

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0006416, Gordon-Pickens Counties **OFFICE** Preconstruction
CSSTP-0006-00(416)
SR 53 Reconstruction **DATE** July 26, 2007

FROM *Genetha Rice-Singleton*
Genetha Rice-Singleton, Assistant Director of Preconstruction

TO *GRS* SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers

Ken Thompson

Jamie Simpson

Michael Henry

Keith Golden

Angela Alexander (file copy)

Babs Abubakari

Kent Sager

BOARD MEMBER

6

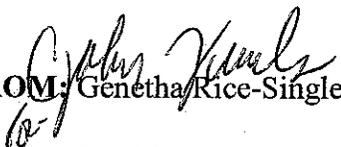
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: P.I. No. 0006416, Gordon/Pickens Counties
CSSTP-0006-00(416)
SR 53 Reconstruction

OFFICE: Preconstruction

DATE: July 17, 2007


FROM: Genetha Rice-Singleton, Assistant Director of Preconstruction

TO: David E. Studstill, Jr., P.E., Chief Engineer

SUBJECT: PROJECT CONCEPT REPORT

This project is a reconstruction and rehabilitation on SR 53. The project limits begin 3700' east of Ryo Mountain Road in Gordon County and ends 1700' west of Davis Road in Pickens County. There are several horizontal and vertical curves that exceed the AASHTO Geometric Standards. State Route 53 is a three lane rural roadway with 0' to 3' shoulders on 80' of existing right-of-way. The accident rates for 2001 through 2004 exceeded the statewide average for this type of roadway. There were 15 accidents resulting in 23 injuries in a four year period that extended to 2004. The base year traffic (2011) is 4500 VPD and the design year traffic (2031) is 9900 VPD. The posted speed is 55 MPH and the design speed is 65 MPH.

The proposed project includes the re-alignment of SR 53 to bring the existing horizontal and vertical curves up to current design standard and adding shoulders for the entire project length. Traffic will be maintained during construction via staging.

Environmental concerns include requiring a Categorical Exclusion will be prepared; a Public hearing is not required; Time saving procedures is appropriate.

The estimated costs for this project are:

| | <u>PROPOSED</u> | <u>APPROVED</u> | <u>FUNDING</u> | <u>PROG DATE</u> |
|-----------------------------|-----------------|-----------------|----------------|------------------|
| Construction (includes E&C) | \$ 6,536,000 | \$ 7,086,000 | LS30 | LUMP |
| Right-of-way & | \$ 2,450,000 | \$ 2,450,000 | LS30 | LUMP |
| Utilities | \$ 500,000 | | | |

P.I. No. 0006416, Gordon/Pickens Counties
July 17, 2007

I recommend this project concept be approved.

GRS: JDQ

Attachment

CONCUR



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

APPROVED



David E. Studstill, Jr., P.E., Chief Engineer

SCORING RESULTS AS PER MOG 2440-2

| | | | | | | |
|---|--------------|---|---|--|--|--|
| Project Number: CSSTP-0006-00(416) | | County: Gordon/Pickens | | PI No.: 0006416 | | |
| Report Date: June 11,2007 | | Concept By: DOT Office: District 6 | | | | |
| | | Consultant- Volkert & Associates | | | | |
| <input checked="" type="checkbox"/> Concept Stage | | | | | | |
| Project Type: Choose One From Each Column | | <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor | <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural | <input type="checkbox"/> ATMS <input type="checkbox"/> Bridge Replacement <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input checked="" type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous | | |
| | | | | | | |
| FOCUS AREAS | SCORE | RESULTS | | | | |
| Presentation | 100 | | | | | |
| Judgment | 100 | | | | | |
| Environmental | 100 | | | | | |
| Right of Way | 100 | | | | | |
| Utility | 100 | | | | | |
| Constructability | 100 | | | | | |
| Schedule | 100 | | | | | |

6-11-07

WBS

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

District 6

PROJECT CONCEPT REPORT

Project Number: CSSTP-0006-00(416)
County: GORDON/PICKENS
P.I. Number: 0006416

JUN 18 2007

Federal Route Number: None
State Route Number: SR-53

Project Description:

The proposed project includes the re-alignment of State Route 53 (SR-53) to bring the existing horizontal and vertical curves up to current design standards and adding shoulders for a distance of approximately 1.5 miles from a point 3,700-feet east of Ryo Mountain Road in Gordon County (MP 26.9) east to a point 1,700-feet west of Davis Road in Pickens County (MP 1.0).

Recommendation for approval:

DATE 6-11-2007 Curtis D. Connor
Project Manager

DATE 6-11-2007 [Signature]
District Engineer

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

DATE _____
DATE 6-13-07 James T. Simpson
State Transportation Planning Administrator
~~Financial Management Administrator~~

DATE _____
State Environment/Location Engineer

DATE _____
State Traffic Safety & Design Engineer

DATE _____
Project Review Engineer

DATE _____
Bridge Design Engineer

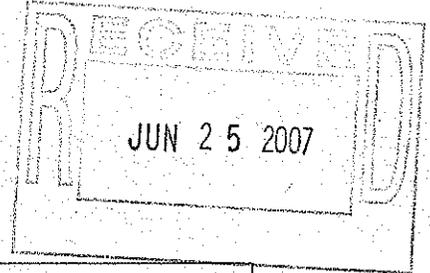
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

District 6

PROJECT CONCEPT REPORT

Project Number: CSSTP-0006-00(416)
County: GORDON/PICKENS
P.I. Number: 0006416

Federal Route Number: None
State Route Number: SR-53



Project Description:

The proposed project includes the re-alignment of State Route 53 (SR-53) to bring the existing horizontal and vertical curves up to current design standards and adding shoulders for a distance of approximately 1.5 miles from a point 3,700-feet east of Ryo Mountain Road in Gordon County (MP 26.9) east to a point 1,700-feet west of Davis Road in Pickens County (MP 1.0).

Recommendation for approval:

DATE 6-11-2007 Curtis D. Combs
Project Manager
DATE 6-11-2007 [Signature]
District Engineer

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

DATE 6/23/07 Angela J. Alexander
State Transportation Planning Administrator
DATE _____
State Transportation Financial Management Administrator
DATE _____
State Environment/Location Engineer
DATE _____
State Traffic Safety & Design Engineer
DATE _____
Project Review Engineer
DATE _____
Bridge Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
District 6
PROJECT CONCEPT REPORT

Project Number: CSSTP-0006-00(416)
County: GORDON/PICKENS
P.I. Number: 0006416

Federal Route Number: None
State Route Number: SR-53

Project Description:

The proposed project includes the re-alignment of State Route 53 (SR-53) to bring the existing horizontal and vertical curves up to current design standards and adding shoulders for a distance of approximately 1.5 miles from a point 3,700-feet east of Ryo Mountain Road in Gordon County (MP 26.9) east to a point 1,700-feet west of Davis Road in Pickens County (MP 1.0).

Recommendation for approval:

DATE 6-11-2007 Curtis D. Carr
Project Manager

DATE 6-11-2007 [Signature]
District Engineer

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

DATE _____
State Transportation Planning Administrator

DATE _____
State Transportation Financial Management Administrator

DATE _____
State Environment/Location Engineer

DATE 6/25/07 [Signature]
State Traffic Safety & Design Engineer

DATE _____
Project Review Engineer

DATE _____
Bridge Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
District 6
PROJECT CONCEPT REPORT

Project Number: CSSTP-0006-00(416)
County: GORDON/PICKENS
P.I. Number: 0006416

Federal Route Number: None
State Route Number: SR-53

Project Description:
The proposed project includes the re-alignment of State Route 53 (SR-53) to bring the existing horizontal and vertical curves up to current design standards and adding shoulders for a distance of approximately 1.5 miles from a point 3,700-feet east of Ryo Mountain Road in Gordon County (MP 26.9) east to a point 1,700-feet west of Davis Road in Pickens County (MP 1.0).

Recommendation for approval:

DATE 6-11-2007 Curtis L. Combs
Project Manager
DATE 6-11-2007 [Signature]
District Engineer

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

DATE _____
State Transportation Planning Administrator

DATE _____
State Transportation Financial Management Administrator

DATE _____
State Environment/Location Engineer

DATE _____
State Traffic Safety & Design Engineer

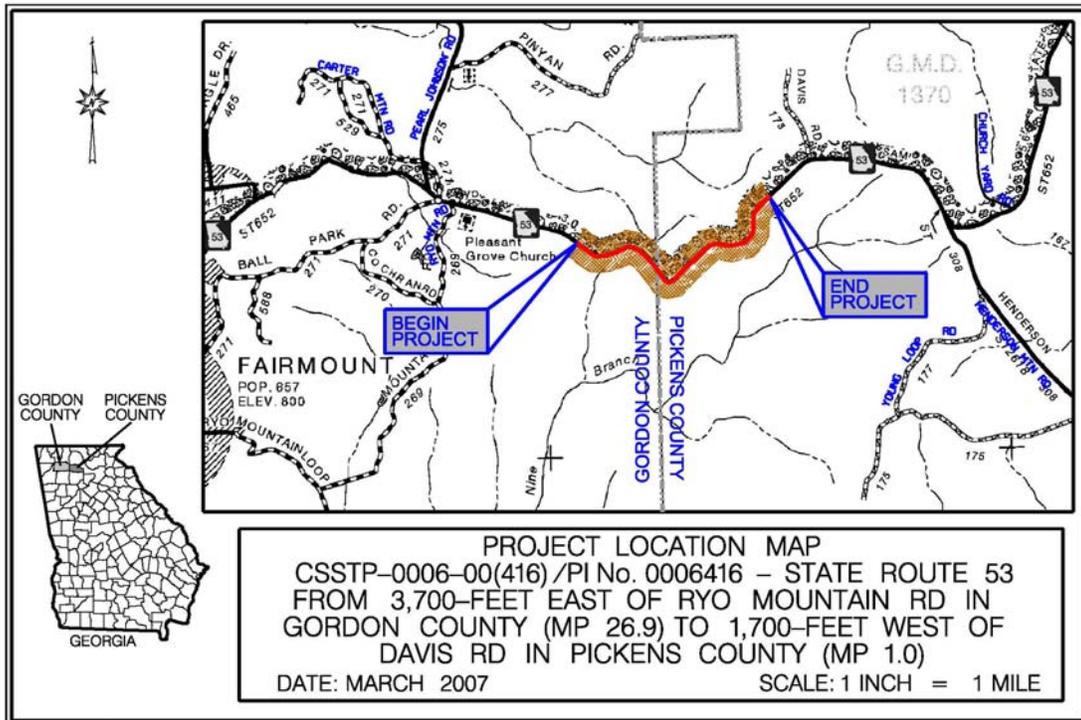
DATE _____
District Engineer

DATE _____
Project Review Engineer

DATE _____
Bridge Design Engineer

Project No. CSSTP-0006-00(416) Gordon & Pickens County, Georgia
P.I. No. 0006416

Project Location Map



Need and Purpose:

- Roadway Conditions

The existing roadway of SR-53 from a point 3,700-feet east of Ryo Mountain Road in Gordon County (MP 26.9) east to a point 1,700-feet west of Davis Road in Pickens County (MP 1.0) for an approximate distance of 1.5 miles consists of three twelve-foot travel lanes and several inadequate horizontal and vertical curves.

- Existing Horizontal Alignment

The existing horizontal alignment consists of nine (9) horizontal curves with radii ranging from 475-foot to 1,500-feet. The transitions between the curves vary in length from 60-feet to 375-feet. The existing curves radii were compared to the minimum curve radii specified for the design speed of 65 mph and a maximum superelevation rate of 6% from *A Policy On Geometric Design of Highways and Streets, 2004 Edition (The Green Book)* from AASHTO. Using the 85th percentile speed of the traveling public of 65 mph on SR-53 and a maximum superelevation rate of 6%, the minimum required curve radius was determined to be 1,660 feet.

The table below shows a comparison of the radii of the existing curves and the minimum radius required to meet the specifications of The Green Book.

| Curve No. | R _{min} (ft) | Existing R (ft) | Remarks |
|-----------|-----------------------|-----------------|------------------------------|
| CUR1 | 1660 | 1494 | Does not meet AASHTO Minimum |
| CUR2 | 1660 | 501 | Does not meet AASHTO Minimum |
| CUR3 | 1660 | 519 | Does not meet AASHTO Minimum |
| CUR4 | 1660 | 1157 | Does not meet AASHTO Minimum |
| CUR5 | 1660 | 473 | Does not meet AASHTO Minimum |
| CUR6 | 1660 | 651 | Does not meet AASHTO Minimum |
| CUR7 | 1660 | 936 | Does not meet AASHTO Minimum |
| CUR8 | 1660 | 495 | Does not meet AASHTO Minimum |
| CUR9 | 1660 | 969 | Does not meet AASHTO Minimum |

Note: The minimum radius was determined from Exhibit 3-27 of "A Policy on Geometric Design of Highways and Streets", 2004 Edition.

- Existing Vertical Profile

| Vertical Curve No. | Sag or Crest Curve | K min. | Existing K | Remarks |
|--------------------|--------------------|--------|------------|------------------------------|
| VCUR1 | Crest | 193 | 1036 | Meets AASHTO Minimum |
| VCUR2 | Sag | 157 | 120 | Does not meet AASHTO Minimum |
| VCUR3 | Crest | 193 | 374 | Meets AASHTO Minimum |
| VCUR4 | Sag | 157 | 126 | Does not meet AASHTO Minimum |
| VCUR5 | Crest | 193 | 141 | Does not meet AASHTO Minimum |
| VCUR6 | Sag | 157 | 122 | Does not meet AASHTO Minimum |
| VCUR7 | Crest | 193 | 84 | Does not meet AASHTO Minimum |

Note: The minimum k values were determined from Exhibits 3-72 and 3-75 of "A Policy on Geometric Design of Highways and Streets", 2004 Edition.

- Existing Capacity Analysis

Due to the re-alignment of existing SR-53, two (2) new intersections located at stations 121+60 and 153+16 will be built to maintain access to local residents and businesses along existing SR-53. Approximately three (3) to seven (7) residents and one (1) business will be served by these intersections; therefore, it was determined that traffic studies are not necessary at these intersections.

The peak hour traffic volumes for the mainline were projected 20 years from the expected date of completion, (2011), assuming a growth rate of 4% per year. The anticipated Level of Service (LOS) at the projected traffic volumes was determined and compared to the 2011 LOS. SR-53 currently operates at a LOS B and is anticipated to operate at a LOS C in the year 2031 for both the build and no-build conditions. The Capacity Analysis Reports are included in the attachments.

- Accident Data

There were a total of 26 accidents recorded within the project study area between 2001 and 2004. The analysis of the accident data yielded the following conclusions:

- Between 2001 and 2004, there were 15 accidents resulting in 23 injuries with no fatalities.
- Approximately 96% of the accidents occurred while negotiating a curve.
- In about 15% of the accidents that occurred while negotiating a curve, driver loss-of-control was the most prevalent contributory factor.
- Approximately 75% of the accidents resulting from loss-of-control struck a roadside feature and 25% of the accidents overturned.
- Approximately 8% of the accidents involved more than one vehicle (two); one sideswipe collision and one head-on collision.
- Weather conditions attributed for about 4% of the accidents.

- The accident data results in an accident rate of 274 accidents per hundred-million-vehicle-miles (HMVM), which is higher than the state average of 227 accidents per HMVM for similar type highways.
- Project Justification

The proposed project will improve the safety of SR-53 by providing a new roadway with vertical and horizontal curves that meet current design standards. By improving the vertical and horizontal alignments, it is expected that the number of accidents will decrease as a result of the improved geometry and sight distances.

Description of Proposed Project:

The proposed SR-53 project includes re-alignment of the existing highway to bring the horizontal and vertical curves up to current design standards and adding shoulders for a distance of approximately 1.5 miles from a point 3,700-feet east of Ryo Mountain Road in Gordon County (MP 26.9) east to a point 1,700-feet west of Davis Road in Pickens County (MP 1.0).

- Logical termini

The proposed western terminus for the SR-53 Re-alignment project is at a point along the existing roadway 3,700-feet east of Ryo Mountain Road in Gordon County. The proposed eastern terminus of the project is at a point located along the existing roadway 1,700-feet west of Davis Road in Pickens County. The western terminus is logical because the accident rate per HMVM along SR-53 is greater within the horizontal curves east of Ryo Mountain Road. The eastern terminus is logical because the accident rate per HMVM along SR-53 is greater within the horizontal curves west of Davis Road. The geometric characteristics of the curves along this section of SR-53 do not meet the minimum AASHTO specifications in curve radius and sight distance; therefore, the proposed SR-53 Re-alignment project termini were established to include the deficient curves along the existing roadway. The project termini were also set at points where the proposed alignment can transition into SR-53 at existing tangent sections.

Is the project located in a Non-attainment area? Yes ___ No X

PDP Classification: Major X Minor ___

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

Functional Classification: Principal Arterial

U. S. Route Number: N/A **State Route Number:** SR-53

Traffic (AADT):

Current Year: (2011) 4500 vpd Design Year: (2031) 9900 vpd

Existing design features:

- Typical Section: Three (3) 12-foot lanes with 0 to 3-foot earth shoulders.
- Posted Speed: 55 mph Minimum radius of curve: 495-ft
- Maximum super-elevation rate for curves: 6%
- Maximum Mainline Grade: 5.2%
- Width of right of way: 80-ft
- Major Structures: None
- Major Interchanges or Intersections along project: None
- Existing length of roadway segment is approximately 1.5 miles.

Proposed Design Features:

- Typical Section: Three (3) 12-foot lanes with 6-foot paved and 4-foot earthen shoulders for a total shoulder width of 10-feet.
- Proposed Design Speed Mainline: 65 mph
- Proposed Design Speed Side Street: 35 mph
- Proposed Maximum Grade Mainline: 5% Maximum Grade allowable: 5%
- Proposed Maximum Grade Side Street: 5.8% Maximum Grade allowable: 13%
- Proposed Maximum Grade Driveway: 25%
- Proposed Maximum degree of Curvature: 3°22'33" Maximum degree allowable: 3°27'00"
- Right of Way:
 - Width : 135-ft to 350-ft
 - Easements: Temporary (X), Permanent (), Utility (), Other ()
 - Type of Access Control: Full (), Partial (), By Permit (X) , Other ()
 - Number of Parcels : 21 Total Number of Displacements: 8
 - Business: 1
 - Residences: 7
 - Mobile Homes: 0
 - Other: 0
- Structures:
 - Two retaining walls may be necessary north and south of the conceptual alignment near station 147+50 to reduce impacts to an ephemeral stream bed. Hydraulic calculations performed during the preliminary design phase of the project will determine the drainage structure requirements and the retaining wall requirements.

- Major Intersections and Interchanges: None
- Traffic Control during construction: Staging as described below.

Stage 1:

- Build the majority of the newly aligned SR-53
- Build the new intersection of existing SR-53 at station 153+16
- Build a temporary intersection at station 107+10
- Install temporary shoring along the existing alignment between approximate stations 133+50 and 140+50 left to allow for a large cut section of roadway to be built without disrupting traffic on existing SR-53
- Tie the new alignment into the existing alignment at the beginning and end of the project, which will require temporary lane closures; however, because the existing roadway is three lanes, a single lane closure will be possible without major disruptions to traffic
- Shift traffic to the new alignment

Stage 2:

- Remove the existing SR-53 pavement at the east end of the project
- Build the intersection at station 121+40 while maintaining access via the temporary intersection at station 107+10 and the intersection at station 153+16

Stage 3:

- Remove the temporary shoring system and continue the cut section for the mainline to the construction limits while building the cul-de-sacs at three different locations
- Remove the temporary intersection at station 107+10 and the existing SR-53 pavement at the beginning of the project
- Complete other construction items as needed

- 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 : None anticipated

- Environmental Concerns

- Historical Sites

Historical records research found no previously recorded National Register of Historic Places (NRHP) listed sites within the area of potential effect (APE) for the proposed project. Twenty

structures located within the SR-53 APE meet the NRHP minimal age requirement of 50 years old or older. Of these structures, two (2) have been recommended eligible for the NRHP. The properties recommended eligible for the NRHP include Resource #4 The Daugherty House and Resource #14 The Wooten House. The NRHP eligibility boundaries have been established for these properties. Approximately 1,245 square feet (0.03 acres) of cut and fill will be required within the boundaries of NRHP boundaries of The Daugherty House; however, no property will be acquired and it is anticipated that no trees will be affected. No other work, including the parking of vehicles during construction, will take place within the NRHP boundaries. Descriptions of these resources and their NRHP boundaries are provided below.

- Station 100+00 to 109+00 Resource #4 The Daugherty House. The Daugherty House includes 5.91 acres of land located north and immediately adjacent to existing SR-53 right-of-way. Contributing elements to the Daugherty House include the house, associated outbuildings, and mature trees that contribute to the setting. The project, as planned, will not require additional right-of-way from this resource. The east and west NRHP boundaries are described as being at the legal property limits identified on Gordon County Tax Map 129 as Parcel 1. The existing SR-53 edge-of-pavement has been established as the southern border of the NRHP boundary.
- Station N/A (Along Existing SR-53 Bypassed by Conceptual Alternative) Resource #14 The Wooten House. The Wooten House includes 2.87 acres of land located east and immediately adjacent to existing SR-53 right-of-way. The proposed project, as planned, will not require additional right-of-way from this resource. The north, south, and east NRHP boundaries are described as being at the legal property limits identified on Pickens County Tax Map 36 as Parcel 42. The existing SR-53 edge-of-pavement has been established as the western border of the NRHP boundary.
- Archaeological Impacts
Archaeological records research found no previously recorded NRHP listed or potentially eligible sites within the APE for the proposed project.
- Relocation
It is anticipated that the proposed project will require the structural take and displacement of one (1) business and seven (7) residences.
- Neighborhoods
No neighborhoods are located within the project area.
- Special Interest Groups
To date, no special interest groups have been identified for the proposed project.
- Context Sensitive Design
Context sensitive designs will be evaluated during the early development phases of the project.
- Cemeteries
No cemeteries are located within the project area.
- Parks and Recreation
No public parks or recreation facilities are located within the APE for the proposed project.

- Wetlands and Streams, including PARs
 The proposed project is located entirely within Hydrologic Unit Code (HUC) unit 03150102, Coosawattee Watershed. The project, as planned, will impact less than 0.50 acre of wetland/open water and/or less than 300 linear feet of stream at any single crossing. It is also anticipated that the project will impact less than 10 acres of wetland/open water and 1,500 feet of stream within the Coosawattee HUC unit. The proposed project will not impact any U.S. Army Corps of Engineers' approved mitigation sites. As a result, an Individual Permit or a Practical Alternatives Report (PAR) will not be necessary for Project CSSTP-0006-00(416). No wetland sites were identified within the APE. One (1) ephemeral stream site will be impacted by the proposed project. The project, as planned, crosses the ephemeral stream bed perpendicularly near Station 147+40. The total stream bed impact at this site and for the project is 292 feet.
- Threatened and Endangered Species (USFWS & GaDNR)
 The US Fish and Wildlife Service and the Georgia Department of Natural Resources currently lists twenty-one (21) species of plants and animals as protected or endangered within Gordon and Pickens Counties, Georgia. The species for each county are listed below. "US" = Federally Protected, Candidate or Partial Status species. "GA" = Georgia Protected Species.

| ANIMALS | | |
|----------------------------------|------------------------|--------|
| Genus & Species | Common Name | Status |
| Gordon County, Georgia | | |
| <i>Epioblasma metastriata</i> | Upland Combshell | US |
| <i>Epioblasma othcaloogensis</i> | Southern Acornshell | US |
| <i>Etheostoma trisella</i> | Trispot Darter | GA |
| <i>Grpatemys pulchra</i> | Alabama Map Turtle | GA |
| <i>Medionidus acutissimus</i> | Alabama Moccasinshell | US |
| <i>Medionidus parvulus</i> | Coosa Moccasinshell | US |
| <i>Moxostoma carinatum</i> | River Redhorse | GA |
| <i>Percina aurolineata</i> | Goldline Darter | US |
| <i>Pleurobema decisum</i> | Southern Clubshell | US |
| <i>Pleurobema georgianum</i> | Southern Pigtoe | US |
| <i>Ptychobranchus greenii</i> | Triangular Kidneyshell | US |
| Pickens County, Georgia | | |
| <i>Cyprinella caerulea</i> | Blue Shiner | US |
| <i>Etheostoma etowahae</i> | Etowah Darter | US |
| <i>Etheostoma scotti</i> | Cherokee Darter | US |

| PLANTS | | |
|--------------------------------|-----------------------------|--------|
| Genus & Species | Common Name | Status |
| Gordon County, Georgia | | |
| <i>Arabis georgiana</i> | Georgia Rockcress | US |
| <i>Carex purpurifera</i> | Purple Sedge | GA |
| <i>Sabatia capitata</i> | Cumberland Rose Gentian | GA |
| <i>Scutellaria montana</i> | Large-flowered Skullcap | US |
| <i>Thalictrum debile</i> | Trailing Meadowrue | GA |
| <i>Xyris tennesseensis</i> | Tennessee Yellow-eyed Grass | US |
| Pickens County, Georgia | | |
| <i>Waldsteinia lobata</i> | Piedmont Barren Strawberry | GA |

Biologist conducted field surveys in July and October, 2006 to determine the presence or absence of the above listed protected species. Surveys for aquatic species, such as fish and mussels, were not conducted due to the lack of suitable habitat within the project APE. Known federally listed species were not observed within the study corridor. Based upon the results of the field survey, the project, as planned, would have no effect on current federally protected or DNR listed aquatic or terrestrial species.

- Erosion and Sediment Control / Water Quality
No surface water intakes are located within the APE for Project CSSTP-0006-00(416). It is anticipated that the proposed project will not impact potable water resources. No state listed 303(d) water bodies are located within the APE for the project. Localized temporary water quality impacts will be minimized during construction by the use of Best Management Practices (BMPs).
- Air Quality
No impacts anticipated. The project is located in an area designated as being in attainment for ozone and PM 2.5.
- Noise
Several noise sensitive land uses (residences, etc) are located within the APE for the proposed project. Some of these land uses are also located in close proximity to existing SR-53. As a result, it is anticipated that noise impacts will occur at isolated receptors within the project study area. It is also anticipated that abatement will not be reasonable or feasible.
- Possible Permits Required
 - U. S. Army Corps of Engineers Section 404 – Nationwide Permit
 - Federal Emergency Management Agency (FEMA)
No FEMA designated floodplains or floodways are located within the APE for the proposed project.
 - Tennessee Valley Authority (TVA)
No waters regulated by the Tennessee Valley Authority are within the APE for the proposed project.
 - U. S. Coast Guard (USCG)
No navigable waters are within the APE for the proposed project. Therefore, no USCG permit will be necessary.
- Underground Storage Tanks (USTs) & Leaking Underground Storage Tanks (LUSTs)
No currently active or abandoned gas stations are located along SR-53 within the study area. No UST sites or LUST sites were identified within the APE for the proposed project.
- Hazardous Waste Sites
There are four (4) potential hazardous waste sites within the APE for the proposed project. None of these sites are Resource Conservation and Reclamation Act (RCRA) registered or National Priority List sites. A land use and location description for each site is provided in the following narrative. The locations of these sites are described with reference to the conceptual SR-53 alignment stationing and each potential hazardous materials source is illustrated on the concept mapping by a triangle with a green circle.
 - Station 135+00 through 142+00: SR-53 at Auto Repair & Salvage Yard - a large auto salvage yard is located along the south side of existing SR-53 at this location. The site is not registered with any hazardous materials database. Potential hazardous materials include metals contamination and petroleum products from salvage vehicles including gasoline, diesel, oil, antifreeze, etc. No above ground storage tanks (ASTs) or USTs were observed at the site. The conceptual alternative will not require additional right-of-way from this site.
 - Station 148+50 through 149+00: Junk Cars within ravine – A ravine with several junk cars is located along the north side of the proposed conceptual alternative at this location. Potential hazardous materials include petroleum products from salvage vehicles including gasoline, diesel, oil, antifreeze, etc. The conceptual alternative will require right-of-way and removal of the cars at this location.

- Station 151+00 through 155+00: SR-53 at Farm House with Barn and Junk Cars – a farm with a large barn with several large farm implements and junk cars is located along the north side of existing SR-53 at this location. The site is not registered with any hazardous materials database. Potential hazardous materials include chemicals associated with farms (pesticides, herbicides, fertilizers) and petroleum products from salvage vehicles or farm implements including gasoline, diesel, oil, antifreeze, etc. No ASTs or USTs were observed at the site. The conceptual alternative will require the acquisition of this farm and all outbuildings at this location.
- Station 159+00: Residence with Large Auto Repair Garage – a residence with a large garage and several junk cars is located along the north side of existing SR-53 at this location. The site is not registered with any hazardous materials database. Potential hazardous materials include petroleum products from salvage vehicles including gasoline, diesel, oil, antifreeze, etc. No AST's or USTs were observed at this location. The conceptual alternative will require right-of-way at this location.

• Level of Environmental Analysis:

- Are Time savings Procedures appropriate? Yes (X) No ()
- Categorical Exclusion (X)

• Utility Involvements

- Amicalola EMC - Tim Jenkins – Ph: (706) 273-8764
- Frontier Communications – Jerry DeBerry – Ph: (706) 337-5000
- Pickens County Water Authority – Larry Coleman – Ph : (706) 253-8718
The proposed alignment will involve the relocation of a water tower and the complete acquisition of a parcel.
- City of Calhoun Water – Larry Muse – Ph: (770) 548-0359
- City of Fairmount Water – Mayor Steve Brannon – Ph: (706) 337-5306

VE Study Required: Yes () No (X)

Project Responsibilities:

- Design - Volkert & Associates, Inc.
- Environmental - Volkert & Associates, Inc.
- Right of Way Acquisition - ~~Volkert & Associates, Inc.~~ DOT ✓
- Relocation of Utilities - GDOT
- Letting of Contract - GDOT ✓
- Supervision of Construction - GDOT
- Providing Material Pits - Contractor
- Providing Detours – Contractor

Coordination:

- The Initial Concept Meeting was held on July 24, 2006 at the Georgia Department of Transportation's District 6 Conference Room. Those from Volkert & Associates, Inc., GDOT, Frontier Communications, and The City of Fairmount, GA attended the meeting. A brief overview of the project was given including the need and purpose as well as four alternative horizontal alignments. Other issues that were discussed include environmental concerns, how the project will be coordinated among several different entities including the public, and a project schedule. A copy of the meeting minutes is included in the attachments.
- The Concept Meeting was held on March 9, 2007 at the Georgia Department of Transportation's District 6 Conference Room. Representatives from GDOT, Volkert & Associates, and Gordon County attended the meeting. A copy of the meeting minutes is included in the attachments.
- P.A.R. meetings, dates and results : N/A
- FEMA, USCG and/or TVA : N/A
- Public Involvement:
 - A Public Information Open House was held on January 9, 2007.
 - Locals invited to Concept Team Meeting
- Local Government comments can be found on page 11 of this report.
- Other projects in the area :
 - PI No. 0007930 - Long Range – SR-53 from SR 61/Gordon County to 0.5 mile East of SR 136 Connector/Pickens County; 10 Miles
 - PI No. 0007931 - Long Range – SR-53 from 0.5 mile East of SR 136 Connector/Pickens County to SR 515; 9 Miles
- Railroads: N/A
- Other coordination to date:

Public Input

A comment was received by the Mayor of Fairmount, GA in response to a request for known conditions and concerns for the SR 53 Safety Improvements Project. (This comment was not a part of the Public Information Open House)

Name: Mr. Steven Brannon
Title: Mayor
Organization: City of Fairmount, GA
Address: 2567 U.S. Highway 411, SE
P.O. Box 705
Fairmount, GA 30139

Phone: (706) 337-5306
Fax: (706) 337-4676
Response Date: 5/25/2006
Comment Method: Letter
Date Received: 9/6/2006
For or Against: For

Comment: *"This letter is in response to your request dated March 13, 2006 for known project conditions or concerns for the above project. I am a life long resident of Fairmount and I am familiar with the area along the proposed construction route. I am very pleased that DOT is planning the much needed improvements along this route. I have 2 areas of concern that many members of our community and the City Council have asked me to convey to your office. (1) We are concerned that a straighter and wider roadway just west of Pearl Johnson Road will have a funnel effect on the west bound traffic. The west bound lane, down Scott Branch is steep with sharp curves. This has always been an accident prone area with many fatalities. (2) We are concerned that any additional widening or right-of-way purchases near Pleasant Grove/Ryo Church could encroach on the Cemetery. This is sacred ground for our community. Some previous improvements along this route may have interfered with some grave sites. We would ask that you please be considerate and respectful in that area. Please advise the City of any plans to improve State Route 53 west of this*

project so the City of Fairmount can plan accordingly. We are currently working on our Comprehensive Plan for the next 20 years and any information could be helpful. I am sure that you are faced with many issues on a project like this. I am confident that you and your engineers will take this challenge and will make the much needed improvements along this section of our community."

A Public Information Open House (PIOH) was held on January 9, 2007 at the Fairmount Elementary School, which is located at 130 Peachtree Street, Fairmount, GA. Displays of the conceptual alignment were on hand for the public to review and ask questions to the GDOT representatives. Seventy-four (74) citizens registered at the PIOH. Nine (9) comments were received from the PIOH meeting. Most people in attendance supported the proposed project. The summary of comments received is below. Actual comments are included in the attachments.

| OPTION | # |
|-----------|---|
| FOR | 5 |
| AGAINST | 3 |
| UNDECIDED | 1 |

The comments resulted in five (5) people for the project, three (3) people against the project and one (1) undecided. The comments in favor of the project focus on the dangerous curves in the area and the number of accidents that have occurred in the past. The comments against the project mention that straightening the roadway will result in higher speeds and more accidents due to vehicles leaving and entering the highway. The one undecided comment was from a property owner concerned about the loss of SR-53 frontage and the effect the project will have upon property values for properties bypassed by the project.

Scheduling – Responsible Parties’ Estimate:

- Time to complete environmental process: 12 months
- Time to complete preliminary construction plans: 6 months
- Time to complete right-of-way plans: 4 months
- Time to complete final construction plans: 9 months
- Time to complete right-of-way purchase: 12 months

Other Alternates considered: No Build – This option does not address the needs for a safer and more efficient operation of SR 53 through the corridor.

Attachments:

1. Construction Cost Estimate (Includes Right-of-Way)
2. Right-of-Way Cost Estimate Approval
3. Typical Sections
4. Accident Summaries
5. Traffic Counts & Speed Studies
6. Capacity Analysis
7. Minutes of Initial Concept and Concept Meetings
8. PIOH Comments
9. PIOH Synopsis

PRELIMINARY COST ESTIMATE
OFFICE OF CONSULTANT DESIGN

DATE: 05/15/07 PREPARED BY: Volkert & Associates.
 PROJECT NO: CSSTP-0006-00(416) FILE NAME:
 P.I. NO: 0006416 MILEAGE: 1.50 miles
 PROJECT DESCRIPTION/CONCEPT: SR 53 Gordon and Pickens County
 EXISTING ROADWAY: SR 53
 TRAFFIC: CURRENT AADT (2010) 4,300 PROJECTED AADT (2030) 9,500

- () PROGRAMMING PROCESS
- (x) CONCEPT DEVELOPMENT
- () DURING PROJECT DEVELOPMENT

PROJECT COSTS

| | | | | | |
|---------------------------|--------------|---------|--|----------|----------------|
| A. MOBILIZATION | 1 LS | | | SUBTOTAL | \$100,000.00 |
| B. RIGHT OF WAY | 1 LS | | | SUBTOTAL | \$2,450,000.00 |
| B. UTILITIES | 1 LS | | | SUBTOTAL | \$500,000.00 |
| C. CLEARING AND GRUBBING | 1 LS | | | SUBTOTAL | \$200,000.00 |
| D. EARTHWORK | | | | | |
| Excavation | 600,000 CY @ | \$6.00 | | | \$3,600,000.00 |
| | | | | SUBTOTAL | \$3,600,000.00 |
| E. TEMPORARY STRUCTURES | | | | | |
| Shoring Wall | 1 LS | | | SUBTOTAL | \$200,000.00 |
| F. BASE AND PAVING | | | | | |
| <u>Aggregate Base</u> | | | | | |
| Graded Aggregate, 12" | 30,800 SY @ | \$15.00 | | | \$462,000.00 |
| <u>Asphalt Paving</u> | | | | | |
| 12.5 mm Superpave | 2,600 ton @ | \$75.00 | | | \$195,000.00 |
| 19 mm Superpave | 3,400 ton @ | \$75.00 | | | \$255,000.00 |
| 25 mm Superpave | 10,000 ton @ | \$75.00 | | | \$750,000.00 |
| Bituminous Tack Coat | 3,000 gal @ | \$1.75 | | | \$5,250.00 |
| | | | | SUBTOTAL | \$1,667,250.00 |
| G. DRAINAGE | | | | | |
| <u>Cross Drain System</u> | | | | | |
| 36" Conc. Pipe | 1,000 LF @ | \$65.00 | | | \$65,000.00 |
| | | | | SUBTOTAL | \$65,000.00 |
| H. TRAFFIC CONTROL | 1 LS | | | SUBTOTAL | \$30,000.00 |
| I. EROSION CONTROL | 1 LS | | | SUBTOTAL | \$50,000.00 |
| J. GUARDRAIL | 1 LS | | | SUBTOTAL | \$10,000.00 |
| K. SIGNS, STRIPING | 1 LS | | | SUBTOTAL | \$20,000.00 |

SUBTOTAL CONSTRUCTION
E & C (10%)

TOTAL CONSTRUCTION COSTS

~~\$8,892,250.00~~
\$889,225.00

~~\$9,781,475.00~~

5,942,250
594,225

6,536,475

Revised 6/13/07
JDP

Preliminary Right of Way Cost Estimate

Date: March 27, 2007

Project: SR 53 (CSSTP 0006-00(416))

P.I. Number: 0006416

Existing/Required R/W: 33.5 acres

No. Parcels: 21

Project Termini: SR 53 from 3,700' East of Ryo Mountain Road to 1,700' West of Davis Road

Project Description: SR 53 (Gordon/Pickens County)

Land:

| | | |
|--------------|------------------------------------|-------------------------|
| Commercial | 2.5 ac @ \$15,000 /ac = \$37,500 | |
| Industrial | 0 ac @ \$ /ac = \$ | |
| Residential | 31.5 ac @ \$10,000 /ac = \$315,000 | |
| Agricultural | 0 ac @ \$ /ac = \$ | |
| TOTAL | | <u>\$352,500</u> |

Improvements:

Six residential structures and misc. site improvements **\$325,000**

Relocation:

| | | | |
|---------------------------------|---|------------------|-------------------------|
| Commercial @ \$25,000/parcel | = | \$ | |
| Residential 6 @ \$40,000/parcel | = | <u>\$240,000</u> | |
| TOTAL | | | <u>\$240,000</u> |

Damages:

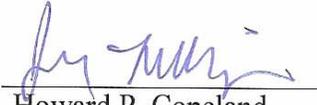
| | | |
|-----------------|----------|------------------------|
| Proximity - | \$45,000 | |
| Consequential - | \$0 | |
| Cost to Cure - | \$0 | |
| TOTAL | | <u>\$45,000</u> |

SUB-TOTAL: \$962,500

| | | |
|------------------------------------|--|-------------|
| Net Cost | | \$962,500 |
| Scheduling Contingency 55 % | | \$529,375 |
| Adm/Court Cost 60 % | | \$577,500 |
| Market Appreciation 40 % | | \$385,000 |
| TOTAL | | \$2,454,375 |

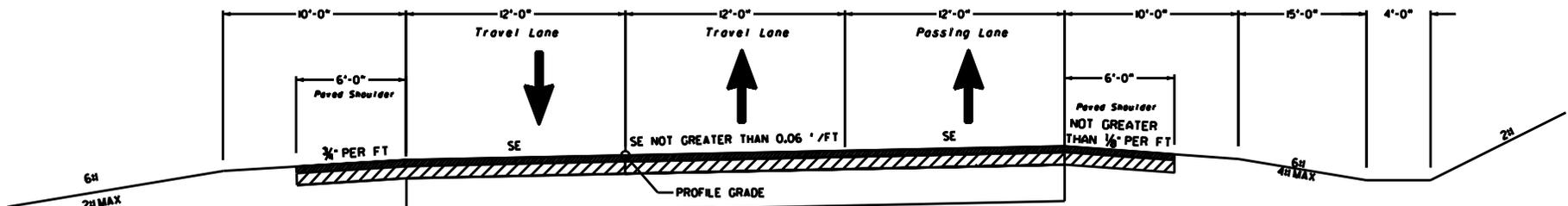
Total Cost \$2,450,000

Prepared By: 
R. David Bell

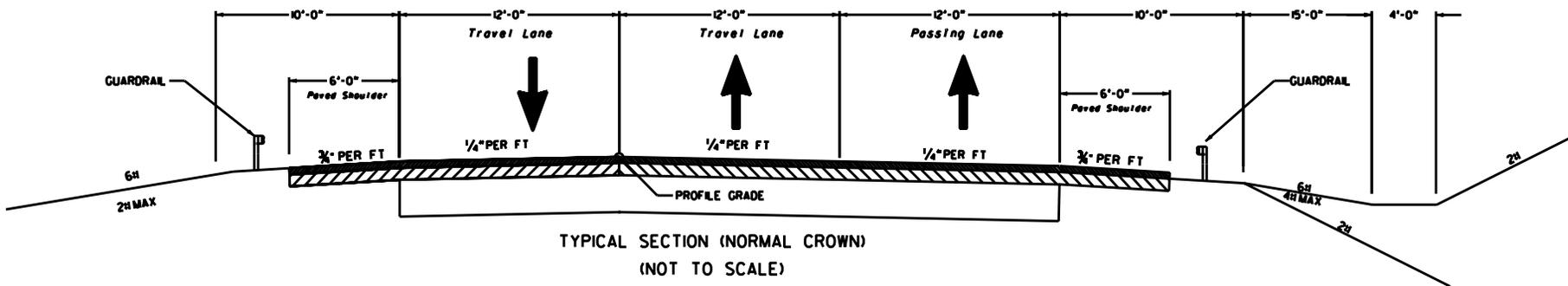
Approved: 
Howard P. Copeland
R/W Administrator

Gordon & Pickens County Land Sales

| <u>Highest & Best Use</u> | <u>Size (acres)</u> | <u>Value (\$ per Acre)</u> | <u>Sales Price</u> |
|-------------------------------|---------------------|----------------------------|--------------------|
| Commercial | 0.580 | \$25,862 | \$15,000 |
| | 11.050 | \$24,163 | \$267,000 |
| | 79.000 | \$2,443 | \$193,027 |
| Residential | 162.357 | \$9,480 | \$1,539,180 |
| | 72.130 | \$5,268 | \$380,000 |
| | 48.285 | \$9,000 | \$434,565 |
| | 10.000 | \$3,500 | \$35,000 |
| | 1.500 | \$9,333 | \$14,000 |
| | 5.760 | \$13,715 | \$79,000 |



TYPICAL SECTION (SUPERELEVATION)
(NOT TO SCALE)



TYPICAL SECTION (NORMAL CROWN)
(NOT TO SCALE)

Volkert
& ASSOCIATES, INC.

CONSULTING ENGINEERS
175 TOWNPARK DRIVE
SUITE 140
KENNESAW, GEORGIA 30144
(770) 919-9520

TYPICAL SECTIONS
SR 53 IN GORDON/PICKENS COUNTY
PROJECT NO. CSSTP-0006-00(416)
P.I. NO. 0006416

ACCIDENT DATA FOR SR 53 (2001-2004)

| ACCIDENT # | CONTRIBUTING FACTOR | COUNTY | DATE | DIRECTION | MANEUVER | MILELOG | MOST HARMFUL EVENT | FATALITIES | INJURIES | VEHICLES | ROUTE # | ROUTE TYPE | VEHICLE DAMAGE |
|------------|--------------------------------------|---------|---------------------|-----------|---------------------|---------|---------------------------|------------|----------|----------|---------|-------------|----------------|
| 11190123 | Other | Pickens | 2001 05-28 12:00 | West | Negotiating a Curve | 0.01 | Jackknife | 0 | 0 | 1 | 53 | State Route | Moderate |
| 11190124 | Other | Pickens | 2001 05-28 12:00 | West | Negotiating a Curve | 0.01 | Tree | 0 | 0 | 1 | 53 | State Route | Moderate |
| 20770163 | Not A Collision With A Motor Vehicle | Pickens | 2002 01-25 3:41 | West | Negotiating a Curve | 0.01 | Overturn | 0 | 1 | 1 | 53 | State Route | Moderate |
| 20270655 | Not A Collision With A Motor Vehicle | Pickens | 2002 01-06 2:35 | West | Negotiating a Curve | 0.01 | Ditch | 0 | 0 | 1 | 53 | State Route | Moderate |
| 32450402 | Not A Collision With A Motor Vehicle | Pickens | 2003 10-26 1:49 | West | Negotiating a Curve | 0.01 | Embankment | 0 | 2 | 1 | 53 | State Route | Moderate |
| 42030584 | Not A Collision With A Motor Vehicle | Pickens | 2004 06-01 8:29 | East | Negotiating a Curve | 0.02 | Culvert | 0 | 0 | 1 | 53 | State Route | Moderate |
| 10960383 | Driver Lost Control | Pickens | 2001 03-03 12:00 | West | Negotiating a Curve | 0.03 | Tree | 0 | 2 | 1 | 53 | State Route | Extensive |
| 11190118 | Driver Lost Control | Pickens | 2001 05-24 12:00 | West | Negotiating a Curve | 0.04 | Overturn | 0 | 3 | 1 | 53 | State Route | Extensive |
| 30720776 | Not A Collision With A Motor Vehicle | Pickens | 2003 04-21 10:12 | West | Negotiating a Curve | 0.04 | Embankment | 0 | 0 | 1 | 53 | State Route | Moderate |
| 33530138 | Not A Collision With A Motor Vehicle | Pickens | 2003 09-28 5:15 | West | Negotiating a Curve | 0.04 | Ditch | 0 | 0 | 1 | 53 | State Route | Moderate |
| 31620548 | Not A Collision With A Motor Vehicle | Pickens | 2003 08-14 7:25 | East | Negotiating a Curve | 0.1 | Overturn | 0 | 1 | 1 | 53 | State Route | Moderate |
| 31620565 | Not A Collision With A Motor Vehicle | Pickens | 2003 08-26 3:24 | East | Negotiating a Curve | 0.1 | Overturn | 0 | 1 | 1 | 53 | State Route | Moderate |
| 31190519 | Not A Collision With A Motor Vehicle | Pickens | 2003 07-07 11:49 | West | Negotiating a Curve | 0.18 | Highway Traffic Sign Post | 0 | 3 | 1 | 53 | State Route | Moderate |
| 41730601 | Not A Collision With A Motor Vehicle | Pickens | 2004 05-18 10:01 | West | Negotiating a Curve | 0.19 | Other Fixed Object | 0 | 0 | 1 | 53 | State Route | Moderate |
| 44780593 | Head On | Pickens | 2004 12-07 7:07 | West | Negotiating a Curve | 0.48 | Motor Vehicle in Motion | 0 | 1 | 2 | 53 | State Route | Moderate |
| 11090096 | Too Fast for Conditions | Pickens | 2001 07-13 12:00 | East | Negotiating a Curve | 0.54 | Overturn | 0 | 2 | 1 | 53 | State Route | Extensive |
| 41060252 | Not A Collision With A Motor Vehicle | Pickens | 2004 01-20 6:14 | West | Negotiating a Curve | 0.78 | Overhead Sign Support | 0 | 0 | 1 | 53 | State Route | Moderate |
| 44840654 | Not A Collision With A Motor Vehicle | Pickens | 2004 12-09 7:33 | West | Straight | 0.99 | Tree | 0 | 0 | 1 | 53 | State Route | Moderate |
| 10970350 | Driver Lost Control | Gordon | 2001 03-23 12:00 | West | Negotiating a Curve | 26.99 | Tree | 0 | 0 | 1 | 53 | State Route | Moderate |

| ACCIDENT # | CONTRIBUTING FACTOR | COUNTY | DATE | DIRECTION | MANEUVER | MILELOG | MOST HARMFUL EVENT | FATALITIES | INJURIES | VEHICLES | ROUTE # | ROUTE TYPE | VEHICLE DAMAGE |
|------------|--------------------------------------|--------|---------------------|-----------|---------------------|---------|-------------------------|------------|----------|----------|---------|-------------|----------------|
| 32050218 | Not A Collision With A Motor Vehicle | Gordon | 2003 09-30 9:10 | West | Negotiating a Curve | 27.07 | Ditch | 0 | 2 | 1 | 53 | State Route | Moderate |
| 10330617 | Driver Lost Control | Gordon | 2001 01-11 12:00 | East | Negotiating a Curve | 27.09 | Tree | 0 | 0 | 1 | 53 | State Route | Moderate |
| 10330618 | Weather Conditions | Gordon | 2001 01-11 12:00 | West | Straight | 27.12 | Overtum | 0 | 1 | 1 | 53 | State Route | Extensive |
| 20800559 | Not A Collision With A Motor Vehicle | Gordon | 2002 02-01 11:22 | West | Negotiating a Curve | 27.17 | Tree | 0 | 1 | 1 | 53 | State Route | Moderate |
| 20770731 | Not A Collision With A Motor Vehicle | Gordon | 2002 01-06 1:30 | West | Negotiating a Curve | 27.17 | Tree | 0 | 1 | 1 | 53 | State Route | Moderate |
| 32340059 | Not A Collision With A Motor Vehicle | Gordon | 2003 06-28 11:59 | West | Negotiating a Curve | 27.17 | Other Non-Collision | 0 | 1 | 1 | 53 | State Route | Moderate |
| 23950465 | Sideswipe - Opposite Direction | Gordon | 2002 10-15 4:52 | West | Negotiating a Curve | 27.26 | Motor Vehicle in Motion | 0 | 0 | 2 | 53 | State Route | Moderate |

Basic Axle Class Summary: 53E

| (DEFAULTX) | | #1 | #2 | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 | #12 | #13 | Total |
|-------------------|------|------------|--------------|-------------|-----------|------------|------------|-----------|------------|-------------|-----------|-----------|-----------|-----------|--------------|
| Description | Lane | Cycle | Cars | 2A-4T | Buses | 2A-SU | 3A-SU | 4A-SU | 4A-ST | 5A-ST | 6A-ST | 5A-MT | 6A-MT | Other | |
| TOTAL COUNT : #1. | | 38 | 7759 | 3786 | 13 | 216 | 188 | 9 | 124 | 1082 | 17 | 11 | 1 | 10 | 13254 |
| #2. | | 74 | 7435 | 3347 | 15 | 181 | 195 | 24 | 229 | 846 | 75 | 34 | 15 | 81 | 12551 |
| | | <u>112</u> | <u>15194</u> | <u>7133</u> | <u>28</u> | <u>397</u> | <u>383</u> | <u>33</u> | <u>353</u> | <u>1928</u> | <u>92</u> | <u>45</u> | <u>16</u> | <u>91</u> | <u>25805</u> |
| Percents : #1. | | 0% | 59% | 29% | 0% | 2% | 1% | 0% | 1% | 8% | 0% | 0% | 0% | 0% | 51% |
| #2. | | 1% | 59% | 27% | 0% | 1% | 2% | 0% | 2% | 7% | 1% | 0% | 0% | 1% | 49% |
| | | <u>0%</u> | <u>59%</u> | <u>28%</u> | <u>0%</u> | <u>2%</u> | <u>1%</u> | <u>0%</u> | <u>1%</u> | <u>7%</u> | <u>0%</u> | <u>0%</u> | <u>0%</u> | <u>0%</u> | |
| Average : #1. | | 5 | 1108 | 541 | 2 | 31 | 27 | 1 | 18 | 155 | 2 | 2 | 0 | 1 | 1893 |
| #2. | | 11 | 1062 | 478 | 2 | 26 | 28 | 3 | 33 | 121 | 11 | 5 | 2 | 12 | 1794 |
| | | <u>16</u> | <u>2170</u> | <u>1019</u> | <u>4</u> | <u>57</u> | <u>55</u> | <u>4</u> | <u>51</u> | <u>276</u> | <u>13</u> | <u>7</u> | <u>2</u> | <u>13</u> | <u>3687</u> |
| Days & ADT : #1. | | 7.0 | 1893 | | | | | | | | | | | | |
| #2. | | 7.0 | 1793 | | | | | | | | | | | | |
| | | <u>7.0</u> | <u>3686</u> | | | | | | | | | | | | |

Basic Speed Class Summary: 53E

| (DEFAULTX) | | #1 | #2 | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 | #12 | #13 | #14 | #15 | #16 | | |
|---------------|-----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|--------------|--|
| | | 0.0 - 19.9 | 20.0 - 24.9 | 25.0 - 29.9 | 30.0 - 34.9 | 35.0 - 39.9 | 40.0 - 44.9 | 45.0 - 49.9 | 50.0 - 54.9 | 55.0 - 59.9 | 60.0 - 64.9 | 65.0 - 69.9 | 70.0 - 74.9 | 75.0 - 79.9 | 80.0 - 84.9 | 85.0 - 89.9 | Other | Total | |
| TOTAL COUNT : | #1. | 1 | 2 | 5 | 22 | 54 | 242 | 854 | 2887 | 4716 | 3281 | 957 | 186 | 36 | 5 | 2 | 4 | 13254 | |
| | #2. | 9 | 8 | 44 | 195 | 506 | 1029 | 2573 | 4016 | 2767 | 1075 | 264 | 41 | 14 | 6 | 0 | 4 | 12551 | |
| | | <u>10</u> | <u>10</u> | <u>49</u> | <u>217</u> | <u>560</u> | <u>1271</u> | <u>3427</u> | <u>6903</u> | <u>7483</u> | <u>4356</u> | <u>1221</u> | <u>227</u> | <u>50</u> | <u>11</u> | <u>2</u> | <u>8</u> | <u>25805</u> | |
| Percents : | #1. | 0% | 0% | 0% | 0% | 0% | 2% | 6% | 22% | 36% | 25% | 7% | 1% | 0% | 0% | 0% | 0% | 51% | |
| | #2. | 0% | 0% | 0% | 2% | 4% | 8% | 21% | 32% | 22% | 9% | 2% | 0% | 0% | 0% | 0% | 0% | 49% | |
| | | <u>0%</u> | <u>0%</u> | <u>0%</u> | <u>1%</u> | <u>2%</u> | <u>5%</u> | <u>13%</u> | <u>27%</u> | <u>29%</u> | <u>17%</u> | <u>5%</u> | <u>1%</u> | <u>0%</u> | <u>0%</u> | <u>0%</u> | <u>0%</u> | <u>0%</u> | |
| Average : | #1. | 0 | 0 | 1 | 3 | 8 | 35 | 122 | 412 | 674 | 469 | 137 | 27 | 5 | 1 | 0 | 1 | 1895 | |
| | #2. | 1 | 1 | 6 | 28 | 72 | 147 | 368 | 574 | 395 | 154 | 38 | 6 | 2 | 1 | 0 | 1 | 1794 | |
| | | <u>1</u> | <u>1</u> | <u>7</u> | <u>31</u> | <u>80</u> | <u>182</u> | <u>490</u> | <u>986</u> | <u>1069</u> | <u>623</u> | <u>175</u> | <u>33</u> | <u>7</u> | <u>2</u> | <u>0</u> | <u>2</u> | <u>3689</u> | |
| Days & ADT : | #1. | 7.0 | 1893 | | | | | | | | | | | | | | | | |
| | #2. | 7.0 | 1793 | | | | | | | | | | | | | | | | |
| | | <u>7.0</u> | <u>3686</u> | | | | | | | | | | | | | | | | |
| Avg,50,67,85% | #1. | 57.5 | 57.7 | 60.1 | 63.8 | | | | | | | | | | | | | | |
| | #2. | 51.9 | 52.4 | 55.1 | 59.2 | | | | | | | | | | | | | | |
| | | <u>54.8</u> | <u>55.4</u> | <u>58.3</u> | <u>62.3</u> | | | | | | | | | | | | | | |

Phone: Fax:
E-Mail:

-----Two-Way Two-Lane Highway Segment Analysis-----

Analyst Richard Boston
Agency/Co. Volkert & Associates, Inc
Date Performed 3/26/2007
Analysis Time Period AM & PM Peak
Highway SR 53
From/To
Jurisdiction Gordon/Pickens Counties
Analysis Year 2011
Description

-----Input Data-----

| | | | | | |
|--------------------------|---------|-------|-------------------------|------|-----|
| Highway class | Class 1 | | | | |
| Shoulder width | 10.0 | ft | Peak-hour factor, PHF | 0.87 | |
| Lane width | 12.0 | ft | % Trucks and buses | 14 | % |
| Segment length | 1.5 | mi | % Recreational vehicles | 4 | % |
| Terrain type | Rolling | | % No-passing zones | 0 | % |
| Grade: Length | | mi | Access points/mi | 8 | /mi |
| Up/down | | % | | | |
| Two-way hourly volume, V | 450 | veh/h | | | |
| Directional split | 50 / 50 | % | | | |

-----Average Travel Speed-----

| | | |
|---|-------|-------|
| Grade adjustment factor, fG | 0.93 | |
| PCE for trucks, ET | 1.9 | |
| PCE for RVs, ER | 1.1 | |
| Heavy-vehicle adjustment factor, | 0.885 | |
| Two-way flow rate, (note-1) vp | 628 | pc/h |
| Highest directional split proportion (note-2) | 314 | pc/h |
| Free-Flow Speed from Field Measurement: | | |
| Field measured speed, SFM | - | mi/h |
| Observed volume, Vf | - | veh/h |
| Estimated Free-Flow Speed: | | |
| Base free-flow speed, BFFS | 62.2 | mi/h |
| Adj. for lane and shoulder width, fLS | 0.0 | mi/h |
| Adj. for access points, fA | 2.0 | mi/h |
| Free-flow speed, FFS | 60.2 | mi/h |
| Adjustment for no-passing zones, fnp | 0.0 | mi/h |
| Average travel speed, ATS | 55.3 | mi/h |

Percent Time-Spent-Following

| | | |
|--|-------|------|
| Grade adjustment factor, fG | 0.94 | |
| PCE for trucks, ET | 1.5 | |
| PCE for RVs, ER | 1.0 | |
| Heavy-vehicle adjustment factor, fHV | 0.935 | |
| Two-way flow rate,(note-1) vp | 589 | pc/h |
| Highest directional split proportion (note-2) | 295 | |
| Base percent time-spent-following, BPTSF | 40.4 | % |
| Adj.for directional distribution and no-passing zones, fd/np | 0.0 | |
| Percent time-spent-following, PTSF | 40.4 | % |

Level of Service and Other Performance Measures

| | | |
|--|------|--------|
| Level of service, LOS | B | |
| Volume to capacity ratio, v/c | 0.20 | |
| Peak 15-min vehicle-miles of travel, VMT15 | 194 | veh-mi |
| Peak-hour vehicle-miles of travel, VMT60 | 675 | veh-mi |
| Peak 15-min total travel time, TT15 | 3.5 | veh-h |

Notes:

1. If $vp \geq 3200$ pc/h, terminate analysis-the LOS is F.
2. If highest directional split $vp \geq 1700$ pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

-----Two-Way Two-Lane Highway Segment Analysis-----

Analyst Richard Boston
Agency/Co. Volkert & Associates, Inc
Date Performed 3/26/2007
Analysis Time Period AM & PM Peak
Highway SR 53
From/To
Jurisdiction Gordon/Pickens Counties
Analysis Year 2031
Description

-----Input Data-----

| | | | | | |
|--------------------------|---------|-------|-------------------------|------|-----|
| Highway class | Class 1 | | | | |
| Shoulder width | 10.0 | ft | Peak-hour factor, PHF | 0.87 | |
| Lane width | 12.0 | ft | % Trucks and buses | 14 | % |
| Segment length | 1.5 | mi | % Recreational vehicles | 4 | % |
| Terrain type | Rolling | | % No-passing zones | 0 | % |
| Grade: Length | | mi | Access points/mi | 8 | /mi |
| Up/down | | % | | | |
| Two-way hourly volume, V | 920 | veh/h | | | |
| Directional split | 50 / 50 | % | | | |

-----Average Travel Speed-----

| | | |
|---|-------|-------|
| Grade adjustment factor, fG | 0.99 | |
| PCE for trucks, ET | 1.5 | |
| PCE for RVs, ER | 1.1 | |
| Heavy-vehicle adjustment factor, | 0.931 | |
| Two-way flow rate, (note-1) vp | 1147 | pc/h |
| Highest directional split proportion (note-2) | 574 | pc/h |
| Free-Flow Speed from Field Measurement: | | |
| Field measured speed, SFM | - | mi/h |
| Observed volume, Vf | - | veh/h |
| Estimated Free-Flow Speed: | | |
| Base free-flow speed, BFFS | 62.2 | mi/h |
| Adj. for lane and shoulder width, fLS | 0.0 | mi/h |
| Adj. for access points, fA | 2.0 | mi/h |
| Free-flow speed, FFS | 60.2 | mi/h |
| Adjustment for no-passing zones, fnp | 0.0 | mi/h |
| Average travel speed, ATS | 51.3 | mi/h |

Percent Time-Spent-Following

| | | |
|--|-------|------|
| Grade adjustment factor, fG | 1.00 | |
| PCE for trucks, ET | 1.0 | |
| PCE for RVs, ER | 1.0 | |
| Heavy-vehicle adjustment factor, fHV | 1.000 | |
| Two-way flow rate,(note-1) vp | 1057 | pc/h |
| Highest directional split proportion (note-2) | 529 | |
| Base percent time-spent-following, BPTSF | 60.5 | % |
| Adj.for directional distribution and no-passing zones, fd/np | 0.0 | |
| Percent time-spent-following, PTSF | 60.5 | % |

Level of Service and Other Performance Measures

| | | |
|--|------|--------|
| Level of service, LOS | C | |
| Volume to capacity ratio, v/c | 0.36 | |
| Peak 15-min vehicle-miles of travel, VMT15 | 397 | veh-mi |
| Peak-hour vehicle-miles of travel, VMT60 | 1380 | veh-mi |
| Peak 15-min total travel time, TT15 | 7.7 | veh-h |

Notes:

1. If $vp \geq 3200$ pc/h, terminate analysis-the LOS is F.
2. If highest directional split $vp \geq 1700$ pc/h, terminate analysis-the LOS is F.

MEETING MINUTES
Initial Concept Meeting
SR 53 Gordon/Pickens Counties
July 24, 2006
10:00 AM – District 6 Conference Room

CSSTP-0006-00(416)
P.I. No. 0006416, Gordon/Pickens Counties
SR 53 from West of Pearl Johnson Road to Church Yard Road

❖ **Attendees**

| NAME | COMPANY | EMAIL | PHONE |
|------------------|------------------------------|--|--------------|
| David Moore | GDOT-District 6 Design | David.moore@dot.state.ga.us | 770-387-3622 |
| Steve Malinak | GDOT-District 6 Design | Steve.malinak@dot.state.ga.us | 770-387-3626 |
| Derrick Cameron | GDOT-Traffic Safety & Design | derrick.cameron@dot.state.ga.us | 404-635-8153 |
| Royce Turner | GDOT-District 6 Utilities | Royce.turner@dot.state.ga.us | 770-387-3615 |
| Dawn Fairist | GDOT-District 6 Design | Dawn.fairist@dot.state.ga.us | 770-387-3626 |
| Gene Burden | GDOT-Geotechnical | Gene.burden@dot.state.ga.us | 404-363-7546 |
| Greg Hood | GDOT-District 6 | Greg.hood@dot.state.ga.us | 770-387-3654 |
| Chris Adams | GDOT-Geotechnical | Chris.adams@dot.state.ga.us | 404-363-7546 |
| Quinn Hazelbaker | GDOT-OEL | Quinn.hazelbaker@dot.state.ga.us | 404-699-4432 |
| Lisa Favors | GDOT-OEL | Lisa.favors@dot.state.ga.us | 404-699-6883 |
| Pam Digsby | GDOT-ROW | Pam.digsby@dot.state.ga.us | 770-387-3658 |
| David McFarlin | Volkert & Associates | dmcfarlin@volkert.com | 770-919-9520 |
| Jason Goffinet | Volkert & Associates | jgoffinet@volkert.com | 770-919-9520 |
| Richard Boston | Volkert & Associates | rboston@volkert.com | 770-919-9520 |
| Gordon Bellmay | Frontier Communications | Gordon.bellmay@frontiercorp.com | 931-528-0784 |
| Joey Bowen | Frontier Communications | Joeph.bowen@frontiercorp.com | 912-764-1246 |
| Steven Brannon | City of Fairmount | mayorbrannon@comcast.net | 706-337-5306 |

❖ **Introductions** – Everyone introduced themselves and stated who they work for.

❖ **Opening Remarks** – David McFarlin

- Project Background
 - This is a safety project due to the substandard horizontal and vertical alignments and the high number of accidents that have occurred within the project limits.
 - The project was advertised as a turnkey project.
- Need and Purpose - The project is a rehabilitation of passing lanes along SR-53 to bring horizontal curves, vertical curves, and sight distances up to current design standards and adding shoulders for a distance of approximately 4.1 miles from a point just west of the intersection of Pearl Johnson Road (M.P. 25.97) in Gordon County eastward to the intersection of Church Yard Road (M.P.1.8) in Pickens County. The proposed project also includes the addition of left turn lanes along SR-53 at Pearl Johnson Road in Gordon County and at Davis Road in Pickens County.

- Existing Alignments – A Microstation file was displayed showing the locations of the substandard curves and the horizontal alignment.
 - Horizontal – 10 out of 18 horizontal curves do not meet current standards
 - Vertical – 16 out of 30 vertical curves do not meet current standards
- Traffic
 - 2004 ADT is 4,020 vpd
 - 2010 ADT is 5,100 vpd
 - 2030 ADT is 11,200 vpd
 - Truck % has not been determined; however, it is expected to be high.
- Accident Data
 - GDOT requested that accident data be reviewed for the area of SR 53 just before the project to determine if moving the project termini to include this area is justified.
 - 41 accidents along this stretch of road from 2001 to 2004
 - 62% occurred in curves
 - 14% occurred while making a left turn
 - 8% were related to weather
 - 15% were due to improper passing maneuvers
- Existing roadway and structures
 - The existing roadway consists of 3 lanes with no shoulders for the majority of the project.
 - A retaining wall exists adjacent to the cemetery
 - There are no existing bridges or box culverts on the project
 - No proposed retaining walls were assumed in the scope of work; although, due to the anticipated cuts and fills, they have not been ruled out.

❖ **Project Overview and Review of Conceptual Alternatives Considered to Date - David McFarlin**

- A Microstation file was displayed showing 4 alternative horizontal alignments which may be changed as conditions warrant.
- Proposed Design Criteria
 - Horizontal Curves
 - 55 mph design speed
 - 6% max super elevation
 - 1,060 feet minimum radius
 - 6 degrees maximum curvature
 - Vertical Curves
 - 55 mph design speed
 - Crest VC K = 114
 - Sag VC K = 115
 - 6% maximum grade
 - The conceptual typical sections were shown
 - No bike lanes or pedestrian facilities are currently proposed for the project. Existing SR 53 through the project area is not designated as a bike route.

- Access Control is by permit
- Staging – Staging details have not been determined because a proposed alignment has not been set. It is anticipated that staging problems will be an issue due to required vertical alignment corrections and where the new alignment transitions back into the existing alignment.
- Traffic will be maintained along the existing roadway at all times during construction
- Survey
 - Concept aerial photography and mapping is complete.
 - A survey control has been set.
 - Additional survey will be completed as needed.
 - Surveying will be conducted once a proposed alignment has been chosen.
 - A 20% check will be made by GDOT once the survey is submitted.
- Utilities
 - Amicalola EMC
 - Frontier Communications
 - Pickens County Water
 - City of Calhoun Water
 - City of Fairmount Water
 - Additional utilities not listed are ETC
 - ◆ Ellijay Telephone Company (ETC) – PO Box 0, Ellijay, GA 30540, Contact is Jim Taylor 706-697-5558, email is jimt@ellijay.com
- Existing Right-of-Way ranges from 80 to 100 feet
- Proposed Projects in the Area
 - GDOT PI # 0007930
 - ◆ Long Range – SR 53 from SR 61/Gordon County to 0.5 mile east of SR 136 Connector/Pickens County
 - ◆ 10 miles long
 - GDOT PI # 0007931
 - ◆ Long Range – SR 53 from 0.5 mile east of SR 136 Connector/Pickens County to SR 515
 - ◆ 9 miles long
- Maintenance
 - No maintenance issues have been anticipated to date.
 - There are several small culverts along the project.

❖ **Environmental Concerns** – Jason Goffinet

- A Microstation file was displayed showing the locations of environmental avoidance issues within the project's APE.
- Historic Resources – Four sites have been recommended eligible for the NRHP
 - The Romine Farmstead is located on the north side of SR 53 between Pearl Johnson Road and Fire Tower Road in Gordon County
 - The Scare Corn/Ryo Arbor and Cemetery is located on the south side of SR53 east of Carter Mountain Road in Gordon County
 - The Daugherty House is located at 13512 SR 53 west of Rambling Road in Gordon County

- The Wooten House is located at 14196 SR 53 west of Davis Road in Pickens County
 - The historic boundaries have been delineated at the property lines; however, the boundaries may be revised or reduced to include only the structures.
 - Archaeological – There are no previously recorded sites.
 - Neighborhoods
 - Pickens West Estates is located off of SR 53 east of Henderson Mountain Road.
 - GDOT personnel stated a future large subdivision will be located off of SR 53 down Henderson Mountain Road. This may instigate stakeholders to request that the intersection of Henderson Mountain Road and SR 53 be upgraded to eliminate the skew and possibly add turn lanes.
 - No special interest groups or EJ communities have been identified.
 - A context sensitive design will be considered.
 - 1 cemetery is located at the beginning of the project. The cemetery is separated from the roadway by a retaining wall and acquiring right-of-way is not necessary.
 - No parks and recreational areas have been identified.
 - Wetlands and Streams
 - 3 stream sites have been identified in APE.
 - 5 wetland sites have been identified in APE.
 - A PAR is not anticipated because less than a ½ acre of waters of the us including wetlands will be impacted
 - A GDOT employee noted that the state paid a claim for impacts to the pond located approximately 1000 feet east of Ryo Mountain Road and that measures need to be taken to protect the pond or acquiring the land.
 - Endangered Species – 14 animals, all aquatic and 7 plants are listed as endangered; however, no impacts are expected.
 - Erosion & Sediment Control
 - BMPs will be utilized during construction.
 - There are no surface water intakes within the APE.
 - No impacts to the air quality are anticipated.
 - Noise – Isolated impacts to noise sensitive areas are expected. i.e. churches, residents, etc.
 - Hazardous Materials
 - 1 gas station is located on SR 53 within the project limits. The station has new tanks, but will still be tested for leaks.
 - 9 potential hazardous material sites include several auto repair shops and junk yards located within the project limits. These sites could contain chemicals, ASTs, and USTs.
- ❖ **Possible Permits – Jason Goffinet**
- United States Army Corps of Engineers (USACE) – The need for a Nationwide Permit is expected since less than ½ acre of waters of the US including wetlands are anticipated to be impacted.
 - FEMA – No permits are anticipated.
 - US Coast Guard – No permits are anticipated.
 - Tennessee Valley Authority – No permits are anticipated.

❖ **Coordination** – David McFarlin

- Early coordination with stakeholders has been conducted with no responses being received to date.
- Utilities have been invited to this meeting and will continue to be invited to future meetings. They will remain in the loop when designs are established and or changed for the duration of the project.
- A Public Information Open House will be held at the key milestone in the Project Development Process. One issue to be discussed with the public may be the functionality of intersecting side roads and whether turn lanes, sight distance improvements, etc. are needed.
- A Public Hearing will be held upon approval of the draft Environmental Assessment (EA).

❖ **Project Schedule** – David McFarlin

- Approved Concept at end of October 2006
- Public Information Open House in November/December 2006
- Draft Environmental Assessment in February 2007
- Final EA in April 2007
- Public Hearing in May/June 2007
- Draft FONSI in August 2007
- Final FONSI in September 2007
- Field Survey in 2007
- Preliminary Plans – 2007 & 2008
- Right-of-way Acquisition – 2008 & 2009
- Final Plans in 2009
- Letting in 2010

❖ **Questions and Comments**

- Several people noted that many accidents involve large trucks flipping over in curves.
- Several of the side roads may be reconstructed to eliminate skewed intersections. In addition, the need for left and right turn lanes will be analyzed.
- The proposed alignments stay close to the existing alignment except for in the areas where the curves are substandard. In these areas, the existing road follows a ridge line and new location is necessary to bring the horizontal alignment within the current standards.
- GDOT noted that Gordon and Pickens County are very proactive and may request bike lanes and 10' paved shoulders.
- An EA/FONSI is anticipated for this project and is included in the schedule.
- Selecting a proposed alignment among the alternatives will involve analyzing several factors including environmental avoidance issues, public involvement, cost, and constructability.
- The existing roadway will be tied in to the new alignment to provide access to existing homes and businesses. It was stated that the project should include improving the existing road so the counties will be more susceptible to taking ownership. This may include resurfacing and adding shoulders.
- Due to amount of new location roadway that is anticipated, the project limits may be reduced to include only the area with substandard curves. In addition, accident data will be requested and reviewed in the area from US 411 to Pearl Johnson

Road to analyze the need for improvements along this stretch of SR 53. The project limits will be discussed with GDOT Traffic Safety and Design and the District Office before any adjustments are made.

- The first contact with OEL will be Quinn Hazellbaker.
- The current level of service at intersecting roads is A and it is expected that this will be maintained once the project is built.
- It was stated that a recent GDOT policy change requires all utility submissions be routed through the District Offices.

MEETING MINUTES
Concept Meeting
SR 53 Gordon/Pickens Counties
March 9, 2007
10:00 AM – District 6 Conference Room

CSSTP-0006-00(416)
P.I. No. 0006416, Gordon/Pickens Counties
SR 53 from 3,700-feet east of Ryo Mountain Rd. (M.P. 26.9)
to 1,700-feet west of Davis Rd. (M.P. 1.0)

The Concept Team Meeting was held on the 9th day of March 2007 at the Georgia Department of Transportation's District 6 conference room commencing at 10:00 am.

❖ **Attendance:**

The following were in attendance at the meeting:

| <u>NAME</u> | <u>COMPANY</u> | <u>E-MAIL</u> | <u>PHONE</u> |
|----------------|----------------------------|--|--------------|
| David Moore | GDOT-District 6 Design | David.moore@dot.state.ga.us | 770-387-3622 |
| Steve Malinak | GDOT-District 6 Design | Steve.malinak@dot.state.ga.us | 770-387-3626 |
| Royce Turner | GDOT-District 6 Utilities | Royce.turner@dot.state.ga.us | 770-387-3615 |
| Greg Hood | GDOT-District 6 | Greg.hood@dot.state.ga.us | 770-387-3654 |
| Pam Digsby | GDOT-ROW | Pam.digsby@dot.state.ga.us | 770-387-3658 |
| Dee Corson | GDOT | D.corson@dot.state.ga.us.com | 770-387-3637 |
| Galen Barrow | GDOT | galen.barrow@dot.state.ga.us.com | 770-387-3685 |
| Bardy Hice | Gordon County | bhice@gordoncounty.org | 706-629-6011 |
| David McFarlin | Volkert & Associates, Inc. | dmcfarlin@volkert.com | 770-919-9520 |
| Jason Goffinet | Volkert & Associates, Inc. | jgoffinet@volkert.com | 770-919-9520 |
| Richard Boston | Volkert & Associates, Inc. | rboston@volkert.com | 770-919-9520 |
| Katrina Pate | Volkert & Associates, Inc. | kpate@volkert.com | 770-919-9520 |
| Isatou Cham | Volkert & Associates, Inc. | icham@volkert.com | 770-919-9520 |
| David Bell | Volkert & Associates, Inc. | dbell@volkert.com | 770-919-9520 |

❖ **Opening Remarks** – David Moore

- Mr. Moore gave a brief description of the project, which is the realignment of SR 53.
- He stated that the project has been shortened from the original conceptual termini. The original project termini was SR 53 from west of Pearl Johnson Road east to Church Yard Road. The revised project termini are described as SR 53 from 3,700-feet east of Ryo Mountain Rd. (M.P. 26.9) to 1,700-feet west of Davis Rd. (M.P. 1.0).
- He also indicated that the project schedule has been changed. The original right-of-way plans date has been moved from 2010 to December 2007. Project letting as also been moved from 2012 to 2009.
- Mr. Moore requested that Mr. Hood update the project description to include the new limits in the State Transportation Improvements Program

(STIP). Volkert and Associates, Inc. agreed to send the updated project description to Mr. Hood. The project description in the STIP should be revised to SR 53 from a point 3700-feet east of Ryo Mountain Road (M.P. 26.9) to 1,700-feet west of Davis Road (M.P. 1.0).

➤ Funds for the project have been increased from \$3.5 million to \$7 million

❖ **Introductions** – Everyone introduced themselves and stated for whom they represent.

❖ **Project Information** – David McFarlin

➤ **Need and Purpose** - The proposed project includes the realignment of SR 53 to bring the existing horizontal and vertical curves up to current design standards and adding shoulders for a distance of approximately 1.5 miles from a point 3,700-feet east of Ryo Mountain Road in Gordon County (MP 26.9) east to a point 1,700-feet west of Davis Road in Pickens County (MP 1.0).

▪ Existing Roadway

- 3 lanes with no shoulders for the majority of the project

▪ Existing Alignment

- Horizontal – 7 out of 9 horizontal curves do not meet current standards
- Vertical – 1 out of 7 vertical curves do not meet current standards

▪ Annual Average Daily Traffic (AADT) Along SR 53

- 2004 AADT is 4,020
- 2010 AADT is 4,300
- 2030 AADT is 9,500
- AADT to be updated to reflect new current year (2007) and design year (2027)

▪ Accident Data

- 26 accidents along this stretch of road for the study year
- 96% occurred in curves
- 4% were related to weather
- Accident rate for this road is 307 per Hundred Million Vehicle Miles (HMVM) (State average is 227)

➤ **STIP Project Definition**

▪ Project Type – Safety Improvements Project

▪ STIP Code – Lump Sum

▪ Primary Work Type – Realignment

▪ Description - SR 53 from CR 271 / Carter Mountain Rd. to CR 178 / Davis Rd. (Needs to be revised to reflect changes below)

▪ Revised Description - SR 53 from a point 3,700-feet east of Ryo Mountain Road in Gordon County (M.P. 26.9) to a point 1,700-feet west of Davis Road in Pickens County (M.P. 1.0)

▪ Project categorized as Major

➤ **Project Background**

▪ The proposed project should improve the safety of SR 53 by establishing a new roadway alignment with vertical and horizontal curves that meet current design standards. By improving the vertical

and horizontal alignment, the number of accidents should be reduced because of the improved geometry and sight distances.

❖ **Environmental Resources** – Jason Goffinet

- Wetlands and Streams
 - An ecological report was submitted to the GDOT Office of Environment and Location on February 22, 2007.
 - 3 stream sites have been identified within the area of potential effect for the project - only one (1) stream site (ephemeral) will be impacted by the proposed conceptual alignment.
 - The proposed alignment crosses the ephemeral stream site perpendicularly and impacts less than 300 feet of stream bed.
 - No wetland sites have been identified within the project limits.
 - The project will not require a Section 404 Individual Permit.
 - A Practical Alternatives Report will not be necessary.
 - It is anticipated that the project will require a Nationwide 23 permit.
 - No impacts to state listed or federally listed threatened or endangered species is anticipated.
- No parks and recreational areas have been identified within the project limits.
- Historic Resources – Two sites have been recommended eligible for the National Register of Historic Places (NRHP).
 - The Daugherty House is located at 13512 SR 53 west of Rambling Road in Gordon County.
 - The Wooten House is located at 14196 SR 53 west of Davis Road in Pickens County.
 - The NRHP eligibility limits at both properties extend to the existing SR 53 edge of pavement. No impacts are anticipated.
- Archaeological – There are no previously recorded NRHP sites. Detailed analysis including shovel testing along the alignment will be conducted after the concept has been approved for the project.
- No Cemeteries have been identified within the project limits.
- Hazardous Waste Sites – Four (4) potential hazardous material sites are located along SR 53. The sites include an auto repair shop, a junk yard, and two agricultural barns.
- No Underground Storage Tanks have been identified in the project limits.
- Noise Assessment
 - Draft noise assessment report was submitted to the GDOT Office of Environmental/Location (OEL) on March 6, 2007.
 - No noise impacts are anticipated – Noise levels expected to decrease due to the realignment of SR 53 being further away from the receptors.
- Air – No impacts are anticipated.

❖ **Public Input** – David McFarlin

- Public Information Open House (PIOH) was held on January 9, 2007 in Fairmount, Ga.
 - 74 people registered at the PIOH and nine (9) comments were received at the meeting.

- One (1) public comment was received early during the concept development stage in response to the projects early coordination mail-out.
- Summary of comments are shown below :

| <u>Opinion</u> | <u>#</u> |
|-----------------------|-----------------|
| FOR | 6 |
| AGAINST | 3 |
| UNDECIDED | 1 |

- The comments in favor of the project focus on the dangerous curves in the area and the number of accidents that have occurred in the past.
- The comments against the project mention that straightening the roadway will result in higher speeds and more accidents due to vehicles leaving and entering the highway.
- The one undecided comment was from a property owner concerned about the loss of SR 53 frontage and the affect the project will have upon his property value.

❖ **Project Overview - David McFarlin**

- Proposed Design Guidelines
 - Horizontal Curves
 - 55 mph design speed for the mainline
 - 35 mph design speed for side roads
 - Max. SE Allowed = 6%, Actual Max. = 5.6%
 - Min. Radius Allowed = 1,060 ft, Actual min. = 1,500 ft
 - Max. Degree of Curvature Allowed = 6°, Actual Maximum = 3°49'11"
 - Vertical Curves
 - 55 mph design speed for the mainline
 - Crest VC Min. K Allowed = 114, Actual min. = 117.5
 - Sag VC Min. K Allowed = 115, Actual Min. = 118.
 - Max. Grade Allowed = 6%, Actual Max. = 6%
 - David Moore stated that it needed to be verified that the 85th percentile speed is being used for design instead of the posted speed.
 - Driveways need to be checked for adequate sight distances
- Proposed typical sections - Three (3) - 12 foot lanes with six (6) foot paved and four (4) foot earthen shoulders for a total shoulder width of ten (10) feet
- VE Study
 - No VE study is required because the project is below the \$25 million threshold
- Access Control

- Access Control is by permit
- Level of Environmental Documentation – Jason Goffinet
 - Practical Alternative Report (PAR) – Not expected to be required.
 - NEPA Documentation - Categorical Exclusion is expected
 - Possible Permit Requirements
 - U. S. Army Corps of Engineers Section 404 Permit – Nationwide 23 permit
 - Georgia Department of Environmental Management – None
 - U. S. Fish and Wildlife Service Section 7 Permit – None; An Ecology Report was submitted to OEL.
 - Federal Emergency Management Agency Permit – None. No flood plains have been identified within the project limits.
 - Tennessee Valley Authority Permit – None
 - U. S. Coast Guard Permit – None
- Right-of-Way Requirements
 - 21 Parcels
 - 9 Potential Relocations – may be 7 or 8 if R/W is adjusted during preliminary design
 - Need to add a driveway to Gibson property. Unsure if it will access existing SR 53 or the new SR 53. It will depend on the terrain of the property.
 - Volkert and Associates, Inc. responsible for acquiring Right-of-Way
 - Right-of-Way Width – 135 feet to 400 feet
 - Six (6) Temporary Driveway Easements
 - One (1) Construction Easement for Temporary Intersection will be required to maintain access to Proposed SR 53.
 - Estimated cost is \$1.1 million
- Utilities
 - Amicalola EMC
 - Frontier Communications
 - Pickens County Water
 - Relocation of a water tower and complete acquisition of parcel will be required.
 - Other alignments were considered to avoid the water tower but were too costly
 - City of Calhoun Water
 - City of Fairmount Water
 - Minor utility relocations other than the water tower will be required.
 - Estimated cost is \$0.5 million
- Structures
 - 3 Potential Retaining Walls to avoid stream impacts may be required
 - Gabion walls being considered
 - GDOT does not have a standard for Gabion Walls.
 - Any type of wall has to be approved by GDOT's Office of Bridge Design.
- Soil Conditions

- Mainly shaly silty Loam which is well drained soil and exists on steep sloping terrain
- Pockets of shaly silty Clay is also present and is a well drained highly erodible soil and is located on a rolling hill terrain
- Construction Limits
 - Construction limits have been adjusted inward to minimize impacts
- Maintenance
 - Does not appear to be a problem area
 -
 - Several small culverts are located along the project
- Capacity Analysis for Build and No-Build Alternatives (LOS)
 - Level of Service (LOS) For Current year (2010) – B
 - Level of Service (LOS) For Design year (2030) – C
 - LOS to be revised to reflect construction year (2009) and design year (2029)
- Staging of Project
 - Stage 1
 - Build the majority of the newly aligned SR 53
 - Build the intersection of existing SR 53 at station 153+16
 - Build a temporary intersection at station 105+50
 - Install temporary shoring along the existing alignment between approximate stations 133+50 and 142+25 left to allow for a large cut section of roadway to be built without disrupting traffic on existing SR 53
 - Tie the new alignment into the existing alignment at the beginning and end of the project, which will require temporary lane closures; however, because the existing roadway is three lanes, a single lane closure will be possible without major disruptions to traffic
 - Shift traffic to the new alignment
 - Stage 2
 - Remove the existing SR 53 pavement at the east end of the project
 - Build the intersection at station 121+40 while maintaining access via the temporary intersection at station 105+50 and the intersection at station 153+16
 - Stage 3
 - Remove the temporary shoring system and continue the cut section of the mainline out to the construction limits while building the cul-de-sacs at three different locations
 - Remove the temporary intersection at station 105+50 and the existing SR-53 pavement at the beginning of the project
 - Complete other construction items as needed
- Preliminary Construction Cost Estimate
 - Right-of-Way - \$1.1 million
 - Utilities - \$0.5 million
 - Construction – \$6.5 million
 - Total Construction cost plus E & C (10%) - \$8.9 million

❖ **Coordination – David McFarlin**

- GDOT
- Public
- Other Agencies and Municipalities
 - City of Fairmount
 - Gordon County
 - Pickens County

❖ **Project Schedule – David McFarlin**

- Public Information Open House Held in January 2007
- Approved Concept at end of April 2007
- Field Survey in May 2007
- Archeological Field Research and Report May/June 2007
- SHPO Coordination July/August 2007
- Draft Environmental Document September 2007 (Assume Categorical Exclusion)
- Final Environmental Document early January 2008 (Assume Categorical Exclusion)
- Preliminary Plans – February 2008
- Right-of-way Plans – March 2009
- Final Plans – March 2010
- Letting in 2010
- Project schedule to be revised due to shortening of the project length per David Moore's request. The revised schedule calls for preliminary plans in 2007.

❖ **Questions and Comments**

- Mapping and Survey needs to be submitted for GDOT approval. Waiting on survey to submit
- 20% plans need to be submitted ASAP for review by GDOT. This will consist of the alignment and profile.
- Submit concept to Steve Malinak.
- Gordon county personnel wanted to know if old SR 53 will be converted to a County Road. It was stated that the existing SR 53 will be taken off of the State System and probably become a County Road
- The latest version of the PDP will be checked to ensure all items are included in the concept report including the VE Study requirement.



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FILE P. I. No. 0006416 **OFFICE** Environmental/Location
DATE January 10, 2007

FROM Mrs. Quinn Hazelbaker, Environmental Project Manager

TO DISTRIBUTION BELOW

SUBJECT: STATE ROUTE 53 PUBLIC INFORMATION MEETING SYNOPSIS

PROJECT NUMBER: CSSTP-0006-00(416)

PROJECT NAME: State Route 53 Rehabilitation

DATE: January 9, 2007

NUMBER IN ATTENDANCE: 74

FOR: 4

CONDITIONAL: 0

UNCOMMITTED: 1

AGAINST: 0

OFFICIALS IN ATTENDANCE: Steven L. Brannon, Mayor; Barry Hice, Public Work Director, Gordon County; Joseph Low, Special Projects Director, Pickens County.

ADDITIONAL COMMENTS: Most people in attendance supported the proposed project. One individual expressed concern regarding the loss of SR 53 frontage as a result of the project and the effect the project will have upon his properties value.

PREPARED BY: Jason Goffinet

TELEPHONE NO.: (770) 919-9520

cc: David Studstill, P. E., GDOT Chief Engineer
Todd Long, P. E., GDOT Preconstruction Engineer
Kent Sager, GDOT District 6 Engineer
DeWayne Comer, P.E., GDOT Preconstruction Engineer
David Moore, GDOT Design Engineer
Steve Malinak, GDOT Project Manager
Greg Hood, GDOT District 6
Mohamed Arafa, GDOT District 6 Communications Officer

Georgia Department of Transportation
SR 53 Realignment Project
Project #: CSSTP-0006-00(416)
P.I. # : 0006416
Counties: Gordon/Pickens

PUBLIC INFORMATION OPEN HOUSE
January 9, 2007
Fairmount Elementary School
Public Comments

A Public Information Open House (PIOH) was held on January 9, 2007 at the Fairmount Elementary School, which is located at 130 Peachtree Street, Fairmount, GA. Displays of the conceptual alignment were on hand for the public to review and ask questions to the GDOT representatives. Seventy-four (74) citizens registered at the PIOH. Nine (9) comments were received from the PIOH meeting. Most people in attendance supported the proposed project. The summary of comments received from the PIOH is included below.

| OPTION | # |
|------------------|----------|
| FOR | 5 |
| AGAINST | 3 |
| UNDECIDED | 1 |

The comments resulted in six (5) people for the project, three (3) people against the project and one (1) undecided. The comments in favor of the project focus on the dangerous curves in the area and the number of accidents that have occurred in the past. The comments against the project mention that straightening the roadway will result in higher speeds and more accidents due to vehicles leaving and entering the highway. The one undecided comment was from a property owner concerned about the loss of SR-53 frontage and the effect the project will have upon property values for properties bypassed by the project.

Comment # 1

Name: Mr. Danny Cochran
Address: 506 Childers Lane
Fairmount, GA 30139
Response Date: 1/9/2007
Comment Method: Comment Card
Date Received: 1/9/2007
For or Against: For

Comment: "This needs to be done because of all the wrecks in those curves through this project. Projects look as if that is the best route to go, just need new fence and access to pastures."

Comment # 2

Name: Ms. Ritta Young
Address: 954 Carter Mtn. Road, SE
Fairmount, GA 30139
Response Date: 1/9/2007
Comment Method: Comment Card
Date Received: 1/9/2007
For or Against: For
Comment: "Good to hear."

Comment # 3

Name: Mr. David L. Perry

Address: 14623 Hwy 53 W

Fairmount, GA 30139

Response Date: 1/9/2007

Comment Method: Comment Card

Date Received: 1/9/2007

For or Against: Undecided

Comment: "This project is going to devalue my property considerably since it is going to take away my road frontage on Hwy 53. Who will make up the difference? Where will the dirt come from for fill dirt? Will any be taken away from my side of the road?"

Comment # 4

Name: Ms. Faye Gibson

Address: 835 Ryo Mr. Rd, SE

Fairmount, GA 30139

Response Date: 1/9/2007

Comment Method: Comment Card

Date Received: 1/22/2007

For or Against: Against

Comment: "The new way you want will only make speed worse on the west end of your project (east probably as well!). Property owners there will be in danger when they try to leave and enter their drive ways. Info on the maps was not correct. The personnel were not familiar with the area or did not seem to care maps were not accurate. Work on the current road - make it safer, wider of you see fit. Add guardrails and get enforcement to keep a better eye on traffic. Save money and several peoples homes and property that's been in their families for years. Think of the property owners."

Comment # 5

Name: Mr. Phillip Gibson

Address: 835 Ryo Mr. Rd, SE

Fairmount, GA 30139

Response Date: 1/9/2007

Comment Method: Comment Card

Date Received: 1/22/2007

For or Against: Against

Comment: "I am a land owner just to the west of the proposed project. I have pasture land along Hwy 53 at the Gibson Polled Herford barn. I move hay and cattle in and out of this area frequently. I have already seen an increased rate of speed in this area since the three lane was built. I am concerned with the about the safety of me and my family with the addition of more road that can be traveled at a higher rate of speed. The information wasn't accurate. The maps and information should be accurate so the representatives can talk more accurately. I got the answer that speed is an enforcement issue. If suggested speed is enforced now there will be no need for a new road for safety reasons."

Comment # 6

Name: Mr. Mark E. Gibson

Address: 13452 Fairmount Hwy, SE

Fairmount, GA 30139

Response Date: 1/9/2007

Comment Method: Comment Card

Date Received: 1/22/2007

For or Against: Against

Comment: "I do not support the proposed realignment of SR-53 (GDOT project CSSTP-0006-00(416)). I attended the open house on the project but found that the GADOT and Volkert & Associates were very poorly prepared for the presentation and the outcome was what was to be expected, very poor maps, improper labeling of property (p.s. I do not live across from the dead deer) but that was not my property that was labeled historical even though my property is historical. The presentation was a very poor presentation overall because it was not planned properly. I

have asked for in the past and will continue to ask for an actual speed survey to be done before, during and after the curves to be realigned. I would also like to know the number of fatalities that have occurred over the past ten years. If you have no plans (as stated during the open house) to realign the curves on 53 west below project (416) then the project should be dropped. In my opinion the speeds will be even more excessive than they are now causing traffic to bottleneck at an even greater speed resulting in more accidents on the curves below the project on 53 west toward Fairmount because I'm sure these curves don't meet current DOT standards and also have a very limited sight distance. I hate to waste my tax dollars on another dead end project that will have little impact on the accident rate but will have a big impact on the property owners and individuals that travel this road daily."

Comment # 7

Name: Mr. James E. Burriss

Address: P.O. Box 278

Fairmount, GA 30139

Phone: 706-337-3721

Response Date: 1/9/2007

Comment Method: Comment Card

Date Received: 1/18/2007

For or Against: For

Comment: "We support the project as presented in the January 9th Fairmount meeting. We have witnessed many accidents and increased traffic flow, especially large trucks, since we built our home 2 1/2 years ago. We own the first track of property in Gordon County leaving Pickens County on the south side of Hwy 53 going west for approximately 1200'. We also understand our home and a large portion of our land will be purchased for the project by Georgia DOT. My wife and I would like to accelerate the process for DOT acquisition. We are retired with some health concerns and would like to make relocation plans as early as possible."

Comment # 8

Name: Paula Peace

Address: 13630 Hwy 53 W

Fairmount, GA 30139

Phone: NA

Response Date: 1/9/2007

Comment Method: Comment Card

Date Received: 1/9/2007

For or Against: For

Comment: None

Comment # 9

Name: Annie Frathers

Address: 13648 Hwy 53 W

Fairmount, GA 30139

Phone: NA

Response Date: 1/9/2007

Comment Method: Comment Card

Date Received: 1/9/2007

For or Against: For

Comment: None