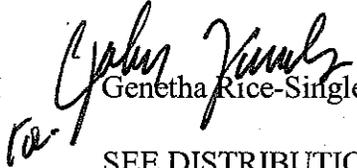


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 110690-, Franklin County **OFFICE** Preconstruction
NH-IM-85-2(173)
I-85 Widening from North of SR 51 **DATE** April 9, 2008
To North of SR 320

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
Joe Sheffield
Paul Liles
Russell McMurry
Robert Mahoney
BOARD MEMBER



U.S. Department
of Transportation
**Federal Highway
Administration**

Georgia Division

61 Forsyth St. SW 17T100
Atlanta, GA 30303

February 19, 2008

In Reply Refer To:
HTM-GA

Ms. Gena L. Abraham, Commissioner
Department of Transportation
No. 2 Capitol Square
Atlanta, Georgia 30334

TOAD LONG - DIRECTOR OF PRECONSTRUCTION
Attention: ~~Mike Thomas, Director, Division of Transportation Planning, Data and Intermodal
Development~~

Dear Ms. Abraham:

Our office has reviewed and approved the revised Concept Reports NH-IM-85-2 (165, 166, 167, 168, 169, 170, 171, 172, 173, 174) conditioned upon the following comments being satisfied:

- For project NH-IM-85-2(167), please evaluate the option of raising SR 332 in the design phase (as opposed to lowering the Interstate profile).
- Several of the reports indicate the reconstruction of Interstate bridges to accommodate 8 lanes total width. After discussion with your staff, we have agreed that all bridges will only be widened to accommodate six lanes.
- Approval of these Concept Reports does not constitute approval of design decisions (sequence of construction/staging etc.).

Please contact George Merritt if you have any questions at 404-562-3655 or george.merritt@fhwa.dot.gov.

Sincerely,

For: Rodney Barry, P.E.
Division Administrator

**MOVING THE
AMERICAN
ECONOMY**

1007

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: NH-IM-85-2(173) Franklin County **OFFICE** Consultant Design
PI No. 110690
I-85 From North of SR 51 to North of SR 320 **DATE** February 20, 2007

FROM: *Four Stanley Hill*
Mohammed (Babs) Abubakari, P.E.
State Consultant Design and Program Delivery Engineer

TO: Genetha Rice-Singleton, Assistant Director of Preconstruction

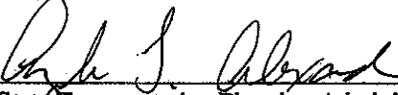
SUBJECT Revised Project Concept Report

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

This concept revision involves the revision of six features. The first is a change in the typical section to decrease the inside shoulder width adjacent to the median barrier from 12'-9" to 12'-0" and to decrease the outside shoulder width from 16'-0" to 12'-0". Additionally, a design exception will be required for the inside shoulder widths on I-85 at all bridges over I-85 due to the encroachment of the concrete barrier into the inside shoulder. The concrete median barrier will be transitioned around the bridge columns at all overpasses. Also, the controlling criteria for vertical grades will be revised. The proposed revision will correct an existing substandard 5.0% vertical grade to meet the current vertical criteria in the 2004 Green Book. The design exception for substandard vertical grade in this area will no longer be required. Next, the controlling criteria for bridge widths will be revised. All bridges on I-85 through the project corridor will be widened to provide sufficient width for the typical section changes noted ~~above as well as a future~~ ~~lane on the outside~~ Also, the controlling criteria for sag vertical curves will be revised. Existing sag vertical curves will be reconstructed as part of this project to meet current criteria established in the 2004 Green Book. In some cases, existing bridges may need to be reconstructed in lieu of widening to meet the current Green Book requirements. Finally, the design exceptions to controlling criteria for substandard stopping sight distance described in the Project Concept Report will no longer 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 3-7-07


State Transportation Planning Administrator

Distribution: Brian Summers, Project Review Engineer
Harvey Keepler, State Environment/Location Engineer
Keith Golden, State Traffic Safety and Design Engineer
Angela T. Alexander, State Transportation Planning Administrator
Jamie Simpson, State Financial Management Administrator
Russell McMurry, District One Engineer
Paul Liles, State Bridge Design Engineer

REVISED PROJECT CONCEPT REPORT

Need and Purpose: See attached Need and Purpose Statement.

Project location: This project consists of the widening and reconstruction of 4.4 miles of I-85 from just north of SR 51 (Milepost 160.0) to just north of SR 320 (Milepost 164.4), in Franklin County.

Description of the approved concept: The approved concept for this project consists of the widening of I-85 from the existing four-lane divided section with a depressed median to a six-lane section with a median barrier.

PDP Classification: Major _____ Minor X

Federal Oversight: Full Oversight (X), Exempt(), SF(), Other ()

Functional Classification: Rural Interstate Principal Arterial

U. S. Route Number(s): I-85 **State Route Number(s):** SR 403

Traffic (AADT) as shown in the approved concept:

Current Year (2005): 47,000 Design Year (2025): 79,900

Proposed features to be revised:

- **Typical section**

Mile log 160.0 – 161.6

- Six 12' lanes
- 76' depressed median
- 14' inside shoulder (12' paved)
- 12' outside shoulder (10' paved)
- Asphalt pavement section with asphalt overlay of existing pavement

Mile log 161.6 – 164.1

- Six 12' lanes
- Median Barrier (Type 20, 21 or 22)
- 14' inside shoulder (12'-9" paved)
- 16' outside shoulder (14' paved)
- Asphalt pavement section with asphalt overlay of existing pavement

The typical section will be revised to decrease the inside and outside paved shoulder widths per agreement with FHWA. The revised typical section will begin on I-85 just north of SR 51 and extend throughout the project corridor, ending just north of SR 320.

- **Controlling criteria:**

- Proposed Maximum Grade – 5.0% Maximum Grade Allowable – 4.0%

The controlling criteria for vertical grade will be revised to reflect the changes proposed to correct the existing substandard vertical grade in the corridor at milepost 161.1.

- Major Structures

- 216'x66' and 240'x66' Widen two parallel two-lane bridges over Indian Creek on I-85 to two parallel three-lane bridges

- 267'x133' Widen two parallel two-lane bridges over Middle Fork Broad River on I-85 to six lanes (includes a 28' median on structure)
- 96'x165' Widen two parallel two-lane bridges over Stephens Creek on I-85 to six lanes (includes a 28' median on structure)

The controlling criteria for bridge width will be revised to reflect the changes in the typical section as noted above as well as provisions for a future ~~three~~ lane on the outside of the proposed structures.

- Design exceptions to controlling criteria anticipated:
Design exceptions for inside shoulder width will be required for I-85 at SR 198 over I-85 and at SR 320 over I-85.

This design exception was not noted in the approved concept report. The concrete median barrier on I-85 will be transitioned around the bridge columns at all overpasses. Design Exceptions for inside shoulder width are required at these locations due to the transition of the concrete barrier encroaching on the 12'-0" paved inside shoulder. As a result, the remaining inside shoulder width at the bridge columns will be 9'-10" measured from the inside edge of travel to the face of the barrier, of which 7'-10" is considered useable. AASHTO's 2004 edition of "A Policy on Geometric Design of Highways and Streets" states that the minimum usable shoulder width should be 10'-0" for a paved median shoulder. The paved shoulder will not meet this minimum width at the location listed above.

- Design exceptions to controlling criteria anticipated:
A Design Exception will be required for substandard stopping sight distance at milepost 159.8, 160.5, 160.6, 161.0, and 162.0 between SR 51 and SR 198.

Design Exceptions for substandard stopping sight distance are no longer required due to the change in design controls for crest vertical curves in AASHTO's 2004 edition of "A Policy on Geometric Design of Highways and Streets". Additionally, and vertical curves that do not meet the sag vertical curve criteria will be reconstructed to meet current criteria.

Describe the revised feature(s) to be approved:

- **The revised typical section:**
 - Mile log 160.0 – 160.3 & 161.1 – 164.4
 - Six 12' lanes, outside lane paving will extend 1'-0" into the paved outside shoulder but will be striped at 12'-0"
 - Median Barrier (Type S-1, S-2 or S-3)
 - 13'-2" inside shoulder (12' paved)
 - 14' outside shoulder (12' paved), includes 1'-0" extension of outside lane pavement
 - Concrete pavement section with full depth reconstruction of existing pavement and an alternative pavement section (asphalt or concrete) for the paved shoulders
 - Mile log 160.3 – 161.6
 - Six 12' lanes, outside lane paving will extend 1'-0" into the paved outside shoulder but will be striped at 12'-0"
 - 64'-4" depressed median
 - 14' inside shoulder (12' paved)
 - 14' outside shoulder (12' paved), includes 1'-0" extension of outside lane pavement

- o Concrete pavement section with full depth reconstruction of existing pavement and an alternative pavement section (asphalt or concrete) for the paved shoulders

The revised typical section will begin on I-85 just north of SR 51 and extend throughout the project corridor, ending just north of SR 320.

- **Controlling criteria:**

- o Proposed Maximum Grade – 4.0% Maximum Grade – 4.0%

The approved concept identifies the maximum grade allowable for the project of 4.0%, while the proposed maximum grade is 5.0% with a design exception required for this substandard vertical grade. The revised concept will correct this substandard vertical grade. The revised concept report will have a maximum grade allowable for the project of 4.0%, while the proposed maximum grade is 4.0%. A design exception for the vertical grade in this area will not be required under the revised concept report.

- o **Major Structures**

- I-85 over Indian Creek – 220'x74' and 235'x74' Replace Northbound two-lane bridge over Indian Creek on I-85 with a ~~two~~^{three}-lane bridge and widen Southbound two-lane bridge to a ~~two~~^{three}-lane bridge

The bridges on I-85 over Indian Creek will be revised from the approved concept report. The proposed design calls for the widening of the two parallel two-lane bridges over Indian Creek to two parallel 3-lane bridges. The proposed northbound structure is 66 feet wide by 216 feet long, and the proposed southbound structure is 66 feet wide by 240 feet long. The revised design calls for the replacement of existing northbound bridge due to vertical grade corrections to a single ~~two~~^{three}-lane bridge, and the widening of the southbound bridge to provide a single ~~two~~^{three}-lane bridge. The revised northbound structure is 74 feet wide by 220 feet long and the revised southbound structure is 74 feet wide by 235 feet long.

- I-85 over Middle Fork Broad River – 267'x146'-4" Replace bridges over Middle Fork Broad River on I-85 with a single bridge consisting of ~~two~~^{six} lanes (includes a 26'-4" median on structure)

The bridges on I-85 over Middle Fork Broad River will be revised from the approved concept report. The proposed design calls for the widening of the two parallel two-lane bridges over Middle Fork Broad River to six lanes including a 28-foot median on structure. The proposed structure is 133 feet wide by 267 feet long. The revised design calls for the widening of the existing bridges to a single ~~two~~^{six}-lane bridge, including a 26'-4" median on structure. The revised structure is 146'-4" wide by 267 feet long.

- I-85 over Stephens Creek – 96'x146'-4" Replace bridges over Stephens Creek on I-85 with a single bridge consisting of eight lanes (includes a 26'-4" median on structure)

The bridges on I-85 over Stephens Creek will be revised from the approved concept report. The proposed design calls for the widening of the two parallel two-lane bridges over Stephens Creek to six lanes including a 28-foot median on

structure. The proposed structure is 165 feet wide by 96 feet long. The revised design calls for the replacement of the existing bridges due to vertical corrections with a single 3-lane bridge, including a 26'-4" median on structure. The revised structure is 146'-4" wide by 96 feet long.

- o Design Exceptions to controlling criteria anticipated:
Design exceptions for inside shoulder width will be required for I-85 at SR 198 over I-85 and at SR 320 over I-85. The minimum inside useable shoulder width is 10'-0". The inside shoulder width will be 9'-10" measured from the inside edge of travel to the face of the barrier at the bridge columns, of which 7'-10" is considered useable.
- o Design Exceptions for substandard stopping sight distance are no longer required at milepost 159.8, 160.5, 160.6, 161.0, and 162.0 between SR 51 and SR 198.
- o Design Exception for substandard vertical grade is no longer required at milepost 161.1.

Updated traffic data (AADT):

Current Year (2009): 47,550 Design Year (2029): 79,000

Programmed/Schedule:

P.E. 2005 R/W: N/A Construction: 2012

Revised cost estimates:

1. Construction cost including inflation and E&C, \$ 72,732,897
2. Right-of-way, \$0
3. Utilities, \$0

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

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

Attachments:

1. Sketch Map,
2. Cost Estimate,
3. Need and Purpose Statement,
4. Revised Typical Sections.

Concur: _____
Director of Preconstruction

Approve: Shammy Chamine
For: Division Administrator, FHWA

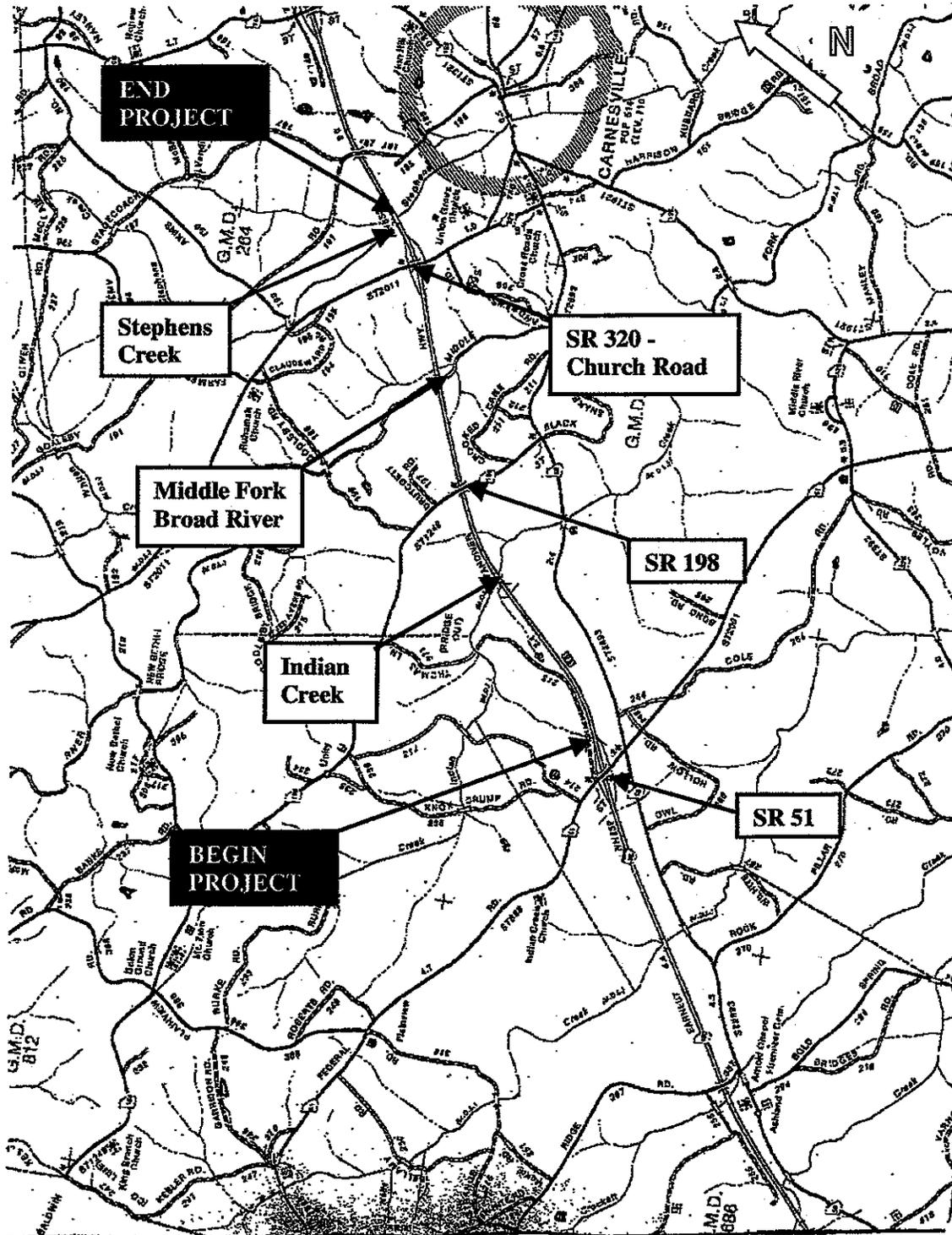
Approve: Dorel M.R.
Chief Engineer

Project No. NH-IM-85-2(173)

PI No. 110690

County: Franklin

Project Location Map - Project No. NH-IM-85-2(173); PI No. 110690; Franklin County



Estimate Report for file "110690"

Section MAJOR STRUCTURES					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
207-0203	200	CY	41.03	FOUND BK FILL MATL, TP II	8206.00
500-3101	400	CY	510.05	CLASS A CONCRETE	204020.00
511-1000	40000	LB	0.86	BAR REINF STEEL	34400.00
518-1000	1	LS	200000.00	RAISE EXISTING BRIDGE, STA - SR 198 OVER I-85	200000.00
540-1102	1	LS	20000.00	REMOVAL OF EXISTING BR, BR NO - 1 I-85 NORTHBOUND OVER INDIAN CREEK	20000.00
540-1102	2	LS	20000.00	REMOVAL OF EXISTING BR, BR NO - 2 I-85 OVER STEPHENS CREEK	40000.00
999-9999	16995	SF	80.00	BRIDGE REPLACEMENT - I-85 NORTHBOUND OVER INDIAN CREEK (77.25 x 220)	1359600.00
999-9999	7520	SF	100.00	BRIDGE WIDENING - I-85 SOUTHBOUND OVER INDIAN CREEK (32 x 235)	752000.00
999-9999	15717	SF	62.50	BRIDGE WIDENING - I-85 OVER MIDDLE FORK BROAD RIVER (59 x 266)	982312.50
999-9999	14360	SF	60.00	BRIDGE REPLACEMENT - I-85 OVER STEPHENS CREEK (149.58 x 96)	861600.00
Section Sub Total:					\$4,462,138.50

Section GRADING AND DRAINAGE					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
206-0002	75000	CY	4.99	BORROW EXCAV, INCL MATL	374250.00
208-0100	150000	CY	9.94	IN PLACE EMBANKMENT	1491000.00
500-3800	10	CY	729.96	CLASS A CONCRETE, INCL REINF STEEL	7299.60
550-1180	15500	LF	36.45	STORM DRAIN PIPE, 18 IN, H 1-10	564975.00
550-1240	6200	LF	44.89	STORM DRAIN PIPE, 24 IN, H 1-10	278318.00
550-1300	3300	LF	54.36	STORM DRAIN PIPE, 30 IN, H 1-10	179388.00
550-1360	2300	LF	66.73	STORM DRAIN PIPE, 36 IN, H 1-10	153479.00
550-1420	1400	LF	87.86	STORM DRAIN PIPE, 42 IN, H 1-10	123004.00
550-1480	400	LF	106.80	STORM DRAIN PIPE, 48 IN, H 1-10	42720.00
550-4218	30	EA	558.86	FLARED END SECTION 18 IN, STORM DRAIN	16765.80
550-4224	15	EA	639.96	FLARED END SECTION 24 IN, STORM DRAIN	9599.40
550-4230	8	EA	732.96	FLARED END SECTION 30 IN, STORM DRAIN	5863.68
550-4236	8	EA	1036.11	FLARED END SECTION 36 IN, STORM DRAIN	8288.88
550-4242	4	EA	1280.92	FLARED END SECTION 42 IN, STORM DRAIN	5123.68
576-1018	3000	LF	26.35	SLOPE DRAIN PIPE, 18 IN	79050.00
668-2110	30	LF	257.21	DROP INLET, GP 1, ADDL DEPTH	7716.30
668-2231	150	EA	5868.28	DROP INLET, GP 1, MODIFIED TP M-1	880242.00
668-2233	50	EA	5446.65	DROP INLET, GP 1, MODIFIED TP M-3	272332.50
Section Sub Total:					\$4,499,415.84

Section BASE AND PAVING					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-1101	309300	TN	25.00	GR AGGR BASE CRS, INCL MATL	7732500.00
402-3121	79200	TN	80.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	6336000.00
402-3130	18200	TN	80.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	1456000.00
402-3190	78000	TN	80.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	6240000.00
413-1000	16000	GL	1.32	BITUM TACK COAT	21120.00
430-1220	200400	SY	70.00	CONT REINF CONC PVMT, CL HES CONC, 12 INCH THK	14028000.00
433-1000	3200	SY	132.95	REINF CONC APPROACH SLAB	425440.00
610-2845	196000	SY	50.00	REM CONC PVMT	9800000.00
Section Sub Total:					\$46,039,060.00

Section GRASSING AND EROSION CONTROL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	18	AC	523.03	TEMPORARY GRASSING	9414.54
163-0240	350	TN	191.61	MULCH	67063.50
163-0300	24	EA	1826.91	CONSTRUCTION EXIT	43845.84
163-0503	35	EA	520.77	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	18226.95

163-0520	4000	LF	14.30	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	57200.00
163-0521	250	EA	167.01	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	41752.50
163-0530	4000	LF	3.05	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	12200.00
163-0550	200	EA	272.79	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	54558.00
165-0010	6000	LF	1.00	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	6000.00
165-0030	24000	LF	1.32	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	31680.00
165-0040	250	EA	71.82	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	17955.00
165-0070	2000	LF	1.76	MAINTENANCE OF BALED STRAW EROSION CHECK	3520.00
165-0087	35	EA	172.98	MAINTENANCE OF SILT CONTROL GATE, TP 3	6054.30
165-0101	72	EA	486.99	MAINTENANCE OF CONSTRUCTION EXIT	35063.28
165-0105	200	EA	98.01	MAINTENANCE OF INLET SEDIMENT TRAP	19602.00
167-1000	2	EA	1477.12	WATER QUALITY MONITORING AND SAMPLING	2954.24
167-1500	30	MO	903.71	WATER QUALITY INSPECTIONS	27111.30
171-0010	12000	LF	1.83	TEMPORARY SILT FENCE, TYPE A	21960.00
171-0030	48000	LF	3.32	TEMPORARY SILT FENCE, TYPE C	159360.00
201-1500	1	LS	700000.00	CLEARING & GRUBBING -	700000.00
441-0204	8000	SY	30.89	PLAIN CONC DITCH PAVING, 4 IN	247120.00
603-2024	3000	SY	46.79	STN DUMPED RIP RAP, TP 1, 24 IN	140370.00
603-7000	11000	SY	4.31	PLASTIC FILTER FABRIC	47410.00
700-6910	36	AC	837.76	PERMANENT GRASSING	30159.36
700-7000	36	TN	59.69	AGRICULTURAL LIME	2148.84
700-7010	90	GL	19.04	LIQUID LIME	1713.60
700-8000	58	TN	294.10	FERTILIZER MIXED GRADE	17057.80
700-8100	1800	LB	1.71	FERTILIZER NITROGEN CONTENT	3078.00
716-2000	40000	SY	1.12	EROSION CONTROL MATS, SLOPES	44800.00
Section Sub Total:					\$1,869,379.05

Section SIGNING AND MARKING

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1031	1000	SF	21.20	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	21200.00
636-1032	650	SF	27.99	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	18193.50
636-1076	5000	SF	28.30	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING TP 6	141500.00
636-2070	300	LF	7.55	GALV STEEL POSTS, TP 7	2265.00
638-1001	4	LS	76482.37	STR SUPPORT FOR OVERHEAD SIGN, TP 1, STA -	305929.48
657-1054	46400	LF	3.56	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, WHITE, TP PB	165184.00
657-1084	3500	LF	4.64	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, WHITE, TP PB	16240.00
657-3054	92800	GLF	2.77	PREFORMED PLASTIC SKIP PVMT MKG, 5 IN, WHITE, TP PB	257056.00
657-6054	46400	LF	3.77	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, YELLOW, TP PB	174928.00
Section Sub Total:					\$1,102,495.98

Section MISCELLANEOUS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	3150000.00	TRAFFIC CONTROL - PROJECT NO. NH-IM-85-2 (173)	3150000.00
621-6001	6000	LF	55.59	CONCRETE BARRIER, TP S-1	333540.00
621-6002	6000	LF	70.48	CONCRETE BARRIER, TP S-2	422880.00
621-6003	1300	LF	177.53	CONCRETE BARRIER, TP S-3	230789.00
622-1033	92800	LF	28.52	PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	2646656.00
622-1050	3500	LF	120.28	PRECAST CONCRETE MEDIAN BARRIER, METHOD 4	420980.00
641-1100	2000	LF	36.09	GUARDRAIL, TP T	72180.00
641-1200	8000	LF	15.99	GUARDRAIL, TP W	127920.00
641-5001	30	EA	549.47	GUARDRAIL ANCHORAGE, TP 1	16484.10
641-5012	30	EA	1713.38	GUARDRAIL ANCHORAGE, TP 12	51401.40
650-1300	2	EA	25243.62	IMPACT ATTENUATOR UNIT, (COMPRESSION CRASH CUSHION) TYPE S -	50487.24
682-6140	23200	LF	26.94	CONDUIT, RIGID, 4 IN	625008.00

Section Sub Total: \$8,148,325.74

Section INFLATION AND E&C

Item Number	Quantity	Units	Unit Price	Item Description	Cost
999-9998	1	Lump Sum	0.00	INFLATION (0 YEARS @ 5%)	0.00
999-9999	1	Lump Sum	6612081.51	E&C (10%)	6612081.51
Section Sub Total:					\$6,612,081.51

Total Estimated Cost: \$72,732,896.62

NEED AND PURPOSE
PROJECTS NH-IM-85-2 (166-174)
BARROW, JACKSON, BANKS, FRANKLIN
P.I. NO. 110620, 110630, 110640, 110650, 110660, 110670, 110680, 110690, 110700
I-85/SR 403 IMPROVEMENTS

I-85/SR 403, a rural principal arterial, is a primary corridor in northeastern Georgia. The proposed project NH-IM-85-2 (166-174) would consist of adding one lane to I-85/SR 403 inside the median in each direction from SR 211 in Barrow County to north of SR 17 in Franklin County for a total of 47.2 miles.

Level of Service

The current Average Annual Daily Traffic (AADT) on I-85/SR 403 for projects NH-IM-85-2 (166-174) ranges from 35,800 to 42,800 providing a Level of Service in the "C" to "D" range. The projected (2025) traffic volumes for NH-IM-85-2 (166-174) range from 76,800 AADT to 95,300 AADT, providing for a LOS "F". The increasing traffic volumes, with 24% trucks, are projected to cause the roadway to reach unacceptable Levels of Service.

<i>Projects NH-IM-85-2</i>	<i>Current Year (2005) AADT</i>	<i>Current Year (2005) (LOS)</i>	<i>Design Year (2025) Projected AADT</i>	<i>Design Year (2025) Projected (LOS) Build</i>	<i>Design Year (2025) Projected (LOS) No Build</i>
(166)	51,600	D	95,300	E	F
(167)	51,600	D	87,700	D	F
(168)	53,800	D	91,500	E	F
(169)	53,200	D	90,500	E	F
(170)	51,200	D	87,100	E	F
(171)	51,200	D	87,100	E	F
(172)	49,500	D	84,200	E	F
(173)	47,000	C	79,900	D	F
(174)	45,200	C	76,800	D	F

Accidents

The latest year that complete accident data is available is 1997. The statewide average accident rate in 1997 for a rural interstate was 49 accidents per 100,000,000 vehicle miles traveled. Proposed projects NH-IM-85-2 (166-173) are below the statewide average. Proposed project NH-IM-85-2 (174) was above the statewide average.

<i>Projects NH-IM-85-2</i>	<i>Accidents</i>	<i>Accident Rate</i>	<i>Statewide Accident Average</i>
(166)	25	31	49
(167)	12	15	49
(168)	26	46	49
(169)	17	17	49
(170)	12	26	49
(171)	9	16	49
(172)	17	21	49
(173)	18	36	49
(174)	65	51	49

Logical Termini

The proposed projects NH-IM-85-2 (166-174) have logical termini:

Projects NH-IM-85-2	Southern Terminus	Northern Terminus	Project Length
(166)	North of SR 211	Ties into proposed project NH-IM-85-2 (167) Location: North of SR 60	5.8 mi.
(167)	Ties into proposed project NH-IM-85-2 (166) Location: North of SR 60	Ties into proposed project NH-IM-85-2 (168) Location: North of US 129/SR 11	5.0 mi.
(168)	Ties into proposed project NH-IM-85-2 (167) Location: North of US 129/SR 11	Ties into proposed project NH-IM-85-2 (169) Location: North of SR 82	3.6 mi.
(169)	Ties into proposed project NH-IM-85-2 (168) Location: North of SR 82	Ties into proposed project NH-IM-85-2 (170) Location: North of SR 98	6.2 mi.
(170)	Ties into proposed project NH-IM-85-2 (169) Location: North of SR 98	Ties into proposed project NH-IM-85-2 (171) Location: North of US 441/SR 15	2.8 mi.
(171)	Ties into proposed project NH-IM-85-2 (170) Location: North of Us 441/SR 15	Ties into proposed project NH-IM-85-2 (172) Location: North of SR 63	4.4 mi.
(172)	Ties into proposed project NH-IM-85-2 (171) Location: North of SR 63	Ties into proposed project NH-IM-85-2 (173) Location: North of SR 51	6.0 mi.
(173)	Ties into proposed project NH-IM-85-29(172) Location: North of SR 51	Ties into proposed project NH-IM-85-2 (174) Location: North of SR 320	4.1 mi.
(174)	Ties into proposed project NH-IM-85-2 (173) Location: North of SR 320	North of SR 17	9.3 mi.

Other Projects in the Area

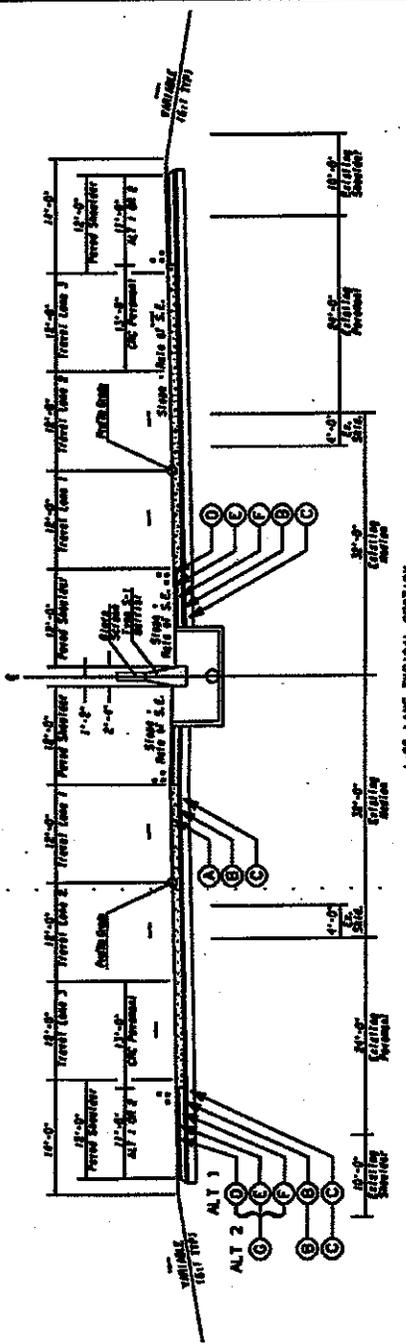
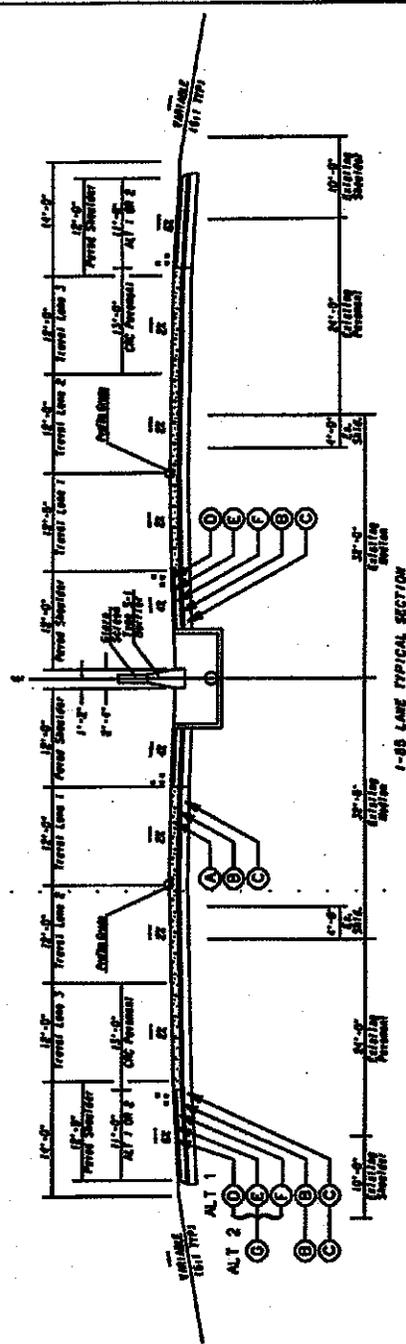
Although the proposed improvements demonstrate independent utility, it is also consistent with the goals of other projects in the area in order to improve the entire transportation network.

- NHS-M001-00 (027), Gwinnett, Barrow, Jackson, and Banks Counties: resurfacing of I-85 south of SR 211 in Gwinnett County to South of US 441/SR 15 in Banks County
- IM-00MS (266), I-85 Safety Upgrades at SR 211 in Barrow County and SR 53, SR 82, and SR 98 in Jackson County
- IM-85-2 (177), Jackson County Rest Areas
- STP-065-3 (55), SR 53 from I-85 to Lanier Raceway/Road Atlanta
- IM-00MS (325), I-85 Safety Upgrades at SR 15 and SR 63 in Banks County and SR 51, SR 320, SR 106, and SR 17 in Franklin County and SR 77 in Hart County
- EDS-IM0545 (19), Widen and Reconstruct SR 17 from CR 67 in Lavonia to Stephens County line including replacement bridge over I-85 and realigning ramp terminals on SR 17

PAVEMENT DESIGN

- (A) 12" CONT REINF CONC PAVT, CL HES CONC
 - (B) 330 #5Y ASPHALTIC CONCRETE, 19 mm SUPERPAVE
 - (C) 12" GRADED AGGREGATE BASE
 - (D) 165 #5Y ASPHALTIC CONCRETE, 12.5 mm SUPERPAVE
 - (E) 220 #5Y ASPHALTIC CONCRETE, 19 mm SUPERPAVE
 - (F) 935 #5Y ASPHALTIC CONCRETE BASE, 25 mm SUPERPAVE
 - (G) PLAN PC CONC PAVT, CL 1 CONC, 12 INCH THK JOINTED WITH 1/8" SMOOTH DOWEL BAR AT 15 FT C/C
- * GROUND IN RUMBLE STRIPS
 ** STRIPING, RM'S, ETC.

SLOPE SELECTION	
SLOPE	FILL
3:1	0' - 10 FT 0' - 10 FT
2:1	10 FT - 10 FT

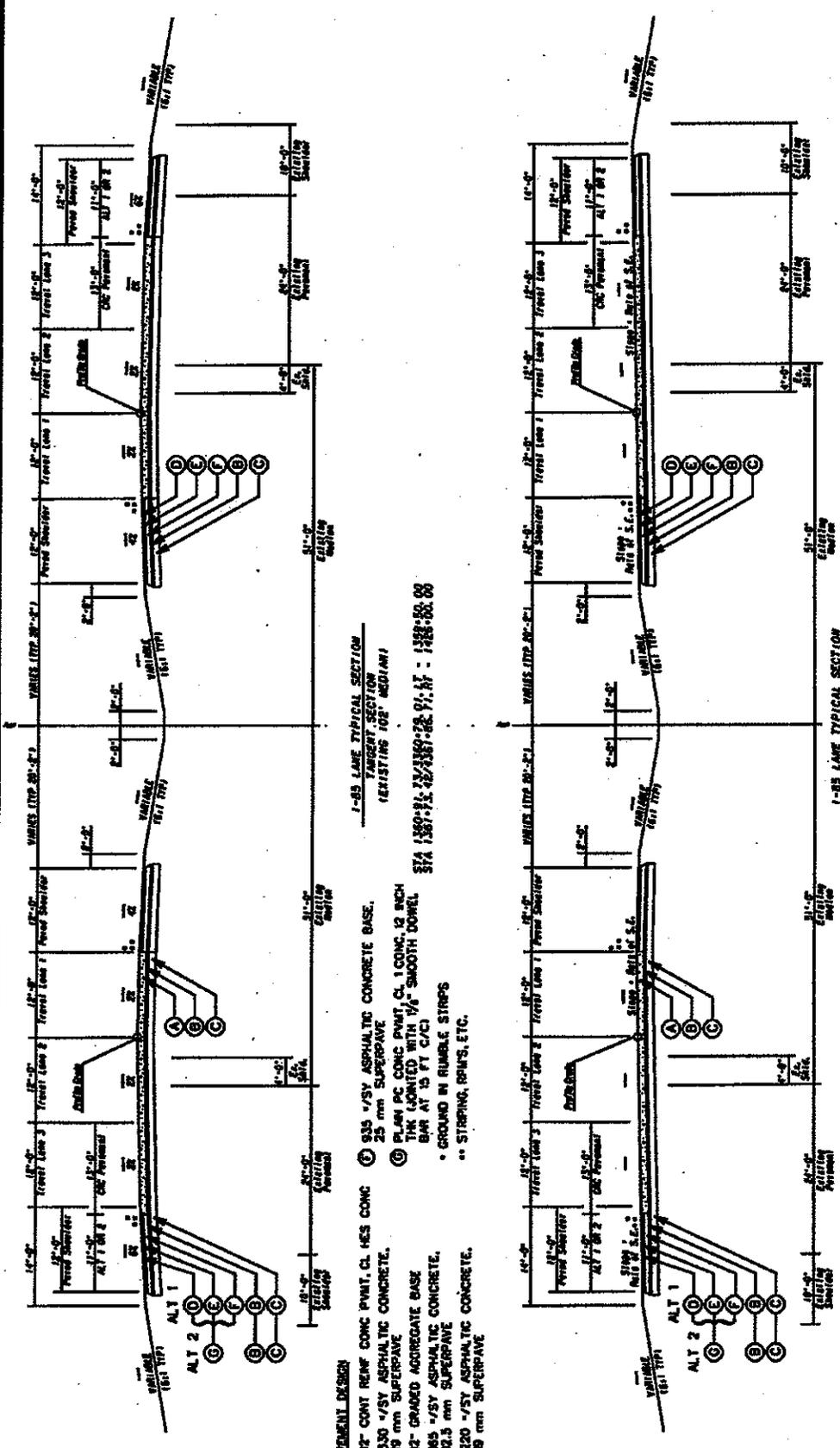


STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE OF CONSULTANT DESIGN
TYPICAL SECTIONS

NO.	DATE	REVISIONS

JORDAN JONES & GOULDING

1-85 WIDENING & IMPROVEMENTS FROM NORTH OF SR 51 TO NORTH OF SR 580



PAVEMENT DESIGN

- (A) 12" CONT REINF CONC PAVT, CL HES CONC
- (B) 3/4" 1/2" ASPHALTIC CONCRETE, 19 mm SUPERPAVE
- (C) 12" GRADED AGGREGATE BASE
- (D) 1/2" 1/2" ASPHALTIC CONCRETE, 12.5 mm SUPERPAVE
- (E) 220 1/2" ASPHALTIC CONCRETE, 9 mm SUPERPAVE
- (F) 3/4" 1/2" ASPHALTIC CONCRETE, 19 mm SUPERPAVE
- (G) 12" CONT REINF CONC PAVT, CL 1 CONC, 12 INCH THK (JOINTED WITH 1/4" SMOOTH DOWEL BAR AT 15 FT C/C)

• GROUND IN RUMBLE STRIPS
 ** STRIPING, REINFS, ETC.

1-05 LANE TYPICAL SECTION
 TANGENT SECTION
 (EXISTING 102' MEDIAN)

STA 1387+32.42/1387+82.91: ST - 1388+82.00

1-05 LANE TYPICAL SECTION
 SUPERELEVATED SECTION
 (EXISTING 102' MEDIAN)

STA 1349+28.88 - STA 1387+32.42/1387+82.91: ST

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE CONSULTANT DESIGN
TYPICAL SECTIONS

1-05 WIDENING & IMPROVEMENTS FROM NORTH OF SR 51 TO NORTH OF SR 350

REVISION DATES

