

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

**OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE**

FILE P.I. #0009678

OFFICE Design Policy & Support

GDOT District 7 - Metro Atlanta
Fulton County
I-75 @ CR624/Mt. Paran Rd &
SR3/US41@ CR624/Mt. Paran Rd

DATE April 12, 2012

FROM  for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Andy Casey, State Roadway Design Engineer
Attn: Mac Cranford, District Design Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Lisa Myers, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Bryant Poole, District Engineer
Scott Lee, District Preconstruction Engineer
Jonathan Walker, District Utilities Engineer
Sue Anne Decker, Project Manager
BOARD MEMBER - 5th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

Office of Program Delivery

PROJECT CONCEPT REPORT

I-75 @ CR 624/ Mt. Paran Rd & SR 3/US 41 @ CR 624/ Mt Paran Rd

QUICK PROJECT

County: Fulton

P. I. Number: 0009678

State Route Number: 401 & 3

Project PI #0009678 will improve operations on the I-75 southbound ramp @ Mt. Paran Rd by adding an additional right turn lane on the ramp to reduce queuing on the ramp and the interstate. Additionally, it will improve operations on Mt. Paran Rd between the I-75 southbound exit ramp and SR 3 by adding a raised median to reduce weaving and merging.

Submitted for approval:

DATE 12-21-11

Mac Crawford
Design Phase Office Head

DATE 1-5-2012

Bobby Hilliard
Office Head

DATE 1/4/2012

Sue Anne Decker
Project Manager

Recommendation for approval:

DATE _____

Program Control Administrator

DATE 2-9-2012

* Glenn Bowman MMO
State Environmental Administrator

DATE 2-24-2012

* Kathy Zahul MMO
State Traffic Engineer

DATE 2-3-2012

* Lisa Myers MMO
Project Review Engineer

DATE 2-3-2012

* Sal Pirzad MMO
for: State Utilities Engineer

DATE 12/21/11

Ben Poole
District Engineer

DATE _____

State Transportation Financial Management Administrator

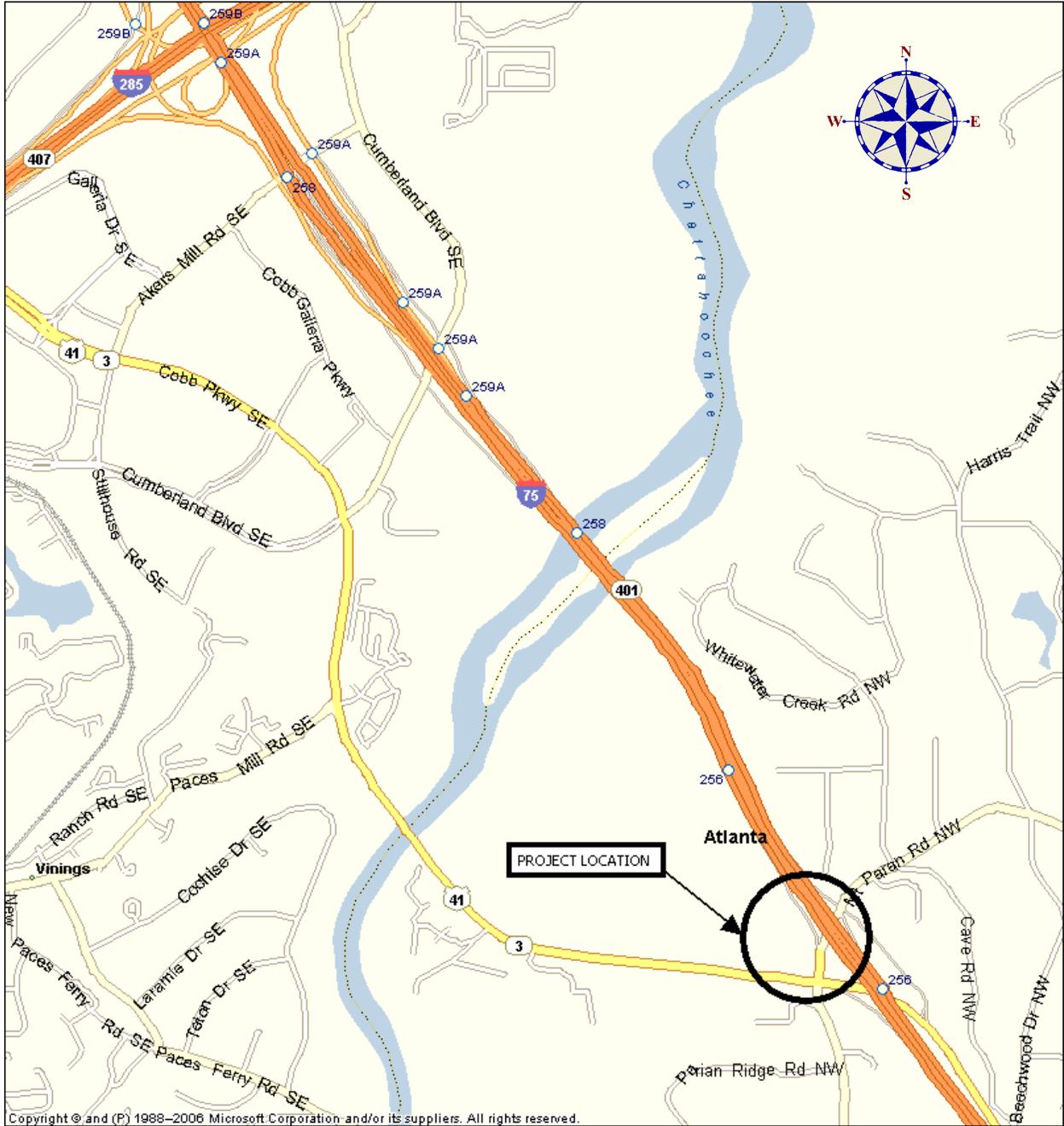
The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 2-3-2012

* Cynthia VanDyke MMO
State Transportation Planning Administrator

* Recommendation on file - MMO

PROJECT LOCATION



Need and Purpose

The purpose of this proposed project is to provide improvements to the southbound exit ramps from I-75 @ CR 624/ Mt. Paran Rd & SR 3/US 41 @ CR 624/ Mt Paran Rd (Exit 256). Currently, vehicles exiting I-75 are backing up on the exit ramp and in peak periods the queues are spilling out onto the interstate creating a hazardous area for stopped or significantly slowing vehicles on the interstate through lanes trying to exit. In addition right turning vehicles which could have a free flowing condition onto both Mt. Paran Rd and Northside Pkwy are caught in weaving and merging vehicles from Mt. Paran Rd.

The current (2011) AADT on Mt. Paran Rd is 29,350 vehicles per day

Other projects in the area:

- PI 0006396: ATMS, I-75 N Ramp Meters-Har from I-85 to Wade Green Road
- PI 720125-: Widening, SR 3 Fm Northgate Dr to Paces Mill Rd;
Inc Bridge Replacement- Ph I
- PI M003558: Resurface & Maintenance, SR3 from Cr 1318/Northside Drive to Cobb County Line
- PI 770680-: ATMS, Surveillance System for the Atlanta Interstates
- PI 0007174: Bridges: SR 3 @ Peachtree Creek

Although there are other projects in the vicinity, this project is a standalone project with independent utility and logical termini.

The proposed project length is approximately 900-ft (0.16 miles) along the exit ramp, beginning at M.P. 17.09 and extending to M.P. 17.24.

Description of the proposed project

The existing south bound exit ramp is not signalized and consists of a 900-ft long 16-ft wide single lane with a right turn only movement at the terminal with Mt. Paran Rd. The improvements to the south bound exit ramp consist of widening to the inside to develop two approximately 900-ft long right turn lanes. The proposed lanes will be 12-feet wide. Traffic entering Mt. Paran Rd from the left lane I-75 south bound ramp will be yield controlled. Additional improvements include constructing a varying 3-ft to 16-ft wide raised median approximately 265-ft long separating the dedicated right turn lane from the combined right-thru lane on Mt. Paran Rd.

Is the project located in PM 2.5 Non-attainment area? Yes No.

The proposed project is an operational improvement project and does not add capacity.

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

PDP Classification: Major Minor

Federal Oversight: Full Oversight (), Exempt(X), State Funded (), or Other ()

Functional Classification: I-75 Exit Ramp, Urban Interstate
Mt. Paran, Urban Minor Arterial
Northside Pkwy, Urban Principal Arterial

U. S. Route Number(s): I-75, 41 (Northside) **State Route Number(s):** 401, 3 (I-75, Northside)

Traffic (AADT): Base Year: (2012) 29,650 Design Year: (2032): 41,920

Existing design features:

- Ramp typical Section: one 16-foot travel lane with an 8-foot inside shoulder and an 8-foot outside shoulder.
- Roadway typical Section (Mt. Paran): six 12-foot travel lanes with 2½ -foot curb and gutter on the east side and rural shoulder on the west side of the roadway.
- Posted speed: 45 mph (Northside and Mt. Paran) Minimum radius for curve: 340-foot
- Maximum super-elevation rate for curve: 6%
- Maximum grade: 4.6%
- Width of right-of-way: 80 ft (Mt. Paran) 60ft (Northside Pkwy)
- Major structures: None
- Major interchanges or intersections along the project: SR 401/I-75 @ CR 624/ Mt Paran Rd
SR 3/US 41 @ CR 624/ Mt Paran Rd
- Existing length of roadway segment and the beginning mile logs for each county segment.
 - Length – 0.16 miles
 - Beginning mile point – 17.09 (SR 401/I-75 exit ramp)
 - Ending mile point – 17.24 (SR 401/I-75 exit ramp)

Proposed Design Features:

- Proposed ramp typical section: Two 12-foot travel lanes, with an 8-foot inside shoulder and an 8-foot outside shoulder.
- Roadway typical Section (Mt. Paran): six 12-foot travel lanes (2 lanes NB with dual left turn lanes, a shared through right lane, and a dedicated turn lane from the I-75 SB ramp to NB SR 3/Northside Pkwy on the SB side) with 2½ -foot curb and gutter on both the east and west side of the roadway. The dedicated turn lane will be separated from the SB Mt. Paran Rd mainline traffic by a 3-ft to 16-ft raised median to eliminate the existing weaving section.
- Proposed design speed mainline: 55 mph (ramp)
- Proposed design speed mainline: 45 mph (Northside and Mt. Paran)
- Proposed maximum grade mainline: 4.6%
- Maximum grade allowable: 9%
- Proposed maximum grade side street: 1.5%
- Maximum grade allowable: 9%

- Proposed maximum grade driveway:
 - Commercial – N/A
 - Residential – N/A
- Proposed minimum radius of curve: 954 foot
- Minimum radius allowable: 643 foot
- Maximum allowable superelevation rate: 6%
- Proposed maximum superelevation rate: 4.2%
- Right-of-Way:
 - Width: 60-80 foot
 - Easements: Temporary (), Permanent (X), Utility (), Other ()_____.
 - Type of access control: Full (X), Partial (), By Permit (), Other ()_____.
 - Number of parcels: 0 Number of displacements:
 - Business: _____ 0
 - Residences: _____ 0
 - Mobile homes: _____ 0
 - Other: _____ 0
- Structures: None
- Major intersections and interchanges: SR 401/I-75 @ CR 624/ Mt Paran Rd
SR 3/US 41 @ CR 624/ Mt Paran Rd
- Transportation Management Plan Anticipated: Yes (), No (X)
- Traffic control during construction: Staged construction.
- Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
1. DESIGN SPEED:	()	()	(X)
2. LANE WIDTH:	()	()	(X)
3. SHOULDER WIDTH:	()	()	(X)
4. BRIDGE WIDTH:	()	()	(X)
5. HORIZONTAL ALIGNMENT:	()	(X)	()
6. SUPERELEVATION:	()	()	(X)
7. VERTICAL ALIGNMENT:	()	()	(X)
8. GRADE:	()	()	(X)
9. STOPPING SIGHT DISTANCE:	()	()	(X)
10. CROSS SLOPE:	()	()	(X)
11. VERTICAL CLEARANCE:	()	()	(X)
12. LATERAL OFFSET TO OBSTRUCTION:	()	()	(X)
13. BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

A Design Exception is required for Horizontal Alignment due to the Intersection Skew Angle of 49.56-degrees between the I-75 SB Ramp and Mt. Paran Rd.

- Design Variances: None

- Environmental concerns: None
- Anticipated level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (X), No (),
 - Categorical exclusion (X),
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS) ().
- Utility involvements:
 - Atlanta Gas Light Company
 - AT&T (formerly BellSouth)
 - Georgia Power Distribution
 - Fulton County Public Works
- Public Interest Determination Policy and Procedure Required: Yes (), No (X),
- VE Study Anticipated: () Yes (X) No
- Benefit/ Cost Ratio: N/A

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST*	MITIGATION
By Whom	GDOT	GDOT	GDOT	GDOT	GDOT
\$ Amount	\$150,000	N/A	\$118,000	\$612,805	N/A

*CST Cost includes: Construction, Engineering and Inspection, Fuel Cost Adjustment, and Asphalt Cement Cost Adjustment:

Project responsibilities:

- Design: GDOT
- Right of Way Acquisition: N/A
- Right-of-Way funding (real property): N/A
- Relocation of Utilities: Utility Companies/ GDOT
- Letting to contract: GDOT
- Supervision of construction: GDOT
- Providing material pits: Contractor
- Providing detours: Contractor
- Environmental Studies/Documents/Permits: GDOT
- Environmental Mitigation: GDOT

Coordination

- Concept meeting date: TBD
- P. A. R. meetings, dates and results: None required.
- FEMA, USCG, and/or TVA: N/A
- Public involvement: PIOH is not anticipated.
- Local government comments: None received
- Other projects in the area:
 - PI 720125-: Widening, SR 3 Fm Northgate Dr to Paces Mill Rd;
Inc Bridge Replacement- Ph I
 - PI M003558: Resurface & Maintenance, SR3 from Cr 1318/Northside
Drive to Cobb County Line
 - PI 770680-: ATMS, Surveillance System for the Atlanta
Interstates
 - PI 0007174: Bridges: SR 3 @ Peachtree Creek
- Railroads: None
- Other coordination to date: None

Other alternates considered:

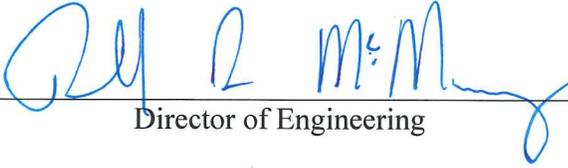
- Alternate 1 - No Build. This alternative was dismissed due to vehicles over flowing from the southbound exit ramp onto the mainline of I-75 Southbound.
- Alternate 2 – Place a signal at the intersection of the I-75 Ramp and Mt. Paran Rd. This alternative was dismissed due to the location of the proximity of the signalized intersection at Mt. Paran Rd & Northside Pkwy and at the I-75 NB Ramp & Mt. Paran Rd. This new signal would be approximately 400-ft from the Northside Pkwy signal and approximately 310-ft from the I-75 NB Ramp signal which would be too close either signal to be an efficient operation.
- Alternate 3 – Install a roundabout at the intersection of the I-75 SB ramp and Mt. Paran Rd. This alternative was dismissed due to proximity of the signalized intersection at Mt. Paran Rd & Northside Pkwy, and a roundabout would not have satisfied the Need & Purpose of this project.

Comments: None

Attachments:

1. Cost Estimates:
 - a. Construction,
 - b. Utilities, and
 - c. ~~Analysis~~ "CE" Adjustments
 2. Typical sections,
 3. Traffic Data
- 60""RtqlgevNc{qwlRrçp"Uj ggvu"

Exempt projects

Concur: 
Director of Engineering

Approve:  Date: 4-10-12
Chief Engineer

STATE HIGHWAY AGENCY

DATE : 03/27/2012

PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0009678_OAO SPEC YEAR: 01
 DESCRIPTION: I-75 @ MT PARAN RD

ITEMS FOR JOB 0009678_OAO

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - 0009678	1.000	30000.00	30000.00
0075	163-0232		AC	TEMPORARY GRASSING	1.000	420.40	420.40
0078	163-0550		EA	CONS & REM INLET SEDIMENT TRAP	6.000	120.93	725.58
0080	165-0105		EA	MAINT OF INLET SEDIMENT TRAP	6.000	59.10	354.65
0085	163-0240		TN	MULCH	35.000	214.55	7509.50
0095	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	530.000	2.86	1518.53
0100	163-0300		EA	CONSTRUCTION EXIT	2.000	1052.13	2104.26
0105	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	265.000	0.86	230.44
0110	165-0101		EA	MAINT OF CONST EXIT	2.000	447.06	894.13
0115	210-0100		LS	GRADING COMPLETE - 0009678	1.000	50000.00	50000.00
0120	310-1101		TN	GR AGGR BASE CRS, INCL MATL	855.000	20.16	17237.83
0125	402-1812		TN	RECYL AC LEVELING, INC BM&HL	45.000	76.17	3427.96
0130	402-3121		TN	RECYL AC 25MM SP, GP1/2, BM&HL	630.000	64.91	40895.25
0135	402-3130		TN	RECYL AC 12.5MM SP, GP2, BM&HL	710.000	69.27	49183.67
0140	402-3190		TN	RECYL AC 19 MM SP, GP 1 OR 2 , INC BM&HL	255.000	69.07	17614.69
0145	413-1000		GL	BITUM TACK COAT	185.000	2.81	520.37
0149	441-0104		SY	CONC SIDEWALK, 4 IN	36.000	44.14	1589.38
0150	441-0748		SY	CONC MEDIAN, 6 IN	635.000	35.32	22429.91
0155	441-6222		LF	CONC CURB & GUTTER/ 8"X30"TP2	975.000	13.24	12911.05
0160	446-1100		LF	PVMT REF FAB STRIPS, TP2, 18 INCH WIDTH	1000.000	4.98	4989.43
0168	621-6210		LF	CONC SIDE BARRIER, TP 6-S	60.000	300.00	18000.00
0169	621-6211		LF	CONC SIDE BARRIER, TP 6-SA	65.000	323.03	20996.95
0170	550-1180		LF	STM DR PIPE 18", H 1-10	462.000	31.30	14463.65
0178	005-0002		LS	INSTALL/LIGHTING FACILITIES	1.000	34000.00	34000.00
0180	636-1033		SF	HWY SIGNS, TP1MAT, REFL SH TP 9	143.000	19.20	2746.91
0185	636-2070		LF	GALV STEEL POSTS, TP 7	213.000	7.62	1624.41
0190	639-2002		LF	STEEL WIRE STRAND CABLE, 3/8"	260.000	3.30	858.98
0194	652-0210		EA	PAVEMENT MARKING, WORD, TP 1	5.000	46.76	233.83
0195	639-5000		EA	PRESTRESSED CONC STR POLE, TP- IV	4.000	5369.68	21478.75
0200	641-1100		LF	GUARDRAIL, TP T	396.000	36.19	14332.30
0203	636-4104		EA	PLASTIC FLEX DELINEATOR, TP 2B	130.000	43.31	5630.91
0204	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	1.000	662.94	662.95
0205	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	3.000	1739.20	5217.62
0210	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	27800.00	27800.00
0213	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	75000.00	75000.00
0214	653-0110		EA	THERM PVMT MARK, ARROW, TP 1	3.000	73.23	219.72
0215	653-0120		EA	THERM PVMT MARK, ARROW, TP 2	10.000	71.35	713.57
0220	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	2883.000	0.44	1269.76
0225	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	1050.000	0.49	519.31
0230	653-1704		LF	THERM SOLID TRAF STRIPE, 24", WH	86.000	3.56	306.60
0235	653-3501		GLF	THERMO SKIP TRAF ST, 5 IN, WHI	320.000	0.37	121.57
0242	432-5010		SY	MILL ASPH CONC PVMT, VARB DEPTH	6220.000	2.83	17616.91

STATE HIGHWAY AGENCY

DATE : 03/27/2012

PAGE : 2

JOB ESTIMATE REPORT

0247	500-9999	CY	CL B CONC,BASE OR PVMT WIDEN	30.000	150.45	4513.69
0252	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	630.000	1.82	1152.13
0257	653-6004	SY	THERM TRAF STRIPING, WHITE	239.000	3.04	728.21
0262	654-1001	EA	RAISED PVMT MARKERS TP 1	12.000	5.01	60.22
0267	654-1003	EA	RAISED PVMT MARKERS TP 3	20.000	4.52	90.55
0272	668-1100	EA	CATCH BASIN, GP 1	3.000	2174.92	6524.77
0276	668-1110	LF	CATCH BASIN, GP 1, ADDL DEPTH	6.000	169.06	1014.41
0277	611-3000	EA	RECONSTR CATCH BASIN, GROUP 1	1.000	1522.82	1522.83
0282	668-2100	EA	DROP INLET, GP 1	4.000	1675.66	6702.67
0287	700-6910	AC	PERMANENT GRASSING	1.000	756.13	756.14
0292	700-8000	TN	FERTILIZER MIXED GRADE	1.000	424.26	424.27
0297	700-7000	TN	AGRICULTURAL LIME	2.000	109.66	219.32
0302	700-8100	LB	FERTILIZER NITROGEN CONTENT	400.000	1.87	750.24
0307	713-3001	SY	WOOD FIBER BLANKET,TP I,SLOPES	315.000	0.92	290.77
0322	402-0005	*\$*	ASPHALT CEMENT PRICE ADJUSTMENT	1.000	30501.53	30501.53

ITEM TOTAL						583623.48
INFLATED ITEM TOTAL						583623.48

TOTALS FOR JOB 0009678_OAO

ESTIMATED COST:						583623.48
E&I PERCENT (5.0):						29181.17
ESTIMATED TOTAL:						612804.65

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0009678 Fulton County
I-75 @ CR 624/MT PARAN RD
& SR 3/US 41@ CR 624/MT PARAN RD

OFFICE District 7
Chamblee

DATE November 18, 2011

FROM Jonathan Walker
District Utilities Engineer

TO Bobby Hilliard P.E., State Program Delivery Engineer
ATTN Sue Anne H. Decker, P.E., Project Manager

SUBJECT PRELIMINARY UTILITY COST (ESTIMATE)

As requested by your office, we are furnishing you with a Preliminary Utility Cost Estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE	GRAND TOTAL
Atlanta Gas Light Company	\$ 20,000.00	\$ 0.00	
AT&T Formerly BellSouth	\$ 45,000.00	\$ 0.00	
Fulton County Pub. Works	\$ 0.00	\$ 0.00	
Georgia Power Distribution	\$ 53,000.00	\$ 0.00	
Totals	\$ 118,000.00	\$ 0.00	<u>\$118,000.00</u>

If you have any questions, please contact Clyde Cunningham at 770-986-1117.

BRP/JW/YPF

C: Jeff Bakef, P.E., State Utilities Engineer
Angela Robinson, Office of Financial Management
Sebastian Nesbitt, Area Engineer

PROJ. NO.

[Redacted]

CALL NO.

9/29/2009

P.I. NO.

0009678

DATE

9/15/2011

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Sep-11	\$ 3.582
DIESEL		\$ 3.873
LIQUID AC		\$ 570.00

Link to Fuel and AC Index:

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

LIQUID AC ADJUSTMENTS

$PA = \left(\frac{APM - APL}{APL} \right) \times TMT \times APL$

Asphalt

Price Adjustment (PA)				10174.5	\$	10,174.50
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	912.00		
Monthly Asphalt Cement Price month project let (APL)			\$	570.00		
Total Monthly Tonnage of asphalt cement (TMT)				29.75		

ASPHALT	Tons	%AC	AC ton
Leveling	17	5.0%	0.85
12.5 OGFC	0	5.0%	0
12.5 mm	54	5.0%	2.7
9.5 mm SP	0	5.0%	0
25 mm SP	452	5.0%	22.6
19 mm SP	72	5.0%	3.6
	595		29.75

BITUMINOUS TACK COAT

Price Adjustment (PA)			\$	20.56	\$	20.56
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	912.00		
Monthly Asphalt Cement Price month project let (APL)			\$	570.00		
Total Monthly Tonnage of asphalt cement (TMT)				0.060131413		

Bitum Tack

Gals	gals/ton	tons
14	232.8234	0.06013141

PROJ. NO.

[Redacted]

CALL NO.

9/29/2009

P.I. NO.

0009678

DATE

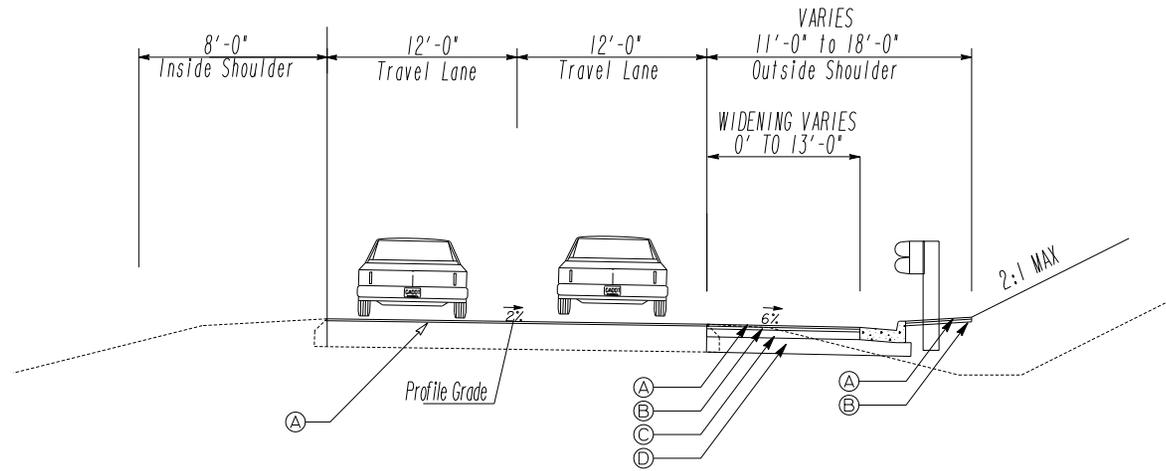
9/15/2011

BITUMINOUS TACK COAT (surface treatment)

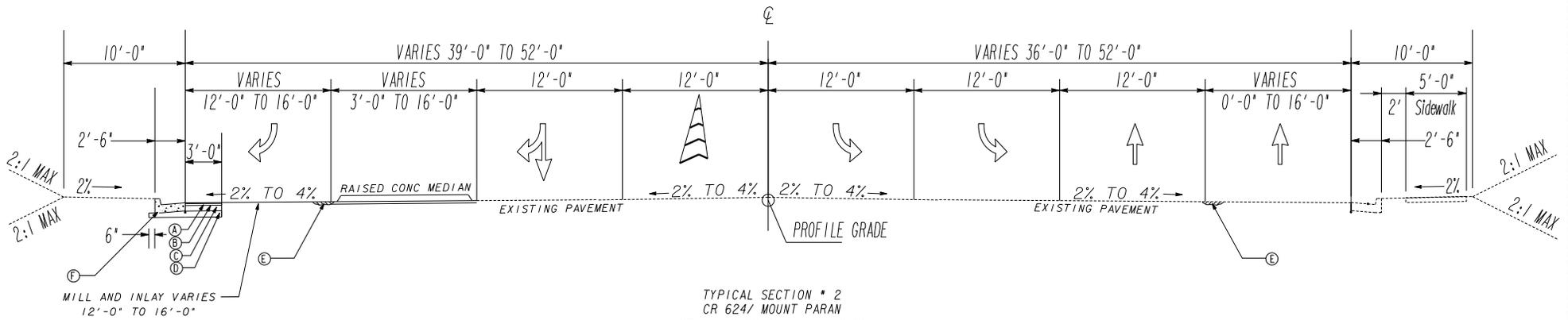
Price Adjustment (PA)						0	\$	-
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$		912.00		
Monthly Asphalt Cement Price month project let (APL)				\$		570.00		
Total Monthly Tonnage of asphalt cement (TMT)						0		

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.	[Redacted]	0.20	0	232.8234	0
Double Surf.Trmt.	[Redacted]	0.44	0	232.8234	0
Triple Surf. Trmt	[Redacted]	0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT	\$	10,195.06
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TYPICAL SECTION * 1
 1-75 MT. PARAN EXIT RAMP
 STA. 19+00.00 - 10+00.00



TYPICAL SECTION * 2
 CR 624/ MOUNT PARAN
 STA. 110+00.00 - 114+10.00

- (A) 165 LB/SY RECYCLED ASPHALTIC CONCRETE, 12.5 MM SUPERPAVE
- (B) 220 LB/SY RECYCLED ASPHALTIC CONCRETE, 19 MM SUPERPAVE
- (C) 770 LB/SY RECYCLED ASPHALTIC CONCRETE, 25 MM SUPERPAVE
- (D) GRADED AGGREGATE BASE, 12 IN.
- (E) LEVELING, AS REQUIRED
- (F) 6" X 30" CONCRETE CURB AND GUTTER, TYPE 2

Lanes, Volumes, Timings
34: Northside Pkwy & Mt Paran Rd

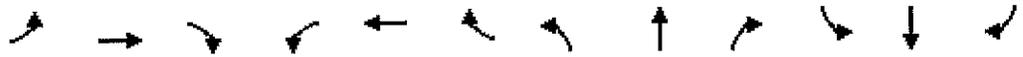
9/29/2011



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	1000	0	25	1000	0	20	30	0	150	100	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	300		250	0		0	0		0
Storage Lanes	1		0	1		1	1		0	2		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.97	0.95	0.95
Frt											0.993	0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	0	1770	3539	1863	1770	1863	0	3433	1757	1504
Flt Permitted	0.193			0.216			0.680			0.950		
Satd. Flow (perm)	360	5085	0	402	3539	1863	1267	1863	0	3433	1757	1504
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)											3	49
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		1564			378			481			552	
Travel Time (s)		21.3			5.2			10.9			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	1087	0	27	1087	0	22	33	0	163	109	54
Shared Lane Traffic (%)												10%
Lane Group Flow (vph)	27	1087	0	27	1087	0	22	33	0	163	114	49
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt			pm+pt		Perm	Perm			Prot		Perm
Protected Phases	1	6		5	2			4		3	8	
Permitted Phases	6			2		2	4					8
Detector Phase	1	6		5	2	2	4	4		3	8	8
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	10.0	22.0		10.0	22.0	22.0	22.0	22.0		10.0	22.0	22.0
Total Split (s)	18.0	44.0	0.0	18.0	44.0	44.0	18.0	18.0	0.0	25.0	43.0	43.0
Total Split (%)	17.1%	41.9%	0.0%	17.1%	41.9%	41.9%	17.1%	17.1%	0.0%	23.8%	41.0%	41.0%

Lanes, Volumes, Timings
34: Northside Pkwy & Mt Paran Rd

9/29/2011



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	12.0	38.0		12.0	38.0	38.0	12.0	12.0		19.0	37.0	37.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	Min	Min		None	Min	Min
Walk Time (s)		5.0			5.0	5.0	5.0	5.0			5.0	5.0
Flash Dont Walk (s)		11.0			11.0	11.0	11.0	11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0	0	0	0			0	0
Act Effct Green (s)	68.8	63.8		68.8	63.8		9.5	9.5		12.3	25.8	25.8
Actuated g/C Ratio	0.66	0.61		0.66	0.61		0.09	0.09		0.12	0.25	0.25
v/c Ratio	0.08	0.35		0.07	0.51		0.19	0.20		0.41	0.26	0.12
Control Delay	0.6	1.0		6.0	12.5		47.4	46.2		45.6	31.7	8.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	0.6	1.0		6.0	12.5		47.4	46.2		45.6	31.7	8.9
LOS	A	A		A	B		D	D		D	C	A
Approach Delay		1.0			12.3			46.7			35.2	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	0	15		5	386		14	21		53	63	0
Queue Length 95th (ft)	1	18		11	113		38	50		83	107	28
Internal Link Dist (ft)		1484			298			401			472	
Turn Bay Length (ft)	300			300								
Base Capacity (vph)	432	3088		455	2149		169	248		687	654	589
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.06	0.35		0.06	0.51		0.13	0.13		0.24	0.17	0.08

Intersection Summary

Area Type: Other

Cycle Length: 105

Actuated Cycle Length: 105

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 11.1

Intersection Capacity Utilization 45.3%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service A

Lanes, Volumes, Timings

34: Northside Pkwy & Mt Paran Rd

9/29/2011

Splits and Phases: 34: Northside Pkwy & Mt Paran Rd

 <p>ø1</p>	 <p>ø2</p>	 <p>ø3</p>	 <p>ø4</p>
<p>18 s</p>	<p>44 s</p>	<p>25 s</p>	<p>18 s</p>
 <p>ø5</p>	 <p>ø6</p>	 <p>ø8</p>	
<p>18 s</p>	<p>44 s</p>	<p>43 s</p>	

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

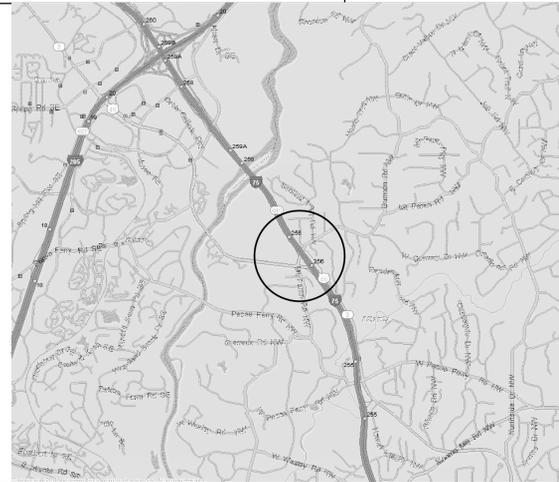
PLAN AND PROFILE OF PROPOSED I-75 @ CR 624/MT PARAN RD & SR 3/US @ CR 624/MT PARAN RD

FEDERAL AID PROJECT
FULTON
QUICK PROJECT

FEDERAL ROUTE * US 19 & I-75
STATE ROUTE * 3 & 401
P.J.NO. 0009678



NOTE :
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA"; "STATE HIGHWAY DEPARTMENT"; "GEORGIA STATE HIGHWAY DEPARTMENT"; "HIGHWAY DEPARTMENT"; OR "DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE STATE HIGHWAY DEPARTMENT OF GEORGIA, AND SHALL BE DEEMED TO MEAN THE DEPARTMENT OF TRANSPORTATION.

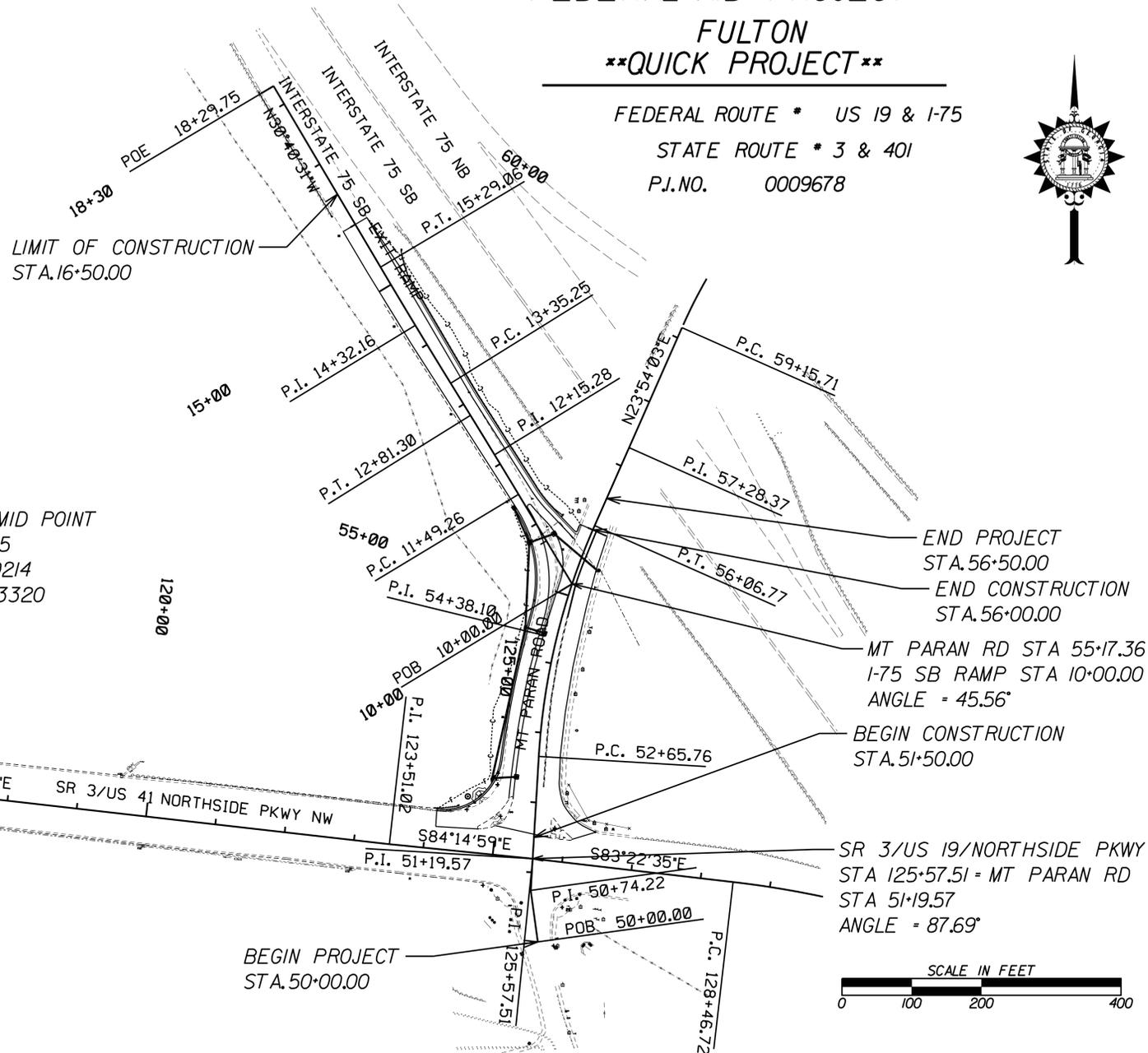


LOCATION SKETCH

DESIGN DATA:
 TRAFFIC A.D.T.: 2800 (2012)
 TRAFFIC A.D.T.: 3411 (2032)
 TRAFFIC D.H.V.: N/A
 DIRECTIONAL DIST: N/A
 % TRUCKS: 1.25%
 24 HR. TRUCKS %: 2%
 SPEED DESIGN: 55 MPH - I-75
 45 MPH - MT PARAN
 45 MPH - SR 3

LOCATION & DESIGN APPROVAL DATE: N/A
 FUNCTIONAL CLASS:
 URBAN COLLECTOR - MT PARAN RD
 URBAN MINOR ARTERIAL - SR 3
 URBAN INTERSTATE - I-75/SR 401
 THIS PROJECT IS 100% IN FULTON COUNTY AND IS 100% IN CONG. DIST. NO. 5.
 PROJECT DESIGNATION:
 DESIGNED IN ENGLISH UNITS.

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

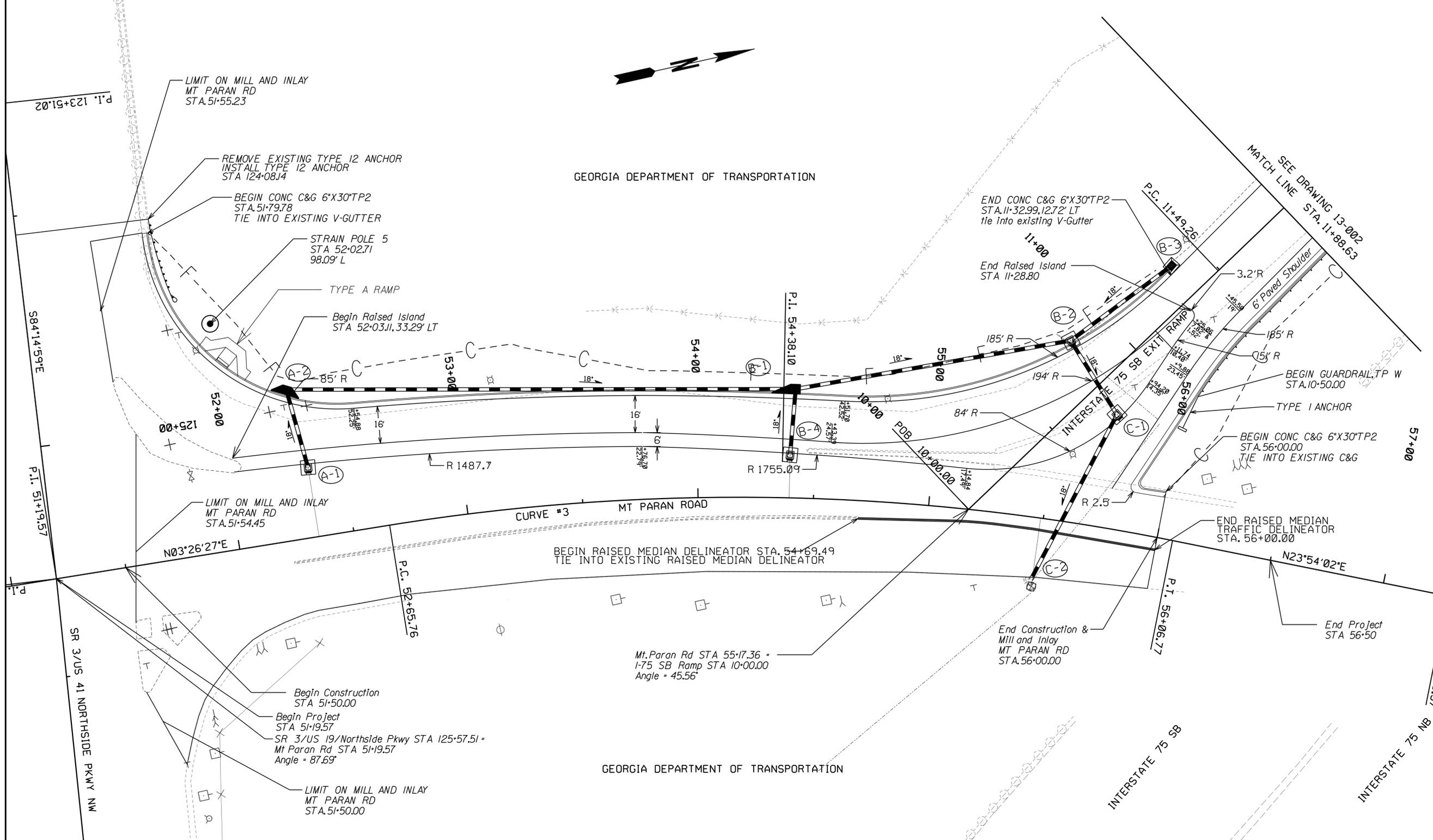


THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

PREPARED BY: OLADIMEJI ONABANJO
 DESIGN ENGINEER 2
 SUBMITTED BY: _____
 DISTRICT ENGINEER

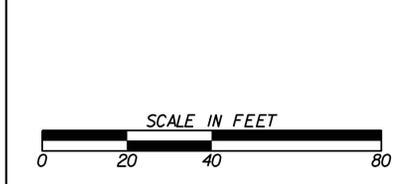
DATE	CHIEF ENGINEER
PLANS COMPLETED	- -
REVISIONS	

LENGTH OF PROJECT	FULTON COUNTY No. 121 Project No. 0009678
	MILES
NET LENGTH OF ROADWAY	0.246
NET LENGTH OF BRIDGES	0.000
NET LENGTH OF PROJECT	0.246
NET LENGTH OF EXCEPTIONS	0.000
GROSS LENGTH OF PROJECT	0.246



PROPERTY AND EXISTING R/W LINE	-----#-----
REQUIRED R/W LINE	-----
CONSTRUCTION LIMITS	---C---F---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF DRIVES	[Hatched Box]

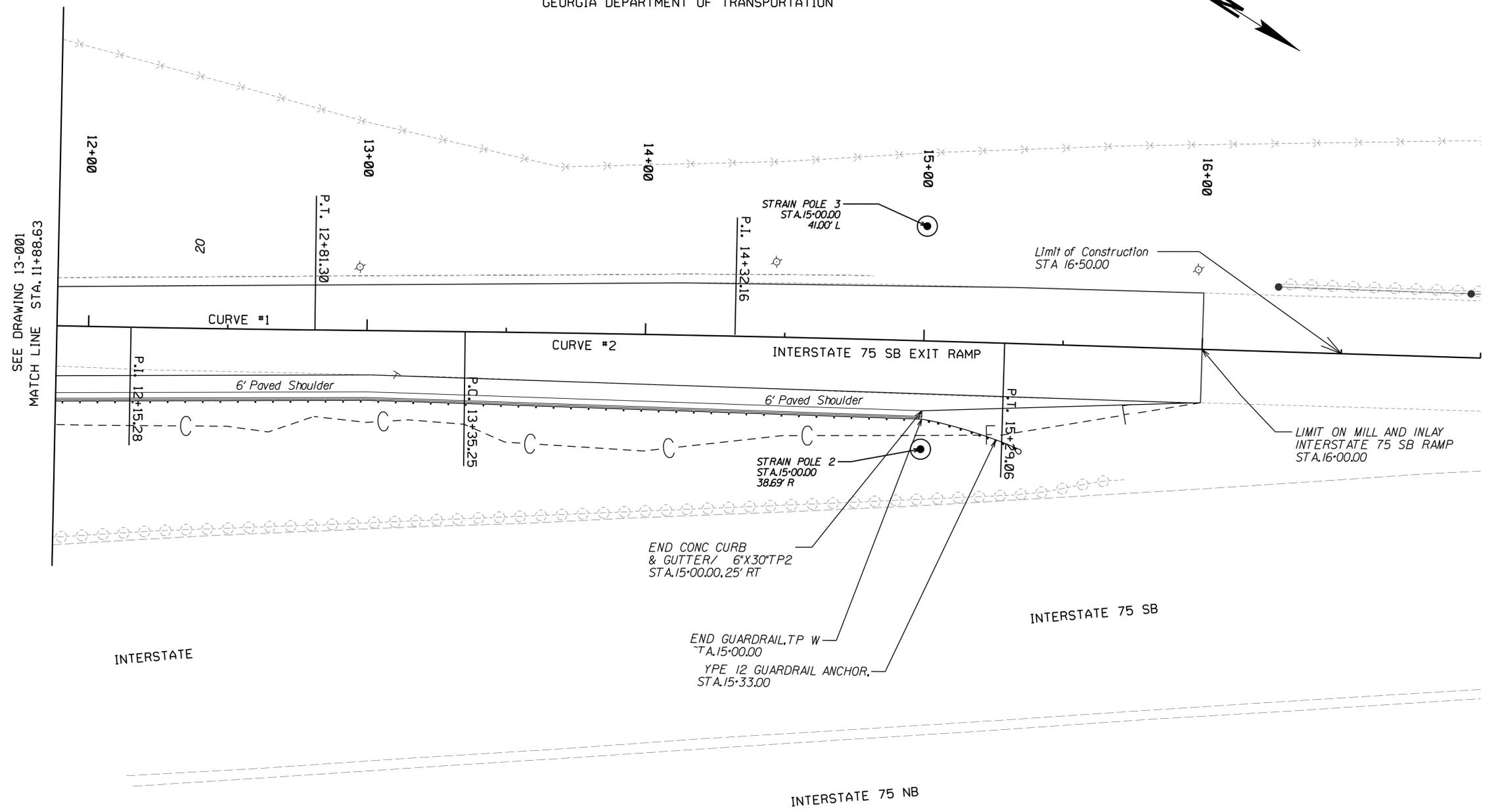
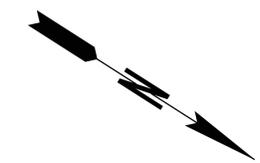
BEGIN LIMIT OF ACCESS.....BLA	-----
END LIMIT OF ACCESS.....ELA	-----
LIMIT OF ACCESS	-----
REQ'D R/W & LIMIT OF ACCESS	-----



REVISION DATES	

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: DISTRICT 7 DESIGN
MAINLINE PLAN
 I-75 SB @ MT PARAN RD
 DRAWING No. 13-001

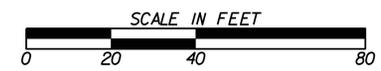
GEORGIA DEPARTMENT OF TRANSPORTATION



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

BEGIN LIMIT OF ACCESS.....BLA	—●—
END LIMIT OF ACCESS.....ELA	—○—
LIMIT OF ACCESS	—○—
REQ'D R/W & LIMIT OF ACCESS	— —

GEORGIA
DEPARTMENT
OF
TRANSPORTATION



REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT 7 DESIGN

MAINLINE PLAN

I-75 SB @ MT PARAN RD

DRAWING No.
13-002