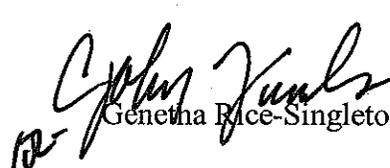


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 142285-, Gwinnett County **OFFICE** Preconstruction
BRST0-0998-00(001)
SR 324 Gravel Springs Road @ I-85 **DATE** June 30, 2008

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Angela Alexander
Paul Liles
Russell McMurry
Robert Mahoney
Neil Kantner
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRST0-0998-00(001) Gwinnett County
SR 324 GRAVEL SPRINGS RD @ I-85
PI # 142285-

OFFICE Gainesville

DATE May 7, 2008

FROM Robert W. Mahoney, P.E., District Preconstruction Engineer

TO Todd I. Long, P.E., PTOE, Preconstruction Division Director

SUBJECT Revised Project Concept Report

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

The typical section and the alignment have been revised. The project termini, access control and controlling criteria have not changed. The Typical Section has been revised to include 2-12 ft. travel lanes northbound, 2-12 ft. travel lanes southbound, curb and gutter with a 36 ft. median and 6' sidewalks on each side. The 36 ft. median will transition to a 24 ft. median prior to the Camp Branch Road and Morgan Road intersections. The 36' median will provide for enhanced safety and not preclude providing for three future left-turn lanes on the bridge; one continuous turn lane in each direction on the full bridge length, and one left turn lane transitioning between northbound and southbound.

The bridge on S.R. 324 over I-85 will also be revised now to one bridge structure 102'-5" in width and 466' in length, eliminating the retaining walls and HOV box section. HOV access is planned for another location and therefore consideration for this has been removed from the project. The bents on the three span bridge will be located between the future collector-distributor lanes and the travel lanes on I-85. No changes to the horizontal alignment on I-85 will be required.

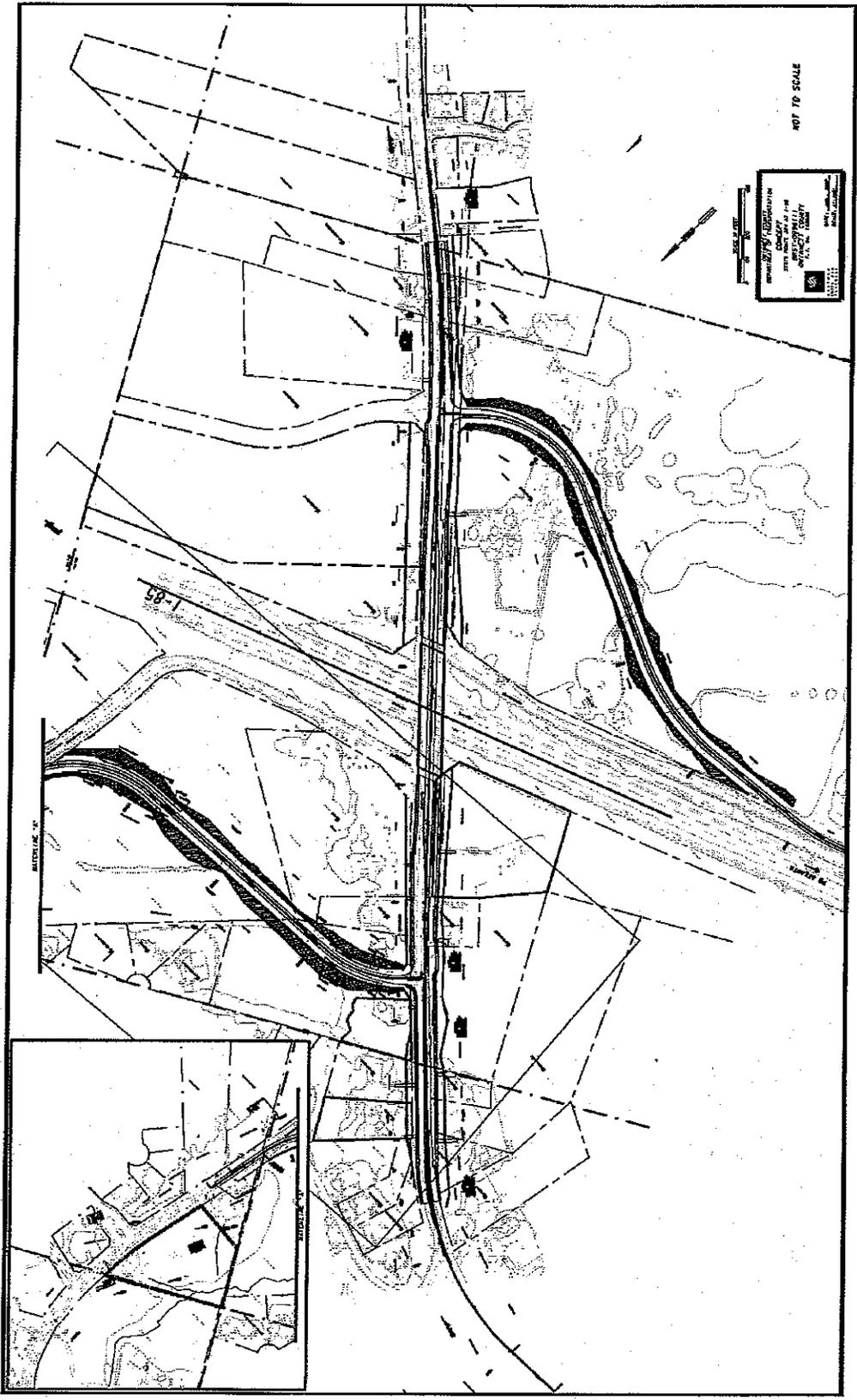
The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE *6/23/08*



State Transportation Planning Administrator

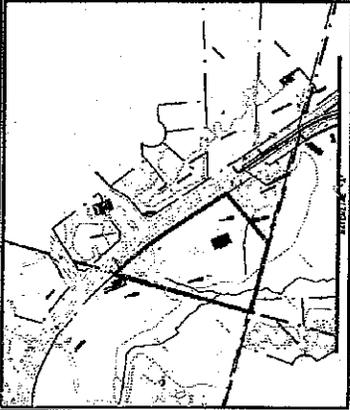
Distribution:



NOT TO SCALE

UNIVERSITY OF ALABAMA
SCHOOL OF CIVIL AND ENVIRONMENTAL ENGINEERING
101 BRIDGEMAN DRIVE
TUSCALOOSA, AL 35487
TEL: 205/885-5200
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SECTION 10



REVISED PROJECT CONCEPT REPORT

BRST-0998 (1) Gwinnett P.I. No. 142285

Need and Purpose: The purpose of the proposed project is to improve safety, operational efficiency throughout the SR 324 corridor, and to provide for future transportation needs along I-85. This proposed bridge replacement is to accompany the planned Gwinnett County Project GW-254 & GW-255 (as identified in the ARC Regional Transportation Plan) which widens SR 324 from 2 to 4 lanes.

The proposed project was added to the STIP in 1999. The project is currently scheduled for Right of Way acquisition in FY 2008 with a Construction/ Implementation date of FY 2009.

S.R. 324 functions as a major collector that connects S.R. 20 near Buford with S.R. 8 near Auburn. S.R. 324 is a major connection for commuter traffic to access I-85 and I-985. It is also one of a number of east west routes that traverse Gwinnett County linking residential areas to I-85 and I-985. Present land use for the property immediately adjacent to the corridor is a mixture of commercial, agricultural and single-family residential. Commercial areas are currently confined to the nodes at S.R. 20 and S.R. 124. The current Level of Service (LOS) is F.

The S.R. 324 corridor will continue to see new single family residential, multi-family residential and commercial growth as the area surrounding the Mall of Georgia develops. Due to residential development and high potential commercial along the project corridor in the vicinity of the Mall of Georgia, the traffic volumes along S.R. 324 have steadily increased over the last five years and will continue to increase in the years to come. The existing two lane configuration of S.R. 324 is not compatible with conveying the projected traffic volumes for the opening and design year (when traffic along the route is expected to double). See Table 1 for traffic projections. Accidents along the project route at several locations have mainly been the result of geometric deficiencies in the roadway alignment and side road intersections. The Accident Rate is below the statewide average for similar facilities (Table 2). However, as the traffic volumes further increase, both the safety and level of service will further decrease. The projected LOS is F with a no build alternate. The projected LOS of the proposed project at the open-to-traffic date is C (Table 1). The projected LOS in the design year is D (Table 1).

Table 1

| Year | Volume | LOS |
|------|--------|-----|
| 2008 | 21,000 | F |
| 2011 | 32,000 | C |
| 2031 | 41,000 | D |

Table 2
(Rates are Accidents per 100 Million Vehicle Miles Traveled)

| Year | Accident Rate | Statewide Average |
|------|---------------|-------------------|
| 2000 | 228 | 515 |
| 2001 | 260 | 527 |
| 2002 | 259 | 534 |

Project location: This project is located on S.R. 324 over I-85 in Gwinnett County. S.R. 324 is also known as Gravel Springs Road. The total project length on S.R. 324 is 0.8 miles, with additional lengths of 0.8 miles on Morgan Road and 0.5 miles on Camp Branch Road.

Description of the approved concept: The project consists of the replacement of the bridge over I-85 and widening of SR 324 approaching the bridge. SR 324 will be widened to a four-lane divided curb and gutter facility with a 24-foot raised median. The project is part of the widening of SR 324 from SR 20 to SR 124. The proposed bridge will be designed to allow for a future HOV lane interchange with I-85. Retaining walls are proposed in the I-85 median for the future HOV interchange backfilled with earth material creating a box section. Separate bridges from the median box section to the outside of I-85 are planned. This will require permanently shifting the I-85 travel lanes 12 feet towards the outside. The bridges will also span the future HOV lanes, future additional SOV lanes, and future collector-distributor lanes on I-85. The proposed bridges will also be designed to allow a future full access interchange. Camp Branch Road and Morgan Road will be relocated on each side of the bridge to allow for future ramp locations.

The proposed project length is 0.8 miles. Two separate bridges are proposed, each 182 feet long and 102 feet wide. Additional proposed lengths of improvements are 0.8 miles on Morgan Road, 0.5 miles on Camp Branch Road, and 0.4 miles (1,900') on I-85.

PDP Classification:

Full Oversight (X) {Bridge over I-85 Only}, Exempt(), SF(), Other ()

Functional Classification: Arterial

U. S. Route Number(s): N/A

State Route Number(s): 324

Traffic (AADT) as shown in the approved concept:

Current Year: 16,700 (2002) Design Year: 55,000 (2028)

Proposed features to be revised: The typical section and the alignment have been revised. The project termini, access control and controlling criteria have not changed.

Describe the revised feature(s) to be approved: The Typical Section has been revised to include 2-12 ft. travel lanes northbound, 2-12 ft. travel lanes southbound, curb and gutter with a 36 ft. median and 6' sidewalks on each side. The 36 ft. median will transition to a 24 ft. median prior to the Camp Branch Road and Morgan Road intersections. The 36' median will provide for enhanced safety and not preclude providing for three future left-turn lanes on the bridge; one continuous turn lane in each

direction on the full bridge length, and one left turn lane transitioning between northbound and southbound.

The bridge on S.R. 324 over I-85 will also be revised now to one bridge structure 102'-5" in width and 466' in length, eliminating the retaining walls and box section. HOV access is planned for another location and therefore consideration for this has been removed from the project. The bents on the three span bridge will be located between the future collector-distributor lanes and the travel lanes on I-85. No changes to the horizontal alignment on I-85 will be required.

Updated traffic data (AADT):

Open to Traffic Year: 32,000 (2011)

Design Year: 41,000 (2031)

Programmed/Schedule:

P.E. 2000

R/W: FY 2008

Construction: FY ~~2008~~ LR

Revised cost estimates:

- | | |
|-------------------------------------|-------------------------------------|
| 1. Construction cost including E&C, | \$ 12,530,000 12,918,000 |
| 2. Right-of-way, and | \$7,288,000 |
| 3. Utilities | \$0 |

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

The proposed project conforms to the model plans' description.

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments{ XE "Attachments to the Revised Concept Report" }:

1. Sketch Map
2. Cost Estimate

Concur:

Todd J. [Signature]
Director of Preconstruction

Approve:

Richard Wayne Fedora
for Division Administrator, FHWA

Approve:

Doreen [Signature]
Chief Engineer

Estimate Report for file "142285 BRST-0998(1) - 2008-05-02"**Section TEMPORARY EROSION CONTROL ITEMS**

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|---|---------------------|
| 163-0232 | 30 | AC | 728.93 | TEMPORARY GRASSING | 21867.90 |
| 163-0240 | 300 | TN | 181.22 | MULCH | 54366.00 |
| 163-0300 | 4 | EA | 1807.17 | CONSTRUCTION EXIT | 7228.68 |
| 163-0504 | 20 | EA | 425.00 | CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 4 | 8500.00 |
| 163-0520 | 200 | LF | 16.64 | CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN | 3328.00 |
| 163-0521 | 20 | EA | 200.00 | CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS | 4000.00 |
| 163-0530 | 10000 | LF | 4.07 | CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK | 40700.00 |
| 163-0531 | 2 | EA | 8336.05 | CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO - | 16672.10 |
| 165-0030 | 20000 | LF | 1.32 | MAINTENANCE OF TEMPORARY SILT FENCE, TP C | 26400.00 |
| 165-0040 | 20 | EA | 102.10 | MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS | 2042.00 |
| 165-0060 | 4 | EA | 1400.14 | MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO - | 5600.56 |
| 165-0070 | 5000 | LF | 1.72 | MAINTENANCE OF BALED STRAW EROSION CHECK | 8600.00 |
| 165-0088 | 20 | EA | 100.00 | MAINTENANCE OF SILT CONTROL GATE, TP 4 | 2000.00 |
| 165-0101 | 4 | EA | 531.92 | MAINTENANCE OF CONSTRUCTION EXIT | 2127.68 |
| 167-1000 | 2 | EA | 1087.83 | WATER QUALITY MONITORING AND SAMPLING | 2175.66 |
| 167-1500 | 24 | MO | 973.27 | WATER QUALITY INSPECTIONS | 23358.48 |
| 171-0030 | 40000 | LF | 3.73 | TEMPORARY SILT FENCE, TYPE C | 149200.00 |
| Section Sub Total: | | | | | \$378,167.06 |

Section ROADWAY ITEMS

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|--|-----------------------|
| 150-1000 | 1 | LS | 900000.00 | TRAFFIC CONTROL - BRST-0998(1) | 900000.00 |
| 150-5000 | 20 | EA | 500.00 | TRAFFIC CONTROL, TEMPORARY SAND LOADED ATTENUATOR MODULE | 10000.00 |
| 153-1300 | 1 | EA | 69627.91 | FIELD ENGINEERS OFFICE TP 3 | 69627.91 |
| 201-1500 | 1 | LS | 150000.00 | CLEARING & GRUBBING | 150000.00 |
| 206-0002 | 100000 | CY | 6.47 | BORROW EXCAV, INCL MATL | 647000.00 |
| 207-2003 | 100 | CY | 33.60 | IMPERFECT TRENCH BK FILL MATL, TP III | 3360.00 |
| 310-5100 | 6250 | SY | 16.46 | GR AGGR BASE CRS, 10 INCH, INCL MATL | 102875.00 |
| 318-3000 | 1000 | TN | 23.28 | AGGR SURF CRS | 23280.00 |
| 402-1811 | 200 | TN | 108.73 | RECYCLED ASPH CONC LEVELING, INCL BITUM MATL | 21746.00 |
| 402-3112 | 2444 | TN | 75.00 | RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME | 183300.00 |
| 402-3121 | 3667 | TN | 75.00 | RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME | 275025.00 |
| 402-3131 | 917 | TN | 75.00 | RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME | 68775.00 |
| 413-1000 | 2194 | GL | 2.00 | BITUM TACK COAT | 4388.00 |
| 441-0016 | 300 | SY | 39.75 | DRIVEWAY CONCRETE, 6 IN TK | 11925.00 |
| 441-0740 | 1000 | SY | 35.93 | CONCRETE MEDIAN, 4 IN | 35930.00 |
| 550-1180 | 3000 | LF | 40.19 | STORM DRAIN PIPE, 18 IN, H 1-10 | 120570.00 |
| 550-1240 | 4000 | LF | 46.13 | STORM DRAIN PIPE, 24 IN, H 1-10 | 184520.00 |
| 550-1360 | 1000 | LF | 80.97 | STORM DRAIN PIPE, 36 IN, H 1-10 | 80970.00 |
| 550-3624 | 4 | EA | 975.07 | SAFETY END SECTION 24 IN, SIDE DRAIN, 6:1 SLOPE | 3900.28 |
| 550-4136 | 2 | EA | 819.07 | FLARED END SECTION 36 IN, SIDE DRAIN | 1638.14 |
| 577-1100 | 4 | EA | 1882.31 | METAL DRAIN INLET - COMPLETE ASSEMBLY | 7529.24 |
| 620-0100 | 2000 | LF | 26.35 | TEMPORARY BARRIER, METHOD NO. 1 | 52700.00 |
| 634-1200 | 50 | EA | 101.50 | RIGHT OF WAY MARKERS | 5075.00 |
| 635-1000 | 20 | LF | 99.82 | BARRICADES | 1996.40 |
| 641-1100 | 100 | LF | 42.44 | GUARDRAIL, TP T | 4244.00 |
| 641-1200 | 2000 | LF | 15.44 | GUARDRAIL, TP W | 30880.00 |
| 641-5001 | 4 | EA | 619.00 | GUARDRAIL ANCHORAGE, TP 1 | 2476.00 |
| 641-5012 | 4 | EA | 1838.99 | GUARDRAIL ANCHORAGE, TP 12 | 7355.96 |
| 643-8200 | 100 | LF | 2.91 | BARRIER FENCE (ORANGE), 4 FT | 291.00 |
| 668-8013 | 100 | SF | 40.07 | SAFETY GRATE, TP 3 | 4007.00 |
| Section Sub Total: | | | | | \$3,015,384.93 |

Section PERMANENT EROSION CONTROL ITEMS

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|-------------|----------|-------|------------|------------------|------|
|-------------|----------|-------|------------|------------------|------|

| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
|---------------------------|----------|-------|------------|---------------------------------|--------------------|
| 166-0650 | 1 | EA | 27500.00 | RESTORATION OF LAKE, STA - | 27500.00 |
| 441-0204 | 500 | SY | 36.30 | PLAIN CONC DITCH PAVING, 4 IN | 18150.00 |
| 603-2018 | 50 | SY | 53.31 | STN DUMPED RIP RAP, TP 1, 18 IN | 2665.50 |
| 603-2024 | 100 | SY | 54.72 | STN DUMPED RIP RAP, TP 1, 24 IN | 5472.00 |
| 603-2036 | 100 | SY | 60.00 | STN DUMPED RIP RAP, TP 1, 36 IN | 6000.00 |
| 603-7000 | 250 | SY | 5.23 | PLASTIC FILTER FABRIC | 1307.50 |
| Section Sub Total: | | | | | \$61,095.00 |

| Section BRIDGE OVER I-85 | | | | | |
|---------------------------|----------|-------|------------|----------------------------------|-----------------------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 000-XXXX | 48162 | SF | 150.00 | BRIDGE OVER I-85 | 7224300.00 |
| 500-3201 | 1100 | CY | 556.27 | CLASS B CONCRETE, RETAINING WALL | 611897.00 |
| Section Sub Total: | | | | | \$7,836,197.00 |

| Section SIGNING AND MARKING ITEMS | | | | | |
|-----------------------------------|----------|----------|------------|-------------------------------|---------------------|
| Item Number | Quantity | Units | Unit Price | Item Description | Cost |
| 000-XXXX | 1 | Lump Sum | 100000.00 | SIGNING AND MARKING - PROJECT | 100000.00 |
| Section Sub Total: | | | | | \$100,000.00 |

Total Estimated Cost: \$11,390,843.99

| | |
|--|-----------------------------------|
| Subtotal Construction Cost | \$11,390,843.99 |
| E&C Rate 10.0 % | \$1,139,084.40 |
| Inflation Rate 0.0 % @ 0 Years | \$0.00 |
| Total Construction Cost | \$12,529,928.39 |
| Right Of Way | \$7,288,000.00 |
| ReImb. Utilities | \$0.00 |
| Grand Total Project Cost | \$19,817,928.39 |

ENGINEERING @ 5% = 569,542
 CONTINGENCY @ 8% = 956,831

TOTAL COST COST = 12,917,215
 RIGHT-OF-WAY - 7,288,000
 REIMB UTILITIES - -0-
 TOTAL PROJECT COST = \$20,205,215

APL 6/23/2008