ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 122890-, Clarke County
NH-003-3(53)
SR 10 Loop/Atlanta Highway Interchange

OFFICE Preconstruction

DATE March 13, 2007

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.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers
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Russell McMurry
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

RECEIVED FEB 2 2 2007

FILE **NH-003-3(53), CLARKE COUNTY**
SR 10 Loop/Atlanta Highway Interchange.
P.I. No. 122890

OFFICE Atlanta
DATE February 21, 2007

FROM Mohamed (Babs) Abubakari P.E., State Consultant Design Engineer

TO Genetha Rice-Singleton., Assistant Director of Preconstruction

SUBJECT **REVISED PROJECT CONCEPT REPORT**

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

The original concept is revised to include the following:

- Updated Traffic
- A typical section that includes four foot wide bike lanes and sixteen foot wide shoulders along US 78/Atlanta Highway.
- Typical sections that include sixteen foot wide shoulders along Huntington Road and Jennings Mill Road.
- Revised project terminus on the west end of the project to begin construction at the Mall Access Road.
- Revised project terminus on the east end of the project to end construction at the intersection of Mitchell Bridge Road and Timothy Road.
- Revised to replace bridge structures in lieu of widening bridge structures.
- Revised design speeds to posted speed limits and revised the design speed on the loop entrance ramps and exit ramps
- Revised construction schedule for Jennings Mill Road.

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

DATE 3-2-07

State Transportation Planning Administrator

Distribution:

Project Review Engineer
State Environmental/Location Engineer
State Traffic Safety & Design Engineer
State Transportation Planning Administrator
State Transportation Financial Management Administrator
District 1 Engineer
State Bridge Design Engineer
Consultant Design Office

RECEIVED
FEB 2 3 2007
BY:

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

REVISED PROJECT CONCEPT REPORT

Need & Purpose: This project was identified by and is a component of the Madison-Athens-Clarke County-Oconee Regional Transportation Study (MACORTS) adopted in September 1997. This interchange is significant regionally in that it provides access to and between SR 10 Loop, which is a perimeter route around the city of Athens from Atlanta Highway (SR 10/US 78), which provides access to The Georgia Square Mall located west of the interchange. It also serves a wide variety of other shopping, eating and employment opportunities in the immediate vicinity.

Accident data for this location indicate a significant accident problem on Atlanta Highway within limits of the interchange. The new loop ramps and additional lanes provided by this project will facilitate the flow of traffic to and from SR 10 Loop to Atlanta Highway as well as the through traffic on Atlanta Highway by eliminating many conflicting turning movements. The relocated Jennings Mill Road provided by this project will improve traffic safety and will facilitate the flow of traffic to and from Jennings Mill Road and a large shopping center to Atlanta Highway by adding a traffic signal and increasing the distance between the intersection of the northbound exit ramp and the Jennings Mill Road along Atlanta Highway.

The needs and desires of Athens-Clark County, businesses, residents and users within the project area and the Georgia Department of Transportation are very similar. The project shall provide improved capacity and mobility. An access plan is needed to ensure maintenance of access to existing property. Some elements of the proposed road system will be access controlled.

Project Location: This project is located in the city of Athens in southwest Clark County.

Description of the original approved concept: The approved concept consists of improvements to the SR 10 Loop/Atlanta Highway (SR 10/US 78) interchange in Athens, Georgia, and the widening in the interchange vicinity for a total project length of .82 mile.

SR 10 Loop is a four lane facility with a forty-foot depressed median and a 55 mph posted speed limit. Atlanta Highway (SR 10/US 78) consists of 4 to 6 lanes, urban shoulders and a variable width raised median and depressed median. The medians range from 8' to 40' wide. The posted speed limit on Atlanta Highway (SR 10/US 78) is 45 mph.

Huntington Road and Jennings Mill Road have posted speeds of 25 mph and 35 mph, respectively, with Huntington Road being 2 to 4 lanes, with urban shoulder and a variable width raised median and Jennings Mill Road being a 2 lane roadway with six foot rural shoulders.

Accident data within the limits of the project indicate a significant problem on Atlanta Highway. Continuous commercial development along Atlanta Highway corridor will increase traffic volumes to 85,000 vehicles per day (VPD) by the year 2026, from year 2006 counts of 60,800 VPD. SR 10 Loop will see an increase of nearly 15,000 VPD to 48,400 VPD by year 2026.

The approved concept proposes construction of a new loop ramp from Atlanta Highway westbound to SR 10 Loop southbound, realigning the existing loop ramp from Atlanta Highway eastbound to SR 10 Loop northbound, and widening Atlanta Highway by adding four lanes and lengthening several turn lanes. In addition, the project includes improvements to the Huntington Road and Atlanta Highway intersection, and relocating the Jennings Mill Road intersection.

Atlanta Highway will be widened to a 7 to 8 lane urban facility, and 8' to 40' raised median, 5' sidewalks, and left turn lanes added or modified at various locations. SR 10 Loop will remain four lanes with a 40' depressed median. Improvements to SR 10 Loop include adding a deceleration / storage lane to the southbound exit ramp, adding a southbound entrance loop ramp with an acceleration lane on SR 10 Loop, realigning the northbound loop ramp and the acceleration lane on SR 10 Loop. Huntington Road will be widened to add left and right turn lanes in both directions and 5' sidewalks. Jennings Mill Road intersection with Atlanta Highway will be relocated approximately 300' east of its current location. Relocated Jennings Mill Road will consist of 2 lanes with curb and gutter and 5' sidewalks.

DESIGN SPEEDS	
Atlanta Highway	45 mph
Jennings Mill Road	40 mph
Huntington Road	35 mph
SR 10 Loop	65 mph
SR 10 Loop - Entrance Loop Ramps	25 mph
SR 10 Loop - Exit Ramps	35 mph

PDP Classification: Full Oversight ( ), Exempt (X), SF ( ), Other ( )

Functional Classification: Urban Principal Arterial

U. S. Route Number(s): 78 **State Route Number(s):** 10

Traffic (AADT) as shown in the approved concept:

Atlanta Hwy Current Year: (2006) - 60,800 Design Year: (2026) - 85,200
SR 10 Loop Current Year: (2006) - 34,600 Design Year: (2026) - 48,400

Proposed features to be revised: Typical Sections, Project Termini, Bridge Replace in lieu of Bridge widening, Design Speeds, and Construction Schedule.

Describe the revised feature(s) to be approved:

Typical Sections: The typical section for Atlanta Highway is to be revised to include 4 ft bike lanes. This was a recommendation at the initial project kickoff meeting. The typical sections are also to be revised to include 16 ft urban shoulders with 5 ft sidewalks for Jennings Mill Road, Huntington Road and Atlanta Highway. This will match the current standard GDOT typical section for urban roadways.

Project Termini: The project terminus is to be extended along Atlanta Highway to include the west quadrants of the Mitchell Bridge Road/Timothy Road intersection. This has been done so that sidewalks and the pedestrian ramps may be added and upgraded at this intersection to meet current ADA requirements and to tie into existing sidewalks on Timothy Road.

The project terminus is to be extended along Atlanta Highway to include the intersection with the

Mall Access Road. Sidewalks and pedestrian ramps will be added and upgraded at this intersection to meet current ADA requirements.

Replace Bridges in lieu of Bridge Widenings: Recommendation of the State Maintenance Engineer, replace both bridges in lieu of widening.

SR 10 & US 78 (Eastbound) over SR 10 Loop
This structure should be replaced for the following reasons:

1. There is shear cracking in the three intermediate bents. These bents were repaired previously and must now be replaced.
2. The deck has cracking and deterioration throughout the structure. The metal stay in place forms under the widening section have severe rust, indicating problems within the deck near these rusted areas. The deck should be replaced as part of this construction project.
3. The edge beams are shallow and need to be replaced throughout the structure.

SR 10 & US 78 (Westbound) over SR 10 Loop
This structure should be replaced for the following reasons:

4. There is shear cracking in the three intermediate bents. These bents were repaired previously and must now be replaced.
5. The deck has cracking and deterioration throughout the structure and should be replaced.
6. The edge beams are shallow and need to be replaced throughout the structure.

For more detailed information on this, see the attached recommendation letter.

Design Speed: The design speeds for SR 10 Loop, Huntington Road and Jennings Mill Road are to be revised to the posted speed limit for each respective roadway. The posted speed limit and revised design speed for each roadway are listed below:

SR 10 Loop -	55 mph
Huntington Road -	25 mph
Jennings Mill Road -	35 mph

The design speed is to be revised for the southbound and northbound SR 10 Loop entrance loop ramps to 30 mph. This can be accomplished with minimal right of way and provides a more desirable design speed related to the Atlanta Highway design speed of 45 mph.

The design speed is to be revised to 45 mph for the southbound and northbound SR 10 Loop exit ramps. This can be accomplished with minimal right of way and provides a more desirable design speed related to the SR 10 Loop design speed of 55 mph.

Construction Schedule: It is recommended to construct Jennings Mill Road without an accelerated schedule. Jennings Mill Road will now be constructed within the time frame of the overall project.

Updated Traffic Data (AADT):

Atlanta Hwy	Current Year: (2011) - 56,150	Design Year: (2031) - 78,250
SR 10 Loop	Current Year: (2011) - 36,000	Design Year: (2031) - 50,500

Programmed/Schedule:

P.E. 2000 R/W 2007 Construction 2010

Revised cost estimates:

1.	Construction cost including inflation and E&C,	$28,400,000
2.	Right-of-way, and	$ 5,150,000
3.	Utilities	$ 5,420,000

The revised estimated cost increase of $18,750,000 compared to the December, 2000 approved concept is due to the added cost to replace both bridge structures, the addition of walls to minimize the impacts to commercial properties, a more detailed construction cost estimate and the use of current mean item unit prices. Updated utility and right of way cost have been requested, but are not available.

Is the project located in a non-attainment area? _____Yes ___X_No

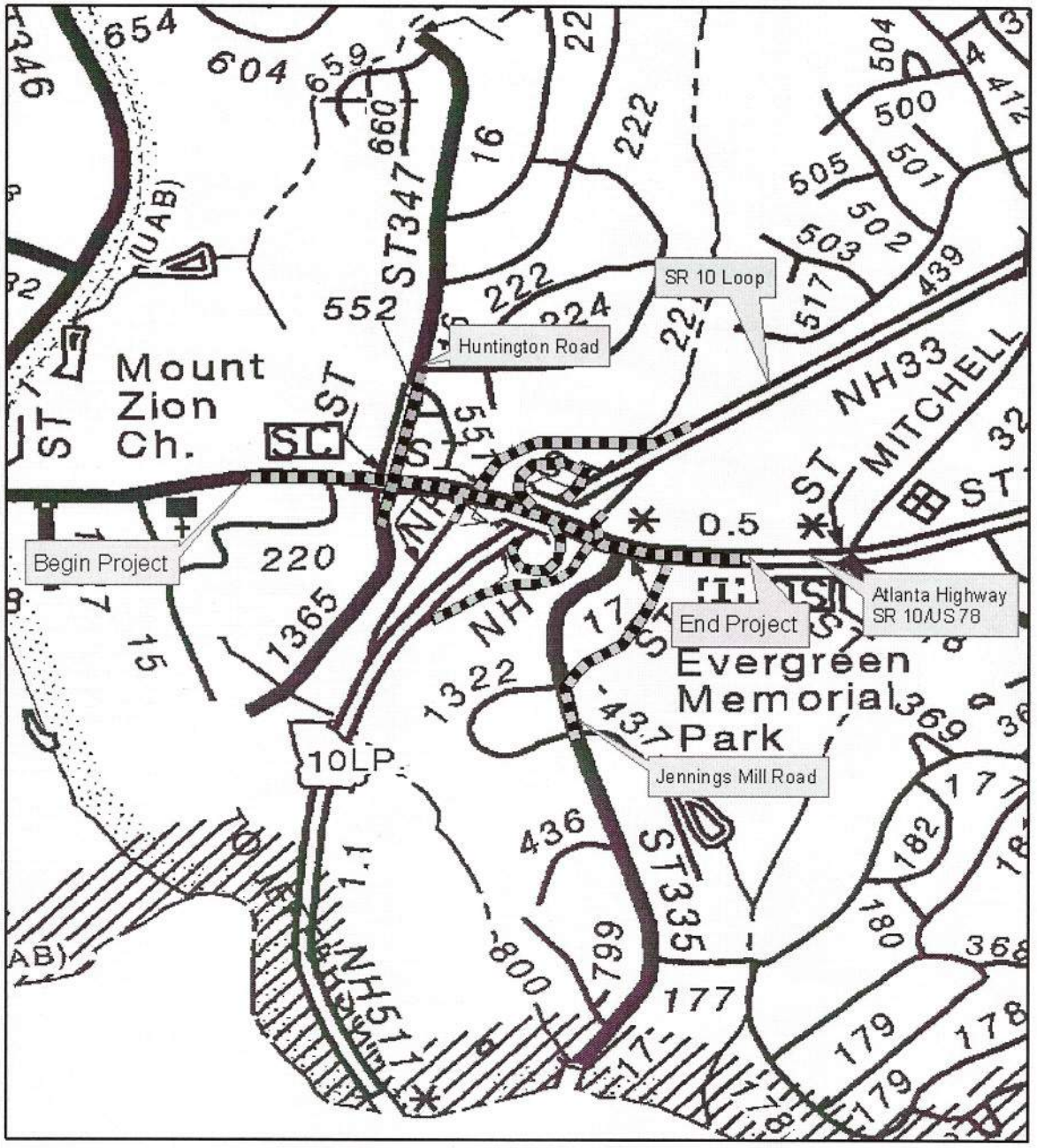
Recommendation: The Consultant Design Office recommends that the proposed revision to the concept be approved for implementation.

Attachments:

1. Location Map
2. Cost Estimate
3. Revised Typical Sections
4. Updated Traffic Data
5. Recommendation Letters for Bridge Replacements

Concur: _____
Director of Preconstruction

Approve: _____
Chief Engineer



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Clarke County
Project NH-003-3(53)
PI No. 122890

SR 10 Loop/Atlanta Highway Interchange Improvements

Project Location Map

Scale
0 570 1,140 1,710
Feet

PRELIMINARY CONSTRUCTION AND RIGHT OF WAY COST ESTIMATE

PROJECT NUMBER: NH-003-3(53) COUNTY: CLARKE
DATE: 2/12/2007 LETTING DATE: MARCH 2009
PREPARED BY: H&L Inc.
(x) PROGRAMMING PROCESS ( ) CONCEPT DEVELOPMENT

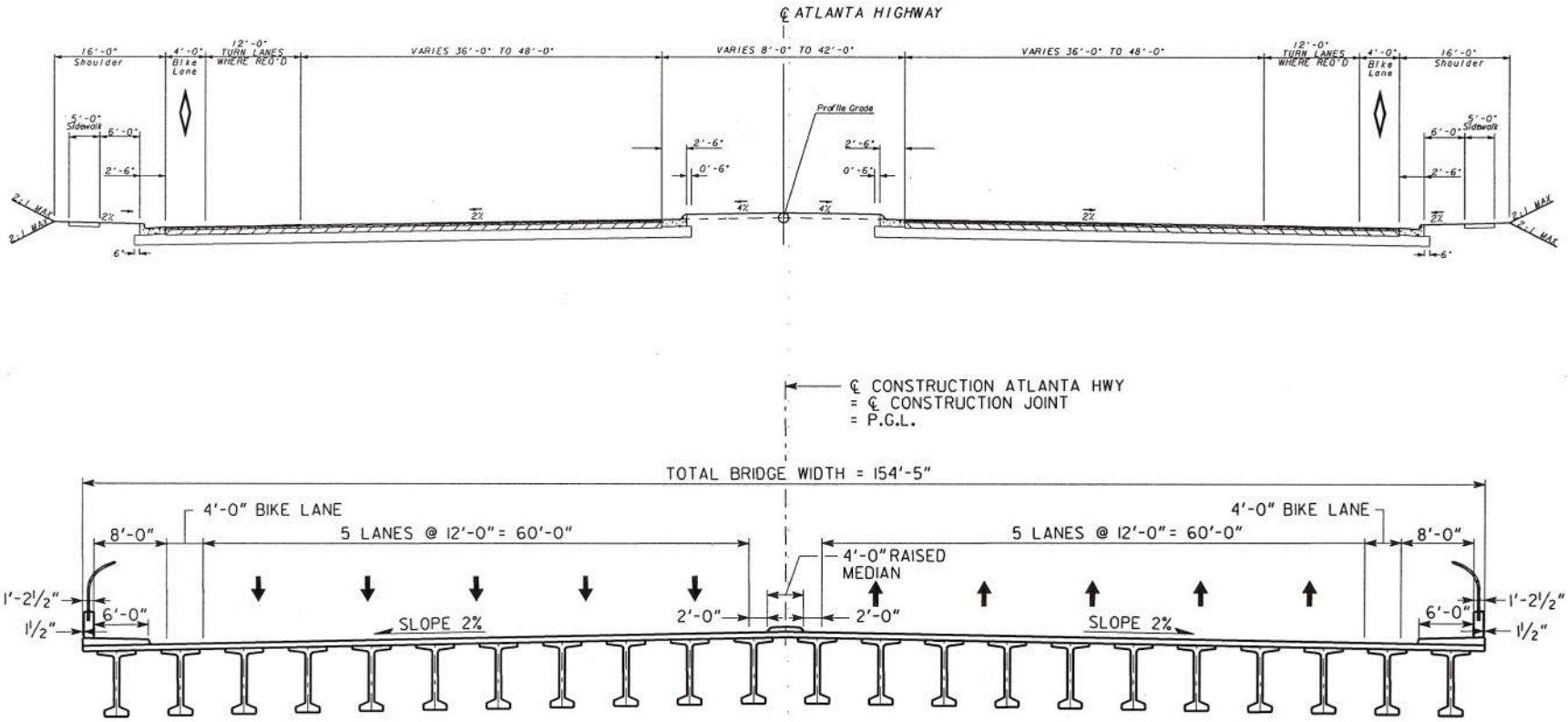
PROJECT COST

1. MAJOR STRUCTURES					
a. BRIDGE OVER SR 10 (Bridge Replacement)	46325	SF	$ 80.00		$3,706,000
b. CULVERT ON JENNINGS MILL RD 6x6	100	LF	$ 820.00		$82,000
c. WALL 1	1350	SF	$ 65.00		$87,750
d. WALL 2	3000	SF	$ 65.00		$195,000
e. WALL 3	350	SF	$ 65.00		$22,750
f. WALL 4	2850	SF	$ 65.00		$185,250
g. WALL 5	1050	SF	$ 65.00		$68,250
h. WALL 6	1700	SF	$ 65.00		$110,500
i. WALL 7	1150	SF	$ 65.00		$74,750
j. WALL 8	700	SF	$ 65.00		$45,500
k. WALL 9	2000	SF	$ 65.00		$130,000
l. COPING	1920	LF	$ 73.70		$141,504
				SUBTOTAL 1:	**$4,849,254**
2. BASE AND PAVING					
a. GRADED AGGREGATE BASE	33295	TN	$ 24.32		$809,734
b. 12.5mm SUPERPAVE	9145	TN	$ 85.00		$777,325
c. 19.0mm SUPERPAVE	5488	TN	$ 90.00		$493,920
d. 25.0mm SUPERPAVE	13590	TN	$ 80.00		$1,087,200
e. LEVELING	13160	TN	$ 90.00		$1,184,400
f. BITUM TACK COAT	8860	GL	$ 2.05		$18,163
g. PVMT REINF FABRIC STRIPS	9500	SF	$ 4.23		$40,185
h. RAISED CONCRETE MEDIAN, 7.5 IN	7130	SF	$ 29.78		$212,331
h. CONC SIDEWALK, 4 IN	9805	SF	$ 29.86		$292,777
i. CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	17650	SF	$ 31.60		$557,740
				SUBTOTAL 2:	**$5,473,776**
3. LUMP ITEMS					
a. TRAFFIC CONTROL	1	LS	$250,000		$250,000
b. CLEARING AND GRUBBING	1	LS	$300,000		$300,000
c. EROSION CONTROL	1	LS	$400,000		$400,000
d. SIGNING AND MARKING	1	LS	$400,000		$400,000
e. SIGNALS & INTERCONNECT FIBER CABLE	4	LS	$130,000		$520,000
				SUBTOTAL 3:	**$1,870,000**
4. MISCELLANEOUS					
a. GUARD RAIL TP T	320	LF	$ 36.09		$11,549
b. GUARD RAIL TP W	4600	LF	$ 17.11		$78,706
c. TP1 ANCHORS	10	EA	$ 613.61		$6,136
d. TP12 ANCHORS	10	EA	$ 1,713.38		$17,134
e. RIGHT OF WAY MARKERS	100	EA	$ 94.15		$9,415
f. PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	3000	LF	$ 28.52		$85,560
g. REINF CONC APPROACH SLAB	916	SY	$ 146.16		$133,883
h. AGGR SURF CRS	100	TN	$ 17.53		$1,753
i. Field Office	1	EA	$ 75,300.00		$75,300
f. PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	3000	LF	$ 28.35		$85,050
g. REINF CONC APPROACH SLAB	916	SY	$ 146.16		$133,883
h. AGGR SURF CRS	100	TN	$ 17.53		$1,753
				SUBTOTAL 4:	**$640,121**
5. GRADING AND DRAINAGE					
a. EARTHWORK - IN PLACE EMBANKMENT (TOTAL FILL 60000 CY @ $9.94/CY)					$600,000
b. DRAINAGE					$700,000
					$1,300,000

ESTIMATE SUMMARY

SUBTOTAL CONSTRUCTION COST	$14,133,151
E. & C. (10%)	$1,413,315
INFLATION	$2,227,738
TOTAL CONSTRUCTION COST	**$17,774,204**
RIGHT OF WAY	$5,150,000
REIMBURSABLE UTILITIES	$5,420,000
GRAND TOTAL PROJECT COSTS	**$28,344,204**

DATE/TIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		CLARKE	NH-003-3(53)		



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA	Heath & Lineback Engineers INCORPORATED 2390 CANTON ROAD, BUILDING 200 MARIETTA, GEORGIA 30066-2295	LAND LOT NO.:	REVISION DATES
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA		LAND DISTRICT:	
CONSTRUCTION LIMITS	LIMIT OF ACCESS		GMD:	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	R/W AND LIMIT OF ACCESS			
EASEMENT FOR CONSTR OF SLOPES	EXISTING R/W LINE			
EASEMENT FOR CONSTR OF DRIVES				

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TYPICAL SECTIONS

SR 10 LOOP/ATLANTA HIGHWAY INTERCHANGE

DRAWING NO. 5-01

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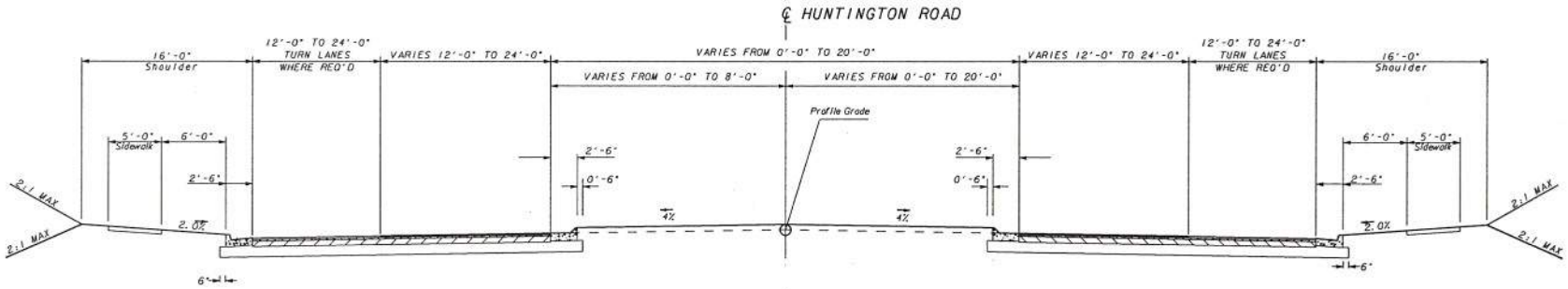
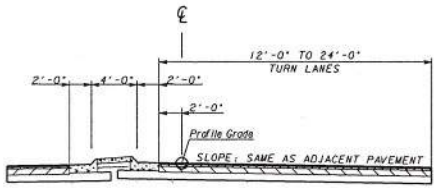
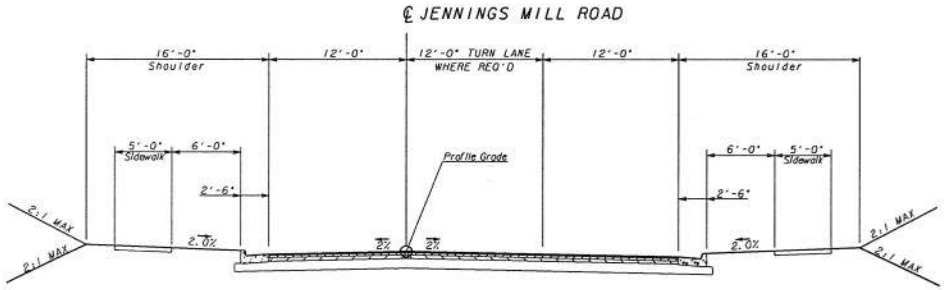
			CLARKE	NH-003-3(53)		





DETAIL FOR LEFT TURN LANES



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA	Heath & Lineback Engineers INCORPORATED 2390 CANTON ROAD, BUILDING 200 MARIETTA, GEORGIA 30066-2393	LAND LOT NO.:	REVISION DATES
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA		LAND DISTRICT:	
CONSTRUCTION LIMITS	LIMIT OF ACCESS		GMD:	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	R/W AND LIMIT OF ACCESS			
EASEMENT FOR CONSTR OF SLOPES	EXISTING R/W LINE			
EASEMENT FOR CONSTR OF DRIVES				

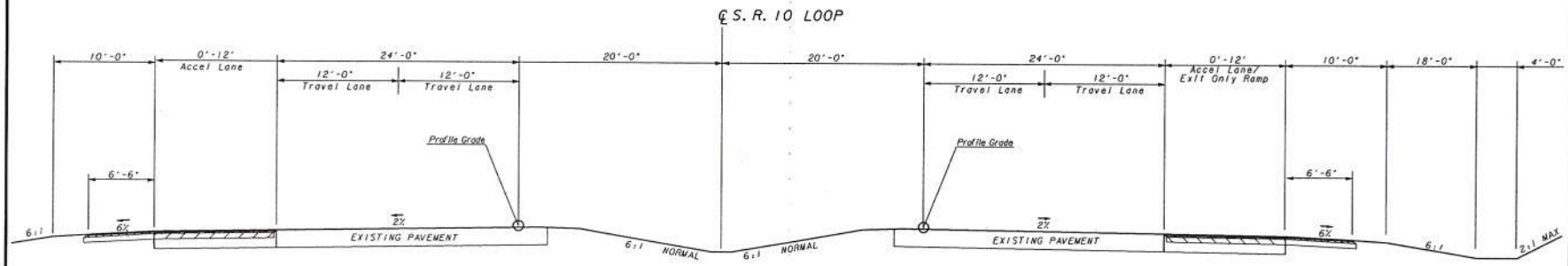
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TYPICAL SECTIONS

SR 10 LOOP/ATLANTA HIGHWAY INTERCHANGE

DRAWING NO. 5-02

DATE/TIME*** *USER*	TIME*** *PRF* **PENTABLE**	*DGN*	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
			CLARKE	NH-003-3(53)		



PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES	BEGIN LIMIT OF ACCESS.....BLA END LIMIT OF ACCESS.....ELA LIMIT OF ACCESS R/W AND LIMIT OF ACCESS EXISTING R/W LINE	Heath & Linebaugh Engineers INCORPORATED 2390 CANTON ROAD, BUILDING 200 MARIETTA, GEORGIA 30060-2393	LAND LOT NO.: LAND DISTRICT: GMD:	REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: CONSULTANT DESIGN **TYPICAL SECTIONS** SR 10 LOOP/ATLANTA HIGHWAY INTERCHANGE DRAWING No. 5-03

DATETIME###	TIME###	#PRF#	#DGN#	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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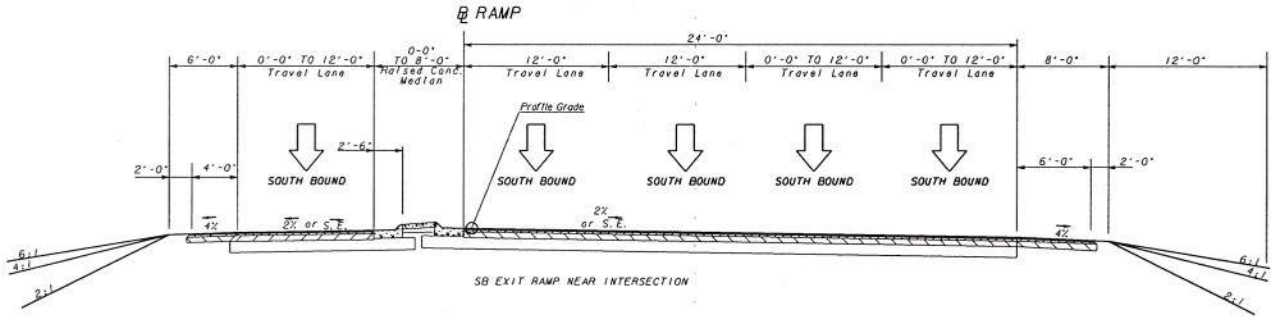
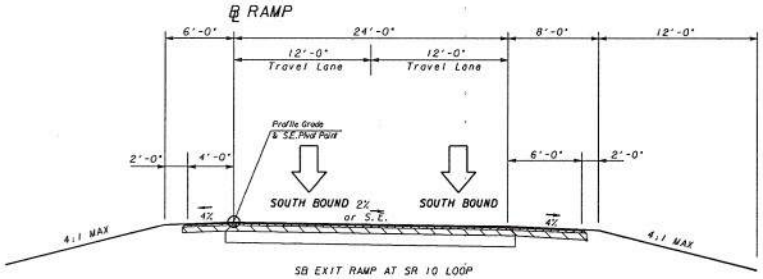


SB EXIT RAMP NEAR INTERSECTION



SB EXIT RAMP AT SR 10 LOOP

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS — C — F —
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
R/W AND LIMIT OF ACCESS
EXISTING R/W LINE

Heath & Lineback Engineers
INCORPORATED
2290 CANTON ROAD, SUITE 200
MARIETTA, GEORGIA 30066-2595

LAND LOT NO.:
LAND DISTRICT:
GMD:

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TYPICAL SECTIONS

SR 10 LOOP/ATLANTA HIGHWAY INTERCHANGE

DRAWING No. 5-04

DATE:TIME$$$ $USER$	TIME$$$	PRF $$PENTABLE$$	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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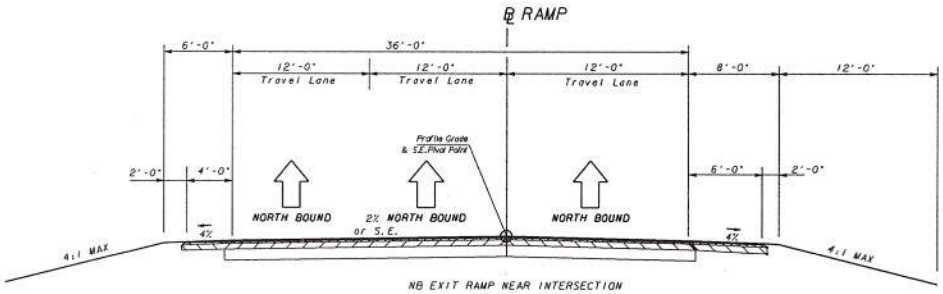
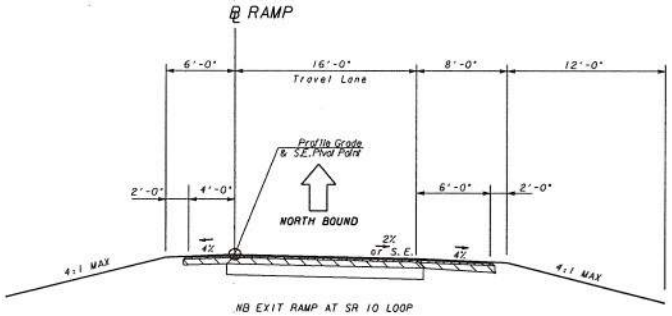


NB EXIT RAMP NEAR INTERSECTION



NB EXIT RAMP AT SR 10 LOOP

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS — C — F —
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
R/W AND LIMIT OF ACCESS
EXISTING R/W LINE

Heath & Lineback Engineers
INCORPORATED
2200 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-2395

LAND LOT NO. :
LAND DISTRICT:
GMD:

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TYPICAL SECTIONS

SR 10 LOOP/ATLANTA
HIGHWAY INTERCHANGE

DRAWING No.
5-05

DATE TIME###	TIME###	PWD	CGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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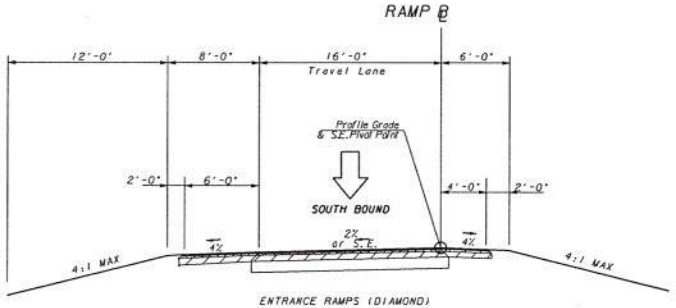
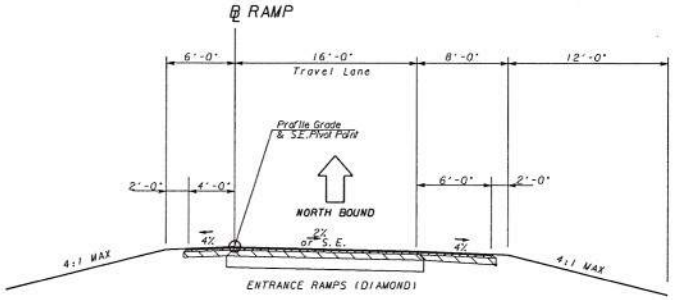
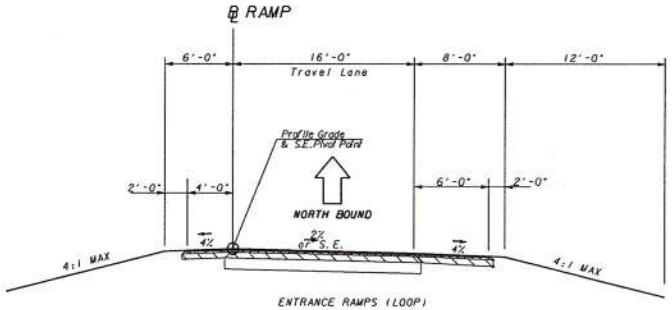


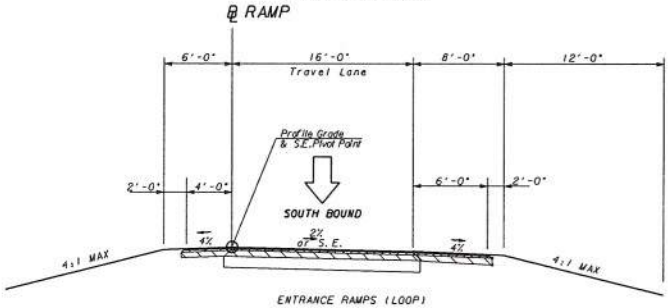
ENTRANCE RAMPS (DIAMOND)



ENTRANCE RAMPS (DIAMOND)



ENTRANCE RAMPS (LOOP)



ENTRANCE RAMPS (LOOP)

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS — C — F —
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
R/W AND LIMIT OF ACCESS
EXISTING R/W LINE

Heath & Lineback Engineers
INCORPORATED
2300 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-3393

LAND LOT NO.:
LAND DISTRICT:
GMD:

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TYPICAL SECTIONS

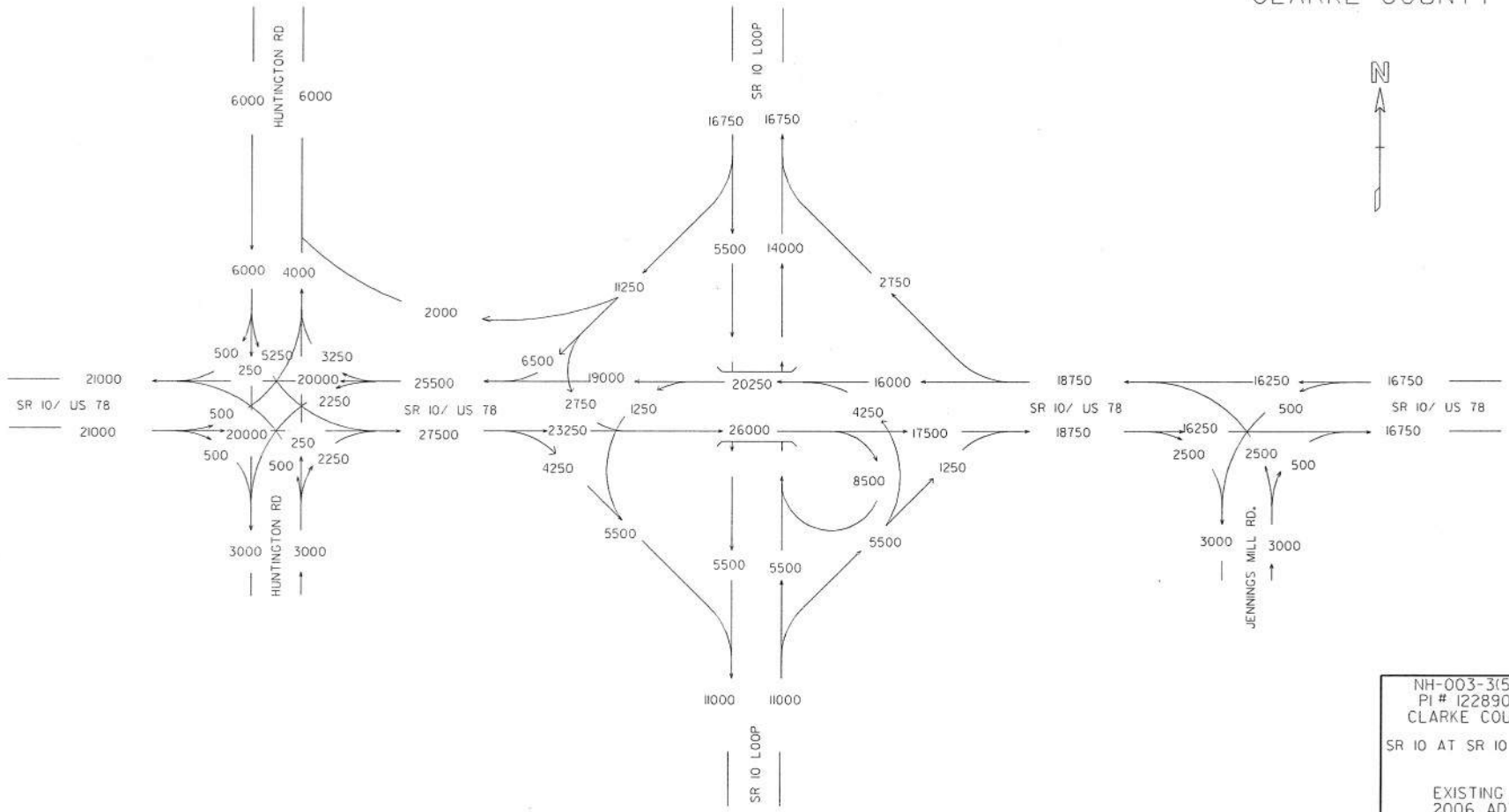
SR 10 LOOP/ATLANTA
HIGHWAY INTERCHANGE

DRAWING NO. 5-06

SHEET 1 OF 1

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

ATHENS
CLARKE COUNTY



NH-003-3(53)
PI # 122890
CLARKE COUNTY

SR 10 AT SR 10 LOOP

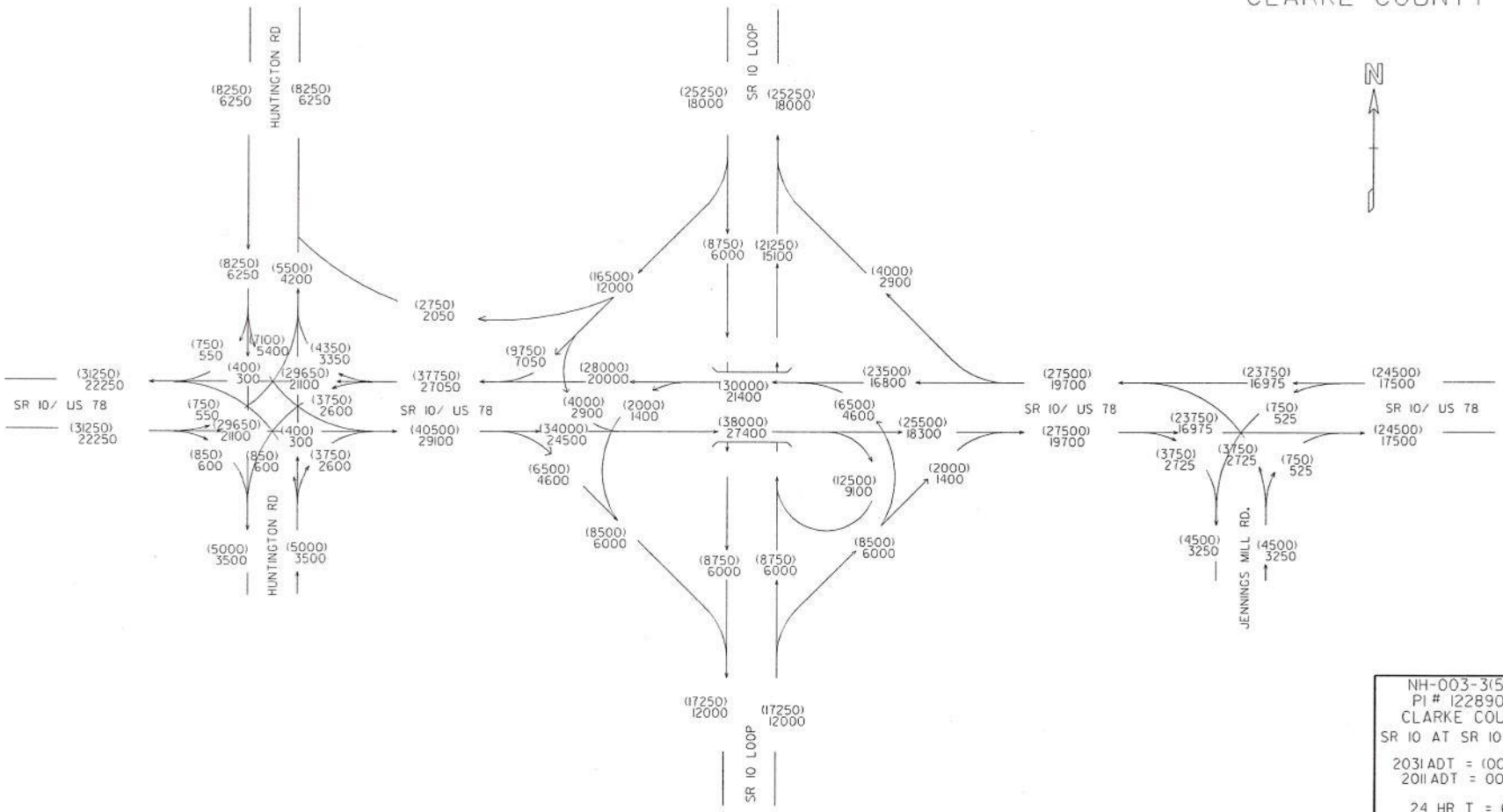
EXISTING
2006 ADT

RGL
2/06

SHEET 1 OF 2

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

ATHENS
CLARKE COUNTY



NH-003-3(53)
PI # 122890
CLARKE COUNTY
SR 10 AT SR 10 LOOP

2031 ADT = (000)
2011 ADT = 000

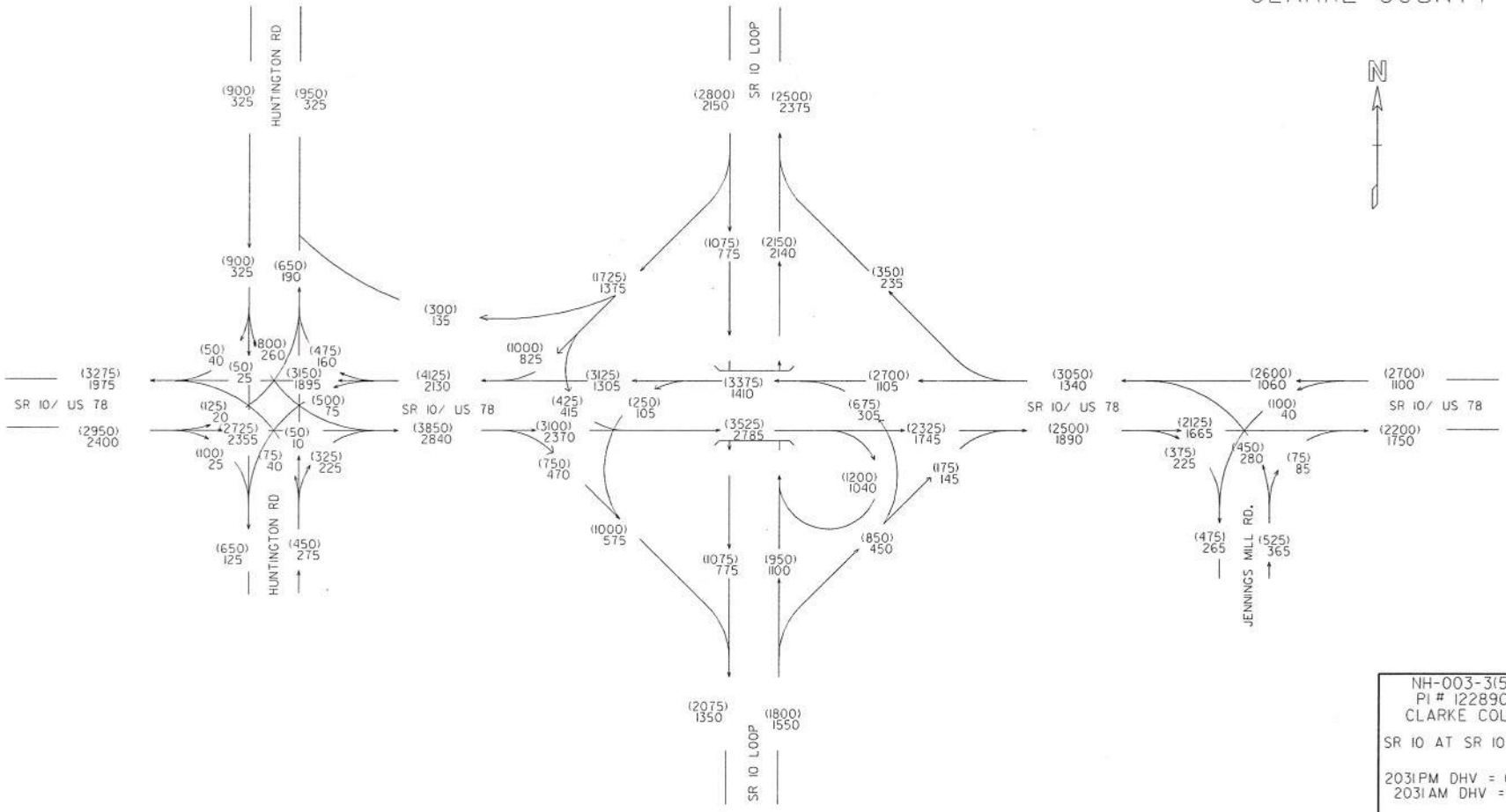
24 HR T = 6%
SU = 3.5%
COMB = 2.5%

RGL
2/06

SHEET 2 OF 2

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

ATHENS
CLARKE COUNTY



NH-003-3(53)
PI # 122890
CLARKE COUNTY

SR 10 AT SR 10 LOOP

2031PM DHV = (000)
2031AM DHV = 000

T = 4%

RGL
2/06

REC_VED
SEP 2 2 2006
HEATH & LINEBACK ENGINEERS, INC.

V 4009 IN 046
RECEIVED
SEP 11
OFFICE OF CONSULTANT DESIGN

Department of Transportation
State of Georgia

HAROLD E. LINNENKOHL
COMMISSIONER
(404) 656-5206

DAVID E. STUDSTILL, JR, P.E.
CHIEF ENGINEER
(404) 656-5277

BUDDY GRATTON, P.E.
DEPUTY COMMISSIONER
(404) 656-5212

EARL L. MAHFUZ
TREASURER
(404) 656-5224

INTERDEPARTMENT CORRESPONDENCE

September 8, 2006

FROM: Ben Rabun, P.E., State Bridge Maintenance Engineer

TO: Mohammed Abubakari, P.E.,
State Program Delivery and Consultant Design Engineer
Attn: Mike Haithcock

SUBJECT: Bridge Condition Survey and Replacement Recommendation

NH-003-3(53) / Clarke County
P.I. No. 122890
SR 10 Loop @ SR 10 / Atlanta Highway

As requested, a condition survey has been performed on the following bridge structures.

Structure ID 059-0020-0
Location ID 059-00010D-003.13E
SR 10 & US 78 (Eastbound) over SR 10 Loop

This bridge was built in 1964 and widened in 1987 and consists of concrete bents, a steel continuous superstructure, and a concrete deck. The load capacity is less than HS-15. This structure should be replaced for the following reasons:

1) There is shear cracking in the three intermediate bents. These bents were repaired previously and must now be replaced.
2) The deck has cracking and deterioration throughout the structure. The metal stay in place forms under the widening section have severe rust, indicating problems within the deck near these rusted areas. The deck should be replaced as part of this construction project.
3) The edge beams are shallow and need to be replaced throughout the structure.

Due to the reasons above and the age of the structure, the bridge should be replaced as part of the construction project. The structural steel beams shall be salvaged from the existing bridge as a part of this construction project. The beams are continuous and shall

be cut at the bents. The resulting beam lengths for span #1 will be approximately 55 feet. The resulting beam lengths for span #2 and #3 will be approximately 69 feet. The resulting beam length for span #4 will be approximately 59 feet. The handrail and posts shall not be salvaged.

Structure ID 059-0021-0
Location ID 059-00010D-003.14E
SR 10 & US 78 (Westbound) over SR 10 Loop

This bridge was built in 1964 and consists of concrete bents, a steel continuous superstructure, and a concrete deck. The load capacity is less than HS-15. This structure should be replaced for the following reasons:

1) There is shear cracking in the three intermediate bents. These bents were repaired previously and must now be replaced.
2) The deck has cracking and deterioration throughout the structure and should be replaced.
3) The edge beams are shallow and need to be replaced throughout the structure.

Due to the reasons above and the age of the structure, the bridge should be replaced as part of the construction project. The structural steel beams shall be salvaged from the existing bridge as a part of this construction project. The beams are continuous and shall be cut at the bents. The resulting beam lengths for span #1 will be approximately 55 feet. The resulting beam lengths for span #2 and #3 will be approximately 69 feet. The resulting beam length for span #4 will be approximately 59 feet. The handrail and posts shall not be salvaged.

The salvaged materials from these structures shall be delivered to the District 1 storage area located in Jackson, Georgia. The District Maintenance Engineer shall be contacted 2 weeks prior to delivery. The contractor shall be responsible for loading, transporting, and unloading materials from both structures at the storage area.

If further information is required for this project, please contact me at (404) 635-8179.

BFR/JAD

cc: Paul Liles, State Bridge Engineer
Myron Banks, Materials Research Branch Chief
Larry Gregory, District Maintenance Engineer
Shawn Fleet, Heath & Lineback (via fax)
File