A Look Back for Future Geotechnics, Oxford & IBH Publishing, New Delhi, pp. 325-348.
- Hiltunen, D.R., Griffin, L.M. and Woods, R.D. (2003), "Liquefaction Evaluation of Vincent Thomas Bridge Sites via Crosshole Seismic Shear Wave Measurements," Proceedings of Soil and Rock America (SARA), 12th Panamerican Conference on Soil Mechanics and Geotechnical Engineering, Vol. 1, pp. 253-260.
- Woods, R.D. (2003), "Foundation Dynamics in the Auto Industry," Proceedings 20th Central Pennsylvania Geotechical Conference, Hershey, PA, Oct 29-31, 2003, 22p.
- Hiltunen, D.R., Nolen-Hoeksema, R.C. and Woods, R.D. (2004), "Characterization of Abandoned Mine Sites Beneath I-70 Via Crosshole and SASW Seismic Wave Methods," *Proceedings: Fifth International Conference on Case Histories in Geotechnical Engineering*, New York, NY, April 13-17, 2004
- Richart, F.E., Jr. and Woods, R.D. (1982), "Foundations for Auto Shredder," American Concrete Institute, 1978 Fall Convention, Houston, Texas

BOOKS-

Vibration of Soils and Foundations, Prentice-Hall, 1970, 414pp, (translated into Japanese, Chinese and Romanian), with F.E. Richart, Jr. and J.R. Hall, Jr.

Dynamic Effects of Pile Installations on Adjacent Structures, A.A. Balkema Publishers, Leiden, Netherlands, 2004, 163p. with V.M. Sharma.

CHAPTER AUTHOR -

"Vibration Problems in Seismic Effects," for U.S. Army Corps of Engineers, *Soil Manual*, 1974,

"Vibrations of Soils", for *Ground Engineer's Reference Book*, Butterworth and Co., 1983

DOCTORAL STUDENTS

20 Completed Ph.D.'s

SHORT COURSES

"Vibration of Soils and Foundation," University of Michigan, June 1968.

"Behavior of Soils for Builders," Chairman, University of Michigan, October 1970.

"Soil Dynamics and Soil-Structure Interaction Relevant to Earthquake Engineering," Univ. of Massachusetts, May 1971.

- "Application of Soil Mechanics to Foundation Engineering," Chairman, Commonwealth Associates, Inc., Jackson, Michigan, November 1972 and March 1973.
- "Soil Mechanics," Chairman, Consumers Power Company, Jackson, Michigan, May 1982.
- "Soil Testing: Field and Laboratory Methods," University of Wisconsin, Madison, Wisconsin, February 1983.
- "Soil Dynamics," at Zhejiang University, Hangzhou, PRC, October 1983.
- "Laboratory and Field Investigation for Soil Dynamics," Central Soils and Materials Research Station, Ministry of Irrigation, New Delhi, India, November 1983.
- "Laboratory Testing in Soil Dynamics," Central Soils and Materials Research Station, Ministry of Irrigation, New Delhi, India, April 1986.
- "Laboratory and Field Testing for Soil Dynamics," Zhejiang University, Hangzhou, PRC, May 1986.
- "5th Short Course on Machine Foundation Design", Univ. of Missouri, St. Louis, MO, Feb. 1988.

OTHER MISCELLANEOUS ASSIGNMENTS

- NSF, Research Initiation Grant Reviewer, 1973.
- Paper Review Chairman, ASCE Speciality Conference, "Geotechnical Practice for Disposal of Soil Waste Materials," Ann Arbor, MI, June 1977.
- NSF, National Geotechnical Centrifuge Facility Proposal Review Panel Member, 1978 and 1984.
- NSF, Chairman, Advisory Panel, National Geotechnical Centrifuge Facility, Univ. of California, Davis, CA,
- NASA, Marshall Space Flight Center, Workshop on Earthquake Engineering Research Potential, Invited Participant, February 1979.
- NSF, Invited Participant, NASA-NSF Centrifuge Workshop, August 1979.
- NSF, University of Texas, Review Committee member for NSF Sponsored Project, "Dynamic Stiffness of Pile Foundations," Nov. 1981.
- Session Moderator, "International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics," St. Louis, MO, May 1981.
- Invited Participant, Cambridge University Workshop on Centrifuge Application in Geotechnical Engineering, Cambridge, England, June 1981.
- Session Chairman, International Conference on Soil Dynamics and Earthquake Engineering, Southampton, England, July 1982.
- Invited Participant, NASA-NSF, Workshop on Earthquake Simulator for Centrifuge Applications, MIT, Cambridge, Mass., July 1982.
- Invited Lecturer, Zhejiang University and Nanjing Hydraulics Institute, People's Republic of China, October 1983.

- FRANCE/USA (NRS/NSF) Workshop on Research Cooperation in Civil Engineering, Participant, Paris, October 1983.
- Session _Chairman, International Workshop on Soil Structure Interaction, Roorkee, India, November 1983.
- Session Chairman, "Measurement and Use of Shear Wave Velocity for Evaluating Dynamic Soil Properties," ASCE Convention, Denver, Colorado, May 1985.
- Session Chairman, RICHART COMMEMORATIVE LECTURES, ASCE October Convention, Detroit, Michigan, October 1985. Editor, Proceedings of Specialty Conference, Geotechnical Practice For Waste Disposal, 1987
- Session Chairman, Vibration of Machine Foundations, 3rd International Conference on Soil Dynamics and Earthquake Engineering, June 1987.
- ASCE Liaison Member, Geotechnical Board, National Research Council, National Academy of Engineering, 1987-1990.
- NSF Workshop, Soil Improvement and Foundation Remediation for Seismic Hazards, Participant, Seattle, 1991.
- NSF Workshop, Experimental Needs for Geotechnical Earthquake Engineering, Participant, Albuquerque, N.M. 1991.
- NSF/France Geotechnical Workshop, Participant, Paris, 1992. United Nations Development Program, Soil Dynamics and Earthquake Engineering Advisor for Central Soil and Materials Research Station, New Delhi, 1989-1994.
- United Nations Development Program, Soil Dynamics Laboratory Advisor to Central Materials Testing Laboratory, Lahore, Pakistan, 1993.
- NSF Workshop, Geophysical Techniques for Site and Material Characterization, Organizer,_ Atlanta, 1993.
- NSF Review Panel Member, NSF Young Investigator Awards, 1993
- NSF/Scandinavia Geotechnical Engineering Workshop, Participant, Trondheim, Norway, 1994.
- NSF/CERF Workshop: Defining Geo-Engineering for the 21st Century, Participant, May 1994.
- NSF Review Panel Member, NSF Small Business Innovation Research Program (SBIR), 1996.

CONDENSED VITA

General Information

Name: RICHARD D. MILLER

Address: 599 N 1000 Road

Lawrence, Kansas 66047

Telephone: (Home) 785-748-0842

(Office) 785-864-2091

Date of Information: January 2006

Education

B.A., Physics (Minor, Chemistry), Benedictine College, 1980. M.S., Physics, Emphasis Geophysics, University of Kansas, 1983.

Professional Experience

Associate Scientist, Kansas Geological Survey, University of Kansas, 1996-present.

Courtesy Associate Professor of Geology, Department of Geology, University of Kansas, 1997-present.

Chief, Exploration Services Section, Kansas Geological Survey, University of Kansas, 1987-present.

Seismic Application Research experience in thirty-three states and seven foreign countries.

Certification: 40-hour 29 CFR 1910.120, CPR, First Aid.

Honors, Memberships, and Affiliations

The Distinguished Achievement Award, Society of Exploration Geophysicists, October 2002.

Nominated best paper at SAGEEP EEGS annual meeting, 2002.

President's Certificate for Excellence in Presentation (Poster) for the Energy Minerals Division of the American Association of Petroleum Geologists, May 2002.

University of Kansas Unclassified employee of the Month, May 2002.

Hal Mooney Award (for scientific and technical excellence and innovation leading to the advancement of nearsurface geophysics), Near-Surface Geophysics Section of the Society of Exploration Geophysicists, 1995.

Nominated best paper in Geophysics, 1990: Miller and Steeples, 1990; Steeples et al., 1990.

Member, American Geophysical Union (AGU).

Member, Geophysical Society of Kansas (GSK).

Member, Near-Surface Geophysics Section of SEG (NSG).

Member, Society of Exploration Geophysicists (SEG).

Member, National Eagle Scout Association (NESA).

Selected, Sigma Pi Sigma, Physics Honor Society, 1984.

Eagle Scout, 1972.

Administrative Experience

Chief, Exploration Services Section, Kansas Geological Survey, 1987-present. Responsible for coordinating budget, planning, administration and research of six professional staff, one office specialist, five engineering technicians, one geologist, and four graduate and undergraduate student assistants. Total budget responsibility exceeds one million dollars per year with total vehicle and equipment responsibility in excess of two million dollars.

Grant and Contract Funding (over \$5.3 million)

Sponsors of Seismic Dissolution Research include: Kansas Department of Transportation, Mosaic Company, Kansas Corporation Commission, U.S. Army Corps of Engineers, ELM Consulting LLC, Burns & McDonnell, North American Salt Company, Burlington Northern Railroad.

Selected Publications: Subsidence

Miller, R.D., and K. Millahn, 2006, High-resolution seismic reflection investigations of dissolution sinkholes [Ext. Abs.]: European Association of Geoscientists and Engineers (EAGE) 68th Conference and Exhibition, Vienna, Austria, June 12-15, 4 p.

- Miller, R.D., 2006, High-resolution seismic reflection to identify areas with subsidence potential beneath U.S. 50 Highway in eastern Reno County, Kansas: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2006), Seattle, Washington, April 2-6, Paper 28, 13 p.
- Miller, R.D., J. Xia, and C.B. Park, 2005, Seismic techniques to delineate dissolution features (Karst) at a proposed power plant site: Soc. Explor. Geophys., Investigations in Geophysics no. 13, Dwain K. Butler, ed., *Near-Surface Geophysics*, p. 663-679.
- Miller, R.D., A. Villella, J. Xia, and D.W. Steeples, 2005, Seismic investigation of a salt dissolution feature in Kansas: Soc. Explor. Geophys., Investigations in Geophysics no. 13, Dwain K. Butler, ed., Near-Surface Geophysics, p. 681-694.
- Miller, R.D., J. Ivanov, D.W. Steeples, W.L. Watney, and T.R. Rademacker, 2005, Unique near-surface seismic-reflection characteristics within an abandoned salt-mine well field, Hutchinson, Kansas [Exp. Abs.]: Soc. of Expl. Geophys., p. 1041-1044.
- Lambrecht, J.L., R.D. Miller, and S. Durrant, 2005, Time-lapse high resolution seismic imaging of a catastrophic salt dissolution sinkhole in central Kansas: Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2005), Atlanta, Georgia, April 3-7, p. 943-951.
- Miller, R.D., and R. Henthorne, 2004, High-resolution seismic reflection to identify areas with subsidence potential beneath U.S. 50 Highway in eastern Reno County, Kansas: Proceedings of the 55th Highway Geology Symposium, September 8-10, Kansas City, Missouri, p. 29-48.
- Miller, R.D., J. Ivanov, S. Hartung, and L. Block, 2004, Seismic investigation of a sinkhole on Clearwater Dam: Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2004), Colorado Springs, Colorado, February 22-26, Paper KAR01, p. 1082-1098.
- Miller, R.D., 2003, High-resolution seismic-reflection investigation of a subsidence feature on U.S. Highway 50 near Hutchinson, Kansas: in K.S. Johnson and J.T. Neal, eds., Evaporite Karst and Engineering/Environmental Problems in the United States, Oklahoma Geological Survey Circular 109, p. 157-167.
- Miller, R.D., J. Xia, and C.B. Park, 2001, Detecting fracture related voids and abandoned lead/zinc mines near Baxter Springs, Kansas: Proceedings of the National Association of Abandoned Mine Lands Annual Conference, August 19-22, Athens, Ohio, proceedings published on CD.
- Miller, R.D., A. Villella, and J. Xia, 1997, Shallow high resolution seismic reflection to delineate upper 400 m around a collapse feature in central Kansas: *AAPG Division of Environmental Geosciences Journal*, v. 4, no. 3, p. 119-126.
- Miller, R.D., and J. Xia, 1996, Shallow high resolution seismic reflection to delineate upper 400 m around a collapse feature in central Kansas [Exp. Abs.]: Soc. Explor. Geophys., p. 892-895.
- Miller, R.D., J. Xia, R.S. Harding, J.T. Neal, J.W. Fairborn, and D.W. Steeples, 1995, Seismic investigation of a surface collapse feature at Weeks Island Salt Dome, Louisiana: *AAPG Division of Environmental Geosciences Journal*, v. 2, no. 2, p. 104-112.
- Anderson, N.L., R.W. Knapp, D.W. Steeples, and R.D. Miller, 1995, Plastic deformation and dissolution of the Hutchinson Salt Member in Kansas: in N.L. Anderson and D.E. Hedke, eds., *Geophysical Atlas of Selected Oil and Gas Fields in Kansas*: Kansas Geological Survey Bulletin 237, p. 66-70.
- Miller, R.D., D.W. Steeples, and T.V. Weis, 1995, Shallow seismic-reflection study of a salt dissolution subsidence feature in Stafford County, Kansas: in N.L. Anderson and D.E. Hedke, eds., *Geophysical Atlas of Selected Oil and Gas Fields in Kansas*: Kansas Geological Survey Bulletin 237, p. 71-76.
- Miller, R.D., D.W. Steeples, L. Schulte, and J. Davenport, 1993, Shallow seismic-reflection feasibility study of the salt dissolution well field at North American Salt Company's Hutchinson, Kansas, facility: *Mining Engineering*, October, p. 1291-1296.
- Knapp, R.W., D.W. Steeples, R.D. Miller, and C.D. McElwee, 1989, Seismic reflection surveys at sinkholes in central Kansas; in Proc. Symposium on Geophysics in Kansas, D.W. Steeples, ed.: Kansas Geological Survey Bull. 226, p. 95-116.
- Steeples, D.W., and R.D. Miller, 1987, Direct detection of shallow subsurface voids using high-resolution reflection techniques; *in* Sinkholes: their geology, engineering, and environmental impact, 2nd ed., ed. Barry Beck and W.L. Wilson: A.A. Balkema, Boston, p. 179-183.
- Miller, R.D., D.W. Steeples, and J.A. Treadway, 1985, Seismic reflection survey of a sinkhole in Ellsworth County, Kansas [Exp. Abs.]; in Technical Program Abstracts and Biographies: Soc. Explor. Geophys. 55th Ann. Mtg., Washington, D.C., p. 154-156.
- Steeples, D.W., R.W. Knapp, and R.D. Miller, 1984, Examination of sinkholes by seismic reflection; in Sinkholes, their geology, engineering, and environmental impact, ed. Barry Beck: A.A. Balkema, Boston, p. 217-224.

Resumes

Assistance in Project Implementation

Burt J. Deutsch, J.D. President General Counsel

Education

College of the Holy Cross, Worcester, Massachusetts, 1960-1961
Bellarmine College, Louisville, Kentucky: B.A., 1966
University of Louisville Law School, Louisville, Kentucky: J.D., 1971
University of Louisville Graduate School's Institute of Community Development, working toward an M.S. in Community Development, 1973-1977

Professional Experience

As President of The Corradino Group since 1990 and as General Counsel, Mr. Deutsch serves as a top business advisor to the Chief Executive Officer and Chief Operating Officer and as a key program manager for major client projects. For the past several years, Mr. Deutsch has served as the Program Manager of the \$800+ million Louisville Airport Improvement Program (LAIP) and has been a key member of the LAIP Project Management Team from the beginning of the program in 1988. He has been the Program Manager from its beginning in 1997 of the world-publicized Heritage Creek program, the top-funded project of the Federal Aviation Administration's Innovative Financing Program, to relocate and rebuild an entire town out of the path of Louisville International Airport. For more than 30 years, Mr. Deutsch has served as a principal government manager and urban economic development, community development, land development, and transportation systems planning professional in a variety of positions including City Attorney and then Deputy Mayor for Louisville, Ky., and Deputy County Executive for Jefferson County, Ky. Mr. Deutsch also has significant private experience as a commercial real estate developer.

Mr. Deutsch has been a key professional in economic development and economic forecasting projects. He has served as the principal-in-charge of Corradino's Engineering Report for the Louisville-Jefferson County Metropolitan Sewer District's capital improvement bond issues since 1992 overseeing the financial and economic forecasting for those reports. He has also overseen the economic forecasting and reporting for the LAIP's Aviation Economic Index prepared by the University of Louisville's Bureau of Economic Research and for the Detroit Intermodal Freight Terminal project in conjunction with Regional Economic Models, Inc. (REMI) and their assorted consultants.

1990 - Present

The Corradino Group, President and General Counsel. Burt J. Deutsch serves as a top business advisor to the Chief Executive Officer and Chief Operating Officer of The Corradino Group and as an active urban economic development, community development, land development, and transportation systems planning professional. Working closely with senior Corradino professionals, Mr. Deutsch participates in the execution and quality control of the firm's projects in the professional disciplinary areas of planning and urban design; land and commercial/industrial site development; urban transportation and public transit planning; environmental impact assessment and environmental planning; traffic and transportation engineering; systems and management planning; airport planning and design; surface water drainage and wastewater system design; and general civil engineering. As a lawyer, he also provides analytical support in projects dealing with financial and legal issues. Key assignments include:

- Program Manager for the \$750+ million Louisville Airport Improvement Program (LAIP). Working closely with the Project Management Team of airport and local governmental leaders, local business leaders, and other senior Corradino professionals and other consultant managers, Mr. Deutsch oversees the management, finance, legal, communication, design, construction, and relocation elements of the LAIP.
- Program Manager for the completion of the 2,179-family Louisville International Airport FAA-approved Part 150 voluntary residential relocation program.
- Program Manager for the presently \$70 million, 500+-home Heritage Creek residential relocation program (Louisville International Airport) under the Federal Aviation Administration's Innovative Financing Program. Mr. Deutsch is directly responsible for overseeing the creation, development, and implementation of this unique program to offer existing homeowners newly constructed comparable homes in a new city. Program involves developing comparable housing standards, design of the new city, and relocation of 500+ families.
- Program Manager for the Business Acquisition Program (LAIP) involving the relocation of 150 businesses over a five-year period with the three largest relocations costing \$30, \$20, and \$10 million, respectively.
- Program Advisor and financial oversight for \$47 million school construction and rehabilitation program (Jefferson County Public Schools).
- Program Manager for Transit 2020, visioning program and transit development program (Transit Authority of River City).

NTS Corporation, Louisville, Ky. Senior Vice President and head of the Commercial Properties Division. Responsible for the operational management, marketing and leasing, and oversight for development and construction of all NTS office space, business centers, and retail operations. This encompassed developments in Louisville, Indianapolis, Atlanta, Orlando, and Fort Lauderdale. Level of operation included 1.6 million square feet of office space under active management. Mr. Deutsch was responsible for the future development of over 500 acres of commercially zoned NTS property.

- Mr. Deutsch's primary developments in Louisville were the 75-acre Springs office, hotel, and retail center; the 400-acre Blankenbaker Crossings development; and NTS's eight office buildings in the Plainview Office Park.
- Mr. Deutsch was responsible, as owner's representative, for the development, construction, and initial lease up of seven individual office buildings in Louisville, Orlando, and Fort Lauderdale comprising 600,000 square feet of rentable space.

Jefferson County Government, Jefferson County, Ky. Deputy County Judge/Executive. The County Judge/Executive is the chief elected county executive official; the Deputy County Judge/Executive is a statutory appointive office. In this position, Mr. Deutsch participated as a senior policy advisor to the Judge/Executive with specific authority and responsibility for overseeing and coordinating government development and financing strategies in economic development and future infrastructure development.

- Responsible for the financing and development of a 500-car, nine-story public parking garage in downtown Louisville and a new 20,000 square foot headquarters for the Tourist and Convention Bureau.
- Principal county official responsible for the planning and financing of the extension of Hurstbourne Parkway from a 2-1/2 mile major suburban commercial center to an eleven-mile suburban economic development cross arterial and for the approval of the Fourth Avenue Trolley and Transitway in downtown Louisville.
- Oversaw policy for the development, financing, and marketing of over 2,600 acres of industrial land owned by Jefferson County, including Jefferson RiverPort; Jefferson RiverPark; Hurstbourne Green, a 200-acre Class A office park; the Freeway Reserve, a 600-acre land reserve for future industrial sites; and a 190-acre industrial park adjacent to the airport.
- Developed and oversaw the county's targeted economic development incentive program for primary employers producing, among others, \$500,000 for GE's Customer Answer Center location in Louisville, and \$250,000 for Prudential's 700-employee Tesseract location in Louisville.

1983 - 1985

Louisville City Government, Louisville, Ky. Deputy Mayor (formerly Secretary of the Cabinet). As Chief administrative officer for all city government line and staff departments and agencies, Mr. Deutsch reported directly to the Mayor and presided over the Mayor's Cabinet of ten line and staff managers.

- Principal city policy director for Phase I of the Broadway Project (a mixed-used hotel, office, retail, parking garage, and public square downtown development); Phase II of the Broadway Project (a 300-unit residential and retail development); and a 500-car, nine-story award-winning downtown parking garage.
- Oversaw the financing by the City of Louisville of Chestnut Manor Apartments, Station House Square Apartments, Phoenix Place II Apartments, and Brook and Oak Apartments.

Louisville City Government, Louisville, Ky. Director of Public Health and Safety Cabinet. Mr. Deutsch served as top executive manager for police, fire, EMS, Civil Preparedness, and associated public protection agencies for the City of Louisville.

1980 - 1982

Regional Office of the U.S. Merit Systems Protection Board, San Francisco. Regional Administrator. As chief supervisory attorney and management head of the Region IX Office (for California, Arizona, Nevada, Hawaii, and the Far East), Mr. Deutsch supervised and managed the adjudication of appeals from federal employee personnel actions.

1978 - 1980

U.S. Department of Housing and Urban Development. Assistant General Counsel. As Chief Supervisory Attorney for FHA multi-family mortgage insurance programs nationally, Mr. Deutsch supervised an office of 19 attorneys; responsible for the preparation of all legal opinions for those programs; reviewed, for legal sufficiency, all regulations, issuances, deeds, notes, forms, documents, and related material for use through throughout the country; supervised all legal processing of MMI claims and payments for FHA; supervised foreclosures of all such defaulted mortgages; supervised litigation and advised the Assistant Secretary for Housing.

1977 - 1978

Private law practice, Louisville, Ky., including advising the Louisville Board of Aldermen, the legislative body for the City of Louisville.

1974 - 1977

Louisville City Government. Director of Law. Chief legal officer for the largest municipal government in Kentucky. Coordinated legal advice by more than 20 attorneys to all departments and agencies of city government. Was a member of the city's seven-member Executive Management and Policy Committee.

1974

Louisville City Government. Special Assistant to the Mayor. Served as the mayor's direct personal assistant, overseeing and evaluating the performance and programs of various city departments, including the Department of Works, Department of Sanitation, Department of Building and Housing Inspection, and the Department of Law.

1973 - 1974

Louisville City Government. Director of the Department of Building and Housing Inspection. As director of the code enforcement department of city government, enforced building, plumbing, electrical, heating, zoning, and housing codes throughout the city.

Louisville City Government. Assistant Director of Law. Served as legal advisor to city's legislative body, prepared all ordinances and legislation for the city. Advised other departments, handled litigation, and assisted the Director of Law in the administration of the Department.

Frederick C. P'Pool Chief Operating Officer

Education

University of Kentucky, Lexington, Ky., B.S. (Agricultural Economics) (1978)

Experience

1994-Present

The Corradino Group: Responsible for oversight of Corradino's overall operations as well as leadership/involvement in projects dealing with economic development, infrastructure development/financing, and transportation planning. Also, leads marketing strategy of Corradino.

1992-1994

Indiana Department of Transportation, Indianapolis: Commissioner. Responsible for day-to-day operations of a 5,000+ employee, \$950 million-budget state agency with 154 field locations. Included policy, budget, personnel and legislative responsibilities. Reduced operating costs by \$63 million in Fiscal Years 1993 and 1994. Savings were reinvested in highway construction contracts. Operating costs declined from 28 percent of total highway spending in Fiscal Year 1988 to 24 percent in Fiscal Year 1993. Full-time and seasonal-authorized positions cut by 3.2 percent since 1989 with current employment at 5,300 down from a high in 1991 of 6,065. Implemented new procurement/distribution system resulting in savings of more than \$6 million.

1/89-12/92

Office of Indiana Governor Evan Bayh, Indianapolis: Executive Assistant for Commerce, Agriculture and Trade. Primarily responsible for economic development and job creation. This required one-on-one negotiations with executives from large and small companies desiring to locate and/or expand in Indiana. Personally involved in the projects listed below as well as numerous others.

United Airlines Maintenance Operations Center, Indianapolis International Airport. At the time, this was a \$1.0 billion project to create 6,300 jobs. It was also the largest economic development project in the United States in 1991 and one of the ten largest in the world. The state agreement included provisions that required United Airlines to guarantee the dollar investment and jobs to be created.

Cummins Engine Company, Walesboro, Ind., a \$230 million project creating 600 jobs.

Dow-Elanco, Indianapolis, a \$200 million project creating 750+ jobs.

International Experience

1/89-1992

Office of Governor Evan Bayh, Indianapolis: Executive Assistant for International Trade. Authored and negotiated the first-ever State/Japan trade agreement with Japan's Ministry of International Trade and Industry and the Japan External Trade Organization. Authored and negotiated the first-ever State/Russia trade agreement with the Moscow Oblast, Moscow, Russia in 1991. Personally worked on a variety of projects with both private and public sector representatives from the international community.

1/89-12/92

Office of Governor Evan Bayh, Indianapolis: Executive Assistant. The Governor's liaison with the following agencies: INDOT, Bureau of Motor Vehicles, Department of Commerce, Alcoholic Beverage Commission, Department of Revenue, and the Indiana State Fair Commission. Responsible for implementing the 1989 pari-mutuel wagering law which has resulted in the issuance of two pari-mutuel permits. Testified before legislative and congressional committees and lobbied on behalf of the state of Indiana. Personally dealt with numerous state, federal and international agencies on a number of diverse issues.

1980-1989

Farmers Feed and Fertilizer Inc., Princeton, Ind.: Owner/manager of small wholesale/retail agribusiness company.

Civic Activities

Princeton Area Chamber of Commerce, President, 1986-89
Salvation Army, Advisory Board, 1985-89
Gibson County Area Rehabilitation Council, Board of Directors, 1987-89
Indiana Grain and Feed Association, Board of Directors, 1984-86
Numerous other organization's Boards while in Princeton

EDUCATION

Doctor of Philosophy, Geography, State University of New York at Buffalo, 2005

Master of Business Administration, Management, State University of New York at Buffalo, 1983

Bachelor of Science, Civil Engineering, State University of New York at Buffalo, 1980

Bachelor of Science, Forestry, Syracuse University, 1974

Bachelor of Science, Photogrammetric Engineering, SUNY College of E.S. & Forestry, 1974

REGISTRATIONS

Professional Engineer, 60383, NY Professional Engineer, 15267, MD Professional Engineer, 18492, VA

PROFESSIONAL AFFILIATIONS

International Bridge, Tunnel & Tumpike Association (IBTTA) Board Member, 1995-2000; 2002 President, 2005

Association of International Border Agencies (AIBA) President, 1997-1999 Board Member, 1994-2002

Bridge and Tunnel Operators Association (BTOA) Board Member, 1993-2003; President, 2002-2003

Continental One Board Member and Secretary, 1999-2003 Retained Consultant/Advisor, 2004-2006

Town of Aurora, NY Board Member, Planning and Conservation Board, 2002-Present

American Society of Civil Engineers Member; Co-Chair, Transportation & Development Institute, Subcommittee on Homeland Security-Professional Discourse, 2004-Present

EXPERIENCE PROFILE

Dr. Mayer is an innovative and results-oriented leader possessing a strong business acumen and exceptional communication, negotiation, decision-making, and applied problem solving skills. He is an accomplished Professional Engineer with expertise in technical project management, operational oversight, regulatory compliance, change facilitation, organizational leadership, profit and loss management, quality control, strategic planning, and marketing.

PARSONS

Washington, DC 2005-date

Market Development Manager-Public Private Programs

Dr. Mayer is responsible for leading Parsons initiatives in Public Private Partnerships (P3s) related to toll financed transportation infrastructure. Consults with a wide array of public and private organizations to utilize P3s to solve funding shortfalls and address urban transportation congestion and traffic management issues.

Works with strategic partners to arrange funding, provide technological, design/build and organizational solutions for both new transportation infrastructure and upgrades of existing transportation facilities.

Possesses 30 years of experience in a wide array of infrastructure projects. Includes 13 years of experience in funding, designing, constructing, and operating toll financed transportation infrastructure. This includes the installation and operation of ITS technologies.

NIAGARA UNIVERSITY

Niagara, New York 2005-date Assistant Professor/Adjunct Professor

Dr. Mayer teaches capstone strategic management courses to seniors and graduate students in the College of Business Administration.

MAYER CONSULTING

Buffalo, New York 2003-2005 Executive Consultant-Owner

Dr. Mayer consulted with business and transportation organizations on a wide array of strategic and operational issues. Adjunct instructor at the SUNY at Buffalo, teaching international business.

BUFFALO AND PORT ERIE PUBLIC BRIDGE AUTHORITY

Buffalo, New York 1993-2003

Co-Chief Executive Officer-General Manager/Operations

Project: Peace Bridge

Role: Co-Chief Executive Officer-General Manager/Operations

Start Date, End Date: 1993-2003

Served as General Manager and American Officer in a co-CEO model. Led an organization of 110 U.S. and Canadian (union and non-union) employees

Market Development Manager-Public Private Programs

with \$33 million in revenues and a \$24 million operating budget in a politically complex, environmentally sensitive, and technologically challenging environment. Consulted with business, community, and special interest groups. Oversaw capital programming, bridge/facilities maintenance, and general operations. Completed a \$53 million public bond offering. Prepared and tracked annual operating and capital improvement budgets. Recruited, trained, mentored, and developed staff. Negotiated agreements with labor and government shareholders.

Prepared a threat assessment and vulnerability review for the bridge, plazas, access roads, and related facilities. Developed plans and specifications for security upgrades and emergency response programs and implemented improvements at the Peace Bridge.

Testified before Congressional Field Hearings on security, immigration reform, and trade corridor issues. Also testified before a New York State Senate Committee on infrastructure security and emergency response.

Working with the Bridge and Tunnel Operators Association through an effort funded by Transport Canada, developed "Best Management Practices for Infrastructure Security at Border Crossings."

- Developed and advanced a \$300 million capital expansion program, including the planning and environmental assessments for a new bridge span.
- Developed effective partnering strategies with regulatory agencies and private businesses to implement a wide array of projects and initiatives.
- Implemented qualifications-based selection procedures for contractors and consultants.
- Represented the Authority at scores of media events including documentary and promotional films, magazine and newspaper interviews, television programs and interviews, and radio talk shows.
- Implemented new border crossing, toll, and traffic management procedure as part of ITS strategies.
- Managed complex engineering and construction contracts

KREHBIEL ASSOCIATES, INC. / INTELIGIS CORPORATION Tonawanda. New York

1990-1993

Project Role: President

Start Date, End Date: 1992-1993

Managed 60-person engineering and surveying firm. Performed staffing functions including hiring, training, resource allocation, and performance evaluation. Translated corporate goals into tangible departmental objectives. Oversaw strategic business planning and day-to-day operations. Created and monitored budgets, defined pricing, developed new clients, and maintained excellent customer relations.

- Directed the ownership transition and succession of firm.
- Managed the firm's largest project, a \$21 million sewer expansion project in Niagara County.

Project Role: Director of Operations & Engineering

Start Date, End Date: 1990-1992

Managed all daily operations of the firm. Provided technical leadership and

Market Development Manager-Public Private Programs

comprehensive project/program management. Ensured that critical milestones were met, managed dynamic schedule, and ensured service quality.

- Instituted Total Quality Management (TQM) process; totally revamped engineering standards, specifications and design processes; created new disciplines in land planning and environmental services; re-directed investments and greatly expanded recruiting and training.
- Implemented a major restructuring and refocusing of the firm.

Project Role: Town Engineer - Towns of Alden & Eden

Start Date, End Date: 1992-1993

BENGSTON, DEBELL, ELKIN & TITUS, LTD.

Centreville, Virginia

1986-1990

Project Role: Vice President, Operations/Board Member

Start Date, End Date: 1988-1990

Officer-in-Charge of corporation's second largest office. Oversaw human resources, operations, marketing, and technical and financial management of 60-person, \$3.8 million office. Provided services to a diversified client base in the areas of planning, surveying, land development, and public words engineering.

 Developed a Management Team and instituted effective TQM and Productivity Improvement processes.

Project Role: Corporate Director of Marketing

Start Date, End Date: 1986-1988

Directed marketing and business development. Prepared yearly marketing plan and budget. Developed yearly sales forecasts, evaluated market segment potential, selected/implemented strategic marketing mix.

 Led the firm in entering two new market areas; transportation and waterfront development.

WENDEL ENGINEERS, PC/UPSTATE BUILDING CORPORATION

Buffalo, New York 1980-1986

Project Role: Principal/Director of Marketing

Start Date, End Date: 1985-1986

Managed marketing and business development for municipal/industrial clients and design/build services for conventional and pre-engineered buildings. Member of Executive Committee and Board of Directors.

Project Role: Project Manager Start Date, End Date: 1980-1984

Served as Project Manager for civil and environmental engineering projects. Performed site analysis, planning, and design. Completed wastewater facilities planning, collection system designs, and system rehabilitation programs.

Project Role: Village Engineer, Lewiston Start Date, End Date: 1982-1986

PUBLICATIONS

STEPHEN F. MAYER, Ph.D., P.E.

Market Development Manager-Public Private Programs

"Sources of Competitive Advantage in U.S. Engineering Firms" (Ph.D. Dissertation-2005)

Written testimony before Congressional Field Hearing, May, 1993 on Border and Infrastructure Security.

AWARDS

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New York State Society of Professional Engineers, Statewide Award – P.E. Manager of the Year, 1999

New York State Society of Professional Engineers, Erie-Niagara Chapter - Engineer Manager of the Year, 1999

U.S. Customs - Service Award of Appreciation for Technological Leadership

EDUCATION

Bachelor of Arts, History, St. Anselm's College, 1971

Master of Arts, Urban/Regional Planning, Mankato State University, 1973

Master of Arts, Urban and Regional Studies, Minnesota State University, 1975

ADDITIONAL COURSEWORK/TRAINING

Leadership/Management Program, Parsons, 2005

Transportation Management, University of Virginia, 1991

Environmental Law, Vermont Law School, 1992

PROFESSIONAL AFFILIATIONS

Center for Research on Vermont, University of Vermont

American Planning Association

Transportation Research Board

EXPERIENCE PROFILE

Mr. Squires has over 30 years experience in finance, public policy, planning, development and management. Prior to joining Parsons, he was Deputy Staff Director for the United States Senate Committee on Environment and Public Works. Mr. Squires led staff efforts in the 107th and 108th Congress to reauthorize the nation's surface transportation program, TEA 21.

Mr. Squires was Program Manager for the General Management, Architecture and Engineering Consortium on Tren Urbano, a heavy rail transit project, providing design and construction management services to the Puerto Rico Highway and Transportation Authority.

Mr. Squires was Vermont's Deputy Transportation Secretary. He also served as the state's first Transportation Planning Director.

Mr. Squires was a Founding Partner in Humstone Squires Associates, an award-winning consulting practice. He has taught, lectured and written widely on matters of finance, public policy and project development.

PROJECT EXPERIENCE

PARSONS

Washington, DC 2005-date

Vice President, Transportation Program Development

As part of the company's senior management team, Mr. Squires works with all of Parsons' modal divisions, advising on matters of finance, partnering and policy application. His recent experience on Capitol Hill affords Mr. Squires a unique perspective. With the federal role in transportation evolving, Mr. Squires helps clients achieve results in program financing and delivery.

UNITED STATES SENATE, COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

Washington, DC 2001-2005

Deputy Staff Director/Senior Policy Advisor

Mr. Squires assisted the Committee in all matters related to transportation. Focused primarily on reauthorization of TEA 21, the nation's surface transportation program, Mr. Squires organized Committee hearings, developed legislative drafts and negotiated funding authorizations and new program financing. He participated in the Committee's markup of S 1072, the Safe, Accountable, Flexible and Efficient Transportation Equity Act of 2004 (SAFE TEA) and staffed the bill managers on the Senate floor, where SAFE TEA passed with seventy six votes. Mr. Squires negotiated on behalf of the Senate minority in the House/Senate conference. Throughout the process, Mr. Squires worked closely with the administration, state and local organizations, trade groups and other interested parties.

DMJM+HARRIS, INC.

San Juan, Puerto Rico 1998-2001 Vice President

As Program Manager and Director of Planning for Tren Urbano, the elevenmile, sixteen station, heavy rail transit system in metropolitan San Juan, Puerto Rico, Mr. Squires managed all contractual issues for the General Management, Architecture and Engineering Consultant consortium that oversees the project. He supervised staff and sub-consultants in the areas of project finance, environmental compliance, urban planning, design and intermodal connectivity. He coordinated federal relations and technology transfer. He assisted the client, the Puerto Rico Highway and Transportation Authority, in its successful \$560 M revenue bond offering and helped secure \$300 M in credit assistance through the US Department of Transportation's TIFIA Program.

VERMONT AGENCY OF TRANSPORTATION

Montpelier, Vermont 1991-1998 Deputy Secretary/Director of Planning

Appointed by then Governor Howard Dean, Mr. Squires advised the Governor on transportation matters and participated in all aspects of Agency management. His responsibilities included policy development, legislative liaison, contract negotiations, interagency and interstate coordination and Federal relations. As the Agency's first Planning Director, Mr. Squires organized and managed a 50-person staff focused on resource allocation, policy formulation, systems planning, data collection, and concept-level project design. Mr. Squires chaired numerous consultant selection committees. The Planning Division produced the State's first longrange transportation plan, reformatted its capital program and established a network of regional transportation advisory committees.

HUMSTONE SQUIRES ASSOCIATES

Burlington, Vermont 1986-1991 Founding Partner

Mr. Squires formed this planning practice in Burlington, Vermon,t with partner Elizabeth Humstone. The firm offered a wide range of services to public and private sector clients. Projects included capital programming, impact assessment, town plan and bylaw preparation, transportation solutions, open space plans, and preparation of training materials for state and local officials.

UNIVERSITY OF VERMONT SCHOOL OF NATURAL RESOURCES

Burlington, Vermont 1992-1998 Adjunct Faculty

VERMONT LAW SCHOOL

South Royalton, Vermont 1992-1998 Visiting Lecturer

LINCOLN INSTITUTE FOR LAND POLICY

Cambridge, Massachusetts 1995-1998 Adjunct Faculty, Transportation Issues

PUBLICATIONS/PRESENTATIONS

Vermont State Government and Administration: 1965-1995 – (Contributed), Center for Research on Vermont, University of Vermont, 1996

"Vermont Sets Examples," Surface Transportation Policy Project – Progress, Vol. 1, No. 8, 1995

State and Regional Initiatives for Managing Growth (Contributed) – The Urban Land Institute, 1991

"Shaping Vermont's Future: A Citizen's Guide to Open State Agency Planning," Governor's Office of Policy Research, 1991

"Participation in the Local Planning Process," Vermont Property Owner's Report, Vol.5, No. 4

"Act 200: Opportunities and Expectations," Central Vermont Magazine. 1988

Attachment D

Derivation of Cost Proposal

Exhibit A - Amend 2 Summary **Derivation of Cost Proposal**

Cont	Tol Section			escription		
1	82900	IN 000000	-	•	eotechnical Analysis Advisory	Group Public
				ement, Add. Coor.	Group, Fublic	
					VV/Our Carraction Feath	
Name of Prime Const	ultant:		The Co	rradino Group	······································	
DIRECT LABOR	\					
Name	Classification	Hours	X	Rate	=	Labor Costs
Corradino, JC	Proj. Manager	1046	X	\$91.74		\$95,960
Corradino, G	Planner	316	×	\$33.65		\$10,633
Anderson	Graphic	184	X	\$22.13		\$4,072
Bocks	Planner	596	x	\$20.76		\$12,373
Butler	Planner	120	x	\$30.87		\$3,704
Deutsch	Counsel	320	X	\$70.80		\$22,656
Hartman	Engineer	276	X	\$53.29		\$14,708
P'Pool	Economic Planner	190	X	\$78.46		\$14,907 \$17,050
Santana	Planner	698	X	\$25.29		\$17,652
Stone	Env. Planner	470	X	\$52.85		\$24,840
Townsend Tucker	Planner	120	X	\$31.72		\$3,806 \$7,064
Velicevic	Planner	414	X	\$19.23		\$7,961 \$9,771
Wolf	Engineer Production	276	X	\$31.78		\$8,771 \$5,084
AAOH		184	X	\$27.63	Total Labor	
	Total Hours	5210				\$247,129
OVERHEAD		\$247,129	×	168.65%	Total Overhead	\$416,783
FACILITIES CO	ST OF CAPITAL	\$247,129	,	0.4566%	Total F.C.C.	\$1,128
DIRECT EXPEN	ISES	Unit Cost		Units		
Environmental Li	invironmental Liability Insurance		x	1 lum	p sum	\$5,250
Wyle Lab Noise	Demo	\$11,612.40	x			\$11,612
Overnight Del		\$18.00	x	14 ove	rnights	\$252
Lodging		\$65.00	x	50 days	=	\$3,250
Meals (per diem))	\$38.50	x	52 day		\$2,002
Airline travel	,	\$500.00	x	11 trips		\$5,500
Airline travel		\$800.00	x	10 trips		\$8,000
Rental car		\$80.00	x	53 day		\$4,240
Hall rental		\$500.00	x	-	kshops	\$8,500
Equipment renta	1	\$2,500.00	X		kshops	\$42,500
RV rental	•	\$3,200.00	x	8 mor	-	\$25,600
	act (see next sheet)	\$1,169.60	x	10	1413	\$11,696
	dino Direct Costs	ψ1,105.00	^	10		\$128,402
						\$120,402
Subconsultant	•					6040 770
Parsons Transp	onation Group					\$342,773
Rick Miller Richard Woods						\$26,518
						\$30,518
	nick Gray Cary US LLP					\$143,228
Alfred Benesch	& Company					\$0 \$4.569
CCRG	201110					\$4,568 \$142.045
Fletcher & Stipp	son Associates					\$142,945 \$0
						\$0 \$0
Northwest Cons	suitants, inc.					\$349,892
	oring Inc					\$34,478
SOMAT Engine	-					\$04,476
TBE Group, Inc						\$0 \$0
Westland & Coas						φυ \$0
Woolpert Desig	n, LLP onsultant Total Costs					پەر \$1,074,918
Judicial 3000		adino Diroc	+ C~	ete Plue Suba	consultant Total Costs	\$1,203,321
	COII			•		
FIXED FEE		\$663,912	X	11.00%	Corradino Fixed Fee	\$73,030
				TOTA	0.000 Personal 0	64 044 204

TOTAL Amend 2 COSTS \$1,941,391 1:\projects\3600\contracts\Amend2\Cost Amend 2 - Aug 29 06.xls 8/30/2006 Page \$70

Exhibit A - Geotechnical Analysis **Derivation of Cost Proposal**

	rol Section		•	escription		
CS	82900	JN 802330			ght-of-Entry and Consent Form	ns for Boring +
			Geote	chnical Analysis Adv	visory Group	
Name of Prime Const	ultant:		The Co	orradino Group		
DIRECT LABOR	₹					
Name	Classification	Hours	x	Rate	=	Labor Costs
Corradino, JC	Proj. Manager	290	x	\$91.74		\$26,605
Corradino, G	Planner	40	x	\$33.65		\$1,346
Anderson	Graphic	0	x	\$22.13		\$0
Bocks	Planner	320	x	\$20.76		\$6,643
Butler	Planner	0	x	\$30.87		\$0
Deutsch	Counsel	0	x	\$70.80		\$0
Hartman	Engineer	0	x	\$53.29		\$0
P'Pool	Economic Planner	_0	x	\$78.46		\$0
Santana	Planner	100	x	\$25.29		\$2,529
Stone	Env. Planner	240	x	\$52.85		\$12,684
Townsend	Planner	0	x	\$31.72		\$0
Tucker	Planner	0	x	\$19.23		\$0
Velicevic	Engineer	0	x	\$31.78		\$0
Wolf	Production	0	x	\$27.63		\$0
	Total Hours	990			Total Labor	\$49,807
OVERHEAD						
		\$49,807	X	168.65%	Total Overhead	\$83,999
FACILITIES CO	ST OF CAPITAL					
		\$49,807		0.4566%	Total F.C.C.	\$227
DIRECT EXPEN	ISES	Unit Cost	:	Units		
	iability Insurance	\$5,250.00	x	1 lump		\$5,250
Overnight Del		\$18.00	X	2 oven	nights	\$36
Lodging		\$65.00	x	0 days		\$0
Meals (per diem)	\$38.50	x	2 days		\$77
Airline travel		\$500.00	x	0 trips		\$0
Airline travel		\$800.00	x	0 trips		\$0
Rental car		\$80.00	X	0 days	;	\$0
				Corradino Dir	ect Costs - Geotech	\$5,363
FIXED FEE		\$133,806	×	11.00%	Total Fixed Fee	\$14,71 9
		ψ100,000				
			S	Subtotal Geot	echnical Analysis	\$154,115

Exhibit A - Public Involvement **Derivation of Cost Proposal**

1	rol Section	1	Project D	escription	· · · · · · · · · · · · · · · · · · ·	
CS	82900	JN 802330				
			DRIC -	- Amendment 2 - Pu	blic Involvement	
Name of Prime Consu	ıltant:		The Co	orradino Group		
DIRECT LABOR	ł.					
Name	Classification	Hours	X	Rate	=	Labor Costs
Corradino, JC	Proj. Manager	506	X	91.74		\$46,420
Corradino, G	Planner	276	X	33.65		\$9,287
Anderson	Graphic	184	X	22.13		\$4,072
Bocks	Planner	276	X	20.76		\$5,730
Butler	Planner	0	X	30.87		\$0
Deutsch	Counsel	0	X	70.8		\$0
Hartman	Engineer	276	X	53.29		\$14,708
P'Pool	Economic Planner	0	X	78.46		\$0
Santana	Planner	598	x	25.29		\$15,123
Stone	Env. Planner	230	x	52.85		\$12,156
Townsend	Planner	0	x	31.72		\$0
Tucker	Planner	414	x	19.23		\$7,961
Velicevic	Engineer	276	x	31.78		\$8,771
Wolf	Production	184	x	27.63		\$5,084
	Total Hours	3220			Total Labor	\$129,313
OVERHEAD						
		\$129,313	x	168.65%	Total Overhead	\$218,086
FACILITIES CO	ST OF CAPITAL					
		\$129,313		0.4566%	Total F.C.C.	\$590
DIRECT EXPEN		Unit Cost		Units Type		
Wyle Lab Noise	Demo	\$11,612	Χ.	1 lump		\$11,612
Overnight Del		\$18.00	X	7 over	~	\$126
Lodging		\$65.00	X	22 days		\$1,430
Meals (per diem	1)	\$38.50	x	22 days	i	\$847
Airline travel		\$500.00	X	3 trips		\$1,500
Airline travel		\$800.00	X	0 trips		\$0
Rental car		\$80.00	X	33 days		\$2,640
Hall rental		\$500.00	x	17 work		\$8,500
Equipment renta	al	\$2,500.00	X	17 work	•	\$42,500
RV rental		\$3,200.00	X	8 mon		\$25,600
Display (see att	ached sheet)	\$1,169.60	x	10 units		\$11,696
			i	Corradino Dire	ct Costs - Public Inv.	\$106,451
FIXED FEE		\$347,399	x	11.00%	Total Fixed Fee	\$38,214
				Subtotal P	ublic Involvement	\$492,655
				Juniotail		+ .024,000

Exhibit A - Add. Coor. with our Canadian Team **Derivation of Cost Proposal**

1	rol Section 82900	MDOT Job # I	Project Description			
	102300		ORIC -	Amendment 2 - A	dd.Coor. Wlour Canadian Tea	m
Name of Prime Const	ultant:		The Co	rradino Group		
DIRECT LABOR	t					
Name	Classification	Hours	x	Rate	. =	Labor Costs
Corradino, JC	Proj. Manager	250	x	\$91.74		\$22,935
Corradino, G	Planner	0	x	\$33.65		\$0
Bocks	Planner	0	x	\$20.76		\$0
Butler	Planner	120	x	\$30.87		\$3,704
Deutsch	Counsel	320	x	\$70.80		\$22,656
Hartman	Engineer	0	x	\$53.29		\$0
P'Poot	Economic Planner	190	x	\$78.46		\$14,907
Santana	Planner	0	x	\$25.29		\$0
Stone	Env. Planner	0	x	\$52.85		\$0
Townsend	Planner	120	x	\$31.72		\$3,806
	Total Hours	1000			Total Labor	\$68,009
OVERHEAD						
		\$68,009	x	168.65%	Total Overhead	\$114,698
FACILITIES CO	ST OF CAPITAL					
		\$68,009		0.4566%	Total F.C.C.	\$311
DIRECT EXPEN	ISES	Unit Cost		Units		
Overnight Del		\$18.00	X	5 over	nights	\$90
Lodging		\$65.00	x	28 days	3	\$1,820
Meals (per diem)	\$38.50	x	28 days	6	\$1,078
Airline travel		\$500.00	x	8 trips		\$4,000
Airline travel		\$800.00	x	10 trips		\$8,000
Rental car		\$80.00	x	20 days	6	\$1,600
	Corradino	Direct Costs	- As	sistance in Pro	oject Implementation	\$16,588
FIXED FEE						<u>.</u>
		\$182,707	x	11.00%	Total Fixed Fee	\$20,098
		Subtota	ıl As:	sistance in Pro	oject Implementation	\$219,703

Derivation of Cost Proposal for Bridge and US Customs Plaza Noise Project Detroit Michigan

2005 T&M Hourly Labor Rate

Wyle Labs Q/N 580.05.332

21-Dec-2005

225	165	126	06	75	50
223	100	123	90	70	ວບ

TASK	DESCRIPTION	9	8	7	6	5	4	HRS	LABOR COST	TRIPS	TRAVEL	MATLS	ī	OTAL
	Prepare equipment, travel to the site, perform													
1	audio recordings and noise measurements			16		4		20	\$ 2,300	1	445	176	\$	2,920
2	Prepare audio demonstration			16				16	\$ 2,000				\$	2,000
	Prepare equipment, travel to Detroit for one public													
3	meeting			12		4		16	\$ 1,800	1	445	176	\$	2,421
	Alternative: Prepare equipment, travel to Detroit for													
4	four public meetings			40		4		44	\$ 5,300	1	1217	176	\$	6,692
WYLE	Total for Tasks 1-3	0	0	44	0	8	(52	\$ 6,100	2	\$ 889	351	\$	7,340
WYLE	Total for Tasks 1, 2, and 4	0	0	72	0	8	0	08 (\$ 9,600	2	\$ 1,661	351	\$	11,612
Travel	Expenses:													
	Airfare	250						PRO.	ECT TO	AL	•	Tasks 1-3	\$	7,340
	Per Diem	30							Alte	rnative	ly Tasks 1	, 2, and 4	\$	11,612
	Car Rental	60												
	Hotel	100												
	Subtotal for 1-eay visit - 1.5 day trip (no car rental	380	(plus 1	17% G	&A)	445								
	Subtotal for 4-day visit - 5 day trip	1040	 (plus 1	17% G	(A&	1217								

Material Expenses:

Shipping

Unit Qty Total 75 2 150 (plus 17% G&A) 176

Cost Estimate

Exhibit A - Attachment - Direct Costs Detail **Derivation of Cost Proposal**

Control Section	MDOT Job #	Project Description
CS 82900	JN 802330	DRIC - EPE with EIS, Amend 2 Traveling Exhibit
Name of Vendor:	34 002330	DRIC - LEE WIII Els, Anielid 2 Haveing Extilor

Competing Vendors	ltem	Unit Price	Number	Total
Nomadic	10' Traveler Economy Pop Up Exhibit	\$1,599.00	10	\$15,990.00
A Smash Hit	Benchmard 10'	\$984.95	10	\$9,849.50
Displays2go	10' Pop Up Tradeshow	\$1,169.60	10	\$11,696.00
Impact Displays	10' Super Econo II-Option 1	\$975.00	10	\$9,750.00
Displayit.net	10' Standard Curved Pop-Up	\$1,495.00	10	\$14,950.00
			50	\$62,235.50
	Average for 10 units	•		\$12,447.10

Selected Company/Item in bold above is lower than the average price and meets need.

Displays2go is selected Vendor

Exhibit B - Summary

Derivation of Cost Proposal

	rol Section		Project	Description		
CS	82900	JN 802330	DRIC	- Amendment 2 - Ge	otechnical Analysis, Put	olic Inv., Add.
					am, Canadian CSS Meel	
Name of Consultant:			Parso	ns Transportation Gr	oup	
DIRECT LABOR						
Classification	Classification	Person Hrs	x	Hourly Rate	=	Labor Costs
Regine Beauboeuf	Deputy Proj. Man.	324	x	\$66.05		\$21,400
Mike Ashmore	Rdway/Bridge Design	0	X	\$48.08		\$0
Gerald Bonner	Tunnel/Geotechnical	40	X	\$89.42		\$3,577
Bruce L. Campbell	Lead Bridge	236	x	\$53.50		\$12,626
Patrick Cassity	Bridge Design	40	X	\$68.75		\$2,750
Alex Gilman	Graphics	40	X	\$35.73		\$1,429
Robert Hosler	Landscape Architect	243	х	\$48.31		\$11,739
Joseph Marson	Lead Traffic	76	x	\$50.18		\$3,814
Stephen Mayer	Policy	60	х	\$79.33		\$4,760
Craig Richardson	Landscape Architect	374		\$31.00		\$11,594
Richard Saporsky	Lead Roadway	164	x	\$45.67		\$7,490
Ken Serzan	Bridge Design	40	x	\$89.42		\$3,577
Jeffrey Squires	Policy	60		\$86.54	*	\$5,192
Jr. Engineer	Rd/Plaza/Bridge	190		\$24.89		\$4,729
Sr. Engineer	Bridge Design	20		\$47.87		\$957
Engineer/Artist	Rd/Plaza/Bridge	375	_	\$37.77		\$14,164
IT Specialists	Meeting Assistance	24		\$37.77		\$906
Administrative	mooning / tobletance	126		\$25.48		\$3,210
	Total Hours	2432	-		Total Labor	\$113,915
OVERHEAD						
		\$113,915	x	137.00%	Total Overhead	\$156,064
FACILITIES COST	OF CAPITAL					-
		\$113,915	x	0.2655%	Total F.C.C.	\$302
DIRECT EXPENSES	5	Unit Cost	į	Units		
Airline Travel		\$500.00	x	44		\$22,000
Mileage		\$0.445	x	3650		\$1,624
Lodging		\$80.00		52		\$4,160
Meals (per diem)		\$38.50		74		\$2,849
Equipment Rental		\$10,000.00		1		\$10,000
Bradley Touchstone	:	\$135.00		16		\$2,160
Bradiey redeficient		\$100.0 0			otal Direct Costs	\$42,793
FIXED FEE						
		\$269,979	x	11.00%	Total Fixed Fee	\$29,698
				TOTAL PAI	RSONS COSTS	\$342,773

Exhibit B Geotech Advisory Group Review Derivation of Cost Proposal

Control Section	MDOT Job #	Project Description
CS 82900	JN 802330	
		DRIC - Amendment 2 - Geotechnical Analysis Advisory Group
Name of Consultant:		Parsons Transportation Group

DIRECT LABOR						
Classification	Classification	Person Hrs	x	Hourly Rate	=	Labor Costs
Regine Beauboeuf	Deputy Proj. Man.	40	x	\$66.05		\$2,642
Mike Ashmore	Rdway/Bridge Design	0	x	\$48.08		\$0
Gerald Bonner	Tunnel/Geotechnical	40	x	\$89.42		\$3,577
Bruce L. Campbell	Lead Bridge	40	X	\$53.50		\$2,140
Patrick Cassity	Bridge Design	40	x	\$68.75		\$2,750
Alex Gilman	Graphics	0	X	\$35.73		\$0
Robert Hosler	Landscape Architect	0	X	\$48.31		\$0
Joseph Marson	Lead Traffic	0	X	\$50.18		\$0
Stephen Mayer	Policy	0	X	\$79.33		\$0
Craig Richardson	Landscape Architect	0	x	\$31.00		\$0
Richard Saporsky	Lead Roadway	0	X	\$45.67		\$0
Ken Serzan	Bridge Design	40	X	\$89.42		\$3,577
Jeffrey Squires	Policy	0	x	\$86.54		\$0
Jr. Engineer	Rd/Plaza/Bridge	0	x	\$24.89		\$0
Sr. Engineer	Bridge Design	20	x	\$47.87		\$957
Engineer/Artist	Rd/Plaza/Bridge	20	X	\$37.77		\$755
IT Specialists	Meeting Assistance	0		\$37.77		\$0
Administrative	0	16	x	\$25.48		\$408
	Total Hours	256			Total Labor	\$16,806
OVERHEAD						
		\$16,806	x	137.00%	Total Overhead	\$23,024
FACILITIES COST	OF CAPITAL					
		\$16,806	x	0.2655%	Total F.C.C.	\$45
DIRECT EXPENSES	S	Unit Cost		Units		No.
Airline Travel		\$500.00	X	9		\$4,500
Mileage		\$0.45	X	450		\$200
Lodging		\$80.00	х	12		\$960
Meals (per diem)		\$38.50	X	12		\$462
Equipment Rental		\$10,000.00	X	0		\$0
Bradley Touchstone	•	\$135.00	X	0	_	\$0
EIVED EEE				Т	otal Direct Costs	\$6,122
FIXED FEE		\$39,830	x	11.00%	Total Fixed Fee	\$4,381

Parsons Advisory Group COSTS \$50,379

Exhibit B - Workshops

Derivation of Cost Proposal

Control Section	# dol TODM	Project Description
CS 82900	JN 802330	DRIC - Amendment 2 - Public Involvement, Community Planning
		Workshops
Name of Consultant:		Parsons Transportation Group

DIRECT LABOR Classification	Classification	Dogg	on Hea	¥	Hourly Data	=	Labor Conto
Ciassification	Classification	Pers	on Hrs	X	Hourly Rate	-	Labor Costs
Regine Beauboeuf	Deputy Proj. Man.		160	x	\$66.05		\$10,568
Mike Ashmore	Rdway/Bridge Design		0	x	\$48.08		\$0
Gerald Bonner	Tunnel/Geotechnical		0	x	\$89.42		\$0
Bruce L. Campbell	Lead Bridge		124	x	\$53.50		\$6,634
Patrick Cassity	Bridge Design		0	x	\$68.75		\$0
Alex Gilman	Graphics		0	x	\$35.73		\$0
Robert Hosler	Landscape Architect		163	x	\$48.31		\$7,875
Joseph Marson	Lead Traffic		60	x	\$50.18		\$3,011
Stephen Mayer	Policy		0	x	\$79.33		\$0
Craig Richardson	Landscape Architect		238	x	\$31.00		\$7,378
Richard Saporsky	Lead Roadway		124	x	\$45.67		\$5,663
Ken Serzan	Bridge Design		0	X	\$89.42		\$0
Jeffrey Squires	Policy		0	x	\$86.54		\$0
Jr. Engineer	Rd/Plaza/Bridge		190	x	\$24.89		\$4,729
Sr. Engineer	Bridge Design		0	x	\$47.87		\$0
Engineer/Artist	Rd/Plaza/Bridge		115	x	\$37.77		\$4,344
IT Specialists	Meeting Assistance		0	x	\$37.77		\$0
Administrative			70	x	\$25.48		\$1,784
	Total Hours	s	1244			Total Labor	\$51,985
OVERHEAD							
			\$51,985	x	137.00%	Total Overhead	\$71,219
FACILITIES COST	OF CAPITAL						
			\$51,985	X	0.2655%	Total F.C.C.	\$138
DIRECT EXPENSES	S		Unit Cost		Units		
Airline Travel		\$	500.00	X	14		\$7,000
Mileage		\$	0.445	X	1600		\$712
Lodging		\$	80.00	. X	14		\$1,120
Meals (per diem)		\$	38.50	X	28		\$1,078
Equipment Rental		\$	10,000	X	0		\$0
Bradley Touchstone)	\$	135.00	X	0	-	\$0
CIVED FFF					Т	otal Direct Costs	\$9,910
FIXED FEE			\$123,204	x	11.00%	Total Fixed Fee	\$13,552

Parsons Community Planning Workshop COSTS \$146,804

Exhibit B - CSS Workshops in US Derivation of Cost Proposal

Control Section	# dol TOOM	Project Description
CS 82900	JN 802330	DRIC - Amendment 2 - Public Involvement, Context Sensitive
		Solutions
Name of Consultant:		Parsons Transportation Group

DIRECT LABOR							
Classification	Classification	Pers	on Hrs	X	Hourly Rate	=	Labor Costs
Regine Beauboeuf	Deputy Proj. Man.		60	x	\$66.05		\$3,963
Mike Ashmore	Rdway/Bridge Design		0	x	\$48.08		\$0
Gerald Bonner	Tunnel/Geotechnical		0	x	\$89.42		\$ 0
Bruce L. Campbell	Lead Bridge		40	x	\$53.50		\$2,140
Patrick Cassity	Bridge Design		0	X	\$68.75		\$0
Alex Gilman	Graphics		0	x	\$35.73		\$0
Robert Hosler	Landscape Architect		80	X	\$48.31		\$3,865
Joseph Marson	Lead Traffic		0	x	\$50.18		\$0
Stephen Mayer	Policy		0	x	\$79.33		\$0
Craig Richardson	Landscape Architect		120	x	\$31.00		\$3,720
Richard Saporsky	Lead Roadway		40	X	\$45.67		\$1,827
Ken Serzan	Bridge Design		0	x	\$89.42		\$0
Jeffrey Squires	Policy		0	X	\$86.54		\$0
Jr. Engineer	Rd/Plaza/Bridge		0	X	\$24.89		\$0
Sr. Engineer	Bridge Design		0	X	\$47.87		\$0
Engineer/Artist	Rd/Plaza/Bridge		80	X	\$37.77		\$3,022
IT Specialists	Meeting Assistance		0	X	\$37.77		\$0
Administrative			0	x	\$25.48		\$0
	Total Hours		420			Total Labor	\$18,536
OVERHEAD							
			\$18,536	x	137.00%	Total Overhead	\$25,395
FACILITIES COST	OF CAPITAL						
			\$18,536	x	0.2655%	Total F.C.C.	\$49
DIRECT EXPENSES	S		Unit Cost		Units		
Airline Travel		\$	500.00	x	8		\$4,000
Mileage		\$	0.445	x	600		\$267
Lodging		\$	80.00	x	6		\$480
Meals (per diem)		\$	38.50	x	14		\$539
Equipment Rental		\$	10,000	X	0		\$0
Bradley Touchstone	1	\$	135.00	x	0		\$0
EIVED EEE					Т	otal Direct Costs	\$5,286
FIXED FEE			\$43,931	x	11.00%	Total Fixed Fee	\$4,832

Parsons Context Sensitive Solutions Workshop COSTS

\$54,098

Exhibit B - CSS Workshops in Canada **Derivation of Cost Proposal**

Control Section	MDOT Job #	Project Description
CS 82900	JN 802330	DRIC - Additional Public Involvement
		Context Sensitive Solutions Workshop in Canada
Name of Consultant:		Parsons Transportation Group

DIRECT LABOR								
Classification	Classification	Pers	on Hrs	x	Hourly Rate	=	Labo	Costs
Regine Beauboeuf	Deputy Proj. Man.		24	x	\$66.05			\$1,585
Mike Ashmore	Rdway/Bridge Design		0	X	\$48.08			\$0
Gerald Bonner	Tunnel/Geotechnical		0	X	\$89.42			\$0
Bruce L. Campbell	Lead Bridge		8	x	\$53.50			\$428
Patrick Cassity	Bridge Design		0	x	\$68.75			\$0
Alex Gilman	Graphics		40	x	\$35.73			\$1,429
Robert Hosler	Landscape Architect		0	x	\$48.31			\$0
Joseph Marson	Lead Traffic		0	x	\$50.18			\$0
Stephen Mayer	Policy		0	x	\$79.33			\$0
Craig Richardson	Landscape Architect		16	x	\$31.00			\$496
Richard Saporsky	Lead Roadway		0	x	\$45.67			\$0
Ken Serzan	Bridge Design		0	x	\$89.42			\$0
Jeffrey Squires	Policy		0	x	\$86.54			\$0
Jr. Engineer	Rd/Plaza/Bridge		0	x	\$24.89			\$0
Sr. Engineer	Bridge Design		0	x	\$47.87			\$0
Engineer/Artist	Rd/Plaza/Bridge		160	x	\$37.77			\$6,043
IT Specialists	Meeting Assistance		24	x	\$37.77			\$906
Administrative	Ü		40	x	\$25.48			\$1,019
	Total Hours		312			Total Labor		\$11,907
OVERHEAD	rotarrioure	,	312			Total East.		4,00.
OTERNIERD	•		\$11,907	x	137.00%	Total Overhead		\$16,313
			ψ11,001	^	107.5070	10101 0 10111000		¥ 1 5,2 1 5
FACILITIES COST	OF CAPITAL							
			\$11,907		0.2655%	Total F.C.C.	ı	\$32
DIRECT EXPENSE	S		Unit Cost		Units			
Airline Travel		\$	500.00	x	9			\$4,500
Mileage		\$	0.445	x	400			\$178
Lodging		\$	80.00	x	16			\$1,280
Meals (per diem)		\$	38.50	X	16			\$616
Equipment Rental		\$	10,000	X	1			\$10,000
Bradley Touchstone	;	\$	135.00	x	16			\$2,160
DIRECT COSTS							\$	18,734
FIXED FEE								
11/10/11/1			\$28,220	x	11.00%	Total Fixed Fee	a.	\$3,104
			ΨΔΟ,ΖΔΟ	^	11.00 /0	i Otal i Inca i o	-	ψ0,104

TOTAL PARSONS COSTS \$50,090

Exhibit B - Add. Coor. With Canadian Team **Derivation of Cost Proposal**

Control Section	MDOT Job #	Project Description
CS 82900	JN 802330	
		DRIC - Amendment 2 - Add. Coor. W/our Canadian Team
Name of Consultant:		Parsons Transportation Group

DIRECT LABOR Classification	Classification	Pers	on Hrs	x	Hourly Rate	=	Labor Costs
		. 5,5			,		
Regine Beauboeuf	Deputy Proj. Man.		40	x	\$66.05		\$2,642
Mike Ashmore	Rdway/Bridge Design		0	x	\$48.08		\$0
Gerald Bonner	Tunnel/Geotechnical		0	X	\$89.42		\$0
Bruce L. Campbell	Lead Bridge		24	x	\$53.50		\$1,284
Patrick Cassity	Bridge Design		0	X	\$68.75		\$0
Alex Gilman	Graphics		0	x	\$35.73		\$0
Robert Hosler	Landscape Architect		0	X	\$48.31		\$0
Joseph Marson	Lead Traffic		16	X	\$50.18		\$803
Stephen Mayer	Policy		60	x	\$79.33		\$4,760
Craig Richardson	Landscape Architect		0	x	\$31.00		\$0
Richard Saporsky	Lead Roadway		0	x	\$45.67		\$0
Ken Serzan	Bridge Design		0	x	\$89.42		\$0
Jeffrey Squires	Policy		60	X	\$86.54		\$5,192
Jr. Engineer	Rd/Plaza/Bridge		0	x	\$24.89		\$0
Sr. Engineer	Bridge Design		0	x	\$47.87		\$0
Engineer/Artist	Rd/Plaza/Bridge		0	X	\$37.77		\$0
IT Specialists	Meeting Assistance		0	x	\$37.77		\$0
Administrative			0	x	\$25.48		\$0
	Total Hours	6	200			Total Labor	\$14,681
OVERHEAD							
			\$14,681	x	137.00%	Total Overhead	\$20,113
FACILITIES COST	OF CAPITAL						
			\$14,681	X	0.2655%	Total F.C.C.	\$39
DIRECT EXPENSES	S		Unit Cost		Units		
Airline Travel		\$	500.00	X	4		\$2,000
Mileage		\$	0.445	X	600		\$267
Lodging		\$	80.00	x	4		\$320
Meals (per diem)		\$	38.50	x	4		\$154
Equipment Rental		\$	10,000	X	0		\$0
Bradley Touchstone	:	\$	135.00	x	0		\$0
	•				1	otal Direct Costs	\$2,741
FIXED FEE			\$34,794	x	11.00%	Total Fixed Fee	\$3,827

Parsons Assistance in Project Implementation COSTS \$41,401

Exhibit B Summary

Derivation of Cost Proposal - Geotechnical Analysis

	Control Section			Project I	•			
	CS 82900		JN 802330	4			2 - Geotechnical Ar	•
						,	deling & Advisory C	Group
Name of Sub Consultant:				NTH CO	NSUL	TANTS, LTD	<u>. </u>	····
DIRECT LABOR								
Name	Classification		Hours	X		Rate	=	Labor Costs
Fritz Klingler	Project Manager		159	x	\$	58.00		\$9,222
Joe Alberts	Task Manager		199	x	\$	46.50		\$9,254
Craig Johnson	Project Engineer		287	x	\$	25.50		\$7,319
Steve Bryan	CADD		46	x	\$	25.50		\$1,173
Natiera Farrington	Clerical		<u>68</u>	X	\$	<u> 15.00</u>		\$1,020
	Total Hours =		759					\$27,987
OVERHEAD								
\$27,987	x		188.00%	=			Total Overhead	\$52,616
FACILITIES COST								
\$27,987	,		0.04%	=			Total F.C.C.	\$11
DIRECT EXPENSES	5		Unit Cost	x		Units	i	-
Mileage			\$0.445	x		300	miles	\$13 4
Copies			\$0.25	x		4000	pages	\$1,000
FedEx			\$20	x		22	units	\$440
SRT for 3-D surface Se	eismic Method Void (Z-Se	eis)	\$2,500	x		1	lump sum	\$2,500
SRT for 3-D surface Se	eismic Method No Void (Z	'-Seis)	\$2,500	x		1	lump sum	\$2,500
SRT for VSP/RVSP M	ethod Void (Z-Seis)		\$2,500	x		1	lump sum	\$2,500
SRT for VSP/RVSP M	ethod No Void (Z-Seis)		\$2,500	x		1	lump sum	\$2,500
SRT for Crosswell Seis	smic Method Void (Z-Seis)	\$2,500	x		1	lump sum	\$2,500
SRT for Crosswell Sei	smic Method No Void (Z-S	Seis)	\$2,500	x		1	lump sum	\$2,500
Crosswell data set for velo	ocity/reflection images Void (Z	Z-Seis)	\$37,500	x		1	lump sum	\$37,500
Crosswell data set for velo	ocity/reflection images No Voi	d (Z-Seis)	\$37,500	x		1	lump sum	\$37,50
Generate 3-D crosswell d	ata gathers and analyze (ski	mmed void) (Z-Se	\$27,500	x		1	lump sum	\$27,500
External Consulting (C	ording)		\$250	x		118	l hours	\$29,50
Cording Assistant - F	PC .		\$100	x		200) hours	\$20,00
Cording Expenses			\$6,900	x		1	lump sum	\$6,90
External Consulting (T	urpening)		\$186	x		133	3 hours	\$24,73
Turpening Expenses			\$6,900	x		1	lump sum	\$6,90
3DEC Software Pac	kage		\$40,000	x			lump sum	\$40,00
External Consulting	(Marion)		\$150			52	2 hours	\$7,80
External Consulting	-		\$5,500					\$5,50
Total Direct Cost	ts						_	\$260,41
FIXED FE		:						
(Total Labor + Total	Overhead) x Profit					=		
\$80,602.5	56 x		11.00%			=	Total Fixed Fee	\$8,86

TOTAL NTH Summary COSTS \$ 349,892

DRAFT DERIVATION OF COST PROPOSAL - Fwd Modeling

Control Section CS 82900	MDOT Joi JN 80233		Project De	•	ical Analysis, Forwa	ما المت	adolina.
CS 62900	JN 00233	CONSULTA			icai Alialysis, Folwa	ITO IVIC	odeling
	NTH	CONSUL					
DIRECT LABOR:				,			
			Person				
Name	Classification		<u>Hours</u>	x	Hourly Rate	=	Labor Costs
Fritz Klingler	Project Manager		62		\$58.00		\$3,596
Joe Alberts	Task Manager		102		\$46.50		\$4,743
Craig Johnson	Project Engineer		184		\$25.50		\$4,692
Steve Bryan	CADD		35		\$25.50		\$893
Natiera Farrington	Clerical		28		\$15.00		\$420
	Total Hours =		411		Total Labor		\$14,344
OVERHEAD:							
\$14,343.5	50 x	188.00%	=		Total Overhead	d	\$26,966
FACILITIES COS	T OF CAPITAL:						
\$14,343.5	50 x	0.04%	Ξ		Total F.C.C.		\$
DIRECT EXPENS	SFS						
	imated Cost - NO MAF	RKUP)					
Copies			500	pages	\$0.250	,	. \$12
FedEx				pages units	\$0.23C \$20		\$20
	ismic Method Void (Z-Se	vic)		lump sum	\$2,500		\$2,50
	ismic Method No Void (2-56	•		lump sum	\$2,500 \$2,500		\$2,50 \$2,50
SRT for VSP/RVSP Me		_		lump sum	\$2,500 \$2,500		\$2,50 \$2,50
SRT for VSP/RVSP Me	•			lump sum	\$2,500 \$2,500		\$2,50
	mic Method Void (Z-Seis)	:)		lump sum	\$2,500 \$2,500		\$2,50
	mic Method No Void (Z-Seis	•		lump sum	\$2,500 \$2,500		\$2,50
5111 101 01033WON 0613	THO INCUIDE 140 VOICE (25	3013)	,	idnip suni	Ψ2,000	,	ΨΖ,Ο

SKT for 3-D surface Seismic Metriod Void (Z-Seis)	r tump sum	ΨZ,300	φ Ζ,3 00
SRT for 3-D surface Seismic Method No Void (Z-Seis)	1 lump sum	\$2,500	\$2,500
SRT for VSP/RVSP Method Void (Z-Seis)	1 lump sum	\$2,500	\$2,500
SRT for VSP/RVSP Method No Void (Z-Seis)	1 lump sum	\$2,500	\$2,500
SRT for Crosswell Seismic Method Void (Z-Seis)	1 lump sum	\$2,500	\$2,500
SRT for Crosswell Seismic Method No Void (Z-Seis)	1 lump sum	\$2,500	\$2,500
Crosswell data set for velocity/reflection images Void (Z-Seis)	1 lump sum	\$37,500	\$37,500
Crosswell data set for velocity/reflection images No Void (Z-Se	1 lump sum	\$37,500	\$37,500
Generate 3-D crosswell data gathers and analyze (skimmed v	1 lump sum	\$27,500	\$27,500
External Consulting (Cording)	50 hours	\$250	\$12,500
Cording Assistant - PC	200 hours	\$100	\$20,000
External Consulting (Turpening)	65 hours	\$186	\$12,090
3DEC Software Package	1 lump sum	\$40,000	\$40,000
External Consulting (Marion)	52 hours	\$150	\$7,800
External Consulting (Marion Expenses)	1 lump sum	\$5,500	\$5,500
Subtotal Direct Costs			\$215,715

NTH FIXED FEE

(Total Labor + Total Overhead) x Profit = \$41,309.28 x 11.00% = Total Fixed Fee

NTH TOTAL Forward Modeling COSTS \$261,574

\$4,544

DRAFT DERIVATION OF COST PROPOSAL- ADVISORY GROUP

Control Section	MDOT Job#	Project Decription
CS 82900	JN 802330	DRIC - Amendment 2 - Geotechnical Analysis Advisory Group
		CONSULTANT NAME
	NTH (CONSULTANTS, LTD.
DIDECT LADOD.		

DIR	RECT	ΊΔ	RO	R
UIR	CUL	LA	BU	K:

DIRECT LABOR	k :						
			Person				
Name	Classification	<u>l</u>	<u>Hours</u>	x	Hourly Rate	=	Labor <u>Costs</u>
Fritz Klingler	Project Mana	ger	97		\$58.00		\$5,626
Joe Alberts	Task Manage	er	97		\$46.50		\$4,511
Craig Johnson	Project Engin	neer	103		\$25.50		\$2,627
Steve Bryan	CADD		11		\$25.50		\$281
Natiera Farrington	Clerical		40		\$15.00		\$600
	Total Hours	=	348		Total Labor		\$13,644
OVERHEAD:							
\$13,643	3.50 x	188.00%	=		Total Overhead		\$25,650
FACILITIES COST OF CAPITAL:							

\$13.643.50	v	0.04%	_	Total F.C.C.	\$5
\$13,0 4 3.30	Х	0.0476	-	TOTAL F.C.C.	ມວ

DIRECT EXPENSES

(Listed by Item at Estimated Cost - NO MARKUP)

Mileage	300 miles	\$0.445	\$134
Copies	3500 pages	\$0.25	\$875
FedEx	12 units	\$20	\$240
External Consulting (Cording)	68 per hour	\$250	\$17,000
External Consulting (Cording Expenses)	1 lump sum	\$6,900	\$6,900
External Consulting (Turpening)	68 per hour	\$186	\$12,648
External Consulting (Turpening Expenses)	1 lump sum	\$6,900	\$6,900

\$44,697

NTH FIXED FEE

(Total Labor + Total Ove	erhead) x	Profit	=	Total Fixed Fee	
\$39,293.28	x	11.00%	=		\$4,322

NTH TOTAL Advisory Group COSTS \$88,317

DERIVATION OF COST PROPOSAL - Exhibit B Advisory Council

(DESIGN PHASE SERVICES)

MDOT PROJECT NUMBER:

PROJECT DESCRIPTION:

JN: 802330 - CS: 82900

DRIC - Amend 2 Geotechnical Analysis Ad. Group

SUBCONSULTANT NAME:

SOMAT Engineering

DIRECT LABOR:

	Person					
Classification	Hours	х	Hou	ırly Rate	=	Labor Cost
QA/QC Engineer	75		\$	56.00		\$4,200
Project Manager	75		\$	58.00		\$4,350
Project Engineer	80		\$	38.00		\$3,040
Project Coordinator	0		\$	27.00		\$0
Staff Engineer	0		\$	26.50		\$0
Field Engineer	0		\$	23.50		\$0
Field Technician	0		\$	18.00		\$0
Clerical	0		\$	17.00		\$0
Total H	ours 230				Total Labor	\$11,590

OVERHEAD:

\$11,590	X	168%	= Total Overhead	\$19,471
		Sul	btotal Labor and Overhead	\$31.061

DIRECT EXPENSES:

None

Subtotal Direct Expenses	\$0
	**

FIXED FEE:

			Subtotal Fixed Fee	\$3,417
\$31,061	Χ	11.0%	 Total Fixed Fee 	\$3,417

TOTAL SOMAT Geotechnical Advisory Group COSTS \$34,478

Derivation of Cost Proposal

Control Section		Project Description
CS 82900	JN 802330	DRIC - Amendment 2 - Geotechnical Analysis -
		Advisory Group
Name of Vendor:		Advisory Group - US - Miller

DIRECT LABOR Name	Classification	Hours	x	Rate	=	Labor Costs
Rick Miller		200	x	\$120.00		\$24,000
	Total Hours	200			Total Labor	\$24,000
DIRECT EXPENS	SES	Unit Cost		Units	Туре	
Airline		\$500.00	X	4	trips	\$2,000
Lodging		\$65.00	X	5	nights	\$325
Per diem (meals)		\$38.50	x	5	days	\$193

TOTAL COSTS \$26,518

\$2,518

Total Direct Costs

Derivation of Cost Proposal

Control Section	MDOT Job #	Project Description
CS 82900	JN 802330	DRIC - Amendment 2 - Geotechnical Analysis - Advisory
		Group
Name of Vendor:		Advisory Group - US - Woods

DIRECT LABOR Name Classificat He	ours	×	Rate	=	Labor Costs
Richard Woods	200	x	\$150.00		\$30,000
Total Hours	200		Te	otal Labor	\$30,000
DIRECT EXPENSES Lodging Per diem (meals)	Unit Cost \$65.00 \$38.50			Type nights days	\$325 \$193
			Total Di	rect Costs	\$518
			TOTAL	_ COSTS	\$30,518

Derivation of Cost Proposal

	Control Section	MDOT Job #	Project Description
	CS 82900	JN 802330	DRIC - Amendment 2 - Goverance Specialist
Name of Vendor:	· · · · · · · · · · · · · · · · · · ·		DLA Piper Rudnick Gray Cary US LLP

DIRECT LABOR					
Classification	Hours	x	Rate	=	Labor Costs
DLA Piper Rudnick Gray Cary US LLP	224	X	\$630.00	_	\$141,120
Total Hours	224			Total Labor	\$141,120
DIRECT EXPENSES	Unit Cost		Units		
Mileage	\$0.445	x	2400 Miles	5	\$1,068
Shipping	\$20.00	X	32 Over	nights	\$640
Misc.		X			\$400
		X			\$0
		X			\$0
		X			\$0
		X		_	\$0
			Tot	al Direct Costs	\$2,108

TOTAL COSTS \$143,228

Derivation of Cost Proposal

CS 82900	i i	Project Description DRIC Amendment 2 - Environmental Liability Insurance	
Name of Sub Consultant:		Commonwealth Cultural Resources Group	

DIRECT EXPENSES ONLY	Unit Cost		Units		
Environmental Liability Insurance		x	lu	mp sum	\$4,568
		x		•	\$0
		x			\$0
FIXED FEE			Total D	irect Costs	\$4,568
TALD I LL	\$0	x	0.00%	Fixed Fee	\$0
		TO	TAL CCR	G COSTS	\$4,568

Derivation of Cost Proposal

Control Section	MDOT Job #	Project Description
CS 82900	IN 802330	DRIC - Amendment 2 - Engagement of Rail Specialists
Name of Vendor:		Fletcher & Sippel, LLC

Phase I						
DIRECT LABOR Classification		Hours	x	Rate	=	Labor Costs
Sippel	STB Specialist	70	x	\$285.00		\$19,950
Gilbert	STB Specialist	60	x	\$250.00		\$15,000
Litwiler	STB Specialist	21	x	\$235.00		\$4,935
Barion	STB Specialist	45	x	\$200.00		\$9,000
	Subtotal	196				\$48,885
DIRECT EXPEN	SES			-		Cost
	Air Travel to MI	Estimate for	our trips	s, three of whic	h will involve two people	\$1,750
	Lodging - Detroit	Estimate o	f seven	days, of which	five involve two people	\$2,000
	Meals (per diem)	Average \$	35/day,	two people for	five days	\$420
	Taxis	To/from air	rport			\$240
	Rental Car in Detroit	Estimate s	even d	ays at \$40/day,	, plus gas	\$450
	Air travel to D.C.			ay trip, involving		\$350
	Lodging - D.C. area			its, one person		\$350
	Taxis	To/from air	rport ar	nd around D.C.	, estimate six	\$75
	Meals (per diem)	Estimate \$	35/day			\$70
		Fees depe	nd on t	ype of applicati	on but range from \$5,300	
	Filing Fees (exempt)	to 18,700				\$18,700
	Printing	Major proje	ects no	t included in fe	e	\$500
	Other	Miscellane	eous			\$500
		Subtotal D	irect Co	osts		\$25,405
	SUBTOTAL - COS	TS				\$74,290

Note: The above assumes preparation of a petition for exemption. If it is confirmed that no traffic has originated or terminated on the line for at least two years (which we understand is not the case), a somewhat simpler filing (a Notice of Exemption) may be made. The estimate does not include the cost of preparing a full abandonment application should the STB require that. Such a circumstance would be included in Phase II.

Phase II

Phase II would only be initiated with the written authorization of MDOT.

DIRECT LABOR

Classification		Hours	x	Rate	=	Labor Costs
Sippel	STB Specialist	75	x	\$285.00		\$21,375
Gilbert	STB Specialist	50	x	\$250.00		\$12,500
Litwiler	STB Specialist	25	X	\$235.00		\$5,875
Barion	STB Specialist	55	x	\$200.00		\$11,000
	Subtotal	205				\$50,750
DIRECT EXPENS	SES	Unit Cost		Units		
	Air Travel to MI	Estimate si	ix trips	, three of which	will involve two people	\$2,070
	Lodging - Detroit	Estimate o	fseve	n days, of which	five involve two people	\$1,800
	Meals (per diem)	Average \$3	35/day	, two people for	five days	\$420
	Taxis	To/from air	port			\$320
	Rental Car in Detroit	Estimate s	even c	lays at \$40/day,	plus gas	\$450
	Air travel to D.C.	Estimate o	ne 2-d	ay trip, involving	g one person	\$700
	Taxis - DC	To/from air	port a	nd around D.C.,	estimate six	\$75
	Meals (per diem)	Estimate \$	35/day	/		\$70
		If necessar	ry to re	efine arguments	of public necessity or	
		geographic	rail-p	ort competition;	average \$200/hr. for 50	
	Retained Experts	hours				\$10,000
	Printing	Major proje	ects no	ot included in fee	e	\$1,000
	Other	Misc.				\$1,000
	Subtotal Direct Costs	6				\$17,905
	SUBTOTAL - COS	TS				\$68,655

Derivation of Cost SUMMARY BY JOB NUMBER AND BY CATEGORY

	Control Section	MDOT Job #	Project Description
	CS 82900	JN 802330	
			DRIC - Amendment 2 - Expanded Boring Program w/Advisory
i i			Review, Add. Coor. W/our Canadian Team, STB Program

DIRECT LABOR (with escalation)	Direct Labor Hours	Direct Labor Costs
Prime Consultant - Corradino	5,210	\$247,129
Subconsultants		
Parsons Transportation Group	2,432	\$113,915
Rick Miller - Geotech Advisory Group	200	\$24,000
Richard Woods - Geotech Advisory Grou	ţ 200	\$30,000
DLA Piper Rudnick Gray Cary US LLP	224	\$141,120
CCRG	0	\$0
Fletcher & Sippel, LLC - Phase I	196	\$48,885
Fletcher & Sippel, LLC - Phase II	205	\$50,750
NTH	759	\$27,987
SOMAT	230	\$11,590
Total Labor	9,656	\$695,376

OVERHEAD		Overhead Costs
Prime Consultant		\$416,783
Subconsultants		
Parsons Transportation Group		\$156,064
Rick Miller - Geotech Advisory Group		\$0
Richard Woods - Geotech Advisory Gr	oup	\$0
DLA Piper Rudnick Gray Cary US LLP		\$0
CCRG		\$0
Fletcher & Sippel, LLC - Phase I		. \$0
Fletcher & Sippel, LLC - Phase II		\$0
NTH		\$52,616
SOMAT		\$19,471
	Total Overhead	\$644.934

Exhibit C

FACILITIES COST OF CAPITAL	F.C.C. Costs
Prime Consultant	\$1,128
Subconsultants	
Parsons Transportation Group	\$302
Rick Miller - Geotech Advisory Group	\$0
Richard Woods - Geotech Advisory Group	\$0
DLA Piper Rudnick Gray Cary US LLP	\$0
CCRG	\$0
Fletcher & Sippel, LLC - Phase I	\$0
Fletcher & Sippel, LLC - Phase II	\$0
NTH	\$11
SOMAT	\$0
Total F.C.C. Costs	\$1,442
DIRECT EXPENSES	Direct Costs
Prime Consultant	\$128,402
Subconsultants	
Parsons Transportation Group	\$42,793
Rick Miller - Geotech Advisory Group	\$2,518
Richard Woods - Geotech Advisory Group	\$518
DLA Piper Rudnick Gray Cary US LLP	\$2,108
CCRG	\$4,568
Fletcher & Sippel, LLC - Phase I	\$25,405
Fletcher & Sippel, LLC - Phase II	\$17,905
NTH	\$260,412
SOMAT	\$0
Total Direct Expenses	\$484,628

Exhibit C

FIXED FEE	Fixed Fee Costs
Prime Consultant	\$73,030
Subconsultants	•
Parsons Transportation Group	\$29,698
Rick Miller - Geotech Advisory Group	\$0
Richard Woods - Geotech Advisory Group	\$0
DLA Piper Rudnick Gray Cary US LLP	\$0
CCRG	\$0
Fletcher & Sippel, LLC - Phase I	\$0
Fletcher & Sippel, LLC - Phase II	\$0
NTH	\$8,866
SOMAT	\$3,417
Total Fixed Fee	\$115,011
Total Labor	\$695,376
Total Overhead	\$644,934
Total Facilities Cost of Capital	\$1,442
Total Direct Costs	\$484,628
Total Fixed Fee	\$115,011
TOTAL COSTS FOR Amendment 2	\$1,941,391

Derivation of Cost

SUMMARY BY CATEGORY BY ORIGINAL CONTRACT AND AMENDMENTS

Control Section	# doL TODM	Proje	ect Description						
CS 82900	JN 802330	DRIC	C - EPE with an El	S					
									•
		Orio	ginal Contract		Amend 1		Amend 2	Cu	mulative Total
		1-							
RECT LABOR									
Corradino		\$	2,017,175	\$	62,928	\$	247,129	\$	2,327,232
Parsons Transportation	Group	\$	1,742,723	\$	9,720	\$	113,915	\$	1,866,358
Rick Miller - Geotech Ad	dvisory Group	\$	-	\$	-	\$	24,000	\$	24,000
Richard Woods - Geote	ch Ad. Group	\$	-	\$	-	\$	30,000	\$	30,000
ACG: The al Chalabi Gr	oup, Ltd.	\$	310,015	\$	-	\$	-	\$	310,015
DLA Piper Rudnick Gra	y Cary US LLP	\$	-	\$	240,660	\$	141,120	\$	381,780
Alfred Benesch & Comp	any	\$	251,624	\$		\$	-	\$	251,624
CCRG		\$	224,488	\$	25,445	\$	_	\$	249,933
Fletcher & Sippel, LLC		\$	-	\$	-	\$	99,635	\$	99,635
Hamilton Anderson Ass	ociates	\$	299,019	\$	3,108	\$	-	\$	302,127
Northwest Consultants,	Inc.	\$	108,617	\$	-	\$	-	\$	108,617
NTH		\$	46,053	\$	169,398	\$	27,987	\$	243,438
SOMAT Engineering, In	nc.	\$	76,069	\$	-	\$	11,590	\$	87,659
TBE Group, Inc.		\$	6,703	\$	_	\$	-	\$	6,703
Wetland & Coastal Res	., Inc.	\$	106,705	\$	<u>-</u>	\$	-	\$	106,705
Woolpert Design, LLP		\$	274,665	\$	2,534	\$		\$	277,199
Total			\$5,463,856		\$513,792		\$695,376		\$6,673,024

OVERHEAD

Corradino	····	£2 200 527	•	102.240	•	440 700	Φ.	2.040.500
		\$3,398,537	\$	103,246	\$	416,783	\$	3,918,566
Parsons Transportation	Group	\$2,335,597	\$	13,316	\$	156,064	\$	2,504,977
Rick Miller - Geotech Ad	lvisory Group	\$0	\$		\$		\$	_
Richard Woods - Geote	ch Ad. Group	\$0	\$	-	\$		\$	
ACG: The al Chalabi Gr	oup, Ltd.	\$0	\$	-	\$	-	\$	_
DLA Piper Rudnick Gray	Cary US LLP	\$0	\$	_	\$	-	\$	_
Alfred Benesch & Comp	any	\$405,089	\$	_	\$	-	\$	405,089
CCRG		\$242,514	\$	27,488	\$	-	\$	270,003
Fletcher & Sippel, LLC		\$0	\$	-	\$	_	\$	-
Hamilton Anderson Ass	ociates	\$504,296	\$	5,242	\$	_	\$	509,537
Northwest Consultants,	Inc.	\$176,166	\$		\$	-	\$	176,166
NTH		\$86,580	\$	318,468	\$	52,616	\$	457,663
SOMAT Engineering, In	C.	\$129,318	\$	-	\$	19,471	\$	148,789
TBE Group, Inc.		\$11,078	\$	_	\$	_	\$	11,078
Wetland & Coastal Res	., Inc.	\$165,392	\$	-	\$	-	\$	165,392
Woolpert Design, LLP		\$456,054	\$	4,390	\$		\$	460,443
Total		\$7,910,620		\$472,150		\$644,934		\$9,027,704

	Original Contract	 mend 1		Amend 2	Cum	ulative Tota
CILITIES COST OF CAPITAL						
Corradino	\$6,336	\$ 234	\$	1,128	\$	7,698
Parsons Transportation Group	\$4,627	\$ 26	\$	302	\$	4,955
Rick Miller - Geotech Advisory Group	\$0	\$ -	\$	-	\$	
Richard Woods - Geotech Ad. Group	\$0	\$ -	\$	-	\$	
ACG: The al Chalabi Group, Ltd.	\$0	\$ -	\$	-	\$	-
DLA Piper Rudnick Gray Cary US LLP	\$0	\$ -	\$	-	\$	-
Alfred Benesch & Company	\$2,667	\$ -	\$	-	\$	2,667
CCRG	\$0	\$ -	\$	-	\$	
Fletcher & Sippel, LLC	\$0	\$ -	\$	-	\$	
Hamilton Anderson Associates	\$2,180	\$ 23	\$	-	\$	2,203
Northwest Consultants, Inc.	\$0	\$ -	\$		\$	<u>-</u>
NTH	\$18	\$ 68	\$	11	\$	9
SOMAT Engineering, Inc.	\$0	\$ -	\$		\$	-
TBE Group, Inc.	\$20	\$0		\$0	\$	20
Wetland & Coastal Res., Inc.	\$0	\$ -	\$		\$	-
Woolpert Design, LLP	\$3,378	\$ 49	\$	-	\$	3,42
Total	\$19,226	\$400	l	\$1,442		\$21,06

DIRECT EXPENSES

Corradino	_	\$400,251	\$ 139,782	\$	128,402	\$ 668,435
Parsons Transportation	Group	\$ 372,903	\$ -	\$	42,793	\$ 415,696
Rick Miller - Geotech Ad	lvisory Group	\$ -	\$ -	\$	2,518	\$ 2,518
Richard Woods - Geote	ch Ad. Group	\$ -	\$ -	\$	518	\$ 518
ACG: The al Chalabi Gr	oup, Ltd.	\$ 7,596	\$ -	\$	-	\$ 7,596
DLA Piper Rudnick Gray	Cary US LLP	\$0	\$ 1,170	\$\$	2,108	\$ 3,278
Alfred Benesch & Comp	any	\$ 52,356	\$ -	\$	-	\$ 52,356
CCRG		\$ 329,327	\$ 1,005	\$	4,568	\$ 334,900
Fletcher & Sippel, LLC		\$ -	\$ -	\$	43,310	\$ 43,310
Hamilton Anderson Ass	ociates	\$ 48,735	\$ 148,836	\$	-	\$ 197,571
Northwest Consultants,	Inc.	\$ -	\$ <u>-</u>	\$	-	\$ -
NTH		\$ 217,619	\$ 1,466,410	\$	260,412	\$ 1,944,440
SOMAT Engineering, In	c.	\$ 112,000	\$ -	\$	<u>-</u>	\$ 112,000
TBE Group, Inc.		\$ 96,955	\$ -	\$	_	\$ 96,955
Wetland & Coastal Res	., Inc.	\$ 70,544	\$ -	\$	-	\$ 70,544
Woolpert Design, LLP		\$ 162,686	\$ 7,129	\$	_	\$ 169,815
Total		\$1,870,971	\$1,764,332		\$484,628	\$4,119,931

	Ori	iginal Contract	 Amend 1	 Amend 2	Cu	mulative Total
FIXED FEE		-				
Corradino	\$	595,728	\$ 18,279	\$ 73,030	\$	687,038
Parsons Transportation Group	\$	448,615	\$ 2,534	\$ 29,698	\$	480,847
Rick Miller - Geotech Advisory Group	\$	-	\$ -	\$ -	\$	_
Richard Woods - Geotech Ad. Group	\$	-	\$ -	\$ -	\$	-
ACG: The al Chalabi Group, Ltd.	\$		\$ 	\$ -	\$	-
DLA Piper Rudnick Gray Cary US LLP	\$	_	\$ -	\$ -	\$	-
Alfred Benesch & Company	\$	72,193	\$ -	\$ -	\$	72,193
CCRG	\$	51,370	\$ 5,823	\$ -	\$	57,193
Fletcher & Sippel, LLC	\$	-	\$ -	\$ -	\$	-
Hamilton Anderson Associates	\$	88,365	\$ 918	\$ -	\$	89,283
Northwest Consultants, Inc.	\$	31,326	\$ _	\$ -	\$	31,326
NTH	\$	14,590	\$ 53,665	\$ 8,866	\$	77,121
SOMAT Engineering, Inc.	\$	22,593	\$ <u>-</u>	\$ 3,417	\$	26,009
TBE Group, Inc.	\$	1,956	\$ -	\$ <u>-</u>	\$	1,956
Wetland & Coastal Res., Inc.	\$	29,931	\$	\$ _	\$	29,931
Woolpert Design, LLP	\$	80,379	\$ 762	\$ -	\$	81,141
Total		\$1,437,045	\$81,981	\$115,011		\$1,634,037

FIRM TOTALS

	Corradino		æ	6,418,028	\$	324,469	\$	866,473	\$	7,608,970
			\$						Ψ_	
	Parsons Transportation		\$	4,904,464	\$	25,595	\$	342,773	\$	5,272,832
	Rick Miller - Geotech Ac	lvisory Group	\$	-	\$		\$	26,518	\$	26,518
	Richard Woods - Geote	ch Ad. Group	\$	-	\$	-	\$	30,518	\$	30,518
(DBE)	ACG: The al Chalabi Gr	oup, Ltd.	\$	317,611	\$	-	\$	1	\$	317,611
	DLA Piper Rudnick Gray	Cary US LLP	\$	-	\$	241,830	\$	143,228	\$	385,058
	Alfred Benesch & Comp	any	\$	783,929	\$	-	\$	-	\$	783,929
	CCRG		\$	847,700	\$	59,761	\$	4,568	\$	912,028
	Fletcher & Sippel, LLC		\$	-	\$	-	\$	142,945	\$	142,945
(DBE)	Hamilton Anderson Ass	ociates	\$	942,594	\$	158,127	\$	-	\$	1,100,721
(DBE)	Northwest Consultants,	Inc.	\$	316,110	\$	_	\$	-	\$	316,110
C+ /	NTH		\$	364,859	\$	2,008,009	\$	349,892	\$	2,722,760
(DBE)	SOMAT Engineering, In	C.	\$	339,979	\$	-	\$	34,478	\$	374,457
(46-)	TBE Group, Inc.		\$	116,712	\$	_	\$	-	\$	116,712
	Wetland & Coastal Res.	, Inc.	\$	372,571	\$	-	\$	-	\$	372,571
	Woolpert Design, LLP		\$	977,162	\$	14,863	\$	-	\$	992,025
		İ	i						i	
TC	OTAL COSTS		\$	16,701,719	1	2,832,655	1 .	\$1,941,391		\$21,475,764

	Original	Contract	 Amend 1	А	mend 2	Cum	ulative Tota
Below are costs related to the	physical						
aspects of the boring program	• •						
including Advisory Group or F							
Modeling							
NTH Subconsultants (no NTH	Habor, OH, FCC or f	ee)	_				
Layne Christenson	\$	-	\$ 989,222	\$	-	\$	989,22
Oil-Ex, Inc.	\$	-	\$ -	\$	-	\$	_
Z-Seis	\$	-	\$ 325,000	\$	_	\$	325,00
Baker	\$	-	\$ - '	\$	-	\$	_
Other Boring Costs	\$	-	\$ 50,500	\$	-	\$_	50,50
Cording	\$	-	\$ 44,900	\$	_	\$	44,90
Turpening	\$	-	\$ 52,893	\$	-	\$	52,89
NTH TOTAL	\$	-	\$ 1,462,515	\$	-	\$	1,462,51
SOMAT Subconsultants (no f	NTH labor, OH, FCC	or fee)					
Oil-Ex, Inc.	\$	-	\$ _	\$	-	\$	_
Other Boring Costs	\$	-	\$ -	\$	-	\$	-
SOMAT TOTAL	\$	-	\$ _	\$		\$	-

1,462,515 \$

1,462,515

Boring Program TOTAL

DRIC - EPE/EIS - COST - AMENDMENT 2

HOURS BY TASE	К	Public Involv.	SEE Studies	Recom. Alternative	Geotech Investigation	
The Corradio	no Group	1230/211M	2310	2510	2330	Total
Corradino, JC	Proj. Manager	506	0	250	290	1046
Corradino, G	Planner	276	0	0	40	316
Anderson	Graphic	184	0	0	0	184
Bocks	Planner	276	0	0	320	596
Butler	Planner	0	0	120	0	120
Deutsch	Counsel	0	0	320	0	320
Hartman	Engineer	276	0	0	0	276
PPool	Economic Planner	0	0	190	0	190
Santana	Planner	598	0	0	100	698
Stone	Env. Planner	230	0	0	240	470
Townsend	Planner	0	0	120	0	120
Tucker	Planner	414	0	0	0	414
Velicevic	Engineer	276	0	0	0	276
Wolf	Production	184	0	0	0	184
	Subtotal Hours	3220	0	1000	990	5210

\$866,473

	\$1,074,732	_	\$899,732	target			
HOURS BY TASK			Public	SEE	Recom.	Geotech	
			lavolv.	Studies	Alternative	Investigation	
Parsons Trans	portation Group		1230/211M	2310	2510	2330	Total
Regine Beauboeuf	Deputy Proj. Man.		244	0	_ 40	40	324
Mike Ashmore	Rdway/Bridge Design		.0	0	0	0	0
Gerald Bonner	Tunnel/Geotechnical		0	0	0	40	40
Bruce L. Campbell	Lead Bridge		172	0	24	40	236
Patrick Cassity	Bridge Design		0	0	0	40	40
Alex Gilman	Graphics		. 40	0	0	0	40
Robert Hosler	Landscape Architect		243	0	0	0	243
Joseph Marson	Lead Traffic		60	0	16	0	76
Stephen Mayer	Policy		0	0	60	0	60
Craig Richardson	Landscape Architect		374	0	0	0	374
Richard Saporsky	Lead Roadway		164	0	0	0	164
Ken Serzan	Bridge Design		0	0	0	40	40
Jeffrey Squires	Policy		0	0	60	0	60
Jr. Engineer	Rd/Plaza/Bridge		190	0	0	0	190
Sr. Engineer	Bridge Design		0	0	0	20	20
Engineer/Artist	Rd/Plaza/Bridge		355	0	0	20	375
IT Specialists	Meeting Assistance		24	0	0	0	24
Administrative			110	0	. 0	16	126
	Subtotal Hours	-	1976	0	200	256	2432

HOURS BY TASK		Public Involv.	SEE Studies	Recom. Alternative	Geotech Investigation	
Geotechnical	Advisory Group	1230/211M	2310	2510	2330	Total
Rick Miller	Geotech Advisory Group	0	0	0	200	200
Richard Woods	Geotech Advisory Group	0	0	0	200	200
	Subtotal Hours	0	0	0	400	400

HOURS BY TA	SK	Public	SEE:	Recom.	Geotech	
		invoiv.	Studies	Alternative	Investigation	
DLA Piper	Rudnick Gray Cary US LLP	1230/211M	2310	2510	2330	Total
Blandchard	Consultant	224	0	• 0	0	224
	Subtotal Hours	224	0	0	0	224

HOURS BY TASK		Public Involv.	SEE Studies	Recom. Alternative	Geotech Investigation	
CCRGroup Inc	: .	1230/211M	2310	2510	2330	Total
Direct Costs Only						
	Subtotal Hours	0	0	0	0	. 0

HOURS BY TA	ask	Γ	Public Involv.	SEE Studies	Recom.	Geotech Investigation	
Fletcher &	Sippel, LLC		1230/211M	2310	2510	2330	Total
	iduct Investigation/Draft Petition	⊥ a for Exempti		2310	2510	2,550	
Sippel	STB Specialist		0	0,	70	0	70
Gilbert	STB Specialist		0	0	60	0	60
Litwiler	STB Specialist		0	0	21	0	21
Barion	STB Specialist		0	0	45	0	45
	Subtotal Hours - Phase I		0	0	196	0	196
PHASE II - ST	B Filings, with Anticipated Oppo	sition and Re	lated Matters		1		
Sippel	STB Specialist		0	0	75	0	75
Gilbert	STB Specialist		0	0	50	0	50
Litwiler	STB Specialist		0	0	25	0	25
Barion	STB Specialist		0	0	55	0	55
	Subtotal Hours - Phase II		0	0	205	0	205
	Total Phase I & II		0	0	401	0	401

HOURS BY TASK			Public	SEE	Recom.	Geotech	
			Involv.	Studies	Alternative	Investigation	
			1230/211M	2310	2510	2330	Total
NTH Consulta	nts - Geotech Adv	isory Grou	p				
Fritz Klingler	Project Manager		0	0	0	97	97
Joe Alberts	Task Manager		0	0	0	97	97
Craig Johnson	Project Engineer		0	0	0	103	103
Steve Bryan	CADD		0	0	0	11	11
Natiera Farrington	Clerical		0	0	0	40	40
	Subtotal Hours		0	0	0	348	348
						•	
NTH Consulta	nts - Forward Mo	deling					
Fritz Klingler	Project Manager		0	0	0	62	62
Joe Alberts	Task Manager		0	0	0	102	102
Craig Johnson	Project Engineer		0	0	0	184	184
Steve Bryan	CADD		0	0	0	35	3:
Natiera Farrington	Clerical		0	0	0	28	28
	Subtotal Hours		0	0	0	411	413

HOURS BY TASK	S	Public Involv.	SEE Studies	Recom. Alternative	Geotech Investigation	
SOMAT		1230/211M	2310	2510	2330	Total
	QA/QC Engineer	0	0	0	75	75
	Project Manager	0	0	0	75	75
	Project Engineer	0	0	0	80	80
	Project Coordinator	0	0	0	0	0
	Staff Engineer	0	0	0	0	0
	Field Engineer	0	0	0	0	0
	Field Technician	0	0	0	0	0
	Clerical	0	. 0	0	0	0
	Subtotal Hours	0	0	0	230	230

TOTAL HOUR	S	Public Involv. 1230/211M	SEE Studies 2310	Recom. Alternative 2510	Geotech Investigation 2330	Total
The Corradino Group		3220	0	1000	990	5,210
Parsons Transportation	Group	1976	0	200	256	2,432
Peer Group		0	0	0	400	400
DLA Piper Rudnick G	ray Cary US LLP	224	0	0	0	224
CCRG		0	0	0	0	0
Fletcher & Sippel, LLC	C - Phase [0	0	196	0	196
Fletcher & Sippel, LLC	C - Phase II	0	0	205	0	205
NTH		0	0	0	759	759
SOMAT		0	0	0	230	230
TOTAL		5420	0	1601	2635	9,656

COST BY TA	ASK		Public	SEE	Recom.	Geotech		
		Wage	Involv.	Studies	Alternative	Investigation		
The Corradia	no Group	Rate	1230/211M	2310	2510	2330		Total
Corradino, JC	Proj. Manager	\$91.74	46420	0	22935	26605	\$	95,960
Corradino, G	Planner	\$33.65	9287	0	0	1346	\$	10,633
Anderson	Graphic	\$22.13	4072	0	0	0	\$	4,072
Bocks	Planner	\$20.76	5730	0	0	6643	\$	12,373
Butler	Planner	\$30.87	0	0	3704	. 0	\$	3,704
Deutsch	Counsel	\$70.80	0	0	22656	0	\$	22,656
Hartman	Engineer	\$53.29	14708	0	0	0	\$	14,708
P'Pool	Economic Planner	\$78.46	0	0	14907	0	S	14,907
Santana	Planner	\$25.29	15123	0	0	2529	\$	17,652
Stone	Env. Planner	\$52.85	12156	0	0	12684	S	24,840
Townsend	Planner	\$31.72	0	0	3806	0	\$	3,806
Tucker	Planner	\$19.23	7961	0	0	0	s	7,961
Velicevic	Engineer	\$31.78	8771	0	0	0	\$	8,771
Wolf	Production	\$27.63	5084	. 0	0	0	3	5,084
	Subtotal Wages		129313	0	68009	49807	s	247,129
Overhead		168-65%	218086	0	114698	83999	s	416,783
Facilities Cost of	Capital	0.4566%	590	0	311	227	S	1,128
Profit		11.00%	. 38214	0	20098	14719	s	73,030
Subtotal - Wages -	+ Overhead + Profit		386,203		203,115	148,752	s	738,070
	Direct Costs			Unit Cost	Туре	# Units		Cost
		Environmen	ntal Liability Insura	nce	lump sum	1	1_	\$5,250
		Wyle Lab N	loise Demo	\$11,612	lump sum	1	<u> </u>	\$11,612
		Overnight I	Del	\$18.00	overnights	14	<u> </u>	\$252
		Lodging		\$65.00	days	50	_	\$3,250
		Meals (per	diem)	\$38.50	days	52	<u> </u>	\$2,002
		Airline trav	rel	\$500.00	trips	- 11	L	\$5,500
		Airline trav	rel	\$800.00	trips	10	1_	\$8,000
		Rental car		\$80,00	days		<u> </u>	\$4,240
		Hall rental		\$500.00	workshops	17	\perp	\$8,500
		Equipment	rental	\$2,500.00	workshops	17	\perp	\$42,500
		RV rental		\$3,200.00	months			\$25,600
		Display (se	e attached sheet)	\$1,169.60	units	10	\perp	\$11,696
		Subtotal O	ther Direct Costs				\$128.402	

TOTAL - COSTS \$866,473

COST BY TASK			Public Involv.	SEE Studies	Recom. Alternative	Geotech Investigation		
Parsons Transp	portation Group		1230/211M	2310	2510	2330		Total
Regine Beauboeuf	Deputy Proj. Man.	\$66.05	16,116	0	2,642	2,642	-	21,400
Mike Ashmore	Rdway/Bridge Design	\$48.08	0	0	0	0	\$	-
Gerald Bonner	Tunnel/Geotechnical	\$89.42	0	0	0	3,577	\$	3,577
Bruce L. Campbell	Lead Bridge	\$53.50	9,202	0	1,284	2,140	\$	12,626
Patrick Cassity	Bridge Design	\$68.75	0	0	0	2,750	\$	2,750
Alex Gilman	Graphics	\$35.73	1,429	0	0	0	S	1,429
Robert Hosler	Landscape Architect	\$48.31	11,739	0	0	0	\$	11,739
Joseph Marson	Lead Traffic	\$50.18	3,011	0	803	0	\$	3,814
Stephen Mayer	Policy	\$79.33	0	0	4,760	0	\$	4,760
Craig Richardson	Landscape Architect	\$31.00	11,594	0	0	0	S	11,594
Richard Saporsky	Lead Roadway	\$45.67	7,490	0	0	0	\$	7,490
Ken Serzan	Bridge Design	\$89.42	0	0	0	3,577	S	3,577
Jeffrey Squires	Policy	\$86.54	0	0	5,192	0	s	5,192
Jr. Engineer	Rd/Plaza/Bridge	\$24.89	4,729	0	0	0	\$	4,729
Sr. Engineer	Bridge Design	\$47.87	0	0	0	957	\$	957
Engineer/Artist	Rd/Plaza/Bridge	\$37.77	13,408	. 0	0	755	\$	14,164
IT Specialists	Meeting Assistance	\$37.77	906	0	0	0	S	906
Administrative		\$25.48	2,803	0	0	408	S	3,210
	Subtotal Wages		82,428	0	14,681	16,806	\$	113,915
	J	127.000/	110.007		20.113	22.024		156,064
Overhead Facilities Cost of Ca	-7 ₁₋₁	137.00%	112,927	-	20,113	23,024	\$	302
Profit	picat	0.2655%	21,489	· · · · · · · · · · · · · · · · · · ·		4381	8	29,698
		11.00%		-	3,827		=	
Subtotal - Wages + O	verhead + Profit		217,063		38,660	44,256	\$	299,979
	Direct Costs			Unit Cost	Турс	# Units		Cost
		Airline Tra	/el	\$500.00	Lump Sum	44		\$22,000
		Mileage		\$0.445	miles	3650	Γ	\$1,624
		Lodging		\$80.00	days	52		\$4,160
		Meals (per	diem)	\$38.50	days	74		\$2,849
		Equipment	Rentat	\$10,000	lump sum	1	L	\$10,000
		Bradley To	uchstone	\$135.00	hours	16		\$2,160
		Subtotal Ot	her Direct Costs					\$42,793

TOTAL - COSTS

COST BY TASK			Public		SEE	Recom.		Geotech		
		Wage	Involv.	i	Studies	Alternative	ŧ	nvestigation		
Advisory Group	·	Rate	1230/211M	╙	2310	2510	2330			Total
Rick Miller	Geotech Advisory Group	\$ 120.00	\$ -	s		\$ -	s	24,000	s	24,000
	Direct Costs		• • • • • • • • • • • • • • • • • • •	T	Unit Cost	Туре		# Units		Cost
		Airline		T	\$500	trips		4		\$2,000
		Lodging		П	\$ 65	nights		5		\$ 325
		Per diem (a	neals)	T	\$38.5	days		5		\$193
		Subtotal Ot	her Direct Costs							\$2,518
	TOTAL - COSTS								S	26,518

Richard Woods	Geotech Advisory Group	\$ 150.00 \$ -	\$		s -	\$ 30,000	s	30,000
	Direct Costs		1	Unit Cost	Туре	# Units	1	Cost
		Lodging		\$65	nights		5	\$325
		Per diem (meals)		\$38.5	days		5	\$193
		Subtotal Other Direct Costs						\$518
	TOTAL - COSTS						s	30,518

COST BY TASE	C			Public		SEE	. 1	Recom.		Geotech		
		Wage	ı	involv.	1	Studies	A.	lternative	1	Investigation		
DLA Piper Ru	dnick Gray Cary US LLP	Rate		1230/211M		2310		2510	l	2330		Total
Blandchard	Consultant	\$ 630.00	S	141,120	\$	- 1	\$		\$		S	141,120
	Subtotal Wages			141120		0		0		0	S	141,120
	Direct Costs					Unit Cost		Турс		# Units		Cost
		Mileage			\$0.445		Miles		2400			\$1,068
		Shipping				\$20		Overnights	_	32		\$640
		Misc.									Ĺ	\$400
		Subtotal Ot	her	Direct Costs								\$2,108
	TOTAL - COSTS		_								5	143,228

COST BY TASK		Public	SEE	Recom.	Geotech		
	Wage	Iuvolv.	Studies	Alternative	Investigation		
CCRGroup Inc.	Rate	1230/211M	2310	2510	2330	1	Total
Direct Cost Only							Cost
	Environmen	ital Liability Insura	псе	luanp suan		s	4,568
	Subtotal Ot	her Direct Costs				S	4,568
TOTAL - COSTS						S	4,568

COST BY TASK			Public	I	SEE	Recom.	Geotech		
		Wage	Involv.	1	Studies	Alternative	Investigation		
Fletcher & Sipp	pel ·	Rate	1230/211M	1	2310	2510	2330		Total
PHASE I - Conduct	Investigation/Draft Petitic	a for Exem	otiea	1					
Sippel	STB Specialist	\$285.00		o	0	19950	0	S	19,950
Gilbert	STB Specialist	\$250.00		0	0	15000	0	\$	15,000
Litwiter	STB Specialist	\$235.00		0	0	4935	0	\$	4,935
Barion	STB Specialist	\$200.00		o	0	9000	0	\$	9,000
	Subtotal Wages Phase I			0	0	48885	0	S	48,885
	Direct Costs				Description				Cost
<u> </u>				Т	Estimate four tri	ps, three of which	will involve two		-
Î	1	Air Travel (o Mi		people			\$	1,750
ł		Ì		-1	Estimate of seve	n days, of which	five involve two	1	
		Lodging - L		4	people			\$	2,000
	1	Meals (per	diem)	4	Average \$35/day	, two people for	five days	5	420
	1	Taxis		_1	To/from airport			\$	240
]	Rental Car	in Detroit	_1	Estimate seven of	lays at \$40/day, p	lus gas	S	450
]	Air travel to	D.C.	_	Estimate one 2-c	lay trip, involvin	g one person	s	350
	<u> </u>	Lodging - D	D.C. area	_	Estimate two nig	ghts, one person		5	350
·		Taxis	_	1	To/from airport	and around D.C.,	estimate six	S	75
		Meals (per	diem)	1	Estimate \$35/da	y		\$	70
				T	Fees depend on	type of application	n but range from	Γ	
		Filing Fees	(exempt)	_{	\$5,300 to 18,700)		S	18,700
		Printing		l	Major projects r	ot included in fe	;	\$	500
!		Other	l	\Box	Miscellaneous			s	500
1		Subtotal Di	rect Costs					S	25,405
	SUBTOTAL - COSTS							s	74,290

Note: The above assumes preparation of a petition for exemption. If it is confirmed that no traffic has originated or terminated on the line for at least two years (which we understand is not the case), a somewhat simpler filing (a Notice of Exemption) may be made. The estimate does not include the cost of preparing a full abandonment application should the STB require that. Such a circumstance would be included in Phase II.

Phase II would only be initiated with the written authorization of MDOT.

Sippel	STB Specialist	\$285.00	0	0	21375	0	\$	21,375	
Gilbert	STB Specialist	\$250.00	0	0	12500	0	\$	12,500	
Litwiler	STB Specialist	\$235.00	0	0	5875	0	S	5,875	
Barion	STB Specialist	\$200.00	0	0	11000	0:	\$	11,000	
	Subtotal Wages Phase II	ļ	0	0	50750	0	S	50,750	
	Direct Costs			Unit Cost	Туре	# Units		Cost	
				Estimate six trips	Estimate six trips, three of which will involve two				
		Air Travel t	o MI	people		:	\$_	2,070	
				Estimate of seve					
		Lodging - [Detroit	people			s	1,800	
		Meals (per	diem)	Average \$35/day	, two people for	five days	\$	420	
		Taxis		To/from airport			S	320	
		Rental Car	in Detroit	Estimate seven d	lays at \$40/day, p	olus gas	S	450	
		Air travel to	D.C.	Estimate one 2-day trip, involving one person To/from airport and around D.C., estimate six				700	
		Taxis - DC						75	
		Meals (per	diem)	Estimate \$35/da	у		S	70	
				If necessary to re	efine arguments	of public necessity			
		1		or geographic ra			1		
		Retained E	cperts	\$200/hr. for 50 t	iom2		5	10,000	
		Printing		Major projects n	ot included in fe	e	S	1,000	
		Other		Misc.			\$	1,000	
		Subtotal Di	rect Costs				ş	17,905	
	SUBTOTAL - COSTS						s	68,655	

COST BY TASK			- 1	Public		SEE	Recom.	Geotech		
				Involv.		Studies	Alternative	Investigation		
NTH Consultants - Forward Modeling			1230/211M		2310	2510	2330		Total	
Fritz Klingler	Project Manager	\$ 58	3.00	0		0	0	3596	s	3,596
Joe Alberts	Task Manager	\$ 40	5.50	0		0	0	4743	s	4,743
Craig Johnson	Project Engineer	\$ 25	5.50	0		0	0	4692	\$	4,692
Steve Bryan	CADD	\$ 25	5.50	0		0	0	893	S	893
Natiera Farrington	Clerical	\$ 15	5.00	0		0	0	420	s	420
		•								
	Subtotal Wages		\neg	0	\Box	0	0	14344	\$	14,344
Overhead		188.	00%	0		0	0	26966	\$	26,966
Facilities Cost of Ca	pital	0.	04%	0		0	0	6	\$	6
Profit		11.	00%	0		0	0	4544	\$	4,544
Subtotal - Wages, Ov	erhead, FCC & Profit			0		0	0	45859	\$	45,859
	Direct Costs					Unit Cost	Туре	# Units		Cost
	Copies				s	0.250	pages	500	\$	125
	FedEx				\$	20	units	10	\$	200
	SRT for 3-D surface Seismic Method Void (Z-Seis)			is)		2500	lump sum	1	\$	2,500
	SRT for 3-D surface Seismic Method No Void (Z-Scis)					2500	lump sum	ı	S	2,500
	SRT for VSP/RVSP Method Void (Z-Seis) SRT for VSP/RVSP Method No Void (Z-Seis) SRT for Crasswell Seismic Method Void (Z-Seis)				Ī	2500	lump sum	1	\$	2,500
						2500	lump sum	i	\$	2,500
						2500	lump sum	1	s	2,500
	SRT for Crosswell Seismic Me	thod No Vo	id (Z-S	icis)		2500	lump sum	1	\$	2,500
	Crosswell data set for velocity/	reflection in	nages 1	Void (Z-Seis)	Γ	37500	lump sum	1	S	37,500
	Crosswell data set for velocity/	reflection in	ruges t	No Void (Z-Scis)		37500	lump sum	1	S	37,500
	Generate 3-D crosswell data ga	athers and a	nalyze	(skimmed void) (Z-Seis)		27500	lump sum	- 1	\$	27,500
	External Consulting (Co	ording)				250.00	hours	50	\$	12,500
	Cording Assistant - PC	2			Π	100,00	hours	200	\$	20,000
	Cording Assistant - T	3				50.00	hours	0	S	
	External Consulting (Tu	rpening)				186.00	hours	65	s	12,090
	3DEC Software Package	е	-			40000	lump sum	1	\$	40,000
	External Consulting (Ma	arion)			\$	150	hours	52	5	7,800
	External Consulting (Ma	arion Exp	enses	.)	\$	5,500	lump sum	1	\$	5,500
	Subtotal Direct Costs						~		\$	215,715
	TOTAL - COSTS								S	261,574
101116-0016										

Note: SRT means Seismic Reflection Trace

COST BY TASK		-	Public	-	EE	Recom,	Geotech		
1			Involv.	Stı	ıdies	Alternative	Investigation		
NTH Consultants - Geotech Advisory Grou			1230/211M	2.	310	2510	2330	Tota	4
Fritz Klingler	Project Manager	\$ 58.00	0		0	0	5626	\$	5,626
Joe Alberts	Task Manager	\$ 46.50	0	i	0	0	4511	\$	4,511
Craig Johnson	Project Engineer	\$ 25.50	0		0	0	2627	\$	2,627
Steve Bryan	CADD	\$ 25.50	0		0	0	281	\$	281
Natiera Farrington	Clerical	\$ 15.00	0		0	0	600	S	600
	Subtotal Wages		0		0	0	13644		13644
Overhead 188.00%			0		0	0	25650	S	25,650
Facilities Cost of Capital 0.04%			0		0	0	5	\$	5
Profit 11.00%			0	İ	0	0	4322	\$	4,322
Subtotal - Wages + Overhead + Profit			0		0	0	43621	\$	43,621
Direct Costs				U	nit Cost	Туре	# Units		Cost
	Mileage			S	0.445	miles	300	\$ 13	
	Copies	L		s	0.250	pages	3500	\$	875
	FedEx			\$	20	units	12	S	240
	External Consulting (Core	ling)		\$	250.00	per hour	68	\$	17,000
Cording Expenses			S	6,900	lump sum	1	\$	6,900	
	External Consulting (Turpening)			S	186.00	per hour	68	S	12,648
	Turpening Expenses	L		S	6,900	lump sum	1	S	6,900
						s	44,697		
	TOTAL - COSTS							S	88,317

COST BY TASK			Public	SEE	Recom.	Geotech		
CONTACT			Involv.	Studies	Alternative	Investigation		· · · · · · · · · · · · · · · · · · ·
SOMAT			1230/211M	2310	2510	2330		Total
·	QA/QC Engineer	\$56.00	0	0	0	4200	S	4,200
1	Project Manager	\$58.00	0	0	0	4350	S	4,350
	Project Engineer	\$38.00	0	0	0	3040	S	3,040
	Project Coordinator Staff Engineer		0	0	0	0	S	-
			0	0	0	0	\$	
	Field Engineer	\$23.50	0	0	0	0	S	-
	Field Technician	\$18.00	0	0	0	0	\$	-
	Clerical	\$17.00	0	0	0	0	\$	-
• • • • • • • • • • • • • • • • • • • •	Subtotal Wages		0	0	0	11590	s	11,590
Overhead		168.00%	0	0	0	19471	\$	19,471
Profit		11.00%	0	0	0	3417	s	3,417
Subtotal - Wages +	Overhead + Profit		0	0	0	\$ 34,478	s	34,478
	Direct Costs			Unit Cost	Туре	# Units	-	Cost
	Subtotal Direct Costs							\$0
	TOTAL - COSTS							\$34,478

COST TOTALS BY TASK AND FIRM

	Public Involv.	SEE Studies	Recom. Alternative	Geotech Investigation						
FIRM	1230/211M	2310	2510	2330	Total Service \$		Directs			Totals
The Corradino Group	386,203	0	203,115	148,752	\$	738,070	S	128,402	\$	866,473
Parsons Transportation Group	217,063	0	38,660	44,256	\$	299,979	S	42,793	\$	342,773
Rick Miller			-	24,000	\$	24,000	\$	2,518	\$	26,518
Richard Woods			-	30,000	S	30,000	\$	518	S	30,518
DLA Piper Rudnick Gray Cary US LLP	141,120	0	0	0	S	141,120	\$	2,108	\$	143,228
CCRG	0	0	0	0	s		S	4,568	S	4,568
Fletcher & Sippel, LLC - Phase I	0	0	48885	0	S	48,885	\$	25,405	\$	74,290
Fletcher & Sippel, LLC - Phase II	0	0	50750	0	S	50,750	S	17,905	\$	68,655
NTH	0	0	0	89480	S	89,480	\$	260,412	S	349,892
SOMAT	0	0	0	34478	s	34,478	s	-	S	34,478
TOTALS	744386	. 0	341410	370966		1,456,763		484,628	S	1,941,391

Scope of Additional Services

The Detroit River International Crossing Study has reached a point where the preliminary list of Practical Alternatives has been established. Additional work needs to be conducted to prepare the Draft Environmental Impact Statement and conduct the Early Preliminary Engineering. That work includes the following.

- 1. Additional Geotechnical Analysis Prior to Drilling
- 2. Additional Public Involvement
 - ✓ Additional Workshops and Public Meetings
 - ✓ Portable Display
 - ✓ Governance Specialist
- 3. Engagement of Rail Specialists
- 4. Additional Coordination with Canadian Team

The scope of work in each area follows:

1. Additional Geotechnical Analyses Prior to Drilling

The purpose of the additional geotechnical analyses prior to drilling is to determine if a suitable clear zone exists at practical alternative crossing locations X-10 and X-11 that will satisfy the requirements of Michigan Department of Transportation's (MDOT's) geotechnical design policy established by the memo dated January 27, 2006, to Larry Tibbits from Brenda O'Brien and John Friend.

Once Right-of-Entry issues are resolved, MDOT will conduct a more intensive investigation at two crossing corridors (X-10 and X-11), in order to more fully investigate the deep rock profile that will ultimately support the envisioned primary and secondary foundations for a new bridge across the Detroit River. Preparatory work will begin while the Right-of-Entry issues are resolved at the fourteen sites still at issue (eleven City of Detroit properties, one site at Norfolk Southern, one site at Lafarge, and one site at PVS Chemicals). This work will consist of Forward Modeling and engaging an international panel of experts to review the geotechnical analysis as it proceeds.

Forward Modeling

Forward modeling will be performed in the areas of rock mechanics and geophysics. The modeling will consist of a geophysical element to estimate expected signal configurations for the crosswell seismic imaging, along with a rock mechanics element to analyze for future collapse potential of solution mined voids. NTH Consultants will direct and coordinate all efforts. As the first step of the forward modeling, a decision tree will be developed to examine the proposed program, various outcomes, and appropriate decisions that should be made based on these outcomes. This decision tree will be maintained, modified, and

expanded as appropriate along the course of the forward modeling and field program. This decision tree will reflect the current view of MDOT that a void of any size will not be acceptable, and will be modified should the results of the forward modeling change that view. Whatever the case may be, the geotechnical and geophysical program will be developed and carried out accordingly.

Geotechnical Issues Advisory Group

MDOT wishes to establish a panel of geophysical/geotechnical experts to formulate protocol by which field data will be analyzed by the U.S. and Canadian consulting teams, and the procedures by which the recommendation from the team will be reviewed, modified, and eventually confirmed.

The Geotechnical Issues Advisory Group will be composed of 12 members, which will be experts in the geophysics and geotechnical areas from MDOT, the Federal Highway Administration (FHWA), the Ontario Ministry of Transportation, and Transport Canada, academia and the private sector, as approved by the Partnership agencies.

The Geotechnical Issues Advisory Group will provide us with objective expert opinion, advice and direction regarding the geotechnical investigation program, which will ultimately determine the suitability of bedrock conditions for siting the proposed international bridge and approach structures. It is expected the Advisory Group will meet four times.

2. Additional Public Involvement

MDOT has decided to expand the public involvement effort from that in the original scope of work of the consultant. Additional work also required of the consultant are seventeen public workshops to conduct land-use-related planning in the focused analysis area of Delray, both with and without the proposed new bridge. This includes equipment rental, printed materials, and other meeting accommodations. Also, MDOT requests the consultant develop a movable/portable display to depict the past, present and foreseeable future of the Delray area. This includes acquiring appropriate equipment (display panels) which will become the property of MDOT.

Additionally, a part of the communications program has been the engagement of a governance specialist to address issues with United States agencies such as the Department of Homeland Security, and Canadian governmental agencies in Ottawa and Toronto. An additional eight months of these services are needed because the governance specialist work will end December 2007; the delay in the drilling program has caused the schedule to extend beyond that.

3. Engagement of Rail Specialists

The United States Department of Homeland Security, Customs and Border Protection Agency, has made it clear the railroad line crossing through the entirety of the focused analysis area is a threat to the development of the new border crossing customs plaza. To address this issue, MDOT requires the assistance of a specialist in rail line

relocation/abandonment including work with the federal Surface Transportation Board (STB). This includes research, involvement with the affected shippers/customers along the rail line, and meetings/briefings of MDOT, Federal Highway Administration and STB, including filing of appropriate materials with each of these federal agencies.

4. Additional Coordination with Our Canadian Team

The Canadians on the Border Transportation Partnership have engaged a consultant to prepare a Business Case for the proposed new crossing. It involves developing a financial model to serve as a benchmark for the Partnership to assess and evaluate various governance options, funding scenarios and other options, as they develop. MDOT needs our consultant's help to be able to develop data and coordinate these activities, which is not currently part of the existing contract.