

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0007138, Gordon County **OFFICE** Preconstruction
CSSTP-0007-00(138)
SR 53 at SR 3/US 41 Intersection Improvements **DATE** February 8, 2007

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

TO SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Angela Alexander (file copy)
Paul Liles
Babs Abubakari
Kent Sager
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

District 6

PROJECT CONCEPT REPORT

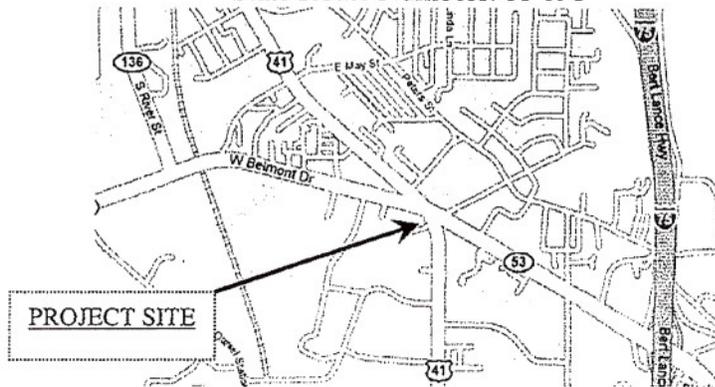
Project Number: CSSTP-0007-00(138)

County: Gordon

P. I. Number: 0007138

Federal Route Number: 41

State Route Numbers: 53 & 3



Recommendation for approval:

DATE 1-12-2007

DATE 1-16-2007

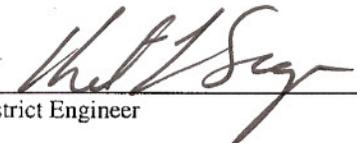

Project Manager
State Traffic Safety & Design Engineer

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 1/23/07


State Transportation Planning Administrator

DATE 1/25/07


District Engineer

DATE 2/1/07


Chief Engineer

NOTICE OF LOCATION AND DESIGN APPROVAL

PROJECT CSSTP-0007-00(138) GORDON COUNTY

P. I. NUMBER 0007138

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of this project.

The date of location approval is *FEBRUARY 8, 2007*

Project CSSTP-0007-00(138) is the proposed intersection improvements to SR 53 @ SR 3. The proposed project length consists of approximately 0.31 miles along SR 53, beginning at mile log 8.58 and ending at 8.89, and 0.11 miles along SR3, beginning at mile log 5.51 and ending at 5.62. The project is within Land lots 265 & 266.

The proposed project consists of adding exclusive east bound right and left turn lanes and a west bound left turn lane on S.R. 53 at the intersection with S.R. 3/ U.S. 41. The split phasing of the signal will be removed and left turn phasing will be added.

Drawings or maps or plats of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

*Mike Thomason
mike.thomason@dot.state.ga.us
874 Peoples Valley Road, NW Cartersville, GA
30120
Telephone: (770) 387-3680
Fax: (770) 387-3993*

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

*Keith Golden, P.E.
Office of Traffic Safety and Design
keith.golden@dot.state.ga.us
935 East Confederate Avenue
Wayne Shackelford Building
Atlanta, Georgia 30316
404-635-8115*

Any written request or communication in reference to this project or notice SHOULD include the Project and P. I. Numbers as noted at the top of this notice.

Project Concept Report page 2
Project Number: CSSTP-0007-00(138)
P. I. Number: 0007138
County: Gordon

Need and Purpose: S. R. 53/West Belmont Dr. functions as an Urban Principal Arterial and is a major connection for commuter traffic to access I-75. In addition, S.R. 53 is a primary route to the City of Calhoun.

Currently there are no eastbound exclusive left turn lanes on S.R. 53/West Belmont Dr. at the S.R.3/U.S.41 intersection. To turn left onto S.R.3 from S.R. 53, a driver has to make a left prior to the intersection with S.R. 3 onto an access road, and then turn left onto S.R.3.

From the collision data (for a period of 12 months), 6 out of 43 collisions were rear end type collisions occurring in the eastbound shared through/right lane. The majority of the collisions were with a vehicle slowing or in a nearly stopped position behind a right turning vehicle. Therefore, it is necessary to improve the intersection of S.R. 53/West Belmont Dr. at S.R. 3 to improve the safety and efficiency.

Description of the proposed project: The proposed project consists of adding exclusive east bound right and left turn lanes and a west bound left turn lane on S.R. 53 at the intersection with S.R. 3/ U.S. 41. The split phasing of the signal will be removed and left turn phasing will be added.

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

PDP Classification: Major Minor X

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

Functional Classification: Urban Principal Arterial

U. S. Route Number(s): 41 State Route Number(s): 53, 3

Traffic (AADT):

Current Year: (2006) 26,290 Opening Year: (2008) 27,784
Design Year: (2028) 48,267

Existing design features:

- Typical Section on SR 53: Urban 4-lane with 12-foot lanes and two way center turn lane, curb & gutter & grassed shoulder with sidewalk at various locations.
- Typical Section on SR 3/US 41: Four-lane undivided urban section, with one left turn lane on the South leg of the intersection, and dual left turn lanes on the North leg of the intersection. Urban shoulder includes 2.5' curb and gutter, with 5' sidewalk on the right side of the north leg ending before the intersection
- Posted speed 45 mph Minimum radius for curve: 4625 ft.
- Maximum super-elevation rate for curve: N.A.
- Maximum grade: 10 %
- Width of right of way: 80 ft.
- Major structures: Double 5'x5' box culvert
- Major interchanges or intersections along the project: S.R.3/U.S.41
- Existing length of roadway segment and the beginning mile logs for each county segment: N.A.

Proposed Design Features:

- Proposed typical section(s) on SR 53: Urban 4-lane with 2-foot lanes and 14ft center turn lane with 16 ft shoulder (5 ft sidewalk & 6 ft grass strip).
- Proposed typical section on SR 3/US 41: Maintain typical section of the road. Extend sidewalk to all quadrants of the intersection. The urban shoulder would consist of 2.5' curb and gutter, 6' grass strip and 5' sidewalk
- Proposed Design Speed Mainline 45 mph
- Proposed Maximum grade Mainline 2.5 % Maximum grade allowable 8 %.
- Proposed Maximum grade Side Street 2.1 % Maximum grade allowable 10 %.
- Proposed Maximum grade driveway 15 %
- Proposed Minimum radius for curve 4625ft. Minimum radius allowable 643
- Proposed Maximum super-elevation rate for curve: 6.0%
- Proposed Maximum degree of curve N. A. Minimum degree allowable N.A.
- Right of way
 - Width 17 ft. from edge of pvmt. (c&g section)
 - Easements: Temporary (), Permanent (), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (), Other ().
 - Number of parcels: 12 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Structures: none
- Major intersections and interchanges: S.R.3
- Traffic control during construction: Open to traffic

- 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:
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (), No (x),
 - Categorical exclusion (x),
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS) ().
- Utility involvements:

Project responsibilities:

- Design: Consultant
- Right of Way Acquisition: GDOT
- Relocation of Utilities: Utility Companies
- Letting to contract: GDOT
- Supervision of construction: GDOT
- Providing material pits: Contractor
- Providing detours: GDOT

Coordination

- Initial Concept Meeting date and brief summary. Attach minutes. **Not Required**
- Concept meeting date and brief summary. **Not Required**
- P. A. R. meetings, dates and results. **Not Required**
- FEMA, USCG, and/or TVA. **Not Required**
- Public involvement. **Not Required**
- Local government comments. **Not Required**
- Other projects in area:
 - STP-065-1(34) Widening of S.R. 53 from C.S. 814 to just west of I-75
Office of road design (Long range program)
 - CSSTP-0007-00(678) Operational improvement S.R. 3 @ S.R. 53
District 6 (Construction Work Program)
 - STP-001-6(35) Widening of S.R. 3 from C.R. 65 to S.R. 53
District 6 (Long range program)

Project Concept Report page 5
Project Number: CSSTP-0007-00(138)
P. I. Number: 0007138
County: Gordon

➤ **CSSTP-M003-00(428) Resurface & maintenance of S.R. 53 from CSX RR to I-75
Maintenance (Under construction)**

- Other coordination to date.
- Railroads **None Impacted by Project**

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 12 Months.
- Time to complete preliminary construction plans: 6 Months.
- Time to complete right of way plans: 2 Months.
- Time to complete the Section 404 Permit: 6 Months.
- Time to complete final construction plans: 6 Months.
- Time to complete to purchase right of way: 7 Months.
- List other major items that will affect the project schedule: Utilities 6 Months.

Other alternates considered:

Comments:

Attachments:

1. Cost Estimates:
 - a. Construction including E&C,
 - b. Right of Way, and
 - c. Utilities.
2. Concept Drawing
3. Typical Sections
4. Location and Design Notice

Preliminary Cost Estimate

Project No.:	CSSTP-0007-00(138)
PI No.:	0007138
GS&P Project No.:	24643.03
Date:	1/5/07
Description:	SR 53 @ SR 3
County:	Gordon
Length of Roadway:	0.32 miles

Project Cost

A. Right of Way

1. Property (Land & Easement)	\$0.00	\$0
2. Displacements: Res:0, Bus:0, M.H.:0	\$0.00	\$0
3. Other Costs (Admin./Cost, Inflation)	\$0.00	\$0

Subtotal: A \$0

B. Preliminary Utility Cost Estimate

1. Non-Reimbursable Utilities	\$450,996.00	\$450,996
2. Reimbursable Utilities	\$140,448.00	\$140,448
3. Local Government Cost	\$1,011,081.00	\$1,011,081

Subtotal: B \$1,602,525

C. Construction

1. Grading & Earthwork				
1 Borrow	2700	CY	\$15.00	\$40,500

Subtotal: C-1 \$40,500

2. Drainage

1 Drainage pipes			
20 LF18"RCP @	\$46.90		\$938
235 LF24"RCP @	\$58.56		\$13,762
2 Catch Basins			
8 Each @	\$2,220.65		\$17,765
3 Extend Head Wall for Existing Culvert	\$5,000.00		\$5,000
		Subtotal: C-2	\$37,465

3. Base & Paving

1 Asphalt Paving			
1,561 Ton 9.5 mm Superpave Overlay	\$49.86		\$77,831
193 Ton 9.5 mm Superpave	\$49.86		\$9,623
391 Ton 19mm Superpave	\$60.00		\$23,460
587 Ton 25mm Superpave	\$57.98		\$34,034
97 Ton Leveling @	\$46.44		\$4,505
4,088 gal Bitum. Tack @	\$2.00		\$8,176
2 Graded Aggregate Base			
800 Ton 12" GAB	\$ 13.63		\$10,904
0 Ton 8" GAB	\$ 8.85		\$0
0 Ton 6" GAB	\$ 6.26		\$0
		Subtotal: C-3	\$168,533

4. Concrete Work

1 Curb & Gutter			
2,441 LF Type 2 @	\$13.46		\$32,856
2 4" Sidewalk			
1,600 SY @	\$62.24		\$99,584
3 Driveway Concrete 8"			
70 SY @	\$53.05		\$3,714
4 Concrete islands			
1,818 SY @	\$132.00		\$239,976
		Subtotal: C-4	\$136,153

5. Signing & Striping

1 Arrows	21	EA	\$71.99	\$1,512
2 Thermo. Solid 5" White	6000	LF	\$0.86	\$5,160
3 Thermo. Solid 5" Yellow	3000	LF	\$0.84	\$2,520
4 Thermo. Skip 5" Yellow	1220	LF	\$0.12	\$146
5 Highway Signs	6	EA	\$150.00	\$900
6 Thermo. Skip 5" White 10' segment	2263	LF	\$0.53	\$1,199
7 Thermo. Skip 5" White 2' segment	310	LF	\$0.53	\$164
8 Thermo. Solid Traff. Stripe, 24" WHITE	156	LF	\$4.97	\$775
9 Thermo. Yellow Hatching	326	SY	\$3.69	\$1,203
10 Thermo. White Hatching	326	SY	\$3.79	\$1,236
11 Thermo. Solid 8" White	930	LF	0.95	\$884
			Subtotal: C-5	\$13,580

6. Traffic Control

1 LS @	\$50,000			\$50,000
			Subtotal: C-6	\$50,000

7. Clearing & Grubbing

0.2 AC @	\$10,000			\$2,000
			Subtotal: C-7	\$2,000

8. Permanent Erosion Control

1 LS @	\$5,000			\$5,000
			Subtotal: C-8	\$5,000

9. Temporary Erosion Control

1 LS @	\$15,000			\$15,000
			Subtotal: C-9	\$15,000

Preliminary Cost Estimate Summary

A. Right of Way	\$0
B. Preliminary Utility Cost Estimate	\$1,602,525
C. Construction	
1. Grading & Earthwork	\$40,500
2. Drainage	\$37,465
3. Base & Paving	\$168,533
4. Concrete Work	\$136,153
5. Signing & Striping	\$13,580
6. Traffic Control	\$50,000
7. Clearing & Grubbing	\$2,000
8. Permanent Erosion Control	\$5,000
9. Temporary Erosion Control	\$15,000
SUBTOTAL CONSTRUCTION COST	468232
E. & C. (5%)	23412
INFLATION (10% PER 1 YEARS)	\$0
TOTAL CONSTRUCTION COST	491644
GRAND TOTAL PROJECT COST	\$2,094,169

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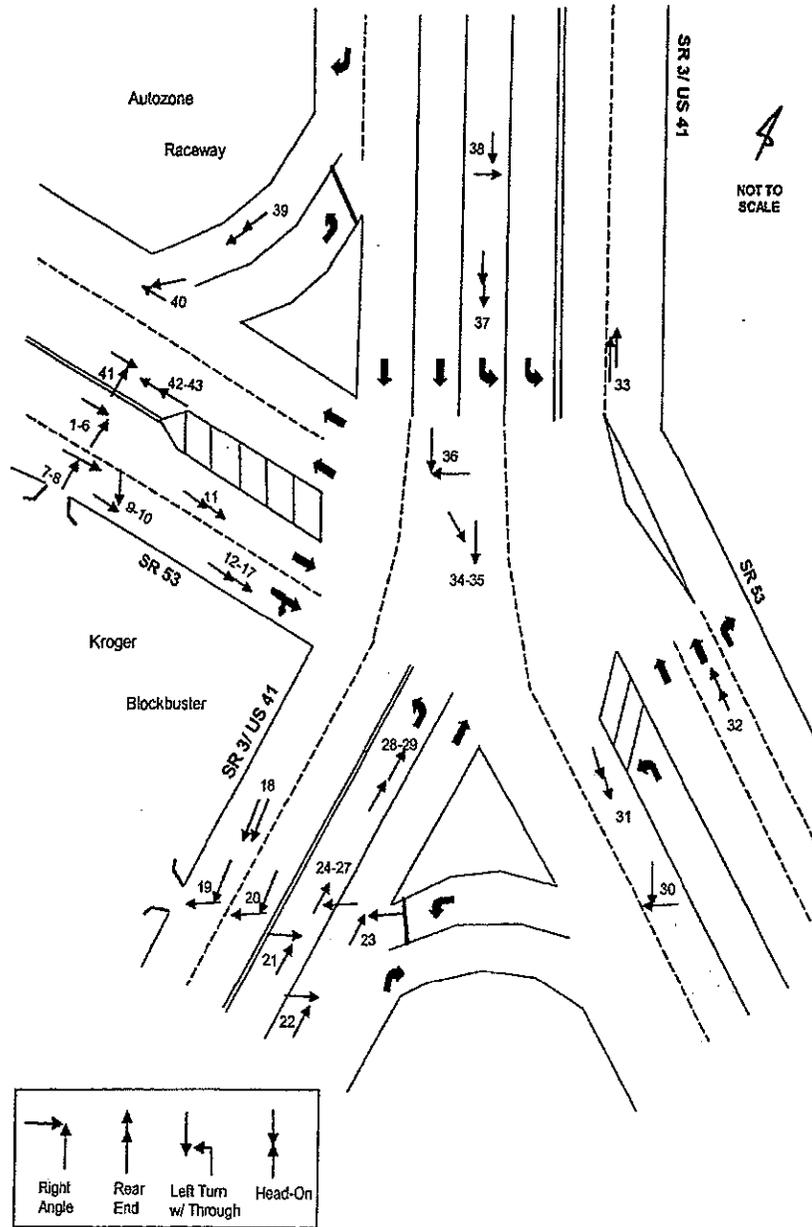
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Traffic Engineering Study Level 3
SR 3/US 41 at SR 53
Gordon County

Appedix F-1
Collision Diagram- Figure 7





**Traffic Engineering Study Level 3
SR 3/US 41 at SR 53
Gordon County**

**Appendix F-2
Collisions April 1, 2002-March 31, 2003 (1 Year)**

Collision	Date	Time	Wet/Dry	Day/Night	Injuries	Fatalities
1	4/12/02	12:22	Wet	Day	0	0
2	6/5/02	13:43	Dry	Day	0	0
3	12/24/02	11:46	Dry	Day	0	0
4	1/16/03	16:27	Wet	Day	0	0
5	1/16/03	10:00	Dry	Day	0	0
6	2/21/02	12:42	Wet	Day	0	0
7	10/13/02	11:49	Dry	Day	0	0
8	11/16/02	11:10	Wet	Day	0	0
9	4/16/02	21:12	Dry	Night	0	0
10	2/21/03	16:52	Wet	Day	1	0
11	10/23/02	19:07	Dry	Night	0	0
12	8/17/02	14:40	Dry	Day	0	0
13	9/26/02	20:50	Wet	Night	0	0
14	11/26/02	10:31	Dry	Day	0	0
15	11/30/02	10:31	Dry	Day	0	0
16	12/24/02	15:27	Dry	Day	0	0
17	2/8/03	13:17	Dry	Day	0	0
18	4/1/02	14:27	Dry	Day	0	0
19	8/9/02	14:35	Dry	Day	2	0
20	2/1/03	13:29	Dry	Day	0	0
21	9/6/02	7:00	Dry	Night	1	0
22	2/28/03	12:21	Dry	Day	1	0
23	8/30/02	19:23	Dry	Day	1	0
24	7/5/02	13:36	Dry	Day	0	0
25	8/2/02	15:36	Dry	Day	0	0
26	8/20/02	17:58	Dry	Day	0	0
27	2/14/03	14:44	Wet	Day	0	0
28	5/31/02	13:13	Dry	Day	0	0
29	11/13/02	18:44	Dry	Night	1	0
30	10/22/02	14:13	Dry	Day	0	0
31	1/2/03	16:48	Wet	Day	1	0
32	5/10/02	17:18	Dry	Day	0	0
33	7/24/02	15:51	Dry	Day	0	0
34	6/14/02	15:20	Wet	Day	0	0
35	12/7/02	9:33	Dry	Day	0	0
36	12/7/02	11:02	Dry	Day	0	0
37	11/9/02	12:55	Dry	Day	0	0
38	6/6/02	11:37	Dry	Day	0	0
39	12/22/02	12:36	Dry	Day	0	0
40	2/25/03	17:42	Dry	Day	0	0
41	12/20/02	13:53	Dry	Day	0	0
42	4/3/02	13:57	Dry	Day	1	0
43	6/28/02	13:22	Wet	Day	0	0