

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
REVISED PROJECT CONCEPT REPORT**

Project Type: <u>Major</u>	P.I. Number: <u>122890</u>
GDOT District: <u>1</u>	County: <u>Clarke</u>
Federal Route Number: <u>US 78</u>	State Route Number: <u>SR 10</u>

This concept revision includes changes in lane layouts, lane widths, shoulder widths, driveway access, removal of bike lanes and updated traffic Volumes throughout the project corridor.

Submitted for approval:

 _____ Shawn Fleet, Heath & Lineback Engineers, Inc.	<u>8-28-2015</u> _____ DATE
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Office Head (<i>GDOT Project Manager's Office</i>)	DATE
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GDOT Project Manager	DATE
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Recommendation for approval:

State Environmental Administrator (<i>recommendation required</i>)	DATE
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State Traffic Engineer (<i>if applicable - recommendation required for roundabout</i>)	DATE
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State Bridge Design Engineer (<i>if applicable - required for projects with bridges</i>)	DATE
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The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

State Transportation Planning Administrator (<i>recommendation required</i>)	DATE
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PLANNING, APPROVED CONCEPT, & BACKGROUND DATA

Project Justification Statement: The 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 the SR 10 Loop which is a perimeter route around the city of Athens, from US 78/SR 10 (Atlanta Hwy), and 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.

Traffic projections estimate that volumes on US 78/SR 10 (Atlanta Hwy) will increase by approximately 30% or 13,200 vehicles per day in the next twenty years. The project proposes 0.90 miles of widening and improvements to the US 78/SR 10 (Atlanta Hwy) in the interchange area. The US 78/SR 10 (Atlanta Hwy) over the SR 10 Loop bridges are to be replaced due cracking throughout the structures and undersized edge beams. The new loop ramp, realigned ramps, auxiliary lane and additional lanes provided by this project would facilitate the flow of traffic to and from SR 10 Loop to Atlanta Highway as well as the through traffic on Atlanta Highway by providing additional capacity and eliminating many conflicting turning movements. The relocated Jennings Mill Road provided by this project would 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 intersection at Atlanta Highway. Widening and improvements to Huntington Road will facilitate the flow of traffic to the Georgia Square Mall, an additional large shopping center and now provides an alternate route connection to Jennings Mill Parkway to the south.

The primary needs of the project are to increased mobility and improved safety and to enhance economic development within the interchange area.

Description of the 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 of Atlanta Highway 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

78,250 vehicles per day (VPD) by the year 2031, from year 2011 counts of 56,150 VPD. SR 10 Loop will see an increase of nearly 14,500 VPD to 50,500 VPD by year 2031.

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 an 8 lane urban facility with 8' to 40' raised median, 4' bike lanes, 5' sidewalks, 16' shoulders 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, and 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 with 5' sidewalks and 16' shoulders. 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, 5' sidewalks, and 16' shoulders. All lanes within the project are to be designed 12 ft wide.

DESIGN SPEEDS	
Atlanta Highway	45 mph
Jennings Mill Road	35 mph
Huntington Road	25 mph
SR 10 Loop	55 mph
SR 10 Loop - Entrance Loop Ramps	30 mph
SR 10 Loop - Exit Ramps	45 mph

PDP Classification: Major Minor
Federal Oversight: Full Oversight Exempt State Funded Other

Projected Traffic AADT as shown in the approved Concept Report:

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

Updated Traffic ADT:

Atlanta Highway	
Open Year (2021): 49,375	Design Year (2041): 59,600
SR 10 Loop:	
Open Year (2021): 37,700	Design Year (2041): 46,000

Functional Classification (Mainline): Urban Principal Arterial

VE Study anticipated: No Yes Completed – Date: 8/10/2007

PROPOSED REVISIONS

Approved Features:	Proposed Features:
<p>Typical Section (Atlanta Hwy):</p> <ul style="list-style-type: none"> • 12'-0" Lane Widths • 4'-0" Bike Lanes • 16'-0" Shoulders <p>Typical Section (Huntington Road):</p> <ul style="list-style-type: none"> • 16'-0" Shoulder <p>Typical Section (Jennings Mill Road):</p> <ul style="list-style-type: none"> • 16'-0" Shoulder <p>Project Concept Layout:</p> <ul style="list-style-type: none"> • 4 lanes in each direction through the interchange area 	<p>Typical Section (Atlanta Hwy):</p> <ul style="list-style-type: none"> • 11'-0" Lane Widths • No Bike lanes • 8'-0" to 16'-0" Shoulders <p>Typical Section (Huntington Road):</p> <ul style="list-style-type: none"> • 10'-0" Shoulder <p>Typical Section (Jennings Mill Road):</p> <ul style="list-style-type: none"> • 10'-0" Shoulder <p>Project Concept Layout:</p> <ul style="list-style-type: none"> • 3 lanes in each direction through the interchange area
<p>Reason(s) for change: ROW is the highest cost item on this project. Reducing the widths and shoulder widths will result in significant cost savings (pavement bridge and ROW) and also reduce / minimize the amount of new ROW required to construct the project. The bike lane would not tie to any proposed bike routes designated by GDOT or Athens-Clarke County.</p>	

ENVIRONMENTAL

Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes
 Is the project located in an Ozone Non-attainment area? No Yes

A Noise Study will be required.
 A UST survey will be required.

Potential environmental impacts of proposed revision:

The reduced lane width and revised lane layout along Atlanta Highway and reduced shoulder widths along Huntington Road and Jennings Mill Road were done to reduce the project foot print and its impacts on the adjacent businesses. This will reduce the environmental impacts throughout the majority of the project corridor.

Have proposed revisions been reviewed by environmental staff? No Yes

Environmental responsibilities (Studies/Documents/Permits):

GDOT is responsible for all environmental studies for the proposed project.

Environmental impacts by section:

NEPA: A reevaluation of the NEPA document will be required for the revisions listed in this report.

Ecology: Project areas should be screened for Ecology resources.

Archeology: Project areas should be screened for archeology resources.

History: Project areas should be screened for History resources.

Air & Noise: Air and noise modeling will need to be performed based on the revised project footprint resources.

Public Involvement: An additional PIOH may be required?

PROJECT COST & ADDITIONAL INFORMATION

Updated Cost Estimate		Date of Estimate
Base Construction Cost:	\$18,961,866.30	08-21-2015
5% Engineering and Inspection:	\$948,093.32	08-21-2015
5% Contingency	\$ 995,497.98	08-21-2015
Liquid AC Adjustment:	\$1,221,560.36	08-21-2015
<u>Total Construction Cost:</u>	<u>\$22,127,017.96</u>	08-21-2015
Right-of-Way:	\$13,064,224.00	06-08-2011
Utilities (reimbursable costs):	\$1,000,000.00	Assumed
Environmental Mitigation:	\$50,000.00	Assumed
TOTAL PROJECT COST:	\$36,241,241.96	

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

Comments: None

Attachments:

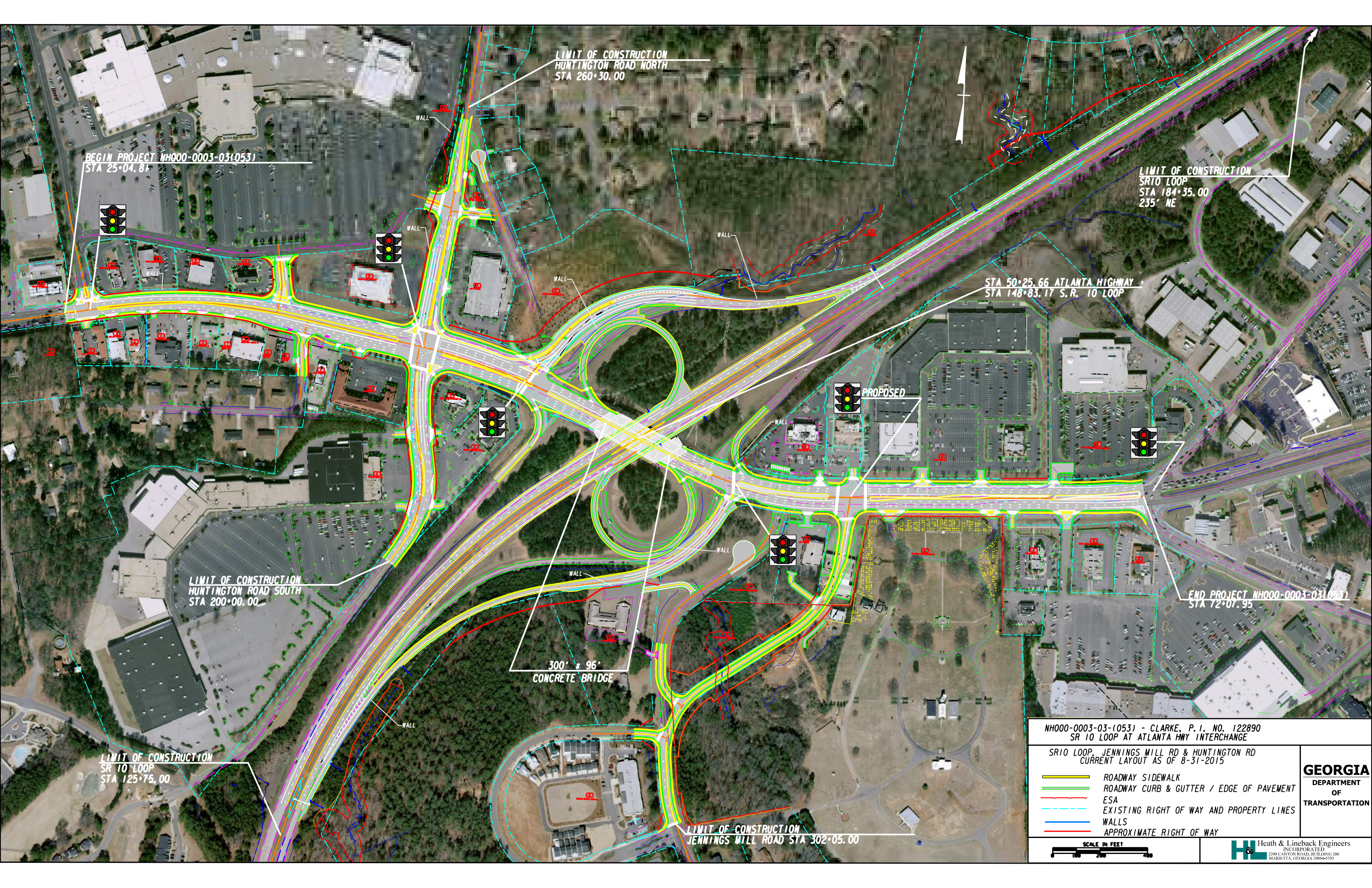
1. Location map
2. Revised Concept Layout
3. Roadway Typical Section
4. Cost Estimates
 - a. Construction including Engineering and Inspection and Contingencies
 - b. Completed Liquid AC Cost Adjustment forms
 - c. Right-of-Way (Not Included/From Precon. Status Report)
 - d. Utilities (Assumed/Not Included)
 - e. Environmental Mitigation (Assumed/Not Included)
5. Logical Termini Form – *(Not Included – Pending completion by OES)*
6. VE Study Implementation Letter
7. Traffic Diagrams
8. Traffic Study Synopsis and Summary Tables
9. Meeting Minutes
 - a. 2-19-2015 Meeting with GDOT District 1
 - b. 4-16-2015 Meeting with FHWA
 - c. 5-20-2015 Meeting with GDOT District 1 & Athens Clarke County
 - d. 7-1-2015 Meeting with GDOT Planning & Athens Clarke County
 - e. Additional Pertinent E-mail Chains

APPROVALS

Concur: _____
Director of Engineering

Approve: _____
Chief Engineer

_____ Date



BEGIN PROJECT NH000-0003-03(053)
STA 25+04.81

LIMIT OF CONSTRUCTION
HUNTINGTON ROAD NORTH
STA 260+30.00

LIMIT OF CONSTRUCTION
SR10 LOOP
STA 184+35.00
235' NE

STA 50+25.66 ATLANTA HIGHWAY
STA 148+83.17 S.R. 10 LOOP

LIMIT OF CONSTRUCTION
HUNTINGTON ROAD SOUTH
STA 200+00.00

END PROJECT NH000-0003-03(053)
STA 72+07.95

LIMIT OF CONSTRUCTION
SR 10 LOOP
STA 125+75.00

300' x 96'
CONCRETE BRIDGE

LIMIT OF CONSTRUCTION
JENNINGS MILL ROAD STA 302+05.00

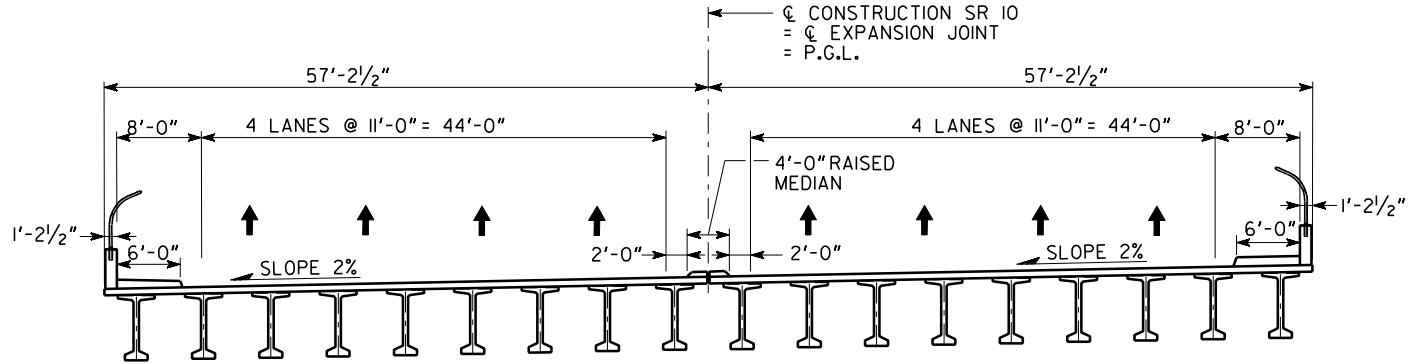
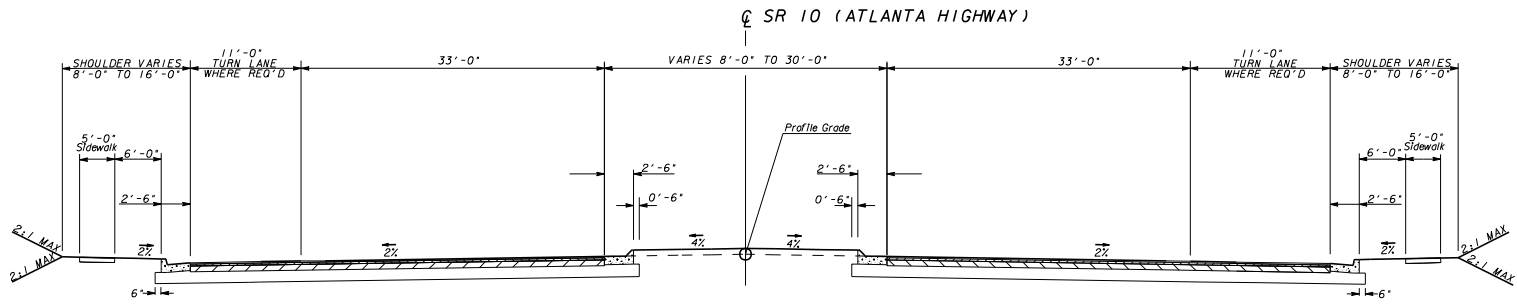
NH000-0003-03-(053) - CLARKE, P. I. NO. 122890
SR 10 LOOP AT ATLANTA HWY INTERCHANGE
SR10 LOOP, JENNINGS MILL RD & HUNTINGTON RD
CURRENT LAYOUT AS OF 8-31-2015

- ROADWAY SIDEWALK
- ROADWAY CURB & GUTTER / EDGE OF PAVEMENT
- ESA
- - - EXISTING RIGHT OF WAY AND PROPERTY LINES
- WALLS
- APPROXIMATE RIGHT OF WAY

GEORGIA
DEPARTMENT
OF
TRANSPORTATION



Health & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5792



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

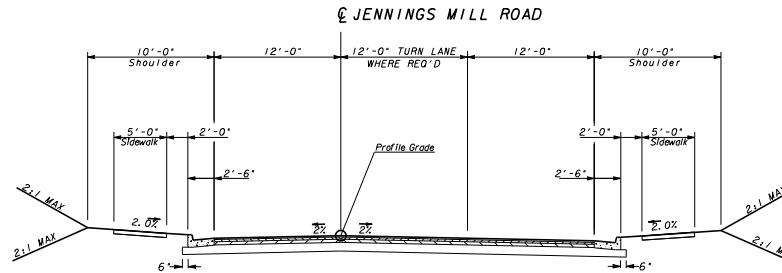
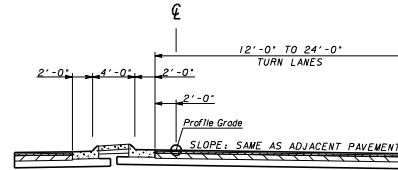
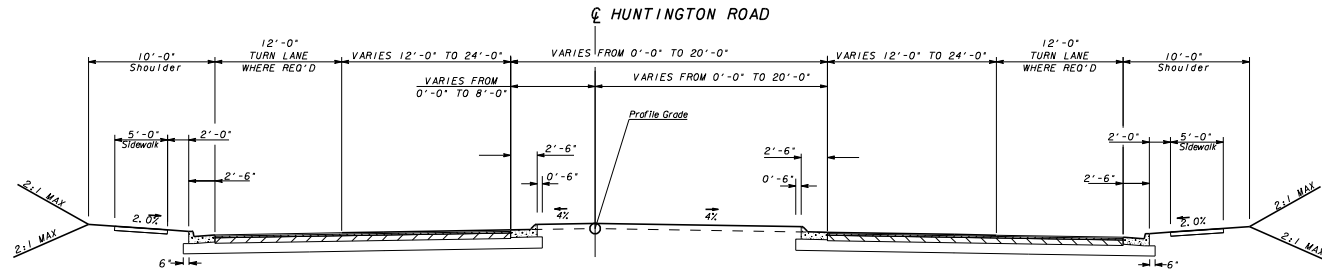
BEGIN LIMIT OF ACCESS.....BLA
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 LIMIT OF ACCESS
 R/W AND LIMIT OF ACCESS
 EXISTING R/W LINE
 FIELD FENCING

Heath & Lineback Engineers
 INCORPORATED
 2348 CANTON ROAD, BUILDING 208
 MARTIN, GEORGIA 30056-7013

REVISION DATES		

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: CONSULTANT DESIGN
 TYPICAL SECTIONS
 ATLANTA HIGHWAY
 SR 10 LOOP/ATLANTA
 HIGHWAY INTERCHANGE

DRAWING No. **5-01**



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
 FIELD FENCING

Heath & Lineback Engineers
 INCORPORATED
 2348 CANTON ROAD, BUILDING 208
 MARTIN, GEORGIA 30080-7013

REVISION DATES

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: CONSULTANT DESIGN
 TYPICAL SECTIONS
 SIDE ROADS
 SR 10 LOOP/ATLANTA
 HIGHWAY INTERCHANGE

DRAWING No.
5-01

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 122890

OFFICE Program Delivery

PROJECT DESCRIPTION

SR 10 LOOP AT US78/SR10(ATLANTA HWY) INTERCHANGE; INCL
JENNINGS MILL RD REALIGNMENT IN ATHENS

DATE August 21, 2015

From: Albert V. Shelby III, State Program Delivery Engineer

To: Lisa L. Myers, State Project Review Engineer

Subject: **REVISIONS TO PROGRAMMED COSTS**

PROJECT MANAGER Anthony Tate

MGMT LET DATE 10/19/2018

MGMT ROW DATE 4/22/2011

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$ 18,961,866.30

DATE 11/15/2012

RIGHT OF WAY \$ 13,064,224.00

DATE 6/8/2011

UTILITIES \$ 1,000,000.00

DATE N/A

REVISED COST ESTIMATES

CONSTRUCTION* \$ 22,127,017.96

RIGHT OF WAY \$

UTILITIES \$ 1,000,000.00

*Cost Contains 5 % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

Construction cost have been updated based on VE Changes, design changes made in agreement with Athens-Clarke County.

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$	18,961,866.30	Base Estimate From CES	
B. ENGINEERING AND INSPECTION (E & I):	\$	948,093.32	Base Estimate (A) x	5 %
C. CONTINGENCY:	\$	995,497.98	Base Estimate (A) + E & I (B) x	5 %
			See % Table in "Risk Based Cost Estimation" Memo	
D. TOTAL LIQUID AC ADJUSTMENT:	\$	1,221,560.36	Total From Liquid AC Spreadsheet	
E. CONSTRUCTION TOTAL:	\$	22,127,017.96	(A + B + C + D = E)	

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Assumed Cost	\$ 1,000,000.00
TOTAL	\$ 1,000,000.00

ATTACHMENTS:

Liquid AC Adjustment Spreadsheet

PROJ. NO. TOOPDDES110124
P.I. NO. 0010739
DATE 8/21/2015

CALL NO. 9/29/2009

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Aug-15	\$ 2.497
DIESEL		\$ 2.725
LIQUID AC		\$ 470.00

Link to Fuel and AC Index:
<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)				1208835.3	\$	1,208,835.30
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	752.00		
Monthly Asphalt Cement Price month project let (APL)			\$	470.00		
Total Monthly Tonnage of asphalt cement (TMT)				4286.65		

ASPHALT	Tons	%AC	AC ton
Leveling	43805	5.0%	2190.25
12.5 OGFC	3415	5.0%	170.75
12.5 mm	8662	5.0%	433.1
9.5 mm SP	0	5.0%	0
25 mm SP	18886	5.0%	944.3
19 mm SP	10965	5.0%	548.25
	85733		4286.65

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$	12,725.06	\$	12,725.06
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	752.00			
Monthly Asphalt Cement Price month project let (APL)			\$	470.00			
Total Monthly Tonnage of asphalt cement (TMT)				45.12433029			

Bitum Tack

Gals	gals/ton	tons
10506	232.8234	45.1243303

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)					\$	0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	752.00				
Monthly Asphalt Cement Price month project let (APL)			\$	470.00				
Total Monthly Tonnage of asphalt cement (TMT)				0				

Bitum Tack

	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0

TOTAL LIQUID AC ADJUSTMENT \$ **1,221,560.36**

Description: NH000-0003-03(053) - CLARKE COUNTY

Cost Estimate Report

US78/SR10 (ATLANTA HWY) & SR 10 LOOP INTERCHANGE IMPROVEMENT

8/21/2015

PI No.: 122890 (Scenario 4 without Timothy/Mitchel Bridge Road)

LINE	ITEM	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
5	150-1000	LS	TRAFFIC CONTROL - 122890	1	\$ 250,000.00	\$ 250,000.00
7	150-5010	EA	TRAF CTRL,PORTABLE IMPACT ATTN	7	\$ 7,934.58	\$ 55,542.06
10	153-1300	EA	FIELD ENGINEERS OFFICE TP 3	1	\$ 79,134.11	\$ 79,134.11
15	201-1500	LS	CLEARING & GRUBBING - 122890	1	\$ 300,000.00	\$ 300,000.00
19	205-0001	CY	UNCLASS EXCAV	77131	\$ 6.34	\$ 489,010.54
20	208-0100	CY	IN PLACE EMBANKMENT	47983	\$ 5.84	\$ 280,220.72
25	318-3000	TN	AGGR SURF CRS	3500	\$ 18.32	\$ 64,120.00
30	433-1100	SY	REF CONC APPR SL/INCL CURB	676	\$ 169.40	\$ 114,514.40
35	441-0104	SY	CONC SIDEWALK, 4 IN	7618	\$ 26.07	\$ 198,601.26
38	441-0301	EA	CONC SPILLWAY, TP 1	11	\$ 1,670.43	\$ 18,374.73
40	441-0302	EA	CONC SPILLWAY, TP 2	1	\$ 1,763.22	\$ 1,763.22
45	441-0740	SY	CONC MEDIAN, 4 IN	6638	\$ 22.48	\$ 149,222.24
50	441-4020	SY	CONC VALLEY GUTTER, 6 IN	49	\$ 38.34	\$ 1,878.66
55	441-6222	LF	CONC CURB & GUTTER/ 8"X30"TP2	19013	\$ 12.81	\$ 243,556.53
56	441-6740	LF	CONC CURB & GUTTER/ 8"X30" TP7	1535	\$ 13.89	\$ 21,321.15
60	456-2012	GLM	INTENT. RUMB. STRIPS - GRND-IN-PL (CONT)	2	\$ 973.70	\$ 1,947.40
65	643-0010	LF	FIELD FENCE WOVEN WIRE	3244	\$ 5.27	\$ 17,095.88
75	620-0100	LF	TEMP BARRIER, METHOD NO. 1	7560	\$ 24.32	\$ 183,859.20
80	634-1200	EA	RIGHT OF WAY MARKERS	192	\$ 102.42	\$ 19,664.64
82	436-1000	LF	ASPH CONC CURB - 4 IN	4584	\$ 8.15	\$ 37,359.60
85	641-1100	LF	GUARDRAIL, TP T	464	\$ 43.86	\$ 20,351.04
90	641-1200	LF	GUARDRAIL, TP W	9176	\$ 16.00	\$ 146,816.00
95	641-5001	EA	GUARDRAIL ANCHORAGE, TP 1	8	\$ 806.45	\$ 6,451.60
100	641-5012	EA	GUARDRAIL ANCHORAGE, TP 12	26	\$ 2,003.71	\$ 52,096.46
105	643-8200	LF	BARRIER FENCE (ORANGE), 4 FT	5568	\$ 1.28	\$ 7,127.04
110	500-3101	CY	CLASS A CONCRETE	28	\$ 690.26	\$ 19,327.28
115	511-1000	LB	BAR REINF STEEL	1992	\$ 1.13	\$ 2,250.96
117	610-9099	LS	REM WINGWALLS/PARAPETS, STA - 168+95 LT, SR 10	1	\$ 2,500.00	\$ 2,500.00
125	550-1180	LF	STM DR PIPE 18",H 1-10	10005	\$ 34.56	\$ 345,772.80
126	550-1181	LF	STM DR PIPE 18",H 10-15	386	\$ 39.01	\$ 15,057.86
127	550-1183	LF	STM DR PIPE 18",H 20-25	92	\$ 52.00	\$ 4,784.00
130	550-1240	LF	STM DR PIPE 24",H 1-10	2178	\$ 44.28	\$ 96,441.84
131	550-1241	LF	STM DR PIPE 24",H 10-15	229	\$ 51.50	\$ 11,793.50
132	550-1243	LF	STM DR PIPE 24",H 20-25	188	\$ 110.00	\$ 20,680.00
135	550-1300	LF	STM DR PIPE 30",H 1-10	739	\$ 59.57	\$ 44,022.23
140	550-1360	LF	STM DR PIPE 36",H 1-10	516	\$ 69.24	\$ 35,727.84
141	550-1361	LF	STM DR PIPE 36",H 10-15	222	\$ 72.37	\$ 16,066.14
143	550-1480	LF	STM DR PIPE 48",H 1-10	87	\$ 107.97	\$ 9,393.39
145	550-4215	EA	FLARED END SECT 15 IN, ST DR	1	\$ 459.91	\$ 459.91
150	550-4218	EA	FLARED END SECT 18 IN, ST DR	13	\$ 539.10	\$ 7,008.30
155	550-4224	EA	FLARED END SECT 24 IN, ST DR	12	\$ 627.53	\$ 7,530.36
160	550-4230	EA	FLARED END SECT 30 IN, ST DR	4	\$ 737.03	\$ 2,948.12
165	550-4236	EA	FLARED END SECT 36 IN, ST DR	5	\$ 1,097.50	\$ 5,487.50
170	668-1100	EA	CATCH BASIN, GP 1	110	\$ 2,223.43	\$ 244,577.30
175	668-1110	LF	CATCH BASIN, GP 1, ADDL DEPTH	153	\$ 180.57	\$ 27,627.21
176	668-1200	EA	CATCH BASIN, GP 2	6	\$ 2,623.60	\$ 15,741.60
177	668-1210	LF	CATCH BASIN, GP 2, ADDL DEPTH	37	\$ 265.65	\$ 9,829.05
180	668-2100	EA	DROP INLET, GP 1	71	\$ 2,010.81	\$ 142,767.51
185	668-2110	LF	DROP INLET, GP 1, ADDL DEPTH	74	\$ 174.54	\$ 12,915.96
186	668-2200	EA	DROP INLET, GP 2	1	\$ 2,316.76	\$ 2,316.76
187	668-2210	LF	DROP INLET, GP 2, ADDL DEPTH	2	\$ 235.05	\$ 470.10
190	668-4300	EA	STORM SEW MANHOLE, TP 1	19	\$ 1,839.15	\$ 34,943.85
195	668-4311	LF	ST SEW MANHOLE,TP 1,A DEP,CL 1	21	\$ 188.76	\$ 3,963.96
196	668-4312	LF	ST SEW MANHOLE,TP 1,A DEP,CL 2	50	\$ 200.03	\$ 10,001.50

198	500-3101	CY	CLASS A CONCRETE	8	\$	786.40	\$	6,291.20
199	511-1000	LB	BAR REINF STEEL	49	\$	1.67	\$	81.83
200	310-1101	TN	GR AGGR BASE CRS, INCL MATL	53480	\$	19.44	\$	1,039,651.20
205	400-3206	TN	ASPH CONC 12.5 MM OGFC,GP 2,INCL PMBM&HL	3415	\$	85.05	\$	290,445.75
210	402-1812	TN	RECYL AC LEVELING,INC BM&HL	43804	\$	64.03	\$	2,804,770.12
215	402-3121	TN	RECYL AC 25MM SP,GP1/2,BM&HL	18886	\$	63.62	\$	1,201,527.32
220	402-3130	TN	RECYL AC 12.5MM SP,GP2,BM&HL	2627	\$	83.02	\$	218,093.54
225	402-3190	TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	10965	\$	68.01	\$	745,729.65
227	402-3600	TN	RECY AC 12.5,SMA,GP2 ON,INCLP-,BM&HL	6035	\$	80.00	\$	482,800.00
230	413-1000	GL	BITUM TACK COAT	10506	\$	2.66	\$	27,945.96
232	430-0200	SY	PLN PC CONC PVMT/CL1C/ 10" TK	25599	\$	40.00	\$	1,023,960.00
245	500-0100	SY	GROOVED CONCRETE	663	\$	7.03	\$	4,660.89
250	211-0200	CY	BR EXCAV, GRADE SEPARATION	102.4	\$	28.32	\$	2,899.97
255	211-0200	CY	BR EXCAV, GRADE SEPARATION	76.8	\$	28.32	\$	2,174.98
260	441-0004	SY	CONC SLOPE PAV, 4 IN	740.8	\$	43.21	\$	32,009.97
265	441-0004	SY	CONC SLOPE PAV, 4 IN	804	\$	42.72	\$	34,346.88
270	500-0100	SY	GROOVED CONCRETE	1600	\$	5.28	\$	8,448.00
275	500-0100	SY	GROOVED CONCRETE	1600	\$	5.28	\$	8,448.00
280	500-1006	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 LT	599.2	\$	625.14	\$	374,583.89
285	500-1006	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 RT	589.6	\$	625.14	\$	368,582.54
290	500-3002	CY	CL AA CONCRETE	172.8	\$	706.83	\$	122,140.22
295	500-3002	CY	CL AA CONCRETE	161.6	\$	706.83	\$	114,223.73
300	507-9033	LF	PSC BEAMS, AASHTO, BULB TEE, 74"	2368	\$	245.29	\$	580,846.72
305	507-9033	LF	PSC BEAMS, AASHTO, BULB TEE, 74"	2368	\$	245.29	\$	580,846.72
310	511-1000	LB	BAR REINF STEEL	28370.4	\$	0.84	\$	23,831.14
315	511-1000	LB	BAR REINF STEEL	28079.2	\$	0.84	\$	23,586.53
320	511-3000	LS	SUPERSTR REINF STEEL, BR NO - 1 LT	111672.8	\$	0.64	\$	71,470.59
325	511-3000	LS	SUPERSTR REINF STEEL, BR NO - 1 RT	111231.2	\$	0.64	\$	71,187.97
330	520-1151	LF	PIL-IN-PL,STEEL H,HP 14 X 89	1752	\$	77.94	\$	136,550.88
335	520-1151	LF	PIL-IN-PL,STEEL H,HP 14 X 89	2048	\$	77.94	\$	159,621.12
340	520-4151	EA	LOAD TEST, STEEL H, HP 14 X 89	1	\$	0.84	\$	0.84
345	520-4151	EA	LOAD TEST, STEEL H, HP 14 X 89	1	\$	0.84	\$	0.84
350	540-1102	LS	REM OF EX BR, BR NO - 1 LT	1	\$	100,000.00	\$	100,000.00
355	540-1102	LS	REM OF EX BR, BR NO - 1 RT	1	\$	100,000.00	\$	100,000.00
360	544-1000	LS	DECK DRAIN SYSTEM, BR NO - 1 LT	1	\$	35,000.00	\$	35,000.00
365	544-1000	LS	DECK DRAIN SYSTEM, BR NO - 1 RT	1	\$	35,000.00	\$	35,000.00
370	643-1152	LF	CH LK FEN,ZC COAT, 6', 9 GA	291	\$	30.69	\$	8,930.79
375	643-1152	LF	CH LK FEN,ZC COAT, 6', 9 GA	291	\$	30.69	\$	8,930.79
377	163-0541	EA	CONSTR & REM ROCK FILTER DAMS	15	\$	587.21	\$	8,808.15
380	163-0232	AC	TEMPORARY GRASSING	20	\$	303.56	\$	6,071.20
385	163-0240	TN	MULCH	585	\$	157.85	\$	92,342.25
390	163-0300	EA	CONSTRUCTION EXIT	24	\$	1,221.73	\$	29,321.52
395	163-0503	EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 3	22	\$	393.72	\$	8,661.84
400	163-0520	LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	954	\$	14.23	\$	13,575.42
405	163-0527	EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	110	\$	262.49	\$	28,873.90
407	163-0528	LF	CONSTR AND REM FAB CK DAM -TP C SLT FN	26520	\$	3.03	\$	80,355.60
409	163-0529	LF	CNST/REM TEMP SED BAR OR BLD STRW CK DM	277	\$	4.43	\$	1,227.11
410	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	186	\$	128.57	\$	23,914.02
415	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	25095	\$	0.53	\$	13,300.35
420	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	20200	\$	0.83	\$	16,766.00
422	165-0087	EA	MAINT OF SILT CONTROL GATE, TP 3	22	\$	70.46	\$	1,550.12
425	165-0071	LF	MAINT OF SEDIMENT BARRIER - BALED STRAW	139	\$	1.17	\$	162.63
430	165-0101	EA	MAINT OF CONST EXIT	24	\$	572.65	\$	13,743.60
435	165-0105	EA	MAINT OF INLET SEDIMENT TRAP	93	\$	36.72	\$	3,414.96
440	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	2	\$	233.85	\$	467.70
445	167-1500	MO	WATER QUALITY INSPECTIONS	28	\$	402.51	\$	11,270.28
450	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	50190	\$	2.74	\$	137,520.60
452	441-0204	SY	PLAIN CONC DITCH PAVING, 4 IN	8318	\$	29.08	\$	241,887.44
455	603-2180	SY	STN DUMPED RIP RAP, TP 3, 12"	295	\$	31.35	\$	9,248.25

460	603-7000 SY	PLASTIC FILTER FABRIC	295	\$	3.91	\$	1,153.45
465	700-6910 AC	PERMANENT GRASSING	39	\$	844.13	\$	32,921.07
470	700-7000 TN	AGRICULTURAL LIME	121	\$	75.90	\$	9,183.90
480	700-8000 TN	FERTILIZER MIXED GRADE	39	\$	522.41	\$	20,373.99
485	700-8100 LB	FERTILIZER NITROGEN CONTENT	1950	\$	2.14	\$	4,173.00
490	710-9000 SY	PERM SOIL REINFORCING MAT	200	\$	6.03	\$	1,206.00
495	716-1000 SY	EROSION CONTROL MATS,WATERWAYS	551	\$	2.31	\$	1,272.81
500	716-2000 SY	EROSION CONTROL MATS, SLOPES	20226	\$	0.97	\$	19,619.22
505	615-1200 LF	DIRECTIONAL BORE - 3"	1055	\$	12.53	\$	13,219.15
510	647-2160 EA	PULL BOX, PB-6	11	\$	1,261.89	\$	13,880.79
515	647-2170 EA	PULL BOX, PB-7	4	\$	1,507.47	\$	6,029.88
520	682-6222 LF	CONDUIT, NONMETL, TP 2, 2 IN	1820	\$	5.35	\$	9,737.00
525	682-6233 LF	CONDUIT, NONMETL, TP 3, 2 IN	925	\$	4.09	\$	3,783.25
530	935-1113 LF	OUT PLNT FBR OPT CBL,LOOSE TB,SM,24 FBR	3065	\$	2.10	\$	6,436.50
535	935-1511 LF	OUT PLNT FBR OPT CBL,DROP,SM,6 FBR	60	\$	2.22	\$	133.20
540	935-3101 EA	FIBER OPTIC CLOSURE,UNDRGRD,6 FIBER	4	\$	573.00	\$	2,292.00
545	935-3602 EA	FBR. OP. CLOS., FDC PRE-TERM., TYP. A,	4	\$	417.00	\$	1,668.00
550	935-4010 EA	FIBER OPTIC SPLICE, FUSION	14	\$	51.36	\$	719.04
555	935-6562 EA	EXT TRNSCVR,DRP&RPT,1310SM,(SIGNAL JOBS)	4	\$	1,713.23	\$	6,852.92
557	935-8000 LS	TESTING	1	\$	3,000.00	\$	3,000.00
560	500-2110 LF	CONCRETE PARAPET, SPCL DES	1329	\$	259.86	\$	345,353.94
565	500-3200 CY	CL B CONC	0	\$	499.70	\$	-
570	515-2020 LF	GALV STEEL PIPE HDRAIL,2",ROUD	155	\$	49.23	\$	7,630.65
575	516-1100 LF	ALUM HANDRAIL, STD 3626	1329	\$	71.37	\$	94,850.73
580	621-3021 LF	CONCRETE BARRIER, TYPE 21	303	\$	184.00	\$	55,752.00
585	621-3022 LF	CONCRETE BARRIER, TYPE 22	255	\$	362.00	\$	92,310.00
587	621-3125 LF	CONC BARRIER, TP 25S, MODIFIED	268	\$	354.22	\$	94,930.96
590	621-4021 LF	CONCRETE SIDE BARRIER, TY 2A	676	\$	373.41	\$	252,425.16
595	621-4022 LF	CONCRETE SIDE BARRIER, TY 2B	889	\$	562.73	\$	500,266.97
600	621-4023 LF	CONCRETE SIDE BARRIER, TY 2C	865	\$	700.22	\$	605,690.30
605	621-4062 LF	CONCRETE SIDE BARRIER, TY 6B	45	\$	425.50	\$	19,147.50
610	621-4063 LF	CONCRETE SIDE BARRIER, TY 6C	149	\$	631.50	\$	94,093.50
615	615-1200 LF	DIRECTIONAL BORE - 5 IN	279	\$	14.08	\$	3,928.32
620	636-1041 SF	HWY SIGNS,TP 2MAT,REFL SH TP 9	124	\$	34.28	\$	4,250.72
625	639-4004 EA	STRAIN POLE, TP IV	4	\$	7,246.37	\$	28,985.48
630	639-4014 EA	STR POLE,TP 4,INCL LUMIN. ARM	12	\$	8,329.17	\$	99,950.04
635	647-1000 LS	TRAF SIGNAL INSTALLATION NO - 1	1	\$	100,000.00	\$	100,000.00
640	647-1000 LS	TRAF SIGNAL INSTALLATION NO - 2	1	\$	100,000.00	\$	100,000.00
645	647-1000 LS	TRAF SIGNAL INSTALLATION NO - 3	1	\$	100,000.00	\$	100,000.00
650	647-1000 LS	TRAF SIGNAL INSTALLATION NO - 4	1	\$	100,000.00	\$	100,000.00
655	682-6233 LF	CONDUIT, NONMETL, TP 3, 2 IN	558	\$	4.09	\$	2,282.22
660	937-6050 EA	INT VIDEO DET SYS ASMBLY, TP A	19	\$	5,801.00	\$	110,219.00
665	937-6100 EA	OUTPUT EXPANSION MODULE, TP A	3	\$	362.03	\$	1,086.09
670	937-6150 EA	PROGRAMMING MONITOR, TP A	1	\$	482.05	\$	482.05
675	636-1020 SF	HWY SGN,TP1MAT,REFL SH TP3	1478	\$	12.35	\$	18,253.30
680	636-1033 SF	HWY SIGNS, TP1MAT,REFL SH TP 9	230	\$	17.82	\$	4,098.60
684	636-2070 LF	GALV STEEL POSTS, TP 7	1644	\$	5.98	\$	9,831.12
685	636-2080 LF	GALV STEEL POSTS, TP 8	144	\$	8.91	\$	1,283.04
689	638-1001 LS	STR SUPPORT OVHD SIGN,TP I,STA 1	1	\$	61,100.00	\$	61,100.00
690	638-1001 LS	STR SUPPORT OVHD SIGN,TP I,STA 2	1	\$	61,100.00	\$	61,100.00
694	638-1001 LS	STR SUPPORT OVHD SIGN,TP I,STA 3	1	\$	61,100.00	\$	61,100.00
695	638-1001 LS	STR SUPPORT OVHD SIGN,TP I,STA 4	1	\$	61,100.00	\$	61,100.00
700	653-0120 EA	THERM PVMT MARK, ARROW, TP 2	71	\$	73.12	\$	5,191.52
705	653-0130 EA	THERM PVMT MARK, ARROW, TP 3	9	\$	98.91	\$	890.19
710	653-1501 LF	THERMO SOLID TRAF ST 5 IN, WHI	32815	\$	0.38	\$	12,469.70
715	653-1502 LF	THERMO SOLID TRAF ST, 5 IN YEL	35837	\$	0.40	\$	14,334.80
720	653-1704 LF	THERM SOLID TRAF STRIPE,24",WH	1005	\$	5.88	\$	5,909.40
725	653-1804 LF	THERM SOLID TRAF STRIPE, 8",WH	9793	\$	1.92	\$	18,802.56
730	653-3501 GLF	THERMO SKIP TRAF ST, 5 IN, WHI	24805	\$	0.24	\$	5,953.20

735	653-6004 SY	THERM TRAF STRIPING, WHITE	2057	\$	3.47	\$	7,137.79	
740	653-6006 SY	THERM TRAF STRIPING, YELLOW	226	\$	4.03	\$	910.78	
745	654-1001 EA	RAISED PVMT MARKERS TP 1	1921	\$	2.91	\$	5,590.11	
750	654-1003 EA	RAISED PVMT MARKERS TP 3	70	\$	3.72	\$	260.40	
755	432-0207 SY	MILL ASPH CONC PVMT/ 1.75" DEP	4074	\$	1.00	\$	4,074.00	
760	432-0214 SY	MILL ASPH CONC PVMT, 3.5" DPTH	29059	\$	1.67	\$	48,528.53	
765	432-5010 SY	MILL ASPH CONC PVMT,VARB DEPTH	8110	\$	3.10	\$	25,141.00	
770	446-1100 LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	14923	\$	3.55	\$	52,976.65	
							Subtotal	\$ 18,961,866.30

Logical Termini Form - To Be Completed

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: NH-003-3(53) Clarke
P. I. No.: 122890
U.S. 78/S.R. 10 Interchange

OFFICE: Engineering Services

DATE: December 5, 2007

FROM: Brian Summers, P.E., Project Review Engineer *REW*

TO: Babs Abubakari, P.E. State Consultant Design Engineer

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT No.	Description	Savings PW & LCC	Implement	Comments
A-2	Investigate a Developer Proposal to connect the Southbound Off Ramp to Huntington Court	\$115,000	No	Would result in ramp traffic being in conflict with traffic entering and exiting the developed property which would be a safety concern.
A-7	Change the Urban Shoulder width from 16 feet to 10 feet	\$204,000 (proposed) \$102,000 (revised)	Yes/Partial	The shoulder width will remain 16 feet on the mainline to better accommodate Utility Relocations and will be changed to 10 feet on the side roads.
A-7A	Eliminate the 2 ½ foot grassed area between the sidewalk and Retaining Wall	\$21,000	No	Since the 16 foot shoulder will be retained on the mainline this would not apply since this would cut the shoulder width to 13.5 feet on the mainline.
B-7	Shift the on-ramp location slightly to the West and use a 100 foot radius curve	\$33,000 (proposed) \$16,500 (revised)	Yes/Partial	The on-ramp location will stay the same but a 100 foot radius will be used.

ALT No.	Description	Savings PW & LCC	Implement	Comments
B-7A	Close existing driveway at the Logans Steakhouse and provide a wider common access at Sta. 60+00± Lt. for Logans as well as adjacent property owners.	-54,000 (Cost Increase)	Yes	This is recommended for safety reasons. Access agreements should be obtained from the property owners to allow this to occur.
B-10	Eliminate the 4 foot Bike Lanes	\$473,000 (proposed) \$687,100 (revised)	Yes	This should be done. The revised cost savings includes bridge savings which was not initially included.
B-11	Reduce the 12 foot travel lanes to 11 feet	\$497,000 (proposed) \$718,900	Yes	This should be done. The revised cost savings includes bridge savings which was not initially included.
B-12	Close the Median Opening at Sta. 68+75 and provide a Type B Median Opening at Timothy Road and Jennings Mill Road	-\$186,000 (proposed) \$20,000 (revised)	Yes/partial	The median opening should be closed but the Type B Median Opening at Timothy Road and Jennings Mill Road will not be done since it would involve additional Right of Way impacts.
F-1	Eliminate the Concrete Curb and Gutter from a section on Jennings Mill Road	\$177,000	No	A land use permit utilizing an urban section to minimize impacts on the cemetery has already been obtained from the court system. Since a cemetery is involved any changes would require another permit delaying the project schedule.
C-2	Use MSE Walls and two - 93 foot spans and delete Bike Lanes on the bridge over S.R. 10	\$1,845,000	No	A more detailed cost estimate done by the Design Consultant revealed that this VE Alternative is more expensive than what was proposed.
C-2A	Use MSE Walls and one - 165 foot span and delete Bike Lanes on the bridge over S.R. 10.	\$1,376,000	No	A more detailed cost estimate done by the Design Consultant revealed that this VE Alternative is more expensive than what was proposed.
C-2B	Use two - 57 foot spans and two - 93 foot spans and delete the Bike Lanes on the	\$1,231,000	No	A more detailed cost estimate done by the Design Consultant revealed that this VE Alternative is more expensive

NH-003-3(53) Clarke
P.I. No. 122890
VE Study Implementation
Page 4.

c: Gus Shanine
Todd Long
James Magnus
Randy Davis
Robert Simpson
Kevin DeWitt
Mike Haithcock
Doug Franks
Amber Perkins
Ken Werho
Lisa Myers

Memorandum

To: Michael Haithcock, GDOT-OEL

From: Shawn Fleet, HLE

CC: Allen Krivsky, Lisa Myers, Brian Summers, Ron Wishon

Date: 12/3/2007

Re: NH-003-3(53) – Clarke, P.I. No. 122890
Atlanta Hwy / S.R. 10 Loop Interchange Improvement
VE Implementation Meeting on 12/1/2007

Items Discussed:

- Alt A-2, Not implementing, Comments on VE Response are adequate.
- Alt A-7, Implementing only on side streets, savings \$102,000
- Alt A-7A, Not implementing, Reducing shoulder width on side streets.
- Alt B-7, Implementing reducing radius only, savings \$16,500
- Alt B-7A, Recommending/Implementing, closing this driveway but will be up to the right of way office to negotiate ultimately.
- Alt B-10, Implementing, Revised savings \$687,100 (Including reduced bridge width)
- Alt B-11, Implementing, A revised Traffic Study is not required for this change since the current design will function at a capacity greater than a Level of Service "E" for the design year. Revised savings \$718,900 (Including reduced bridge width)
- Alt B-12, Implementing median closing only, Revised cost increase -\$20,000
- Alt C-2 through C-2C, Not implementing, VE Bridge cost calculations less detailed. More detailed cost calculations provided in VE response show that each alternate is more expensive then the proposed bridge.
- Alt F-1, Not implementing, Additional comments - The typical section of Jennings Mill Road has been approved by Athens County Court system for land use permit change. Urban drainage system is better suited to convey stormwater along the cemetery.
- A-1, Implementing design suggestion
- B-2, Implementing design suggestion
- D-1, Implementing design suggestion
- E-1, Implementing design suggestion
- L-1/2, Not Implementing design suggestion, Parapet and hand rails are required.

Action Items:

- A Project Cover Sheet needs to be provided with for the VE team's submittal. HLE will provide.
- Upon the approval of the Implementation of VE Study Alternatives document, HLE will submit a supplemental agreement to incorporate approved alternatives.

Attendees:

Shawn Fleet, HLE
Allen Krivsky, HLE
Michael Haithcock, GDOT-OCD
Lisa Myers, GDOT-ES
Brian Summers, GDOT-ES
Ron Wishon, GDOT-ES

Attachments: Reduced bridge width savings calculations

COMP. BY SF DATE 1-3-07



Heath & Lineback Engineers
INCORPORATED

SHEET _____ OF _____

CHKD. BY _____ DATE _____

JOB NO. _____

PROJECT ATLANTA HWY OVER SR 10 LOOP STRUCTURE _____

COST SAVINGS ELIMINATING BIKE LANES/11 FT LANES ON BRIDGE

DETAILED COST IN VE RESPONSE

PROPOSED BRIDGE W/BIKE LANES \$3,460,240.00
 PER SQ FT $= \$3,460,240 \div 46325.00 \text{ SF} = \$74.70/\text{SF}$

PROPOSED BRIDGE W/O BIKE LANES \$3,246,190 (-8 FT)
 PER SQ FT $= \$3,246,190 \div 43925 \text{ SF} = \73.90

SAVINGS = \$214,050

PROPOSE BRIDGE W 11' LANES (-10 FT) 73.90/SF

$\$73.90/\text{SF} \times 40925 \text{ SF} = \$3,024,357$

SAVINGS = \$221,833

SAVINGS

B-10 \$473,000 + \$214,050 = \$687,050

B-11 \$497,000 + \$221,833 = \$718,833

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA



INTERDEPARTMENT CORRESPONDENCE

FILE NH-003-3(53) **OFFICE** Atlanta
Clarke County
PI No. 122890
US 78/SR10 (Atlanta Hwy over SR 10 Loop) **DATE** October 25, 2007

FROM *M. B. Abubakari* (MB)
Mohammed (Babs) Abubakari, P.E.,
State Consultant Design & Program Delivery Engineer

TO Brian Summers, P.E., Project Review Engineer
Attention: Lisa Myers

SUBJECT VALUE ENGINEERING STUDY – FINAL REPORT RESPONSE

Below are the responses to the Value Engineering Study report dated August 10, 2007 for the above referenced project. Each comment was studied and addressed by both the Department's Project Manager and the Consultant's Project Manager:

Value Engineering Alternative A-2 – To investigate a Developer proposal to connect the southbound SR 10 loop off ramp to Huntington Court in lieu-of the current Huntington Road slip ramp connector.

- **Ingress/egress access points on the SR 10 Loop exit ramp are unsafe and are not recommended.** Egress access points on an exit ramp are susceptible to wrong way drivers on the exit ramp and SR 10 Loop.
- The expectation of drivers exiting the SR 10 Loop southbound exit ramp is to emerge at the intersection of Atlanta Highway. This proposed configuration by the Diversified Development plans will not meet the driver expectation.
- The Diversified Development Property currently has an existing access point along Huntington Court. The interchange improvement project will not impact this access point.
- The current interchange design requires approximately 110 ft of right of way along the east side of the property to construct the realigned SR 10 Loop southbound exit ramp. These impacts conflict with the proposed development plans as submitted.
- The Diversified Development plans propose extending a portion of the southbound exit ramp to Huntington Court. This would require extensive design and construction on Huntington Court and Biscayne Court to carry the increased traffic. Traffic volumes on the slip ramp are projected at 2750 vehicles per day for year 2031.
- Right of Way along SR 10 loop and the interchange ramp is limited access and is full access control.
- Topps 4A-3 directive requires access control be acquired on major arterials that are being reconstructed so that driveway connections are not permitted in the functional area of an intersection. Access connections too close to intersections can cause serious traffic conflicts that impair the function of the affected facility.
- Topps 4A-4 directive recommends only breaking access control for supporting street systems. It does not recommend breaking access control for individual driveway access points.

- An early land acquisition process is recommended to prevent this development that could ultimately jeopardize the design and construction of this interchange improvement project.

(We do not recommend the approval or the implementation of the Diversified Development plans).

Value Engineering Alternative No. A-7 - To change the project's 16-foot urban shoulder to a 10-foot urban shoulder.

- The 16 ft shoulders are the GDOT desirable width for urban shoulders. This additional shoulder width is necessary for relocating impacted existing utilities and for the installation of future utilities.
- There are many existing utilities throughout the project. These include an aerial electric transmission line, multiple aerial electric lines, multiple underground electric lines, multiple underground telephone lines, multiple gas lines, multiple waterlines and a sanitary sewer.
- A clear zone width of 20 ft is warranted along Atlanta Hwy. A right of way line set beyond the 16 ft shoulder will ensure that most of this area will be clear of obstructions.
- A clear zone width of 16 ft is warranted along Huntington Road. A right of way line set beyond the 16 ft shoulders will ensure that all of this area will be clear of obstructions.
- Right of way has been set just beyond the shoulder along Atlanta Highway and Huntington Road, easements have been used to construct slopes and minimize right of way in these areas.
- The clear zone along Jennings Mill Road is 13 ft. for slopes 6:1 or flatter. A right of way line set beyond the shoulders will ensure that all of this area will be clear of obstructions.
- Reducing the shoulder width to 10 ft in areas along Jennings Mill Road would require guardrail at 2:1 slopes. Adding guardrail requires an additional 5.5 ft of shoulder width.

(We do not recommend reducing the shoulder width to 10 ft).

Value Engineering Alternative No. A-7A – To eliminate the 2.5-foot grass area between the outside edge of the sidewalk and the inside edge of the retaining walls for a total shoulder width of 13.5 feet.

- The 16 ft shoulders are the GDOT desirable width for urban shoulders. This additional shoulder width will provide space to relocate impacted existing utilities and for the installation of future utilities.
- There are many existing utilities throughout the project. These include an aerial electric transmission line, multiple aerial electric lines, multiple underground electric lines, multiple underground telephone lines, multiple gas lines, multiple waterlines and a sanitary sewer.
- At the Burger King restaurant property near the beginning of the project, the 2.5 ft grass area was removed at the wall location to reduce right of way impacts to the property by preserving the business's drive through lane.

(We do not recommend reducing the shoulder width at all wall locations as a typical detail).

Value Engineering Alternative No. B-7 – To reduce the radius of the curve for the westbound right-turn movement from Atlanta Highway to the SR 10 northbound on ramp and shifting the ramp to the west.

- The radius of the curve for the westbound right-turn movement from Atlanta Highway to the SR 10 northbound entrance ramp can be reduced to 100 ft.

(We recommend reducing the radius for the curve on the northbound entrance ramp).

- Shifting the alignment to the west will cause 250 ft of additional ramp reconstruction. This cost is \$43,400. This cost exceeds the cost of right of way of \$33,000. (Detail cost calculations are included with this response).

(We do not recommend shifting the alignment of the northbound entrance ramp).

Value Engineering Alternative No. B-7A – To close the existing access driveway at the Logans Roadhouse parcel.

- The driveway at the Logans Roadhouse Parcel should be closed. Access changes for the Logans Roadhouse will likely need to be provided through the Athens Bypass LLC parcel for direct access to the proposed Jennings Mill Road signalized intersection.
- Access agreements between property owners may be difficult to obtain.

(We recommend closing the existing access driveway at the Logan's Roadhouse parcel).

Value Engineering Alternative No. B-10 – To eliminate the proposed 4-foot bike lane on both sides of Atlanta Highway.

- Adding 4 ft bike lanes to Atlanta Highway was a GDOT recommendation at the project concept kick off meeting. Bike lanes were added to the project concept at this time. Further research has proven that the Statewide Bicycle Route Network and the Athens-Clarke County Bicycle Master Plan do not identify this route for proposed bike lanes. (Clarke County Master Plan has been attached)

(We recommend removing the 4 foot bike lanes from the Atlanta Highway typical section).

Value Engineering Alternative No. B-11 – To reduce the width of the 12-foot travel lanes on Atlanta Highway.

- The design speed and posted speed of Atlanta Hwy is 45 MPH. Future traffic on Atlanta Hwy is 78,300 vehicles per day. Reducing the lane width of Atlanta Hwy to 11 ft would reduce the functionality and the capacity of the interchange. A revised traffic study would be required to determine the possible reduction in level of service. Since this project is based on increasing capacity and mobility through the interchange area, this design suggestion is not recommended.
- The reduced lane width reduces driver comfort, reduces safety, and increases traffic accidents.

(We do not recommend reducing the lane widths to 11 ft).

Value Engineering Alternative No. B-12 – To close the Atlanta Highway median opening at Station 68+75 and provide Type B median crossovers at Timothy Road and Jennings Mill Road.

- Access to the shopping center can be provided at the proposed Jennings Mill Road signalized intersection and on Mitchell Bridge Road. Access improvements will likely be required through the shopping center to provide better access to the proposed Jennings Mill Road signalized intersection.

(We recommend closing the median opening on Atlanta Highway station 68+75 at the Publix Shopping Center/Academic Sporting Goods Shopping Center).

- Adding a type "B" median crossover intersection on Atlanta Hwy at the Mitchell Bridge Road/Timothy Road intersection will extend the project through this intersection. Adding this improvement would require the realignment of Mitchell Bridge Road/Timothy Road to improve the substandard skew of these roads at the intersection.
- Adding a type "B" median crossover intersection on Atlanta Hwy at the Mitchell Bridge Road/Timothy Road intersection will extend the project and does not conform to the logical termini points for this project.

(We do not recommend adding a type "B" median crossover intersection on Atlanta Hwy at the Mitchell Bridge Road/Timothy Road intersection).

Project No. NH-003-(53)

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Value Engineering Alternative No. C-2- To construct a 186'x146'-5" two span bridge with 2-93' spans and "U" shaped MSE walls at the abutment ends.

- A more detailed cost calculation reveals that alternative C-2 is approximately \$134,000 more expensive than the proposed 300'x146'-5" bridge (2 spans at 150'). (Detailed cost calculations are attached).
- Alternative C-2 will restrict the cross section of the SR 10 loop for future widening to the outside.
- MSE walls complicate and lengthen staged construction time with the addition of waiting periods inherently required with MSE wall construction.
- Alternative C-2 layout does not allow for longitudinal drainage ditch along SR 10. There will be additional cost and maintenance associated with this alternate to be considered.

(We do not recommend a 186'x146'-5" two span bridge with 2-93' spans and "U" shaped MSE walls at the abutment ends for this project).

Value Engineering Alternative No. C-2A- To construct a 165'x146'-5" single span bridge with "U" shaped MSE walls at the abutment ends.

- A more detailed cost calculation reveals that Alternative C-2A is approximately \$88,500 more expensive than the proposed 300'x146'-5" bridge (2 spans at 150'). (Detailed cost calculations are attached).
- Alternative C-2A will reduce the shoulder width to 2 feet less than the desirable shoulder width.
- Alternative C-2A will restrict the cross section of the SR 10 loop for future widening to the outside.
- MSE walls complicate and lengthen staged construction time with the addition of waiting periods inherently required with MSE wall construction.
- Alternative C-2A layout does not allow for longitudinal drainage ditch along SR 10. There will be additional cost and maintenance associated with this alternate to be considered.

(We do not recommend a 165'x146'-5" single span bridge with "U" shaped MSE walls at the abutment ends for this project).

Value Engineering Alternative No. C-2B- To construct a four span 300'x146'-5" bridge with 2-57' spans and 2-93' spans across SR 10.

- A more detailed cost calculation reveals that Alternative C-2B is \$456,000 more expensive than the proposed 300'x146'-5" bridge (2 spans at 150'). (Detailed cost calculations are attached).
- Alternative C-2B will restrict the cross section of the SR 10 loop for future widening to the outside.
- Alternative C-2B will lengthen construction time to build 2 additional intermediate bents.

(We do not recommend a four span 300'x146'-5" bridge with 2-57' spans and 2-93' spans for this project).

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Value Engineering Alternative No. C-2C- *To construct a three span 279'x146'-5" bridge with 2-57' spans and 1-165' span across SR 10.*

- A more detailed cost calculation reveals that Alternative C-2C is approximately \$500,000 more expensive than the proposed 300'x146'-5" bridge (2 spans at 150'). (Detailed cost calculations are attached).
- Alternative C-2C will restrict the cross section of the SR 10 loop for future widening to the outside.
- Alternative C-2C will lengthen construction time to build 2 additional intermediate bents.

(We do not recommend a three span 279'x146'-5" bridge with 2-57' spans and 1-165' span for this project).

Value Engineering Alternative No. F-1 – *To minimize the amount of urban curb and gutter shoulder on Jennings Mill Road.*

- Neighborhoods, apartments, businesses and a church are located along Jennings Mill Road. Eliminating the sidewalks along a portion of Jennings Mill Road would not provide connectivity from these areas to the many shopping, eating and retail businesses located along Atlanta Hwy. Retaining the sidewalk potentially reduces traffic and improves the community.
- Eliminating the sidewalks along a portion of Jennings Mill Road would reduce safety for pedestrian traffic along this portion of Jennings Mill Road.

(We do not recommend eliminating sidewalk along a portion of Jennings Mill Road).

Additional Design Suggestions:

- Right of Way Steps – Right of way is typically stepped to remain parallel with roadway centerlines. In some areas, the right of way lines will be tapered to reduce steps and reduce the total right of way area required.
- Superelevation on the bridge - The superelevation transition will be corrected to remove transition from the bridge.
- Concrete Barrier Modification – The design of the concrete barrier will be revised so the end treatments will end outside of the clear zone for on coming traffic. The end treatments will begin parallel to the exit ramps and end parallel to the loop entrance ramps.
- Eliminate Parapet and Pipe Hand Rail - The parapets must be retained on walls within the clearzone. The pipe hand rails will be utilized where they are required to protect pedestrians from falls. GA STD 3626 aluminum hand railing will be utilized on top of parapets for aesthetics and to reduce future maintenance cost.

COMP. BY GTP DATE 9-17-07



Heath & Lineback Engineers
INCORPORATED

SHEET _____ OF _____

CHKD. BY _____ DATE _____

JOB NO. 4009

PROJECT US 78 OVER SR 10 STRUCTURE _____

NOTE: STRUCTURE ELEMENTS COMMON BETWEEN THE PROPOSED STRUCTURE AND ALTERNATIVES ARE NOT LISTED.

PROPOSED BRIDGE WITH BIKE LANES BRIDGE WIDTH = 154'-5"

2-SPANS @ 150'

DECK = $154'-5" \times 7\frac{1}{2}" \times 300' = 1072 \text{ cy} \times \$1200 = \$1,286,400$

BEAMS = $300' \times 22 \text{ BEAMS} = 6,600 \text{ LF} \times \$200 = \$1,320,000$

BENTS = $5' \times 5' \times 75' + 3 \times 5' \times 5' \times 20' + 3 \times 12' \times 12' \times 3' = 173 \text{ cu yd} \times 2 \text{ BENTS} \times 340 \text{ cu yd} \times \$600 = \$207,600$

SUPER REINF. = $230 \text{ #/cy} \times 1072 \text{ cy} = 246,560 \text{ lbs} \times \$1.00 = \$246,560$

SUB REINF. = $180 \text{ #/cy} \times 346 \text{ cy} = 62,280 \text{ lbs} \times \$1.00 = \$62,280$

PILES = END BENTS: 22 PILES $\times 55 \text{ LF} = 1,210 \text{ LF} \times 2 \text{ BENTS} = 2,420 \text{ LF}$

INTERMEDIATE BENT = 10 PILES $\times 6 \text{ FOOTINGS} = 60 \text{ PILES} \times \text{HALF} = 2,400 \text{ LF}$

$2420 \text{ LF} + 2400 \text{ LF} = 4,820 \text{ LF} \times \$70 = \$337,400$

TOTAL = \$3,460,240

PROPOSED BRIDGE WITHOUT BIKE LANES BRIDGE WIDTH = 146'-5"

2-SPANS @ 150'

DECK = $146'-5" \times 7\frac{1}{2}" \times 300' = 1,017 \text{ cy} \times \$1200 = \$1,220,400$

BEAMS = $300' \times 20 \text{ BEAMS} = 6,000 \text{ LF} \times \$200 = \$1,200,000$

BENTS = \$207,600

SUPER REINF. = $230 \text{ #/cy} \times 1017 \text{ cy} = 233,910 \text{ lbs} \times \$1.00 = \$233,910$

SUB REINF. = $180 \text{ #/cy} \times 346 \text{ cy} = 62,280 \text{ lbs} \times \$1.00 = \$62,280$

PILES = END BENTS: 20 PILES $\times 55 \text{ LF} = 1,100 \text{ LF} \times 2 \text{ BENTS} = 2,200 \text{ LF}$

INTERMEDIATE BENT = 10 PILES $\times 6 \text{ FOOTINGS} = 60 \text{ PILES} \times 2400 \text{ LF}$

$2,200 \text{ LF} + 2400 \text{ LF} = 4600 \text{ LF} \times \$70 = \$322,000$

TOTAL = \$3,246,190

COMP. BY GTP DATE 8-3-07



Heath & Lineback Engineers
INCORPORATED

SHEET _____ OF _____

CHKD. BY _____ DATE _____

JOB NO. 4009

PROJECT _____ STRUCTURE _____

WITHOUT BIKE LANES

ALT C-2 - 2 SPW (2 @ 93 FT) WITH 'U' MSE WALL BRIDGE WIDTH = 146.417

$$\text{DECK} = (2 \times 93)(146.417) \times 7\frac{1}{2}' = 670' \times \$1200 = \$756,000$$

$$\text{BEAMS} = 186' \times 26 \text{ BEAMS} = 4,836 \text{ LF} \times \$137 = \$662,532$$

MSE WALL = H UNDER BRIDGE = 21.42 FT, L UNDER BRIDGE 171 FT

$$\text{AREA UNDER BRIDGE} = 2(21.42 \times 171 \text{ FT}) = 7,326 \text{ FT}^2$$

$$7,326 \text{ FT}^2 \times \$55.55 = \$406,959$$

$$\text{COPING A} = 2 \times 171 \text{ FT} = 342 \text{ LF} \times \$70 = \$23,940$$

H FOR MSE SIDES = 28 FT, L = 60 FT

$$\text{AREA OF MSE SIDES} = 1680 \text{ FT}^2 \times 4 \text{ SIDES} = 6720 \text{ FT}^2 \times \$59 = \$396,480$$

$$\text{COPING V: H} \times 60 \text{ FT} = 240 \text{ LF} \times \$250 = \$60,000$$

$$\text{ADDITIONAL BACKFILL MATERIAL} = 1465 \text{ FT}^2 \times 5.75 \text{ FT} = 8424 \text{ FT}^3 = 312' \times 26 \text{ FT}$$

$$= 312' \times 26 \text{ FT} = 624' \times \$200 = \$124,800$$

$$\text{BENTS} = \$207,600$$

$$\text{ADDITIONAL ROADWAY} = 300 \text{ FT} - (2 \times 93) = 114 \text{ FT} \times \$1530 = \$174,420$$

$$\text{SUPER REINF} = 230' \times 620 \text{ LF} = 144,900 \text{ LBS} \times \$1.00 = \$144,900$$

$$\text{SUB REINF} = 180' \times 346 \text{ LF} = 62,280 \text{ LBS} \times \$1.0 = \$62,280$$

$$\text{PILES: END BENTS} = 26 \text{ PILES} \times 55 \text{ LF} = 1,430 \text{ LF} \times 2 \text{ BENTS} = 2,860 \text{ LF}$$

$$\text{INTER-MEDIATE BENTS} = 10 \text{ PILES} \times 6 \text{ FOOTINGS} = 60 \text{ PILES} \times 40 \text{ LF} = 2,400 \text{ LF}$$

$$2,860 \text{ LF} + 2,400 \text{ LF} = 5,260 \text{ LF} \times \$70 = \$368,200$$

TOTAL = \$3,390,111

COMP. BY HTP DATE 9.5-07



Heath & Lineback Engineers
INCORPORATED

SHEET _____ OF _____

CHKD. BY _____ DATE _____

JOB NO. 4009

PROJECT _____ STRUCTURE _____

WITHOUT CURB LANES

ALT C-2A - 1 SPAN (165 FT) WITH "U" MSE WALL BRIDGE WIDTH = 146.47

DECK = 165' x 146.47' x 7 1/2" = 559.4 yd x \$1200 = \$670,800

BEAMS = 165' x 30 BEAMS = 4950 LF x \$200 = \$990,000

MSE WALL: H UNDER BRIDGE = 19 FT, L UNDER BRIDGE = 171

AREA UNDER BRIDGE = 2 (19 x 171 FT) = 6498 FT²

6498 FT² x \$55.55 = \$360,964

COPING A = 2 x 171 FT = 342 LF x \$70 = \$23,940

H FOR MSE SIDES = 28 FT, L = 60 FT

AREA OF MSE SIDES = 1,680 FT² x 4 SIDES = 6,720 FT² x \$59 = \$396,480

COPING V = 4 x 83.5 FT = 334 LF x \$250 = \$83,500

ADDITIONAL BACKFILL MATERIAL = 1,465 FT² x 8.145 FT = 11,965 FT³ = 443 yd

443 yd x 2 = 886 yd x \$200 = \$177,200

ADDITIONAL ROADWAY = 300 FT - 165 FT = 135 FT x \$1530 = \$206,550

SUPER RETNF. 230 3/4" x 559 1/4" = 128,570 LF x \$100 = \$12,857,000

PILES = 30 PILES x 55 LF = 1,650 LF x 2 BEAMS = 3,300 LF x \$97 = \$320,100

TOTAL = \$3,334,604

COMP. BY GTA DATE 9.5.07



SHEET _____ OF _____

CHKD. BY _____ DATE _____

Heath & Lineback Engineers
INCORPORATED

JOB NO. 4009

PROJECT _____ STRUCTURE _____

WITHOUT BRICK LAMES

ALT L-2B - 4 SPAW 2 @ 57' & 2 @ 93' BRIDGE WIDTH = 146.417

DECK = 300 FT x 146.417 FT x 7 1/2" = 1017 ^{cu} x \$ 1,200 = \$ 1,220,400

BEAMS:	TYPE II	:	2 x 57 FT = 114 FT	x	20 ⁶ BEAMS	=	2,280 LF	x	175	=	\$ 399,000	400,140
	TYPE III	:	2 x 93 FT = 186 FT	x	20 ⁶ BEAMS	=	3,720 LF	x	137	=	\$ 509,640	662,532

BEAMS: \$ 207,600 x 3 BEAMS = \$ 622,800

SUPER REINF. 230 ^{cu} x 1017 ^{cu} = 233,910 lb x \$ 1.0 = \$ 233,910

SUB REINF. 180 ^{cu} x 1038 ^{cu} = \$ 186,840

PILES: END BEAMS = 26 PILES x 55 LF = 1,430 LF x 2 BEAMS = 2,860 LF

INTER MEDIATE = 10 PILES x 6 FOOTING x 3 BEAMS = 180 PILES x 40 LF = 7,200 LF

2,860 LF + 7,200 LF = 10,060 LF x 570 = \$ 5,734,200

TOTAL = 3,702,412

ADJUSTMENT FOR INTERMEDIATE BEAMS

-25% (\$ 622,800 + \$ 186,840 + 7200 x \$ 70) = \$ 328,410

COMP. BY GFP DATE 8-3-07



Heath & Lineback Engineers
INCORPORATED

SHEET _____ OF _____

CHKD. BY _____ DATE _____

JOB NO. 4009

PROJECT _____ STRUCTURE _____

WITHOUT RIGID LANDS

ALT C-2C 3 SPAN 2 @ 67'-0" + 1 @ 165'

DECK = 300 FT X 146.417 FT X 7 1/2" = 1017 ^{cu} X \$1200 = \$1,220,400

BEAMS = 105' X 30 BEAMS = 4950 LF X \$200 = \$990,000

135' X 18" BEAMS = 3,240 LF X \$137 = \$443,880 333,000

FASCIA = 135' X 4 BEAMS = 540 LF X \$200 = \$108,000

BEAMS = \$207,600 X 2 = \$415,200

SUPER REINF = 230 ^{sq} Y X 10.17 ^{sq} = 233,910 lbs X \$1.00 = \$233,910

SUB REINF = 180 ^{sq} Y X 692 ^{sq} = 124,560 lbs X \$1.00 = \$124,500

FILES = ENDBENTS = 20 FILES X 55 LF = 1,100 LF X 2 BEAMS = 2,200 LF

INTERMEDIATE 10 FILES X 60 FT IN CLG X 2 BEAMS = 120 LF X 40 LF = 4800 LF

2,200 LF + 4,800 LF = 7,000 LF X \$70 = \$490,000

TOTAL \$3,742,330

Adjust for int. ends

- 25' (415,200 + 124,560 + 4800 X 70) = 218,940

Σ = \$3,742,330

RAMP 6

A RECYCLED ASPH. CONC. 12.5mm SUPERPAVE, GP. 2 ONLY, INCL. BITUM MATL & H LIME									
A	Location	Area	unit	unit weight	unit	total	unit	Unit Price	Price per LF
	Mainline		2.9 SY	0.0825 Tons/SY			0.2 Tons		
						Total	0.2 Tons	70	14

B RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME									
B	Location	Area	unit	unit weight	unit	total	unit	Unit Price	Price per LF
	Mainline		2.9 SY	0.2200 Tons/SY			0.6 Tons		
						Total	1 Tons	90	54

C RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME									
C	Location	Area	unit	unit weight	unit	total	unit	Unit Price	Price per LF
	Mainline		2.9 SY	0.3300 Tons/SY			1 Tons		
						Total	1 Tons	80	80

D GR AGGR BASE CRS, INCL MATL										
D	Location	Area	unit	unit	total	unit	Total	Unit	Unit price	Price per LF
	Mainline(10 in)		1.8 SY	Tons/SY		2 SY		1 Tons		
						Total	2 SY	1 Tons	25	25

BITUM TACK COAT										
	Location	Area	unit	unit weight	unit	layers	total	unit	Unit Price	Price per LF
	Mainline		2.9 SY	0.035 GL/SY			3	0.3 GL		
							Total	0.3 GL	2	0.6

Total Price per LF
 \$174

Ramp 6 = 250 ft

Total Cost \$43,400



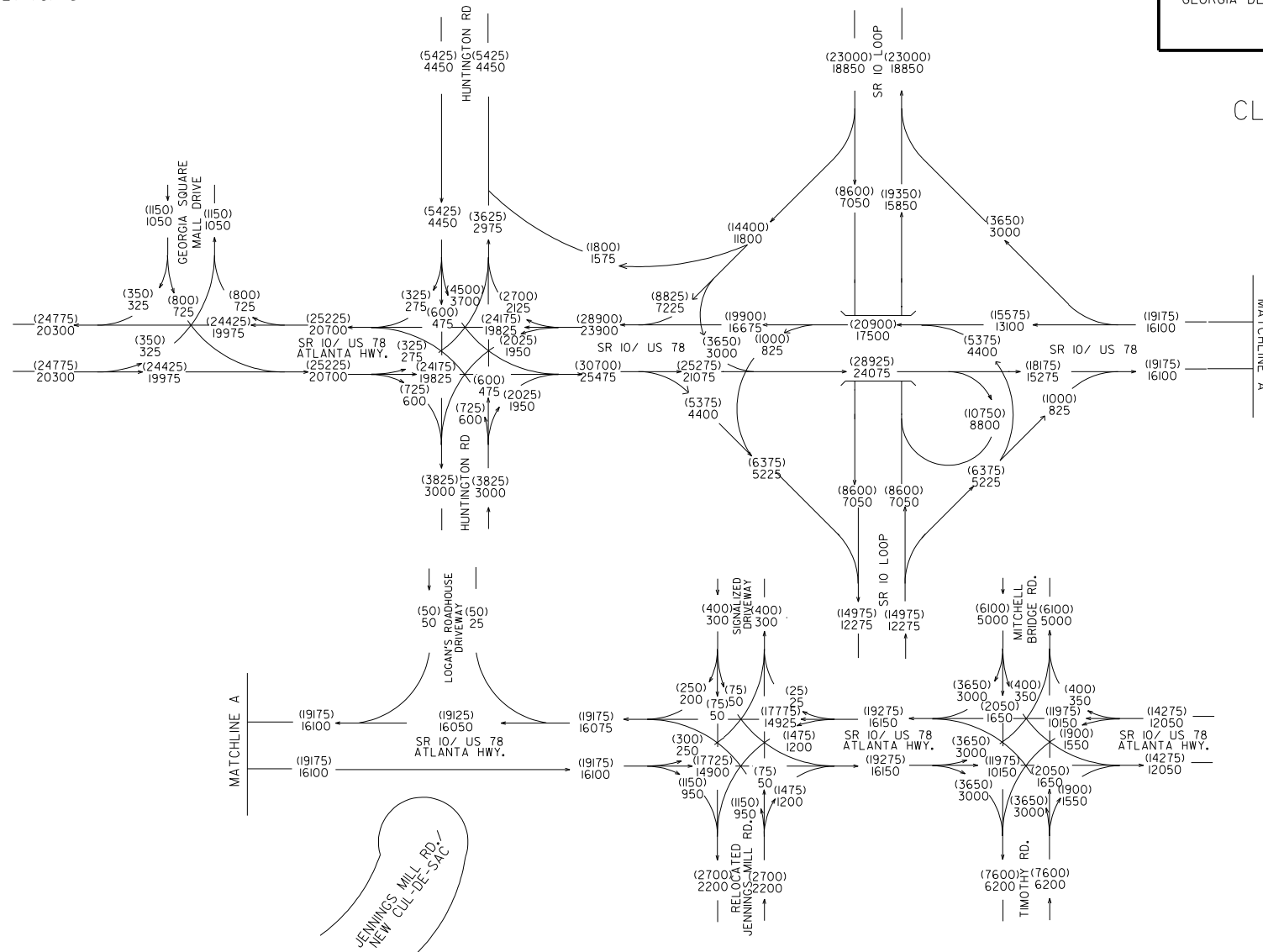
Athens-Clarke County Bicycle Master Plan

- Existing Bicycle Facility
- Planned Bicycle Facility
- GDOT Statewide Bicycle Route Network
- Major Construction (Proposed)
- Minor Construction (Proposed)
- Signing and Striping (Proposed)

HJR/WLJorden

0 0.5 1 2 Miles

ATHENS
CLARKE COUNTY

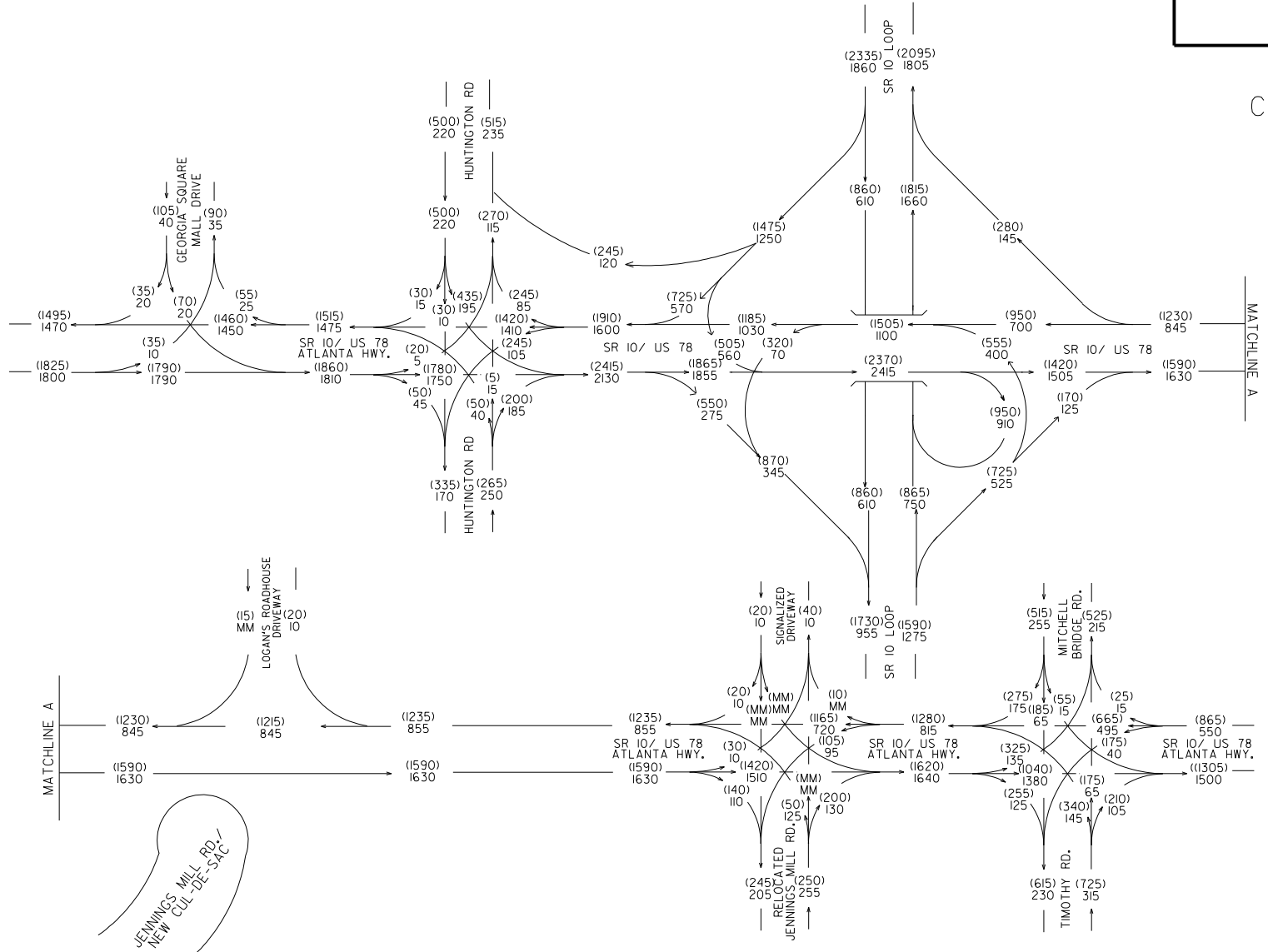


24-HR. T. = 6%
S.U.T. = 4%
COMB. T. = 2%

NH00-0003-03(053)
PI # 122890
CLARKE COUNTY
SR 10 @ SR 10 LOOP
BUILD
DESIGN TRAFFIC ADT
2041 = (000)
2021 = 000

LRW
10/14

ATHENS
CLARKE COUNTY

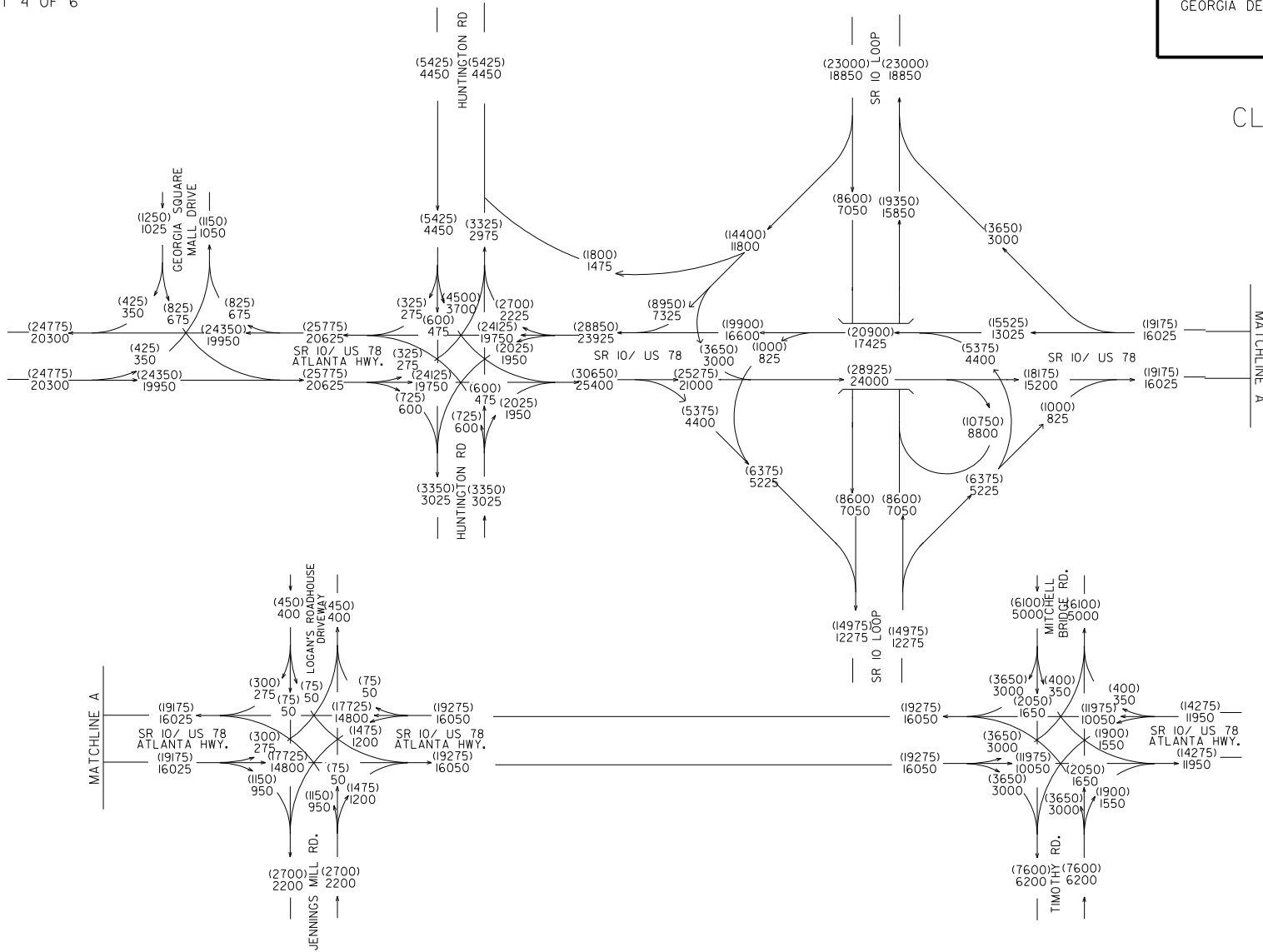


T. = 8%
S.U.T. = 4.5%
COMB. T. = 3.5%

NH00-0003-03(053)
PI # 122890
CLARKE COUNTY
SR 10 @ SR 10 LOOP
BUILD
DESIGN YEAR
2041 DHV
PM = (000)
AM = 000

LRW
10/14

ATHENS
CLARKE COUNTY

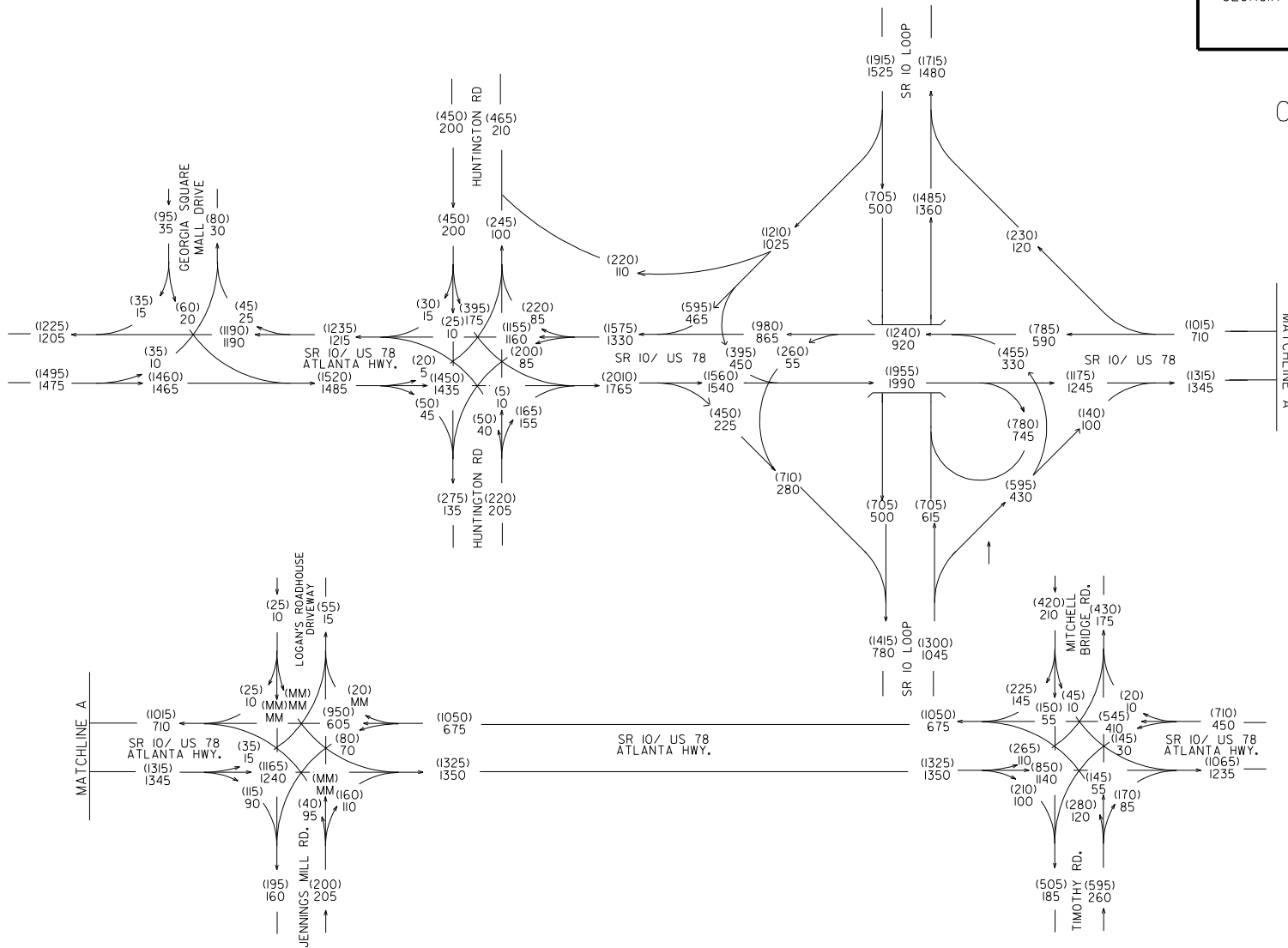


24-HR. T. = 6%
S.U.T. = 4%
COMB. T. = 2%

NH00-0003-03(053)
PI # 122890
CLARKE COUNTY
SR 10 @ SR 10 LOOP
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DESIGN TRAFFIC ADT
2041 = 000
2021 = 000

LRW
10/14

ATHENS
CLARKE COUNTY

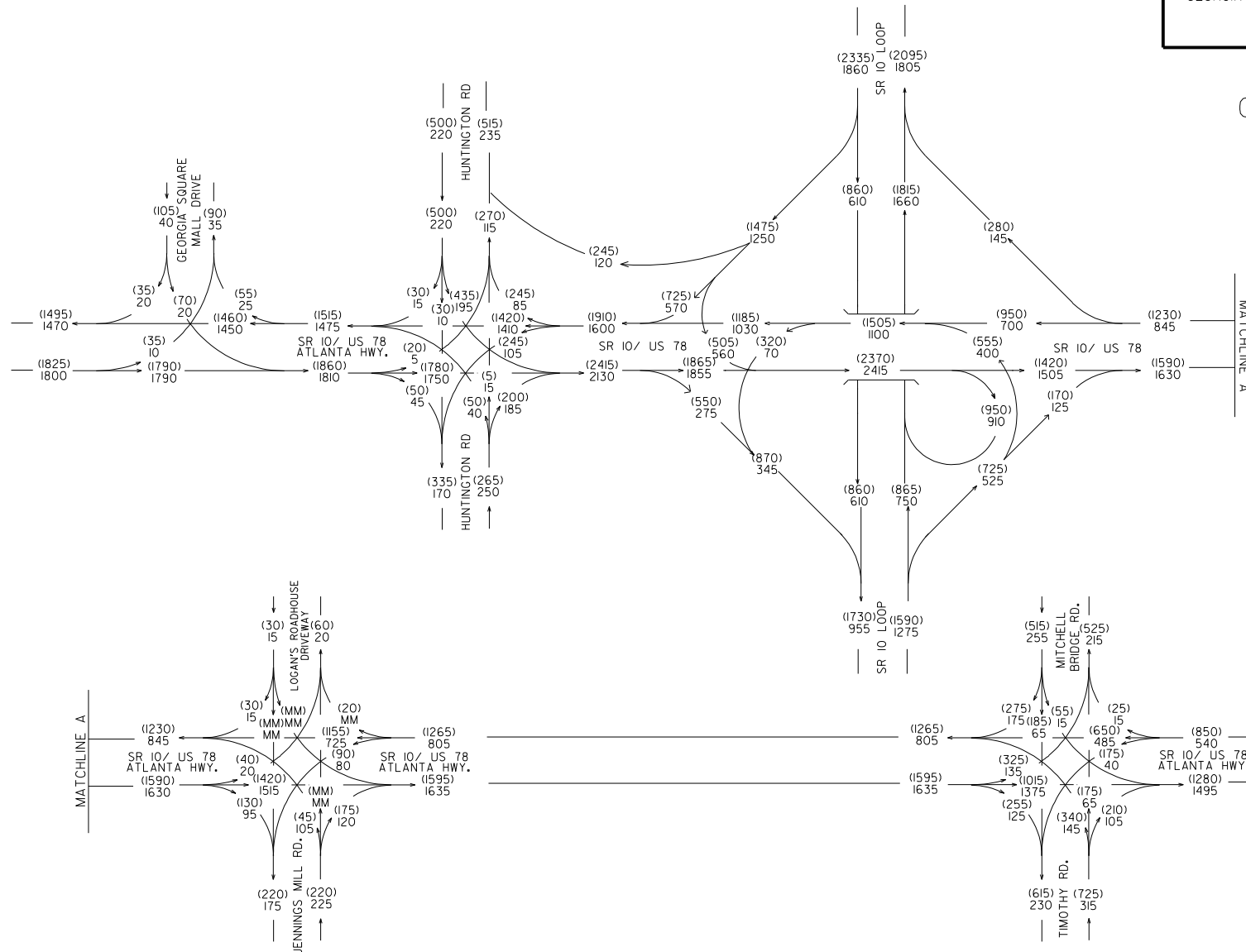


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S.U.T. = 4.5%
COMB. T. = 3.5%

NH00-0003-03(053)
PI # 122890
CLARKE COUNTY
SR 10 @ SR 10 LOOP
NO-BUILD
BASE YEAR 2021
DHV PM = (000)
AM = 000

LRW
10/14

ATHENS
CLARKE COUNTY

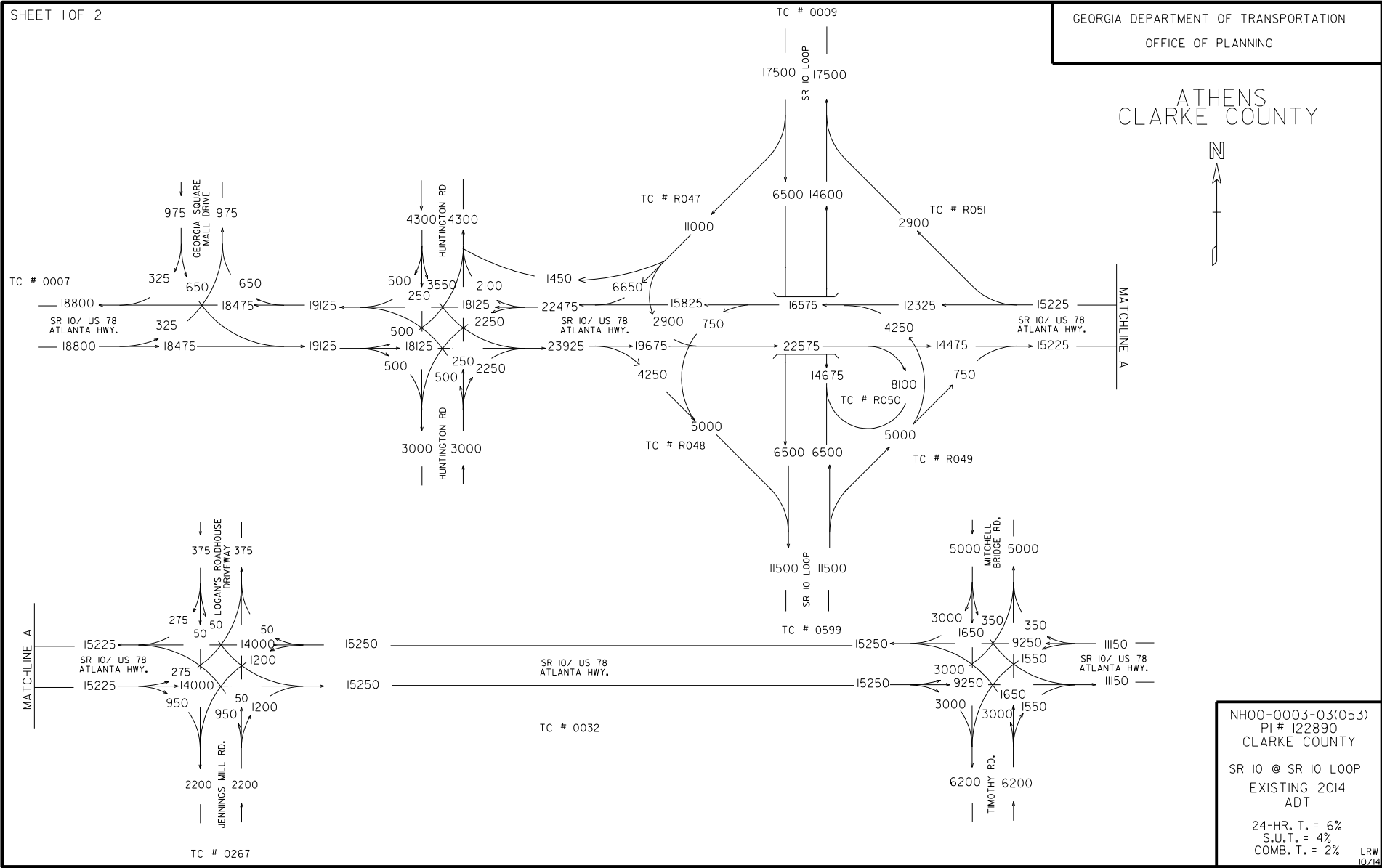


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S.U.T. = 4.5%
COMB. T. = 3.5%

NH00-0003-03(053)
PI # 122890
CLARKE COUNTY
SR 10 @ SR 10 LOOP
NO-BUILD
DESIGN YEAR
2041 DHV
PM = (000)
AM = 000

LRW
10/14

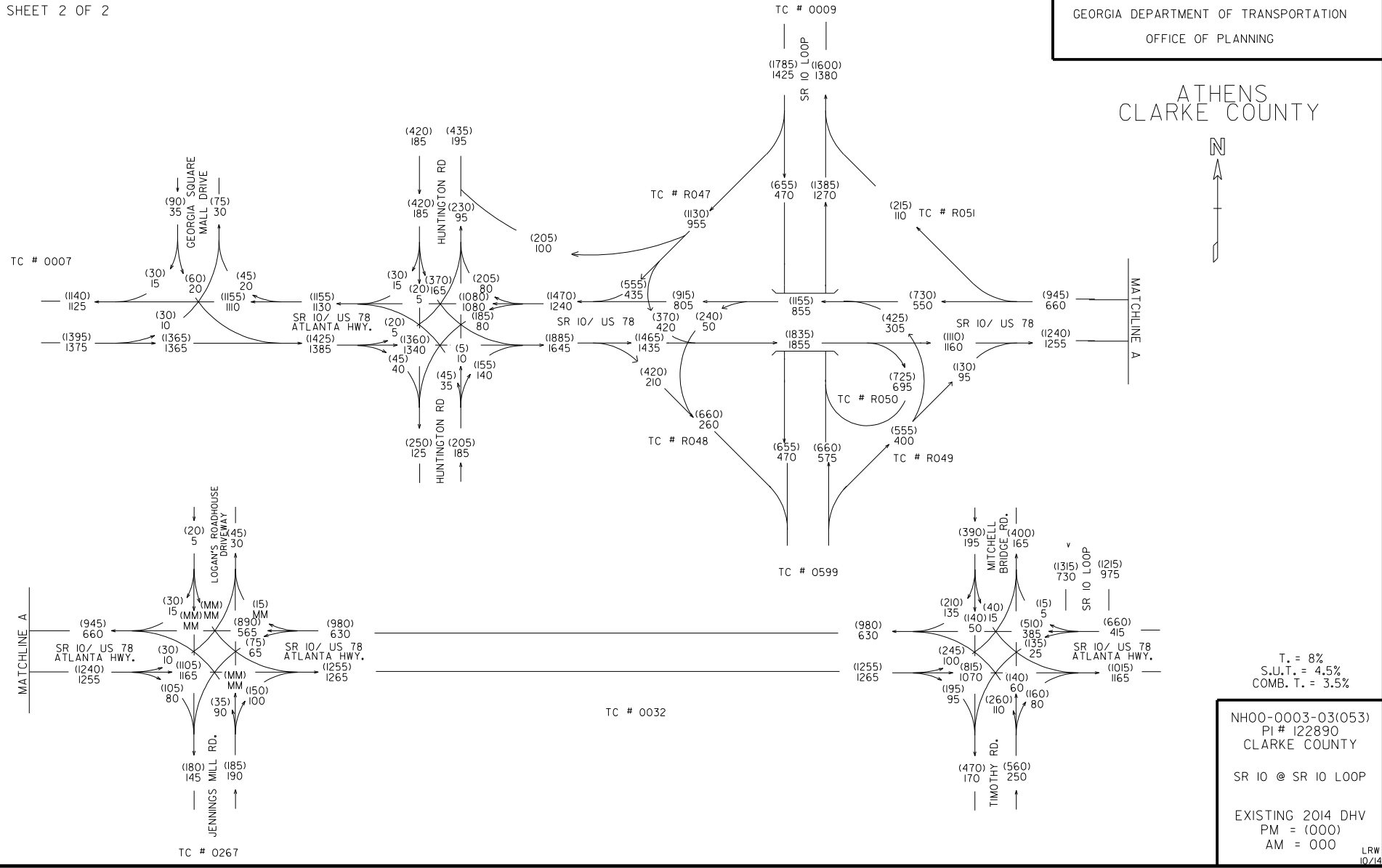
ATHENS
CLARKE COUNTY



NH00-0003-03(053)
 PI # 122890
 CLARKE COUNTY
 SR 10 @ SR 10 LOOP
 EXISTING 2014
 ADT
 24-HR. T. = 6%
 S.U.T. = 4%
 COMB. T. = 2%

LRW
10/14

ATHENS
CLARKE COUNTY



T. = 8%
S.U.T. = 4.5%
COMB. T. = 3.5%

NH00-0003-03(053)
PI # 122890
CLARKE COUNTY
SR 10 @ SR 10 LOOP
EXISTING 2014 DHV
PM = (000)
AM = 000
LRW 10/14

Traffic Study & Concept Synopsis:

8-21-2015

- 10-24-2014 - Revised GDOT traffic volumes completed.
 - 12-12-14 - Stantec prepared revised traffic study - Scenario 3 with Improvements recommended.
 - 12-12-14 Traffic Analysis Summary Chart was completed and is included following the Synopsis.
 - Scenario 2 – Is a reduced scope layout proposed by Athens Clarke County (ACC).
 - Scenario 3 – Is the approved GDOT Concept with reductions requested by ACC.
 - Reduced impacts to the commercial properties west of Huntington Road.
 - Added a left turn ingress access point to the Publix Shopping Center on the east end of the project.
 - Scenario 2 & 3 “With Improvements” includes recommended improvements at the Timothy Rd/Mitchell Bridge Rd (TR/MBR) Intersection.
 - 2-19-2015 – The Traffic Study and Layouts were presented to District 1. The Scenario 3 with improvements produced acceptable LOS at all intersections. The project layout was then revised to include the TR/MBR Intersection improvements.
 - 4-16-2015 - The Scenario 3 layout with improvements was presented to FHWA. FHWA concluded that the TR/MBR Intersection improvements needed to be included in concept and environmental document to meet Logical Termini requirements.
 - 7-1-2015 - The Scenario 3 layout with improvements was presented to ACC for concurrence. ACC requested that GDOT reduce traffic and reduced lanes through the interchange.
 - 7-22-2015 - GDOT reevaluated and reduced traffic volumes were completed.
 - 8-11-2015 - Stantec analyzed reduced traffic volumes.
 - Scenario 2 & 3
 - Scenario 2 & 3 **without** improvements to TR/MBR Intersection were selected to analyzed and determine if improvements at TR/MBR the intersection were needed due to the reduced traffic.
 - Created Scenario 4 **with** improvements to TR/MBR Intersection.
 - Scenario 4 is Scenario 3 with a reduced lane in each direction through the interchange generally from Huntington Road to Jennings Mill Road.
 - 8-11-2015 Traffic Analysis Summary Chart was completed and is included following the Synopsis.
 - Results show that Scenario 2 produces LOS Es and Fs for certain movements in the Huntington Road, Southbound Ramp and TR/MBR Intersections.
 - Results show that Scenario 3 produced acceptable LOS at all intersections and did not require improvements to TR/MBR.
 - Results show that Scenario 4 produced acceptable LOS at all intersections.
 - Improvements to TR/MBR are not proposed since Scenario 3 produced acceptable LOS and improvements are not required with the reduced traffic.
- Scenario 4 **without** improvements to TR/MBR Intersection is selected as the preferred Alternate.

Conclusion: Since Scenario 3 produced acceptable LOS at TR/MBR in the final analysis, and Scenario 3 and Scenario 4 includes the same added lanes between Jennings Mill Rd to TR/MBR, Scenario 4 will provide acceptable LOS at TR/MBR intersection.

* See Meeting Notes and E-mails for additional information.

* See Traffic Analysis Summary Charts for additional information.

Reference: Atlanta Highway at SR 10 Loop Traffic Analysis Summary

LOS / Delay Summary Table		2014 Existing		2021 No-Build		2021 Build				2041 No-Build		2041 Build				2041 Build with Improvements			
Intersection						Scenario 2		Scenario 3				Scenario 2		Scenario 3		Scenario 2		Scenario 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Atlanta Hwy. @ GA Square Mall Dr.	Overall	A (3.1)	A (4.2)	A (3.3)	A (4.7)	A (4.0)	A (6.5)	A (4.2)	A (5.2)	A (4.3)	A (6.3)	A (4.5)	A (8.4)	A (4.9)	A (6.6)	A (4.5)	A (8.1)	A (4.9)	A (8.7)
	EB	A (2.9)	A (3.5)	A (3.2)	A (4.4)	A (3.3)	A (5.0)	A (3.0)	A (5.0)	A (4.4)	A (5.6)	A (4.7)	A (6.8)	A (4.5)	A (6.7)	A (4.7)	A (6.7)	A (4.7)	A (6.7)
	WB	A (1.3)	A (0.8)	A (1.2)	A (1.0)	A (2.5)	A (4.1)	A (3.9)	A (1.4)	A (2.1)	A (1.8)	A (2.1)	A (5.6)	A (3.4)	A (2.0)	A (2.3)	A (5.5)	A (3.1)	A (6.7)
	SB	D (42.5)	D (43.7)	D (41.7)	D (43.7)	D (44.1)	D (43.2)	D (39.9)	D (43.2)	D (40.8)	E (55.7)	D (39.2)	D (49.6)	D (43.0)	D (46.8)	D (39.2)	D (46.8)	D (39.2)	D (46.8)
Atlanta Hwy. @ Huntington Rd.	Overall	B (17.5)	D (39.9)	B (18.3)	D (45.6)	B (16.6)	D (41.6)	B (14.8)	C (31.5)	C (22.3)	F (104.0)	C (21.2)	E (66.3)	B (16.7)	D (41.4)	B (19.3)	D (37.5)	B (16.8)	C (33.0)
	EB	B (14.8)	C (32.7)	B (16.6)	C (33.9)	B (14.8)	D (40.2)	A (9.7)	C (27.5)	C (21.7)	F (88.7)	C (26.8)	D (43.1)	B (12.1)	C (31.3)	B (13.5)	E (57.3)	B (11.8)	C (32.5)
	WB	A (9.0)	C (31.8)	A (8.7)	C (32.8)	A (6.5)	C (21.2)	A (9.9)	C (24.8)	B (11.5)	F (103.5)	A (5.9)	E (59.8)	B (10.5)	C (28.8)	A (4.8)	C (20.7)	B (12.6)	C (25.1)
	NB	D (53.7)	D (44.5)	D (53.4)	E (56.6)	E (56.8)	D (42.1)	D (51.2)	D (42.4)	D (52.7)	F (88.8)	D (49.4)	D (53.4)	E (55.0)	D (41.0)	F (140.5)	D (51.3)	D (49.6)	D (35.3)
SB	E (57.2)	E (74.3)	E (58.3)	F (99.4)	E (55.0)	F (103.1)	D (47.7)	D (53.6)	E (63.7)	F (138.9)	D (50.4)	F (132.0)	D (51.6)	F (96.1)	D (46.5)	D (45.1)	D (46.7)	E (55.7)	
Atlanta Hwy. @ SR 10 Loop SB Ramps	Overall	C (23.6)	D (40.0)	C (27.1)	E (60.7)	C (23.4)	C (27.6)	A (9.7)	B (10.6)	D (36.8)	F (123.3)	C (29.0)	E (58.0)	B (11.5)	B (13.5)	C (31.4)	D (51.3)	B (11.0)	B (13.7)
	EB	B (16.3)	D (35.4)	B (19.0)	E (69.2)	B (18.5)	B (19.6)	A (6.8)	A (6.7)	C (31.2)	F (132.3)	C (23.9)	E (66.3)	A (8.7)	A (8.8)	C (28.3)	D (49.7)	A (8.4)	B (10.6)
	WB	B (15.1)	C (34.1)	C (22.4)	D (42.6)	A (9.9)	C (20.9)	A (5.1)	B (10.9)	B (19.5)	F (103.9)	B (17.3)	C (33.2)	A (7.0)	B (15.2)	B (18.4)	C (31.7)	A (6.2)	B (13.4)
	SB	D (44.9)	E (60.3)	D (46.3)	E (75.3)	D (44.5)	E (56.5)	B (19.1)	B (18.5)	E (62.3)	F (139.4)	D (48.8)	F (85.0)	C (20.6)	C (20.9)	D (48.8)	F (90.2)	B (19.7)	C (20.9)
Atlanta Hwy. @ SR 10 Loop NB Ramps	Overall	A (7.6)	A (8.7)	A (8.3)	B (11.1)	B (12.5)	A (9.7)	A (7.0)	A (8.0)	B (11.3)	B (18.2)	B (12.8)	B (15.0)	A (7.2)	A (7.2)	B (12.8)	B (14.7)	A (7.4)	A (9.2)
	EB	A (5.5)	A (5.4)	A (6.7)	A (3.8)	A (4.7)	A (3.8)	A (4.7)	B (11.0)	B (11.7)	A (9.0)	A (5.5)	A (4.7)	A (4.1)	A (4.0)	A (5.6)	A (6.0)	A (4.2)	A (9.2)
	WB	A (3.0)	A (6.9)	A (3.1)	A (4.3)	A (2.1)	A (1.2)	A (2.3)	A (1.6)	A (4.2)	A (9.9)	A (2.3)	A (9.9)	A (2.5)	A (5.2)	A (2.0)	A (9.4)	A (4.8)	A (5.5)
	NB	C (20.4)	C (20.7)	C (20.5)	D (45.6)	D (49.4)	D (45.6)	C (20.4)	B (19.5)	C (20.7)	E (60.4)	D (48.0)	D (51.2)	C (22.3)	B (19.6)	D (48.0)	D (47.6)	C (20.0)	B (19.6)
Atlanta Hwy. @ Logan's Roadhouse Driveway / Jennings Mill Rd.	Overall	B (14.8)	B (14.7)	C (31.0)	F (117.9)	-	-	-	-	F (##)	F (120.8)	-	-	-	-	-	-	-	-
	EB	A (0.1)	A (0.3)	A (0.1)	A (0.4)	-	-	-	-	A (0.1)	A (0.6)	-	-	-	-	-	-	-	-
	WB	A (1.4)	A (0.6)	A (1.4)	A (0.7)	-	-	-	-	A (2.1)	A (1.0)	-	-	-	-	-	-	-	-
	NB	F (148.9)	F (235.6)	F (##)	F (##)	-	-	-	-	F (##)	F (##)	-	-	-	-	-	-	-	-
SB	B (10.0)	B (17.1)	B (10.3)	B (19.3)	-	-	-	-	B (10.8)	C (25.8)	-	-	-	-	-	-	-	-	
Atlanta Hwy. @ Logan's Roadhouse Driveway	Overall	-	-	-	-	A (0.0)	A (0.0)	# (#)	# (#)	-	-	A (0.0)	A (0.1)	# (#)	# (#)	A (0.0)	A (0.1)	# (#)	# (#)
	EB	-	-	-	-	A (0.0)	A (0.0)	# (#)	# (#)	-	-	A (0.0)	A (0.0)	# (#)	# (#)	A (0.0)	A (0.0)	# (#)	# (#)
	WB	-	-	-	-	A (0.0)	A (0.0)	# (#)	# (#)	-	-	A (0.0)	A (0.0)	# (#)	# (#)	A (0.0)	A (0.0)	# (#)	# (#)
	SB	-	-	-	-	A (9.4)	B (11.9)	# (#)	# (#)	-	-	A (9.6)	B (13.2)	# (#)	# (#)	A (9.6)	B (13.2)	# (#)	# (#)
Atlanta Hwy. @ Jennings Mill Rd.	Overall	-	-	-	-	A (5.8)	A (4.5)	A (6.1)	A (4.6)	-	-	A (6.3)	A (7.3)	A (7.3)	A (6.5)	A (6.5)	A (7.9)	B (12.1)	A (7.3)
	EB	-	-	-	-	A (3.5)	A (2.7)	A (5.3)	A (3.2)	-	-	A (2.1)	A (4.1)	A (7.1)	A (5.7)	A (2.5)	A (4.7)	B (10.8)	A (4.6)
	WB	-	-	-	-	A (1.7)	A (3.3)	A (5.8)	A (5.6)	-	-	A (4.7)	A (5.4)	A (4.9)	A (4.9)	A (4.4)	A (6.9)	A (6.1)	A (7.3)
	NB	-	-	-	-	C (32.2)	C (28.2)	B (12.7)	A (6.0)	-	-	D (37.3)	D (46.1)	B (15.2)	C (26.1)	D (37.3)	D (39.4)	D (37.5)	C (26.1)
SB	-	-	-	-	A (0.0)	A (0.5)	A (0.0)	A (0.1)	-	-	A (0.0)	A (0.3)	# (#)	A (0.3)	# (#)	A (0.2)	# (#)	A (0.3)	
Atlanta Hwy. @ Mitchell Bridge Rd. / Timothy Rd.	Overall	B (19.7)	D (46.7)	C (20.6)	E (59.1)	B (15.3)	D (49.7)	C (20.9)	D (51.7)	C (26.3)	F (99.3)	B (19.5)	F (85.5)	C (25.2)	F (92.1)	B (17.0)	D (53.4)	B (18.0)	D (54.7)
	EB	B (12.2)	C (33.4)	B (12.7)	C (32.2)	A (4.3)	C (26.2)	B (15.2)	C (32.2)	B (19.9)	E (56.1)	B (11.3)	D (46.0)	B (19.4)	D (49.6)	A (9.1)	C (29.8)	B (10.6)	D (37.4)
	WB	C (22.5)	D (49.7)	C (22.7)	E (74.8)	B (15.2)	E (59.2)	B (15.4)	E (59.6)	C (26.6)	F (133.0)	B (17.7)	F (107.1)	B (17.7)	F (124.2)	B (17.1)	E (72.6)	B (17.4)	E (68.1)
	NB	D (42.5)	E (69.4)	D (44.0)	F (87.4)	D (48.9)	E (75.2)	D (45.3)	E (74.9)	D (47.5)	F (125.4)	D (48.4)	F (117.0)	D (52.8)	F (120.5)	D (40.7)	E (59.0)	D (40.6)	E (58.6)
SB	C (27.6)	D (47.1)	C (30.1)	E (56.4)	C (32.1)	F (95.1)	C (29.5)	E (56.7)	C (32.8)	F (96.5)	C (29.5)	F (99.8)	C (32.9)	F (88.5)	C (29.5)	E (64.6)	C (29.5)	E (62.7)	

(#) – No value calculated by Synchro

F (##) – Delay calculated by Synchro greater than 300 second



August 11, 2015
 Shawn Fleet
 Page 1

Reference: Atlanta Highway at SR 10 Loop Traffic Analysis Summary

LOS / Delay Summary Table		2041 Build					
Intersection		Scenario 2		Scenario 3		Scenario 4 (with Improvements)	
		AM	PM	AM	PM	AM	PM
Atlanta Hwy. @ GA Square Mall Dr.	Overall	A (3.7)	A (6.5)	A (4.2)	A (6.9)	A (3.9)	A (6.8)
	EB	A (3.4)	A (6.4)	A (3.6)	A (6.4)	A (3.4)	A (5.7)
	WB	A (3.0)	A (4.0)	A (4.2)	A (4.8)	A (3.6)	A (5.6)
	SB	D (38.7)	D (44.9)	C (34.6)	D (44.9)	C (34.0)	D (43.3)
Atlanta Hwy. @ Huntington Rd.	Overall	C (28.2)	D (48.0)	B (17.7)	C (24.0)	B (19.4)	C (24.5)
	EB	D (39.6)	E (76.2)	B (16.3)	C (22.1)	B (18.2)	C (23.4)
	WB	A (6.8)	B (10.7)	A (9.9)	B (15.6)	B (11.9)	B (15.3)
	NB	E (58.3)	D (53.3)	D (50.2)	D (49.6)	D (49.8)	D (49.9)
Atlanta Hwy. @ SR 10 Loop SB Ramps	Overall	C (27.5)	D (44.8)	B (11.5)	B (13.6)	B (13.0)	B (18.3)
	EB	C (21.1)	D (35.3)	A (9.8)	B (12.1)	B (12.0)	B (11.1)
	WB	B (18.0)	D (38.6)	A (6.4)	B (12.1)	A (6.8)	B (12.0)
	SB	D (48.9)	E (70.9)	B (19.5)	B (18.1)	C (20.5)	D (38.4)
Atlanta Hwy. @ SR 10 Loop NB Ramps	Overall	B (13.2)	B (12.6)	A (7.5)	A (7.6)	A (7.4)	A (8.5)
	EB	A (5.6)	A (3.7)	A (4.3)	A (4.6)	A (4.4)	A (7.6)
	WB	A (2.7)	A (3.4)	A (5.2)	A (4.5)	A (4.5)	A (2.8)
	NB	D (52.0)	D (45.7)	C (20.3)	B (19.0)	C (20.4)	B (19.9)
Atlanta Hwy. @ Logan's Roadhouse Driveway / Jennings Mill Rd.	Overall	-	-	-	-	-	-
	EB	-	-	-	-	-	-
	WB	-	-	-	-	-	-
	NB	-	-	-	-	-	-
Atlanta Hwy. @ Logan's Roadhouse Driveway	Overall	A (0.0)	A (0.1)	# (#)	# (#)	A (0.0)	A (0.0)
	EB	A (0.0)	A (0.0)	# (#)	# (#)	A (0.0)	A (0.0)
	WB	A (0.0)	A (0.0)	# (#)	# (#)	A (0.0)	A (0.0)
	SB	A (0.0)	B (10.7)	# (#)	# (#)	A (0.0)	A (9.0)
Atlanta Hwy. @ Jennings Mill Rd.	Overall	A (7.0)	A (6.9)	A (9.9)	A (6.0)	B (10.8)	A (6.1)
	EB	A (4.1)	A (5.0)	A (7.2)	A (5.4)	B (10.6)	A (3.8)
	WB	A (3.3)	A (4.0)	A (8.8)	A (3.5)	A (4.7)	A (5.9)
	NB	D (37.4)	C (34.0)	C (31.6)	C (22.3)	C (32.4)	C (22.3)
Atlanta Hwy. @ Mitchell Bridge Rd. / Timothy Rd.	Overall	B (13.9)	D (37.4)	B (15.2)	D (40.8)	B (13.1)	C (31.0)
	EB	A (4.8)	C (21.5)	A (7.6)	C (31.2)	A (6.2)	C (22.2)
	WB	B (15.8)	D (46.1)	B (19.3)	D (51.8)	B (13.9)	C (32.6)
	NB	D (48.4)	E (56.2)	D (41.5)	D (51.0)	D (39.5)	D (44.0)
Atlanta Hwy. @ SR 10 Loop SB Ramps	Overall	C (26.0)	D (46.1)	C (22.5)	D (38.1)	C (23.5)	D (37.7)
	EB	C (21.1)	D (35.3)	A (9.8)	B (12.1)	B (12.0)	B (11.1)
	WB	B (18.0)	D (38.6)	A (6.4)	B (12.1)	A (6.8)	B (12.0)
	SB	D (48.9)	E (70.9)	B (19.5)	B (18.1)	C (20.5)	D (38.4)

Meeting Minutes



Project: NH000-0003-03-(053) - Clarke County
PI No. 122890
Atlanta Hwy at SR 10 loop

Date: 2-27-2015

Attendees: Anthony Tate, GDOT – PM
Derrick Brown, GDOT D1 – Program Manager
David Olson, GDOT D1 – Traffic
Bobby Dollar, GDOT D1 – Traffic
Brandon Kirby, GDOT OES
Allen Krivsky, Heath and Lineback Engineers
Shawn Fleet, Heath and Lineback Engineers

Minutes By: Shawn Fleet

A meeting was held February 19, 2015 to discuss the findings of the revised traffic study and to discuss the steps moving forward.

Meeting Minutes

- Shawn started the meeting with a brief description of differences between the two project layout Scenarios.
 - H&L – Scenario 3 –
 - Provides 5 WB and 4 EB lanes through the interchange.
 - Project limits from the Mall Entrance Road to Timothy Road/ Mitchel Bridge Road.
 - Provides a southbound loop entrance ramp to SR 10 Loop from the east.
 - Provides a 2000 ft auxiliary lane on the southbound exit ramp.
 - Athens Clarke County (ACC) - Scenario 2 –
 - Provides 3 WB and 2 EB lanes through the interchange.
 - Project limits generally run from Huntington Road to Jennings Mill Road.
 - Provides a left turn movement to Southbound SR 10 Loop from the east.
- Derrick Brown then provided information on the history of the projects.
 - H&L Scenario 3 project had progress into right of way acquisition and final design.
 - During Right of Way acquisition ACC proposed reduced traffic (Based on 2011/2031) and a reduced layout to minimize Right of Way impacts and to provide additional access to properties.
 - Right of Way acquisition was stopped to study the proposal presented by ACC.
 - GDOT then updated traffic to 2021/2041 and revised the traffic study to re-analyze the no build, the ACC Reduced Scenario 2 and the H&L current design Scenario 3.
- Discussion of the Traffic Study
 - The revised traffic study shows that the ACC Reduced Scenario 2 provides LOS E at both the Huntington Road and the Southbound Entrance Ramp.

- The revised traffic study shows that the H&L Scenario 3 provides LOS D & B for the Huntington Road and the Southbound Entrance Ramp respectively.
- The Loop Ramp provides a significant benefit to the operation of the South Bound Ramp signal. Eliminating the left turn and providing the loop ramp improves the signal operation from a LOS E to LOS B. It was agreed that the South Bound Loop Ramp should be retained.
- Generally it was agreed that the H&L Scenario 3 should be pursued. If GDOT pursues H&L Scenario 3, it will likely be met with resistance from the locals.
- A discussion was then initiated to brainstorm options to adjust the H&L Scenario 3 design to accommodate some of the local concerns to provide additional access and reduce Right of Way impacts while still meeting the Need & Purpose/Project Justification and Logical Termini.

The Brainstorm ideas:

- Reduce one through lane in each direction on SR 10 (Atlanta Hwy) on Scenario 3 layout.
- Reduce right turn lanes at west end of project on Scenario 3 layout to reduce property impacts.
- Provide left-in and right- in/right-out only at Publix shopping center drive. Revise full access median opening as shown currently in Scenario 3 (Just east of On the Border restaurant) to right-in/right-out to match the existing configuration at this location.
- H&L will determine reductions to Right of Way impacts. Additional reductions can be made by reducing the shoulder from 16 ft to 10 ft in some areas.

Other Items Discussed:

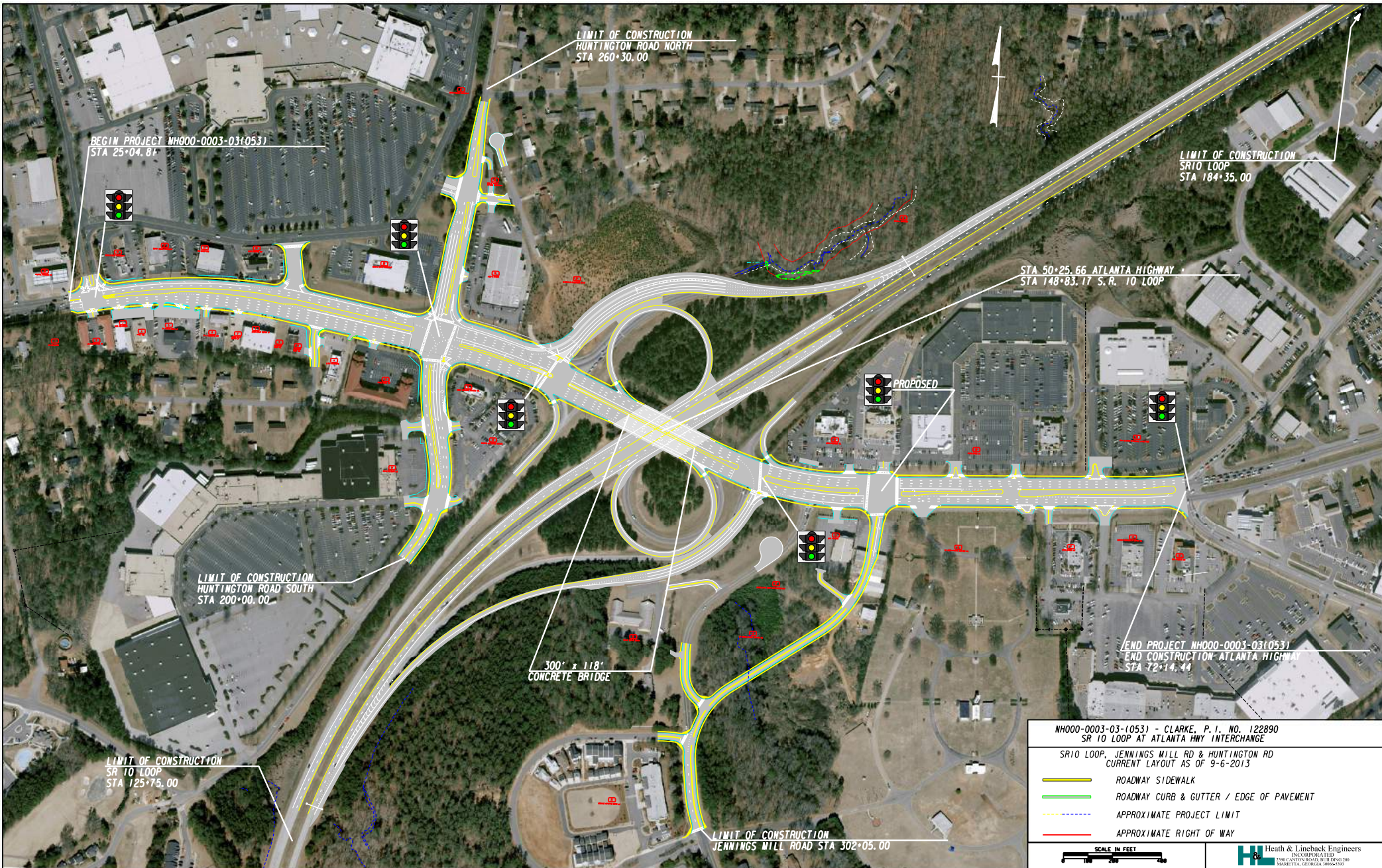
- Present layout to FHWA meeting on March 4/5th to get their input.
- The signal at the Timothy Road/Mitchell Bridge Road fails (LOS F) under both scenarios unless improvements are made to the intersection. This may be an issue in determining the correct Logical Termini. The project description is an interchange improvement project. Project limits have been held at its location to avoid scope creep.

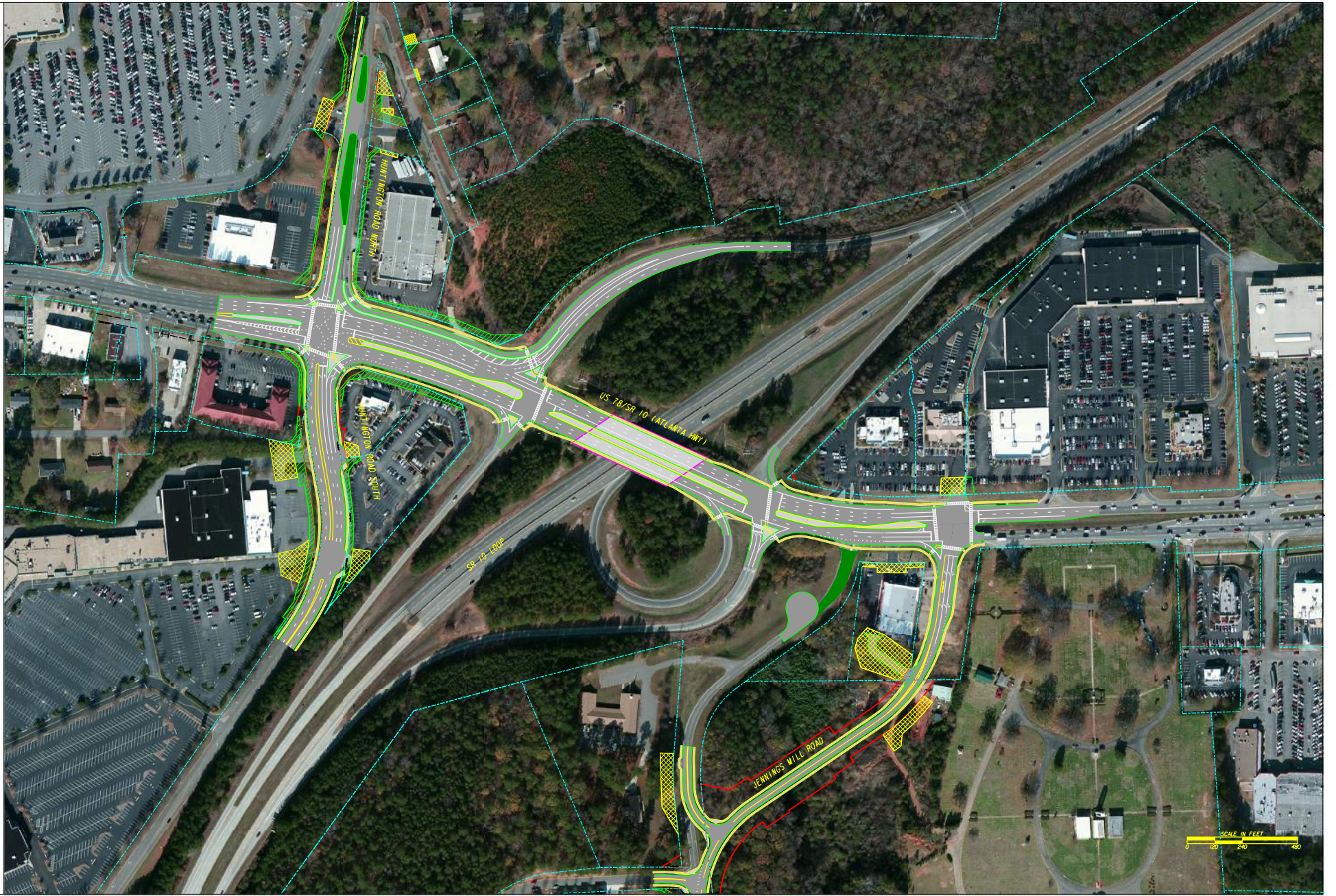
Moving Forward:

- H&L is studying the above items to determine what items provide the best LOS while providing a reduced right of way benefit.

Attachments:

- H&L Project Layout & Athens-Clark County Project Layout





Meeting Minutes

Project: NH000-0003-03-(053) - Clarke County

PI No. 122890

Atlanta Hwy at SR 10 loop

Date: 4-20-2015



H & L Project Number: 2008.030.023

Attendees: Derrick Brown, GDOT D1 – Program Manager
Anthony Tate, GDOT PM
Bobby Dollar, GDOT OES
Jennifer Giersch, FHWA; Via Conference Call
Larry Overn, Stantec
Allen Krivsky, Heath and Lineback Engineers
Shawn Fleet, Heath and Lineback Engineers

Minutes By: Shawn Fleet

Meeting was held at GDOT on April 16, 2015.

Project history was presented as well as a description of the current approved project concept and the reductions to the project that Athens Clark County (ACC) had proposed to reduce impacts to businesses.

The main differences of the project concepts are:

- The ACC Layout project concept reduces lanes on SR 10 and Huntington Road.
- The ACC Layout project limits are just east of Jennings Mill Road and just west of Huntington Road and the H&L layout project limits are from West Mall Access to Timothy Road Mitchell Bridge Road.
- The ACC Layout eliminates the south bound loop Ramp and SR 10 Loop auxiliary lane and eliminates the need to realign the south bound Exit Ramps.
- The ACC Layout eliminates the need to realign the north bound Ramps.

The traffic study results were discussed.

- It was noted that LOS E & Fs were unacceptable.
- The ACC layout shows LOS E at Huntington Road, the SB Ramp and Timothy Road/Mitchell Bridge Road.
- The H&L Layout show LOS E at Timothy Road/Mitchell Bridge Road
- The H&L Layout with improvements to Timothy Road/Mitchell Bridge Road can improve the intersection to LOS D.
- Assume ACC will accept LOS D.

Logical Termini Discussion

- Since Timothy Road/Mitchell Bridge Road intersection requires improvement to operate at an acceptable LOS, the H&L project concept as it stands, which does not propose improvements to the intersection, does not meet Logical Termini.
- ACC Layout does not meet Logical Termini since it excludes improvement to Timothy Road/Mitchell Bridge Road.
- There is an existing project programmed as PI 010100, CR 32 Mitchell Bridge Rd from SR 10/Atlanta Highway to CR 684/Athens West Parkway. Anthony Tate will investigate if this project includes improvements to the Timothy Road/Mitchell Bridge Road Intersection.
- If project PI 010100 does not include improvements to the Timothy Road/Mitchell Bridge Road Intersection, a new project will need to be programmed.

Environmental Document

- A project that includes improvements to the Timothy Road/Mitchell Bridge Road Intersection will need to be added to the environmental document so that Logical Termini requirements can be met. The project does not need to be constructed with the current project.
- GDOT OES will prepare and complete the Project Need, Effectiveness and Logical Termini Form.
- A CE reeval could be completed and approved in 2016.
- Traffic should be good for 2 to 3 years.

Minimization to Commercial Property Impacts

- H&L has proposed to provide a left turn in access to the Publix Shopping Center. See Detail Attached.
- H&L has proposed to reduce impacts to the commercial properties along the western edge of the project.
- A meeting with GDOT District 1 and ACC to discuss impacts, reductions, and the additional project is needed to get ACC's concurrence.

Action Items:

- Anthony Tate to investigate details of project PI 010100.
- H&L to study possible improvements to Timothy Road/Mitchell Bridge Road Intersection and provide a concept layout as a separate project.

Meeting Minutes



Project: NH000-0003-03-(053) - Clarke County
PI No. 122890
Atlanta Hwy at SR 10 loop

Date: 6-3-2015

Attendees: Anthony Tate, GDOT – PM
David Olson, GDOT D1 – District Traffic Engineer
Justin Lot, GDOT D1 Design
Warren Dimsdale, Heath and Lineback Engineers
Shawn Fleet, Heath and Lineback Engineers

Attendees Via Conference Call:

Derrick Brown, GDOT D1 – Program Manager
Brandon Kirby, GDOT D1 Assistant District Engineer

Minutes By: Shawn Fleet

A meeting was held May 20, 2015 to discuss and review the project layout that has been revised per prior meetings with District 1 and with FHWA.

Meeting Minutes

- Shawn started the meeting with a brief history of the project to date.
- The recent changes to the layout were then discussed.
 - West end reduction to reduce property impacts to business properties. This was done primarily by reducing lane addition lengths, but also included reducing the shoulder widths on both sides of the Atlanta Highway.
 - Left turn access into Publix. This was done by providing a median break large enough only to allow for left in access. The break location and access driveway location was relocated to the western edge of the property to maximize storage and deceleration lengths for the Atlanta Highway E.B. left turn lanes to Mitchell Bridge Road N.B.
 - Improvements to Timothy Road and Mitchell Bridge Road and Intersection.
 - The improvements are required and added to meet Logical Termini Per FHWA.
 - Improvements to the Mitchell Bridge Road side extend out to hold the lane addition 800 ft beyond the intersection then 495 ft to taper the lane drop for a total length of 1295 ft. Improvements were set up to tie into the current improvement project that will be constructed by Athens-Clark County along Mitchell Bridge Road.
 - Two alternates of improvements to the Timothy Road side were presented. The first showed improvement with desirable taper rates (15:1) and decel/storage (400ft/150ft) lengths per GDOT Standard. The second showed minimum taper rates (8.33:1) and decel/storage (250ft/150ft) lengths per GDOT Standard. The group decided the alternate that met the minimum design requirements along Timothy Road should be implemented to reduce impacts and improve property access.

- The additional work on Timothy Road / Mitchell Bridge Road would increase the construction cost of the project approximately \$2 million.
- The speed limit on Timothy Road / Mitchell Bridge Road is 45 MPH. The improvement proposed for the intersection are to meet 35 MPH to minimize impacts to properties. The layout also illustrated the additional impacts for 45 MPH. It was agreed that 35 MPH should be used and that a design exception should be submitted for the reduction in speed for approval.
- Derrick noted the GDOT SMEs should review and approve the layout limits along Timothy Road / Mitchell Bridge Road.

Additional General Layout and Project Comments

- Brandon Kirby noted that if the Interchange Ramp's pavement are to be concrete that the shoulder slopes should match the travel lane cross slope to allow for future widening if needed.
- Investigate reducing the dual right turn lanes to a single right lane on Huntington Road to east bound Atlanta Highway.
- David Olson noted overhead signs will be required on Timothy Road north bound due to the existing thru travel lane becoming the inside left turn lane for the proposed intersection.
- The Publix access driveway along Mitchel Bridge Road will need to be converted to right in right out. It was also requested to investigate adding a small raised median to discourage left turns into and out of the Publix entrance along Mitchel Bridge Road. However, it was determined no median could be added there due to the fire station driveway across the street.
- David Olson likes that the left lane progresses all the way through the project on Atlanta Highway.
- David Olson requested the striping to be revised to provide left turn access to Coile Drive.
- It was requested to increase the concrete island sizes at the Timothy Road / Mitchell Bridge Road intersection.
- It was requested to correct the marking on the south bound exit ramp where the two lanes expand to the right and left turn lanes.
- Revise the marking for the Olive Garden access driveway across from Jennings Mill Road to provide a left turn out and a thru/right out and a single inbound lane.
- David Olson requested us to review the possible weaving problems that could occur due to the north bound exit ramp right turn lane crossing the right turn lane for Jennings Mill Road.
- David Olson requested us to review the possible weaving problems at the lane additions near Arrowhead Road.

Right of Way

- It was requested to remove the driveway just west of JMR into the Logans Road House restaurant. This driveway access was provided per Right of Way request since it would require an agreement between property owners for access to the property.

The next step is present the revised project layout to Athens Clarke County.

Attachments:

- H&L Project Layout & Athens-Clark County Project Layout

Shawn Fleet

From: Shawn Fleet
Sent: Tuesday, July 21, 2015 1:49 PM
To: William A. Krivsky
Cc: sfleet@heath-lineback.com
Subject: FW: PI# 122890 Clarke - Today's Meeting Synopsis

Abby Ebodaghe and David Clarke's response to the meeting on the traffic projections.

Shawn C. Fleet, P.E., Heath & Lineback Engineers, Inc.
sfleet@heath-lineback.com
www.heath-lineback.com

From: David.Clark@athensclarkecounty.com [mailto:David.Clark@athensclarkecounty.com]
Sent: Thursday, July 02, 2015 4:14 PM
To: Tate, Anthony
Cc: Ebodaghe, Abby; Brown, Derrick M.; Woods, Leslie; Shawn Fleet
Subject: Re: PI# 122890 Clarke - Today's Meeting Synopsis

Anthony:

Thank you again for arranging the meeting yesterday and your continued efforts in moving this project forward.

One point that I hope that I left with GDOT staff yesterday is that ACC is very appreciative of the work completed to date - especially the proposed improvements identified for the Mitchell Bridge/Timothy Road intersection. In general, ACC remains supportive for improving the interchange to better accommodate today's and the future traffic. Everyone would agree that the current traffic volumes through the interchange has long exceeded the existing capacity of the interchange's configuration and that improvements are needed.

We just want to be sure that we build a project that is the "right size" for the future conditions. I understand that we probably differ in what we believe the future will have in store for the corridor.

I appreciate the additional investigation and review that Abby & Leslie (and the rest of the GDOT Planning staff) has offered to undertake. If there is any additional local information that they might need, please have them contact me directly.

Hope you have a happy and safe July 4th weekend.

-David

From: Tate, Anthony [mailto:atate@dot.ga.gov]
Sent: Thursday, July 02, 2015 1:25 PM
To: Ebodaghe, Abby; Shawn Fleet; Woods, Leslie; Clark, David
Cc: Brown, Derrick M.
Subject: RE: PI# 122890 Clarke - Today's Meeting Synopsis

Thanks for the update.

Anthony Tate

Project Manager
Office of Program Delivery
600 West Peachtree Street, 25th Floor
Atlanta, Georgia 30308
Phone: (404) 631-1769
Cell: (404) 807-7692
Email: atate@dot.ga.gov

From: Ebodaghe, Abby
Sent: Thursday, July 02, 2015 12:39 PM
To: Tate, Anthony; Shawn Fleet; Woods, Leslie; Clark, David
Cc: Brown, Derrick M.
Subject: RE: PI# 122890 Clarke - Today's Meeting Synopsis

Anthony,

Update for Design Traffic: We are reviewing the Existing volumes & projections on Huntington Road. We will send updated numbers as soon as it is completed.

THANK YOU!

*CHEERS,
ABBY F. EBODAGHE
OFFICE OF PLANNING
5TH FLOOR, ONE GEORGIA CENTER
(404) 631-1923 OFFICE
(404) 631-1957 FAX
JOH 14:13-14
JOH 15:5-9*

From: Tate, Anthony
Sent: Wednesday, July 01, 2015 3:06 PM
To: Shawn Fleet; Ebodaghe, Abby; Woods, Leslie; Clark, David
Cc: Brown, Derrick M.
Subject: PI# 122890 Clarke - Today's Meeting Synopsis

Quick synopsis of today's meeting:

- David Clark (ACC) discussed his concerns with the previously provided traffic projections based upon the current economic trends in the area.
- Mr. Clark also expressed concerns about the proposed 10-lane bridge and the possible ROW impacts along the south side of the outer-loop portion of the project, and the negative impact the larger scale transportation project could have on existing businesses in that vicinity.
- Abby & Leslie (GDOT Planning) reviewed the traffic data in the area, drove around the corridor yesterday to investigate, and feel that the previously determined traffic projections are valid.
- After some debate, Derrick stated that we will have to move forward based upon the GDOT projections.
 - Abby indicated that she would review her data this afternoon, but was certain that it wouldn't warrant ACC's proposed 0.5% growth.

Action Item:

- Heath & Lineback: Review your latest concept sketch and look to minimize ROW impacts along the southern portion of that outer loop corridor as much as possible.

Feel free to respond with any questions or concerns.

Thanks,

Anthony Tate

Project Manager

Office of Program Delivery

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Atlanta, Georgia 30308

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Cell: (404) 807-7692

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Traffic fatalities are on the rise since the beginning of 2015 and Georgia could see the first increase in nine years! Many of these fatalities are the result of distracted driving. DriveAlert ArriveAlive implores motorists to drive responsibly. 1—buckle up; 2—stay off the phone/no texting; and 3—drive alert. Visit www.dot.ga.gov/DS/SafetyOperation/DAAA. #ArriveAliveGA

Shawn Fleet

From: Olson, David W <DOlson@dot.ga.gov>
Sent: Tuesday, August 18, 2015 11:53 AM
To: Shawn Fleet; Tate, Anthony; Brown, Derrick M.
Cc: Lott, Justin; Kirby, Brandon; William A. Krivsky
Subject: RE: NH000-0003-03(053), P. I. No. 122890, Clarke County

I support Scenario 4. It includes the refinements from discussions in several meetings to improve operations while reducing right-of-way impacts. Scenario 2 does not provide adequate LOS for certain movements and does not meet logical termini. Scenario 3 had more lanes than necessary, creating weaving situations and other potential operational impacts that would have detracted from theoretical LOS improvements.

David W. Olson, PE
District Traffic Engineer

Georgia Department of Transportation
District 1, Gainesville, GA
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(678) 677-6078 *mobile*
dolson@dot.ga.gov

From: Shawn Fleet [mailto:sfleet@heath-lineback.com]
Sent: Wednesday, August 12, 2015 3:12 PM
To: Tate, Anthony; Brown, Derrick M.
Cc: Olson, David W; Lott, Justin; Kirby, Brandon; William A. Krivsky
Subject: FW: NH000-0003-03(053), P. I. No. 122890, Clarke County

Anthony, Gentlemen,

Please see the revised expanded traffic analysis summary table showing all legs of the intersections per the reduced traffic data. The chart does show that the ACC layout produces LOS Es and Fs for certain movements in the Huntington Road, Southbound Ramp and Mitchell Bridge/Timothy Road Intersections. Please review the results and let us know your thoughts on if these values are acceptable?

Scenario 2 is the original ACC Layout
Scenario 3 is the original H&L/GDOT Layout
Scenario 4 is a new layout that was developed to reduce a lane across but does includes the Timothy/Mitchell Bridge Road Improvement.

Scenario 2 & 3 shown do not include Timothy/Mitchell Bridge Road Improvements.

Thanks,

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