

PRE-DEVELOPMENT AGREEMENT

for the

Mid-Currituck Bridge Project

State Project No. 6.049002T, STIP No. R-2576

Currituck and Dare Counties

April 29, 2009

between

North Carolina Turnpike Authority

and

The Currituck Development Group, LLC

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PRE-DEVELOPMENT AGREEMENT

North Carolina Turnpike Authority -- Mid-Currituck Bridge Project Pre-Development Agreement

This Pre-Development Agreement (this "Agreement") is made and entered into as of April 29, 2009 ("Agreement Date"), by the North Carolina Turnpike Authority ("NCTA"), an agency of the State of North Carolina and The Currituck Development Group, LLC, a Delaware limited liability company ("Developer").

RECITALS

A. NCTA was created by the North Carolina General Assembly by the Act to Authorize Public Toll Roads And Bridges in North Carolina and the Creation of a Turnpike Authority in North Carolina General Statute 136 89.180, et seq. (the "Enabling Laws"), to accelerate the implementation of needed transportation improvements by funding specifically identified projects with tolls.

B. NCTA is authorized by the North Carolina General Assembly under the Enabling Laws to study, plan, develop, design, establish, purchase, construct, operate and maintain certain Turnpike Projects, including the Mid-Currituck Bridge (as further described in Appendix B, the "Project").

C. Pursuant to N.C.G.S. 136-89.183(a)(17), NCTA is authorized to enter into agreements with private entities for the purpose of financing the cost of acquiring, constructing, equipping, operating or maintaining turnpike projects.

D. Pursuant to N.C.G.S. 136-89.194(c), NCTA is authorized to utilize alternative contracting methods for an individual project if NCTA determines that the alternative method is in the public interest, NCTA provides for a competitive proposal process to the extent possible, and the alternative method provides for reasonable compliance with DBE requirements.

E. On November 14, 2007, the Board authorized NCTA to seek qualifications from private sector firms for developing the Project as a public-private partnership.

F. On June 2, 2008, pursuant to the Enabling Laws, NCTA issued a Request for Qualifications ("RFQ") from firms desiring to participate in a long-term strategic partnership with NCTA with respect to the Project.

G. On September 29, 2008, NCTA issued a Request for Proposals relating to the Project to the proposers short-listed based on NCTA's evaluation of Statements of Qualifications delivered to NCTA on June 30, 2008 in response to the RFQ.

H. On November 18, 2008, NCTA received a number of proposals for the Project, including a proposal from Currituck Development Group ("CDG") who formed the special purpose entity of Developer for the purpose of entering into and carrying out the obligations of this Agreement.

I. On December 11, 2008, NCTA selected CDG's Proposal ("Proposal") for the negotiation of a pre-development agreement to develop the Project; subject to satisfaction of certain terms and conditions.

J. On January 21, 2009 the Board approved the selection of CDG as the selected proposer for negotiations of this Agreement.

K. Developer's obligations under this Agreement are guaranteed by ACS Infrastructure Development, Inc., the sole member of Developer (the "Guarantor").

L. The Concession Agreement described herein, with respect to the final design, construction, finance, operation and maintenance of the Project, is contingent on the inclusion of the Project in NCTA's choice of build alternatives, if any, in the ROD.

M. If the final EIS and ROD do not include the Project or the ROD is not issued on or before December 2010, NCTA and Developer each have the right to terminate this Agreement, as more fully described in Section 13.3.

N. On March 18, 2009, the Board approved the execution of this Agreement.

NOW, THEREFORE, in consideration of the terms, conditions, covenants and performance contained herein, including the appendices attached hereto and made a part hereof, the Parties hereto agree as follows:

1. Background

1.1 Definitions

Appendix A sets forth the meanings of capitalized terms used in this Agreement.

1.2 Public-Private Partnership

The Parties intend to pursue a highly cooperative and collaborative effort to engage Developer's innovation, private sector resources, entrepreneurial skills, risk sharing capabilities, management capabilities and technical and financial expertise, and to engage NCTA's governmental authority, planning capabilities, risk sharing capabilities, management capabilities and technical and financial expertise, to bring the Project to fruition.

1.3 Phases

1.3.1 The relationship is expected to proceed in phases.

1.3.2 This Agreement governs the first phase ("Pre-Development Phase"), and is intended to provide the framework for a long-term relationship between NCTA and Developer to analyze, identify, plan, develop, design, construct, maintain, operate and/or finance the Project. This Agreement does not establish, and shall not be construed as, a legal partnership between NCTA and Developer.

1.3.3 During the Pre-Development Phase, the Parties will work to advance certain Project elements including the environmental and permitting processes, feasibility studies, financial planning and engineering to the point needed to enter into the next phase of the Project. The Pre-Development Phase will include milestones that reflect key decision points in the development of the Project.

1.3.4 Upon completion of the Phase 1A Services and deliverables described in Appendix E, including the technical feasibility assessment, Cost Assessments, traffic and revenue studies and preliminary value for money assessment, Developer and NCTA shall make a preliminary assessment of the financial feasibility of the Project (the "Financial Feasibility Assessment"). If the Financial Feasibility Assessment results in an agreement between the Parties that the Project is likely to be financially feasible and the value for money analysis indicates that private financing provides more value than traditional public financing, and a ROD is issued that includes the Project, subject to any modification provided in Section 1.5.3.3, Developer shall commence the Services to be performed in Phase 1B.

1.3.5 If the Project is determined by NCTA, in its discretion, to be consistent with the improvement concepts in the final EIS and ROD, then NCTA intends to negotiate a new agreement with Developer ("Concession Agreement") to govern the second phase ("Concession Period"). The Concession Period will include finance, design, construction, operations and maintenance. If the Project is determined by NCTA, in its discretion, not to be consistent with the improvement concepts in the final EIS and ROD, then NCTA may terminate this Agreement without negotiating the Concession Agreement.

1.4 Agreement Documents

This Agreement consists of the entire agreement between NCTA and Developer with respect to the Project. All of the Appendices and the Proposal are incorporated into this Agreement by this reference.

1.5 Environmental and Land Use Process

1.5.1 NCTA's Rights and Responsibilities

1.5.1.1 The identification of a preferred alternative is exclusively within the control and decision-making authority of NCTA, in conjunction with FHWA as the lead federal agency for NEPA. Nothing in this Agreement shall in any manner limit the full discretion that NCTA will exercise in conducting its environmental review and

preparing the environmental documents for the Project, including the unfettered discretion of NCTA and FHWA as the lead federal agency for NEPA to choose a no-build alternative for the Project.

1.5.1.2 Until the environmental documentation is completed and a Record of Decision (ROD) is entered for the Project, all references to a Project are understood to mean a potential Project.

1.5.2 Developer's Rights and Responsibilities

As part of the Services, Developer may provide engineering, technical and other support services to NCTA and to any consultants retained by NCTA to prepare the environmental review documents and/or other services. Developer is expressly prohibited from performing services that would violate conflict of interest rules under NEPA regarding the preparation, review, revision and decisions on scope and content of draft and final environmental review documents. To the extent NCTA and Developer mutually determine and agree that the services to be performed by Developer would violate the conflict of interest rules under NEPA, Developer shall have no obligation to perform such services.

1.5.3 Selection of No-Build or Substantially Different Alternative

1.5.3.1 Developer understands and acknowledges the possibility that the NEPA process may result in a no-build alternative, or a project description or alignment that differs from the description and alignment designated in Appendix B. Except as set forth in Section 1.5.3.3 below, nothing contained in this Agreement shall commit NCTA or Developer to any Project alternative.

1.5.3.2 If a no-build alternative, or an alternative that does not include (a) the Project, or (b) the alternative described in Section 1.5.3.3 below, is selected for development, then this Agreement will terminate. See Section 13.3.

1.5.3.3 The alternatives being considered in the NEPA studies include those referred to as "ER2", "MCB2" and "MCB4". The Project, as described in

Appendix B, is "MCB4." If at any time, MCB2 becomes the proposed alternative or the selected alternative, Developer and NCTA will negotiate in good faith to mutually agree on appropriate changes to the definition of the Project set forth in Appendix B and the scopes of work set forth in Appendix E, including pricing for deliverables and Progress Milestone deadlines, in accordance with Section 5.3, below.

1.5.4 Key Personnel

Developer acknowledges and agrees that NCTA selected Developer, in part, because of the special qualifications of Developer's Key Personnel. In particular, NCTA, through this Agreement is engaging the expertise, experience, judgment and personal attention of those persons listed in Appendix F (collectively, the "Key Personnel" or individually, a "Key Person"). Each Key Person shall be in place for sufficient duration to accomplish the task or tasks required under this Agreement. Each Key Person shall not delegate performance of any management powers and/or other responsibilities he/she is required to provide under this Agreement to another of Developer's personnel without first obtaining the prior written consent of NCTA. Further, Developer shall not re-assign or transfer any Key Person to other duties or positions such that the Key Person is no longer available to provide NCTA with his/her expertise, experience, judgment and personal attention under this Agreement, without first obtaining NCTA's prior written consent to such re-assignment or transfer. Developer shall promptly notify NCTA in writing of any resignation, termination for cause, disability or death of any Key Person and the proposed changes to such Key Person. NCTA shall have the right to interview, review the qualifications of and accept or not accept the proposed replacement(s) for the Key Person, such acceptance not to be unreasonably withheld, delayed or denied. Any accepted substitute or replacement for a Key Person shall be deemed to be a Key Person under this Agreement. NCTA shall have the right to access liquidated damages in the amount of \$100,000 with respect to any change to the Project Manager, Design Manager, Construction Manager or Regulatory Manager made by Developer without prior NCTA approval; provided, however, if Developer notifies NCTA in writing of any such resignation, disability or death of said Project Manager, Design Manager, Construction Manager or Regulatory

Manager, liquidated damages shall not apply unless NCTA has disapproved the requested replacement within 15 calendar days of the written notice and Developer has not promptly replaced such person with a replacement reasonably acceptable to NCTA. Failure of Developer to obtain prior NCTA approval (or deemed approval in accordance with the preceding sentence) in a change to a Key Person is a Developer Default under Section 12.1, subject to the applicable cure period.

Developer further acknowledges and agrees that these damages would be difficult and impracticable to measure and prove, are incapable of accurate measurement because of, among other things, the unique nature and qualifications of the Key Personnel for the Project, and the unavailability of a substitute for those Key Personnel. The amount of liquidated damages stated herein represent good faith estimates and evaluations as to the actual potential damages that NCTA would incur as a result of Developer's failure to satisfy the obligations under this Section 1.5.4, and do not constitute a penalty. Developer agrees to such liquidated damages in order to fix and limit the damages owed by Developer with respect to such Developer Default and to avoid later disputes over what amount of damages are properly chargeable to Developer.

2. Closing Documents

Developer shall deliver the following documents (the "Closing Documents") to NCTA and NCTA will accept such documents as a condition precedent to the effectiveness of this Agreement:

- Evidence of authorization to execute this Agreement and the Guaranty, in the form of certified resolutions of the governing bodies of Developer and its Equity Member expressly stating Developer's authorization to execute this Agreement; and a certified resolution of the governing body of Guarantor expressly stating Guarantor's authorization to execute the guaranty;
- The insurance policies, endorsements, and/or certificates required under Section 7;

- Evidence that Developer, its Equity Member, and other identified Subcontractors hold all licenses required as of the Agreement Date necessary to perform the Services;
- A certificate of good standing from the Secretary of State of Delaware and a certificate of authority to transact business from the North Carolina Secretary of State, each dated no earlier than 30 calendar days before the Agreement Date for Developer and its Equity Member;
- A favorable written opinion from counsel for Developer and Guarantor, which counsel shall be approved by NCTA (which may be in-house or outside counsel, provided that the enforceability opinion shall be provided by an attorney licensed in the State), in substantially the form attached hereto as Appendix H (Form of Opinion of Counsel);
- A favorable executed form of Appendix J (Execution of Bid, Noncollusion Affidavit and Debarment Certification); and
- An executed form of guaranty in substantially the form attached hereto as Appendix L (Form of Guaranty).

3. Performance of Services -- Developer Obligations and Rights

3.1 Scope of Services

Developer shall perform the services set forth in Appendix E (the "Services") and summarized in this Section 3 by the Progress Milestone deadlines set forth on Appendix E (as such deadlines may be extended in accordance with the terms hereof). To the extent there is an inconsistency between this Section 3 and the provisions in Appendix E, the provisions in Appendix E shall apply and be enforceable under this Agreement. In no event shall the provisions of this Section 3 be interpreted to create new obligations or expand the scope of Services described in Appendix E. Under Appendix E, the Services are divided between Phase 1A and Phase 1B. For the avoidance of doubt, notwithstanding the completion date of all Phase 1A Services, Developer shall have no obligation to commence Phase 1B Services prior to the issuance of the ROD and a determination by both Parties after the Financial Feasibility

Assessment that the Project is likely to be financially feasible. Notwithstanding the foregoing, the amounts and descriptions set forth in Appendices D and E (and this Section 3) with respect to Phase 1B Progress Milestone Compensation and Phase 1B Services (and maximum termination compensation pursuant to Section 13.1.5) are only intended to be conceptual and will be negotiated and finalized by the Parties prior to the commencement of Phase 1B.

3.2 Coordination

Developer will be required to coordinate with certain third-parties in performing the Services, including, without limitation, coordination with mapping and field authorities, FHWA, NCDOT, Environmental Agencies, EEP and universities.

3.3 Financing Plan

NCTA and Developer will work together to determine the Project's financial feasibility and develop a finance plan to be approved by NCTA for the Project ("Financing Plan") with a value for money analysis, as more particularly described in Appendix E. The Financing Plan shall also provide for a reasonable rate of return on private financing. There shall be no requirement of NCTA or other State financial participation in the Project, except as otherwise specifically agreed to by NCTA; provided, however, that in determining financial feasibility of the Project, such Financing Plan may analyze the need for NCTA or other State financial participation in the Project.

Pursuant to Appendix E, Developer shall prepare both preliminary and final value for money assessments during Phase 1A, which define the initial base case of the Project, the legal and institutional framework necessary for the development of the Project, and additional elements needed to ensure the feasibility of the Project, including optimization of the Project using financial tools and NCTA's payment structure.

3.4 Costing Plan

During the Pre-Development Phase, Developer will prepare a costing plan for the Project ("Costing Plan"), which will include sufficient detail to develop the Financing

Plan. The Costing Plan will include drawings in sufficient detail so that construction quantities, right of way requirements, utility impacts and constructability issues necessary for Developer to establish a final firm fixed price to be set forth in the Concession Agreement (during the negotiations of the final Concession Agreement) that can be developed and verified independently by NCTA. The Costing Plan and other cost estimating materials will be utilized for the Open Book Basis negotiations for Developer's compensation and scope of work during the Concession Period. As part of these negotiations, Developer shall be prepared to share all information related to quantity development, unit price estimates, estimate assumptions, right of way estimates, utility impact/relocation estimates, Construction Methodologies, lay down areas, location of key construction materials (asphalt plants, borrow pits, concrete batch plants, casting yards, etc.), pricing methodologies, logistical issues, applicable risks, contingencies, mark-ups, profit margins, mobilization costs, maintenance of traffic costs, escalations and any other factor utilized to develop or support the firm fixed price. If Developer is unable to obtain mark-ups and profit margins from its Subcontractors, then Developer shall provide a certification to NCTA (a) that Developer is paying the stated amount to the Subcontractor without discount or set-off, and (b) that Developer is not receiving a discount from the Subcontractor for work on other projects. In addition, Developer shall demonstrate that the Subcontractor's prices are at market by providing any of the following: (i) various bids that Developer received from potential subcontractors bidding for such work, (ii) a comparison of the price charged for such work to similar work performed for a State agency under prior or existing contracts, or (iii) a certificate from such Subcontractor that the price being charged is commercial and not in excess of the prices such Subcontractor is charging to its other customers.

During Phase 1A, Developer will provide a Cost Assessment of quantities, a Cost Assessment construction schedule, and Cost Assessment detail sheets. Developer shall provide the Costing Plan during Phase 1B.

NCTA acknowledges and agrees that the Costing Plan contains confidential and proprietary information of Developer and its Subcontractors. Accordingly, such

confidential information will be maintained by NCTA in strict confidence and only disclosed as required by Law.

3.5 Design

3.5.1 Design Services - General

Developer shall prepare a design package, for NCTA approval, that will include sufficient detail to develop the Costing Plan. The design package shall be in accordance with all applicable guidelines and regulations, and shall include the key elements outlined in Appendix E.

Developer shall establish the design providing opportunities to use local materials. The design shall also include a commitment to recycling, which goes beyond the use of only the on-site materials.

The initial design Services will include the following key elements, as more particularly described in Appendix E:

- Review and revision of existing design criteria for each major feature of the Project and review of the alternatives;
- Environmental analysis of the Project's right of way limits;
- Development of conceptual design plans for the alternatives;
- Performance of an access management study and traffic analysis;
- Analysis and preparation of coastal engineering design criteria;
- Development of bridge design for the selected Project alternative; and
- Research of local and regional recycling and reuse markets for use in the Project.

During Phase 1A, Developer will provide numerous deliverables, including without limitation, an alternative review memo, design criteria and conceptual plans, as

well as, access management reports, traffic analysis reports, a coastal engineering and sea level rise study, and various zero-waste matrices and technical memoranda. During Phase 1B, Developer will provide a set of deliverables, including without limitation, preliminary roadway plans, a conceptual ITS and communications plan, an aesthetic/green design plan, conceptual lighting design, landscaping and signing plans, a preliminary design noise analysis, a preliminary toll facility design plan, preliminary bridge plans, and a design exception checklist.

3.5.2 Hydrologic/Hydraulic Design and Services

Developer shall verify existing drainage structures and existing land use to define surface drainage flow patterns and develop a general Project drainage scheme. In addition, Developer shall attend TEAC meetings to discuss bridging options and coordinate with various agencies and staff during the development of the preliminary hydraulic design.

3.5.3 Phase 1A and 1B Design Services

During Phase 1A, Developer shall provide conceptual hydraulic design plans, a conceptual erosion and sediment control plan, and a conceptual stormwater design. During Phase 1B, Developer shall provide a preliminary bridge survey report, a preliminary drainage design, and a preliminary erosion and sediment control plan.

3.5.4 Project Feasibility Report

Developer shall evaluate the feasibility of the Project based on environmental, design, and construction factors. During Phase 1A, Developer shall provide a technical assessment of the Project based on data from the Project. During Phase 1B, Developer shall first provide a draft Project feasibility report to NCTA including the three above-listed factors, and later shall produce an updated and final Project feasibility report for NCTA approval.

3.5.5 General Data Collection

Developer shall provide supplemental survey field data for the Project as mutually determined to benefit the development of the Project, including, without limitation, establishing GPS points, contacting property owners prior to surveying, performing a baseline traverse to be used for pavement locations and miscellaneous staking. During Phase 1A, Developer shall provide Project control data, DGN and section data, and geotechnical location data.

3.6 Utilities

Developer shall prepare a utility relocation plan, for NCTA approval, that will include sufficient detail to develop the Costing Plan. In preparing the utility relocation plan, Developer shall be responsible for identifying all necessary utility relocations, coordinating with utility owners on the utility relocations, and determining the cost responsibility for the utility relocations.

During Phase 1A, Developer shall provide a preliminary utility identification report, preliminary utility by others plans, and conceptual water, sewer routing plans, and a utility impact and cost estimate for the recommended alternative. During Phase 1B, Developer will update the preliminary utility identification report for the preferred alternative and provide a utility impact and cost estimate for the preferred alternative.

3.7 Right of Way

As more particularly described in Appendix E, Developer shall prepare right of way cost estimates, for NCTA approval, that will include sufficient detail to develop the Costing Plan. Developer shall provide all right of way services necessary to ensure accurate cost estimates and quantified impacts to property owners. In doing so, Developer shall determine all properties for right of way acquisition and/or easements, right of way cost estimates for these properties, relocation assessment and relocation costs. Developer will participate in public hearings and workshops to address participants' concerns and questions related to right of way and relocation issues.

During Phase 1A, Developer will provide right of way cost estimates and EIS relocation reports for the draft EIS, as well as, right of way cost estimates and updated

EIS relocation reports for the recommended alternative and a preliminary acquisition schedule. During Phase 1B, Developer will provide right of way cost estimates and updated EIS relocation reports for the preferred alternative and an updated preliminary acquisition schedule.

3.8 Geotechnical

Developer shall perform subsurface investigations, laboratory testing and implement a pile load testing program to accurately substantiate the design and Costing Plan. These Services shall include, without limitation, geophysical profiling, initial subsurface exploration and the interpretation of the profiling results, as well as, pre-design foundation analysis and load testing for pile types along the selected bridge alignment. Developer shall perform subsurface investigations and laboratory testing in accordance with the *NCDOT Geotechnical Unit Guidelines and Procedures Manual*. Developer shall be responsible for obtaining all permits necessary for such subsurface investigation and pile load testing.

During Phase 1A, Developer shall provide a geophysical profiling report, initial subsurface exploration results, and a preliminary geotechnical report. During Phase 1B, Developer shall provide supplemental subsurface exploration results, a pre-design foundation analysis report, pile load testing results, and a preliminary Currituck Sound foundation report.

3.9 NEPA Assistance

Developer shall support NCTA in conducting analyses, as requested, to assist with addressing issues that arise during the environmental study process, including, but not limited to, environmental and design analysis; engineering, traffic, or other technical studies; financial feasibility and public involvement services, as more particularly set forth in Appendix E. These Services will include, without limitation: (i) independent review of draft versions of the environmental documents, along with supporting technical reports prepared by NCTA and its consultants; (ii) review of Developer comments to these documents with NCTA; (iii) preparation of alternative review memo;

and (iv) environmental analysis of the Project right of way limits. This work may be directly related to the Project, as well as other alternatives identified in the Draft EIS. NCTA and FHWA will retain control and responsibility for the NEPA process. Developer will assist NCTA in meeting its expedited schedule for the environmental study and facilitate a seamless transition into Project permitting and design. Developer will also review the permitting issues and commitments in the NEPA document to the extent requested by NCTA.

3.10 PMP

Developer shall complete the Project Management Plan (PMP) as required by the Federal Highway Administration (FHWA) and as required for obtaining a TIFIA loan from USDOT. This plan must meet the requirements of the Major Projects Provisions of Title 23, Section 106(h) of the United States Code. Developer shall provide the PMP in Phase 1B, as further described in Appendix E.

3.11 Traffic and Revenue Studies

Developer shall procure the services of an experienced traffic and revenue consultant who shall produce a study sufficient to support the financing of the Project. That study, at a minimum, should include a 30-year forecast of traffic by segment, a projected schedule of tolls, the revenues associated with the estimated tolls and levels of traffic, a projection of operating costs and a schedule of annual maintenance and capital replacement expenses. Such study shall be comparable in quality and in form and substance to studies that have been acceptable to the USDOT in connection with their approval of prior TIFIA loans and to bond rating agencies. Developer's Services shall include, without limitation, a scoping and data collection phase, directed at land use assessment, users' "willingness to pay" surveys, as well as, traffic count and journey time surveys, forecasting, and potential tolling options. The Services shall also include building a traffic model for the immediate study area.

As more particularly described in Appendix E, Developer shall initially provide technical memoranda on scoping and data collection, real estate market assessment, willingness to pay surveys, peak and shoulder season surveys, and tolling options, as well as, a

preliminary traffic and revenue forecast. Developer will later provide a final forecast report and a final traffic and revenue report. It is understood that Developer's traffic and revenue subconsultant producing traffic and revenue forecasts for the Project will include appropriate disclaimers in accordance with industry best practices in the United States with respect to its reliance on third party information. The Parties understand and agree that, consistent with such disclaimers, neither Developer nor its subconsultants will specifically guarantee or warrant any estimate or projections contained in the subconsultants report.

3.12 Toll Strategy and Marketing

Developer shall work with NCTA in developing a tolling strategy and marketing plan for the Project, as more particularly described in Appendix E. Marketing plans and tolls shall be established by Developer for different market segments in order to encourage various categories of potential customers to utilize the Project to its fullest potential.

The toll strategy shall aim to maximize potential revenues while maximizing the utilization of the Project during peak and off-peak periods. A variety of tolling regimes shall be considered that encourages local residents to utilize the Project year round and make it the facility of choice by visitors. Toll rates may depend on such factors as peak hours, and peak and off peak seasons which can result in the application of variable rates and discounts for frequent users.

A marketing plan shall address seasonal and daily demand fluctuations, varied market segments, and an approach for marketing the Project to local citizens and visitors. When developing a marketing plan for visitors, the plan shall take into consideration 1) origin and destination of visitors; 2) what form of transportation they will take to get to their destination; 3) how long visitors will stay; and 4) what is the most convenient payment plan. A similar plan shall be developed when marketing to local residents, but with emphasis on travel time savings and payment convenience.

During Phase 1A, Developer shall provide a concept of operations and a preliminary OPEX/CAPEX model. During Phase 1B, Developer shall provide a

preliminary system design, a definitive OPEX/CAPEX model, a service level agreement, and a plan for interfacing with NCTA's toll operations with respect to toll collection, customer accounts, violations processing and traffic management. Developer shall also provide a tolling services agreement during Phase 1B if directed by NCTA.

3.13 Operations and Maintenance

As more particularly described in Appendix E, Developer shall prepare an operations and maintenance plan, for NCTA approval, that will include sufficient detail to develop the Financing Plan. Developer shall research materials and develop construction techniques that will result in the long term reduction in cost of maintenance. Developer will work concurrently with its operations and maintenance team members to ensure that both the durability and useful life (consistent with best industry practice) are key factors in the design of all structures and roadways. Various materials will be researched to increase the quality and durability of the entire Project. At the end of the Pre-Development Phase, NCTA expects to have a long term operations and maintenance plan including the following key elements:

- Security and incident management plan
- Estimate of annual operation and maintenance costs
- Schedule of major life cycle rehabilitation and reserve maintenance fund requirements

During Phase 1A, Developer shall provide a preliminary O&M work document, a description of overall O&M requirements for the Project, preliminary OPEX and CAPEX budgets, and a preliminary O&M Plan. During Phase 1B, Developer shall provide a final O&M Plan and final OPEX and CAPEX budgets.

3.14 Regulatory Approvals

As more particularly described in Appendix E, Developer shall be responsible for developing a plan to effectively obtain all Regulatory Approvals necessary to implement the Project during the Concession Period. Developer will work with NCTA

during the Pre-Development Phase to explore and determine opportunities which may expedite the permitting process once the Concession Agreement is executed. Throughout the Pre-Development Phase, Developer will work closely with NCTA in identifying permit requirements associated with the preferred alternative as the NEPA process progresses.

During Phase 1A, Developer shall provide a bridge clearance briefing letter, a permit concept report, approved permits for subsurface exploration, and minutes from each NCTA meeting and each Environmental Agency coordination meeting. During Phase 1B, Developer shall provide draft Regulatory Approval applications to NCTA, approved permits for pile load testing and/or subsurface exploration, and minutes from each NCTA meeting and each Environmental Agency coordination meeting.

3.15 Environmental Mitigation

As more particularly described in Appendix E, Developer shall work with NCTA during the Pre-Development Phase to investigate onsite and innovative mitigation opportunities and develop preliminary mitigation and conceptual monitoring plans, as needed, that will include sufficient detail to develop the Costing Plan. The scope of Services include, without limitation, the review of existing mapping, conducting field reviews of the Project area, and the assessment of potential mitigation for the Maple Swamp area, as well as coordination with Environmental Agencies, EEP and ECU.

During Phase 1A, Developer shall provide an on-site mitigation field review technical memorandum, minutes of each NCTA meeting and minutes of each Environmental Agency coordination meeting, a technical memorandum regarding Maple Swamp mitigation, an EEP coordination briefing letter, and a conceptual mitigation plan and cost estimate. During Phase 1B, Developer shall provide a preliminary mitigation plan, conceptual monitoring plan, if needed, and cost estimate, as well as, minutes of each NCTA meeting and minutes of each Environmental Agency coordination meeting.

3.16 Construction Plan

Developer shall work with NCTA to complete a phased construction plan that will include sufficient detail to develop the Costing Plan. Developer shall evaluate different construction methods for the Project, including whether to build from above or below the ground, and shall study the development of unique solutions for the Project's foundation, as more particularly described in Appendix E.

During Phase 1A, Developer shall provide a report identifying Construction Methodologies for the Project, in conjunction with the Cost Assessment.

3.17 Community Involvement

Developer shall participate in community involvement activities as requested by NCTA. These activities will include participation in local public workshops, communication with Project stakeholders in concert with NCTA staff, and developing other community outreach efforts to ensure that the Project moves forward with a high level of community involvement. During Phase 1A, Developer shall participate in public involvement activities and community outreach activities, as set forth in Appendix E, and provide written reports and technical documents as necessary to support the public involvement activities for the Project. During Phase 1B, Developer shall facilitate and participate in public workshops for the Project and prepare marketing outreach documents, presentations and handouts.

4. NCTA Obligations and Rights

4.1 Environmental and Permitting Process

NCTA will prepare the NEPA document for the Project. The preparation of applications for Regulatory Approvals for the Project will be the responsibility of Developer, assisted as required by NCTA.

4.2 Oversight Services

During the Pre-Development Phase, Developer will work with NCTA as a team member in developing the Project. In doing so, Developer will keep NCTA fully

engaged and informed with respect to all Developer activities and efforts on the Project. Conversely, NCTA will keep Developer engaged and informed with respect to NCTA's efforts on the Project.

NCTA, NCDOT, FHWA, the Office of the State Auditor and the Secretary of State reserve the right to review, inspect, and/or audit all activities performed by, or on behalf of, Developer under this Agreement. Any such review, inspection or audit shall be done during normal business hours.

4.3 Community Outreach/Public Information Program

NCTA will lead community involvement activities and provide direction to Developer in all aspects of community outreach efforts to ensure that the Project moves forward with a high level of community involvement.

4.4 Right of Entry

NCTA will not own the Project right of way during the Pre-Development Phase. However, NCTA will use reasonable efforts to cause Developer, as NCTA's agent, to have access to the Project right of way during the Pre-Development Phase to gather information concerning Project feasibility, route desirability, utility locations, site conditions and characteristics of the Project. The right of entry provided to Developer shall include the right to inspect, measure, survey, analyze, study, test and take borings and samples. Developer's rights granted in this Section are limited by and conditioned on, applicable provisions of State law, as set forth in N.C.G.S. 136-89.194(d), and certain right of entry letters delivered by NCTA to Developer to facilitate Developer's entry upon certain portions of the Project right of way.

4.5 Right of Way Acquisition

NCTA will retain the right and authority, as necessary, to condemn property for Project development, in accordance with State law.

4.6 Exclusive Right

During the term of this Agreement, NCTA will not execute a concession agreement or other PPP Agreement in respect to the Project with another firm or firms that would be inconsistent with Developer pursuing the Concession Period in accordance with the terms of this Agreement; provided, however, that nothing in this Section 4.6 will in any way limit NCTA's right to terminate this Agreement in accordance with the terms hereof and pursue the development of the Project under a concession agreement or any other arrangement with other firms after this Agreement terminates, subject to the termination provisions set forth herein.

5. Compensation and Changes in Scope

5.1 Payment of Progress Milestone Compensation

5.1.1 Developer's compensation for Services, Project Work Product and/or achievement of the Progress Milestones under this Agreement shall be the lump sum prices for each Progress Milestone set forth in Appendix D. Developer acknowledges and agrees that payment under this Section and Appendix D may not fully compensate Developer for all of its costs and therefore may require Developer to carry or absorb some of its costs to perform the Services under this Agreement. Developer shall not be entitled to any increase in the compensation for the Services or Project Work Product or extension of any deadline, except as otherwise expressly set forth herein.

5.1.2 The payment set forth in Appendix D represent NCTA's compensation obligations to Developer for all Services and other Developer responsibilities performed under this Agreement, including (a) all labor, materials, supplies, expenses, design, equipment, insurance premiums, overhead, profit, subcontracts, intellectual property rights and incidentals necessary to complete the Services and other obligations, (b) the cost of applying for and assisting NCTA with obtaining all applicable Regulatory Approvals required for performance of the Services and other obligations (excluding only such services and obligations which this Agreement specify will be undertaken by other Persons) and compliance with such Regulatory Approvals and Law and (c) payment of any duties, taxes and other fees, costs and/or royalties imposed with respect to the Services or other obligations. Developer releases NCTA

from and waives any claims against NCTA for any additional payment arising out of the Services for any reason, including extensions of time for completion, changes of conditions, unforeseen circumstances, governmental action and Force Majeure, unless such changes of conditions, unforeseen circumstances, governmental action or Force Majeure require additional services to be performed that are outside of the scope of Services pursuant to Section 5.3 and NCTA issues a Change Order in accordance with Section 5.3.2.

5.2 Invoicing and Payment

5.2.1 Prior to or concurrently with Developer's first written invoice to NCTA, Developer will provide NCTA a completed US Department of the Treasury Internal Revenue Service Form W-9 (Request for Taxpayer Identification Number and Certification). Developer shall submit a written invoice to NCTA in the form attached as Appendix K, for each Progress Milestone Compensation event set forth in Appendix D within ten calendar days from receiving final acceptance by NCTA for such Progress Milestone. Each invoice will reconcile previous invoices submitted, current amount invoiced and Project to date billings. Further, each invoice will be sequentially numbered to coincide with the Progress Milestone and be approved by ACS Project Manager.

5.2.2 Payment of each invoice will be processed and paid by NCTA by check to Developer within 30 calendar days of receipt, provided that the invoice is complete, accurate and in conformance with this Section 5.2. If Developer elects for payment via an Automated Clearing House (ACH) agreement, an ACH application will be forwarded to Developer by NCTA. It is Developer's responsibility to provide all the necessary details for prompt processing of the ACH application. Failure of Developer to provide accurate information will not result in a breach or default by NCTA for untimely payment.

5.2.3 For each such invoice, NCTA will make the Progress Milestone Compensation payment (per the attached schedule in Appendix D, as may be amended by a Change Order) due to Developer after NCTA's final acceptance under

Section 6.1 of the applicable Progress Milestone. NCTA will verify that Developer has met all of the requirements of the Services for the applicable Progress Milestone payment, which is contingent upon receipt of all applicable Project Work Product (i.e. deliverables and/or progress reports) and all materials purchased to carry out this Agreement. Acceptance of payment for a Progress Milestone by Developer shall constitute a release of all future claims for payment which Developer may have against NCTA for such Progress Milestone unless such claims are specifically reserved in writing and transmitted to NCTA by Developer at the time the invoice is sent for payment and prior to acceptance by NCTA for payment. Said payment shall not, however, be a bar to any claims that NCTA may have against Developer or to any remedies NCTA may pursue with respect to such claims.

5.2.4 Payment for any Project Work Product or Services performed pursuant to this Agreement in any fiscal year, other than the current fiscal year, is subject to appropriations by the General Assembly and approval for the NCTA annual plan of work. Developer shall have the right to suspend Services in the event funds are unavailable for payment of the Services for a period exceeding 90 consecutive calendar days, which suspension shall be deemed an NCTA directed suspension and subject to Section 6.4.1. NCTA reserves the right to terminate or suspend any Services under this Agreement, if funds will not be available for payment of the Services to be performed. In the event of suspension or termination under this Section 5.2.4, NCTA will give Developer written notice of such suspension or termination at least 60 calendar days before completion of scheduled Services for which funds are available. In the event of termination, Developer will be paid for the Services already performed in accordance with the Agreement.

5.2.5 The maximum amount payable by NCTA with respect to Progress Milestone Compensation for the Services performed during each quarter of Phase 1A of the Project shall not exceed, on a cumulative basis, the following: (a) 26% of the entire lump sum Progress Milestone Compensation for Phase 1A Services for the period of April 1, 2009 through June 30, 2009, which shall include payment for Services performed in March 2009; (b) 57% of the entire lump sum Progress Milestone

Compensation for Phase 1A Services for the period of July 1, 2009 through September 30, 2009; (c) 79% of the entire lump sum Progress Milestone Compensation for Phase 1A Services for the period of October 1, 2009 through December 31, 2009; and (d) 100% of the entire lump sum Progress Milestone Compensation for Phase 1A Services for the period of January 1, 2010 through March 31, 2010. For the avoidance of doubt, the maximum amount in subsection (b) above includes the 26% maximum amount from subsection (a), and the 79% maximum amount in subsection (c) includes the 26% and 57% maximum amounts from subsections (a) and (b), respectively. Any increase in the maximum available amounts for any quarter of the maximum payment curve for Phase 1A Services will require the prior written approval of NCTA and is subject to review and approval of the Board; provided, however, that any excess and unpaid available funds from a previous quarter may be carried over to the next quarter, without such prior written approval.

5.3 Changes in Scope

5.3.1 NCTA may, at any time and from time to time, authorize and/or require changes in the Services and Project Work Product. Developer will be advised of any such changes by written notification from NCTA describing the change. All additions, deductions or changes to the work so directed shall be executed under the conditions of this Agreement.

5.3.2 If a change in Services and/or Project Work Product directed by NCTA results in an increase or decrease in the cost of or time required for the performance of the Services, the applicable compensation shall be modified, as appropriate, in accordance with the terms of this Agreement. In addition, if NCTA requests that any work under Phase 1B or delivery of Project Work Product be performed or delivered during Phase 1A, NCTA shall compensate Developer in a mutually agreeable amount for the performance of such Services and/or delivery of such Project Work Product, but not in excess of the costs set forth in Exhibit E. Promptly after a change notification is given to Developer by NCTA, Developer and NCTA will attempt to negotiate a mutually agreeable change in compensation and/or time of performance and amend the

Agreement accordingly. If Developer and NCTA are unable to agree on the compensation amount for such change or the additional time required for such change, NCTA may, in its discretion, hire a third party to perform such changes, self-perform such changes, or issue a Change Order to Developer for performance of the changes. In the event a Change Order is issued without the mutual agreement of the Parties; Developer shall perform such changes outlined in the Change Order and any disputed compensation or time extension with respect to such Change Order shall be resolved through the Dispute Resolution process. Developer shall not be entitled to compensation for Services performed pursuant to such changes, prior to the execution of a Change Order relating to the changes required by NCTA.

5.3.3 Except as otherwise expressly permitted under this Agreement, Developer shall not suspend performance of this Agreement during the negotiation of any change order, except as may be directed by NCTA pursuant to Section 6.4. Developer shall perform all changes in accordance with all standards and terms of this Agreement.

6. Schedule of Performance

6.1 Final Acceptance of Progress Milestones

Developer shall achieve each Progress Milestone by the applicable deadline set forth on Appendix E, unless otherwise extended under Section 6.3. When Developer believes it has completed and achieved all of the requirements of a Progress Milestone, Developer shall submit a written request for final acceptance to NCTA for the applicable Progress Milestone. Developer's written request shall include a statement identifying the Progress Milestone that has been completed and shall also include all relevant Project Work Product and documentation necessary for verification of such Progress Milestone. NCTA will respond to Developer within five Business Days of receipt of any such request and either provide its final acceptance or provide guidance on what is needed to achieve the Progress Milestone. NCTA will expeditiously cooperate with Developer to resolve any outstanding issues with respect to achieving final acceptance of a Progress Milestone. Achievement of a Progress Milestone shall

be deemed to be the date that NCTA issues its final acceptance of such Progress Milestone. Any unresolved disputes regarding final acceptance after the Parties have participated in good faith resolution efforts for a period of at least 14 calendar days shall be resolved through the Dispute Resolution process.

6.2 Failure to Achieve Progress Milestones

If Developer fails to achieve any Progress Milestone by its deadline set forth in Appendix E, this Agreement may be terminated by NCTA, as set forth in Section 13.2, subject to Developer's opportunity to cure set forth in Section 12.2.

6.3 Extension of Progress Milestones

6.3.1 If Developer is rendered wholly or partly unable to meet any Progress Milestone by the deadline for such Progress Milestone set forth in Appendix E because of an event of Force Majeure, NCTA Delay or an unreasonable failure or delay of a local governmental entity to issue a relevant permit, Developer's time to meet such Progress Milestone date shall be extended to the extent such delay impacted its ability to maintain its schedule by the actual number of calendar days Developer was delayed to meet any such Progress Milestone date as a direct and proximate result of such event of Force Majeure, NCTA Delay or unreasonable failure or delay of a local governmental entity to issue such relevant permit. To the extent Progress Milestone Deadlines are extended under this Section 6.3.1, the September 1, 2011 deadline set forth in Section 10.1 will (i) in the case of a NCTA Delay, be automatically extended by the number of days equal to the greatest number of calendar days by which any Progress Milestone affected by such NCTA Delay was extended pursuant to the previous sentence or (ii) in the case of an event of Force Majeure or an unreasonable failure or delay of a local governmental entity to issue a relevant permit, be extended by mutual agreement of the Parties, as appropriate.

6.3.2 As a condition precedent to Developer's entitlement to an appropriate extension of time to the Progress Milestones, Developer shall deliver to NCTA written notice, describing in reasonable detail the event of delay, its cause, when and how

Developer obtained knowledge of the event and of the actual or anticipated delay caused thereby and the date the event commenced or occurred, not later than 15 calendar days after the date Developer obtains both (a) knowledge or reasonable cause to believe that such event has commenced or occurred and (b) knowledge or reasonable cause to believe that the event either has resulted in or may result in delay in achieving a Progress Milestone. Developer understands that it shall be forever barred from receiving a time extension under this Section 6.3 if it fails to give notice of any act, or failure to act, by NCTA or any of its representatives or the happening of any event, thing or occurrence pursuant to a proper notice, and thereafter complies with the remaining requirements of this Section 6.3.

6.3.3 Developer shall use commercially reasonable efforts to remedy any inability to perform and minimize the impact of any delay.

6.4 Suspension of Services

6.4.1 NCTA may order Developer in writing to suspend, delay, or interrupt all or any part of the Services, as NCTA may determine to be appropriate for the convenience of NCTA. Developer shall have the right to demobilize (i) after 75 calendar days of such continuous suspension of the applicable Services or other NCTA Delay or (ii) there occurs a cumulative period of suspension of Services or other NCTA Delay of more than 75 calendar days in a consecutive 180-day period. In the event a NCTA directed suspension or NCTA Delay exceeds a period of 180 consecutive calendar days or a cumulative period of suspension of 180 days within a 365-day period, Developer shall have the right to deem and declare such suspension a Termination for Convenience by NCTA under Section 13.1 by delivering to NCTA a written notice within 30 calendar days after such 180-day suspension or NCTA Delay specifying the effective date of the Termination for Convenience, subject to Section 6.4.3.

6.4.1.1 For any suspension for convenience in excess of 24 hours or for a series of suspensions for convenience where the aggregate suspension period exceeds 24 hours within a consecutive seven-day period, Developer shall have the right

to (a) an appropriate extension of time in those Project Milestones that were directly and adversely impacted by such suspension, if any, and (b) to negotiate with NCTA an appropriate increase in compensation for those Project Milestones that were directly and adversely impacted by such suspension Project Milestones, if any, not subject to extension will not be affected. To the extent Progress Milestone Deadlines are extended under this Section 6.4.1.1, the September 1, 2011 deadline set forth in Section 10.1 will be automatically extended by a number of days equal to the greatest number of calendar days by which any Progress Milestone affected by such suspension was extended pursuant to the previous sentence.

6.4.1.2 Developer shall resume full performance of the Services within 15 calendar days, or if Developer has demobilized as permitted in Section 6.4.1 above, within 30 calendar days, of receipt of written notice from NCTA to resume the Services, unless Developer has terminated the Agreement pursuant to Section 6.4.1.

6.4.1.3 NCTA assumes no liability for Services performed or costs incurred prior to the date authorized by NCTA to begin Services, during periods when the Services are suspended, or after the term of this Agreement. NCTA shall compensate Developer for reasonable and documented demobilization and remobilization costs associated with any suspension hereunder (other than in respect of a suspension pursuant to Section 6.4.2 below) solely for those costs related to the performance of the geotechnical and traffic study Services in the field. Such demobilization and remobilization costs shall not include any administrative costs, overhead or office expenses.

6.4.2 NCTA has the authority to suspend the Services wholly or in part for such period as NCTA deems necessary (without any compensation) because of the failure on the part of Developer to perform any material obligations of this Agreement, or the failure of Developer to perform in accordance with the requirements of the Regulatory Approvals or Law. Developer shall promptly comply with the written order of NCTA to suspend the Services wholly or in part. Developer shall resume full performance of the Services within five calendar days following receipt of written notice

from NCTA to resume the Services, subject to the termination provisions set forth herein.

6.4.3 The ROD is currently expected to be issued by the end of the first quarter of 2010. Any delay in the issuance of the ROD shall not be deemed to constitute a suspension of Services under Section 6.4.1 or give rise to a Termination for Convenience. Notwithstanding the foregoing, if the ROD is delayed beyond 365 calendar days from April 1, 2010, either Party may terminate this Agreement without further obligation to the other Party, or the Parties may mutually agree in writing to extension of such Progress Milestone deadlines as the Parties deem appropriate.

7. Indemnification, Insurance and Liability

7.1 Insurance Requirements

7.1.1 Coverage

During the term of this Agreement, Developer shall maintain in full force, at its own expense, from companies licensed to do business in the State, the following insurance coverage:

7.1.1.1 General liability insurance coverage of not less than \$1,000,000 per occurrence/\$2,000,000 aggregate of primary coverage;

7.1.1.2 Workers' compensation insurance coverage in accordance with the State's statutory limits;

7.1.1.3 Automobile liability insurance coverage of not less than \$1,000,000 combined single limit per policy period; and

7.1.1.4 Professional liability/errors and omissions and "tail" coverage insurance with a combined single limit, or the equivalent, of not less than \$2,000,000 for each claim, incident or occurrence. This is to cover damages caused by error, omission or negligent acts related to the professional services to be provided

under this Agreement. This coverage is not a limitation on Developer's liability or responsibility under the terms of this Agreement.

7.1.2 Notice of Cancellation or Change

There shall be no cancellation, material change, reduction of limits or intent not to renew the insurance coverage(s) without 30 calendar day's prior written notice from Developer or its insurer(s) to NCTA.

7.1.3 Certificate of Insurance

As evidence of the insurance coverage required by this Agreement, Developer shall furnish acceptable insurance certificates to NCTA prior to commencing the Services for all the required insurance set forth in Section 7.1.1. The certificate(s) for the required insurance (except for Workers' Compensation) will specify "The State of North Carolina, The Board of Directors for the North Carolina Turnpike Authority and its members, the North Carolina Turnpike Authority, its officers and employees, The North Carolina Board of Transportation and its members, and the North Carolina Department of Transportation, its officers and employees" as Additional Insureds for Automobile Liability, Professional Liability and General Liability. It need not reference this Agreement name or number. Insuring companies or entities are subject to reasonable acceptance by NCTA. If requested, complete copies of insurance policies, trust agreements, etc. shall be provided to NCTA. Developer shall be financially responsible for all pertinent deductibles, self insured retentions and/or self insurance.

7.2 Indemnity

7.2.1 Claims for Other than Professional Liability

Developer shall indemnify, hold harmless and defend the State, NCTA, FHWA and NCDOT, their officers, agents and employees ("Indemnified Parties") from all third party claims, suits or actions of whatsoever nature, resulting from or arising out of the following:

7.2.1.1 The breach or alleged breach of this Agreement by Developer or its Subcontractors, agents or employees;

7.2.1.2 The failure or alleged failure by Developer or its Subcontractors, agents or employees to comply with any Regulatory Approvals or Laws applicable to the performance of the Services;

7.2.1.3 Any alleged patent, trademark, or copyright infringement or other allegedly improper appropriation or use by Developer or its Subcontractors, agents or employees of trade secrets, patents, proprietary information, know-how, copyright rights, inventions or other third-party proprietary rights in performance of the Services, or arising out of any use in connection with the facility of methods, processes, designs, information, or other items furnished or communicated to NCTA or another Indemnified Party pursuant to the Agreement; provided that this indemnity shall not apply to any infringement resulting from NCTA's failure to comply with specific written instructions regarding use provided to NCTA by Developer; or

7.2.1.4 The actual or alleged negligence, willful misconduct or breach of applicable Law or contract of Developer or its Subcontractors, agents or employees in or associated with performance of the Services, regardless of whether the claimed loss was caused in part by an Indemnified Party.

Developer's indemnity obligations set forth in Sections 7.2.1.1 through 7.2.1.3 shall not extend to any claims, suits or actions to the extent directly attributable the negligence, recklessness or willful misconduct, bad faith or fraud of an Indemnified Party.

In claims by an employee of Developer, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligations under this Section 7.2 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for Developer or a Subcontractor under workers' compensation, disability benefit or other employee benefits laws.

7.2.2 Claims for Professional Liability

Developer shall defend, save and hold harmless the Indemnified Parties from all claims, suits or actions arising out of the professional negligent acts, errors or omissions of Developer or its Subcontractors and Subcontractors agents or employees in performance of professional services under this Agreement; provided, however, that Developer's indemnity obligations hereunder shall not extend to any claims, suits or actions to the extent directly attributable to the negligence, recklessness or willful misconduct, bad faith or fraud of an Indemnified Party or violation of any Law or Regulatory Approval by an Indemnified Party.

7.2.3 State Rights

Notwithstanding the foregoing defense obligations under Sections 7.2.1 and 7.2.2, neither Developer nor any attorney engaged by Developer shall defend any claim in the name of NCTA, the State or any agency of the State, nor purport to act as legal representative of NCTA, the State or any of its agencies, without the prior written consent of the North Carolina Attorney General and the Governor. NCTA or the State may, at any time at its election, assume its own defense and settlement in the event that it determines that (a) Developer is prohibited from defending NCTA or the State, (b) that an important governmental principle is at issue or that it is in the best interests of NCTA or the State to do so, or (c) that Developer is not adequately defending NCTA or the State's interests; provided, however, with respect to an assumption of defense by NCTA for the reasons set forth in clauses (a) and (b) above, neither NCTA nor the State shall have the right to settle or compromise the claim without Developer's prior written consent, which consent shall not be unreasonably withheld or delayed. . NCTA and the State reserves all rights to pursue any claims either may have against Developer if NCTA or the State elects to assume its own defense.

7.2.4 Limitation on Consequential Damages

7.2.4.1 Notwithstanding any other provision of this Agreement and except as set forth in Section 7.2.4.2 below, to the extent permitted by applicable Law, Developer shall not be liable for punitive damages or special, indirect or incidental consequential damages, whether arising out of breach of this Agreement, tort (including negligence) or any other theory of liability, and NCTA releases Developer from any such liability.

7.2.4.2 The foregoing limitation on Developer's liability for consequential damages shall not apply to or limit any right of recovery NCTA may have respecting the following:

(a) Losses (including defense costs) to the extent covered by the proceeds of insurance required to be carried pursuant to this Agreement;

(b) Losses arising out of fraud, criminal conduct, intentional misconduct (which does not include any intentional Developer Default), recklessness, bad faith or gross negligence on the part of Developer or its Subcontractors, agents or employees;

(c) Developer's indemnities set forth in Sections 7.2.1; and

(d) Developer's obligation to pay liquidated damages in accordance with Section 1.5.4. Certifications.

8. **Contracting Practices**

8.1 Developer Certifications

8.1.1 Lobbying Activities

Developer certifies that to the best of Developer's knowledge and belief:

8.1.1.1 No Federal appropriated funds have been paid or will be paid by or on behalf of Developer, to any person for influencing or attempting to influence an employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.

8.1.2 Nondiscrimination

Developer certifies that:

8.1.2.1 Neither Developer nor its Subcontractors shall discriminate on the basis of race, color, national origin or sex in the performance of the Services. Developer shall carry out, and shall cause the Subcontractors to carry out, applicable requirements of 49 CFR Part 26 in the award and administration of FHWA-assisted agreements. Failure by Developer to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as NCTA deems appropriate.

8.1.2.2 Developer shall include the above in every Subcontract (including purchase orders and in every Subcontract of any Developer-related entity member for Services), and shall require that they be included in all Subcontracts at lower tiers, so that such provisions will be binding upon each Subcontractor.

8.1.2.3 Developer will not discriminate against minority, women or emerging small business enterprises in obtaining any subcontracts.

8.1.2.4 Developer will not discriminate on the basis of race, color, national origin or sex in the award of subcontracts.

8.1.3 Use of Prequalified Subcontractors

Developer certifies that it shall require and ensure that all Subcontractors performing the Services are (i) licensed by the State to the extent required by Law before such Subcontractors (that are engineering firms) commence the Services and for the duration of the subcontract and (ii) prequalified in accordance with NCTA's standard policies and procedures, which includes compliance with General Guideline 7 of the Guidelines for Coordination Between the North Carolina Department of Transportation and the North Carolina Turnpike Authority during the Preliminary Engineering and Environmental Study Process of July 28, 2006.

8.1.4 SPSF Compliance

During the Pre-Development Phase, Developer will use good faith efforts to utilize the SPSF program, as developed by NCDOT, to the greatest extent possible. NCDOT has developed a SPSF program to provide consulting opportunities for firms that meet the eligibility criteria to compete against other consulting firms that are comparably positioned in their industries. Small businesses that NCDOT determines to be eligible for participation in the SPSF program are those meeting the size standards defined by the Small Business Administration regulation, 13 CFR Part 121 in Section 54 under the North American Industrial Classification System (NAICS). The SPSF program is a race, ethnicity, and gender neutral program designed to increase the availability of opportunities for small businesses on federal, state or locally funded contracts. SPSF participation is not contingent upon the project funding source.

Real-time information about SPSF that is certified by NCDOT through North Carolina's Unified Certification Program is available in the Directory of Transportation Firms. The Directory can be accessed by the link on the NCDOT's homepage or by entering <https://apps.dot.state.nc.us/vendor/directory/> in the address bar of a web browser.

The listing of an individual firm in NCDOT's directory shall not be construed as an endorsement of the firm by NCTA or NCDOT. Developer shall submit

a listing of all known SPSF firms that will participate in the performance of the proposed work prior to executing this Agreement. The participation shall be submitted on the NCDOT's Prime Form RS-2 and/or Subconsultant Form RS-2.

Developer has added key DBE's and SPSF's to date and will add others as the Project progresses through the Pre-Development Phase and into the Concession Period. For planning and design, the Developer will contract with three North Carolina based firms; two of which are also DBE firms:

- Wetherill Engineering (DBE/SPSF) will be responsible for the utility engineering, drainage design, and stormwater control services;
- Gibson Engineering (DBE/SPSF) will be responsible for assisting with roadway design, maintenance-of-traffic, and traffic analysis efforts; and
- Alpha & Omega Group (SPSF) will be responsible for assisting with structure design.

Developer may add additional DBE and SPSF team members after the Pre-Development Phase has commenced and the specific needs of the Project are better defined.

8.1.5 NCTA Standards of Performance; Licenses

The Services will be performed in accordance with the professional standard of skill and care ordinarily exercised by members of the profession applicable to the particular Service involved, under similar conditions and circumstances. Developer and its Subcontractors shall, at all times during the term of this Agreement be duly licensed to perform the Services, and if there is no licensing requirement for the profession or Services, be duly qualified and professionally competent.

8.1.6 Compliance with Applicable Law

Developer shall comply with all federal, State and local laws, regulations, executive orders and ordinances applicable to the Services under this Agreement ("Law"). Without limiting the generality of the foregoing, Developer expressly agrees to comply with: (i) Title VI of the Civil Rights Act of 1964; (ii) Section V of the Rehabilitation Act of 1973; (iii) the Americans with Disabilities Act of 1990; (iv) all regulations and administrative rules established pursuant to the foregoing laws; and (v) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations.

With respect to any right of way or utilities Services, Developer shall comply with the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended, and 23 CFR part 710.

8.1.7 Regulatory Approvals

Developer shall obtain all Regulatory Approvals necessary, if any, to accomplish the Services. Developer shall comply with all conditions imposed by and undertake all actions required by and all actions necessary to maintain in full force and effect, all Regulatory Approvals, except to the extent that such responsibility is expressly assigned in this Agreement to another Person.

8.1.8 Taxes

Developer shall pay all applicable federal, State and local sales, consumer, use and similar taxes, property taxes and any other taxes, fee, charges or levies imposed by a governmental entity, whether direct or indirect, relating to, or incurred in connection with, the performance of the Services.

8.1.9 Debarment and Suspension

Developer shall include the requirement to comply with 49 CFR 29.300 et seq. and State non-collusion law in each Subcontract and shall require each

Subcontractor to include the same provision in lower-tier Subcontracts. Debarment certification shall be provided in accordance with Appendix J.

9. Representations and Warranties

9.1.1 Developer represents and warrants to NCTA as follows.

(a) Developer is a duly formed limited liability company created under the laws of the State of Delaware, is duly authorized to conduct its business in the State of North Carolina, has the requisite power and has or will timely have all required licenses to carry on its present and proposed activities and has full power, right and authority to enter into this Agreement and to perform each and all of the obligations of Developer provided for herein.

(b) Developer has taken or caused to be taken all requisite corporate action to authorize the execution and delivery of, and the performance of its obligations under, this Agreement, and this Agreement constitutes the legal, valid and binding agreement of Developer, enforceable against Developer in accordance with its terms.

(c) Each person executing this Agreement in the name of Developer has been duly authorized to do so on behalf of Developer.

(d) Neither the execution and delivery by Developer of this Agreement nor the consummation of the transactions contemplated hereby is in conflict with the governing instruments of Developer or its Equity Member, any order or decree of any judicial or administrative tribunal or any other agreements or instruments to which Developer or its Equity Member is a party or by which Developer or its Equity Member is bound or, to the knowledge of Developer, in conflict with any federal or state law or regulation to which Developer is subject.

(e) Upon the execution and delivery by NCTA and Developer, this Agreement shall constitute a legal, valid and binding agreement of Developer, enforceable in accordance with its terms, subject to all Laws, Regulations and Ordinances respecting bankruptcy and insolvency and to the extent applicable, principles of equity.

(f) There is no litigation pending and served on Developer or its Equity Member which challenges Developer's or its Equity Member's authority to execute,

deliver or perform this Agreement, and Developer has disclosed to NCTA any threatened litigation with respect to such matters of which Developer or its Equity Member is aware.

(g) Developer and its Equity Member are in material compliance with all laws, regulations and ordinances applicable to Developer's activities in connection with this Agreement.

(h) Guarantor is a duly formed corporation created under the laws of the State of Delaware, is duly authorized to conduct its business in the State of North Carolina, and will remain in good standing throughout the term of this Agreement and for as long thereafter as any obligations remain outstanding under the Agreement

(i) All required approvals have been obtained with respect to the execution, delivery and performance of the Guaranty, and performance of the Guaranty will not result in a breach of or a default under Guarantor's organizational documents or any indenture or loan or credit agreement or other material agreement or instrument to which Guarantor is a party or by which its properties and assets may be bound or affected.

(j) The Guaranty has been duly authorized by all necessary corporate action, has been duly executed and delivered by Guarantor, and constitutes the legal, valid and binding obligation of the Guarantor, enforceable in accordance with its terms.

9.1.2 NCTA represents and warrants to Developer as follows.

(a) NCTA has the requisite authority to enter into this Agreement and to perform each and all of the obligations of NCTA provided for herein.

(b) NCTA has taken or caused to be taken all requisite action to authorize the execution and delivery of, and the performance of its obligations under, this Agreement.

(c) Each person executing this Agreement on behalf of NCTA has been duly authorized to do so on behalf of NCTA.

(d) Upon the execution and delivery by NCTA and Developer, this Agreement shall constitute a legal, valid and binding agreement of NCTA, enforceable in accordance with its terms, subject to all Laws, Regulations and Ordinances respecting bankruptcy and insolvency.

(e) There is no litigation pending and served on NCTA which challenges authority to execute, deliver or perform this Agreement.

10. Concession Period

10.1 Developer Right to Negotiate Concession Agreement

Developer shall have the exclusive right to negotiate a Concession Agreement with NCTA for a period commencing with the execution of this Agreement and ending 60 calendar days from the date that all the following conditions precedent have been satisfied, but not later than September 1, 2011 (as such date may be extended pursuant to Sections 6.3 and 6.4). The Concession Agreement must provide for Developer to finance the Project through the issuance of debt directly obtained by the Developer, supplemented or secured by a substantial equity investment by the Developer, or an equivalent long-term financial guarantee that assures that Developer will remain "at risk" with respect to the adequacy of toll revenues to repay Project debt.

10.1.1 No Developer Default exists under this Agreement and no circumstance or event exists which with the giving of notice or passage of time would become a Developer Default under this Agreement.

10.1.2 Developer has achieved final acceptance for each Progress Milestone pursuant to Section 6.1 by the applicable deadline set forth on Appendix E, as such deadline may be extended pursuant to Sections 6.3 and 6.4 above.

10.1.3 The ROD approves a preferred build alternative that includes the Project.

10.1.4 NCTA has obtained an independent evaluation of the Project costs, business terms and constructability.

10.1.5 A firm fixed price for the Concession Agreement has been mutually agreed upon between the Parties.

10.1.6 Subject to Section 10.1.8, Developer has submitted applications for all the Regulatory Approvals necessary to reach financial close and Developer reasonably expects to obtain such Regulatory Approvals by the Financial Close Deadline.

10.1.7 A traffic and revenue consultant approved by NCTA has delivered to NCTA a traffic and revenue study for the Project in form and substance acceptable to the rating agencies and financing entities, and NCTA is satisfied with the analysis, methodology, revenue projections, data, information and conclusions set forth therein.

10.1.8 Developer has provided satisfactory letters of support from its lenders clearly stating each such lender's willingness to lend the proposed amounts to Developer for the Project under the terms of the Concession Agreement and Financing Plan, including reaching financial close within 120 calendar days from the date of approval by both Parties of the Concession Agreement ("Financial Close Deadline"), which period may be extended by mutual written agreement of the Parties; provided, however, that the Financial Close Deadline shall not be extended in the event Developer does not obtain the necessary Regulatory Approvals to reach financial close by the Financial Close Deadline.

10.2 Final Negotiation and Execution of Concession Agreement

10.2.1 Upon satisfaction of the conditions precedent set forth in Section 10.1, NCTA and Developer shall commence the final stage of good faith negotiations in an attempt to reach agreement on all the terms and conditions of an executable Concession Agreement granting Developer the exclusive right to develop, design, construct, acquire, finance and potentially operate and maintain the Project in accordance with the approved Financial Plan, Proposal and the description of the Concession Agreement set forth on Appendix G.

10.2.2 If the Parties have not reached agreement on the final terms and conditions of the Concession Agreement within 60 calendar days after satisfaction of the conditions precedent set forth in Section 10.1, the deadline for any such conditions precedent has passed without achievement or extension, or a termination event under Section 13.3 has occurred, or such longer or shorter period as may be mutually agreed between the Parties, (a) either Party may withdraw from further negotiations concerning the Concession Agreement without obligation or liability and (b) NCTA shall have the unrestricted right to address the Project in any manner it deems appropriate, including procurement of the Project by means of a competitive procurement, or by declining to proceed further with the Project. Nothing in this Section 10.2.2 is intended or shall be construed as obligating either Party to accept any specific terms or conditions for a Concession Agreement. The Parties agree and understand that, except as otherwise expressly stated, no provision or definition provided in this Agreement shall serve as precedent for terms to be negotiated under the Concession Agreement. Developer shall not be precluded from participating in any subsequent competitive procurement for development or construction of all or any part of the Project.

10.2.3 If this Agreement is terminated pursuant to Section 10.2.2, Developer will be entitled to compensation for any partially completed Phase 1A Progress Milestones in accordance with Section 13.5. Developer shall have no right to any additional termination compensation, irrespective of whether NCTA enters into a concession agreement with another party.

10.2.4 Following final negotiations and completion of the Concession Agreement, and approval by the Board and, if applicable, FHWA, NCTA will deliver four (4) sets of execution copies of the Concession Agreement to Developer and Developer shall deliver to NCTA, within 10 calendar days of receipt of the execution copies of the Concession Agreement from NCTA, the following:

- The Concession Agreement, executed on behalf of Developer; and
- The documents set forth in Section 10.2.5.

NCTA will return one copy of the Concession Agreement executed by NCTA within 10 calendar days of receipt of all required documents from Developer. The Concession Agreement will take effect when NCTA delivers the fully executed Concession Agreement to Developer.

NCTA will not execute the Concession Agreement in the event there is any litigation, arbitration or judicial or administrative proceeding pending or overtly threatened which does or could materially and adversely affect (a) the Project or its design, permitting, financing, constructing, tolling management or operation, (b) the financial ability or creditworthiness of Developer or any key contractor, co-obligor or guarantor, (c) the right or authority of NCTA to enter into and perform the Concession Agreement or (d) the timely performance of the obligations of any Party to the Concession Agreement.

10.2.5 Developer shall deliver the following documents, in satisfactory form and content to NCTA, with the executed Concession Agreement:

- Any agreements and/or certifications required prior to execution of the Concession Agreement have been fully executed by the necessary parties, including the certification to meet DBE goals;
- Evidence of all required guaranties, bonds, and evidence of insurance, including an irrevocable guaranty from Guarantor securing Developer's obligations under the Concession Agreement, in a form reasonably acceptable to NCTA;
- Evidence that Developer complies with all applicable federal and State requirements, including requirements regarding DBE, EEO, Buy America, Davis Bacon and prevailing wages;
- Evidence of authorization to execute the Concession Agreement, in the form of certified resolutions of the governing bodies of Developer and its Equity Member expressly stating such body's authorization to execute the Concession Agreement;

- Evidence that Developer, its Equity Member, and other identified Subcontractors currently hold all licenses necessary to perform the work and services under the Concession Agreement;
- A certificate of good standing from the Secretary of State of Delaware and a certificate of authority to transact business from the North Carolina Secretary of State each dated no earlier than 30 calendar days before the Agreement Date for Developer and its Equity Member; and
- A favorable written opinion from counsel for Developer and Guarantor, which counsel shall be approved by NCTA (which may be in-house or outside counsel, provided that the enforceability opinion shall be provided by an attorney licensed in the State), in substantially the form attached hereto as Appendix H (Form of Opinion of Counsel), with changes applicable to execution of the Concession Agreement.

10.2.6 The Concession Agreement will be an agreement between Developer and NCTA under which NCTA grants to Developer the exclusive right and obligation to develop, design, construct, acquire, finance, operate and maintain the Project for a period not shorter than the term of the financing. The Concession Agreement will grant the Developer the right to collect tolls on the Project in accordance with the terms and limitations set forth in the Concession Agreement.

All Project debt and equity interests under the Concession Agreement will be issued by Developer (except for any bonds or other obligations issued as taxable or tax-exempt either directly by the Developer or a related entity or by the State or political subdivision or agency thereof or entity acting on behalf of the State or political subdivision, which are secured by a loan agreement with Developer). The Project financing shall include an equity contribution by Developer in such amounts as may be required by the Developer's lenders; provided, however, Developer shall at all times remain financially responsible and retain a substantial equity risk in the successful completion and operation of the Project.

Other than with respect to a collateral assignment to lenders, in accordance with the terms of the Concession Agreement, the obligations of Developer under the

Concession Agreement shall not be assignable without the prior written consent of NCTA.

10.3 Close of Finance

Developer shall have 120 calendar days from the effective date of the Concession Agreement to reach close of finance, which period may be extended for an additional 30 calendar days by mutual agreement of the Parties. The Concession Agreement shall include the following conditions precedent for the close of finance:

10.3.1 No Developer Default exists under the Concession Agreement and no circumstance or event exists which with the giving of notice or passage of time would become a Developer Default under the Concession Agreement.

10.3.2 Developer has not satisfied any condition under Section 10.1 waived by NCTA.

10.3.3 Any concession fee or payment to NCTA shall be paid within 2 calendar days of the close of finance.

10.3.4 Developer has provided to NCTA evidence that financing commitments are in place sufficient to pay the full cost of design, construction, operation and maintenance of the Project, and concession fee, if applicable.

11. **Disputes**

All disputes with respect to this Agreement shall be governed by the terms and procedures for Dispute Resolution set forth in Appendix C.

12. **Defaults and Remedies**

12.1 Default by Developer

Developer shall be in default under this Agreement upon the occurrence of any one or more of the following events or conditions ("Developer Default"), except to the extent directly attributable to an NCTA Delay or an event of Force Majeure:

12.1.1 Developer fails to promptly commence performance of the Services within 30 calendar days of the Agreement Date to meet the Progress Milestones and as required under this Agreement; or

12.1.2 Developer fails to resume performance of the Services that have been suspended or stopped, within a reasonable time after receipt of notice from NCTA to do so or (if applicable) after cessation of the event preventing performance; or

12.1.3 Developer fails to timely perform any portion of the Services in accordance with the Agreement, including conforming to applicable standards set forth therein; or

12.1.4 Developer fails to satisfy any Progress Milestone by the deadline set forth in Appendix E, as such deadlines may be extended pursuant to Section 6.3, NCTA; or

12.1.5 Abandonment of the Project by Developer; or

12.1.6 Developer makes or attempts to make or suffers a voluntary or involuntary assignment or transfer of all or any portion of any right or interest in this Agreement; or

12.1.7 Developer, Key Personnel, or key contractors no longer hold any license or certificate that is required to perform the Services or any portion thereof; or

12.1.8 Any representation or warranty in the Agreement made by Developer, or any certificate, schedule, report, instrument or other document delivered by or on behalf of Developer to NCTA pursuant to the Agreement (except with respect to any projections made by Developer in any such certificate, report, instrument or other document) is false or materially misleading or inaccurate when made or omits material information when made; or

12.1.9 Developer materially fails to timely observe or perform or cause to be observed or performed any other material covenant, agreement, obligation, term or condition required to be observed or performed by Developer under this Agreement; or

12.1.10 Developer commences a voluntary case seeking liquidation, reorganization or other relief with respect to itself or its debts under any U.S. or foreign bankruptcy, insolvency or other similar Law now or hereafter in effect, seeks the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its assets; becomes insolvent, or generally does not pay its debts as they become due; admits in writing its inability to pay its debts; makes an assignment for the benefit of creditors; or takes any action to authorize any of the foregoing; or

12.1.11 An involuntary case is commenced against Developer seeking liquidation, reorganization, dissolution, winding up, a composition or arrangement with creditors, a readjustment of debts or other relief with respect to Developer or Developer's debts under any U.S. or foreign bankruptcy, insolvency or other similar Law now or hereafter in effect; seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of Developer or any substantial part of Developer's assets; seeking the issuance of a writ of attachment, execution, or similar process; or seeking like relief, and such involuntary case shall not be contested by Developer in good faith or shall remain undismissed and unstayed for a period of 60 calendar days; or

12.1.12 After exhaustion of all rights of appeal, there occurs any suspension or debarment (distinguished from ineligibility due to lack of financial qualifications) of Developer or its Equity Member, from bidding, proposing or contracting with any federal or State department or agency, including NCTA; or

12.1.13 Developer fails to obtain NCTA approval prior to a change to a Key Person in accordance with Section 1.5.4.

12.2 Notice and Opportunity to Cure

Developer and Guarantor shall be entitled to 30 calendar days written notice and opportunity to cure any breach before a Developer Default is declared under Sections 12.1.1 through 12.1.5 and Sections 12.1.7, 12.1.9 and 12.1.13. Developer and Guarantor shall be entitled to 15 calendar days written notice and opportunity to cure the effect of any breach before a Developer Default is declared under Section 12.1.8. If a breach is capable of cure but, by its nature, cannot be cured within the applicable cure period, as determined by NCTA, such additional period of time shall be allowed as may be reasonably necessary to cure the breach so long as Developer commences such cure within such 30-day period or 15-day period, as applicable, and thereafter diligently prosecutes such cure to completion; provided, however, that in no event shall such cure period exceed 60 calendar days in total. No such notice and opportunity to cure is required for NCTA to declare a Developer Default due to any breach described in Sections 12.1.6 and 12.1.12, and any breach described in Sections 12.1.10 and 12.1.11 shall automatically constitute a Developer Default upon its occurrence, without notice.

12.3 Remedies for Developer Default

Upon the occurrence of a Developer Default and expiration, without cure, of any applicable cure period, NCTA shall have the following rights without further notice and without waiving or releasing Developer from any obligations:

12.3.1 NCTA may terminate this Agreement or a portion thereof under Section 13.3, including removal of one or more of the Progress Milestones from this Agreement;

12.3.2 NCTA may direct Developer to take any and all applicable action as set forth in Section 13.4; and

12.3.3 NCTA may exercise all other rights and remedies provided by law or equity and such rights and remedies as are otherwise available under the Agreement.

12.4 Developer's Remedies

12.4.1 In the event NCTA wrongfully withholds an approval or consent required under this Agreement, or wrongfully issues an objection to or disapproval of a submittal or other matter under this Agreement, it shall constitute a NCTA Delay for which Developer's sole remedy, except as expressly set forth herein, against NCTA shall be an extension of time under Section 6.3 to the applicable Progress Milestone.

12.4.2 Developer shall have the right to suspend performance of the Services if NCTA fails to make an undisputed payment due Developer hereunder within 30 calendar days after NCTA's receipt of notice of nonpayment from Developer. Developer shall not have the right to terminate this Agreement as the result of any failure by NCTA to make an undisputed payment hereunder, provided, however, that if such nonpayment continues for more than 180 calendar days, Developer shall have the right to deem and declare the non-payment of such undisputed amount a Termination for Convenience by NCTA under Section 13.1 by delivering to NCTA a written notice within 30 calendar days after such 180-day period specifying the effective date of the Termination for Convenience. Developer shall not have the right to suspend performance of the Services, terminate this Agreement or declare a Termination for Convenience for any nonpayment of amounts disputed in good faith.

12.4.3 The measure of compensation available to Developer as set forth in this Agreement for a Progress Milestone or an event of termination under Section 13.5 shall constitute the sole and exclusive monetary relief and damages available to Developer from the State or NCTA arising out of or relating to such event; and Developer irrevocably waives and releases any right to any other or additional damages or compensation from the State or NCTA arising out of or relating to such event. No award of compensation or damages shall be duplicative.

12.4.4 Except as expressly set forth herein, Developer's sole remedy against NCTA for a NCTA Delay or a NCTA suspension under Section 6.4 shall be an extension of time under Section 6.3 to the applicable Progress Milestone.

12.4.5 Developer's remedy for NCTA's failure to comply with Section 10.2.1 shall be to either (i) deem and declare such failure a Termination for Convenience by NCTA under Section 13.1 by delivering to NCTA a written notice within 30 calendar days after such NCTA failure specifying the effective date of the Termination for Convenience, or (ii) pursue remedies provided under Law.

13. Termination

13.1 Termination for Convenience

13.1.1 NCTA may terminate this Agreement in whole, but not in part, if NCTA determines, in its sole discretion, that a termination is in NCTA's best interest (a "Termination for Convenience").

13.1.2 NCTA may exercise Termination for Convenience by delivering to Developer a written Notice of Termination for Convenience specifying the election to terminate.

13.1.3 Subject to Section 13.1.5, in the event of a Termination for Convenience, Developer will only be entitled to unpaid compensation for fully or partially completed Progress Milestones, as set forth in Section 13.5.

13.1.4 If NCTA terminates this Agreement on grounds or in circumstances beyond NCTA's termination rights specifically set forth in this Agreement, such termination shall be deemed a Termination for Convenience for the purpose of determining the termination compensation due.

13.1.5 If NCTA terminates this Agreement on grounds of a Termination for Convenience at any time following commencement of Phase 1B, NCTA shall pay Developer the cost of any partially or fully completed Phase 1B Progress Milestones, but not in excess of the Progress Milestone Compensation amounts set forth on Appendix E (as amended during Phase 1A pursuant to Section 3.1).

13.1.6 If within 18 months of any Termination for Convenience following commencement of Phase 1B that includes the Project, NCTA determines to proceed with the development of the Project through a procurement for a concession agreement or other PPP Agreement, it shall issue a written notice and invitation to Developer to enter into exclusive negotiations for a Concession Agreement or PPP Agreement with NCTA prior to issuance of the procurement documents. Upon receipt of such written notice, the Parties shall negotiate the terms of a Concession Agreement in good faith on terms and conditions substantially similar to those developed by the Parties during the term of this Agreement for a period not to exceed 90 calendar days. If the Parties fail to reach an agreement by the end of such period, NCTA shall have the right to develop the Project through any procurement and contractual arrangement in its sole discretion, with no further obligation of any kind to Developer.

13.2 Termination for Developer Default

NCTA, in NCTA's sole discretion, shall have the right to terminate this Agreement or a portion thereof if:

(a) A Developer Default occurs under Sections 12.1.1 through 12.1.5 and Sections 12.1.7, 12.1.8, 12.1.9 and 12.1.13 and such default is not completely cured within any applicable cure period;

(b) A Developer Default occurs under Sections 12.1.6, 12.1.10, 12.1.11 and 12.1.12; or

(c) Any other material breach of this Agreement by Developer that occurs and is not cured within the applicable cure period; provided, however, that in the event there is no applicable cure period for such material breach, a cure period of 15 calendar days shall apply.

13.3 Termination in Certain Events

Either Developer or NCTA shall have the right to terminate this Agreement in its sole discretion upon the occurrence of any of the following events:

- (a) Issuance of a final EIS and ROD that does not include the Project;
- (b) Failure of the Parties to negotiate a Concession Agreement satisfactory to both Parties by the earlier of (a) 60 calendar days after satisfaction of the conditions precedent set forth in Section 10.1 and (b) September 1, 2011, as either date may be mutually extended in writing by the Parties;
- (c) Action by a court or other adjudicative body or the North Carolina Legislature prohibiting continuation of the Project;
- (d) Determination by either Party after the Financial Feasibility Assessment or, if later, the issuance of the ROD that the Project is not financeable with the available public funds, publicly or privately issued debt, and private equity;
- (e) Failure of the issuance of a ROD that includes the Project by December 2010; or
- (f) The North Carolina General Assembly repeals the annual \$15 million Project appropriation set forth in North Carolina General Statute Section 136-176(b2) (as of the applicable effective date), or such lesser amount of annual appropriation as is required to finance the Project set forth the approved Financial Plan unless, based on information supplied by NCTA, the Parties reasonably expect that such an appropriation will be reenacted or restored by the end of the next regular session of the North Carolina General Assembly.

13.4 Termination Process

13.4.1 No termination of this Agreement is effective until written notice of such termination is provided by the terminating Party to the other Party. The effective date of termination shall be the date which the notice of termination is delivered by the terminating Party to the other Party.

13.4.2 Termination of this Agreement shall not relieve Developer (or the Guarantor) or NCTA of their respective obligations for any claims arising from any action or failure to act of Developer (or the Guarantor) or NCTA prior to termination.

13.4.3 Upon termination of this Agreement for any reason, NCTA shall have the following rights without further notice and without waiving or releasing Developer from any claims arising from any action or failure to act of Developer prior to termination and Developer shall have the following obligations (as applicable):

13.4.3.1 If and as directed in writing by NCTA, Developer shall (i) stop, vacate and surrender its Project office and any areas in which it is co-located with NCTA or its consultants, and (ii) remove materials, equipment, tools and instruments used by, and any debris or waste materials generated by Developer in the performance of the Services;

13.4.3.2 Within 30 calendar days of the effective date of termination, Developer shall deliver to NCTA all books, records and, subject to Section 14.3, Project Work Product, including all completed or partially completed drawings (including plans, elevations, sections, details and diagrams), specifications, information, schedules, samples, shop drawings, electronic files and other documents related to the Project that NCTA deems necessary for completion of the Services;

13.4.3.3 Developer shall confirm the assignment to NCTA of the subcontracts requested by NCTA, communicate notice of termination to all affected Subcontractors and terminate, at its sole cost, all other subcontracts;

13.4.3.4 NCTA may deduct from any amounts payable by NCTA to Developer such amounts payable by Developer to NCTA, including reimbursements owing or damages that NCTA has determined are or may be payable to NCTA under the Agreement; provided, however, that if it is determined through Dispute Resolution that NCTA wrongfully withheld payment to Developer under this Section 13.4.3.4, then NCTA will pay Developer interest on such amount from the date it is determined that payment should have been made by NCTA at the average rate earned by the State

Treasurer on the investment within the State's Short Term Investment Fund during the month preceding the date interest becomes payable.

13.4.3.5 If NCTA exercises any right to perform any obligations of Developer, in the exercise of such right NCTA may, but is not obligated to, among other things: (i) perform or attempt to perform, or cause to be performed, such Services (ii) spend such sums as NCTA deems necessary and reasonable to employ and pay such architects, engineers, and/or consultants as may be required for the purpose of completing such Services; (iii) execute all applications, certificates and other documents as may be required for completing the Services; (iv) modify or terminate any contractual arrangements; (v) take any and all other actions which it may in its sole discretion consider necessary to complete the Services; and (vi) prosecute and defend any action or proceeding incident to the Services; and

13.4.3.6 Developer shall take all commercially reasonable action that may be necessary, or that NCTA may direct, for the protection and preservation of Project Work Product not yet in NCTA's possession.

13.5 Termination Compensation

13.5.1 No compensation of any nature will be provided for termination events except that Developer may be paid for partially completed work on Progress Milestones on a pro-rata basis of the Progress Milestone Compensation for any such partially completed Progress Milestone.

13.5.2 For compensation relating to a termination event, Developer shall submit a written invoice to NCTA, in a form reasonably acceptable to NCTA, for the pro-rata share of payment, calculated up to the effective date of termination, for performance of the applicable Progress Milestones set forth in Appendix D.

13.5.3 NCTA will pay Developer any undisputed amounts of termination compensation in accordance with NCTA's standard practices and procedures.

13.5.4 Any unresolved disputes regarding termination compensation after the Parties have participated in good faith resolution efforts for a period of at least 14 calendar days shall be resolved through the Dispute Resolution process.

14. Records, Work Product and Reporting

14.1 Maintenance and Inspection of Records

14.1.1 Developer shall maintain all Project Work Product in a reasonably accessible location within the County of Wake in the State.

14.1.2 Developer shall use Constructware as its Project collaboration system, pursuant to Section 14.3.13.

14.1.3 The file system shall be developed so as to enable Developer and NCTA to keep track of all Services and relevant products and shall include a comprehensive indexing process to enable the Project Work Product to be easily located at all times. The file system plan shall in addition provide for all Project Work Product to be maintained so as to enable a clear distinction to be made between direct and indirect costs related to the Project and the costs of other projects, operations and tasks undertaken by Developer.

14.1.4 Developer shall index, file and maintain all Project Work Product and other records relating to the Project in accordance with the approved file system plan.

14.1.5 Developer shall retain and preserve all Project Work Product and other records relating to the Project for a period of six years after final payment, or until all disputes, if any, concerning this Agreement or the Project have been resolved, whichever occurs later, or for such longer period as may be required by law (the "Record Retention Period").

14.1.6 For the duration of this Agreement and the Record Retention Period, within two Business Days after receipt of written request therefor, Developer shall make all Project Work Product and other records relating to the Project available

during normal business hours for inspection, audit or copying by NCTA and NCTA's representatives, including the North Carolina Secretary of State accountants and auditors, for any purpose related to this Agreement, including but not limited to monitoring Developer's performance, verifying Developer's compliance with the terms and conditions of this Agreement and substantiating costs payable under this Agreement; provided, however, that such notice requirement under Law does not apply to the Office of the State Auditor and the Secretary of State.

14.1.7 Developer shall require each Subcontractor to retain its Project Work Product and other records relating to the Project for duration of the Subcontract and the Record Retention Period, and to provide equivalent access to such records to NCTA and NCTA's representatives, including representative of the North Carolina Department of Transportation, the North Carolina Secretary of State and the Department of State Auditor. Developer shall require each Subcontractor to include in lower-tier Subcontracts the same project record retention and access requirements.

14.1.8 Upon completion of each Progress Milestone and each Payment Milestone and within 15 calendar days of receipt by Developer of NCTA's written request and NCTA's payment of such Progress Milestone, Developer shall deliver to NCTA all Project Work Product generated in the performance of the Services up to that milestone date or request date. Developer may make and retain copies of any such Project Work Product at its own expense.

14.2 Public Records

NCTA may maintain the confidentiality of information only as authorized in N.C.G.S. § 132-1 et seq., and as otherwise provided by Law. If a request is made for disclosure of information submitted to NCTA by Developer, or an action is brought to compel NCTA to disclose information marked confidential pursuant to N.C.G.S. § 132-1 et seq., NCTA will notify Developer of such request or action.

Developer agrees to: (i) defend its assertions of confidentiality by instituting appropriate legal proceedings, at its own expense and through its counsel, or

intervening in an action brought against NCTA to compel disclosure, to defend its assertions of confidentiality; and (ii) hold the State and NCTA, and any officials or employees thereof harmless from any and all damages, costs, and attorney's fees awarded against the State and NCTA arising out of any such actions. Nothing in this Section shall preclude the State or NCTA from participating in the defense of such actions, at its option and expense through its counsel. NCTA shall have no liability to Developer with respect to the disclosure of any information, including confidential information, subject to an order by a court of competent jurisdiction pursuant to N.C.G.S. § 132-9 et seq. and as otherwise provided by Law.

14.3 Ownership and Use of Work Product

14.3.1 Project Work Product

All Project Work Product created by Developer or its Subcontractors and paid for by NCTA as Progress Milestone Compensation, including derivative works and compilations, and whether or not such Project Work Product is considered a "work made for hire" or an "employment to invent" shall be the exclusive property of NCTA. NCTA and Developer agree that the Project Work Product is "work made for hire" of which NCTA is the author within the meaning of the United States Copyright Act. If for any reason the Project Work Product is not "work made for hire", Developer hereby irrevocably assigns to NCTA, and shall cause its Subcontractors to irrevocably assign to NCTA, any and all of its or its Subcontractors' rights, title and interest in all Project Work Product, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrine. Developer shall execute and cause its Subcontractors to execute such further documents and instruments as NCTA reasonably requests to fully vest such rights in NCTA. Developer forever waives any and all rights relating to Project Work Product, including any and all rights arising under 17 U.S.C. § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications. Without limiting the foregoing, following termination of this Agreement, NCTA shall have full right to utilize

any such Project Work Product in connection with the development of the Project through contracts with any other party or by its own efforts.

14.3.2 Developer Work Product

In the event that Developer uses any Developer Work Product in performing the Services, Developer hereby grants to NCTA, and shall cause its Subcontractors that own or license Developer Work Product to grant to NCTA, an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use Developer Work Product incorporated into the Project Work Product, including the right of NCTA to authorize concessionaires, developers, consultants and others to use Developer Work Product incorporated into the Project Work Product, for the purposes described in this Agreement or any Subcontract; provided, however, that the use of such Developer Work Product is solely with respect to the Project.

14.3.3 Third Party Work Product

In the event that Developer uses any Third Party Work Product in performing the Services, Developer shall diligently endeavor to secure on NCTA's behalf and in the name of NCTA, an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use the Third Party Work Product incorporated into the Project Work Product, including the right of NCTA to authorize concessionaires, developers, consultants and others to use the Third Party Work Product incorporated into the Project Work Product, for the purposes described in this Agreement or any Subcontract; provided, however, that the use of such Third Party Work Product is solely with respect to the Project.

14.3.4 Developer Work Product -Derivative Work

In the event that Project Work Product created by Developer under this Agreement is a derivative work based on Developer Work Product, or is a compilation that includes Developer Work Product, Developer hereby grants to NCTA, and shall cause its Subcontractors that own or license such Developer Work Product to grant to NCTA, an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to

use the pre-existing elements of Developer Work Product incorporated into the Project Work Product, including the right of NCTA to authorize concessionaires, developers, consultants and others to use the pre-existing elements of Developer Work Product incorporated into the Project Work Product, for the purposes described in this Agreement or any Subcontract; provided, however, that the use of such Developer Work Product is solely with respect to the Project.

14.3.5 Third Party Work Product-Derivative Work

In the event that Project Work Product created by Developer under this Agreement is a derivative work based on Third Party Work Product, or is a compilation that includes Third Party Work Product, Developer shall diligently endeavor to secure on NCTA's behalf and in the name of NCTA an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use the pre-existing elements of the Third Party Work Product incorporated into the Project Work Product, including the right to authorize concessionaires, developers, consultants and others to use the pre-existing elements of the Third Party Work Product incorporated into the Project Work Product, for the purposes described in this Agreement or any Subcontract; provided, however, that the use of such Third Party Work Product is solely with respect to the Project.

14.3.6 Developer Use of Work Product

NCTA, despite other conditions of this provision, hereby grants to Developer an irrevocable, non-exclusive, perpetual, royalty-free license to utilize the Work Product in (i) its brochures or other literature that it may utilize for its sales, and (ii) other projects, including this Project if done through a subsequent procurement.

14.3.7 Developer's Construction Methodologies

NCTA acknowledges and agrees that the Construction Methodologies are confidential and proprietary information of Developer and represent extremely valuable business assets of Developer. Accordingly, such Construction Methodologies shall be maintained by NCTA in strict confidence and shall not, except with the prior written consent of Developer, be disclosed by NCTA to any third party other than to

such legal counsel, independent engineering advisers and subcontractors and any of their directors, officers, employees, affiliates and agents (collectively the "NCTA Representatives") as necessary for NCTA's performance under this Agreement. NCTA and the NCTA Representatives may use the Construction Methodologies only for the purposes of performing this Agreement. Access to the Construction Methodologies shall be limited to NCTA, and to NCTA Representatives who have agreed in writing to be bound by the terms of this Section 14.3.7.

Notwithstanding anything to the contrary in this Section 14.3, the Construction Methodologies shall be the sole and exclusive property of Developer. In the event Developer and NCTA do not enter into the Concession Agreement, NCTA acknowledges and agrees that it may not, without Developer's prior, written consent, use the Construction Methodologies and that it shall, and shall cause its Representatives to, immediately return all copies of Construction Methodologies; provided, however, that any electronic versions of Construction Methodologies shall be destroyed by NCTA. Agreement by NCTA to this Section 14.3.7 is in consideration of the warranty and representation by Developer, hereby given, that none of the Construction Methodologies are essential to the constructibility of the plans and specifications for the Project provided by Developer under this Agreement.

If NCTA receives a request for public disclosure of the Construction Methodologies, NCTA will notify Developer of the request and give Developer an opportunity to assert, in writing and at its sole expense, a claimed exception under the N.C.G.S. 132-1.2 or other applicable Law within the time specified in the notice issued by NCTA and allowed under N.C.G.S. 132-1.2 or such other applicable Law.

NCTA shall have no liability for monetary damages, and Developer hereby expressly waives and releases all claims for monetary damages against NCTA and NCTA's Representatives, arising out of any unauthorized disclosure of the Construction Methodologies to any person or entity, except where (a) Developer has, prior to any such disclosure, specifically notified NCTA in writing that an item or information supplied to NCTA constitutes Construction Methodologies, (b) NCTA's

disclosure or communication thereof to a third person or entity is directly caused by NCTA's gross negligence or intentional misconduct, and (c) Developer bears the burden of proving that the item or information in fact constitutes Construction Methodologies, has been held and retained by Developer as confidential and proprietary information, and NCTA's unauthorized disclosure thereof directly caused monetary harm or loss.

The Parties acknowledge that monetary damages would not be an adequate remedy for any breach or threatened breach of this Section 14.3.7 by NCTA and that Developer shall be entitled to equitable relief, including a temporary restraining order, a preliminary or permanent injunction or specific performance, as a remedy for any such breach. The Parties agree that the remedies of temporary restraining order, preliminary or permanent injunction or specific performance shall constitute the exclusive remedies for a breach of this Section 14.3.7, except to the extent monetary damages are available as specified above.

14.3.8 Confidential Information

Developer acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to NCTA or NCTA's clients. Any and all information marked confidential, or identified as confidential in a separate writing, that NCTA provides to Developer or its employees or agents in the performance of this Agreement shall be deemed to be confidential information of NCTA ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Developer shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Developer) publicly known, (b) is furnished by NCTA to others without restrictions similar to those imposed by this Contract, (c) is rightfully in Developer's possession without the obligation of nondisclosure prior to the time of its disclosure under this Contract, (d) is obtained from a source other than NCTA, and to

Developer's reasonable belief, without the obligation of confidentiality, (e) is disclosed with the written consent of NCTA or (f) is independently developed by employees or agents of Developer who can be shown to have had no access to the Confidential Information.

14.3.9 Non-Disclosure

Developer agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Developer uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties, or use Confidential Information for any purposes whatsoever other than the provision of Services to NCTA hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Developer shall use its best efforts to assist NCTA in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the generality of the foregoing, Developer shall advise NCTA immediately in the event Developer learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Developer will at its expense cooperate with NCTA in seeking injunctive or other equitable relief in the name of NCTA or Developer against any such person. Developer agrees that, except as directed by NCTA, Developer will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, except in accordance with this Agreement, and that upon termination of this Agreement or at NCTA's request, Developer will turn over to NCTA all documents, papers, and other matter in Developer's possession that embody Confidential Information.

14.3.10 Injunctive Relief

Developer acknowledges that breach of this Section 14.3, including disclosure of any Confidential Information, will give rise to irreparable injury to NCTA that is inadequately compensable in damages. Accordingly, NCTA may seek and obtain

injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Developer acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interests of NCTA and are reasonable in scope and content.

14.3.11 Publicity

Developer agrees that news releases and other publicity relating to the subject of this Agreement will be made only with the prior written consent of NCTA.

14.3.12 Information Technology Terms and Conditions

Developer agrees to comply with North Carolina statewide information technology security standards, as set forth in North Carolina General Statutes 147-33.110 and 147-33.76, and in conformance with the security standards provided at <http://www.scio.state.nc.us/sitPolicies.asp>.

14.3.13 Project Management Internet Communication Requirements

(a) NCTA will use the internet based project collaboration system, "Constructware", developed by Autodesk, to manage and track the Project. As a Project requirement, the Developer shall use Constructware to facilitate design reviews, transmittals, and RFIs; to retain project files, designs, plans, test results and all other project documents; and to collaboratively communicate among Project team members. Developer shall upload or generate and maintain all project related documents in Constructware. Exceptions may be provided to allow specific items to be distributed in the traditional manner, outside the system.

All costs associated with using the Constructware system, including computer hardware, and internet service, are the responsibility of Developer; provided, however that the cost of any licenses will be borne by NCTA.

Use of Constructware will not replace or alter any contractual responsibilities of the Developer set forth in this Agreement or within the NCDOT Standard Specifications for Roads and Structures.

Developer's team members shall have access during normal business operations to the internet and an internet e-mail address in order to utilize Constructware.

(b) Developer shall provide both at field office and home office locations from where the Project is managed, computer hardware and software that meets the requirements of Constructware project collaboration system.

Software requirements are as follows:

- A 32-bit operating system, such as Windows 2000, 98 or Windows NT.
- An Internet Browser that supports HTML 1.1, Tables, Cookies, JavaScript, and Frames. Internet Explorer version 5.0 or higher.

Hardware requirements are as follows:

- Pentium based (or equivalent) workstation or laptop.
- A connection to the Internet (high-speed is optimum).
- Developer may select internet access through an internet provider of its choice.

The Constructware project collaboration system and temporary licenses will be provided by NCTA for the duration of the Project.

NCTA will train the Key Personnel on the use of the Constructware project collaboration system. Developer will then disseminate this training information such that necessary personnel are proficient in the use of Constructware.

Developer shall provide an adequate number of users to properly manage the Project utilizing the modules contained within Constructware.

More information on Constructware may be obtained via the internet, at www.autodesk.com/constructware.

14.4 Reporting

14.4.1 Developer shall prepare a monthly progress report, in a form approved by NCTA, that will outline in written and graphical form the various phases and the order of performance of the Services and update Developer's progress with respect to each Progress Milestone in sufficient detail so that NCTA can easily evaluate the progress of the Services.

14.4.2 Each report Developer submits to NCTA shall be accompanied by a written certification in a format acceptable to NCTA executed by an authorized representative of Developer to the effect that (a) the representations and warranties of Developer contained in this Agreement are true and correct in all material respects as if made on the certification date, (b) except as may otherwise be disclosed in such report, Developer is in compliance with all material covenants and provisions contained in this Agreement to be performed by Developer on or before the certification date, and (c) all compensation computations performed by Developer and submitted to NCTA are accurate and consistent with the terms and provisions herein.

14.4.3 Not later than five calendar days after Developer or any Subcontractor becomes the subject of any pending or threatened litigation pertaining to or that could potentially impact the Project, the Services or this Agreement, Developer shall notify NCTA of that fact, shall thereafter keep NCTA currently informed of the status of such matters and shall provide NCTA such information concerning the same and true and correct copies of related documents as NCTA may reasonably request.

14.4.4 Developer shall not issue any media releases, written statements generally available to the public, public involvement plans or other public information

materials related to the Project without the prior written approval of NCTA, the timing and/or content of which NCTA may approve or disapprove in its sole discretion.

14.4.5 Developer shall furnish or cause to be furnished to NCTA such other documents, reports and information relating to the Project as NCTA may reasonably request from time to time.

15. Miscellaneous

15.1 Notices

Except as otherwise expressly provided in this Agreement, any notices to be given hereunder shall be given in writing by personal delivery, facsimile, or mailing the same, postage prepaid, to Developer or NCTA at the address or number set forth below, or to such other addresses or numbers as either Party may hereafter indicate pursuant to this Section 15.1. Any notice so addressed and mailed shall be deemed to be given five calendar days after mailing. Any notice delivered by facsimile shall be deemed to be given when receipt of the transmission is generated by the transmitting machine. To be effective against NCTA, such facsimile transmission must be confirmed by telephone notice to NCTA's Contract Administrator. Any notice by personal delivery shall be deemed to be given when actually delivered. Regular, day-to-day communications between the Parties may be transmitted through one of the methods set forth above, in person, by telephone, by email or by other similar electronic transmission.

If to NCTA:

Steven D. DeWitt
Chief Engineer
5400 Glenwood Avenue, Suite 400
Raleigh, North Carolina 27612
Telephone: (919) 571-3030
Fax: (919) 571-3015
Email: steve.dewitt@ncturnpike.org

If to Developer:

ACS Infrastructure Development, Inc.
One Alhambra Plaza, Suite 710
Coral Gables, FL 33314
Attention: Juan Santamaría
Phone: (305) 423-7606
Facsimile: (305) 424-5401
Email address: jsantamaria@acsinfra.com

And a copy to:

Ramon Villaamil
Mid-Currituck Bridge Project – Project Manager
One Alhambra Plaza, Suite 710
Coral Gables, FL 33134
Facsimile: (305) 648-0120
Email address: rvillaamil@ascinfra.com

15.2 Standard for Approvals

In all cases where approvals or consents are required to be provided by NCTA or Developer hereunder, such approvals or consents shall not be withheld, delayed or denied unreasonably except in cases where a different standard (such as sole discretion) is specified. In cases where sole discretion is specified, the decision shall not be subject to Dispute Resolution hereunder.

15.3 Successors and Assigns

15.3.1 Developer shall not (i) enter into any subcontracts for any of the Services required by this Agreement, except with those contractors and subcontractors listed in the Proposal, or (ii) assign or transfer any of its interest in this Agreement, without NCTA's prior written consent. In addition to any other provisions NCTA may require, Developer shall include in any permitted subcontract under this Agreement provisions to ensure that NCTA will receive the benefit of Subcontractor performance, as if the Subcontractor were Developer. NCTA's consent to any subcontract shall not relieve Developer of any of its duties or obligations under this Agreement. Payment under the terms of this Agreement will be made to Developer, and Subcontractors have no right to payment directly from NCTA.

15.3.2 NCTA may assign (a) all, but not less than all, of its rights, title and interests in and to this Agreement, without Developer's consent, to any other Person that succeeds to the governmental powers and authority of NCTA, and (b) all or any portion of its rights, title and interest in and to this Agreement to others with the prior written consent of Developer.

15.3.3 The provisions of this Agreement shall be binding upon and shall inure to the benefit of the Parties, and their respective successors and permitted assigns, if any.

15.4 Survival

All rights and obligations shall cease upon termination or expiration of this Agreement, except those set forth in Sections 11, 13.1.6, 14.2 and 14.3 or as otherwise expressly set forth herein.

15.5 No Third Party Beneficiaries

NCTA and Developer are the only parties to this Agreement and are the only parties entitled to enforce its terms. Nothing in this Agreement gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Agreement.

15.6 Waiver

No waiver, consent, modification or change of terms of this Agreement shall bind either Party unless in writing and signed by all Parties and all necessary State governmental approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of NCTA to enforce any provision of this Agreement shall not constitute a waiver by NCTA of that or any other provision.

15.7 Governing Law, Jurisdiction and Venue

This Agreement shall be governed by and construed in accordance with the laws of the State without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively "Claim") between NCTA and Developer that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within the General Court of Justice in Wake County, North Carolina; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the Eastern District of North Carolina. In no event shall this Section be construed as a waiver by the State of any form of defense or immunity, whether based on sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the United States Constitution or otherwise. DEVELOPER, BY EXECUTION OF THIS AGREEMENT, CONSENTS TO THE PERSONAL JURISDICTION OF SUCH COURTS AND COVENANTS NOT TO SEEK CHANGE OF VENUE.

15.8 Construction and Interpretation of Agreement

15.8.1 References in this instrument to this "Agreement" mean, refer to and include this instrument as well as any riders, appendices, addenda and attachments hereto (which are hereby incorporated herein by reference) or other documents expressly incorporated by reference in this instrument. The captions of the sections of this Agreement are for convenience only and shall not be deemed part of this Agreement or considered in construing this Agreement. In this Agreement, where appropriate: the singular includes the plural and vice versa; references to statutes or regulations include all statutory or regulatory provisions consolidating, amending, or replacing the statute or regulation referred to; the words "including," "included," "includes," and "include" are deemed to be followed by the words "without limitation"; unless the context requires otherwise, in phrases involving performance by a Person, the word "shall" indicates a requirement imposed on the Person; unless otherwise indicated, references to sections, appendices and appendices are to the document which contains such references; words such as "herein," "hereof," and "hereunder"

refer to the entire document in which they are contained and not to any particular provision or section; words not otherwise defined that have well-known technical or construction industry meanings are used in accordance with such recognized meanings; and words of any gender used herein include each other gender where appropriate.

15.8.2 Developer acknowledges and agrees that it had the opportunity and obligation, prior to submission of the Proposal, to review this Agreement and to bring to NCTA's attention any conflicts or ambiguities contained therein. The Parties acknowledge and agree that this Agreement has been prepared jointly by the Parties and has been the subject of arm's length and careful negotiation over a period of time, that each Party has been given the opportunity to independently review this Agreement with legal counsel, and that each Party has the requisite experience and sophistication to understand, interpret and agree to the particular language of the provisions hereof. Accordingly, in the event of an ambiguity in or dispute regarding the interpretation of this Agreement, this Agreement shall not be interpreted or construed against the Party preparing it, and instead other rules of interpretation and construction shall be used.

15.9 Entire Agreement

This Agreement and the attached Appendices to this Agreement constitute the entire agreement between the Parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement.

No waiver, consent, modification or change of terms of this Agreement shall bind either Party hereto unless in writing and signed by all Parties and all necessary State governmental approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of NCTA to enforce any provision of this Agreement shall not

constitute a waiver by NCTA of that or any other provision. The Parties may amend the terms of this Agreement, including deadlines set forth herein, by written agreement.

15.10 Appropriations

NCTA's payment obligations under this Agreement are subject to appropriations of funds by the General Assembly.

15.11 Counterparts

This Agreement may be executed in several counterparts, all of which when taken together shall constitute one agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of the Agreement so executed shall constitute an original.

[the remainder of this page is intentionally left blank]

IN WITNESS WHEREOF, the Parties, intending to be legally bound, have executed this Agreement as of the date first written above.

The Currituck Development Group, LLC,
a Delaware limited liability company

By: ACS Infrastructure Development, Inc.,
a Delaware corporation, as its sole member

By: _____

Name: Juan Santamaria

Title: Chief Operating Officer

North Carolina Turnpike Authority,
an agency of the State of North Carolina

By: _____

Name: Eugene A. Conti, Jr.

Title: Secretary of Transportation and
Chair, NCTA Board of Directors

By: _____

Name: David Joyner

Title: Executive Director

Appendices to Pre-Development Agreement
Appendix A: Definitions

Acronyms and Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
BMP	Best Management Practices
CAPEX	Capital Expenditure
CFR	Code of Federal Regulations
CPT	Cone Penetration Test
DBE	Disadvantaged Business Enterprise
DGN	Roadway Design File (in Microstation)
DRN	Drainage Design File (in Microstation)
DTM	Digital Terrain Model
DWQ	Division of Water Quality
ECU	East Carolina University
EEO	Equal Employment Opportunity
EEP	Ecosystem Enhancement Program
EIS	Environmental Impact Statement
ERI	Electrical Resistivity Imaging
FFA	Financial Feasibility Assessment
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
GPS	Global Positioning System
ITS	Intelligent Transportation System
LEDPA	Least Environmentally Damaging Practicable Alternative
NCDOT	North Carolina Department of Transportation
N.C.G.S.	North Carolina General Statutes
NCTA	North Carolina Turnpike Authority
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
OPEX	Operational Expenditure

PABs	Private Activity Bonds
PMP	Project Management Plan
RFP	Request for Proposals
ROD	Record of Decision
SAV	Submerged Aquatic Vegetation
SPSF	Small Professional Services Firm
SPT	Standard Penetration Test
STIP	Statewide Transportation Improvement Program
TEAC	Turnpike Environmental Agency Coordination
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIN	Triangulated Irregular Network
U.S.C.	United States Code
USDOT	United States Department of Transportation

Definitions

“Abandonment” means (a) Developer has clearly demonstrated through statements or acts an intent not to continue performing one or more of its material obligations under the Agreement or (b) no significant Services are being performed or prosecuted by Developer for a continuous period of more than 45 calendar days; provided, however, that any such abandonment of obligations by Developer is not directly attributable to an event of Force Majeure, NCTA Delay, or an unreasonable failure or delay of a local governmental entity to issue a relevant permit that materially interferes with Developer’s ability to continue the Services.

“Agreement” has the meaning set forth in the opening paragraph.

“Agreement Date” has the meaning set forth in the opening paragraph.

“Board” means the Board of Directors for NCTA.

“Business Day” means any day on which NCTA is officially open for business.

“Change Order” means a means a written order issued by NCTA to Developer under Section 5.3.2 of the Agreement.

“Closing Documents” has the meaning set forth in Section 2.

“Concession Agreement” has the meaning set forth in Section 1.3.5.

“Concession Period” has the meaning set forth in Section 1.3.5.

“Confidential Information” has the meaning set forth in Section 14.3.8.

“Construction Methodologies” means (i) the confidential or proprietary means and methods to perform the Services related to construction developed by Developer, its affiliates or any Subcontractor (including any and all inventions or discoveries resulting therefrom) and (ii) confidential or proprietary cost estimation techniques and formulae developed by Developer, its affiliates or any Subcontractor, in each case whether developed independently of this Agreement or during the course of performing the Services and/or the Project.

“Cost Assessment” means the cost estimate performed in Phase 1A by Developer.

“Costing Plan” means the costing plan described in Section 3.4.

“Developer” has the meaning set forth in the opening paragraph.

“Developer Default” has the meaning set forth in Section 12.1.

“Developer Work Product” means (i) any Work Product owned or licensed by Developer or any of its Subcontractors and developed independently from this Agreement; (ii) the Construction Methodologies and (iii) any derivatives of the foregoing.

“Dispute Resolution” is the dispute resolution process required under this Agreement, as described in Appendix C.

“Draft EIS” is the version of the EIS for the Project being reviewed and modified during Phase 1A for approval by FHWA and the Environmental Agencies.

“Enabling Laws” has the meaning set forth in Recital A.

“Equity Member” means ACS Infrastructure Development, Inc., the sole member of Developer with a 100% direct equity interest in Developer.

“Environmental Agencies” means the federal and state environmental resource and regulatory agencies.

“Excluded Work Product” means (i) all Developer Work Product, and (ii) all Third Party Work Product.

“Final EIS” is the final version of the EIS for the Project approved by FHWA and the Environmental Agencies.

“Financial Close Deadline” has the meaning set forth in Section 10.1.8.

“Financial Feasibility Assessment” means the preliminary assessment of financial feasibility of the Project as described in Section 1.3.4.

“Financing Plan” means the financing plan described in Section 3.3.

“Force Majeure” means the occurrence of any of the following events that materially and adversely affects performance of Developer’s obligations, provided that such events (or the effects of such events) could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Developer: (a) war (including civil war and revolution), invasion, armed conflict, violent act of foreign enemy, military or armed blockade, or military or armed takeover of the Project, in each case occurring within the State; (b) any act of terrorism or sabotage that causes direct physical damage to the Project; (c) nuclear explosion or contamination, in each case occurring within the State; (d) riot and civil commotion on or in the immediate vicinity of the Project; or (e) a category four (or greater) hurricane that adversely impacts entry to the immediate vicinity of the Project.

“Guarantor” has the meaning set forth in Recital K.

“Guaranty” means the guaranty issued by Guarantor in favor of NCTA, securing Developer’s obligations under this Agreement, in the form of Appendix L.

“Indemnified Parties” has the meaning set forth in Section 7.2.1.

“Key Person” has the meaning set forth in Section 1.5.4.

“Law” has the meaning set forth in Section 8.1.6.

“NCTA Delay” means any of the following events, to the extent they result in a material delay or interruption in performance of any obligation under the Agreement, and provided such events are beyond Developer’s control and are not due to any act, omission, negligence, recklessness, willful misconduct, breach of contract or law of any of Developer or the Subcontractors, and further provided that such events (or the effects of such events) could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Developer or the Subcontractor:

- (a) NCTA directed changes to the scope of work or Services under the Agreement;
or
- (b) Failure of NCTA to act or provide responses to proposed schedules, plans, design documents, and other submittals and matters submitted to NCTA after the Agreement Date for which response is required under the Agreement as an express prerequisite to Developer’s right to proceed or act, within the time periods (if any) indicated in the Agreement, or if no time period is indicated, within a reasonable time, taking into consideration the nature, importance and complexity of the submittal or matter, following delivery of written notice from Developer requesting such action in accordance with the terms and requirements of the Agreement; or
- (c) Failure of NCTA to fulfill its obligations described herein and in Appendix E or to cooperate in good faith with Developer with respect to joint obligations or tasks; or
- (d) Failure of NCTA to provide right of entry to the Project under Section 4.4, subject to Developer’s obligation under this Agreement to obtain permits for carrying out any of the Services within the Project right-of-way.

“Open Book Basis” means allowing NCTA to review, in a confidential manner, all underlying assumptions and data associated with the Progress Milestones, Progress

Milestone Compensation, Costing Plan, Financial Plan, pricing or compensation (whether of Developer or NCTA) or adjustments thereto, including assumptions as to costs of the Services, Work Product, schedule, composition of equipment spreads, equipment rates, labor rates, productivity, estimating factors, design and productivity allowance, contingency and indirect costs, risk pricing, discount rates, interest rates, inflation and deflation rates, and other items reasonably required by NCTA to satisfy itself as to the reasonableness of the amount.

“Party” means Developer or NCTA, as the context may require, and **“Parties”** means Developer and NCTA, collectively.

“Person” means any individual, corporation, company, voluntary association, partnership, trust, unincorporated organization, or any federal, state, local or foreign government and any political subdivision or any governmental, quasi-governmental, judicial, public or statutory instrumentality, administrative agency, authority, body or entity, including NCTA.

“Phase 1A” is the time period for Services from the Agreement Date through the earliest of the date FFA occurs, February 28, 2010, or the termination of this Agreement.

“Phase 1B” is the time period for Services from the date that the FFA results in an agreement that the Project is likely to be financially feasible and a ROD is issued that includes the Project, through the earlier of termination of this Agreement or execution of the Concession Agreement.

“Phase 2” means the Services performed during the Concession Period.

“PPP Agreement” means a form of public-private partnership agreement for the Project, whereby the private entity assumes a long-term direct financial obligation in the form of (a) an equity investment, (b) responsibility for repayment of debt secured by a substantial guaranty of the private entity or a related financially responsible entity, (c) other long-term performance obligation secured by a substantial guaranty of the private entity or a related financially responsible entity, or (d) any other unique public private

partnership financing solution identified by Developer during the term of this Agreement and not available to parties other than Developer in the financial markets, which Developer commits to deliver and which NCTA, in its sole and unfettered discretion, determines would be beneficial for and add value to the Project. For the avoidance of doubt, a design-build contract and/or an operation and maintenance contract, standing alone and for which the private entity has not assumed the risk of financing, does not constitute a PPP Agreement.

"Pre-Development Phase" has the meaning set forth in Section 1.3.2.

"Progress Milestone Compensation" means the compensation milestones set forth in Appendix D.

"Progress Milestones" means the milestones set forth in Appendix E.

"Project" has the meaning set forth in Recital B, as may be modified pursuant to Section 1.5.3.3.

"Project Feasibility Assessment" means the Project feasibility assessment with respect to environmental, revenue, design and construction, performed by Developer during Phase 1B in conjunction with the preparation of the Costing Plan and Financial Plan.

"Project Management Plan" or "PMP" means the project management plan required by FHWA to be assembled to meet the requirements of the Major Projects Provisions of Title 23, Section 106(h) of the United States Code.

"Project Work Product" means all Work Product relating to the Services, other than Excluded Work Product.

"Proposal" has the meaning set forth in Recital I.

"Proposal Due Date" means November 18, 2008.

"Record Retention Period" has the meaning set forth in Section 14.1.5.

“Regulatory Approvals” means and includes the following: (i) US Army Corps of Engineers (USACE) Section 404 Individual Permit and Section 10 Permit; (ii) US Coast Guard Bridge Permit; (iii) NC Department of Environment and Natural Resources (NCDENR) - Division of Water Quality (DWQ) - 401 Water Quality Certification; (iv) NCDENR - Division of Coastal Management (DCM) - Coastal Area Management Act (CAMA) Permit including consistency certification; (v) NCDENR - DWQ - State Stormwater Permit; (vi) NCDENR - Division of Land Resources (DLR) Land Quality Section - Erosion and Sediment Control Permit; and (vii) those other regulatory approvals and permits necessary to implement the Project, as described in Section 3.14 (excluding any required permits from local governmental entities in connection with the construction of the Project).

“Request for Proposals” means Request for Proposals issued by NCTA on September 29, 2008.

“Services” has the meaning set forth in Section 3.1.

“State” means the State of North Carolina.

“Subcontractor” means contractors and consultants and any other persons or entities performing any of the Services for whom Developer may be legally or contractually responsible, and the employees, agents, officers, directors, shareholders, representatives, consultants, successors and assign of any of the foregoing; provided, however, that “Subcontractor” excludes NCTA.

“Termination for Convenience” has the meaning set forth in Section 13.1.

“Third Party Work Product” means all Work Product owned by a Person other than NCTA, Developer or a Subcontractor and developed independently from this Agreement from a subcontract with a Subcontractor relating to the Services.

“Uniform Act” means the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, P.L. 91-646, as amended.

“Work Product” means every design, drawing, report, study, plan, document, correspondence, memorandum, specification, note, invention, discovery, work of authorship, trade secret and all other work product, whether tangible or intangible, and all intellectual property rights therein.

Appendix B: Project Description

The Project consists of improvements between US 158 near Barco and NC 12 near Corolla in Currituck County, North Carolina. The Project includes construction of a bridge over Maple Swamp and Currituck Sound, an interchange and toll collection facilities at US 158 on the Currituck County mainland, and an intersection with NC 12 on the Currituck County Outer Banks. The Project shall also include improvements on NC 12 south of the bridge terminus for a distance of 2 to 4 miles to ensure efficient bridge operations. In addition, improvements on US 158 for emergency evacuation may be required.

Three alternatives are being considered in the NEPA studies (known as "ER2", "MCB2" and "MCB4"). The Project as referenced in this Agreement is "MCB4" in the NEPA studies and contemplates improvements between US 158 near Barco and NC 12 near Corolla in Currituck County, North Carolina. The selected alternative for the NEPA studies will be determined in the ROD, anticipated in February 2010.

The Project includes construction of a two-lane bridge over Maple Swamp and Currituck Sound with an interchange and toll collection facilities at US 158 on the Currituck County mainland, and an intersection with NC 12 on the Currituck County Outer Banks.

Two bridge corridors are currently being considered as a component of "MCB4" - C1 and C2. The C1 corridor parallels the power line right-of-way north of Aydlett Road, crosses the Currituck Sound and terminates on NC 12 near Corolla Bay. The C2 corridor parallels the power line right-of-way north of Aydlett Road, crosses the Currituck Sound and terminates on NC 12 near Albacore Street. The C1 and C2 corridors are approximately 2 miles apart.

Improvements on NC 12 south of the bridge terminus for a distance of 2 to 4 miles (depending on bridge corridor selected) to ensure efficient bridge operations are anticipated.

Improvements on US 158 for emergency evacuation may be required. On the mainland, these improvements include providing third outbound (northbound) lane from the bridge termini near Aydlett Road on US 158 north a distance of approximately 5 miles to the US 158/NC 168 intersection (or using the center turn lane as a third outbound evacuation lane). On the Outer Banks, these improvements include providing a third outbound lane on US 158 between the Wright Memorial Bridge and NC 12 (or using the center turn lane as a third outbound evacuation lane).

The bridge will be tolled and the improvements to existing facilities (NC 12 and US 158) will not be tolled.

Appendix C

DISPUTE RESOLUTION

DISPUTE REVIEW BOARD (DRB)

I GENERAL

A. Definitions

Dispute – A contractual issue that involves cost and/or time (either credits or additions) that remains unresolved following good faith negotiations between authorized representatives of Developer and NCTA.

Dispute Review Board (DRB) – three neutral individuals mutually selected by Developer and NCTA to review Disputes and render findings and recommendations based on the Agreement.

B. Formal DRB Review

This provision provides for a formal DRB review process.

Any of the procedures for the formal DRB Review established by this provision may be altered or modified by mutual written agreement of Developer and NCTA to better suit the needs of a particular Dispute.

C. Summary

A DRB will be established to assist in the analysis of Disputes that arise between Developer and NCTA, to include, but not limited to, Articles 104-4, 104-8(B) or 108-10 of the Standard Special Provision, Division One, contained elsewhere in this RFP.

It is not intended for NCTA or Developer to default on their normal responsibilities to cooperatively and fairly settle their differences by indiscriminately assigning them to the DRB. It is intended that the DRB encourage NCTA and Developer to resolve potential disputes without resorting to this alternative resolution procedure.

Utilization of the DRB does not relieve Developer or NCTA from complying with all Agreement terms and conditions, and does not waive any notice or timeliness requirements of the Standard Specifications for Roads and Structures. However, if a Dispute is referred to the DRB, the claim submittal and review time frames may be superseded by time frames established by the DRB, and agreed to in writing by both Developer and NCTA.

Either Developer or NCTA may refer a Dispute to the DRB. Such referral should be initiated as soon as it appears that the normal NCTA-Developer dispute resolution effort is not succeeding. However, prior to referring a Dispute to the DRB, NCTA and Developer must agree on the central or core issue to bring before the DRB.

Promptly thereafter, the DRB will impartially consider the Dispute(s) referred to it. The DRB will provide non-binding written findings and recommendations to Developer and NCTA.

Although the findings and recommendations of the DRB should carry great weight for both Developer and NCTA, they are not binding on either Developer or NCTA. However, the findings and recommendations are admissible in subsequent claim resolution proceedings as per the Dispute Review Board, Review of Disputes, Admissibility section contained elsewhere in this provision.

The Dispute Review Board is a condition of this Agreement. NCTA and Developer agree that the submission of any unresolved dispute or claim to the DRB is a condition precedent to Developer having the right to proceed with its final claim.

D. Scope

This provision describes the purpose, procedure, function, and features of the DRB. A Three-Party Agreement among NCTA, Developer, and the selected DRB members will formalize creation of the DRB and establish the scope of its services and the rights and responsibilities of Developer and NCTA. In the event of a conflict between this Specification and the Three-Party Agreement, the latter governs. The form of the Three-Party Agreement will be provided by NCTA.

E. Purpose

The purpose of the DRB is to provide an independent and impartial review of the Dispute and provide non-binding written findings and recommendations, in

accordance with the 2006 NCDOT Standard Specifications for Roads and Structures, based on the Agreement, applicable contract law, industry practices, and the facts presented.

It is not the purpose, or responsibility, of the DRB to resolve the Dispute. That responsibility remains with Developer and NCTA. However, it is anticipated that the DRB review will assist Developer and NCTA in resolving the Dispute.

Creation of the DRB is not intended as a substitute for NCTA or Developer responsibility to make a good-faith effort to settle the Dispute. Indiscriminate referral of disputes to the DRB without prior attempts by Developer and NCTA to resolve them shall be avoided. Developer or NCTA shall exhaust resolution through the escalation process defined in the formal partnering process prior to escalating an issue to the DRB.

F. Continuance of Work

Both Developer and NCTA shall proceed diligently with the work and comply with all applicable Agreement provisions while the DRB considers a Dispute.

G. Tenure of DRB

The DRB will be deemed established after NCTA, Developer and the DRB execute the Three-Party Agreement.

The DRB will be dissolved as of the end of this Agreement to Developer unless earlier terminated or dissolved by mutual agreement of Developer and NCTA. If mutually agreed upon by Developer and NCTA, the DRB may be dissolved on the date of final payment to Developer and a new DRB established as outlined herein to serve for the life of this Agreement.

II MEMBERSHIP

A. General

The DRB will consist of three members selected jointly by Developer and NCTA. One member will serve as Chairperson.

B. Criteria

1. Experience:

(a) It is desirable that all DRB members be experienced with the construction process including design, construction, contract administration, contract law, and resolution of construction disputes.

(b) It is not necessary that the DRB members be intimately familiar with the specific type of construction involved in the Dispute. The DRB may consult technical experts if the need arises under provisions provided for elsewhere in this Special Provision. See the Dispute Review Board, Review of Disputes, Admissibility section contained elsewhere in this provision.

2. Neutrality:

(a) It is imperative that the DRB members be neutral, act impartially, and be free of any conflict of interest.

(b) For purposes of this subparagraph, the term "member" also includes the member's current primary or full-time employer, and "involved" means having a contractual relationship with either Developer or NCTA, such as a subcontractor, architect, engineer, or construction manager.

(c) Prohibitions; disqualifying relationships for prospective members:

(i) An ownership interest in any entity involved in the Project or Agreement, or a financial interest in the Agreement, except for payment for services on this Dispute Review Board;

(ii) Previous employment by, or financial ties to, any Party involved in the Agreement within a period of eighteen (18) months prior to award of the Agreement, except for fee-based consulting services on other projects;

(iii) A close professional or personal relationship with any key member of any entity involved in the Agreement which, in the judgment of either Developer or NCTA, could suggest partiality; or

(iv) Prior involvement in the project of a nature that could

compromise the prospective member's ability to participate impartially in the DRB's activities.

(d) Prohibitions; disqualifying relationships for members:

(i) Employment, including fee-based consulting services, by any entity involved in the construction contract except with the express approval of both Developer and NCTA;

(ii) Discussion concerning, or the making of, an agreement with any entity involved in the Agreement regarding employment after the Agreement is completed.

(e) Any of the provisions of 1 through 4 above may be waived by mutual written agreement of Developer and NCTA.

C. Disclosure Statement

As a part of the selection process, all prospective DRB members will be required to submit complete disclosure statements for the approval of both Developer and NCTA. Each statement shall include a resume of experience, together with a declaration describing all past, present, and anticipated or planned future relationships, including indirect relationships through the prospective member's primary or full-time employer, to this project and with Developer or NCTA, or others involved in the Agreement, including Subcontractors, suppliers, design professionals, and consultants. Disclosure of close professional or personal relationships with all key members of Developer or NCTA or other parties involved in the construction Agreement shall be included.

D. Selection Process

Within 30 calendar days of Notice to Proceed, or as otherwise mutually agreed upon by Developer and NCTA, Developer and NCTA will jointly select the DRB using the following procedure:

1. To form a DRB, NCTA will provide to Developer a copy of the resume and references of the person proposed for the DRB. Likewise, Developer will provide NCTA the resume and references for their proposed DRB Member. Developer and NCTA will confirm the availability, neutrality, experience, and expertise of the

nominees. Both NCTA and Developer will have the ability to reject the others nominee. The Parties shall continue to exchange nominee information until each Party has selected a nominee which is agreeable to the other Party. NCTA shall be responsible for notifying the nominees of their selection.

2. Once the two mutually agreeable nominees have confirmed their participation within the DRB, they shall be responsible for selecting a third DRB member, who shall become the DRB Chairperson that is mutually agreeable to Developer and NCTA.

3. This DRB should serve for the life of the Agreement. Should the need arise to select a replacement DRB member, the remaining DRB members shall be responsible for selecting an additional member that is mutually agreeable to Developer and NCTA.

E. Three-Party Agreement

The DRB members and the authorized representatives of Developer and NCTA shall execute the Dispute Review Board Three-Party Agreement within 2 weeks after the selections are made.

III OPERATION

A. General

In general, the DRB will operate in accordance with this provision. However, it is not desirable to adopt hard-and-fast rules for the functioning of the DRB. The entire procedure shall be kept flexible to adapt to changing situations. The DRB may initiate, with NCTA's and Developer's prior written concurrence, new procedures or modifications to existing procedures whenever this is deemed appropriate.

B. Agreement Documents, Reports and Information

NCTA will provide a set of the Agreement documents to each DRB member.

The DRB members will be kept informed of construction activity and other developments by means of timely transmittal of relevant information requested by the DRB and prepared by Developer and NCTA in the normal course of construction,

including, but not limited to, periodic reports and minutes of progress meetings. At any time, the DRB may request copies of documents that are normally generated by Developer or NCTA during the course of business throughout the Project. Only during the resolution of a specific dispute may the DRB request reports, documents or other information that is not normally generated during the course of business, and this information shall be limited to that which is specific to this dispute.

C. Periodic Meetings and Visits

If requested, the DRB may participate in the formal partnering process as outlined in the contract. Additional meetings or site visits may be needed as mutually agreed among NCTA, Developer, and the DRB.

Site visits should cover all active segments of the work. Representatives of both Developer and NCTA shall accompany the DRB during project meetings or site visits.

The DRB shall be provided "issue logs" and "Supplemental Agreement/Change Order Logs" throughout the life of the contract.

IV REVIEW OF DISPUTES

A. General

Developer and NCTA will cooperate to ensure that the DRB considers Disputes promptly, taking into consideration the particular circumstances and the time required to prepare appropriate documentation.

Procedures and time periods may be modified by mutual agreement.

B. Prerequisites to Review

A Dispute is subject to referral to the DRB when either Developer or NCTA believes that bilateral negotiations have reached an impasse. However, NCTA and Developer must agree on the central or core issue to bring before the DRB prior to referring a dispute to the DRB.

C. Requesting Review

Either Developer or NCTA may refer a dispute to the DRB. Requests for DRB review shall be submitted in writing to the Chairperson of the DRB. The Request for Review shall state clearly and in full detail the specific core issue of the Dispute to be considered by the DRB. A copy of the request shall be simultaneously provided to the other Party.

After conferring with both Developer and NCTA, the DRB Chairperson will establish a submittal/presentation schedule.

Concise written position statements shall be prepared by both Developer and NCTA, with page number references to any supporting documentation, and submitted to each DRB member and simultaneously to the other Party 30 calendar days prior to presentation, unless both Parties mutually agree otherwise.

Any rebuttals information to the position statements shall be submitted to each DRB member and simultaneously to the other Party 14 calendar days prior to presentation, unless both Parties mutually agree otherwise.

D. Presentation

Unless otherwise agreed by the DRB, Developer and NCTA, the presentation will be conducted at NCTA office. However, any location that would be more convenient and still provide all required facilities and access to necessary documentation is satisfactory. Private deliberations of the DRB may be held at any convenient location.

Developer and NCTA shall have representatives in attendance at all presentations. The Party which brought the dispute before the DRB will make its presentation first. A full presentation of the dispute shall be allowed without interruption, except from the DRB. Once all information is presented the other Party may provide a rebuttal, at which time each Party will be allowed successive rebuttals until all aspects of the dispute are fully covered. The DRB members, Developer and NCTA may ask questions, request clarification, or ask for additional data. In difficult or complex cases, additional presentations may be necessary in order to facilitate full consideration and understanding of all the evidence presented by both Developer and NCTA. Both Developer and NCTA shall be provided adequate opportunity to present

their evidence, documentation, and statement regarding all issues before the DRB. No documents, materials, reports, analysis or other information of any type shall be referenced in the presentations or considered by the DRB in its review unless the same was previously provided to the other Party as supporting documentation for the position statement.

Unless otherwise agreed by Developer and NCTA, presentations will relate to issues of entitlement only. Agreement time extensions and compensation will be resolved between NCTA and Developer, in accordance with the provisions of the Standard Special Provision entitled "Division One" contained elsewhere in this RFP.

Normally, a formal transcript of the presentations will not be prepared. When requested by either Developer or NCTA, the DRB may allow recordation and transcription with the cost to be allocated to the Party requesting such documentation. Such transcript, when prepared, shall not constitute the official record of the DRB Review. The record prepared by the DRB shall be the official record of the DRB Review. The DRB may provide for audio or video recordings of the presentations for the use of the DRB only.

Developer and NCTA shall not have their attorneys in attendance at the presentations to counsel and/or advise them.

If either Developer or NCTA fails to appear before the DRB on the date scheduled for the presentations, without justifiable cause, the dispute will continue under the applicable provisions of the 2006 NCDOT Standard Specifications for Roads and Structures and this RFP to include, but not limited to, Articles 104-8, 108-10 107-25 and 109-10 of the Standard Special Provision, Division One found elsewhere in this RFP.

E. Deliberations

After the presentation is concluded, the DRB will confer to formulate its findings and recommendations. All DRB deliberations shall be conducted in private, with all individual views kept confidential.

If the DRB desires technical assistance, the DRB will make a request in writing to both Parties briefly defining the scope and estimated budget for the services. Direct attorney advisement or assistance is prohibited. If mutually agreeable,

Developer and NCTA will execute an agreement with a service provider. Developer and NCTA will equally share the costs for the service provider. In the typical situation the special services provider will respond to the DRB's questions in private consultation between the provider and the DRB and no permanent record of the questions or responses will be required by Developer or NCTA. However, if mutually agreeable, these typical operating procedures may be modified. In arriving at its findings and recommendations the DRB will not be bound by any information provided by the special service provider.

F. Findings and Recommendations

The findings and recommendations of the DRB concerning any dispute are non-binding but admissible (see Admissibility section included in this provision).

It is not the responsibility of the DRB to resolve the Dispute, only to make a recommendation based upon the contract documents and information supplied and presented before them. It shall remain the responsibility of Developer and NCTA to resolve all Disputes.

The DRB's findings and recommendations will be provided in writing, by certified mail, return receipt requested, to both Developer and NCTA within 14 calendar days of the completion of the presentations. The DRB should set forth, as clearly as possible, the logic and reasoning behind its findings and recommendations. The findings and recommendations will address entitlement only. In difficult or complex cases, and in consideration of the DRB's schedule, this time may be extended by mutual agreement of the DRB, Developer and NCTA.

If the three person DRB is unable to reach unanimity in its findings and recommendations, the DRB will so advise Developer and NCTA in the report of the DRB. The dissenting member shall prepare a minority report to be included with the DRB report.

G. Acceptance or Rejection

Within 30 calendar days of the date of the DRB's findings and recommendations, or such other time specified by the DRB, both Developer and NCTA shall provide, by certified mail return receipt requested, written notice to the other and to the DRB of acceptance or rejection of the DRB's findings and recommendations.

If, with the aid of the DRB's findings and recommendations, Developer and NCTA are able to resolve their Dispute, NCTA will promptly process any required Agreement changes.

If either Developer or NCTA rejects the findings and recommendations of the DRB, the Dispute will continue under the applicable provisions of the NCDOT Standard Specifications for Roads and Structures and this RFP to include, but not be limited to, Articles 104-8, 108-10 107-25 and 109-10 of the Standard Special Provision, Division One found elsewhere in this RFP.

H. Clarification and Reconsideration

Should the dispute remain unresolved because of a request for clarifications of the recommendation or new information or material becomes available which was not available at the time of the presentation, either Developer or NCTA may within the 7 calendar day period following the date of the DRB's findings and recommendations, request in writing, by certified mail return receipt requested, that the DRB clarify or reconsider its findings and recommendations. This information shall be supplied simultaneously to the other Party.

Should new information be made available, the other Party shall have an opportunity to review such information and respond appropriately.

I. Admissibility

If the DRB's findings and recommendations do not resolve the Dispute, the Agreement, the written findings and recommendations, including any minority report, and the qualifications of the DRB members will be admissible as evidence to the extent permitted by law in any subsequent dispute resolution proceeding or forum to establish (a) that a DRB considered the Dispute, and (b) the qualifications of the DRB members.

J. Legal Relations

Each DRB member, in the performance of his or her duties on the DRB, is acting in the capacity of an independent agent and not as an employee of either Developer or NCTA.

Each DRB member is acting in a capacity intended to facilitate resolution of Disputes. Accordingly, Developer and NCTA agree that to the fullest extent permitted by law, each DRB member shall be accorded quasi-judicial immunity for any actions or decisions associated with the review and findings and recommendations of Disputes referred to the DRB. No DRB member may be called as a witness by either Developer or NCTA in subsequent proceedings on the dispute. The DRB shall, upon completion of their findings, turn all records of the DRB over to NCTA for storage and preservation.

By execution of the Three-Party Agreement, Developer and NCTA agree not to pursue legal proceedings against a DRB member for activities related to or consequences resulting from their participation in the DRB.

V PAYMENT

A. Method of Measurement

Developer and NCTA shall equally bear the costs and expenses of the DRB.

The DRB members should not engage in activities related to the project, for which compensation is expected, unless requested by either NCTA or Developer.

Time spent at formalized meetings or Reviewing the Dispute – Each DRB member will be compensated for actual time spent at the rate of \$250 per hour with a maximum of \$2,000 per day. This rate shall include all normal incidental expenses such as telephone, fax, postage, courier, printing, and computer services. The DRB activity must be preauthorized by both Developer and NCTA.

Travel Time to and from Preauthorized Meetings – Each DRB member will be compensated for actual travel time to and from DRB meetings at the rate of \$50 per hour with a maximum of \$200 each way.

Travel Expenses – Travel expenses will be reimbursed at standard NC state rates for transportation, lodging, and meals for each day, or portion thereof, that the DRB member is traveling to or from, or attending, an authorized DRB activity. Expense receipts are required.

NCTA will provide, at no cost to Developer, administrative services such as conference facilities, meeting rooms and copying services during DRB presentations.

The Three Party Agreement and the Special Provisions contain all of the provisions for compensation and expenses of the DRB. All DRB members shall be compensated at the same daily and hourly rate.

Each DRB member may submit invoices for payment for work completed and qualified expenses no more often than once per month during the progress of work. Such invoices shall be in a format approved by NCTA, and accompanied by a general description of activities performed during that period. The value of work accomplished for payment shall be established from the billing rate and hours expended by the DRB member together with qualified expenses incurred.

The cost records and accounts pertaining to this Agreement shall be kept available for inspection by representatives of NCTA or Developer for 5 years after final payment.

No additional compensation for services associated with the DRB, beyond that detailed above, will be provided to the DRB members.

B. Basis of Payment

Payment for accepted work will be made as follows:

Each party shall independently pay the one-half of the invoices of all DRB members after approval by both Developer and NCTA.

There shall be no markups applied to expenses connected with the DRB, either by the DRB members or by Developer. Regardless of the DRB recommendation, neither NCTA nor Developer shall be entitled to reimbursement of DRB costs from the other Party.

If the DRB desires special technical services, both Developer and NCTA must agree to provide the special services, following the procedures included in the Dispute Review Board, Review of Disputes, Deliberations section, contained elsewhere in this provision. If such services are approved and rendered, payment will be made

under these provisions in accordance with the Dispute Review Board, Review of Disputes, Deliberations section, contained elsewhere in this provision.

These special provisions and the Three Party Agreement contain all of the provisions for compensation and expenses of the DRB. All DRB members shall be compensated at the same daily and hourly rate.

Appendix D: Compensation for Progress Milestones

Activity 3.1 - Project Management

DELIVERABLE	MILESTONE DATE	PRICE
Insurance	Execution of Contract	\$201,949* (estimated)
Phase 1A		
Submission of Monthly Progress Reports	Monthly	\$23,000 (\$230,000 total)
Phase 1B		
Insurance	Upon expiration of the insurance provided in Phase 1A or the first day of Phase 1B, whichever is later.	\$201,949

Activity 3.15 – Environmental Mitigation

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
On-site mitigation field review technical memorandum	August-09	\$15,000
Maple Swamp mitigation technical memorandum	September-09	\$9,000
Conceptual mitigation plans and cost estimate	October-09	\$20,000
EEP coordination briefing letter	December-09	\$6,000
Phase 1B		
Preliminary mitigation plans, conceptual monitoring plan, if needed, and cost estimate	May-10	\$25,000

Activity 3.14 – Regulatory Approvals

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Bridge clearance briefing letter	Sep-09	\$6,000
Permit concept report	Dec-09	\$23,000
Phase 1B		
Draft Regulatory Approval applications to NCTA	Jun-10	\$20,500

Activity 3.8 – Geotechnical Studies

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Geophysical profile report	June-09	\$123,664
Subsurface exploration results on land	July-09	\$64,731
Subsurface exploration results in Currituck Sound	July-09	\$67,167
Preliminary geotechnical report	September-09	\$46,014
Developer Oversight	September-09	\$30,000
Phase 1B		
Supplemental subsurface exploration results (SPT and CPT logs)	April-10	\$96,923
Pre-design foundation analysis report	May-10	\$50,000
Pile load testing results	July-10	\$76,923
Preliminary Currituck Sound foundation report	July-10	\$38,462

3.7 Right of Way Services

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A Draft EIS		
Right of way cost estimates for the Draft EIS	April-09	\$130,095
EIS relocation reports for the Draft EIS	April-09	
Phase 1A after Draft EIS		
Right of way cost estimates for the recommended alternative	October-09	\$47,140
Updated EIS relocation reports for the recommended alternative	October-09	
Preliminary acquisition schedule	October-09	
Phase 1B		
Right of way cost estimates for the preferred alternative	March-10	\$87,050
Updated EIS relocation reports for the preferred alternative	March-10	
Updated acquisition schedule	March-10	

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A Draft EIS		
Preliminary utility identification report	April-09	\$68,805
Phase 1A after Draft EIS		
Preliminary utility by others plans	September09	\$30,183
Conceptual water and sewer routing plans	September 09	\$37,267
Utility impact and cost estimate for the recommended alternative	September 09	
Developer Oversight	September 09	\$12,500
Phase 1B		
Update preliminary utility identification report for the preferred alternative	May-10	\$9,779
Utility impact and cost estimate for the preferred alternative		

Activity 3.5 a –Design Services (including Activity 3.9 – NEPA Assistance)

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A Draft EIS		
Alternative review memo	May-09	\$118,500
Design criteria	May-09	\$18,835
Phase 1A up to Final EIS		
Conceptual roadway/bridge plans – first submittal	September-09	\$369,784
Draft access management report	July-09	\$ 20,000
Final access management report	August-09	\$ 6,500
Draft traffic analysis report	July-09	\$ 35,000
Final traffic analysis report	August-09	\$ 10,503
Coastal engineering design criteria and sea level rise study	July-09	\$51,300
Zero waste matrix listing key structures and buildings needing to be removed	June-09	\$10,400
Zero waste matrix listing waste materials expected to be generated	June-09	\$10,400
Zero waste matrix listing construction materials expect to be used for which there may be opportunities to substitute recycle/reuse materials	July-09	\$8,300
Zero waste on-site opportunities for materials recycle/reuse technical memorandum	July-09	\$6,200
Zero waste opportunities for on-site processing of recycle/reuse materials technical memorandum	August-09	\$5,500
Zero waste on-site handling and storage of recycle/reuse materials technical memorandum	September-09	\$3,800
Zero waste on-site/off-site reuse/recycle comparison technical memorandum	June-09	\$5,500
Zero waste commingled waste option technical memorandum	September-09	\$5,500
Remainder of Phase 1A		
Conceptual roadway plans – second submittal	February-10	\$ 243,906
Conceptual bridge design plan	February-10	\$ 126,136
Coastal engineering concept plan report	December-09	\$23,700
Zero waste potential off-site markets for recycle/reuse material technical memorandum	October-09	\$5,000

DELIVERABLE	MILESTONE DATE	PRICE
Zero waste recycle/reuse material storage and shipping options technical memorandum	October-09	\$3,200
Zero waste construction cost estimate for recycle/reuse/waste-free elements of project	October-09	\$8,200
Phase 1B		
Preliminary roadway plans	August-10	\$347,499
Conceptual ITS and communication plan	August-10	\$6,433
Conceptual aesthetics/green design plan	August-10	\$3,958
Conceptual lighting design	August-10	\$5,938
Preliminary design noise analysis	August-10	\$3,711
Conceptual landscaping plan	August-10	\$4,305
Conceptual signing schematics	August-10	\$2,820
Preliminary toll facility design	August-10	\$6,433
Preliminary bridge plans	August-10	\$242,097
Design exception checklist	August-10	\$7,917
Preliminary lighting plan	August-10	\$18,061
Design noise report	August-10	\$25,829

Activity 3.5b – Hydrologic/Hydraulic Design and Services

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Conceptual hydraulic design plans	September-09	\$57,000
Conceptual erosion and sediment control plan	November-09	\$15,000
Conceptual stormwater design	September-09	\$5,000
Phase 1B		
Preliminary bridge survey report	May-10	\$15,792
Preliminary drainage design	June-10	\$66,491
Preliminary erosion and sediment control plan	August-10	\$12,467

Activity 3.5c – Project Feasibility Report

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Technical feasibility assessment	February-10	\$18,878
Developer Oversight	February-10	\$22,207
Phase 1B		
Draft Project feasibility report	March-10	\$23,252
Final Project feasibility report	April-10	\$6,748

Activity 3.5d – General Data Collection (Survey, Aerial, Mapping)

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Project control data	May-09	\$9,700
DGN and section data	May-09	\$60,933
Geotechnical location data	June-09	\$6,700

Activities 3.4, 3.10, and 3.16 – Costing Plan, PMP, and Construction Plan

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Construction methodologies report	November-09	\$28,834
Cost Assessment of quantities	November-09	\$36,236
Cost Assessment construction schedule	November-09	\$60,394
Cost Assessment detail sheets	November-09	\$36,236
Phase 1B		
Costing Plan	May-10	\$440,000
Portions of the Project Management Plan (PMP) directly related to Developer's organizational, management and financial structure to include a organization structure, project development plan (Attachment A), and plan of finance	April-10	\$65,017

Activities 3.11 and 3.12 – Traffic & Revenue Studies and Toll Strategies & Market Research

DELIVERABLE/MILESTONE		Meeting at NCTA	DATE	Traffic Advisor/ACS Attendee	PRICE
Phase 1A					
Phase A	3.11.1 Scoping Phase. Technical Memo #1: Scoping report, data collection, and methodology. Land use and value-of-time survey included.	Yes	Beginning to mid June -09 (to be provided incrementally)	Traffic advisor to attend this meeting	\$56,610
Phase B	3.11.2 Data Collection Phase. Technical Memo #2: Real Estate Market Assessment – survey instrument and approach	Yes	June-09	Traffic advisor to attend this meeting	\$41,350
	Technical Memo #3: Willingness to Pay Surveys – survey instrument and approach		June-09		
	Technical Memo #4: Real estate market assessment	Yes	July-09		\$69,250
	Technical Memo #5: Peak season survey and results		August-09		
	Technical Memo#6: Shoulder season survey and results	Yes	September-09		\$25,740
Phase C	3.11.3 Model Development Phase. Technical Memo #7: Proposed methodology for developing the model.	No	End August -09		\$49,000
Phase D	3.11.4 Technical Memo #10 Tolling Strategy & Marketing Plan	Yes	October -09	Assumed by ACS (Julia Monsó)	\$31,500
Phase E	3.11.5 Technical Memo #11: Concept of Operations	Yes	October -09	Assumed by ACS (Julia Monsó)	\$31,500
Phase F	3.11.6 Base Year Model and Calibration phase. Technical Memo #8: Presentation of the model and calibration results.	Yes (combined)	End October -09	Traffic advisor to attend this meeting	\$71,820
Phase G	3.11.7 Forecasting and Tolling Options. Technical Memo #9: Forecasting Methodology Growth Models		End October -09		\$56,360
Phase H	3.11.8 Technical Memo #12: OPEX/CAPEX Preliminary	Yes	Early November -09	Assumed by ACS (Julia Monsó)	\$6,300
Phase I	3.11.9 Preliminary Forecast. Technical Memo #13: Presentation of initial results	Yes	End November -09	Traffic advisor to attend this meeting	\$50,660
Phase J	3.11.10 Final forecasts in Excel	No	End December -09 / Early January -10		\$49,845
Phase K	3.11.11 Final T&R report	Yes	Mid January -10	Traffic advisor to attend this meeting	

Sub-consultants

The Developer will not assume as part of the fix price for this agreement the cost of the activities specified below. The price of the activities is just an estimation provided for NCTA information.

Please note that the information below is provided for informational purposes only and the actual fees may vary, as these are costs that the Developer cannot control. For example, the fee for the willingness to pay / stated preference surveys can vary depending on the method of the survey and the instruments used. These fees will be analyzed with NCTA during the scoping phase of the project and will be subject to NCTA approval

Surveys Indicative Costs	Price Range	
Stated Preference Surveys	\$200,000	\$250,000
Demographics Land Use Survey	\$125,000	\$150,000
Automatic Traffic Counts (ATC)	One ACT for one week one location one direction	Around \$1,600
Journey time surveys	\$7,000	\$15,000

Activity 3.17 – Public Involvement, Public/Community Outreach, Public Communications, Media Support

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
3.17.1.a. Attend TEAC meetings (6) with written feedback as it relates to CDG activities		\$5,848.49 (\$974.75/ meeting)
3.17.1.b. Attend Draft EIS Public hearings (4), local and state officials meetings with written feedback as it relates to CDG activities		\$8,214.72
3.17.1.c. Attend community group meetings (8) with written feedback as it relates to CDG activities		\$6,150.27 (\$768.78 / meeting)
	PHASE 1A TOTAL	\$20,213.48
Phase 1B		
As directed by the NCTA, preparation of all public information/ outreach materials, facilitation of and participation in local public workshops		\$60,000*
Public information items pertaining to the above communication and public information program such as displays, display maps, handouts, PowerPoint slideshows, announcements, comment forms, meeting summaries, etc.		\$180,000

*Estimated amount; this activity is not considered at the risk the Developer. NCTA will pay the Developer the cost of this activity, as part of a supplemental agreement.

Activity 3.13 – Development of Operations and Maintenance (“O&M”) Plan

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Preliminary O&M work Document	May-09	\$19,000
O&M Requirements	July-09	\$9,000
Preliminary O & M Plan	October-09	\$11,000
Preliminary OPEX	November-09	\$10,000
Preliminary CAPEX	November-09	\$11,000
Phase 1B		
Final O & M Plan	April-10	\$60,000
Technical Tolling Design	March -10	\$15,000
<u>Final Tolling OPEX/CAPEX Model</u>	March-10	\$5,000
Final OPEX Budget	May-10	\$40,000
Final CAPEX Budget		

Activity 3.3 – Legal and Financial Services

DELIVERABLE/MILESTONE	DATE	PRICE
Phase 1A		
Preliminary value for money assessment	Decemember-09	\$493,000
Final value for money assessment	February-10	\$100,000
Phase 1B		
Summary report of technical due diligence	One week before signing of the concession agreement	\$780,000
Summary report of the rating agency		\$300,00
Summary of bond counsel report, provided that a bond option is a component of the financial plan.		\$150,000
Summary report of the tax assessment		\$250,000

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.1 - Project Management

The Developer will manage and administer the Project with assistance from Dragados USA, Inc. (Dragados) and Lochner MMM. Management will be directed from a local office. Dragados USA, Inc. (Dragados) will be responsible for direct management and administration of construction portions of the Project with oversight for planning and design. Dragados and Lochner MMM LLP will manage and administer the planning and design aspects of the Project. Key benefits of this task to NCTA:

- Risk allocation (Developer will take responsibility for work products developed)
- Single point of contact
- Responsibility and accountability for delivery and schedule
- Reduced project management time required from NCTA staff
- Integrated financial analysis, value engineering and constructability analysis during project development

Description of Work (Scope of Work) – Phase 1A

The Developer shall provide:

- 3.1.1. Partnership Project Plan – Collaborate with NCTA to develop a workable partnership Project plan to be used during the Pre-Development Phase of the Project.
- 3.1.2. Monthly Progress Reporting –Produce progress reports that cover work completed during the previous month, current activities, Project related issues (including potential solutions), schedule adherence, and anticipated completions.
- 3.1.3. Records Maintenance –Maintain Project related records in a manner acceptable to NCTA.
- 3.1.4. Management and Administration –Plan, schedule, and administer the execution of work under the various Project related activities, including the coordination and interaction between team work activities and team members.
- 3.1.5. Management Coordination –Attend periodic Project related management meetings, provide summarization of meeting discussion/decisions, and will hold periodic telephone and electronic communications for management coordination.
- 3.1.6. Insurance coverage- Provide the insurance coverage detailed in Section 7 of this Agreement.

Description of Work (Scope of Work) – Phase 1B

The Developer shall provide:

- 3.1.7 Insurance coverage- Provide the insurance coverage detailed in Section 7 of this Agreement.

Phase 1A Deliverables

The Developer shall provide the following items:

- Local office for direct management and Project oversight

Appendix E: Scopes of Work and Progress Milestones

- Partnership Project Plan
- Monthly progress reports and invoices
- Project records
- Meeting/coordination summaries
- Certificates of insurance required in Section 7.1.3 of the Agreement, it being understood that delivery of such certificates on the Agreement Date, and execution by NCTA of the Agreement shall constitute final acceptance of such deliverable

Phase 1A Deliverables

The Developer shall provide the following items:

- Certificates of insurance required in Section 7.1.3 of the Agreement to be provided upon expiration of the insurance provided in Phase 1A or the first day of Phase 1B, whichever is later.

Milestones

Management and administration is an ongoing task for the life of the Agreement. Milestones are less easily identified with this activity as project management is continuous over the entirety of this Agreement. Monthly milestones will be adopted to coincide with monthly progress reports over the approximate 10 month schedule for Phase 1A; thereby, monthly payments for this activity will be 1/10th of the total cost.

Milestone Schedule and Costs

The following table outlines the milestone deliverable events for this activity along with the associated costs to produce the deliverable and the Project time frame:

DELIVERABLE	MILESTONE DATE	PRICE
Insurance	Execution of Contract	\$201,949* (estimated)
Phase 1A		
Submission of Monthly Progress Reports	Monthly	\$23,000 (\$230,000 total)
Phase 1B		
Insurance	Upon expiration of the insurance provided in Phase 1A or the first day of Phase 1B, whichever is later.	\$201,949

* Phase 1A Insurance cost will be a direct pass through for the actual cost of the insurance coverage without markup.

Appendix E: Scopes of Work and Progress Milestones

Assumptions and Exceptions (including NCTA responsibilities)

- NCTA will be responsible for coordination and management of the various non-Developer entities involved with the Project including NCTA staff, consultants, and advisors. Developer will be responsible for management of the companies associated for the Project under their direct authority. Developer will be required to coordinate with certain third-parties in performing the Services, including, without limitation, coordination with mapping and field authorities, FHWA, NCDOT, Environmental Agencies, EEP and universities.
- NCTA will provide a single point of contact for all management related discussion for the Project.
- Management meetings are assumed at approximately one half-day meeting per month.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.15 – Environmental Mitigation

Developer shall work with NCTA during the Pre-Development Phase to investigate on-site and innovative mitigation opportunities and develop preliminary mitigation and conceptual monitoring plans, as needed, for all impacts requiring compensatory mitigation. Mitigation and monitoring plans will include sufficient detail to develop the Costing Plan. Mitigation to be investigated will include restoration, enhancement, innovative and/or non-traditional mitigation opportunities.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A

The Developer shall:

- 3.15.1 Review existing mapping – Review Project areas and mapping from the NCTA, the United States Geological Survey, National Wetland Inventory, Natural Resource Conservation Service (Soil Surveys, Prior and Converted and Farmed Wetland mapping) in order to identify potential mitigation areas.
- 3.15.2 Field review – Following selection of the Least Environmentally Damaging Practicable Alternative (LEDPA), conduct a field review of the Project area to identify and document potential on-site mitigation areas for impacts to coastal marshes, freshwater wetlands, streams, submerged aquatic vegetation (SAV), and SAV habitat. Conduct assessments on potential mitigation areas, including Maple Swamp, identified from the review of existing mapping. Investigate and evaluate restoration, enhancement, innovation and/or non-traditional mitigation opportunities. Prepare and submit to NCTA a technical memorandum detailing findings of field reviews and evaluation of a broad spectrum of mitigation opportunities. Provide potential on-site mitigation areas and nearby mitigation areas on aerial photography of the Project area.
- 3.15.3 Environmental Agency coordination – Attend NCTA TEAC meetings between LEDPA selection and issuance of the Record of Decision (ROD) to present potential strategies and locations for mitigation, receive Environmental Agency feedback, and cooperatively develop mitigation plans with NCTA.
- 3.15.4 EEP coordination – Attend meetings with the North Carolina Ecosystem Enhancement Program (EEP) and NCTA between LEDPA selection and issuance of the ROD in evaluating the potential for EEP to provide required off-site mitigation. Prepare and deliver to NCTA a briefing letter outlining the results of coordination with EEP.
- 3.15.5 NCTA coordination – Attend meetings with NCTA staff to review technical findings, discuss results of Environmental Agency coordination, and discuss potential Project commitments relative to mitigation for inclusion in the Final EIS. Prepare meeting minutes following each meeting.
- 3.15.6 Assess potential for mitigation in Maple Swamp – Prepare and submit to NCTA a technical memorandum documenting the potential for preservation and conservation in Maple Swamp and identifying potential preservation and conservation areas, management

Appendix E: Scopes of Work and Progress Milestones

partners, and available funding opportunities for inclusion in the Project Feasibility Assessment. NCTA will not be responsible for monitoring, maintenance, liability, or ownership.

3.15.7 Conceptual mitigation plans and cost estimate – Based upon NCTA and Environmental Agency feedback, develop conceptual plans for viable mitigation areas and prepare a cost estimate for such mitigation (on-site and in-lieu fee). Such conceptual plans and estimates will be developed sufficiently for use in preparing the cost estimate for the Cost Assessment. Submit the plan and cost estimate to NCTA for approval.

3.15.8 University coordination – Coordinate with Elizabeth City State University (ECSU) and East Carolina University (ECU) relative to mitigation. Opportunities mutually agreed upon by NCTA for engagement of these resources will be coordinated. ECU has funding through a federal earmark that may be used for this purpose. ECSU may have funding through ongoing sources that may be used for this purpose.

Description of Work (Scope of Work) – Phase 1B

The Developer shall:

3.15.9 Revise mitigation plans – Based on findings of the above tasks and on the characteristics of the design of the Project, refine mitigation plans for impacts to coastal marshes, freshwater wetlands, streams, SAV, and SAV habitat. Such mitigation plans will include descriptions of proposed timing and schedule for mitigation activities, discussions of measures taken during Project design to avoid and minimize impacts to resources and discussions of relevant Project commitments included in the ROD. If monitoring is associated with the mitigation, develop conceptual monitoring plans for inclusion in the Costing Plan. Deliver preliminary mitigation plans, conceptual monitoring plan, if needed, and cost estimates to the NCTA for review, revise the mitigation plans based on NCTA comments and present them to the NCTA TEAC for Environmental Agency comment.

3.15.10 Environmental Agency coordination –Attend NCTA TEAC meetings after issuance of the ROD to discuss potential mitigation strategies, present preliminary mitigation and conceptual monitoring plans, receive Environmental Agency feedback, and cooperatively develop plans. Prepare meeting minutes following each meeting as requested by NCTA.

3.15.11 NCTA coordination – Attend meetings with NCTA staff to review preliminary monitoring and mitigation plans and to discuss technical findings and results of Environmental Agency coordination. Prepare meeting minutes following each meeting.

Deliverables – Phase 1A

The Developer shall provide the following items:

- On-site mitigation field review technical memorandum.
- Minutes of each meeting with NCTA.
- Minutes of each Environmental Agency coordination meeting.
- Maple Swamp mitigation technical memorandum.
- EEP coordination briefing letter.
- Conceptual mitigation plan and cost estimate.

Appendix E: Scopes of Work and Progress Milestones

Deliverables – Phase 1B

The Developer shall provide the following items:

- Preliminary mitigation plan, conceptual monitoring plan, if needed, and cost estimate.
- Minutes of each meeting with NCTA.
- Minutes of each Environmental Agency coordination meeting.

Milestones and Prices

The following table outlines the milestone dates for this activity along with the associated price for each deliverable:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
On-site mitigation field review technical memorandum	August-09	\$15,000
Maple Swamp mitigation technical memorandum	September-09	\$9,000
Conceptual mitigation plans and cost estimate	October-09	\$20,000
EEP coordination briefing letter	December-09	\$6,000
Phase 1B		
Preliminary mitigation plans, conceptual monitoring plan, if needed, and cost estimate	May-10	\$25,000

Note: All draft meeting minutes will be submitted within ten (10) working days of the day of the meeting.

Assumptions and Exceptions (including NCTA responsibilities)

- NCTA and FHWA will retain control and responsibility for the NEPA process as provided in 23 CFR 636.109.
- Evaluation of potential mitigation should apply to any alternative selected.
- NCTA will provide available aerial photography and mapping for the Project area for this work activity. NCTA will assist the Developer in obtaining available aerial photography from other sources such as the North Carolina Department of Transportation (NCDOT) or other governmental agencies.
- NCTA will provide information developed during the preparation of the Draft EIS relating to streams, wetlands, SAV and SAV habitat identified, field marked, and mapped by others, including all jurisdictional delineations.
- The NCTA has provided all available reports and documents related to permitting and mitigation to the Developer. All additional materials developed through the NEPA process will be provided.
- Mitigation schedules based on 1.30.2009 PDA Timeline.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.14 – Regulatory Approvals

Developer shall be responsible for developing a plan to effectively obtain all Regulatory Approvals necessary to implement the Project during the Concession Period. Developer will work with NCTA during the Pre-Development Phase to explore and determine opportunities which may expedite the permitting process once the Concession Agreement is executed. Throughout the Pre-Development Phase, Developer will work closely with NCTA in identifying permit requirements associated with the preferred alternative as the NEPA process progresses.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A

The Developer shall:

3.14.1. Identification of Regulatory Approvals – Coordinate with NCTA and Environmental Agencies, review materials generated in the preparation of the EIS, and analyze proposed alternative designs in order to identify (i) the necessary Regulatory Approvals, (ii) issues to be resolved prior to submitting any permit applications, and (iii) the information to be included in such permit/certification applications. Review existing TEAC meeting minutes relative to this Project and available Project documentation relative to permits and permit related issues. It is assumed, subject to verification, that the following Regulatory Approvals will be required in order to construct the proposed Project:

- 3.14.1.1. US Army Corps of Engineers (USACE) Section 404 Individual Permit
- 3.14.1.2. USACE Section 10 Permit
- 3.14.1.3. US Coast Guard (USCG) Bridge Permit
- 3.14.1.4. NC Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) – 401 Water Quality Certification
- 3.14.1.5. NCDENR Division of Coastal Management Coastal Area Management Act (CAMA) Permit (including consistency determination)
- 3.14.1.6. NCDENR DWQ State Stormwater Permit
- 3.14.1.7. NCDENR Division of Land Resources Erosion and Sediment Control Permit

3.14.2. Bridge clearance determination – Coordinate with the USCG, NCTA, NCDOT, and FHWA on clearance needs under the Mid-Currituck Bridge. Conduct any required studies to substantiate the proposed clearance requirements other than the assumed 35-foot vertical clearance. At this time, it is understood that clearance requirements will be equivalent to current clearances under the Wright Memorial Bridge. Less clearance will be investigated as an option for the Project. Prepare and submit to NCTA a briefing letter documenting the findings of this analysis.

Appendix E: Scopes of Work and Progress Milestones

3.14.3. Coordination

3.14.1.8. NCTA coordination - Attend meetings with NCTA staff to address Regulatory Approvals. Prepare meeting minutes following each meeting.

3.14.1.9. Environmental Agency coordination – Attend NCTA TEAC meetings in order to confer on Regulatory Approvals, clarify permitting requirements, and resolve Environmental Agency concerns. Prepare meeting minutes following each meeting.

3.14.4. Permit concept report – Prepare a report summarizing the conceptual approach for each of the Regulatory Approvals on the project. Report will address coordination and discussions to date along with plans for obtaining Regulatory Approvals. Submit the report to NCTA for approval.

3.14.5. The Developer will acquire any required permits associated with the subsurface exploration. Provide a copy of the approved permits to NCTA.

Description of Work (Scope of Work) – Phase 1B

The Developer shall:

3.14.6. Preparation of draft Regulatory Approval applications – Following approval of the ROD, prepare and submit draft Regulatory Approval applications to NCTA for review. This draft Regulatory Approval application will be based in the level of design developed in Phase 1B.

3.14.7. Coordination

3.14.7.1. NCTA coordination - Attend meetings with NCTA staff to review applications for Regulatory Approvals. Prepare meeting minutes following each meeting.

3.14.7.2. Environmental Agency coordination – Attend NCTA TEAC meetings to discuss Regulatory Approvals and address Environmental Agency comments. Prepare meeting minutes following each meeting.

3.14.8. The Developer will acquire any required permits associated with the pile load testing and/or subsurface exploration. Provide a copy of the approved permits to NCTA.

Deliverables – Phase 1A

The Developer shall provide the following items:

- Bridge clearance briefing letter.
- Minutes of each meeting with NCTA.
- Minutes of each Environmental Agency coordination meeting.
- Permit concept report.
- Approved permits for subsurface exploration.

Deliverables – Phase 1B

The Developer shall provide the following items:

Appendix E: Scopes of Work and Progress Milestones

- Draft Regulatory Approval applications to NCTA.
- Minutes of each meeting with NCTA.
- Minutes of each Environmental Agency coordination meeting.
- Approved permits for pile load testing and/or subsurface exploration.

Milestones and Prices

The following table outlines the milestone dates for this activity along with the associated price for each deliverable:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Bridge clearance briefing letter	Sep-09	\$6,000
Permit concept report	Dec-09	\$23,000
Phase 1B		
Draft Regulatory Approval applications to NCTA	Jun-10	\$20,500

Note: All draft meeting minutes will be submitted within ten (10) working days of the day of the meeting. Developer must submit approved permits to NCTA prior to commencing geotechnical field work.

Assumptions and Exceptions (including NCTA responsibilities)

- NCTA and FHWA will retain control and responsibility for the NEPA process as provided in 23 CFR 636.109.
- The Developer's role is only to support NCTA and FHWA as they execute their NEPA responsibilities.
- NCTA will provide to Developer information developed during the preparation of the Draft EIS relating to streams, wetlands, SAV, and SAV habitat identified, field marked, and/or mapped by others, including all jurisdictional delineations.
- The NCTA has provided all available reports and documents related to permitting and mitigation to the Developer. All additional materials developed through the NEPA process will be provided.
- Permitting schedule based on 1.30.2009 PDA Timeline.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.8 – Geotechnical Studies

Developer shall perform subsurface investigations, laboratory testing and implement a pile load testing program to accurately substantiate the design and Costing Plan. The NCTA has the discretion to eliminate the pile load testing pending outcome of preliminary subsurface investigation. Developer shall perform subsurface investigations and laboratory testing in accordance with the most current *NCDOT Geotechnical Unit Guidelines and Procedures Manual*. Developer shall provide all data obtained from the above testing to NCTA in a format that is consistent with NCDOT procedures. Any foundation design recommendation report shall be sealed by a professional engineer registered in the State who has completed a minimum of three geotechnical design projects of scope and complexity similar to that anticipated for this Project, using the load and resistance factor design (LRFD) method in accordance with the latest edition of the AASHTO LRFD Bridge Design Specifications. If the engineer of record does not demonstrate the aforementioned LRFD experience, then the design must undergo a peer review by an individual with such experience. In such case, the reviewer must be a registered professional engineer, but is not required to be registered in the State.

Developer shall be responsible for obtaining all permits necessary for such subsurface investigation and pile load testing.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A

The Developer shall:

3.8.1. Geophysical profiling – Investigate the sites along C1 and C2 using remote sensing tools, so as to (i) identify distinct geophysical horizons that can be correlated laterally over significant distances along the proposed bridge alignments, and (ii) identify any distinct anomalies in these horizons that might indicate a change in stratigraphy or subsurface geomorphology (e.g., the presence of a sand-filled channel, etc.). After identifying laterally continuous horizons and interpreting any associated data anomalies, optimal cone penetration test (CPT) and standard penetration test (SPT) locations will be selected that will best facilitate the objective of the geophysical survey, to vertically correlate the depths of these distinct horizons with CPT and SPT data to determine the physical nature of the lithologies (e.g., fine-grained vs. coarse-grained; thinly-bedded vs. thickly bedded, etc.) that are bounded by these horizons.

3.8.1.1. Currituck Sound - Profile Currituck Sound for the C1 and C2 alignment alternatives using both seismic reflection profiling and electrical resistivity imaging.

3.8.1.2. Maple Swamp and other land areas – Along the proposed alignment, profile the Maple Swamp and other land areas of the Project using electrical resistivity imaging and multichannel analysis of surface waves (MASW) in select intervals that represent variations in observed ERI results.

Appendix E: Scopes of Work and Progress Milestones

- 3.8.2. Interpreting results of geophysical profiling – Interpret the subsurface stratigraphy based on the lateral and vertical variations in material type (sand to clay for instance) and relative density (loose to dense). Submit a report on the geophysical profile results and recommendations to the initial subsurface exploration program. Meet with NCTA to present and discuss the findings and agree on the scope of the initial subsurface exploration program. If the initial subsurface exploration scope is modified, the price detailed herein for this activity will be modified accordingly.
- 3.8.3. Initial subsurface exploration – Perform CPT and SPT borings and provide initial subsurface exploration results including SPT and CPT boring logs to NCTA.
- 3.8.3.1. Currituck Sound – Perform CPT's to a depth of 150 feet at a spacing of about one mile in the Sound along the C1 and C2 alignments, comprising seven locations. Perform three SPT borings to a depth of 150 feet.
- 3.8.3.2. On land – Perform four CPT borings to a depth of 150 feet: one in Maple Swamp and one near the western shore of Currituck Sound along the C1/C2 alignment, one near the eastern shore of Currituck Sound on the C1 alignment, and one on the eastern shore of Currituck Sound on the C2 alignment. Perform four SPT boring to a depth of 150 feet beside each of these CPT's. In addition, perform four SPT borings to a depth of 50 feet where major retaining walls and/or embankments are planned at the interchanges with US 158 and NC 12. Obtain representative undisturbed samples of soft clays and organic soils, if present, for laboratory strength, consolidation and soil classification testing. Perform pore pressure dissipation tests in the two CPT borings on the island to estimate in-situ permeability of soils and measure groundwater levels. The subsurface exploration results shall also include soil testing and groundwater results.
- 3.8.3.3. The Developer will be responsible for obtaining any permits required for subsurface field investigations, including access to test locations.
- 3.8.4. Preliminary geotechnical report - Perform a pre-design foundation analysis for representative zones along the respective alignments with similar subsurface conditions. Conduct geotechnical analyses to estimate pile capacity versus depth. Develop preliminary pile design recommendations. Perform a preliminary analysis of embankment stability and settlement and provide preliminary geotechnical recommendations for design. Review the results of the geophysical profiling and initial subsurface exploration with NCTA to determine if additional subsurface exploration will be needed in order to complete the Costing Plan for the project. Submit the report to NCTA for approval.

Description of Work (Scope of Work) – Phase 1B

- 3.8.5. Perform a supplemental subsurface exploration of the areas of proposed retaining walls and approach embankments and areas of new pavement along US 158 and NC 12 as well as the selected alignment of the Project as follows, and provide the results to NCTA :
- 3.8.5.1. Currituck Sound – no further subsurface exploration planned.

Appendix E: Scopes of Work and Progress Milestones

3.8.5.2. On land – perform three CPT borings to a depth of 150 feet and three SPT borings at the same locations as the CPT borings to a depth of 150 feet for bridge foundations. Perform four SPT borings to a depth of 50 feet for major retaining walls and approach embankments. Perform 10 CPT borings to a depth of 20 feet for new pavement sections with embankments less than 10 feet high. Obtain representative undisturbed samples of soft clays and organic soils, if present, for laboratory strength, consolidation and soil classification testing. The supplemental subsurface exploration results shall also include soil testing results.

3.8.6. Pre-design foundation analysis – Refine foundation analysis performed in Phase 1A for representative zones along the preferred alternative alignment with similar subsurface conditions. Conduct geotechnical analyses in order to estimate pile capacity versus depth and lateral load resistance in each zone for the pile types and sizes that are envisioned for the Project. Conduct a drivability analysis for the given pile types and sizes and the potential driving system. Develop preliminary pile design recommendations. Develop recommendation for a pile load-test program with the objective of evaluating capacities of the most promising pile types for the range of soil conditions encountered along the selected bridge alignment. Submit a report with results and recommendations.

3.8.7. Load testing program – After a preferred bridge alignment is established, conduct a test pile program in order to evaluate capacities of the most promising pile types for the range of soil conditions encountered along the selected bridge alignment by driving piles at selected locations along the proposed alignment utilizing the driving systems planned for the production pile driving. Establish and submit for NCTA's acceptance a pre-design pile load testing program. Maintain records of the pile driving for each test pile. Implement the accepted pile load test program for the potential pile types identified. Provide pile load testing results to NCTA.

3.8.8. Prepare a preliminary Currituck Sound foundation report on the load-testing program with the results of the testing and revised recommendations on pile design. Submit the report to NCTA for approval.

Deliverables – Phase 1A

The Developer shall provide the following items:

- Geophysical profiling report
- Initial subsurface exploration results on land
- Initial subsurface exploration results in Currituck Sound
- Preliminary geotechnical report

Deliverables – Phase 1B

The Developer shall provide the following items:

- Supplemental subsurface exploration results (SPT and CPT logs)
- Pre-design foundation analysis report

Appendix E: Scopes of Work and Progress Milestones

- Pile load testing results
- Preliminary Currituck Sound foundation report

Milestones and Prices

The following table outlines the milestone deliverable events for this activity along with the associated prices to produce the deliverable and the Project time frame:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Geophysical profile report	June-09	\$123,664
Subsurface exploration results on land	July-09	\$64,731
Subsurface exploration results in Currituck Sound	July-09	\$67,167
Preliminary geotechnical report	September-09	\$46,014
Developer Oversight	September-09	\$30,000
Phase 1B		
Supplemental subsurface exploration results (SPT and CPT logs)	April-10	\$96,923
Pre-design foundation analysis report	May-10	\$50,000
Pile load testing results	July-10	\$76,923
Preliminary Currituck Sound foundation report	July-10	\$38,462

Assumptions and Exceptions (including NCTA responsibilities)

- Work on land in Maple Swamp will be done along the C1/C2 corridor provided environmental permits allow clearing for access. If clearing is not allowed, work in Maple Swamp will be limited to the power line corridor at a mutually acceptable reduced price.
- While the Developer will be responsible for distributing letters to property owners prior to property entry and attempting to notify residents at the time of entry, NCTA will assist in preparation of the property owner letter, which will be distributed on NCTA letterhead.
- No geo-environmental investigations required in Phase 1A.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

3.7 Right of Way Services

Developer shall prepare right of way cost estimates, for NCTA approval, that will include sufficient detail to develop the Costing Plan. Developer shall provide all right of way services necessary to ensure accurate cost estimates and property impacts. In doing so, Developer shall determine all properties for right of way acquisition and/or easements, right of way cost estimates for these properties, relocation assessment and relocation costs. Developer will participate in public hearings and workshops to address participants' concerns and questions related to right of way and relocation issues. The work contained within this scope will be consistent with the NCDOT right of way manual and the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A Draft EIS

3.7.1 Right of way impact assessment

Review the designs and spreadsheets provided by NCTA and/or PB Americas to identify parcels and respective acquisitions, acquisition type (fee simple, permanent easement, and temporary easement) and acquisition cost estimate for each alternative considered in the Draft EIS (ER2, MCB2 and MCB4). The information shall be provided in the breakdown of alternative components in the following individual segments:

- a) US 158 6-lane
- b) US 158 8-lane
- c) NC 12 3-lane
- d) NC 12 4-lane
- e) Outer Banks Bridge Approach and C2 Terminus South (Albacore Street)
- f) Outer Banks Bridge Approach and C1 Terminus North
- g) Mainland Bridge Approach, Interchange and Frontage Roads North (common for C1 and C2 Mid-Currituck Bridge corridors)
- h) Access frontage roads along US 158
- i) US 158 Hurricane lane (Wright Memorial Bridge to Mid-Currituck Bridge)
- j) US 158 Hurricane Lane (Mid-Currituck Bridge to NC 168)
- k) US 158 Hurricane Lane (NC 12 to Wright Memorial Bridge)

Utilize areas provided by NCTA and/or PB Americas in order to evaluate the impact on each parcel. Developer shall conduct an assessment for acquisition type (fee simple, permanent easement, and temporary easement), improvements obtained, and potential damages. Considerations for NC 12 property impacts include septic tank issues, nonconforming lot sizes due to partial parcel acquisition, proximity damages to dwellings, and/or loss of parking for commercial properties. Approximate damages to parcels associated with set-back reduction (based on current tax value) without consideration for relocation benefits, asbestos abatement, and environmental/contamination.

Appendix E: Scopes of Work and Progress Milestones

3.7.2 Relocation assessment

Review the designs and spreadsheets provided by NCTA and/or PB Americas to identify the impact on each parcel for each alternative considered in the Draft EIS (ER2, MCB2 and MCB4). Establish the number of proposed residential and business relocations and compile information on the properties with potential septic tank and/or septic field impacts. Evaluate potential relocation claims to include existing cemeteries and billboards and provide the number and type of relocation. Provide a NCTA EIS relocation report for each individual segment (items a-k above).

3.7.3 Right of way cost estimate

Evaluate current tax information provided by NCTA and/or PB Americas and obtain current tax information for the properties identified in the aforementioned right of way impact assessment. Conduct a current windshield review of each property impact. Conduct sales research based on recent closed sales and current listings available in the market.

Based upon the right of way and relocation assessments and property cost evaluation above, provide a right of way cost estimate for each alternative considered in the Draft EIS (ER2, MCB2 and MCB4).

Description of Work (Scope of Work) – Phase 1A after Draft EIS

7.3.4 Update right of way impact assessment

Review designs and spreadsheets to identify parcels and respective acquisitions for the recommended alternative. Update areas to evaluate the project impact on each parcel. Consideration will be made for acquisition (fee simple, permanent easement, and temporary easement), improvements obtained, and potential damages. Considerations for NC 12 property impacts include septic tank and/or septic field issues, nonconforming lot sizes due to acquisition, proximity damages to dwellings, and loss of parking for commercial properties.

7.3.5 Update relocation assessment

Review the designs for the recommended alternative and update the number of residential and business relocations. Evaluate potential relocation claims and provide the number and type of relocation. Document potential right of way services, to include demolition, asbestos abatement, and sealing of abandoned wells. Update the NCTA EIS relocation report for the recommended alternative.

7.3.6 Update right of way cost estimate

Evaluate current tax information for the properties identified in the aforementioned right of way impact assessment for the recommended alternative. Update sales research based on recent closed sales and current listings available in the market. Develop residential and business relocation estimated costs with supporting documentation. Review historical data for similar projects and develop a condemnation and settlement rate multiplier. Develop costs for the service fees associated with acquiring properties to include appraisals, title searches, closing fees, legal services, title insurance, grave relocation and relocation services. Develop and substantiate a contingency cost for right of way.

Appendix E: Scopes of Work and Progress Milestones

Based upon the right of way impact and relocation assessments and current market cost evaluation above, provide a preliminary right of way cost estimate for the recommended alternative for inclusion in the Cost Assessment.

7.3.8 Preliminary acquisition schedule

Provide a preliminary acquisition schedule for the recommended alternative.

Description of Work (Scope of Work) – Phase 1B

7.3.9 Refine right of way impact assessment

Review plans for the preferred alternative to identify parcels and respective acquisitions for the preferred alternative. Update areas to evaluate the project impact on each parcel. Consideration will be made for acquisition (fee simple, permanent easement, temporary easement), improvements obtained, and potential damages. Considerations for NC 12 property impacts will include septic tank and/or septic field issues, nonconforming lot sizes due to acquisition, proximity damages to dwellings, and/or loss of parking for commercial properties.

7.3.10 Refine relocation assessment

Review the designs for the preferred alternative and establish the number of residential and business relocations. Evaluate potential relocation claims and provide the number and type of relocations. Establish potential right of way services, to include the demolition, asbestos abatement, and sealing of abandoned wells. Update the NCTA EIS relocation report for the preferred alternative.

7.3.11 Refine right of way cost estimate

Evaluate current tax information for the properties identified in the aforementioned right of way impact assessment for the preferred alternative. Update sales research based on recent closed sales and current listings available in the market. Update estimated residential and business relocation costs. Update condemnation and settlement rate multiplier. Perform limited number of appraisals on varying land use parcels throughout the project limits. Refine the right of way cost contingency. Develop costs for the service fees associated with acquiring properties to include appraisals, title searches, closing fees, legal services, title insurance, grave relocation and relocation services.

Based upon the right of way and relocation assessments and current market cost evaluation above, provide a refined right of way cost estimate for the preferred alternative for inclusion in the Costing Plan.

Coordinate right of way cost estimates with design activities to provide cost data for access study evaluation.

7.3.12 Acquisition schedule

Update the preliminary acquisition schedule for the preferred alternative.

Appendix E: Scopes of Work and Progress Milestones

Deliverables

Deliverables – Phase 1A Draft EIS

- Right of way cost estimates for the Draft EIS (ER2, MCB2 and MCB4)
- EIS relocation reports for the Draft EIS (ER2, MCB2 and MCB4)

Deliverables – Phase 1A from after Draft EIS

- Right of way cost estimates for the recommended alternative
- Updated EIS relocation reports for the recommended alternative
- Preliminary acquisition schedule

Deliverables – Phase 1B

- Right of way cost estimates for the preferred alternative
- Updated EIS relocation reports for the preferred alternative
- Updated preliminary acquisition schedule

Milestones and Prices

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A Draft EIS		
Right of way cost estimates for the Draft EIS	April-09	\$130,095
EIS relocation reports for the Draft EIS	April-09	
Phase 1A after Draft EIS		
Right of way cost estimates for the recommended alternative	October-09	\$47,140
Updated EIS relocation reports for the recommended alternative	October-09	
Preliminary acquisition schedule	October-09	
Phase 1B		
Right of way cost estimates for the preferred alternative	March-10	\$87,050
Updated EIS relocation reports for the preferred alternative	March-10	
Updated acquisition schedule	March-10	

Appendix E: Scopes of Work and Progress Milestones

Assumptions and Exceptions (including NCTA responsibilities)

- The cost estimate is not to be considered an appraisal. Individual appraisals will need to be secured for each parcel in order to determine offer amounts.
- EIS relocation report will be based on observations and will not constitute relocation cost evaluation, which will be performed during acquisition of properties.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.6 – Utility Services

Developer shall prepare a utility relocation plan, for NCTA approval, that will include sufficient detail to develop the Costing Plan. In preparing the utility relocation plan, Developer shall be responsible for identifying all necessary utility relocations, coordinating with utility owners on the utility relocations, and determining the cost responsibility for the utility relocations. Coordination shall include the negotiation of any required utility relocation agreements, when applicable during the Pre-Development Phase.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A Draft EIS

The Developer shall:

- 3.6.1. Coordinate with NCTA to obtain plans for the detailed study alternatives for the Draft EIS and obtain existing utility information available for the project from NCTA.
- 3.6.2. Obtain publicly available utility information for the project area that is not already available from NCTA.
- 3.6.3. Perform a survey of the project study area to confirm data received from NCTA and the utility companies. Submit to NCTA a listing of utility owners within the project corridor.
- 3.6.4. Identify existing utilities within the project corridor from mapping provided by NCTA and site visit.
- 3.6.5. Prepare and submit to NCTA a preliminary utility identification report for use in the Draft EIS. Such preliminary utility identification report will evaluate and document the utility impacts (including wet and dry utilities) associated with each of the detailed study alternatives (ER2, MCB2 and MCB4) on an equal and consistent basis and will contain a utility impact and relocation cost estimate for each of the detailed study alternatives for the Draft EIS on an equal and consistent basis. The cost estimate shall reflect whether prior rights exist for the utility to the extent that this information is readily available for this preliminary report. The report shall also contain a listing of each utility owner identified, along with a contact person for that utility.

Description of Work (Scope of Work) – Phase 1A after Draft EIS

The Developer shall:

- 3.6.6. Coordinate with NCTA and existing utility owners - Coordinate with NCTA and existing utility owners in order to determine the extent of potential conflicts. Conduct on-site meetings with utility owners for this activity.
- 3.6.7. Develop general project utility relocation concepts – Coordinate with both the existing utility owners and NCTA in order to develop general project utility relocation concepts.

Appendix E: Scopes of Work and Progress Milestones

- 3.6.8. Prepare a conceptual utility location plan and cost estimate for accommodating utilities in and along the project right of way. Investigate the potential for locating utilities on the bridge over the Currituck Sound.
- 3.6.9. Develop preliminary “utility by others” plans and conceptual water and sewer routing plans detailing utilities in conflict with the recommended alternative as identified in the Draft EIS. Submit the plans to NCTA for approval.
- 3.6.10. Develop and submit to NCTA an utility impact and cost estimate for the recommended alternative.

Description of Work (Scope of Work) – Phase 1B

The Developer shall:

- 3.6.11. Continue coordination with NCTA and existing utility owners - Coordinate with NCTA and existing utility owners in order to determine the extent of potential conflicts. Attend meetings to determine the extent of such potential conflicts.
- 3.6.12. Update preliminary “utility by others” plans and conceptual water and sewer plans for the preferred alternative.
- 3.6.13. Develop and submit to NCTA a utility impact and cost estimate for the preferred alternative.

Deliverables – Phase 1A Draft EIS

The Developer shall provide the following item:

- Preliminary utility identification report

Deliverables – Phase 1A after Draft EIS

The Developer shall provide the following items:

- Preliminary utility by others plans
- Conceptual water and sewer routing plans
- Utility impact and cost estimate for the recommended alternative.

Deliverables – Phase 1B

- Update preliminary utility plans for the preferred alternative.
- Utility impact and cost estimate for the preferred alternative.

Milestones and Prices

The following table outlines the milestone dates for this activity along with the associated price for each deliverable:

Appendix E: Scopes of Work and Progress Milestones

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A Draft EIS		
Preliminary utility identification report	April-09	\$68,805
Phase 1A after Draft EIS		
Preliminary utility by others plans	September 09	\$30,183
Conceptual water and sewer routing plans	September 09	\$37,267
Utility impact and cost estimate for the recommended alternative	September 09	
Developer Oversight	September 09	\$12,500
Phase 1B		
Update preliminary utility identification report for the preferred alternative	May-10	\$9,779
Utility impact and cost estimate for the preferred alternative		

Assumptions and Exceptions (including NCTA responsibilities)

- NCTA will provide plans for detailed study alternatives in the Draft EIS.
- NCTA and its consultants will coordinate with the Developer during this activity.
- NCTA will provide available utility information developed during the Draft EIS.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.5 a –Design Services (including Activity 3.9 – NEPA Assistance)

Developer shall prepare a design package, for NCTA approval, that will include sufficient detail to develop the Costing Plan. The design package shall be in accordance with all applicable guidelines and regulations. The superstructure selection and design will continue through the overall Project selection process of identifying an economical, aesthetically pleasing structure that can be built with minimal environmental impacts.

Developer shall establish the design providing opportunities for local material use. The design shall also include a commitment to recycling, which goes beyond the use of only the on-site materials. Developer's design shall address and include the reduction of local stockpiles of recycled materials when and where it is feasible to do so. Design efforts shall evaluate all improvement options along NC 12 and the timing for those improvements.

The following describes the Scope of Work.

Design Services (General)

The roadway design shall be in accordance with the 2004 AASHTO A Policy on Geometric Design of Highways and Streets, July 2006 NCDOT Roadway Standard Drawings, NCDOT 2002 Roadway Design Manual, Roadway Design Policy and Procedure Manual, Roadway Design Guidelines for Design-Build Projects, 2006 North Carolina Standard Specifications for Roads and Structures, the AASHTO Roadside Design Guide 2002, Manual for Uniform Traffic Control Devices (MUTCD), AASHTO Roadway Lighting Design Guide and An Informational Guide to Roadway Lighting, NCDOT's Planning and Designing Local Pedestrian Facilities, North Carolina Bicycle Facilities Planning and Design Guidelines, and other pertinent NCTA or NCDOT guidelines. If the NCDOT Roadway Design Manual, the 2004 AASHTO A Policy on Geometric Design of Highways and Streets, the 2006 Roadway Standard Drawings and / or any other guidelines, standards or policies have desirable and/or minimum values, the Developer shall use the desirable values unless otherwise approved by NCTA. Similarly, in case of conflicting design parameters in the various resources, the proposed design shall adhere to the most conservative values unless otherwise approved by NCTA.

The structure design shall be in accordance with the latest edition of the AASHTO LRFD Bridge Design Specifications, NCDOT Structure Design Manual (including policy memos), and NCDOT Bridge Policy Manual. Construction and materials shall be in accordance with the current NCDOT 2006 Standard Specifications for Roads and Structures, NCDOT Structure Design Unit Project Special Provisions, NCDOT Structure Design Unit Standard Drawings, AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, and NCDOT Geotechnical Engineering Unit Roadway and Structure Foundation Guidelines. Fracture critical structures shall not be permitted. Any structure design shall be sealed by a professional engineer registered in the State who has completed a minimum of five design projects of scope and complexity similar to that anticipated for this Project, using the load and resistance factor design (LRFD) method in accordance with the latest edition of the AASHTO LRFD Bridge Design Specifications. If the engineer of record does not demonstrate the aforementioned LRFD experience, then the design must undergo a peer review by an individual with such experience. In such

Appendix E: Scopes of Work and Progress Milestones

case, the reviewer must be a registered professional engineer, but is not required to be registered in the State.

Prior to commencing each design activity, the Developer shall coordinate with NCTA, NCDOT and FHWA, collectively, to establish the design criteria for such activity. The Developer shall periodically meet with NCTA and during these review meetings provide NCTA the opportunity to review the design data for the Project. These interim reviews do not constitute a formal design submittal; however, will allow for the review of working drawings, reports, etc. by the NCTA. Design exceptions and alternative designs, details, or construction practices (such as those employed by others, but not standard practice in North Carolina) are subject to NCTA review and shall be evaluated on a case by case basis. The NCTA will have ultimate approval of the criteria and requirements to which the Project shall be designed.

The design efforts shall include alternatives to increase the efficiency and value of the Project. Bridge alternatives shall be evaluated to determine the most appropriate structure to further a Project goal of providing a world-class, green and sustainable facility in a cost effective manner. The design shall maintain or exceed the functionality and capacity as shown in the Draft EIS, based on the traffic forecasts in the NEPA process. However, if there are alternative design concepts that enhance the financial feasibility of the project, the NCTA will discuss and may approve deviations from the NEPA preliminary design.

Description of Design and NEPA Support Work (Scope of Work) – Phase 1A Draft EIS

The Developer shall:

- 3.5a.1 Design criteria – Review and revise the existing design criteria for each major design feature using the standards of the AASHTO and NCDOT standards (variations from either set of standards to be confirmed with NCTA). Coordinate with NCTA to gain approval for the design criteria (design assumptions) prior to commencing on any design features. Provide approved design criteria to NCTA.
- 3.5a.2 Alternative review – Review NCTA's alternatives against any conceptual designs that are being considered by the Developer, to ensure that the Developer's concept will be contained within the footprint of the NCTA's alternatives (C1 & C2). The design shall maintain or exceed the functionality and capacity as shown in the Draft EIS, based on the traffic forecasts in the NEPA process. However, if there are any alternative design concepts that enhance the financial feasibility of the project, the NCTA will discuss and may allow deviations from the NEPA Preliminary Design. The Developer will produce a memo to NCTA detailing the results of the alternative review.
- 3.5a.3 Environmental analyses – Determine whether the right-of-way limits for the design fall within NCTA's existing boundaries for environmental analysis. For any portion of a conceptual design falling outside those limits, coordinate with NCTA so that environmental impacts can be determined in accordance with the project's existing standards. Perform any additional analyses required and submit such additional analyses to NCTA for inclusion in environmental documentation.

Appendix E: Scopes of Work and Progress Milestones

- 3.5a.4 Independent review of draft environmental documents – Review draft versions of the environmental documents (Draft EIS), along with supporting technical reports prepared by the NCTA and its consultants. Review comments on these documents with NCTA.

Description of Design and NEPA Support Work (Scope of Work) – Phase 1A up to Final EIS

The Developer shall:

- 3.5a.5 Conceptual design plan development – Utilizing all the latest AASHTO, NCDOT, and FHWA guidelines, develop conceptual design plans for C1 and C2, which shall include key design features. Conceptual plans shall include horizontal and vertical alignments with typical sections. Alternatives such as modified signalized intersections and roundabouts should be evaluated for access to NC 12 from the Currituck Sound Bridge. The plans will be developed using the same survey and traffic forecast data as the Draft EIS alternatives. Coordinate with NCTA throughout the development of these conceptual designs. Once a preferred alternative is established, work will focus on that alternative alone. The conceptual design plan will also include:
- 3.5a.5.1 Over/under and miscellaneous studies - Conduct an over/under study at the Narrow Shore Road Crossing and any additional studies identified per NCTA requests. No access will be provided from North Shore Road to the toll facility. Perform an analysis at US 158 to determine the over/under at this interchange location.
 - 3.5a.5.2 Bicycle and pedestrian facility studies – Develop conceptual bicycle and pedestrian plans to accommodate existing facilities and proposed expansions.
 - 3.5a.5.3 Conceptual toll booth facility designs - Develop the conceptual site development plans for the toll booth facility. Incorporate the site development plan into the conceptual design. Coordinate with NCTA during the development of the toll booth facility designs.
 - 3.5a.5.4 Design avoidance and minimization - After selection of the LEDPA, provide additional support to NCTA in preparation for the TEAC meeting to discuss avoidance and minimization measures.
 - 3.5a.5.5 Draft design exception checklist – Conduct a design exception checklist on the conceptual design to ensure that the design meets the minimum standards as identified by the NCTA, NCDOT and FHWA guidelines. Identify any elements that are found to require a design exception and coordinate with NCTA to determine the appropriate action
 - 3.5a.5.6 Conceptual bridge design - Develop type, size, location conceptual bridge design for the preliminary alternative. All bridges will be designed according to NCDOT and AASHTO LRFD Specifications and Standards. The current concept involves long bridges over Maple Swamp and over Currituck Sound. In addition to these major bridges, the US 158 Interchange will have one or two grade separation bridges and a potential small bridge at the grade separation of the mainline/Narrow Shore Road. The substantial reduction in hurricane clearance time for residents and visitors who use NC 168 and US 158 during a coastal evacuation will be a key design consideration during the Pre-Development Phase. Developer shall investigate the feasibility of design alternatives, such as the use of a Contra Flow Lane during an evacuation event; as well as replacing the median barrier on the Intracoastal Bridge with a moveable barrier.

Appendix E: Scopes of Work and Progress Milestones

For each bridge, the conceptual bridge design will include:

- Coastal engineering considerations (for bridge over Currituck Sound) to identify a preliminary water elevation for approximately setting profile;
- Development of one reasonable span arrangement based on bridge engineering knowledge and experience;
- Development of a bridge typical section to support the span arrangement above;
- Determination of a likely general foundation type;
- Determination of vertical and horizontal clearance requirements, coordination with the US Coast Guard and Corps of Engineers, as needed, to establish clearances. If required, a formal submittal of intent and request for guidelines regarding clearances will be provided to NCTA by the Developer;
- Coordination with hydraulics, utilities and geotechnical engineers;
- Discussions and coordination with environmental engineer regarding sub-aqueous vegetation (SAV);
- Conceptual drainage and water handling discussions with environmental and hydraulics engineers; and
- Coordination with the Developer's design build committee.

3.5a.5.7 Submit the design plans to NCTA for approval.

3.5a.6 Access management study:

Perform an access study for parcels along the project. Evaluate landlocked parcels for providing access versus a complete purchase of the property. Coordinate with right of way cost estimate preparation in evaluating if it is more cost effective to provide access or purchase parcels.

3.5a.6.1 Draft access management report - Prepare and submit draft report documenting the access management recommendations.

3.5a.6.2 Final access management report- After NCTA's review, finalize and resubmit final report.

3.5a.7 Traffic analysis – Perform traffic analysis work, as required, to fully evaluate any changes to traffic operations that are proposed within the Developer's conceptual plans.

3.5a.7.1 Coordination – Attend periodic coordination meetings with NCTA to identify assumptions and expectations for traffic studies, to review data, and to review study conclusions.

3.5a.7.2 Results – Review the traffic analysis results with NCTA and revise the analysis based on comments from NCTA.

3.5a.7.3 Draft traffic analysis report- Prepare and submit a draft traffic analysis report, detailing the results of the traffic analysis.

3.5a.7.4 Final traffic analysis report- Revise the traffic analysis report from NCTA's comments and resubmit the final report.

Appendix E: Scopes of Work and Progress Milestones

3.5a.8 Independent review of draft environmental documents – Review draft versions of the environmental documents (Final EIS), along with supporting technical reports prepared by the NCTA and its consultants. Review comments on these documents with NCTA. Review comments and responses on the Draft EIS.

3.5a.9 Corridor design combined public hearing – Following publication of the Draft EIS, attend a series of corridor design combined public hearings and open houses as detailed in Activity 3.17.

3.5a.10 Coastal engineering design criteria:

- Determine return period for design (considering design life and acceptable level of risk);
- Study the possibility for barrier island breaches;
- Develop initial estimate of ocean side surge levels (and possibly waves) to evaluate design water levels, wave heights, and overwash/breach potential based in Federal Emergency Management Agency (FEMA) work, in addition to NCDOT and FHWA work;
- Complete preliminary numerical modeling to identify possible design conditions for surges, currents and waves on the sound.
- Identify range of estimates for possible flow speeds under bridge.
- Sea level rise study – Research and document sea level rise potential for setting bridge clearance and for evaluating the impact on the lands in the vicinity of the project. Prepare and submit to NCTA a report summarizing the impact of sea level change.

3.5a.11 Zero waste report:

- Review the entire path and proposed rights-of-way of the Project to confirm the key (apparent above ground and listed underground) structures and buildings that would need to be removed based on the currently identified potential route(s). Deliver a matrix listing key structures and buildings needing to be removed.
- Develop a preliminary estimate of the representative waste materials expected to be generated from the project including the probable origin, type and quantities of all waste materials projected to be generated from the site demolition portion. This will include building as well as road network materials that need to be removed during the project. Deliver a matrix listing waste materials expected to be generated.
- Evaluate the projected materials of construction expected to be used in the new construction, which includes certain buildings and site improvements as well as bridge and paving materials, and develop a preliminary listing of new construction/renovation project material specifications and quantities for comparison to the properties and quantities of potentially available recycle/reuse materials that might be incorporated into and/or around the new construction. Deliver a matrix listing construction materials expected to be used for which there may be opportunities to substitute recycle/reuse materials.
- Document the on-site opportunities to incorporate as much of the environmentally permissible recycle/reuse materials into the project as feasible, based on the available level of preliminary engineering, on-site guidelines and allowed Phase 1A activities. Deliver on-site opportunities for materials recycle/reuse technical memorandum.
- Evaluate the opportunity to develop a potential on-site program for processing recycle/reuse materials for implementation during the project construction phase. Deliver opportunities for on-site processing of recycle/reuse materials technical memorandum.

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- Identify the best method for on-site handling (which may include day-labor site cleanup) and storage of the waste stream materials, recognizing that some materials and their quality that could provide good reuse/recycling opportunities will be impacted by the weather if not sorted and/or stored properly. Deliver an on-site handling and storage of recycle/reuse materials technical memorandum.
- Perform preliminary research of available alternate recycling/reuse locations for “waste materials” estimated to be generated versus the use of on-site portable processing equipment. Research material receipt specifications for alternative off-site recycling/reuse centers, considering the handling, storage and shipping (transportation costs) versus the value or cost at the market destination. Deliver an on-site/off-site reuse/recycle comparison technical memorandum.
- Determine the total costs for handling and processing commingled (mixed) C&D waste, even though this may be the least-preferred option. Deliver a commingled waste option technical memorandum.

Description of Design Work (Scope of Work) – Remainder of Phase 1A

The Developer shall:

3.5a.12 Conceptual engineering:

- 3.5a.12.1 Conceptual roadway plans – Continue with the develop of the conceptual roadway plans using the latest AASHTO, NCDOT, and FHWA design guidelines, and coordinated with NCTA in order to gain approval. The conceptual roadway plans will include: a title sheet, typical, plan and profile sheets, vertical clearance calculations, superelevation design, structure recommendations, sight distance calculations, capacity analysis, preliminary interchange design including gore calculations, preliminary intersection designs, shear point diagrams (if applicable), property owner contact forms, and cross sections. Coordinate with NCTA to determine the appropriate plan and profile sheet scale.
- 3.5a.12.2 Identification of all multi-use paths and pedestrian facilities.
- 3.5a.12.3 Identification of any retaining walls and / or noise barriers – Identify all retaining walls and / or noise barriers during the development of the conceptual designs. If requested by NCTA, all wall envelopes will be developed and submitted for NCTA approval.
- 3.5a.12.4 Construction phasing and maintenance of traffic concepts – Develop a conceptual construction phasing concept diagram in order to ensure that the conceptual design can be constructed with minimal disruption to the existing traffic patterns. Identify potential construction staging areas to prevent or minimize negative impacts to the surrounding environment, and to the natural and cultural resources on or adjacent to the project corridor. Coordinate with NCTA during the development of the construction phasing and maintenance of traffic concepts.
- 3.5a.12.5 Conceptual pavement design – Develop a conceptual pavement design to be used on the project; this includes identifying locations for the use of permeable

Appendix E: Scopes of Work and Progress Milestones

pavement. The pavement design will be performed using applicable NCDOT standards and the AASHTO Guide for Design of Pavement Structures. Other references will include Transportation Research Board (TRB) and Federal Highway Administration (FHWA) publications and State publications. Research into the state-of-the-art use of permeable pavements will be incorporated into the identification of locations for its appropriate use. Life cycle costs using benefit to cost analysis during the pavement type selection process will be utilized.

3.5a.12.6 Conceptual signal plan – Develop a conceptual signal recommendation for the Project. Coordinate with NCTA and NCDOT to determine the signal locations.

3.5a.12.7 Submit the design plans to NCTA for approval.

3.5a.13 Coastal engineering concept plan and design:

- Identify Project components that require scour estimates (piers) and/or protection (abutment and approaches) and/or coastal wave effects.
- Develop the concept level design for bridge pier scour allowance and abutment/approaches protection.
- Interact with structural designers and attend meetings.
- Submit coastal engineering concept plan report to NCTA for approval.

3.5a.14 Continued development of bridge design plan - Develop bridge design plan for the established alternative. All bridges will be designed according to NCDOT and AASHTO LRFD Specifications and Standards. The following work is proposed for each bridge location, including Maple Swamp, Currituck Sound and the US 158 Interchange:

- Identification and development of up to four (4) potentially viable bridge superstructure types;
- Conceptual design of superstructure types to establish viability to include any special design features or construction techniques;
- Coastal engineering considerations (for bridge over Currituck Sound) to set the profile to accommodate storm surge and wave action;
- Identification and development of up to four (4) viable foundation types;
- Provide pile loads to geotechnical and work collaboratively to determine reasonably accurate pile tip elevations;
- Work with geotechnical engineer, Developer's design build committee and NCDOT to define an acceptable geotechnical program needed for the final bridge designs for the Maple Swamp, Currituck Sound and US 158 bridges;
- Conceptual foundation support needs for the viable superstructure types;
- Begin working with Developer's design build committee to determine pile delivery and installation requirements; and
- Continued coordination and discussion with team members.
- Submit conceptual bridge design plan to NCTA for approval.

Appendix E: Scopes of Work and Progress Milestones

3.5a.15 Zero waste report-

- Research local and regional recycling/reuse markets for the key materials identified, realizing that the uses of the materials in off-site reuse/recycling opportunities will be regionally dependent. Deliver potential off-site markets for recycle/reuse materials technical memorandum.
- Confirm material storage and shipping transportation options to recyclers/reuse market(s). Deliver a recycle/reuse material storage and shipping options technical memorandum.
- Prepare a construction cost estimate for the recycle/reuse/waste-free elements of the project. Deliver a preliminary construction cost estimate for recycle/reuse/waste-free elements of the Project.

3.5a.16 Independent review of draft environmental documents – Within the context of the design activities, review draft versions of the environmental documents (ROD), along with supporting technical reports prepared by the NCTA and its consultants. Review comments on these documents with NCTA.

Description of Design Work and NEPA Support (Scope of Work) – Phase 1B

The Developer shall:

3.5a.17 Design public meeting - After the ROD, prepare for the design public meeting. Develop a design public meeting map using the latest NCTA practices. Submit the meeting map to NCTA for review and resubmit the final meeting map incorporating NCTA's comments for their use at the public meeting. Attend Public Meeting (3 nights).

3.5a.18 NEPA support work could include preparation of consultations, depending on the amount of time between the ROD and begin right of way acquisition and/or construction.

3.5a.19 Preliminary roadway plans -

- 3.5a.19.1 Develop the preliminary roadway plans using the latest NCDOT and AASHTO design guidelines. The preliminary roadway plans will incorporate the Phase 1B hydraulic design recommendations (see Activity 3.5b), the concepts developed in Phase 1A. Develop the design to a sufficient level, as agreed upon between NCTA and the Developer, to develop the Costing Plan.
- 3.5a.19.2 Identification of all multi-use paths and pedestrian facilities.
- 3.5a.19.3 Preliminary pavement design – Develop a preliminary pavement design for all alignments and detours.
- 3.5a.19.4 Submit the design plans to NCTA for approval.

3.5a.20 Conceptual signing schematics – Locate and size signing for the project for the purpose of including the cost in the Costing Plan for the project. Submit the design plans to NCTA for approval.

3.5a.21 Conceptual ITS and Communications Plan – Locate and provide communications for ITS devices such as cameras and message boards for the project for the purpose of including the cost in the Costing Plan for the project. Submit the design plans to NCTA for approval.

Appendix E: Scopes of Work and Progress Milestones

- 3.5a.22 Conceptual aesthetics/green design plan – Develop design concepts for aesthetic and environmentally friendly project elements. Coordinate concepts for aesthetics and green design with NCTA prior to inclusion in the preliminary design plans for the Project. Submit the design plans to NCTA for approval.
- 3.5a.23 Preliminary Toll facility designs - Develop the preliminary site development plans for the toll booth facility. Coordinate with NCTA and the traffic and revenue consultant during the development of the toll booth facility designs. Submit the design plans to NCTA for approval.
- 3.5a.24 Conceptual lighting design – Develop lighting designs (safety and aesthetic) and plan to a level that is sufficient for preparing the Costing Plan for the Project. Examine alternative energy options and evaluate to minimize light pollution, to include the effect on migrating birds. Submit the design plans to NCTA for approval.
- 3.5a.25 Preliminary design noise analysis – Update noise study prepared for the Draft EIS based on preliminary design plans to confirm sound barrier locations and sizes. Submit the analysis to NCTA for approval.
- 3.5a.26 Conceptual Landscaping – Develop a conceptual landscaping plan that meets NCTA standards and that also fits within the rural character of the Project relative to the aesthetic treatments and green design recommendations. Submit the design plans to NCTA for approval.
- 3.5a.27 Preliminary Bridge Plans – Continue to optimize the bridge designs. All bridges will be designed according to NCDOT and AASHTO LRFD Specifications and Standards. This work involves examining all of the viable alternatives so far, both superstructure and substructure, and developing a matrix of these alternatives. The three bridge sites, Maple Swamp, Currituck Sound and the US 158 interchange are under this study. This work includes:
- 3.5a.27.1 Estimate quantities of superstructure, substructure and foundation items;
- 3.5a.27.2 Assess the foundation delivery system regarding cost and environmental impact, which will require coordination and collaboration with the environmental team members with the goal of establishing specific locations and guidelines for working in Currituck Sound and Maple Swamp;
- Work with the hydraulics and environmental engineers to determine an acceptable means of handling stormwater and locations where special handling may be required;
 - Coordinate with NCTA and NCDOT to establish utility requirements for the bridges;
 - Prepare the pile load catalog and preliminary foundation design;
 - Calculate and assess cost estimates within the bridge alternative matrix;
 - Prepare boring layout based upon the geotechnical scope activities;
 - Prepare the preliminary bridge development report that defines the bridges at each of the three locations. This work will identify the primary bridge components for each bridge. As discussed earlier, the bridge across the swamp and sound may vary in type because of environmental or geometric requirements.
 - Submit the design plans to NCTA for approval.
- 3.5a.28 Design exception checklist – Conduct a design exception checklist on the preliminary design to ensure that the design meets the minimum standards as identified by the NCDOT and FHWA guidelines. Identify any elements that are found to require a design variance or exception and

Appendix E: Scopes of Work and Progress Milestones

coordinate with NCTA to determine the appropriate action. Submit the checklist to NCTA for approval.

3.5a.29 Continue Project coordination with NCTA, NCDOT and project team - Coordinate all efforts with NCTA, NCDOT and the project team throughout the development of the design services.

3.5a.30 Preliminary lighting design – Prepare a safety and aesthetic lighting design for inclusion in the right of way plans. Submit the design plans to NCTA for approval.

3.5a.31 Design noise report – Update previous studies for the design of the facility and produce the design noise study up to the date of public knowledge. Submit the report to NCTA for approval.

Deliverables – Phase 1A Draft EIS

The Developer shall provide the following:

- Alternative review memo
- Design criteria

Deliverables – Phase 1A up to Final EIS

The Developer shall provide the following:

- Conceptual roadway/bridge plans – first submittal
- Draft access management report
- Final access management report
- Draft traffic analysis report
- Final traffic analysis report
- Coastal engineering design criteria and sea level rise study
- Zero waste matrix listing key structures and buildings needing to be removed
- Zero waste matrix listing waste materials expected to be generated
- Zero waste matrix listing construction materials expect to be used for which there may be opportunities to substitute recycle/reuse materials
- Zero waste on-site opportunities for materials recycle/reuse technical memorandum
- Zero waste opportunities for on-site processing of recycle/reuse materials technical memorandum
- Zero waste on-site handling and storage of recycle/reuse materials technical memorandum
- Zero waste on-site/off-site reuse/recycle comparison technical memorandum
- Zero waste commingled waste option technical memorandum

Appendix E: Scopes of Work and Progress Milestones

Deliverables – Remainder of Phase 1A

The Developer shall provide the following:

- Conceptual roadway plans – second submittal
- Conceptual bridge design plan
- Coastal engineering concept plan report
- Zero waste potential off-site markets for recycle/reuse material technical memorandum
- Zero waste recycle/reuse material storage and shipping options technical memorandum
- Zero waste construction cost estimate for recycle/reuse/waste-free elements of project

Deliverables – Phase 1B

The Developer shall provide the following:

- Preliminary roadway plans
- Conceptual ITS and communications plan
- Conceptual aesthetics/green design plan
- Conceptual lighting design
- Preliminary design noise analysis
- Conceptual landscaping plan
- Conceptual signing schematics
- Preliminary toll facility design plan
- Preliminary bridge plans
- Design exception checklist
- Preliminary lighting plan
- Design noise report

Milestones and Prices

The following table outlines the milestone dates for this activity along with the associated price of each deliverable:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A Draft EIS		
Alternative review memo	May-09	\$118,500
Design criteria	May-09	\$18,835
Phase 1A up to Final EIS		
Conceptual roadway/bridge plans – first submittal	September-	\$369,784

Appendix E: Scopes of Work and Progress Milestones

DELIVERABLE	MILESTONE DATE	PRICE
	09	
Draft access management report	July-09	\$ 20,000
Final access management report	August-09	\$ 6,500
Draft traffic analysis report	July-09	\$ 35,000
Final traffic analysis report	August-09	\$ 10,503
Coastal engineering design criteria and sea level rise study	July-09	\$51,300
Zero waste matrix listing key structures and buildings needing to be removed	June-09	\$10,400
Zero waste matrix listing waste materials expected to be generated	June-09	\$10,400
Zero waste matrix listing construction materials expect to be used for which there may be opportunities to substitute recycle/reuse materials	July-09	\$8,300
Zero waste on-site opportunities for materials recycle/reuse technical memorandum	July-09	\$6,200
Zero waste opportunities for on-site processing of recycle/reuse materials technical memorandum	August-09	\$5,500
Zero waste on-site handling and storage of recycle/reuse materials technical memorandum	September-09	\$3,800
Zero waste on-site/off-site reuse/recycle comparison technical memorandum	June-09	\$5,500
Zero waste commingled waste option technical memorandum	September-09	\$5,500
Remainder of Phase 1A		
Conceptual roadway plans – second submittal	February-10	\$ 243,906
Conceptual bridge design plan	February-10	\$ 126,136
Coastal engineering concept plan report	December-09	\$23,700
Zero waste potential off-site markets for recycle/reuse material technical memorandum	October-09	\$5,000
Zero waste recycle/reuse material storage and shipping options technical memorandum	October-09	\$3,200
Zero waste construction cost estimate for recycle/reuse/waste-free elements of project	October-09	\$8,200
Phase 1B		
Preliminary roadway plans	August-10	\$347,499
Conceptual ITS and communication plan	August-10	\$6,433
Conceptual aesthetics/green design plan	August-10	\$3,958

Appendix E: Scopes of Work and Progress Milestones

DELIVERABLE	MILESTONE DATE	PRICE
Conceptual lighting design	August-10	\$5,938
Preliminary design noise analysis	August-10	\$3,711
Conceptual landscaping plan	August-10	\$4,305
Conceptual signing schematics	August-10	\$2,820
Preliminary toll facility design	August-10	\$6,433
Preliminary bridge plans	August-10	\$242,097
Design exception checklist	August-10	\$7,917
Preliminary lighting plan	August-10	\$18,061
Design noise report	August-10	\$25,829

Assumptions and Exceptions (including NCTA responsibilities)

- NCTA and its consultants will coordinate with Developer during this activity.
- NCTA to provide available preliminary designs and CADD files.
- Design will be done in MicroStation using the North Carolina coordinate system.
- NCTA will provide traffic data developed during the NEPA process.
- NCTA and FHWA will retain control and responsibility for the NEPA process as provided in 23 CFR 636.109.
- Developer's role in the NEPA process is support to NCTA and FHWA as they execute their NEPA responsibilities. Developer is looking to optimize the financial feasibility of the project.
- NCTA and its consultants will be responsible for the preparation of all technical documentation to comply with NEPA.
- The environmental audit of existing structures necessary to identify on-site asbestos-containing materials, asphalt roofing shingles on buildings which contain a high asbestos baseline, buried tanks, underground buried utility locations and lead based paint issues, and the similar specialized investigations necessary to determine suspected contaminated soils will not be performed during Phase 1A or 1B.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.5b – Hydrologic/Hydraulic Design and Services

At minimum, all hydraulic design shall be in accordance with criteria provided in the North Carolina Division of Highways "Guidelines for Drainage Studies and Hydraulics Design-1999", the addendum "Handbook of Design for Highway Drainage Studies-1973", North Carolina Department of Transportation "Best Management Practices for Construction and Maintenance Activities-2003" and the North Carolina Division of Highways Hydraulics Unit web-site:

<http://www.ncdot.org/doh/preconstruct/highway/hydro/>

Implement and adhere to the provisions and programs of NCTA's NPDES MS4 Permit.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A

The Developer shall:

- 3.5b.1 Collection of existing data - Collect existing drainage data from field and office reconnaissance visits. Verify existing drainage structures, drainage features and existing land use to define surface drainage flow patterns.
- 3.5b.2 Develop a general Project drainage scheme (excluding curb and gutter design) - Prior to commencing the development of a general Project drainage scheme, coordinate with NCTA and NCDOT to ensure that such drainage scheme will conform to the procedures and guidelines set forth in the NCDOT Guidelines for Drainage Studies and Hydraulic Design and the Handbook of Design for Highway Drainage Studies. Developer shall use the AASHTO Model Drainage Design Manual and Highway Drainage Guidelines as reference sources in developing such general Project drainage scheme. Implement the provisions and programs of NCTA's NPDES MS4 Permit within the general Project drainage scheme.
- 3.5b.3 Conceptual design studies for drainage features - Develop conceptual hydraulic design plans that will be used to facilitate discussions of drainage issues at TEAC meetings. The conceptual hydraulic design plans will include sufficient details so as to aid in the development of bridging hydraulic requirements for the Project. Submit the design plans to NCTA for approval.
- 3.5b.4 Investigate potential for Eastern Carolina University (ECU) to perform research relative to stormwater treatments of coastal bridges in coordination with NCTA NPDES permit.
- 3.5b.5 Prepare conceptual stormwater design showing BMP features and approximate sizing. Plans to be used to prepare the Cost Assessment for the Project. Submit the design plans to NCTA for approval.
- 3.5b.6 Prepare conceptual erosion and sediment control permit plan. Coordinate with appropriate agencies to ensure that the design will conform to permitting guidelines. Submit the design plans to NCTA for approval.
- 3.5b.7 Attend TEAC meetings to discuss bridging options, LEDPA and minimization.

Appendix E: Scopes of Work and Progress Milestones

Description of Work (Scope of Work) – Phase 1B

The Developer shall:

- 3.5b.8 Continue the design studies - Develop drainage plans that will be used to facilitate discussions of the drainage design at the TEAC meetings. Prepare the preliminary drainage design file in MicroStation format. Incorporate the preliminary drainage design into the preliminary design plans in order for Right of Way and construction limits to be determined. Preliminary drainage plans to be used in the development of the Costing Plan. Prepare preliminary bridge survey reports. Complete all surface drainage analysis, preliminary design [related thereto] and any preliminary culvert sizing that may be required. Conduct ditch and channel analysis along with the storm drainage design for the preliminary alternative. Design all bridge deck drainage systems and a stormwater system that conforms to the NCTA NPDES MS4 permit and Regulatory Approval requirements. Submit the design plans and report to NCTA for approval.
- 3.5b.9 Prepare preliminary erosion and sediment control permit plans. Coordinate with appropriate agencies to ensure that the design will conform to permitting guidelines. Submit the design plans to NCTA for approval.
- 3.5b.10 State stormwater permit coordination with regional Division of Water Quality (DWQ) staff - Coordinate with NCTA, NCDOT and regional DWQ staff during the development of the preliminary hydraulic design to ensure that the design will conform to DWQ's permitting guidelines.

Deliverables – Phase 1A

The Developer shall deliver the following items:

- Conceptual hydraulic design plans
- Conceptual erosion and sediment control plan
- Conceptual stormwater design

Deliverables – Phase 1B

The Developer shall deliver the following items:

- Preliminary bridge survey report
- Preliminary drainage design (DRN File)
- Preliminary erosion and sediment control plan

Milestones and Prices

The following table outlines the milestone dates for this activity along with the associated price for each deliverable:

Appendix E: Scopes of Work and Progress Milestones

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Conceptual hydraulic design plans	September-09	\$57,000
Conceptual erosion and sediment control plan	November-09	\$15,000
Conceptual stormwater design	September-09	\$5,000
Phase 1B		
Preliminary bridge survey report	May-10	\$15,792
Preliminary drainage design	June-10	\$66,491
Preliminary erosion and sediment control plan	August-10	\$12,467

Assumptions and Exceptions (including NCTA responsibilities)

- NCTA and its consultants will coordinate with the Developer during this activity.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.5c – Project Feasibility Report

The Developer shall evaluate the feasibility of the Project based on environmental, design, and construction. This evaluation will result in the publication of feasibility report for the Project.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A

The Developer shall:

- 3.5c.1 Technical feasibility assessment – At the conclusion of Phase 1A activities, prepare an assessment of the feasibility of the Project based on data from the Project including environmental, design and constructability, which assessment will include data from the study and opinions of the Developer's team members.
- 3.5c.2 Feasibility assessment meeting – Meet with NCTA to present the findings of the Feasibility Assessment. Submit the assessment to NCTA for approval.

Description of Work (Scope of Work) – Phase 1B

The Developer shall:

- 3.5c.3 Following the announcement of the selected alternative, prepare a draft Project feasibility report:
 - 3.5c.3.1 Project environmental and design feasibility - Develop a draft Project feasibility report, after completion of the ROD, which will study the Projects feasibility from an environmental and design perspective.
 - 3.5c.3.2 Project construction feasibility - Develop a draft Project feasibility report, after completion of the ROD, which will study the Projects feasibility from a construction perspective.
 - 3.5c.3.3 Conduct Project feasibility meeting – Attend meeting to present Phase 1A activity findings and Project feasibility assessment to NCTA.
 - 3.5c.3.4 Submit the draft report to NCTA for approval.
- 3.5c.4 Final Project feasibility report – Update and produce a final version of the Project feasibility report, which shall include all three of the above-referenced feasibility studies (i.e., environmental, design and construction). Submit the assessment to NCTA for approval.

Appendix E: Scopes of Work and Progress Milestones

Deliverables – Phase 1A

The Developer shall deliver the following items:

- Technical feasibility assessment

Milestones – Phase 1B

The Developer shall deliver the following items:

- Draft Project feasibility report
- Final Project feasibility report

Milestones and Prices

The following table outlines the milestone dates for this activity along with the associated price for each deliverable:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Technical feasibility assessment	February-10	\$18,878
Developer Oversight	February-10	\$22,207
Phase 1B		
Draft Project feasibility report	March-10	\$23,252
Final Project feasibility report	April-10	\$6,748

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.5d – General Data Collection (Survey, Aerial, Mapping)

The Developer shall provide supplemental survey field data for the Project as mutually determined to benefit the development of the Project.

The following describes the Scope of Work.

Description of Work (Scope of Work) – Phase 1A

The Developer shall:

- 3.5d.1 GPS points (main survey control for Project) –Establish Project survey control and baseline data for use in the Project. Perform 2nd order static GPS surveys required to provide control for the Project. Adhere to NCDOT Surveying Manuals, specifically Baseline Guidelines and GPS Survey Guidelines.
- 3.5d.2 Contact property owners - Perform property owner contacts for parcels on which the Developer will be performing surveys. Contact property owners either by phone, mail or in person.
- 3.5d.3 Submit the project control data to NCTA for approval.
- 3.5d.4 Baseline traverse - Perform baseline traverse to be used for locations of pavement, utilities and DTM's.
- 3.5d.5 Pavement DTM's and sections – Obtain pavement elevations and sections along existing terminus roadways to develop conceptual plans and project ties to existing conditions.
- 3.5d.6 Field location of planimetric features and topography - Profile existing ground alignment of C1/C2 at 200' intervals across Maple Swamp to enhance existing data.
- 3.5d.7 Field location of gravity utilities and pipe inverts – Obtain field information for gravity utilities, including existing storm drainage facilities.
- 3.5d.8 Production of base mapping - Compile all field located data into the appropriate DGN files. Merge and edit all field data into the existing photogrammetric data for final deliverables to include files from items 3.5d.4 – 3.5.d.7 above. Submit the DGN and section data to NCTA for approval.
- 3.5d.9 Miscellaneous staking (geotechnical bore holes): Stake out bore holes for geotechnical purposes. Seven locations are in Currituck Sound and four are on land.

Description of Work (Scope of Work) – Phase 1B

The Developer shall:

- 3.5d.10 Additional survey data for design – No additional surveying is anticipated in Phase 1B. Developer will coordinate with NCTA and NCDOT to provide additional surveys if needed, and upon negotiation of scope and fee.

Appendix E: Scopes of Work and Progress Milestones

Deliverables – Phase 1A

The Developer shall deliver the following items:

- Project control data
 - GPS control report
 - Localized control point list
- DGN and section data
 - DTM file
 - TIN file
 - Planimetric file (PLN)
 - Baseline DGN file (BLN)
 - Gravity utility DGN file (HYL)
 - Baseline text file
 - GPK file
- Geotechnical location data

Milestones and Prices

The following table outlines the milestone dates for this activity along with the associated price for each deliverable:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Project control data	May-09	\$9,700
DGN and section data	May-09	\$60,933
Geotechnical location data	June-09	\$6,700

Assumptions and Exceptions (including NCTA responsibilities)

- NCTA and its consultants will coordinate with Developer during this activity.
- NCTA will provide available mapping and survey data developed during the Draft EIS.
- No subsurface utility exploration (SUE) is anticipated prior to Phase 1B on this Project.
- All work and deliverables will be performed per the current NCDOT Standards and Specifications.
- DGN deliverables will be mapped at 1" = 50'.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activities 3.4, 3.10, and 3.16 – Costing Plan, PMP, and Construction Plan

During the Pre-Development Phase, Developer will prepare a costing plan for the Project (“Costing Plan”), which will include sufficient detail to develop the Financing Plan. The Costing Plan will include drawings in sufficient detail so that construction quantities, right of way requirements, utility impacts and constructability issues necessary for Developer to establish a firm fixed price can be developed and verified independently by NCTA. The Costing Plan and other cost estimating materials will be utilized for the Open Book Basis negotiations for Developer’s compensation and scope of work during the Concession Period. [As part of these negotiations, Developer shall be prepared to share all information related to quantity development, unit price estimates, estimate assumptions, right of way estimates, utility impact/relocation estimates, construction methodologies, lay down areas, location of key construction materials (asphalt plants, borrow pits, concrete batch plants, casting yards, etc.), pricing methodologies, logistical issues, applicable risks, contingencies, mobilization costs, maintenance of traffic costs, escalations and any other factor utilized to develop or support the firm fixed price.

Since a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan is anticipated as part of the Project plan of finance, the Developer shall assist in the preparation and completion of a Project Management Plan (PMP), meeting the requirements of the Major Projects Provisions of Title 23, Section 106(h) of the United States Code. The Developer will be responsible for completion of portions of the PMP directly related to their organizational, management and financial structure to include a organization structure, project development plan (Attachment A), and plan of finance.

A draft Project Management Plan must be submitted to the FHWA for review prior to approval of the NEPA decision document. The FHWA will provide comments and the NCTA/Concessionaire must submit a Project Management Plan for approval within 90 days of the date of the signed NEPA decision document. The Project Management Plan must be approved by FHWA prior to approval of the TIFIA loan.

Developer shall work with NCTA to complete a phased construction plan that will include sufficient detail to develop the Costing Plan.

Initially, this plan should address the following:

- a. Contract Administration efforts by both Developer and NCTA;
- b. Quality Assurance (QA)/ and Quality Control (QC) process concepts;
- c. Design and other engineering reviews of Developers work by NCTA;
- d. General Construction phasing including construction steps, major material sources and delivery considerations, maintenance of traffic considerations, and other logistical issues;
- e. Alternate construction methods with cost analysis;
- f. Risk assessment;
- g. Value Engineering processes;
- h. Constructability processes;
- i. Life cycle analysis;
- j. Construction phase maintenance of traffic considerations;
- k. Utilization of local contractors, SPSF’s and other small business entities;

Appendix E: Scopes of Work and Progress Milestones

- l. FHWA and NCDOT related reviews;
- m. Approach to construction phasing including: peak vacation periods, seasons, access, material supply and existing conditions found during the Pre-Development Phase;
- n. Assessment of using porous paving materials for all Project paved surfaces; and
- o. Approach to hurricane evacuation and reducing hurricane clearance time.

The following describes the Scope of Work.

Description of Work (Scope of Work) Phase 1A

3.16.1. The Developer shall: Evaluate different construction methods for the Project, including whether to build from above or from ground/water for all elements of the structures and roadway work. Evaluate each element as a separate component in order to determine the appropriate construction method for the Project with emphasis on cost, schedule, quality, environmental impacts, aesthetics and constructability.

Use graphic tools to analyze the construction sequence and detect possible improvements and constraints.

3.16.2. Methodologies to be analyzed:

- a. Construction Methodology using Conventional Marine Equipment;
- b. Construction Methodology using Top Down System;
- c. Construction Methodology using Template System
- d. Construction Methodology using a Mechanically Controlled Barge and
- e. Construction Methodology using temporary trestle.

3.16.3. Develop a construction methodologies report. Submit the report to NCTA for approval.

3.16.4. Based on the different methods analyzed, define tentative design and construction schedules. Develop Cost Assessment construction schedule. Submit the Cost Assessment construction schedule to NCTA for approval.

3.16.5. Audit and review quantities with the goal of minimizing the risk of deviations. Develop Cost Assessment of quantities. Submit the Cost Assessment of quantities to NCTA for approval.

3.16.6. In parallel to the construction methods considered, and incorporating design data obtained in Phase 1A, develop a Cost Assessment details that will include drawings (consistent with NCTA plan development standards) in sufficient detail so that construction quantities, Right of Way requirements, utility impacts and constructability issues necessary to determine the price of each solution considered. Submit the Cost Assessment detail sheets to NCTA for approval.

Appendix E: Scopes of Work and Progress Milestones

Description of Work (Scope of Work) Phase 1B

- 3.16.7. In parallel to the construction methods considered, and incorporating design data obtained in Phase 1A and Phase 1B, develop a Costing Plan that will include drawings (consistent with NCTA plan development standards) in sufficient detail so that construction quantities, Right of Way requirements, utility impacts and constructability issues necessary to determine the price of each solution considered. Establish a Costing Plan that can be verified independently by NCTA. The Costing Plans and other cost estimating materials will be utilized for the Open Book Basis negotiations for Developer's compensation and scope of work during the Concession Period. This Costing Plan is based upon the selected alternative and preliminary design. Submit the costing plan to NCTA for approval.
- 3.16.8. Developer shall complete the Project Management Plan (PMP) as required by the Federal Highway Administration (FHWA) and as required for obtaining a TIFIA loan from USDOT. This plan must meet the requirements of the Major Projects Provisions of Title 23, Section 106(h) of the United States Code. Submit the PMP to NCTA for approval.
- 3.16.9. Developer shall prepare the portions of the Project Management Plan (PMP) directly related to their organizational, management and financial structure to include a organization structure, project development plan (Attachment A), and plan of finance for approval within 90 days of the date of the signed NEPA decision document and approval of the TIFIA loan.

Milestones –Phase 1A

The Developer shall provide the following items:

- Construction methodologies report
- Cost Assessment of quantities
- Cost Assessment construction schedule
- Cost Assessment detail sheets

Milestones –Phase 1 B

The Developer shall provide the following items:

- Costing Plan
- Portions of the Project Management Plan (PMP) directly related to their organizational, management and financial structure to include a organization structure, project development plan (Attachment A), and plan of finance for approval within 90 days of the date of the signed NEPA decision document and approval of the TIFIA loan.

Milestone and Prices

The following table outlines the milestone deliverable events for this activity along with the associated costs to produce the deliverable and the Project time frame:

Appendix E: Scopes of Work and Progress Milestones

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Construction methodologies report	November-09	\$28,834
Cost Assessment of quantities	November-09	\$36,236
Cost Assessment construction schedule	November-09	\$60,394
Cost Assessment detail sheets	November-09	\$36,236
Phase 1B		
Costing Plan	May-10	\$440,000
Portions of the Project Management Plan (PMP) directly related to Developer's organizational, management and financial structure to include a organization structure, project development plan (Attachment A), and plan of finance	April-10	\$65,017

Assumptions and Exceptions (including NCTA responsibilities)

- The NCTA will be responsible of the execution of the points of the PMP that are not included as Developer's responsibilities in this scope.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activities 3.11 and 3.12 – Traffic & Revenue Studies and Toll Strategies & Market Research

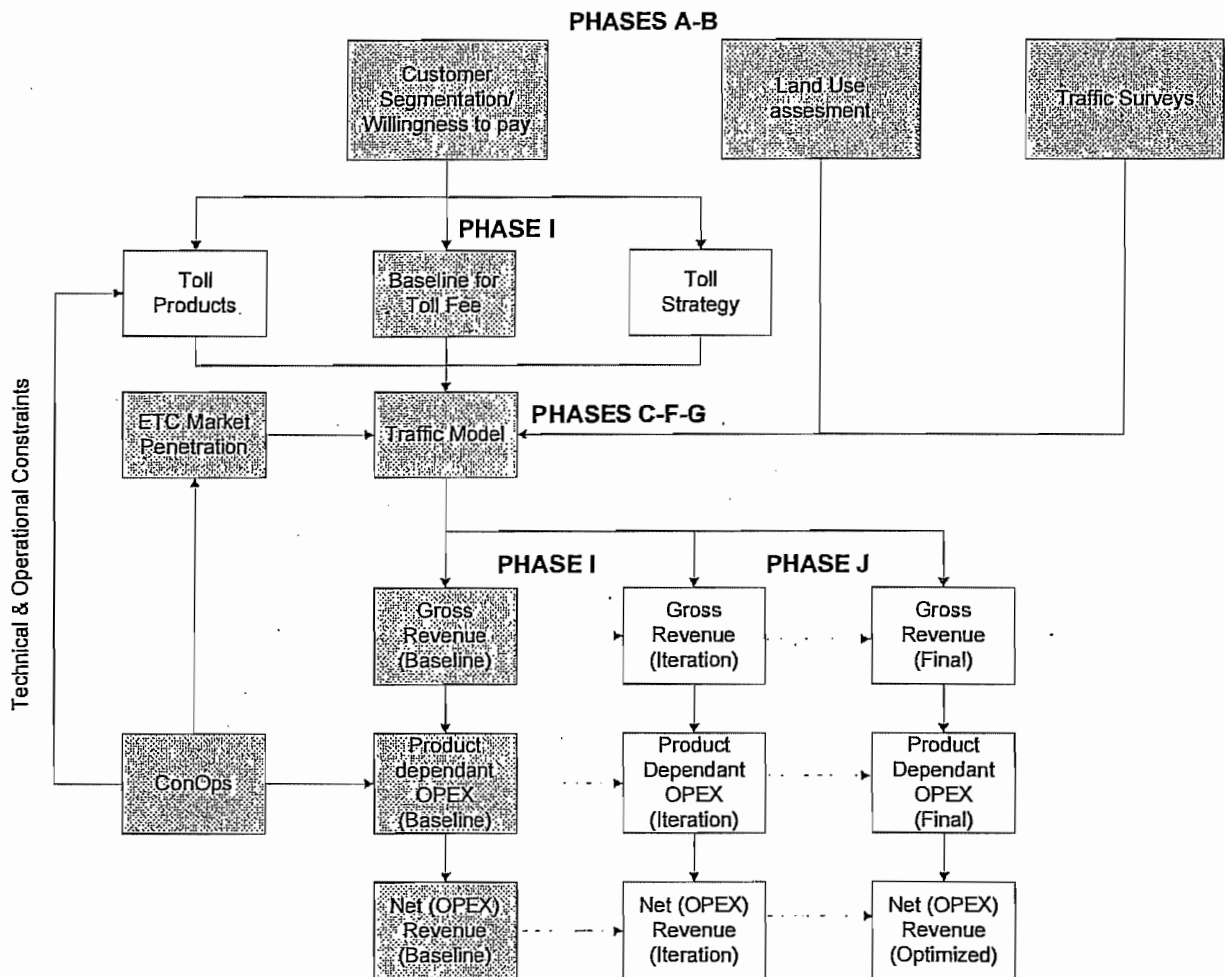
Subject to the Scope described below, and acting together with the internal resources of the Developer, Developer shall procure the services of an experienced traffic and revenue consultant who shall produce a study sufficient to support the financing of the Project. This activity will acknowledge the particularities of the Project of applying an out of the box thought process to the more typical, modeling and revenue collection approaches used elsewhere.

The Mid Currituck Bridge presents a unique marketing opportunity to leverage the existing Outer Banks travel/tourism industry. The new bridge will substantially improve traffic flow conditions on NC12 and US158 and at the same time reduce travel time between the mainland and the Outer Banks and improve the overall system efficiency with additional linkage. Acknowledging the requirements of the potential Lenders, the study will incorporate all surveys expected by the banking industry (such as traffic surveys, willingness to pay surveys and land use surveys) but will also expand the level of depth by conducting surveys with real estate developers and other officials as described in this scope. This is necessary in order to capture the potential of the area and portray the distinct characteristics of the market segmentation.

The study, at a minimum, shall include a 30-year forecast of traffic by segment, a projected schedule of tolls, and the revenues associated with the estimated tolls and levels of traffic. Such study shall be of comparable quality to and in form and substance comparable to studies that have been previously acceptable to the USDOT in connection with their approval of prior TIFIA loans and to the bond rating agencies. Forecasts beyond 30 years will be done as stated in paragraph 3.11.9.

The following flowchart depicts the relationship of the different phases of this Activity:

Appendix E: Scopes of Work and Progress Milestones



As the figure shows and the following paragraphs describe in detail, toll strategies and market segmentation will work in parallel and coordinated with the traffic and revenue model, especially on the land use assessment and customer segmentation exercise. Once a clear baseline is produced, the final forecast and tolling strategy will include the toll products developed in this activity in order to optimize the net revenue of the Project.

In parallel, a preliminary and limited OPEX model will be prepared including only these operating items which are Toll product dependant. Once this is done, and based in the forecasted OPEX, the baseline for the Project's net revenue will be determined.

From here on, two different processes will run in parallel as the different toll products and strategies developed will be modeled in both the Traffic Model and the OPEX model (in this case by considering the operational and technical constraints of having them in production within the Mid-Currituck environment) in order to evaluate their joint effect in the net revenue of the Project.

The final goal for this activity will be to optimize the net revenue of the project.

Appendix E: Scopes of Work and Progress Milestones

Description of Work (Scope of Work):

The Developer shall:

3.11.1 Phase A: Scoping phase – Develop methods for retaining sub-consultant teams to work with Developer (and ARUP) to conduct a development assessment in order to determine real estate market trends and the survey tool necessary to examine the willingness to pay in both the visitor and residential market and by sub sectors within the residential market. Key assignments will include:

3.11.1.1 Land use assessment

- Scoping of land use assessment.
- Identify a list of suitable firms with known experience that can carry out the survey
- Discuss land use assessment and list of firms with NCTA
- In consultation with NCTA select a suitable firm that will be approached to undertake the assessment. The scope of the surveys, budget and ultimate selection of sub-consultant will need to be approved by NCTA.
- Identification of real estate brokers and firms for interviews on the real estate market research, including commercial and residential developers, public officials such as city managers, public works directors, planners, regional development agencies, environmental and resource management agencies, the military and any other agencies that will control or influence long term growth of the study area. The ultimate list and number of target interviews will be approved by NCTA. Within a week after signing the PDA agreement, Developer shall send a draft list of questions for the real state market research for NCTA to review and approve.

3.11.1.2 Willingness-to-pay (Value of time) survey

- Scoping of willingness to pay survey
- Identify a list of suitable firms with known experience that can carry out the survey
- Discuss scope and list of firms with NCTA
- In consultation with NCTA select a suitable firm that will be approached to undertake the assessment. The scope of the surveys, budget and ultimate selection of sub-consultant will need to be approved by NCTA. Site selection for off peak season surveys. NCTA to approve locations
- Site selection for peak season surveys. NCTA to approved locations. Acknowledging the potential significant contribution of visitors to the overall revenue we will aim to administer some of the surveys through realtors.
- The willingness to pay survey will be designed in a manner to capture the income distribution of the potential users, primary residence, travel time to study area, trip purpose, time periods and frequency. The exact scope will be drafted during this phase.
- Develop appropriate variables in order to provide an efficient customer segmentation which would characterize the different types of customers using the facility. Once this is done it will produce the appropriate customer research in order to segment the potential customers of the project within the different identified variables. It will eventually include focus groups in order to test and evaluate criteria which can be considered as critical within the Toll Strategy.

Appendix E: Scopes of Work and Progress Milestones

3.11.1.3 Traffic count and journey time surveys

- Scoping of surveys
- Identify a list of suitable firms with known experience that can carry out the survey
- Discuss scope and list of firms with NCTA
- In consultation with NCTA select a suitable firm that will be approached to undertake the assessment. The scope of the surveys, budget and ultimate selection of sub-consultant will need to be approved by NCTA.
- Site selection for off peak season surveys
- Site selection for peak season surveys

3.11.2 Phase B: Data collection phase – Conduct the land use assessment during the shoulder season. Conduct the Willingness-to-Pay (Value of Time) surveys and traffic surveys during both the peak season and shoulder season. Note: Success for the real estate market surveys will depend on start date given the difficulties in contacting real estate brokers once business activity increases for the peak season. Key assignments will include:

3.11.2.1 Land Use/Demographic assessment

- Preparation of interview questions for real estate brokers and local planning authorities
- Meeting with sub-consultant team for project briefing, orientation and preparation for site visit – via teleconference
- Conduct interviews as identified and agreed with NCTA during the scoping phase (see Phase A above). On critical interviews, a senior member of Developer together with a representative of NCTA and NCTA's advisor will attend. The Developer shall begin the interviews with the real estate brokers the week after the NCTA approval of the final list of questions to be made during the interviews.
As part of the survey to be undertaken, the Developer will try to obtain brokers' data bases on seasonal rentals and renters during these interviews (subject to availability and data protection act restrictions).
- Review work product from local sub-consultant firm. This work product will include long term land use forecasts for selected years together with underlying documentation.

3.11.2.2 Willingness-to-pay (value of time) survey

- Survey site selection, clearance with local authorities, and preparation for survey administration
- Peak season survey administration in July 2009
- Results reported in August 2009
- Shoulder Peak season survey administration in September 2009
- Results reported in late September 2009

3.11.2.3 Traffic surveys (Counts and Journey Times)

- Survey site selection, clearance with local authorities, and preparation for survey administration
- Peak season survey administration in July 2009
- Results reported in August 2009

Appendix E: Scopes of Work and Progress Milestones

- Shoulder peak survey administration in September 2009
- Results reported end of 2009

3.11.2.4 ETC Market Penetration

- Research the current ETC market penetration

3.11.2.5 Project Comparison

The Developer will compare by the end of the study the results obtained with other toll projects with the aim of taking advantage of other experiences and insights.

In this Phase, the Developer will identify and evaluate the operating experience, toll strategies, non-traditional toll payment methods and penetration of seasonal markets for a sample of broadly comparable projects in the US, Canada, Mexico and other locations. The work product will highlight "lessons learned" that have applicability to the Mid-Currituck project. The objective would be to identify and to document up to 12 candidate projects. The developer will use all the publicly available information related to these projects. If it is possible, the developer will make a telephone contact to the operators/owners of the selected projects. If it is not possible to the Developer to establish the contacts, the NCTA will assist the Developer in this task.

Only, if specifically requested by the NCTA, the Developer will visit the project site to set a series of interviews. All cost related to the obtaining of not publicly available information (meetings, travels, insights) will be billed by the Developer to the NCTA in a separate bill not included in the fix price of this T&R study.

3.11.3 Phase C: Model development phase – Build a traffic model for the immediate study area (the "Phase C Traffic Model").

3.11.3.1 The Phase C traffic model will:

- cover the project area and the alternative routes (for example the Wright Memorial Washington Baum Bridges), as there is limited route choice;
- include all principal roads;
- incorporate a toll choice function (logit), which toll choice model structure will be based on the approach used by Arup in previous toll road studies, and the parameters will be developed from Arup's experience in similar previous studies;
- be built using one of the standard software programs such as CUBE VOYAGER / EMME or SATURN; and
- likely be a 24-hour model as the traffic volumes are low, and also include a weekday and weekend model to take into consideration the potential of the leisure market to significantly contribute to the total revenues generated by the bridge; however this make change after the critical review of the traffic count data and analysis of the possible tolling options.
- Incorporate the agreed parameters and values to be used to built up the different toll products offered within the toll Strategy to be developed at Phase D

3.11.4 Phase D: Tolling Strategy & Marketing Plan. -Subject to the Scope described here, the Developer will work with NCTA in developing a tolling strategy and marketing plan for the Project.

Appendix E: Scopes of Work and Progress Milestones

Marketing plans and tolls will need to be established for different market segments in order to encourage various categories of potential customers to utilize the Project to its fullest potential.

The toll strategy will identify toll products and should aim to maximize potential revenues while maximizing the utilization of the Project during peak and off-peak periods, while consistent with applicable law and taking into account financing considerations. A variety of tolling regimes should be considered that encourages local residents to utilize the Project year round and make it the facility of choice by visitors. Toll rates may depend on such factors as peak hours, and peak and off peak seasons which can result in the application of variable rates and discounts for frequent users.

A marketing plan should address seasonal and daily demand fluctuations, varied market segments, and an approach for marketing the Project to local citizens and visitors. When developing a marketing plan for visitors, the plan should take into consideration (1) origin and destination of visitors, (2) what form of transportation they will take to get to their destination, (3) how long visitors will stay and (4) what is the most convenient payment plan. A similar plan should be developed when marketing to local residents, but with emphasis on travel time savings and payment convenience. Therefore, Developer should investigate marketing through and partnering with Outer Banks residential rental agencies, travel agencies, and rental car agencies to promote the Project to visitors. Local commodity and service providers should be considered as partners in providing locals with a convenient toll payment plan. Tolling Strategy and Tolling Products will be developed by considering the Customer segmentation as well as the operational and Technical constraints of the project, and will be used by the T&R Model as an input when optimizing the gross revenue.

Therefore, this Phase will have a sub deliverable to be delivered August 2009 before the Model Development Phase can be achieved, so the Traffic Model can accommodate the necessary parameters.

The findings included in the deliverable will be used when iterating the Model during the Final Forecasts Phase.

- 3.11.5 Phase E: Concept of operations (the "ConOps") - The goal of this Phase will be to Develop, analyze and make final recommendation regarding the different options to be considered in terms of outsourcing levels or Plaza Topology. The ConOps shall include field studies/surveys and research work, which shall be done by an outsourced partner within the potential community of customers for the Project. At a minimum, the Developer's toll collection system will be able to read the NCTA's chosen transponder and interface with the NCTA's back office for the sharing of data files.
- 3.11.6 Phase F: Base year model calibration phase – Calibrate the Phase D Traffic Model to 2009 traffic count, utilizing the Wilbur Smith Associates demand trip tables adjusted to 2009 levels, without collecting any additional origin-destination data.
- 3.11.7 Phase G: Forecasting and possible tolling options – Develop the future year networks in accordance with the current metropolitan planning organization plans, including any highway upgrades, new infrastructure and toll charges that could impact on the Mid-Currituck Bridge traffic demand. A list of future network upgrades will be agreed in consultation NCTA.

Appendix E: Scopes of Work and Progress Milestones

- Derive trip generation functions for each trip purpose based on demographic and economic parameters and calibrated using the existing origin and destination matrices. The trip generation functions will be used to derive growth factors to apply to the base year demand matrix for each origin and destination total.
 - Define forecast in consultation with the NCTA
 - Analysis of the tolling options that will likely be tested with the traffic model.
- 3.11.8 Phase H: OPEX/CAPEX Model (Preliminary) - Preliminary model populated at a budgetary level with the different options considered within the ConOps in order to identify the option providing the highest net present value of the costs. This model will incorporate a sub-deliverable including only those components of the whole OPEX Model which are toll Product dependant in order for the Traffic & Revenue Model to optimize the net revenue of the project when iterating the different toll products considered in the tolling strategy in Phase D
- 3.11.9 Phase I: Preliminary forecasts – Further refine the traffic model and test various options of toll fees in terms of maximizing the Gross revenue which will be considered as the base line for the toll revenues.
- Critically review the model forecasts against observed traffic levels and patterns on the corridor and competing routes to provide a reliable and explainable transaction and revenue stream from year one. The impact of capacity constraints on the project or feeder routes that may prevent the modeled demand forecasts from being realized would be broadly reviewed and forecasts adjusted accordingly if necessary (to be discussed with NCTA).
 - Test assumptions (including innovative methods of collecting tolls) in view of optimizing value proposition.
 - Traffic and revenue forecasts beyond year 30 will be derived outside the traffic model. The exact method will be discussed with NCTA. And will take into account the characteristics of the project.
 - Presented forecast outputs in spreadsheet format agreed with NCTA.
 - Develop typical peak hour to annual average daily traffic expansion factors based on historic project data. Note: expansion factors to be applied in future years may be varied due to a number of factors including changes in road network congestion.
 - Identify and justify ramp up factors and the ramp up profile to be applied to opening traffic in consultation with the NCTA.
 - The results will be compared to other projects in order to take advantage of other experiences and insights. The developer will only use the information obtained in Phase B to make the mentioned comparison.
 - This Phase will use the OPEX/CAPEX Model Preliminary results in order to generate the Base Case for the net revenue.
- 3.11.10 Phase J: Final forecasts – Further refine the model and run additional tolling optimization scenarios introducing the Tolling Strategy and Tolling products developed within The Tolling Plan and Marketing Plan Phase in order to optimize the net revenue, incorporate any feedback received from NCTA during this Phase.
- Undertake a range of sensibility/sensitivity tests to demonstrate the appropriateness of the model behavior, the characteristics of the Project benefits. These will include but not limited to:
 - Traffic growth scenarios;

Appendix E: Scopes of Work and Progress Milestones

- Road network improvements;
- Base toll rate; and
- Value of time.
- The results will be compared to other projects in order to take advantage of other experiences and insights. The developer will only use the information obtained in Phase B to make the mentioned comparison

3.11.11 Phase K: Final T&R report—Deliver a final report summarizing the above technical notes and present the traffic and revenue forecasts, tolling strategy, revenue optimization and sensitivity tests.

Milestones

The following Table shows the key milestones for the project, proposed meetings and Arup attendance of the meetings. Please note that this is indicative and can change as and if required by the project in consultation with NCTA.

Fees

An indicative breakdown by phase is shown below.

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DELIVERABLE/MILESTONE		Meeting at NCTA	DATE	Traffic Advisor/ACS Attendee	PRICE
Phase 1A:					
Phase A	3.11.1 Scoping Phase. Technical Memo #1: Scoping report, data collection, and methodology. Land use and value-of-time survey included.	Yes	Beginning to mid June -09 (to be provided incrementally)	Traffic advisor to attend this meeting	\$56,610
Phase B	3.11.2 Data Collection Phase. Technical Memo #2: Real Estate Market Assessment – survey instrument and approach	Yes	June-09	Traffic advisor to attend this meeting	\$41,350
	Technical Memo #3: Willingness to Pay Surveys – survey instrument and approach		June-09		
	Technical Memo #4: Real estate market assessment	Yes	July-09		\$69,250
	Technical Memo #5: Peak season survey and results		August-09		
	Technical Memo#6: Shoulder season survey and results	Yes	September-09		\$25,740
Phase C	3.11.3 Model Development Phase. Technical Memo #7: Proposed methodology for developing the model.	No	End August -09		\$49,000
Phase D	3.11.4 Technical Memo #10 Tolling Strategy & Marketing Plan	Yes	October -09	Assumed by ACS (Julia Monsó)	\$31,500
Phase E	3.11.5 Technical Memo #11: Concept of Operations	Yes	October -09	Assumed by ACS (Julia Monsó)	\$31,500
Phase F	3.11.6 Base Year Model and Calibration phase. Technical Memo #8: Presentation of the model and calibration results.	Yes (combined)	End October -09	Traffic advisor to attend this meeting	\$71,820
Phase G	3.11.7 Forecasting and Tolling Options. Technical Memo #9: Forecasting Methodology Growth Models		End October -09		\$56,360
Phase H	3.11.8 Technical Memo #12: OPEX/CAPEX Preliminary	Yes	Early November -09	Assumed by ACS (Julia Monsó)	\$6,300
Phase I	3.11.9 Preliminary Forecast. Technical Memo #13: Presentation of initial results	Yes	End November -09	Traffic advisor to attend this meeting	\$50,660
Phase J	3.11.10 Final forecasts in Excel	No	End December -09 / Early January -10		\$49,845
Phase K	3.11.11 Final T&R report	Yes	Mid January -10		

Appendix E: Scopes of Work and Progress Milestones

The Table below shows the level of effort to be made by ARUP

Level of Effort		Personnel involved from Arup	Hours
Phase A	3.11.1 Scoping Phase	6	334
Phase B	3.11.2 Data Collection Phase	8	664
Phase C	3.11.3 Model Development Phase	5	284
Phase F	3.11.6 Base Year Model and Calibration phase	7	410
Phase G	3.11.7 Forecasting and Tolling Options	5	235
Phase J	3.11.10 Final forecasts in Excel	5	252
Phase K	3.11.11 Final T&R report	5	236

Sub-consultants

The Developer will not assume as part of the fix price for this agreement the cost of the activities specified below. The price of the activities is just an estimation provided for NCTA information.

Please note that the information below is provided for informational purposes only and the actual fees may vary, as these are costs that the Developer cannot control. For example, the fee for the willingness to pay / stated preference surveys can vary depending on the method of the survey and the instruments used. These fees will be analyzed with NCTA during the scoping phase of the project and will be subject to NCTA approval

Surveys Indicative Costs	Price Range	
Stated Preference Surveys	\$200,000	\$250,000
Demographics Land Use Survey	\$125,000	\$150,000
Automatic Traffic Counts (ATC)	One ACT for one week one location one direction	Around \$1,600
Journey time surveys	\$7,000	\$15,000

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As previously discussed the Developer and NCTA will be fully involved in the process. As stated above, during the scoping phase of the project Arup will:

- Identify a list of sub-consultants for each survey / study required.
- Discuss with Developer and NCTA the list
- Scope the work of the sub-consultants
- Discuss with Developer and NCTA the scope
- Solicit proposals from sub-consultants
- Select best valued proposals in consultation with Developer and NCTA
- Manage the sub-consultants

Effie Drivyla and Trent Letcho will manage the sub-consultants with support from other staff as required.

Personnel and Management of the Study

Developer's personnel that will manage and coordinate Developer's T&R study is shown below. Resumes are provided in Appendix A.

Miguel Seisdodos

Iridium Technical Director

More than twenty years of experience including a large expertise on international projects. Technical Director of Iridium since 2006. He has managed all the T&R studies done by Iridium, formerly Dragados Concesiones de Infraestructuras, in the last ten years. His experience regarding T&R studies includes, among others, projects like Pennsylvania Turnpike Lease in Pennsylvania, IH635 in Texas, Korinth - Pathras Motorway in Greece (motorway feeding the different turistic / residential locations in the north of Peloponnese), N25 Waterford Bypass – Southlink N25, Dundalk Western Bypass, Pacifico Project in Mexico (800 km of motorway in the Pacific coast of Mexico including an access motorway to the turistic resort of Puerto Vallarta).

Ramon Villaamil

ACS Infrastructure Development Technical Director

Ramon Villaamil is ACS Infrastructure Development, Inc.'s Technical Director in the United States. As part of his responsibilities, Ramon has interfaced with Departments of Transportation throughout the country; established business relations with engineering companies and technical and traffic advisors; met with equipment and services suppliers and managed all technical aspects of proposals such as the Port of Miami Tunnel Project, IH 635 in Texas, TTC-69 in Texas, A-30 in Montreal, the I-595 in Florida, the Pennsylvania Turnpike and several others nationwide.

Prior to coming to the USA, Ramon managed the Materials and Pavements Department in the Technical Department of Dragados. As manager of this department Ramon has guided all decisions made by the ACS group in the definition and development of all the materials and pavements in all phases, from proposal development, to design, life cycle cost analysis, materials selection, final construction and maintenance. As part of this responsibility Ramon has been member of multiple technical committees

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and has participated in numerous Technical Conferences as speaker and written articles for several technical publications.

Ramon Villaamil is an expert in highways and road planning, design, build, operations and maintenance. He has been working in the Technical Department of DRAGADOS S.A., the construction branch of the ACS group, for 16 years and has been Technical Director with ACS Infrastructure Development for 2 years, and therefore has a wide expertise in those fields. He has been involved in all the important airports, highways and roads projects of the ACS group in Spain and all around the world in the last years.

Julia Monsó

ACS Infrastructure Development ITS & Toll Operations Director

He is a Transportation Professional with a broad blend of Contractual, Operating, Marketing and Information Technology expertise, and 20+ years experience in Highways Public Private Partnerships, transport, e-commerce and Logistics, acting at a senior and Board level, having served as a CEO, COO, CIO and Business Development Director.

In his actual role he has influenced, gained insight and provided advice to State and Federal Departments of Transportation regarding Public Private Partnerships to be developed in the short and medium term.

He is also responsible for the Tolling Concept of Operations, OPEX, CAPEX and IT for the PPP bids tendered by ACS, assuring the stakeholders (DOTs, financing community and consortium partners) their alignment to the contractual arrangements from the qualification stage to the due diligence previous to financial closing. Projects handled were among others: Pennsylvania Turnpike Concession Lease bid, Autoroute A-30 (Montreal, Canada), I-69/Trans-Texas Corridor Development bid (Texas), IH635 (Dallas), I-595 (Florida), Autoestrada Transmontana (Portugal), A-50 ORT Bid (Ireland).

Arup can provide all the specialists required to advise ACS and NCTA on the traffic tasks for the project. We propose that the Traffic Advisor work be undertaken in our office in London and New York with assistance from other offices as required. It should be noted that Arup has a wealth of specialist resources with extensive experience in demand and revenue forecasting that can be made available for the project.

The project will be led by Efie Drivyla. Resumes are provided in Appendix A and a short bio is shown below.

Efie Drivyla

Associate Principal

Efie is an Associate Principal with wide experience gained from directing and managing a broad range of projects ranging from multi-modal and urban and inter-urban studies to local transportation studies. Her specialist skills focus on providing advice to both the Public and the Private Sectors in respect of Highway Concession Projects. Her broad experience in the evaluation of toll road schemes and strategies has been achieved through her involvement in a number of highway concession projects in the USA, Mexico, Costa Rica, UK, Ireland, Greece, Spain, Jamaica and Kenya. She has also conducted a number of audits and made recommendations on the suitability of proposed tolling strategies and traffic and revenue forecasts. Efie has led a number of traffic and revenue studies acting on behalf on the Sponsor's or the prospective Lenders. She was recently the Project Director on the Pennsylvania Turnpike Lease in Pennsylvania, Mid-Currituck Bridge in North Carolina, IH635 in Texas, SH121 in Texas,

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providing traffic and revenue advice to the Sponsor and on the Capital Beltway HOT Lanes Project in Virginia, Transjamaican Highway in Jamaica, San Jose Caldera in Costa Rica and FARAC III in Mexico providing advice to the prospective Lenders. On the Ionia Motorway project in Greece, Efie evaluated a tolling scheme and regime of a 200 km motorway running along the west part of Greece and serving a number of high touristic areas along the coast. She also reviewed willingness to pay data for tourists in order to capture the characteristics of the tourist market. On the Capital Beltway project in Virginia, she led the evaluation of the toll optimization and tolling regime of the proposed HOT lane project in Fairfax, Virginia taking into consideration the particularities of the locality which is a very high income area in the US.

Trent Letcho

Associate Principal

Trent Letcho is an Associate Principal with Arup's Transportation Planning Group in New York. He has over 11 years of experience and has worked in New York, Boston, Washington DC, Los Angeles, Chicago, and the San Francisco Bay Area.

Trent has a strong background in transportation planning, policy, and funding issues. He also has extensive experience directing public involvement for projects involving multiple stakeholders.

Trent's primary focus is on effectively linking transportation and land use policy to achieve fiscal, environmental, and social sustainability. He has been involved in a variety of projects for clients in the public sector and has a thorough understanding of local, state, and federal guidelines.

Andrew Bamforth

Associate

Andrew is an Associate with ten years' experience, based in Arup's London office. He has managed a wide range of transport planning projects, working for both private and public sector clients. His experience includes demand / revenue forecasting for highway and public transport schemes, with focus on traffic and revenue advice for private finance initiative (PFI)/public-private partnership (PPP) projects in the toll road sector. He also has experience in the appraisal of major transport schemes and multi modal strategies and undertaking a wide range of traffic surveys. These include projects in the UK, Ireland, Azerbaijan, Croatia, South Africa and Greece. Andrew has experience in managing projects with responsibility for resourcing, client liaison, budget management, task leading, report writing and presenting study results. These skills have been developed on a range of projects where Andrew acted as project manager as well as task leader. He is technically proficient in a wide range of the transport planning industry's standard software and has a detailed knowledge of EMME/2, SATURN, and PEDROUTE. He has managed an number of due diligence studies for prospective Lenders including the Douro Interior Highway in Portugal, the A80 / M80 Haggs to Stepps Upgrade in Scotland, the N4 / N6 Toll Study Audit, the N7 / N8 PPP and N3 Toll / PPP in Ireland.

Clement Ho

Senior Consultant

Clement Ho has ten years experience in transport planning with Arup in the UK, Ireland and Hong Kong, and with Network Rail. His experience covers transport modelling, road, air and rail passenger demand forecasting, economic and financial appraisal, and traffic engineering. Clement has been involved in a number of demand and revenue forecasting for toll road projects. He was recently involved in the Douro

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Interior Highway in Portugal, Hyderabad- Vijayawada Toll Road in India, and revenue allocation study for East Midlands Trains and First Capital Connect. He was also the project manager on several multi-modal transport modelling studies in Northamptonshire, the study area of interest also extended to cover Northampton, Daventry and Towcester areas. Clement gas extended traffic modeling experience and has developed and calibrated traffic simulation models in SATURN and EMME/2 for several projects in Hong Kong and the UK.

Marius Roman

Transportation Modeler / Analyst

Marius is an Engineer working within the Transport Planning group of Arup Melbourne. Since joining Arup, he has been heavily involved in technical and analytical work on numerous significant projects including the Town Hall Station Redevelopment Project, Ngauranga to Airport Strategic Study, and traffic forecasting for the Pennsylvania Turnpike in Pennsylvania and Cross City Tunnel recapitalisation bid. Marius' strengths include his communication and analytical skills and his technical knowledge of macro and micro simulation modelling packages such as Legion, EMME/2, Cube Voyager and S-Paramics.

Direct Expenses

Developer shall make commercially reasonable efforts to control costs; however, Coach airfare costs vary depending on dates and availability for advanced booking. All direct expenses shall be consistent with North Carolina's maximum allowable non-salary direct costs current at the date of expenditure.

Documentation shall be provided for all direct costs incurred for this activity for which compensation is being sought. The travel expenses for this task shall not exceed \$35,200.

Assumptions and Exceptions (including NCTA responsibilities)

- Developer intends, whenever possible, to incorporate expenses for site visits and meetings with subs / realtors at a similar time as the NCTA meetings in order to minimize costs.
- The above fee includes the management of sub-consultants, but excludes the cost of specialist sub-consultants for Traffic Surveys, Demographics, and Market Research, Willingness to pay surveys.
- Willingness to pay survey will be specified by Arup, agreed with NCTA and designed/analyzed and conducted by the sub-consultant specialist.
- Commercial and residential real estate interviews as well as interviews with environmental and planning officials will be conducted by a representative of NCTA and a specialized marketing firm as identified during the scoping phase and agreed with NCTA.
- Scope excludes micro-simulation modeling that may be required to assess traffic operation of design options.
- NCTA have provided the Wilbur Smith Associates demand trip tables which will be used for the purpose of the study. No additional origin – destination data is assumed to be collected.
- NCTA will provide the Developer customer service business policies and incident management plans for consideration in the hopes of establishing uniform processes throughout the state for its customers. NCTA requires that at a minimum, the Developer's toll collection system will be able to read the NCTA's chosen transponder and interface with NCTA's back office for sharing of the data files.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.17 – Public Involvement, Public/Community Outreach, Public Communications, Media Support

Subject to the Scope described below, the Developer will attend Turnpike Environmental Agency Committee (TEAC) meetings, public open house meetings and public hearings for comprehension of Project and community details, issues and stakeholders. The Developer will provide feedback to NCTA, outside of these meetings, on any issues relevant or affecting the Developer's proposed design, construction, operations, marketing or financial activities. Upon signing of the ROD, the Developer will be responsible for developing and conducting all public involvement/ outreach in direct involvement with NCTA.

Description of Work (Scope of Work) – Phase 1A (through February 2010)

The Developer shall review and provide reaction regarding prepared reports and technical documents, used in the public involvement for the Project.

3.17.1. Participate in public involvement. The Developer will support the public involvement efforts in this phase of the project. Public involvement activities shall mean the following activities:

a. TEAC Meetings

The Developer will attend TEAC meetings and provide feedback to NCTA, outside of these meetings, on any issues relevant or affecting the Developer's proposed design, construction, operations, marketing or financial activities. Six (6) Agency / TEAC Meetings are assumed, as the project progresses.

b. Draft EIS Public Meetings / Hearings

The Developer will:

- Review and provide feedback on the prepared materials for the Draft EIS Public Meetings / Hearings, and Local and State Officials Meetings. Four (4) meetings are assumed.
- Attend Draft EIS Public Meetings / Hearings, Local and State Officials Meetings. Provide feedback to NCTA, outside of these meetings, on any issues relevant or affecting the Developer's proposed design, construction, operations, marketing or financial activities.

It is assumed that the Public Hearings and related Meetings occur during the course of a single week.

c. Community Group Meetings

The Developer will:

- Review and provide feedback on the prepared materials for the Community Group Meetings as relates to CDG activities.

Attend Community Group Meetings and provide feedback to NCTA, outside of these meetings, on any issues relevant or affecting the Developer's proposed design, construction, operations, marketing or financial activities. Eight (8) Community Group meetings are assumed, as the

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project progresses. ; it is assumed that these occur during one (1) additional trip to the area of the project, as well during the week of the DEIS Public Hearings.

Description of Work (Scope of Work) – Phase 1B

3.17.2. At the direction of the NCTA, the Developer shall organize and participate in public involvement activities to be held by the NCTA in Phase 1B of the Project. The Developer shall prepare items pertaining to the public involvement activities such as displays, display maps, handouts, PowerPoint slideshows, announcements, comment forms, meeting summaries, etc. Additionally, the Developer shall participate in the following activities (as requested by the NCTA):

- Communicate with Project stakeholders,
- Develop community outreach efforts to ensure that the Project moves forward with a high level of community involvement,
- Community Group meetings,
- Local and State Officials' briefings,
- Development of Project materials, and
- Project website implementation.

3.17.3. The Developer shall establish an integrated communication and public information program that provides timely and accurate information to all stakeholders and engages the community in the design, construction, and operation of the Project. This program shall maximize public awareness of the Project and travel/toll requirements. Strategies shall be developed and implemented to address:

- Project branding
- Market Research and Analysis
- Media Outreach
- Stakeholder Outreach and Information
- NCTA Interface and Liaison
- Project Communication Team
- Design Build – Public Information and Involvement
- Pre - Operations - Public Education and Awareness

The Developer shall develop and implement a public information program to address education and awareness related to public safety surrounding the work zone, notification of forthcoming construction activities, management of public inquiries and concerns, and conveyance of accurate and timely issuance of anticipated delays, lane closures, and major traffic changes. The Developer shall prepare all public information items pertaining to the above communication and public information program such as displays, display maps, handouts, PowerPoint slideshows, announcements, comment forms, meeting summaries, etc.

Deliverables – Phase 1A

Developer shall provide the following items:

- Attend TEAC meetings with written feedback as it relates to CDG activities
- Attend Draft EIS Public meetings, Public hearings, local and state officials meetings with written feedback as it relates to CDG activities

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- Attend community group meetings with written feedback as it relates to CDG activities

Deliverables – Phase 1B

Developer shall provide the following items:

- As directed by the NCTA, preparation of all public information/ outreach materials, facilitation of and participation in local public workshops
- Public information items pertaining to the above communication and public information program such as displays, display maps, handouts, PowerPoint slideshows, announcements, comment forms, meeting summaries, etc.

Milestones and Prices

Developer shall provide the Activity 3.17 Deliverables according to the following Milestone Schedule:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
3.17.1.a. Attend TEAC meetings (6) with written feedback as it relates to CDG activities		\$5,848.49 (\$974.75/ meeting)
3.17.1.b. Attend Draft EIS Public hearings (4), local and state officials meetings with written feedback as it relates to CDG activities		\$8,214.72
3.17.1.c. Attend community group meetings (8) with written feedback as it relates to CDG activities		\$6,150.27 (\$768.78 / meeting)
	PHASE 1A TOTAL	\$20,213.48
Phase 1B		
As directed by the NCTA, preparation of all public information/ outreach materials, facilitation of and participation in local public workshops		\$60,000*
Public information items pertaining to the above communication and public information program such as displays, display maps, handouts, PowerPoint slideshows, announcements, comment forms, meeting summaries, etc.		\$180,000

*Estimated amount; this activity is not considered at the risk the Developer. NCTA will pay the Developer the cost of this activity, as part of a supplemental agreement.

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Assumptions and Exceptions (including NCTA responsibilities)

- NCTA shall manage the public involvement activities.
- NCTA is conducting public hearings.
- CDG is conducting a series of workshops after the ROD. The Developer assumes that the workshops to be held by the Developer consist of a three consecutive workshops in the project area.

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Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.13 – Development of Operations and Maintenance (“O&M”) Plan

Developer shall prepare an operations and maintenance plan, for NCTA approval, that will include sufficient detail to develop the Financing Plan. Developer shall research materials and develop construction techniques that will result in the long term reduction in cost of maintenance. Developer will work concurrently with its operations and maintenance team members to ensure that durability and useful life consistent with industry practice is a key factor in the design of all structures and roadways. Various materials will be researched to increase the quality and durability of the entire Project. At the end of the Pre-Development Phase, NCTA expects to have a long term operations and maintenance plan including the following key elements:

- Security and incident management plan
- Estimate of annual operation and maintenance costs
- Schedule of major life cycle rehabilitation and reserve maintenance fund requirements

Description of Work (Scope of Work) – Phase 1A

O & M Defined: O&M activities are the activities related to the performance of routine, preventive, predictive, scheduled, and unscheduled actions aimed at preventing failure or decline with the goal of increasing efficiency, reliability, and safety. O&M activities also include responding to incidents, accidents, and other emergency situations along the project corridor, but exclude tolling customers and enforcement related to toll violations, as those are defined under tolling strategies (Activity 3.12).

The Developer shall:

- 3.13.1 Work to define the most cost effective management structure and O&M organization and will explore ways to share management resources for functional and cost effectiveness.
- 3.13.2 Prepare the scope of work and performance requirements for each Project scenario that it studies. The performance requirements will establish the general goals for the Project, set targets for measuring performance and provide incentives for achieving these targets. This includes a variety of incentive-based mechanisms for controlling the outcome of the operations and maintenance activities rather than the process. The overall specification will outline key maintenance objectives.
- 3.13.3 Preliminary O&M work document: This will include defining management structures, work loads, communication, document control, meeting schedules, organization charts, and key personnel. Develop preliminary O & M work document. Submit document to NCTA for approval
- 3.13.4 O & M requirements based on project needs: The overall requirements for O & M will be researched and defined during this stage. These include: Providing for the maintenance and operations of all the existing assets within the O&M Limits during the Construction Period; providing for the maintenance and operations of the Project’s assets within the O&M Limits during the Operating Period, providing for the Renewal Work of the Project’s assets; providing

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for the Handback of the Project assets; Providing first responder incident/emergency response. Develop O & M requirements document. Submit document to NCTA for approval.

- 3.13.5 Prepare an in-depth O&M Plan. Using the performance requirements, developed in 3.13.2, create a specific and detailed O&M Plan that will be analyzed in the due diligence process and implemented during the Concession Agreement. The O&M Plan will be customized for each alternative identified during the first stage of the PDA.
- 3.13.6 Implement a cost effective Preliminary O&M Plan that is in compliance with the NCTA regulations, topics, specifications and other terms of the Contract Documents.
- 3.13.7 Prepare a detailed cost breakdown for the Project based on the O&M Plan performance requirements.
- 3.13.8 The O&M plan will discuss areas of interface with NCTA that are cost effective, efficient, and customer friendly.
- 3.13.9 Develop preliminary O & M plan. Submit plan to NCTA for approval.
- 3.13.10 Define Resources based on project needs: Management, Labor, Direct Expenses, Office Space, Maintenance Yard, Equipment/Vehicles, Energy, Routine and Preventative Maintenance Programs, Long Term Maintenance Programs, Roadway Operational Programs, Technical Advisors/Sub Consultants. These resources will be used to develop the OPEX and CAPEX Budgets. (To be delivered after the Financial Feasibility Assessment)
- 3.13.11 Preliminary OPEX: The preliminary OPEX budget will be formulated based on the O & M resources defined in the Preliminary O & M Plan. This budget will include cost of operating and maintaining the project on a yearly basis for a concession period up to 50 years. Develop preliminary OPEX budget. Submit budget to NCTA for approval.
- 3.13.12 Preliminary CAPEX: The preliminary CAPEX budget will be formulated based on the O & M resources defined in the Preliminary O & M Plan. This budget will include cost of capital improvements for a concession period up to 50 years and is based on programmed and deterioration-based estimates for major rehabilitation activities. Develop preliminary CAPEX budget. Submit budget to NCTA for approval.

Description of Work (Scope of Work) – Phase 1B

- 3.13.13 Final O & M Plan: The major components of the O & M Plan include:
 - a. Operations Manual: This manual includes detailed procedures for operations during both construction and O&M phases. This includes operating protocols, and directives and guidelines for operating requirements of equipment
 - b. Maintenance Manual: This manual includes detailed documentation of all functions and activities necessary to form a detailed Asset Management Plan that includes preventative and routine maintenance services for roadway maintenance, condition assessments, staffing plans, procedures and schedules.
 - c. Quality Management Systems Plan: This document details Developer's approach to the self-monitoring process of the O&M work. This will include policies, procedures and guidelines for conducting Quality Control and Quality Assurance activities.
 - d. This also may include: Safety Plans, Emergency Response Plans, and Inspection Plans.
 - e. Develop final O & M plan. Submit plan to NCTA for approval

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3.13.14 Technical Tolling Design. This Phase will include:

- System Design (Preliminary): Shall be used for budgeting purposes and requirement specifications. System Design shall incorporate interface elements with NCTA.
- Develop a plan for interfacing with NCTA toll operations as it relates to toll collection, customer accounts (interoperability and reciprocity business rules), violations processing and traffic management.
- Tolling Services Agreement (TSA): In the event that an agreement with the NCTA is recommended with in the ConOps, Developer shall provide a contractual basis for an agreement with NCTA
- Service Level Agreement (SLA): Basis for SLAs to be included into the TSA (if this is the case) or to be used by the NCTA when auditing the performance of the concessionaire

3.13.15 Final Tolling OPEX/CAPEX Model (Definitive): A definitive model utilizing the chosen Tolling alternative will be further refined based upon the final figures resulting from the work completed after the Financial Feasibility Assessment.

3.13.16 Final OPEX Budget: The final OPEX budget will be an extended version of the Preliminary OPEX budget. This will include the resources necessary to successfully perform operations and maintenance activities for the entire concession. Develop final OPEX budget. Submit budget to NCTA for approval.

3.13.17 Final CAPEX Budget: The final CAPEX budget will be an extended version of the Preliminary CAPEX budget. This will include the resources necessary to successfully perform capital improvement activities for the entire concession. Develop final CAPEX budget. Submit budget to NCTA for approval.

Deliverables –Phase 1A

The Developer shall provide the following items:

- Preliminary O&M work Document
- O&M Requirements
- Preliminary O & M Plan
- Preliminary OPEX
- Preliminary CAPEX

Deliverables –Phase 1B

The Developer shall provide the following items:

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- Final O & M Plan
- Technical Tolling Design
- Final Tolling OPEX/CAPEX Model
- Final OPEX Budget
- Final CAPEX Budget

Milestone and Prices

The following table outlines the milestone deliverable events for this activity along with the associated costs to produce the deliverable and the Project time frame:

DELIVERABLE	MILESTONE DATE	PRICE
Phase 1A		
Preliminary O&M work Document	May-09	\$19,000
O&M Requirements	July-09	\$9,000
Preliminary O & M Plan	October-09	\$11,000
Preliminary OPEX	November-09	\$10,000
Preliminary CAPEX	November-09	\$11,000
Phase 1B		
Final O & M Plan	April-10	\$60,000
Technical Tolling Design	March -10	\$15,000
<u>Final Tolling OPEX/CAPEX Model</u>	March-10	\$5,000
Final OPEX Budget	May-10	\$40,000
Final CAPEX Budget		

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Activity 3.3 – Legal and Financial Services during the Phase 1A

NCTA and Developer, subject to the Scope described below, will work together to determine the Project's financial feasibility, and shall complete a "value for money" (Value for Money) analysis to support the recommendation of a finance plan to be approved by NCTA for the Project ("Financing Plan"). The Value for Money analysis shall consider all reasonable financing options, both public and private, to make the Mid-Currituck Bridge feasible with minimum financial public support, and shall include an assessment of the benefit of each potential financing structure. For private finance options, the Financing Plan shall include a reasonable rate of return on any Developer equity. The overall goal shall be that there should be no requirement of NCTA or other State financial participation in the Project, except as otherwise specifically agreed to by NCTA; however, if the Project is deemed not feasible without such funding, options for such NCTA or other State financial participation may be considered

The Financing Plan will include the following information:

(a) Amount and timing of the anticipated uses of funds, including:

- Costs of the development services;
- Permitting costs;
- Right of way acquisition costs;
- Utility relocation costs;
- Cost of design, materials, and construction;
- Operation and maintenance costs;
- Other costs required to complete the Project, such as financing charges; and
- Mitigation plan;

(b) Amount and timing of the anticipated sources of funds, including:

- Equity contributions;
- Debt proceeds (taxable and PABs); and
- TIFIA loan proceeds.

Appendix E: Scopes of Work and Progress Milestones

Description of Work (Scope of Work) for Phase 1A

During the Phase 1A of the Project the Developer shall prepare the Preliminary and the Final Value for Money Assessment for the Project. This includes the required financial and legal framework which will include data from the study and opinions of the Developer. Deloitte will work with the Developer on the definition of each item identified in the scope.

3.3.1. Throughout Phase 1A of the project, the Developer will work with the NCTA on the various steps to define the Preliminary and Final Value for Money Assessment to eventually be delivered by the Developer.

The documents described below will be delivered by Developer by the date specified. After the submission of each document, the financial committee will comment on the different issues discussed. The financial committee will be formed by members of both the NCTA and the Developer and its sub-consultants. As a final step for the discussion of each document the financial committee will hold a meeting in order to review the final results and define the future steps of the process.

Working documents that will be considered during the Phase 1 A:

- Cost/Inputs sheets definition. Definition of the template to be used to provided inputs by the different members of the team. (June 2009)
- First analysis and discussion of the different financial options for the project. (June 2009)
- First version of the risk matrix of the Project. (July 2009)
- Definition of different payment mechanisms to be considered in the various scenarios that will be defined in the Value for Money Assessment. Legal implications will be defined for each mechanism. (August 2009)
- Model Development. In order to work on the final definition of the model, the Developer will define a pre-base case scenario using the inputs available at the moment of the exercise. The model will be updated in October, November and January with the various inputs supplied by the other committees. (August / September 2009)
- Special attention will be placed on coordinating the financial committee with the T&R Committee. It is expected that by the end of November the team will have the first approach to the T&R results, which will include the different toll policies. The financial committee and the Traffic committee will analyze the first approach to the T&R results in order to define the final toll policy for the project. (November 2009)

From this point on, the model will be run with each new update of the traffic results

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- **Tax/Accounting.** Developer will provide the first approach to the definition of the Tax/Accounting of the project.

Second analysis and discussion of the different financial options for the project. (November 2009)

- **Legal Framework.** Developer will submit the first version of the document that will define the legal framework/roles and responsibilities of the NCTA, FHWA, etc. in the development of the Project. Second version of the risk matrix of the project will be submitted as well. (October 2009)

3.3.2. The Value for Money Assessment shall include the following elements:

- Definition for the Initial Base Case of the Project.
- Definition of the legal [and institutional] framework required for the development of the Project.
- Development of additional ideas to ensure the feasibility of the Project, including:
 - Optimization of the Project using financial tools
 - Structuring and optimization of the payment to be made by the NCTA through the use of different payment mechanisms.

Description of Work (Scope of Work) – Phase 1B

3.3.3 **Due Diligence Process:** A due diligence process will be conducted by the Developer during Phase 1B of the project in order to prove to the financial markets (including federal financing) the feasibility of the project. This due diligence process will be managed by the lenders of the project.

3.3.3.1 This process includes due diligence of the Project technical solution (including design, construction, operation & maintenance and tolling strategies), insurance considerations, Project legal aspects (structure of the contract, risk analysis, etc.), traffic & revenue and the financial model. This specific due diligence of each activity detailed above will be undertaken by specialized companies selected by the lenders. This due diligence process will be performed after obtaining the final inputs of the Project and before signing of the Concession Agreement. One week prior to the signing of the Concession Agreement, the Developer shall deliver to the NCTA a summary highlighting the overall findings (as of the date thereof) of the due diligence.

3.3.3.2 **Due Diligence Process:** A due diligence process will be conducted by the Developer during Phase 1B Rating Agency: An assessment will be performed by Rating Agencies in order to establish the investment rating of the Project. This assessment will be performed after obtaining the final inputs of the Project and before the signing of the Concession Agreement. One week prior to the signing of the Concession Agreement, the Developer shall deliver to the NCTA a summary highlighting the overall findings (as of the date thereof) of the rating agency report and will provide the rating certificate, if already obtained.

3.3.3.3 **Bond Counsel:** A Bond Counsel agent will be necessary, to allocate the instrument in the financial market, if a bond solution is selected as the financial option for the Project. This task

Appendix E: Scopes of Work and Progress Milestones

will be performed after obtaining the final inputs of the Project and before the financial close of the Project. Only a portion of this activity will be performed during Phase 1B of the Project. A final bond counsel report will be submitted to the NCTA, provided that a bond option is a component of the financial plan.

3.3.3.4 Tax advisor: A Tax advisor will be needed to support and review the different tax solutions of the Concession contract. This task will be performed after obtaining the final inputs of the Project and before the signing of the Concession Agreement. One week prior to the signing of the Concession Agreement, the Developer shall deliver to the NCTA a summary highlighting the tax issues analyzed.

Deliverables–Phase 1A

Developer shall provide the following milestone deliverables (the “Activity 15/16 Deliverables”), as well as all of the interim work products outlined above:

- Preliminary value for money assessment
- Final value for money assessment

Deliverables–Phase 1B

Developer shall provide the following milestone deliverables:

- Summary of the due diligence report
- Summary of the rating agency report
- Summary of bond counsel
- Summary of taxes advisor

Milestone and Prices

Developer shall provide the Activity 15/16 Deliverables according to the following Milestone Schedule:

DELIVERABLE/MIILESTONE	DATE	PRICE
Phase 1A		
Preliminary value for money assessment	Decemember-09	\$493,000
Final value for money assessment	February-10	\$100,000
Phase 1B		
Summary report of technical due diligence	One week before signing of the concession agreement	\$780,000
Summary report of the rating agency		\$300,00
Summary of bond counsel report, provided that a bond option is a component of the financial plan.		\$150,000
Summary report of the tax assessment		\$250,000

Milestones for this activity during the first stage of the Pre-Development Agreement shall be linked to the development of the Traffic and Revenue studies as well as the Cost Plan.

Appendix E: Scopes of Work and Progress Milestones

Assumptions and Exceptions (including NCTA responsibilities)

- All work products developed during this task should become the property of NCTA, including any input from Deloitte used to develop any deliverable. The financial model produced by the Developer shall be fully functional and available for use and audit by the NCTA.

Appendix E: Scopes of Work and Progress Milestones

Mid-Currituck Bridge Pre-Development Agreement Scope of Services

Attachment A Mid Currituck Project Management Plan Project Development Plan Requirements of Concessionaire

As a complement to the Project Management Plan developed by the North Carolina Turnpike Authority, the Concessionaire shall develop and supply the following information, specific to their management and structure of the Project.

A draft Project Management Plan must be submitted to the FHWA for review prior to approval of the NEPA decision document. The Concessionaire requirements are not part of this draft Project Management Plan; however, this document must be amended and submitted to FHWA for approval within 90 days of the date of the signed NEPA decision document. The Project Management Plan must also be approved by FHWA prior to approval of a TIFIA loan.

1. Project Description and Scope of Work

The project description and scope of the plan should be well stated, consistent and complement NCTA's scope.

2. Goals and Objectives

The goals and objectives should be well stated, consistent and complement NCTA's goals. Quality measurements should be established to cover schedule, budget (including cost containment), quality, safety, scope control, public trust and confidence, and federal requirements.

3. Project Organizational Chart, Roles, and Responsibilities

- a) This section of the document describes the Concessionaire's managerial approach, strategy, and quality procedures to finance, design, build and maintain the Project and achieve all requirements of the Project. This section also identifies individuals responsible for ensuring that required activities are planned, implemented and controlled, and their progress is monitored.
- b) Include an organizational chart outlining the basic structure of the Concessionaire's Project organization including the design, construction, operations and maintenance sub-organizations and a description of the roles, responsibilities, and items of work to be accomplished by each member of the management team and each sub-organization, including identified Subcontractors and suppliers, DBEs and small professional service firms (SPSFs).
- c) Describe how the Project Development Plan fits within the overall quality management system, responsibilities for developing and maintaining the plans and the schedule for implementation.
- d) Address the Concessionaire's procedures for preparation and submission of amendments to any part of this PMP.

4. Project Phases

- a) Develop a Construction Plan to define the construction approach and activities for the construction of the Project that address:
 - i. construction organization and responsibilities
 - ii. safety during construction
 - iii. security

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- iv. environmental management and compliance
- v. quality
- vi. phasing of the Project construction into construction areas/segments
- vii. general construction sequence
- viii. temporary site facilities and storage areas
- ix. field equipment and materials management
- x. construction schedule

5. Procurement and Contract Management

- a) Describe procurement, contract management and subcontracting practices specific to the Concessionaire activities.
- b) Describe the DBE plan and define the approach to meet the DBE participation goal for the construction phase.
- c) Detail the proposed method to achieve the DBE participation goal or demonstrate a good faith effort to meet the goal.
- c) Detail an established proactive DBE outreach program for DBE participation
- d) Describe the reporting methods that will be utilized for DBE participation.
- e) Describe approach used to achieve small professional service firm participation.

6. Cost Budget and Schedule

The Concessionaire shall provide an overview of the Project financial structure and the various funding mechanisms that will be utilized to fund the project. Provide a history as to how this plan of finance was selected. Describe the duration of the financing and any project finance conditions for finance sharing.

7. Project Reporting and Tracking

Describe the project reporting and tracking system which will be used to collect, assess and maintain project status information and data that is timely, independent, and accurate. This system should provide current information on project prosecution, progress, changes, and issues specifically related to quality, budget, scope and schedule. Ensure that all documents and data are controlled and responsibility for review and approval is assigned. Ensure that applicable codes, standards, specifications, quality characteristics and regulatory requirements, as established by NCTA, NCDOT and/or FHWA are met.

- a) Describe the document management plan which addresses:
 - i. the document management system
 - ii. document management procedures
 - iii. requirements for records retention
 - iv. electronic plan development for construction, electronic as-built plans and revisions during maintenance such that all assets are coordinately located within an asset management application
 - v. Asset Management

8. Internal and Stakeholder Communications

Address how communications between project team members and stakeholders will be conducted. Provide informal and formal communications mechanisms that will be utilized to communicate information. Describe the mechanisms in which the Concessionaire will communicate with NCTA, NCDOT and FHWA.

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9. Project Management Controls (Scope, Cost, Schedule, Claims, etc.)

- a) Describe the project controls functional team which will manage the scope, total cost and overall master schedule for the project, in order for the entire project delivery team to meet the stated objectives of the project being completed on time and within budget. Describe the process for reporting, quantifying schedule delays and cost increases, and initiating recovery plans.
- b) Describe the Risk Management Plan, the risk assessment matrix and method for risk reduction.
- c) Describe the Scope Management Plan and methods utilized to contain scope creep.
- d) Describe the Scheduling Software that will be utilized and the CPM schedule milestones.
- e) Describe the Cost Tracking Software which will be utilized to track project costs and payments to subcontractors.
- f) Describe the Project Metrics which should align with the project goals and how such metrics will be measured and reported.
- g) Describe all New and Innovative Contracting Strategies proposed for the project
- h) Discuss the Value Engineering, Value Analyses, and Constructability Reviews performed during the PDA and design process
- i) Describe the process that will be utilized to encompass work outside the original scope of the project.

11. Claims Management Procedures

Describe the process and procedures that will be utilized for project dispute resolution.

10. Design Quality Assurance/Quality Control (QA/QC)

Ensure that the requirements for reviews for adequacy and effectiveness of the plan are stated and flow through to PMP revision procedures;

- a) Describe the Design Management Plan which defines the design approach and activities for the design of the Project and addresses:
 - i. the design organization and responsibilities
 - ii. the design basis (e.g. design criteria, design standards and specifications)
 - iii. work zone and worker safety review during design
 - iv. quality
 - v. the breakdown of the Project design into design packages
 - vi. the process the Engineering Consultant will use to design and seal each design package
 - vii. the system engineering process for the design of the systems components
 - viii. the proposed strategy for integrating the facilities and systems component into the design process
 - ix. design deliverables
 - x. design control
 - xi. the design review process, both informal and formal
 - xii. the process by which the Concessionaire's construction group, NCTA, NCDOT and FHWA will be involved in the design review process

11. Construction Quality Assurance/Quality Control (QA/QC)

Describe the Quality Management System Plan which defines the quality management systems for the construction and O&M and addresses:

- i. how the system is consistent with ISO 9001 and will lead to continuing improvement
- ii. auditing responsibilities and procedures
- iii. how the requirements of the contract will be met

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- iv. the quality organization and responsibilities
- v. the use of independent quality assurance
- vi. the requirement for any future contractor, subcontractor or professional service firm employed by the Concessionaire for substantial design, construction or maintenance activities to develop, implement and maintain a quality management system consistent with this Quality Management Plan

12. Environmental Monitoring

Describe the Environmental Management Plan which defines the environmental activities required during the design and construction phases of the Project and addresses:

- i. the environmental policy for the Project
- ii. the environmental goals for the Project
- iii. the organization and responsibilities of the various positions related to environmental management
- iv. compliance with the environmental requirements and regulations
- v. the Project environmental rules and regulations

13. Right-of-Way

Describe the Right of Way (ROW) Acquisition Plan which defines the approach to acquisition of the project ROW and addresses:

- i. the roles and responsibilities of the Concessionaire, NCTA, NCDOT and FHWA for ROW acquisition
- ii. the ROW acquisition process and procedures
- iii. applicable guidelines, laws and regulations
- iv. ROW acquisition services
- v. coordination with NCTA and property owners
- vi. ROW acquisition cost management
- vii. the utility and relocation schedule
- viii. environmental concerns

14. Safety and Security

Describe the Health, Safety and Security Plan which defines the health, safety and security activities required during the design and construction phases of the Project and addresses:

- i. the health and safety policy for the Project
- ii. the health and safety goals for the Project
- iii. the organization and responsibilities of the various positions related to health, safety and security
- iv. construction occupational health and safety
- v. the Project health and safety rules and regulations
- vi. site security

15. Traffic Management

The NCTA and the Concessionaire will jointly develop a Transportation Management Plan (TMP) for the project. The Concessionaire's contribution to the TMP will be extracted from the Maintenance of Traffic Plan and Public Information Plan as defined below.

Describe the Maintenance of Traffic (MOT) Plan for construction activities that addresses:

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- i. construction phasing plans with maps and narratives
- ii. emergency access plans for emergency vehicles and public/semi-public facilities such as hospitals, fire stations and police stations
- iii. incident management liaison with NCTA and NCDOT
- iv. the approach to developing detailed Traffic Control Plans (TCPs)
- v. the approach to public information

16. Project Communications (Media and Public Information)

- a) Describe the integrated Communication, Public Outreach and Community Education Plan that:
 - i. provides an effective framework for communication between the Concessionaire and stakeholders
 - ii. effectively engages the community in the design, construction and operation of the Project to minimize negative impacts, and maximize positive outcomes
 - iii. builds a strong and enduring relationship with stakeholders and the community within the Mid Currituck Bridge region over the life of the Project
 - iv. identifies and manages risks associated with the Project
 - v. develops a strong and enduring brand relationship between the community, motorist and the owners and operators of the Project
 - vi. maximizes public awareness of features and benefits of the Mid Currituck Bridge
 - vii. ensures the public understands how best to use the Mid Currituck Bridge and the requirements for travel
 - viii. will be consistent with NCTA goals for the project
 - ix. provides a detailed outline of communication tools and strategies to be employed during each phase of the Project development, delivery and operation, including:
 - 1. Project Branding
 - 2. Market Research and Analysis
 - 3. Media Outreach
 - 4. Stakeholder Outreach and Information
 - 5. NCTA Interface and Liaison
 - 6. Project Communication Team
 - 7. Design Build – Public Information and Involvement
 - 8. Pre-Operations - Public Education and Awareness
 - x. addresses the development of a crisis communications plan and procedure, addressing coordination with NCTA, NCDOT, FHWA and local municipalities and responsiveness to the media.
- b) Describe the Public Information Plan that fits within the context of the broader Communication, Public Outreach and Community Education Plan and addresses:
 - i. the identification of stakeholders and the outreach tactics that will be used to engage them
 - ii. training of relevant Project personnel in crisis communications, media relations and community outreach techniques
 - iii. development of a Community Engagement Program, outlining the approach to consultation with the community regarding design and construction matters, including:
 - 1. mechanisms to engage the community in applicable design and construction activities
 - 2. measures to communicate with and mitigate the impacts of construction on

Appendix E: Scopes of Work and Progress Milestones

- directly impacted properties (dust, noise, access constraints, utility impacts, etc.)
- 3. hosting Community Information Meetings to provide updated Project information as required
- 4. education and awareness related to public safety surrounding the work zone
- iv. the approach to communication with the public regarding construction activities, including:
 - 1. notification of upcoming construction activities to surrounding homes and businesses
 - 2. commitments of key Project staff to participate in community outreach activities such as public meetings and media interviews
 - 3. establishment and maintenance of a Project hotline to manage public inquiries and concerns
 - 4. facilitation and maintenance of Project signage, including information to pedestrians and cyclists, and Project branding information
- v. provisions for information to motorists and stakeholders to facilitate the MOT during construction. This will include:
 - 1. packaging of all MOT information, such as anticipated delays and lane closures, for provision to the Project Communication Team on a regular basis to facilitate communication to the media, stakeholders and the broader community
 - 2. communication with direct impact area property owners
 - 3. communication with elected officials and other key stakeholders
 - 4. coordination with local agencies
 - 5. notification program to inform motorists and the broader community about expected traffic changes/delays (such as on-road signage, DMS and email alerts)
 - 6. providing information to stakeholders regarding events in the area that may be affected by construction activities
- xi. coordination of construction-related information for inclusion on all Project communication material as developed under the Communication, Marketing and Public Outreach Plan (including web and bulletins)
- xii. management of construction site tours, including stakeholder events
- xiii. recording of Project progress through photography
- ix. packaging and timely delivery to NCTA of information on expected, major traffic changes for inclusion in NCTA or NCDOT public advertising programs

17. Civil Rights Program

Describe the policy, procedures and mechanisms used to meet the specific goals and requirements related to Disadvantaged Business Enterprises (DBE), Small Business Enterprises (SBE), and Equal Employment Opportunity (EEO).

18. Closeout Plan

Describe the Closeout Plan which will provide a coordinated transition from construction to operations along with the roles and responsibilities of various subcontractors.

19. Project Documentation

Describe the procedures that will be utilized to retain and archive the project records.

20. Utilities Plan

Appendix E: Scopes of Work and Progress Milestones

Describe the Utilities Plan which defines the utility coordination activities during the design and construction phases of the Project and addresses:

- i. the roles and responsibilities of the Concessionaire, NCTA, NCDOT and FHWA
- ii. the utility relocation process
- iii. applicable guidelines, laws and regulations
- iv. the application of prior rights
- v. utility agreements, including NCTA Utility Agreement and/or development of Project specific utility relocation agreements
- vi. wet utility relocations
- vii. dry utility relocations
- viii. the coordination with NCTA, municipalities, utilities and subcontractors
- ix. the process for resolution of utility conflicts
- x. the development and maintenance of a Utility Relocation Report

21. Operations and Maintenance Plan

Describe the Operations and Maintenance Plan which identifies the methods, systems and procedures whereby the Concessionaire will comply with the operation and maintenance requirements of the Project, including;

- i. organizational structure including key operations and maintenance personnel
- ii. key suppliers and subcontractors
- iii. operating procedures
- iv. interface with incident management
- v. inspection methods and inspection schedule
- vi. identification and scheduling of routine maintenance

22. Life Cycle Maintenance Plan

Describe the Life Cycle Maintenance Plan which identifies the methods, systems and procedures whereby activities are performed to accomplish, i) performance requirements, ii) enduring life cycle of the project assets, iii) performance of warranty work and iv) reconditioning requirements for Project prior to project turn over to NCTA.

23. Appendices

APPENDIX F: KEY PERSONNEL

The Currituck Development Group, lead by ACS Infrastructure, has brought together an excellent team of leaders for the Mid-Currituck Bridge PDA and Implementation Phases. The key personnel is shown in the following table.

Key Personnel (as specified in RFP)

Name	Position	Company	Time During Development Phase	Commitment Pre-During Concession Period
Ramon Villaamil (*)	Project Manager	ACS Infrastructure Development	70%	—
Jose Luque (*)	Deputy Project Manager	ACS Infrastructure Development	100%	—
Roy Bruce	Design Manager	Lochner MMM Group	25%	60
Roy Bruce	Environmental Manager	Lochner MMM Group	50%	15%
Ricardo Davila (*)	Construction Manager. Pre-Development Phase	Dragados USA	100%	—
Manuel Pardo (*)	Construction Senior Advisor. Pre-Development Phase	Dragados USA	40%	—
Leonardo Paez (*)	Financial Advisor	ACSID	100%	—
Angel Muriel (*)	Financial Senior Advisor	ACSID	40%	—
Robert Tucker	Utilities Manager	Wetherill Engineering	25%	25%
Jimmy J. Faircloth	Right of Way Manager	TBE Group	25%	25%
Randy Sullivan	Geotechnical Manager	Golder Associates	25%	25%
Julia Monso (*)	Tolling and Marketing Manager	ACSID	40%	—
Ron Ferrell	Regulatory/Permitting Manager	EcoScience	60%	40%
Ramon Villaamil (*)	Operations and Maintenance Manager	ACSID	40%	—

(*)These personnel will work on the project during the Pre-Development Agreement Phase as well as during thought financial close process. During the Pre-Development phase of the contract, The Currituck Development Group will define with the NCTA the requirements and experience of the personnel who will work on the Project in those positions during the whole term of the Concession period.

Appendix G

[Reserved]

Appendix H: Form of Opinion of Counsel

[Letterhead of Independent Law Firm or In-house Counsel]

North Carolina Turnpike Authority

Re: Pre-Development Agreement ("PDA") for the Mid-Currituck Bridge Project; North
Carolina Turnpike Authority Contract No. _____ ("Contract");
_____ (the "Developer")

Ladies and Gentlemen:

[Describe relationship to Developer and its joint venture members, general partners,
members, as applicable, and any other entities whose approval is required in order to
authorize execution of the PDA.] This letter is provided to you pursuant to
_____ of the PDA.

In giving this opinion, we have examined _____.
We have also considered such questions of law and we have examined such
documents and instruments and certificates of public officials and individuals who
participated in the procurement process as we have deemed necessary or advisable. [if
certificate used/obtained from Developer or Guarantor, such certificate should also run
in favor of NCTA and should be attached to opinion]

In giving this opinion, we have assumed that all items submitted to us or reviewed by us
are genuine, accurate and complete, and if not originals, are true and correct copies of
originals, and that all signatures on such items are genuine.

Subject to the foregoing, we are of the opinion that:

1. [opinion regarding organization/formation and existence of Developer [if partnership/joint venture, add: and each of its joint venture members and general partners] and that Developer has corporate power to own its properties and assets, carry on its business, enter into the PDA and to perform its obligations under the PDA.]
2. [opinion regarding good standing and qualification to do business in State of North Carolina for Developer]
3. [opinion regarding organization/formation and existence of Guarantor and that Guarantor has corporate power to own its properties and assets, to carry on its business, to enter into the Guaranty and to perform its obligations under the Guaranty].
4. [opinion regarding good standing and qualification to do business in State of North Carolina for Guarantor]
5. [opinion that PDA has been duly authorized by all necessary corporate action on the part of Developer and the PDA has been duly executed and delivered by Developer.]
6. [opinion that Guaranty has been duly authorized by all necessary corporate action on the part of Guarantor and the Guaranty has been duly executed and delivered by Guarantor.]
7. [opinion that the PDA constitutes a legal, valid and binding obligation of Developer enforceable against Developer in accordance with its terms; if partnership/joint venture, add: and its joint venture members/general partners after the second "Developer"]
8. [opinion that the Guaranty constitutes a legal, valid and binding obligation of the Guarantor enforceable against the Guarantor in accordance with its terms; if partnership/joint venture, add: and its joint venture members/general partners after the second "Guarantor"]
9. [opinion that all required approvals have been obtained with respect to execution, delivery and performance of the PDA; and that the PDA does not conflict

with any agreements to which Developer is a party [if partnership/joint venture, add: and its joint venture members/general partners are a party] or with any orders, judgments or decrees by which Developer is bound [if partnership/joint venture, add: and its joint venture members/general partners are bound].

10. [opinion that all required approvals have been obtained with respect to execution, delivery and performance of the Guaranty; and that the Guaranty does not conflict with any agreements to which Guarantor is a party or with any orders, judgments or decrees by which Guarantor is bound.]

11. [opinion that execution, delivery and performance of all obligations by Developer under the PDA does not conflict with, and are authorized by, the articles of incorporation and bylaws of Developer [if partnership, replace articles of incorporation and bylaws with partnership agreement and (if applicable) certificate of limited partnership); if joint venture, replace articles of incorporation and bylaws with joint venture agreement; if limited liability company, replace articles of incorporation and bylaws with operating agreement and certificate of formation].

12. [opinion that execution, delivery and performance of all obligations by Guarantor under the Guaranty does not conflict with, and is authorized by, the articles of incorporation and bylaws of Guarantor].

13. [opinion that execution and delivery by Developer of the PDA does not, and Developer's performance of its obligations under the PDA will not, violate any current statute, rule or regulation applicable to Developer or to transactions of the type contemplated by the PDA].

14. [opinion that execution and delivery by the Guarantor of the Guaranty do not, and the Guarantor's performance of its obligations under the Guaranty will not, violate any current statute, rule or regulation applicable to the Guarantor or to transactions of the type contemplated by the Guaranty].

APPENDIX I

[Reserved]

**APPENDIX J: EXECUTION OF BID, NONCOLLUSION AFFIDAVIT, AND
DEBARMENT CERTIFICATION**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of "Status" under penalty of perjury under the laws of the United States in accordance with the Debarment Certification included elsewhere in the proposal, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

LIMITED LIABILITY COMPANY

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Print or type full name of Firm

Address as prequalified

Signature of Manager

Individually

Subscribed and sworn to
before me this the

Print or type signer's name and title

_____ day of _____,
20____.

Signature of Notary Public
Of
_____ County

State of _____

Notary Seal Here

My Commission Expires

Signature Sheet 1 (Bid) LLC

Contract No _____

County (ies): _____

ACCEPTED BY THE
NCTA

NCTA Chief Engineer

Date

Execution of Contract and Bonds
Approved as to Form:

Attorney General

Signature Sheet (Bid - Acceptance by NCTA)

DEBARMENT CERTIFICATION OF BIDDERS

Instructions & conditions for certification

1. By signing and submitting this proposal, the bidder is providing the certification set out below.
2. The inability of a bidder to provide the certification required below will not necessarily result in denial of participation in this contract. If the certification is not provided, the bidder must submit an explanation (exception) of why it cannot provide the certification set out below. The certification or explanation (exception) will be considered in connection with NCTA's determination whether to award the contract. However, failure of the prospective bidder to furnish a certification or an explanation (exception) may be grounds for rejection of the bid.
3. The certification in this provision is a material representation of fact upon which reliance is placed when NCTA determines whether or not to award the contract. If it is later determined that the bidder knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, NCTA may terminate this contract for cause of default.
4. The prospective bidder shall provide immediate written notice to NCTA if at any time the bidder learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12540. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Chief Engineer of NCTA.
6. The bidder agrees by submitting this bid that, should the contract be awarded, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or

voluntarily excluded from participation in this contract, unless authorized by NCTA.

7. The prospective bidder further agrees by submitting this proposal that it will include the Federal-Aid Provision titled "Required Contract Provisions Federal-Aid Construction Contract" (Form FHWA PR 1273) provided by NCTA, without subsequent modification, in all lower tier covered transactions.

8. The prospective bidder may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if the successful bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, NCTA may terminate this transaction for cause of default.

DEBARMENT CERTIFICATION

The bidder certifies to the best of its knowledge and belief, that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal or State department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Where the prospective bidder is unable to certify to any of the statements in this certification, it shall attach an explanation to this proposal.

IF AN EXPLANATION, AS PROVIDED IN THE ABOVE DEBARMENT CERTIFICATION, HAS BEEN ATTACHED TO THE PROPOSAL, PLEASE CHECK THE BOX SHOWN BELOW:

☐ An explanation has been attached to the proposal.

APPENDIX K – Form of Invoice

DATE

Mr. Robert Weisenberger, CPA, Controller
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, North Carolina 27699-1578

Please Remit Payment to:

Invoice No.: 1

For Professional Services of work completed in connection with Mid-Currituck Bridge Project PDA
for the period of March 1st, 2009 through April 1st, 2009.

Total Project Lump Sum Amount	\$75.00
Milestone Activities Completed To Date	\$4.00
Previous Invoice Amount	\$3.00
Current Invoice Amount Due	\$1.00

Note: Invoice amounts from attached Phase IA Milestone Deliverable Schedule.

We Certify that the above statement is just and correct,
and that payment therefore has not been received.

Name	Title	Date
------	-------	------

APPENDIX L -- Form of Guaranty

GUARANTY (Pre-Development Agreement)

THIS GUARANTY (this "**Guaranty**") is made as of April ____, 2009 by ACS Infrastructure Development, Inc., a Delaware corporation ("**Guarantor**"), in favor of the **North Carolina Turnpike Authority**, an agency of the State of North Carolina ("**NCTA**").

RECITALS

A. The Currituck Development Group, LLC, a Delaware limited liability company (referred to herein as "**Developer**"), and NCTA are parties to that certain Pre-Development Agreement of even date herewith (the "**Agreement**") pursuant to which Developer has agreed to provide the Services and provide certain Project Work Product for the Project (as each term is defined therein). Initially capitalized terms used herein without definition will have the meaning given such terms in the Agreement.

B. To induce NCTA to (i) enter into the Agreement; and (ii) consummate the transactions contemplated thereby, Guarantor has agreed to enter into this Guaranty.

C. The Guarantor is the sole member of Developer. The execution of the Agreement by NCTA and the consummation of the transactions contemplated thereby will materially benefit Guarantor. Without this Guaranty, NCTA would not have entered into the Agreement. Therefore, in consideration of NCTA's execution of the Agreement and consummation of the transactions contemplated thereby, Guarantor has agreed to execute this Guaranty.

NOW, THEREFORE, in consideration of the foregoing Recitals, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Guarantor agrees as follows:

1. GUARANTY

Guarantor guarantees to NCTA and its successors and assigns the full and prompt payment and performance when due of all of the obligations of Developer arising out of, in connection with, under or related to the Agreement; provided, however,

notwithstanding the foregoing or any other provision in this Guaranty, nothing herein shall expand the obligations of the Guarantor hereunder beyond those of the Developer under the Agreement, as such obligations may be amended from time to time, but only to the extent permitted by the Agreement. The obligations guaranteed pursuant to this Guaranty are collectively referred to herein as the **"Guaranteed Obligations."**

Notwithstanding any other provision hereunder, this Guaranty shall be valid until the earlier of (a) satisfaction of all of the Guaranteed Obligations and (b) termination of the Agreement pursuant to Section 13.1 or Section 13.3 thereof; provided, however, Guarantor shall not be relieved of its obligations for any claims arising prior to any such termination pursuant to clause (b) hereof; provided, further, Guarantor's obligations hereunder shall not terminate with respect to any obligations of the Developer set forth in the Agreement that expressly survive termination or expiration of the Agreement.

2. UNCONDITIONAL OBLIGATIONS.

2.1 This Guaranty is a guaranty of payment and performance and not of collection. Except as provided in Section 18, this Guaranty is an absolute, unconditional and irrevocable guarantee of the full and prompt payment and performance when due of all of the Guaranteed Obligations, whether or not from time to time reduced or extinguished or hereafter increased or incurred, and whether or not enforceable against Developer. If any payment made by Developer or any other Person and applied to the Guaranteed Obligations is at any time annulled, set aside, rescinded, invalidated, declared to be fraudulent or preferential or otherwise required to be repaid or refunded, then, to the extent of such payment or repayment, the liability of Guarantor with respect thereto will be and remain in full force and effect as fully as if such payment had never been made.

2.2 Guarantor covenants that this Guaranty will not be fulfilled or discharged, except by the complete repayment and performance of the Guaranteed Obligations, whether by the primary obligor or Guarantor under this Guaranty. Without limiting the generality of the foregoing, Guarantor's obligations hereunder will not be released or discharged by (a) any change in the Agreement or the obligations thereunder, or any insolvency, bankruptcy or similar proceeding affecting Developer, Guarantor or their respective assets, and (b) the existence of any right of claim or set off which Developer has or Guarantor may have against NCTA, whether in connection with this Guaranty or any unrelated transaction, provided Guarantor shall have the same benefit and right of claim or set off which Developer may have against NCTA and nothing in this Guaranty

will be deemed a waiver by Guarantor of any such claim or prevent the assertion of any claim by set-off (to the extent permitted in the Agreement), separate suit or counterclaim.

2.3 This Guaranty will in all respects be a continuing, absolute and unconditional guaranty irrespective of the genuineness, validity, regularity or enforceability of the Guaranteed Obligations or any part thereof or any instrument or agreement evidencing any of the Guaranteed Obligations or relating thereto, or the existence, validity, enforceability, perfection, or extent of any collateral therefor or any other circumstances relating to the Guaranteed Obligations, except as provided in Section 18.

3. INDEPENDENT OBLIGATIONS.

3.1 Guarantor agrees that the Guaranteed Obligations are independent of the obligations of Developer and any other Person and if any default occurs hereunder, a separate action or actions may be brought and prosecuted against Guarantor whether or not Developer or other Person is joined therein. The NCTA may maintain successive actions for other defaults of Guarantor. NCTA's rights hereunder will not be exhausted by the exercise of any of its rights or remedies or by any such action or by any number of successive actions until and unless all Guaranteed Obligations have been paid and fully performed.

3.2 Guarantor agrees that NCTA may enforce this Guaranty, at any time and from time to time (until and unless all Guaranteed Obligations have been paid and fully performed), without the necessity of resorting to or exhausting any security or collateral and without the necessity of proceeding against Developer or any other Person.

Guarantor hereby waives the right to require NCTA to proceed against Developer or any other Person, to exercise any right or remedy under the Agreement or to pursue any other remedy or to enforce any other right.

3.3 Guarantor will continue to be subject to this Guaranty notwithstanding: (a) any modification, agreement or stipulation between Developer and NCTA or their respective successors and assigns, with respect to the Agreement or the Guaranteed Obligations; (b) any waiver of or failure to enforce any of the terms, covenants or conditions contained in the Agreement or any modification thereof; (c) any release or discharge of any other guarantor from any liability with respect to the Agreement; or (d)

any release or subordination of any collateral then held by NCTA as security for the performance by Developer of the Guaranteed Obligations.

3.4 The Guaranteed Obligations are not conditional or contingent upon the genuineness, validity, regularity or enforceability of the Agreement or the pursuit by NCTA of any remedies which NCTA either now has or may hereafter have with respect thereto under the Agreement.

4. LIABILITY OF GUARANTOR.

4.1 NCTA may bring action to enforce this Guaranty upon the occurrence of a breach of any of the Guaranteed Obligations, notwithstanding the existence of any dispute between NCTA and Developer with respect to the existence of such a breach; it being understood that Guarantor shall have the same right of claim and defense in respect of such breach which Developer may have against NCTA.

4.2 Guarantor's performance of some, but not all, of the Guaranteed Obligations will in no way limit, affect, modify or abridge Guarantor's liability for those Guaranteed Obligations that have not been performed.

4.3 NCTA, upon such terms as it deems appropriate (but only to the extent permitted by the Agreement), without notice or demand and without affecting the validity or enforceability of this Guaranty or giving rise to any reduction, limitation, impairment, discharge or termination of Guarantor's liability hereunder, from time to time may (a) with respect to the financial obligations of Developer, renew, extend, accelerate, or otherwise change the time, place, manner or terms of payment of such financial obligations that are Guaranteed Obligations, and/or subordinate the payment of the same to the payment of any other obligations, (b) settle, compromise, release or discharge, or accept or refuse any offer of performance with respect to, or substitutions for, the Guaranteed Obligations or any agreement relating thereto, provided that Guarantor shall have available to it the same defenses, if any, to performance of the Guaranteed Obligations that may be available to Developer based on any such settlement, compromise, release or discharge voluntarily made by NCTA, except defenses available to Developer under any federal or state law respecting bankruptcy, insolvency, arrangement, reorganization or similar relief of debtors, (c) request and accept other guarantees of the Guaranteed Obligations and take and hold security for the payment and performance of this Guaranty or the Guaranteed Obligations, (d) release, surrender, exchange, substitute, compromise, settle, rescind, waive, alter,

subordinate or modify, with or without consideration, any security for performance of the Guaranteed Obligations, any other guarantees of the Guaranteed Obligations, or any other obligation of any Person (other than the Developer) with respect to the Guaranteed Obligations, (e) enforce and apply any security hereafter held by or for the benefit of NCTA in respect of this Guaranty or the Guaranteed Obligations and direct the order or manner of sale thereof, or exercise any other right or remedy that NCTA may have against any such security, as NCTA in its discretion may determine, and (f) exercise any other rights available to it under the Agreement.

4.4 Without derogating the Guarantor's rights under Section 18, this Guaranty and the obligations of Guarantor hereunder will be valid and enforceable and will not be subject to any reduction, limitation, impairment, discharge or termination for any reason (other than infeasible performance in full of the Guaranteed Obligations), including without limitation the occurrence of any of the following, whether or not Guarantor will have had notice or knowledge of any of them: (a) any failure or omission to assert or enforce or agreement or election not to assert or enforce, or the stay or enjoining, by order of court, by operation of law or otherwise, of the exercise or enforcement of, any claim or demand or any right, power or remedy (whether arising under the Agreement, at law, in equity or otherwise) with respect to the Guaranteed Obligations or any agreement or instrument relating thereto; (b) any rescission, waiver, amendment or modification of, or any consent to departure from, any of the terms or provisions (including without limitation provisions relating to events of default) of the Agreement or any agreement or instrument executed pursuant thereto, provided that Guarantor shall have available to it the same defenses, if any, to performance of the Guaranteed Obligations that may be available to Developer based on any such rescission, waiver, amendment, modification or consent voluntarily given or entered into by NCTA, except defenses available to Developer under any federal or state law respecting bankruptcy, insolvency, arrangement, reorganization or similar relief of debtors; (c) NCTA's consent to the change, reorganization or termination of the corporate structure or existence of Developer or any other Person obligated under the Agreement; or (d) any defenses, set offs or counterclaims that Developer may allege or assert against NCTA in respect of the Guaranteed Obligations, except as provided otherwise in Section 18, provided that Guarantor shall have the same benefit and right of claim or set off which Developer may have against NCTA.

5. WAIVERS.

Without derogating the Guarantors rights under Section 18, to the fullest extent permitted by law, Guarantor hereby waives and agrees not to assert or take advantage of: (a) any right to require NCTA to proceed against Developer or any other Person or to proceed against or exhaust any security held by NCTA at any time or to pursue any right or remedy under the Agreement or any other remedy in NCTA's power before proceeding against Guarantor; (b) any defense that may arise by reason of the incapacity, lack of authority, death or disability of, or revocation hereof by Guarantor, Developer or any other Person or the failure of NCTA to file or enforce a claim against the estate (either in administration, bankruptcy or any other proceeding) of any such Person; (c) any defense that may arise by reason of any presentment, demand for payment or performance or otherwise, protest or notice of any other kind or lack thereof; (d) any right or defense arising out of an election of remedies by NCTA even through the election of remedies, such as nonjudicial foreclosure with respect to any security for the Guaranteed Obligations, has destroyed Guarantor's rights of subrogation and reimbursement against Developer by the operation of law or otherwise; (e) all notices to Guarantor, to Developer or to any other Person, including, but not limited to, notices of the acceptance of this Guaranty or the creation, renewal, extension, modification, accrual of any of the obligations of Developer under the Agreement, or of default in the payment or performance of any such obligations, enforcement of any right or remedy with respect thereto or notice of any other matters relating thereto; (f) any requirements of diligence or promptness on the part of NCTA; (g) any defense arising out of the lack of validity or the unenforceability of the Guaranteed Obligations or any agreement or instrument relating thereto, except as provided otherwise in Section 18; (h) any defense based upon any act or omission of NCTA which directly or indirectly results in or aids the discharge or release of any security given or held by NCTA in connection with the Guaranteed Obligations; and (i) the taking of any action or failure to take any action which would give rise to a legal or equitable defense, release, or discharge of a surety.

6. WAIVER OF SUBROGATION AND RIGHTS OF REIMBURSEMENT; SUBORDINATION.

Until the Guaranteed Obligations have been indefeasibly paid and performed in full, Guarantor waives any claim, right or remedy which it may now have or may hereafter acquire against Developer that arises from the performance of Guarantor

hereunder, including, without limitation, any claim, right or remedy of subrogation, reimbursement, exoneration, contribution, or indemnification, or participation in any claim, right or remedy of NCTA against Developer, or any other security or collateral that NCTA now has or hereafter acquires, whether or not such claim, right or remedy arises in equity, under the Agreement, by statute, under common law or otherwise. All existing or future indebtedness of, and all existing or future rights to return of capital or distributions from, Developer to Guarantor, or of or from any shareholders, partners, members, joint venturers or other Equity Member of Developer to Guarantor relating to or derived from Developer or the Project, are subordinated to all of the Guaranteed Obligations. Whenever and for so long as Developer shall be in breach in the performance of a Guaranteed Obligation, Guarantor shall not accept or take receipt of any payment with respect to any such indebtedness or rights offered or tendered to Guarantor by Developer or any shareholders, partners, members, joint venturers or other Equity Member of Developer without the prior written consent of NCTA. Any such payment by Developer or any shareholders, partners, members, joint venturers or other Equity Members of Developer to Guarantor in violation of this provision shall be deemed to have been received by Guarantor as trustee for NCTA.

7. CUMULATIVE RIGHTS.

All rights, powers and remedies of NCTA hereunder will be in addition to and not in lieu of all other rights, powers and remedies given to NCTA, whether at law, in equity or otherwise.

8. REPRESENTATIONS AND WARRANTIES.

Guarantor represents and warrants that as of the date hereof:

- (a) it is a corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware;
- (b) it has all requisite corporate power and authority to execute, deliver and perform this Guaranty;
- (c) the execution, delivery, and performance by Guarantor of this Guaranty have been duly authorized by all necessary corporate action on the part of Guarantor;
- (d) this Guaranty has been duly executed and delivered and constitutes the

legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms, subject only to bankruptcy, insolvency and similar laws affecting enforceability of the rights of creditors generally and general principles of equity;

- (e) neither the execution nor delivery of this Guaranty nor compliance with or fulfillment of the terms, conditions, and provisions hereof, will conflict with, result in a material breach or violation of the terms, conditions, or provisions of, or constitute a material default, an event of default, or an event creating rights of acceleration, termination, or cancellation, or a loss of rights under (i) the certificate of incorporation or by-laws of Guarantor, (ii) any judgment, decree, order, agreement, indenture, instrument, note, mortgage, lease, governmental permit, or other authorization, right restriction, or obligation to which Guarantor is a party or any of its property is subject or by which Guarantor is bound, or (iii) any federal, state, or local law, statute, ordinance, rule or regulation applicable to Guarantor;
- (f) it has full and complete access to any and all information concerning the transactions contemplated by the Agreement or referred to therein, the financial status of Developer and the ability of Developer to pay and perform the Guaranteed Obligations;
- (g) it has reviewed and approved copies of the Agreement and is fully informed of the remedies NCTA may pursue, with or without notice to Developer or any other Person, in the event of default of any of the Guaranteed Obligations;
- (h) it has informed itself, to the extent the Guarantor deems appropriate, as to the financial condition of Developer, the performance of the Guaranteed Obligations and any circumstances bearing upon the risk of nonpayment or nonperformance of the Guaranteed Obligations. Guarantor hereby waives and relinquishes any duty on the part of NCTA to disclose any matter, fact or thing relating to the business, operations or conditions of Developer now known or hereafter known by NCTA;
- (i) no consent, authorization, approval, order, license, certificate, or permit or act of or from, or declaration or filing with, any governmental authority or any party to any agreement, instrument, lease, or license to which

Guarantor is a party or by which Guarantor is bound, is required for the execution, delivery, or compliance with the terms hereof by Guarantor, except as have been obtained prior to the date hereof; and

- (j) there is no pending or, to the best of its knowledge, threatened action, suit, proceeding, arbitration, litigation or investigation of or before any governmental authority which challenges the validity or enforceability of this Guaranty.

9. GOVERNING LAW.

The validity, interpretation and effect of this Guaranty are governed by and will be construed in accordance with the laws of the State of North Carolina.

10. ENTIRE AGREEMENT.

This Guaranty contains the entire agreement of Guarantor with respect to the matters contained herein and supersedes all other negotiations or agreements, whether written or oral, with respect to the subject matter hereof. No waiver, modification or amendment of any provision of this Guaranty is effective unless made in writing and duly signed by Guarantor and NCTA referring specifically to this Guaranty, and then only to the specific purpose, extent and interest so provided.

11. SEVERABILITY.

If any provision of this Guaranty is determined to be unenforceable for any reason by a court of competent jurisdiction, it will be adjusted rather than voided, to achieve the intent of the parties and all of the provisions not deemed unenforceable will be deemed valid and enforceable to the greatest extent possible.

12. NOTICES.

All notices, demands or other communications under the Guaranty shall be given in accordance with the notice requirements of the Agreement and if to the Guarantor, at the address specified below the space for its execution of this Guaranty.

13. CAPTIONS.

The captions of the various Sections of this Guaranty have been inserted only for convenience of reference and do not modify, explain, enlarge or restrict any of the provisions of this Guaranty.

14. CONSTRUCTION OF GUARANTY.

Ambiguities or uncertainties in the wording of this Guaranty will not be construed for or against any party, but will be construed in the manner that most accurately reflects the parties' intent as of the date hereof.

15. NO WAIVER.

Any forbearance or failure to exercise, and any delay by NCTA in exercising, any right, power or remedy hereunder will not impair any such right, power or remedy or be construed to be a waiver thereof, nor will it preclude the further exercise of any such right, power or remedy.

16. BANKRUPTCY; REINSTATEMENT OF GUARANTY.

The obligations of Guarantor under this Guaranty will not be reduced, limited, impaired, discharged, deferred, suspended or terminated by any proceeding, voluntary or involuntary, involving the bankruptcy, insolvency, receivership, reorganization, liquidation or arrangement of Developer or by any defense which Developer may have by reason of the order, decree or decision of any court or administrative body resulting from any such proceeding. NCTA is not obligated to file any claim relating to the Guaranteed Obligations if Developer becomes subject to a bankruptcy, reorganization, or similar proceeding, and the failure of NCTA so to file will not affect Guarantor's obligations under the Guaranty. Until Developer shall have fully and satisfactorily paid, performed, completed and discharged all the Guaranteed Obligations, Guarantor hereby agrees not to file, not to solicit the filing by others of, and not to otherwise support, directly or indirectly, the filing of any involuntary petition in bankruptcy against Developer.

17. CONSENT TO JURISDICTION.

All disputes between Guarantor and NCTA arising under or relating to this Guaranty shall be resolved through the Dispute Resolution process set forth in the Agreement.

18. DEFENSES.

Guarantor shall be entitled to the benefit of all defenses available to Developer under the Agreement except (a) those expressly waived in this Guaranty, (b) failure of consideration, lack of authority of Developer and any other defense to formation of the Agreement, and (c) defenses available to Developer under any federal or State law respecting bankruptcy, arrangement, reorganization or similar relief of debtors. Action against Guarantor under this Guaranty shall be subject to no prior notice or demand.

19. MERGER.

Guarantor shall not, in a single transaction or through a series of related transactions, consolidate with or merge with or into any other Person or sell, assign, convey, transfer, lease, or otherwise dispose of any material portion of its properties and assets to any person or group of affiliated persons that would materially affect Guarantor's ability to perform its obligations under this Guaranty, unless:

- (a) in case of a merger, Guarantor shall be the continuing corporation; or
- (b) the Person (if other than Guarantor) formed by such consolidation or into which Guarantor merges, or the Person (or group of affiliated Persons) that acquires by sale, assignment conveyance, transfer, lease or other disposition a material portion of the properties and assets of Guarantor, shall expressly agree to perform all of the obligations of Guarantor hereunder, as a joint and several obligor with Guarantor if Guarantor continues to exist after such transaction, by a writing in form and substance reasonably satisfactory to NCTA.
- (c) Notwithstanding the agreement by any such Person to perform the obligations of Guarantor hereunder, Guarantor shall not be released from its obligations hereunder.

20. JOINT AND SEVERAL LIABILITY.

Guarantor shall be and remain jointly and severally liable with each and every other Person that guarantees payment or performance of any of the Guaranteed Obligations, but only in respect of the Guaranteed Obligations.

21. COUNTERPARTS.

This Guaranty may be executed in one or more counterparts, all of which shall constitute one and the same instrument.

[The remainder of this page intentionally left blank.]

IN WITNESS WHEREOF, Guarantor has executed this Guaranty as of the date first written above.

ACS Infrastructure Development, Inc.,
a Delaware corporation

By: _____

Name: Manuel García Buey
Title: Chief Executive Officer

Address for Notices:
ACS Infrastructure Development, Inc.
One Alhambra Plaza, Suite 710
Coral Gables, FL 33314
Attention: Juan Santamaría
Phone: (305) 423-7606
Facsimile: (305) 424-5401
Email address: jsantamaria@acsinfra.com

ACKNOWLEDGED AND AGREED

this ____ day of April, 2009:

North Carolina Turnpike Authority,
an agency of the State of North Carolina

By: _____

Name: _____

Title: _____

Address for Notices:

North Carolina Turnpike Authority
5400 Glenwood Avenue, Suite 400
Raleigh, NC 27612

Attention: [_____]

Phone: [_____]

Facsimile: [_____]

Email address: [_____]