



DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA



INTERDEPARTMENT CORRESPONDENCE

FILE BRST0-0054-01(063) OFFICE Roadway Design  
Forsyth /Gwinnett Cos.  
P.I. No. 132985- DATE June 8, 2010

FROM:   
Russell McMurry, P.E. State Roadway Design Engineer

TO: Brent Story, P.E. State Design Policy and Support Engineer

SUBJECT: **Request of Location and Design Approval**

**Description and Project Proposal:** Project BRST0-0054-01(063) is located on the Forsyth/Gwinnett County Line. This project is the widening of SR 20 over the Chattahoochee River, from two lanes to four lanes from approximately 650 feet south of James Burgess Road in Forsyth County to approximately 900 feet east of Burnette Trail in Gwinnett County. The typical section will include four 12-foot thru lanes, a 44-foot depressed grassed median, 16-foot shoulders, curb and gutter on the outside pavement edges and 5-foot sidewalks on both sides of the roadway. The existing bridge over the Chattahoochee River is proposed to be replaced with two parallel bridges approximately 48 feet wide by 840 feet long. Design Speed is 45 MPH. Project length of 0.74 miles.

**Concept Approval Date:** February 28, 2006

**Environmental Document Type and Approval Date:** EA FONSI, June 2, 2010

**Public Involvement:**

Public Information Open House – July 19, 2005

- Generally positive feedback.
- Numerous comments to expedite the project and concern for traffic flow at the bridge.
- 128 in attendance
- 41 for the project
- 15 conditional
- 3 against the project
- Officials attending the open house were: 1 un-identified official.

Public Information Open House – March 7, 2006

- 349 in attendance
- 40 for the project
- 27 conditional
- 2 against the project
- Officials in attendance were: Marc Cohen and Steve Edwards of the Sugar Hill City Council

Public Hearing Open House – August 9, 2009

- 357 in attendance
- 57 for the project
- 14 conditional support
- 4 against the project
- Officials in attendance were: Brian Allen of Gwinnett County, Tim Allen of Forsyth County, Mark Hamilton-GA House District 23, and Gary Pirkle-Mayor of Sugar Hill

**Consistency with Approved Planning:** The design description as presented herein and submitted for approval is consistent with the approved Concept Report.

**Recommendations:** Recommend that the location and design for the project be approved and that the attached Notice be approved for advertising.

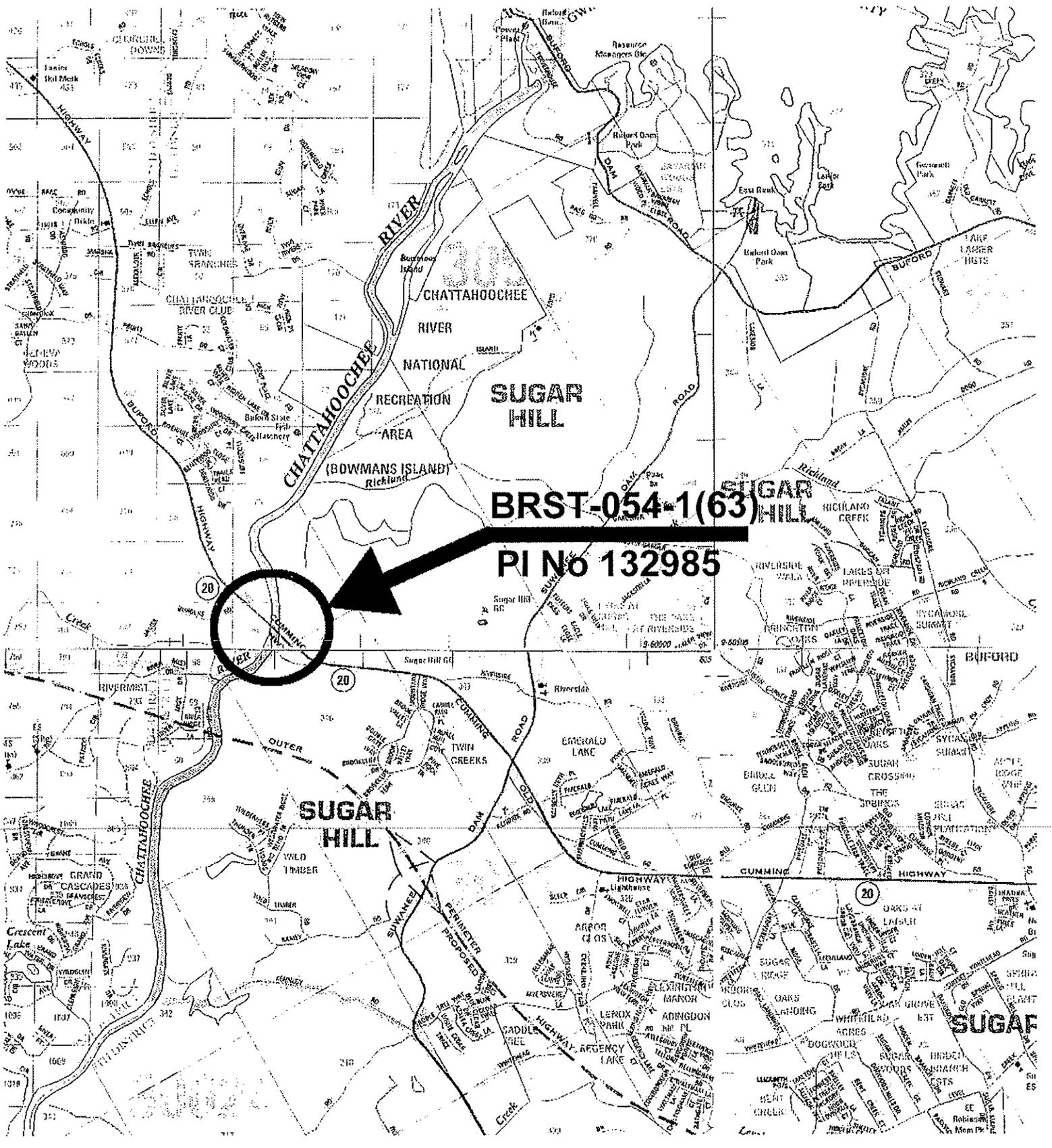
RECOMMEND: Ben Buchan<sup>BAS</sup> 6/11/10  
Director of Engineering Date

APPROVE: Orvil M. Rini 6/11/2010  
Chief Engineer Date of Approval

Attachments:

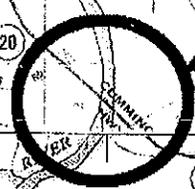
- Sketch Map
- Cost Estimate
- Notice of Location and Design Approval

Date of Location & Design Approval: 6/11/2010  
Date



**BRST-054-1(63)**

**PI No 132985**



**REVISED COST ESTIMATE FOR BRST0-0054-01(063) P.I. 132985**

**Date: February 3, 2010**

CONSTRUCTION\* \$ 10,796,195.92

RIGHT OF WAY \$ 5,300,000

\* Costs contain 10% Engineering and Inspection and 5% Construction Contingencies and Fuel/Liquid AC Adjustments.

**CONTINGENCY SUMMARY**

Construction Cost Estimate:	\$ 8,913,896.07	(Base Estimate)
Engineering and Inspection:	\$ 891,389.61	(Base Estimate x 10%)
Construction Contingency:	\$ 445,694.80	(Base Estimate x 5%) (The Construction Contingency is based on the Project Improvement Type in TPro.)
Total Fuel Adjustment	\$ 235,068.20	(From attached worksheet)
Total Liquid AC Adjustment	\$ 310,147.24	(From attached worksheet)
<b>Construction Total:</b>	<b>\$ 10,796,195.92</b>	
Utility Cost Estimate:	\$ 100,000.00	
Utility Contingency:	\$ 10,000.00	10 %
<b>Utility Total:</b>	<b>\$ 110,000.00</b>	

**Detailed Cost Estimate for BRST0-0054-01(063) P.I. 132985**

**Section ROADWAY ASPHALT**

<b>Item Number</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Price</b>	<b>Item Description</b>	<b>Cost</b>
310-1101	9390	TN	14.87	GR AGGR BASE CRS, INCL MATL	139629.3
318-3000	200	TN	16.89	AGGR SURF CRS	3378.0
402-1812	3060	TN	59.21	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	181182.6
402-3121	5130	TN	54.01	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	277071.3
402-3130	1944	TN	59.87	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	116387.28

402-3190	1830	TN	58.0	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	106140.0
413-1000	1980	GL	1.73	BITUM TACK COAT	3425.4
432-5010	2060	SY	1.25	MILL ASPH CONC PVM T, VARIABLE DEPTH	2575.0
446-2118	1070	LF	4.63	HIGH STRENGTH PVM T REINF FABRIC, 18 IN WIDTH	4954.09

**Section Sub Total:\$834,742.98**

**Section ROADWAY CONCRETE**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
433-1100	620	SY	122.05	REINF CONC APPROACH SLAB, INCL CURB	75671.0
441-0016	540	SY	36.25	DRIVEWAY CONCRETE, 6 IN TK	19575.0
441-0104	3200	SY	23.64	CONC SIDEWALK, 4 IN	75648.0
441-4020	240	SY	35.26	CONC VALLEY GUTTER, 6 IN	8462.4
441-6720	7520	LF	21.0	CONC CURB & GUTTER, 6 IN X 30 IN, TP 7	157920.0
500-3200	5	CY	319.78	CLASS B CONCRETE	1598.89
634-1200	23	EA	85.4	RIGHT OF WAY MARKERS	1964.2

**Section Sub Total:\$340,839.50**

**Section DRAINAGE**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
550-1180	2000	LF	29.13	STORM DRAIN PIPE, 18 IN, H 1-10	58260.0
550-1181	880	LF	60.18	STORM DRAIN PIPE, 18 IN, H 10-15	52958.4
550-1240	256	LF	35.46	STORM DRAIN PIPE, 24 IN, H 1-10	9077.76
550-1241	200	LF	46.4	STORM DRAIN PIPE, 24 IN, H 10-15	9280.0
550-1300	200	LF	41.61	STORM DRAIN PIPE, 30 IN, H 1-10	8322.0
550-1301	192	LF	46.94	STORM DRAIN PIPE, 30 IN, H 10-15	9012.48
550-1360	16	LF	49.93	STORM DRAIN PIPE, 36 IN, H 1-10	798.88
550-2180	64	LF	21.68	SIDE DRAIN PIPE, 18 IN, H 1-10	1387.52
550-2240	48	LF	28.11	SIDE DRAIN PIPE, 24 IN, H 1-10	1349.28
550-3618	2	EA	542.27	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	1084.54
550-3624	2	EA	788.87	SAFETY END SECTION 24 IN, SIDE DRAIN, 6:1 SLOPE	1577.74
550-4218	2	EA	445.27	FLARED END SECTION 18 IN, STORM DRAIN	890.54
550-4224	2	EA	551.46	FLARED END SECTION 24 IN, STORM DRAIN	1102.92
550-4230	3	EA	725.01	FLARED END SECTION 30 IN, STORM DRAIN	2175.02
550-4236	2	EA	920.82	FLARED END SECTION 36 IN, STORM DRAIN	1841.64
603-2012	3530	SY	24.98	STN DUMPED RIP RAP, TP 1, 12 IN	88179.40
603-7000	3530	SY	3.36	PLASTIC FILTER FABRIC	11860.8
668-1100	33	EA	2117.93	CATCH BASIN, GP 1	69891.68
668-1110	100	LF	149.49	CATCH BASIN, GP 1, ADDL DEPTH	14949.0
668-1200	2	EA	2711.74	CATCH BASIN, GP 2	5423.48
668-2100	10	EA	1821.91	DROP INLET, GP 1	18219.10
668-2105	2	EA	1162.72	DROP INLET, GP 1, SPCL DES	2325.44
668-4300	3	EA	1965.96	STORM SEWER MANHOLE, TP 1	5897.88

**Section Sub Total:\$375,865.52**

**Section GUARDRAIL**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
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641-1100	170	LF	43.4	GUARDRAIL, TP T	7378.0
641-1200	3500	LF	14.56	GUARDRAIL, TP W	50960.0
641-5001	6	EA	632.59	GUARDRAIL ANCHORAGE, TP 1	3795.54
641-5012	10	EA	2225.99	GUARDRAIL ANCHORAGE, TP 12	22259.89

**Section Sub Total:\$84,393.44**

**Section SIGNING & MARKING**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	40	SF	13.48	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	539.2
636-1033	40	SF	18.17	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	726.80
636-2080	140	LF	8.94	GALV STEEL POSTS, TP 8	1251.6
653-1501	1860	LF	0.31	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	576.6
653-1502	10450	LF	0.33	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	3448.5
653-1704	50	LF	3.59	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	179.5
653-1804	330	LF	1.69	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	557.69
653-3501	8390	GLF	0.22	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	1845.8
653-6006	570	SY	2.65	THERMOPLASTIC TRAF STRIPING, YELLOW	1510.5
654-1001	30	EA	2.97	RAISED PVMT MARKERS TP 1	89.10
654-1003	100	EA	3.35	RAISED PVMT MARKERS TP 3	335.0
657-6054	2170	LF	3.77	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, YELLOW, TP PB	8180.9

**Section Sub Total:\$19,241.20**

**Section EROSION CONTROL**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	10	AC	291.16	TEMPORARY GRASSING	2911.60
163-0240	40	TN	141.98	MULCH	5679.2
163-0300	5	EA	932.66	CONSTRUCTION EXIT	4663.3
163-0503	5	EA	368.6	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	1843.0
163-0520	630	LF	12.43	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	7830.9
163-0531	2	EA	5295.27	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	10590.54
163-0550	50	EA	145.08	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	7254.00
165-0030	8620	LF	0.63	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	5430.6
165-0060	2	EA	1278.86	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	2557.72
165-0087	5	EA	99.23	MAINTENANCE OF SILT CONTROL GATE, TP 3	496.15
165-0101	5	EA	432.2	MAINTENANCE OF CONSTRUCTION EXIT	2161.0
165-0105	50	EA	52.5	MAINTENANCE OF INLET SEDIMENT TRAP	2625.0
167-1000	18	EA	409.97	WATER QUALITY MONITORING AND SAMPLING	7379.46
167-1500	18	MO	508.17	WATER QUALITY INSPECTIONS	9147.06
171-0030	17250	LF	2.65	TEMPORARY SILT FENCE, TYPE C	45712.5
700-6910	12	AC	667.95	PERMANENT GRASSING	8015.40
700-7000	25	TN	52.94	AGRICULTURAL LIME	1323.5
700-7010	30	GL	15.9	LIQUID LIME	477.0
700-8000	14	TN	360.45	FERTILIZER MIXED GRADE	5046.3

700-8100	600	LB	2.22	FERTILIZER NITROGEN CONTENT	1332.00
716-2000	17380	SY	0.94	EROSION CONTROL MATS, SLOPES	16337.19

**Section Sub Total: \$148,813.43**

**Section LUMP SUM ITEMS**

<b>Item Number</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Price</b>	<b>Item Description</b>	<b>Cost</b>
150-1000	1	LS	810000.0	TRAFFIC CONTROL - BRST0-0054-01 (063)	810,000.0
210-0100	1	LS	2300000.0	GRADING COMPLETE - BRST0-0054-01 (063)	2,300,000.0
541-0001	1	LS	4000000.0	BRIDGE - #1	4,000,000.0

**Section Sub Total: \$7,110,000.00**

**Total Estimated Cost: \$8,913,896.07**

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

FILE **Project No.** BRST0-0054-01(063) **OFFICE** Right of Way  
**P.I. No.** 132985 **County** Forsyth, Gwinnett  
SR 20/Cumming Hwy @ Chattahoochee River @ Forsyth County Line

**DATE** 03/12/2010

**FROM** Howard P. Copeland, Right of Way Administrator

**TO** Brad McManus, Project Manager

**SUBJECT** Cost Estimates **Mgmt LET Date:** 11/15/2012  
**Mgmt R/W Date:** 03/19/2010

Attached is a current detailed cost estimate that we received that will be utilized for Right of Way authorization.

ROW Phase: 2010 \$1,026,353.28

**Attached Cost Estimate \$5,300,000.00**

Please let Floyd J. Williams know, for tracking purposes, once the cost estimate has been sent to Engineering Services. Right of Way funding cannot be requested until the cost estimate has been approved by the Chief Engineer.

Timely submission of the cost estimate and timely approval notification is critical to maintaining the Right of Way authorization schedule. If you have any questions please call Floyd J. Williams at 404-347-0191.

Cc: Brent Story, Road Design

**DETAIL COST ESTIMATE SUMMARY SHEET**

DATE: February 4, 2010  
 PROJECT: BRSTO-0054-01(063) COUNTY: Gwinnett/Forsyth  
 PROJECT DESCRIPTION: SR20 Bridge Widening over Chattahoochee River

P.I. #: 132985  
 PARCELS: 16

**1. LAND (Total area and cost by category)**

Right of Way:	674,552.19 sf	\$ 2,417,966.80	
Permanent and Temporary Easement:	38,849.53 sf	\$ 78,850.40	
<b>Total</b>			\$ <u>2,496,817.20</u>

**2. IMPROVEMENTS**

Main Structures:		\$ 100,000.00	
Site Improvements:		\$ 65,000.00	
<b>Total</b>			\$ <u>165,000.00</u>

**3. DAMAGES**

Damages to Land and Structures		\$ 326,096.75	
Specialty Costs (Cost to Cures, Trade Fixtures, etc.)		\$ 25,000.00	
<b>Total</b>			\$ <u>351,096.75</u>

**4. RELOCATION (Including Consequential Displacements)**

Businesses:	0	Displaced x \$	15,000.00	\$	0.00	
Residential Tenant:	0	Displaced x \$	20,000.00	\$	0.00	
Residential Owner:	1	Displaced x \$	40,000.00	\$	40,000.00	
<b>Total</b>				4		\$ <u>40,000.00</u>

**5. PROPERTY MANAGEMENT (Asbestos Removal and Demolition)**

Number of Structures	1	x \$	25,000.00	\$	25,000.00	
Number of sites with UST's:	0	x \$	50,000.00	\$	0.00	
Number of signs (not billboards):	1	x \$	1,500.00	\$	1,500.00	
<b>Total</b>						\$ <u>26,500.00</u>

<b>Estimated Cost of Right of Way</b>				\$	<u>3,079,413.95</u>
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C/O, Condemnation Increase & Legal Cost (50% of R/W)		\$ 1,539,706.97	
Service Fees and Appraisal Cost ( 16 Par x \$7,500)		\$ 120,000.00	
Condemnation Cost ( 16 Par x \$7,500 x 15%)		\$ 18,000.00	
Incidentals ( 16 Par x \$2,000)		\$ 32,000.00	

<b>Net Cost</b>			\$	<u>4,789,120.92</u>
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Market Appreciation (5% rural, 10% urban)			\$	<u>478,912.09</u>
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<b>TOTAL COST</b>			\$	<u>5,268,033.01</u>
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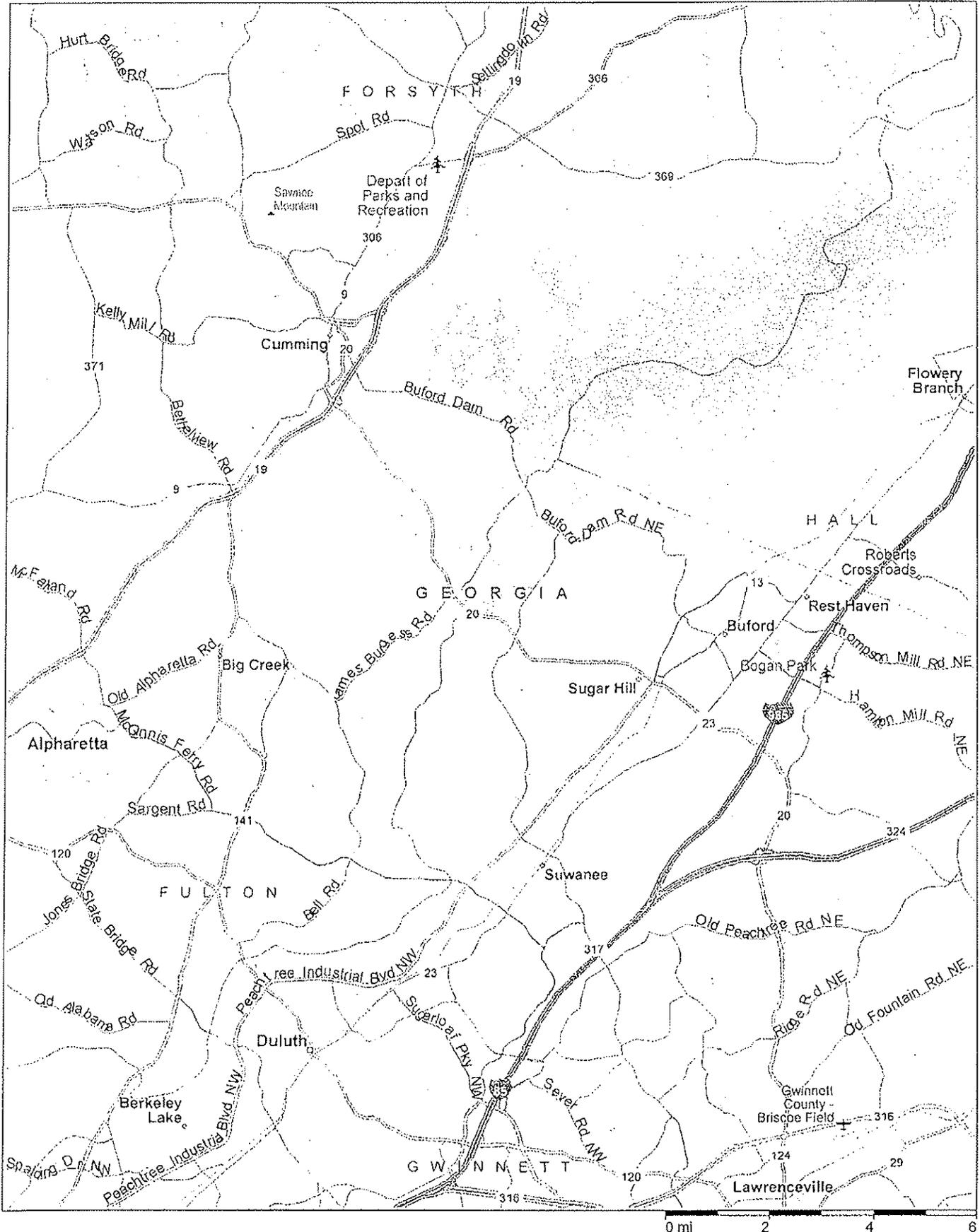
<b>TOTAL COST (ROUNDED)</b>			\$	<u>5,300,000.00</u>
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Credits:                      # Hours

\*Note- Parcels 20 and 21 were not included in this DCE. The major impacts to these parcels will occur as a result of acquisitions during the adjoining project (STP00-002-00(392), SR20 road widening) and it is an assumption of this DCE that these parcels were considered during that project evaluation.

\*Note- Parcels 4, 5, and 18 are currently under the ownership of the United States government and US Army Corp of Engineers. These properties were not considered as part of this DCE.

# Project Location Map



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 © Copyright 2003 by Geographic Data Technology, Inc. All rights reserved. © 2004 NAVTEQ. All rights reserved. This data includes information taken with permission from Canadian authorities © Her Majesty the Queen in Right of Canada.

### Comparable Sales Data

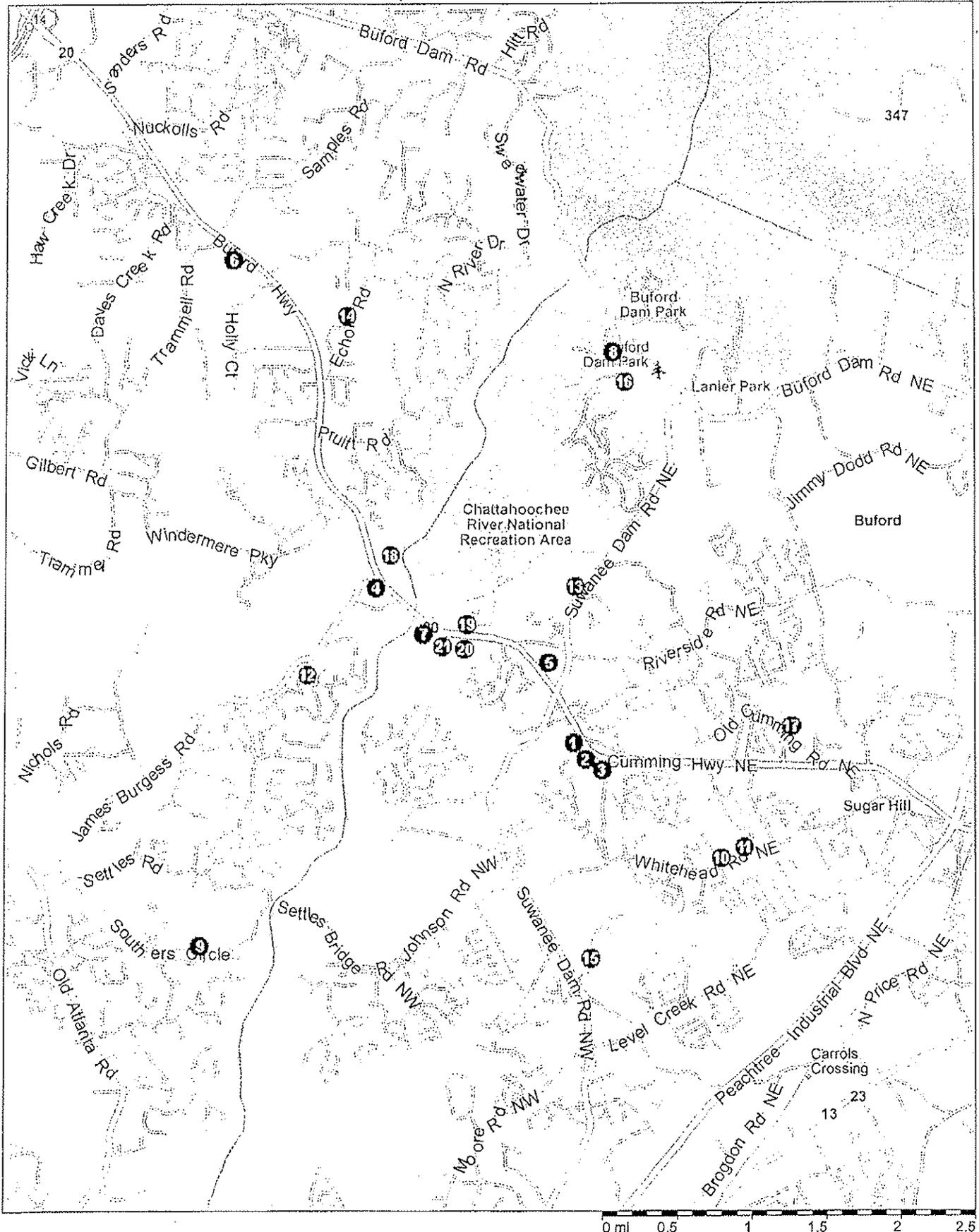
**Date:** February-10  
**Project:** BRSTO-0054-01(063)  
**County:** Gwinnett/Forsyth  
**PI#** 132985  
**Description:** SR20 Bridge Widening over Chattahoochee River

COMMERCIAL LAND						
	ADDRESS	DATE	SALES PRICE	ACREAGE	PRICE/AC	PRICE/SF
1	5627 Hwy 20 (SR20)	02/14/07	\$300,000	1.04	\$288,462	\$6.62
2	5690 Cumming Hwy (SR20)	04/21/06	\$524,100	1.05	\$499,143	\$11.46
3	5700B Cumming Hwy (SR20)	06/16/06	\$977,200	1.95	\$501,128	\$11.50
4	3218 Buford Hwy (SR20)	08/28/07	\$1,850,000	3.51	\$527,066	\$12.10
5	6001 Hwy 20 (SR20)	07/02/07	\$8,156,250	26.79	\$304,474	\$6.99
6	Buford Hwy (SR20)	04/18/06	\$5,003,000	31.01	\$161,335	\$3.70
7	41.39 Hwy 20 (SR20)	01/12/07	\$3,000,000	41.39	\$72,481	\$1.66
				<b>MEAN</b>	\$336,298	\$7.72
				<b>MEDIAN</b>	\$304,474	\$6.99

RESIDENTIAL LAND						
	ADDRESS	DATE	SALES PRICE	ACREAGE	PRICE/AC	PRICE/SF
8	6785 Pannell Rd	12/10/06	\$95,000	0.59	\$161,017	\$3.70
9	805 Southers Plantation Ln	12/22/08	\$45,000	0.75	\$60,000	\$1.38
10	Lot 1 Whitehead Rd	01/21/10	\$82,250	2.33	\$35,300	\$0.81
11	Lot 2 Whitehead Rd	01/21/10	\$82,250	2.37	\$34,705	\$0.80
12	292 Patrick Cir	02/09/07	\$305,000	2.45	\$124,490	\$2.86
13	6170 Suwanee Dam Rd	06/09/06	\$141,000	3.04	\$46,458	\$1.07
14	2842 Echols Rd	07/16/07	\$325,000	3.12	\$104,167	\$2.39
15	5090 Price DR	10/26/06	\$439,200	4.90	\$89,633	\$2.06
16	957 Island Ford Rd	12/07/06	\$383,500	5.00	\$76,700	\$1.76
17	5631 Old Cumming Rd	02/21/07	\$520,000	7.00	\$74,286	\$1.71
				<b>MEAN</b>	\$80,675	\$1.85
				<b>MEDIAN</b>	\$75,493	\$1.73

LISTINGS						
	ADDRESS	DATE	LIST PRICE	ACREAGE	PRICE/AC	PRICE/SF
18	3221 Buford Hwy	Listing	\$3,441,000	15.50	\$222,000	\$5.10
19	Burnette Trl @ SR20	Listing	\$4,000,000	17.30	\$231,214	\$5.31
20	6180 Cumming Hwy	Listing	\$18,000,000	121.00	\$148,760	\$3.42
21	6274 Hwy 20	Listing	\$240,000	1.50	\$160,000	\$3.67
				<b>MEAN</b>	\$190,494	\$4.37
				<b>MEDIAN</b>	\$191,000	\$4.38

# Comparable Location Map



## NOTICE OF LOCATION AND DESIGN APPROVAL

**Project Number: BRST0-0054-01(063)**  
**Forsyth/Gwinnett Counties**  
**P.I. No.: 132985-**

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 and design approval is \_\_\_\_\_

### **Descriptions of the Proposed Project:**

This project is located on the Forsyth/Gwinnett County Line in the 7<sup>th</sup> and 9<sup>th</sup> U.S. Congressional Districts respectfully, Land Lots 55, 57, 61 and 62 of the 2<sup>nd</sup> Land District of Forsyth County and in Land Lots 346 and 347 of the 7<sup>th</sup> Land District of Gwinnett County.

### **Descriptions of the Proposed Construction:**

This project is the widening of SR 20 over the Chattahoochee River, from two lanes to four lanes from south of James Burgess Road in Forsyth County to east of Burnette Trail in Gwinnett County. The typical section will include four 12-foot lanes divided by a 44-foot grassed median, 16-foot shoulders, curb and gutter on the outside pavement edges and 5-foot sidewalks on both sides of the roadway. The existing bridge over the Chattahoochee River is proposed to be replaced with two parallel bridges.

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 Area Engineer's Office:

Harold Mull, Area 5 Engineer  
Georgia Department of Transportation  
145 Hurricane Shoals Rd, NW  
Lawrenceville, GA 30046  
Email: [hmull@dot.ga.gov](mailto:hmull@dot.ga.gov)  
Telephone: (770) 339-2308

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:

Hiral Patel, Project Manager  
Georgia Department of Transportation  
600 West Peachtree St.  
Atlanta, GA 30308  
Email: [hpatel@dot.ga.gov](mailto:hpatel@dot.ga.gov)  
Telephone: (706) 601-1849

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.