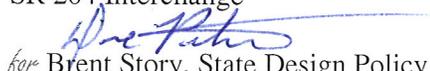


**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**OFFICE OF DESIGN POLICY & SUPPORT  
INTERDEPARTMENTAL CORRESPONDENCE**

**FILE** P.I. # 522870 **OFFICE** Design Policy & Support  
NH000-0111-01(024)  
GDOT District 5 - Jesup  
Chatham County **DATE** February 4, 2011  
SR 204 Interchange

**FROM**  Brent Story, State Design Policy Engineer

**TO** SEE DISTRIBUTION

**SUBJECT** APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

**DISTRIBUTION:**

Genetha Rice-Singleton, Program Control Administrator  
Bobby Hilliard, State Program Delivery Engineer  
Cindy VanDyke, State Transportation Planning Administrator  
Angela Robinson, Financial Management Administrator  
Glenn Bowman, State Environmental Administrator  
Ben Rabun, State Bridge Engineer  
Kathy Zahul, State Traffic Engineer  
Georgene Geary, State Materials & Research Engineer  
Ron Wishon, State Project Review Engineer  
Jeff Baker, State Utilities Engineer  
Ken Thompson, Statewide Location Bureau Chief  
Tony Collins, District Engineer  
Brad Saxon, District Preconstruction Engineer  
Karon Ivery, District Utilities Engineer  
Robert Murphy, Project Manager  
BOARD MEMBER - 1<sup>st</sup> and 12<sup>th</sup> Congressional District

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

PROJECT CONCEPT REPORT

Project Number: NH000-0111-01(024)  
County: Chatham  
P. I. Number: 522870  
Federal Route Number: N/A  
State Route Number: SR 204

SR 204/Abercorn Street Extension Improvements  
at King George Boulevard (CR 71),  
including construction of a grade separated interchange

Submitted for approval

DATE 12/16/2010 Thomas M. Crochet, PE, PTOE Thomas M. Crochet  
Design Consultant - McGee Partners, Inc.  
DATE 12/20/2010 Bobby Hilliard, PE Bobby Hilliard  
State Program Delivery Engineer  
DATE 12/16/2010 Robert P. Murphy Robert P. Murphy  
Project Manager

Recommendation for approval:

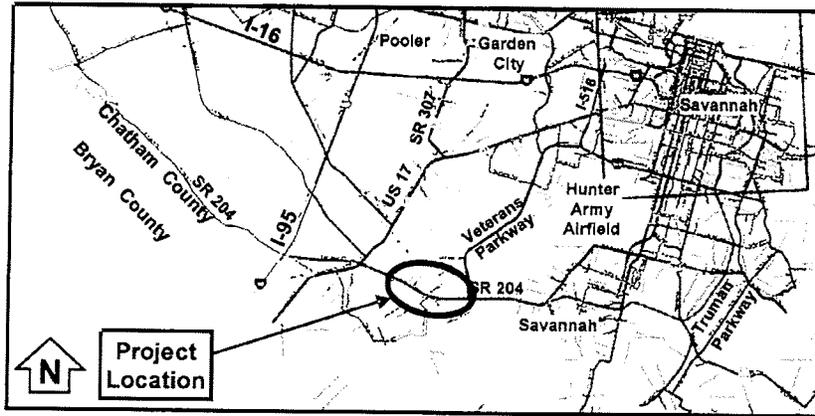
DATE 7/29/2010 \* GENETHA DICE-SINGLETON / dfjs  
Program Control Administrator  
DATE 8/2/2010 \* GLEN BOWMAN / dfjs  
State Environmental Administrator  
DATE \_\_\_\_\_  
State Traffic Engineer  
DATE 7/29/2010 \* ROD WISHAW / dfjs  
Project Review Engineer  
DATE 7/28/2010 \* LEE WILKINS FOR JEFF BAKER / dfjs  
State Utilities Engineer  
DATE \_\_\_\_\_  
District Engineer / District Utilities Engineer  
DATE 7/29/2010 \* PAUL LINES / dfjs  
State Bridge Design Engineer  
DATE \_\_\_\_\_  
State Transportation Financial Management Administrator

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).

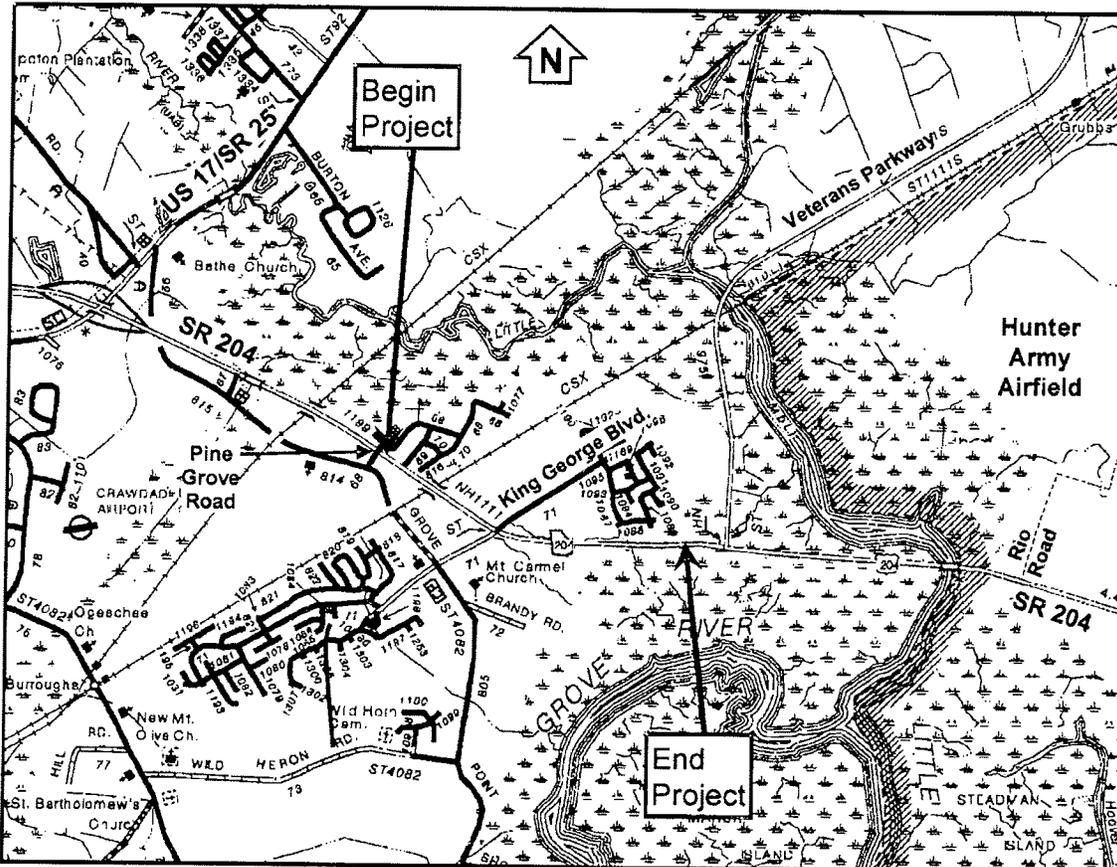
DATE 7/30/2010 \* ANGELA ALEXANDER / dfjs  
State Transportation Planning Administrator

\* RECOMMENDATION ON FILE

### Project Location Map



### Project Limits Map



**Need and Purpose:**

The purpose of Project NH000-0111-01(024) is to improve travel time and reduce crash frequency along SR 204 at its intersection with King George Boulevard. This signalized intersection is currently operating at level of service (LOS) F with excessive delays, which negatively effects overall travel time along SR 204. While the crash and injury rates for the section of SR 204 between Pine Grove Road and Veterans Parkway are slightly below the statewide averages for similar facilities, there is a high incidence of rear-end crashes. Rear-end crashes comprise 80 percent of the total crashes.

Detailed Need and Purpose Statement is attached.

**Description of the Proposed Project:**

The proposed project would construct a grade separated interchange at the intersection of SR 204/Abercorn Street Extension and King George Boulevard (CR 71) in unincorporated Chatham County. The project would begin just east of Pine Grove Road (CR 68) and end just west of Veterans Parkway (CR 975). The proposed project length is 1.53 miles, with the project beginning at Mile Log 11.94 and ending at Mile Log 13.48. SR 204 would be grade separated over King George Boulevard. The existing roadway of SR 204 consists of four 12-foot basic lanes, a 20-foot median with concrete barrier, and 12-foot outside shoulders, 10-foot paved with turn lanes are provided at various locations. The proposed project would maintain the four 12-foot basic lanes and a 20-foot median with concrete barrier. Outside shoulders would be 14-foot graded, 12-foot paved. Auxiliary lanes would be included in both directions along SR 204 between Veterans Parkway and the King George Boulevard interchange ramps. No additional basic lanes would be added to SR 204. However, the project would be constructed so as to not preclude the widening of SR 204 at a later date in order to provide for six basic lanes. The interchange ramp configuration would include loop ramps in the northwest and southeast quadrants, along with a semi-direct ramp from westbound SR 204 to northbound King George Boulevard. Interchange lighting would be included in the project. With the elimination of the traffic signal on SR 204 at King George Boulevard, the proposed project would substantially reduce delays on SR 204 at this location and would also greatly reduce the number of rear-end crashes at this location. The project termini were established so as to properly end the parallel westbound entrance ramp near Pine Grove Road on the western end, and provide auxiliary lanes between the King George Boulevard ramps and the Veterans Parkway ramps on the eastern end.

Is the project located in a PM 2.5 Non-attainment area?  Yes  No

Is this project located in an Ozone Non-attainment area?  Yes  No

PDP Classification: Major  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): SR 204

**Traffic (AADT):**

Current (2009): 55,700 Build Year (2015): 70,200 Design Year (2035): 82,700

**Existing design features:**

SR 204/Abercorn Street Extension (Mainline)

- Typical Section:
  - Four basic 12-foot lanes (two in each direction)
  - 20-foot median with concrete barrier
  - Outside shoulders: 12-foot overall, 10-foot paved
- Posted speed: 55 mph
- Minimum radius for curve: 5730 ft
- Maximum superelevation rate for curve: 8%
- Maximum grade: 3.8%
- Width of right of way: 200-430 ft

King George Boulevard (CR 71)

- Typical Section:
  - Four 12-foot lanes (two in each direction)
  - 24-foot raised median
  - Outside shoulders: curb & gutter with intermittent sidewalks
- Posted speed: 35 mph
- Minimum radius for curve: 2292 ft
- Maximum superelevation rate for curve: 4%
- Maximum grade: 2.1%
- Width of right of way: 100-135 ft

Project Complete

- Major structures:

	Structure ID	Length x Width (feet)	Sufficiency Rating	Minimum Vertical Clearance	Design Load
Four-lane bridge on SR 204 (MP 12.49) over CSX Railroad	051-0075-0	178 x 90	86.10	23' 1"	HS-20+

- Major interchanges or intersections along the project:
  - SR 204 At-Grade, Signalized Intersection at Pine Grove Road (CR 68)
  - SR 204 At-Grade, Signalized Intersection at King George Boulevard (CR 71)
  - SR 204 Grade Separated Interchange at Veterans Parkway (CR 975)
- ITS System: ITS components currently within the project limits consist of a changeable message sign (CMS) on WB SR 204 west of Pine Grove Road with communications via modem. Beyond the project limits, there is a video camera at the intersection of SR 204 at I-95
- Existing length of roadway segment and the beginning mile logs: 1.53 miles in Chatham County; Beginning Mile Log 11.94; Ending Mile Log 13.48



Ramps

- Proposed typical section:
  - Single Lane: One 16-foot lane
  - Multi-Lane: Two 12-foot lanes
  - Outside shoulders: 8-foot overall, 6-foot paved
  - Inside shoulders: 6-foot overall, 4-foot paved
- Proposed design speed:
  - Diagonal: 35-40 mph
  - Loop (WB): 35 mph
  - Loop (EB): 30 mph
- Proposed maximum grade: 5.0%                      Maximum grade allowable: 8%
- Proposed maximum grade Side Street: N/A
- Proposed maximum grade driveway: N/A
- Minimum radius of curve:
 

	<u>Proposed</u>	<u>Allowable</u>
○ 40 mph (Diagonal)	450 ft	444 ft
○ 35 mph (Diagonal)	320 ft	314 ft
○ 35 mph (Loop)	300 ft	292 ft
○ 30 mph (Loop)	200 ft	200 ft
- Maximum superelevation rate:
 

	<u>Proposed</u>	<u>Allowable</u>
○ Diagonal:	8%	8%
○ Loop:	10%	10%

Project Complete

- Right of Way
  - Number of parcels: 22                      Number of displacements: 1
    - Businesses: 1
    - Residences: 0
    - Mobile homes: 0
    - Other: 0
  - Note: Easements may be required from approximately 15 additional parcels should sound barriers be warranted and included in the project along the south side of SR 204 east of King George Boulevard.

• Structures – Bridges:

	Length (feet)	Width (feet)	Sufficiency Rating
<u>SR 204 over CSX Railroad (east fork)</u> Existing four-lane, three-span bridge to accommodate proposed WB auxiliary lane for parallel entrance ramp with reduced shoulders, existing bridge railings to be replaced and may need to accommodate sound barriers	178	90	86.10
<u>SR 204 over King George Blvd.</u> New four-lane, single-span bridge with MSE Wall abutments, including EB Ramp and WB Ramp tapers on the bridge	159	171	N/A

- Structures – Retaining Walls:

	Type	Length (feet)	Height (feet)
WB SR 204 Mainline, outside shoulder west of CSX Railroad (east fork)	Side Barrier	600	2-5
EB SR 204 Mainline, outside shoulder approaching bridge over King George Blvd.	MSE	1000	6-27
WB SR 204 Mainline, outside shoulder approaching bridge over King George Blvd.	MSE	530	5-18
WB SR 204 to King George Blvd. North Ramp, outside shoulder	Side Barrier	1000	2-6
King George Blvd. to EB SR 204 Ramp, outside shoulder	Side Barrier	820	3-8

- Major intersections and interchanges:
  - SR 204 At-Grade, Signalized Intersection at Pine Grove Road (CR 68)
  - SR 204 Grade Separated Interchange at King George Boulevard (CR 71)
  - SR 204 Grade Separated Interchange at Veterans Parkway (CR 975)
  - King George Boulevard Signalized Intersection at Mariners Way (new signal location)
  - King George Boulevard Signalized Intersection at Eastbound Ramps (new signal location)
  - King George Boulevard Unsignalized Intersection at Westbound Ramps
- ITS System: Additional ITS components proposed within the project limits include: video cameras along SR 204 at Pine Grove Road, King George Boulevard and Veterans Parkway, with fiber communications between ITS devices and signals and communications to GDOT via DSL modem.
- Traffic control during construction:
  - Existing traffic will be maintained on the project during construction.
  - During construction of grade separation over King George Boulevard, SR 204 traffic (four-lanes) will be maintained on future WB ramps and temporary pavement.
- Transportation Management Plan anticipated: Yes ( ) No ( X )
- Design Exceptions to controlling criteria anticipated:

	<u>Yes</u>	<u>No</u>	<u>Undetermined</u>
HORIZONTAL ALIGNMENT:	( )	( X )	( )
LANE WIDTH:	( )	( X )	( )
SHOULDER WIDTH:	( )	( X )	( )
VERTICAL GRADES:	( )	( X )	( )
CROSS SLOPES:	( )	( X )	( )
STOPPING SIGHT DISTANCE:	( )	( X )	( )
SUPERELEVATION RATES:	( )	( X )	( )
VERTICAL ALIGNMENT:	( )	( X )	( )
SPEED DESIGN:	( )	( X )	( )
VERTICAL CLEARANCE:	( )	( X )	( )
BRIDGE WIDTH:	( X )	( )	( )
BRIDGE STRUCTURAL CAPACITY:	( )	( X )	( )
LATERAL OFFSET TO OBSTRUCTION:	( )	( X )	( )

- Bridge Width: Design Exception would be required for outside shoulder width along WB SR 204 on the bridge over CSX Railroad. Based on a four-lane freeway with greater than 250 DHV trucks, the required outside usable shoulder width is 12 feet. AASHTO requires “the clear width on bridges carrying freeway traffic should be as wide as the approach roadway.” The proposed project would not widen or replace this bridge. The inclusion of a third 12-foot lane as a parallel entrance ramp would result in a 2-foot minimum outside shoulder width while maintaining the minimum AASHTO inside shoulder width of 4 feet. CSX Railroad has indicated their desire to provide for width under the bridge for an additional track(s), which would require replacement of the bridge in order to provide required horizontal clearances. Therefore, widening of the existing bridge is not a likely option since CSX would prefer replacement to provide width for future tracks, adding substantial cost to the project. The outside bridge rails will be replaced with jersey barriers.
- Design Variances anticipated:
  - Minimum Profile Elevation above High Water (Design Policy Manual 4.3.7): Portions of the existing SR 204 roadway from 2000 feet west of Veterans Parkway to the eastern end of the project, along with the Veterans Parkway ramps, are below the 100 year flood elevation. The 100-year flood elevation in this area varies from 11 feet to 13 feet, 1988 NAVD. While the SR 204 roadway profile is generally at or above the flood elevation, portions of the roadway and shoulders fall beneath the flood elevation at depths of less than one foot. Flooding depths on the ramps are also less than one foot with the exception of the SR 204 eastbound ramp to northbound Veterans Parkway, which would experience depths up to 2.7 feet. While these areas are within the project limits, construction will be limited to milling, inlay and striping at the locations below the flood elevation. Raising the elevation of the roadway and ramps would require the reconstruction of the median barrier, possible jacking of the Veterans Parkway bridge and would have a substantial cost.
  - Bike Lanes (Design Policy Manual Chapter 9): The Design Policy Manual indicates “bike lanes and related improvements shall be incorporated into all widening and reconstruction projects when there is an existing bikeway or if the project is on an approved Bicycle Route.” While not a state bicycle route, SR 204 is included as a bicycle corridor in the Chatham County MPO’s “Chatham County Bikeways Plan.” The SR 204 corridor was developed as a limited access roadway and has been evolving into an urban freeway, including existing interchanges at US 17 and Veterans Parkway and a proposed interchange at King George Boulevard. AASHTO’s “Guide for the Development of Bicycle Facilities” indicates that “normally, freeways in urban areas will have characteristics making them highly undesirable to permit bicycle use.” With high volumes at ramp entrances and exits, inclusion of bike lanes in the roadway shoulder would not provide a suitable route for bicycle travel and will not be included in this project. However, the project will be developed so as to not preclude the construction of a parallel, separated facility for bikes and other non-motorized modes within the right of way of SR 204.

- Environmental concerns:
  - Archaeology: One eligible site is not worthy of preservation in place, the project would impact the site and mitigation is anticipated
  - History: CSX Railroad, no adverse affect anticipated
  - UST: Parkers, Circle K/Shell
  - Wetlands & Streams: PCN anticipated for Section 404 minor stream and wetland impacts, stream buffer variance not likely required
  - Coastal Zone: Stream and saltwater marsh near Veterans Parkway should not be impacted
  - Noise: Numerous residential and commercial properties along SR 204 will be evaluated to determine impacted areas and warrants for inclusion of sound barriers
- Anticipated level of environmental analysis:
  - Are Time Savings Procedures appropriate? Yes ( ) No (X)
  - Categorical Exclusion (CE) ( )
  - Environmental Assessment/Finding of No Significant Impact (EA/FONSI) (X)
  - Environmental Impact Statement (EIS) ( )
- Utility involvements:
  - Gas: Atlanta Gas Light
  - Communications: AT&T, Qwest, Coastal Communications, Comcast
  - Electric: Georgia Power
  - Water: City of Savannah
  - Sewer: City of Savannah
  - Railroad: CSX Railroad
  - ITS: GDOT
  - Traffic Signals: GDOT, Chatham County
- VE Study anticipated: Yes (X) No ( )  
*(Conducted March 15, 2010, Implementation Approved July 7, 2010)*
- Benefit/Cost Ratio: 1.76

**Project Cost Estimates and Funding Responsibilities:**

	<u>Amount</u>	<u>By Whom</u>
a. Preliminary Engineering:	\$ 6,629,055	GDOT (state/federal)
b. Construction :	\$ 29,832,133 *	GDOT (state/federal)
c. Right of Way:	\$ 14,590,000 **	GDOT (state/federal)
d. Utilities:	\$ 1,454,440 ✓	GDOT (state/federal)
e. Mitigation:	\$ 2,000,000 ***	GDOT (state/federal)

\* Construction cost includes: Construction, Engineering and Inspection, Fuel Cost Adjustment, and Asphalt Cement Cost Adjustment.

\*\* \$7,320,000 spent to date on early acquisition of right of way is included in the costs above. Remaining right of way acquisition costs are estimated at \$7,270,000.

\*\*\* OES estimate for archaeology mitigation.

**Project Activities Responsibilities:**

- Design: GDOT/McGee Partners
- Right of Way Acquisition: GDOT
- Right of Way Funding (real property): GDOT
- Relocation of Utilities: Utility Companies (Coordination by GDOT)
- Letting to contract: GDOT
- Supervision of construction: GDOT
- Providing material pits: GDOT (*See Note B in Comments Section*)
- Providing detours: N/A
- Environmental Studies/Documents/Permits: GDOT/McGee Partners/Edwards-Pitman
- Environmental Mitigation: GDOT

**Coordination:**

- Initial Concept Meeting: Held on August 23, 2006, minutes attached
- Concept meeting date and brief summary: Held on Feb. 19, 2010, minutes attached
- P. A. R. meetings, dates and results: Not anticipated to be required
- FEMA: Coordination not anticipated to be required
- USCG and/or TVA: Not required
- Public involvement (*summaries attached*):
  - Public information open houses (PIOH) held in November 2006, June 2007 and on June 17, 2010
  - Key stakeholder meetings held with:
    - Hunter Army Airfield
    - Armstrong Atlantic State University
    - St-Joseph's-Candler Hospital
    - Savannah Mall
    - Forest Cove and Grove Hill Subdivisions
- Local government comments: The following comments were made at the Concept Team Meeting, or shortly thereafter.
  - Chatham County requested that interchange lighting be included in the project. The Department has since agreed to this request.
  - The MPO and City of Savannah requested that bicycle facilities be included in the project along SR 204.
  - The City of Savannah expressed concern about the project's impact on the SR 204/Rio Road Intersection.
  - The City of Savannah emphasized the need for improvements along SR 204 between Rio Road and Truman Parkway.
  - The MPO emphasized need to coordinate with CAT on bus operations and stop locations.

- Other projects in the area:
 

<u>Project No.</u>	<u>PI No.</u>	<u>Description</u>
○ NHS00-0002-00(922)	0002922	SR 204/Abercorn St. from Rio Road to Harry S Truman Parkway, Phase V
○ TBD	TBD	SR 204/Abercorn St. Improvements at Rio Road
○ NHS00-0002-00(921)	0002921	Harry S Truman Parkway from Abercorn St to Whitfield Ave - Phase V
- Railroads: CSX Railroad has indicated that additional tracks are planned for their corridors crossing SR 204 in the project area. Existing SR 204 bridges over the railroad would have to be replaced to accommodate additional tracks. The proposed project does not include widening or replacing the bridges over CSX Railroad. However, the bridge rails would likely be replaced on the bridge over CSX Railroad east of Pine Grove Road.
- Other coordination to date (*summaries attached*):
  - Briefings with CUTS Technical Coordinating Committee – April 2006, June 2006, August 2006, October 2006, December 2006, January 2007, April 2007, August 2007, December 2007
  - Briefings with CUTS Policy Committee – August 2006, August 2007
  - Briefing with CUTS Citizens Advisory Committee – August 2007
  - Briefing with CUTS Advisory Committee on Accessible Transportation – June 2007

**Scheduling – Responsible Parties’ Estimate:**

	<u>Begin</u>	<u>End</u>
• Time to complete the environmental process:	11/2009	10/2011
• Time to complete preliminary construction plans:	9/2010	7/2011
• Time to complete right of way plans:	10/2011	1/2012
• Time to complete the Section 404 Permit:	1/2012	5/2012
• Time to complete final construction plans:	12/2011	10/2012
• Time to complete the purchase of right of way:	3/2012	2/2013
• Time to complete mitigation of archaeology site:	2/2011	2/2013

**Other alternates considered:**

- Transportation Systems Management (TSM): Intersection and signal upgrades. Eliminated due to unacceptable build and design year traffic operations and anticipated increase in crash rates.
- Alternate A1: Eight-lane with at-grade signalized intersections. Eliminated due to unacceptable design year traffic operations and anticipated increase in crash rates.
- Alternate A2: Six-lane with at-grade signalized intersections. Eliminated due to unacceptable design year traffic operations and anticipated increase in crash rates.
- Alternate B1: Eight-lane with at-grade signalized intersections, including “continuous flow intersection” at King George Boulevard. Eliminated due to unacceptable design year traffic operations and anticipated increase in crash rates.
- Alternate B2: Six-lane with at-grade signalized intersections, including “continuous flow intersection” at King George Boulevard. Eliminated due to unacceptable design year traffic operations and anticipated increase in crash rates.

- Alternate C: Several variations providing a six-lane freeway from US 17/SR 25 to Rio Road were considered as capacity improvements. These typically included grade-separated interchanges at King George Boulevard and Pine Grove Road. While these alternatives would provide desirable level of service for the corridor, they were cost prohibitive. However, the preferred alternative will be developed so as not to preclude the addition of basic lanes on SR 204 and the completion of the conversion to a freeway from US 17 to Rio Road.
- Alternate D2: Grade-separated interchange at King George Boulevard while maintaining four basic lanes on SR 204. Ramp configuration at the interchange consists of EB diamond ramps, WB loop ramps in the northwest quadrant and a WB to NB diamond ramp in the northeast quadrant. Eliminated due to potential queuing of ramps extending onto the SR 204 mainline.
- Alternate D3: Grade-separated interchange at King George Boulevard while maintaining four basic lanes on SR 204. Ramp configuration at the interchange consists of EB diamond ramps and WB diamond ramps in an urban diamond layout. This alternate was developed as a “minimization alternative” in the interest of impacts to the archaeological site on the Trellis property in the northwest quadrant. Eliminated due to potential queuing of ramps extending onto the SR 204 mainline.
- Alternate D4: Grade-separated interchange at King George Boulevard while maintaining four basic lanes on SR 204. Ramp configuration at the interchange consists of EB diamond ramps and WB loop ramps in the northeast quadrant. This alternate was developed as an “avoidance alternative” in the interest of impacts to the archaeological site on the Trellis property in the northwest quadrant. Eliminated due to the inadequate weave distance between Veterans Parkway and King George Boulevard along WB SR 204, along with a high number of multi-family relocations.
- Alternate D5: Grade-separated interchange at King George Boulevard while maintaining four basic lanes on SR 204. Ramp configuration at the interchange consists of EB diamond ramps and WB diamond ramps in a “diverging diamond” configuration. This alternate was developed as a “minimization alternative” in the interest of impacts to the archaeological site on the Trellis property in the northwest quadrant. Eliminated due to potential queuing of ramps extending onto the SR 204 mainline.
- Alternate D6: Grade-separated interchange at King George Boulevard while maintaining four basic lanes on SR 204. Ramp configuration at the interchange consists of EB loop ramps in the southeast quadrant and WB diamond ramps. Eliminated due to potential queuing of ramps extending onto the SR 204 mainline.

#### Comments:

**Note A:** AASHTO indicates the maximum grade for a 60 mph freeway in level terrain is 3%, with the notation that “grades 1% steeper...may be provided...in urban areas with crucial right of way controls.” Therefore, in order to avoid additional, undesirable impacts to single-family and multi-family residential properties, the proposed maximum grade for SR 204 is 4% as allowed by AASHTO guidelines.

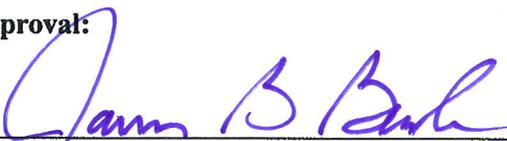
**Note B:** The proposed concept layout includes the excavation of ponds for the dual purpose of providing borrow material for the project and serving as stormwater detention facilities. The ponds would be located within and adjacent to the loop ramps in the northwest and southeast quadrants of the interchange. Excavated material from the ponds is expected to eliminate the need for offsite borrow material. As stormwater detention facilities, the ponds would reduce peak flows, thereby reducing the required size of outfall culverts and channels.

**Attachments:**

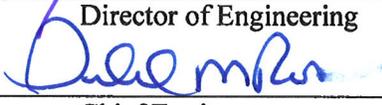
1. Need and Purpose Statement
2. Detailed Cost Estimates:
  - a. Construction including Contingencies, Engineering and Inspection, Fuel/Asphalt Price Adjustments
  - b. Right of Way
  - c. Utilities
  - d. Environmental Mitigation
3. Typical Sections
4. Crash Summary
5. Traffic Volume Diagrams
6. Executive Summary of Traffic Studies, including Summary of Signal Warrant Studies
7. Bridge Inventory
8. Conceptual Bridge Layout
9. Minutes of Initial Concept Team Meeting
10. Minutes of Concept Team Meeting
11. Public Information Open House and Stakeholder Meeting Summaries
12. Concept Layouts
13. Benefit/Cost Analysis

**Concept Approval:**

Concur: \_\_\_\_\_

  
Director of Engineering

Approve: \_\_\_\_\_

  
Chief Engineer

Date: \_\_\_\_\_

1/27/10



**NH000-0111-01(024), Chatham Co., PI 522870  
SR 204/Abercorn Street Improvements at King George Boulevard,  
From Pine Grove Road to Veterans Parkway**

**Need and Purpose**

**Background**

The purpose of Project NH000-0111-01(024) is to improve travel time and reduce crash frequency along SR 204/Abercorn Extension (SR 204) at its intersection with CR 71/King George Boulevard (King George Boulevard). Various intersection modifications will be evaluated with the overall goal of improving travel time along SR 204. SR 204 is an existing principal arterial that provides east-west connectivity between the City of Savannah and I-95 to the west. From SR 25/US 17 to Rio Road, a distance of approximately 4.5 miles, SR 204 is a partially limited access facility providing four travel lanes divided by a concrete median barrier and paved shoulders.

The intersection of SR 204 and King George Boulevard is located in an unincorporated portion of Chatham County, west of the City of Savannah. The project area is characterized mostly by residential land uses with some supporting commercial developments. Undeveloped coastal marsh and the Little Ogeechee River separates the intersection of SR 204 and King George Boulevard and the more commercially developed land uses along SR 204 located further to the east.

SR 204 consists of four 12-foot travel lanes with a 20-foot median with concrete barrier and 12-foot outside shoulders, 10-foot paved. Turn lanes are provided at various locations. SR 204 is functionally classified as an Urban Principal Arterial with existing average annual daily traffic volumes of approximately 53,000 vehicles between Pine Grove Road and King George Boulevard and 63,000 vehicles between King George Boulevard and Veterans Parkway.

South of SR 204, King George Boulevard is functionally classified as an Urban Collector Street and consists of four 12-foot travel lanes with a 24-foot raised median with intermittent outside curb & gutter and sidewalks. North of SR 204, King George Boulevard is functionally classified as an Urban Local Street and consists of two 12-foot travel lanes with a 16-foot two-way left-turn lane, outside curb & gutter and intermittent sidewalks. King George Boulevard has an average daily traffic volume of approximately 24,000 vehicles south of SR 204 and 17,000 vehicles north of SR 204. SR 204 is one of four designated hurricane evacuation routes in Chatham County.

### **Need and Purpose**

The purpose of Project NH000-0111-01(024) is to improve travel time and reduce crash frequency along SR 204 at its intersection with King George Boulevard. This signalized intersection is currently operating at level of service (LOS) F with excessive delays, which negatively effects overall travel time along SR 204. While the crash and injury rates for the section of SR 204 between Pine Grove Road and Veterans Parkway are slightly below the statewide averages for similar facilities, there is a high incidence of rear-end crashes. Rear-end crashes comprise 80 percent of the total crashes.

### **Land Use**

The primary land uses along SR 204 are residential and commercial establishments. Large, single-family subdivisions and multi-family apartment complexes are prevalent between Pine Grove Road and Veterans Parkway. Noteworthy destinations along SR 204 east of Veterans Parkway include the Savannah Mall, Armstrong Atlantic State University, St. Joseph's Hospital, and Hunter Army Air Field. Hunter Army Air Field recently upgraded the facility entrance gate at Rio Road to accommodate the majority of commercial traffic to that entrance gate.

### **Local and Regional Planning**

Growth and development in the City of Savannah and unincorporated Chatham County are guided by two major planning documents: The Unified Comprehensive Plan and the Unified Zoning Ordinance. The documents comprise the *Chatham County – Savannah Tricentennial Plan (March 2006)*. The Community Assessment Report is part of the Unified Comprehensive Plan, and it provides a framework from which to formulate the city/county Comprehensive Plan and Zoning Ordinance.

Growth in western Chatham County has increased at a substantially higher rate than has other parts of the county. According to the Community Assessment Report, the population in West Chatham is projected to increase by 73 percent by the year 2030. West Chatham is expected to experience much higher growth than other portions of the county that are at or near build-out already (East Chatham and the Savannah Area). Continued growth in the western portion of the county is expected to degrade the level of service provided by the existing transportation network.

In addition, the Community Assessment Report states that commuting activity from adjacent counties (Bryan and Effingham) is one of the primary regional transportation issues facing Chatham County. Chatham County is a major regional economic and employment hub. Nearly all Chatham County residents work within the county limits, while a significant majority of Bryan and Effingham residents commute to Chatham County for employment. The large commuter population poses capacity challenges for the regional roadway system, including interstates, US highways, and other major roads.

### **Other Projects Planned in the Area**

The Georgia Department of Transportation (GDOT) and Chatham County officials have been evaluating the need for transportation improvements along SR 204 for some time. Georgia DOT has a long range project to widen SR 204 between Rio Road and Truman Parkway Phase V. Preliminary engineering studies for Project NHS00-0002-00(921) have been conducted and concluded that capacity improvements to SR 204 are needed. This project remains a long range project in the TIP. Right-of-way and construction funds have not been allocated at this time. In addition, the Coastal Region (CORE) MPO has undertaken a SR 204 Corridor Study to further refine alternatives for moving traffic along SR 204. American Recovery and Reinvestment Act of 2009 (ARRA) funds to study alternatives have been allocated by the CORE MPO. However, right-of-way and construction funds have not been allocated at this time.

Projects in the area include the following:

- NHS00-0002-00(921), Chatham Co., PI 0002921; Truman Parkway from Abercorn St. to Whitfield Ave. – Phase V (construction began in March 2010)
- NHS00-0002-00(922), Chatham Co., PI 0002922; SR 204/Abercorn St. from Rio Road to Harry S. Truman Parkway/Phase V
- CSSTP-0009-00(314), Chatham Co., PI 0009314; SR 204/Abercorn St. from I-95 to Harry S. Truman Parkway/Phase V (study only)

### **Safety and Roadway Deficiencies**

Traffic crash data was collected from the GDOT Office of Traffic Safety and Design for the years 2006 through 2008 and are presented below in Tables 1 and 2. Crash rates were calculated for SR 204 from Pine Grove Road to Veterans Parkway. SR 204 is currently classified as a Non-Freeway Principal Arterial type roadway. Table 1 compares the crash history of SR 204 with statewide average crash rates

for Non-Freeway Principal Arterial facilities. As shown, the crash rates for the SR 204 corridor have been close to, but have not exceeded the statewide crash rates for similar facilities.

Year	Crashes	Crash Rate	Injuries	Injury Rate	Fatalities	Fatality Rate
2006	154	372 (545)	49	118 (207)	0	0.00 (1.69)
2007	213	496 (546)	67	156 (201)	1	3.02 (1.51)
2008	180	404 (524)	49	110 (191)	1	2.91 (1.33)

Note: All rates are per 100 million miles of travel. Numbers in parentheses are **statewide average rates for Urban Principal Arterials, Non-Freeway**.

In order to examine the crash history along the project area more closely, a segmental analysis of crash history by type of crash was conducted. This analysis showed that rear end crashes were the most common type of crash, comprising 80 percent of total crashes within the project area. Table 2 presents a summary of the rear end crashes that occurred at the two signalized intersection within the project limits: Pine Grove Road and King George Boulevard. Table 2 also shows that the vast majority of the crashes are occurring at the westbound and eastbound approaches to the King George Boulevard intersection.

Intersection	Direction	2006	2007	2008	Overall
SR 204 at Pine Grove Road	EB	7	27	19	53
	WB	2	4	7	13
	NB	1	4	1	6
	SB	0	0	0	0
<b>Total</b>		<b>10</b>	<b>35</b>	<b>27</b>	<b>72</b>
SR 204 at King George Boulevard	EB	32	29	28	89
	WB	65	93	65	223
	NB	8	4	9	21
	SB	10	9	14	33
<b>Total</b>		<b>115</b>	<b>135</b>	<b>116</b>	<b>366</b>

### Traffic and Level of Service

Level of service (LOS) is defined as a qualitative measure describing operational conditions within traffic streams. There are six defined LOS tiers at which a roadway can operate. Each of the six tiers is identified by a letter; LOS A represents the best operating conditions and LOS F represents the worst.

The existing (2009), opening year (2015) and future (2035) No Build roadway level of service (LOS) for generalized roadway segments between the study intersections along the corridor were analyzed and are presented in Table 3. Table 3 presents the projected two-way daily and one-way peak hour traffic volumes. The peak hour traffic volumes for the AM and PM peak periods are in the eastbound and westbound directions are presented. The LOS associated with the one-way peak period is presented.

		Eastbound Segments (AM Peak)				Westbound Segments (PM Peak)			
		US 17 to Pine Grove	Pine Grove to King George	King George to Veterans	Veterans to Rio	Rio to Veterans	Veterans to King George	King George to Pine Grove	Pine Grove to US 17
No. Lanes		2	2	3	2	2	2	2	2
Segment Type *		Multi	Multi	Frwy	Multi	Frwy	Multi	Multi	Multi
<b>2009 Existing</b>	Two-Way Daily Volume (vpd)	52,253	53,400	63,322	64,382	64,382	63,322	53,400	52,253
	AM Peak Hour Volume (vph)	2,275	2,324	3,557	3,203	2,010	1,673	1,523	1,526
	AM Peak LOS	C	C	C	E	C	C	B	B
	PM Peak Hour Volume (vph)	1,786	1,813	1,968	2,405	3,415	3,636	2,620	2,570
	PM Peak LOS	C	C	B	D	E	F	D	D
<b>2015 No Build</b>	Two-Way Daily Volume (vpd)	59,266	59,486	69,740	68,991	68,991	69,740	59,486	59,266
	AM Peak Hour Volume (vph)	2,756	2,906	4,241	3,774	2,376	2,010	1,843	1,940
	AM Peak LOS	D	D	D	F	C	C	C	C
	PM Peak Hour Volume (vph)	2,287	2,230	2,347	2,756	4,271	4,482	3,161	3,071
	PM Peak LOS	C	C	B	D	F	F	E	D
<b>2035 No Build</b>	Two-Way Daily Volume (vpd)	67,269	67,657	80,407	75,641	75,641	80,407	67,657	67,269
	AM Peak Hour Volume (vph)	3,128	3,282	4,943	4,359	2,796	2,317	2,095	2,189
	AM Peak LOS	E	E	E	F	D	C	C	C
	PM Peak Hour Volume (vph)	2,558	2,506	2,654	3,192	5,085	5,339	3,600	3,507
	PM Peak LOS	D	D	C	E	F	F	F	E

\*HCS analysis segment types are Multilane Highways (Multi) and Basic Freeway (Frwy).

As shown in Table 3, LOS F conditions are experienced along the segment of SR 204 from Veterans Parkway to King George Boulevard (westbound direction) under existing conditions. Field observations confirmed heavy queuing and travel delay during the PM peak period for the westbound approach to King George Boulevard, which acts as a major choke point on the SR 204 corridor. The roadway segment analysis predicts that SR 204 traffic operations will continue to fail (LOS F) in 2035 under the No Build condition. Although traffic volume decreases in the westbound direction once King George Boulevard is passed, LOS continues to worsen between King George Boulevard and US 17.

For the eastbound direction, LOS C conditions are experienced along all segments of SR 204 from US 17 to Veterans Parkway, where traffic volume peaks. East of Veterans parkway, eastbound traffic volumes decrease. However, the LOS worsens presumably because the number of travel lanes decreases from three lanes to two lanes. The roadway segment analysis predicts that SR 204 traffic operations will fail (LOS F) in 2035 under the No Build condition.

Table 4 presents the intersection LOS at King George Boulevard based on existing and projected daily traffic volumes for the No Build condition. The intersection analysis predicts that by the year 2035, traffic operations on SR 204 at King George Boulevard would continue to be LOS F under the No Build condition but that the need for improvements, as measured by seconds of delay, would continue to grow.

Condition	LOS		Delay (sec/veh)		Queue (ft) (95 <sup>th</sup> percentile)	
	AM	PM	AM	PM	AM (EB)	PM (WB)
	<b>Current (2009)</b>	F	F	167	542	1965
<b>2035 No Build</b>	F	F	369	600+ *	2646	6142

\*Delay calculation exceeds methodology, used for more than 600 seconds delay

Table 5 shows a travel time summary for the No Build condition. This analysis shows a continued worsening of travel time under the projected traffic volumes previously presented. Travel time increases substantially for the segment of SR 204 from Pine Grove Road to King George Boulevard in the eastbound direction for both AM and PM periods. Once King George Boulevard is passed, travel time is consistent from the existing condition through the future (2035) No Build condition. In the westbound direction, travel time increased substantially between Rio Road and King George Boulevard. Once King George Boulevard is passed, travel time to Pine Grove Road is fairly consistent from the existing condition through the future (2035) No Build condition.

<b>Table 5: Travel Time Summary</b>				
<b>Segment</b>	<b>Distance (miles)</b>	<b>Average Travel Time (min:sec)</b>		
		<b>Existing (2009)</b>	<b>2015</b>	<b>2035</b>
			<b>No Build</b>	<b>No Build</b>
<b>Eastbound AM</b>				
Pine Grove Rd. to King George Blvd.	0.7	3:03	6:27	7:05
King George Blvd. to Veterans Pkwy.	1.0	0:53	0:53	0:53
<b>Overall</b>	<b>1.7</b>	<b>3:56</b>	<b>7:20</b>	<b>7:58</b>
<b>Eastbound PM</b>				
Pine Grove Rd. to King George Blvd.	0.7	1:35	6:47	7:11
King George Blvd. to Veterans Pkwy.	1.0	0:51	0:52	0:52
<b>Overall</b>	<b>1.7</b>	<b>2:26</b>	<b>7:39</b>	<b>8:03</b>
<b>Westbound AM</b>				
Rio Road to Veterans Pkwy.	1.4	0:35	1:52	1:52
Veterans Pkwy. to King George Blvd.	1.0	1:28	1:44	2:19
King George Blvd. to Pine Grove Rd.	0.7	1:01	1:40	1:15
<b>Overall</b>	<b>3.1</b>	<b>3:04</b>	<b>5:16</b>	<b>5:26</b>
<b>Westbound PM</b>				
Rio Road to Veterans Pkwy.	1.4	9:11	20:02	28:41
Veterans Pkwy. to King George Blvd.	1.0	5:34	6:24	6:45
King George Blvd. to Pine Grove Rd.	0.7	1:07	1:30	1:27
<b>Overall</b>	<b>3.1</b>	<b>15:52</b>	<b>27:56</b>	<b>36:53</b>

### Logical Termini

The FHWA defines logical termini for project development as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. The termini of a proposed project will be of sufficient length to address the problems of congestion and safety at the intersection of SR 204 and King George Boulevard.

An analysis of level of service along SR 204 shows that LOS F conditions are experienced along the segment of SR 204 from King George Boulevard to Veterans Parkway under existing conditions. This condition exists in the PM peak hour westbound direction and the AM peak hour eastbound direction.

This condition adversely affects travel time along SR 204 and is expected to worsen as traffic volume increases in the future. The analysis also shows that by the year 2035, LOS E and F conditions will be

experienced along SR 204 from US 17 to Rio Road. This demonstrates an overall need for capacity improvements within this segment.

However, the need for operational improvements is demonstrated by the heavy queuing at the King George Boulevard intersection, which causes the westbound travel lanes to back up as far east as Veterans Parkway, which is approximately one mile east of the King George Boulevard intersection. The worse condition for eastbound travel is experienced in the AM peak hour. The traffic volume continues to increase eastbound and reaches a peak between King George Boulevard and Veterans Parkway. Eastbound traffic volumes begin to decrease between Veterans parkway and Rio Road presumably because eastbound traffic is pulling off SR 204 to travel northbound on Veterans Parkway. The worse condition for westbound travel is experienced in the PM peak hour. The traffic volume continues to increase westbound and reaches a peak between Veterans Parkway to King George Boulevard. Westbound traffic volumes begin to decrease between King George Boulevard and Pine Grove Road presumably because westbound traffic is pulling off SR 204 to travel northbound or southbound along King George Boulevard. Westbound traffic volumes continue to decrease west of Pine Grove Road to US 17. Therefore, the extent of the deficiencies along SR 204 that can be attributed to the King George Boulevard intersection extend from King George Boulevard west to Veterans Parkway. Any proposed project to improve the operational characteristics of this intersection should not preclude the development of alternatives to provide needed capacity improvements to the SR 204 corridor.

### **Modal Interrelationships**

There are currently no existing bikeways on SR 204 and it is not designated as a state bicycle route. The Coastal Region Metropolitan Planning Organization (CORE) designates SR 204 as a Bicycle Corridor (Chatham County Bikeway Plan 2000). The project should be designed to not preclude the construction of separate bicycle/pedestrian facilities adjacent to SR 204.

The Chatham Area Transit Authority (CAT) is the responsible agency for providing bus service throughout the county. Currently, there is one bus route that services SR 204 within the project area. Bus Route 6 (Crosstown) services stops along SR 204 between King George Boulevard and Middleground Road, including the Savannah Mall and along King George Boulevard.

### **Conclusion**

The purpose of Project NH000-0111-01(024) is to improve travel time and reduce crash frequency along SR 204 at its intersection with King George Boulevard. Analysis of the existing and future No Build conditions shows that conditions are expected to worsen over time as traffic volume is predicted to grow. The anticipated growth in the project area will increase traffic congestion and create lengthy delays for commuter and local traffic traveling through the corridor. Today, traffic traveling through the corridor experiences significant delay and congestion at the at-grade intersection of SR 204 and King George Boulevard during the AM and PM peak periods. This demonstrates the need to reduce travel time along SR 204, reduce crash frequency, and ultimately improve east-west connectivity in this region.

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

-----  
INTERDEPARTMENT CORRESPONDENCE

**FILE** Project No. NH000-0111-01(024)  
SR 204, US 17 to Rio Road  
Chatham  
P.I. No. 522870

**OFFICE** Urban Design  
**DATE** June 11, 2010

**FROM** Bobby Hilliard, P.E., State Program Delivery Engineer

**TO** Ronald E. Wishon, Project Review Engineer

**SUBJECT REVISIONS TO PROGRAMMED COSTS**

PROJECT MANAGER Robert Murphy

MNGT LET DATE [REDACTED]  
MNGT R/W DATE [REDACTED]

**PROGRAMMED COST (Tpro W/OUT INFLATION)**

**LAST ESTIMATE UPDATE**

CONSTRUCTION \$26,768,194.00

DATE 11/20/2009

RIGHT OF WAY \$9,300,000.00

DATE 7/13/2009

UTILITIES

DATE [REDACTED]

**REVISED COST ESTIMATES**

CONSTRUCTION\* \$29,832,133.00

RIGHT OF WAY [REDACTED] \$0.00

UTILITIES\*\* \$1,454,440.00

\* Costs contain 5 % Engineering and Inspection  
and Fuel and Liquid AC Adjustments

5 % Construction Contingencies

\*\* Costs contain 30 % Contingency

**REASON FOR COST INCREASE**

CONSTRUCTION - Revised layout includes elements to facilitate widening of SR 204 in the future. Assumption for asphalt base thickness increased. Unit prices for asphalt and graded aggregate increased. Anticipated sound barriers increased. Fuel and Liquid AC Indexes increased, causing increase in adjustments.

UTILITIES - Initial estimate from District.

*7.2 mil*

### CONTINGENCY SUMMARY

Construction Cost Estimate:	\$24,388,426.91	(Base Estimate)
Engineering and Inspection:	\$1,219,421.35	(Base Estimate x 5 %)
Construction Contingency:	\$1,219,421.35	(Base Estimate x 5 %) (The Construction Contingency is based on the Project Improvement Type in Tpro)
Total Fuel Adjustment:	\$1,323,227.91	
Total Liquid AC Adjustment:	\$1,681,635.90	
<b>Construction Total</b>	<b>\$29,832,133.00</b>	
Utility Cost Estimate:	\$1,118,800.00	
Utility Contingency:	\$335,640.00	30 %
<b>Utility Total</b>	<b>\$1,454,440.00</b>	

### REIMBURSABLE UTILITY COST

Utility Owner	Reimbursable Costs
Atlanta Gas Light	\$100,000.00
City of Savannah (water & sewer)	\$886,000.00
ATT	\$132,800.00

c: Genetha Rice-Singleton, State Program Control Administrator

**Summary of Costs**

Project Name: **SR 204, US 17 to Rio Road**  
 Project No.: **NH000-0111-01(024)**  
 Alt: **D1e - EB Loop, WB Loop**

PI No.: **522870**  
 County **Chatham**  
 Date: **11-Jun-10**

**A. RIGHT OF WAY**

- 1. Property (Land & Easement)
- 2. Displacements
- 3. Other Costs (Scheduling/Administration)

**SUBTOTAL: A. RIGHT OF WAY \$ -**

**B. UTILITIES**

- 1. Railroad (Trackwork Etc.)
- 2. Transmission Lines
- 3. Other Services (Gas, Telephone, Water, Sewer)

\$ 1,118,800  
**SUBTOTAL \$ 1,118,800**  
 \$ 335,640

Utilities Contingency: 30%

**SUBTOTAL: B. UTILITIES \$ 1,454,440**

**C. CONSTRUCTION**

- 1. Traffic Control & Staging (Incl. Temp. Pavement, Bridges, Barriers) \$ 1,225,143
- 2. Miscellaneous (Field Office, Training, R/W Markers) \$ 75,201
- 3. Temporary Erosion Control & Grassing \$ 192,666
- 4. Clearing & Grubbing \$ 624,000
- 5. Earthwork \$ 1,386,528
- 6. Base & Paving \$ 5,179,194
- 7. Sidewalk, Curb & Gutter, Concrete Median \$ 164,279
- 8. Driveways \$ 53,980
- 9. Bridges (Incl. Approach Slabs, Slope Paving) \$ 2,679,837
- 10. Retaining Walls \$ 3,795,128
- 11. Box Culverts \$ -
- 12. Drainage \$ 558,452
- 13. Permanent Erosion Control & Grassing \$ 150,676
- 14. Removal \$ 545,350
- 15. Permanent Concrete Barrier \$ 1,335,004
- 16. Sound Barriers \$ 3,155,775
- 17. Signing \$ 448,826
- 18. Guardrail \$ 129,090
- 19. Fencing \$ 35,599
- 20. Traffic Signals \$ 214,000
- 21. Marking \$ 39,700
- 22. Sanitary Sewer \$ -
- 23. Water Distribution \$ -
- 24. Lighting \$ 870,000
- 25. Landscaping \$ -
- 26. ATMS \$ 1,530,000

**SUBTOTAL \$ 24,388,427**

Engineering & Inspection: 5% \$ 1,219,421  
 Construction Contingency: 5% \$ 1,219,421  
 Total Fuel Adjustment: \$ 1,323,228  
 Total Liquid AC Adjustment: \$ 1,681,636  
 INFLATION: @ 5% PER YEAR \$ -  
 NUMBER OF YEARS: 0

**SUBTOTAL: C. CONSTRUCTION \$ 29,832,133**

**D. MITIGATION**

- 1. Wetlands & Streams n/a
- 2. Archaeological Mitigation

\$ -  
 \$ 2,000,000  
**SUBTOTAL: D. MITIGATION \$ 2,000,000**

PROJ. NO.  
P.I. NO.  
DATE

NH000-0111-01(024)  
522870  
6/11/2010

Total Fuel Adjustment: \$ 1,323,227.91  
Total Liquid AC Adjustment: \$ 1,681,635.90

INDEX (TYPE)  
REG. UNLEADED  
DIESEL  
LIQUID AC

DATE INDEX  
Jun-10 \$ 2.608  
\$ 2.926  
\$ 493.00

Link to Fuel and AC Index:  
<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

**LIQUID AC ADJUSTMENTS**

PA=(((APM-APL)/APL)-0.05)\*TMTxAPL

Asphalt

Price Adjustment (PA)						\$ 1,645,180.44	\$ 1,645,180.44
Monthly Asphalt Cement Price month placed (APM)				Max. Cap	125%	\$ 1,109.25	
Monthly Asphalt Cement Price month project let (APL)						\$ 493.00	
Total Monthly Tonnage of asphalt cement (TMT)						2780.9	

**ASPHALT**

	Tons	%AC	AC ton
Leveling	2610	5.0%	130.5
12.5 OGFC	1430	5.0%	71.5
12.5 mm	12142	5.0%	607.1
9.5 mm SP	0	5.0%	0
25 mm SP	27750	5.0%	1387.5
19 mm SP	11686	5.0%	584.3
	<b>55618</b>		<b>2780.9</b>

**BITUMINOUS TACK COAT**

Price Adjustment (PA)						\$ 36,455.46	\$ 36,455.46
Monthly Asphalt Cement Price month placed (APM)				Max. Cap	125%	\$ 1,109.25	
Monthly Asphalt Cement Price month project let (APL)						\$ 493.00	
Total Monthly Tonnage of asphalt cement (TMT)						61.62181293	

**Bitum Tack**

Gals.	gals/ton	tons
14347	232.8234	61.6218129

**TOTAL LIQUID AC ADJUSTMENT**

\$ 1,681,635.90

PROJ. NO. NH000-0111-01(024)  
 P.I. NO. 522870  
 DATE 6/11/2010

**INDEX (TYPE)**

REG. UNLEADED	DATE	INDEX
DIESEL	Jun-10	\$ 2.608
LIQUID AC		\$ 2.926
		\$ 493.00

Link to Fuel and AC Index:

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

Total Fuel Adjustment: \$ 1,323,227.91  
 Total Liquid AC Adjustment: \$ 1,681,635.90

**FUEL ADJUSTMENTS - ROADWAY**

FPA = (((FPM-FPL)/FPL)-.10)xQxI)FPL

**GRADED AGGREGATE BASE**

Fuel Price Adjustment (FPA) \$ 43,051.72 \$ 58,363.85 \$ 101,415.57  
 Monthly Fuel Price for month work was accomplished (FPM) \$ 5.868 \$ 6.584  
 Monthly Fuel Price for month when project was let (FPL) \$ 2.608 \$ 2.926  
 Quantity Placed (Q) 59810  
 Fuel Usage Factor (F) 0.24 0.29

**ASPHALT**

Fuel Price Adjustment (FPA) \$ 118,434.75 \$ 542,732.12 \$ 661,166.87  
 Monthly Fuel Price for month work was accomplished (FPM) \$ 5.868 \$ 6.584  
 Monthly Fuel Price for month when project was let (FPL) \$ 2.608 \$ 2.926  
 Quantity Placed (Q) 55618  
 Fuel Usage Factor (F) 0.71 2.90

**EARTHWORK - Section 205 - Roadway Excavation**

Fuel Price Adjustment (FPA) \$ 5,641.50 \$ 12,236.80 \$ 17,878.29  
 Monthly Fuel Price for month work was accomplished (FPM) \$ 5.868 \$ 6.584  
 Monthly Fuel Price for month when project was let (FPL) \$ 2.608 \$ 2.926  
 Quantity Placed (Q) 12540  
 Fuel Usage Factor (F) 0.15 0.29

**EARTHWORK - Section 206 - Borrow Excavation**

Fuel Price Adjustment (FPA) \$ 151,429.61 \$ 328,461.35 \$ 479,890.96  
 Monthly Fuel Price for month work was accomplished (FPM) \$ 5.868 \$ 6.584  
 Monthly Fuel Price for month when project was let (FPL) \$ 2.608 \$ 2.926  
 Quantity Placed (Q) 336600  
 Fuel Usage Factor (F) 0.15 0.29

**TOTAL ROADWAY FUEL ADJUSTMENTS**

\$ 4,260,351.69



**DETAILED ESTIMATE**

<b>Project Name:</b> SR 204, US 17 to Rio Road	<b>PI No.:</b> 522870	<b>Unit Prices based on DTEST as of:</b> 6/27/2010
<b>Project No.:</b> NH000-0111-01(024)	<b>County:</b> Chatham	
<b>Alt:</b> D1e - EB Loop, WB Loop	<b>Date:</b> 11-Jun-10	<b>\$ 24,388,426.91</b>

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
----------	------------------	-------	----------	------------	-----------	----------------

**TRAFFIC CONTROL & STAGING** **\$ 1,225,142.64**

150-1000	TRAFFIC CONTROL -	LS	1	\$ 680,000.00	\$ 680,000.00	
310-1101	GR AGGR BASE CRS, INCL MATL	TN	5,500	\$ 25.00	\$ 137,500.00	
400-3206	ASPH CONC 12.5 MM OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H	TN		\$ 85.00		
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN		\$ 75.00		
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN		\$ 70.00		
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	TN	1,032	\$ 70.00	\$ 72,240.00	
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	1,376	\$ 70.00	\$ 96,320.00	
413-1000	BITUM TACK COAT	GL	417	\$ 1.74	\$ 725.58	
432-5010	MILL ASPH CONC PVMT, VARIABLE DEPTH	SY		\$ 1.18		
541-9000	DETOUR BRIDGE	SF		\$ 55.00		
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF		\$ 27.57		
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	LF	210	\$ 34.53	\$ 7,251.30	
620-0100	TEMPORARY BARRIER, METHOD NO. 1	LF	3,675	\$ 24.61	\$ 90,441.75	
632-0003	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	EA	3	\$ 6,734.49	\$ 20,203.47	
647-0220	TRAFFIC SIGNAL INSTALLATION, TEMPORARY	LS	2	\$ 50,000.00	\$ 100,000.00	
150-5010	TRAFFIC CONTROL, PORTABLE IMPACT ATTENUATOR	EA	3	\$ 5,743.47	\$ 17,230.41	
668-2105	DROP INLET, GP 1, SPCL DES	EA	3	\$ 1,076.71	\$ 3,230.13	

**MISCELLANEOUS** **\$ 75,200.59**

153-1300	FIELD ENGINEERS OFFICE TP 3	EA	1	\$ 63,997.13	\$ 63,997.13	
158-1000	TRAINING HOURS	HR	10,000	\$ 0.80	\$ 8,000.00	
634-1200	RIGHT OF WAY MARKERS	EA	37	\$ 86.58	\$ 3,203.46	

**TEMPORARY EROSION CONTROL** **\$ 192,665.67**

163-0232	TEMPORARY GRASSING	AC	10	\$ 256.40	\$ 2,564.00	
163-0240	MULCH	TN	30	\$ 145.44	\$ 4,363.20	
163-0300	CONSTRUCTION EXIT	EA	7	\$ 926.78	\$ 6,487.46	
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	EA	15	\$ 356.60	\$ 5,349.00	
163-0527	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAR	EA	4	\$ 163.13	\$ 652.52	
163-0528	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	LF	1,023	\$ 2.78	\$ 2,843.94	
163-0531	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	EA	4	\$ 5,200.57	\$ 20,802.28	
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	55	\$ 140.15	\$ 7,708.25	
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	LF	5,731	\$ 0.46	\$ 2,636.26	
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	20,383	\$ 0.64	\$ 13,045.12	
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES	LF	72	\$ 1.56	\$ 112.32	
165-0060	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	EA	4	\$ 1,122.71	\$ 4,490.84	
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	EA	15	\$ 93.62	\$ 1,404.30	
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	7	\$ 423.65	\$ 2,965.55	
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	EA	55	\$ 46.06	\$ 2,533.30	
167-1000	WATER QUALITY MONITORING AND SAMPLING	EA	5	\$ 413.39	\$ 2,066.95	
167-1500	WATER QUALITY INSPECTIONS	MO	40	\$ 521.54	\$ 20,861.60	
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	5,731	\$ 1.33	\$ 7,622.23	
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	20,383	\$ 2.68	\$ 54,626.44	
643-8200	BARRIER FENCE (ORANGE), 4 FT	LF	13,200	\$ 1.83	\$ 24,156.00	
700-7000	AGRICULTURAL LIME	TN	30	\$ 53.69	\$ 1,610.70	
700-7010	LIQUID LIME	GL	25	\$ 15.54	\$ 388.50	
700-8000	FERTILIZER MIXED GRADE	TN	6	\$ 383.46	\$ 2,300.76	
700-8100	FERTILIZER NITROGEN CONTENT	LB	495	\$ 2.17	\$ 1,074.15	

**DETAILED ESTIMATE**

<b>Project Name:</b> SR 204, US 17 to Rio Road	<b>PI No.:</b> 622870	<b>Unit Prices based on DTEST as of:</b> 5/27/2010
<b>Project No.:</b> NH000-0111-01(024)	<b>County:</b> Chatham	
<b>Alt:</b> D1e - EB Loop, WB Loop	<b>Date:</b> 11-Jun-10	<b>\$ 24,388,426.91</b>

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
<b>CLEARING &amp; GRUBBING</b>						<b>\$ 624,000.00</b>

202-1000	CLEARING AND GRUBBING	AC	52	\$ 12,000.00	\$ 624,000.00	
----------	-----------------------	----	----	--------------	---------------	--

<b>EARTHWORK</b>						<b>\$ 1,386,528.00</b>
------------------	--	--	--	--	--	------------------------

205-0001	UNCLASS EXCAV	CY	12,540	\$ 3.20	\$ 40,128.00	
206-0002	BORROW EXCAV, INCL MATL	CY	336,600	\$ 4.00	\$ 1,346,400.00	
206-9999	Waste Material	CY		\$ 4.00		
208-0200	ROCK EMBANKMENT	CY		\$ 20.46		

<b>BASE &amp; PAVING</b>						<b>\$ 5,179,193.90</b>
--------------------------	--	--	--	--	--	------------------------

310-1101	GR AGGR BASE CRS, INCL MATL	TN	53,490	\$ 25.00	\$ 1,337,250.00	
400-3206	ASPH CONC 12.5 MM OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H	TN	1,430	\$ 85.00	\$ 121,550.00	
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	2,610	\$ 75.00	\$ 195,750.00	
402-3103	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL	TN		\$ 70.00		
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	27,750	\$ 70.00	\$ 1,942,500.00	
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	TN	10,950	\$ 70.00	\$ 766,500.00	
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	10,100	\$ 70.00	\$ 707,000.00	
413-1000	BITUM TACK COAT	GL	13,860	\$ 1.74	\$ 24,116.40	
430-0220	PLAIN PC CONC PVMT, CL 1 CONC, 12 INCH THK	SY		\$ 37.70		
430-0620	PLAIN PC CONC PVMT, CL HES CONC, 12 INCH THK	SY		\$ 99.50		
430-0630	REINFORCED CONCRETE LUG ANCHORS	LF		\$ 52.98		
430-0820	CONT REINF CONC PVMT, CL 1 CONC, 12 INCH THK	SY		\$ 73.96		
430-1220	CONT REINF CONC PVMT, CL HES CONC, 12 INCH THK	SY				
432-5010	MILL ASPH CONC PVMT, VARIABLE DEPTH	SY	43,940	\$ 1.18	\$ 51,849.20	
442-0100	ROLLER COMPACTED CONCRETE PAVEMENT	SY		\$ 18.39		
456-2012	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS)	GLM	10	\$ 596.55	\$ 5,965.50	
500-3200	CLASS B CONCRETE	CY	80	\$ 333.91	\$ 26,712.80	

<b>SIDEWALKS, CURB &amp; GUTTER, CONCRETE MEDIANS</b>						<b>\$ 164,279.10</b>
---	--	--	--	--	--	----------------------

441-0104	CONC SIDEWALK, 4 IN	SY	1,460	\$ 23.60	\$ 34,456.00	
441-0740	CONCRETE MEDIAN, 4 IN	SY	140	\$ 22.70	\$ 3,178.00	
441-0754	CONCRETE MEDIAN, 7 1/2 IN	SY	1,450	\$ 41.07	\$ 59,551.50	
441-3999	CONCRETE V GUTTER	LF	1,520	\$ 15.50	\$ 23,560.00	
441-6222	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF	2,670	\$ 11.44	\$ 30,544.80	
441-6740	CONC CURB & GUTTER, 8 IN X 30 IN, TP 7	LF	1,230	\$ 10.56	\$ 12,988.80	

<b>DRIVEWAYS</b>						<b>\$ 53,979.70</b>
------------------	--	--	--	--	--	---------------------

310-1101	GR AGGR BASE CRS, INCL MATL	TN	820	\$ 14.89	\$ 12,209.80	
318-3000	AGGR SURF CRS	TN	490	\$ 16.73	\$ 8,197.70	
402-3103	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL	TN		\$ 70.00		
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	TN	160	\$ 70.00	\$ 11,200.00	
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	210	\$ 70.00	\$ 14,700.00	
413-1000	BITUM TACK COAT	GL	70	\$ 1.74	\$ 121.80	
441-0016	DRIVEWAY CONCRETE, 6 IN TK	SY		\$ 33.03		
441-4030	CONC VALLEY GUTTER, 8 IN	SY		\$ 37.30		
441-6222	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF	660	\$ 11.44	\$ 7,550.40	
550-2180	SIDE DRAIN PIPE, 18 IN, H 1-10	LF		\$ 21.42		
550-2240	SIDE DRAIN PIPE, 24 IN, H 1-10	LF		\$ 27.60		
550-2360	SIDE DRAIN PIPE, 36 IN, H 1-10	LF		\$ 43.38		
550-2480	SIDE DRAIN PIPE, 48 IN, H 1-10	LF		\$ 90.45		
550-3618	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	EA		\$ 503.47		
550-3624	SAFETY END SECTION 24 IN, SIDE DRAIN, 6:1 SLOPE	EA		\$ 777.58		
550-3636	SAFETY END SECTION 36 IN, SIDE DRAIN, 6:1 SLOPE	EA		\$ 1,455.71		
550-3648	SAFETY END SECTION 48 IN, SIDE DRAIN, 6:1 SLOPE	EA		\$ 4,204.05		

**DETAILED ESTIMATE**

<b>Project Name:</b> SR 204, US 17 to Rio Road	<b>PI No.:</b> 622870	<b>Unit Prices based on DTEST as of:</b> 5/27/2010
<b>Project No.:</b> NH000-0111-01(024)	<b>County:</b> Chatham	
<b>Alt:</b> D1e - EB Loop, WB Loop	<b>Date:</b> 11-Jun-10	<b>\$ 24,388,426.91</b>

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
----------	------------------	-------	----------	------------	-----------	----------------

**BRIDGES**

**\$ 2,679,836.68**

433-1000	REINF CONC APPROACH SLAB	SY		\$ 137.94		
433-1100	REINF CONC APPROACH SLAB, INCL CURB	SY		\$ 122.05		
433-1200	REINF CONC APPROACH SLAB, INCL SLOPED EDGE	SY		\$ 133.25		
433-1300	REINF CONC APPROACH SLAB, INCL BARRIER	SY	1,174	\$ 151.82	\$ 178,236.68	
441-0004	CONC SLOPE PAV, 4 IN	SY		\$ 38.65		
500-9001	Bridge No. 1 - SR 204 over CSX Railroad (Replace Side Barriers )	SF	1,080	\$ 100.00	\$ 108,000.00	
500-9002	Bridge No. 2 - SR 204 over King George Boulevard (New 176x160)	SF	28,160	\$ 85.00	\$ 2,393,600.00	
500-9003	Bridge No.	SF				
500-9004	Bridge No.	SF				
500-9005	Bridge No.	SF				
500-9006	Bridge No.	SF				
500-9007	Bridge No.	SF				
500-9008	Bridge No.	SF				
500-9009	Bridge No.	SF				
500-9010	Bridge No.	SF				
500-9011	Bridge No.	SF				
500-9012	Bridge No.	SF				
518-9001	Raise Existing Bridge No. -	SF				
518-9002	Raise Existing Bridge No. -	SF				
518-9003	Raise Existing Bridge No. -	SF				
518-9004	Raise Existing Bridge No. -	SF				
518-9005	Raise Existing Bridge No. -	SF				

**RETAINING WALLS**

**\$ 3,795,128.00**

500-9510	Retaining Wall - Cantilever - 0-10 ft. Ht.	SF	11,756	\$ 75.00	\$ 881,700.00	
500-9520	Retaining Wall - Cantilever - 10-20 ft. Ht.	SF		\$ 110.00		
500-9530	Retaining Wall - Cantilever - 20-30 ft. Ht.	SF		\$ 130.00		
500-9610	Retaining Wall - Gravity - 0-10 ft. Ht.	SF	612	\$ 65.00	\$ 39,780.00	
627-1140	TRAFFIC BARRIER V, WALL NO -	LF	4,820	\$ 191.00	\$ 920,620.00	
627-9510	Retaining Wall - MSE 0-10 ft. Ht.	SF		\$ 50.00		
627-9520	Retaining Wall - MSE 10-20 ft. Ht.	SF	32,626	\$ 53.00	\$ 1,729,178.00	
627-9530	Retaining Wall - MSE 20-30 ft. Ht.	SF	4,070	\$ 55.00	\$ 223,850.00	
627-9540	Retaining Wall - MSE - 30-40 ft. Ht.	SF		\$ 65.00		

**BOX CULVERTS**

**\$ -**

207-0203	FOUND BK FILL MATL, TP II	CY		\$ 36.63		
500-3101	CLASS A CONCRETE	CY		\$ 357.34		
511-1000	BAR REINF STEEL	LB		\$ 0.60		

**DETAILED ESTIMATE**

<b>Project Name:</b> SR 204, US 17 to Rio Road	<b>PI No.:</b> 622870	<b>Unit Prices based on DTEST as of:</b> 6/27/2010
<b>Project No.:</b> NH000-0111-01(024)	<b>County:</b> Chatham	
<b>Alt:</b> D1e - EB Loop, WB Loop	<b>Date:</b> 11-Jun-10	<b>\$ 24,388,426.91</b>

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
<b>DRAINAGE</b>						<b>\$ 558,452.09</b>

500-3800	CLASS A CONCRETE, INCL REINF STEEL	CY	31	\$ 497.45	\$ 15,420.95	
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF	4,334	\$ 27.57	\$ 119,488.38	
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	LF	1,463	\$ 34.53	\$ 50,517.39	
550-1360	STORM DRAIN PIPE, 36 IN, H 1-10	LF	220	\$ 49.47	\$ 10,883.40	
550-1480	STORM DRAIN PIPE, 48 IN, H 1-10	LF	11	\$ 73.79	\$ 811.69	
550-1600	STORM DRAIN PIPE, 60 IN, H 1-10	LF	2,420	\$ 101.12	\$ 244,710.40	
550-1721	STORM DRAIN PIPE, 72 IN, H 10-15	LF				
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	EA	14	\$ 437.56	\$ 6,125.84	
550-4224	FLARED END SECTION 24 IN, STORM DRAIN	EA	10	\$ 531.69	\$ 5,316.90	
550-4236	FLARED END SECTION 36 IN, STORM DRAIN	EA	4	\$ 910.79	\$ 3,643.16	
573-2006	UNDR PIPE INCL DRAINAGE AGGR, 6 IN	LF		\$ 9.23		
615-1000	JACK OR BORE PIPE -	LF		\$ 204.76		
668-1100	CATCH BASIN, GP 1	EA	14	\$ 2,074.70	\$ 29,045.80	
668-1110	CATCH BASIN, GP 1, ADDL DEPTH	LF	27	\$ 151.08	\$ 4,079.16	
668-2105	DROP INLET, GP 1, SPCL DES	EA	42	\$ 1,076.71	\$ 45,221.82	
668-2110	DROP INLET, GP 1, ADDL DEPTH	LF	160	\$ 144.92	\$ 23,187.20	

**PERMANENT EROSION CONTROL & GRASSING**

**\$ 150,676.18**

163-0240	MULCH	TN	60	\$ 145.44	\$ 8,726.40	
441-0204	PLAIN CONC DITCH PAVING, 4 IN	SY	2,274	\$ 24.72	\$ 56,213.28	
576-1010	SLOPE DRAIN PIPE, 10 IN	LF	484	\$ 27.41	\$ 13,266.44	
576-1018	SLOPE DRAIN PIPE, 18 IN	LF	330	\$ 26.78	\$ 8,837.40	
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	SY		\$ 42.57		
603-2182	STN DUMPED RIP RAP, TP 3, 24 IN	SY	600	\$ 32.40	\$ 19,440.00	
603-7000	PLASTIC FILTER FABRIC	SY	600	\$ 3.26	\$ 1,956.00	
700-6910	PERMANENT GRASSING	AC	20	\$ 660.30	\$ 13,206.00	
700-7000	AGRICULTURAL LIME	TN	60	\$ 53.69	\$ 3,221.40	
700-7010	LIQUID LIME	GL	50	\$ 15.54	\$ 777.00	
700-8000	FERTILIZER MIXED GRADE	TN	12	\$ 383.46	\$ 4,601.52	
700-8100	FERTILIZER NITROGEN CONTENT	LB	990	\$ 2.17	\$ 2,148.30	
700-9300	SOD	SY		\$ 2.79		
710-9000	PERMANENT SOIL REINFORCING MAT	SY		\$ 2.92		
715-2200	BITUMINOUS TREATED ROVING, WATERWAYS	SY	3,149	\$ 1.35	\$ 4,251.15	
716-2000	EROSION CONTROL MATS, SLOPES	SY	15,419	\$ 0.91	\$ 14,031.29	

**REMOVAL**

**\$ 545,350.00**

540-1101	REMOVAL OF EXISTING BR, STA NO -	LS		\$ 150,000.00		
609-1000	REMOVE ROADWAY SLAB	SY		\$ 40.00		
610-0714	REM CONC MEDIAN	SY		\$ 10.00		
610-0716	REM CONC MEDIAN BARRIER	LF	3,400	\$ 150.00	\$ 510,000.00	
610-1055	REM GUARDRAIL	LF		\$ 2.47		
610-1075	REM GUARDRAIL ANCH, ALL TYPES	EA		\$ 128.20		
610-2700	REM CONCRETE	SY		\$ 50.00		
610-2705	REM CONC APPROACH SLAB	SY		\$ 350.00		
610-6510	REM HWY SIGN, OVHD	EA	1	\$ 400.00	\$ 400.00	
610-9005	REM PORTIONS OF EXISTING RETAINING WALL -	LS	1	\$ 30,000.00	\$ 30,000.00	
610-9007	REM PORTIONS OF EXISTING CLVT, CONC, STA -	LS		\$ 50,000.00		
610-9099	REM WINGWALLS & PARAPETS, STA -	LS		\$ 1,641.62		
610-9310	REM STR SUPPORT, TP -	LS	1	\$ 4,950.00	\$ 4,950.00	

**DETAILED ESTIMATE**

<b>Project Name:</b> SR 204, US 17 to Rio Road	<b>PI No.:</b> 522870	<b>Unit Prices based on DTEST as of:</b> 5/27/2010
<b>Project No.:</b> NH000-0111-01(024)	<b>County:</b> Chatham	
<b>Alt:</b> D1e - EB Loop, WB Loop	<b>Date:</b> 11-Jun-10	<b>\$ 24,388,426.91</b>

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
<b>PERMANENT CONCRETE BARRIER</b>						<b>\$ 1,335,003.68</b>
621-3125	CONCRETE BARRIER, TP 25S, MODIFIED	LF		\$ 366.24		
621-3126	CONCRETE BARRIER, TYPE 26S	LF		\$ 200.00		
621-6001	CONCRETE BARRIER, TP S-1	LF	2,898	\$ 79.41	\$ 230,130.18	
621-6002	CONCRETE BARRIER, TP S-2	LF	3,150	\$ 90.69	\$ 285,673.50	
621-6003	CONCRETE BARRIER, TP S-3	LF		\$ 225.00		
621-6004	CONCRETE BARRIER, TP S-3A	LF				
621-6005	CONCRETE BARRIER, TP S-3B	LF		\$ 450.00		
621-6008	CONCRETE SIDE BARRIER, TP 7-CS	LF		\$ 175.00		
621-6012	CONCRETE SIDE BARRIER, TP 7-RS	LF		\$ 105.00		
621-6013	CONCRETE SIDE BARRIER, TP 7-TS	LF		\$ 280.48		
621-6201	CONCRETE SIDE BARRIER, TP 2-SA	LF	1,680	\$ 450.00	\$ 756,000.00	
621-6202	CONCRETE SIDE BARRIER, TP 2-SB	LF		\$ 600.00		
621-6203	CONCRETE SIDE BARRIER, TP 2-SC	LF		\$ 714.78		
621-6204	CONCRETE SIDE BARRIER, TP 2-SD	LF		\$ 2,300.00		
621-6205	CONCRETE SIDE BARRIER, TP 2-SE	LF		\$ 3,000.00		
621-6210	CONCRETE SIDE BARRIER, TP 6-S	LF		\$ 350.00		
621-6211	CONCRETE SIDE BARRIER, TP 6-SA	LF	158	\$ 400.00	\$ 63,200.00	
621-6212	CONCRETE SIDE BARRIER, TP 6-SB	LF		\$ 600.00		
621-6213	CONCRETE SIDE BARRIER, TP 6-SC	LF		\$ 1,700.00		
<b>SOUND BARRIERS</b>						<b>\$ 3,155,775.00</b>
621-6012	CONCRETE SIDE BARRIER, TP 7-RS	LF		\$ 105.00		
624-0400	SOUND BARRIER, TYPE-	SF	126,231	\$ 25.00	\$ 3,155,775.00	
<b>SIGNING</b>						<b>\$ 448,826.19</b>
636-1020	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	SF	233	\$ 13.33	\$ 3,105.89	
636-1029	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3	SF	124	\$ 19.15	\$ 2,374.60	
636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF	242	\$ 17.88	\$ 4,326.96	
636-1041	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9	SF	61	\$ 28.29	\$ 1,725.69	
636-1072	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 3	SF	3,380	\$ 18.74	\$ 63,341.20	
636-2070	GALV STEEL POSTS, TP 7	LF	593	\$ 6.76	\$ 4,008.68	
636-2090	GALV STEEL POSTS, TP 9	LF	379	\$ 7.46	\$ 2,827.34	
638-1001	STR SUPPORT FOR OVERHEAD SIGN, TP 1, STA -	LS	5	\$ 61,098.56	\$ 305,492.80	
639-2002	STEEL WIRE STRAND CABLE, 3/8 IN	EA	495	\$ 4.06	\$ 2,009.70	
639-3004	STEEL STRAIN POLE, TP IV	EA	7	\$ 8,516.19	\$ 59,613.33	
<b>GUARDRAIL</b>						<b>\$ 129,089.91</b>
402-3103	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL	TN	182	\$ 61.11	\$ 11,122.02	
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	290	\$ 58.42	\$ 16,941.80	
436-1000	ASPHALTIC CONCRETE CURB -	LF	4,107	\$ 8.36	\$ 34,334.52	
641-1100	GUARDRAIL, TP T	LF		\$ 41.46		
641-1200	GUARDRAIL, TP W	LF	4,107	\$ 14.33	\$ 58,853.31	
641-2200	DBL FACED GUARDRAIL, TP W	LF		\$ 21.33		
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	2	\$ 621.35	\$ 1,242.70	
641-5012	GUARDRAIL ANCHORAGE, TP 12	EA	3	\$ 2,198.52	\$ 6,595.56	
642-0100	CABLE BARRIER	LF		\$ 14.54		
642-0300	CABLE TERMINAL (NCHRP 350 TL-3 COMPLIANT)	EA		\$ 2,915.12		

**DETAILED ESTIMATE**

Project Name: SR 204, US 17 to Rio Road      PI No.: 522870      Unit Prices based on DTEST as of: 5/27/2010  
 Project No.: NH000-0111-01(024)      County: Chatham  
 Alt: D1e - EB Loop, WB Loop      Date: 11-Jun-10      \$ 24,388,426.91

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
----------	------------------	-------	----------	------------	-----------	----------------

**FENCING**

						\$ 35,599.41
643-0010	FIELD FENCE WOVEN WIRE	LF	7,623	\$ 4.67	\$ 35,599.41	
643-0105	FIELD FENCE BARBED WIRE, 5 STRANDS	LF		\$ 4.05		
643-1171	CH LK FENCE, ZC COAT, 8 FT, 9 GA	LF		\$ 30.05		
643-8000	GATE, FIELD FENCE -	EA		\$ 470.77		
643-8010	GATE, CHAIN LINK ZC COAT -	EA		\$ 1,088.97		

**TRAFFIC SIGNALS**

						\$ 214,000.00
647-1001	TRAFFIC SIGNAL INSTALLATION NO - Complete - Major Intersection	EA	2	\$ 100,000.00	\$ 200,000.00	
647-1002	TRAFFIC SIGNAL INSTALLATION NO - Complete - Minor Intersection	EA		\$ 80,000.00		
647-1003	TRAFFIC SIGNAL INSTALLATION NO - Complete - Upgrade Existing	EA		\$ 60,000.00		
647-1050	TRAFFIC SIGNAL Communications Cable	LF	700	\$ 20.00	\$ 14,000.00	

**MARKING**

						\$ 39,700.17
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	EA	53	\$ 68.12	\$ 3,610.36	
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LF	40,865	\$ 0.32	\$ 13,076.80	
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LF	19,525	\$ 0.33	\$ 6,443.25	
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	528	\$ 3.64	\$ 1,921.92	
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF	3,168	\$ 1.69	\$ 5,353.92	
653-3501	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	GLF	16,115	\$ 0.22	\$ 3,545.30	
653-3502	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	GLF		\$ 0.25		
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	SY	286	\$ 2.51	\$ 717.86	
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	SY	722	\$ 2.57	\$ 1,855.54	
654-1001	RAISED PVMT MARKERS TP 1	EA	264	\$ 2.93	\$ 773.52	
654-1003	RAISED PVMT MARKERS TP 3	EA	730	\$ 3.29	\$ 2,401.70	

**SANITARY SEWER**

						\$ -
660-0008	SAN SEWER PIPE, 8 IN, PVC	LF		\$ 24.39		
660-0012	SAN SEWER PIPE, 12 IN, PVC	LF				
660-0808	SAN SEWER PIPE, 8 IN, DUCTILE IRON	LF		\$ 41.37		
660-0812	SAN SEWER PIPE, 12 IN, DUCTILE IRON	LF		\$ 153.68		
660-0816	SAN SEWER PIPE, 16 IN, DUCTILE IRON	LF		\$ 64.56		
660-0824	SAN SEWER PIPE, 24 IN, DUCTILE IRON	LF		\$ 190.00		
668-3300	SAN SEWER MANHOLE, TP 1	EA		\$ 1,870.51		
668-3311	SAN SEWER MANHOLE, TP 1, ADDL DEPTH, CL 1	LF		\$ 150.62		

**DETAILED ESTIMATE**

<b>Project Name:</b> SR 204, US 17 to Rio Road	<b>PI No.:</b> 622870	<b>Unit Prices based on DTEST as of:</b> 5/27/2010
<b>Project No.:</b> NH000-0111-01 (024)	<b>County:</b> Chatham	
<b>Alt:</b> D1e - EB Loop, WB Loop	<b>Date:</b> 11-Jun-10	<b>\$ 24,388,426.91</b>

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
----------	------------------	-------	----------	------------	-----------	----------------

**WATER DISTRIBUTION**

670-1080	WATER MAIN, 8 IN	LF		\$ 18.73		
670-1120	WATER MAIN, 12 IN	LF		\$ 36.29		
670-1160	WATER MAIN, 16 IN	LF		\$ 60.00		
670-2080	GATE VALVE, 8 IN	EA		\$ 1,036.15		
670-2120	GATE VALVE, 12 IN	EA		\$ 1,808.09		
670-2160	GATE VALVE, 16 IN	EA		\$ 5,050.00		
670-3087	TAPPING SLEEVE & VALVE ASSEMBLY, 8 IN X 8 IN	EA		\$ 2,474.28		
670-3129	TAPPING SLEEVE & VALVE ASSEMBLY, 12 IN X 12 IN	EA		\$ 5,408.04		
670-3170	TAPPING SLEEVE & VALVE ASSEMBLY, 16 IN X 16 IN	EA		\$ 14,100.00		
670-4000	FIRE HYDRANT	EA		\$ 2,466.39		
670-5010	WATER SERVICE LINE, 1 IN	LF		\$ 13.19		
670-7000	STEEL CASING -	LF		\$ 93.03		
670-8112	DBL STRAP SADDLE, 12 IN X 1 IN	EA		\$ 462.34		
670-8320	DBL STRAP SADDLE, 8 IN X 1 IN	EA		\$ 356.66		
670-8440	DBL STRAP SADDLE, 16 IN X 1 IN	EA				
670-9710	RELOCATE EXIST FIRE HYDRANT	EA		\$ 2,073.00		
670-9720	RELOCATE EXIST WATER VALVE, INCL BOX	EA		\$ 1,000.00		
670-9730	RELOCATE EXIST WATER METER, INCL BOX	EA		\$ 349.21		

**LIGHTING**

**\$ 870,000.00**

681-0001	Street Lighting Complete	MI	1	\$ 270,000.00	\$ 270,000.00	
681-1365	LIGHTING STD, ALUM, 37 FT MH, 8.5 FT ARM	EA				
681-6364	LUMINAIRE, TP 3, 400 W, METAL HALIDE	EA		\$ 810.76		
682-1406	CABLE, TP XHHW, AWG NO 6	LF		\$ 1.04		
682-1408	CABLE, TP XHHW, AWG NO 2	LF		\$ 2.19		
682-6120	CONDUIT, RIGID, 2 IN	LF		\$ 7.29		
682-6222	CONDUIT, NONMETL, TP 2, 2 IN	LF		\$ 4.77		
682-9010	SVC POLE RISER	EA		\$ 1,095.61		
682-9021	ELECTRICAL JUNCTION BOX, CONC GROUND MOUNTED	EA		\$ 861.61		
683-0001	Interchange Lighting Complete	EA	1	\$ 600,000.00	\$ 600,000.00	
683-1121	LIGHTING TOWER, STEEL, 120 FT MH, INCL LOWERING EQUIP	EA		\$ 18,320.00		
683-6586	HIGH LEVEL LUMINAIRE, TP 5, 1000 W, HP SODIUM	EA		\$ 834.38		

**LANDSCAPING**

**\$ -**

702-0001	Landscaping Complete	MI		\$ 200,000.00		
702-0030	ACER RUBRUM -	EA		\$ 200.00		
702-0140	CERCIS CANADENSIS -	EA		\$ 300.00		
702-0159	CHIONANTHUS VIRGINICUS -	EA		\$ 250.00		
702-0280	GARDENIA JASMINOIDES -	EA		\$ 40.00		
702-0472	ILEX X ATTENUATA -	EA		\$ 200.00		
702-0507	JUNIPERUS HORIZONTALIS -	EA		\$ 15.00		
702-0542	LAGERSTROEMIA INDICA -	EA		\$ 200.00		
702-0559	LIRIOPE MUSCARI -	EA		\$ 5.00		
702-0636	MAGNOLIA SOULANGIANA -	EA		\$ 350.00		
702-0795	PITTOSPORUM TOBIRA -	EA		\$ 20.00		
702-0910	QUERCUS VIRGINIANA -	EA		\$ 4,000.00		
702-0977	RHAPHOLEPIS INDICA -	EA		\$ 30.00		
702-9005	SPRING APPLICATION FERTILIZER	LB		\$ 2.00		
702-9025	LANDSCAPE MULCH	SY		\$ 8.00		
708-1000	PLANT TOPSOIL	CY		\$ 150.00		

**DETAILED ESTIMATE**

<b>Project Name:</b>	SR 204, US 17 to Rio Road	<b>PI No.:</b>	622870	<b>Unit Prices based on DTEST as of:</b>	5/27/2010
<b>Project No.:</b>	NH000-0111-01(024)	<b>County:</b>	Chatham		
<b>Alt:</b>	D1e - EB Loop, WB Loop	<b>Date:</b>	11-Jun-10		
					<b>\$ 24,388,426.91</b>

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION	SECTION TOTALS
	<b>ATMS</b>					<b>\$ 1,530,000.00</b>
935-0001	ATMS - Coduit Bank Complete	MI	2	\$ 200,000.00	\$ 400,000.00	
935-0002	ATMS - Fiber Complete	MI	2	\$ 250,000.00	\$ 500,000.00	
935-0003	ATMS - Cameras, Detectors, etc. Complete	MI	2	\$ 250,000.00	\$ 500,000.00	
935-0004	ATMS - Changeable Message Signs	EA	1	\$ 130,000.00	\$ 130,000.00	

# Preliminary Right of Way Cost Estimate (Revised)

Date: 5/4/2010  
 Project: NR100-0111-01(024), Chatham County P.I. Number 522870  
 Existing/Required R/W: Varies/Varies No. Parcels 22  
 Project Termini: State Route 204 at the King George Boulevard Interchange  
 Project Description: Construction of SR 204 Interchange at King George Boulevard

**Fee Simple:**

Small Residential	1,536 sf	@ \$	2.76 /sf =	\$	4,239	
Multi-Family	25,009 sf	@ \$	2.87 /sf =	\$	71,776	
Light Commercial	103,767 sf	@ \$	8.04 /sf =	\$	834,287	
Heavy Commercial	20,022 sf	@ \$	16.07 /sf =	\$	1,446,654	
<b>Total</b>	<b>220,334 sf</b>			\$	<b>2,356,956</b>	<b>\$2,356,956</b>

**Permanent Construction Easement:**

Small Residential	0 sf	@ \$	1.38 /sf =	\$	0	
Multi-Family	3,028 sf	@ \$	1.44 /sf =	\$	4,360	
Light Commercial	4,251 sf	@ \$	4.02 /sf =	\$	17,089	
Heavy Commercial	4,133 sf	@ \$	8.03 /sf =	\$	33,188	
<b>Total</b>	<b>11,412 sf</b>			\$	<b>54,637</b>	<b>\$54,637</b>

**Improvements:**

1 Commercial	=	\$	312,500	
1 Residential	=	\$	0	
				<b>312,500</b>

**Relocation:**

1 Commercial	=	\$	25,000	
1 Residential	=	\$	0	
				<b>25,000</b>

**Damages:**

Proximity -	1 Parcels	\$	100,000	
Consequential -	1 Parcel	\$	80,000	
Cost to Cure -	0 Parcel	\$	0	

Net Cost	\$	180,000
Scheduling Contingency 35%	\$	2,929,093
Adm/Court Cost 60%	\$	1,611,001
	\$	2,724,056
	\$	7,264,150

<b>Total to be Acquired</b>	\$	<b>7,270,000</b>
<b>Total Acquired to Date</b>	\$	<b>7,320,000</b>
<b>Total Cost</b>	\$	<b>14,590,000</b>

Prepared By: John G. Simshauser Reviewed/Approved: Howard P. Copeland  
 John G. Simshauser, Cert. No. 2772 Howard P. Copeland  
 Moreland Altobelli Associates, Inc Right-of-Way Administrator

**Note: Accuracy of estimate is the sole responsibility of the preparer.**  
**Note: The Market Appreciation (40%) is not included in this Preliminary Cost Estimate.**

The following parcels have been acquired by GDOT as advanced acquisitions for the project. The actual acquisition costs are shown and are not included in the detailed estimate above.

Parcel H14	Lucke Investments	\$	1,040,000
Parcel E01	The Trellis	\$	4,000,000
Parcel H09, H10, H12	Gus Bell	\$	1,709,119
Parcel H15	Umezoni Shigenobu Etal Administration	\$	491,976
		\$	76,551
	<b>Total Acquired to Date</b>	\$	<b>7,317,646</b>

PRELIMINARY RIGHT OF WAY COST ESTIMATE - WORKSHEET  
 NH000-0111-01(024), Chatham County  
 Construction of SR 204 Interchange at King George Boulevard

P.I. # 522870  
 ALTERNATE D1e

May 4, 2010

Parcel #	Tax PIN	Current Owner Name	Property Address	Total Lot Size (AC)	Total Lot Area (SF)	Prop. Type	H&B	Land Value (p/ac)	Land Value (p/sf)	Req. ROW (Acres)	Req. ROW (SF)	Total take	Actual Acquired ROW
E01	1-0993-02-002	GA DOT	0 King George Blvd	37.10	1,616,076.00	Multi-Family	B	\$ 125,000.00	\$ 2.87	0.000	74,055.00	-	0.00
E02	1-0993-02-017	First City Assoc. LLLP	880 King George Blvd	1.70	74,052.00	Heavy Comm	D	\$ 700,000.00	\$ 16.07	1.700	74,055.00	Y	74,055.00
F07	1-0993-03-002	Mid-American Apts	1800 Grove Point Rd	15.80	689,248.00	Multi-Family	B	\$ 125,000.00	\$ 2.87	0.000	-	-	0.00
F14	1-0993-03-011	Watford-Sims LLC	1020 King George Blvd	0.87	37,962.00	Heavy Comm	D	\$ 700,000.00	\$ 16.07	0.128	5,666.00	N	5,666.00
F15	1-0993-03-006	GSG Savannah LLC	1040 King George Blvd	5.20	226,512.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.087	3,778.00	-	3,778.00
F16	1-0993-03-001A	Circle K Stores Inc	2008 King George Blvd	1.00	43,560.00	Heavy Comm	D	\$ 700,000.00	\$ 16.07	0.150	6,520.00	N	6,520.00
F17	1-0993-03-017	Waffle House Inc	1002 King George Blvd	0.70	30,492.00	Heavy Comm	D	\$ 700,000.00	\$ 16.07	0.089	3,681.00	N	3,681.00
G01	1-0993-02-021	A-C Financing LLC	821 King George Blvd	6.20	270,072.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.962	41,890.00	N	41,890.00
G02	1-0993-02-015A	Sugar Magnolia Inc	100 St George Blvd	10.60	461,736.00	Multi-Family	B	\$ 125,000.00	\$ 2.87	0.386	16,820.00	N	16,820.00
G09	1-0993-02-029	Sugar Magnolia Inc	1 St. George Blvd	7.40	322,344.00	Multi-Family	B	\$ 125,000.00	\$ 2.87	0.009	393.00	N	393.00
H05	1-0994-01-001G	Georgetown Crossing	1015 King George Blvd	13.00	566,260.00	Multi-Family	B	\$ 125,000.00	\$ 2.87	0.046	1,984.00	N	1,984.00
H06	1-0994-03-011e	Forest Cove POA	0 Abercorn Ext	0.20	8,712.00	Multi-Family	B	\$ 125,000.00	\$ 2.87	0.033	1,456.00	N	1,456.00
H07	1-0994A-03-011w	Forest Cove POA	0 Abercorn Ext	0.10	4,356.00	Multi-Family	B	\$ 125,000.00	\$ 2.87	0.064	2,799.00	Y	4,356.00
H08	1-0994A-03-012	Georgia Heritage Federal Cre	101 William Ct	1.33	59,096.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.000	-	-	0.00
H09	1-0994A-03-013	GA DOT	109 William Ct	1.30	56,626.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.000	-	-	0.00
H10	1-0994A-03-014	GA DOT	117 William Ct	2.00	87,120.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.000	-	-	0.00
H12	1-0994A-03-015	GA DOT	123 William Ct	2.00	87,120.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.000	-	-	0.00
H14	1-0994A-03-019	GA DOT	135 William Ct	3.30	143,748.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.000	-	-	0.00
H15	1-0994A-03-018	GA DOT	141 William Ct	1.90	82,764.00	Light Comm	C	\$ 350,000.00	\$ 8.04	0.000	-	-	0.00
H16	1-0994A-03-001	Sommer Kenneth P	138 Mariners Way	0.50	21,780.00	Small Res.	A	\$ 120,000.00	\$ 2.76	0.021	935.00	N	935.00
H17	1-0994A-03-002	McGuffin-Noll Douglas J	140 Mariners Way	0.40	17,424.00	Small Res.	A	\$ 120,000.00	\$ 2.76	0.011	487.00	N	487.00
H18	1-0994A-03-003	Weinzettel Joyce Adams	143 Mariners Way	0.40	17,424.00	Small Res.	A	\$ 120,000.00	\$ 2.76	0.003	134.00	N	134.00
										3.68	160,878.00		220,334.00

SUMMARY

Type	Description	Land Value (p/ac)	Land Value (p/sf)
A	Small Res.	\$ 120,000.00	2.76
B	Multi-Family	\$ 125,000.00	2.87
C	Light Comm	\$ 350,000.00	8.04
D	Heavy Comm	\$ 700,000.00	16.07
		\$ 1,536.00	0.04
		\$ 23,452.00	0.54
		\$ 45,668.00	1.05
		\$ 90,022.00	2.07

PRELIMINARY RIGHT PRELIMINARY RIGHT OF WAY COST ESTIMATE - WORKSHEET  
 NH000-0111-01(024), NH000-0111-01(024), Chatham County  
 Construction of SR 2 Construction of SR 204 Interchange at King George Boulevard

P.I. # 522870  
 ALTERNATE D1e

May 4, 2010

Parcel #	Value of ROW	Improvement Costs			Damages			Property & Displacement Costs	Other Costs			Total ROW Costs	
		Improv	Relocation Cost	Proximity	Conseq	CTC	Scheduling		Admin	Inflation	Total Other Costs		
E01	\$ 1,190,063.85	\$ 252,500.00	\$ 25,000.00				\$ 1,467,563.85	\$ 807,160.12	\$ 1,364,834.38	\$ -	\$ -	\$ 2,171,994.50	\$ 3,639,558.35
E02	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
F07	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
F14	\$ 89,445.62						\$ 89,445.62	\$ 49,195.09	\$ 83,194.43	\$ -	\$ -	\$ 132,379.52	\$ 221,825.14
F15	\$ 30,375.12						\$ 30,375.12	\$ 16,706.32	\$ 28,248.86	\$ -	\$ -	\$ 44,955.18	\$ 75,330.30
F16	\$ 104,776.40	\$ 30,000.00					\$ 134,776.40	\$ 74,127.02	\$ 125,342.05	\$ -	\$ -	\$ 199,469.07	\$ 334,245.47
F17	\$ 62,367.67	\$ 30,000.00					\$ 92,367.67	\$ 50,802.22	\$ 85,901.93	\$ -	\$ -	\$ 136,704.15	\$ 229,071.82
G01	\$ 336,795.60				\$ 80,000.00		\$ 416,795.60	\$ 229,237.58	\$ 387,619.91	\$ -	\$ -	\$ 616,857.49	\$ 1,033,653.09
G02	\$ 48,273.40			\$ 100,000.00			\$ 148,273.40	\$ 81,550.37	\$ 137,894.26	\$ -	\$ -	\$ 219,444.63	\$ 367,718.03
G08	\$ 1,127.91						\$ 1,127.91	\$ 620.35	\$ 1,048.96	\$ -	\$ -	\$ 1,669.31	\$ 2,797.22
H05	\$ 5,694.08						\$ 5,694.08	\$ 3,131.74	\$ 5,295.49	\$ -	\$ -	\$ 8,427.24	\$ 14,121.32
H06	\$ 4,178.72						\$ 4,178.72	\$ 2,298.30	\$ 3,886.21	\$ -	\$ -	\$ 6,184.51	\$ 10,363.23
H07	\$ 12,501.72						\$ 12,501.72	\$ 6,875.95	\$ 11,626.60	\$ -	\$ -	\$ 18,502.55	\$ 31,004.27
H08	\$ 467,115.96						\$ 467,115.96	\$ 256,913.78	\$ 434,417.84	\$ -	\$ -	\$ 691,331.62	\$ 1,158,447.58
H09	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H10	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H12	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H14	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H15	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H16	\$ 2,580.60						\$ 2,580.60	\$ 1,419.33	\$ 2,399.86	\$ -	\$ -	\$ 3,819.29	\$ 6,389.89
H17	\$ 1,288.92						\$ 1,288.92	\$ 708.91	\$ 1,198.70	\$ -	\$ -	\$ 1,907.60	\$ 3,196.52
H18	\$ 369.84						\$ 369.84	\$ 203.41	\$ 343.95	\$ -	\$ -	\$ 547.36	\$ 917.20
	\$ 2,356,855.00	\$ 312,500.00	\$ 25,000.00	\$ 100,000.00	\$ 80,000.00	\$ 0.00	\$ 2,874,455.00	\$ 1,560,950.00	\$ 2,673,244.00	\$ 0.00	\$ 0.00	\$ 4,254,194.00	\$ 7,128,645.00

SUMMARY

Type	Description	3	1	1	1	0
A	Small Res.	0.00	0.00	0.00	0.00	0.00
B	Multi-Family	0.00	0.00	100,000.00	0.00	0.00
C	Light Comm	834,287.00	0.00	0.00	80,000.00	914,287.00
D	Heavy Comm	1,446,654.00	312,500.00	25,000.00	0.00	1,784,154.00

PRELIMINARY RIGHT OF WAY COST ESTIMATE - WORKSHEET  
 NH000-0111-01(024), Chatham County  
 Construction of SR 204 Interchange at King George Boulevard

P.I. # 522870  
 ALTERNATE D1e

May 4, 2010

Parcel #	Tax PIN	Current Owner Name	Property Address	Total Lot Size (AC)	Total Lot Area (SF)	Prop. Type	H&B	Land Value (p/ac)	Land Value (p/sf)	Req. Esmt (Acres)	Req. Esmt (SF)	Total take	Actual Acquired ROW
E01	1-0993-02-002	GA DOT	0 King George Blvd	37.10	1,615,076.00	Multi-Family	B	\$ 62,500.00	\$ 1.44	0.000	0.00		
E02	1-0993-02-017	First City Assoc, LLLP	890 King George Blvd	1.70	74,052.00	Heavy Comm	D	\$ 350,000.00	\$ 8.03	0.000	0.00		
F07	1-0993-03-002	Mid-American Apts	1800 Grove Point Rd	15.90	688,248.00	Multi-Family	B	\$ 62,500.00	\$ 1.44	0.000	0.00		
F14	1-0993-03-011	Watford-Sims LLC	1020 King George Blvd	0.87	37,962.00	Heavy Comm	D	\$ 350,000.00	\$ 8.03	0.000	0.00		
F15	1-0993-03-006	GSC Savannah LLC	1040 King George Blvd	5.20	228,512.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.000	0.00		
F16	1-0993-03-001A	Circle K Stores Inc	2008 King George Blvd	1.00	43,560.00	Heavy Comm	D	\$ 350,000.00	\$ 8.03	0.066	2,888.00		
F17	1-0993-03-017	Waffle House Inc	1002 King George Blvd	0.70	30,492.00	Heavy Comm	D	\$ 350,000.00	\$ 8.03	0.029	1,245.00		
G01	1-0993-02-021	A-C Financing LLC	821 King George Blvd	6.20	270,072.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.098	4,251.00		
G02	1-0993-02-015A	Sugar Magnolia Inc	100 St George Blvd	10.50	461,736.00	Multi-Family	B	\$ 62,500.00	\$ 1.44	0.000	0.00		
G09	1-0993-02-029	Sugar Magnolia Inc	1 St. George Blvd	7.40	322,344.00	Multi-Family	B	\$ 62,500.00	\$ 1.44	0.000	0.00		
H05	1-0994-01-001G	Georgetown Crossing	1015 King George Blvd	13.00	566,260.00	Multi-Family	B	\$ 62,500.00	\$ 1.44	0.031	1,336.00		
H06	1-0994A-03-011w	Forest Cove POA	0 Abercorn Ext	0.20	8,712.00	Multi-Family	B	\$ 62,500.00	\$ 1.44	0.039	1,692.00		
H07	1-0994A-03-011w	Forest Cove POA	0 Abercorn Ext	0.10	4,356.00	Multi-Family	B	\$ 62,500.00	\$ 1.44	0.000	0.00		
H08	1-0994A-03-012	Georgia Heritage Federal Cr	101 William Ct	1.33	59,099.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.000	0.00		
H09	1-0994A-03-013	GA DOT	109 William Ct	1.30	56,628.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.000	0.00		
H10	1-0994A-03-014	GA DOT	117 William Ct	2.00	87,120.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.000	0.00		
H12	1-0994A-03-015	GA DOT	123 William Ct	2.00	87,120.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.000	0.00		
H14	1-0994A-03-019	GA DOT	135 William Ct	3.30	143,748.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.000	0.00		
H15	1-0994A-03-018	GA DOT	141 William Ct	1.90	82,764.00	Light Comm	C	\$ 175,000.00	\$ 4.02	0.000	0.00		
H16	1-0994A-03-001	Sommer Kenneth P	138 Mariners Way	0.50	21,760.00	Small Res.	A	\$ 60,000.00	\$ 1.38	0.000	0.00		
H17	1-0994A-03-002	McGuffin-Noll Douglas J	140 Mariners Way	0.40	17,424.00	Small Res.	A	\$ 60,000.00	\$ 1.38	0.000	0.00		
H18	1-0994A-03-003	Weinzettel Joyce Adams	143 Mariners Way	0.40	17,424.00	Small Res.	A	\$ 60,000.00	\$ 1.38	0.000	0.00		
										0.26	11,412.00		0.00

SUMMARY

Type	Description	Land Value (p/ac)	Land Value (p/sf)
A	Small Res.	\$ 60,000.00	1.38
B	Multi-Family	\$ 62,500.00	1.44
C	Light Comm	\$ 175,000.00	4.02
D	Heavy Comm	\$ 350,000.00	8.03

Req. Esmt (Acres)	Req. Esmt (SF)	Total take	Actual Acquired ROW
0.00	0.00	0.00	0.00
0.07	3,028.00	3,028.00	3,028.00
0.10	4,251.00	4,251.00	4,251.00
0.09	4,133.00	4,133.00	4,133.00



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** NH000-0111-01(024) Chatham  
P.I. # 522879

**OFFICE** Jesup

**FROM** Karon Ivery  
District Utilities Engineer

**DATE** 01/15/2010

**TO** McGee Partners, Inc.  
**ATTN** Jenny C. Jenkins, P.E.

**SUBJECT** PRELIMINARY UTILITY COST (ESTIMATE)

As requested by your office, we are furnishing you with a Preliminary Utility Cost estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON- REIMBURSABLE	REIMBURSABLE
Atlanta Gas Light	\$ 300,000	\$ 100,000
Coastal Communications	\$ 41,000	\$ 0
City of Savannah	\$3,552,000	\$ 886,000
Georgia Power-Dist.	\$ 25,000	\$ 0
ATT/Bellsouth	\$ 410,000	\$ 132,800
Comcast	\$ 24,000	\$ 0
Qwest	\$ 0	\$ 0
<b>Totals</b>	<b>\$ 4,352,000</b>	<b>\$ 1,118,800</b>
30% Utilities Contingency		\$ 335,640
<b>Total Reimbursement Cost:</b>		<b>\$ 1,454,440</b>

**CC:** Angela Whitworth, Office of Financial Management  
Lee Upkins, State Utilities Preconstruction Engineer  
Robert Murphy, Project Manager  
District Office File  
Utilities Office File

**Tommy Crochet**

**From:** Baughman, Pamela [pbaughman@dot.ga.gov]  
**Sent:** Thursday, November 12, 2009 11:55 AM  
**To:** Tommy Crochet  
**Cc:** Murphy, Robert; Duff, Eric; Williams, Rich  
**Subject:** PI 522870, Mitigation Cost Estimates

Tommy,

I've played around with the numbers and talked this over with my colleagues and supervisor, and we believe we have a reasonable set of estimates for mitigation of the site on the Trellis property. Please understand that these are very conceptual estimates, based on known estimated and actual costs of past GDOT mitigation projects and on the findings of the survey and testing at Trellis, but also many unknown factors. As you know, each case is unique and the actual mitigation may include less or more, or just different, plans than those that I have used to estimate the following costs. Additionally, these estimates are based on numerous complex factors, many of which cannot be fully captured at this moment (such as project development activities, consultant, field crew size, field decisions, and, of course, actual findings). A summary appears below, but if you would like to see the actual numbers that went into these estimates, and what they are based on, please let me know.

So, with all that said, here are my estimates for a full mitigation of the parcel, for a scaled-back mitigation of the loop ramp, and for a mitigation of the minimization alternative:

1. **FULL** – In general, such a mitigation would need to include research design/background, fencing/security of the entire parcel, metal detection for the Civil War component, clearing of the vegetation, geophysical survey work, field investigations (stripping of the plowzone, trenching/excavation, excavation of features), data analysis, reporting, curation, public involvement, etc. (example overhead and profit for consultant). **\*\*A mitigation of the entire parcel (~20.76 acres) must consider and involve investigation of two vastly different components, areas of different artifact/feature density, and a series of successive steps.\*\*** Such a mitigation could = **~1.5 to 2 million dollars.**
2. **SCALED to the LOOP** – This estimate involves all of the above but with a reduction of the area which would be directly stripped and excavated (limited to the area within the footprint of the loop)...**\*\*Please note though that the area remaining within the interior of the loop would still be considered site area (some of it high probability site area) and would still require some sort of mitigation\*\*** A scaled back version (at 50% of the above effort) could = **~ 1 million dollars.** Again, it should also be duly noted that the Department is not really a land management agency and would be put in a difficult position in owning and managing some or all of such a large archaeological site. Future costs to the Department would include work done in light of considerations such as stewardship, monitoring, looting, vandalism, and neglect/site destruction (and costs associated with fixing these)....
3. **MINIMIZATION** – This estimate involves the minimization alternative of the diamond interchange. This alternative would involve mitigation of only the direct impact area (footprint) and would reduce costs regarding fencing/security, metal detection, clearing, field investigations, etc. (basically, all of the above) to approximately a quarter of that previously estimated. **\*\*However, this alternative would have to consider the remainder of the property and its ultimate dispensation would have to be accomplished with stipulations for the archaeological site (i.e. the remaining parcel could not just be surplus/sold with no restrictions...)\*\*** Mitigation of the minimization area could probably be accomplished at a cost of = **~\$500,000.**

Schedule: Such a mitigation project could run 6-18 months, staged for field work, but its development is highly dependent on field crew size and availability of personnel/resources;

5/17/2010

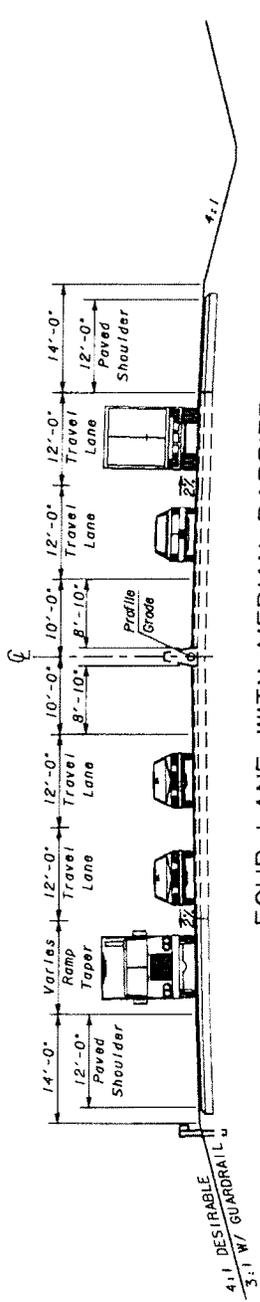
usually it takes 12-24 months for analysis, report preparation, curation, mitigation following field investigations of this kind.

All of these estimates are also dependent on what contributions the Department and the construction contract can make to the mitigation (for example, in fencing, clearing, stripping, and geophysical work-OEL), perhaps cutting costs by a 1/4 to a 1/2. It should also be noted that the property not currently owned by the Department (the conv. store and its surrounds) would probably need to be investigated and/or monitored for archaeological remains during the further development of the project.

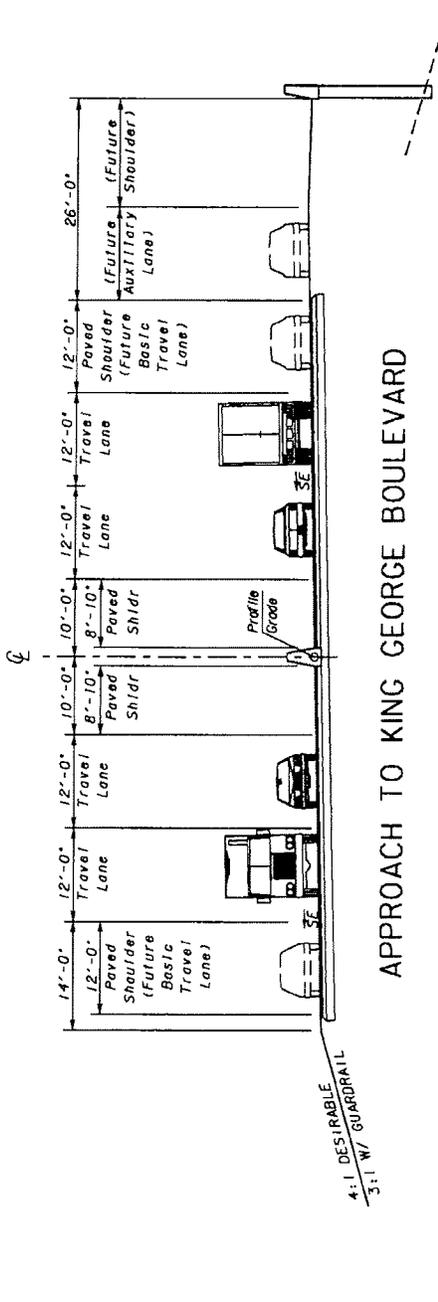
If you have any questions or concerns regarding this information, please let me know. If I can provide you with any further information, please let me know.

Thanks,  
Pam

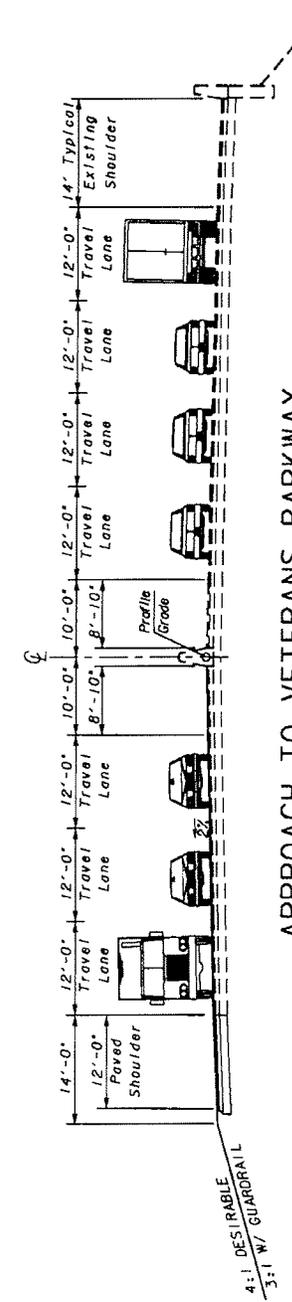
***Pamela J. Baughman***  
*Archaeologist*  
*Georgia Department of Transportation*  
*Office of Environment/Location*  
*One Georgia Center*  
*600 W. Peachtree Street, 16th floor*  
*Atlanta, GA 30308*  
*(404) 631-1198*  
**[pbaughman@dot.ga.gov](mailto:pbaughman@dot.ga.gov)**



FOUR-LANE WITH MEDIAN BARRIER



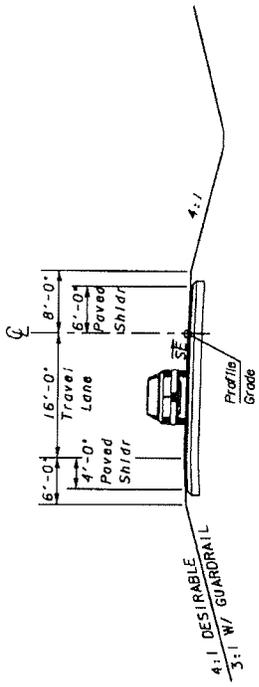
APPROACH TO KING GEORGE BOULEVARD



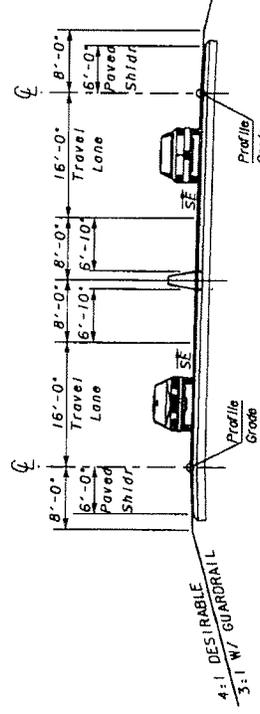
APPROACH TO VETERANS PARKWAY

CONCEPTUAL TYPICAL SECTIONS  
 SR 204 AT KING GEORGE BOULEVARD  
 PROJECT NO. N1000-OH-010241  
 P.L. NUMBER 522870  
**McGee Partners, Inc.**  
 SHEET 1 OF 2  
 CHATHAM COUNTY  
 JANUARY 2000

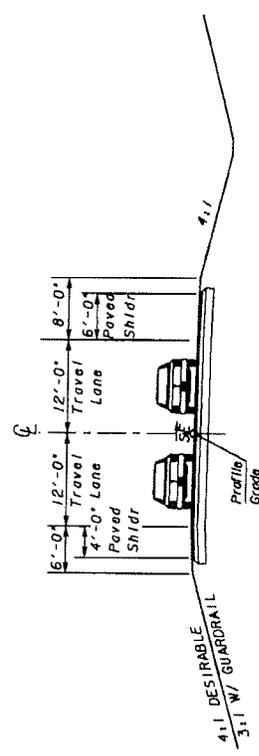
M.T.S.



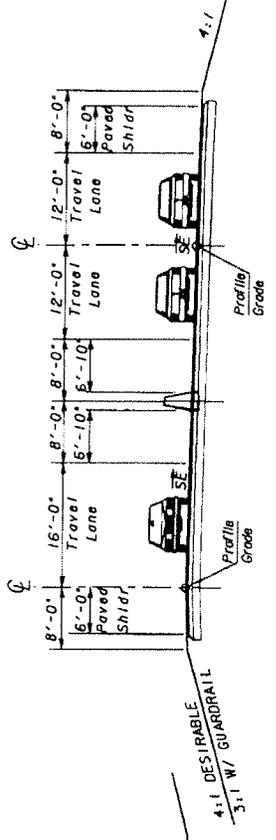
SINGLE-LANE RAMP



RAMPS WITH MEDIAN BARRIER  
(SINGLE LANE IN EACH DIRECTION)



DUAL-LANE RAMP



RAMPS WITH MEDIAN BARRIER

CONCEPTUAL TYPICAL SECTIONS  
 SR 204 AT KING GEORGE BOULEVARD  
 PROJECT NO. IN4000-06-0K0241  
 P.L. NUMBER 522870  
 McGee Partners, Inc.  
 SHEET 2 OF 2  
 CHATHAM COUNTY  
 JANUARY 2010

N.T.S.

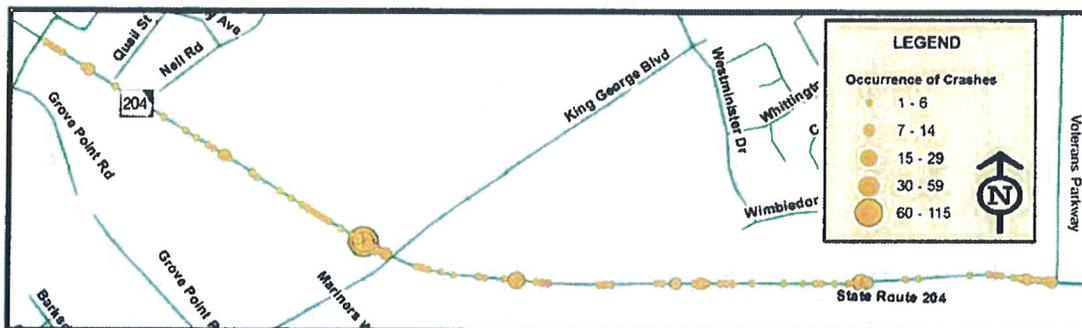
Project Number: NH000-0111-01(024)  
P. I. Number: 522870  
County: Chatham  
June 2010

CRASH HISTORY						
SR 204, From Pine Grove Road to Veterans Parkway (Milelog 11.94 to 13.61)						
Year	Crashes	Crash Rate	Injuries	Injury Rate	Fatalities	Fatality Rate
2006	149	466(545)	49	153 (207)	0	0.00 (1.69)
2007	178	537 (549)	58	175 (201)	1	3.02 (1.51)
2008	154	448 (524)	34	99 (191)	1	2.91 (1.33)

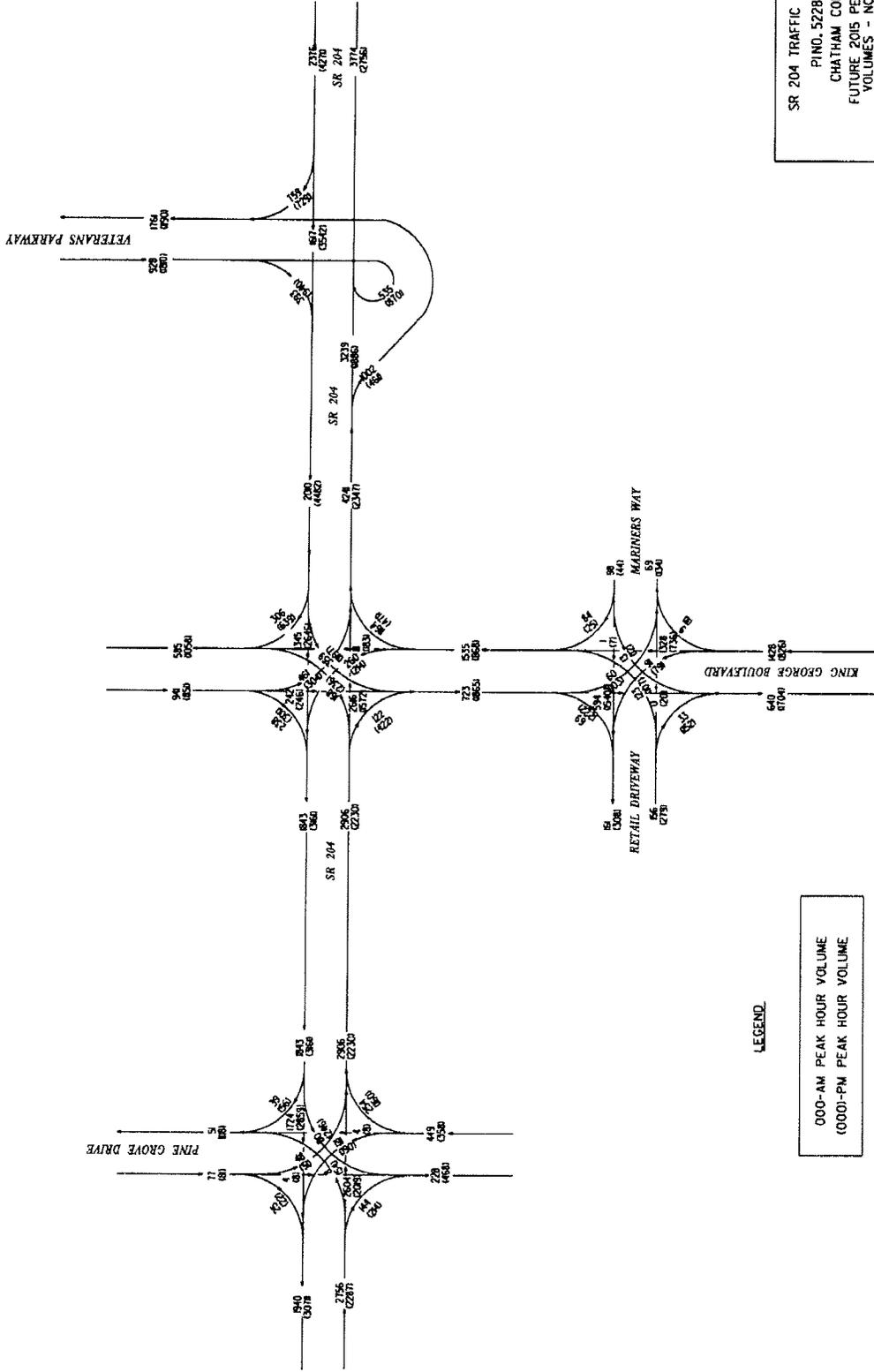
Note: All rates are per 100 million miles of travel. Numbers in parentheses are statewide average rates for Urban Principal Arterials, Non-Freeway.

SUMMARY BY CRASH TYPES				
SR 204, From Pine Grove Road to Veterans Parkway (Milelog 11.94 to 13.61)				
Crash Type	2006	2007	2008	Overall
Angle	8	4	10	22
Head On	1	4	0	5
Rear End	120	131	117	368
Sideswipe-Same Direction	2	13	7	22
Sideswipe-Opposite Direction	0	0	0	0
Other	18	26	20	64
<b>Total</b>	<b>149</b>	<b>178</b>	<b>154</b>	<b>481</b>

### CRASH INTENSITY DIAGRAM



STATE	PROJECT NUMBER	SHEET NUMBER
GA.	BH000-011-010(24)	14



SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 FUTURE 2015 PEAK HOUR  
 VOLUMES - NO BUILD

**JACOBS**

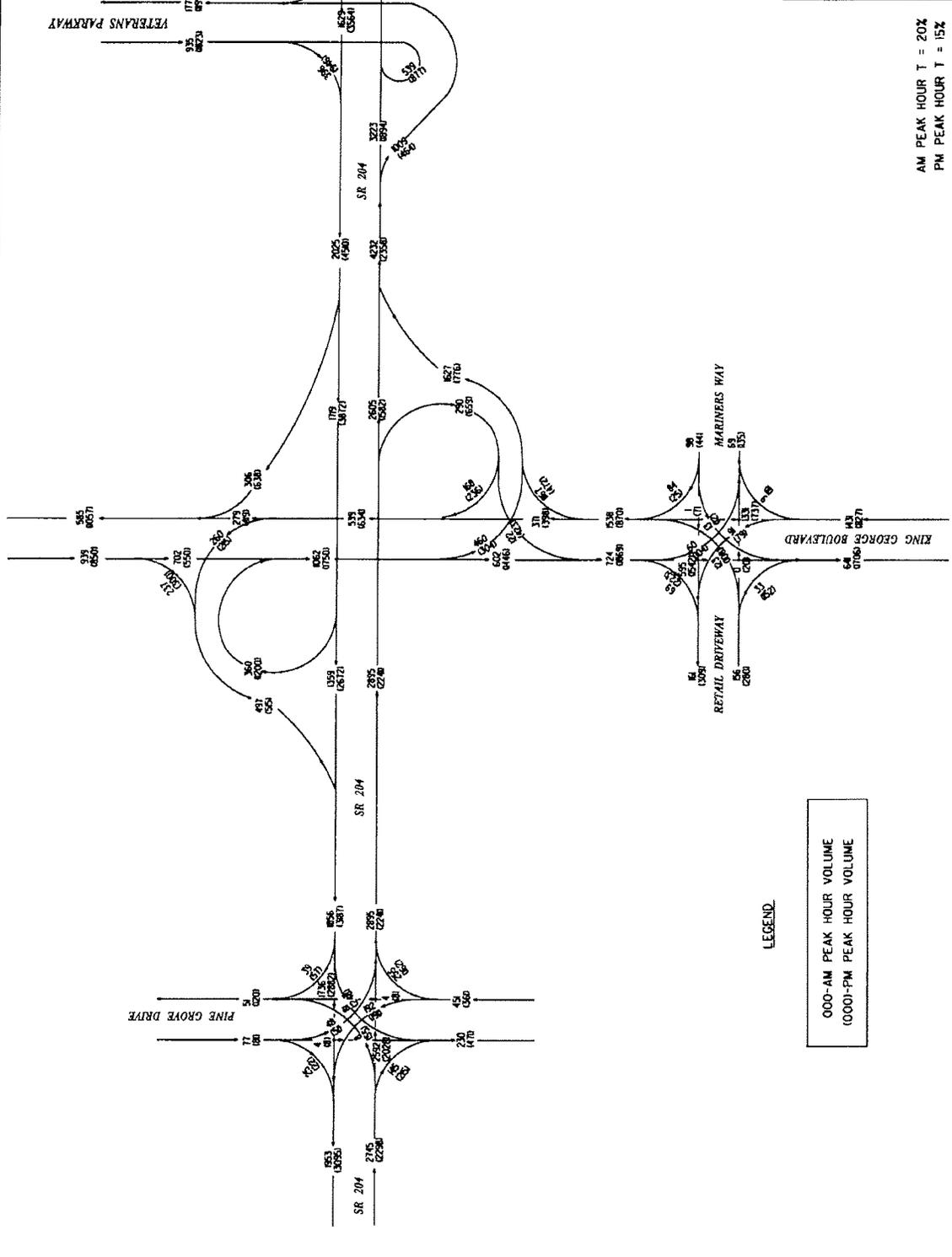
FIGURE 1

SCALE: N.T.S. JANUARY 2010

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME

AM PEAK HOUR T = 20%  
 PM PEAK HOUR T = 15%

STATE	PROJECT NUMBER	SHEET TOTAL
G.A.	IN5000-001-010(24)	NO. SHEETS



SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 FUTURE 2015 PEAK HOUR  
 VOLUMES - ALTERNATIVE D1E

**JACOBS**

FIGURE 2

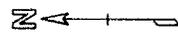
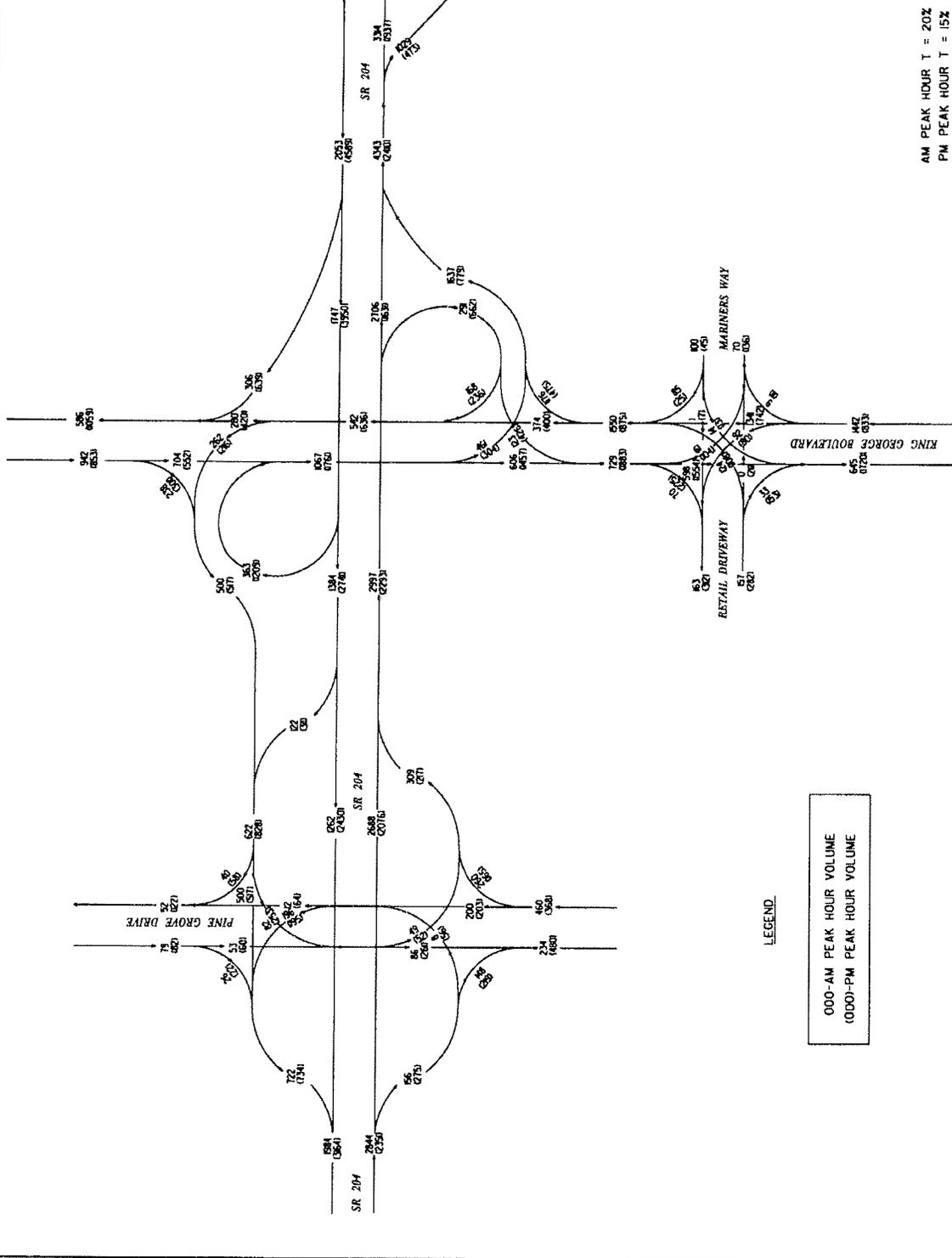
SCALE: N.T.S. JANUARY 2000

AM PEAK HOUR T = 20%  
 PM PEAK HOUR T = 15%

LEGEND

000-AM PEAK HOUR VOLUME  
 0000-PM PEAK HOUR VOLUME

STATE	PROJECT NUMBER	SHEET TOTAL
GA.	IN000-011-010(23)	23



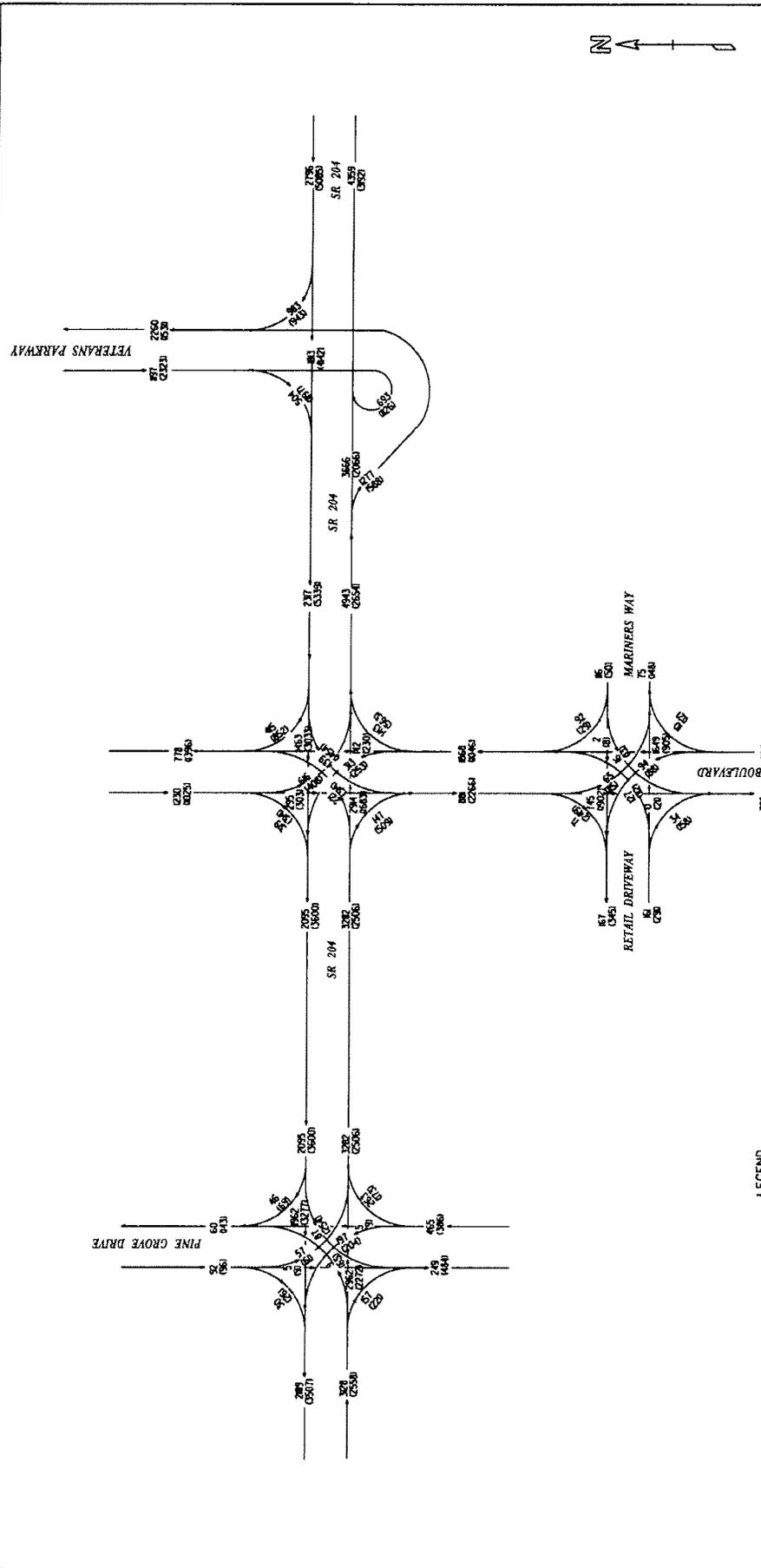
SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 FUTURE 2015 PEAK HOUR  
 VOLUMES - ALTERNATIVE C5B  
**JACOBS**  
 FIGURE 3  
 SCALE: N.T.S.  
 JANUARY 2010

AM PEAK HOUR T = 20%  
 PM PEAK HOUR T = 15%

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME

LEGEND

STATE	PROJECT NUMBER	SHEET TOTAL
G.A.	81000-DRI-010(24)	NO. SHEETS



SR 204 TRAFFIC ANALYSIS  
 PIND, 522870  
 CHATHAM COUNTY  
 FUTURE 2035 PEAK HOUR  
 VOLUMES - NO BUILD

**JACOBS**

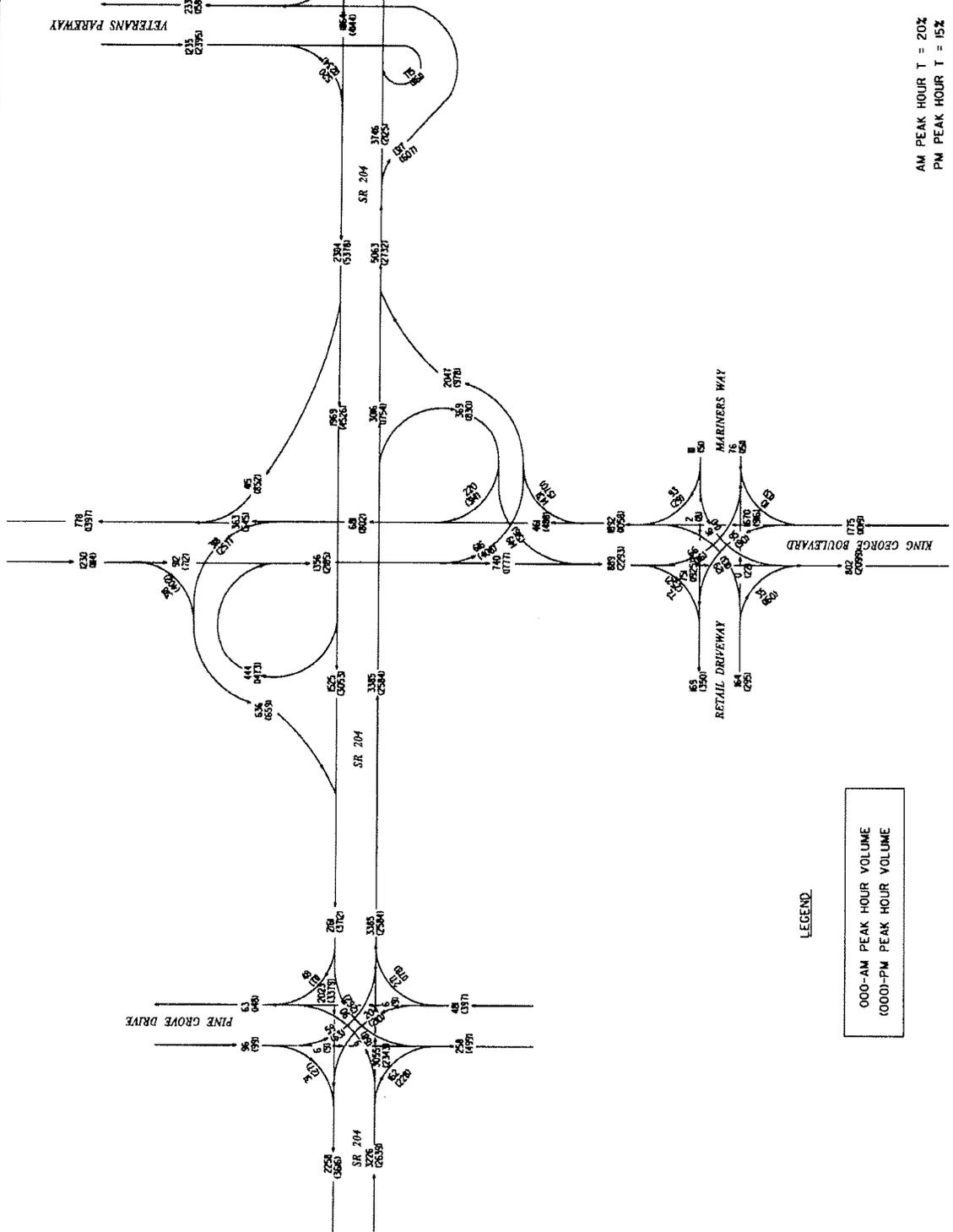
FIGURE 4

SCALE: N.T.S. JANUARY 2000

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME

AM PEAK HOUR T = 20%  
 PM PEAK HOUR T = 15%

STATE	PROJECT NUMBER	SHEET TOTAL
G.A.	SH000-011-010(25)	25



SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 FUTURE 2035 PEAK HOUR  
 VOLUMES - ALTERNATIVE D1E

**JACOBS**

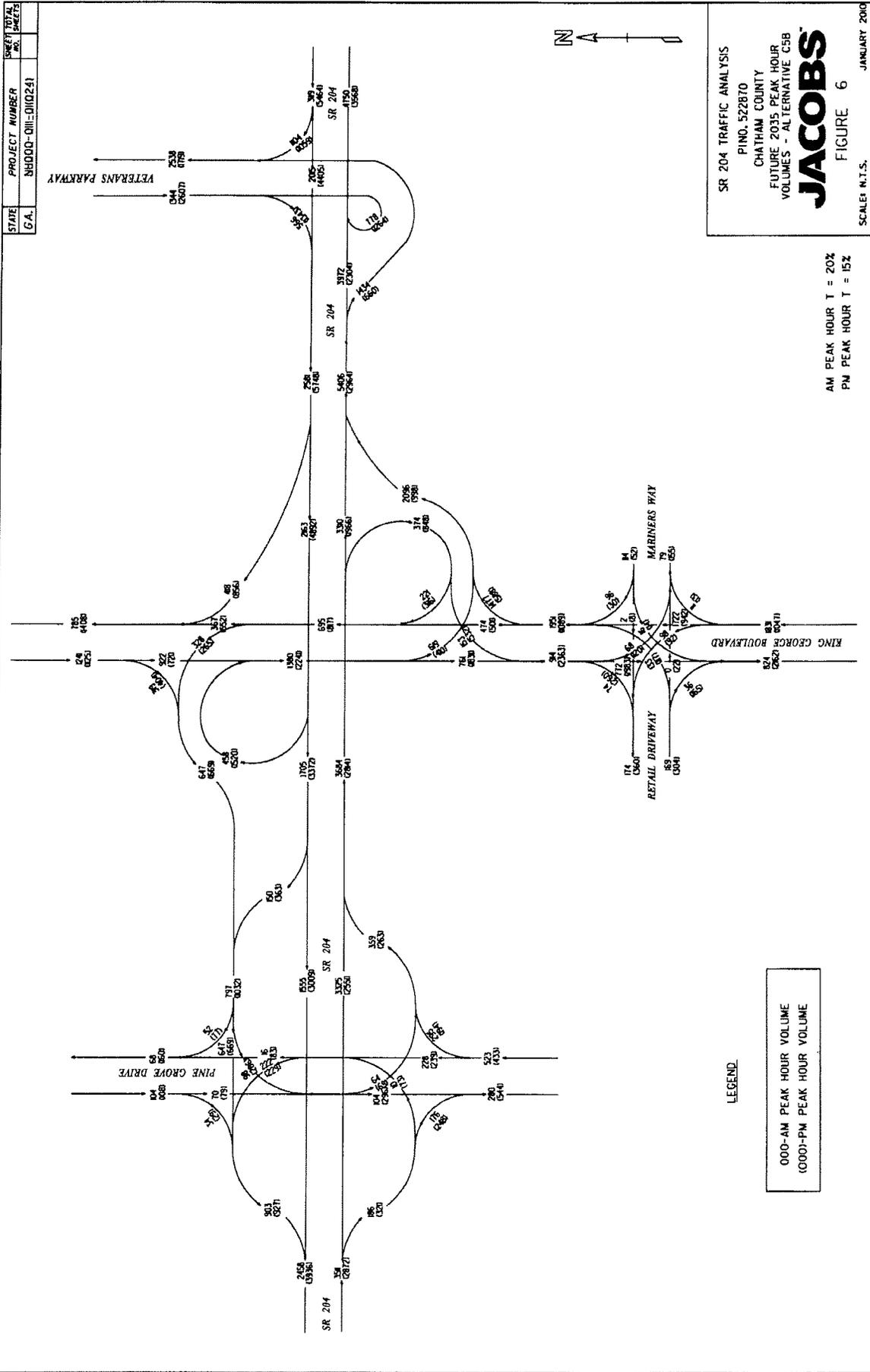
FIGURE 5  
 SCALE: N.T.S.  
 JANUARY 2000

AM PEAK HOUR T = 20%  
 PM PEAK HOUR T = 15%

LEGEND

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME

STATE	PROJECT NUMBER	SHEET TOTAL
G.A.	88000-QII-0102241	NO. SHEETS



SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 FUTURE 2035 PEAK HOUR  
 VOLUMES - ALTERNATIVE C5B

**JACOBS**

FIGURE 6  
 SCALE: N.T.S.  
 JANUARY 2008

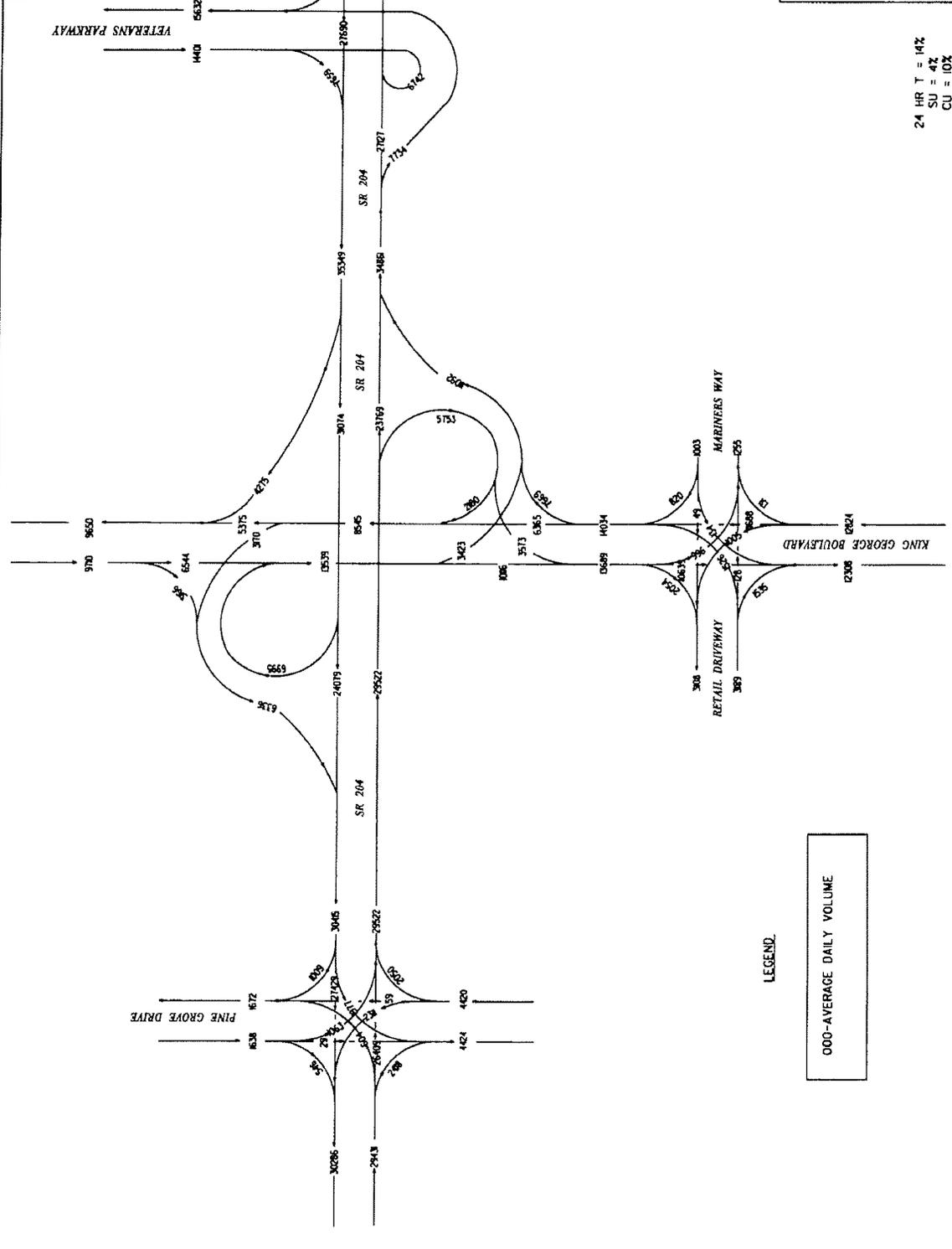
LEGEND

000-AM PEAK HOUR VOLUME  
 1000-PM PEAK HOUR VOLUME

AM PEAK HOUR T = 20%  
 PM PEAK HOUR T = 15%



STATE	PROJECT NUMBER	SHEET TOTAL
G.A.	86000-CHI-01024)	NO. SHEETS



SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 FUTURE 2015 AVERAGE DAILY  
 VOLUMES - ALTERNATIVE D1E

**JACOBS**

FIGURE 8  
 SCALE: N.T.S.  
 JANUARY 2010

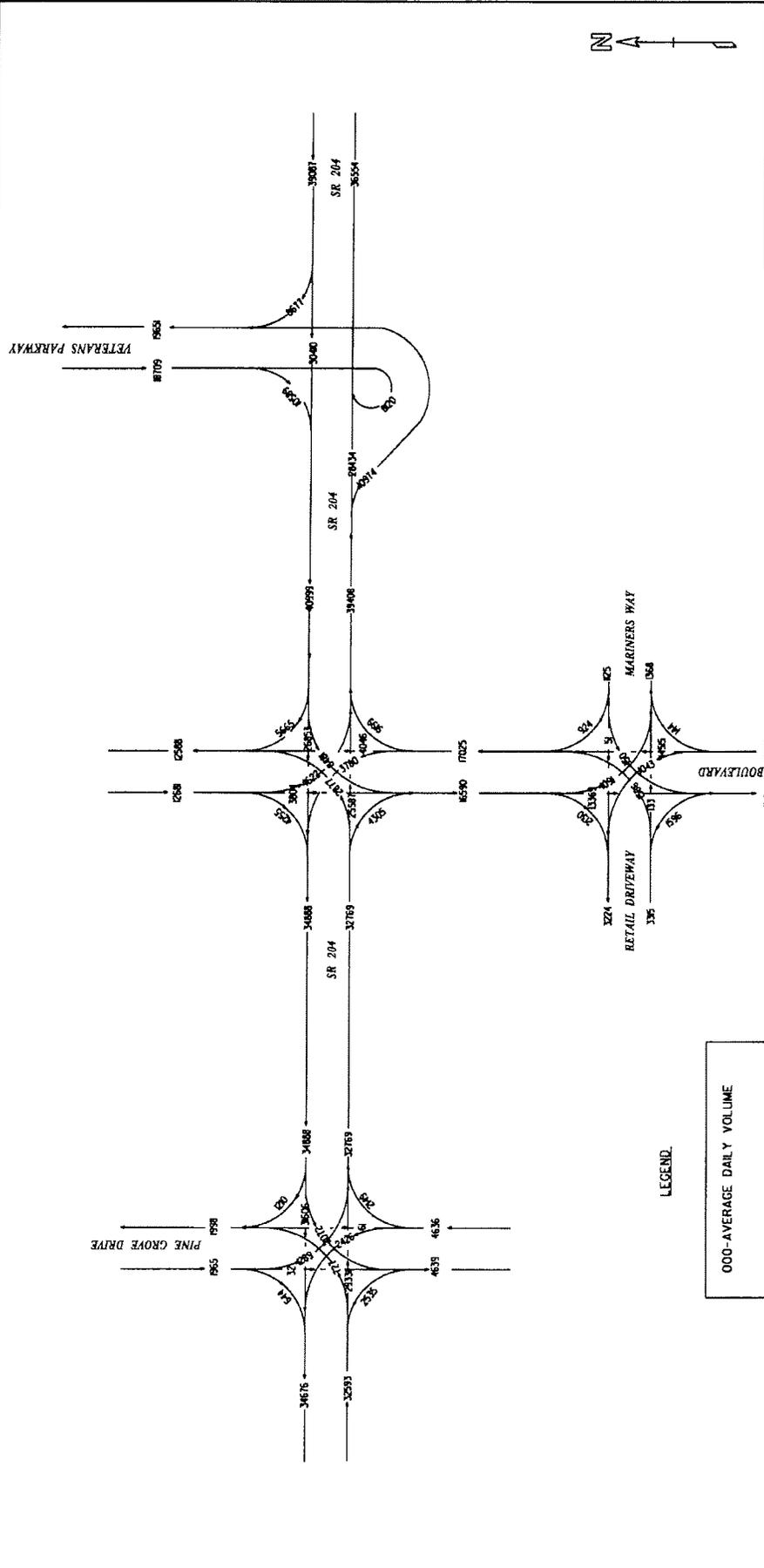
24 HR T = 14%  
 SU = 4%  
 CU = 10%

000-AVERAGE DAILY VOLUME

LEGEND.



STATE	PROJECT NUMBER	DRAWING TITLE
G.A.	BR000-011-010(2/1)	SR 204 TRAFFIC ANALYSIS



SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 FUTURE 2035 AVERAGE DAILY  
 VOLUMES - NO BUILD

**JACOBS**

FIGURE 10  
 SCALE: N.T.S.  
 JANUARY 2000

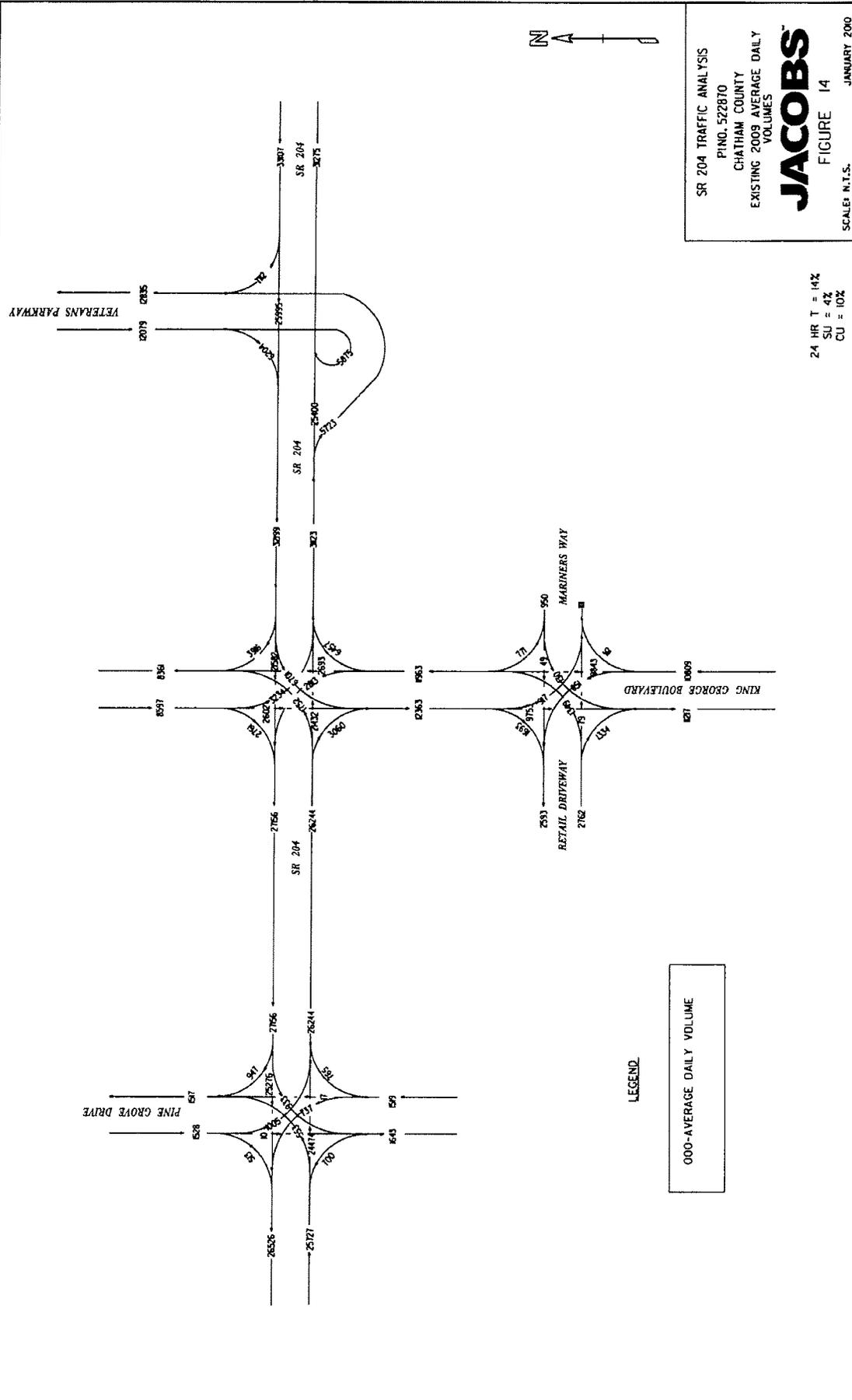
24 HR T = 14%  
 SU = 4%  
 CU = 10%







STATE	PROJECT NUMBER	SHEET TOTAL
GA.	W6000-011-010241	NO. SHEETS



SR 204 TRAFFIC ANALYSIS  
 PINO. 522870  
 CHATHAM COUNTY  
 EXISTING 2009 AVERAGE DAILY  
 VOLUMES  
**JACOBS**  
 FIGURE 14  
 SCALE: N.T.S. JANUARY 2000

As part of the SR 204 improvement project, Jacobs Engineering, Inc. (JEG) has completed a corridor study for SR 204 from Pine Grove Road to Rio Road in Chatham County, Georgia. Existing and future traffic conditions were analyzed for the corridor taking into consideration the proposed long-range widening of SR 204 and the anticipated growth in the area. The anticipated growth will increase traffic congestion and create lengthy delays for commuter and local traffic traveling through the corridor. Today, traffic traveling through the corridor experiences significant delay and congestion at the at-grade intersection of SR 204 and King George Boulevard during the AM and PM peak periods. To address these issues several roadway capacity and traffic operational improvement alternatives (including a no-build scenario) were evaluated as part of the study. The build condition proposes to convert the SR 204 at King George Boulevard intersection to a grade-separated interchange. Several alternative interchange configurations were examined including variations of a tight diamond, partial cloverleaf, single-point diamond, and diverging diamond interchange. Additionally, each alternative was examined with SR 204 as 4-lanes (D-Alternatives) and 6-lanes (C-Alternatives) to incorporate the proposed long-range widening project. Based on the results of the traffic analysis performed for the study, the proposed concept to convert SR 204 at King George Boulevard to a grade-separated partial cloverleaf interchange will provide the most benefit for traffic operations, reduce crash frequency and severity, and will increase mobility and minimize delay for both local and commuter vehicles traveling through the corridor.

### **Existing Conditions**

SR 204 is the major east-west urban principal arterial traversing suburban Savannah and southwest Chatham County and serves residential, commercial, office, military, and educational land uses. From Pine Grove Road to Rio Road, SR 204 has a rural characteristic and is comprised of lower density development. Most of the land along the east and west sides of the Little Ogeechee River is comprised of undeveloped tidal marsh. In the study area, SR 204 is a four-lane divided facility with an interchange at Veterans Parkway and at-grade signalized intersections at King George Boulevard and Pine Grove Road. SR 204 carries approximately 55,800 vehicles per day (vpd) between Veterans Parkway and King George Boulevard. The daily traffic volume on SR 204 drops significantly west of King George Boulevard to approximately 32,600 vpd.

Presently, traffic congestion exists along the SR 204 corridor during the peak hours, particularly at the King George Boulevard and Rio Road intersections during the PM peak period. Additionally, the SR 204 corridor from Pine Grove Road to Veterans Parkway has historic crash rates that are higher than the statewide average for urban principal arterial, freeway (non-interstate) by approximately 136%. Historic injury rates along the same stretch of SR 204 are also higher than the statewide average for urban principal arterial, freeway (non-interstate) by approximately 127%.

### **Traffic Volume Methodology**

Opening year (2015) and design year (2035) daily and peak hour traffic projections were prepared for the no-build condition and the concept alternatives. The future traffic projections took into consideration on-going and approved projects within the study area. Additionally, each alternative was examined with SR 204 as 4-lanes (D-Alternatives) and 6-lanes (C-Alternatives) to incorporate the proposed long-range widening project.

Under the no-build condition, the estimated average daily traffic (ADT) volume on SR 204 from Veterans Parkway to King George Boulevard is approximately 80,400 vpd and 67,700 vpd from King George Boulevard to Pine Grove Road for the year 2035. The traffic impact of the operational improvement project (D-alternatives) coupled with the background growth expected in southwestern Chatham County will increase daily traffic volumes to approximately 82,800 vpd from Veterans Parkway to King George Boulevard and 69,900 vpd from King George Boulevard to Pine Grove Road by 2035. If SR 204 is widened to 6-lanes (C-alternatives), traffic increases to approximately 89,700 vpd from Veterans Parkway to King George Boulevard and 76,500 vpd from King George Boulevard to Pine Grove Road due to the expected draw in traffic caused by widening SR 204 from 4-lanes to 6-lanes. These volumes are summarized in Table 1.

**Table 1 – Summary of ADTs**

Time Period	Pine Grove to King George ADT (vpd)	King George to Veterans Parkway ADT (vpd)
Existing (2009)	53,400	63,322
2035 No Build	67,657	80,407
2035 Build-Operational	69,907	82,767
2035 Build-Capacity (6-Ln)	76,496	89,678

Based on existing geometry, traffic congestion currently exists at the intersection of SR 204 and King George Boulevard which operates at level-of-service (LOS) F. This intersection requires operational improvements to meet the existing traffic demand because it creates a choke point that affects the entire corridor. The westbound SR 204 approach at this intersection in particular has very long queues (approximately 4200') during the weekday PM peak hour. Average westbound travel times from Rio Road to King George Boulevard are approximately 15 minutes in the PM peak hour. By 2035, this figure increases to approximately 29 minutes. As volumes increase along the corridor, queue length and delay will also increase. Without any operational improvements to SR 204, by 2035, conditions at this intersection are expected to continue to degrade.

**Alternatives Considered**

Several alternative concepts were considered for the SR 204 at King George Boulevard intersection to improve traffic conditions and safety. The alternatives considered for the concept include variations of a tight diamond, partial cloverleaf, single-point diamond, and diverging diamond.

Based on the results of the traffic analysis of existing and future conditions, the partial cloverleaf interchange concept was determined to best meet the future traffic needs and improve safety along the corridor. The other options were not able to accommodate the future traffic demand, improve safety, or effectively manage local traffic.

The preferred concept proposes to convert the intersection of SR 204 and King George Boulevard into a partial cloverleaf interchange with loop ramps in the northwest and southeast quadrants. Traffic signals are proposed for the eastbound ramp intersection with King George Boulevard. A traffic signal at the westbound ramp intersection will likely be warranted by 2035. The existing geometry along King George Boulevard was able to provide acceptable traffic

operations. This interchange configuration is expected to handle future traffic growth better than the other alternatives considered.

**Analysis Results**

Peak hour intersection operations for the existing, no-build, and build conditions were analyzed through the corridor using Synchro software. As depicted in Table 2, the King George Boulevard at SR 204 intersection is currently experiencing LOS F conditions in the eastbound-AM and westbound-PM peak directions with vehicle delays greater than 200 seconds. Under no-build conditions, the vehicle delay increases to greater than 500 seconds for the eastbound-AM and westbound-PM peak directions in 2035. Under the preferred concept alternative (D1e), most intersections will operate at LOS C or better conditions with delays of 29 seconds or less per vehicle. The King George Boulevard at SR 204 eastbound on-ramp intersection is expected to operate at LOS E with 66 seconds of vehicle delay. This is primarily due to the heavy northbound right-turn volume of vehicles turning onto SR 204 from King George Boulevard.

Table 2 – 2035 Intersection LOS for D-Alternatives

Intersection	Existing		No-Build		D1c, D1d, D1e		D2c & D2d		D3a	
	Overall LOS	Delay (s)	Overall LOS	Delay (s)	Overall LOS	Delay (s)	Overall LOS	Delay (s)	Overall LOS	Delay (s)
<b>AM</b>										
King George Blvd at Mariner's Way (u/s)	--	--	--	--	C	30	C	23	C	25
Eastbound Approach	E	50	F	*	--	--	--	--	--	--
Westbound Approach	C	21	E	44	--	--	--	--	--	--
King George Blvd at SR 204 EB (s)	F**	261**	F**	575**	F	88	F	83	F	97
King George Blvd at SR 204 WB (s)	E**	77**	F**	127**	A	5	A	4	C	33
Pine Grove Road at SR 204 (s)	C	24	F	163	F	182	F	182	F	182
<b>PM</b>										
King George Blvd at Mariner's Way (u/s)	--	--	--	--	C	30	C	28	C	20
Eastbound Approach	F	178	F	*	--	--	--	--	--	--
Westbound Approach	E	37	F	*	--	--	--	--	--	--
King George Blvd at SR 204 EB (s)	F**	128**	F**	400**	C	23	D	40	D	40
King George Blvd at SR 204 WB (s)	F**	*	F**	*	B	10	B	10	D	53
Pine Grove Road at SR 204 (s)	C	34	F	216	F	226	F	226	F	226

(s) = signalized, (u) = unsignalized, (u/s) = unsignalized for existing and no build, signalized for D-Alternatives

\*Delay calculation exceeds methodology, used where delay exceeds 600 seconds

\*\*Approach LOS, Delay, V/C Ratio and Queue Lengths used for comparison

Note: LOS & Delay for King George Blvd @ SR 204 EB & WB are at signalized ramp intersections for Alts D1, D2, and D3

Synchro analysis was also performed to determine LOS with SR 204 widened to 6-lanes (C-alternatives). As depicted in Table 3, the King George Boulevard at SR 204 intersection is currently experiencing LOS F conditions in the eastbound-AM and westbound-PM peak directions with vehicle delays greater than 200 seconds. Under no-build conditions, the vehicle delay increases to greater than 500 seconds for the eastbound-AM and westbound-PM peak directions in 2035. Under the preferred concept alternative (C5b), all intersections are expected to operate at LOS C or better with delays of 31 seconds or less per vehicle.

**Table 3 – 2035 Intersection LOS for C-Alternatives**

Intersection	Existing		No-Build		C1a,C1b,C1c,C1d		C4a		C5a & C5b		C6a	
	Overall LOS	Delay (s)	Overall LOS	Delay (s)	Overall LOS	Delay (s)	Overall LOS	Delay (s)	Overall LOS	Delay (s)	Overall LOS	Delay (s)
<b>AM</b>												
King George Blvd at Mariner's Way	B	12	C	24	B	13	B	12	B	19	B	18
King George Blvd at SR 204 EB	F**	264**	F**	558**	E	71	E	68	C	31	B	12
King George Blvd at SR 204 WB	F**	85**	F**	121**	A	3	C	25	A	3	C	23
Pine Grove Road at SR 204 EB	B**	17**	F**	224**	A	9	A	9	A	4	A	4
Pine Grove Road at SR 204 WB	A**	7**	D**	49**	B	12	B	12	B	13	B	13
<b>PM</b>												
King George Blvd at Mariner's Way	B	14	D	37	B	11	A	10	C	20	B	13
King George Blvd at SR 204 EB	E**	63**	F**	377**	C	33	C	28	C	24	B	19
King George Blvd at SR 204 WB	F**	754**	F**	1489**	A	2	D	51	A	3	D	53
Pine Grove Road at SR 204 EB	B**	16**	F**	128**	B	13	B	13	A	5	A	5
Pine Grove Road at SR 204 WB	B**	13**	F**	272**	B	13	B	13	B	14	B	14

\*\*Approach LOS, Delay, V/C Ratio and Queue Lengths used for comparison  
Note: LOS & Delay for King George Blvd @ SR 204 EB & WB are at signalized ramp intersections for Alts D1, D2, and D3

Traffic simulation software, CORSIM, was utilized to determine network-wide operating characteristics for the build conditions during the AM and PM peak hours. The results of the CORSIM analysis are depicted in Table 4 (D-alternatives) and Table 5 (C-alternatives). Additionally, Table 6 is a travel time summary for the build alternatives which shows a travel time savings of nearly seven minutes over no-build. The CORSIM results indicate that operations are similar along SR 204 for all the C & D alternatives during the AM Peak. However during the PM Peak, the C-Alternatives (27 minutes travel time savings) had significantly better operations than the D-Alternatives (18 minutes travel time savings).

**Table 4 – Densities and Speeds for D-Alternatives in Year 2035**

Location	D1c		D1d		D1e		D2c		D2d		D3a	
	Density (vpmp)	Speed (mph)										
<b>EB-AM</b>												
Before KG Offramp	26	51	27	51	27	51	28	50	27	51	28	50
KG Offramp to KG Onramp	24	52	24	52	24	52	24	53	23	53	24	52
KG Onramp to Veterans Offramp	21	52	22	52	22	52	22	52	21	52	22	52
After Veterans Offramp	20	53	21	53	21	53	20	53	20	53	20	53
Overall	23	52	24	52	23	52	23	52	22	52	23	52
<b>WB-PM</b>												
Veterans to KG Directional Ramp	156	6	135	9	137	9	158	6	136	7	109	11
KG Directional Ramp to Loop Ramp	119	7	102	9	109	9	124	7	110	8	138	7
KG Loop Ramp to Onramp	150	6	146	6	149	6	151	6	153	6	139	7
After Onramp	125	8	124	9	125	9	127	8	128	8	130	9
Overall	137	7	128	9	140	7	140	7	133	7	129	9

**Table 5 – Densities and Speeds for C-Alternatives in Year 2035**

Location	C1a		C1b		C1c		C4a		C5a		C6a	
	Density (vpmp)	Speed (mph)										
<b>EB-AM</b>												
Before KG Offramp	22	54	22	54	22	54	22	54	22	54	22	54
KG Offramp to KG Onramp	19	54	19	53	19	54	19	54	21	54	21	54
KG Onramp to Veterans Offramp	19	54	19	53	19	54	19	54	21	53	21	53
After Veterans Offramp	19	54	19	53	19	54	19	54	21	53	21	53
Overall	27	51	26	51	27	51	27	51	27	51	27	51
<b>WB-PM</b>												
Veterans to KG Directional Ramp	27	52	27	52	27	52	26	52	26	52	27	51
KG Directional Ramp to Loop Ramp	22	53	25	52	24	52	18	54	22	53	22	53
KG Loop Ramp to Onramp	22	53	22	53	24	53	18	54	22	53	22	53
After Onramp	22	53	22	53	22	53	18	54	22	53	22	53
Overall	26	50	26	50	25	51	22	51	26	50	26	50

Table 6 – Travel Time Summary

Location	Travel Time (sec)			
	Existing	No-Build	C-Alternatives (avg travel time)	D-Alternatives (avg travel time)
<b>EB-AM</b>				
Pine Grove Road to King George Blvd	183	425	46	23
King George Blvd to Veterans Parkway	53	53	51	61
<b>Overall</b>	<b>236</b>	<b>479</b>	<b>97</b>	<b>84</b>
<b>Savings over No-Build (sec)</b>			<b>382</b>	<b>395</b>
<b>WB-PM</b>				
Rio Road to Veterans Parkway	551	1332	115	99
Veterans Parkway to King George Blvd	334	414	53	334
King George Blvd to Pine Grove Road	67	95	46	304
<b>Overall</b>	<b>952</b>	<b>1842</b>	<b>213</b>	<b>737</b>
<b>Savings over No-Build (sec)</b>			<b>1628</b>	<b>1105</b>

A traffic signal warrant analysis was performed for the intersections of King George Boulevard at Mariner's Way and King George Boulevard at SR 204 EB Ramp using the criteria provided in the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA), 2009. According to the MUTCD, the investigation of the need for traffic signal control shall include an analysis of the applicable factors contained in the following traffic signal warrants and other factors related to existing operations and safety at the study location:

- Warrant 1 – Eight-Hour Peak Volume
- Warrant 2 – Four-Hour Vehicular Volume
- Warrant 3 – Peak Hour
- Warrant 4 – Pedestrian Volume
- Warrant 5 – School Crossing
- Warrant 6 – Coordinated Signal System
- Warrant 7 – Crash Experience
- Warrant 8 – Roadway Network
- Warrant 9 – Intersection Near a Grade Crossing

Table 7 – Signal Warrant Analysis Results

Warrant	King George Blvd at Mariner's Way (2009)		King George Blvd at Mariner's Way (2015)		King George Blvd at SR 204 EB Ramp (2015)	
	Result	Hrs. Met / Required	Result	Hrs. Met / Required	Result	Hrs. Met / Required
1A	Not Met	0/8	Not Met	0/8	Not Met	6/8
1B	Met	9/8	Met	9/8	Met	8/8
1C	N/A	N/A	N/A	N/A	N/A	N/A
2	Met	4/4	Met	7/4	Met	5/4
3A	Met	3/1	Met	4/1	Not Met	0/1
3B	Met	1/1	Met	2/1	Met	2/1
4	N/A	N/A	N/A	N/A	N/A	N/A
5	N/A	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A	N/A
7	N/A	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A	N/A
9	N/A	N/A	N/A	N/A	N/A	N/A

As Table 7 shows, three of the MUTCD signal warrants were satisfied for King George Boulevard at Mariner's Way (2009), three were satisfied for King George Boulevard at Mariner's Way in (2015), and three were satisfied for King George Boulevard at SR 204 EB Ramp in (2015). In addition, a traffic signal at the westbound ramp intersection will likely be warranted by 2035.

### **Conclusion**

Existing and future traffic conditions were analyzed for the corridor taking into consideration the proposed long-range widening of SR 204 and the anticipated growth in the area. As shown in the analysis, the anticipated growth will increase traffic congestion and create lengthy delays for commuter and local traffic traveling through the corridor. Based on the results of the traffic analysis performed for the study, the proposed concept to convert SR 204 at King George Boulevard to a grade-separated partial cloverleaf interchange will provide the most benefit for traffic operations, reduce crash frequency and severity, and will increase mobility and minimize delay for both local and commuter vehicles traveling through the corridor. The decision to implement Alternative D1e or Alternative C5b should be based on the available funding for the proposed widening of SR 204. If Alternative D1e is selected, it should be designed as not to preclude the future widening of SR 204. Widening of SR 204 is recommended as a long-range improvement.

**BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION**

Structure ID: 051-0075-0

Chatham

SUFF. RATING 86.10

**Location & Geography**

\* Structure I.D.No: 051-0075-0  
 \* 200 Bridge Information 06  
 \* 6A Feature Int: CSX RAILROAD  
 \* 6B Critical Bridge: 0  
 \* 7A Route Number Carried: SR00204  
 \* 7B Facility Carried: SR 204  
 \* 9 Location: 4 MIE OF INT I-16  
 2 DOT District: 5  
 207 Year Photo: 2008  
 \* 91 Inspection Frequency: 24 Date: 07/08/2008  
 92A Fract Crit Insp Freq: 00 Date: 02/01/1901  
 92B Underwater Insp Freq: 00 Date: 02/01/1901  
 92C Other Spc. Insp Freq: 00 Date: 02/01/1901  
 \* 4 Place Code: 00000  
 \* 5 Inventory Route (O/U): 1  
 Type: 3  
 Designation: 1  
 Number: 00204  
 Direction: 0  
 \* 16 Latitude: 31-59.3137 MMS Prefix: SR  
 \* 17 Longitude: 81-13.3762 MMS Suffix: 00 MP: 12.49  
 98 Border Bridge: 000 %Shared: 00  
 99 ID Number: 0000000000000000  
 \* 100 STRAHNET: 2  
 12 Base Highway Network: 1  
 13A LRS Inventory Route: 511020400  
 13B Sub Inventory Route: 0  
 \* 101 Parallel Structure: N  
 \* 102 Direction of Traffic: 2  
 \* 264 Road Inventory Mile Post: 012.49  
 \* 208 Inspection Area: 05 Initials: EEP  
 Engineer's Initial: sgm  
 \* Location I.D. No.: 051-00204D-012.49E

**Signs & Attachments**

\* 104 Highway System: 0  
 \* 26 Functional Classification: 14  
 \* 204 Federal Route Type: F No.: 01111  
 105 Federal Lands Highway: 0  
 110 Truck Route: 0  
 206 School Bus Route: 1  
 217 Benchmark Elevation: 0049.23  
 218 Datum: 2  
 \* 19 Bypass Length: 02  
 \* 20 Toll: 3  
 \* 21 Maintenance: 01  
 \* 22 Owner: 01  
 \* 31 Design Load: 6  
 37 Historical Significance: 5  
 205 Congressional District: 12  
 27 Year Constructed: 1971  
 106 Year Reconstructed: 0000  
 33 Bridge Median: 3  
 34 Skew: 00  
 35 Structure Flared: 0  
 38 Navigation Control: N  
 213 Special Steel Design: 0  
 267 Type of Paint: 2  
 \* 42 Type of Service on: 1  
 Under: 2  
 214 Movable Bridge: 0  
 203 Type Bridge: D-O-M-O  
 259 Pile Encasement: 3  
 \* 43 Structure Type Main: 3 02  
 45 No. Spans Main: 003  
 44 Structure Type Appr: 0 00  
 46 No. Spans Appr: 0000  
 226 Bridge Curve Horz: 0 Vert: 0  
 111 Pier Protection: 0  
 107 Deck Structure Type: 1  
 108 Wearing Surface Type: 1  
 Membrane: 8  
 Protection: 8

225 Expansion Joint Type: 10  
 242 Deck Drains: 1  
 243 Parapet Location: 0  
 Height: 0.00  
 Width: 0.00  
 238 Curb: 0.80 1  
 239 Handrail: 1 1  
 \* 240 Median Barrier Rail: 1  
 241 Bridge Median Height: 2.60  
 Width: 2.00  
 \* 230 Guardrail Loc Dir Rear: 8  
 Fwrd: 4  
 Oppo Dir Rear: 8  
 Fwrd: 4  
 244 Approach Slab: 3  
 224 Retaining Wall: 0  
 233 Posted Speed Limit: 55  
 236 Warning Sign: 0  
 234 Delineator: 1  
 235 Hazard Boards: 0  
 237 Utilities Gas: 00  
 Water: 00  
 Electric: 00  
 Telephone: 22  
 Sewer: 00  
 247 Lighting Street: 0  
 Navigation: 0  
 Aerial: 0  
 \* 248 County Continuity No.: 00

# BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 051-0075-0

Chatham

SUFF. RATING

86.10

## Programming Data

201 Project No.: FU-111-1 (6) CT.2  
 202 Plans Available: 4  
 249 Prop. Proj. No. 0000000000000000  
 250 Approval Status: 0000  
 251 P.I. No.: 00000000  
 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: \$ 0  
 76 Imp. Length: 000000  
 97 Imp. Year: 0000  
 114 Future ADT: 074745 Year: 2027

## Measurements

\* 29 ADT: 049830 Year: 2007  
 109 % Trucks: 0  
 \* 28 Lanes On: 04 Under: 00  
 210 No. Tracks On: 00 Under: 01  
 \* 48 Max. Span Length: 0060  
 \* 49 Structure Length: 178  
 51 Br. Rwdy. Width: 85.00  
 52 Deck Width: 90.40  
 \* 47 Tot. Horz. Cl: 51.10  
 50 Curb/Sdewlk Width: 0.00/0.00  
 32 Approach Rdwy Width: 084  
 \* 229 Shoulder Width:

Rear Lt: 9.50 Type: 2 Rt: 10.00  
 Fwd Lt: 9.20 Type: 2 Rt: 8.40  
 Pavement Width:

Rear: 23.20 Type: 2  
 Fwd: 23.50 Type: 2  
 Intersection Rear: 0 Fwd: 1  
 36 Safety Features Br. Rail: 2  
 Transition: 2  
 App. G. Rail: 1  
 App. Rail End: 2  
 53 Minimum Cl. Over: 99 ' 99 " Dir: 23 ' 00 " Under: R

## 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: N  
 216 Water Depth: 00.0 Br. Height: 00.0  
 222 Slope Protection: 4  
 221 Spur Dikes Rear: 0 Fwd: 0  
 219 Fender System: 0  
 220 Dolphin: 0  
 223 Culvert Cover: 000  
 Type: 0  
 No. Barrels: 0  
 Width: 0.00 Height: 0.00  
 Length: 0 Apron: 0  
 \* 265 U/W Insp. Area: 0 Diver: ZZZ

\* Location I.D. No.: 051-00204D-012.49E

## Ratings

65 Inventory Rating Method: 1  
 63 Inventory Rating Method: 1  
 66 Inventory Type: 2 Rating: 32  
 64 Operating Type: 2 Rating: 53  
 231 Calculated Loads

H-Modified: 21 0  
 HS-Modified: 30 0  
 Type 3: 31 0  
 Type 3s2: 40 0  
 Timber: 36 0  
 Piggyback: 40 0

261 H Inventory Rating: 29  
 262 H Operating Rating: 50  
 67 Structural Evaluation: 7  
 58 Deck Condition: 7

59 Superstructure Condition: 7  
 \* 227 Collision Damage: 0  
 60A Substructure Condition: 7  
 60B Scour Condition: N  
 60C Underwater Condition: N  
 71 Waterway Adequacy: N  
 61 Channel Protection Cond: N  
 68 Deck Geometry: 9  
 69 UnderClr. Horz/Vert: 9  
 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 Loads H-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

# GEORGIA DEPARTMENT OF TRANSPORTATION

## Bridge Inspection Report

**District:** 5  
**Bridge Inspector:** Gene Palmer  
**Location ID:** 051-00204D-012.49E  
**Structure ID:** 051-0075-0

**Inspection Date:** 7/8/2008  
**Over:** CSX RAILROAD  
**County:** Chatham  
**Road Name:** SR 204

**Inspection Area:** 05  
**Bridge Status:** 06

### EVALUATION & DEFICIENCIES

**SubStructure:**

**Year Painted:** 0000

4 Concrete caps, abutments have 10 PSC pile each ,bents 2,&3,have 4 concrete columns each. (Off plans).  
 Substructure = H-29 Calculated 2008 by Central Office (Load Factor).

**Deficiencies noted:**

1) Minor cracks on both abutment caps, (No repair).

**SuperStructure:**

**Year Painted:** 1999

3 Spans with 12 steel beams per span. Spans 1 &3 has W36X160 on beams 1,6,7,12., and W36X182 on the rest. Span 2 has W36X160 on beams 1,6,7,12, and W36X 194 on the rest.  
 Superstructure = H-43 Calculated 2008 by Central Office (Load Factor).

**Deficiencies noted:**

1)Bent 3 beam 4 anchor bolt loose. also bent 1 beam 3 loose.

**Deck:**

8" Concrete deck.

**Deficiencies noted:**

1) Minor map cracking, and light scaling in deck, (No repair).  
 2) Joints 1,3,&4 open.

**General:**

Built in 1971.

2 Approach slabs both are cracked.

CALCULATIONS FOR THIS STRUCTURE WERE DETERMINED BY THE CENTRAL OFFICE – MAY 2008.

This bridge is over CSX R/R.

08 ADDED TO SNOOPER LIST. ALL 3 SPANS.

**Recommended repairs;**

- 1)Right rear spillway has started to wash, due to plastic pipe shroud shrinking where it was poured into concrete. (REPAIRED)
- 2) Tighten loose anchor bolts .
- 30 Spot seal joints.

**Condition Rating**

Temp Shored: No

Component	Material	Rating
Substructure	Concrete	7
Superstructure	Steel	7
Deck	Concrete	7

Truck Type	Gross/H-Mod	HSMOD	Tand	3-S-2	Log	Piggy
Calculated Posting	21	30	31	40	36	40
Posting Required	No	No	No	No	No	No
Existing Posting	00	00	00	00	00	00

\*\*\*School Bus Route.\*\*\*\*

**Structure Does Not Require Posting**

# GEORGIA DEPARTMENT OF TRANSPORTATION

## Vertical Clearance Report

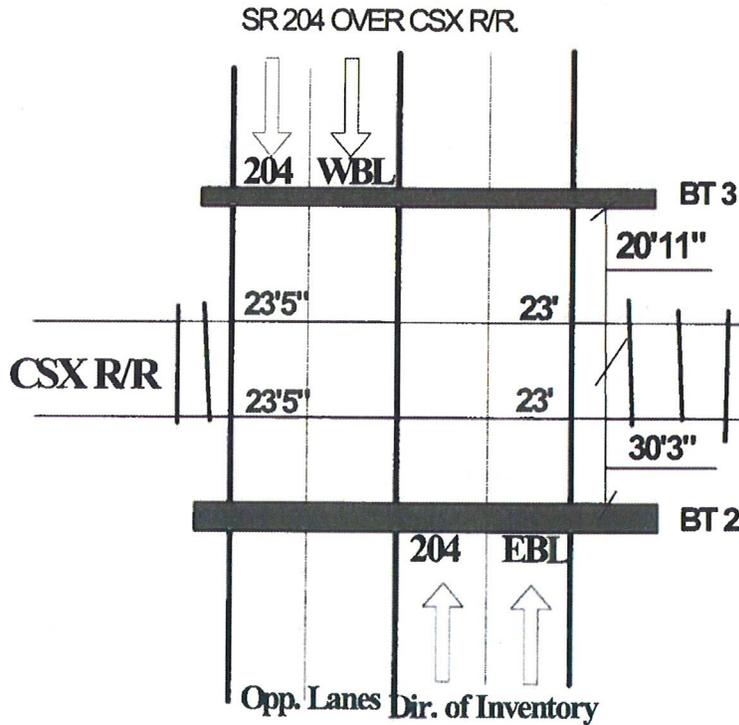
District: 5  
 Bridge Inspector: Gene Palmer  
 Location ID: 051-00204D-012.49E  
 Structure ID: 051-0075-0

Inspection Date: 7/8/2008  
 Over: CSX RAILROAD  
 County: Chatham  
 Road Name: SR 204

Inspection Area: 05  
 Skew: 00

4 LANE

### VERTICAL CLEARANCE



### Cross-Reference Route

XLocationID None  
 XRef ID: 051-0075-0

Min Clearance Over: 99-99	Min Clearance Under: 23-00	Clearance Type: R
Act Min Vert. Odom: 99-99	Post Min Vert. Odom: 00-00	
Act Min Vert. Opp: 99-99	Post Min Vert. Opp: 00-00	
Max Min Vert. Clear: 99-99	Direction:	

Lat Under CI Right: 20.90      Left: 0.00      Lateral Type: 9

Rating-Under CI Horz/Vert: 9      Total Horizontal Clearance (ft): 51.10

# GEORGIA DEPARTMENT OF TRANSPORTATION

## Bridge Component Report

District: 5  
 Bridge Inspector: Gene Palmer  
 Location ID: 051-00204D-012.49E  
 Structure ID: 051-0075-0  
 Inspection Date: 7/8/2008  
 Over: CSX RAILROAD  
 County: Chatham  
 Road Name: SR 204  
 Inspection Area: 05

### SubStructure Data

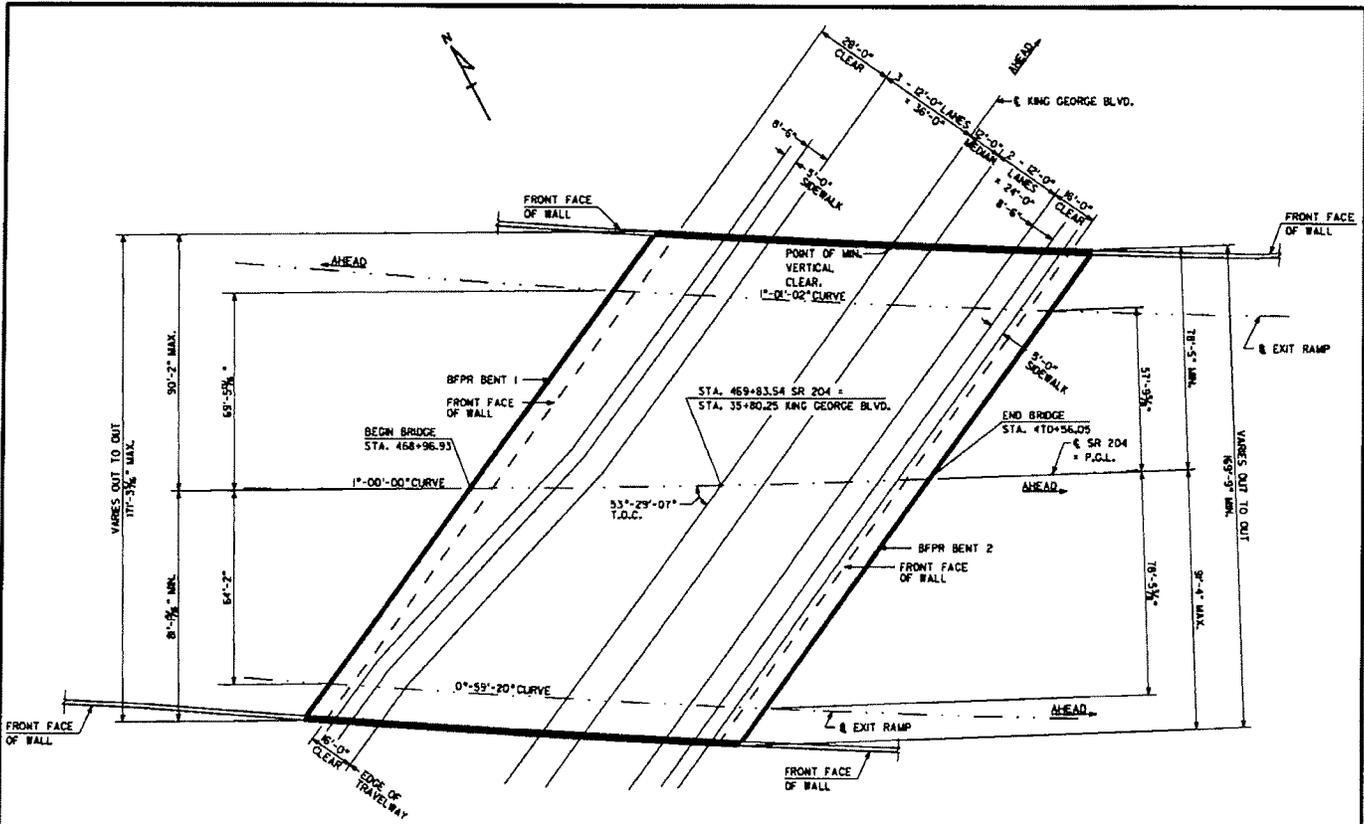
Beit#	Type	Foundation	Col	#Cols	Piling	#Piles	Sway	CAP	Remarks
1	A	ZZ		0		0		C	Foundation Unknown
2	B	PF	C	4		0		C	6 PSC pile each footing
3	B	PF	C	4		0		C	6 PSC pile each footing
4	A	ZZ		0		0		C	Foundation Unknown

### SuperStructure Data

Span#	Beam Type	Spacing	Length	#Beams	Remarks
1	Steel	8.40	59.60	12	See B-1
2	Steel	8.40	59.60	12	See B-1
3	Steel	8.40	59.60	12	See B-1

### Bearing Data

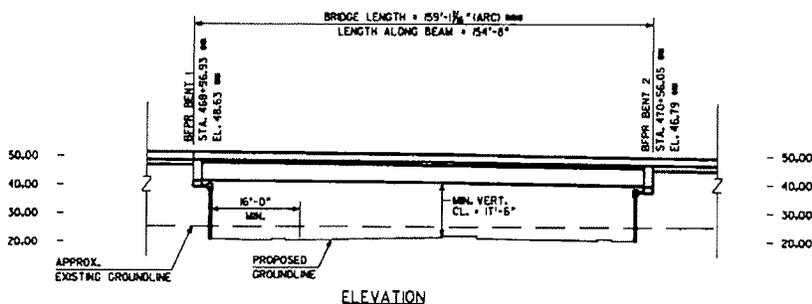
Span#	Rear Type Bearing	FWD Type Bearing	Remarks
1	02 - Fixed Plate	01 - Sliding Plate	
2	01 - Sliding Plate	02 - Fixed Plate	
3	01 - Sliding Plate	02 - Fixed Plate	



PLAN

BRIDGE CONSISTS OF

- 1 - BULB TEE, 74", PSC BEAM SPAN (BEAMS SPACED @ 6'-0" @) --- SPECIAL DESIGN
- 2 - PILE END BENTS ----- SPECIAL DESIGN



ELEVATION

- NOTES:
1. STATIONS SHOWN ARE AT THE INTERSECTION OF SR 204 AND B.F.P.R. ELEVATIONS ARE PROFILE GRADE.
  2. MEASURED ALONG SR 204.
  3. PROPOSED BRIDGE HAS A CONSTANT CROSS SLOPE OF 2.1% SLOPING DOWN TO THE LEFT.
  4. ALL BENTS ARE PARALLEL TO KING GEORGE BLVD.

**McGee Partners, Inc.**  
www.mcgeepartners.com

**HL** **Hesth & Lineback Engineers**  
INCORPORATED  
2200 CANTON ROAD, BUILDING 200  
MARIETTA, GEORGIA 30067-0200

CONCEPTUAL BRIDGE LAYOUT  
SR 204 OVER  
KING GEORGE BLVD  
CHATHAM COUNTY NH000-C11-01(024)

SCALE: 1" = 60'-0"      JANUARY 2010

## McGee Partners, Inc.

1990 Lakeside Parkway  
Suite 240  
Tucker, Georgia 30084  
T 770.938.6400  
F 770.938.6333

## Meeting Minutes

Date: August 23, 2006 Time: 1:30 pm  
Location: Savannah MPC  
Subject: SR 204 Initial Concept Team Meeting  
NH-111-1(24), PI No 0522870 and NHS-0002-00(922),  
Project No: PI No 0002922, Chatham County MPI: 2001006  
Recorded By: Jenny Jenkins  
Attendees: (See Attached)

Tommy Crochet of McGee Partners began the meeting by asking everyone to introduce themselves (see list of attendees). Following introductions, the meeting followed the presentation given by Tommy. A few items were discussed during the presentation, as summarized below:

### Miscellaneous PDP Requirements

It was agreed that a formal location inspection was not required; an informal location inspection has been completed by McGee Partners and GDOT staff.

### ITS

Mike Weiner stated that the City would like to have fiber optics and ATMS components installed along SR 204.

### Bicycle Facilities

here are three alternatives for dealing with the issue of bikes along the project: 1) Do not include provisions for bicycles in the design, 2) Include bike paths in the design, or 3) Leave room in the proposed R/W for bike facilities in the future. This subject will be discussed further with all involved parties.

### Public Involvement

Potential locations for public information open houses were discussed. It was tentatively decided that Southwest Middle School and Armstrong Atlantic State University would host the meetings.

### Project Schedule

The current programmed schedule for each project is as follows:

- PI 522870: R/W – FY 2008, Const – FY 2010
- PI 0002922: R/W – FY 2009, Const – FY 2011

## Meeting Minutes

Page 2 of 2

Initial Concept Team Meeting

August 23, 2006

SR 204 Improvements, US 17 to Truman Parkway, Chatham County

NH-111-1(24), PI 522870 and NHS-0002-00(922), PI 0002922

At the conclusion of the presentation, Butch Welch welcomed any comments or questions.

- Tony Collins asked about the next steps in the project. Tommy explained that the project team will perform the necessary traffic analyses and coordinate with GDOT. Project alternates will be modified, added, or removed from consideration as necessary. Butch emphasized that we want to be sure to have a good grasp on the traffic studies and viable alternates before going to the public. After the first round of public meetings (around the beginning of November), alternates will be revised as necessary, some cost estimating will be done, and the second round of public meetings will take place. After a preferred alternate is selected, the formal concept team meeting will be held.
- Tommy suggested that the alternative analysis be somewhat complete before the October 19<sup>th</sup> CUTS Technical Coordinating Committee meeting. At this meeting, the alternates can be discussed and the project team can determine exactly what needs to be presented to the public.
- Darrell Richardson pointed out that eventually we will need some utility estimates. Tommy stated that after all viable alternates are being considered, cost estimates will then be considered. He also pointed out that TBE will be doing some quality level D SUE work to pick up any major facilities along the corridor.
- Bill Megathlin stated that AASU has recently received a grant for construction of a bike path on campus. Tommy suggested that they build the portions away from SR 204 until the proposed design of SR 204 is determined.
- Billy Gordon pointed out that there is a significant residential development being constructed along SR 204 just west of US 17. Tommy stated that volumes resulting from the development are included in the model and ensured that this information will be dealt with appropriately in the traffic study.
- Ginny Murphy pointed out that BellSouth has a fiber optic conduit line running along the south side of SR 204 for the length of the project.
- Butch stated that GDOT would like some landscaping along the corridor. It was noted that this issue must be dealt with early in the process, since it will likely affect the project footprint.
- Nick Millionis emphasized that utility coordination should be done in the area of the Truman Parkway Phase V tie-in in an attempt to avoid relocation of facilities twice. It was noted that Butch Welch is project manager for the Truman Parkway project as well.

Tommy requested that all persons wishing to comment do so by September 4, 2006.

Initial Concept Team Meeting  
 SR 204 Improvements, US 17 to Truman Parkway, Chatham County  
 NH-111-1(24), PI 522870 and NHS-0002-00(922), PI 0002922  
 Wednesday, August 23, 2006, 1:30 pm  
 Metropolitan Planning Commission

## SIGN-IN SHEET

Name	Organization/Department	email	Phone
Bill Magatlin	Armstrong Atlantic	magatlin@mailto.armstrong.edu	912 527-5384
R McCall	GADOT / Safety	rdout.mccall@dot.state.ga.us	90-427-5703
BRAD SAXON	GADOT / Construction	brad.saxon@dot.state.ga.us	912-427-5733
JEROME SERRANO	GADOT / Dist. Construction		(912) 427-5760
Keith Mottin	" PL		404.657.6913
BILLY GORDON	MAAT - R/W ACQ.	bigordon@maei.net	912 963-1112
RAONEY SIMBOL	GDOT - Planning		404-657-6689
KARON IVERY	GDOT - Utilities	Karon.Ivery@dot.state.ga.us	912-427-5777
Stephen Thomas	GDOT - Utilities	Stephen.Thomas@dot.state.ga.us	912-427-5777
CHRIS MARSENGER	McGEE PARTNERS	cmarsen@mcgeepartners.com	770-938-6400/6
Donnie Williams	GADOT		
MASOOD SHABAZAR	Heath & Linebeck	mshabaz@heath-linebeck.com	770-424-1668
Mark Wilkes	MPO	wilkesm@thempc.org	912 651 1451
Rick Day	Conter & Burgess	rick.day@c-b.com	404-249-7550
Anne de la Sierra	Hunter Army Air	anne.delasiera@stewart.army.mil	912 767 7864
Jane Love	MPO	lovej@thempc.org	912-651-1443
Jennifer Giersch	FHWA	jennifer.giersch@fhwa.dot.gov	404-562-3633
Tony Collins	GDOT / Safety	Tcollins@dot.state.ga.us	912-427-5775
YERESA SEAT	GDOT / Safety	YSEAT@dot.state.ga.us	"
Ginny Murphy	BellSouth	virginia.murphy@bellsouth.com	356-3948
Suzanne Sheldahl	BMW Archts.	Suzanne.Sheldahl@bmv.archt.com	442-5666

Initial Concept Team Meeting  
 SR 204 Improvements, US 17 to Truman Parkway, Chatham County  
 NH-111-1(24), PI 522870 and NHS-0002-00(922), PI 0002922  
 Wednesday, August 23, 2006, 1:30 pm  
 Metropolitan Planning Commission

## SIGN-IN SHEET

Name	Organization/Department	email	Phone
Jennifer Dudley	EPEI	jdudley@edwards-pitman.com	770-333-9484
Linda Edwards	EPEI	ledwards@ " "	" "
George Fidler, PE	Savannah Airport Commission	gfidler@savannahairport.com	912-964-0514
David Kusso	Carter & Burgess	David.Kusso@Cob.com	<del>404</del> 249-7550
Tom Thomson	MPC/MPD	thomson@thumpe.org	912-651-4446
Peter Eze	GDOT	peze@dot.state.ga.us	404-656-5467
Sonya Skices	GDOT-4D	SONYA.SKICES@dot.state.ga.us	404-656-5447
Nick Milonis	COS WSP/E	Nick-Milonis@savannahga.gov	651-6573
Allan Black	Chatham	arblack@Chatham County, GA	552-780
MIKE WEINER	City Serk.	mweiner@ci.savannahga.us	912-651-6600
David J. Finkbeiner	AASU	dfinkbe@mailed.com	912-927-5329
Jenny Jenkins	MPE	jjenkins@mcgeepartners.com	7 938 6400 404-656-5436
ALBERT WELCH	GDOT URBAN	ALBERT.WELCH@dot.state.ga.us	
Tommy Crochet	MPE	tcrochet@mcgeepartners.com	770 938 6400
Billy Jones	COS	bjones@savannahga.gov	912 657 6575
Darrell Richardson	GDOT Urban		
Susan Thomas	EPEI	stthomas@edwards-pitman.com	(7)3339404
Paul Condit	GDOT/OEL	paul.conda@dot.state.ga.us	(404) 699-4413
Al Bungard			
JEN PRICE	SYCAMORE CONSULTANTS	jenprice@sycamoreconsulting.net	404-377-9147



**SR 204 Improvements**  
Chatham County, Georgia

**Initial Concept Team Meeting**  
SR 204 Improvements  
US 17 to Truman Parkway  
NH-111-1(24), PI 522870  
NHS-0002-00(922), PI 0002922  
Chatham County  
August 23, 2006




**SR 204 Improvements**  
Chatham County, Georgia

**Agenda**

- Introductions
- Project Background/Traffic/Need & Purpose
- Environmental Screening & Requirements
- Alternatives to be Considered
- Design Criteria
- Other Issues
- Schedule/Public Involvement

SR 204 Initial Concept Team Meeting - August 23, 2006



**SR 204 Improvements**  
Chatham County, Georgia

**Project Descriptions**

- NH-111-1(24), PI No. 522870
  - SR 204/Abercorn St From King George Blvd To Rio Rd
  - *Can this be modified to US 17 to Rio Rd?*
  - NHS & HPP Funding
- NHS-0002-00(922), PI No. 0002922
  - SR 204/Abercorn St From Rio Road To Harry S Truman Pky/Ph V
  - STP Funding

SR 204 Initial Concept Team Meeting - August 23, 2006



**SR 204 Improvements**  
Chatham County, Georgia

**Project Background/  
Traffic/  
Need & Purpose**

SR 204 Initial Concept Team Meeting - August 23, 2006



**SR 204 Improvements**  
Chatham County, Georgia

**Previous Work on Projects**

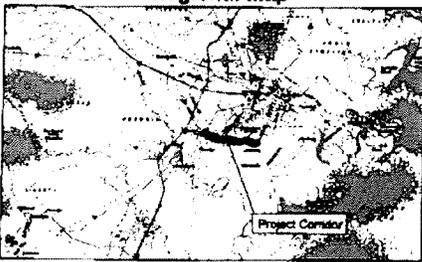
- NH-111-1(24), PI No. 522870
  - Concept Team Meeting Held on 9/16/2002
  - No Approved Concept
  - Draft Concept Focused on King George Interchange
- NHS-0002-00(922), PI No. 0002922
  - Concept Team Meeting Held on 8/16/2002
  - No Approved Concept
  - Draft Concept Focused on Widening to 8 Lanes

SR 204 Initial Concept Team Meeting - August 23, 2006



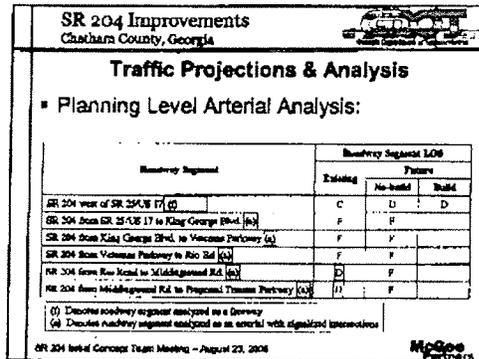
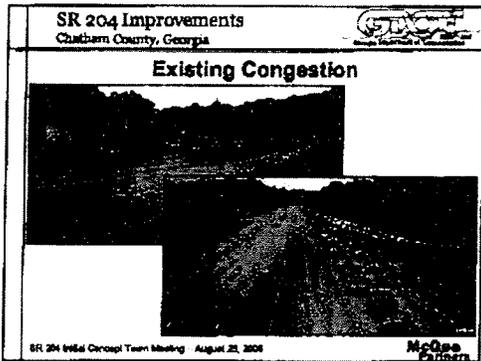
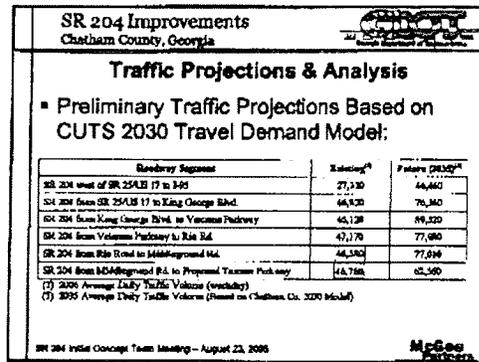
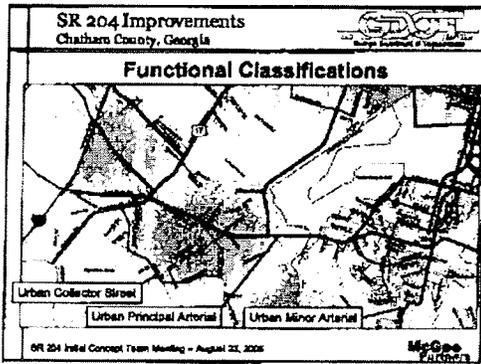
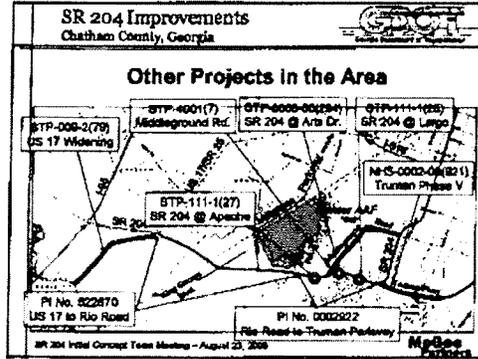
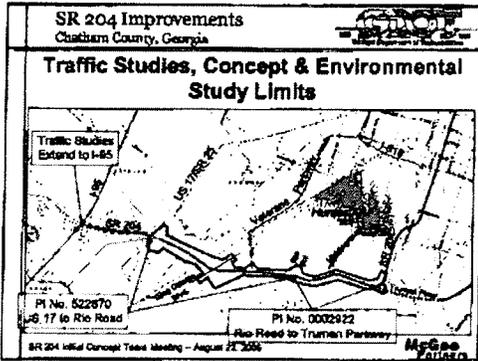
**SR 204 Improvements**  
Chatham County, Georgia

**Regional Map**



SR 204 Initial Concept Team Meeting - August 23, 2006





SR 204 Improvements  
Chatham County, Georgia

### Crash Summary

CRASH HISTORY  
East of King George Blvd. to River Road (including I-95 to I-16)

Year	Crashes	Crash Rate	Injuries	Injury Rate	Fatalities	Fatality Rate
2001	75	44 (2.02)	56	156 (2.21)	1	2.74 (1.25)
2002	142	80 (3.12)	54	77 (2.92)	1	2.88 (1.27)
2004	155	87 (3.15)	66	79 (2.82)	0	0.00 (0.00)

Note: All rates are per 100 million miles of travel. Numbers in parentheses are statewide average rates for when principal arterial, one-lane.

CRASH HISTORY  
East of King George Blvd. to River Road (including I-95 to I-92)

Year	Crashes	Crash Rate	Injuries	Injury Rate	Fatalities	Fatality Rate
2002	114	34 (1.29)	55	143 (2.7)	0	0.00 (0.00)
2004	85	26 (1.00)	28	92 (3.5)	0	0.00 (0.00)
2004	85	26 (1.00)	21	69 (2.6)	0	0.00 (0.00)

Note: All rates are per 100 million miles of travel. Numbers in parentheses are statewide average rates for when principal arterial, one-lane.

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

### Crash Summary

CRASH HISTORY  
Forest Road to Veterans Blvd. (including I-95 to I-16)

Year	Crashes	Crash Rate	Injuries	Injury Rate	Fatalities	Fatality Rate
2002	156	80 (2.88)	159	208 (2.49)	1	2.07 (1.27)
2003	114	64 (2.45)	208	121 (2.45)	1	2.07 (1.27)
2004	156	80 (2.88)	184	128 (2.00)	0	0.00 (0.00)

Note: All rates are per 100 million miles of travel. Numbers in parentheses are statewide average rates for when principal arterial, one-lane.

- Rates are about 50% above Statewide Rate
- Six-lane roadway already has raised median & reduced number of access points

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

### Need & Purpose

- Capacity, Safety, Operational
- Logical Termini & Independent Utility
- Modal Interrelationships
  - Transit (Buses)
  - Bicycles

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

### CUTS FY 2007-2009 TIP

Based on these projects, the FY 2007-2009 TIP highway priority projects are derived.

See Priority Projects - projects that have a maximum commitment in the FY 2008-2009 TIP. The list includes some projects whose construction was initiated in FY 2006 (Chatham Road Interchange Improvement and Transit Interchange Linkage). They are listed to indicate continued priority.

- PI 012276: Abacoast Street widening and improvement at I-95 Access
- PI 013302: Abacoast Street to edge improvement at Veterans Canal
- PI 002422: Chatham Street widening from River Avenue to I-16
- PI 002606: I-95 Laneshield reduction project
- PI 012221: Montgomery Cross Road bridge replacement at County Canal
- PI 011453: Opposed Road widening from Lyles Parkway to Victory Drive
- PI 011849: Roadway Road widening from River Road to Poplar Avenue
- PI 008818: SR 204 widening from I-95 to I-16
- PI 008167: Thomas Parkway interchange project
- PI 109568: Walden Avenue widening from Old Woodland Road to Veterans Avenue

The Project Priority projects are listed below for informational purposes.

- PI 022526: Chatham Street widening from Edge Overpass Blvd to River Road
- PI 002222: Abacoast Street widening from Old Road to Transit Interchange Phase V
- PI 002422: Chatham Street widening from Poplar Avenue to Montgomery Drive
- PI 002422: Chatham Street widening from Poplar Avenue to Montgomery Drive
- PI 002422: Chatham Street widening from Poplar Avenue to Montgomery Drive
- PI 002422: Chatham Street widening from Poplar Avenue to Montgomery Drive

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

### CUTS TIP

- NH-111-1(24), PI No. 522870
  - TIP # 2000-H-04
  - PE: Authorized in FY \_\_\_\_\_
  - RW: FY 2007 - \$9,186,000 (2006-08 TIP)
- NHS-0002-00(922), PI No. 0002922,
  - TIP # 99-H-2
  - PE: FY 2007 - \$3,072,000 (2007-09 TIP)

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

### Transit in Corridor

- CAT Bus Routes 6 (Crosstown) & 14 (Abercorn)

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

**Transit in Corridor**

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

**Chatham County Bikeway Plan**

- Existing Bikeways

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

**Chatham County Bikeway Plan**

- Adopted Sep. 2000
- Selected Corridors

Bicycle Corridor Guide

- Adopted in Final Design
- Main Street Corridor (Harbor AAF)
- SR 204 Corridor

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

**Chatham County Bikeway Plan**

- SR 204 Corridor from US 17 to Rio Road Rated in "Least Suitable" Category

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

**Chatham County Bikeway Plan**

- On-Road Bikeway Ranking by Corridor

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia

**Chatham County Bikeway Plan**

- Detailed Ratings for SR 204

SR 204 Segment	Category	Rating
SR 204 - US 17 to Harbor AAF	Least Suitable	1
SR 204 - Harbor AAF to Rio Road	Least Suitable	1
SR 204 - Rio Road to SR 100	Least Suitable	1
SR 204 - SR 100 to SR 101	Least Suitable	1
SR 204 - SR 101 to SR 102	Least Suitable	1
SR 204 - SR 102 to SR 103	Least Suitable	1
SR 204 - SR 103 to SR 104	Least Suitable	1
SR 204 - SR 104 to SR 105	Least Suitable	1
SR 204 - SR 105 to SR 106	Least Suitable	1
SR 204 - SR 106 to SR 107	Least Suitable	1
SR 204 - SR 107 to SR 108	Least Suitable	1
SR 204 - SR 108 to SR 109	Least Suitable	1
SR 204 - SR 109 to SR 110	Least Suitable	1
SR 204 - SR 110 to SR 111	Least Suitable	1
SR 204 - SR 111 to SR 112	Least Suitable	1
SR 204 - SR 112 to SR 113	Least Suitable	1
SR 204 - SR 113 to SR 114	Least Suitable	1
SR 204 - SR 114 to SR 115	Least Suitable	1
SR 204 - SR 115 to SR 116	Least Suitable	1
SR 204 - SR 116 to SR 117	Least Suitable	1
SR 204 - SR 117 to SR 118	Least Suitable	1
SR 204 - SR 118 to SR 119	Least Suitable	1
SR 204 - SR 119 to SR 120	Least Suitable	1
SR 204 - SR 120 to SR 121	Least Suitable	1
SR 204 - SR 121 to SR 122	Least Suitable	1
SR 204 - SR 122 to SR 123	Least Suitable	1
SR 204 - SR 123 to SR 124	Least Suitable	1
SR 204 - SR 124 to SR 125	Least Suitable	1
SR 204 - SR 125 to SR 126	Least Suitable	1
SR 204 - SR 126 to SR 127	Least Suitable	1
SR 204 - SR 127 to SR 128	Least Suitable	1
SR 204 - SR 128 to SR 129	Least Suitable	1
SR 204 - SR 129 to SR 130	Least Suitable	1
SR 204 - SR 130 to SR 131	Least Suitable	1
SR 204 - SR 131 to SR 132	Least Suitable	1
SR 204 - SR 132 to SR 133	Least Suitable	1
SR 204 - SR 133 to SR 134	Least Suitable	1
SR 204 - SR 134 to SR 135	Least Suitable	1
SR 204 - SR 135 to SR 136	Least Suitable	1
SR 204 - SR 136 to SR 137	Least Suitable	1
SR 204 - SR 137 to SR 138	Least Suitable	1
SR 204 - SR 138 to SR 139	Least Suitable	1
SR 204 - SR 139 to SR 140	Least Suitable	1
SR 204 - SR 140 to SR 141	Least Suitable	1
SR 204 - SR 141 to SR 142	Least Suitable	1
SR 204 - SR 142 to SR 143	Least Suitable	1
SR 204 - SR 143 to SR 144	Least Suitable	1
SR 204 - SR 144 to SR 145	Least Suitable	1
SR 204 - SR 145 to SR 146	Least Suitable	1
SR 204 - SR 146 to SR 147	Least Suitable	1
SR 204 - SR 147 to SR 148	Least Suitable	1
SR 204 - SR 148 to SR 149	Least Suitable	1
SR 204 - SR 149 to SR 150	Least Suitable	1

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee Partners

SR 204 Improvements  
Chatham County, Georgia



# Environmental Screening & Requirements

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



## Wetlands & Waters



SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



## Wetlands & Waters



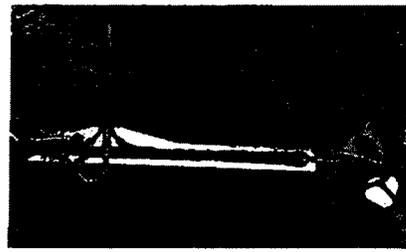
SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



## Wetlands & Waters



SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



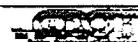
## Wetlands & Waters



SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



## Wetlands & Waters



SR 204 Initial Concept Team Meeting - August 23, 2006





SR 204 Improvements  
Chatham County, Georgia



## Alternatives to be Considered

McGee  
Partners

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia



### Alternatives To Be Considered

- No Build
- TDM
- Build Alternatives

McGee  
Partners

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia



### SR 204, US 17 to Rio Road

- Build Alternatives
  - A1: Eight-Lane Arterial, At-Grade Intersections
  - B1: Continuous Flow Intersections
  - C1: Limited Access - Split Diamond Interchange at Pine Grove and King George
  - C2: Limited Access - Diamond Interchange at King George
  - C3: Limited Access - Partial Cloverleaf Interchange at King George
  - Other Alternatives?

McGee  
Partners

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia



### SR 204, US 17 to Rio Road

- Sub-alternatives Addressing
  - Interchange/Intersection Configurations
  - Neighborhood/Commercial Access

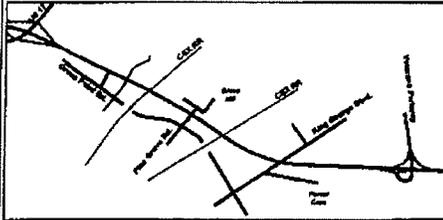
McGee  
Partners

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia



### SR 204, US 17 to Rio Road



McGee  
Partners

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia



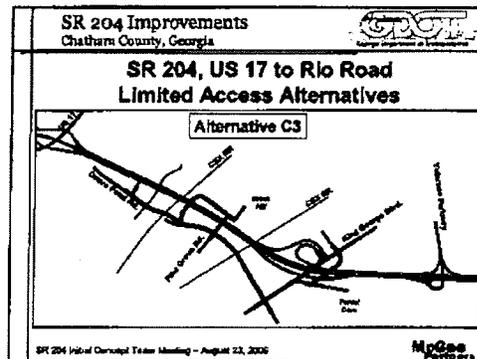
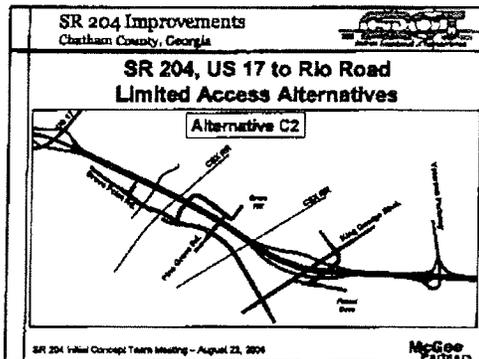
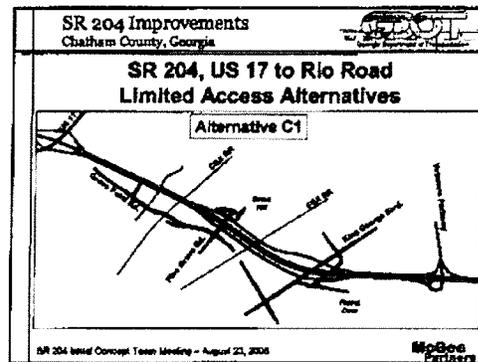
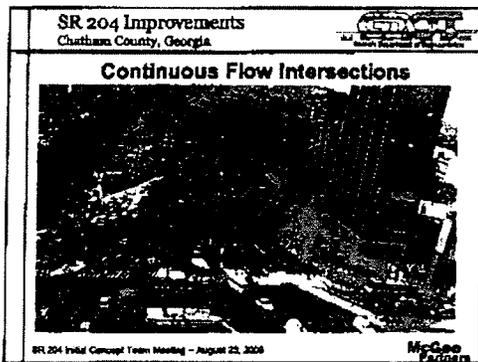
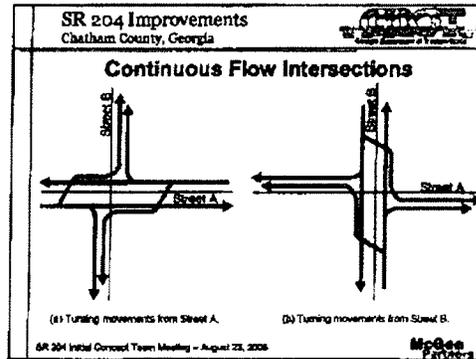
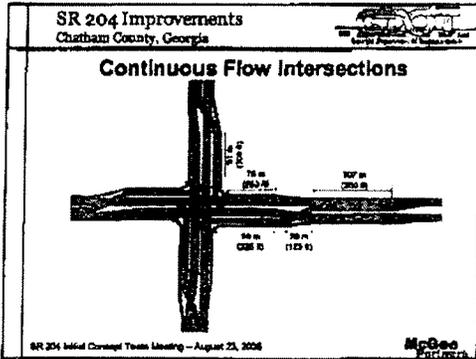
### SR 204, US 17 to Rio Road Eight-Lane, At-Grade Intersection Alt.

Alternative A1



McGee  
Partners

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**SR 204, Rio Road to Truman V**

- Build Alternatives
  - J1: Eight-Lanes w/Conventional Intersections
  - K1: Eight-Lanes w/Continuous Flow Intersections
  - L1-4: Limited Access w/Frontage Roads
  - M1-2: Freeway Viaduct
  - Other Alternatives?

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia

**SR 204, Rio Road to Truman V**

- Sub-alternatives Addressing
  - Intersection/Interchange Configurations
  - Property Access

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia

**SR 204, Rio Road to Truman V**

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia

**SR 204, Rio Road to Truman V  
Eight-Lane Alternative**

Alternative J1

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia

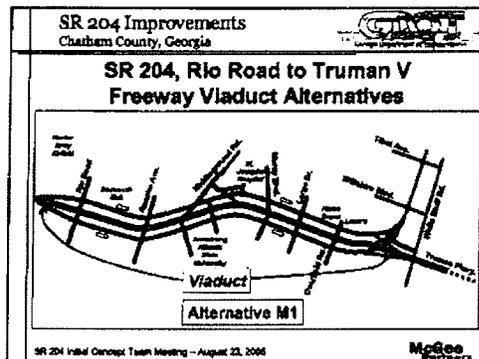
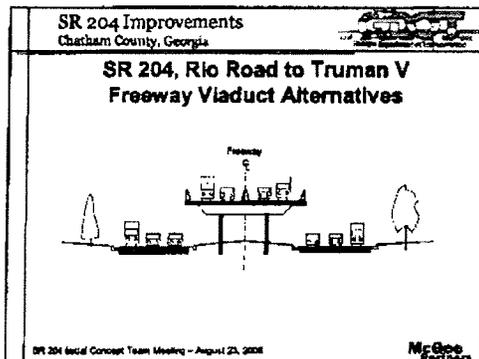
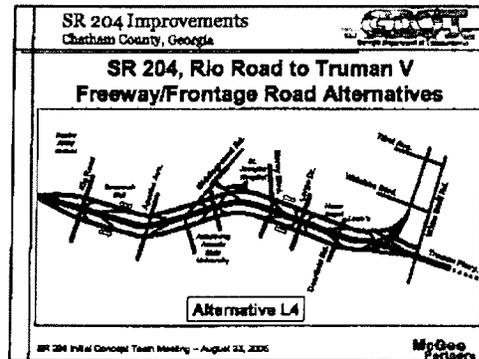
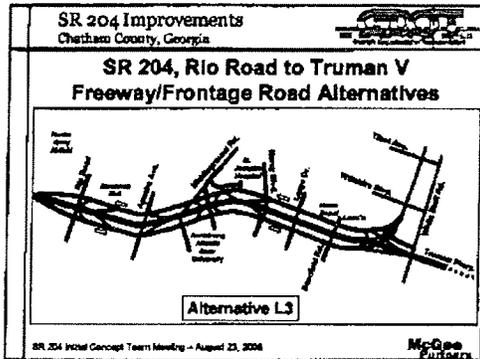
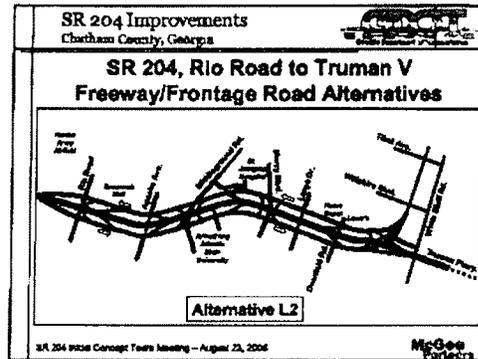
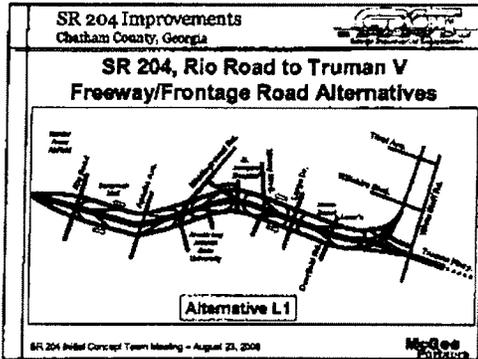
**SR 204, Rio Road to Truman V  
Freeway/Frontage Road Alternatives**

SR 204 Initial Concept Team Meeting - August 23, 2006

SR 204 Improvements  
Chatham County, Georgia

**SR 204, Rio Road to Truman V  
Freeway/Frontage Road Alternatives**

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**SR 204, Rio Road to Truman V  
Freeway/Viaduct Alternatives**

Alternative M2

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee  
Engineers

SR 204 Improvements  
Chatham County, Georgia

**Lane Schematics for Analysis**

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee  
Engineers

SR 204 Improvements  
Chatham County, Georgia

**Design Criteria**

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee  
Engineers

SR 204 Improvements  
Chatham County, Georgia

**Design Criteria**

- Design Speeds
  - Freeway
    - AASHTO for Freeway:
      - 50 mph Minimum
      - 60 mph or Higher Desirable
    - Existing
      - SR 204 I-95 to Rio - 70 mph
      - Truman - 55 mph (90 km/h)
    - Use 55 mph
  - Frontage Road - Use 45 mph
  - Urban Signalized Arterial - 45 mph

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee  
Engineers

SR 204 Improvements  
Chatham County, Georgia

**Design Criteria**

- Access Control
  - Freeway - Limited Access
  - Frontage Road - By Permit
  - Urban Arterial - By Permit

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee  
Engineers

SR 204 Improvements  
Chatham County, Georgia

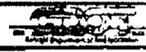
**Design Exceptions & Variances**

- Will try to avoid Design Exceptions & Variances
- Possible Exceptions
  - Shoulder widths along SR 204 near Veterans Parkway
- Possible Variances
  - Signal spacing on King George Blvd.
- Context Sensitive Design Considerations

SR 204 Initial Concept Team Meeting - August 23, 2006

McGee  
Engineers

SR 204 Improvements  
Chatham County, Georgia



## Other Issues

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



### Existing Structures

	Structure ID	Length x Width	Efficiency Rating	Minimum Vertical Clearance	Design Load
Four-lane bridge on SR 204 over tributary to Little Ogeechee River	051-0073-0	90' x 91'	73.50	N/A	HS-20+
Four-lane bridge on SR 204 over CSX Railroad (MP 11.54)	051-0074-0	209' x 91'	42.72	23' 11"	HS-20+
Four-lane bridge on SR 204 over CSX Railroad (MP 12.49)	051-0075-0	178' x 90'	49.00	23' 0"	HS-20+
Four-lane bridge on Pinecrest Parkway over SR 204	051-5063-0	160' x 96'	91.97	17' 2"	HS-20+
Four-lane bridge on SR 204 over Forest River (Little Ogeechee River)	051-0076-0	134' x 90'	71.00	N/A	HS-20+

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



### Miscellaneous PDP Requirements

- Interchange Justification Report (IJR) not required since route is not an interstate highway.
- Need for formal or informal location inspection?

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



### Other Issues

- ITS Opportunities?
- Traffic Calming Opportunities?
- Known Maintenance, Pavement or Drainage Problems?
- Major Utilities
- Railroad Coordination - CSX

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

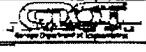


## Public Involvement & Schedule

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia



### Coordination to Date

- Original Initial Concept Team Meetings in 2002
- Key Stakeholder Meetings Since April
  - CUTS Technical Coordinating Committee (3 times)
  - Armstrong Atlantic State University (2 times)
  - Hunter Army Air Field
  - St. Joseph's Candler Hospital
  - Savannah Mall
- Various Conversations with Property Owners

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**Public Involvement**

- Key Stakeholder Identification & Meetings
- Series of Public Information Open Houses
  - Two meetings each round
  - Separate locations on successive evenings
  - 2-3 rounds
- Small Interest Group/Neighborhood Meetings
- Distribution of Meeting Notices
- Study/Project Information Posted on GDOT Website

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**Schedule**

2006	2007	2008	2009
Concept			
Environmental			
Design Guidelines			
	Preliminary Plans		
			US 17 to Truman PI Nos. 522870 & 0002922
			US 17 to Rio Road PI No. 522870
			R/W Plans-Acquisition
			Final Plans

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**Questions,  
Comments,  
Suggestions?**

SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**SR 204, US 17 to Rio Road**



SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**SR 204, Rio Road to Truman V**

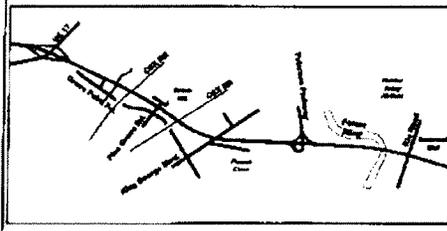


SR 204 Initial Concept Team Meeting - August 23, 2006



SR 204 Improvements  
Chatham County, Georgia

**Limited Access Alternatives**



SR 204 Initial Concept Team Meeting - August 23, 2006



## McGee Partners, Inc.

1990 Lakeside Parkway  
Suite 240  
Tucker, Georgia 30084  
T 770.938.6400  
F 770.938.6333

## Meeting Minutes

Date: February 19, 2010 Time: 10:00 am  
Location: Savannah MPC  
Subject: SR 204 Concept Team Meeting  
Project No: NH000-0111-01(024), PI No. 522870, Chatham County MPI: 2001006  
Recorded By: Jenny Jenkins  
Attendees: (See Attached)

Robert Murphy of GDOT began the meeting by asking everyone to introduce themselves (see list of attendees). Following introductions, Robert gave a brief overview of the need and purpose of the project, and then handed the meeting over to Tommy Crochet of McGee Partners. The meeting followed the attached presentation given by Tommy. A few items were discussed during the presentation, as summarized below:

### Purpose & Need

Jason Crane of GDOT Planning made some requests regarding the Purpose & Need. He suggested that the traffic report differentiate between crashes that occurred at intersections and those that occurred along SR 204 itself. Jason also asked that the traffic report explain the affect that this project will have on the Pine Grove Road and Rio Road intersections. Tommy stated that this information will all be included in the final traffic report.

### Bicycle Facilities

Per input from the Initial Concept Team Meeting in August 2006, no provision for bicycle facilities are included in the current concept. However, City of Savannah and Metropolitan Planning Commission representatives expressed that they would like GDOT to consider including provisions for bicycle facilities in the concept at this time. (Further discussion follows in comment section below.)

At the conclusion of the presentation, Tommy welcomed any comments or questions.

- Michael Brown asked about the project's impact on the Rio Road intersection. Tommy stated that GDOT is considering a project at this location that would help alleviate some of the traffic in the intersection. Al Bungard stated that the County is aware of the need for a project at Rio Road and is willing to assist with the implementation of a project in this area.

## Meeting Minutes

Page 2

Concept Team Meeting

February 19, 2010

SR 204 at King George Boulevard

NH000-0111-01(024), PI 522870

- Michael Brown emphasized the need for improvements along the SR 204 corridor between Rio Road and Truman Parkway Phase V.
- Michael Brown wants GDOT to seriously consider including provisions for bicycle facilities along the project corridor. Tommy stated that the City needs to approach GDOT with a formal request and plan for safely incorporating bikes into the project. Robert Murphy said that GDOT would consider a formal request from the City, at which point the Department would analyze the safety implications of including bicycle provisions along this corridor.
- Wykoda Wang stated that she is concerned about the bus routes through the corridor. Tommy stated that the design would accommodate busses and that bus stop locations would remain on King George Boulevard in their existing locations unless otherwise requested by Chatham Area Transit (CAT). Tommy also indicated the project would coordinate with CAT on future service, stop locations and possible accommodation for shelters or benches.
- Cynthia Phillips asked if a traffic signal would be warranted at the intersection of Mariner's Way and King George Boulevard. Tommy said that it is warranted, and supporting information will be included in the final traffic report. Cynthia also asked who would maintain the signal if installed; Al Bungard agreed that the County would maintain the signal.
- Cynthia mentioned that the crosswalk along King George Boulevard at Mariner's Way should be moved to the other side of Mariner's Way. Tommy emphasized that extensive coordination will be done with GDOT Traffic Operations during plan development before finalizing the design.
- Tommy asked whether the District would like to continue to provide access to the Georgia Heritage Federal Credit Union property located at the corner of Mariner's Way and King George Boulevard. The District indicated that they would like to close the frontage road that currently runs along King George Boulevard. Furthermore, access would not be provided directly off King George Boulevard.
- Wykoda asked if the project schedule could be expedited. Tommy stated that the project schedule presented in the presentation is based on the assumption that no major design changes will be required after the VE study in March. Furthermore, Tommy emphasized that approval of the environmental document (EA/FONSI) will require a public hearing.

Concept Team Meeting  
 SR 204 Improvements at King George Blvd., Chatham County  
 NH000-0111-01(024), PI 522870  
 Friday, February 19, 2010, 10:00 am  
 Metropolitan Planning Commission

## SIGN-IN SHEET

Name	Organization/Department	email	Phone
Joey Harris	D.O.T (R/W)	joharris@dot.ga.gov	(912) 427-1981
KAROL IVERY	ADOT White	kivey@dot.ga.gov	912-427-5779
Masood Shabazz	Heath & Lineback	mshabazz@heath-lineback.com	770-424-1668
LARRY BOWMAN	GDOT/OES	lbowman@dot.ga.gov	404-631-1362
TROY PITTMAN	GDOT	tpittman@dot.ga.gov	912-651-2144
Clay Rogers	City of Sav. Water & Sewer	clay.rogers@savannahga.gov	912 351-3999
Wykoda Wang	CORE MPO	wangw@thempc.org	912-651-1452
Tom Lepleader	City of Sav. Water & Sewer	tom.lepleader@sevensunhga.gov	912-65-6585
Cynthia Phillips	GDOT - Traffic Oper.	cphillips@dot.ga.gov	912-427-5767
Jeffery Young	GDOT - Location	J.Young@dot.ga.gov	912-370-2588
JASON FANE	GDOT - Planning	JCFANE@dot.ga.gov	(404) 631-7774
Jane Lee	CORE MPO	lovej@thempc.org	912-651-1443
A.G. BUNGARD	CHATHAM COUNTY	bungarda@chathamcountyor.gov	912-644-7800
Stan Bull	City	sbull@savannahga.gov	657-6415
Michael Brown	City of Sav	mbrown@savannahga.gov	6516415

Concept Team Meeting  
 SR 204 Improvements at King George Blvd., Chatham County  
 NH000-0111-01(024), PI 522870  
 Friday, February 19, 2010, 10:00 am  
 Metropolitan Planning Commission

## SIGN-IN SHEET

Name	Organization/Department	email	Phone
ROBERT MURPHY	GDOT	Romurphy@dot.ga.gov	404-631-5866
Tommy Crochet	McGee Partners	tcrochet@mcgeepartners.com	770-938-6400
Jenny Jenkins	MPI	jjenkins@mcgeepartners.com	7-938-6400
CHRIS MARSENGILL	McGEE PARTNERS	cmarsengill@mcgeepartners.com	770-938-6400
David Kasbo	Jacobs	david.kasbo@jacobs.com	404 478 3920
JOSH EARHART	EP&I	jeearhart@edwards-pitman.com	7/833-9484
Rick Filal	"	rfilal@edwards-pitman.com	"
SUSAN THOMAS	"	sthomass@edwards-pitman.com	"
Slade Cole	GDOT	george.slade.cole@dot.ga.gov	912-651-2144
Cesar Laureano	City of Savannah	cesar_laureano@cityofsavannahga.gov	912-651-6573
Billy Gordon	MORELAND AUTOBELT	bgordon@meui.net	912-965-1112
Leon Davenport	Chatham County	ldavenport@chathamcounty.org	912-652-7800
Paul Teague	AGL	pteague@agresources.com	(404) 653-5986



**SR 204 Improvements**  
Chatham County, Georgia

**CONCEPT TEAM MEETING**  
**SR 204 Improvements**  
NH000-0111-01(024), PI 522870  
Chatham County

February 19, 2010



SR 204 Improvements  
Chatham County, Georgia

**Agenda**

- Introductions
- Project Background
- Purpose & Need
- Planning Issues
- Environmental Resources
- Public Involvement
- Alternatives Considered
- Design Issues
- Accommodations for Other Modes
- Structural Issues
- Environmental Requirements
- Right of Way Issues
- Geotechnical Issues
- Utility Issues
- Maintenance Issues
- Signals & ITS Issues
- Construction Staging
- Cost Estimates
- Management Issues
- Comments

SR 204 Concept Team Meeting – February 19, 2010



SR 204 Improvements  
Chatham County, Georgia

**Project Background**

SR 204 Concept Team Meeting – February 19, 2010



SR 204 Improvements  
Chatham County, Georgia

**Project Background**

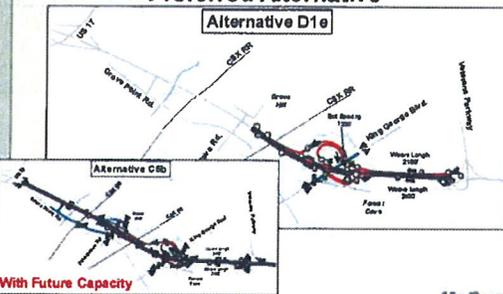
- Early 2009: Directed by Chief Engineer to abandon work on capacity project between US 17 and Truman, and prepare concept for operational improvement at King George
- December 2009: Directed by Chief Engineer to proceed with preferred alternative
  - Move forward with Concept, VE Study, and Environmental Studies
  - Do not preclude future capacity widening

SR 204 Concept Team Meeting – February 19, 2010



SR 204 Improvements  
Chatham County, Georgia

**Preferred Alternative**



SR 204 Concept Team Meeting – February 19, 2010



SR 204 Improvements  
Chatham County, Georgia

**Purpose & Need Issues**

SR 204 Concept Team Meeting – February 19, 2010



SR 204 Improvements  
Chatham County, Georgia

### Purpose & Need

- Operational
  - AADT: 55,700 (2009); 70,200 (2015); 82,700 (2035)
  - King George Signalized Intersection:
    - Existing: LOS – F; PM Delay – 8 minutes/vehicle
    - 2035 No Build: LOS – F; PM Delay – 18 minutes/vehicle
  - Build Interchange: Reduce peak westbound travel time by 27 minutes (4 min. Build, 31 min. No Build)
- Safety
  - Current crash rate ~480, 75% are rear-end
  - Build Interchange: Anticipate crash rate reduced to ~200, which is statewide rate for urban freeways

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Logical Termini

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Planning Issues

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Conformance w/TIP and STIP

REGIONAL METROPOLITAN PLANNING ORGANIZATION  
PLANNING AND TRANSPORTATION DIVISION

NO. 204 WESTBOUND TURNING LANE PROJECT  
KING GEORGE BLVD

**Description:**  
Widen 4 to 6 lanes between Rio and King George.  
Change to interchange construction at King George pending revised concept approval.

STATE	FEDERAL AID	FISCAL YEAR	PLANNING
GA	90%	2010	PLANNING
GA	10%	2010	CONSTRUCTION

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Planning Issues

- Benefit to Cost Analysis
  - Being prepared by Office of Planning
- No need for Interchange Justification Report

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Other Projects in the Area

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Planning Issues

- Considerations for additional capacity to SR 204
  - Consider inclusion in RTP update
  - Provisions for future widening in current project

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

### Environmental Resources

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

### Environmental Resources

- Wetlands, Open Waters, Coastal Zone

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

### Environmental Resources

- Historic Resources

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

### Environmental Resources

- Archaeological Resources

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

### Environmental Resources

- UST Sites

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Environmental Resources**

- Potential Sound Barriers

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

**Community Concerns**

- Live Oak Trees

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

**Public Involvement**

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

**Public Involvement To Date**

- Public Information Open Houses (PIOH)
  - November 2006
  - June 2007
- Key Stakeholder Meetings (2006-08)
  - Hunter Army Airfield
  - Armstrong Atlantic State University
  - St. Joseph's Candler Hospital
  - Savannah Mall
  - Forest Cove and Grove Hill Subdivisions
- Coordination with CUTS/CORE

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

**Planned Public Involvement**

- Public Information Open House (PIOH)
  - June 2010
- Public Hearing Open House (PHOH)
  - Early 2011
- Coordination with CORE
- Key Stakeholder Coordination (as required)

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

**Alternatives Considered**

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Alternatives Considered

- No Build
- Transportation Systems Management
- At-Grade Signalized Intersection
  - Six-Lane, Eight-Lane, Continuous Flow Intersection
- Six-Lane Freeway with Interchanges (Capacity)
- Grade Separated Interchanges at King George Boulevard
  - Urban Diamond, Diverging Diamond, Other Partial Cloverleafs

Does Not Meet Operational & Safety Needs

Too Expensive

Preferred Alternative Chosen From Analysis

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

## Design Issues

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Proposed Design Speeds

- SR 204 – 60 mph (55 Posted Speed)
- Diagonal Ramps – 35-40 mph
- Loop Ramps – 30-35 mph
- King George – 35 mph (35 Posted Speed)

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Proposed Design Criteria

	Max. Grade	Min. Curve Radius	Max. Superelevation
SR 204	4% (4%)	8730' (1330')	6%
Ramps	6% (8%)		8%
30 mph		220' (214')	
35 mph		320' (314')	
40 mph		450' (444')	
King George	2% (8%)	2292' (371')	n/a

AASTHO allowable values shown in parentheses  
\* Normally 3%, 4% allowed in urban areas with crucial right of way controls

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Typical Sections

FOUR-LANE WITH MEDIAN BARRIER

- Basic Section:
  - Travel Lanes: Four 12' Lanes
  - Outside Shoulders: 12' Paved, 14' Graded
  - Median: 20' w/Barrier

SR 204 Concept Team Meeting – February 18, 2010

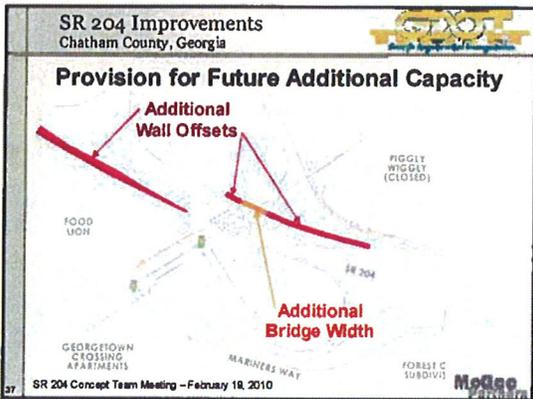
SR 204 Improvements  
Chatham County, Georgia

### Design Issues

- VE Study scheduled for March 15-18, 2010
- Drainage Strategies

SR 204 Concept Team Meeting – February 18, 2010

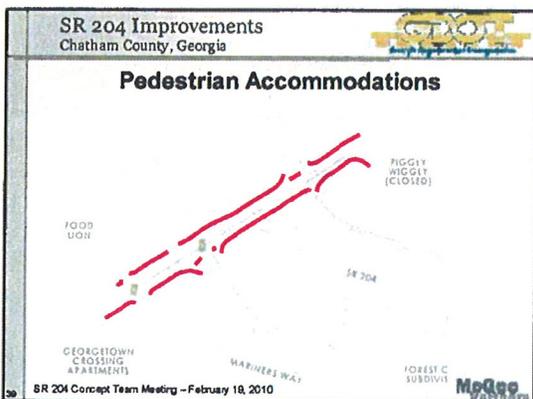




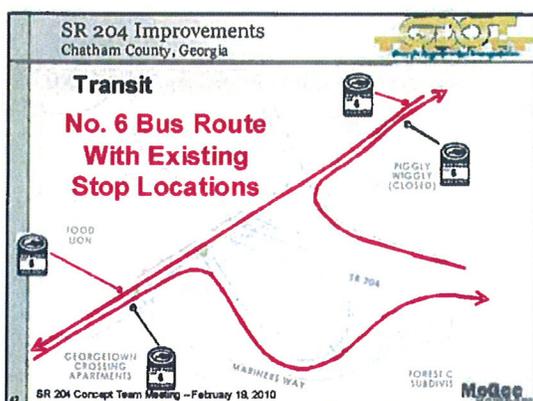
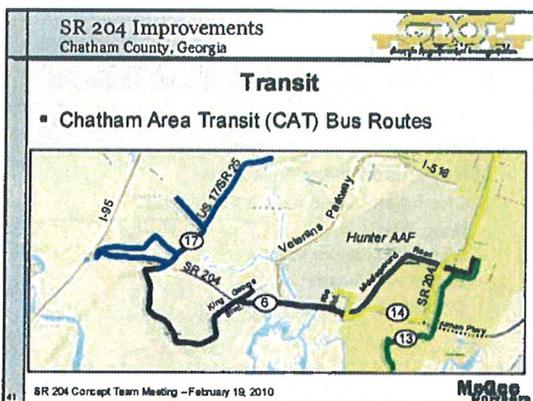
SR 204 Improvements  
Chatham County, Georgia

### Accommodations for Other Modes

SR 204 Concept Team Meeting – February 19, 2010



- SR 204 Improvements  
Chatham County, Georgia
- ### Bicycle Accommodation
- No existing bicycle facilities in project corridor
  - Per input from Initial Concept Meeting, no provisions for bicycle facilities are currently included
  - SR 204 not a GDOT designated bicycle corridor
  - Chatham County Bikeway Plan (2000) indicates the SR 204 bikeway corridor as "least suitable"
- SR 204 Concept Team Meeting – February 19, 2010



SR 204 Improvements  
Chatham County, Georgia

**Coordinate with CAT During Design**

- Bus stop locations
- Space for benches or shelters
- Use/location of turnouts
- Accommodation for future transit service

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Structural Issues**

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Bridges**

- Existing SR 204 over CSX Railroad
  - Replace side barriers
  - Sufficiency Rating = 86.1
  - Min. clearance above rails = 23'-1"
  - Design Load = HS-20+
- Proposed SR 204 over King George Boulevard
  - Single span (\$900,000 less than 3-span)
  - MSE walls around end bents
  - Accommodates: 4 basic lanes, ramp tapers and 2 future basic lanes

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Proposed SR 204 over King George**

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Retaining Walls**

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Environmental Requirements**

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Environmental Requirements**

- NEPA EA/FONSI anticipated
- No PAR required
- Permits
  - Section 404 PCN likely
  - Stream Buffer Variance likely
- Mitigation Required
  - Minor stream impacts likely, no wetland impacts
  - Archaeology mitigation
  - Sound barriers

SR 204 Concept Team Meeting -- February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Right of Way Issues**

SR 204 Concept Team Meeting -- February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Early Acquisitions**

SR 204 Concept Team Meeting -- February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Right of Way Issues**

- Access Control: Limited
- No. Parcels: 18
- Relocations: 1 (Parker's)
- Acquisition Responsibility:
  - GDOT Funded (state & federal)
  - Acquisition by Moreland Altobelli through McGee Partners contract with GDOT

SR 204 Concept Team Meeting -- February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Geotechnical Issues**

SR 204 Concept Team Meeting -- February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Geotechnical Issues**

- Soil Survey (Completed in 2009)
  - Maximum 3:1 slopes required
  - No removal or wasting
  - No surcharge for bridge approach fills
- Pavement Analysis (Completed in 2009)
  - Pavement in good to very good shape
  - Full depth shoulders east of King George
- Borrow Investigation (Completed in 2009)
  - On-site ponds/pits are suitable as borrow
  - Pits excavated up to 25' depth, 2:1 slopes

SR 204 Concept Team Meeting -- February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Utility Issues**

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Utility Involvements**

- Atlanta Gas Light
- AT&T, Qwest, Coastal Communications, Comcast
- Georgia Power
- City of Savannah (water & sewer)
- GDOT (ITS & signals)

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Utility Issues**

- SUE QL-B completed in 2009
- Major facilities
  - Fiber bank in SR 204 eastbound shoulder
  - 8" gas line along north side of SR 204

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Railroad/Airport Involvement**

- Replace barriers on existing SR 204 bridge over CSX
- Closest airport: Hunter Army Airfield (no impact)

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Maintenance Issues**

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

**Maintenance Issues**

- Existing SR 204 cross-drain west of CSX: outfall appears blocked

SR 204 Concept Team Meeting – February 19, 2010

SR 204 Improvements  
Chatham County, Georgia

### Maintenance Issues

- Access to drainage between SR 204 and Forest Cove Subdivision with addition of probable sound barriers

Alternative Sound Barrier Locations

SR 204 Concept Team Meeting - February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Maintenance Issues

- Other maintenance problems along the project?
  - Drainage?
  - Pavement?
  - Other?

SR 204 Concept Team Meeting - February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Signals & ITS Issues

SR 204 Concept Team Meeting - February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Existing Signals & ITS Facilities

Changeable Message Sign  
Westbound, West of Pine Grove Road

CSX Railroad

King George Blvd

SR 204

Veterans Parkway

Groves Road

To Be Constructed  
By Chatham County in 2010

SR 204 Concept Team Meeting - February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Proposed Signals & ITS Facilities

EB CMS

CCT Cameras

CSX Railroad

King George Blvd

Fiber Communications  
Via DSL Modem

CCT Cameras

Veterans Parkway

Groves Road

SR 204

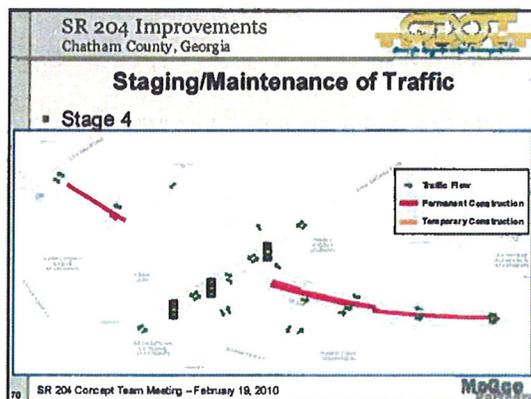
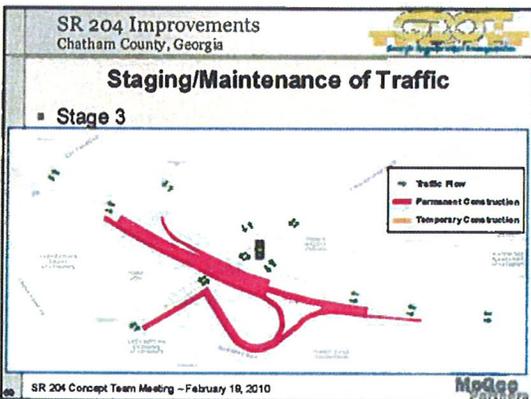
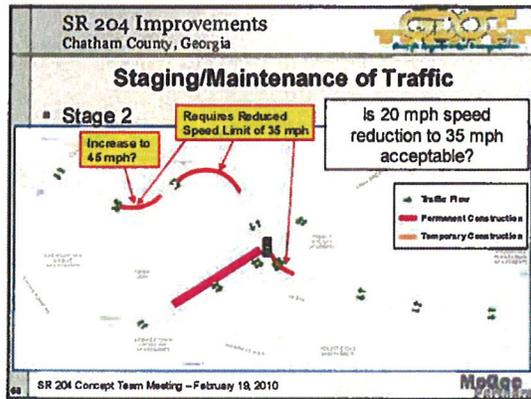
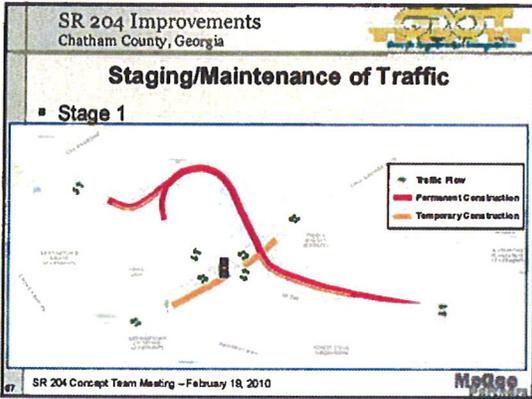
Need For  
EB CMS?

SR 204 Concept Team Meeting - February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Construction Staging

SR 204 Concept Team Meeting - February 18, 2010



SR 204 Improvements  
Chatham County, Georgia

### Staging/Maintenance of Traffic

- Need for Constructability Review?
- Need for Transportation Management Plan (Workzone Safety & Mobility)?

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia

### Cost Estimates

SR 204 Concept Team Meeting – February 18, 2010

SR 204 Improvements  
Chatham County, Georgia



### Cost Estimates

	<u>Amount</u>	<u>Funded By</u>
Preliminary Engineering	\$ 6,629,055	GDOT
Construction incl. E&C:	\$ 31,388,550	GDOT
Right of Way:	\$ 7,500,000 (Not approved)	GDOT
Utilities:	\$ 1,454,440	GDOT
Mitigation:	\$ 2,000,000 (Draft OES Est.)	GDOT

73 SR 204 Concept Team Meeting -- February 19, 2010 

SR 204 Improvements  
Chatham County, Georgia



## Management Issues

74 SR 204 Concept Team Meeting -- February 19, 2010 

- SR 204 Improvements  
Chatham County, Georgia
- 
- ### Management Issues
- Need for Project Framework Agreement?
  - Project Assignments:
    - Design: GDOT/McGee Partners
    - Right of Way Acquisition: GDOT/McGee Partners/Moreland Altobelli
    - Relocation of Utilities: Utility Companies (Coordination by GDOT)
    - Letting to contract: GDOT
    - Supervision of construction: GDOT
    - Providing material pits: GDOT (Onsite Borrow Pits)
    - Providing detours: N/A
    - Environmental Studies/Documents/Permits:
      - GDOT/McGee Partners/Edwards-Pitman
    - Environmental Mitigation: GDOT
- 75 SR 204 Concept Team Meeting -- February 19, 2010 

- SR 204 Improvements  
Chatham County, Georgia
- 
- ### Schedule
- VE Study: March 2010
  - Approved Concept: May 2010
  - PIOH: June 2010
  - Submit Draft EA: July 2010
  - Public Hearing: January 2011
  - EA/FONSI Approved: May 2011
  - FFPR: July 2011
  - R/W Approval: October 2011
  - FFPR: September 2012
- 76 SR 204 Concept Team Meeting -- February 19, 2010 

SR 204 Improvements  
Chatham County, Georgia



# COMMENTS

77 SR 204 Concept Team Meeting -- February 19, 2010 

### **Meetings Details**

November 14, 2006  
Armstrong Center  
13040 Abercorn Street, Unit 21  
Savannah, GA  
4:00 – 7:00 pm  
235 Attendees

November 15, 2006  
Southwest Middle School  
6030 Ogeechee Road  
Savannah, GA  
4:30 – 7:30 pm  
103 Attendees

### **Objectives**

1. To introduce the project to the general public
2. To present preliminary alternatives
3. To get the public's input on preliminary alternatives

### **Notification Strategy**

Key stakeholders (approximately 80 people) received an 8 ½ x 11 sized meeting flyer accompanied by a letter asking that the document be posted in a high-traffic area (see Attachment 1). Key stakeholders included service providers and organizations throughout the study area as well as churches and other organizations. A postcard was mailed to 742 database entries which provided notification of the meeting (see Attachment 2). In addition, meeting notification was posted on the GDOT website and roadway signs advertising the meetings were placed along SR 204 two weeks in advance of the meetings (see Attachment 3).

Two display advertisements were placed in the Savannah Morning News to advertise both meetings. Display ad #1 ran on October 24; display ad #2 ran on November 7 (see Attachment 4). News releases were distributed by Sherry Beal at the GDOT Office of Communications.

### **Format of Meeting**

The meeting format is an open house with an emphasis on education and receiving public input. There was no formal presentation for this meeting. A Welcome Station was set up to orient attendees to the meeting format and expected outcomes. Handout packages were distributed, which included a welcome letter from GDOT, project information, instructions for posting comments to the GDOT website, and a comment form (see Attachments 5 & 6).

Stations with display boards were arranged around the meeting room. These stations, which were staffed by study team and consulting team members, provided graphic information on the following project elements:

- Purpose & Need
- Public Involvement
- Traffic & Crash Data
- US 17 to Rio Road Alternatives
- Rio Road to Truman Phase V Alternatives
- Alternatives Simulation

An area was also set aside for the public to sign up for the project mailing list, prepare and submit written comments, and speak with a court reporter to have comments transcribed.

**Meeting Attendance**

Date	Location	Total # Counted	# Elected Officials
11/14/06	Armstrong Center	235	<ul style="list-style-type: none"> <li>• Hon. David H. Gellatly -- Chatham County Commission</li> <li>• Hon. Pete Liakakis -- Chatham County Commission Chairman</li> <li>• Hon. Ron Stephens -- Representative (District 164)</li> <li>• Hon. Jack Kingston -- Representative (District 1)</li> </ul>
11/15/06	Southwest Middle School	103	<ul style="list-style-type: none"> <li>• Hon. Eric Johnson – Senator (District 1)</li> </ul>

**Summary of Comments**

Meeting participants were given a comment form. Side-one of the form addressed project specific information including how people use the SR 204 corridor, expected outcomes of the projects, and preferred alternatives for the two projects. The backside of the comment form asked questions regarding the public involvement process. A total of 96 comment forms were returned the night of the meetings. An additional 34 were received prior to the end of the comment period either via GDOT website, mail, or fax. Court Reporters on site both meeting nights collected 9 comments. The following sections summarize the frequency of responses.

**Project Specific Feedback**

The majority of people attending the meeting **live on or adjacent to** the SR 204 corridor. Some people wrote in responses that they also work on the corridor.

- Live on/adjacent to corridor – 78%
- Own business on corridor – 16%
- Work on corridor – 5%

The majority of people attending the meetings were **in favor of improvements** in this corridor, while another large portion of people's support for the project is conditional.

- For – 56%
- Against – 3%
- Conditional – 38%
- Uncommitted – 3%

People were asked to provide an **explanation regarding support** for the project. The most common explanations received include:

- There is a need for relief from traffic and a reduction of travel time
- Concerned with impacts to Armstrong Atlantic State University (AASU)
- Concerns with negative impacts to environment/homeowners/businesses

*Note: Respondents commenting that there is a need to reduce traffic congestion were for the project while those with concerns about impacts to AASU, the environment, homeowners, and businesses were conditional supporters.*

People were asked their opinion of the **most important outcome** of the SR 204 improvements. Most feel that the improvements will decrease traffic congestion and improve safety on the roadway.

- Decrease Traffic Congestion – 32%
- Provide Immediate Access to Businesses – 8%
- Improve Safety on Roadway – 27%
- Decrease the Number of Signals on the Corridor – 16%
- Decrease the Number of Entrances directly onto the Corridor – 9%
- Other – 7%

*Note: There were no common themes for “Other” responses.*

Most respondents prefer making the corridor from **US 17 to Rio Road** a limited access freeway, with the options to make improvements to signal timing and to widen the corridor to 8-lanes received nearly equal support.

US 17 to Rio Road	Make no changes to SR 204 – 1%
	Only improve intersections & signal timing on SR 204 – 23%
	Widen SR 204 to an 8-lane facility with at-grade intersections – 28%
	Make SR 204 a limited-access freeway – 48%

Regarding the segment from **Rio Road to Wilshire**, the majority of people favored the limited-access freeway with frontage roads option, followed closely by the viaduct option:

Rio Road to Wilshire	Make no changes to SR 204 – 6%
	Only improve intersections & signal timing on SR 204 – 12%
	Widen SR 204 to an 8-lane facility with at-grade intersections – 19%
	Make SR 204 a limited-access freeway with frontage roads – 34%
	Extend Truman Pkwy to Rio Rd on a freeway viaduct above the median of SR 204 – 30%

### **Public Involvement Process Feedback**

Respondents were asked to evaluate the **meeting notification efforts**. The majority were notified about the meeting from the local newspaper. This could be due to the two display ads that were placed in the paper, as well as the heavy media coverage that the projects received in the weeks and days prior to the first meeting. A significant portion of people heard about the meeting by word of mouth. Some people wrote in responses, captured under “Other”, which included postcard/mail out and television.

- Radio – 9%
- Newspaper – 44%
- Signs – 13%

- Word of Mouth – 22%
- Other – 12%

All respondents agreed that the location was convenient and 99% of respondents believed the time was also convenient.

The majority (91%) of attendees felt that GDOT staff answered their questions and 91% stated that they have a better understanding the project after attending the meeting.

A summary of the most common response themes received as additional comments is as follows:

- Specific alternatives or recommendations offered – 31%
- Positive comments/Thank-you – 12%
- General comments – 15%
- Impacts to AASU– 6%
- Impacts to neighborhoods – 8%
- Project timeliness – 6%
- Truman Phase V project – 7%
- Project understanding/meeting format – 6%
- Issues at US 17 – 3%
- Impacts to the environment – 3%
- Impacts to businesses – 4%
- Issues with website – 1%

## **Meetings Details**

June 19, 2007	June 20, 2007
Armstrong Center	Armstrong Center
13040 Abercorn Street, Unit 21	13040 Abercorn Street, Unit 21
Savannah, GA	Savannah, GA
4:00 – 7:00 pm	4:00 – 7:00 pm
136 Attendees	102 Attendees

## **Objectives**

1. To review alternatives presented at PIOH #1
2. To explain how alternatives are evaluated, eliminated and modified
3. To get the public's input on a refined list of design alternatives

## **Notification Strategy**

Specific efforts were undertaken by the project team to ensure the meetings were well publicized. The following paragraphs detail the activities conducted to announce the meetings to area stakeholders and the general public.

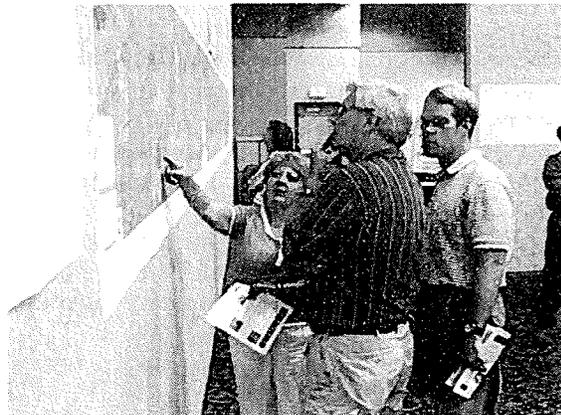
Key stakeholders (175 individuals/organizations) received an 8 ½ x 11 sized meeting flyer, a letter asking that the document be posted in a high-traffic area (see Attachment 1), as well as a Frequently Asked Questions (FAQ) document which summarized questions and comments submitted from the first PIOH. Key stakeholders included service providers and organizations throughout the study area as well as churches and other organizations.

Individuals who signed up to be placed on the mailing list at the previous PIOH (186 individuals/organizations) as well as 652 property owners received a meeting flyer and a copy of the FAQ document by mail. In addition, the meeting notification was posted on the GDOT website and roadway signs advertising the meetings were placed along SR 204 two weeks in advance of the meetings (see Attachment 2).

Two display advertisements were placed in the Savannah Morning News to advertise both meetings. Display ad #1 ran on May 29; display ad #2 ran on June 12 (see Attachment 3). News releases were distributed by the GDOT Office of Communications.

## **Format of Meeting**

A series of two meetings presenting identical information were held to give the public ample opportunity to learn about the project and submit comments. The meetings were conducted in an open house format with no



formal presentation for this meeting. A welcome station was set up to orient attendees to the meeting format and expected outcomes. Handout packages were distributed, which included a welcome letter from GDOT, project information, instructions for posting comments to the GDOT website, the FAQ document, and a comment form (see Attachments 4 & 5).

Stations with display boards were arranged around the meeting room. These stations, which were staffed by study team and consultant team members, provided graphic information on the following project elements:



- Purpose & Need
- Public Involvement
- Traffic & Crash Data
- US 17 to Rio Road Alternatives (eliminated and refined)
- Rio Road to Truman Phase V Alternatives (eliminated and refined)
- Alternatives Simulation

An area was also set aside for the public to sign up to be added to the project mailing list, prepare and submit written comments, and speak with a court reporter to have verbal comments transcribed.

**Meeting Attendance**

Date	Total # Counted	# Elected Officials
6/19/07	136	Hon. Jeff Felser – Alderman at Large (Post 2)
6/20/07	102	N/A

**Summary of Comments**

In addition to educating the public, meeting attendees were encouraged to submit their comments on various aspects of the project. The meeting comment form was a double-sided document. Side-one of the form addressed project specific information including how people use the SR 204 corridor, the frequency of corridor usage and preferred alternatives for the two projects.

Side two of the comment form asked questions regarding the public involvement process. A total of 41 comment forms were submitted at the PIOHs. An additional 21 comments were received prior to the end of the comment period either via GDOT website, mail, or fax. The Court Reporter who was on site both meetings collected a total of 5 comments. The following sections summarize comments and the frequency of responses.

**Project Specific Feedback**

The highest percentage of people who submitted a comment form **work** in a location along the SR 204 corridor, followed closely by those who **live** on/adjacent to the corridor. A small number of people noted that they do not live, own a business, or work on the corridor by checking "No".

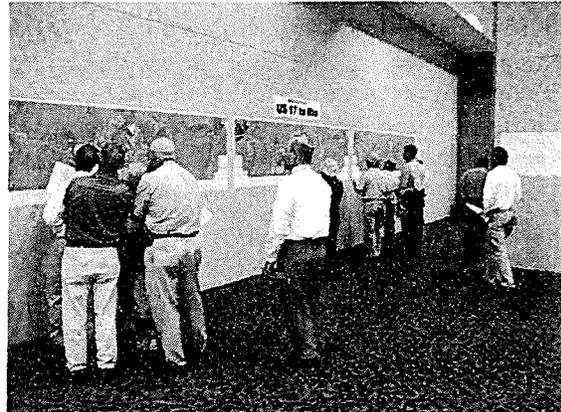
- Live on/adjacent to corridor – 42%
- Own business on corridor – 18%
- Work on corridor – 31%
- None of the above (checked the "No" box) – 9%

A strong majority of people who submitted a comment form use SR 204 on a **daily** basis.

- Daily – 85%
- A few times a week – 9%
- A few times a month – 4%
- Rarely – 2%

Over one-half of people who submitted a comment form are **in favor of improvements** on SR 204.

- For – 52%
- Against – 16%
- Conditional – 27%
- Uncommitted – 6%



People were asked to choose the alternative they would prefer for both segments of the corridor. For the segment from US 17 to Rio Road, most respondents chose the **C1** limited access freeway alternative.

<b>US 17 to Rio Road</b>
C1 Alternative – 56%
C3a Alternative – 12%
C3b Alternative – 22%
Other – 10%

"Other" improvements suggested by 10% of the respondents include:

- Park & ride, ride share, telecommute, staggered shifts, and public transportation
- A flyover from SR 204 west to King George Blvd south
- Placing bridges on both tracks on Grove Point Road
- Undecided

Regarding the segment from Rio Road to Wilshire, the majority of people favored the L2n option.

Rio Road to Wilshire Boulevard	
L2n Alternative	– 46%
L2s Alternative	– 35%
Other	– 19%

Responses regarding “Other” improvements include:

- Park & ride, ride share, telecommute, staggered shifts, and public transportation
- Choose the “No Build” option
- Choose an option similar to L2s but use Largo Drive and Rio Road as signalized intersection.

#### Public Involvement Process Feedback

Respondents were asked to evaluate the **meeting notification efforts**. The majority were notified about the meeting from the mailed meeting notice followed closely by newspaper, roadway signs, and word of mouth. “Other” means of notification included notification through AASU, the Georgetown Neighborhood Association Newsletter and from information shared at Savannah-Chatham County Metropolitan Planning Commission meetings.



- Radio – 5%
- Newspaper – 25%
- Signs – 18%
- Word of Mouth – 16%
- Mailed Notice – 30%
- Other – 5%

All respondents agreed that the location and time were convenient.

Ninety-eight percent of meeting attendees felt that GDOT staff answered their questions and 91% stated that they have a better understanding the project after attending the meeting.

Meeting attendees were given the opportunity to submit additional general comments about any aspect of the project. A summary of the most common response themes received as additional comments is as follows:

- General comments – 30%

- Impacts to King George/Georgetown area – 23%
- Impacts to specific neighborhoods – 12%
- Project understanding/meeting format – 9%
- Project timeliness – 7%
- Positive comments/Thank-you – 7%
- Improvements from Rio to Truman – 7%
- Impacts to businesses – 5%

## Meetings Details

June 17, 2010  
Georgetown Elementary School  
Savannah, GA  
4:00 – 7:00 pm  
154 Attendees

## Objectives

1. To update the community on the study history
2. To present the proposed layout for the project
3. To solicit feedback and comments

## Notification Strategy:

The general stakeholder database has been modified to include all tax parcels in the vicinity of the revised project location. Written notification in the form of a postcard flyer was mailed to these general stakeholder database entries (approximately 300 individuals). Key stakeholders (approximately 175 people) received an 8 ½ x 11 sized meeting flyer accompanied by a letter asking that the document be posted in a high-traffic area. All written notification was mailed out 4 weeks prior to the meeting date (May 20, 2010).

An **e-mail reminder** was sent to key stakeholders with email addresses on file (87 individuals/agencies). In addition, a meeting notification was posted on the GDOT website and roadway signs were developed and placed at strategic locations in the study area.

All media notifications were coordinated with the GDOT District office. Display advertisements were placed in the Savannah Morning News. Two ads ran to advertise the meeting.

## Format of Meeting:

The meeting was a Public Information Open House Meeting with an emphasis on education and receiving public input. There was no formal presentation for this meeting. A Welcome Station was set up to orient attendees to the meeting format and expected outcomes, to collect contact information for the project database, and to distribute a meeting handout.

Stations with display boards were arranged around the meeting room. These stations, which were staffed by study team and consultant team members, provided graphic information on the following project elements:

- Purpose & Need
- Public Involvement
- King George intersection alternatives considered
- Provisions for Future Widening/Additional Capacity
- Environmental Resources

- Construction Staging
- Roadway Typical Sections
- Alternatives Simulation

An area was also set aside for the public to sign up to prepare and submit written comments and speak with a court reporter to have verbal comments transcribed.

### Summary of Comments

In addition to educating the public, meeting attendees were encouraged to submit their comments on various aspects of the project. The meeting comment form asked questions regarding the public involvement process. A total of 36 comment forms were submitted at the PIOH. An additional 4 comments were received prior to the end of the comment period either via GDOT website, mail, or fax. The Court Reporter collected a total of 11 comments.

Respondents were asked if they support the project. Thirty-nine out of 40 people returning comment forms answered this question. The majority of the people who answered this question were in favor of the project. Responses were as follows:

- For – 69%
- Against – 3%
- Conditional – 21%
- Uncommitted – 8%



This question also allowed for comments regarding support for the project. There were several comments received. Regardless of support for the project, the majority of the residents from the study area feel the project is needed to reduce congestion but that sound barriers to protect the homes closest to the corridor are a must.

Respondents were asked to evaluate the **meeting notification efforts**. The majority were notified about the meeting from the “Other” means which included the mailed meeting postcard, the letter, homeowners’ association newsletters/emails, and television. The roadway signs were also a very effective method for notifying people of the meeting.

- Radio – 0%
- Newspaper – 4%
- Signs – 38%
- Word of Mouth – 17%
- Other – 40%

A very small amount of people referred to the newspaper as their method of notification about the meeting.

With the exception of one respondent, all agreed that the location and time were convenient. The one respondent who disagreed with the meeting location noted that they were from Evans, GA. The one who disagreed with the meeting time suggested 4:00 to 8:00 PM as the meeting time.

All meeting attendees felt that GDOT staff answered their questions and that they have a better understanding the project after attending the meeting.

Meeting attendees were given the opportunity to submit additional general comments about any aspect of the project. A summary of the most common response themes received as additional comments is as follows:

- General comments – 30%
- Impacts to King George/Georgetown area – 23%
- Impacts to specific neighborhoods – 12%
- Project understanding/meeting format – 9%
- Project timeliness – 7%
- Positive comments/Thank-you – 7%
- Improvements from Rio to Truman – 7%
- Impacts to businesses – 5%

Comments made to the court reporter were varied in theme but most were about the need for sound barriers along the Forest Cove neighborhood at SR 204:

- Overpass at Pine Street
- Install a caution light at the exit by the fire station
- More information, in the future, about the sound barrier and final plans that will be affecting Forest Cove
- A sound barrier is vital for Forest Cove
- Concerned with the close proximity of the loop to Forest Cove; would like to be notified if changes need to be made to the gate entrance to neighborhood
- Sound barriers are needed at Forest Cove
- Adding four more ponds will flood my home, regardless of the drainage.
- Not happy with the design proposed. Should be pushed to the north side of 204. Must have sound barriers
- This is the best proposal I've seen for this area
- Concerned with delays during construction – what should be expected?
- Need a sound barrier.

## Meetings Details

May 17, 2007  
Georgetown Elementary School  
1516 King George Blvd  
Savannah, GA  
6:30 – 8:00 pm  
47 Attendees

## Objectives

1. To provide a targeted update of the modified improvement alternatives to the Forest Cove and Grove Hill neighborhoods
2. To get the public's input on modified alternatives
3. To advertise the June PIOH

## Notification Strategy

A flyer advertising the neighborhood meeting was developed and distributed to the Forest Cove and Grove Hill neighborhoods' Homeowner Association contacts. The Forest Cove neighborhood included the neighborhood meeting information in its newsletter and sent a follow up community events postcard which also included the meeting information. The Grove Hill neighborhood used an email list to notify residents.

## Format of Meeting

The meeting format was a brief presentation followed by a question and answer period. Attendees were asked to sign-in and received an FAQ document and a flyer advertising the June PIOHs.

## Meeting Attendance

A total of 47 individuals were present. The majority of the residents (89%) were from the Forest Cove neighborhood. The Honorable Ron Stephens (Representative, District 164) was also in attendance.

## Summary of Comments

The following questions and comments were heard during the question and answer period.

- What are the anticipated right-of-way and construction dates and costs?
- What about other transit options, such as light rail and HOV?
- What is the projected increase in traffic for this area?
- Relief is needed now. This project was proposed in 2002 and now there are no funds available until 2014. This should be the #1 priority project in Chatham County
- Will noise barriers be considered?
- How is noise measured?
- Where are traffic counts taken?
- What part does the county play in making improvements?

- Have studies been done on ways to finance this project?
- Will the visuals from this presentation be the same resolution when posted on the GDOT website?
- Are there wetlands in Grove Hill and Forest Cove?
- How will drainage issues be addressed?
- Is there a combination of the C3a and C3b alternatives?
- How will the DOT keep future development from occurring where improvements will need to be made?
- Will the loop in the C3a option be a one-lane road?
- What are the red lines on the graphics?
- Will the gas station at the corner of King George Blvd and SR 204 remain?
- Is there a map that shows how Truman Phase V ties in?
- In Forest Cove, do some of the red lines come through some of the properties?
- Will GDOT buy property now?
- How long will it take to build this project?
- Will the ramps be elevated at King George?
- Will the Forest Cove entrance gates have to be moved? How far?
- Why are so many traffic lights needed on King George?
- Will sewer lines be impacted?
- Will the Waffle House restaurant be relocated?
- How high will the noise barriers be?

**SR 204 WIDENING PROJECT**  
Stakeholder Meeting Summary



<b>Date/Time/ Location:</b>		July 27, 2006; 2:00 pm Armstrong Atlantic State University	
<b>Attendees</b>			
<b>Name</b>	<b>Organization</b>	<b>Phone</b>	<b>email</b>
Tom Jones	AASU, President	912-927-5231	jonestom@mail.armstrong.edu
Bill Megathlin	AASU, Assistant to the President	912-927-5384	megathwi@mail.armstrong.edu
Leary Bell	AASU, VP for External Affairs	912-927-5231	belllear@mail.armstrong.edu
Jim Brignati	VP for Business & Finance	912-927-5255	
David Faircloth (by phone)	AASU, Director of Plant Operations		faircida@mail.armstrong.edu
Neil Dawson	Dawson Wissmach Architects	912-201-0111	ndawson@dwarch.com
Tony Collins	GDOT – District 5, Preconstruction	912-427-5715	tony.collins@dot.state.ga.us
Hayden Rozier	GDOT – District 5, State-Aid	912-427-5733	
Tommy Crochet	McGee Partners	770-938-6400	
Chris Marse	McGee Partners	770-938-6400	

This meeting was requested by Bill Megathlin, who began by reviewing proposed improvements to the university campus. Issues discussed included:

- A copy of the Campus Master Plan (Oct. 2002) was provided and discussed.
- AASU has plans to construct a new building (Leadership Hall) at the front of the campus to serve as a monument or flagship building for the campus. Conceptual drawings and renderings were provided. They are interviewing architects and expect to break ground next summer. Schedule is critical to AASU as bonds are involved. While there is approximately 180' between the proposed building and SR 204 R/W, expansion of the roadway more than 50'-60' south would greatly impact the aesthetics of this building.
- The GDOT project (STP-0008-00(294), PI 0008294) to construct a median opening with signal at Arts Drive was discussed. GDOT plans to move forward with this project and hopes to let it with other Abercorn intersection projects late this year.
- New gateways are planned for the Arts Drive and Science Drive entrances; total construction cost estimated at approximately \$125,000.
- AASU is investigating the possibility of developing the 30 acres on the north side of SR 204. A development plan was provided showing retail, office, bookstore, auditorium and hotel. This is not a definite plan. They would like to begin development in 2-3 years.
- AASU has been allocated TEA funds for the construction of bike paths. A plan was provided.

**SR 204 WIDENING PROJECT**  
Stakeholder Meeting Summary



- AASU is developing an internal road improvement plan.

Tommy Crochet provided an overview of the project scope and schedule. A discussion on traffic projections and analysis and alternatives to be studied followed. Some key points to note:

- AASU may be interested in shifting the alignment of SR 204 onto their 30 acre parcel north of the existing roadway, significantly or just a minor shift.
- AASU would be invited to the Initial Concept Team Meeting scheduled for August 23<sup>rd</sup>.
- McGee Partners will work with AASU as viable alternatives are developed.
- Public meetings should be held beginning in October.
- Preferred alternative should be selected in early 2007.
- Final decisions on the preferred alternative rest with GDOT and FHWA and will be based on many factors.

Recorded by: Crochet & Marsengill

**SR 204 WIDENING PROJECT**  
Stakeholder Interview Summary



<b>Date/Time/Location:</b>	June 21, 2006; 1:00 pm Armstrong Atlantic State University
<b>Interviewee(s):</b>	C. Leary Bell, Ph.D. – VP for External Affairs David Faircloth – Director of Plant Operations
<b>Interviewer(s):</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet began by providing an overview of the project scope and study area.

Comments and concerns expressed by AASU staff include:

- AASU has plans to construct a new building (Leadership Hall) at the front of the campus to serve as a gateway or flagship building for the campus.
  - A widened highway may come too close to the front of the new building
  - Grade separation could interfere with the views of this building
  - A conceptual drawing is available and will be sent to the project team.
- There are plans to completely close the middle entrance to the campus (at Barrett Hall). This is in conjunction with plans to add a median opening and traffic signal at Arts Drive, which is being coordinated with the GDOT District Office and Chatham County.
- AASU is concerned with the potential impacts to parking at the Armstrong Center
- The possibility of shifting the alignment of the widened highway to the north side of SR 204 to decrease the impacts to planned development at the University
  - At last delineation, there were no wetlands on this property
- Tommy raised the possibility of shifting the alignment of Middle Ground Road/Science Drive to the east. AASU thought that would not be a problem.
- Congestion of SR 204 does impact the quality of life along the corridor and if not improved will eventually impact the growth in the area.

Public outreach opportunities:

- Use the electronic newsletter and quarterly magazine to advertise public meetings is permitted
- In addition to the Armstrong Center, AASU has facilities on camps that may be conducive to public meetings



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Interview Summary



Other information:

- Current campus enrollment: 7,000
- 5-year projected enrollment: 10,00
- Current Master Plan (2012) was received via email from David Faircloth on 6/21/06
- Conceptual drawings for Leadership Hall were received via email from Becky Smith on 6/23/06.



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Interview Summary



<b>Date/Time/Location:</b>	June 23, 2006; 9:00 a.m. Hunter Army Air Field
<b>Interviewee(s):</b>	Kewyn Williams, Deputy Garrison Commander Anne de la Sierra, Chief, Master Planning Division Col. Coffman, Garrison Commander
<b>Interviewer(s):</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet began by providing an overview of the project scope and study area.

Comments and concerns expressed by Hunter Army Air Field staff include:

- There are plans to develop an RV park/campgrounds near SR204 along Lots Island Road
  - The park will have 31 concrete pads, water, sewer, washer/dryer facilities, latrine, etc.
  - Walking paths and trails will be located around the wetlands which are close to SR 204
- There are also plans for expanding access at the a Rio Road gate
  - Most of the traffic at the reconfigured gate will be traveling west on SR 204
  - There will be truck access at this gate, which will reduce trucks from traveling through the residential areas
  - The access control point will be 4 lanes
  - HAAF will be coordinating with Chatham County on possible widening of Rio Road from SR 204 to the new gate location
  - The gate will be reconstructed north of the existing gate near Mohawk Street
  - Detailed plans of the new gate location have not been prepared
- HAAF has increased in size since the last traffic counts were completed – there were 5500 active duty at last traffic count; estimated to grow to 7500, with the recent addition of 2 Battalions, 6 Companies
- The base will not expand beyond 3 access points however, if a school is built at Middleground/Tibet there will likely be a need for another gate at that location
- Ms. De la Sierra will be happy to work with our traffic consultants to help project the traffic to be expected from the Rio Gate as well as from the other gates

Other Information:

- Received email from Anne de la Sierra on6/28/06 with plans for RV Park and proposed Rio Gate Location



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Interview Summary



<b>Date/Time/Location:</b>	June 22, 2006; 2:30 pm Savannah Mall
<b>Interviewee(s):</b>	Al Smith, Operations Manager
<b>Interviewer(s):</b>	Jen Price, Sycamore Consulting, Inc.

Jen Price began by providing an overview of the project scope and study area.

Comments and concerns expressed by Savannah Mall staff include:

- No new development is planned for the mall; if new development will occur it would be at the rear of the mall
- Expressed concern with the possibility of losing some property due to the widening but welcomes the possibility of the mall gaining its own entrance/exit onto the limited access freeway system

Public outreach opportunities:

- Will look into the use of the mall as an information kiosk location



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Meeting Summary



<b>Date/Time/ Location:</b>	October 20, 2006; 7:30 am Southside Fire Department 2225 Norwood Avenue Savannah, GA 31406		
<b>Attendees</b>			
<b>Name</b>	<b>Organization</b>	<b>Phone</b>	<b>email</b>
Wesley Meadows	Chief/General Mgr. SSFD	912-354-1011	Chief@SouthSideFire.com
Hugh Futrell	Assistant Chief SSFD	912-354-1011	Hazmoid@SouthSideFire.com
Tommy Crochet	McGee Partners	770-938-6400	

This meeting was requested by Tommy Crochet, who gave a brief overview of the project and showed schematics of possible alternatives for US 17 to Rio, including no build, 8-lane, and 3 freeway alternatives.

The SSFD station on Grove Point Road near US 17 was discussed.

- Tommy indicated that it is unlikely that the no build and 8-lane alternatives will be chosen and that any freeway alternatives would require closing the existing, non-signalized median opening on SR 204 near the station.
- He also indicated that there would likely not be a need to purchase any of the SSFD property to build the project, but he understood that re-routing the access could affect the service range of the station. He discussed a few options for reconnection of Grove Point Road including connections to either Pine Grove Road or US 17.
- SSFD indicated that this station primarily served the area to the west and covered a 3-mile service range. Any lengthening of the access to SR 204 at US 17 would affect some of the subscribers to their service, especially some of the hotels and other facilities at the Gateway area at SR 204 and I-95. They would study the potential change for the alternatives discussed. SSFD is a non-profit organization with a subscriber base for fire fighting service. They also have an EMS service, which would be less affected by a change in access.
- Tommy also indicated that there was not likely any mechanism for GDOT to compensate SSFD for any affects to their service range.
- SSFD asked about potential for emergency vehicle access directly to a freeway section of SR 204. Tommy indicated that GDOT may consider this, but it would at best be a right-out only access onto SR 204, and that it would take special consideration on the part of GDOT to include such an access. It was noted that a right-out access at this station would not help with avoiding lengthening of their service distance to some of their subscribers.
- Tommy encouraged them to consider the alternatives and make comments at the upcoming PIOHs in November.

Recorded by: Crochet

**SR 204 WIDENING PROJECT**  
Stakeholder Interview Summary



<b>Date/Time/Location:</b>	June 22, 2006; 1:00 pm St. Joseph's-Candler of Savannah
<b>Interviewee(s):</b>	Richard Underwood, Director of Engineering Peter Schenk – Vice President
<b>Interviewer(s):</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet began by providing an overview of the project scope and study area.

Comments and concerns expressed by St. Joseph's staff include:

- The hospital has considered constructing a new entrance to the property off of SR 204
- New construction on site will likely occur north of the existing main hospital facility (may be a relocation of services and likely for out-patient services)
- There are no major construction plans for the hospital; existing facilities will be reused if needed
- Out-patient services is growing as the dominant use of the hospital by the public
- The bulk of the traffic into/out of the site is usually begins in the morning and ends in the late afternoon

Public outreach opportunities:

- Hospital has a newsletter that may be used to advertise meetings
- Hospital has meeting space available

Other Information:

- Current Beds: 325                      Projected Beds: 325
- Growth of traffic from the facility is likely to be at current corridor growth rates



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	May 17, 2007; 2:00 pm Armstrong Atlantic State University
<b>Stakeholder Attendees:</b>	Dr. Bill Megathalin, Assistant to the President Dr. Michael Donahue, Acting VP External Affairs David Faircloth, Director of Plant Operations
<b>Project Team Attendees:</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc. Teresa Scott, GDOT District 5

Tommy Crochet began by providing an overview of the project status and the alternatives carried forward for the Rio to Truman section. Main concerns of AASU staff were concerning how access to the campus would be changed and how the campus' future development plans can be altered in order to benefit from GDOT improvements.

Comments and concerns expressed by AASU staff include:

- Details regarding retaining walls – how do they look? How high will they be? How will the view of the campus be changed?
- If the highway is pushed to the north, how will this impact Middleground road?
- How many lanes at or near AASU?
- There is a Student Success Center planned which will include a 500 bed housing unit. It will be vertical construction, with a café to link to the old gym and student union/recreation center. This is planned for the wooded lot at the rear of the campus
- AASU is negotiating an additional 11 acres on the east end of the campus that could be potentially linked to the triangle lot across the street
- AASU is considering putting the triangle lot on the market in order to purchase the 11 acre lot
- AASU will consider changing the entrance to the campus to face east and would strongly consider closing the current access to campus that faces Burnette Hall.
- AASU is also considering changing the location of a planned signature facility.
- AASU will also consider allowing access to the campus from the Armstrong Center



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	May 18, 2007; 9:30 am St. Joseph's Hospital
<b>Stakeholder Attendees:</b>	Peter Schenk, VP Ancillary Services Richard Underwood, Director of Engineering
<b>Project Team Attendees:</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet began by providing an overview of the project status. He reviewed the presentation given to the neighborhoods the evening prior. Tommy also reviewed the alternatives carried forward for the Rio to Truman section and discussed specific impacts to the hospital property.

Comments and concerns expressed by St. Joseph's staff include:

- Will Truman V ever connect directly to I-95 other than through SR 204?
- Will the interchange at I-95 be analyzed as a part of this project?
- How much property from the center line will be needed in both directions?
- The height of the highway at the St. Joseph's section
- Has right-of-way acquisition for Truman V already started?
- Is light-rail an option for SR 204?
- The hospital's current population comes from the east, but west Chatham County is growing. St. Joseph's will need to consider the regional impact it has on the Chatham-Savannah area. Should the hospital consider additional sites for relocation?
- There may be a need to use the existing parking lot for expansion and build a parking garage



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	May 18, 2007; 1:30 am Hunter AAF
<b>Stakeholder Attendees:</b>	Anne de la Sierra, Planning Col. Coffman Col. Whitfield (will replace Coffman) Vic Maulden, Public Works
<b>Project Team Attendees:</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet began by providing an overview of the project status. He reviewed the alternatives carried forward for the project and discussed the minimal impacts to Hunter's property.

Comments and concerns expressed by HAAF staff include:

- The impacts are adjacent to the site currently planned for an RV park, but are very minimal
- Some of the tree buffer would be disturbed
- There will be a need for some drainage mitigation
- The improvements would be beneficial to the base, allowing better movement of military vehicles, especially if the rear gate is re opened
- Will also benefit the troops stationed at the base who live in the Georgetown area



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	June 20, 2007; 2:00 pm Armstrong Center Ballroom
<b>Stakeholder Attendees:</b>	Advisory Committee on Accessible Transportation Jane Love, MPO/CUTS
<b>Project Team Attendees:</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet began by providing an overview of the project to the ACAT. He discussed the project information as it was displayed for the PIOHs. He provided details regarding public involvement, the alternatives evaluation process, and anticipated outcomes of the project. He also provided a verbal description of the traffic simulations.

Comments, questions and concerns expressed by ACAT members are as follows.

- Will frontage roads give appropriate access to buses, paratransit, pedestrians, cyclists, and wheelchairs?
- Will there be sidewalks on frontage roads?
- Will there be curb cuts?
- Will there be a pedestrian bridge crossing anywhere?
- Will audible signals be used for pedestrian crossings?
- Where does SR 204 become a street? Is it a state route the whole length?
- Some people like to cycle from Highway 144 to Veterans Pkwy.
- Is it the state's responsibility to add sidewalks all the way along SR 204 since it is a state route?
- Will both sides of the frontage roads have sidewalks?
- Where Truman will tie into Holland Drive, how will pedestrian traffic in this highly residential area be impacted?
- Is King George mainly a residential area?
- Is the I-17 area heavily populated? Will most improvements impact vehicular traffic more than residential/pedestrian traffic in this area?
- Are there sidewalks under grade separations/bridges?
- What are the projected start/completion dates?
- Is this consulting team working on the Middleground road project? What is the projected completion date?
- Please describe the profile of the freeway/frontage road.
- Is there any responsibility of the state to fund the project?
- Will the final report include technical analysis and input?
- How is DeRenne Ave impacted by this project?
- Is congestion on SR 204 impacted by congestion on I-95?



**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	August 16, 2007; 5:00 PM Savannah-Chatham MPC
<b>Stakeholder Attendees:</b>	Citizens Advisory Committee Members
<b>Project Team Attendees:</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet provided an overview of the project status and public involvement efforts completed to date. He discussed the alternatives analysis process, including why alternatives were eliminated. Tommy discussed some of the frequently asked questions from the public. Of particular concern to the public is the possibility of re-routing Truman Parkway through the marsh south of SR 204. Tommy provided detail regarding the issues with this scenario. He also discussed the details of the preferred alternatives and the next steps of the project. Members received a copy of the PIOH executive summary from the June meetings, the June PIOHs handouts, which included a project fact sheet and list of frequently asked questions.

Questions/concerns raised by the Citizens Advisory Committee include:

- Why is the Truman/Veteran's Connector not feasible?
- Does the L2n alternative have 2 frontage roads? Does it have u-turns?
- Will Abercorn Street have to be relocated?
- Have you estimated what the induced traffic will be 10 years after the road is built? Do you have any idea of what will happen? Can you guarantee a reduction in traffic or improvements?
- What happens when gas is \$10 per gallon or when oil is \$100 per barrel?
- Is there any consideration for high speed bus lanes or mono-rail?
- Regarding the number of people who responded to the PIOH survey, who are they? Where do they live? What do they do for a living?
- I do not see HOV or public transit options
- Regarding sound barriers, they will be one of the first things cut from the project
- Improvements do not decrease congestion or increase safety
- Savannah is planning for yesterday and today, not for the future
- Is there any thought to making this a toll road?
- Savannah's history of "pay me now, pay me later" is destroying businesses by increasing ad valorem taxes. Though I do not agree with this project, it needs to be done right with enough money allocated to do it right now or else we'll pay for it later
- They already have their minds made up to destroy Abercorn Street. It should not have been built as a street; it should have been built as a freeway with frontage roads.
- What is the County Commission's position on Truman V?



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	August 16, 2007; 3:00 PM Savannah-Chatham MPC
<b>Stakeholder Attendees:</b>	Technical Coordinating Committee Members
<b>Project Team Attendees:</b>	Paul Condit, GDOT Butch Welch, GDOT Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Tommy Crochet provided an overview of the project status and public involvement efforts completed to date. He discussed the alternatives analysis process, including why alternatives were eliminated. Tommy discussed some of the frequently asked questions from the public. Of particular concern to the public is the possibility of re-routing Truman Parkway through the marsh south of SR 204. Tommy provided detail regarding the issues with this scenario.

Chatham Area Transit questioned whether or not there were any questions from the public regarding the use of bus lanes and/or expanding transit options in the corridor. Tommy discussed the potential to incorporate bus rapid transit facilities within the corridor in the future when the need for such facilities is greater.

Issues regarding the pedestrian crossings as related to bus stops at frontage roads were also discussed. Tommy suggested that Chatham Area Transit send a letter to Butch Welch at GDOT Urban Design to discuss efforts to coordinate on this issue.

Tommy also discussed the details of the preferred alternatives and the next steps of the project. Members received a copy of the PIOH executive summary from the June meetings and the project costs matrix.



**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	August 16, 2007; 1:00 PM Savannah-Chatham MPC
<b>Stakeholder Attendees:</b>	Allan Black Dennis Hutton Mike Weiner Mark Wilkes
<b>Project Team Attendees:</b>	Paul Condit, GDOT Susan Thomas, Edwards-Pitman Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

Susan Thomas presented information related to the following issues:

- Indirect and cumulative impacts
- Indirect impacts including:
  - Right-of-way
  - Changes to land use around communities (induced growth, flight, devaluation, etc.) as a result of indirect impacts
- Cumulative impacts including:
  - Incremental changes over time
  - Impacts to resources due to past, current and future projects
- The area of influence of the project
  - No "hard and fast" method used to determine this boundary
  - Determined by collecting data, talking with experts, etc.

Comments regarding the area of influence of the project include:

- The fastest growth is occurring in west Chatham County
- Chatham County is being affected by urban sprawl; better schools plus lower taxes in Effingham and Bryan counties is resulting in people moving farther west but still commuting to the city for work
- Hospitals, Oglethorpe Mall, ports, downtown are all major attractions that pull people who have moved out of the county back in
- The proposed project will reduce travel times and will open up much needed highway capacity which could in turn push people farther out inducing more sprawl.

Comments regarding cumulative impacts include the following projects which have/are expected to produce impacts to the area:

- 1957 construction to bring SR 204 south of DeRenne & the early 1970s construction to extend SR 204
- Zoning change requests are currently being submitted to Chatham County for PUDs
- The City is annexing large tracts
  - Growth is occurring south of King George



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



- Not much impact to the east re: SR 204 unless redevelopment occurs downtown or closer to Truman V

Regarding the preferred alternatives (C1 and L2N), the following issues were raised:

- Current models show some influence of the projects on I-16; marginal influence (reductions) on I-516
- Impacts from Rio to Truman are mainly to commercial properties
- In the area from Largo to Savannah Mall, residences fronting near Home Depot on north and south sides of SR 204 will be better suited to convert to commercial.

A draft of the EA should be complete by January 2008 with a PHOH to follow in the summer of 2008.



Sycamore Consulting, Inc.

**SR 204 WIDENING PROJECT**  
Stakeholder Briefing Summary



<b>Date/Time/Location:</b>	August 22, 2007; 10:00 AM Savannah-Chatham MPC – CUTS Policy Committee
<b>Stakeholder Attendees:</b>	CUTS Policy Committee Members
<b>Project Team Attendees:</b>	Tommy Crochet, McGee Partners Jen Price, Sycamore Consulting, Inc.

The purpose of the presentation was to provide an overview of the project status and public involvement efforts completed to date. Tommy Crochet expressed that the technical and public involvement teams have been working for the past year to develop a preferred alternative for the SR 204 improvements. He provided an overview of the November 2006 and June 2007 PIOHs and feedback received.

Tommy discussed some of the frequently asked questions from the public. Of particular concern to the public is the possibility of re-routing Truman Parkway through the marsh south of SR 204. Tommy provided detail regarding the issues with this scenario.

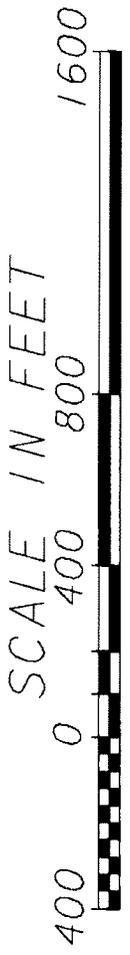
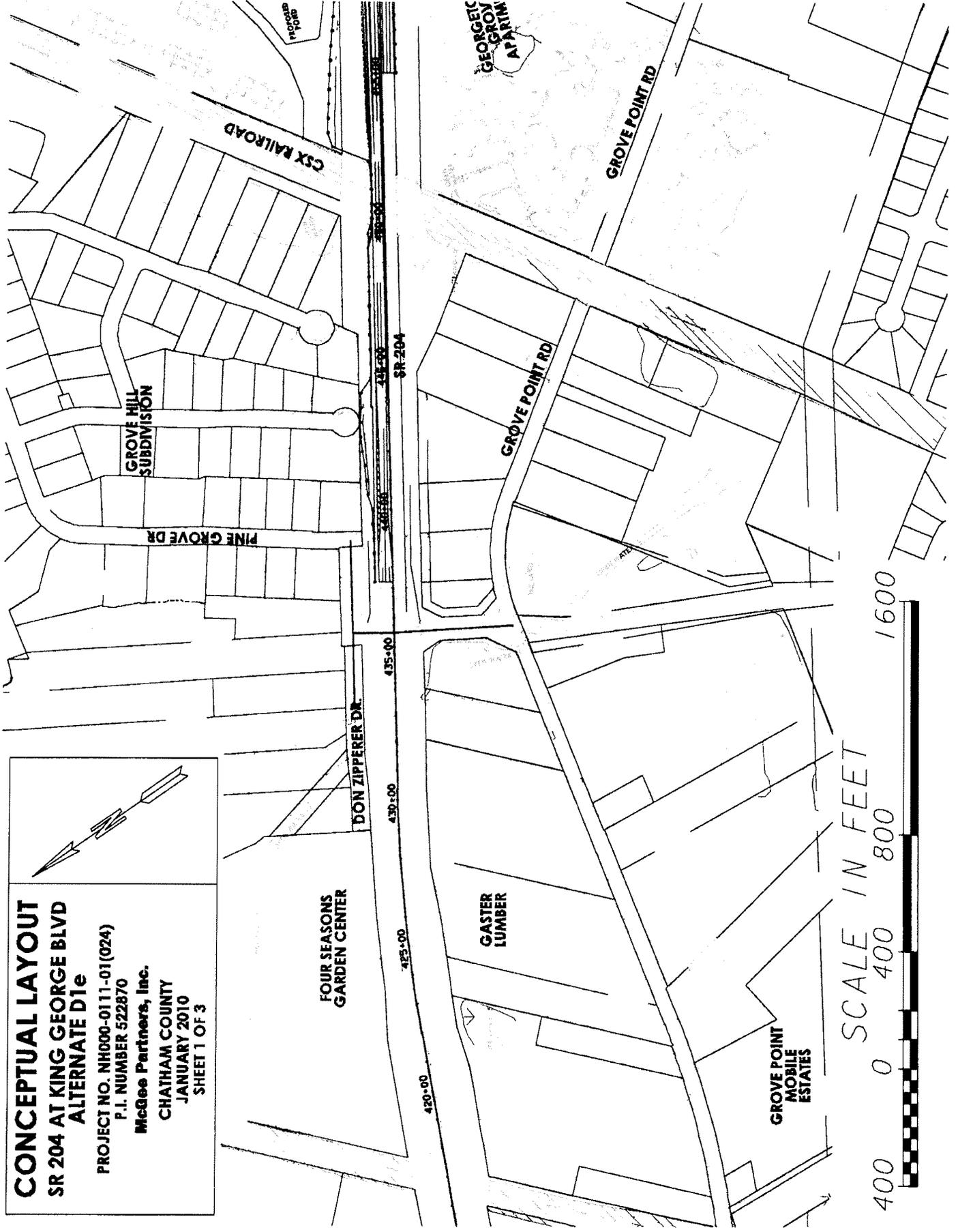
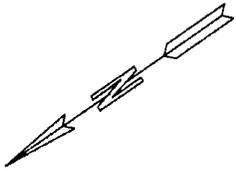
Tommy also discussed the details of the preferred alternatives and the next steps of the project, which will include development of a detailed design for the US 17 to Rio Road portion of the highway; finalizing layouts; completion of the EA document; and hosting a PHOH in summer 2008.

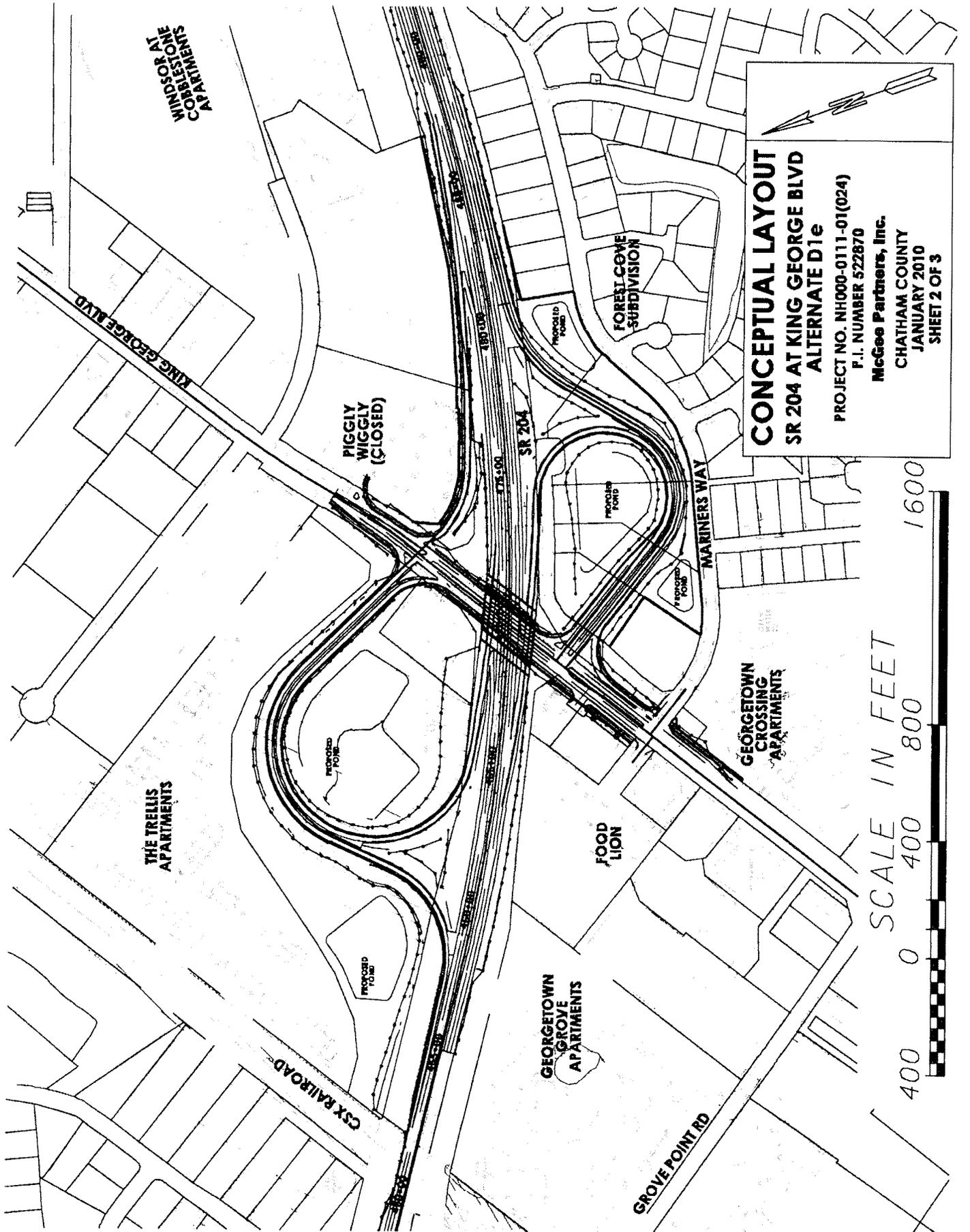


Sycamore Consulting, Inc.

**CONCEPTUAL LAYOUT  
SR 204 AT KING GEORGE BLVD  
ALTERNATE D1e**

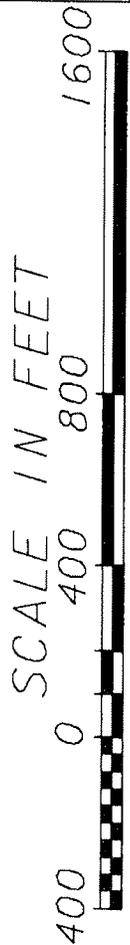
PROJECT NO. NH000-0111-01(024)  
P.I. NUMBER 522870  
McGee Partners, Inc.  
CHATHAM COUNTY  
JANUARY 2010  
SHEET 1 OF 3





**CONCEPTUAL LAYOUT**  
**SR 204 AT KING GEORGE BLVD**  
**ALTERNATE D1e**

PROJECT NO. NH000-0111-01(024)  
 P.I. NUMBER 522870  
 McGee Partners, Inc.  
 CHATHAM COUNTY  
 JANUARY 2010  
 SHEET 2 OF 3



### GDOT Benefit-Cost Calculator

enter information in green cells

#### Project Information

ID: 522870  
 Description: SR 204/Abercorn St Ext. Imp's at King George Blvd (CR 71), including cst of a grade separated interchange

#### Cost Estimate

Date of estimate: 3/15/2010  
 PE cost: \$ 6,629,055  
 ROW cost: \$ 14,590,000  
 UTILITY cost: \$ 1,454,440  
 CST cost: \$ 29,832,133  
**Total \$ 52,505,628**

#### Traffic in 2035

Source of traffic data: VMT and VHT figures were provided by consultant team on 12/16/10.

#### Without project (nobuild)

Annual VMT: 6,947,750  
 Annual VHT: 669,250  
 Average speed (mph): 10

#### With project (build)

Annual VMT: 7,745,500  
 Annual VHT: 392,500  
 Average speed (mph): 20

Parameters	Default	Override	Used
Analysis year	2035	2035	2035
Discount rate	7.0%	7%	7%
Design life (years)	25	20	20
Base year of cost estimate	N/A	2010	2010
Current CST program year	N/A	2015	2015
Fuel price (\$/gallon)	3.22	3.22	3.22
Fuel economy (mpg)	18.03	18.03	18.03
Value of auto travel (\$/hr)	13.75	13.75	13.75
Value of truck travel (\$/hr)	72.65	72.65	72.65
Percent trucks	12%	12%	12%
Include GSP benefits	No	No	No

<b>Costs</b>			
Total cost	\$	52,505,628	
Annualized cost	\$	3,201,409	
<b>Auto Delay Costs</b>			
Nobuild	\$	8,097,925	
Build	\$	4,749,250	
Auto delay savings	\$	3,348,675	
<b>Truck Delay Costs</b>			
Nobuild	\$	5,834,522	
Build	\$	3,421,815	
Truck delay savings	\$	2,412,707	
<b>Fuel Costs</b>			
Nobuild	\$	1,240,807	
Build	\$	1,383,278	
Fuel cost savings	\$	(142,471)	
<b>Change in GSP</b>			
Auto delay cost adjustment		NA	
Truck delay cost adjustment		NA	
Fuel cost adjustment		NA	
Total benefit adjustment		NA	
<b>Benefits in 2035</b>	\$	5,618,910	
<b>Benefit-Cost Ratio</b>		1.76	

#### Notes

CST is LR, 2015 based on build year in concept report;  
 Cost estimate was prepared for concept report update;  
 VMT and VHT figures were provided by consultant team on 12/16/10. B/C updated by special request received on 12/15/10.

## GDOT Benefit-Cost Equations

### 1. Annualized Cost

$$A = P \times \frac{i}{1 - (1 + i)^{-n}}$$

where

A	annualized cost
P	total cost (PE + ROW + CST)
n	design life
i	discount rate

### 2. Auto Delay Savings

$$DC_A = (VHT_{NB} - VHT_B) \times (1 - T) \times Value_A$$

where

DC <sub>A</sub>	auto delay cost savings
VHT <sub>NB</sub>	vehicle hours traveled in 2035 - no build
VHT <sub>B</sub>	vehicle hours of travel in 2035 - build
T	percent of traffic consisting of trucks
Value <sub>A</sub>	value of time for autos

### 3. Truck Delay Savings

$$DC_T = (VHT_{NB} - VHT_B) \times T \times Value_T$$

where

DC <sub>T</sub>	truck delay cost savings
VHT <sub>NB</sub>	vehicle hours traveled in 2035 - no build
VHT <sub>B</sub>	vehicle hours of travel in 2035 - build
T	percent of traffic consisting of trucks
Value <sub>T</sub>	Value of time for trucks

### 4. Fuel Cost Savings

$$FC = (VMT_{NB} - VMT_B) \times \left( \frac{\text{Fuel Price}}{\text{Fuel Economy}} \right)$$

where

FC	fuel cost savings
VMT <sub>NB</sub>	vehicle hours of travel in 2035 - no build
VMT <sub>B</sub>	vehicle hours of travel in 2035 - build

### 5. Change in gross state product

$$GSP = (DC_A \times 0.0000071) + (DC_T \times 0.0000701)$$

where

GSP	Change in GSP
DC <sub>A</sub>	auto delay cost savings
DC <sub>T</sub>	truck delay cost savings

### 6.a Benefits with no GSP component

$$Benefits = DC_A + DC_T + FC$$

where

DC <sub>A</sub>	auto delay cost savings
DC <sub>T</sub>	truck delay cost savings
FC	fuel cost savings

### 6.b. Benefits with GSP component

$$Benefitis = 0.7 \times (FC_A + DC_A) + GSP$$

where

FC <sub>A</sub>	auto fuel cost savings
DC <sub>A</sub>	auto delay cost savings

### 7. Benefit-Cost Ratio

$$B / C = \frac{Benefits}{AnnualizedCost}$$



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** NH000-0111-01(024) Chatham **OFFICE:** Engineering Services  
P.I. No.: 522870  
SR 204 from King George Blvd to Rio Rd **DATE:** July 7, 2010

**FROM:** Ronald E. Wishon, State Project Review Engineer

**TO:** Bobby K. Hilliard, PE, State Program Delivery Engineer *REW*  
Attn.: Robert Murphy

**SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES**

The VE Study for the above project was held March 15 – 18, 2010. Responses were received on July 6, 2010. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
B-1	Bridge King George Blvd over SR 204	\$2,687,000	No	The profile provided by the VE Team did not provide minimum vertical clearance over the full width of SR 204, including the ramp tapers, nor did it provide for intersection sight distance at either of the ramp intersections with King George Boulevard. The VE Team did not take into account the ROW impacts or acquisition costs to properties along King George Boulevard, including the resulting displacements of the Waffle House and the Forest Cove gate house. These additional ROW costs and the additional retaining wall and fill costs associated with the increased profile height would require an additional \$1,560,000.
B-2	Use SE ramp alignment in NW quadrant	\$1,268,000	No	This recommendation would not provide an acceptable acceleration length for the entrance ramp terminal.

B-4	Use a reduced pavement thickness for ramp shoulders not required for staging	\$133,000	Yes	This will be done.
B-5	Use reduced pavement section for King George Blvd	Proposed = \$173,000 Actual = \$96,000	Yes, with modifications	A preliminary pavement analysis indicates the 8.5 inch asphalt/12 inch GAB section currently included in the cost estimate can be reduced to a 7.5 inch asphalt/8 inch GAB section. This is slightly different than what was suggested by the VE Team; therefore, the savings have been adjusted. As design progresses, a detailed pavement analysis will be performed and an appropriate pavement section will be submitted for review and approval.
C-2	Eliminate/minimize retaining wall at the sound barrier location along the NE quadrant	\$202,800	No	The inclusion of the side barrier retaining wall along the WB SR 204 to NB King George ramp minimizes impacts to the adjacent property, reducing required ROW costs, consequential damages to parking at the former Piggly Wiggly site and proximity damages to Georgetown Woods Apartments. Without the retaining wall, an additional 10 to 15 feet of ROW would be required. Elimination of the retaining wall would increase ROW acquisition costs by \$522,000, clearly outweighing the potential for construction cost savings.
C-3	Eliminate/minimize retaining wall along the western limit of SR 204	Proposed = \$79,800 Actual = \$174,000	Yes, with modifications	The proposed side barrier retaining wall will be eliminated from Sta. 439+25 to Sta. 443+25 and replaced with guardrail and v-gutter in front of the sound barrier with a 3:1 minimum side slope behind the sound barrier. Beginning at Sta. 443+25, a side barrier retaining wall will be required to avoid ROW acquisition from adjacent residential properties.

E-1	Use a center pier for the SR 204 bridge over King George Blvd.	<b>(-\$10,000)</b> <b>Cost increase</b>	No	This recommendation does not provide any added benefit and would increase the cost of the project.
G-2	Delete WB off ramp to King George Blvd and add a signal and left turn lane to the loop ramp	\$1,193,000	No	The WB exit ramp to NB King George Boulevard will be used during staging as a detour for mainline SR 204 traffic during the construction of the SR 204 bridge over King George Boulevard. Eliminating this ramp would reduce the efficiency of traffic operations on SR 204 and King George Boulevard. The WB to NB exit is expected to carry 5,600 AADT in 2035 while the WB to SB ramp will carry 8,600 AADT. Maintaining these movements on separate ramps improves the weaving and diverging on SR 204 and reduces delays at the ramp intersection with King George Boulevard.
K-1	Eliminate interchange lighting	\$630,000	No	The project will include interchange lighting as requested by Chatham County officials, who have committed to energize and maintain the lighting. The Office of Design Policy and Support has reviewed the project and determined that the project meets AASHTO warranting criteria for lighting. It is anticipated that low mast lighting will be utilized where adjacent to residential areas.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:  Date: 7/8/10  
 Gerald M. Ross, PE, Chief Engineer

REW/LLM

Attachments

c: Ben Buchan  
Bobby Hilliard/Mike Haithcock/Robert Murphy  
Paul Liles/Bill Duvall/Bill Ingalsbe/Jennifer Tait  
Larry Bowman  
Will Murphy/Brad Saxon/Teresa Scott  
Ken Werho  
Lisa Myers  
Matt Sanders

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** NH000-0111-01(024) Chatham County      **OFFICE:** Program Delivery  
P.I. No.: 522870  
SR204 and King George Blvd.      **DATE:** July 6, 2010

**FROM:** Bobby K. Hilliard, PE, State Program Delivery Engineer *B.H.*

**TO:** **Ronald E. Wishon**, State Project Review Engineer  
Attn.: Lisa Myers

**SUBJECT: RESPONSE TO VALUE ENGINEERING STUDY ALTERNATIVES**

Attached are the responses for the Value Engineering Study. This office concurs with the responses. Along with our consultant responses we have attached concurring documentation from our Bridge office, OMR, and Roadway Design Office for compliance.

If you have any questions, please contact Robert Murphy, Project Manager at (404-631-1586).

BKH:  
RPM  
c: Ben Buchan

## **McGee Partners, Inc.**

1990 Lakeside Parkway  
Suite 240  
Tucker, Georgia 30084  
T 770.938.6400  
F 770.938.6333

April 15, 2010

Mr. Bobby Hilliard, P.E.  
State Program Delivery Engineer  
Georgia Department of Transportation  
600 West Peachtree Street – 25<sup>th</sup> Floor  
Atlanta, Georgia 30308

Attn: Mr. Robert Murphy, Senior Project Manager

Re: SR 204 Improvements at King George Blvd.  
NH000-0111-01(024), Chatham County  
PI No. 522870  
Contract No.: AEOCDDES060054  
**VALUE ENGINEERING STUDY  
RECOMMENDATION RESPONSES**

Gentlemen:

After reviewing the recommendations from the Value Engineering Study Report prepared by MACTEC, dated April 7, 2010, we offer the following responses to the design alternatives suggested for the referenced project:

**B-1: Construct King George Boulevard over SR 204.** This recommendation proposes to construct King George Boulevard over SR 204 in lieu of SR 204 over King George Boulevard as in the original design. This proposed change simplifies construction and SR 204 remains on grade, thus reducing wall heights, median barrier construction and paving.  
**Potential savings: \$2,687,000**

**Response:** No, the design team will not implement this recommendation. The profile provided by the VE Team did not provide minimum vertical clearance over the full width of SR 204, including the ramp tapers, nor did it provide for intersection sight distance at either of the ramp intersections with King George Boulevard. The VE Team did not take into account the impacts or right of way acquisition costs to properties along King George Boulevard, including the resulting displacements of the Waffle House and the Forest Cove gate house. Taking into account the right of way acquisition costs and the additional retaining wall and fill costs associated with the increased profile height, this recommendation would substantially increase the cost of the project.

**Revised potential savings (increase): (\$1,560,000)**

*(See attached supporting documentation for graphics showing the King George profile and impacts to properties, along with updated savings cost estimate.)*

Mr. Bobby Hilliard, P.E.  
Page 2  
April 15, 2010

**McGee Partners, Inc.**

**B-2: Use SE ramp alignment in NW quadrant.** For the NW quadrant, use the ramp alignment as shown on the plans for the SE loop, 30 mph design speed. This idea is dependent on acceptance of idea B-1, constructing King George Blvd over SR 204, to eliminate the use of this ramp for mainline staging purposes.

**Potential savings: \$1,268,000**

**Response:** No, the design team will not implement this recommendation. The proposed alignment would not provide for an acceptable acceleration length for the entrance ramp terminal.

The justification provided by the VE Team indicated that using a tighter ramp radius "will allow a full length acceleration lane and taper of 720 feet, tying in before the CSX railroad bridge," eliminating "the railroad bridge reconstruction and the mainline work... on SR 204 west of the RR bridge." Exhibit 10-70 from AASHTO's Green Book indicates a minimum acceleration length of 800 feet is required for an entrance curve design speed of 35 mph to a highway design speed of 60 mph. The design team developed three alternatives utilizing the tighter 30 mph loop ramp, each with a 35 mph entrance curve. Alternative A provides a parallel-type entrance with 340 feet of acceleration length. Alternative B provides a 50:1 taper-type entrance with 40 feet of acceleration length. Alternative C provides a 23:1 taper-type entrance with 380 feet of acceleration length. None of these alternatives provide for the minimum acceleration length of 800 feet. The current concept provides a parallel-type entrance with 1240 feet of acceleration length.

*(See attached supporting documentation for graphics showing the alternative entrance ramp configurations.)*

**B-4: Use Shoulder pavement for ramps not required for staging.** This recommendation proposes a reduced pavement thickness for ramp shoulders not required for staging operations. This will be at the ramps in the southeast quadrant.

**Potential savings: \$133,000**

**Response:** Yes, the design team will implement this recommendation.

**B-5: Use a reduced pavement section for King George Blvd.** This recommendation proposes a reduced pavement thickness for King George Blvd. Existing traffic volumes (ADT's) on SR 204 are 63,000 vpd while the King George Blvd is 20,000 vpd, roughly 3 times the volume.

**Potential savings: \$173,000**

**Response:** Yes, the design team will implement this recommendation with modifications. A preliminary pavement analysis indicates the 8.5-inch asphalt/12-inch GAB section currently included in the concept cost estimate can be reduced to a 7.5-inch asphalt/8-inch GAB section. As the design proceeds, a detailed pavement analysis will be performed and an appropriate pavement section will be

presented for review and approval by the Department's Pavement Design Committee.

**Revised potential savings: \$96,000**

*(See attached supporting documentation for updated savings cost estimate and pavement analysis.)*

**C-2: Eliminate/minimize retaining wall at the sound barrier location along the NE quadrant.** This recommendation eliminates the footing and retaining wall portions of the side barrier placed in front of and to protect the noise barrier, which will have post and footing elements as part of its own support.

**Potential savings: \$202,800**

**Response: No,** the design team will not implement this recommendation. The inclusion of the side barrier retaining wall along the WB SR 204 to NB King George ramp minimizes impacts to the adjacent properties, reducing required right of way costs, consequential damages to parking at the former Piggly Wiggly site and proximity damages to Georgetown Woods Apartments. Without the retaining wall, an additional 10 to 15 feet of Right of Way would be required to accommodate the widened shoulder and fill slope. Elimination of the retaining wall would increase right of way acquisition costs by about \$522,000, clearly outweighing the potential construction cost savings.

**Revised potential savings (increase): (\$319,000)**

*(See attached supporting documentation for right of way acquisition cost estimate.)*

**C-3: Eliminate/minimize retaining wall along the (western) limit of SR 204.** This recommendation eliminates the footing and retaining wall portions of the side barrier placed in front of and to protect the noise barrier, which will have post and footing elements as part of its own support. This can be applied in areas where a 4:1 sideslope can be constructed, station 439+25 to 444+75.

**Potential savings: \$79,800**

**Response: Yes,** the design team will implement this recommendation with modifications. The proposed side barrier retaining wall will be eliminated from station 439+25 to 443+25 and replaced with guardrail and v-gutter in front of the sound barrier with a 3:1 minimum side slope behind the sound barrier. Beginning at station 443+25, a side barrier retaining wall is required to avoid right of way acquisition from adjacent residential properties.

**Revised potential savings: \$174,000**

**E-1: Use a center pier for the SR 204 bridge over King George Blvd.** This recommendation proposes to use a two span bridge with a concrete intermediate bent in the middle of KGB to reduce the structure depth of the bridge and raise the profile of KGB. Jersey style side barrier will be added parallel to the intermediate pier to protect the travelling public and traffic impact attenuators will be added to the end of the piers at the side barrier ends to protect the blunt ends.

Mr. Bobby Hilliard, P.E.  
Page 4  
April 15, 2010

**McGee Partners, Inc.**

***Potential increase: (\$10,000)***

**Response:** No, the design team will not implement this recommendation. Since this item does not provide for a cost savings to the project and would not provide added benefit, it should not be implemented.

**G-2: Delete WB off ramp to King George Blvd and add a signal and left turn lane to the loop ramp.** This recommendation would eliminate the SR204 WB ramp to NB KGB and add a left turn lane to the proposed ramp. A traffic signal is anticipated to be required.

***Potential savings: \$1,193,000***

**Response:** No, the design team will not implement this recommendation. The WB exit ramp to NB King George Boulevard will be used during staged construction as a detour for mainline SR 204 traffic during the construction of the SR 204 bridge over King George Boulevard. Further, eliminating this ramp would reduce the efficiency of traffic operations on SR 204 and King George Boulevard. The WB to NB exit ramp is expected to carry 5,600 AADT in 2035 while the WB to SB ramp will carry 8,600 AADT. Maintaining these movements on separate ramps improves the weaving and diverging on SR 204 and reduces delays at the ramp intersection with King George Boulevard.

**K-1: Eliminate interchange lighting.** This recommendation will eliminate the high mast interchange lighting, which is adjacent to residential areas.

***Potential savings: \$630,000***

**Response:** No, the design team will not implement this recommendation. The project will include interchange lighting as requested by Chatham County officials, who have committed to energize and maintain the lighting. The Office of Design Policy and Support has reviewed the project and has determined that the project meets AASHTO warranting criteria for lighting. It is anticipated that low mast lighting will be utilized where adjacent to residential areas.

We have attached a letter-size version of the Conceptual Plans Cover Sheet for reference.

Please let me know if you have any questions or comments.

Sincerely,

McGee Partners, Inc.



Thomas M. Crochet, PE, PTOE  
President

Enclosures

NH000-0111-01(024), Chatham County  
 VE Study Recommendation Responses  
 SUPPORTING DOCUMENTATION

Item No.: B-1 (Cont.)

SR 204 at King George Blvd.  
 PI 522870  
 Chatham County  
 April 12, 2010

VE COST ESTIMATE

Item No. B-1:  
 Construct King George Boulevard over SR 204

Additional construction costs due to increased height of profile to provide adequate clearance over SR 204, with minimum SSD

Item No.	Description	Units	Unit Price	Original Estimate		VE Estimate		Revised Estimate	
				Quantity	Extension	Quantity	Extension	Quantity	Extension
150-1000	Traffic Control	LS	Lump	1	\$ 990,000	1	\$ 500,000	1	\$ 500,000
205-0001	Unnecessary Erosion	CY	\$ 3.20	12,540	\$ 40,128	-	\$ -	38,000	\$ 121,600
610-0715	Remove Conc Median Barrier	LF	\$ 104.87	3,400	\$ 355,558	-	\$ -	-	\$ -
various	Base and Asphalt	SY	\$ 45.00	100,000	\$ 4,500,000	99,000	\$ 4,455,000	99,000	\$ 4,455,000
627-9510	Retaining Wall - MSE - 0-10 ft. Ht.	SF	\$ 50.00	-	\$ -	7,000	\$ 350,000	9,000	\$ 450,000
627-9520	Retaining Wall - MSE - 10-20 ft. Ht.	SF	\$ 53.00	35,185	\$ 1,864,805	3,000	\$ 159,000	5,000	\$ 265,000
627-9530	Retaining Wall - MSE - 20-30 ft. Ht.	SF	\$ 55.00	4,389	\$ 241,395	16,125	\$ 886,875	18,125	\$ 996,875
621-6002	Conc. Barrier Type S-2	LF	\$ 90.69	3,300	\$ 299,277	-	\$ -	-	\$ -
	Bridge Complete	SF	\$ 100.00	28,160	\$ 2,816,000	21,952	\$ 2,195,200	21,952	\$ 2,195,200
Subtotal Construction					\$ 11,108,163		\$ 8,546,075		\$ 8,983,075
Markup 5%					\$ 555,408		\$ 427,304		\$ 449,164
TOTAL Construction					\$ 11,663,571		\$ 8,973,379		\$ 9,432,859
Right of Way Acquisition Cost					\$ -		\$ -	**	\$ 3,791,000
Utility Relocation Cost					\$ -		\$ -		\$ -
TOTAL PROJECT COST					\$ 11,663,571		\$ 8,973,379		\$ 13,223,859
TOTAL ACTUAL COST SAVINGS (INCREASE)							<b>\$ 2,690,192</b>		<b>\$ (1,560,000)</b>

Quantity Calculations - Additional Quantities due to Revised Profile

Additional measured profile area: 6,200 SF

Additional Fill

King George Roadway/Shoulders 6,200 SF x 150 FT width = 930,000 CF  
 Fill slope on east side of King George 6,200 SF x 15 FT avg. height = 93,000 CF  
 1,023,000 CF  
 38,000 CY

Additional MSE Retaining Wall along west side of King George Blvd.

Estimated 6,000 SF split equally:

Retaining Wall - MSE - 0-10 ft. Ht. 2,000 SF + 7,000 (VE Estimate) = 9,000 SF  
 Retaining Wall - MSE - 10-20 ft. Ht. 2,000 SF + 3,000 (VE Estimate) = 5,000 SF  
 Retaining Wall - MSE - 20-30 ft. Ht. 2,000 SF + 16,125 (VE Estimate) = 18,125 SF

\*\* See next page for Right of Way Acquisition Cost Estimate

NH000-0111-01(024), Chatham County  
 VE Study Recommendation Responses  
 SUPPORTING DOCUMENTATION

Item No.: B-1 (Cont.)

SR 204 at King George Blvd.  
 PI 522670  
 Chatham County  
 April 12, 2010

**VE COST ESTIMATE**

Item No. B-1:  
 Construct King George Boulevard over SR 204

Estimate of Additional Right of Way Impacts Not Included in VE Team Estimate

**Additional Property Costs**

Parcel	Req'd RW (acs.)	Cost per Acre Right of Way	Req'd Esmt (acs.)	Cost per Acre Easement	Extension
Waffle House	0.65	\$ 700,000			\$ 455,000
Circle K		\$ 700,000	0.10	\$ 350,000	\$ 35,000
GSG Savannah (Food Lion)		\$ 350,000	0.26	\$ 175,000	\$ 45,799
Watford-Sims (Sonic)	0.11	\$ 700,000	0.10	\$ 350,000	\$ 113,742
Forest Cove Homeowners - corner parcel	0.19	\$ 100,000			\$ 19,284
Forest Cove Homeowners - Mariners Way	0.20	\$ 100,000			\$ 20,202
Georgetown Apartments		\$ 125,000	0.71	\$ 62,500	\$ 44,479
A-C Financing (former Piggly Wiggly)		\$ 350,000	0.85	\$ 100,000	\$ 85,000
<b>Total Property Costs</b>					<b>\$ 818,506</b>

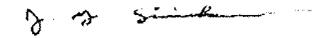
**Additional Damages**

Parcel	Extension	
Waffle House: Consequential displacement	\$ 210,000	
Circle K: Consequential loss of access to King George	\$ 100,000	
Forest Cove Homeowners: Displacement & relocation of Gate House and entrance gates	\$ 150,000	
Georgetown Apartments: Temporary loss of parking, damages to detention pond	\$ 100,000	
Sonic, Food Lion, Circle K, etc.: Temporary loss of access	\$ 100,000	
A-C Financing: Consequential - temporary lost parking	\$ 50,000	
<b>Total Damages Costs</b>		<b>\$ 710,000</b>

<b>Total Property, Displacement &amp; Damages Cost</b>	<b>\$ 1,528,506</b>
Scheduling Cost 55%	\$ 840,678
Administrative Cost 60%	\$ 1,421,510

**TOTAL ADDITIONAL RIGHT OF WAY ACQUISITION COST** **\$ 3,791,000**

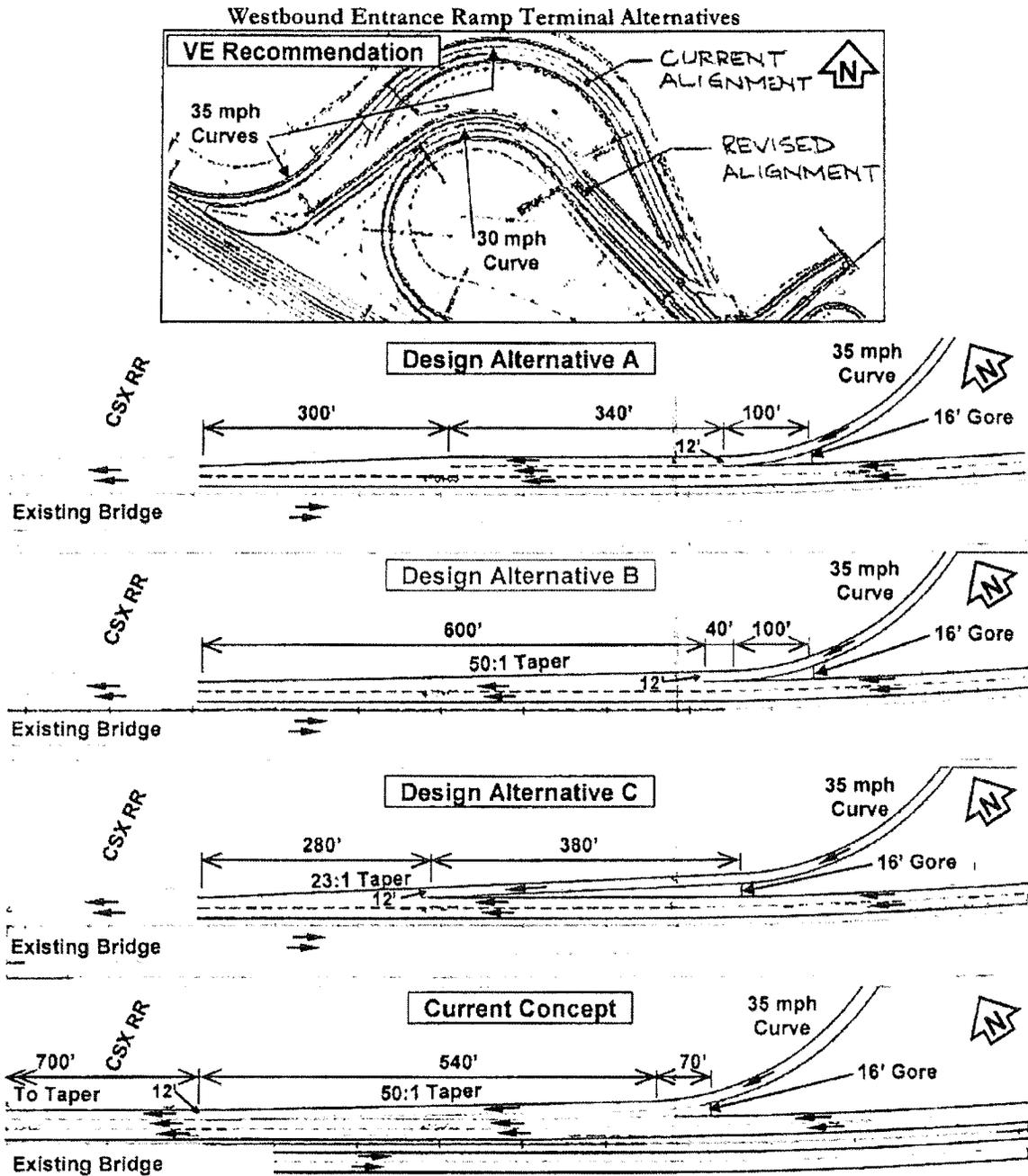
Prepared By:



John G. Simshauser, Cert. No. 2772  
 Moreland Altobelli Associates, Inc.

NH000-0111-01(024), Chatham County  
 VE Study Recommendation Responses  
 SUPPORTING DOCUMENTATION

Item No.: B-2



NH000-0111-01(024), Chatham County  
 VE Study Recommendation Responses  
**SUPPORTING DOCUMENTATION**

**Item No.: B-5**

SR 204 at King George Blvd.  
 PI #22870  
 Chatham County  
 April 9, 2010

**VE COST ESTIMATE**

Item No. B-5:  
 Reduced King George Pavement Section

Item No.	Description	Units	Unit Price	Original Estimate			Revised Estimate		
				Section	Quantity	Extension	Section	Quantity	Extension
310-1101	GR AGGR BASE CRS, INCL MATL	TN	\$ 18.20	12"	5,790	\$ 105,378	8"	3,860	\$ 70,252
402-3130	RECYCLED ASPH CONC 2.5 MM SUPERPAVE	TN	\$ 66.89	1-1/2"	730	\$ 48,830	1-1/2"	730	\$ 48,830
402-3160	RECYCLED ASPH CONC 5 MM SUPERPAVE. (E	TN	\$ 67.27	3"	1,450	\$ 97,542	2"	970	\$ 65,252
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE. (E	TN	\$ 82.20	4"	1,930	\$ 120,046	4"	1,930	\$ 120,046
413-1000	BITUM TACK COAT	GL	\$ 2.35	4 Coats	1,170	\$ 2,750	3 Coats	880	\$ 2,068
Subtotal Construction						\$ 374,545			\$ 306,448
Asphalt/Fuel Contingency						\$ 162,965			\$ 141,571
E&C 10%						\$ 37,454			\$ 30,845
<b>TOTAL Construction</b>						<b>\$ 574,964</b>			<b>\$ 478,663</b>
Right of Way Acquisition Cost						\$ -			\$ -
Utility Relocation Cost						\$ -			\$ -
<b>TOTAL PROJECT COST</b>						<b>\$ 574,964</b>			<b>\$ 478,663</b>
<b>TOTAL ACTUAL COST SAVINGS (INCREASE)</b>									<b>\$ 96,000</b>

**Quantity Calculations**

Quantity calculations based on 71,600 SF of full-depth pavement construction along King George Blvd.  
 Original quantities from detailed quantity take-off calculations.

		Original (SF)	Rev. (IN)		Orig. (IN)		Revised (SF)
GR AGGR BASE CRS, INCL MATL	TN	5,790	x 8	/	12	=	3,860
RECYCLED ASPH CONC 2.5 MM SUPERPAVE	TN	730	x 1.5	/	1.5	=	730
RECYCLED ASPH CONC 5 MM SUPERPAVE. (E	TN	1,450	x 2	/	3	=	970
RECYCLED ASPH CONC 25 MM SUPERPAVE. (E	TN	1,930	x 4	/	4	=	1,930
BITUM TACK COAT	GL	1,170	x 3	/	4	=	880

NH000-0111-01(024), Chatham County  
 VE Study Recommendation Responses  
 SUPPORTING DOCUMENTATION

Item No.: B-5 (Cont.)

**McGee Partners, Inc.**

1990 Lakeside Parkway  
 Suite 240  
 Tucker, Georgia 30084  
 T 770.938.6400  
 F 770.938.6333

**FLEXIBLE PAVEMENT DESIGN ANALYSIS**

(Based on AASHTO Interim Guide for Design of Flexible Pavement Structures)

Project No: NH000-0111-01(024) PI No: 522870 County: Chatham

Description: SR 204/Abercorn Street Extension Improvements, from Pine Grove Road (CR 68)  
to Veterans Parkway (CR 975), including construction of a grade separated  
interchange at King George Boulevard (CR 71)

Type of Adjoining Pavement: \_\_\_\_\_ Beginning of Project: Asphalt  
 End of Project: Asphalt

Traffic Data: 24 Hr. Truck Percentage 5.00%  
 One Way AADT Beginning of Design Period 14000 2015 Year  
 One Way AADT End of Design Period 17000 2035 Year  
 One Way AADT Mean 15500

Design Loading: 18k Axle  

Volume	LDF	%	Description	Eq. Load	
15500 x	0.9 x	2%	Combination Trucks	x 0.730 =	204
15500 x	0.9 x	3%	SU Type Vehicles	x 0.400 =	168
15500 x			Passenger Cars	x 0.0040 =	0
Total Daily Loading =					372

Total Design Period Loading:  $372 \times 365 \times 20 = 2,715,600$

**Design Data:**

Serviceability (Pt): 2.5  
 Soil Support Value (Si): 4 Regional Factor (R): 1.7

**Recommended Flexible Pavement Structure:**

Type of Material	Thickness	Coef.	SN
Asphaltic Concrete Surface - 12.5 mm Superpave	1.50	0.44	0.66
Asphaltic Concrete Binder - 19 mm Superpave	2.00	0.44	0.88
Asphaltic Concrete Base - 25 mm Superpave	1.00	0.44	0.44
Asphaltic Concrete Base - 25 mm Superpave	3.00	0.30	0.90
Graded Aggregate Base Course	8.00	0.16	1.28
<b>TOTAL</b>	<b>15.50</b>		

Required Weighted Structural Value (SN): 4.38 Total SN = 4.16  
 Underdesign 5 %

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Prepared By: \_\_\_\_\_ Date: 4/12/10  
 R. Christopher Marsengill, P.E.

NH000-0111-01(024), Chatham County  
 VE Study Recommendation Responses  
 SUPPORTING DOCUMENTATION

Item No.: C-2

SR 204 at King George Blvd.  
 PI 522870  
 Chatham County  
 April 12, 2010

**VE COST ESTIMATE**

Item No. C-2:  
 Eliminate/Minimize Retaining Wall Along NE Quadrant

Estimate of Additional Right of Way Impacts Not Included in VE Team Estimate

**Additional Property Costs**

Parcel	Req'd Area (acs.)	Cost per Acre	Extension		
A-C Financing (former Piggly Wiggly)	0.18	\$ 350,000	\$ 63,000		
Sugar Magnolia (Georgetown Woods Apts.)	0.16	\$ 125,000	\$ 20,000		
				<b>Total Property Costs</b>	<b>\$ 83,000</b>

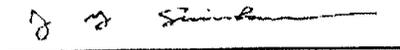
**Additional Damages**

Parcel	Spaces	Cost per Space	Extension		
A-C Financing: Consequential - lost parking	15	\$ 4,500	\$ 67,500		
Sugar Magnolia: Proximity - to apartment building, displacement of A/C units			\$ 60,000		
				<b>Total Damages Costs</b>	<b>\$ 127,500</b>

<b>Total Property, Displacement &amp; Damages Cost</b>	<b>\$ 210,500</b>
<b>Scheduling Cost</b>	<b>55% \$ 115,775</b>
<b>Administrative Cost</b>	<b>60% \$ 195,765</b>

**TOTAL ADDITIONAL RIGHT OF WAY ACQUISITION COST** **\$ 522,000**

Prepared By :

  
 John G. Simshauser, Cert. No. 2772  
 Moreland Altobelli Associates, Inc.

Potential savings from VE Report (construction only)	\$ 202,800
Additional Right of Way Cost	\$ 522,000
<b>TOTAL ACTUAL COST SAVINGS (INCREASE)</b>	<b>\$ (319,000)</b>

NH000-0111-01(024), Chatham County  
 VE Study Recommendation Responses  
 SUPPORTING DOCUMENTATION

**Item No.: C-3**

SR 204 at King George Blvd.  
 PI 522870  
 Chatham County  
 April 9, 2010

**VE COST ESTIMATE**

Item No. C-3:  
 Eliminate/minimize retaining wall along western limit of SR 204

Modified implementation, replace side barrier wall with guardrail from Sta 439+25 to 443+25

Item No.	Description	Units	Unit Price	Original Estimate		Revised Estimate	
				Quantity	Extension	Quantity	Extension
821-6201	CONCRETE SIDE BARRIER, TP 2-SA	LF	\$ 450.00	400	\$ 180,000	-	\$ -
441-3999	CONCRETE V GUTTER	LF	\$ 19.81		\$ -	400	\$ 7,924
641-1200	GUARDRAIL, TP W	LF	\$ 17.34		\$ -	400	\$ 6,936
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	\$ 653.71		\$ -	1	\$ 654
206-0002	BORROW EXCAV, INCL MATL	CY	\$ 4.00		\$ -	330	\$ 1,320
various	Additional grassing & erosion control						\$ 5,000
Subtotal Construction					\$ 180,000		\$ 21,834
Asphalt/Fuel Contingency					\$ -		\$ -
E&C 10%					\$ 18,000		\$ 2,183
TOTAL Construction					\$ 198,000		\$ 24,017
Right of Way Acquisition Cost					\$ -		\$ -
Utility Relocation Cost					\$ -		\$ -
<b>TOTAL PROJECT COST</b>					<b>\$ 198,000</b>		<b>\$ 24,017</b>
<b>TOTAL ACTUAL COST SAVINGS (INCREASE)</b>							<b>\$ 174,000</b>

**Quantity Calculations**

Replace 400 LF of Type 2-SA Concrete Side Barrier with Guardrail, V-Gutter and 4:1 Slope

Additional Fill (Borrow Excavation)

		Shoulder	Slope
Average Fill Height	FT	2	2
Average Fill Width	FT	6 / 1	10 / 2
Length	FT	400	400
	CY	180	150

**Murphy, Robert**

---

**From:** McMurry, Russell  
**Sent:** Monday, May 24, 2010 8:13 PM  
**To:** Murphy, Robert  
**Subject:** Re: P.I #522870 SR 204 and King George Blvd. Improvements.

Robert,  
Based on the comments without review of materials, the responses seem adequate.  
Russell McMurry  
Georgia Department of Transportation  
Sent via Blackberry

---

**From:** Murphy, Robert  
**To:** Liles, Paul; DuVall, Bill; McMurry, Russell; Geary, Georgene; Jubran, Abdallah (AJ); Story, Brent; Hopkins, Eugene  
**Sent:** Mon May 24 08:11:28 2010  
**Subject:** P.I.#522870 SR 204 and King George Blvd. Improvements.  
Team,

I have attached a copy of McGee Partners official responses to the V.E. recommendations for P.I. #522870 SR204 and King George Blvd. Improvements.

Please review each recommendation and responses accordingly and inform the Office of Program Delivery if you are in agreement with the response or you disagree with the response. You can send me an email or official letter stating your confirmation. I would like to have your response to me no later than June 1, 2010.

Lisa Myers has posted the official V.E. recommendation on Terex for anyone who would like to review.

Should you have any questions please don't hesitate to contact me.

Thank you,

Robert Murphy,

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** NH000-0111-01(024) CHATHAM COUNTY                      **DATE** June 9, 2010  
P.I No. 522870

**FROM**  Paul V. Liles, Jr., P.E., State Bridge Engineer

**TO** Bobby Hilliard, P.E., State Program Delivery Engineer  
Attn: Robert Murphy

**SUBJECT** BRIDGE DESIGN VALUE ENGINEERING RESPONSE

The Value Engineering Study for the above referenced project dated April 7, 2010 contained one VE Alternative requiring response from the Bridge Office, VE Alternative E-1. Below is our recommendation for this alternative.

**E-1 VE Alternative** – “Use a center pier for the SR 204 Bridge over King George Boulevard.”

Recommendation: **Do Not Implement**. Based on the typical section provided, there is not a suitable median along King George Boulevard that will provide adequate horizontal clearance to an intermediate bent. Therefore a two span bridge is not feasible.

If you have any questions and/or comments, please contact Bill DuVall of the Bridge Design Office at (404) 631-1883 or at email address [bduvall@dot.ga.gov](mailto:bduvall@dot.ga.gov).

PVL/WMD

cc: Ron Wishon, Engineering Services  
Bill DuVall, Bridge Office

## Murphy, Robert

---

**From:** Jubran, Abdallah (AJ) *OMR*  
**Sent:** Wednesday, June 02, 2010 6:36 PM  
**To:** Murphy, Robert  
**Cc:** Geary, Georgene; Pahnó, Steve V  
**Subject:** RE: P.I.#522870 SR 204 and King George Blvd. Improvements.

Robert,

Having two typicals is common. A typical for King George Blvd and another for SR 204 are feasible. Pavement thickness should be determined by traffic volume, truck percentage and soil design values.

*A.J. Jubran, P.E.  
State Pavement Engineer  
Georgia Department of Transportation  
404-363-7582  
404-363-7684 fax*

*[ajubran@dot.ga.gov](mailto:ajubran@dot.ga.gov)*

*Help GDOT serve you better. Visit <http://www.howmyservice.dot.ga.gov> and rate the service you received from Team GDOT.*

**From:** Murphy, Robert  
**Sent:** Monday, May 24, 2010 8:11 AM  
**To:** Liles, Paul; DuVall, Bill; McMurry, Russell; Geary, Georgene; Jubran, Abdallah (AJ); Story, Brent; Hopkins, Eugene  
**Subject:** P.I.#522870 SR 204 and King George Blvd. Improvements.

Team,

I have attached a copy of McGee Partners official responses to the V.E. recommendations for P.I. #522870 SR204 and King George Blvd. Improvements.

Please review each recommendation and responses accordingly and inform the Office of Program Delivery if you are in agreement with the response or you disagree with the response. You can send me an email or official letter stating your confirmation. I would like to have your response to me no later than June 1, 2010.

Lisa Myers has posted the official V.E. recommendation on Terex for anyone who would like to review.

Should you have any questions please don't hesitate to contact me.

Thank you,

Robert Murphy,



PRECONSTRUCTION STATUS REPORT FOR PI:522870-

**PROJ ID:** 522870- Chatham  
**COUNTY:** Chatham  
**LENGTH (MI):** 2.39  
**PROJ NO.:** NH000-0111-01(024)  
**PROJ MGR.:** Murphy, Robert P.  
**AOHD Initials:** MAH  
**OFFICE:** Program Delivery  
**CONSULTANT:** Turnkey Consultant, (Contract with GDOT)  
**SPONSOR:** GDOT  
**DESIGN FIRM:** McGee Partners, Inc.

**SR 204/ABERCORN ST FM KING GEORGE BLVD TO RIO RD**  
**MPO:** Savannah TNIA  
**TIP #:** 2000-H-04  
**MODEL YR:**  
**TYPE WORK:** Widening  
**CONCEPT:** INTERCHANGE  
**PROG TYPE:** Reconstruction/Rehabilitation  
**Prov. for ITS:** N  
**BOND PROJ.:**

**PRIORITY CODE:**  
**DOT DIST:** 5  
**CONG. DIST:** 12.1  
**BIKE:** Y  
**MEASURE:** E  
**NEEDS SCORE:** 6  
**BRIDGE SUFF:**

**MGMT LET DATE:** 06/15/2010  
**MGMT ROW DATE:** 06/14/2012  
**BASELINE LET DATE:** 5/17/2013  
**WHO LETS?:** GDOT Let  
**LET WITH:** 0008840

BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS				Date Auth		
								Activity	Approved	Proposed	Cost		Fund	Status
9/25/2008	9/25/2008	7/15/2010	7/15/2010	Concept Development	10/26/1999	9/16/2002	89	PE	2000	2000	6,629,055.24	Q05	AUTHORIZED	10/25/1999
9/26/2008	10/9/2008	7/29/2010	7/29/2010	PM Submit Concept Report	1/8/2010	1/8/2010	100	ROW	2009	2009	817,000.00	L050	AUTHORIZED	
10/9/2008	10/9/2008	7/15/2010	7/15/2010	Receive Preconstruction Concept Approval	1/8/2010	1/8/2010	93	ROW	2013	2011	5,773,586.05	L050	PREST	
11/4/2008	11/4/2008	7/27/2010	7/27/2010	Management Concept Approval Complete	12/2/2009		100	ROW	2011	2011	1,124,874.95	LY205	PREST	
10/24/2008	10/24/2008	7/30/2010	7/30/2010	Value Engineering Study			85	ROW	2005	2005	6,798,600.00	Q05	AUTHORIZED	
10/10/2008	2/4/2010			Public Information Open House Held	8/7/2007	12/12/2009	31	CST	LR	LR	39,623,466.19	L050	PREST	
9/18/2009	11/12/2009	4/1/2011	8/5/2010	Environmental Approval	12/5/2009		0							
10/24/2008	11/13/2008	7/16/2010	7/22/2010	Pub Hear Held/Comm Resp (EA/FONSI, GEPA)	11/11/2009		0							
11/17/2008	12/19/2008			Mapping			50							
12/23/2008	9/22/2009	7/16/2010	1/7/2011	Field Surveys/SDE			48							
3/31/2009	9/22/2009	7/16/2010	1/7/2011	Preliminary Plans			0							
10/10/2008	2/19/2009	7/16/2010	11/25/2010	Preliminary Bridge Design			0							
11/23/2008	3/5/2009	7/16/2010	10/28/2010	Underground Storage Tanks			0							
2/26/2010	3/1/2011	1/1/2011	2/1/2011	404 Permit Obtainment			0							
3/27/2010	4/26/2010	2/2/2011	3/29/2011	PFPR Inspection			0							
4/27/2010	6/7/2010	3/30/2011	5/10/2011	R/W Plans Preparation			0							
4/7/2010	4/9/2010	3/10/2011	3/14/2011	R/W Plans Final Approval			0							
7/20/2010	7/22/2010	6/22/2011	6/24/2011	L & D Approval			0							
10/29/2010	11/1/2010	10/3/2011	10/14/2011	R/W Authorization			0							
3/5/2009	7/23/2009	10/29/2010	10/14/2011	Stake R/W			100	PE Cost Est Amt:	6,629,055.24	Date:	7/13/2009	PE	0.00	Q05
9/23/2009	8/20/2010	1/10/2011	12/7/2011	Soil Survey	8/12/2009	3/12/2010	0	ROW Cost Est Amt:	5,551,525.05	Date:	7/13/2009	ROW	0.00	Q05
6/6/2011	6/6/2011	3/15/2011	9/20/2012	Bridge Foundation Investigation			0	ROW Cost Est Amt:	1,124,874.95	Date:	7/13/2009	ROW	0.00	L050
8/23/2010	5/27/2011	12/8/2011	9/12/2012	Final Design			0	ROW Cost Est Amt:	6,798,600.00	Date:	7/13/2009	ROW	1,124,874.95	LY205
6/28/2011	6/29/2011	10/12/2012	10/15/2012	Final Bridge Plans Preparation			0	ROW Cost Est Amt:	26,768,194.00	Date:	11/20/2009	ROW	6,244,710.67	L050
7/13/2011	7/26/2011	10/29/2012	11/9/2012	FFPR Inspection			0	CST Cost Est Amt:	0.00	Date:		CST	0.00	L050
7/13/2011	7/26/2011	10/29/2012	11/9/2012	Submit FFPR Responses (OES)			0							

**PDD:** Widening and interchange: 10/5/04

**Bridge:** BRIDGE REQUIRED

**Design:** UD-Whaley Planning revising Project Scope

**EIS:** CEI April/Recall Appvd 12.31.08|NotOnSched|RWILB 6 24 10

**LCPA:** NOTIFICATION LETTER SENT TO CHATHAM 4-21-05

**Planning:** N&P comments sent on 3/19/10, ON ABERCORN EXT BIKEWAY & TERMINATES @ SRR 95 & COASTAL GA GREENWAY

**Prog. Develop:** RW STIP AMENDMENT #5 11-07

**Programming:** ADDITIONAL DEMO \$ ON PI# 0008840|#1 4-01|#2 11-05|#3 3-06|RW ADV ACQ LS 0006206 & 006208#1 11-08#5 5-09

**ROW:** Pre-Acq O'Quinn, Hill (CC), Williamson (C) Appeals

**Traffic Op:** AWAITING CNSLT PLANS FOR PFPR-REVW CNSLT PROPOSAL 11-1-05\$+

**Utility:** OCD SUBJECT LC8

**FMG:** RCT/REHAB/WIDEN/FLY 6465706.C. MIDD&D(S/LANDAIR/DMCGFF)

**Conceptual Design:** BC-0 01 Tier 4

Distric Comments	Activity	Cost	Fund
TAS/Need to hold P10H/3-30-05/high priority project from County; need VE study;3-2-06/GDOT has hired McGee Partners to perform Env study on SR 204 corridor, from HST 5 to US 17;9-12-06/P10H Nov 14th & 15th/5-2-07/P10H June 19th & 20th/9-24-07/working on concept report and comments from P10H/11-7-07/Final concept meeting 12-17-07	PE	0.00	Q05
Consultant to revised concept report and schedule V.E. Environmental has history impacts to deal with (9/25/09)	ROW	0.00	Q05
	ROW	0.00	L050
	ROW	1,124,874.95	LY205
	ROW	6,244,710.67	L050
	CST	0.00	L050

**Acquired by:** DDOT  
**Acquisition MGR:** O'Quinn, Andy  
**ROW Cert Date:**

**Cond. Filed:** 0  
**Relocations:** 0  
**Options - Pending:** 0  
**Acquired:** 9

**Total Parcel in ROW System:** 9  
**Options - Pending:** 0  
**Condemnations- Pend:** 0  
**Released:** 8

**DEEDS CT:** 9