

INVITATION TO SUBMIT
PROPOSAL

REQUEST FOR PROPOSALS - QUALIFICATION BASED SELECTION
NO.: QBS 10-2-4

ENGINEERING SERVICES FOR THE ISLANDS EXPRESSWAY OVER THE
WILMINGTON RIVER BRIDGE REPLACEMENT

PRE-PROPOSAL CONFERENCE.: 2:00 P.M., NOVEMBER 19, 2009

PROPOSALS RECEIVED BY: 2:00 P.M., DECEMBER 8, 2009

THE COMMISSIONERS OF CHATHAM COUNTY, GEORGIA

PETE LIAKAKIS, CHAIRMAN

COMMISSIONER HELEN J. STONE

COMMISSIONER HARRIS ODELL JR.

COMMISSIONER JAMES J. HOLMES

COMMISSIONER DAVID M. GELLATLY

COMMISSIONER PATRICK O. SHAY

COMMISSIONER DEAN KICKLIGHTER

COMMISSIONER PATRICK J. FARRELL

COMMISSIONER PRISCILLA D. THOMAS

R. JONATHAN HART
COUNTY ATTORNEY

CHATHAM COUNTY, GEORGIA

**CHATHAM COUNTY, GEORGIA
DOCUMENT CHECK LIST**

The following documents, when marked, are contained in and made a part of this Package or are required to be submitted with the qualification proposal. It is the responsibility of the Proposer to read, complete and sign, where indicated, and return these documents with his/her qualification proposal. FAILURE TO DO SO MAY BE CAUSE FOR DISQUALIFICATION.

 X GENERAL INFORMATION

 X PROPOSAL

 X SCOPE OF WORK

 X DRUG-FREE WORKPLACE CERTIFICATION (attachment A)
NON-DISCRIMINATION STATEMENT (attachment B)
DISCLOSURE OF RESPONSIBILITY STATEMENT (attachment C)
IMMIGRATION AND SECURITY FORM (attachment D)
CONTRACTOR AFFIDAVIT & AGREEMENT (attachment E)

 X LEGAL NOTICE

The undersigned bidder certifies that he/she has received the above listed and marked documents and acknowledges that his/her failure to return each, completed and signed as required, may be cause for disqualifying his/her bid.

BY: _____
SIGNATURE

DATE

TITLE

COMPANY

MINORITY YES___ NO___

**CHATHAM COUNTY, GEORGIA
OFFICE OF THE PURCHASING AGENT
POST OFFICE BOX 15180
SAVANNAH, GEORGIA 31416
(912) 790-1622**

DATE: November 3, 2009

RFP NO.: QBS 10-2-4

GENERAL INFORMATION FOR REQUEST FOR QUALIFICATIONS

This is an invitation to submit a proposal to supply Chatham County with services as indicated herein. Sealed proposals will be received at the Office of the Purchasing Agent, **1117 EISENHOWER DRIVE, SUITE C, SAVANNAH, GEORGIA** up to **2:00 P.M., DECEMBER 8, 2009**. Responses must either be mailed or delivered to the Purchasing Office. The Purchasing Agent reserves the right to reject any and all proposals and to waive formalities.

Instructions for preparation and submission of a qualification proposal are contained in the Request for Proposal package. Please note that specific forms for submission of a proposal are required. Proposals must be typed or printed in ink. If you do not submit a qualification proposal, return the signed invitation sheet and state the reason; otherwise, your name may be removed from our list.

A **pre-proposal conference** has been scheduled for **2:00 P.M., NOVEMBER 19, 2009** at **1117 EISENHOWER DRIVE, SUITE C, SAVANNAH, GEORGIA**. Your attendance is welcome and recommended.

Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Agent will issue a written addendum to document approved changes. Generally when addenda are required, the bid opening date will be changed.

Chatham County has an equal opportunity procurement policy. Chatham County seeks to ensure that all segments of the business community have access to providing services needed by County programs. The County affirmatively works to encourage utilization of disadvantaged and minority business enterprises in our procurement activities. The County provides equal opportunity for all businesses and does not discriminate against any persons or businesses regardless of race, color, religion, age, sex, national origin or handicap. The County expects its contractors to make maximum feasible use of minority businesses and qualified minority employees. The terms "disadvantaged business", "minority business enterprise", and "minority person" are more specifically defined and explained in the Chatham County Purchasing Ordinance and Procedures Manual, Article VII - Disadvantaged Business Enterprises Program.

INSTRUCTIONS TO PROPOSERS

- 1.1 Purpose:** The purpose of this document is to provide general and specific information for use in submitting a qualification proposal to supply Chatham County with services as described herein. All proposals are governed by the Code of Chatham County, Chapter 4, Article IV, and the laws of the State of Georgia.

1.2 How to Prepare Qualification Proposals: All proposals shall be:

- A. Typewritten or completed with pen and ink, signed by the business owner or authorized representative, with all erasures or corrections initialed and dated by the official signing the proposal. **ALL SIGNATURE SPACES MUST BE SIGNED.**

Proposers are encouraged to review carefully all provisions and attachments of this document prior to submission. Each proposal constitutes an offer and may not be withdrawn except as provided herein.

1.3 How to Submit Qualification Proposals: All proposals shall be:

- A. **Submitted in sealed opaque envelopes, plainly marked with the proposal number and title, date and time for submission, and company name.**
- B. Mailed or delivered as follows in sufficient time to ensure receipt by the Purchasing Agent on or before the time and date specified above.
- a. **Mailing Address: Purchasing Agent, Post Office Box 15180, Savannah, Georgia 31416.**
- b. **Hand Delivery: Purchasing Agent, 1117 Eisenhower Drive, Suite C, Savannah, Georgia.**

QUALIFICATION PROPOSALS NOT RECEIVED BY THE TIME AND DATE SPECIFIED WILL NOT BE OPENED OR CONSIDERED. However, if a well justified request to delay receipt of proposals is received at least one work day before proposal due date, it will be considered.

- 1.4 How to Submit an Objection:** Objections from Offerers to this Request for Proposals and/or these specifications should be brought to the attention of the County Purchasing Agent in the following manner:

- A. When a pre-proposal conference is scheduled, the proposer may object in writing any time prior to or at the pre-proposal conference.

- B. When a pre-proposal conference is not scheduled, the Proposer shall object in writing not less than five (5) days prior to the Date for submission.
 - C. The objections contemplated must pertain both to form and substance of the Request for Proposal documents. Failure to object in accordance with the above procedure will constitute a waiver on the part of the business to protest this Request for Proposal.
- 1.5 Failure to Offer:** If a Proposal is not submitted, the business should return this Request for Proposal, stating reason therefore, and indicate whether the business should be retained or removed from the County's bidders list.
- 1.6 Errors in Proposals:** Proposers or their authorized representatives are expected to fully inform themselves as to the conditions, requirements, and specifications before submitting proposals. Failure to do so will be at the Proposer's own risk.
- 1.7 Standards for Acceptance of Proposers for Contract Award:** The County reserves the right to reject any or all Proposals and to waive any irregularities or technicalities in Proposals received whenever such rejection or waiver is in the best interest of the County. The County reserves the right to reject the Offer of a Proposer who has previously failed to perform properly or complete on time contracts of a similar nature, whom investigation shows is not in a position to perform the contract.
- 1.8 Proposer:** Whenever the term "Proposer" is used it shall encompass the "person", "business", "firm", or other party submitting a proposal to Chatham County in such capacity before a contract has been entered into between such party and the County.
- 1.9 Compliance with Laws:** The Proposer shall obtain and maintain all licenses, permits, liability insurance, workman's compensation insurance and comply with any and all other standards or regulations required by federal, state or County statute, ordinances and rules during the performance of any contract between the Proposer and the County. Any such requirement specifically set forth in any contract document between the Proposer and the County shall be supplementary to this section and not in substitution thereof.
- 1.10 Contractor:** Contractor or subcontractor means any person, firm, or business having a contract with Chatham County. The Contractor of goods, material, equipment or services certifies that the firm will follow equal employment opportunity practices in connection with the awarded contract as more fully specified in the contract documents.
- 1.11 Local Preference:** The Contractor agrees to follow the local preference guidelines as more fully specified in the contract documents.

PROPOSAL CONDITIONS

- 2.1 Specifications:** Any obvious error or omission in specifications shall not inure to the benefit of the bidder but shall put the Proposer on notice to inquire of or identify the same to the County.
- 2.2 Multiple Proposals:** No Proposer will be allowed to submit more than one offer. Any alternate proposals must be brought to the Purchasing Agent's attention during the Pre-proposal Conference or submitted in writing at least five (5) days preceding the date for submission of proposals.
- 2.3 Offers to be Firm:** The Proposer warrants that terms and conditions quoted in his offer will be firm for acceptance for a period of sixty (60) days from bid date submitted, unless otherwise stated in the proposal. When requested to provide a fee proposal, fees quoted must also be firm for a sixty day period.
- 2.4 Completeness:** All information required by the Request for Proposals must be completed and submitted to constitute a proper proposal.
- 2.5 Liability Provisions:** Where Proposers are required to enter or go into Chatham County property to take measurements or gather other information in order to prepare the proposal as requested by the County, the Proposer shall be liable for any injury, damage or loss occasioned by negligence of the Proposer, his agent, or any person the Proposer has designated to prepare the Offer and shall indemnify and hold harmless Chatham County from any liability arising therefrom. The contract document specifies the liability provisions required of the successful Proposer in order to be awarded a contract with Chatham County.
- 2.6 Certification of Independent Price Determination:** By submission of this Offer, the Proposer certifies, and in the case of a joint offer each party thereto certifies as to its own organization, that in connection with this procurement:
- (1) The prices in this offer have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other competitor;
 - (2) Unless otherwise required by law, the prices which have been quoted in this offer have not been knowingly disclosed by the Proposer and will not knowingly be disclosed by the Proposer prior to opening, directly or indirectly to any other competitor; and
 - (3) No attempt has been made or will be made by the Proposer to induce any other

person or firm to submit or not submit an offer for the purpose of restricting competition.

2.7 Award of Contract: The contract, if awarded, will be awarded to that responsible Proposer whose proposal will be most advantageous to Chatham County. The Board of Commissioners will make the determination as to which proposal best serves the interest of Chatham County.

2.8 Procurement Protests: Objections and protests to any portion of the procurement process or actions of the County staff may be filed with the Purchasing Agent for review and resolution. The Chatham County Purchasing Procedures Manual, Article IX - Appeals and Remedies shall govern the review and resolution of all protests.

2.9 Qualification of Business (Responsible Proposer): A responsible Proposer is defined as one who meets, or by the date of the acceptance can meet, all requirements for licensing, insurance, and service contained within this Request for Proposals. Chatham County has the right to require any or all Proposers to submit documentation of the ability to perform the service requested.

Chatham County has the right to disqualify the proposal of any Proposer as being unresponsive or irresponsible whenever such Proposer cannot document the ability to deliver the requested service.

2.10 County Tax Certificate Requirement: Contractor must supply a copy of their Tax Certificate as proof of payment of the occupational tax where their office is located. Please contact the County Building Safety and Regulatory Services (912) 201-4300 for additional information.

No contract shall be awarded unless all real and personal property taxes have been paid by the successful contractor and/or subcontractors as adopted by the Board of Commissioners on April 8, 1994.

2.11 Insurance Provisions, General: The selected CONTRACTOR shall be required to procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Bid.

It is every contractor's responsibility to provide the County Purchasing and Contracting Division current and up-to-date Certificates of Insurance for multiple year contracts before the end of each term. **Failure to do so may be cause for termination of contract.**

2.11.1 General Information that shall appear on a Certificate of Insurance:

- I. Name of the Producer (Contractor's insurance Broker/Agent).
- II. Companies affording coverage (there may be several).
- III. Name and Address of the Insured (this should be the Company or Parent of the firm Chatham County is contracting with).
- IV. A Summary of all current insurance for the insured (includes effective dates of coverage).
- V. A brief description of the operations to be performed, the specific job to be performed, or contract number.
- VI. Certificate Holder (This is to always include Chatham County).

Chatham County as an "Additional Insured": Chatham County invokes the defense of "sovereign immunity." In order not to jeopardize the use of this defense, the County **is not** to be included as an "Additional Insured" on insurance contracts.

2.11.2 Minimum Limits of Insurance to be maintained for the duration of the contract:

- A. **Commercial General Liability:** Provides protection against bodily injury and property damage claims arising from operations of a Contractor or Tenant. This policy coverage includes: premises and operations, use of independent contractors, products/completed operations, personal injury, contractual, broad form property damage, and underground, explosion and collapse hazards. Minimum limits: \$1,000,000 bodily injury and property damage per occurrence and annual aggregate.
- A. **Worker's Compensation and Employer's Liability:** Provides statutory protection against bodily injury, sickness or disease sustained by employees of the Contractor while performing within the scope of their duties. Employer's Liability coverage is usually included in Worker's Compensation policies, and insures common law claims of injured employees made in lieu of or in addition to a Worker's Compensation claim. Minimum limits: \$500,000 for each accident., disease policy limit, disease each employee and Statutory Worker's Compensation limit.
- C. **Business Automobile Liability:** Coverage insures against liability claims arising out of the Contractor's use of automobiles. Minimum limit: \$1,000,000 combined single limit per accident for bodily injury and property damage. Coverage should be written on an "Any Auto" basis.

2.11.3 Special Requirements:

- A. **Claims-Made Coverage:** The limits of liability shall remain the same as the occurrence basis, however, the Retroactive date shall be prior to the coincident with the date of any contract, and the Certificate of Insurance shall

state the coverage is claims-made. The Retroactive date shall also be specifically stated on the Certificate of Insurance.

- B. **Extended Reporting Periods:** The Contractor shall provide the County with a notice of the election to initiate any Supplemental Extended Reporting Period and the reason(s) for invoking this option.
- C. **Reporting Provisions:** Any failure to comply with reporting provisions of the policies shall not affect coverage provided in relation to this request.
- D. **Cancellation:** Each insurance policy that applies to this request shall be endorsed to state that it shall not be suspended, voided, or canceled, except after thirty (30) days prior to written notice by certified mail, return receipt requested, has been given to the County.
- E. **Proof of Insurance:** Chatham County shall be furnished with certificates of insurance and with original endorsements affecting coverage required by this request. The certificates and endorsements are to be signed by a person authorized by the insurer to bind coverage on its behalf. All certificates of insurance are to be submitted prior to, and approved by, the County before services are rendered. The Contractor must ensure Certificate of Insurance are updated for the entire term of the County.
- F. **Insurer Acceptability:** Insurance is to be placed with an insurer having an A.M. Best's rating of A and a five (5) year average financial rating of not less than V. If an insurer does not qualify for averaging on a five year basis, the current total Best's rating will be used to evaluate insurer acceptability.
- G. **Lapse in Coverage:** A lapse in coverage shall constitute grounds for contract termination by the Chatham County Board of Commissioners.
- H. **Deductibles and Self-Insured Retention:** Any deductibles or self-insured retention must be declared to, and approved by, the County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as related to the County, its officials, officers, employees, and volunteers; or the Contractor shall procure a bond guaranteeing payment of related suits, losses, claims, and related investigation, claim administration and defense expenses.

2.11.4 **Additional Coverage for Specific Procurement Projects:**

- A. **Professional Liability:** Insure errors or omission on behalf of architects, engineers, attorneys, medical professionals, and consultants.

Minimum Limits:
Coverage Requirement:

\$1 million per claim/occurrence.
If "claims-made," retroactive date must precede or coincide with the contract effective date or the date of the Notice to Proceed. The professional must state if "tail" coverage has been purchased and the duration of the coverage.

B. **Builder's Risk: (For Construction or Installation Contracts)** Covers against insured perils while in the course of construction.

Minimum Limits: All-Risk coverage equal 100% of contract value.

Coverage Requirements: Occupancy Clause - permits County to use the facility prior to issuance of Notice of Substantial Completion.

2.12 Indemnification. The CONSULTANT agrees to protect, defend, indemnify, and hold harmless Chatham County, Georgia, its commissioners, officers, agents, and employees from and against any and all liability, damages, claims, suits, liens, and judgments, of whatever nature, including claims for contribution and/or indemnification, for injuries to or death of any person or persons, or damage to the property or other rights of any person or persons caused by the CONSULTANT or its subconsultants. The CONSULTANT's obligation to protect, defend, indemnify, and hold harmless, as set forth herein above shall include, but not be limited to, any matter arising out of any actual or alleged infringement of any patent, trademark, copyright, or service mark, or any actual or alleged unfair competition, disparagement of product or service, or other business tort of any type whatsoever, or any actual or alleged violation of trade regulations. CONSULTANT further agrees to investigate, handle, respond to, provide defense for, and to protect, defend, indemnify, and hold harmless Chatham County, Georgia, at his sole expense, and agrees to bear all other costs and expenses related thereto, even if such claims, suits, etc., are groundless, false, or fraudulent, including any and all claims or liability for compensation under the Worker's Compensation Act arising out of injuries sustained by any employee of the CONSULTANT or his subcontractors or anyone directly or indirectly employed by any of them.

The CONSULTANT's obligation to indemnify Chatham County under this Section shall not be limited in any way by the agreed-upon contract price, or to the scope and amount of coverage provided by any insurance maintained by the CONSULTANT.

2.13 Compliance with Specification - Terms and Conditions: The Request for Proposals, Legal Advertisement, General Conditions and Instructions to Proposers, Specifications, Special Conditions, Proposers Offer, Addendum, and/or any other pertinent documents form a part of the Offeror's proposal and by reference are made a part hereof.

2.14 Signed Response Considered An Offer: The signed Response shall be considered an offer

on the part of the Proposer, which offer shall be deemed accepted upon approval by the Chatham County Board of Commissioners, Purchasing Agent or his designee. In case of a default on the part of the Proponent after such acceptance, Chatham County may take such action as it deems appropriate, including legal action for damages or lack of required performance.

- 2.15 Notice to Proceed:** The successful proposer shall not commence work under this Request for Proposal until a written contract is awarded and a Notice to Proceed is issued by the Purchasing Agent or his designee. If the successful Proposer does commence any work or deliver items prior to receiving official notification, he does so at his own risk.
- 2.16 Payment to Contractors:** Instructions for invoicing the County for service delivered to the County are specified in the contract document.
- A. Questions regarding payment may be directed to the Finance Department at (912) 652-7905 or the County's Project Manager as specified in the contract documents.
 - B. Contractors will be paid the agreed upon compensation upon satisfactory progress or completion of the work as more fully described in the contract document.
 - C. Upon completion of the work, the Contractor will provide the County or contractor with an affidavit certifying all suppliers, persons or businesses employed by the Contractor for the work performed for the County have been paid in full.
 - D. Chatham County is a tax exempt entity. Every contractor, vendor, business or person under contract with Chatham County is required by Georgia law to pay State sales or use taxes for products purchased in Georgia or transported into Georgia and sold to Chatham County by contract. Please consult the State of Georgia, Department of Revenue, Sales and Use Tax Unit in Atlanta (404) 656-4065 for additional information.

The undersigned proposer certifies that he/she has carefully read the preceding list of instructions and all other data applicable hereto and made a part of this invitation; and, further certifies that the prices shown in his/her proposal are in accordance with all documents contained in this Request for Proposals package, and that any exception taken thereto may disqualify his/her proposal.

This is to certify that I, the undersigned Proposer, have read the instructions to Proposer and agree to be bound by the provisions of the same.

This _____ day of _____ 20 ____.

BY _____

SIGNATURE

TITLE

COMPANY

ADDRESS

PHONE NO.

REQUEST FOR PROPOSALS

GENERAL CONDITIONS SECTION I

- 1.1 **DESCRIPTION AND OBJECTIVES:** Chatham County is requesting qualification proposals from qualified firms to perform engineering services for **Engineering Services for the Islands Expressway Over the Wilmington River Bridge Replacement**. The County presents this "Request for Proposals - Qualification Based Selection" (QBS) to describe its needs and those criteria which will be used to determine selection of services.
- 1.2 **METHODOLOGY.** The procurement described herein is being conducted as a Request for Qualifications through professional services selection, a method of selecting professional services as provided in The Chatham County Purchasing Ordinance and Procedures Manual. This will be a three-step selection process, a summary of which follows:

STEP 1/ACCEPTANCE AND EVALUATION OF QUALIFICATION PROPOSALS:

All technical requirements, unless otherwise specified, must be met by the proponent. The goal of Step 1 will be to accept, evaluate and score qualification proposals that meet technical requirements and develop a "short list" (finalists) usually of no more than three firms that represent the best of all proposals.

–In the interest of a fair, objective and competitive process, Chatham County intends to accept all qualified proposals and give them complete and impartial consideration.

–Any proposal which does not meet all technical requirements may be disqualified as being non-responsive.

–Qualification Proposals which are deemed to be incomplete as to substance and content may be returned without consideration. Proponents whose proposals are not accepted will be promptly notified that they are not being further considered and why.

–Recommending proponents that best qualify for the short list will be done through a committee evaluation process based on established technical criteria as described herein. Final decision on the staff's recommendation is made by the Board of Commissioners.

–Do **not** submit a fee proposal.

STEP 2/INTERVIEWS: The evaluation committee **may** interview each finalist firm. If interviews are conducted, they will be scored. It will be at the discretion of the evaluation committee on the number of firms that will be interviewed **NOTE:** Do **not** submit a fee proposal.

STEP 3/NEGOTIATION OF FEE/SCHEDULE: The highest rated firm will be notified and brought in to negotiate fee and schedule with the County. Prior to negotiation, the highest ranked firm will be presented, with any updates to, a "Scope of Work" to base it's fee upon. If a negotiated fee cannot be reached with the highest ranked firm, the County will then enter negotiations with the 2nd ranked firm.

- 1.3 **PRE-PROPOSAL CONFERENCE.** A pre-qualification conference will be held at **2:00 P.M. on NOVEMBER 19, 2009, at 1117 Eisenhower Drive, Suite C, Savannah, Georgia.** Representatives from Chatham County will be in attendance. Attendance assures that all competitors hear the same information, can ask questions and suggest constructive changes to the solicitation.

- 1.4 **PROPOSAL DEADLINE.** The response to this 'Request for Proposal' must be received by the Purchasing Division no later than **2:00 P.M., DECEMBER 8, 2009.** Any qualification proposal received after the time stipulated will be rejected and returned unopened to the proponent.

For good and sufficient reason, up to 24 hours before the advertised deadline, the County may extend the response schedule. Should such action occur, all proponents who attended the pre-qualification conference will receive an addendum setting forth the new date and time. This will be provided initially by oral message or fax and followed by written verification.

It is emphasized that late proposals will be rejected. Hence, all firms are warned that if they find they cannot meet the established due date that it is incumbent upon them to justify and submit a request for slippage of due date **at least 24 hours prior to due date for proposals.**

- 1.5 **WITHDRAWAL OF PROPOSAL.** Any proposal submitted before the deadline may be withdrawn by written request received by the County before the time fixed for receipt of qualification proposals. Withdrawal of any proposal will not prejudice the right of a proponent to submit a new or amended proposal as long as Chatham County receives it by the deadline as provided herein.

- 1.6 **CONFIDENTIALITY OF DOCUMENTS.** Upon receipt of a proposal by the County, the proposal shall become the property of the County without compensation to the proponent, for disposition or usage by the County at its discretion (except for as provided by Georgia law for proprietary information). The details of the qualification proposal documents will remain confidential until final award or rejection of proposals and/or protected under the restraints of law.

- 1.7 **FORMAT OF RESPONSES.** To be considered, proponents must submit a complete response to the request for proposals. The format for responses is presented in Section 2. All responses must be presented in this format, which will not be negotiable.

The response to the QBS must be submitted in 4 copies to:

Mr. Robert Marshall
Senior Procurement Specialist
1117 Eisenhower Drive, Suite C
Savannah, Georgia 31406
(912) 790-1622
Fax (912) 790-1627
rmarshal@chathamcounty.org

Technical questions relating to the proposal may be directed by mail or telephone to:

Mr. Leon Davenport
Assistant County Engineer
124 Bull Street, Suite 430
Savannah, Georgia 31401
(912) 652-7800
Fax (912) 652-7818
ldavenport@chathamcounty.org

- 1.8 REJECTING QUALIFICATION PROPOSALS.** The County reserves the right to reject any or all proposals and will not be bound to accept any proposal should Chatham County consider that the proposal would be contrary to the best interest of Chatham County or this project.
- 1.9 COSTS TO PREPARE RESPONSES.** The County assumes no responsibility nor obligation to the respondents and will make no payment for any costs associated with the preparation or submission of the proposal.
- 1.10 EQUAL EMPLOYMENT OPPORTUNITY.** During the performance of this Contract, the CONTRACTOR agrees as follows:

The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, creed, color, sex, age, national origin, place of birth, physical handicap, or marital status.

SECTION II

SPECIAL CONDITIONS

- 2.1** Factors such as proponent's relevant experience, reputation, past performance on similar projects, excellence of the team and project manager to be assigned to the project, technical competence, ability to meet program goals, completion within a reasonable time will be considered in the shortlist and contract award recommendations made to the Board for their decision. Commitment in the level of involvement of MBE firms, consultants and employees will also be regarded in evaluating proposals.

Firms will be evaluated initially on the basis of the written qualification proposals. Thus, the proposal must be complete, concise and clear as to the capability and intent of the respondent. Further evaluation may include an oral presentation which will be scheduled after receipt of the written qualification proposal.

As such, to maintain competitiveness and to ease evaluation, responses to the RFQ must be responsive to the following and presented in this format and order:

- Introduction/cover letter
- Experience in Similar Projects
- Qualifications/Key Personnel
- Project Understanding/Methodology
- Minority/Local Outreach
- References
- Miscellaneous (not scored)
- Appendix (not scored)

FORMAT ORDER AND GRADING CRITERIA OF RESPONSES TO THE RFQ

NOTE: All qualification proposals will be presented on 8 1/2" by 11" paper, either bound or in a notebook. The information will be tabbed according to each requested section.

PURPOSE AND RATING

Chatham County is selecting a consulting engineer to perform as outlined in the scope of work. County staff will use the following criteria for evaluating the proposals and presenting a recommendation to the Board of Commissioners for their consideration.

The following guidelines will be used for establishing a numerical value to each category.

<u>Rating</u>	<u>Evaluation Value Points</u>
Excellent	5
Good	4
Average	3
Below Avg.	2
Poor	1

This value is multiplied by the number which will make the *excellent* rating equal to the number of points of the specific category. (See attached ***Evaluation Points Key*** for points breakdown) Each committee member will then submit their individual scores which in turn will be averaged together to establish the "Total Score" for that firm.

I. INTRODUCTION/COVER LETTER: You should provide no more than a 2 page letter of introduction. The letter should highlight or summarize whatever information you deem appropriate as a cover letter, as a minimum, this section should include the name, address, telephone number and FAX number of one contact to whom any correspondence should be directed.

II. EXPERIENCE (40 points)

1. List of similar projects performed in the last five years with a brief narrative of each project, client, services provided by consultant, value of services, current status on date of completion, project management, client's project manager and phone number. Include a statement as to why it is considered a similar project. (35 points)
2. Rating of past performance on similar projects. (5 points)
3. Basis of Evaluation;
 - a. Relationship of Experience to this project as it relates to size, quality and relevance.
 - b. Experience with reporting to the State of Georgia and following State regulations and requirements.
 - c. Information should be complete.
 - d. Information should be in a clear and concise manner.

III. QUALIFICATIONS (35 points)

1. List of key personnel including project manager along with resumes. Identify person who on a day-by-day basis will be responsible for the work. Identify the key personnel necessary for implementing the project. (20 points)
2. Describe how key personnel will be involved in project. (10 points)
3. Describe availability of project manager and key personnel for this project (5 points)
4. Basis of Evaluation
 - a. Quality and relevant experience to project and the County goals.
 - b. Does description include all categories and how personnel function within categories?
 - c. Are all potential categories included?

IV. PROJECT UNDERSTANDING (20 points)

1. List key element of project and how each will be addressed. (10 points)
2. Project schedule. (5 points)
3. Personnel needed to implement each phase. (5 points)
4. Basis of Evaluation
 - a. Is the project discussion and schedule reasonable?
 - b. Are personnel listed adequate to implement the schedule?
 - c. Understanding the current renovation of the Chatham County Courthouse and how that impacts this project.
 - d. Discuss method and timing of implementing project.

V. MBE/WBE PARTICIPATION (5 points) Disadvantaged Firm Involvement. Indicate past efforts for minority outreach and any current ongoing activities. Indicate proposed level of involvement for this project.

VI. REFERENCES (10 points) References (at least three), including contact, relationship, address and phone number. Note: Chatham County reserves the right to contact any known former clients about your performance.

VII. MISCELLANEOUS. This section provides an opportunity for you to provide other information that the project team considers relevant. Be specific.

VIII. APPENDIX. The Appendix may be used to provide additional or detailed

information about your firm's project team, experience and background which you wish to have considered.

- 2.2 EVALUATION CRITERIA (STEP 1).** Based on requirements in Section 3.1, responses will be evaluated by an evaluation committee. While each proponent's proposal will be rated on its merits, the following will be regarded as assumptions applicable to each:

--Responses will follow the format and instructions within each section or subsection (proponents should consider Section 3.1 as an outline or checklist).

--Responses should be complete.

--Responses should be presented in a clear and concise fashion.

Difficulty in reading any proponent's proposal because of confusing information, errors or missing information considered as key to a fair evaluation can result in its consideration as not responsive. PLEASE REMEMBER: EVALUATION OF THE QUALIFICATION PROPOSALS WILL DETERMINE WHICH FIRMS ARE SELECTED FOR THE SHORTLIST!

- 2.3 EVALUATION CRITERIA (STEP 2).** Based on an evaluation of proposals under Step 1, those proponents that make the "short list" (finalists) may be interviewed. If interviews are conducted, they will be scored using the same process as the proposals. **(25 points possible)**

- 2.4 NEGOTIATION OF FEE / SCHEDULE (STEP 3).** Under the final step, the highest ranked firm will be notified and called in to negotiate fee and schedule. Prior to negotiations, a "Scope of Work" will be provided for the basis of presenting a fee. The negotiated fee shall also include all reimbursibles. The County will not separately pay reimbursibles. If, during negotiations, a reasonable fee cannot be agreed upon, the 2nd rated firm will be called in to negotiate fee and schedule.

- 2.5 DISCRETION.** The County shall have sole discretion in evaluating both the responses and qualifications of the respondents. **Please note that the evaluation committee will recommend the firm with the highest score after all steps are complete, but it is the Board of Commissioners which, after consideration of staff's recommendations, makes the final contract award decision.**

- 2.6 ASSIGNMENT.** The contractor shall not assign or transfer any interest in the contract without the prior written consent of the County.

- 2.7 CONTRACT.** The successful respondent will be expected to execute a contract within 30 days of notice of award.

- 2.8 PERFORMANCE AND APPROVAL OF SUB-CONSULTANTS.** The proponent will perform the project as an independent contractor and not as an agent or employee of the County. Joint ventures and sub-consultant arrangements are not prohibited; however, the proponent shall secure written permission from the County before subconsulting any part of the project. Such permission should be obtained during the proposal evaluation stage.
- 2.9 CHANGES.** In the event a contract is awarded, the County may, at any time during the contract period, make changes within the general scope of the contract and its technical provisions. Any changes in the project team, including consultants, will require prior approval of the County. At the least, replacements must be equal in experience and preserve commitment to local or MBE participants. If any such change causes any increase or decrease in the proponent's cost of performing any part of the contract, whether changed or not changed by any such notice, an equitable adjustment shall be made in the contract price, or in the time of performance, or in both, and a written memorandum of such adjustment shall be made. Any claim by the proponent for an equitable adjustment shall be supported by detailed cost and pricing data, which the County shall have the right to verify by audit of the proponent's records or, at the County's election, by other appropriate means. Any claim by the proponent for an equitable adjustment shall be made in writing and prior to proceeding with the additional services or capital investments. The County may accept and act upon claims made later if, in the County's sole discretion, circumstances justify so doing. Nothing in this clause shall excuse the proponent from proceeding with performance of this contract in accordance with its original terms and conditions and any approved changes.
- 2.10 TERMINATION OF CONTRACT.** The County shall have the right to terminate any contract to be made hereunder for its convenience by giving the proponent written notice 30 days in advance of its election to do so and by specifying the effective date of such termination. The proponent shall be paid for services rendered and not in question or dispute through the effective date of such termination. Further, provided a contract is awarded, if a proponent shall fail to fulfill any of its obligations hereunder, the County may, by giving written notice to the proponent at issue, terminate the agreement with said proponent for such default. If this agreement is so terminated, the proponent shall be paid only for work satisfactorily completed.
- 2.11 ADEQUACY AND ACCURACY.** The professional and technical adequacy and accuracy of designs, drawings, specifications, documents and other work products furnished under contract, will be conducted in a manner of the profession. Where Chatham County must have work done by change order or addition resulting from an error or omission by the Engineer/Architect, the Engineer/Architect shall provide, at no cost to the County, all professional services attributable to the change order. This is in addition to the County's right to recover from the Engineer/Architect damages for the Engineer's/Architect's errors and omissions.

SECTION III
SCOPE OF SERVICES
FOR
ENGINEERING SERVICES FOR THE REPLACEMENT OF THE ISLANDS
EXPRESSWAY BRIDGE OVER THE WILMINGTON RIVER

Objectives

Chatham County is seeking a qualified consulting firm to perform Engineering Services for the replacement of the Islands Expressway Bridge over the Wilmington River.

A draft concept report has been provided that lists the preferred alternative. The following Scope of Services shall be included.

- Perform a survey and prepare a database of the existing facilities for the purpose of design of a replacement structure for the Bascule Bridges.
- Environmental Permitting required as part of the Georgia Department of Transportation's (GDOT) Plan Development Process (PDP). Included but not limited to the development of the environmental document (NEPA standards).
- Structural design for the high span structure to be included in the bridge plans and approved by the GDOT bridge office.
- Construction plans to include drainage, utility relocations, erosion and sediment control, signing, pavement marking, bridge, culvert and roadway plans.
- Hydraulic and Scour Study of Wilmington River as required by the GDOT bridge office.
- Right of Way plans approved by the GDOT.
- Final construction plans shall include all special provisions, specifications and details.

The Georgia Department of Transportation Plan Development Process shall be followed.

ATTACHMENT A

DRUG - FREE WORKPLACE CERTIFICATION

THE UNDERSIGNED CERTIFIES THAT THE PROVISIONS OF CODE SECTIONS 50-24-1 THROUGH 50-24-6 OF THE OFFICIAL CODE TO GEORGIA ANNOTATED, RELATED TO THE **DRUG-FREE WORKPLACE**, HAVE BEEN COMPLIED WITH IN FULL. THE UNDERSIGNED FURTHER CERTIFIES THAT:

1. A Drug-Free Workplace will be provided for the employees during the performance of the contract; and
2. Each sub-contractor under the direction of the Contractor shall secure the following written certification:

_____ (CONTRACTOR) certifies to Chatham County that a Drug-Free Workplace will be provided for the employees during the performance of this contract known as **Engineering Services for the Islands Expressway over the Wilmington River Bridge Replacement.**
(PROJECT)

pursuant to paragraph (7) of subsection (B) of Code Section 50-24-3. Also, the undersigned further certifies that he/she will not engage in the unlawful manufacture, sale, distribution, possession, or use of a controlled substance or marijuana during the performance of the contract.

CONTRACTOR

DATE

NOTARY

DATE

ATTACHMENT B

PROMISE OF NON-DISCRIMINATION STATEMENT

Know All Men By These Presence, that I (We), _____,
_____, _____ Name
_____, _____ (herein after
"Company"),
Title _____ Name of Bidder
in consideration of the privilege to bid/or propose on the following Chatham
County project procurement _____ hereby
consent, covenant and agree as follows:

- (1) No person shall be excluded from participation in, denied the benefit of or otherwise discriminated against on the basis of race, color, national origin or gender in connection with the bid submitted to Chatham County or the performance of the contract resulting therefrom;
- (2) That it is and shall be the policy of this Company to provide equal opportunity to all business persons seeking to contract or otherwise interested with the Company, including those companies owned and controlled by racial minorities, and women;
- (3) In connection herewith, I (We) acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide minority and women owned companies with the maximum practicable opportunities to do business with this Company on this contract;
- (4) That the promises of non-discrimination as made and set forth herein shall be continuing throughout the duration of this contract with Chatham County;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made a part of and incorporated by reference in the contract which this Company may be awarded;
- (6) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth above may constitute a material breach of contract entitling the County to declare the contract in default and to exercise appropriate remedies including but not limited to termination of the contract.

Signature

Date

Attachment C

DISCLOSURE OF RESPONSIBILITY STATEMENT

Failure to complete and return this information will result in your bid/offer/proposal being disqualified from further competition as non-responsive.

1. List any convictions of any person, subsidiary, or affiliate of the company, arising out of obtaining, or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract.

2. List any indictments or convictions of any person, subsidiary, or affiliate of this company for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offenses indicating a lack of business integrity or business honesty which affects the responsibility of the contractor.

3. List any convictions or civil judgments under states or federal antitrust statutes.

4. List any violations of contract provisions such as knowingly (without good cause) to perform, or unsatisfactory performance, in accordance with the specifications of a contract.

5. List any prior suspensions or debarments by any governmental agency.

6. List any contracts not completed on time.

7. List any penalties imposed for time delays and/or quality of materials and workmanship.

8. List any documented violations of federal or any state labor laws, regulations, or standards, occupational safety and health rules.

I, _____, as _____
Name of individual Title & Authority

of _____, declare under oath that

Company Name _____

the above statements, including any supplemental responses attached hereto, are true.

Signature

State of _____

County of _____

Subscribed and sworn to before me on this _____ day of _____

2008 by _____ representing him/herself to be

_____ of the company named herein.

Notary Public

My Commission expires:

Resident State: _____

Attachment D

IMMIGRATION AND SECURITY FORM

SB529 (The Ga Security and Immigration and Compliance Act) requires contractors to file an affidavit that the contractor and its subcontractors have registered and participate in a federal work authorization program intended to insure that only lawful citizens or lawful immigrants are employed by the contractor or subcontractor. This requirement of SB529 is a phased-in affidavit filing requirement based on the size of the contractor. Contractors with 500 or more employees are required to file an affidavit of compliance beginning 7/1/07. However, because the requirement is set forth in OCGA 13-10-91 which is a part of Chapter 10 of Title 13 governing public works contracts, the affidavit filing requirements of SB529 therefore only apply to public works contracts.

- A. In order to insure compliance with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act OCGA 13-10-90 et.seq., Contractor must initial one of the sections below:

____ Contractor has 500 or more employees and Contractor warrants that Contractor has complied with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act by registering at <https://www.vis-dhs.com/EmployerRegistration> and verifying information of all new employees; and by executing any affidavits required by the rules and regulations issued by the Georgia Department of Labor set forth at Rule 300-10-1-.01 et.seq.

____ Contractor has 100-499 employees and Contractor warrants that no later than July 1, 2008, Contractor will register at <https://www.vis-dhs.com/EmployerRegistration> to verify information of all new employees in order to comply with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act; and by executing any affidavits required by the rules and regulations issued by the Georgia Department of Labor set forth at Rule 300-10-1-.01 et.seq.

____ Contractor has 99 or fewer employees and Contractor warrants that no later than July 1, 2009, Contractor will register at <https://www.vis-dhs.com/EmployerRegistration> to verify information of all new employees in order to comply with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act; and by executing any affidavits required by the rules and regulations issued by the Georgia Department of Labor set forth at Rule 300-10-1-.01 et.seq.

- B. Contractor warrants that Contractor has included a similar provision in all written agreements with any subcontractors engaged to perform services under this Contract.

Signature Title

Firm Name: _____
Street/Mailing Address: _____
City, State, Zip Code: _____
Telephone Number: _____
Email Address: _____

Attachment E

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with (name of public employer) has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with (name of public employer), contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the (name of the public employer) at the time the subcontractor(s) is retained to perform such service.

EEV / Basic Pilot Program* User Identification Number

BY: Authorized Officer or Agent
(Contractor Name)

Date

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

____ DAY OF _____, 200__

Notary Public
My Commission Expires:

* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV / Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

SUBCONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with (name of contractor) on behalf of (name of public employer) has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

EEV / Basic Pilot Program* User Identification Number

BY: Authorized Officer or Agent
(Subcontractor Name)

Date

Title of Authorized Officer or Agent of Subcontractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN

BEFORE ME ON THIS THE

____ DAY OF _____, 200__

Notary Public

My Commission Expires:

* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV / Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

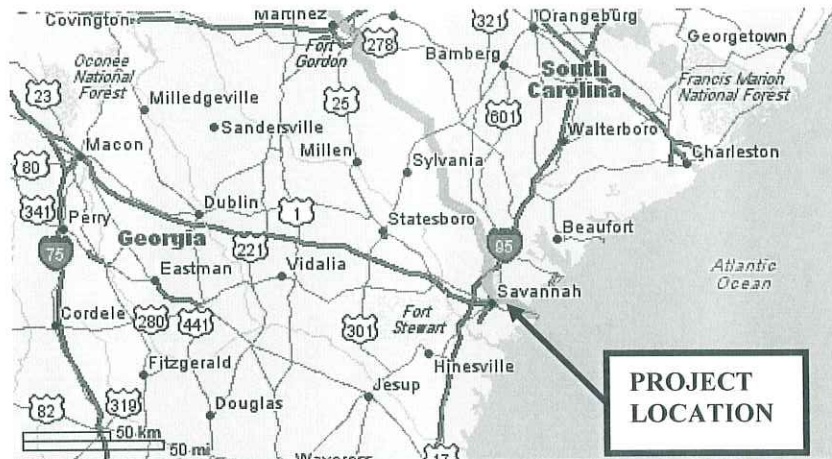
Office of Urban Design

PROJECT CONCEPT REPORT

Project Number: CSBRG-0007-00(128)

County: Chatham

P.I. Number: 0007128



Replacement of the Islands Expressway Bridges over the Wilmington River

Recommendation for approval:

DATE _____

Project Manager

DATE _____

State Urban Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District Engineer

DATE _____

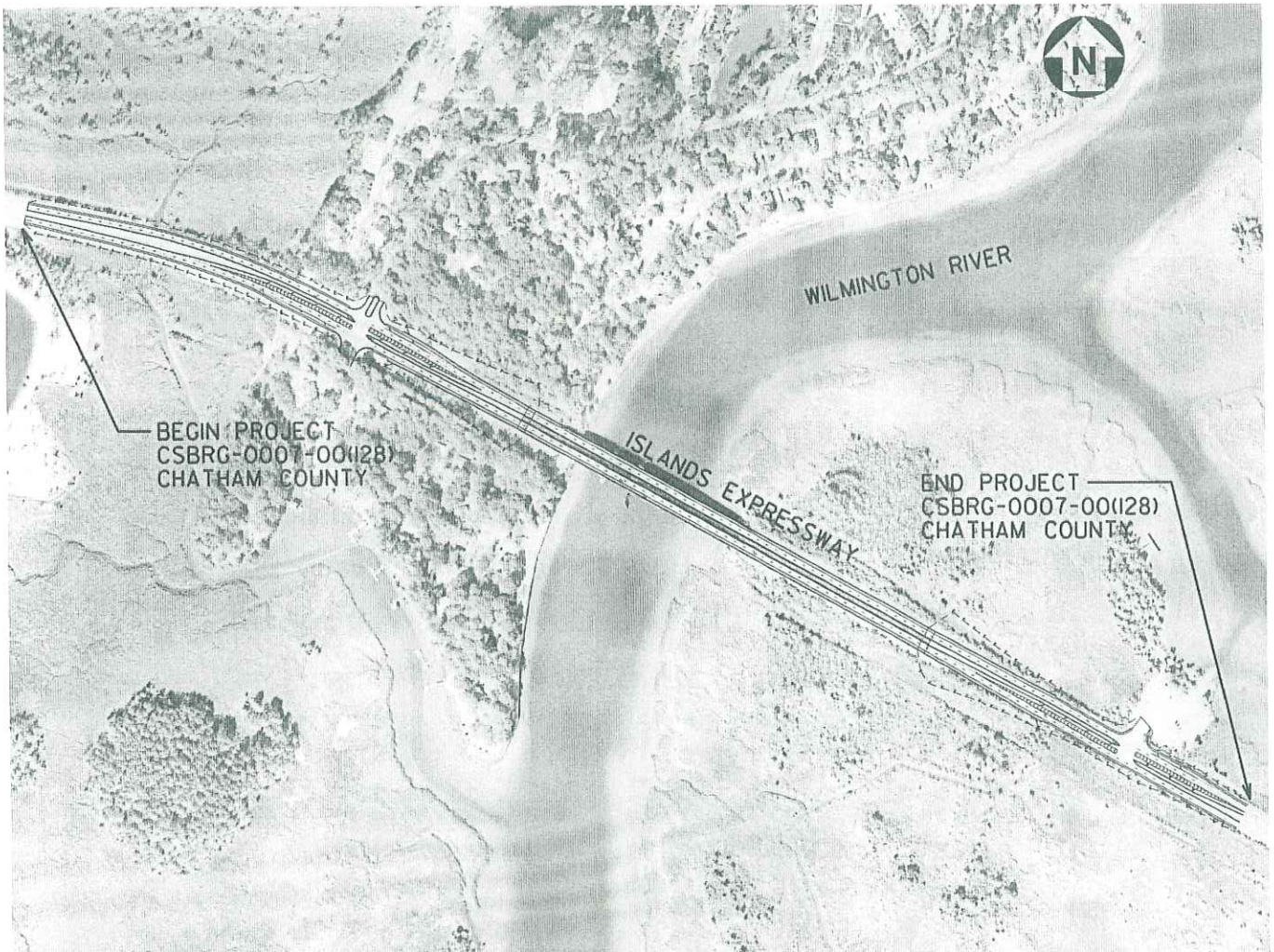
Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

Project Concept Report page 2
Project Number: CSBRG-0007-00(128)
P. I. Number: 0007128
County: Chatham

NOT TO SCALE



PROJECT LIMITS

Need and Purpose Statement

Background

Islands Expressway (CR 787) provides two parallel bascule bridges over the Wilmington River at Causton Bluff, approximately 1/3 of a mile east of the city limit of Savannah in Chatham County. East of the Wilmington River crossing, Islands Expressway merges with US 80/SR 26, which provides direct access to Tybee Island.

Islands Expressway is a four-lane rural divided highway with grass median. The functional classification of the roadway is Urban Principal Arterial. The eastbound bridge (Structure ID 051-0132-0) provides two 12-ft travel lanes and it was constructed in 1963. The westbound bridge (Structure ID 051-5027-0) provides two 12-ft travel lanes and it was constructed in 1989. The westbound bridge was previously part of the US 80/ SR 26 crossing of the Wilmington River at Thunderbolt. The bridge was moved to the Islands Expressway crossing of the Wilmington River in 1989 when US 80/ SR 26 was widened and the bascule bridge was replaced with a 2,188-ft long by 72-ft wide fixed span structure.

The project area is characterized by surrounding coastal marshland and late 20th century residential development. A large single-family subdivision constructed on Causton Bluff is located north and south of the Islands Expressway, west of the Wilmington River crossing. The communities of Oatland and Riverside are located to the east of the Wilmington River crossing.

The Wilmington River is a navigable waterway that is part of the Atlantic Intercoastal Waterway. The Wilmington River and associated marshlands are tidally influenced. The two bascule bridges have a vertical clearance of 22.3-ft in the closed position. Islands Expressway is a designated school bus route and is the major hurricane evacuation route for Tybee Island on the current GEMA, FEMA and local evacuation plan route maps. This portion of Islands Expressway is located on the Savannah-Whitemarsh bicycle corridor. This project is currently not identified in the Chatham County Urban Transportation Study (CUTS) Transportation Improvement Program (TIP) (FY 2007-2009). This project is currently listed as a Tier 2 project in the TIP for information only.

Need and Purpose

The proposed project would replace the existing Islands Expressway bridges over the Wilmington River with two fixed span structures having a minimum vertical clearance of 65-feet for the navigational waterway. The existing bascule bridges are functionally obsolete. The bridges are opened/ closed approximately 4,000 times per year. The frequent openings cause traffic delays, which results in an inconvenience to the traveling public. The proposed project would increase the vertical clearance of the crossing and eliminate the traffic delay and associated lost travel time due to frequent bridge openings.

The maintenance and operation of the Islands Expressway bascule bridges are a substantial burden to Chatham County. Chatham County is solely responsible for these costs because Islands Expressway is a county route. The annual operation and routine maintenance costs for these bridges represent approximately 60 percent of the County's annual bridge budget. The cost associated with the operation of the bascule bridges includes three full-time employees; the bridge is manned 24 hours per day, seven days a week. The annual maintenance costs do not include any capital expenditures; i.e., specific improvements to the bridge that need

to be done on a regular basis, such as rehabilitation of electrical on span motors, lock motor, navigation lights, traffic lights, and console (required every 20 years); steam clean and pressure washing (required every 5 years); replacement of bridge grating; rehabilitate locks and grease fittings (required every 5 years); and painting (required every 20 years). The removal of the Islands Expressway bascule bridges would eliminate the operation costs and reduce the maintenance and required capital improvements costs, which are anticipated to be less with the new fixed span structures.

The existing horizontal clearance for the Wilmington River at the site of the bridge is 100-ft between the existing bridge piers. Nonetheless, barge traffic still has difficulty maneuvering through the crossing, and there have been several collisions with the fender system. Not only does this represent a safety issue, the collisions also add to the maintenance and operation costs of the existing bridge. The proposed fixed span bridges would provide increased horizontal clearance for maritime traffic under the bridge, which would enhance the safety of the navigational waterway and the Islands Expressway.

Logical Termini

This project is not associated with any other construction project and would not restrict consideration of any future improvements to Islands Expressway. The proposed improvements are limited to the replacement of an existing bridge, on essentially the same alignment. The total project length is approximately 1.2 miles. The project termini occur where the new bridge can appropriately tie into the existing Islands Expressway.

Bridge Sufficiency Rating

Bridge sufficiency rating includes factors such as: structural condition, bridge geometry, and traffic considerations. The sufficiency rating is calculated per a formula defined in the Federal Highway Administration's Recording and Coding Guides for the Structure Inventory and Appraisal of the Nation's Bridges. This rating is indicative of a bridge's sufficiency to remain in service. The formula places 55 percent value on the structural condition of the bridge, 30 percent on its serviceability and obsolescence, and 15 percent on its essentiality to public use. The point calculation is based on a 0 – 100 scale and it compares the existing bridge to a new bridge designed to current engineering standards.

The bridge's sufficiency rating provides an overall measure of the bridge's condition and is used to determine eligibility for federal funds. Bridges are considered structurally deficient if significant load carrying elements are found to be in poor condition due to deterioration or the adequacy of the waterway opening provided by the bridge is determined to be extremely insufficient to the point of causing intolerable traffic interruptions.

Bridges with a sufficiency rating below 80 are eligible to receive federal funding for rehabilitation. If a bridge has a sufficiency rating below 50 and is considered functionally obsolete or structurally deficient, the structure is eligible for federal bridge replacement funding.

Condition ratings are based on a scale of 0 – 9 and are collected for the following components of a bridge. A condition rating of 4 or less on one of the following item classifies a bridge as structurally deficient.

- The bridge deck, including wearing the surface;
- The superstructure, including all primary load-carrying members and connection;
- The substructure, considering the abutments and all piers.

Vehicular Accident Data

Traffic accident data was obtained from the GDOT *Office of Traffic Safety and Design* for the years 2005 through 2007. The accident data for roadway segments was available for all three years within the timeframe. The rates derived from this data were compared to the statewide average annual accident rates for a roadway classified as "Urban Principal Arterial" from GDOT's *Statewide Mileage, Travel and Accident Data* for the years 2005, 2006 and 2007.

Table 1: Chatham County, CR 787/Islands Expressway – P.I. 0007128
Accident Rate Calculations for year(s) 2005, 2006, & 2007

Year	Total Vehicle Miles	Total Accidents	Accident Rate	Statewide Average	Total Injuries	Injury Rate	Injury Rate (Statewide Average)	Total Fatalities	Fatality Rate	Fatality Rate (Statewide Average)
2005	8,372	9	295	244	1	33	59	1	33	0.93
2006	8,604	3	96	288	2	64	71	0	0	1.22
2007	8,644	1	32	176	0	0	41	0	0	0.34

NOTE: Rates are per 100 Million Vehicle Miles

A comparison of the accident rates of the Islands Expressway segments under study versus the statewide average for similar roadways shows that the rates for total crashes, injury crashes, and fatal crashes were below the statewide averages for both 2006 and 2007. However, the total accidents and fatal crashes were both higher for the study segments in the year 2005. Injury crash rates were below the statewide average for 2005.

Analysis of the accident data indicates that 23 percent of the total number of accidents on Islands Expressway occurred at an intersection. Thirty-three (33) percent of the crashes involving intersections were injury related, while only 22 percent of crashes not related to an intersection resulted in injuries.

Non-vehicle collisions were the most prevalent accident type occurring within the study area roadway segments. Nearly 54 percent of all the accidents along these segments of roadway were non-vehicle collisions. This type of crash accounted for 75 percent of the injury-related accidents and 100 percent of the fatality-related accidents from 2005 to 2007. One recurring non-vehicle collision appears to be taking place at mile log 4.23. Nearly 43 percent of all the non-vehicle collision took place at this location.

The most common type of collision involving two vehicles taking place within the study area was rear end crashes. Fifty (50) percent of all the vehicle-to-vehicle crashes were rear end collisions, and 33 percent of these crashes were injury-related. The lone event taking place in 2007 involved a rear end collision.

Existing and Projected Traffic Volumes

The existing traffic volumes show extremely heavy directional flows during the morning and afternoon peak hours. During the morning peak hour, the westbound traffic (heading towards Savannah) exceeds 2100 vehicles and is nearly six times larger than the eastbound traffic. During the afternoon peak hour, the heavy directional flow is reversed, with over 1900 vehicles traveling away from Savannah towards the east. The eastbound volume is nearly three times the westbound volume during the afternoon peak hour.

Average Annual Daily Traffic Volume (AADT) data for the Islands Expressway was obtained from GDOT's Automatic Traffic Station Data. Data from 1997 through 2003 were obtained for Chatham County count stations 441 and 443. The AADT for the two count station locations, which were rounded to the nearest hundred vehicles, are summarized in Table 2.

Table 2: Historic AADT		
Year	Station 441	Station 443
1997	19,400	16,500
1998	20,100	17,300
1999	18,500	17,700
2000	21,700	18,600
2001	21,000	16,900
2002	20,200	18,700
2003	21,700	16,100
Average	20,400	17,400

Speed and Traffic data was collected using ATR on the eastbound and westbound approaches to the existing bascule bridges between Tuesday, December 14, 2004 and Friday December 17, 2004. Table 3 summarizes the daily traffic volumes at the count locations.

Table 3: Daily Traffic Counts – December 2004					
Direction	December 14	December 15	December 16	December 17	Total
Eastbound	11,388	10,640	10,441	10,247	42,716
Westbound	11,436	11,435	11,621	11,955	46,447
Total	22,824	22,075	22,062	22,202	89,163

Based on this count information, the average daily westbound volume is 11,612 and the average daily eastbound volume is 10,679 vehicles, for an average daily traffic volume of 22,291 vehicles.

These traffic volumes were adjusted to account for seasonal variations in traffic. The monthly and weekday adjustment factors for roadways with the functional classification of 'urbanized arterials' were obtained from GDOT and applied to the daily traffic volumes. The resulting adjusted AADT for each of the four days counted were averaged to produce an adjusted 2004 AADT of 21,500 vehicles per day. Long term traffic projections for the Islands Expressway in the vicinity of the existing bascule bridges were obtained using the 2030 area transportation model loaded highway network from the Chatham Urban Transportation Study's *Long Range Transportation Plan*. For the purposes of this analysis, the six model links between nodes 2990 and 3506 represent the study area roadway system. The volumes on these links ranged from approximately 23,500 vehicles per day at the western end to approximately 22,300 vehicles per day on the eastern end. In the immediate vicinity of the bridge, the projected 2030 traffic volumes were about 22,500 vehicles per day.

The historic traffic data and the 2030 traffic projections were used to project trends in the annual growth of traffic. The average historic traffic volume (shown in Table 2) and the 2030 projected traffic volume from the long range plan were used to estimate total growth in traffic between 2004 and 2030. The estimated traffic growth rate is summarized in Table 4.

Table 4: Estimated Traffic Growth Rate		
	Station 441	Station 443
Average Historic	20,400	17,400
Projected 2030	22,500	22,500
Total Growth (percentage)	10.2%	29.3%

The more aggressive total growth rate of 29.3% (about one percent annually) was applied to the existing through movements on CR 787 to estimate 2030 peak hour traffic volumes at the intersection of Islands Expressway and Woodhull Road/ Causton Harbor Drive. The turning movements to and from Woodhull Road/ Causton Harbor Drive were not factored since these volumes are generated by the residential development within each subdivision and contain no through traffic. Growth in traffic would only occur on these streets if additional residential development would take place within the subdivisions. For the purposes of this analysis, it was assumed these subdivisions are largely built out in 2004.

Traffic Congestion/ LOS

Unsignalized intersection capacity analyses were performed for the intersection of CR 787 (Islands Expressway) with Woodhull Road/ Causton Harbor Drive for existing and projected 2030 traffic conditions. The analyses were performed using the Highway Capacity Software (HCS), release 4.1e. The results of the analyses are summarized in Table 5.

The results of the analyses reflect the heavy directional traffic flow along the Islands Expressway. During the morning peak hour, the heavy westbound through traffic causes delays to the eastbound left turn movement. The reverse is true during the afternoon peak hour: the heavy eastbound through movement causes delay to the westbound left turn movement. In addition, the extremely heavy through traffic during the morning and afternoon peak hour results in generally high delay and poor levels of service for the movements from the stop sign controlled side streets of Woodhull Road/ Causton Harbor Drive.

Table 5: Unsignalized Intersection Capacity Analysis Results					
	LOS (Delay)				
	CR 787		Woodhull Rd.		Causton Harbor Drive
	EB Left	WB Left	NB Left-Through	NB Right	SB Left-Through-Right
2004 AM Peak	D (28.2)	A (8.2)	F (64.4)	A (9.5)	F (178.6)
2030 AM Peak	F (57.0)	A (8.5)	F (1580)	A (9.9)	F (834.7)
2004 Mid-day Peak	A (9.2)	A (8.5)	C (15.2)	A (9.9)	B (12.2)
2030 Midday Peak	B (10.1)	A (9.1)	C (18.2)	C (10.6)	B (13.9)

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 P. I. Number: 0007128
 County: Chatham

2004 PM Peak	A (9.4)	C (21.5)	F (150.1)	C (23.8)	C (20.6)
2030 PM Peak	B (10.4)	E (36.3)	F (605.0)	E (38.0)	D (32.3)

The HCS analysis also provides an estimate of the 95th percentile queue (number of vehicles) for each of the turn movements. The estimated 95th percentile queues were rounded up to the next whole number of vehicles, and are summarized in Table 6.

Table 6: 95 th Percentile Queue – Number of Vehicles					
	LOS (Delay)				
	CR 787		Woodhull Rd.		Causton Harbor Drive
	EB Left	WB Left	NB Left-Through	NB Right	SB Left-Through-Right
2004 AM Peak	1	1	1	1	6
2030 AM Peak	1	1	4	1	10
2004 Mid-day Peak	1	1	1	1	1
2030 Midday Peak	1	1	1	1	1
2004 PM Peak	1	1	1	1	1
2030 PM Peak	1	1	2	1	1

Based on the queue analysis, traffic exiting Causton Harbor Drive during the morning peak hours creates the longest traffic queue. This is a result of a combination of the heavy westbound traffic and having only a single shared left turn-through-right turn lane provided for traffic to exit.

The analysis indicates that traffic coming from the residential areas accessed from Woodhull Road/ Causton Harbor Drive will face increasing delay entering CR 787 through 2030. Since traffic volumes from the side street approaches will likely not be high enough to warrant the installation of a traffic signal at that intersection, maintaining or widening the existing median area at the intersection will provide for additional vehicular storage for two stage left turn and through movements.

Conclusion

The average Annual Average Daily Traffic (AADT) on Islands Expressway between 1997 and 2003 was approximately 20,400 vehicles. The projected 2030 AADT from the *Long Range Transportation Plan* is 22,500. There is extremely heavy directional traffic during the morning and afternoon peak hours. Westbound traffic is nearly six times larger than the eastbound traffic during the morning peak hour, while eastbound traffic is nearly three times larger than the westbound traffic during the afternoon peak hour.

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NOT TO SCALE

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Description of the proposed project:

Project CSBRG-0007-00(128) represents the construction of two new, high level, fixed span, multi-lane bridges over the Wilmington River (Atlantic Intracoastal Waterway) approximately 0.3 miles east of the city limit of Savannah along Islands Expressway (CR 787) in Chatham County. The Project will replace the double bascule bridges that currently exist at this location and which are considered to be functionally obsolete. The Project will begin at a point approximately 0.6 miles west of the Wilmington River and extend eastward to a point approximately 0.6 miles east of the Wilmington River. Project length is approximately 1.2 miles. The begin project mile log is approximately 2.9 and end project mile log is approximately 4.1. The minimum vertical clearance under the new bridges at the Wilmington River channel will be approximately 65-ft above mean high water for vessels using the waterway. The horizontal clearance in the channel below the bridge will be increased from its current 100-ft in width to 195-ft in width between the proposed new fender system. The total length of the proposed new bridges is approximately 1836-ft each. The new westbound bridge will be 38 feet wide between the side barriers providing for two 12-ft lanes in each direction with a 10-ft wide outside shoulder and 4-ft wide inside shoulder. The new eastbound bridge will be 38-ft wide between the side barriers providing for two 12-ft lanes in each direction with a 10-ft wide outside shoulder and 4-ft wide inside shoulder. The roadway approaches will be reconstructed to provide two 12-ft wide lanes in each direction separated by a 44-ft wide median transitioning to a 30-ft wide median near each end of the project to match the existing roadway. The new roadway will provide 10-ft wide outside shoulders with 6.5-ft paved for pedestrian and bicycle use and 6-ft inside shoulders with 2-ft paved. The intersection at Woodhull Road/ Causton Harbor Drive and Frank W. Spencer boat ramp park will be reconstructed to meet current GDOT design guidelines. The concrete pipe culverts west of Woodhull Road/ Causton Harbor Drive intersection will be extended to accommodate the widening of the roadway at that location.

Is the project located in a Non-attainment area? ____Yes ____X No

Is the project on the National Highway System? __X Yes ____ No

PDP Classification: Major __X__ Minor ____

Federal Oversight: Full Oversight (), Exempt(X), State Funded (), or Other ()

Functional Classification: Urban Principal Arterial

U. S. Route Number(s): N/A **State Route Number(s):** N/A **County Route Number(s):** 787

Traffic (AADT):

Islands Expressway: Base Year: (2010) 20,100

Design Year: (2030) 22,500

Existing design features:

Islands Expressway

- Typical Section: Rural 4 12-ft lanes, 2 lanes each direction separated by 30-ft wide depressed grassed median
- Posted speed: 50 mph Maximum radius: 3819.72 ft.
- Maximum super-elevation rate for curve: 3.0%
- Maximum grade: 3.00 %
- Width of right of way: 195-600 ft.
- Major structures: Double Bascule bridges over the Intracoastal Waterway(Wilmington River)
Structure ID# 051-0132-0 (EB), 051-5027-0 (WB)
Sufficiency Rating: 72.19 (EB), 73.05 (WB)
- Major interchanges or intersections along the project: None
- Project Length: 1.2 miles (Mile log 2.9 to 4.1)

Proposed Design Features:

Islands Expressway

- Proposed typical section: Rural 4 12-ft lanes with a 30-ft to 44-ft width depressed grassed median (added or modified right and left turn lanes at two locations).
- Proposed Design Speed: 55 mph
- Proposed Maximum grade: 6.50 % Maximum grade allowable: 5.00 %
- Proposed Maximum degree of curve 1°8'45" Maximum degree allowable 5°24'19"
- Proposed Radius: 5000.00 ft. Minimum allowable radius: 1060.00 ft.
- Proposed maximum super-elevation rate for curve: 3.0 % (6.0 max. S.E. Table)
- Right of way
 - Width 195-600 ft.
 - Easements: Temporary (X), Permanent (X), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: 5 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other:
- Structures:
 - Bridges: An eastbound 41.58 feet wide x 1836 feet long and westbound 41.58 feet wide x 1836 feet long, fixed span, high level, pre-stressed concrete bridges with wrap around abutments – See Attached Structure Type Study
 - Retaining walls: MSE walls and wrap-around vertical abutments, approximately 63,430-sq. ft.
- Major intersections and interchanges: Two minor intersections with median crossovers (type B)

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- Traffic control during construction: Maintain two lanes of traffic for each direction during construction. Some temporary lane closures and on-site detours may be required during staged construction.

- Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	(X)	()
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

A Design Exception is required for the use of 6.5 % grades for the new bridge and approaches (5.0% is the maximum for level terrain at 55 mph) for the following reasons. Lesser percent grades on the approaches result in a greater grade change at the intersections west and east of the bridge approaches. The increased roadway grade height at these intersections will require relocation of the intersection and/or complete reconstruction of two ornate subdivision entrances resulting in extreme cost increases and adverse impacts to the surrounding human and natural environment.

- Design Variances: None Anticipated
- Environmental concerns:
 - Section 404 permit
 - Programmatic 4F (Minor Park Impacts)
 - Section 7 Consultation with USFWS and NMFS
 - Coast Guard Section 10 permit
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (), No (X),
 - Categorical exclusion (X),
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS)
- Utility involvements: Georgia Power (Overhead Power); City of Savannah (16" force main Bell South (fiber optic); Atlanta Gas Light Co. (6" high pressure gas main)

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VE Study Required Yes (X) No ()

Project responsibilities:

- Design - Office of Urban Design
- R/W Acquisition – Chatham County
- Relocation of Utilities -Local Government(s) requested to do utility relocations
- Letting to contract – Georgia DOT
- Supervision of construction – Georgia DOT
- Providing materials pit - Not required; will use Grading Complete
- Providing detours - Not anticipated; will be staged constructed under traffic

Coordination

- Initial Concept Meeting date and brief summary, held on February 4, 2005.
- Concept meeting date and minutes attached (held April 26, 2007)....
- P. A. R. meetings, dates and results. Not Required
- FEMA, USCG, USFWS, NMFS, COE: Required
- Public involvement: A public information open house meeting (PIOH) held May 26, 2005.
- Local government comments: See Meeting minutes (attached)
- Other projects in the area: NH000-0005-05(038), P.I. 522860 Widening of Islands Expressway from General McIntosh Blvd. To Harry S. Truman Parkway
- Other coordination to date: Pre-concept meetings held with GDOT Office of Urban Design on November 2, 2004 and December 13, 2004.

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 12 Months
- Time to complete preliminary construction plans: 12 Months.
- Time to complete right of way plans: 3 Months.
- Time to complete the Section 404 Permit: 6 Months.
- Time to complete final construction plans: 6 Months.
- Time to complete to purchase right of way: 9 Months.
- List other major items that will affect the project schedule: N/A Months.

Alternates considered:

Nine Alternates were studied for this project. The alternates studied represented a no build, single bridge and double bridge options and considered 2 lane, 3 lane, and 4 lane maintenance of traffic during the construction period. A structural alternate study has also been performed and is available as a part of this report. Please find attached an *alternatives matrix* to compare attributes of each alternative.

Alternate No. 1---- Alternate No. 1 maintains 4 lanes of traffic through the construction period. Alternate No. 1 proposes two parallel bridges (1836-ft x 41.58-ft each) over the Wilmington River separated by a 52-ft +/- median. The entire north (westbound bridge) would be constructed in stage 1 and westbound traffic would be transferred to the new bridge with eastbound traffic being shifted to the existing westbound bridge. The southern bridge (eastbound) would be removed and the new eastbound bridge would be constructed in stage 2. Eastbound traffic would be shifted from the old westbound bridge to the new eastbound bridge and the old westbound bridge would be removed. This alternate will require relocation of the bridge tender house and all controls for the operation of the westbound bascule bridge. **Alternate No.1 is the first recommended alternate for further consideration on this project. This alternate has the lowest overall project cost while maintaining two lanes of traffic in each direction during the entire construction period. Optimum traffic maintenance is a major factor on this project due to the high volumes of commuter and tourist traffic utilizing Islands Expressway each day for travel to and from Tybee Island and other nearby communities. Furthermore maintaining four lanes of traffic throughout the construction period also will enhance Chatham County's ability to move a high volume of traffic in the shortest time possible in the event of emergency hurricane evacuation. This alternate is also preferred to help ensure that at least one of the existing bascule bridges is operable in the event of mechanical or structural failure of the other which will help keep Islands Expressway open to traffic and avoid closure of the roadway during the construction.**

Alternate No. 2----Alternate No. 2 maintains 4 lanes of traffic through the construction period. Alternate No. 2 proposes a single bridge structure (1836-ft x 95.92-ft) over the Wilmington River with a 24-ft raised median. Stage 1 proposes to construct a 55-ft +/- section of the new bridge on the north side of the existing north (westbound bridge). Once constructed, all 4 lanes of east bound and westbound traffic would be shifted to this new section of the bridge and the existing bridges would be removed. The remaining section (40-ft +/-) of the new bridge would then be constructed in stage 2. **Alternate No. 2 was not selected due to its adverse effects to the subdivision entrance, specimen trees and privacy wall on the north side of the west approach (Causton Bluff) as well as the higher overall project cost.**

Alternate No. 3----Alternate No. 3 maintains 2 lanes of traffic for half of the construction period and 4 lanes of traffic for the remaining half of the construction period and proposes a single structure (1836-ft x 95.92-ft) over the Wilmington River with a 24-ft raised median. Alternate No. 3 stage one construction proposes to reduce the existing 4 lane roadway to 2 lanes and utilize the south (eastbound bridge) to maintain 2 lanes of traffic while removing the existing north (westbound bridge). Once removed, stage 1 would construct a 55-ft +/- section of a new single bridge directly north and adjacent to the existing eastbound bridge. 4 lanes of traffic would be shifted to the new bridge and the existing eastbound bridge would be removed and the remaining 40-ft +/- of the new bridge would be constructed as stage 2.

Alternate No. 3 was not selected due to its inability to maintain an adequate number of lanes of traffic for the entire construction period. Utilization of 2 lane (one lane each direction) maintenance of traffic for half of the construction period will result in lengthy delays for commuters during peak hours and higher potential for delay during hurricane evacuation.

An operational failure of the existing southbound bascule bridge during stage one construction would result in temporary closure of Islands Expressway and rerouting all traffic south to US 80 greatly congesting this route and creating major inconvenience and long delays for commuter and tourist traffic. Every effort to avoid closure of this roadway during construction must be made to ensure its efficient operation during an emergency hurricane evacuation event.

Alternate No. 4-----Alternate No. 4 maintains only 2 lanes of traffic for the entire construction period and proposes two parallel bridges (1836-ft x 41.58-ft each) over the Wilmington River. Alternate No. 4 would require reducing the travel lanes to one lane in each direction and utilizing the south (eastbound bridge) while removing the north (westbound) bridge in stage 1. Stage 1 would then require construction of the new westbound bridge. 2 lanes of traffic would then be shifted to the new westbound bridge, the existing eastbound bridge would then be removed and the new eastbound bridge would be constructed in stage 2. **Alternate No. 4 was not selected due to its inability to maintain an adequate number of lanes of traffic for the entire construction period. Utilization of 2 lane maintenance of traffic for half of the construction period will result in lengthy delays for commuters during peak hours and higher potential for delay during hurricane evacuation. An operational failure of the existing southbound bascule bridge during stage one construction would result in closure of Islands Expressway and rerouting all traffic south to US 80 greatly congesting this route and creating major inconvenience and long delays for commuter and tourist traffic. Every effort to avoid closure of this roadway during construction must be made to ensure its efficient operation during an emergency hurricane evacuation event.**

Alternate No. 5-----Alternate No. 5 maintains 4 lanes of traffic for the entire construction period and proposes a single bridge structure (1836-ft x 95.92-ft) over the Wilmington River with a 24-ft raised median. Alternate No. 5 proposes to construct a temporary 2 lane bridge and approaches on the north side of the existing north (westbound bridge) in stage 1. Westbound traffic would be shifted to the new temporary bridge and eastbound traffic would be shifted to the old westbound bridge. The existing south (eastbound) bridge would be removed and a (55-ft +/-) section of the new bridge would be constructed directly adjacent to the existing westbound bridge in stage 2. Once constructed, all 4 lanes of traffic would be shifted to the new section of the new bridge and the temporary and old westbound bridge would be removed. The remaining 40-ft +/- section of the new bridge would then be constructed as stage 3. This alternate would require relocation of the eastbound bascule bridge, bridge tender house and all controls to the temporary bridge in stage one and would require 2 lane maintenance of traffic during this operation.

Alternate No. 5 was not selected due to its higher overall project cost, increased adverse effects to the "Causton Bluff" subdivision entrance, privacy wall and surrounding specimen trees, and increased time of construction.

Alternate No. 6-----Alternate No. 6 maintains 4 lanes of traffic through the construction period and proposes two parallel bridges (1836-ft x 41.58-ft each) over the Wilmington river separated by a 70-ft +/- median. 4 lanes of traffic would be maintained on the existing bridges and the new east bound bridge would be constructed on the south side of the existing south (eastbound) bridge in stage 1. Once completed, the eastbound traffic would be shifted to the new eastbound bridge and the

westbound traffic would be shifted to the existing eastbound bridge, allowing for the removal of the existing north (westbound) bridge. Stage 2 would then be the construction of the new westbound bridge in the same location as the existing westbound bridge.

Alternate No. 6 was not selected due to its increased adverse effects to the underground utilities on the south side of Islands Expressway, increased wetland impacts, higher overall project cost, increased time of construction, and increased adverse effects to "The Bluffs" subdivision entrance including a potential loss of very large live oak tree at the entrance island.

Alternate No. 7---- Alternate No. 7 maintains 4 lanes of traffic through the entire construction period and proposes two parallel bridges (1836-ft x 41.58-ft each) over the Wilmington River separated by a 21-ft +/- median. Stage 1 would be the construction of the new north (westbound) bridge while maintaining traffic on the existing eastbound and westbound bridges. Westbound traffic would then be shifted to the new westbound bridge and the existing westbound bridge would be removed. Once removed, the new eastbound bridge would be constructed in the same location as the old westbound bridge parallel to the new westbound bridge in stage 2. This alternate requires the use of a launching truss to construct the superstructure of the new westbound bridge in stage 2. The old south (eastbound) bridge would be removed once eastbound traffic was shifted to the new eastbound bridge.

Alternate No. 7 was not selected due to its higher overall project cost and increased adverse effects to the "Causton Bluff" subdivision entrance, privacy wall and surrounding specimen trees.

Alternate No. 8---- Alternate No. 8 maintains 3 lanes of traffic (2 lanes in one direction during peak hours utilizing a reversible center lane) for approximately 18 months long of the construction period (stage 2). Alternate 8 proposes to construct two parallel bridges (1836' x 41.58' and 1836' x 43.58') over the Wilmington River separated by a 44 foot wide median. The entire new westbound bridge would be constructed in stage 1 just north of the existing westbound bridge, and eastbound and westbound traffic would be maintained on the existing two bascule bridges. Once the new westbound bridge is completed, three lanes of traffic would be shifted to the new westbound bridge where a reversible lane configuration would be utilized allowing two lanes of traffic for the morning westbound and evening eastbound peak hours during stage 2. Stage 2 construction will include removal of both existing bascule bridges and construction of the new eastbound bridge. **Alternate 8 is the second recommended alternate for further consideration on this project. The reasons for selecting Alternate 8 are as follows: 1. Alternate 8 will provide the lowest overall project costs while maintaining 4 lanes during stage 1 construction and 3 lanes during stage 2 construction. Alternate 8 will provide for the least overall time of construction. Time savings and cost savings can be realized during the removal of the existing two bascule bridges since they can be removed simultaneously in stage 2. Other alternates require that at least one of the existing bridges be maintained during stage 2 construction for vehicular traffic and maritime traffic maintenance. 3. Alternate 8 provides for the construction of the new bridges to be located as far north of the existing utilities as possible allowing for potential costs and time savings in the utility relocation process.**

Alternate No. 9----Alternate No. 9 represents the “No Build “alternative.

Alternate No. 9 was rejected for not meeting the transportation need stated in the “Need and Purpose” above.

Comments: On May 26, 2005, a PIOH was held near the project location at the Islands Expressway Elementary School. After consulting with GDOT OEL, Chatham County was instructed to take three alternates to the PIOH which represented the most desirable alternates from a cost and impacts perspective. After careful review with the Office of Urban Design, it was determined that Alternates 1, 4, and 6 were the alternates which provided the best value for the traveling public and caused the least adverse affects to the surrounding human and natural environment. The results of the PIOH are attached herein. On April 26, 2007, a concept team meeting was held to discuss the recommended alternates for this project. (See attached meeting minutes.) At that meeting, it was recommended by the project team to study an additional alternate which provided for 3 lanes of traffic maintenance during the construction period. This alternate (Alternate 8) would provide two lanes for traffic in the AM and PM peak traffic hours and one lane for off peak traffic. The project team decided that this alternate could provide benefits not realized in the other alternates specific to utility impacts, time of construction, bridge removal, and overall time of construction and it deserved consideration.

Attachments:

1. Cost Estimates: Construction including E&C, right of way, utilities
2. Synopsis of PIOH held 5/26/2005
3. Minutes of Initial Concept meetings, held 2/04/05
4. Minutes from Consultation meeting, held 12/13/04 and 11/02/04
5. Concept Team Meeting minutes, held April 26,2007
6. Typical sections, (Includes stage construction sequencing for all alternates considered.)
7. Accident summaries, (See Need and Purpose)
8. Capacity analysis, (See Need and Purpose)
9. Bridge inventory sheet
10. Alternative Matrix
11. Layout of the proposed project
12. Project Funding Agreement (PFA)

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Approvals, Exempt projects:

Concur: _____
 Director of Preconstruction

Approve: _____
 Chief Engineer

PROJECT NO. CSBRG-0007-00(128) ALTERNATE 1 PI 0007128

Section ROADWAY ITEMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	2091111.62	TRAFFIC CONTROL - CSBRG-0007-00(128)	2091111.62
150-5010	4	EA	10755.67	TRAFFIC CONTROL, PORTABLE IMPACT ATTENUATOR	43022.68
153-1300	1	EA	125000.00	FIELD ENGINEERS OFFICE TP 3	125000.00
201-1500	1	LS	200000.00	CLEARING & GRUBBING - CSBRG-0007-00(128)	200000.00
205-0001	29810	CY	10.00	UNCLASS EXCAV	298100.00
206-0002	142588	CY	15.00	BORROW EXCAV, INCL MATL	2138820.00
310-1101	23152	TN	19.00	GR AGGR BASE CRS, INCL MATL	439888.00
318-3000	200	TN	15.71	AGGR SURF CRS	3142.00
402-1812	100	TN	90.00	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	9000.00
402-3121	10141	TN	95.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	963395.00
402-3130	3001	TN	95.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	285095.00
402-3190	4002	TN	95.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	380190.00
413-1000	3202	GL	2.00	BITUM TACK COAT	6404.00
433-1200	540	SY	131.92	REINF CONC APPROACH SLAB, INCL SLOPED EDGE	71236.80
441-6222	407	LF	25.00	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	10175.00
456-2015	2	GLM	684.41	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (SKIP)	1368.82
622-1033	10000	LF	35.00	PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	350000.00
641-1100	83	LF	29.90	GUARDRAIL, TP T	2481.70
641-1200	1500	LF	12.78	GUARDRAIL, TP W	19170.00
641-5001	5	EA	454.53	GUARDRAIL ANCHORAGE, TP 1	2272.65
641-5012	5	EA	1520.50	GUARDRAIL ANCHORAGE, TP 12	7602.50

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Section Sub Total: \$7,447,475.77

Section DRAINAGE ITEMS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
000-0002	1	Lump Sum	290500.00	WICK DRAINS	290500.00
550-1180	2800	LF	28.01	STORM DRAIN PIPE, 18 IN, H 1-10	78428.00
550-1240	830	LF	33.21	STORM DRAIN PIPE, 24 IN, H 1-10	27564.30
550-1600	300	LF	105.76	STORM DRAIN PIPE, 60 IN, H 1-10	31728.00
550-4218	15	EA	421.25	FLARED END SECTION 18 IN, STORM DRAIN	6318.75
668-2100	23	EA	1946.93	DROP INLET, GP 1	44779.39
Section Sub Total:					\$479,318.44

Section RETAINING WALL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
627-1010	63430	SF	55.00	MSE WALL FACE, 10 - 20 FT HT, WALL NO -	3488650.00
Section Sub Total:					\$3,488,650.00

Section TEMPORARY EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	2	AC	477.73	TEMPORARY GRASSING	1194.32
163-0240	73	TN	200.14	MULCH	14610.22
163-0300	2	EA	1136.92	CONSTRUCTION EXIT	2273.84
163-0503	2	EA	471.43	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	942.86
163-0530	2500	LF	2.36	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	5900.00
165-0010	1500	LF	0.91	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	1365.00
165-0030	3200	LF	1.19	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	3808.00
165-0070	1250	LF	1.28	MAINTENANCE OF BALED STRAW EROSION CHECK	1600.00
165-0087	2	EA	160.24	MAINTENANCE OF SILT CONTROL GATE, TP 3	320.48
165-0101	2	EA	360.82	MAINTENANCE OF CONSTRUCTION EXIT	721.64
167-1000	2	EA	1932.53	WATER QUALITY MONITORING AND SAMPLING	3865.06
167-1500	36	MO	807.72	WATER QUALITY INSPECTIONS	29077.92
171-0010	3000	LF	1.82	TEMPORARY SILT FENCE, TYPE A	5460.00
171-0030	6400	LF	3.08	TEMPORARY SILT FENCE, TYPE C	19712.00
Section Sub Total:					\$90,851.34

Section PERMANENT EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-2182	50	SY	42.48	STN DUMPED RIP RAP, TP 3, 24 IN	2124.00
603-7000	50	SY	3.92	PLASTIC FILTER FABRIC	196.00
700-6910	5	AC	760.20	PERMANENT GRASSING	3801.00
700-7000	23	TN	56.06	AGRICULTURAL LIME	1289.38
700-7010	19	GL	18.77	LIQUID LIME	356.63
700-8000	4	TN	250.72	FERTILIZER MIXED GRADE	1002.88
700-8100	375	LB	1.45	FERTILIZER NITROGEN CONTENT	543.75
700-9300	5500	SY	3.89	SOD	21395.00
716-2000	1000	SY	1.13	EROSION CONTROL MATS, SLOPES	1130.00
Section Sub Total:					\$31,838.64

Section SIGNING ITEMS

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Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	52	SF	13.31	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	692.12
636-1029	65	SF	19.89	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3	1292.85
636-1031	125	SF	16.72	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	2090.00
636-1032	120	SF	26.99	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	3238.80
636-2070	403	LF	6.46	GALV STEEL POSTS, TP 7	2603.38
636-2080	40	LF	8.58	GALV STEEL POSTS, TP 8	343.20
636-2090	200	LF	6.27	GALV STEEL POSTS, TP 9	1254.00
Section Sub Total:					\$11,514.35

Section PAVEMENT MARKINGS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
653-0120	23	EA	56.33	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	1295.59
653-1501	10300	LF	0.25	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	2575.00
653-1502	10300	LF	0.24	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	2472.00
653-1704	120	LF	3.23	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	387.60
653-3501	11250	GLF	0.14	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	1575.00
653-6004	3000	SY	2.42	THERMOPLASTIC TRAF STRIPING, WHITE	7260.00
653-6006	108	SY	2.56	THERMOPLASTIC TRAF STRIPING, YELLOW	276.48
654-1001	20	EA	3.38	RAISED PVMT MARKERS TP 1	67.60
654-1003	300	EA	3.24	RAISED PVMT MARKERS TP 3	972.00
Section Sub Total:					\$16,881.27

Section BRIDGE ITEMS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
000-0000	153013	SF	124.00	PROPOSED BRIDGES	18973612.00
000-0001	1	Lump Sum	200000.00	RELOCATION OF BRIDGE TENDER HOUSE	200000.00
540-1101	1	LS	1250000.00	REMOVAL OF EXISTING BR, STA NO -	1250000.00
Section Sub Total:					\$20,423,612.00

Total Estimated Cost: \$31,990,141.82

Subtotal Construction Cost \$31,990,141.82

E&C Rate 10.0 % \$3,199,014.18

Inflation Rate 0.0 % @ 0 Years \$0.00

Total Construction Cost \$35,189,156.00

Right Of Way \$34,200.00

ReImb. Utilities \$7,776,500.00

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Grand Total Project Cost \$42,999,856.00

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Project Number: CSBRG-0007-00(128)
P. I. Number: 0007128
County: Chatham

Synopsis

PIOH May 26,2005

CSBRG-0007-00(128) PI 0007128 Chatham County

76 people attended

26 comment cards received (two cards from same person)(Includes e-mail comments)

19 support the project

1 uncommitted

5 conditional

0 against

Preferred Alternate:

Alt. 1	Alt.4	Alt.6
13	10	0

One person selected both 1 and 4. Each was counted

13 comments were received by the Court Reporter

13 comments appear to support the project

Preferred Alternates:

3 preferred alternates were counted in the above synopsis

1 no preference

Alt.1	Alt. 4	Alt.6
4	3	1

Total Of Preferred Alternates

Alt.1	Alt. 4	Alt. 6
17	13	1

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Project Number: CSBRG-0007-00(128)
P. I. Number: 0007128
County: Chatham

Minutes of Initial Concept meetings

Project Number: CSBRG-0007-00(128) P. I. No. 0007128, Chatham County
Replacement of the Islands Expressway Bridges Over Wilmington River
Initial Concept Meeting
Office of Urban Design
Date: 2/04/05

Purpose of meeting: Discuss the controlling criteria for the design of the project. Discuss speed design, grades, sight distance, intersection design, design vehicles, and alternatives for design for a single bridge and double bridges.

Attendees:

Mr. Darryl VanMeter GDOT Office of Urban design
Ms. Marcela Coll GDOT Office Of Urban Design
Mr. Darrell Richardson GDOT Office of Urban design
Mr. Jim Kennerly LPA
Mr. Al Bowman LPA
Mr. Tom Montgomery LPA
Mr. Al Black Chatham County (remote teleconference)

MINUTES: Darryl Van Meter began the meeting and introduced the attendees. Jim Kennerly began the discussion by handing out an agenda. He followed up by handing out a copy of the speed study and accident analysis performed by LPA for the project corridor. The results of the speed study indicated that the 85th percentile speed along the corridor was between 55 and 60 mph and that the project area had no specific accident problems at the project location. Jim presented vertical alignments for the bridge and approaches for 50, 55, and 60 mph design speeds. 50 mph was rejected due to the higher operating speeds on the corridor. 60 mph was also considered but rejected due to the resulting steep mainline and driveway grades to the subdivision and to the county park. 55 mph was selected as the preferred design speed for the project. The 55mph design speed resulted in grades that exceeded the AASHTO maximum grade (5%) for a principle arterial on level terrain. A design exception will be required for the proposed 6.5 % grades. Conditions for mitigating the effects of the steeper mainline grades would be to maintain the 50 mph posted speed and possible advisory signing. Justification for the design exception is that flatter grades would result in relocation of the subdivision entrance roads into the salt marsh west of their current location and creation of an unsafe intersection serving the entrance to the County Park.

The next topic of discussion was the location and design of the subdivision entrance roads/intersection on the west side of the project and the entrance/intersection to the County Park on the east side of the project. An intersection sight distance diagram was presented to GDOT for their review. Intersection sight distance (ISD) requirements were shown for both the passenger vehicle and the SU vehicle for both intersections and available sight distance exceeded the requirements at both intersections using the 55mph vertical alignment. It was noted that left turning vehicles from the

subdivision roads would make a 2 stop movement by crossing the near two lanes and storing in the median opening prior to making the left turn into the mainline traffic lanes. Left turn vehicles from the County Park drive could make a continuous movement by not stopping in the median but proceeding into the mainline lanes when an adequate gap existed. It was also noted that the single and double bridge alternates under consideration presented specific design problems for the two median divided intersections. The available decel length is less for the double bridge alternate than the single bridge alternate due to the fact that no decel or taper could occur on the bridges. The single bridge option will allow turn lane tapers and decel lanes on the bridges if necessary. The single bridge alternates will have less distance to transition the travel lanes from the bridge to provide a desired type "B" (44-ft wide) median opening at the two intersections. The median opening width may be reduced thus affecting the left turn movements and the intersection sight distance. It was determined that the pavement transition from the bridge(s) would be based on the 85th percentile speed multiplied by the transition width ($L=WS$) in all alternates considered and the resulting available median widths would be identified and sight distance would be calculated for each.

The LPA Group presented 5 alternatives designs for the project. Alternate 1 indicated twin 38-ft wide bridges with 4 lanes of traffic maintained through the construction period. Alternate 2 would construct a four lane section of the single new bridge to the north and complete the single structure upon removal of the existing westbound bridge. 4 lanes of traffic could be maintained through the construction period. Alternate 3 would stage construct a single structure similar to Alternate 2 but would occur above the location of the existing west bound bridge(removed). Two lanes of traffic would be maintained during stage 1 and 4 lanes during stage 2. Alternate 4 is construction of twin bridges in the same location as the existing bridges. Traffic could be maintained only on two lanes through the construction period. Alternate 5 would construct a temporary two lane bridge north of the west bound bridge and require temporary relocation of the bascule spans from the existing eastbound bridge. 4 lanes of traffic could be maintained through the construction period and a stage constructed single bridge would be required.

Due to the high traffic volumes (>20,000 vpd) and the predominant AM/PM commuter traffic distribution, Chatham County strongly recommends an alternative that maintains 4 lanes of traffic through the construction period. All four lane alternatives considered thus far included stage construction or separate bridge construction occurring to the north of the existing westbound bridge to avoid impacting the array of under channel and overhead utilities south of the existing eastbound bridge. It was determined that maintaining traffic on the eastbound bridge is less problematic than on the westbound bridge due to the fact that the bridge tenders house /control panel is located on the eastbound bridge. Removal of the eastbound bridge before removal of westbound bridge would require relocation of the bridge tenders house/control panel to the existing westbound bridge. This costly relocation could be avoided by removal of the westbound bridge first and maintaining traffic on the eastbound bridge through the construction period. Therefore, LPA will consider additional alternates that take this fact into consideration.

Darryl Van Meter stated that no PE funds had yet been established for their office to participate in a Concept Team meeting, but his office would continue to participate in pre-concept meetings to flush out design parameters and alternatives. He also stated that an initial concept team meeting may not

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be needed and one concept meeting may suffice due to the up front work done thus far on the project. Darryl suggested that the County work with OEL to plan a public information open house meeting (PIOH) in the near future and determine the number of viable alternatives to be shown at that meeting. Al Black suggested that several alternates should be presented to clearly demonstrate that all viable alternatives of this project are considered. LPA will develop the additional alternatives mentioned herein and work with Chatham County and GDOT to determine a preferred alternative(s).

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County: Chatham

Project: Islands Expressway @ Wilmington River at Causton Bluff, Chatham County
Date: 12/13/04 10:30 A.M.
Project Consultation Meeting with GDOT Officials
Place: Office of Urban Design Conference Room

Attendees:

Mr. Ben Buchan-----GDOT Office of Urban Design
Mr. Darryl VanMeter—GDOT Office of Urban Design
Mr. Darrell Richardson-GDOT Office of Urban Design
Ms. Irene Belinfante----GDOT Office of Bridge Design
Mr. Keith Melton-----GDOT Office of Planning
Mr. Steve Adewale-----GDOT Office of Urban Design
Mr. Jim Kennerly-----LPA Group
Mr. Al Bowman -----LPA Group
Mr. Al Black (Remote)---Chatham County Department of Engineering

Purpose of Meeting

Brief GDOT Officials on the above Project and gather input for the development of a project concept following Department guidelines for a major project. Identify some concerns and issues by GDOT at an early stage so solutions recommended in the concept will address those issues relative to design and safety for the proposed transportation facility.

Opening Discussion

Darryl VanMeter opened the meeting and turned it over to Jim Kennerly to provide a project overview. Various drawings of the project site with preliminary conceptual drawings were located in the room and used for talking points. Jim explained the project location, existing bridge maintenance and operation issues, posted speed (50 mph), known environmental concerns, design speed selection issues, and the difference in impacts to the two subdivision entrances located on the west approach to the bridge with respect to a 50 mph and 45 mph design speed. Bridge clearances both horizontally and vertically were discussed as well as stage construction requirements for both maintaining 2 lanes and 4 lanes of traffic. The potential for the relocation of the existing driveway entrances to the upscale subdivisions on the west approach was also discussed with explanations of the difference in driveway grades between the 45mph and the 50 mph designs. Hurricane evacuation was also discussed and it was explained that Islands Expressway is currently the major evacuation route for Tybee Island on the current GEMA, FEMA and local evacuation plan route maps.

GDOT Issues and Concerns

1. Ben Buchan expressed concern that the raising of the grade on Islands Expressway to construct the new bridge(s) (65 ft. vertical clearance) will create a change in driver expectancy for motorists

traveling Islands Expressway westbound with regard to intersection for the subdivision entrances. Such a major change in grade has resulted in accident situations on like and similar projects especially when intersections are located very near the ends of the new bridge/approaches and driver sight distances are reduced. Reaction time to turning/crossing traffic or stopping traffic queuing is reduced especially for vehicles traveling at high speeds. LPA will need to address this issue by obtaining 85th percentile speeds (operating speed) and comparing it with the posted and proposed design speeds. All alternatives considered should include comparisons of stopping and intersection sight distance prior to recommending a final design speed for the project.

2. Ben Buchan was concerned with the location of the vertical curve with respect to the location of the navigational channel. This could have a direct effect on the stopping and intersection sight distance at the subdivision entrance intersection. The PVI of the vertical curve should be located as far east of the river channel as possible while still providing the necessary clearance over the navigational channel for maritime usage. Also the possibility of widening or shifting the navigational channel eastward was discussed to maximize the available sight distance. LPA will address these issues with its alternative studies.

3. Relocation of the subdivision entrances to the west was also discussed and will also be considered to achieve improved sight distances if necessary during the upcoming alternative studies. Relocating these entrances will likely add additional impacts to the adjacent marsh and may not be acceptable to the homeowners.

4. Darryl VanMeter recommended that a single bridge be considered with a wide raised median in lieu of 2 separate bridges to help facilitate stage construction maintaining 4 lanes of traffic. The preference of Chatham County is to maintain 4 lanes of traffic during the construction period. Such a bridge could be designed with a raised median while meeting high speed (>45 mph) design criteria. LPA will consider this during alternative studies.

5. LPA will determine if Islands Expressway is currently on the Chatham County or GDOT Statewide bicycle plan. (*Keith Melton has stated that this portion of Islands Expressway is located on the Savannah-Whitemarsh bicycle Corridor*)

6. Darryl VanMeter suggested that all alternates considered include adequate right of way to construct the bridge(s). LPA will consult with the Office of Bridge Design/ Office of Construction/Bridge Contractor to determine the needed amounts for the recommended alternate(s).

7. Keith Melton indicated that the project is not currently identified in the Chatham County TIP for any phase. Al Black stated that there is an ongoing effort to program PE for this project in the February 2005 TIP amendment to cover GDOT participation costs for FY 2005. ROW and construction funding is not yet identified but the County desires for the project to be federally funded and the contract let by GDOT at some time in the future.

8. Ben Buchan and Darryl Van Meter agreed to participate in the review of design work developed by LPA for the alternative studies but an official concept meeting could not be held until PE funds were established for GDOT participation.
9. Al Black stated that he attended the annual Causton Bluff homeowners' association meeting and provided information to the members in regard to this project. The homeowners expressed concern about the noise generated by the grates on the current bridges but expressed no real opposition to the bridge replacement project. It is likely a reduction in noise levels would occur with the new bridge(s).
10. Darryl Van Meter stated Islands Expressway is on the National Highway System (NHS) which could open the project to further scrutiny by the FHWA. Darryl also requested that any survey control work be reviewed by OEL at the earliest opportunity. Darryl mentioned that shoulders on this project would most likely be full depth paving.
11. Darryl VanMeter stated that it would permissible for LPA to pursue consultations with the resource agencies (USCG, COE, GEMA, FEMA etc.) for input in the concept process.
12. Jim Kennerly stated that the survey database for the concept work would be complete in two to three weeks and that the concept alternatives would be available in the latter part of January 2005.

Islands Expressway Bridge @ Causton Bluff (Intracoastal Waterway) Wilmington River
Chatham County Engineering Office
Kick off meeting minutes
11/2/04

Attendees: Mr. Al Black Chatham County
Tom Montgomery LPA
Jim Kennerly LPA
Al Bowman LPA
Jim Gardner Ward Edwards
Ray Cook Ward Edwards

Items Discussed:

1. Initial Concept team meeting

Al Black stated that an Initial Concept Team Meeting may be required by GDOT for this project. This meeting could be held in Savannah at Chatham County Engineering Office, or at the District 5 office in Jesup, or at the Office of Urban Design in Atlanta. LPA will discuss this with GDOT and County officials and make a determination on the need for this meeting and the preferred location.

2. Survey letters to the affected public

LPA will draft a general letter to the public, following Chatham County format, which will inform the public of the project and that environmental surveys and land surveys will be made within the project area in the near future. It will also state that access to their property may be required to gather needed project information and explain why such information is needed. LPA will provide a draft of this letter to the Chatham County for their review and approval prior to mail out. No field work should begin outside the project existing right of way until property owners are notified. Ward Edwards will obtain the names and addresses of all affected property owners and provide them to LPA as soon as possible. LPA will handle the mail out to the property owners.

3. Public Information Meeting

The need for an initial public information meeting (PIM) was discussed and it was decided that due to the limited number of affected properties, that the need for such a meeting was not warranted at present and that such a meeting could wait until expressed public interest was requested through Chatham County or GDOT during the concept or environmental processes.

4. Project Status/ Meetings

Currently this project is identified in the 2003-2008 SPLOST program for road improvements in Chatham County. This project is not currently identified in the GDOT Construction Work Program or the Chatham County TIP. The County will handle all programming issues with GDOT and the Chatham County MPO. LPA's main function will be solely to handle concept development with County and GDOT officials following GDOT format. All meetings with GDOT shall address the technical issues related to concept development and wetlands delineation of the project and minutes of all meetings will be prepared by LPA and forwarded to the County for their information.

5. Schedule

The schedule for Concept Development and Wetlands delineation shall adhere to the schedule attached as part of the consultant contract for services between LPA and Chatham County for this project. This schedule may be extended by **one month** due the fact that the project did not officially begin until the date of the contract signing which was after the start date in the current schedule.

6. Maintenance of Traffic

The preliminary alternatives to be studied for replacement of the existing bridge will include alternatives for maintaining 4 lanes of traffic and 2 lanes of traffic through the construction period. Al Black stated that the preference of the County would be to maintain 4 lanes of traffic if possible.

7. Need and Purpose

Establishing a solid "need and purpose" for the project will be a first priority for LPA. Al Black suggested we discuss the maintenance and operational cost issues of the existing bridges with the Chatham County Public Works Office. Mr. Robert Drewry, Director, is the contact person with that office. (912-652-6842) LPA will develop the need and purpose statement in cooperation with Edwards- Pittman and the GDOT Office of Planning.

8. Utilities

The location of the overhead transmission power lines (SEPCO) will pose a problem for bridge construction on this project. LPA will coordinate with GDOT, SEPCO and the Chatham County Public Works Office to successfully address this matter during concept development.

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Concept Team Meeting Minutes
CR 787/Islands Expressway @ Wilmington River/Bascule Bridge
Project Number: CSBRG-0007-00(128)
PI # 0007128
Chatham County
April 26, 2007
Chatham County-Savannah Metropolitan Planning Commission

- This meeting was held in accordance with the current Plan Development Process. (Albert) Butch Welch, GDOT Project Manager, began the meeting by introducing the project. He stated that the project is currently scheduled for construction in fiscal year 2010, but that the schedule is subject to change.
- Jim Kennerly, with LPA gave a description of the proposed project.
 - Project CSBRG-0007-00(128) represents the construction of two new, high level, fixed span, multi-lane bridges over the Wilmington River (Intracoastal Waterway) in the City of Savannah along Islands Expressway (CR 787) in Chatham County. The Project will replace the existing double bascule bridges that currently exist at this location and considered to be functionally obsolete. The Project will begin at a point approximately one-half mile west of the Wilmington River and extend eastward to a point approximately one-half mile east of the Wilmington River. Project length is approximately one mile. The begin project milelog is approximately 2.9 and end project milelog is approximately 4.1. The minimum vertical clearance under the new bridges at the Wilmington River channel will be approximately 65-ft above mean high water for vessels using the waterway. The horizontal clearance in the channel below the bridge will be increased from its current 100-ft in width to 195-ft in width between the proposed new fender system. The total length of the new bridges is approximately 1715-ft each. The new bridges will each be 38-ft wide between the side barriers providing for two 12-ft lanes in each direction with a 10-ft wide outside shoulder and 4-ft wide inside shoulder. The roadway approaches will be reconstructed to provide two 12-ft wide lanes in each direction separated by a 44-ft wide median transitioning to a 30-ft wide median near each end of the project to match the existing roadway. The new roadway will provide 10-ft wide outside shoulders with 6.5-ft paved for pedestrian and bicycle use and 6-ft inside shoulders with 2-ft paved.
- Josh Earhart, with Edwards Pittman discussed the Need and Purpose of the proposed project.
 - The proposed project would replace the existing Islands Expressway bridges over the Wilmington River with a fixed span structure having a minimum vertical clearance of

65-feet for the navigational waterway. The existing bascule bridges are functionally obsolete. The bridges are opened/ closed approximately 4,000 times per year. The frequent openings cause traffic delays, which results in an inconvenience to the traveling public. The proposed project would increase the vertical clearance of the crossing and eliminate the traffic delay and associated lost travel time due to frequent bridge openings.

- The maintenance and operation of the Islands Expressway bascule bridges are a substantial burden to Chatham County. Chatham County is solely responsible for these costs because Islands Expressway is a county route. The annual operation and routine maintenance costs for these bridges represent approximately 60 percent of the County's annual bridge budget.
- Jim Kennerly, discussed the Vehicular Accident Data, Existing and Projected Traffic Volumes, and Traffic Congestion/LOS portion of the Need & Purpose of the proposed project.
 - He stated that an updated traffic report was just received and would be incorporated into the Concept Report.
- Jim Kennerly, then discussed the proposed design features of the project which included the following: Roadway typical, proposed design speed, proposed maximum grade, proposed maximum degree of curve, and right-of-way width.
- Josh Earhart, discussed the environmental impacts of the proposed project.
 - He stated that it is not likely that the proposed project would impact archaeological resources eligible for listing on the NRHP.
 - He stated that the review of the existing information on previously identified historic properties revealed that no National Register listed properties, proposed National Register nominations, National Historic Landmarks, or bridges determine eligible for inclusion in the National Register in the updated Georgia Historic Bridge Survey were identified within the proposed project's APE.
 - He stated that there would need to be coordination with US Fish and Wildlife.
 - He stated that there could be a possible 4f at Boat Ramp.
 - He stated a Nationwide 404 permit would be needed.

- Al Bowman, discussed the bridge structure type study of the proposed project.
 - He stated that since the bridge will be spanning over the Intercoastal Waterway (ICWW), the Horizontal and Vertical Clearances were regulated by the United States Coast Guard (USCG). At this location the minimum vertical clearance for fixed span bridges is 65-ft.
 - He further stated that the minimum Horizontal clearance in this location is 100-ft, however in conversations with Paul Liles, it was stated that 100-ft clearance does not provide enough safety from barge collisions, therefore Paul recommended providing as much horizontal clearance as possible using conventional beam or girder construction.
 - Based on these limitations, exotic or long span superstructures such as trusses, tied arches, suspension cable, or cable-stayed bridges were eliminated from consideration.
 - The beam type bridges studied included conventional pre-stressed beams, spliced post-tensioned beams, and segmental box girders. Steel Plate girders were eliminated due to GDOT bridge office policy to not use steel beams in coastal environments when there are other alternatives.
 - Al stated that due to the raise in grade of approximately 50-ft over the channel, the bridge could not land near the bluffs and therefore a study was performed to determine the optimum locations for the bridge ends.
 - On the West side of the ICWW, there are subdivisions to the north and south of Islands Expressway. In order to minimize impacts to these subdivisions, a retaining wall was needed for the abutment on this side. Historical cost data suggests that MSE walls are the most economical type of walls for fill heights over 20-ft. A bridge vs. MSE wall cost comparison was completed and it was determined that MSE walls would be least costly up to 50-ft in height. However, the representatives from Reinforced Earth, a MSE manufacturer stated that due to the soft soils in the area, the walls should be practically limited to 40-ft in height. This was used as the controlling factor for locating the West end of the bridge.
 - On the East side of the ICWW, there are no cultural resources to protect, but there are marsh wetlands very near the existing edge of pavement. LPA was told by the environmental subconsultant that up to 3 acres of fill in these wetlands would be acceptable under a local permit, therefore the end of the bridge was based on limiting the height of the fill slopes to a level where the fill extension at 3:1 would result in less than 3 acres of fill in the wetlands. This corresponded to a 30-ft fill height, and was used to locate the end of the bridge on this side.
 - He stated that the first bridge alternate studied used 78-FBT's which would span a maximum of 160-ft. Subtracting 15-ft either side of the channel for a fender system gave a 130-ft horizontal clearance with this option. This option could be built for \$80/SF. It was mentioned that Paul Liles thought that 130-ft clearance was not enough clearance.

- The second alternate studied was a Post-tensioned, Spliced Bulb-T, which used modified 78-FBT's spliced together with post-tensioning to create a continuous beam allowing longer span lengths. He noted that Paul Liles limited the maximum span length for this type of construction to 225-ft. This allows for 195-ft of channel clearance and can be built for \$85/SF.
 - The last alternate was an AASHTO PC 2700 box girder. Span lengths were limited to 225 ft to compare with spliced bulb-T alternate. Therefore, clear channel was identical at 195 ft, but cost was much higher at \$109/SF.
 - Based on the studies performed it was easy to determine that the recommended design would use a spliced bulb-tee, due to the ability to provide nearly double the existing horizontal clearance of the channel for only a few dollars/SF more than the simple span bulb-T and much less than the Segmental box girder.
-
- It was stated that a VE study would be required.
 - Brad Saxon stated it would be difficult and costly to remove the existing westbound bridge in between the two new proposed bridges during stage construction. Al stated that this had been discussed with both David Graham and Melissa Harper at a separate meeting and everyone was confident that a contractor could complete this work without too much difficulty.
 - It was discussed to review a 3 lane option with reversible lanes.
 - Bryan Prince, with GA Power stated some concerns with relocations.
 - He stated that GA Power would not want to be relocated on the bridge structure.
 - He has concerns with potential impacts to customers on the northwest side of the bridges.
 - He stated that relocation to 50-ft underneath the river channel would be very costly (5 million per mile).
 - He stated that GA Power needs a safe distance of 150-ft clear but in some cases 135-ft has been used per Brad Saxon.
 - He stated the schedule would be long for relocations.

Attendees:

Darrell Richardson, GDOT Office of Urban Design
Albert Welch, GDOT Office of Urban Design
Marcela Coll, GDOT Office of Urban Design
Brad Saxon, GDOT District 5 Construction

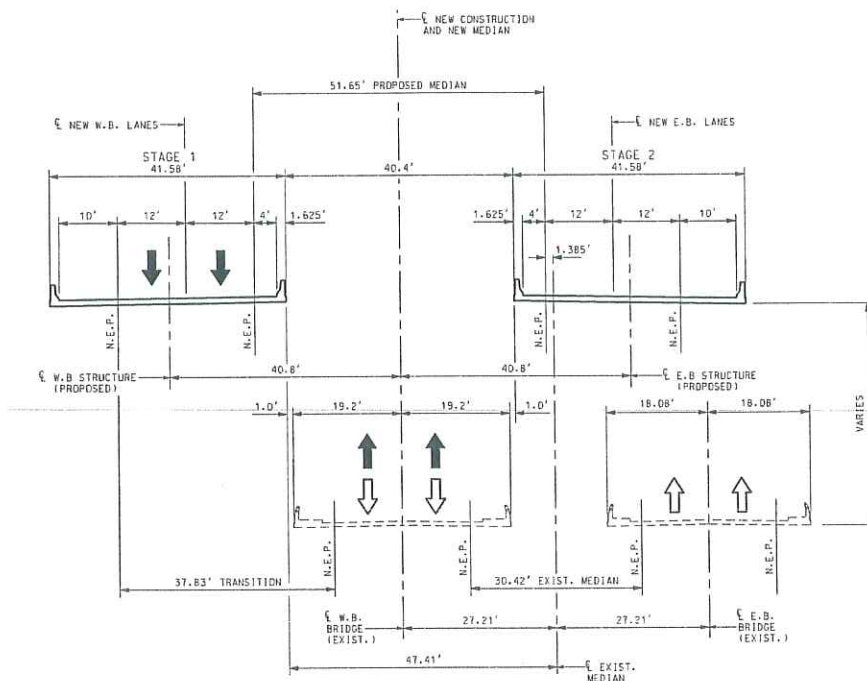
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Troy Pittman, GDOT
Slade Cole, GDOT
Shannon McGahee, GDOT
Doug Patten, GDOT
Rob McCall, GDOT
Teresa Scott, GDOT
Mike Clements, GDOT Bridge Design
Paul Condit, GDOT/OEL
Jane Love, Savannah MPO
Wykoda Wang, Savannah MPO
Mark Wilkes, Savannah MPO
Dialo Cartwright, Georgia Power
Bryan Prince, Georgia Power
Kenyatta Sprail, City of Savannah
Al Black, Chatham County
Martin Melville, Edwards Pittman
Josh Earhart, Edwards Pittman
Jim Kennerly, LPA
Al Bowman, LPA
Brad Gowen, LPA

[illegible]

TYPICAL SECTION

CONCEPT
ISLANDS EXPRESSWAY (CAUSTON BLUFF)
BRIDGE REPLACEMENT
PROJECT No: CSBRG-0007-00(128)
P. I. No: 0007128
CHATHAM COUNTY, GA



CONSTRUCTION STAGING ALTERNATE 1
 MAINTAIN 4 LANES OF TRAFFIC
 2 SEPARATE STRUCTURES 41.58' WIDE

CONSTRUCTION STAGING

REQUIRED STAGES:

- 1) CONSTRUCT 41.58' WIDE (ENTIRE) NEW WESTBOUND BRIDGE (NORTH) (OFFSET 1' NORTH OF EXISTING WESTBOUND BRIDGE).
- 2) SHIFT WESTBOUND TRAFFIC TO NEW WESTBOUND BRIDGE.
- 3) SHIFT EASTBOUND TRAFFIC TO EXISTING WESTBOUND BRIDGE (NORTH).
- 4) REMOVE EXISTING EASTBOUND BRIDGE AND APPROACHES.
- 5) CONSTRUCT 41.58' WIDE NEW EASTBOUND BRIDGE.
- 6) SHIFT EASTBOUND TRAFFIC TO NEW EASTBOUND BRIDGE (SOUTH).
- 7) REMOVE EXISTING WESTBOUND BRIDGE AND APPROACHES.

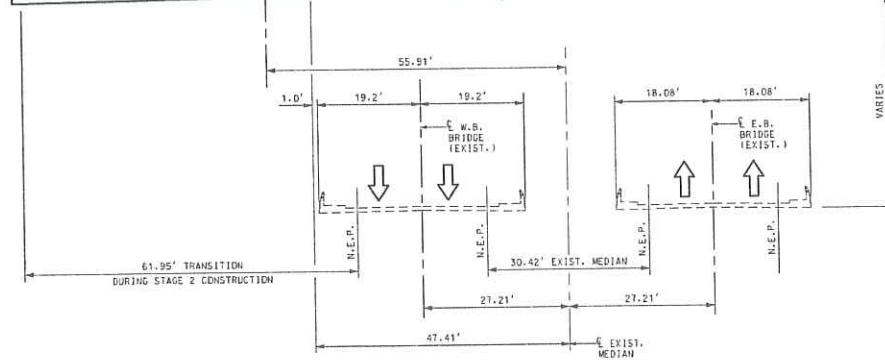
ADVANTAGES

- 1) MAINTAINS 4 LANES OF TRAFFIC AT ALL TIMES.
- 2) MINIMAL INTRUSION TO SUBDIVISIONS AND SALT MARSH WHILE MAINTAINING 4 LANES OF TRAFFIC.
- 3) TWIN 41.58' WIDE BRIDGES MINIMIZES BRIDGE COST.
- 4) MINIMIZES IMPACT TO UNDERCHANNEL UTILITIES ON THE SOUTHSIDE OF EASTBOUND BRIDGE.

DISADVANTAGES

- 1) REQUIRES MAJOR ALIGNMENT CHANGE.
- 2) HIGHER PROJECT COSTS (HIGHER RETAINING WALLS ON WEST APPROACH).
- 3) DIFFICULT REMOVAL OF WESTBOUND EXISTING BRIDGE.
- 4) REQUIRES RELOCATION OF BRIDGE TENDER HOUSE/POWER TO EXISTING WESTBOUND BRIDGE (STAGE 2).
- 5) PROVIDES MINIMUM DECELERATION DISTANCE TO SUBDIVISION ENTRANCE.





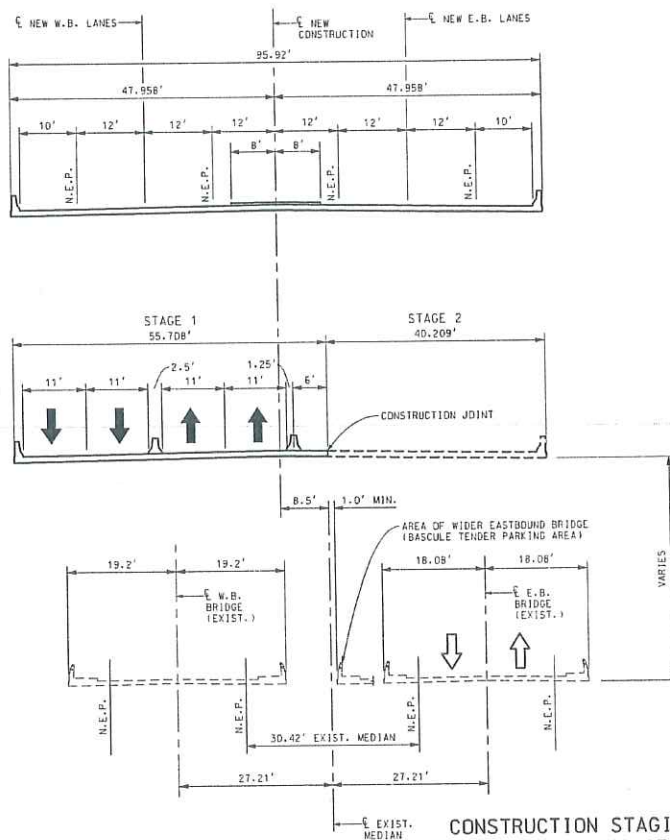
- 1) CONSTRUCT 55' NEW BRIDGE (NORTH) (OFFSET 1' NORTH OF EXISTING WESTBOUND BRIDGE).
- 2) SHIFT EASTBOUND AND WESTBOUND TRAFFIC TO NEW WESTBOUND LANES
- 3) REMOVE EXISTING WESTBOUND BRIDGE AND APPROACHES.
- 4) REMOVE EXISTING EASTBOUND BRIDGE AND APPROACHES.
- 5) CONSTRUCT REMAINING PORTION (40'+) OF NEW BRIDGE.
- 6) TRANSITION REQUIREMENT FOR PAVEMENT 62' APPROX.

- 1) MAINTAINS 4 LANES OF TRAFFIC AT ALL TIMES.
- 2) SIMPLE STAGE CONSTRUCTION (2 TRAFFIC SHIFTS).
- 3) SINGLE BRIDGE STRUCTURE.
- 4) MINIMIZES IMPACT TO UNDERCHANNEL UTILITIES ON THE SOUTHSIDE OF EASTBOUND BRIDGE.

- 1) REQUIRES MAJOR ALIGNMENT CHANGE.
- 2) INCREASED SALT MARSH IMPACTS AND RIGHT-OF-WAY IMPACTS.
- 3) HIGHER PROJECT COSTS.
- 4) REDUCED WIDTH OF MEDIAN AT SUBDIVISION ENTRANCE.



CONSTRUCTION STAGING ALTERNATE 2
MAINTAIN 4 LANES OF TRAFFIC
SINGLE STRUCTURE 95.92' WIDE



CONSTRUCTION STAGING

REQUIRED STAGES:

- 1) SHIFT WESTBOUND TRAFFIC TO EASTBOUND BRIDGE. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION.
- 2) REMOVE EXISTING WESTBOUND BRIDGE AND APPROACHES.
- 3) CONSTRUCT 55'+ PORTION OF NEW BRIDGE ON THE NORTH SIDE.
- 4) SHIFT 4 LANES OF TRAFFIC TO NEW BRIDGE.
- 5) REMOVE EXISTING EASTBOUND BRIDGE.
- 6) CONSTRUCT REMAINING PORTION (40'+) OF NEW BRIDGE.

ADVANTAGES

- 1) NEW BRIDGE IS LOCATED CLOSE TO EXISTING ALIGNMENT (MINOR ALIGNMENT CHANGE).
- 2) SMALL PROJECT FOOTPRINT.
- 3) MINIMAL IMPACTS TO SALT MARSH.
- 4) MINIMAL RIGHT-OF-WAY IMPACTS.
- 5) SIMPLE STAGE CONSTRUCTION.
- 6) MINIMIZES IMPACT TO UNDERCHANNEL UTILITIES ON THE SOUTHSIDE OF EASTBOUND BRIDGE.

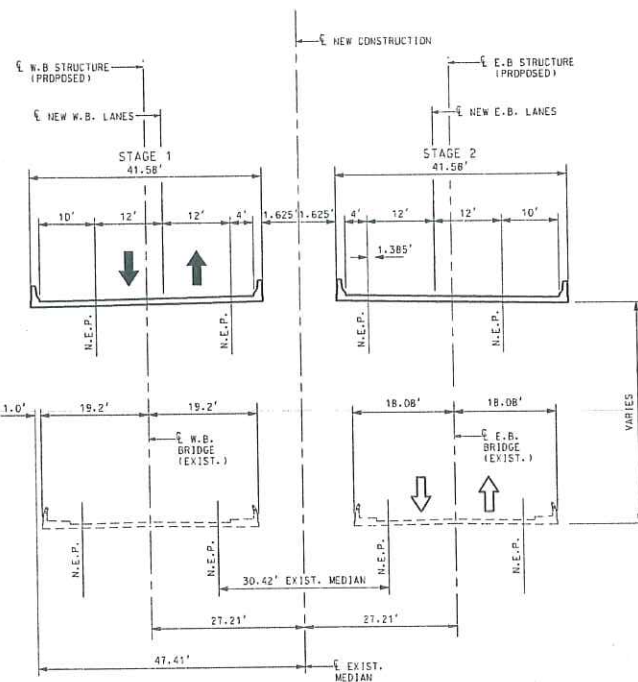
DISADVANTAGES

- 1) MAINTAINS ONLY 2 LANES OF TRAFFIC FOR 1/2 THE CONSTRUCTION PERIOD.



CONSTRUCTION STAGING ALTERNATE 3
 MAINTAIN 2 LANES OF TRAFFIC STAGE 1
 MAINTAIN 4 LANES OF TRAFFIC STAGE 2
 SINGLE STRUCTURE 95.92' WIDE

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CONSTRUCTION STAGING ALTERNATE 4
 MAINTAIN 2 LANES OF TRAFFIC
 2 SEPARATE STRUCTURES 41.58' WIDE

CONSTRUCTION STAGING

REQUIRED STAGES:

- 1) SHIFT WESTBOUND TRAFFIC TO EXISTING EASTBOUND BRIDGE, MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION.
- 2) REMOVE EXISTING WESTBOUND BRIDGE AND APPROACHES.
- 3) CONSTRUCT NEW WESTBOUND BRIDGE.
- 4) SHIFT TRAFFIC TO NEW WESTBOUND BRIDGE, MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION.
- 5) REMOVE EXISTING EASTBOUND BRIDGE AND APPROACHES.
- 6) CONSTRUCT NEW EASTBOUND BRIDGE.
- 7) SHIFT EASTBOUND TRAFFIC TO NEW EASTBOUND BRIDGE.

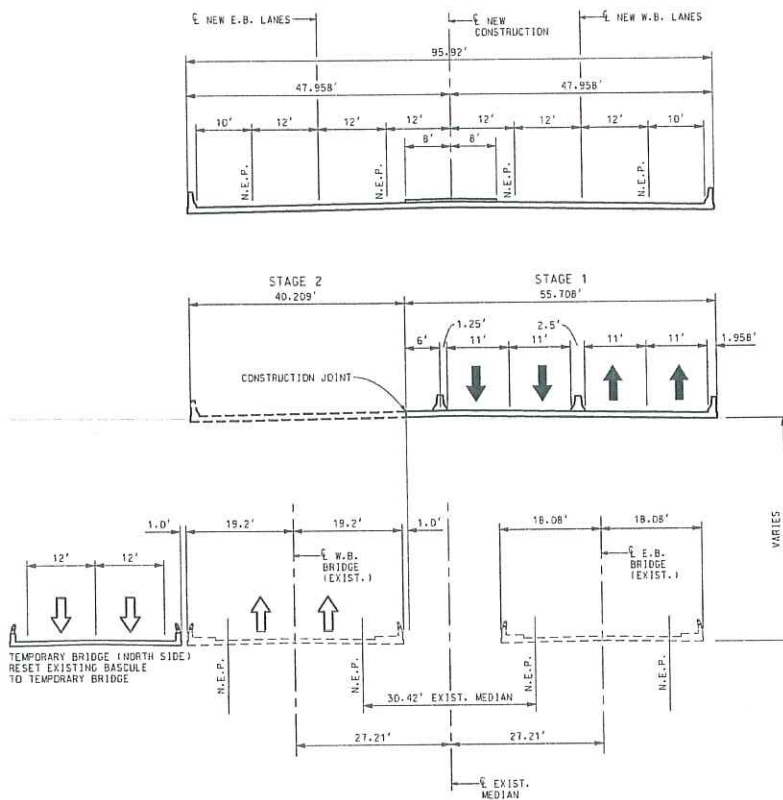
ADVANTAGES

- 1) MINIMIZES PROJECT FOOTPRINT. MINIMAL SALT MARSH IMPACTS.
- 2) MINIMAL BRIDGE COSTS.
- 3) MINIMAL OVERALL PROJECT COSTS.
- 4) NO NEW RIGHT-OF-WAY REQUIRED.
- 5) MINIMIZES IMPACT TO UNDERCHANNEL UTILITIES ON THE SOUTHSIDE OF EASTBOUND BRIDGE.

DISADVANTAGES

- 1) ONLY ONE LANE OF TRAFFIC IN EACH DIRECTION FOR ENTIRE CONSTRUCTION PERIOD - GREATEST POTENTIAL FOR DELAY.





CONSTRUCTION STAGING ALTERNATE 5
 MAINTAIN 4 LANES OF TRAFFIC
 UTILIZING TEMPORARY DETOUR AND BRIDGE
 SINGLE STRUCTURE 95.92' WIDE

CONSTRUCTION STAGING

REQUIRED STAGES:

- 1) CONSTRUCT TEMPORARY BRIDGE ON NORTH SIDE OF EXISTING WESTBOUND BRIDGE. TEMPORARILY CLOSE EASTBOUND LANES AND REMOVE BASCULE FROM EXISTING EASTBOUND BRIDGE. RESET BASCULE ON TEMPORARY BRIDGE. (REQUIRES SHORT-TERM ONE LANE TRAFFIC IN EACH DIRECTION ON EXISTING WESTBOUND BRIDGE).
- 2) SHIFT WESTBOUND TRAFFIC TO TEMPORARY BRIDGE. SHIFT EASTBOUND TRAFFIC TO EXISTING WESTBOUND BRIDGE.
- 3) REMOVE REMAINDER OF EASTBOUND BRIDGE AND APPROACHES.
- 4) CONSTRUCT 55'+ PORTION OF NEW BRIDGE ON THE SOUTH SIDE.
- 5) SHIFT ALL TRAFFIC (4-LANES) TO THE NEW BRIDGE SEGMENT.
- 6) REMOVE TEMPORARY BRIDGE.
- 7) REMOVE EXISTING WESTBOUND BRIDGE.
- 8) CONSTRUCT REMAINING 40'+ SEGMENT OF NEW BRIDGE.

ADVANTAGES

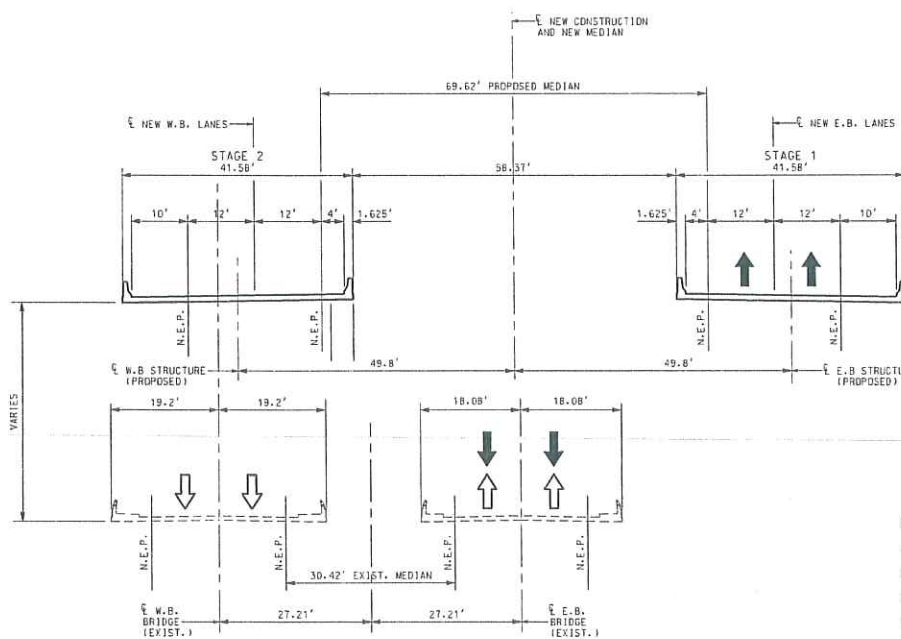
- 1) MAINTAINS 4-LANES OF TRAFFIC THROUGHOUT CONSTRUCTION PERIOD (DISCOUNTS TEMPORARY CLOSURE OF EASTBOUND LANES TO REMOVE AND RESET BASCULE).
- 2) NEW BRIDGE IS LOCATED WITHIN EXISTING ALIGNMENT.
- 3) SMALLER PROJECT FOOTPRINT.
- 4) MINIMAL PERMANENT IMPACTS TO SALT MARSH.
- 5) MINIMIZES IMPACT TO UNDERCHANNEL UTILITIES ON THE SOUTHSIDE OF EASTBOUND BRIDGE.

DISADVANTAGES

- 1) COST OF TEMPORARY BRIDGE/RELOCATION OF BASCULE.
- 2) INCREASED TIME OF CONSTRUCTION.
- 3) ADVERSE IMPACTS TO SUBDIVISION ENTRANCE (CAUSTON BLUFF).



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CONSTRUCTION STAGING

REQUIRED STAGES:

- 1) CONSTRUCT 41.58' WIDE (ENTIRE) NEW EASTBOUND (SOUTH) BRIDGE.
- 2) SHIFT EASTBOUND TRAFFIC TO NEW EASTBOUND BRIDGE.
- 3) SHIFT WESTBOUND TRAFFIC TO EXISTING EASTBOUND (SOUTH) BRIDGE.
- 4) REMOVE EXISTING WESTBOUND (NORTH) BRIDGE.
- 5) CONSTRUCT 41.58' WIDE NEW WESTBOUND (NORTH) BRIDGE.
- 6) SHIFT WESTBOUND TRAFFIC TO NEW WESTBOUND (NORTH) BRIDGE.
- 7) REMOVE EXISTING EASTBOUND BRIDGE (SOUTH).

ADVANTAGES

- 1) MAINTAINS 4 LANES OF TRAFFIC AT ALL TIMES.
- 2) TWIN 41.58' WIDE BRIDGES MINIMIZES BRIDGE COST.

DISADVANTAGES

- 1) REQUIRES MAJOR ALIGNMENT CHANGE.
- 2) HIGHER PROJECT COSTS(HIGHER RETAINING WALLS ON WEST APPROACH).
- 3) DIFFICULT REMOVAL OF EASTBOUND EXISTING BRIDGE.
- 4) REQUIRES RELOCATION OF UTILITIES ON SOUTHSIDE OF BRIDGE.
- 5) PROVIDES MINIMUM DECELERATION DISTANCE TO SUBDIVISION ENTRANCE.

CONSTRUCTION STAGING ALTERNATE 6
 MAINTAIN 4 LANES OF TRAFFIC
 2 SEPARATE STRUCTURES 41.58' WIDE

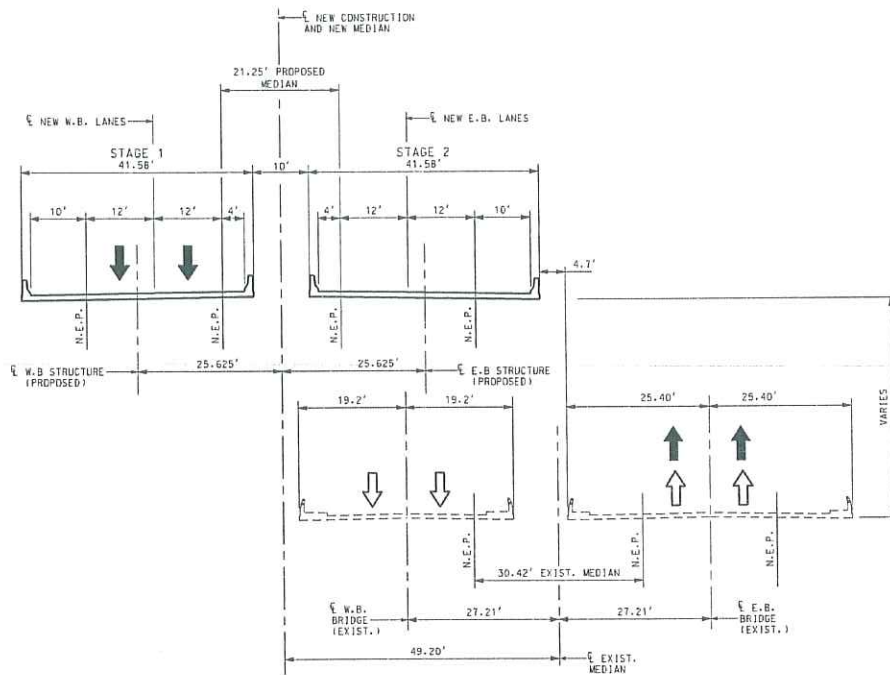


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CONSTRUCTION STAGING

REQUIRED STAGES:

- 1) CONSTRUCT 41.58' WIDE (ENTIRE) NEW WESTBOUND BRIDGE (NORTH).
- 2) SHIFT WESTBOUND TRAFFIC TO NEW WESTBOUND BRIDGE.
- 3) REMOVE EXISTING WESTBOUND BRIDGE AND APPROACHES.
- 4) CONSTRUCT 41.58' WIDE NEW EASTBOUND BRIDGE.
- 5) SHIFT EASTBOUND TRAFFIC TO NEW EASTBOUND BRIDGE (SOUTH).
- 6) REMOVE EXISTING EASTBOUND BRIDGE AND APPROACHES.

ADVANTAGES

- 1) MAINTAINS 4 LANES OF TRAFFIC AT ALL TIMES.
- 2) TWIN 41.58' WIDE BRIDGES MINIMIZES BRIDGE COST.
- 3) MINIMIZES IMPACT TO UNDERCHANNEL UTILITIES ON THE SOUTHSIDE OF EASTBOUND BRIDGE.

DISADVANTAGES

- 1) REQUIRES MAJOR ALIGNMENT CHANGE.
- 2) HIGHER PROJECT COSTS (HIGHER RETAINING WALLS ON WEST APPROACH).
- 3) DIFFICULT REMOVAL OF WESTBOUND EXISTING BRIDGE.
- 4) PROVIDES MINIMUM DECELERATION DISTANCE TO SUBDIVISION ENTRANCE.
- 5) DIFFICULT CONSTRUCTION OF NEW EASTBOUND BRIDGE.
- 6) INCREASED CONSTRUCTION TIME.
- 7) ADVERSE IMPACT TO SUBDIVISION ENTRANCE (CAUSTON BLUFF).

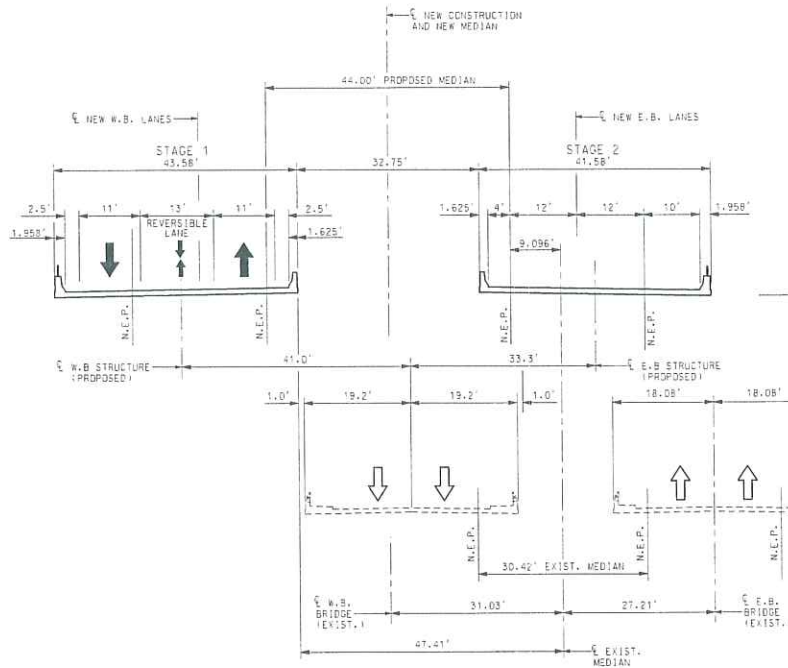


STAGE 1 TRAFFIC



STAGE 2 TRAFFIC

CONSTRUCTION STAGING ALTERNATE 7
 MAINTAIN 4 LANES OF TRAFFIC
 2 SEPARATE STRUCTURES 41.58' WIDE



CONSTRUCTION STAGING ALTERNATE 8
 MAINTAIN 4 LANES OF TRAFFIC STAGE 1
 MAINTAIN 3 LANES OF TRAFFIC STAGE 2
 2 SEPARATE STRUCTURES 43.58' AND 41.58' WIDE
 SCALE: 1"=20'

CONSTRUCTION STAGING

REQUIRED STAGES:

- 1) CONSTRUCT 43.58' WIDE (ENTIRE) NEW WESTBOUND BRIDGE (NORTH) (OFFSET 1' NORTH OF EXISTING WESTBOUND BRIDGE).
- 2) SHIFT 3 LANES, ONE BEING REVERSIBLE, TO NEW WESTBOUND BRIDGE. DURING THE AM TWO LANES SHOULD BE OPEN TO WESTBOUND TRAFFIC AND ONE LANE OPEN FOR EASTBOUND TRAFFIC. DURING THE PM TWO LANES SHOULD BE OPEN TO EASTBOUND TRAFFIC AND ONE LANE OPEN FOR WESTBOUND TRAFFIC.
- 3) REMOVE EXISTING EASTBOUND AND WESTBOUND BRIDGES AND APPROACHES.
- 4) CONSTRUCT 41.58' WIDE NEW EASTBOUND BRIDGE.
- 5) SHIFT EASTBOUND TRAFFIC TO NEW EASTBOUND BRIDGE (SOUTH).

ADVANTAGES

- 1) REMOVAL OF EXISTING BRIDGES IS SIMPLIFIED.
- 2) MINIMAL INTRUSION TO SUBDIVISIONS AND SALT MARSH WHILE MAINTAINING 3 LANES OF TRAFFIC.
- 3) SEPARATE 43.58' AND 41.58' WIDE BRIDGES MINIMIZES BRIDGE COST.
- 4) DOES NOT REQUIRE TEMPORARY REPLACEMENT OF BRIDGE TENDER HOUSE AND CONTROLS.
- 5) POTENTIALLY LEAST AFFECT TO UNDERCHANNEL UTILITIES ON SOUTHSIDE OF EASTBOUND BRIDGE.

DISADVANTAGES

- 1) REQUIRES MAJOR ALIGNMENT CHANGE.
- 2) HIGHER PROJECT COSTS (HIGHER RETAINING WALLS ON WEST APPROACH).
- 3) MAINTAINS 2 LANES PEAK TRAFFIC AND ONE LANE OFF PEAK TRAFFIC.
- 4) REQUIRES SPECIAL TRAFFIC SIGNALIZATION FOR REVERSIBLE LANE OPERATIONS.
- 5) PROVIDES MINIMUM DECELERATION DISTANCE TO SUBDIVISION ENTRANCE.



BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 051-0132-0		Chatham		SUFF. RATING		72.19
Location & Geography		Signs & Attachments				
* 007	051-0132-0	104 Highway System:	0	225 Expansion Joint Type:	02	
* 200	07	26 Functional Classification:	14	242 Deck Drains:	1	
* 6A	WILMINGTON RIVER	204 Federal Route Type:	F	243 Parapet Location:	0	
* 0	0	105 Federal Lands Highway:	0	Height:	0.00	
* 6B	CR00787	110 Truck Route:	0	Width:	0.00	
* 7A	ISLAND EXPRESSWAY	206 School Bus Route:	1	238 Curb:	1.20	1
* 7B	1 MILE OF SAVANNAH	217 Benchmark Elevation:	0000.00	239 Handrail:	1	1
* 9	5	218 Datum:	0	* 240 Median Barrier Rail:	0	
* 207	1998	19 Bypass Length:	01	241 Bridge Median Height:	0.00	
* 91	24	20 Toll:	3	Width:	0.00	
* 92A	12	21 Maintenance:	02	* 230 Guardrail Loc Dir Rear:	3	
* 92B	60	22 Owner:	02	Fwrd:	3	
* 92C	00	31 Design Load:	5	Oppo Dir Rear:	0	
* 4	69000	37 Historical Significance:	5	Fwrd:	0	
* 5	1	205 Congressional District:	01	244 Approach Slab:	3	
* 4	4	27 Year Constructed:	1963	224 Retaining Wall:	7	
* 1	1	106 Year Reconstructed:	0000	233 Posted Speed Limit:	50	
* 00787	0	33 Bridge Median:	0	236 Warning Sign:	0	
* 0	0	34 Skew:	00	234 Delineator:	0	
* 32-03.8	MMS Prefix:	35 Structure Flared:	1	235 Hazard Boards:	0	
* 81-01.9	MMS Suffix:	38 Navigation Control:	1	237 Utilities Gas:	00	
* 000	%Shared: 00	213 Special Steel Design:	4	W	00	
* 0000000000000000		267 Type of Paint:	2	Ele	22	
* 0		42 Type of Service on:	1	Telephone:	21	
* 12 Base Highway Network:	1	214 Movable Bridge:	1	Sc	00	
* 512078700	0	203 Type Bridge:	O-O-N-N	247 Lighting Street:	1	
* R	0	259 Pile Encasement:	3	Navigation:	1	
* 1	1	43 Structure Type Main:	3	Aerial:	0	
* 004.23	004.23	45 No. Spans Main:	001	* 248 County Continuity No.:	00	
* 05	Initials: EEP	44 Structure Type Appr:	1			
* jal	05	46 No. Spans Appr:	0012			
		226 Bridge Curve Horz:	0			
		111 Pier Protection:	2			
		107 Deck Structure Type:	1			
		108 Wearing Surface Type:	1			
			8			
			F			
			8			

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID:	051-0132-0	Chatham	SUFF. RATING	72.19
Programming Data				
201 Project No.:	UNKNOWN			
202 Plans Available:	4			
249 Prop. Proj. No.:	000000000000000000			
250 Approval Status:	0000			
251 P.I. No.:	00000000			
252 Contract Date:	02/01/1901			
260 Seismic No.:	00000			
75 Type Work:	31 1			
94 Bridge Imp. Cost:	\$ 2,442			
95 Roadway Imp. Cost:	\$ 267			
96 Total Imp Cost:	\$ 3,150			
76 Imp. Length:	001009			
97 Imp. Year:	1990			
114 Future ADT:	028050	Year: 2022		
Measurements				
* 29 ADT:	018700	Year: 2002		
109 % Trucks:				
* 28 Lanes On:	02	Under: 00		
210 No. Tracks On:	00	Under: 00		
* 48 Max. Span Length:	0150			
* 49 Structure Length:		798		
51 Br. Rwdy. Width:		28.00		
52 Deck Width:		34.00		
* 47 Tot. Horz. Cl:		28.00		
50 Curb/Sdewlk Width:		2.10/2.10		
32 Approach Rdwy Width:		023		
* 229 Shoulder Width:				
Rear Lt:	6.00	Type: 8 Rt:	6.00	
Fwd Lt:	6.00	Type: 8 Rt:	6.00	
Ratings				
65 Inventory Rating Method:				2
63 Inventory Rating Method:				2
66 Inventory Type:				36
64 Operating Type:				70
231 Calculated Loads				
H-Modified:	20			0
HS-Modified:	25			0
Type 3:	28			0
Type 3s2:	40			0
Timber:	36			0
Piggyback:	00			0
261 H Inventory Rating:	23			
262 H Operating Rating:	44			
67 Structural Evaluation:				6
58 Deck Condition:				6
59 Superstructure Condition:				8
* 227 Collision Damage:				0
60A Substructure Condition:				6
60B Scour Condition:				7
60C Underwater Condition:				5
71 Waterway Adequacy:				8
61 Channel Protection Cond:				8
68 Deck Geometry:				3
69 UnderClr. Horz/Vert:				N
72 Appr. Alignment:				8
62 Culvert:				N
Posting Data				
70 Bridge Posting Required:				5
41 Struct Open, Posted, Cl:				A
* 103 Temporary Structure:				0
232 Posted Load				-Modified: 00
HS-Modified:	00			
Type 3:	00			
Type3s2:	00			
Timber:	00			
Piggyback:	00			
253 Notification Date	02/01/1901			
253 Fed Notify Date:	02/01/1901			0

Hydraulic Data

215 Waterway Data				
Highwater Elev.:	0000.0	Year: 1900		
Avg. Streambed Elev.:	0000.0	Freq.: 00		
Drainage Area:	00000			
Area Of Opening:	000000			
113 Scour Critical:	T			
216 Water Depth:	23.0	Br. Height: 30.2		
222 Slope Protection:	1			
221 Spur Dikes Rear:	0	Fwd: 0		
219 Fender System:	8			
220 Dolphin:	4			
223 Culvert Cover:	000			
Type:	0			
No. Barrels:	0			
Width:	0.00	Height: 0.00		
Length:	0	Apron: 0		
* 265 U/W Insp. Area:	2	Diver: RM		
* Location I.D. No.:	051-00787X-003.47E			

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 051-5027-0		Chatham		SUFF. RATING		73.05	
Location & Geography				Signs & Attachments			
*	Structure I.D.No:	051-5027-0		104 Highway System:	0	225 Expansion Joint Type:	02
*	200 Bridge Information	01		26 Functional Classification:	14	242 Deck Drains:	1
*	6A Feature Int:	WILMINGTON RIVER		204 Federal Route Type:	F	No.: 00055	
*	6B Critical Bridge:	0		105 Federal Lands Highway:	0	243 Parapet Location:	3
*	7A Route Number Carried:	CR00787		110 Truck Route:	0	Height:	1.50
*	7B Facility Carried:	ISLAND EXPRESSWAY		206 School Bus Route:	1	Width:	1.00
*	9 Location:	1 MI E OF SAVANNAH		217 Benchmark Elevation:	0000.00		0.50
	2 DOT District:	5		218 Datum:	0	Curb:	1
	207 Year Photo:	1998		19 Bypass Length:	01	Handrail:	7
	91 Inspection Frequency:	24	Date: 09/23/2002	20 Toll:	3	Median Barrier Rail:	0
	92A Fract Crit Insp Freq:	12	Date: 06/26/2003	21 Maintenance:	02	240 Bridge Median Height:	0.00
	92B Underwater Insp Freq:	60	Date: 06/18/2003	22 Owner:	02	Width:	0.00
	92C Other Spc. Insp Freq:	00	Date: 02/01/1901	31 Design Load:	5		
*	4 Place Code:	69000		37 Historical Significance:	5		
*	5 Inventory Route (O/U):	1		205 Congressional District:	01	* 230 Guardrail Loc Dir Rear:	3
	Type:	4		27 Year Constructed:	1989	Fwrd:	3
	Designation:	1		106 Year Reconstructed:	0000	Oppo Dir Rear:	0
	Number:	00787		33 Bridge Median:	0	Fwrd:	0
	Direction:	0		34 Skew:	00	244 Approach Slab:	3
*	16 Latitude:	32-03.8	MMS Prefix:	35 Structure Flared:	0	Retaining Wall:	7
*	17 Longitude:	81-01.9	MMS Suffix:	38 Navigation Control:	1	233 Posted Speed Limit:	50
	98 Border Bridge:	000	%Shared: 00	213 Special Steel Design:	4	236 Warning Sign:	0
	99 ID Number:	0000000000000000		267 Type of Paint:	2	234 Delineator:	0
*	100 STRAHNET:	0		42 Type of Service on:	1	235 Hazard Boards:	0
	12 Base Highway Network:	1		214 Movable Bridge:	1	237 Utilities Gas:	00
	13A LRS Inventory Route:	512078700		203 Type Bridge:	D-O-N-N	W	00
	13B Sub Inventory Route:	0		259 Pile Encasement:	3	Ele	21
*	101 Parallel Structure:	L		43 Structure Type Main:	3	Telephone:	00
	102 Direction of Traffic	1		45 No. Spans Main:	001	S	00
*	264 Road Inventory Mile Post:	003.48		44 Structure Type Appr:	5	247 Lighting Street:	1
*	208 Inspection Area:	05	Initials: EEP	46 No. Spans Appr:	0009	Navigation:	1
	Engineer's Initial:	jal		226 Bridge Curve Horiz:	0	Aerial:	0
				111 Pier Protection:	2		
				107 Deck Structure Type:	1		
				108 Wearing Surface Type:	1	* 248 County Continuity No.:	00
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					8		
					8		

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BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID:	051-5027-0	Chatham	SUFF. RATING	73.05
Programming Data				
201 Project No.:	MA-F-005-5 (12) CT.5			
202 Plans Available:	1			
249 Prop. Proj. No.	000000000000000000			
250 Approval Status:	0000			
251 P.I. No.:	0000000			
252 Contract Date:	02/01/1901			
260 Seismic No.:	00000			
75 Type Work:	00 0			
94 Bridge Imp. Cost:	\$ 5			
95 Roadway Imp. Cost:	\$ 10			
96 Total Imp Cost:	\$ 20			
76 Imp. Length:	000000			
97 Imp. Year:	0000			
114 Future ADT:	030300	Year: 2022		
Measurements				
* 29 ADT:	020200	Year: 2002		
109 % Trucks:				
* 28 Lanes On:	02	Under: 00		
210 No. Tracks On:	00	Under: 00		
* 48 Max. Span Length:	0144			
* 49 Structure Length:	834			
51 Br. Rwdy. Width:	27.10			
52 Deck Width:	37.80			
* 47 Tot. Horz. Cl:	27.10			
50 Curb/Stewlk Width:	4.00/4.00			
32 Approach Rdwy Width:	023			
* 229 Shoulder Width:				
Rear Lt:	6.00	Type: 8	Rt: 6.00	
Fwd Lt:	6.00	Type: 8	Rt: 6.00	
Pavement Width:				
Rear:	23.00	Type: 2		
Fwd:	23.00	Type: 2		
Intersection Rear:	0	Fwd: 0		
36 Safety Features Br. Rail:				
Transition:				
App. G. Rail:	1			
App. Rail End:	2			
53 Minimum Cl.Over:				
Under:	N			
* 228 Min. Vertical Cl				
Act. Odin Dir:				
Oppo. Dir:				
Posted Odin. Dir:				
Oppo. Dir:				
55 Lateral Underel. Rt:	N	99.90		
56 Lateral Underel. Lt:		0.00		
* 10 Max Min Vert Cl:		99 ' 99 " Dir: 0		
39 Nav Vert Cl:	021	Horz: 0100		
116 Nav Vert Cl Closed:	021			
245 Deck Thickness Main:		6.00		
Deck Thick Approach:		7.00		
246 Overlay Thickness:		0.00		
212 Year Last Painted:	Sup: 1989	Sub: 1901		
Hydraulic Data				
215 Waterway Data				
Highwater Elev.:	0000.0	Year: 1900		
Avg. Streambed Elev.:	0000.0	Freq.: 00		
Drainage Area:	00000			
Area Of Opening:	000000			
113 Scour Critical:	T			
216 Water Depth:	25	Br. Height: 30.5		
222 Slope Protection:	1			
221 Spur Dikes Rear:	0	Fwd: 0		
219 Fender System:	8			
220 Dolphin:	4			
223 Culvert Cover:	000			
Type:	0			
No. Barrels:	0			
Width:	0.00	Height: 0.00		
Length:	0	Apron: 0		
* 265 U/W Insp. Area:	2	Diver: RM		
Posting Data				
70 Bridge Posting Required:	5			
41 Struct Open, Posted, Cl:	A			
* 103 Temporary Structure:	0			
-Modified:	00			
232 Posted Load				
HS-Modified:	00			
Type 3:	00			
Type 3s2:	00			
Timber:	00			
Piggyback:	00			
253 Notification Date	02/01/1901			
253 Fed Notify Date:	02/01/1901			

* Location I.D. No.: 051-00787X-003.48E

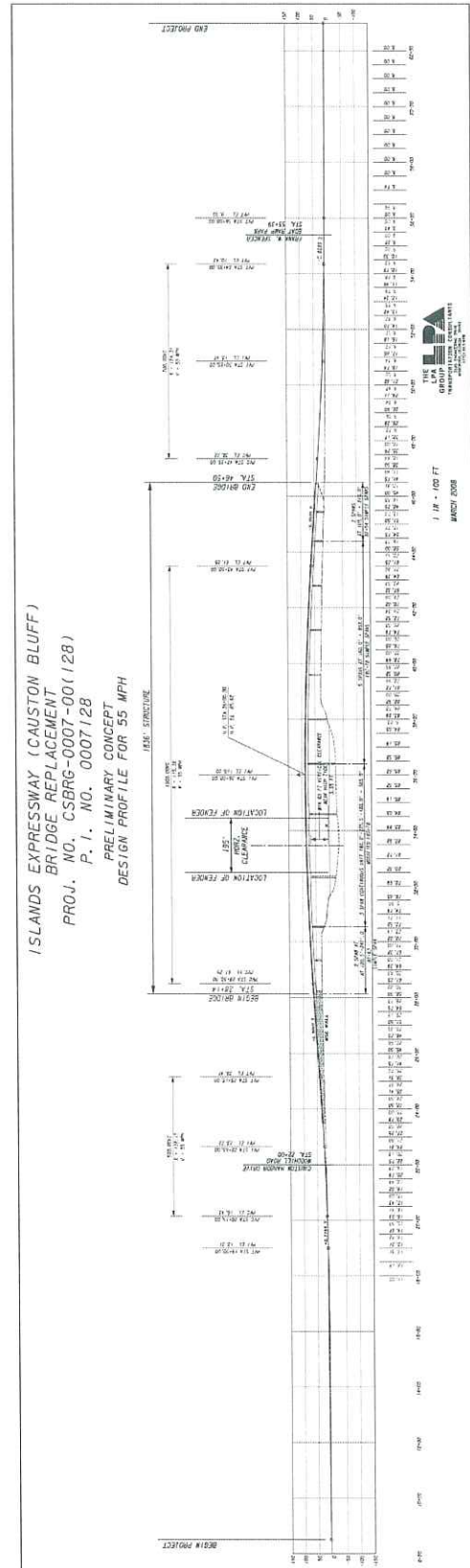
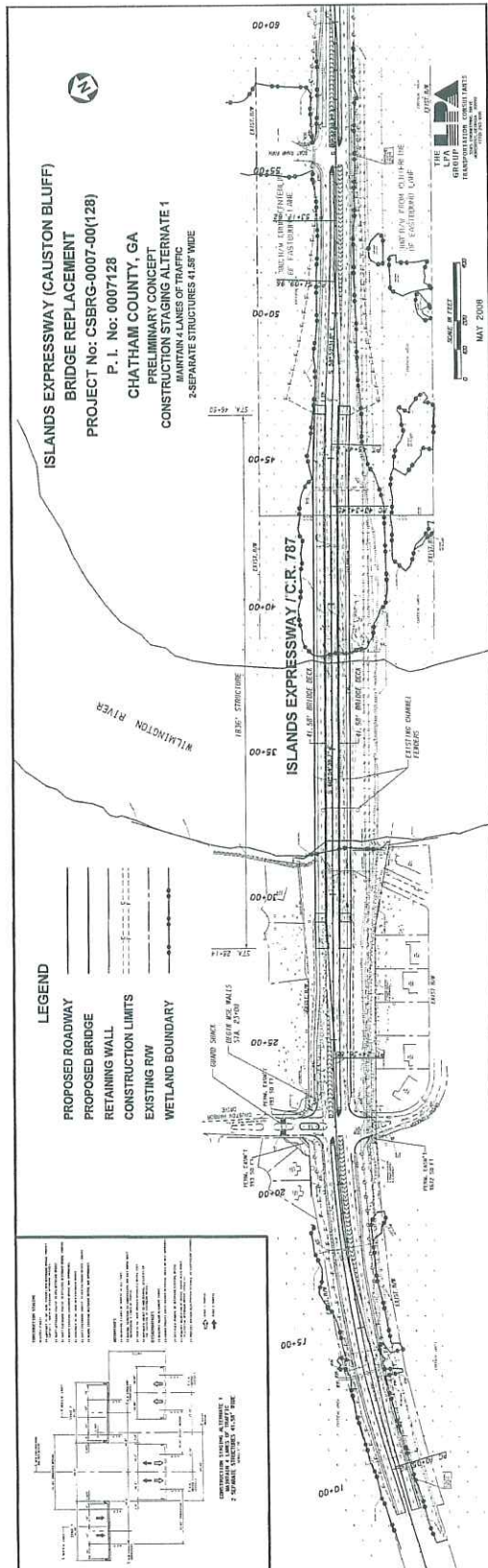
CSBRG 0007-00(128), Chatham County
 P.I. No. 0007128

Alternatives Matrix

Alternatives	1	2	3	4	5	6	7	8
<u>Attributes</u>								
Project Length	1.2 miles	1.2 miles	1.2 miles	1.2 miles	1.2 miles	1.2 miles	1.2 miles	1.2 miles
Construction Cost	\$ 35,189,156.00	\$ 36,510,181.05	\$ 36,501,968.45	\$ 32,892,423.97	\$ 37,866,407.00	\$ 35,813,284.66	\$ 36,930,200.26	\$ 34,400,288.80
ROW Cost	\$34,200.00	\$214,291.00	\$50,305.00	\$12,700.00	\$45,430.00	\$20,100.00	\$99,300.00	\$34,200.00
Utility Relocations Cost	\$7,776,500.00	\$7,776,500.00	\$7,776,500.00	\$7,836,500.00	7,776,500.00	\$9,323,770.00	7,776,500.00	7,776,500.00
TOTAL PROJECT COSTS	\$ 42,999,856.00	\$ 44,500,972.05	\$ 44,328,773.45	\$ 40,741,623.97	\$ 45,688,337.00	\$ 45,157,164.66	\$ 44,806,000.26	\$ 42,210,988.80
Relocations	0	0	0	0	0	0	0	0
Historic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Archaeological	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wetlands impacts w/ no walls on east side	1.52 Ac.	1.3 Ac.	1.81 Ac.	1.41 Ac.	1.78 Ac.	2.48 Ac.	1.50 Ac.	1.52 Ac.
Endangered Species - Manatee, Short Nosed Sturgeon, (Risk is same for all Alternates during construction.)								
Park/Boat Ramp Impacts	5256 Sq. Ft.	5618 Sq. Ft.	9981 Sq. Ft.	5325 Sq. Ft.	5762 Sq. Ft.	6140 Sq. Ft.	5190 Sq. Ft.	5256 Sq. Ft.
Time of Construction	2 Yr. 10 Mo.	2 Yr. 8 Mo.	2 Yr. 7 Mo.	2 Yr. 6 Mo.	3 Yr. 5 Mo.	3 Yr. 2 Mo.	2 Yr. 10 Mo.	2 Yr. 6 Mo.

* All costs shown are non-reimbursable.

Maritime Delays - (Similar Construction Delays for All Alternatives.)



LEGAL NOTICE

CC NO. 163959

REQUEST FOR PROPOSALS
QUALIFICATION BASED SELECTION (QBS)

Sealed proposals will be received until **2:00 P.M. on DECEMBER 8, 2009** in Chatham County Purchasing and Contracting Department, **1117 EISENHOWER DRIVE, SUITE C, SAVANNAH, GA.** for: **QBS 10-2-4 ENGINEERING SERVICES FOR THE ISLANDS EXPRESSWAY OVER THE WILMINGTON RIVER BRIDGE REPLACEMENT.**

A PRE-PROPOSAL CONFERENCE will be held at **2:00P.M. NOVEMBER 19, 2009, AT 1117 EISENHOWER DRIVE, SUITE C, SAVANNAH, GA.**

Invitation to Submit Proposal Packages are available at 1117 Eisenhower Drive, Suite C, Savannah, Georgia, on the Chatham County Web Site www.chathamcounty.org ,or by calling **Robert Marshall, Senior Procurement Specialist, at (912) 790-1622.**

CHATHAM COUNTY RESERVES THE RIGHT TO REJECT ANY/AND OR ALL PROPOSALS AND TO WAIVE ALL FORMALITIES. THIS WILL BE THE ONLY SOLICITATION FOR THIS PROJECT. ONLY THOSE FIRMS RESPONDING TO THE QBS WILL BE ALLOWED TO PARTICIPATE IN THE PROJECT.

"CHATHAM COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER, M/F/H, ALL PROPOSERS ARE TO BE EQUAL OPPORTUNITY EMPLOYERS"



WILLIAM R. PARSON, CPPO, PURCHASING AGENT

SAVANNAH N/P INSERT: Nov. 9, Nov. 17, 2009

Please send affidavit to:
Chatham County Purchasing and Contracting Department
P.O. Box 15180
Savannah, GA 31416
912-790-1622