

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0007259, Chatham County **OFFICE** Preconstruction
CSSTP-0007-00(259)
Jimmy DeLoach Parkway @ US 80 -
Proposed New Interchange **DATE** April 17, 2008

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction
TO  SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Angela Alexander
Paul Liles
Glen Durrence
Brad Saxon
BOARD MEMBER

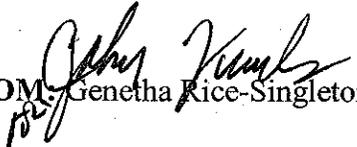
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: P.I. No. 0007259, Chatham County
CSSTP-0007-00(259)
Jimmy DeLoach Parkway @ US 80-
Proposed New Interchange

OFFICE: Preconstruction

DATE: April 14, 2008

FROM:  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO: Gerald M. Ross, P.E., Chief Engineer

SUBJECT: *PROJECT CONCEPT REPORT*

This project is the construction of a new interchange where Jimmy DeLoach Parkway currently intersects US 80/SR 26/SR 17 at-grade. The existing section of Jimmy DeLoach Parkway begins at US 80/SR 26/SR 17, extending north across I-95 and terminates at SR 21. The existing southern terminus of Jimmy DeLoach Parkway forms a "T" intersection with US 80/SR 26/SR 17. Additionally, a planned extension of Jimmy DeLoach Parkway [GDOT Project STP-218-1(1), Chatham County, and P.I. No. 522790-], beginning at I-16 and extending north to US 80/SR 26/SR 17, is currently in preliminary design, and construction is expected to begin in 2014. The Jimmy DeLoach Parkway extension to I-16 would improve regional connectivity by providing an alternative, direct route from the western portion of Chatham County traveling on I-16 to the Georgia Ports Authority area and to I-95 north of Savannah. Preliminary traffic studies for the existing intersection of Jimmy DeLoach Parkway and US 80/SR 26/SR 17 determined an annual traffic growth rate of 3.5 percent. The planned signalized intersection is expected to have unacceptable level of service (LOS E/F) for traffic operations by year 2030. The proposed interchange would facilitate the efficient flow of traffic along the Parkway, by replacing the at-grade signalized intersection with a grade separated interchange.

The proposed project will construct a full diamond interchange with one full lane movement in each quadrant. Additional width pavement will be provided at the crossroads ramp termini to facilitate traffic turning movements. Jimmy DeLoach Parkway would be the mainline and bridge over US 80. A portion of Osteen Road would be reconstructed on new alignment to intersect with US 80 west of the interchange.

Environmental concerns include requiring a COE 404 permit; an Environmental Assessment will be prepared; Extensive public involvement has been completed including presenting various alternatives to the public; A PIOH was held for the preferred alternative on April 26, 2007. Time saving procedures is not appropriate.

P.I. No. 0007259, Chatham County
Page 2
April 14, 2008

The estimated costs for this project are:

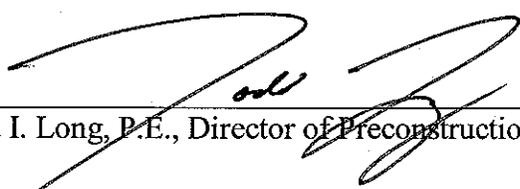
| | <u>PROPOSED</u> | <u>APPROVED</u> | <u>FUNDING</u> | <u>PROG DATE</u> |
|-----------------------------|-----------------|-----------------|----------------|------------------|
| Construction (includes E&C) | \$22,884,000 | \$7,000,000 | L230 | LR |
| Right-of-way & Utilities | \$13,826,000 | \$ 2,000,000 | Local | Local |

*PMA sent 2-28-2006 requesting Chatham County do PE & utilities; right-of-way (local funded) and construction is unfunded at this time.

I recommend this project concept be approved.

GRS: JDQ
Attachment

CONCUR



Todd I. Long, P.E., Director of Preconstruction

APPROVED



Gerald M. Ross, P.E., Chief Engineer

End Project
CSSTP-0007-00(259)

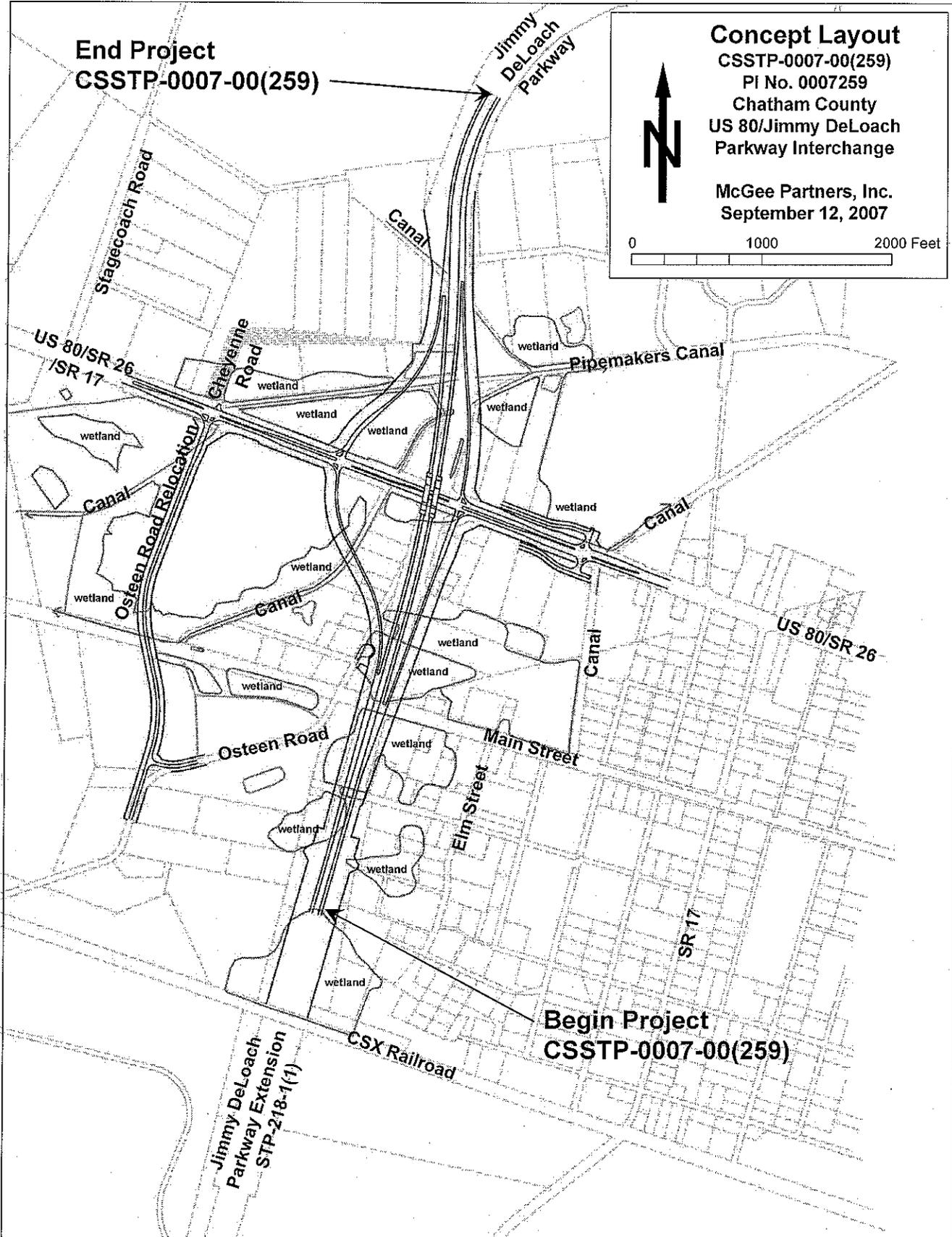
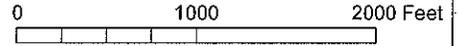
Jimmy DeLoach Parkway

Concept Layout

CSSTP-0007-00(259)
PI No. 0007259
Chatham County
US 80/Jimmy DeLoach
Parkway Interchange



McGee Partners, Inc.
September 12, 2007



**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P.I. No. 0007259 **OFFICE:** Environment/Location
DATE: March 5, 2008
FROM:  Glenn Bowman, P.E., State Environmental/Location Engineer
TO: Genetha-Rice Singleton, Assistant Director of Preconstruction
SUBJECT: **PROJECT CONCEPT REPORT**
CSSTP-0007-00(259) / Chatham County
Jimmy DeLoach Parkway at US 80 Interchange

The Concept Report for the above project has been reviewed and it appears satisfactory for approval subject to the following comments:

1. One historic farm is located near the intersection of Bloomingdale and Pine Barren Roads. Also, several houses are located along Osteen Road which may be National Register (NR) eligible pending a history survey. An archaeological study indicated that archaeological deposits may be associated with these structures. The CSX RR at the southern end of the project would be NR eligible.
2. A public hearing will be required for an EA.

If you have any questions, please contact Glenn Bowman at (404)699-4401.

GB:lc

Attachment

cc: Brian Summers
Jamie Simpson
Angela Alexander
Keith Golden
Ben Buchan
Glenn Durrence
Paul Liles

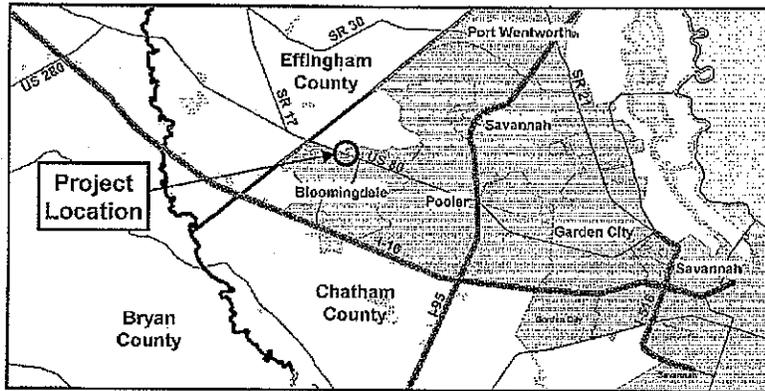
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

Office of Urban Design

PROJECT CONCEPT REPORT

US 80/Jimmy DeLoach Parkway Interchange
Project Number: CSSTP-0007-00(259)
County: Chatham
P. I. Number: 0007259

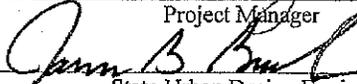
Federal Route Number: US 80
State Route Number: SR 17 & 26



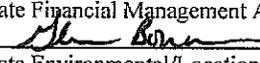
Recommendation for approval:

DATE 18 FEB 08

DATE 2/19/08


Project Manager

State Urban Design Engineer

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

| | |
|--------------------|---|
| DATE _____ | _____ |
| DATE _____ | State Transportation Planning Administrator |
| DATE <u>3/6/08</u> | State Financial Management Administrator |
| DATE _____ |  State Environmental/Location Engineer |
| DATE _____ | State Traffic Safety and Design Engineer |
| DATE _____ | District Engineer |
| DATE _____ | Project Review Engineer |
| DATE _____ | State Bridge and Structural Design Engineer |

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

Office of Urban Design

PROJECT CONCEPT REPORT

US 80/Jimmy DeLoach Parkway Interchange

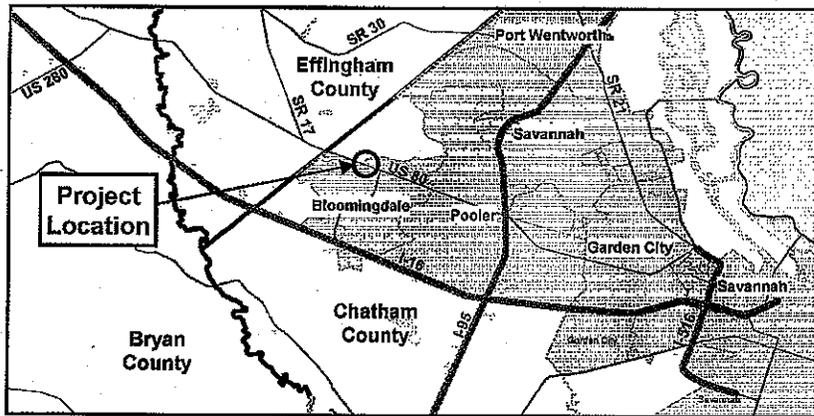
Project Number: CSSTP-0007-00(259)

County: Chatham

P. I. Number: 0007259

Federal Route Number: US 80

State Route Number: SR 17 & 26



Recommendation for approval:

DATE 18 FEB 08

[Signature]
Project Manager

DATE 2/19/08

[Signature]
State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District Engineer

DATE _____

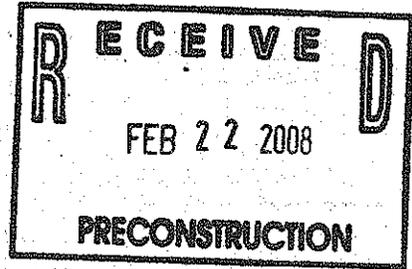
Project Review Engineer

DATE 2/21/08

[Signature]
State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

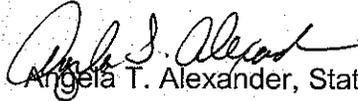
MEMORANDUM



FILE CSSTP-0007-00(259)
P.I. 0007259

Office Planning

DATE 2/21/2008

FROM 
Angela T. Alexander, State Transportation Planning Administrator

TO Genetha Rice-Singleton, Assistant Director of Preconstruction

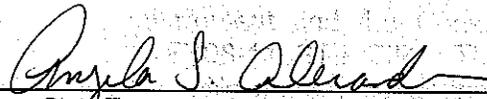
SUBJECT Project Concept Report - Chatham County
CSSTP-0007-00(259) P.I. 0007259

The Planning Office was requested by Preconstruction to verify if the subject project was identified in the FY '08-'11 STIP/TIP. PE was authorized in 2005. Right-of-Way is, currently, the responsibility of the local government and the Construction phase is currently outside of the currently approved FY08-11 STIP/TIP. The project will be moved into the STIP/TIP as funding allows. This project, as defined in the concept report, is consistent with the project description which will appear in the STIP/TIP.

KBM

Attachment

Date: 2-22-08


State Transportation Planning Administrator

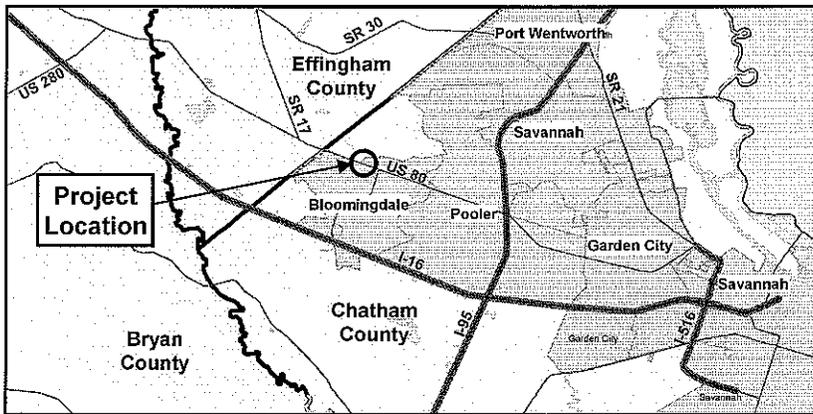
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

Office of Urban Design

PROJECT CONCEPT REPORT

US 80/Jimmy DeLoach Parkway Interchange
Project Number: CSSTP-0007-00(259)
County: Chatham
P. I. Number: 0007259

Federal Route Number: US 80
State Route Number: SR 17 & 26



Recommendation for approval:

DATE 18 FEB 08

Project Manager

DATE 2/19/08

State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District Engineer

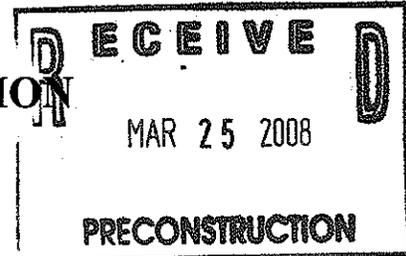
DATE _____

Project Review Engineer

DATE _____

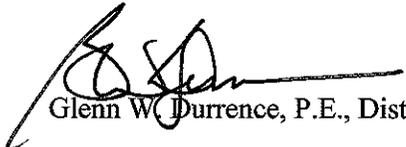
State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA



INTERDEPARTMENT CORRESPONDENCE

DATE March 21, 2008

FROM  Glenn W. Durrence, P.E., District Engineer

TO James B. Buchan, P.E., State Urban Design Engineer

SUBJECT Jimmy DeLoach Parkway @ US 80 Interchange
CSSTP-0007-00(259), PI 0007259, Chatham County

Attached is the signature page for the above project. The District has reviewed the concept report and would like to offer the following comment:

District Utilities Office – The summary of cost does not include a value for utilities. Chatham County has signed an agreement to fund the relocation of utilities, so GDOT will not responsible for reimbursable costs.

Should you have any questions, please contact the District Office at (912) 427-5788.

Attachment

GWD:BWS:TAS:tas

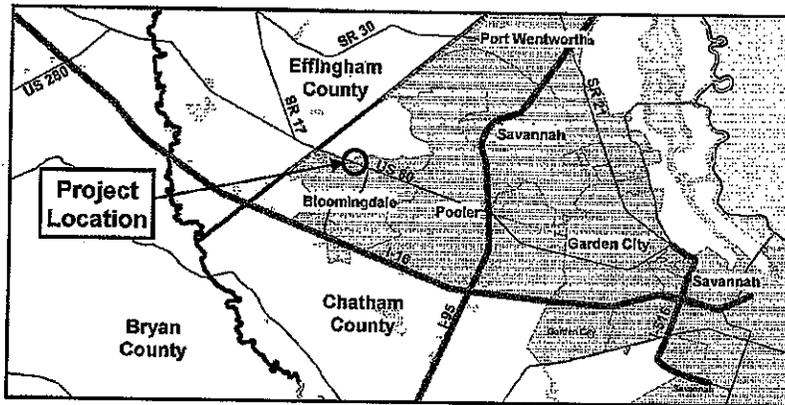
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

Office of Urban Design

PROJECT CONCEPT REPORT

US 80/Jimmy DeLoach Parkway Interchange
Project Number: CSSTP-0007-00(259)
County: Chatham
P. I. Number: 0007259

Federal Route Number: US 80
State Route Number: SR 17 & 26



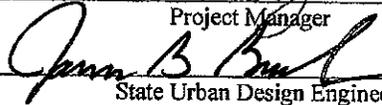
Recommendation for approval:

DATE 18 FEB 08

DATE 2/19/08



Project Manager



State Urban Design Engineer

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

DATE _____

DATE _____

DATE _____

DATE _____

DATE 3/26/08

DATE _____

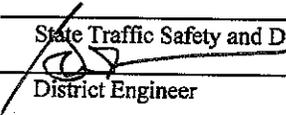
DATE _____

State Transportation Planning Administrator

State Financial Management Administrator

State Environmental/Location Engineer

State Traffic Safety and Design Engineer



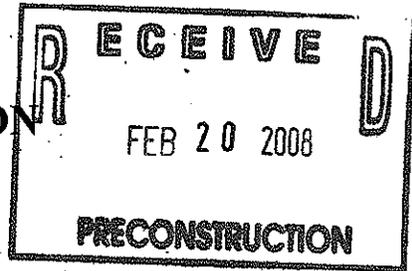
District Engineer

Project Review Engineer

State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE



FILE CSSTP-0007-00(259), Chatham County **OFFICE** Urban Design
Jimmy DeLoach Parkway
@ US 80 Interchange
P.I. No. 0007259 **DATE** February 19, 2008

James B. Buchan

FROM James B. Buchan, P. E., State Urban Design Engineer

TO Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT Project Concept Report

Attached is the original copy of the Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

This project will replace the at-grade intersection of CR 984/Jimmy DeLoach Parkway and US 80/SR 26/SR 17 with a grade separated, limited access interchange that will allow for safe and efficient traffic flow. Jimmy DeLoach Parkway will be the mainline and will bridge over US 80. Full diamond interchange ramps will intersect US 80 at grade.

If you have any questions, please contact Albert Welch or Larry Smith at 404-656-5447.

JBB:ASW:lcs *ASW*
Attachment

Distribution: Brian Summers, P. E., Project Review Engineer, w/ attachment
Glenn Bowman, P. E., State Environmental/Location Engineer, w/ attachment
Keith Golden, P. E., State Traffic Safety and Design Engineer, w/ attachment
Angela Alexander, State Transportation Planning Administrator, w/ attachment
Jamie Simpson, Financial Management Administrator, w/ attachment
Glenn Durrence, P. E., District 5 Engineer, w/ attachment
Paul Liles, P. E., State Bridge and Structural Design Engineer, w/ attachment

Need and Purpose:

The proposed project would replace the at-grade intersection of Jimmy DeLoach Parkway (CR 984) and US 80/SR 26/SR 17 with a grade separated, limited access interchange that would allow for safe, efficient traffic flow.

The existing section of Jimmy DeLoach Parkway begins at US 80/SR 26/SR 17, extends north across I-95 and terminates at SR 21. The existing southern terminus of Jimmy DeLoach Parkway forms an at-grade T intersection with US 80/SR 26/SR 17. Furthermore, a planned extension of Jimmy DeLoach Parkway (Jimmy DeLoach Parkway Extension, GDOT Project STP-218-1(1), Chatham Co., P.I. No. 522790), beginning at I-16 and extending north to US 80/SR 26/SR 17, is currently in preliminary design, and construction is expected to begin by 2014. The intersection of US 80 and Jimmy DeLoach Parkway will be signalized with the Jimmy DeLoach Parkway Extension project. A widening project along US 80 (Project STP-005-5(28), P.I. No. 522170) is under construction at this time. The existing two lane facility is being widened to two lanes in each direction with a flush median.

US 80/SR 26/SR 17 is a designated State Bicycle Route at this location, part of the March to Sea, TransGeorgia, Savannah River Run and Coastal routes. Jimmy DeLoach Parkway is identified as a bicycle route in the Chatham County Bikeway Plan.

The proposed project CSSTP-0007-00(259) would replace the at-grade signalized intersection of Jimmy DeLoach Parkway and US 80/SR 26/SR 17 with a grade separated, limited access interchange. The proposed project would allow for a continuous, limited access travel on Jimmy DeLoach Parkway over US 80/SR 26/SR 17.

Preliminary traffic studies for the existing intersection of Jimmy DeLoach Parkway and US 80/SR 26/SR 17 determined an annual traffic growth rate of 3.5 percent. Projected Annual Daily Traffic (ADT) for 2010 and 2030 are provided in the following table. The planned signalized intersection is expected to have unacceptable level of service (LOS E/F) for traffic operations by 2030.

Annual Daily Traffic

| Roadway | 2010 ADT | 2030 ADT |
|-----------------------|----------|----------|
| US 80 | 17,760 | 30,650 |
| Jimmy DeLoach Parkway | 10,860 | 29,280 |

The Jimmy DeLoach Parkway extension to I-16 would improve regional connectivity by providing an alternative, direct route from the western portion of Chatham County traveling on I-16 to the Georgia Ports Authority area and to I-95 north of Savannah. The Parkway would provide a route along a partially limited access facility between these destinations without having to travel along I-95. Completion of the Parkway is expected to reduce the volume of large truck traffic traveling along I-95. The proposed interchange at Jimmy DeLoach Parkway and US 80/SR 26/SR 17 would facilitate the efficient flow of traffic along the Parkway, by replacing an at-grade, signalized intersection with a grade separated interchange. Jimmy DeLoach Parkway would be the mainline and would bridge over US 80/SR 26/SR 17.

February 4, 2008

Description of the Proposed Project:

The proposed project includes construction of a grade-separated interchange; Jimmy DeLoach Parkway would be the mainline and would bridge over US 80. Full diamond interchange ramps to and from Jimmy DeLoach Parkway would intersect US 80 at grade. A portion of Osteen Road would be reconstructed on new alignment to an intersection with US 80 west of the interchange.

Is the project located in a Non-attainment area?

Ozone Yes No PM 2.5 Yes No

PDP Classification: Major Minor

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

Functional Classification: US 80: Urban Minor Arterial
Jimmy DeLoach Parkway: Urban Principal Arterial
Osteen Road: Urban Local Street

U. S. Route Number(s): US 80 **State Route Number(s):** SR 17 & SR 26

Traffic (AADT):

Current Year: (2010) US 80: 17,760 Design Year: (2030) US 80: 30,650
JDP: 10,860 JDP: 29,280

Truck %?

Existing design features:

US 80 (Based upon completion of Project Number STP-005-5(28))

- Typical Section:
 - Four 12' lanes (two in each direction)
 - 14' flush median
 - 3' add'l width on both sides - footprint to accommodate future 20' raised median
 - Outside shoulders: 10' graded, 6.5' paved, (bike shoulder)
- Posted speed: 45 mph
- Minimum radius: N/A (no curves)
- Maximum superelevation rate for curve: N/A
- Maximum grade: 0.07%
- Width of right of way: Varies (145'-208')
- Major structures: None
- Major interchanges or intersections along the project: US 80 at Jimmy DeLoach Parkway
- Existing length of roadway segment and the beginning mile logs for each county segment: Beginning mile log 3.90; End mile log 3.20; Total length 0.70 miles

Jimmy DeLoach Parkway (Based upon construction of Project Number STP-218-1(1))

- Typical Section:
 - Four 12' lanes (two in each direction)
 - 66' depressed median (north of US 80)
 - 24' raised median (at US 80)
 - 44' depressed median (south of US 80)
 - Inside shoulders: 2' paved;
 - Outside shoulders: 10' overall, 6.5' paved, (bike shoulder)
- Posted speed: 55 mph
- Minimum radius: 1880'
- Maximum superelevation rate for curve: 6%
- Maximum grade: 1.00%
- Width of right of way: Varies (200'-328')
- Major structures: N/A
- Major interchanges or intersections along the project: Jimmy DeLoach Pkwy at US 80
- Existing length of roadway segment and the beginning mile logs for each county segment: Mile logs on Jimmy DeLoach Parkway Extension have not yet been established; Total length 1.1 miles, 0.6 miles north of US 80, 0.5 miles south of US 80.

Proposed Design Features (Locally Preferred Alternate A2):

US 80

- Proposed typical section:
 - Four 12' lanes (two in each direction)
 - 20' raised median
 - Outside shoulders: 10' overall, 6.5' paved, (bike shoulder)
- Proposed Design Speed: 45 mph
- Proposed Maximum grade: 0.07% (existing) Maximum grade allowable: 6%
- Proposed Maximum grade Side Street: 3% Maximum grade allowable: 7%
- Proposed Maximum grade driveway: 7% (trucks)
- Proposed Minimum Radius: N/A (no curves) Minimum allowable radius: N/A
- Proposed Maximum superelevation rate for curve: N/A
- Right of way
 - Width: Varies (145'-208')
 - Easements: Temporary (), Permanent (X), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
- Structures:
 - none

Jimmy DeLoach Parkway

- Proposed typical section:
 - Four 12' lanes (two in each direction) ^{heavy} ~~trucks~~
 - 44' depressed median (typical)
 - Inside shoulders: 6' Overall, 2' paved;
 - Outside shoulders: 10' overall, 6.5' paved, (bike shoulder)

Note: It is proposed to route bikes along the outside shoulder of Jimmy DeLoach Parkway as they approach the US 80 interchange. At the ramp diverges, bikes would be routed along the outside shoulder of the exit ramp, cross US 80 at-grade, then proceed along the outside shoulder of the entrance ramp back onto the outside shoulder of Jimmy DeLoach Parkway. Bikes would be prohibited from crossing the ramp diverge/merge points with the mainline.

 - Ramps: One 16' Lane; 6' overall, 4' paved inside shoulder; 12' overall, 10' paved outside shoulder, ramp shoulder paving should be full depth to accommodate two-lanes of traffic during the staged construction of the interchange
- Proposed Design Speed: 55 mph mainline, 45 mph ramps
- Proposed Maximum grade: 3% Maximum grade allowable: 5%
- Proposed Maximum grade Ramps: 3% Maximum grade allowable: 5%
- Proposed Maximum grade Side Street: N/A Maximum grade allowable: N/A
- Proposed Maximum grade driveway: N/A
- Proposed Minimum Radius: 1910' Minimum allowable radius: 1060'
- Proposed Minimum Radius Ramps: 700' Minimum allowable radius: 587'
- Proposed Maximum superelevation rate for curve: 6% mainline, 8% ramps
- Right of way
 - Width: Varies (200'-1200')
 - Easements: Temporary (), Permanent (X), Utility (), Other ().
 - Type of access control: Full (), Partial (X), By Permit (), Other ().
- Structures:
 - Two parallel 260'x46' (~~42'~~ ^{38'} clear) bridges on Jimmy DeLoach Pkwy over US 80

Osteen Road

- Proposed typical section:
 - Two 12' lanes (one in each direction)
 - Outside shoulders: 6' overall, 2' paved
- Proposed Design Speed: 35 mph
- Proposed Maximum grade: 3% Maximum grade allowable: 7%
- Proposed Maximum grade Side Street: 3% Maximum grade allowable: 7%
- Proposed Maximum grade driveway: 7% (trucks)
- Proposed Minimum Radius: 1000' Minimum allowable radius: 340'
- Proposed Maximum superelevation rate for curve: 6%
- Right of way
 - Width: 80' (Typical)
 - Easements: Temporary (), Permanent (X), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().

- Structures:
 - none

Complete Project

- Right of way
 - Number of parcels: 30 Number of displacements:
 - Business: 1
 - Residences: 8
 - Mobile homes: 5
 - Other: 0

- Major intersections and interchanges:
 - *Grade separated interchange on Jimmy DeLoach Parkway at US 80*
- Traffic control during construction:
 - *Existing traffic will be maintained on the project during construction. Staged construction of the interchange will first require the construction of ramps, then shifting of Jimmy DeLoach Parkway traffic to the ramps while the mainline is reconstructed to bridge over US 80.*
- Design Exceptions to controlling criteria anticipated:

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

- Design Variances anticipated:
 - *Minimum Length of Horizontal Curve on ramps – The minimum length of horizontal curves with a design speed of 45 mph is 675', for 35 mph it is 525'. The following curves do not meet these minimum lengths: SB Exit Ramp approaching US 80 – 230' and SB Entrance Ramp leaving US 80 – 440'. Increasing the lengths of these curves would require increasing the skew of the ramp intersection with US 80, or increasing the total length of the ramps. A variance is considered to avoid lengthening the ramps, or increasing the skew of the intersections beyond 10-degrees for the ramp approaching US 80 or beyond 15-degrees for the ramp leaving US 80.*
 - *Decision Sight Distance on Jimmy DeLoach Parkway crest vertical over US 80 – Proposed vertical curve is 1200' long with a K of 200 which provides stopping sight distance of 660', while the required stopping sight distance for 55 mph is 495'. Decision sight distance for speed/path/direction change on an urban road at 55 mph is 1135', which would require a vertical curve approximately 3600' long with a K of 600. A variance is considered at this location to avoid*

lengthening the project, substantially increasing the cost and to avoid potential ponding of water near the crest of the vertical curve.

- *Maximum Angle of Horizontal Deflection – Based on the plans for Project STP-005-5(28), the existing angle of horizontal deflection on US 80 about 1000' east of Jimmy DeLoach Parkway is 50-minutes where the maximum for 45-mph is 30-minutes. To correct this, a 50,000' radius curve would need to be constructed at this location to provide for the 675' minimum length of curve. A variance is considered at this location as this would require lengthening the project limits approximately 250'.*
- Environmental concerns: Section 404 – Ecology (wetlands, streams)
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (), No (X),
 - Categorical exclusion (),
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (X), or
 - Environmental Impact Statement (EIS) ().
- Utility involvements:
 - Atlanta Gas Light Company
 - AT&T
 - Alltel Communications
 - Georgia Power Company
 - City of Bloomingdale Water & Sewer
 - Comcast Cable

VE Study Required: Yes (X), No ()

Project responsibilities:

- Environmental Studies, Permits & Mitigation: Chatham County
- Design: Chatham County
- Right of Way Acquisition: Chatham County
- Relocation of Utilities: Chatham County
- Letting to contract: Georgia DOT
- Supervision of construction: Georgia DOT
- Providing material pits: N/A
- Providing detours: N/A

Coordination

- Initial Concept Meeting: *Held February 22, 2006 (Minutes are attached)*
- Concept meeting date and brief summary. *Held August 16, 2007 (Minutes are attached)*
- P. A. R. meetings, dates and results: *A P.A.R. will be required. An Interagency meeting was held on February 13, 2007 to review the alternatives with the resource agencies and discuss information they would like to have for the P.A.R.*
- FEMA: *Coordination may be required.*
- USCG, and/or TVA: *N/A*
- Public involvement: *A public information open house was held on April 26, 2007 (Summary is attached)*

February 4, 2008

- Local government comments:
 - *Mayor of the City of Bloomingdale supports the locally preferred alternative*
- Other projects in the area:
 - *STP-005-5(28), PI 522170, SR 17/SR 26/US 80 Widening From SR 17 to Cherry Street (under construction)*
 - *STP-218-1(1), PI 522790, Jimmy DeLoach Parkway Extension From I-16 to US 80*
- Other coordination to date:
 - *A project kick-off meeting with Chatham County staff was held on February 10, 2005 at Chatham County Engineering.*
 - *A coordination meeting with Chatham County and City of Bloomingdale was held on August 24, 2006 at Chatham County Engineering.*

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 24 Months
- Time to complete preliminary construction plans: 12 Months
- Time to complete right of way plans: 6 Months
- Time to complete the Section 404 Permit: 6 Months
- Time to complete final construction plans: 12 Months
- Time to purchase right of way: 18 Months

Other alternates considered: *(See attached Alternatives Analysis Matrix for more details.)*

- *Alternate A1 – Full-diamond interchange with ramps centered about existing Jimmy DeLoach Parkway. Eliminated due to required displacement of Bloomingdale Alliance Church*
- *Alternate A3 – Full-diamond interchange with ramps shifted to the east about existing Jimmy DeLoach Parkway. Eliminated due to required displacement of Bloomingdale Alliance Church*
- *Alternate B1 – Partial-cloverleaf interchange with loop ramp in northwest quadrant. Similar relocations and wetland impacts to selected alternative. Eliminated due to less desirable interchange configuration.*
- *Alternate B2 – Partial-cloverleaf interchange with loop ramp in southwest quadrant. Slightly less wetland impacts to selected alternative, but 3 additional residential relocations. Eliminated due to additional residential relocations and less desirable interchange configuration.*
- *Alternate B3 – Partial-cloverleaf interchange with loop ramp in northeast quadrant. Similar wetland impacts to selected alternative, but 2 additional residential relocations. Eliminated due to additional relocations and less desirable interchange configuration.*
- *Alternate B4 – Partial-cloverleaf interchange with loop ramp in southeast quadrant. Eliminated due to required displacement of Bloomingdale Alliance Church and additional wetland impacts.*

February 4, 2008

Comments:

Attachments:

1. Cost Estimates:
 - a. Construction, including E&C: \$22,883,401
 - b. Right of Way: *By Locals* (\$13,825,157)
 - c. Utilities: *By Locals*
 - d. Mitigation: *By Locals* (\$315,000)
2. Typical sections
3. Executive Summary for Traffic Study Report
4. Traffic Projection Diagrams
5. Minutes of Initial Concept Team Meeting
6. Minutes of Concept Team Meeting
7. Public Information Open House Summary
8. Concept Layout (Letter Size Schematic)
9. Alternatives Analysis Matrix

Notes on Attachments:

- Accident Summary: *An Accident Summary has not been included; accident history at this location for this project is irrelevant as US 80 is currently being widened from 2-lanes to 5-lanes, and the Jimmy DeLoach Parkway Extension to I-16 has not been constructed.*
- PFA: *No Project Framework Agreement has been prepared for this project by the Department as of this date.*

February 4, 2008

Summary of Costs

Project Name: **US 80/DeLoach Pkwy. Interchange**
 Project No.: **CSSTP-0007-00(259)**
 Alt: **A2 - Locally Selected**

PI No.: **0007259**
 County **Chatham**
 Date: **23-Oct-07**

A. RIGHT OF WAY

| | | | |
|--|----|----------------------------------|----------------------|
| 1. Property (Land & Easement) | \$ | 3,022,900 | |
| 2. Displacements | \$ | 959,000 | |
| 3. Other Costs (Sch./Adm./Market Appreciation) | \$ | 9,843,257 | |
| | | SUBTOTAL: A. RIGHT OF WAY | \$ 13,825,157 |

B. UTILITIES

| | | | |
|--|----|-------------------------------|-------------|
| 1. Railroad (Trackwork Etc.) | \$ | - | |
| 2. Transmission Lines | \$ | - | |
| 3. Other Services (Gas, Telephone, Water, Sewer) | \$ | - | |
| | | SUBTOTAL: B. UTILITIES | \$ - |

C. CONSTRUCTION

| | | | |
|--|-------------|----------------------------------|----------------------|
| 1. Traffic Control & Staging (Incl. Temp. Pavement, Bridges, Barriers) | \$ | 1,385,643 | |
| 2. Miscellaneous (Field Office, Training, R/W Markers) | \$ | 99,062 | |
| 3. Temporary Erosion Control & Grassing | \$ | 853,858 | |
| 4. Clearing & Grubbing | \$ | 640,000 | |
| 5. Earthwork | \$ | 4,457,550 | |
| 6. Base & Paving | \$ | 5,060,354 | |
| 7. Sidewalk, Curb & Gutter, Concrete Median | \$ | 184,218 | |
| 8. Driveways | \$ | 159,622 | |
| 9. Bridges (Incl. Approach Slabs, Slope Paving) | \$ | 2,231,400 | |
| 10. Retaining Walls | \$ | - | |
| 11. Box Culverts | \$ | 1,134,423 | |
| 12. Drainage | \$ | 533,973 | |
| 13. Permanent Erosion Control & Grassing | \$ | 1,207,537 | |
| 14. Removal | \$ | 50,000 | |
| 15. Permanent Concrete Barrier | \$ | - | |
| 16. Sound Barriers | \$ | 900,000 | |
| 17. Signing | \$ | 126,732 | |
| 18. Guardrail | \$ | 116,329 | |
| 19. Fencing | \$ | - | |
| 20. Traffic Signals | \$ | 320,000 | |
| 21. Marking | \$ | 172,391 | |
| 22. Sanitary Sewer | \$ | - | |
| 23. Water Distribution | \$ | - | |
| 24. Lighting | \$ | 770,000 | |
| 25. Landscaping | \$ | 400,000 | |
| 26. ATMS | \$ | - | |
| | | SUBTOTAL | \$ 20,803,092 |
| E. & C. @ | 10% | \$ | 2,080,309 |
| INFLATION: @ | 0% PER YEAR | \$ | - |
| NUMBER OF YEARS: | 0 | | |
| | | SUBTOTAL: C. CONSTRUCTION | \$ 22,883,401 |

D. MITIGATION

| | | | |
|--|----|--------------------------------|-------------------|
| 1. Wetlands & Streams (11 ac. wetlands, 90 credits @ \$3,500/credit) | \$ | 315,000 | |
| 2. Other | \$ | - | |
| | | SUBTOTAL: D. MITIGATION | \$ 315,000 |

TOTAL PROJECT COST \$ 37,023,558

Estimate Report for file "DETEST_PI0007259_071023.prn"

| Section TRAFFIC CONTROL & STAGING | | | | | |
|-----------------------------------|----------|-------|------------|---|-----------------------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 150-1000 | 1 | LS | 91000.00 | TRAFFIC CONTROL - | 91000.00 |
| 310-1101 | 0 | TN | 19.98 | GR AGGR BASE CRS, INCL MATL | 0.00 |
| 400-3206 | 0 | TN | 100.00 | ASPH CONC 12.5 MM OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED | 0.00 |
| 402-1812 | 0 | TN | 75.00 | RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME | 0.00 |
| 402-3121 | 0 | TN | 75.00 | RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 0.00 |
| 402-3130 | 0 | TN | 75.00 | RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM | 0.00 |
| 402-3190 | 0 | TN | 75.00 | RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 0.00 |
| 413-1000 | 0 | GL | 2.00 | BITUM TACK COAT | 0.00 |
| 432-5010 | 0 | SY | 2.07 | MILL ASPH CONC PVMT, VARIABLE DEPTH | 0.00 |
| 541-9000 | 0 | SF | 55.00 | DETOUR BRIDGE | 0.00 |
| 550-1180 | 600 | LF | 45.96 | STORM DRAIN PIPE, 18 IN, H 1-10 | 27576.00 |
| 550-1240 | 240 | LF | 54.17 | STORM DRAIN PIPE, 24 IN, H 1-10 | 13000.80 |
| 620-0100 | 3600 | LF | 34.83 | TEMPORARY BARRIER, METHOD NO. 1 | 125388.00 |
| 632-0003 | 3 | EA | 16286.19 | CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3 | 48858.57 |
| 647-0220 | 3 | EA | 50000.00 | TRAFFIC SIGNAL INSTALLATION, TEMPORARY | 150000.00 |
| 650-1100 | 5 | EA | 17601.15 | IMPACT ATTENUATOR UNIT (CRASH COMPRESSION CUSHION) TYPE P- | 88005.75 |
| 668-2105 | 8 | EA | 2851.74 | DROP INLET, GP 1, SPCL DES | 22813.92 |
| Section Sub Total: | | | | | \$1,385,643.04 |

| Section MISCELLANEOUS | | | | | |
|---------------------------|----------|-------|------------|-----------------------------|--------------------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 153-1300 | 1 | EA | 76829.70 | FIELD ENGINEERS OFFICE TP 3 | 76829.70 |
| 158-1000 | 10000 | HR | 0.79 | TRAINING HOURS | 7900.00 |
| 634-1200 | 144 | EA | 99.53 | RIGHT OF WAY MARKERS | 14332.32 |
| Section Sub Total: | | | | | \$99,062.02 |

| Section TEMPORARY EROSION CONTROL | | | | | |
|-----------------------------------|----------|-------|------------|---|-----------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 163-0232 | 74 | AC | 679.69 | TEMPORARY GRASSING | 50297.06 |
| 163-0240 | 435 | TN | 161.07 | MULCH | 70065.45 |
| 163-0300 | 8 | EA | 1655.76 | CONSTRUCTION EXIT | 13246.08 |
| 163-0503 | 10 | EA | 529.93 | CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3 | 5299.30 |
| 163-0522 | 123 | EA | 300.00 | CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - TYPE A SILT FENCE | 36900.00 |
| 163-0523 | 477 | EA | 350.00 | CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - TYPE C SILT FENCE | 166950.00 |
| 163-0524 | 0 | EA | 400.00 | CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - STONE PLAIN RIP RAP/SAND BAGS | 0.00 |
| 163-0531 | 5 | EA | 8671.96 | CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO - | 43359.80 |
| 163-0550 | 10 | EA | 282.90 | CONSTRUCT AND REMOVE INLET SEDIMENT TRAP | 2829.00 |
| 165-0010 | 12360 | LF | 0.78 | MAINTENANCE OF TEMPORARY SILT FENCE, TP A | 9640.80 |
| 165-0030 | 48840 | LF | 1.64 | MAINTENANCE OF TEMPORARY SILT FENCE, TP C | 80097.60 |
| 165-0040 | 599 | EA | 66.20 | MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS | 39653.80 |
| 165-0060 | 5 | EA | 1389.83 | MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO - | 6949.15 |
| 165-0087 | 10 | EA | 169.84 | MAINTENANCE OF SILT CONTROL GATE, TP 3 | 1698.40 |
| 165-0101 | 8 | EA | 607.78 | MAINTENANCE OF CONSTRUCTION EXIT | 4862.24 |
| 165-0105 | 10 | EA | 96.97 | MAINTENANCE OF INLET SEDIMENT TRAP | 969.70 |
| 167-1000 | 4 | EA | 1278.47 | WATER QUALITY MONITORING AND SAMPLING | 5113.88 |

| | | | | | |
|---------------------------|-------|----|--------|------------------------------|---------------------|
| 167-1500 | 44 | MO | 944.75 | WATER QUALITY INSPECTIONS | 41569.00 |
| 171-0010 | 12360 | LF | 1.63 | TEMPORARY SILT FENCE, TYPE A | 20146.80 |
| 171-0030 | 48840 | LF | 3.83 | TEMPORARY SILT FENCE, TYPE C | 187057.20 |
| 643-8200 | 9600 | LF | 2.98 | BARRIER FENCE (ORANGE), 4 FT | 28608.00 |
| 700-7000 | 220 | TN | 59.64 | AGRICULTURAL LIME | 13120.80 |
| 700-7010 | 183 | GL | 22.32 | LIQUID LIME | 4084.56 |
| 700-8000 | 44 | TN | 292.83 | FERTILIZER MIXED GRADE | 12884.52 |
| 700-8100 | 3660 | LB | 2.31 | FERTILIZER NITROGEN CONTENT | 8454.60 |
| Section Sub Total: | | | | | \$853,857.74 |

Section CLEARING & GRUBBING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|-----------------------|---------------------|
| 202-1000 | 80 | AC | 8000.00 | CLEARING AND GRUBBING | 640000.00 |
| Section Sub Total: | | | | | \$640,000.00 |

Section EARTHWORK

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|-------------------------|-----------------------|
| 205-0001 | 28850 | CY | 7.00 | UNCLASS EXCAV | 201950.00 |
| 206-0002 | 425560 | CY | 10.00 | BORROW EXCAV, INCL MATL | 4255600.00 |
| 206-9999 | 0 | CY | 5.00 | Waste Material | 0.00 |
| 208-0200 | 0 | CY | 41.24 | ROCK EMBANKMENT | 0.00 |
| Section Sub Total: | | | | | \$4,457,550.00 |

Section BASE & PAVING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|---|-----------------------|
| 310-1101 | 48690 | TN | 19.98 | GR AGGR BASE CRS, INCL MATL | 972826.20 |
| 400-3206 | 2030 | TN | 100.00 | ASPH CONC 12.5 MM OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED | 203000.00 |
| 402-1812 | 10290 | TN | 75.00 | RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME | 771750.00 |
| 402-3110 | 0 | TN | 75.00 | RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 0.00 |
| 402-3121 | 16230 | TN | 75.00 | RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 1217250.00 |
| 402-3130 | 12500 | TN | 75.00 | RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM | 937500.00 |
| 402-3190 | 12180 | TN | 75.00 | RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 913500.00 |
| 413-1000 | 15020 | GL | 2.00 | BITUM TACK COAT | 30040.00 |
| 430-0220 | 0 | SY | 52.84 | PLAIN PC CONC PVMT, CL 1 CONC, 12 INCH THK | 0.00 |
| 430-0620 | 0 | SY | 65.90 | PLAIN PC CONC PVMT, CL HES CONC, 12 INCH THK | 0.00 |
| 430-0630 | 0 | LF | 80.69 | REINFORCED CONCRETE LUG ANCHORS | 0.00 |
| 430-0820 | 0 | SY | 65.41 | CONT REINF CONC PVMT, CL 1 CONC, 12 INCH THK | 0.00 |
| 430-1220 | 0 | SY | 63.08 | CONT REINF CONC PVMT, CL HES CONC, 12 INCH THK | 0.00 |
| 432-5010 | 2860 | SY | 2.07 | MILL ASPH CONC PVMT, VARIABLE DEPTH | 5920.20 |
| 442-0100 | 0 | SY | 44.00 | ROLLER COMPACTED CONCRETE PAVEMENT | 0.00 |
| 456-2012 | 10 | GLM | 856.78 | INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS) | 8567.80 |
| 500-3200 | 0 | CY | 394.64 | CLASS B CONCRETE | 0.00 |
| Section Sub Total: | | | | | \$5,060,354.20 |

Section SIDEWALKS, CURB & GUTTER, CONCRETE MEDIANS

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|--|---------------------|
| 441-0104 | 0 | SY | 33.67 | CONC SIDEWALK, 4 IN | 0.00 |
| 441-0740 | 4020 | SY | 31.64 | CONCRETE MEDIAN, 4 IN | 127192.80 |
| 441-0754 | 1050 | SY | 54.31 | CONCRETE MEDIAN, 7 1/2 IN | 57025.50 |
| 441-6222 | 0 | LF | 19.04 | CONC CURB & GUTTER, 8 IN X 30 IN, TP 2 | 0.00 |
| 441-6740 | 0 | LF | 15.02 | CONC CURB & GUTTER, 8 IN X 30 IN, TP 7 | 0.00 |
| Section Sub Total: | | | | | \$184,218.30 |

| Section DRIVEWAYS | | | | | |
|---------------------------|----------|-------|------------|---|---------------------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 310-1101 | 590 | TN | 19.98 | GR AGGR BASE CRS, INCL MATL | 11788.20 |
| 318-3000 | 0 | TN | 19.48 | AGGR SURF CRS | 0.00 |
| 402-3110 | 0 | TN | 75.00 | RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 0.00 |
| 402-3130 | 110 | TN | 75.00 | RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM | 8250.00 |
| 402-3190 | 150 | TN | 75.00 | RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 11250.00 |
| 413-1000 | 50 | GL | 2.00 | BITUM TACK COAT | 100.00 |
| 441-0016 | 380 | SY | 42.44 | DRIVEWAY CONCRETE, 6 IN TK | 16127.20 |
| 441-4030 | 0 | SY | 53.05 | CONC VALLEY GUTTER, 8 IN | 0.00 |
| 441-6222 | 0 | LF | 19.04 | CONC CURB & GUTTER, 8 IN X 30 IN, TP 2 | 0.00 |
| 550-2180 | 290 | LF | 32.87 | SIDE DRAIN PIPE, 18 IN, H 1-10 | 9532.30 |
| 550-2240 | 290 | LF | 37.90 | SIDE DRAIN PIPE, 24 IN, H 1-10 | 10991.00 |
| 550-2360 | 290 | LF | 60.31 | SIDE DRAIN PIPE, 36 IN, H 1-10 | 17489.90 |
| 550-2480 | 0 | LF | 60.52 | SIDE DRAIN PIPE, 48 IN, H 1-10 | 0.00 |
| 550-3618 | 20 | EA | 659.02 | SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE | 13180.40 |
| 550-3624 | 20 | EA | 854.88 | SAFETY END SECTION 24 IN, SIDE DRAIN, 6:1 SLOPE | 17097.60 |
| 550-3636 | 20 | EA | 2190.76 | SAFETY END SECTION 36 IN, SIDE DRAIN, 6:1 SLOPE | 43815.20 |
| 550-3648 | 0 | EA | 3638.99 | SAFETY END SECTION 48 IN, SIDE DRAIN, 6:1 SLOPE | 0.00 |
| Section Sub Total: | | | | | \$159,621.80 |

| Section BRIDGES | | | | | |
|---------------------------|----------|-------|------------|--|-----------------------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 433-1000 | 0 | SY | 126.26 | REINF CONC APPROACH SLAB | 0.00 |
| 433-1100 | 0 | SY | 79.86 | REINF CONC APPROACH SLAB, INCL CURB | 0.00 |
| 433-1200 | 614 | SY | 201.46 | REINF CONC APPROACH SLAB, INCL SLOPED EDGE | 123696.44 |
| 433-1300 | 0 | SY | 33.90 | REINF CONC APPROACH SLAB, INCL BARRIER | 0.00 |
| 441-0004 | 1636 | SY | 45.54 | CONC SLOPE PAV, 4 IN | 74503.44 |
| 500-9001 | 11960 | SF | 85.00 | Bridge No. 1a - NB JDP over US 80 (New 46x260) | 1016600.00 |
| 500-9002 | 11960 | SF | 85.00 | Bridge No. 1b - SB JDP over US 80 (New 46x260) | 1016600.00 |
| 500-9003 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9004 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9005 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9006 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9007 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9008 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9009 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9010 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9011 | 0 | SF | 0 | Bridge No. | 0.00 |
| 500-9012 | 0 | SF | 0 | Bridge No. | 0.00 |
| 518-9001 | 0 | SF | 0 | Raise Existing Bridge No. - | 0.00 |
| 518-9002 | 0 | SF | 0 | Raise Existing Bridge No. - | 0.00 |
| 518-9003 | 0 | SF | 0 | Raise Existing Bridge No. - | 0.00 |
| 518-9004 | 0 | SF | 0 | Raise Existing Bridge No. - | 0.00 |
| 518-9005 | 0 | SF | 0 | Raise Existing Bridge No. - | 0.00 |
| Section Sub Total: | | | | | \$2,231,399.88 |

| Section RETAINING WALLS | | | | | |
|--------------------------------|----------|-------|------------|---|------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 500-9510 | 0 | SF | 75.00 | Retaining Wall - Cantilever - 0-10 ft. Ht. | 0.00 |
| 500-9520 | 0 | SF | 110.00 | Retaining Wall - Cantilever - 10-20 ft. Ht. | 0.00 |
| 500-9530 | 0 | SF | 130.00 | Retaining Wall - Cantilever - 20-30 ft. Ht. | 0.00 |
| 500-9610 | 0 | SF | 65.00 | Retaining Wall - Gravity - 0-10 ft. Ht. | 0.00 |
| 627-1140 | 0 | LF | 250.00 | TRAFFIC BARRIER V, WALL NO - | 0.00 |

| | | | | | |
|---------------------------|---|----|-------|--------------------------------------|---------------|
| 627-9510 | 0 | SF | 50.00 | Retaining Wall - MSE - 0-10 ft. Ht. | 0.00 |
| 627-9520 | 0 | SF | 53.00 | Retaining Wall - MSE - 10-20 ft. Ht. | 0.00 |
| 627-9530 | 0 | SF | 55.00 | Retaining Wall - MSE - 20-30 ft. Ht. | 0.00 |
| 627-9540 | 0 | SF | 65.00 | Retaining Wall - MSE - 30-40 ft. Ht. | 0.00 |
| Section Sub Total: | | | | | \$0.00 |

Section BOX CULVERTS

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|---------------------------|-----------------------|
| 207-0203 | 789 | CY | 56.68 | FOUND BK FILL MATL, TP II | 44720.52 |
| 500-3101 | 1567 | CY | 600.77 | CLASS A CONCRETE | 941406.59 |
| 511-1000 | 157762 | LB | 0.94 | BAR REINF STEEL | 148296.28 |
| Section Sub Total: | | | | | \$1,134,423.39 |

Section DRAINAGE

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|---------------------------------------|---------------------|
| 500-3800 | 11 | CY | 764.37 | CLASS A CONCRETE, INCL REINF STEEL | 8408.07 |
| 550-1180 | 2585 | LF | 45.96 | STORM DRAIN PIPE, 18 IN, H 1-10 | 118806.60 |
| 550-1240 | 792 | LF | 54.17 | STORM DRAIN PIPE, 24 IN, H 1-10 | 42902.64 |
| 550-1360 | 220 | LF | 86.79 | STORM DRAIN PIPE, 36 IN, H 1-10 | 19093.80 |
| 550-1480 | 220 | LF | 127.33 | STORM DRAIN PIPE, 48 IN, H 1-10 | 28012.60 |
| 550-1600 | 0 | LF | 181.88 | STORM DRAIN PIPE, 60 IN, H 1-10 | 0.00 |
| 550-1720 | 0 | LF | 300.00 | STORM DRAIN PIPE, 72 IN, H 1-10 | 0.00 |
| 550-4218 | 20 | EA | 672.20 | FLARED END SECTION 18 IN, STORM DRAIN | 13444.00 |
| 550-4224 | 8 | EA | 781.26 | FLARED END SECTION 24 IN, STORM DRAIN | 6250.08 |
| 550-4236 | 5 | EA | 1252.70 | FLARED END SECTION 36 IN, STORM DRAIN | 6263.50 |
| 573-2006 | 11000 | LF | 19.32 | UNDDR PIPE INCL DRAINAGE AGGR, 6 IN | 212520.00 |
| 615-1000 | 0 | LF | 428.25 | JACK OR BORE PIPE - | 0.00 |
| 668-1100 | 0 | EA | 2784.43 | CATCH BASIN, GP 1 | 0.00 |
| 668-1110 | 0 | LF | 285.46 | CATCH BASIN, GP 1, ADDL DEPTH | 0.00 |
| 668-2105 | 22 | EA | 2851.74 | DROP INLET, GP 1, SPCL DES | 62738.28 |
| 668-2110 | 44 | LF | 353.03 | DROP INLET, GP 1, ADDL DEPTH | 15533.32 |
| Section Sub Total: | | | | | \$533,972.89 |

Section PERMANENT EROSION CONTROL & GRASSING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|--------------------------------------|-----------------------|
| 163-0240 | 213 | TN | 161.07 | MULCH | 34307.91 |
| 441-0204 | 11136 | SY | 34.02 | PLAIN CONC DITCH PAVING, 4 IN | 378846.72 |
| 576-1010 | 1344 | LF | 12.68 | SLOPE DRAIN PIPE, 10 IN | 17041.92 |
| 576-1018 | 888 | LF | 33.79 | SLOPE DRAIN PIPE, 18 IN | 30005.52 |
| 603-2024 | 0 | SY | 54.20 | STN DUMPED RIP RAP, TP 1, 24 IN | 0.00 |
| 603-2182 | 5256 | SY | 61.02 | STN DUMPED RIP RAP, TP 3, 24 IN | 320721.12 |
| 603-7000 | 5256 | SY | 4.71 | PLASTIC FILTER FABRIC | 24755.76 |
| 700-6910 | 71 | AC | 1023.43 | PERMANENT GRASSING | 72663.53 |
| 700-7000 | 213 | TN | 59.64 | AGRICULTURAL LIME | 12703.32 |
| 700-7010 | 177 | GL | 22.32 | LIQUID LIME | 3950.64 |
| 700-8000 | 43 | TN | 292.83 | FERTILIZER MIXED GRADE | 12591.69 |
| 700-8100 | 3540 | LB | 2.31 | FERTILIZER NITROGEN CONTENT | 8177.40 |
| 700-9300 | 0 | SY | 5.47 | SOD | 0.00 |
| 710-9000 | 22587 | SY | 4.38 | PERMANENT SOIL REINFORCING MAT | 98931.06 |
| 715-2200 | 35600 | SY | 2.46 | BITUMINOUS TREATED ROVING, WATERWAYS | 87576.00 |
| 716-2000 | 87720 | SY | 1.20 | EROSION CONTROL MATS, SLOPES | 105264.00 |
| Section Sub Total: | | | | | \$1,207,536.59 |

Section REMOVAL

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|-------------|----------|-------|------------|----------------------------------|------|
| 540-1101 | 0 | EA | 150000.00 | REMOVAL OF EXISTING BR, STA NO - | 0.00 |
| 609-1000 | 0 | SY | 20.00 | REMOVE ROADWAY SLAB | 0.00 |
| 610-0714 | 0 | SY | 25.00 | REM CONC MEDIAN | 0.00 |
| 610-0716 | 0 | LF | 60.00 | REM CONC MEDIAN BARRIER | 0.00 |
| 610-1055 | 0 | LF | 1.50 | REM GUARDRAIL | 0.00 |
| 610-1075 | 0 | EA | 400.00 | REM GUARDRAIL ANCH, ALL TYPES | 0.00 |
| 610-2700 | 0 | SY | 5.00 | REM CONCRETE | 0.00 |
| 610-2705 | 0 | SY | 50.00 | REM CONC APPROACH SLAB | 0.00 |

| | | | | | |
|---------------------------|---|----|----------|--|--------------------|
| 610-6510 | 0 | EA | 1000.00 | REM HWY SIGN, OVHD | 0.00 |
| 610-9005 | 0 | EA | 30000.00 | REM PORTIONS OF EXISTING RETAINING WALL - | 0.00 |
| 610-9007 | 0 | EA | 50000.00 | REM PORTIONS OF EXISTING CLVT, CONC, STA - | 0.00 |
| 610-9099 | 5 | EA | 10000.00 | REM WINGWALLS & PARAPETS, STA - | 50000.00 |
| 610-9310 | 0 | EA | 5000.00 | REM STR SUPPORT, TP - | 0.00 |
| Section Sub Total: | | | | | \$50,000.00 |

Section PERMANENT CONCRETE BARRIER

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|------------------------------------|---------------|
| 621-3125 | 0 | LF | 354.99 | CONCRETE BARRIER, TP 25S, MODIFIED | 0.00 |
| 621-3126 | 0 | LF | 359.18 | CONCRETE BARRIER, TYPE 26S | 0.00 |
| 621-6001 | 0 | LF | 64.01 | CONCRETE BARRIER, TP S-1 | 0.00 |
| 621-6002 | 0 | LF | 74.87 | CONCRETE BARRIER, TP S-2 | 0.00 |
| 621-6003 | 0 | LF | 189.28 | CONCRETE BARRIER, TP S-3 | 0.00 |
| 621-6004 | 0 | LF | 300.00 | CONCRETE BARRIER, TP S-3A | 0.00 |
| 621-6005 | 0 | LF | 450.00 | CONCRETE BARRIER, TP S-3B | 0.00 |
| 621-6008 | 0 | LF | 165.63 | CONCRETE SIDE BARRIER, TP 7-CS | 0.00 |
| 621-6012 | 0 | LF | 81.91 | CONCRETE SIDE BARRIER, TP 7-RS | 0.00 |
| 621-6013 | 0 | LF | 268.67 | CONCRETE SIDE BARRIER, TP 7-TS | 0.00 |
| 621-6201 | 0 | LF | 600.00 | CONCRETE SIDE BARRIER, TP 2-SA | 0.00 |
| 621-6202 | 0 | LF | 507.64 | CONCRETE SIDE BARRIER, TP 2-SB | 0.00 |
| 621-6203 | 0 | LF | 714.78 | CONCRETE SIDE BARRIER, TP 2-SC | 0.00 |
| 621-6204 | 0 | LF | 2300.00 | CONCRETE SIDE BARRIER, TP 2-SD | 0.00 |
| 621-6205 | 0 | LF | 3000.00 | CONCRETE SIDE BARRIER, TP 2-SE | 0.00 |
| 621-6210 | 0 | LF | 200.00 | CONCRETE SIDE BARRIER, TP 6-S | 0.00 |
| 621-6211 | 0 | LF | 600.00 | CONCRETE SIDE BARRIER, TP 6-SA | 0.00 |
| 621-6212 | 0 | LF | 1200.00 | CONCRETE SIDE BARRIER, TP 6-SB | 0.00 |
| 621-6213 | 0 | LF | 1700.00 | CONCRETE SIDE BARRIER, TP 6-SC | 0.00 |
| Section Sub Total: | | | | | \$0.00 |

Section SOUND BARRIERS

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|---------|------------|--------------------------------|---------------------|
| 621-6012 | 0 | LF | 81.91 | CONCRETE SIDE BARRIER, TP 7-RS | 0.00 |
| 624-0410 | 36000 | 624-041 | 25.00 | SOUND BARRIER | 900000.00 |
| Section Sub Total: | | | | | \$900,000.00 |

Section SIGNING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|--|---------------------|
| 636-1020 | 625 | SF | 15.19 | HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3 | 9493.75 |
| 636-1029 | 155 | SF | 15.83 | HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3 | 2453.65 |
| 636-1033 | 758 | SF | 19.64 | HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9 | 14887.12 |
| 636-1041 | 76 | SF | 36.76 | HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9 | 2793.76 |
| 636-1072 | 0 | SF | 20.51 | HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 3 | 0.00 |
| 636-2070 | 2306 | LF | 8.27 | GALV STEEL POSTS, TP 7 | 19070.62 |
| 636-2080 | 1016 | LF | 10.87 | GALV STEEL POSTS, TP 8 | 11043.92 |
| 638-1001 | 0 | EA | 81504.94 | STR SUPPORT FOR OVERHEAD SIGN, TP I, STA - | 0.00 |
| 639-2002 | 420 | LF | 3.30 | STEEL WIRE STRAND CABLE, 3/8 IN | 1386.00 |
| 639-3004 | 6 | EA | 10933.87 | STEEL STRAIN POLE, TP IV | 65603.22 |
| Section Sub Total: | | | | | \$126,732.04 |

Section GUARDRAIL

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|-------------|----------|-------|------------|--|----------|
| 402-3110 | 133 | TN | 75.00 | RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 9975.00 |
| 402-3190 | 213 | TN | 75.00 | RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM | 15975.00 |

| | | | | | |
|---------------------------|------|----|---------|---|---------------------|
| 436-1000 | 1080 | LF | 9.13 | ASPHALTIC CONCRETE CURB - | 9860.40 |
| 641-1100 | 360 | LF | 46.34 | GUARDRAIL, TP T | 16682.40 |
| 641-1200 | 1800 | LF | 16.93 | GUARDRAIL, TP W | 30474.00 |
| 641-2200 | 0 | LF | 24.32 | DBL FACED GUARDRAIL, TP W | 0.00 |
| 641-5001 | 10 | EA | 634.44 | GUARDRAIL ANCHORAGE, TP 1 | 6344.40 |
| 641-5012 | 15 | EA | 1801.20 | GUARDRAIL ANCHORAGE, TP 12 | 27018.00 |
| 642-0100 | 0 | LF | 24.79 | CABLE BARRIER | 0.00 |
| 642-0300 | 0 | EA | 2950.00 | CABLE TERMINAL (NCHRP 350 TL-3 COMPLIANT) | 0.00 |
| Section Sub Total: | | | | | \$116,329.20 |

Section FENCING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|------------------------------------|---------------|
| 643-0010 | 0 | LF | 4.96 | FIELD FENCE WOVEN WIRE | 0.00 |
| 643-0105 | 0 | LF | 4.60 | FIELD FENCE BARBED WIRE, 5 STRANDS | 0.00 |
| 643-1171 | 0 | LF | 12.70 | CH LK FENCE, ZC COAT, 8 FT, 9 GA | 0.00 |
| 643-8000 | 0 | EA | 536.11 | GATE, FIELD FENCE - | 0.00 |
| 643-8010 | 0 | EA | 657.36 | GATE, CHAIN LINK ZC COAT - | 0.00 |
| Section Sub Total: | | | | | \$0.00 |

Section TRAFFIC SIGNALS

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|--|---------------------|
| 647-1001 | 2 | EA | 100000.00 | TRAFFIC SIGNAL INSTALLATION NO - Complete - Major Intersection | 200000.00 |
| 647-1002 | 1 | EA | 80000.00 | TRAFFIC SIGNAL INSTALLATION NO - Complete - Minor Intersection | 80000.00 |
| 647-1003 | 0 | EA | 60000.00 | TRAFFIC SIGNAL INSTALLATION NO - Complete - Upgrade Existing | 0.00 |
| 647-1050 | 2000 | LF | 20.00 | TRAFFIC SIGNAL Communications Cable | 40000.00 |
| Section Sub Total: | | | | | \$320,000.00 |

Section MARKING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|---|---------------------|
| 653-0120 | 288 | EA | 73.54 | THERMOPLASTIC PVMT MARKING, ARROW, TP 2 | 21179.52 |
| 653-1501 | 66240 | LF | 0.68 | THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE | 45043.20 |
| 653-1502 | 65895 | LF | 0.62 | THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW | 40854.90 |
| 653-1704 | 1268 | LF | 4.53 | THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE | 5744.04 |
| 653-1804 | 12365 | LF | 2.08 | THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE | 25719.20 |
| 653-3501 | 33840 | GLF | 0.51 | THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE | 17258.40 |
| 653-3502 | 0 | GLF | 0.39 | THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW | 0.00 |
| 653-6004 | 780 | SY | 2.85 | THERMOPLASTIC TRAF STRIPING, WHITE | 2223.00 |
| 653-6006 | 1968 | SY | 3.19 | THERMOPLASTIC TRAF STRIPING, YELLOW | 6277.92 |
| 654-1001 | 330 | EA | 3.14 | RAISED PVMT MARKERS TP 1 | 1036.20 |
| 654-1003 | 1917 | EA | 3.68 | RAISED PVMT MARKERS TP 3 | 7054.56 |
| Section Sub Total: | | | | | \$172,390.94 |

Section SANITARY SEWER

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|-------------|----------|-------|------------|---|------|
| 660-0008 | 0 | LF | 51.07 | SAN SEWER PIPE, 8 IN, PVC | 0.00 |
| 660-0012 | 0 | LF | 0 | SAN SEWER PIPE, 12 IN, PVC | 0.00 |
| 660-0808 | 0 | LF | 97.06 | SAN SEWER PIPE, 8 IN, DUCTILE IRON | 0.00 |
| 660-0812 | 0 | LF | 82.05 | SAN SEWER PIPE, 12 IN, DUCTILE IRON | 0.00 |
| 660-0816 | 0 | LF | 225.50 | SAN SEWER PIPE, 16 IN, DUCTILE IRON | 0.00 |
| 660-0824 | 0 | LF | 115.00 | SAN SEWER PIPE, 24 IN, DUCTILE IRON | 0.00 |
| 668-3300 | 0 | EA | 4210.00 | SAN SEWER MANHOLE, TP 1 | 0.00 |
| 668-3311 | 0 | LF | 339.73 | SAN SEWER MANHOLE, TP 1, ADDL DEPTH, CL 1 | 0.00 |

Section Sub Total: \$0.00

Section WATER DISTRIBUTION

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|--|---------------|
| 670-1080 | 0 | LF | 71.44 | WATER MAIN, 8 IN | 0.00 |
| 670-1120 | 0 | LF | 48.54 | WATER MAIN, 12 IN | 0.00 |
| 670-1160 | 0 | LF | 69.08 | WATER MAIN, 16 IN | 0.00 |
| 670-2080 | 0 | EA | 1192.19 | GATE VALVE, 8 IN | 0.00 |
| 670-2120 | 0 | EA | 2212.18 | GATE VALVE, 12 IN | 0.00 |
| 670-2160 | 0 | EA | 5242.86 | GATE VALVE, 16 IN | 0.00 |
| 670-3087 | 0 | EA | 4930.21 | TAPPING SLEEVE & VALVE ASSEMBLY, 8 IN X 8 IN | 0.00 |
| 670-3129 | 0 | EA | 7643.61 | TAPPING SLEEVE & VALVE ASSEMBLY, 12 IN X 12 IN | 0.00 |
| 670-3170 | 0 | EA | 19133.33 | TAPPING SLEEVE & VALVE ASSEMBLY, 16 IN X 16 IN | 0.00 |
| 670-4000 | 0 | EA | 3446.20 | FIRE HYDRANT | 0.00 |
| 670-5010 | 0 | LF | 34.05 | WATER SERVICE LINE, 1 IN | 0.00 |
| 670-7000 | 0 | LF | 213.67 | STEEL CASING - | 0.00 |
| 670-8112 | 0 | EA | 471.50 | DBL STRAP SADDLE, 12 IN X 1 IN | 0.00 |
| 670-8320 | 0 | EA | 221.40 | DBL STRAP SADDLE, 8 IN X 1 IN | 0.00 |
| 670-8440 | 0 | EA | 0 | DBL STRAP SADDLE, 16 IN X 1 IN | 0.00 |
| 670-9710 | 0 | EA | 3028.57 | RELOCATE EXIST FIRE HYDRANT | 0.00 |
| 670-9720 | 0 | EA | 725.61 | RELOCATE EXIST WATER VALVE, INCL BOX | 0.00 |
| 670-9730 | 0 | EA | 2265.78 | RELOCATE EXIST WATER METER, INCL BOX | 0.00 |
| Section Sub Total: | | | | | \$0.00 |

Section LIGHTING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|---|---------------------|
| 681-0001 | 1 | MI | 270000.00 | Street Lighting Complete | 270000.00 |
| 681-1365 | 0 | EA | 4200.00 | LIGHTING STD, ALUM, 37 FT MH, 8.5 FT ARM | 0.00 |
| 681-6364 | 0 | EA | 932.59 | LUMINAIRE, TP 3, 400 W, METAL HALIDE | 0.00 |
| 682-1406 | 0 | LF | 1.48 | CABLE, TP XHHW, AWG NO 6 | 0.00 |
| 682-1408 | 0 | LF | 2.84 | CABLE, TP XHHW, AWG NO 2 | 0.00 |
| 682-6120 | 0 | LF | 15.26 | CONDUIT, RIGID, 2 IN | 0.00 |
| 682-6222 | 0 | LF | 10.14 | CONDUIT, NONMETL, TP 2, 2 IN | 0.00 |
| 682-9010 | 0 | EA | 2139.97 | SVC POLE RISER | 0.00 |
| 682-9021 | 0 | EA | 1879.05 | ELECTRICAL JUNCTION BOX, CONC GROUND MOUNTED | 0.00 |
| 683-0001 | 1 | EA | 500000.00 | Interchange Lighting Complete | 500000.00 |
| 683-1121 | 0 | EA | 26907.16 | LIGHTING TOWER, STEEL, 120 FT MH, INCL LOWERING EQUIP | 0.00 |
| 683-6586 | 0 | EA | 735.44 | HIGH LEVEL LUMINAIRE, TP 5, 1000 W, HP SODIUM | 0.00 |
| Section Sub Total: | | | | | \$770,000.00 |

Section LANDSCAPING

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|-------------|----------|-------------|------------|--|-----------|
| 702-0001 | 2 | MI | 200000.00 | Landscaping Complete | 400000.00 |
| 702-0030 | 0 | EA | 550.00 | ACER RUBRUM - 5 GAL Red Maple | 0.00 |
| 702-0140 | 0 | EA | 500.00 | CERCIS CANADENSIS - 1-1.5 IN. Eastern Redbud | 0.00 |
| 702-0159 | 0 | EA | 400.00 | CHIONANTHUS VIRGINICUS - 1-1.5 IN. Fringe Tree | 0.00 |
| 702-0280 | 0 | EA | 40.00 | GARDENIA JASMINOIDES - 3 GAL Dwarf Gardenia | 0.00 |
| 702-0472 | 0 | EA | 200.00 | ILEX X ATTENUATA - 1-1.5 IN. Savannah Holly | 0.00 |
| 702-0507 | 0 | EA | 15.00 | JUNIPERUS HORIZONTALIS - 1 GAL Creeping Juniper | 0.00 |
| 702-0542 | 0 | EA | 320.00 | LAGERSTROEMIA INDICA - 3 GAL Crape Myrtle | 0.00 |
| 702-0559 | 0 | EA | 20.00 | LIRIOPE MUSCARI - 1 GAL Border Grass | 0.00 |
| 702-0636 | 0 | EA | 200.00 | MAGNOLIA SOULANGIANA - 1-1.5 IN. Saucer Magnolia | 0.00 |
| 702-0795 | 0 | Unavailable | 20.00 | PITTIOSPORUM TOBIRA - 3 GAL Dwarf | 0.00 |

| | | | | | |
|---------------------------|---|-------------|---------|--|---------------------|
| | | | | Pittosporum | |
| 702-0910 | 0 | Unavailable | 4000.00 | QUERCUS VIRGINIANA - 6 IN. Live Oak | 0.00 |
| 702-0977 | 0 | EA | 50.00 | RHAPHIOLEPIS INDICA - 3 GAL Indian Hawthorne | 0.00 |
| 702-9005 | 0 | LB | 0.22 | SPRING APPLICATION FERTILIZER | 0.00 |
| 702-9020 | 0 | SY | 3.62 | MULCH | 0.00 |
| 708-1000 | 0 | CY | 42.00 | PLANT TOPSOIL | 0.00 |
| Section Sub Total: | | | | | \$400,000.00 |

| Section ATMS | | | | | |
|---------------------------|-----------------|--------------|-------------------|--|---------------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 935-0001 | 0 | MI | 200000.00 | ATMS - Conduit Bank Complete | 0.00 |
| 935-0002 | 0 | MI | 250000.00 | ATMS - Fiber Complete | 0.00 |
| 935-0003 | 0 | MI | 400000.00 | ATMS - Cameras, Detectors, etc. Complete | 0.00 |
| 935-0004 | 0 | EA | 130000.00 | ATMS - Changeable Message Signs | 0.00 |
| Section Sub Total: | | | | | \$0.00 |

Total Estimated Cost: \$20,803,092.03

| | | |
|-----------------------------------|--|------------------------|
| Subtotal Construction Cost | | \$20,803,092.03 |
| E&C Rate 10 % | | \$2,080,309.20 |
| Inflation Rate 0.0 % @ 0.0 Years | | \$0.00 |
| <hr/> | | |
| Total Construction Cost | | \$22,883,401.23 |
| Right Of Way | | \$14,140,157.00 |
| ReImb. Utilities | | \$0.00 |
| <hr/> | | |
| Grand Total Project Cost | | \$37,023,558.23 |

REVISED CONCEPT REPORT RIGHT OF WAY

COST ESTIMATE

Date: September 26, 2007
Project: STP-0007-00(259) **P.I. Number:** 0007259
Existing/Required R/W: US80/Jimmy DeLoach Parkway Interchange **No. Parcels:** 57
Project Termini: ± 150' to New Location / ± 220' to ± 1,200'
Project Description: North of Perry Road to south of Cregor Street
Interchange creation where existing Jimmy DeLoach Parkway meets north side of US Highway 80 and where the future Jimmy DeLoach Parkway Phase II will meet the south side of US Highway 80. The acquisition areas will absorb various local surface road rights of way including a long run of Osteen Road.

Land:

(Residential-Lots): Generally \$50,000/AC

(Rural Residential-Small to Medium Acreage): Generally \$12,000/AC

(Large Acreage Tracts): Generally \$20,000/AC or \$30,000/AC (varies with proximity to US80)

(Commercial Sites): Generally \$175,000/AC

(Note: area & unit value calculations are on the spreadsheet)

TOTAL: \$3,022,900

Improvements:

Buildings: \$655,000

Minor site improvements (not significant): \$ 0

TOTAL: \$ 655,000

Relocation:

Commercial- 1 Displacee \$ 40,000

Residential- 12 Displacees \$180,000

TOTAL: \$ 220,000

Damages:

| | |
|-------------------------|------------------|
| Proximity- 1 Parcel | \$ 50,000 |
| Consequential-2 Parcels | <u>\$ 34,000</u> |

TOTAL: \$ 84,000

| | |
|---|---------------------|
| Net Cost: | \$ 3,981,900 |
| Plus Scheduling Contingency (55%): | \$ 2,190,045 |
| Plus Admin./Court Cost (60% of 2 lines above): | \$ 3,703,167 |
| Plus Factor <i>Mkt. Appres.</i> Factor (40% of 3 lines above): | <u>\$ 3,950,045</u> |
| | \$13,825,157 |

TOTAL COST: \$13,826,000 (R)

Notes: There is 1 commercial displacee (NE-01) based on the plans furnished to the appraiser. There are 12 residential relocations with the majority coming from the southeast and southwest quadrants. The relocation costs were estimated at \$15,000 each for residential displacees and \$40,000 estimated for the one commercial business. These figures include estimated relocation benefits and moving costs.

55% adjustment for scheduling contingencies between date of estimate and project implementation. There are additional adjustments for unforeseen management and condemnation costs as well as for inflation.

The appraiser has retained a work file with notes outlining unusual zoning or assessment issues, unusual geographical features, valuation issues, damage considerations, etc.

Prepared by: *[Signature]*, Moreland Altobelli Associates
Approved by: *[Signature]*, GDOT RW

**SUPPORTING SALES –
US80/JIMMY DELOACH PARKWAY INTERCHANGE**

Residential-Lots (2 acres or less)

| <u>No.</u> | <u>Date</u> | <u>PIN</u> | <u>Size</u> | <u>Price/AC</u> | <u>Comments</u> |
|------------|-------------|------------|-------------|-----------------|-------------------|
| 1 | 12-22-05 | 8-10G-2-7 | 0.55 AC | \$69,091 | Conaway Road lot |
| 2 | 1-13-06 | 8-10G-3-4 | 0.48 AC | \$72,917 | 101 Conaway Road |
| 3 | 3-28-06 | 8-10B-1-5 | 0.677 AC | \$51,699 | 14 Osteen Road |
| 4 | 1-27-03 | 8-10J-1-5 | 0.48 AC | \$41,667 | 212 Oak Street |
| 5 | 1-27-03 | 8-10L-4-9 | 0.54 AC | \$33,333 | Pine Street lot |
| 6 | 9-26-05 | 8-10D-10-2 | 0.47 AC | \$53,191 | E/s Cherry Street |

Sales No. 1 and 2 are older lots previously developed with improvements that were removed to allow newer development.

Sale No. 3 was zoned commercial but was located far enough off of US80 to make commercial use unlikely. It has had a small house developed on it since the date of sale. This sale is also a property with an acquisition along the project length.

Sales No. 4, 5 and 6 are lots within the more urban section of Bloomingdale south of US80 and east of Cherry Street.

These sales have a tighter value range of \$18,000 to \$38,000 when compared on a per lot basis. Most lots are estimated in this area at anywhere from \$20,000 to \$40,000 per lot. The range of the above sales is \$33,333 to \$72,917 if considered on a strictly per acre basis.

Acreage pricing distorts the single homesite value somewhat but is derived for use in partial taking calculations. This is in contrast with the earlier informal cost estimate but makes the GDOT format cost estimate more closely follow practice on other projects, including the Jimmy DeLoach Parkway Phase II Cost Estimate done earlier. A \$50,000 per acre unit value will be used for estimating purposes in this cost estimate for smaller residential lots.

Residential-Small to Medium Acreage (typically 2 to 10 acres)

| <u>No.</u> | <u>Date</u> | <u>PIN</u> | <u>Size</u> | <u>Price/AC</u> | <u>Comments</u> |
|------------|-------------|----------------------|-------------|-----------------|-------------------|
| 1 | 6-5-03 | 8-1043-3-9 | 5.005 AC | \$9,990 | 80 Cheyenne Road |
| 2 | 1-6-05 | 8-1019-1-19 | 5.0 AC | \$7,200 | Towles Road site |
| 3 | 5-24-05 | 8-1019-1-53 | 5.0 AC | \$7,300 | Towles Road site |
| 4 | 3-14-02 | 8-10N-3-2, 8-10N-6-1 | 7.52 AC | \$10,505 | 211 Walnut Street |
| 5 | 12-10-02 | 8-10B-1-7 | 6.05 AC | \$9,917 | Osteen Road site |

Sale No. 1 is a rural acreage lot sale just north of US80 and west of Jimmy DeLoach Parkway. The buyer is involved in a dispute with his neighbors over access via the flag-stems extending to US80 (Cheyenne Road).

Sales No. 2 and 3 are rural residential acreage sites located off of Jimmy DeLoach Parkway in a zone that features many mobile homes.

Sale No. 4 featured an old salvage residence without value. It was bought as a speculative holding.

Sale No. 5 is Project Parcel SE-11 on the aerial photo plans. It was zoned R-A at the time of sale but has since been rezoned to multi-family status.

The per acre range is \$7,200 to \$10,505 with \$12,000 per acre selected as the unit value for this property type. The appraiser went slightly above the indicated range for purposes of the cost estimate due to the relatively older dates of sale as well as due to the more speculative nature of small residential sites in closer proximity to the US Highway 80 corridor.

This value range is for "rural" small acreage lots that are most typical of the area from Interstate 16 northward to Chinaberry Street (Main Street). Values are higher north of Chinaberry Street extending northward toward US80 as the area becomes less rural with lots that are more defined. There is also more potential for multi-family development in this zone. Some speculative commercial appeal develops as one moves quite close to US80.

Larger Acreage Tracts

| <u>No.</u> | <u>Date</u> | <u>PIN</u> | <u>Size</u> | <u>Price/AC</u> | <u>Comments</u> |
|------------|-------------|-----------------|-------------|-----------------|-------------------------|
| 1 | 2-10-04 | 8-5-1-6 | 10.93 AC | \$22,873 | Highway 80 tract |
| 2 | 5-19-05 | 8-1042-2-3 | 88.45 AC | \$22,612 | Highway 80 tract |
| 3 | 7-23-04 | 5-1023-1-1 | 144.93 AC | \$18,497 | Pine Barren Road tract |
| 4 | 12-15-05 | 8-1019-1-15 | 154.11 AC | \$11,998 | J. DeLoach Pkwy tract |
| 5 | 8-16-02 | 5-987-7-6 | 114.15 AC | \$31,500 | Pooler US80 tract |
| 6 | 2-10-05 | 2-985-4-63 | 16.621 AC | \$32,074 | 232 Bourne Boulevard |
| 7 | 8-30-05 | 6-918-1-1, 2... | 97.9 AC | \$33,202 | E/s SR307 (Dean Forest) |
| 8 | 7-7-06 | 8-3-1-6, 6D... | 44.45 AC | \$29,246 | Highway 80 tract |

Sale No. 1 has poor shape and appears somewhat low but is located on US80 close to the proposed future Jimmy DeLoach Parkway Interchange.

Sale No. 2 appears somewhat low but is located at the approximate proposed future interchange of US80 and Jimmy DeLoach Parkway, giving it some speculative appeal.

Sale No. 3 is a large residential acreage tract in Pooler with Somersby Subdivision currently under construction.

Sale No. 4 is a tract at one of the crossroad/median openings along Jimmy DeLoach Parkway. It is adjacent to the tract currently under development with The Farm at Morgan Lakes Subdivision.

Sale No. 5 was a large tract sale with extensive Highway 80 frontage in Pooler close to the Interstate 95 interchange and to SPA Industrial Park. It is currently under development with industrial and commercial sites (Westside Business Park).

Sale No. 6 is an industrial site within the SPA Industrial Park. It features some wetlands.

Sale No. 7 is industrial and features a fair bit of wetlands (high ground pricing was \$50,000/acre according to the buyer).

Sale No. 8 is a recent tract sale within Bloomingdale and extending from US80 to Pipemakers Canal. It is zoned for residential use at present.

The per acre range is \$11,998 to \$33,202 with tracts with industrial appeal tending to be at the upper end of the value range. Considering the relative ease of rezoning in Bloomingdale and recent market trends, \$30,000 per acre is selected as the unit value for this property type where properties have immediate US80 frontage or value influence. Properties without direct US80 frontage or influence are estimated at a lower rate of \$20,000 per acre.

Note that these are both higher than the acre prices utilized for smaller rural acreage tracts. This appears to run counter to economy of scale theory, but large contiguous tracts with adequate exposure and access are becoming increasingly rare in this area. The pricing differential will likely make owners less and less willing to subdivide large tracts into 2 to 10 acre sites. By subdividing all the way down into "residential lots" under two acres, typical pricing efficiencies are regained and subdivision makes sense.

Commercial Sites (typically 5 acres or less)

| <u>No.</u> | <u>Date</u> | <u>PIN</u> | <u>Size</u> | <u>Price/AC</u> | <u>Comments</u> |
|------------|-------------|------------------|-------------|-----------------|--------------------------|
| 1 | 5-1-06 | 5-16-2-10 | 0.816 AC | \$566,176 | US80 near Pooler Pkwy |
| 2 | 10-13-03 | 8-3-1-36 | 1.09 AC | \$136,697 | 502 E. Highway 80 |
| 3 | 12-8-06 | 8-10E-1-7B | 1.24 AC | \$189,516 | Highway 80 site |
| 4 | 8-24-05 | 5-22-1-2 (split) | 1.603 AC | \$266,157 | US80 site close to I-95 |
| 5 | 3-28-02 | 5-5-16-4, 3 | 2.15 AC | \$183,721 | Highway 80 site |
| 6 | 2-1-06 | 5-4A-1-25 | 2.53 AC | \$148,221 | Highway 80 site |
| 7 | 4-27-07 | 8-11-2-11 | 2.6 AC | \$134,615 | Highway 80 site |
| 8 | 9-10-04 | 5-987-2-2C | 7.84 AC | \$121,173* | US80 site near D. Forest |
| 9 | 10-28-05 | 6-924A-2-14, 17 | 10.9 AC | \$40,367 | 4912 Old Louisville Rd. |
| 10 | 4-29-05 | 5-22-1-2 | 16.22 | \$98,644 | US80 site close to I-95 |

Sale No. 1 is now developed with an Autozone store. It is in a growing commercial zone close to Pooler Parkway.

Sale No. 2 is developed with Douglas Plaza, a retail strip center. The sale was via two concurrent transactions from separate owners. The strip center has recently resold as an improved investment property.

Sale No. 3 is a recent resale of a vacant site on the north side of US80 and in front of Magnolia Lane Apartments in Bloomingdale. It sold in December 2004 for \$141,129 per acre.

Sale No. 4 is now a retail strip center adjacent to Spanky's in a relatively new business park.

Sale No. 5 is now "Fortune Plaza", a retail strip center on the south side of US80 in Pooler, just west of the Interstate 95 interchange.

Sale No. 6 is now an Advance Auto Parts store located slightly west of the Pooler Parkway Interchange.

Sale No. 7 was improved with a small old house without value but was already zoned commercial. This is a site on the north side of US80 slightly west of Sangrena Drive.

Sale No. 8 is an industrial/commercial mixed use condominium project on the low-intensity stretch of US80 between Dean Forest Road and the more developed area to the west as one approaches Interstate 95. It is marked with an asterisk as it was much less expensive until the site preparation costs are factored in to reach a total unit price if \$121,173/acre.

Sale No. 9 is a large commercially zoned site just off of Dean Forest Road on Old Louisville Road.

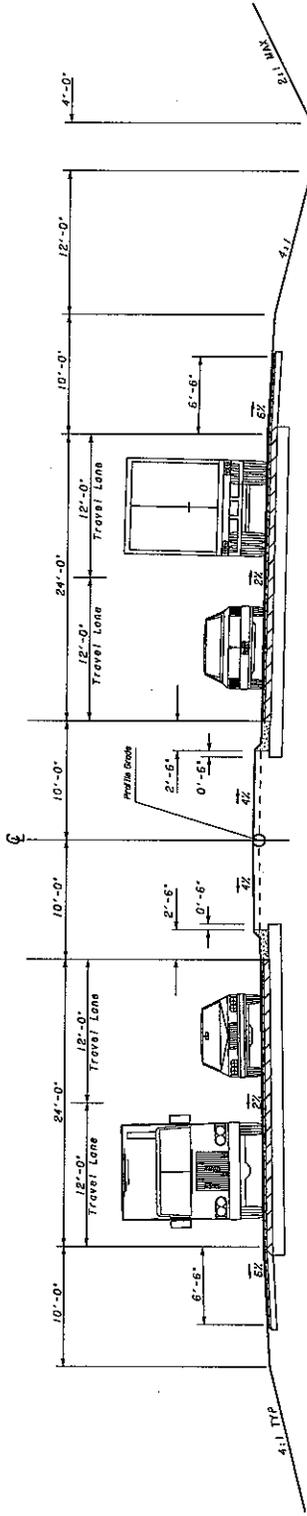
Sale No. 10 was the sale of the larger commercial tract developed with the business park that features Spanky's, a retail strip center, etc. It is located just east of the I-95 interchange.

The range per acre is \$40,367 to \$566,176. Dropping the top and bottom outliers yields a range of \$98,644 to \$266,157. Most emphasis is placed on Sales 2, 3 and 7 as they are within the city limits of Bloomingdale and are less than 5 acres in size. **\$175,000** per acre will be utilized for most typical commercial properties. This may slightly understate potential values along US80 and slightly overstate potential values for those properties without good US80 frontage and exposure but is a good overall estimate for this property type.

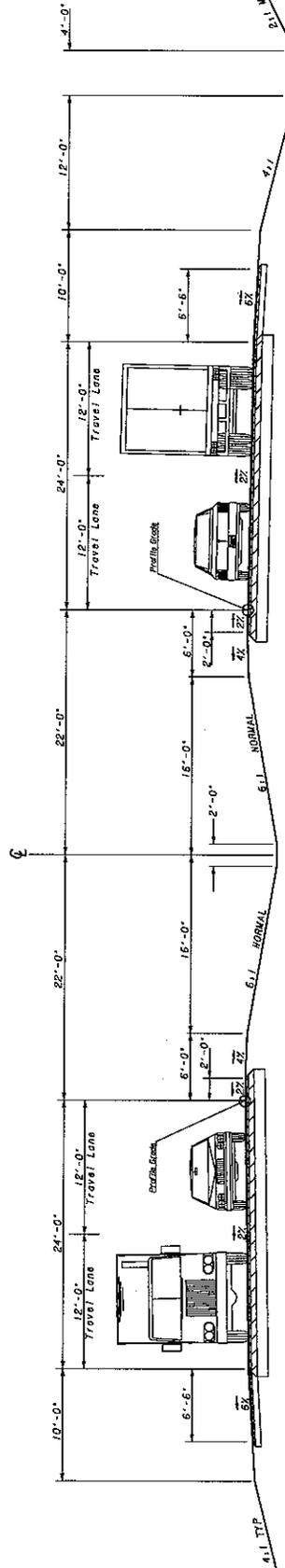
RIGHT OF WAY COST ESTIMATE
FOR CONCEPT REPORT
S/P4001-04(04)50, P.L.No. 007285, Chatham County
US 84Jimmie DeLoach Parkway Interchange

Alternate A2 - Locally Preferred Alternative

| Project Parcel No. | Tax PIN | Owner Name | Res/Comm/Other | Current | | Calculated Total Acreage | Partial Take Land Value per Acre | Total Improvement Value | Relocation Cost | Property | Displacements | | | | Other Costs | | | TOTAL R/W COSTS |
|-----------------------|----------------|--|----------------|-------------------------|---------------------|--------------------------------|--|-------------------------------|--------------------|----------|---------------------|--------------------|----------------------|-------------------------------|-------------|-----------|------------------------|--------------------|
| | | | | Partial Take Acreage | Total Land Value | | | | | | Improvement Cost | Relocation Cost | Other Damage Cost | Total Displacement Cost | Scheduling | Admin | Market Appreciation | |
| NORTHBOUND | | | | | | | | | | | | | | | | | | |
| NE-01 | 8-0005-01-001A | SMITH & LAND IMPROVEMENT | Comm | 3.5 | 175,000 | 612,500 | 130,000 | 40,000 | 120,000 | 85,000 | 220,000 | 84,000 | 255,000 | 1,024,110 | 1,748,586 | 1,885,158 | 4,667,854 | |
| NE-02 | 8-0005-01-001 | HARRICK LINDA HERRINGTON | Comm | 4.2 | 175,000 | 737,500 | 150,000 | 15,000 | 120,000 | 40,000 | 85,000 | 50,000 | 140,000 | 411,510 | 598,525 | 648,000 | 2,613,000 | |
| NE-03 | 8-0005-01-002 | PHILLIPS WILFRED R | Comm | 5.2 | 175,000 | 910,000 | 50,000 | 40,000 | 120,000 | 40,000 | 85,000 | 50,000 | 140,000 | 268,275 | 46,225 | 17,500 | 13,300 | |
| NE-04 | 8-0005-01-003 | TIPTON WAYNE E | Comm | 36.2 | 30,000 | 1,036,000 | n/a | 15,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 18,500 | 30,600 | 32,276 | 115,000 | |
| NE-05 | 8-0005-01-001 | HARRICK LINDA HERRINGTON | Other (PUD) | 0.3 | 5,000 | 1,500 | 50,000 | 15,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-06 | 8-1025-01-2533 | MORRIS A MURRAY & PAULA T | Res | 3.1 | 12,000 | 37,200 | 150,000 | 15,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 18,500 | 30,600 | 32,276 | 115,000 | |
| NE-07 | 8-1025-01-2534 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.1 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-08 | 8-1025-01-2535 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-09 | 8-1025-01-2536 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-10 | 8-1025-01-2537 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-11 | 8-1025-01-2538 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-12 | 8-1025-01-2539 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-13 | 8-1025-01-2540 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-14 | 8-1025-01-2541 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-15 | 8-1025-01-2542 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-16 | 8-1025-01-2543 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-17 | 8-1025-01-2544 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-18 | 8-1025-01-2545 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-19 | 8-1025-01-2546 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-20 | 8-1025-01-2547 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-21 | 8-1025-01-2548 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-22 | 8-1025-01-2549 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-23 | 8-1025-01-2550 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-24 | 8-1025-01-2551 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-25 | 8-1025-01-2552 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-26 | 8-1025-01-2553 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-27 | 8-1025-01-2554 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-28 | 8-1025-01-2555 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-29 | 8-1025-01-2556 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-30 | 8-1025-01-2557 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-31 | 8-1025-01-2558 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-32 | 8-1025-01-2559 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-33 | 8-1025-01-2560 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-34 | 8-1025-01-2561 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-35 | 8-1025-01-2562 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-36 | 8-1025-01-2563 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-37 | 8-1025-01-2564 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-38 | 8-1025-01-2565 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-39 | 8-1025-01-2566 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-40 | 8-1025-01-2567 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-41 | 8-1025-01-2568 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-42 | 8-1025-01-2569 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-43 | 8-1025-01-2570 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-44 | 8-1025-01-2571 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-45 | 8-1025-01-2572 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-46 | 8-1025-01-2573 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-47 | 8-1025-01-2574 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-48 | 8-1025-01-2575 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-49 | 8-1025-01-2576 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-50 | 8-1025-01-2577 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-51 | 8-1025-01-2578 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-52 | 8-1025-01-2579 | WILSON RICHARD D WAYNE & OTHER (ASSEMBLED) | Res | 0.2 | 12,000 | 8,400 | n/a | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 28,275 | 46,225 | 52,000 | 129,260 | |
| NE-53 | 8-1025-01-2580 | WILSON RICHARD D WAYNE & OTHER (AS | | | | | | | | | | | | | | | | |



**US 80
20' Raised Median**



**Jimmy DeLoach Parkway
44' Median**

**US 80/Jimmy DeLoach Parkway
Interchange**

CSSTP-0007-00(259)

CONCEPTUAL TYPICAL SECTIONS

**Chatham County
June 2007**



TRAFFIC ENGINEERING STUDY US 80 AND JIMMY DELOACH PARKWAY CHATHAM COUNTY

EXECUTIVE SUMMARY

The County of Chatham in Georgia has requested that the intersection of US 80 and Jimmy Deloach Parkway, located in Bloomingdale, Georgia, be evaluated to determine the future year by which grade separation would be necessary. In achieving this goal, Grice & Associates, Inc. has conducted a traffic engineering study for this location and the surrounding areas. Osteen Road at US 80, located about 350 feet east of Jimmy Deloach Parkway, was also analyzed for relocation/realignment feasibility. This project bears a Georgia Department of Transportation Project No. CSSTP-0007-00(259) and P.I. No. 0007259.

The study location of US 80 and Jimmy Deloach Parkway is a T-intersection. Jimmy Deloach Parkway is a four lane divided Urban Principal Arterial that traverses in the north-south direction with US 80 being its southern termini. US 80 is a two lane Urban Minor Arterial that traverses east to west. Jimmy Deloach Parkway has an existing (as of the year 2005) Average Daily Traffic (ADT) of approximately 4,000 vehicles per day (vpd), and US 80 has an existing ADT of about 17,000 vpd.

Based on comprehensive data collection and analysis of the CUTS "Existing + Committed" travel demand model, historical traffic volumes on US 80 and other roadways in the study area, development patterns reflected in the regional comprehensive plan and the extension of Jimmy Deloach Parkway to connect with I-16, it was predicted that US 80 will experience moderate continuous traffic growth through the future year 2030. During the same time period, Jimmy Deloach Parkway is expected to have higher traffic growth rates. Resulted traffic growth rates were used to forecast future traffic and conduct trip generation, trip distribution and traffic assignment. The predicted ADT of the future year 2030 is approximately 30,650 vpd on US 80, and 29,280 on Jimmy Deloach Parkway.

The existing and future capacity analysis for the study freeway, ramps, roadways and intersections are based on analytical procedures provided in the *Highway Capacity Manual (HCM), Special Report 209*. Synchro/SimTraffic software were used to conduct intersection and arterial analysis. HCS 2000 software was used to analyze operational conditions of basic freeway segments, ramp merges and diverges.

The analyses reveal that under existing conditions the stop-controlled approaches of the two study intersections operate at unacceptable Level of Service (LOS). For future conditions, at-grade intersection and interchange configurations for US 80 at Jimmy Deloach Parkway were studied to find out the best solution. Osteen Road is proposed to be relocated to the west of Jimmy Deloach Parkway and line up with Cheyenne Road.

After Jimmy Deloach Parkway is expanded south to connect with I-16, the new four-leg intersection of US 80 at Jimmy Deloach Parkway will start experiencing unacceptable LOS from the year 2025. A variety of other improvement alternatives without grade separation were developed and analyzed; however, none of them will be able to provide sufficient capacity and acceptable LOS for this intersection in 2030.



TRAFFIC ENGINEERING STUDY US 80 AND JIMMY DELOACH PARKWAY CHATHAM COUNTY

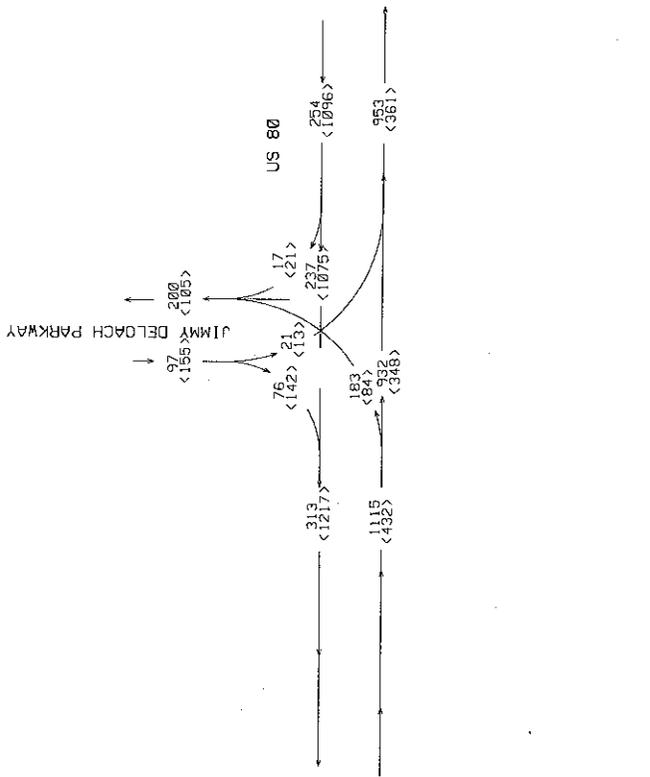
Two urban diamond interchange configurations, one with 500 feet ramp terminal spacing and the other with 1,000 feet ramp terminal spacing, were analyzed as an enhancement to the intersection of US 80 at Jimmy Deloach Parkway. Under either configuration, the two ramp intersections will operate at acceptable LOS through the year 2040, however experiencing continuously deteriorating LOS. During the timeframe between 2040 and 2045, the LOS for both ramp intersections reduce to unacceptable LOS E or F, indicating the interchange probably will not have sufficient capacity to accommodate traffic volumes beyond 2045. By 2040, the intersection of US 80 at Osteen Road/Cheyenne Road will start experiencing unacceptable LOS.

Both the 500-foot and the 1000-foot ramp spacing diamond interchanges will be able to provide sufficient capacity and acceptable LOS for the US 80 arterial in 2030, but neither of them will be sufficient for the US 80 arterial by 2045. The 1000-foot ramp spacing diamond interchange consistently performs better than the 500-foot ramp spacing diamond interchange by providing better arterial LOS and/or higher arterial speed.

At the freeway ramp merge/diverge influence areas of both the 500 feet ramp spacing and 1000 feet diamond interchange configurations, all ramps will experience acceptable LOS up to 2045. All basic freeway segments will also experience acceptable LOS up to 2045.

Based on detailed traffic engineering analyses for various scenarios, Grice & Associates recommends that the intersection of US 80 at Jimmy Deloach Parkway be built into a grade-separated interchange, with Jimmy Deloach Parkway serving as the freeway facility. When feasible regarding right-of-way acquisition, construction costs, etc., the urban diamond interchange with 1,000 feet spacing between the northbound and southbound ramp intersections at US 80 should be the preferred configuration. Compared with the 500 feet ramp spacing configuration, a 1000 feet ramp spacing interchange will provide conceivably better operating conditions for the US 80 arterial, especially for the remote future year 2045. It is also recommended that Osteen Road be realigned to intersect with US 80 approximately 1,795 feet west of Jimmy Deloach Parkway and line up with Cheyenne Road.

2005 TMC



| | | | |
|-------|--------------------|-------|--------|
| STATE | PROJECT NUMBER | SHEET | SERIES |
| GA. | CSSTP-0007-00(259) | | |

EXISTING 2005 TURNING MOVEMENT COUNTS (TMC)

GRICE & ASSOCIATES, INC.
 1344 WEST PEACHTREE STREET, N.E., SUITE 1200
 ATLANTA, GEORGIA 30309
 404-377-5588 / 404-377-8510 FAX

LEGEND:
 0000 AM TMC
 <000> PM TMC

| DATE | REVISIONS | DATE | REVISIONS |
|------|-----------|------|-----------|
| | | | |
| | | | |
| | | | |

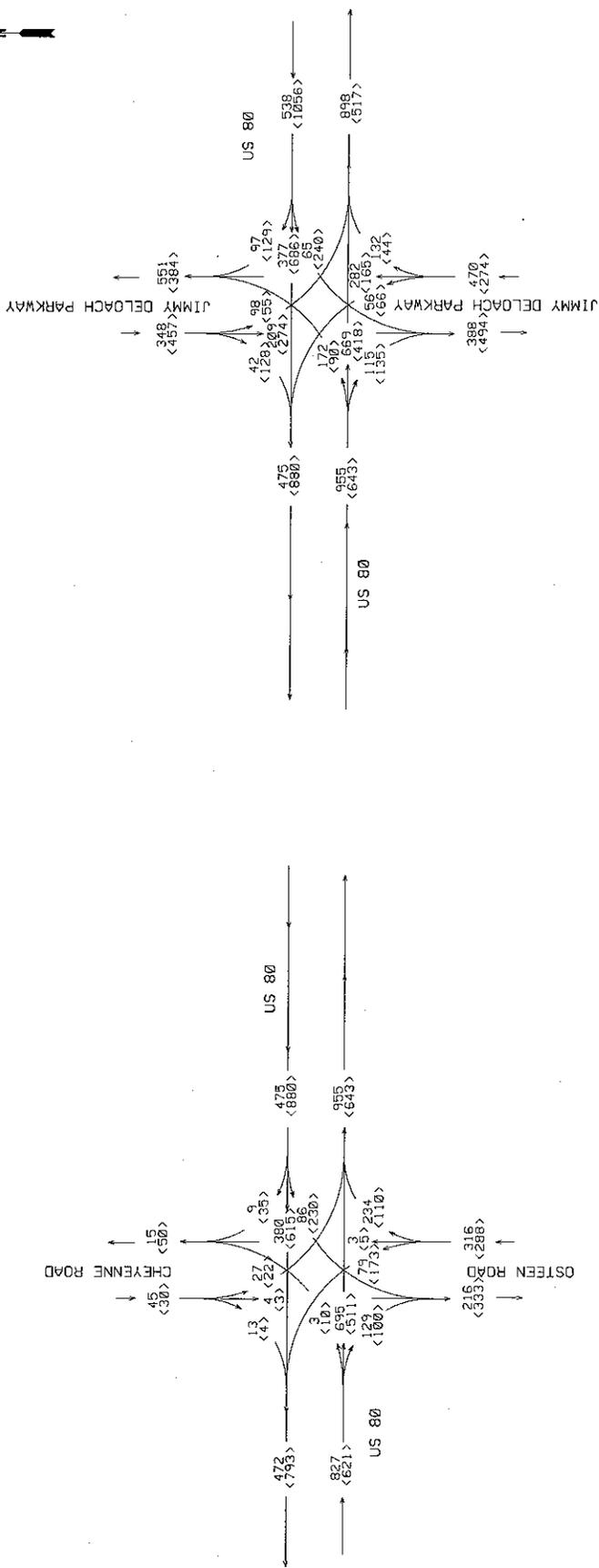
TRAFFIC DATA
 US 80/JIMM DELOACH PARKWAY INTERCHANGE
 PROJECT 0007259
 COUNTY CHATHAM
 DATE 10/16/2006 SH OF

BRANCHING NUMBER

2010 DHV

STATE PROJECT NUMBER
 GA. CSSTIP-0007-001259

DESIGN SHEET NO.
 SHEETS

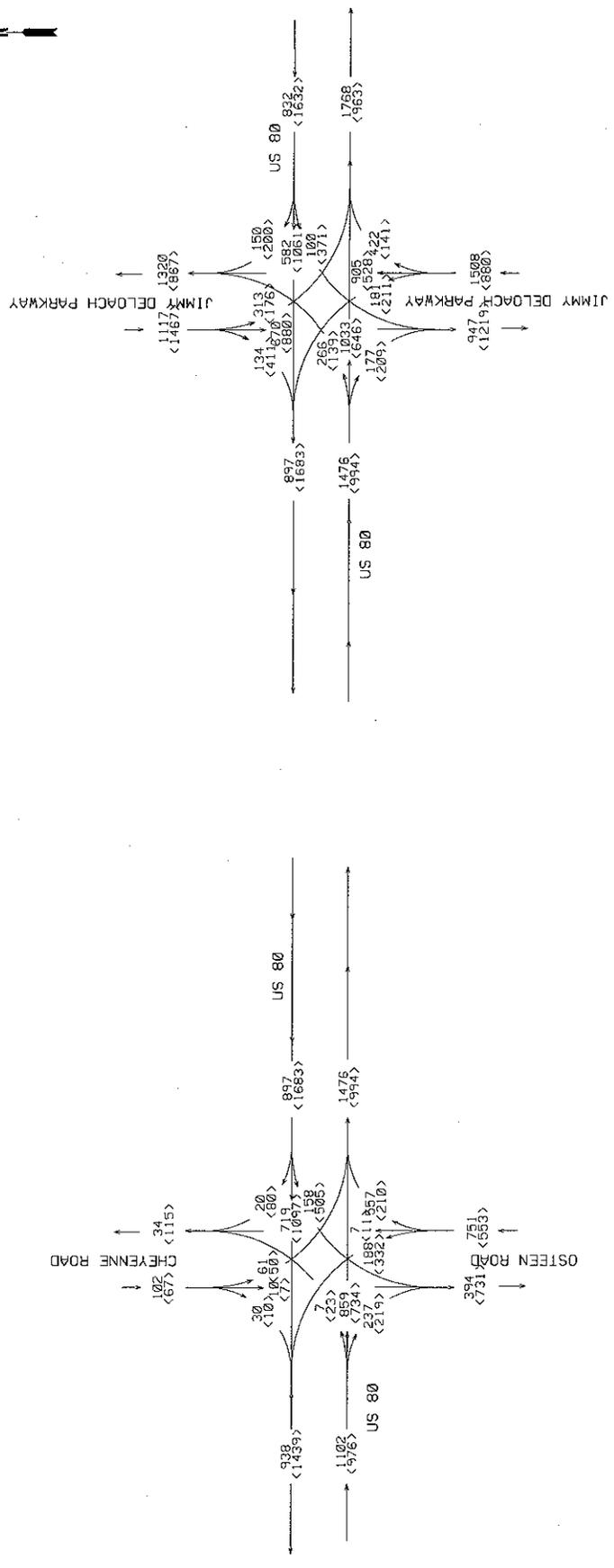


FORECASTED 2010 DESIGN HOURLY VOLUMES (DHV)

| LEGEND: | 000 AM DHV <000> | PM DHV | T • 10% | DATE | REVISIONS | DATE | REVISIONS | TRAFFIC DATA | DRAWING NUMBER |
|---------|---------------------|--------|---------|------|-----------|------|-----------|---|----------------|
| | | | | | | | | US 80/JIMMY DELOACH PARKWAY INTERCHANGE | |
| | | | | | | | | PROJECT 0007259 | |
| | | | | | | | | COUNTY CHATHAM | |
| | | | | | | | | DATE 1/18/2007 SH OF | |

GRICE & ASSOCIATES, INC.
 170 MIDTOWN PLAZA
 1345 WEST PEACHTREE STREET, N.E., SUITE 1200
 ATLANTA, GEORGIA 30309
 404-577-5308 / 404-577-5310 FAX

2030 DHV



FORECASTED 2030 DESIGN HOURLY VOLUMES (DHV)

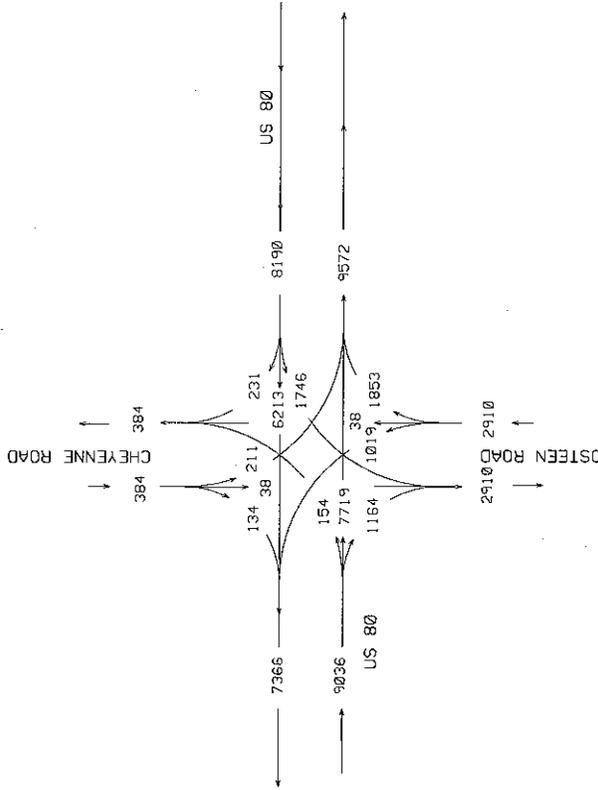
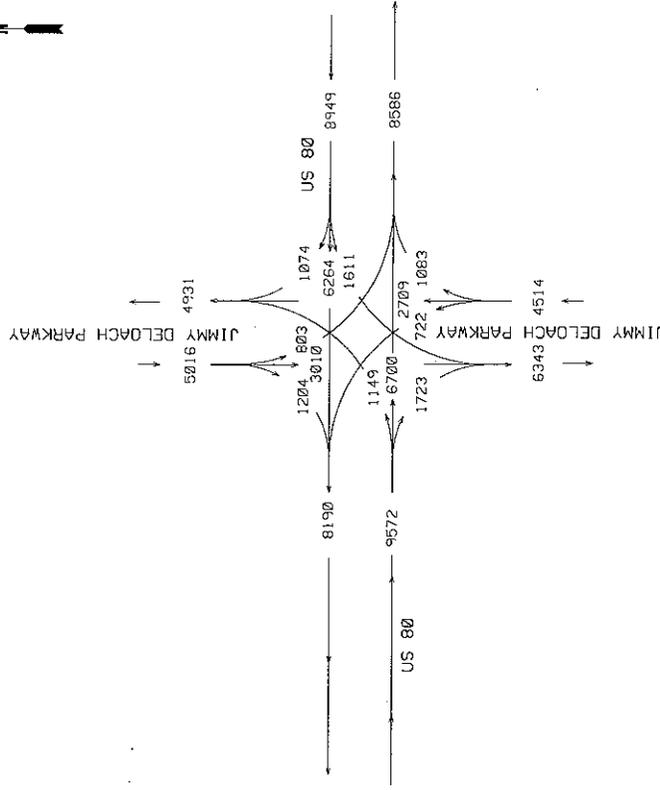
| | | |
|-------|-------------------|-------------|
| STATE | PROJECT NUMBER | SHEET TOTAL |
| GA. | CSSTP-0007-001259 | NO. SHEETS |

| | | | |
|---------|--------------|---|----------------|
| LEGEND: | 000 AM DHV | TRAFFIC DATA | DRAWING NUMBER |
| | <000> PM DHV | US 80/JIMMY DELOACH PARKWAY INTERCHANGE | |
| | T = 10% | PROJECT 0007259 | |
| | | COUNTY CHATHAM | |
| | | DATE 1/18/2007 SH OF | |

GRICE & ASSOCIATES, INC.
 TWO MIDTOWN PLAZA
 1345 WEST PEACHTREE STREET, NE, SUITE 1208
 ATLANTA, GEORGIA 30309
 404-577-6585 / 404-577-6310 FAX

| | | |
|-------|--------------------|--------------|
| STATE | PROJECT NUMBER | SHEET TOTALS |
| GA. | CSSTP-0007-00(259) | NO. SHEETS |

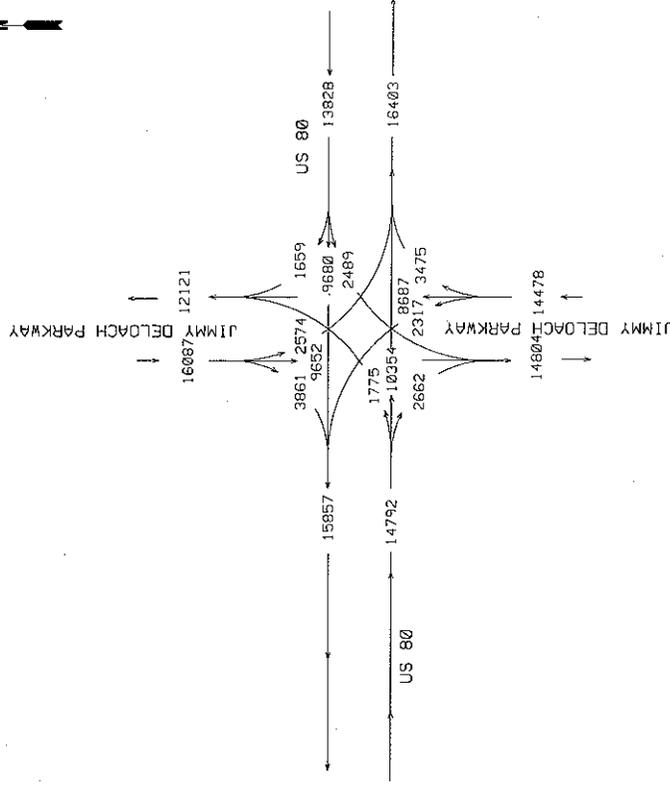
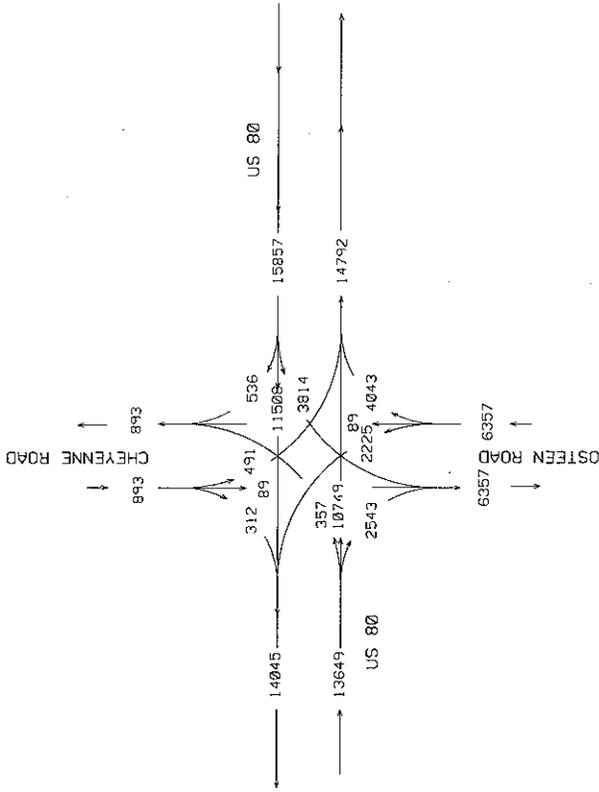
2010 ADT



FORECASTED 2010 ADT

| | | | | | | | |
|--|---|------|-----------|------|-----------|--|----------------|
| 24 HR. T. = 11% S.U. = 5% CONB. = 6% | GRICE & ASSOCIATES, INC. TWO MIDTOWN PLAZA 1349 WEST PEACHTREE STREET, N.E., SUITE 1208 ATLANTA, GEORGIA 30301 404-577-5580 / 404-577-5510 FAX | DATE | REVISIONS | DATE | REVISIONS | ADT DATA | DRAWING NUMBER |
| | | | | | | US 80/JIMMY DELOACH PARKWAY INTERCHANGE PROJECT 0007259 COUNTY CHATHAM DATE 1/18/2007 SH OF | |

2030 ADT



| | | |
|-------|---------------------|-------------|
| STATE | PROJECT NUMBER | SHEET TOTAL |
| GA. | CSSTP-0007-001(259) | NO. SHEETS |

24 HR. T. • 11%
S.U. • 5%
COMB. • 6%

GRICE & ASSOCIATES, INC.
TWO MIDTOWN PLAZA
1349 WEST PEACHTREE STREET, N.E., SUITE 1208
ATLANTA, GEORGIA 30309
404-577-6888 / 404-577-6310 FAX

DATE REVISIONS DATE REVISIONS

DRAWING NUMBER

ADT DATA
US 80/JIMMY DELOACH PARKWAY INTERCHANGE
PROJECT 0007259
COUNTY CHATHAM
DATE 1/18/2007 SH OF

FORECASTED 2030 ADT

McGee Partners, Inc.

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

Meeting Minutes

Date: February 22, 2006 Time: 2:00 pm
Location: Chatham County Courthouse – Green Room
Subject: US 80/Jimmy DeLoach Parkway Initial Concept Team Meeting
Project No: CSSTP-0007-00(259) PI No. 0007259, Chatham County MPI: 3003003
Recorded By: Jenny Jenkins

| | | |
|------------|----------------------|---|
| Attendees: | Al Bungard | Chatham County |
| | Al Black | Chatham County |
| | Frank Sweat | Chatham County |
| | Albert "Butch" Welch | GDOT Urban Design |
| | Darrell Richardson | GDOT Urban Design |
| | Matthew Fowler | GDOT Planning |
| | Radney Simpson | GDOT Planning |
| | Keith Melton | GDOT Planning |
| | Teresa Scott | GDOT – District 5 |
| | Carol Newsom | GDOT – District 5 |
| | Stephen Thomas | GDOT – District 5 Utilities |
| | Sheree Smart | GDOT – District 5 Environmental |
| | Donnie Williams | GDOT – Area Engineer, Savannah |
| | Slade Cole | GDOT – Area Construction Engineer, Savannah |
| | Wykoda Wang | Savannah MPO |
| | John Funny | Grice and Associates |
| | W. Freddy He | Grice and Associates |
| | Andy Pitman | Edwards-Pitman Environmental |
| | Berry Edwards | Ward Edwards, Inc. |
| | Jim Gentry | Ward Edwards, Inc. |
| | Tommy Crochet | McGee Partners, Inc. |
| | Chris Marsengill | McGee Partners, Inc. |
| | Jenny Jenkins | McGee Partners, Inc. |

This Initial Concept Team Meeting followed the agenda included in the presentation that was given by Tommy Crochet of McGee Partners. The following summarizes the seven main items discussed at the meeting.

Meeting Minutes

Page 2 of 4

Chatham County
February 22, 2006
US 80/Jimmy DeLoach Parkway Interchange

Introductions

- Tommy Crochet began the meeting by asking everyone to introduce themselves (see list of attendees).

Need & Purpose

- Freddy He summarized the traffic studies that have been completed to date.
- John Funny stated that Grice and Associates will add the land use component to the traffic study, which will lead to an increase in the traffic volumes.
- Tommy Crochet questioned whether an Interchange Justification Report (IJR) would be required. Matthew Fowler stated that an IJR would not be necessary.
- Darrell Richardson indicated that a formal location inspection would not be required; the site visit performed on 2/22/06 by GDOT and McGee Partners staff would suffice.

Environmental Screening

- Jim Gentry summarized the condition of some of the wetlands in the area. The wetlands in the southwest quadrant of the existing intersection are poor quality, as almost all of the trees in the area have been cleared. However, the small plants and hydrology characteristics of the area are still indicative of wetlands.
- The wetlands in the northwest quadrant of the intersection are in good condition. Berry Edwards stated that as these wetlands age, they will likely increase in value.
- Most alternatives that have been studied so far will not directly affect any potential environmental justice (EJ) areas. (EJ areas have not been analyzed demographically, only by visual inspection.)
- As a result of the extensive floodplain in the study area, careful FEMA coordination will be required as the project is developed.

Design Criteria & Typical Sections

- Tommy Crochet questioned whether GDOT had a standard "functional distance" of limited access away from interchange ramps. Darrell Richardson stated that the distance of limited access in each interchange is site specific and is determined by the engineer.
- Keith Melton stated that bike shoulders should be included on Jimmy DeLoach Parkway, since the corridor is included in the County's bikeway plan.

Interchange Configuration Alternatives

- Teresa Scott asked whether loop ramps in a partial cloverleaf configuration would discourage trucks from using US 80 to get to Jimmy DeLoach Parkway, rather than I-16 (the trucks avoid the weigh station on I-16 by using US 80). John Funny stated that the traffic study would look at this issue.

Meeting Minutes

Chatham County
February 22, 2006
US 80/Jimmy DeLoach Parkway Interchange

- Darrell Richardson stated that GDOT would discourage lining up Osteen Road with any ramps associated with the interchange. This issue should be considered during the selection of alternatives.
- The configuration alternatives will be dealt with as follows:
 1. Grice and Associates will upgrade the traffic projections and analyze the basic configurations.
 2. McGee Partners will complete conceptual layouts and quantify relocations for each alternative, and Ward Edwards will quantify wetland impacts for each alternative.
 3. McGee Partners will develop an "alternatives matrix."
 4. The layouts and alternatives comparison will be discussed with GDOT Urban Design.

Other Design Issues

- Tommy asked the District to verify what utilities they think are present in the study area. The concept report states that Atlanta Gas Light, Bellsouth, and Savannah Electric and Power have utilities in the study area; Stephen Thomas concurred. He also stated that The City of Pooler should have water and sewer facilities in the area, as well as Comcast Cable. It was noted that the utility companies involved in the US 80 reconstruction project would likely be the same utility companies involved in this concept.

Environmental Requirements

- Tommy Crochet questioned what should be the next step following the Initial Concept Team Meeting: the Public Information Open House (PIOH) or Practical Alternatives Report (PAR) meeting? Al Bungard stated that the PAR should be taken care of first, to avoid bringing too many alternatives to the public.
- Teresa Scott questioned whether the public would be shown an alternative that would include relocating the church. Tommy Crochet stated that the alternatives to be shown to the public would be determined at a later date, possibly following completion of the PAR process.

At the conclusion of the meeting, Darrell Richardson explained the desired result of completing this concept. GDOT would like to have a preferred alternative on record to guide permitting and development in the area during the next several years, such that the ultimate design of the interchange can be completed without major conflicts. Tommy Crochet stated that having an approved concept would allow Chatham County to buy right of way as needed.

Darrell Richardson asked when a PAR meeting could be expected; Tommy Crochet estimated 4 months.

Chatham
County -
Green Room

Jimmy DeLoach Pkwy / US80 Interchange

Initial Concept Team Meeting - Feb 22, '06

| <u>Name</u> | <u>Organization</u> | <u>Phone</u> |
|-------------------|-------------------------|-----------------------|
| CARIS MARSENGILL | MCGEE PARTNERS, INC. | 770-938-6400 |
| TOMMY CROCHET | " " " | " " " |
| JENNY JENKINS | " " " | " " " |
| JOHN FUNNY | GRICE & ASSOCIATES | 404 577 6300 |
| W. Freddy Mc | GRICE & ASSOCIATES | 404 577-6300 Ext. 121 |
| Keith Melton | GDOT PL | 404 657 6913 |
| MATTHEW FOWLER | GDOT PLANNING | 404-657-6916 |
| RADNEY SIMPSON | GDOT Planning | 404-657-6689 |
| Stephen Thomas | GDOT District Utilities | (912) 427-5779 |
| SHEREE SMART | GDOT ENVIRONMENTAL | (912) 427-5756 |
| Teresa Sicht | GDOT - Jesup | (912) 427-45788 |
| Carol Newsom | GDOT - Jesup | (912) 370-2588 |
| Stade Cole | GDOT - Savannah | 912 651-2144 |
| Danniel Williams | GDOT - Savannah | 912-651-2144 |
| ANDY PITMAN | EDWARDS-PITMAN ENVIRON. | 770-333-9484 |
| Jim Gentry | Ward Edwards | 813-837-5250 |
| Benny Edwards | Ward Edwards | 813 837-5250 |
| Frank Sweat | Chatham Co. | (912) 652-7800 |
| Wypoda Wang | Savannah MPO | (912) -651-14521 |
| H. G. BUNGARD | CHATHAM CO | (912) -652-7800 |
| Albert Welch | URBAN DESIGN | (404) 652-5447 |
| Darwin Richardson | Urban Design | 4-657-9872 |
| Allan Black | Chatham County | 912-652-7822 |

McGee Partners, Inc.

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

Meeting Minutes

Date: August 16, 2007 Time: 10:00 am
Location: Chatham County Courthouse – Green Room
Subject: US 80/Jimmy DeLoach Parkway Concept Team Meeting
Project No: CSSTP-0007-00(259) PI No. 0007259, Chatham County MPI: 3003003
Recorded By: Tommy Crochet
Attendees: See attached Sign-In Sheets

Introductions

Tommy Crochet began the meeting by asking everyone to introduce themselves.

Review of Project Concept

Tommy reviewed the key elements of the Concept Report, issues of note:

- The Need and Purpose for the project is to facilitate the flow of traffic along Jimmy DeLoach Parkway between the Georgia Ports Area and I-16. The proposed signalized intersection of Jimmy DeLoach Parkway and US 80/SR 26/SR 17 is expected to reach undesirable levels of service by 2030. Construction of a grade separated interchange at this location with Jimmy DeLoach Parkway as the mainline will help to provide efficient traffic flow in this corridor.
- Urban Design indicated that Phase II of Jimmy DeLoach Parkway, P.I. No. 522790, is currently programmed for construction in 2014. The EA/FONSI for this project is approved and Chatham County's consultant is preparing preliminary plans for a PFPR.
- This project is not included in the current TIP or STIP. PE was previously authorized. Chatham County has funds available from previous and current SPLOST programs for the acquisition of R/W. Tommy noted that locally funded R/W will likely need to be included in the TIP for FHWA to consider approving an environmental document.
- The project is not in a Non-Attainment Area.
- The project will not need an Interchange Justification Report since it is not on a facility with FHWA full oversight.
- A PIOH was held for the project on April 26, 2007. There were 63 attendees with 16 comments received, 8 supported the project, 4 conditionally supported and 4 were uncommitted. Seven interchange alternatives were presented at the PIOH.
- Alternate A2 was selected as the locally preferred alternative based on desirable traffic operations and driver expectancy, relative wetland impacts, residential and commercial relocations, construction and right of way costs, and public input. This alternate is a full

Meeting Minutes

Chatham County

February 22, 2006

US 80/Jimmy DeLoach Parkway Interchange

diamond interchange with the ramps shifted asymmetrically to the west of Jimmy DeLoach Parkway. It was noted that the alignment of Osteen Road was shifted from that shown at the PIOH in order to eliminate the need for one of the residential relocations.

- A preliminary signal warrant study was distributed, which showed that signals will likely be warranted at the time of construction of the interchange at the following intersections: US 80 at the northbound ramps, US 80 at the southbound ramps, and US 80 at the relocated Osteen Road.
- Design criteria and typical sections were briefly discussed. Design speeds are 45 mph for US 80 and 55 mph for Jimmy DeLoach Parkway. A 20' raised median would be constructed along US 80 through the interchange area within the five-lane pavement being constructed at this time. Jimmy DeLoach Parkway will be constructed as a four-lane with a 44' depressed median, 2' inside paved shoulder and 6.5' paved outside shoulder, 10' overall.
- Access along Jimmy DeLoach Parkway will be partially controlled. Access along US 80 is by permit, but will be controlled through the interchange.
- Bike shoulders are included along US 80 and Jimmy DeLoach Parkway.
- A VE Study will be required.
- Environmental resources within the project area include wetlands and streams, and associated floodplains. There are no eligible historic resources. An Individual Section 404 Permit is anticipated. An EA/FONSI is anticipated. The PAR process will be required.
- There is no Project Framework Agreement in place for this project at this time.
- SUE will likely be required for this project
- GDOT Area construction staff noted that there was a good bit of undercut required during the US 80 widening project near Jimmy DeLoach Parkway.
- Traffic along Jimmy DeLoach Parkway will be maintained during construction. Basic construction staging will call for the ramps to be constructed first, traffic moved onto the ramps while the mainline and bridges are constructed.
- There were no known maintenance problems identified at this location.

Comments

Tommy then asked for comments from the attendees:

- Mark Wilkes, Metropolitan Planning Commission, indicated that the CUTS travel demand model is being updated with new socio-economic data and that he expected traffic volumes to grow faster along Jimmy DeLoach Parkway than the current projections.
- Cynthia Phillips, GDOT District Traffic Ops, asked that we should consider using 10' paved outside shoulders along Jimmy DeLoach Parkway. Tommy indicated that since heavy truck volumes are expected and that this is being constructed as a partial freeway, that this may be appropriate. He also questioned the paved shoulder for Jimmy DeLoach Parkway Phase 2, and added that this would make sense only if the 10' paved shoulder is included in the Phase 2 project. Urban will look into this issue.
- Brad Saxon, GDOT District Construction, would like to see the interchange built at the same time as Jimmy DeLoach Parkway Phase 2,

Meeting Minutes

Page 3 of 5

Chatham County

February 22, 2006

US 80/Jimmy DeLoach Parkway Interchange

- Tom Franklin, GDOT R/W Consultant, indicated that the GDOT R/W Office would like a copy of the Concept R/W Cost Estimate. Chatham County indicated that they would have their R/W Acquisition Consultant update the estimate and submit to GDOT.

Meeting Minutes

Chatham County
 February 22, 2006
 US 80/Jimmy DeLoach Parkway Interchange

Concept Team Meeting
 US 80/Jimmy DeLoach Parkway Interchange Concept
 CSSTP-0007-00(259), PI No. 0007259, Chatham County
 August 16, 2007, 10:30 am, Old Chatham County Courthouse

SIGN-IN SHEET

| Name | Organization/Department | email | Phone |
|-------------------|-------------------------|------------------------------|----------------|
| Tony Crocket | Mabee Partners | Tcrocket@mcgoepartners.com | 770/438-6400 |
| Paul Caudit | GDOT/OEL | paul.caudit@dot.state.ga.us | (404) 699-4413 |
| Kyle MOTE | GDOT/PLANNING | Kyle.MOTE@DOT.STATE.GA.GS | |
| Randall Butler | GDOT/Construction | | 912-651-2144 |
| JOSEPH CAPELLI | GDOT/CONSTRUCTION | | 912-651-2144 |
| Tom Franklin | GDOT/CONSULTING | TFranklin@BellSouth.NET | 770-584-3915 |
| Ernest Greenard | City of Blount County | EGreenard@ATT.NET | 912 748-0069 |
| MARCELA COLL | GDOT/Urban Design | | 404 656 5447 |
| RYAN MCKENS | GDOT/URBAN DESIGN | | 404-656-5447 |
| Susan Thomas | Edwards Pitman | stomas@edwards-pitman.com | (7) 333 9481 |
| ALBERT WELCH | GDOT/URBAN | | 4) 656-5747 |
| Carla Holme | Grice & Associates | cholmes@griceinc.com | 4) 577-6300 |
| Dorlene Broughton | GRICE & ASSOC. | dbroughton@griceinc.com | (404) 577-6300 |
| W. Freddy He | | | |
| Cynthia Phillips | GA DOT | Cynthia.y.phillips@DOT.STATE | 912-427-5767 |
| BRAA SAXON | GA DOT/Construction | | 912-427-5733 |
| Teresca Scott | GDOT | | |
| Stephen Thomas | GDOT | | 912 427-5779 |
| Bob Beady | City of Blount County | | 912 748-0970 |
| Mark Wilkes | MPO | wilkesm@thempc.org | 912-651-1451 |
| Rick Long | Gen. Power Co. | rlong@southernco.com | 912-897-3812 |
| Allan Black | Chatham | | (912) 652-7822 |

DISPOSITION OF COMMENTS:

The following represents a breakdown of a review of comments by the offices to which they pertain:

| RESPONSIBLE OFFICE | COMMENT # | NATURE OF COMMENT |
|--------------------|-----------|--|
| Design | 1, 2, 9 | Please include a curb cut to the back of properties along Osteen Road at Gavin Street. |
| | 9 | Please leave the woods on the back of my property along Osteen Road for a sound buffer from the highway. |

| RESPONSIBLE OFFICE | COMMENT # | NATURE OF COMMENT |
|--------------------|-----------|---|
| All Letters | All | <p>Thank you for your input regarding the public information open house for the proposed project. Your interest in this meeting and your comments are appreciated. Your comments will be made a part of the official record of the project.</p> <p>The attendees of the open house and those persons sending in comments afterwards raised the following questions and concerns. The GDOT has prepared one response to all comments so that everyone can be aware of the concerns raised and the responses given. Please find the comments, concerns, and questions listed below along with their response.</p> |

Edwards-Pitman Environmental, Inc. will respond to all comments on behalf of the GDOT.

Attached is a complete transcript of the comments received during the comment period and a copy of the public information open house handout.

If you have any questions about the comments, please either email or call Paul Condit at (404) 699-4413.

HDK/pc/rje-EPEI

Summary of Comments
CSSTP-0007-00(259), PI No. 0007259, Chatham County
June 11, 2007
Page 3

Attachments

DISTRIBUTION:

David E. Studstill, Jr., P.E.

Buddy Gratton, P.E.

Butch Welch

Paul Condit

Al Black

Tommy Crochet

Jonathan Cox

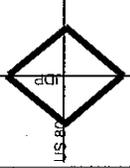
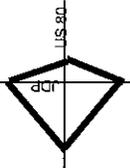
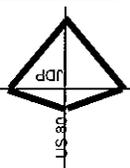
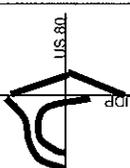
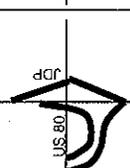
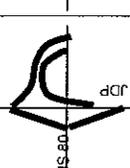
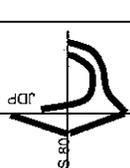
ALTERNATIVES ANALYSIS MATRIX (Estimated Impacts & Costs)

STP-0007-00(259), Chatham County

P.I. No. 0007259

US 80/ DeLoach Pkwy. Interchange

June 14, 2007

| Alternative No. --> | A1 | A2 | A3 | B1 | B2 | B3 | B4 |
|--|---|---|--|---|---|---|---|
| Alternative Description --> | Full Diamond with Ramps Centered About Existing Alignment | Full Diamond with Ramps Shifted West About Existing Alignment | Full Diamond with Ramps Shifted East About Existing Alignment | Partial Cloverleaf with Loop in NW Quadrant | Partial Cloverleaf with Loop in SW Quadrant | Partial Cloverleaf with Loop in NE Quadrant | Partial Cloverleaf with Loop in SE Quadrant |
| Alternative Schematic --> |  |  |  |  |  |  |  |
| Displacements | | | | | | | |
| Residential | 16 | 14 | 14 | 14 | 17 | 16 | 15 |
| Commercial | 1 | 1 | 1 | 0 | 1 | 1 | 2 |
| Church | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required Right of Way | | | | | | | |
| Required R/W Area (acres) | 34 | 36 | 38 | 36 | 34 | 32 | 35 |
| Jurisdictional Impacts | | | | | | | |
| Wetland Impact Area (acres) | 10.3 | 10.7 | 10.3 | 10.8 | 9.4 | 11.7 | 12.7 |
| Open Water (Pond) Impact Area (acres) | 0.7 | 0.8 | 0.7 | 1.1 | 0.1 | 0.7 | 0.7 |
| Open Water (Ditch) Impact Length (feet) | 1,381 | 1,313 | 1,590 | 1,724 | 818 | 1,895 | 1,426 |
| Mitigation Credits (Approximate) | 89 | 89 | 91 | 88 | 79 | 99 | 112 |
| Traffic Operations | | | | | | | |
| Driver Expectancy of Interchange Configuration | High | High | High | Medium | Medium | Medium | Medium |
| Design Variance for Intersection and/or Signal Spacing | No | No | No | No | No | No | No |
| Design Year LOS (2035) | D | D | D | D | D | D | D |
| Cost | | | | | | | |
| Construction | \$16,250,000 | \$18,120,000 | \$17,180,000 | \$20,960,000 | \$18,980,000 | \$19,740,000 | \$16,400,000 |
| Right of Way | \$17,311,000 | \$12,542,000 | \$19,525,000 | \$10,853,000 | \$13,924,000 | \$16,827,000 | \$16,572,000 |
| Utilities | \$500,000 | \$500,000 | \$500,000 | \$500,000 | \$500,000 | \$500,000 | \$500,000 |
| Mitigation | \$312,000 | \$314,000 | \$319,000 | \$310,000 | \$280,000 | \$348,000 | \$393,000 |
| TOTAL COST | \$34,373,000 | \$31,476,000 | \$37,524,000 | \$32,623,000 | \$33,684,000 | \$37,415,000 | \$33,865,000 |