

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** P. I. No. 722010, Fulton-Forsyth Counties **OFFICE** Preconstruction  
NH-0561-1(59)  
SR 400 Widening **DATE** September 9, 2005

**FROM** *for* *John Kunkle*  
Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**TO** SEE DISTRIBUTION

**SUBJECT APPROVED PROJECT CONCEPT REPORT**

Attached for your files is the approval for subject project.

MBP/cj

Attachment

**DISTRIBUTION:**

Brian Summers  
Harvey Keepler  
Ken Thompson  
Jamie Simpson  
Michael Henry  
Keith Golden  
Joe Palladi (file copy)  
Paul Liles  
Babs Abubakari  
Bryant Poole  
BOARD MEMBER  
FHWA

SAW THIS AS PART  
OF PAVEMENT  
DESIGN.

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

**FILE** P.I. No. 722010, Fulton-Forsyth Counties **OFFICE** Preconstruction  
 NH-0561-1(59)  
 GA 400 Widening **DATE** May 3, 2005

**FROM** *John Pirkle*  
 Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**TO** *for* David E. Studstill, Jr., P.E., Chief Engineer

**SUBJECT** PROJECT CONCEPT REPORT

This project is the widening of SR 400 to add lanes north and southbound in the median area only from south of Holcomb Bridge Road in Fulton County north to McFarland Road in Forsyth County. These are currently 3 lanes in each direction from Holcomb Bridge Road to Haynes Bridge Road with a 40' wide median and inside concrete shoulders 4' wide. From Haynes Bridge road to McFarland Road, there are 2 lanes in each direction with a 64' wide median and inside concrete shoulders 4' wide. The existing right-of-way varies from 300' to 500' and 900' to 1800' at the interchanges. The posted speed limit along the project length is 65 MPH. Georgia 400 north of I-285 is one of the most heavily congested corridors in the Atlanta region. The section of GA 400 north of the Chattahoochee River is particularly congested with daily delays, especially in the northbound direction in the afternoon peak hour. The congestion on GA 400 without substantial improvements is anticipated to get substantially worse with level of service (LOS) "F" throughout much of its length from north of McFarland Road to the Perimeter. The projected traffic volumes from just south of Holcomb Bridge Road are 218,000 AADT in 2010 and 237,270 AADT in 2025.

The construction proposes to add one and two lanes along sections of the northbound roadway and one lane along the southbound roadway. In addition, lane shifts to the mainline will be incorporated in the design to provide smooth transitions to the additional lanes. A fifth lane will be added on GA 400 just south of the Holcomb Bridge Road northbound to westbound exit ramp for lane balance to provide four lanes on the mainline and a two lane exit ramp. The proposed roadway widening will be constructed with concrete pavement at a 2% cross slope toward the median. There is no bridge construction or reconstruction proposed under this project since all mainline bridges over cross streets have already been widened. All of the proposed work will be done within the existing right-of-way and no utility impacts are anticipated. The construction in the median will be accomplished with temporary lane closures.

3 4 LANE  
ITS?

Environmental concerns include requiring a Categorical Exclusion be prepared; a public information open house has been held; time saving procedures are appropriate.

David Studstill

Page 2

P.I. No. 722010, Fulton-Forsyth

May 3, 2005

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C and inflation)	\$39,710,000	\$40,000,000	GRVA	2006
Right-of-Way & Utilities*	-0-	-0-		

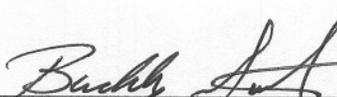
\*Notification letter sent to Forsyth-Fulton-Alpharetta 2-21-05.

I recommend this project concept be approved.

MBP:JDQ/cj

Attachment

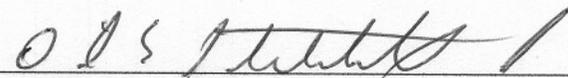
CONCUR

  
Buddy Gratton, P.E., Director of Preconstruction

APPROVE

  
For: Robert M. Callan, Administrator, FHWA

APPROVE

  
David E. Studstill, Jr., P.E., Chief Engineer

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN  
PROJECT CONCEPT REPORT**

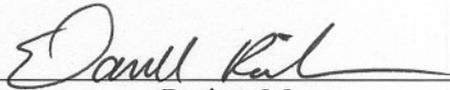
**NH-056-1(59)  
Fulton/Forsyth County  
P. I. Number: 722010**

**Federal Route Number: U.S. 19  
State Route Number: S.R. 400**

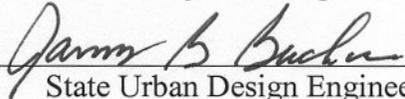
**GA 400 from south of Holcomb Bridge Road/Fulton County north to McFarland Road/Forsyth County**

Recommendation for approval:

DATE April 14, 2005

  
Project Manager

DATE April 14, 2005

  
State Urban Design Engineer

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 \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Financial Management Administration

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental/Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE \_\_\_\_\_

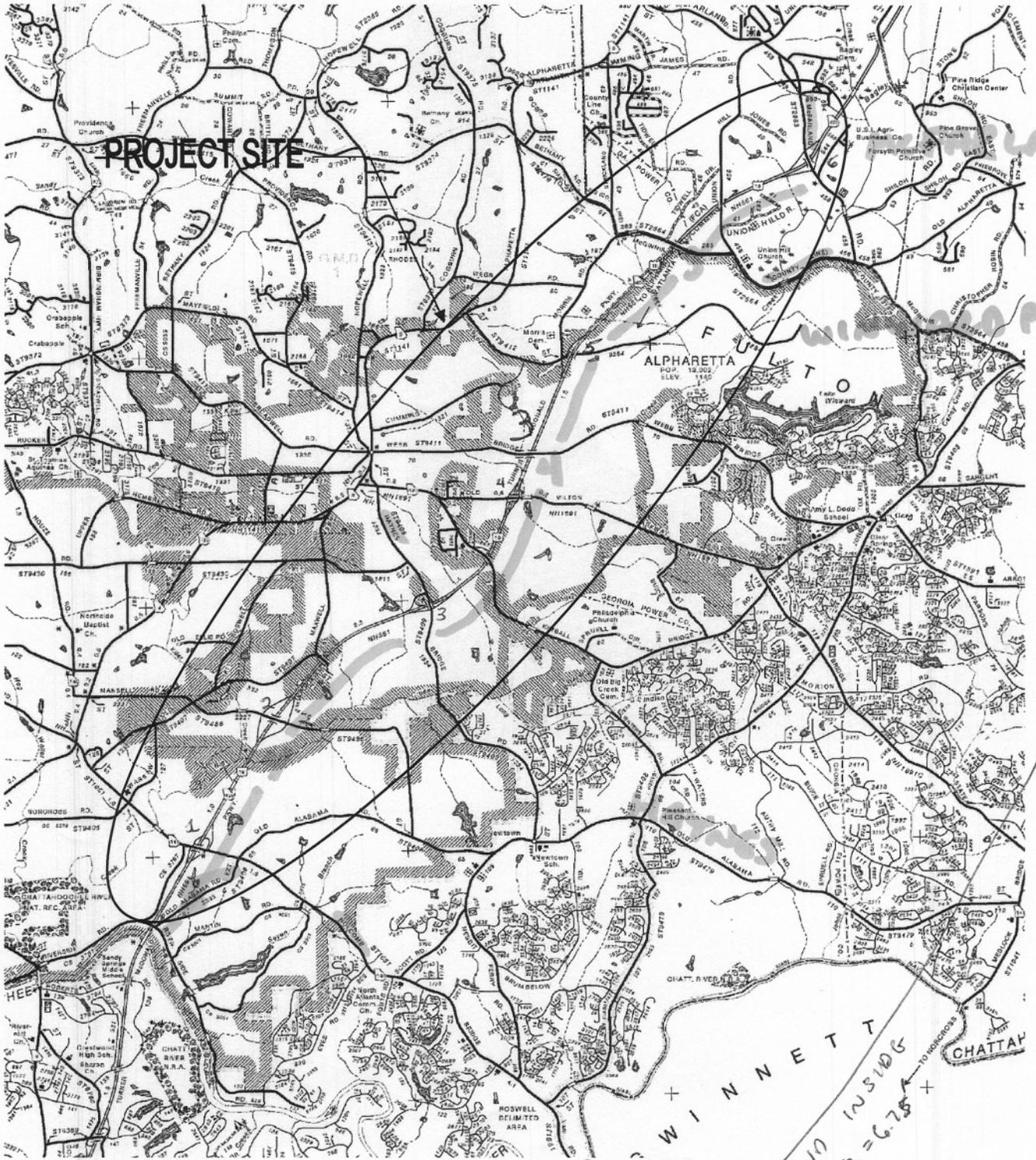
\_\_\_\_\_  
District 7 Engineer, Chamblee

DATE \_\_\_\_\_

\_\_\_\_\_  
District 1 Engineer, Gainesville

DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer



**Location Map**

Project: NH-056-1 (59), Fulton/Forsyth Co's., P.I. No. 722010

Description: GA 400 from south of Holcomb Bridge Road/Fulton County north to McFarland Road/Forsyth County

**Need and Purpose:** See Attachment.

**Description of the proposed project:** Project NH-056-1(59) is located along GA 400 in Fulton and Forsyth Counties. The proposed northbound and southbound lane additions to the GA 400 existing median area is intended to improve the safety and operations associated with the traffic in the GA 400 corridor. This project proposes to add one and two lanes along sections of the northbound roadway and one lane along the southbound roadway. In addition, lane shifts to the mainline will be incorporated in the design to provide smooth transitions to the additional lanes. A 5<sup>th</sup> lane will be added on GA 400 just south of the Holcomb Bridge Road NB to WB exit ramp for lane balance to provide 4 lanes on the mainline and a 2 lane exit ramp. IN  
OUT  
?

**Is the project located in a Non-attainment area?**  Yes  No. See Appendix I.

**PDP Classification:** Major  Minor

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

**Functional Classification:** GA 400/US 19.....Urban Principal Arterial

**U. S. Route Number(s) 19** **State Route Number(s): 400**

**Traffic (AADT):**

Roadway	<u>Design Year: (2010)</u>	<u>Design Year: (2025)</u>
U.S. 19 (GA 400)	218,000*	237,270*

\*These forecasts are based on the refined model developed for the Northern Sub-Area/GA 400 Study

**Existing design features:**

- Typical Sections:

Holcomb Bridge Road Interchange to south of Haynes Bridge Road Interchange: The total median width is 40 feet wide (edge of inside travel lane to edge of inside travel lane) with 3-12 foot wide concrete travel lanes in both the north and southbound directions. The inside concrete paved shoulders are 4 feet wide and the paved outside shoulders are 12 foot wide (10 feet concrete extended with 2 feet of asphalt paving)

Haynes Bridge Road Interchange to McFarland Road Interchange: The total median width is 64 feet wide (edge of inside travel lane to edge of inside travel lane) with 2-12 foot wide concrete travel lanes in both the north and southbound directions. The inside concrete paved shoulders are 4 feet wide and the paved outside shoulders are 12 foot wide (10 feet concrete extended with 2 feet of asphalt paving)

<u>Roadway</u>	<u>Posted Speed</u>	<u>Min. Radius</u>	<u>Max. Grade</u>
S.R. 400/U.S.19 Mainline	65 mph	2292 Ft.	4.0%

- Width of right of way: Along S.R. 400/U.S.19: Varies 300 ft. - 500 ft.  
 At the Interchanges: Varies 900 ft. - 1800 ft.

- Major structures:

<u>Bridge</u>	<u>Struct. I.D.</u>	<u>Suff. Rating</u>	<u>Min. Vert. Cl.</u>	<u>NB Horiz. Cl.</u>	<u>SB Horiz.Cl.</u>
Holcomb Bridge Road	121-0086-0	85.15	16.45'SB	84.5'	84.5'
Big Creek Bridge	121-0127-0	83.44	N/A	N/A	N/A
Mansell Road Bridge	121-0732-0	88.86	N/A	N/A	N/A
Center Bridge/Maxwell Rd	121-0307-0	76.48	16.91'SB	85'	85'
Haynes Bridge Road	121-0303-0	96.58	18.75'NB	84.5'	84.5'
Kimball Bridge Road	121-0475-0	93.88	16.97'NB	85'	85'
Old Milton Parkway	121-0075-0	64.07	17.01'NB	84.5'	84.5'
Webb Bridge Road	121-0299-0	75.39	16.74'NB	84.5'	84.5'
Windward Parkway	121-5295-0	98.64	N/A	N/A	N/A
McGinnis Ferry Road	121-0285-0	95.63	16.45'NB	84.5'	84.5'
Union Hill Road	117-0031-0	74.56	17.15'SB	86'	86'
McFarland Road	117-0042-0	96.17	16.81'NB	86.5'	85'

- Major interchanges or intersections along the project:

- 1 Holcomb Bridge Road Modified Diamond Interchange
  - 2 Mansell Road Diamond Interchange
  - 3 Haynes Bridge Road Modified Diamond Interchange
  - 4 Old Milton Parkway Diamond Interchange
  - 5 Windward Parkway Diamond Interchange
  - 6 McFarland Road Diamond Interchange
- } BARRIER?  
 } BARRIER?

- Existing Roadway Length:

Begin Project south of Holcomb Bridge Road at Sta. 14+00 to End Project at Sta. 503+00 at McFarland Road interchange. 48,900 Lin Ft. = 9.261 miles

- Mile Point Reference:

S.R. 400/U.S 19 (Fulton County).....MP 13.960 to MP 22.470  
 S.R. 400/U.S.19 (Forsyth County)... MP 0.000 to MP 1.8000

**Proposed Design Features:**

- Proposed typical sections:

Northbound S.R.400:

- From Begin Project at 0.13 miles south of Holcomb Bridge, to 0.27 miles south of Haynes Bridge Road widen the existing travel lanes in the median to provide one(1) additional 12 Ft wide travel lane (Total 4-12 Ft. wide travel lanes)
- From 0.27 miles south of Haynes Bridge Road to 0.27 miles north of Windward Parkway widen existing S.R. 400 travel lanes in the median to provide two(2) additional 12 Ft wide travel lane (Total 4-12 Ft. wide travel lanes)
- From 0.27 miles north of Windward Parkway to the End Project at 0.16 miles north of McFarland Road widen the existing travel lanes in the median to provide one(1) additional 12 Ft wide travel lane (Total 3-12 Ft. wide travel lanes)

*BARRIER?*  
*BARRIER?*

*40' MED*  
*64' MED*  
*64' MED*

Southbound S.R.400:

- From 0.36 miles south of Haynes Bridge Road to 0.03 miles north of McFarland Road widen existing travel lanes in the median to provide one (1) additional 12 Ft wide travel lane (Total 3-12 Ft. wide travel lanes); The median will be enclosed with full depth pavement and striped out for future use.

• <u>Roadway</u>	<u>Design</u>	<u>Max.</u>	<u>Max. Grade</u>	<u>Min. Radius</u>	<u>Allowable</u>
	<u>Speed</u>	<u>Grade</u>	<u>Allowable</u>		<u>Min. Radius</u>
S.R.400/U.S. 19	65 mph	4.0%	4.5%	2292'	1485'

- Proposed Maximum grade driveway: None Anticipated

- Right of way : None Anticipated

- Easements: Temporary ( ), Permanent ( ), Utility ( ), Other ( )
- Type of access control:  
 Urban Principal Arterial Full (X), Partial ( ), By Permit ( ), Other ( )
- Number of parcels: 0  
 Number of displacements:
  - Business: \_\_\_\_\_
  - Residences: \_\_\_\_\_
  - Mobile homes: \_\_\_\_\_
  - Other: \_\_\_\_\_

- Structures:

- Bridges: None Anticipated
- Noise Walls: Location varies from along the shoulder to the toe of slope

<u>Location</u>	<u>Length</u>	<u>Height</u>
Wall No. 1: North of Holcomb Bridge Rd SB side	3850'	Var. 10'to30'
Wall No. 2: Holcomb Bridge Rd NB exit ramp	2657'	Var. 8'to24'
Wall No. 3: South of Holcomb Bridge Rd SB side	(Wall Not Cost Effective)	
*Wall No. 4: Old Milton Pkwy NB entrance ramp	1496'	Var. 8'to12'
Wall No. 5: Old Milton Pkwy SB entrance ramp	(Wall Not Cost Effective)	
Wall No. 6: South of McGinnis Ferry Rd SB side	2303'	Var. 8'to18'
*Wall No. 7: Windward Pkwy NB exit ramp	945'	Var. 12'to18'

\* When evaluating the noise wall locations, an assumed barrier separated HOV build alternative was reviewed. Where practical, the wall alignment was selected to accommodate the anticipated ultimate HOV build alternative, in order to reduce the throw-away-cost by the time this alternative is constructed. However, there were some areas in which existing environmental conditions and right-of-way restrictions would prohibit constructing the noise walls to accommodate the anticipated ultimate HOV build alternative. Noise walls 4 and 7 would require additional right-of-way to locate outside the assumed HOV alternative.

- Major intersections and interchanges:

A 5<sup>th</sup> lane will be added on GA 400 just south of the Holcomb Bridge Road NB to WB exit ramp for lane balance to provide 4 lanes on the mainline and a 2 lane exit ramp.

SK POINT IS? WE WOULD/WILL TAKE THEM OUT FOR HOV

?

- Traffic control during construction: Staged construction with inside lane closures will be required and any temporary lane closures will be structured to minimize disruption to traffic flow.
- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT:	( )	( )	(x)
ROADWAY WIDTH:	( )	( )	(x)
*SHOULDER WIDTH:	( )	(X)	( )
VERTICAL GRADES:	( )	( )	(x)
CROSS SLOPES:	( )	( )	(x)
STOPPING SIGHT DISTANCE:	( )	( )	(x)
SUPERELEVATION RATES:	( )	( )	(x)
HORIZONTAL CLEARANCE:	( )	( )	(x)
SPEED DESIGN:	( )	( )	(x)
VERTICAL CLEARANCE:	( )	( )	(x)
BRIDGE WIDTH:	( )	( )	(x)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(x)

*How?* \*Under the proposed project the northbound inside shoulder width would become 6'-10" from Holcomb Bridge Road to Windward parkway, which is less than recommended by AASHTO for this type of facility.

*DESIGN EXCEPTION REQ'D*

- Design Variances: None Anticipated
- Accident Analysis: All segments of S.R. 400 located between each of the listed interchanges exceed the three (3) year average Statewide Crash Rate Ratio with the exception of the segment from Windward Parkway to McFarland Road near the north end of the project.

Based on the reviewed data from the documented crashes obtained from GDOT for the referenced three-year period, the majority of the accidents (69.18% or 2,029 out of the total number crashes) are rear-end crashes. This type of crash is often related to the stop-and-go condition of heavily traveled segments and with congested conditions in general.

Angle and sideswipe crashes are respectively the second and third highest ranked type of accident, and combined account for 20.39% of the total number of crashes. These types of accidents are also related to congested conditions when the number of sudden lane changes increases along with delays and driver's frustration.

These findings are also consistent with the results of the daily trend analysis, which showed that almost half of the accidents daily total (44%) occurred during the AM and PM peak periods, and with the fact that more than 72% of the accidents are property damage only, which are usually the result of the low speeds that accompany congested conditions.

As far as the locations analyzed, it was found that the majority of the segments may be classified as High Accident Locations. Particularly dangerous is the segment between Holcomb Bridge and Mansell Road (Safety Ratio of 1.722), which also presents the highest occurrence of almost all types of crashes; namely: rear-end crashes, sideswipe and angle crashes. It is also the segment with more fatalities.

The crash patterns described above suggest a strong relationship between peak periods' congested conditions and high accident locations.

- Environmental concerns:
  - UST/Hazardous Waste Site:
    - None Anticipated
  - Natural Resources:
    - None Anticipated
  - Permits:
    - None Anticipated
- Level of environmental analysis:
  - Are Time Savings Procedures appropriate? Yes ( ), No (X),
  - Categorical Exclusion (X ),
  - Environmental Assessment/Finding of No Significant Impact ( ) FONSI ( ), or
  - Environmental Impact Statement (EIS) ( ).
- Utility involvements: None Anticipated

**Project responsibilities:**

- Design: **GRTA/GDOT**
- Right of Way Acquisition: None Required or Anticipated
- Relocation of Utilities: GDOT (however None Anticipated)
- Letting to contract: GDOT Contracts Office
- Supervision of construction: GDOT Construction Office
- Providing material pits: Contractor
- Providing detours: Consultant Designer

**Coordination**

- Initial Concept Meeting: N/A
- Concept meeting date and brief summary. March 9, 2005 (meeting minutes attached)
- P. A. R. Meetings: None Anticipated
- FEMA, USCG, and/or TVA
- Public involvement: PIOH Scheduled for April 11, 2005
- Local government comments:
- Other projects in the area: NHS-M001-00(752), Fulton Co., Outside Shoulder Replacement NB & SB (Under Construction); STP-0007-00(239), Fulton Co., SB Exit Ramp to Holcomb Bridge Road (Under Design)
- Other coordination to date: Initial Project Coordination Meeting 4/20/04 (minutes attached)
- Critical Path Milestones:
  - Environmental Document Approval Anticipated By – 4/29/05
  - Field Plan Review – Beginning of May 2005
  - Submit Final Plans to Contracts By – 6/10/05
  - Project Let – 8/19/05

### Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 4 Months.
- Time to complete preliminary construction plans: 3 Months.
- Time to complete right of way plans: N/A Months.
- Time to complete the Section 404 Permit: N/A Months.
- Time to complete final construction plans: 2 Months.
- Time to complete to purchase right of way: N/A Months.
- List other major items that will affect the project schedule: N/A Months.

### Other alternates considered:

1. No Build
2. Two alternates were investigated for the north and south bound lane additions to the median of S.R. 400/U.S. 19

**(2b)** Enclose the median utilizing concrete barrier between the NB and SB lanes from the beginning of the project to Windward Parkway and using full depth pavement for the inside shoulder areas. From Windward Parkway to the end of the project at McFarland Rd., reconstruct the median to provide full depth shoulder paving with slopes utilizing guardrail with extra depth post and a grassed median ditch.

**(2c)** Enclose the median utilizing concrete barrier between the NB and SB lanes from the beginning of the project to Windward Parkway and using shoulder depth pavement for the inside shoulder areas. From Windward Parkway to the end of the project at McFarland Rd., reconstruct the median to provide shoulder depth paving with slopes utilizing guardrail with extra depth post and a grassed median ditch. ?

**Comments:** On all alternates except the No Build the existing NB and SB inside concrete shoulders are to be removed from the beginning to the end of the project. All of the alternates proposed, add the additional lanes to the median NB and SB in the areas along the project as recommended by the approved Northern Sub-Area/GA 400 corridor study. Alternate **2a** is recommended and is noted as the proposed design in the concept report. Alternate **2a** would enclose the median utilizing concrete barrier between the NB and SB lanes and using full depth pavement for the inside shoulder areas. The additional costs to provide concrete barrier between Windward Parkway and McFarland Road is estimated to be \$5 million. The preferred alternate was chosen considering the minimum additional costs and the added safety to the facility. Also, the new pavement can be utilized for the future proposed HOV project and for construction staging along GA 400.

### Attachments:

- A. Need and Purpose Statement
- B. Accident Summary
- C. Cost Estimates:
  - a. Construction including E&C,
  - b. Right of Way, and
  - c. Utilities.
- D. Typical Sections
- E. Minutes of Concept Meeting
- F. Traffic Diagrams

2a NOT DESCRIBED !!  
BARRIER ALONG  
ENTIRE LENGTH?  
AS WELL AS FULL DEPTH  
PAVEMENT.

## NEED AND PURPOSE STATEMENT

Georgia 400 north of I-285 is one of the most heavily congested corridors in the Atlanta Region. The section of GA 400 north of the Chattahoochee River is particularly congested with daily delays, particularly in the northbound direction in the afternoon peak hour. Much of this delay is caused by lane drops at Holcomb Bridge Road where the northbound roadway drops from four to three lanes and again at Haynes Bridge Road where the northbound roadway drops again from three to two lanes. The congestion in the AM peak hour is not quite as severe with travel congestion somewhat less than in the PM peak hour as is typical on most urban freeways. The proposed traffic volumes just south of Holcomb Bridge Road are 218,000 AADT in 2010 and 237,270 AADT in 2025. These forecasts are based on the refined model developed for the NSAS/GA400 Study.

Based on a set of "short term" recommendations developed through the Northern Sub-Area/GA400 Study, GDOT and GRTA are pursuing the addition of lanes to the median area of GA400. On the north bound side of GA 400 the following lane additions are proposed:

- One lane to be added from Holcomb Bridge Road north to Haynes Bridge (3 lanes to 4 lanes)
- Two lanes to be added from Haynes Bridge Road to Windward Parkway (2 lanes to four lanes)
- One lane to be added from Windward Parkway to McFarland Road.

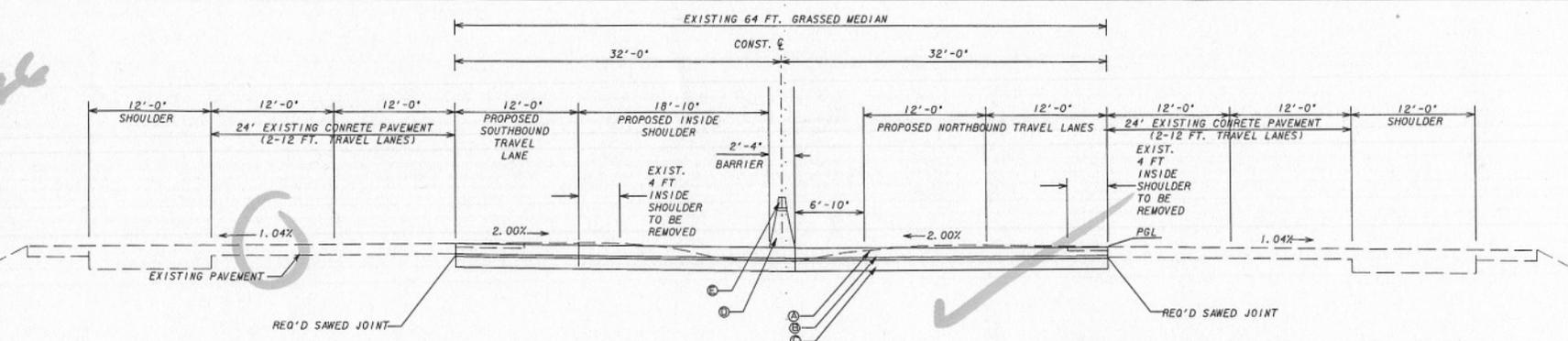
On the south bound side of GA400 a single lane is to be added from Haynes Bridge Road to McFarland Road. The additional southbound lane from Windward Parkway to Holcomb Bridge Road was not recommended to avoid a projected congestion point at Holcomb Bridge Road. The equivalent of three lanes of traffic are added at Holcomb Bridge Road and the addition of an extra lane of traffic moving south through the interchange was expected to exacerbate an already difficult traffic merge. South of Holcomb Bridge Road the south bound on-ramp to GA 400 was recommended to be extended to the River to ease the transition of traffic into GA 400.

*SPACING IMPACTS OUT*  
*IS SBND RAMP SEPARATED FROM MAINLINE ALL WAY TO RWBY?*

The congestion on GA400 without substantial improvements is anticipated to get substantially worse with levels of service F throughout much of its length from north of McFarland Road to the Perimeter. Traffic is anticipated to be at the highest in the PM peak period, particularly in the in-bound direction, as is typical in other Atlanta freeway corridors. Throughout much of the length of the corridor the inbound lanes are expected to operate at level of service F, breakdown conditions.

**DRAWING OK**

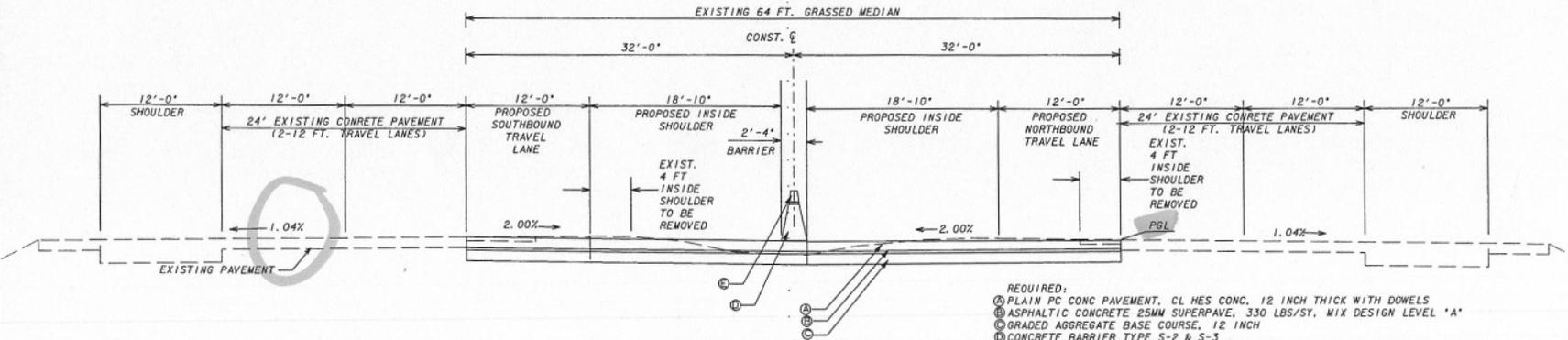
**DRAWING OK**



**TS-3**  
 FROM JUST NORTH OF HAYNES BRIDGE ROAD  
 TO WINDWARD PARKWAY

- REQUIRED:**
- Ⓐ PLAIN PC CONC PAVEMENT, CL HES CONC, 12 INCH THICK WITH DOWELS
  - Ⓑ ASPHALTIC CONCRETE 25MM SUPERPAVE, 330 LBS/SY, MIX DESIGN LEVEL 'A'
  - Ⓒ GRADED AGGREGATE BASE COURSE, 12 INCH
  - Ⓓ CONCRETE BARRIER TYPE S-2 & S-3
  - Ⓔ 27" GLARE SCREEN (GA STD. 4940)

**NOTE:**  
 REQ'D DOWEL BAR DIAMETER-11/2"  
 REQ'D MAXIMUM JOINT SPACING 15'-0"



**TS-4**  
 WINDWARD PARKWAY TO McFARLAND ROAD

- REQUIRED:**
- Ⓐ PLAIN PC CONC PAVEMENT, CL HES CONC, 12 INCH THICK WITH DOWELS
  - Ⓑ ASPHALTIC CONCRETE 25MM SUPERPAVE, 330 LBS/SY, MIX DESIGN LEVEL 'A'
  - Ⓒ GRADED AGGREGATE BASE COURSE, 12 INCH
  - Ⓓ CONCRETE BARRIER TYPE S-2 & S-3
  - Ⓔ 27" GLARE SCREEN (GA STD. 4940)

**NOTE:**  
 REQ'D DOWEL BAR DIAMETER-11/2"  
 REQ'D MAXIMUM JOINT SPACING 15'-0"

REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: URBAN DESIGN  
 TYPICAL SECTIONS



Parsons  
Brinckerhoff

3340 Peachtree Road, NE  
Suite 2400, Tower Place  
Atlanta, GA 30326-1001  
404-237-2115  
Fax 404-237-3015

## Memorandum of Meeting

**Date:** March 30, 2005  
**Meeting Date:** March 9, 2005  
**Project:** GA 400 Improvements from Holcomb Bridge Road to McFarland Road  
**Location:** Georgia Department of Transportation Urban Design Office

### Attendees:

Ben Buchan, GDOT  
Bryant Poole, GDOT  
Darrell Richardson, GDOT  
Marvin Woodward, GRTA  
John Cunard, Forsyth Co.  
Antonio Valenzuelo, Fulton Co.  
Brent Cook, GDOT  
Jeff Jacques, GDOT  
Neil Kantner, GDOT  
Terri Pope, GDOT  
Bert Brantley, GDOT  
Marshall Troup, GDOT  
Mike Lobdell, GDOT  
Greg Hood, GDOT

Jonathan Cox, GDOT  
Derrick Cameron, GDOT  
Scott Zehngraff, GDOT  
Nabil Rand, GDOT  
Margaret Reitz, GDOT  
David Moyer, GDOT  
Brian Leavell, AGL  
Terry Kazmerzak PBQD  
Roger Palmer, PBQD  
Jim Graybeal, PBQD  
Daveitta Jenkins, PBQD  
Mary Best, PBQD  
Larry Saben, PBQD

**Distribution:** Attendees

A concept team meeting was held at the Georgia Department of Transportation Office of Urban Design (GDOT) on Wednesday, March 9, 2005 to discuss the GRTA task order project to add additional lanes in the median along GA 400. The purpose of the meeting was to present the proposed concept alternatives for the project. After introductions by all the attendees, the following items were discussed:

Darrell Richardson began the meeting by stating that the project was an interim widening project to add lanes north and southbound to the median area only from the Holcomb Bridge Road interchange north to the McFarland Road interchange in Forsyth County. Darrell noted that the project was scheduled for an August 2005 let date. He then introduced Daveitta Jenkins as the PB Project Manager to describe the proposed project improvements.

### Existing Design Features

Daveitta indicated that the interim widening project was intended to improve the safety and operations along this area of the corridor. She noted that the project has full



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oversight by FHWA. Daveitta presented the existing design features: There are currently 3 lanes in each direction from Holcomb Bridge Road to Haynes Bridge Road with a 40' wide median and inside concrete shoulders 4' wide. From Haynes Bridge to McFarland Road, there are 2 lanes in each direction with a 64' wide median and inside concrete shoulders 4' wide. The existing right-of-way varies along GA 400 from 300' to 500' and 900' to 1800' at the interchanges. The posted speed limit along the project length is 65mph.

### **Concept Alternatives**

Daveitta noted that the extent of the widening under this project will be lanes added to the median in the northbound and southbound directions from Holcomb Bridge Road to McFarland Road. The proposed widening will end north of McFarland Road and transition back to the existing 2 lane roadway section in each direction. The proposed roadway widening will be constructed with concrete pavement at a 2% cross slope toward the median. There is no bridge construction or reconstruction proposed under this project since all mainline bridges over cross streets have already been filled in. All of the proposed work will be done within the existing right-of-way and no utility impacts are anticipated. The construction in the median will be accomplished with temporary lane closures. Daveitta commented that the traffic data could be found in the concept report. The proposed concept alternatives were discussed in further detail:

**Northbound:** From the beginning of the project at Holcomb Bridge Road to Haynes Bridge Road, 1 lane will be added to the northbound median. At Holcomb Bridge Road a 5<sup>th</sup> lane will be added just south of the bridge for the purpose of lane balance to provide 5-lanes on the mainline and a 4-lane to a 2-lane split at the ramp juncture. Between Haynes Bridge Road to Windward Pkwy, 2 lanes will be added to the northbound median. From Windward Pkwy to McFarland Road, 1 lane will be added and then tapered back to the existing 2 lanes at McFarland Road.

**Southbound:** From McFarland Road to Haynes Bridge Road, 1 lane will be added to the SB median.

There were three alternatives considered in the concept report that varied the median treatment options along different segments of the project. The draft concept report recommended enclosing the median with concrete barrier from Holcomb Bridge Road to Windward Parkway and using full depth pavement for the inside shoulder. From Windward Parkway to McFarland Road the median would be reconstructed to provide full depth shoulder paving with slopes utilizing guardrail with extra depth posts. The estimated preliminary construction cost of this alternate is \$34.6 million. A recommendation was made and accepted during the comment period to enclose the median and provide full depth pavement from Holcomb Bridge Road to McFarland Road.

Daveitta noted that another feature of the project is 5 proposed noise walls. She commented that their placement and descriptions were available on the project layout and



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in the concept report.

### **Environmental Issues**

Daveitta noted that no environmental permits or impacts to natural resources are anticipated and that a Categorical Exclusion would be the appropriate level of analysis. Mary Best added that the environmental screening had been conducted to evaluate the impacts of the concept alternative. She indicated that a second check of the noise wall locations was in process to reconfirm that there were not any impacts to water resources.

### **Other Items of Concern**

Daveitta commented and Darrell agreed that everyone's cooperation and effort will be required to expedite the project for an August 2005 letting.

Daveitta noted that due to the size of the draft concept report some of the associated attachments were only distributed to Urban Design and not provided to all attendees. The final concept submittal will include a complete package.

A Public Information Open House (PIOH) is scheduled for April 11, 2005 at the Alpharetta Community Center.

The meeting was then turned back over to Darrell to receive comments and questions from attendees.

- A question on the cost of the noise walls was raised and Daveitta noted that the preliminary construction cost for the noise walls was estimated at \$3,000,000.
- A question was raised about the widening of the bridges and the existing bridge clearance. Darrell commented that all the bridges have already been widened and the bridge clearance checked.
- A comment was made that a schedule previously provided by the consultant noted an October 2005 letting. However, an August 2005 let date has been set.
- A comment was made to clarify the statement in the draft concept report regarding noise walls 4 and 7 and the impact of the future HOV project.
- Darrell indicated that a design exception would be required for the inside shoulder based on the proposed width of 6'-10".
- Antonio Valenzuelo from Fulton County had no comments.
- John Cunard from Forsyth County commented that the project limits should extend to S.R. 20 in Forsyth County.



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- David Moyer from Engineering Services indicated that there would need to be Value Engineering Study conducted for the project. It was also noted that the project could possibly be advanced through the preconstruction process by conducting a Preliminary Field Plan Review and possibly an email version of a Final Field Plan Review.
- Ben Buchan indicated that the critical project milestone dates should be noted in the concept report. Ben also questioned how the different median options presented in the concept report would affect the construction time.
- Marvin Woodward from GRTA indicated that the southbound exit ramp project at the Holcomb Bridge Road interchange should be let in conjunction with this project. He also noted that the shoulder widening project and ATMS project should be completed by this summer.
- Mike Lobdell, District 7 Preconstruction Engineer indicated that the District has a project currently under design to widen the southbound exit ramp to Holcomb Bridge Road.
- A representative from the GDOT Traffic Operations Office questioned whether the proposed concrete median barrier could be changed to the cable type guardrail north of Windward Parkway to the end of the project at McFarland Road. It was noted that the cable barrier is cheaper and easier to maintain, but the median would have to be regraded and drainage structures adjusted to provide the required 6:1 slopes. The additional cost to provide concrete barrier between Windward Parkway and McFarland Road is estimated to be \$5 million.
- Darrell made a recommendation to add full depth pavement for both the north and southbound median areas with concrete median barrier on GA 400 for the entire length of the project from Holcomb Bridge Road in Fulton County to McFarland Road in Forsyth County. There was a general consensus to support this recommendation.
- Mary noted that Jonathan Cox from OEL would receive the special studies the following week.
- It was noted that the PIOH handouts would be on GDOT letterhead.
- GRTA and GDOT would review the locations of the signs to be placed for the PIOH.
- A representative from District 7 commented that they have confirmed the court reporter for the PIOH.



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- It was indicated that District 7 would take the lead on the construction of the project to include the Forsyth County portion.
- Mary Best questioned which newspapers the PIOH announcement should be advertised. The response was the AJC, Roswell Review, and the Forsyth County News.
- Darrell indicated that the final plan presentation will be modified where possible since the project is fairly straight forward and not very complicated. Spreadsheets will be used to display the drainage and superelevation information and plan sheets will not be provided for the entire length of the project.
- The District 7 Engineer indicated that this section of the Ga. 400 corridor does not have any significant design related issues. He indicated that the additional drainage requirements for the project should be carefully addressed. If it is proposed to utilize any existing drainage structures, the drainage analysis should indicate that the existing drainage structures are adequate. Darrell noted that the consultant will verify that the existing outfalls are adequate and consider utilizing a larger pipe to provide a measure of detention for storm water runoff in the center rather than jack and bore under the pavement.
- Darrell made a comment to check the laneage at the ramp junctures for lane balance.

The foregoing is my understanding of the topics discussed. If you have any corrections or comments, please email them to Daveitta Jenkins at [jenkinsdav@pbworld.com](mailto:jenkinsdav@pbworld.com).

Sincerely,

**PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.**

Roger Palmer, P.E.  
Project Manager

RAP: dlj

# GEORGIA DEPARTMENT OF TRANSPORTATION

## MEETING/CONFERENCE RECORD OF ATTENDEES

PURPOSE: Concept Team Meeting CA 400 from Halcomb Bridge to McFarland  
 LOCATION: URBAN Rm 352  
 DATE: Mar 9, 2005 TIME: 10:00 AM  
 MODERATOR: Darrell Rufardso 1 of 2

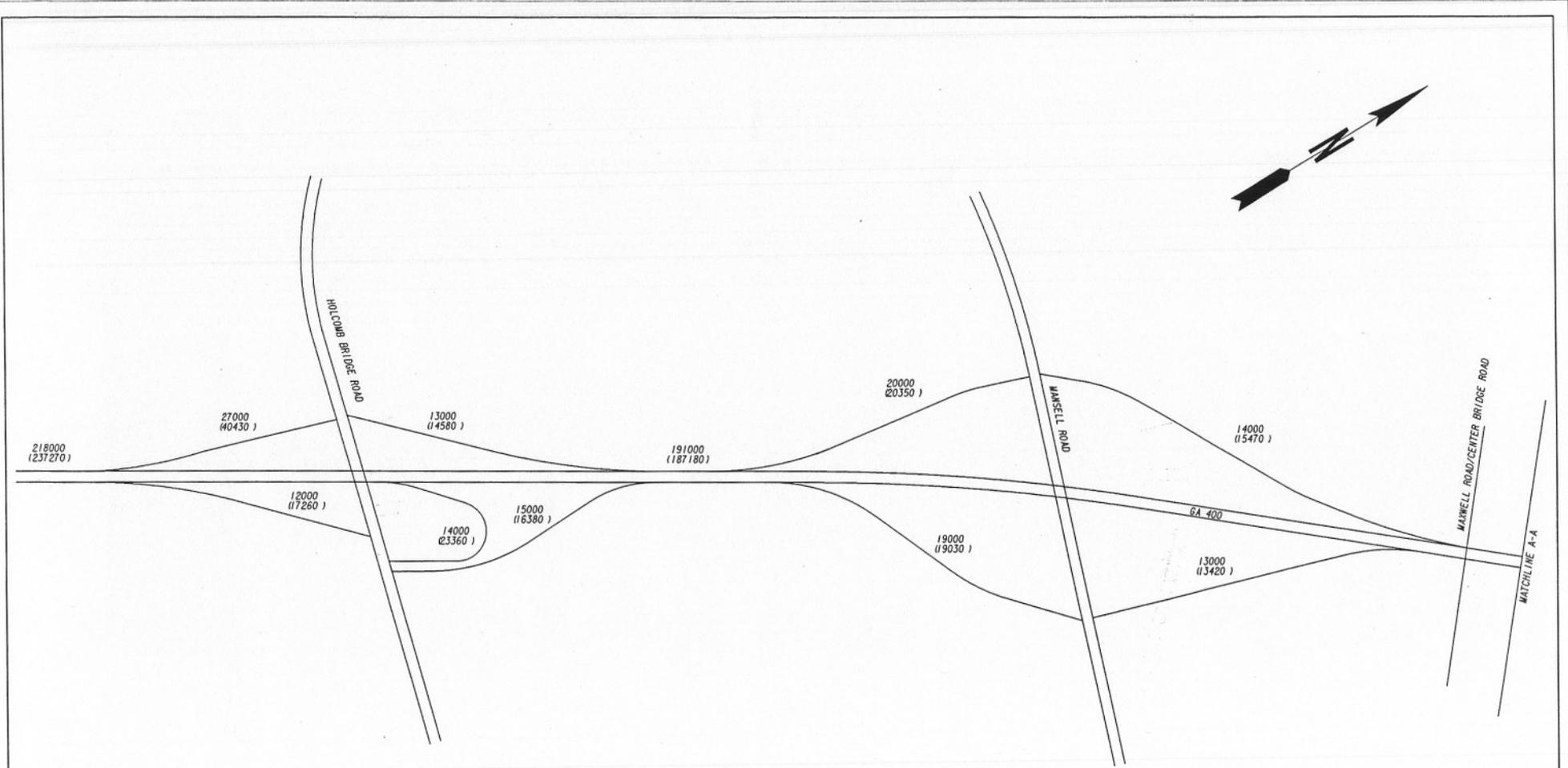
NAME	ORGANIZATION	PHONE NO.	E-MAIL ADDRESS <small>(DOT employees do not list e-mail)</small>
1. Brent Cook	District 1 - GDOT	770.532.5563	
2. Jeff Jacques	District 1 - GDOT	770 532 5541	
3. Neil Kantner	District 1 - GDOT	770-532-5520	
4. GREG HOOD	GDOT OEL	404-699-4404	
5. Jonathan Cox	GDOT-OEL	4)699-3475	
6. DERRICK CAMERON	GDOT-TS&D	404 635 8153	
7. SCOTT ZEHNGRAFF	GDOT-TS&D	4-635-8127	
8. Nabil Raad	GDOT OTS & D	4-635-8126	
9. MARGARET LEITE	GDOT-URBAN	4)-656-5440	
10. David Moyer	GDOT - Eng. Sec.	4-651-7481	
11. TERI POPE	GDOT-DISTRICT 1	7-718-3924	
12. BERT BRANTLEY	GDOT-COMMUNICATIONS	4-463-6462	
13. Marshall Troup	GDOT-D7	4-463-4947	
14. Mike Lobdell	GDOT-D7	4/463-4947	
15. MAMIE WOODWARD	GRTA	4/463-3099	
16. Jim Graybeal	PB	404-364-8190	
17. TERRY W. KAZMERZAK	PARSONS BRINCKERHOFF	404/237-2115	
18. WARETT SATTEN	"	404/264/2642	
19. ROGER PALMER	"	4)364-2658 palmer@pbworld.com	
20. Mary Best	"	4)364-2649 bestm@pbworld.com	

# GEORGIA DEPARTMENT OF TRANSPORTATION

## MEETING/CONFERENCE RECORD OF ATTENDEES

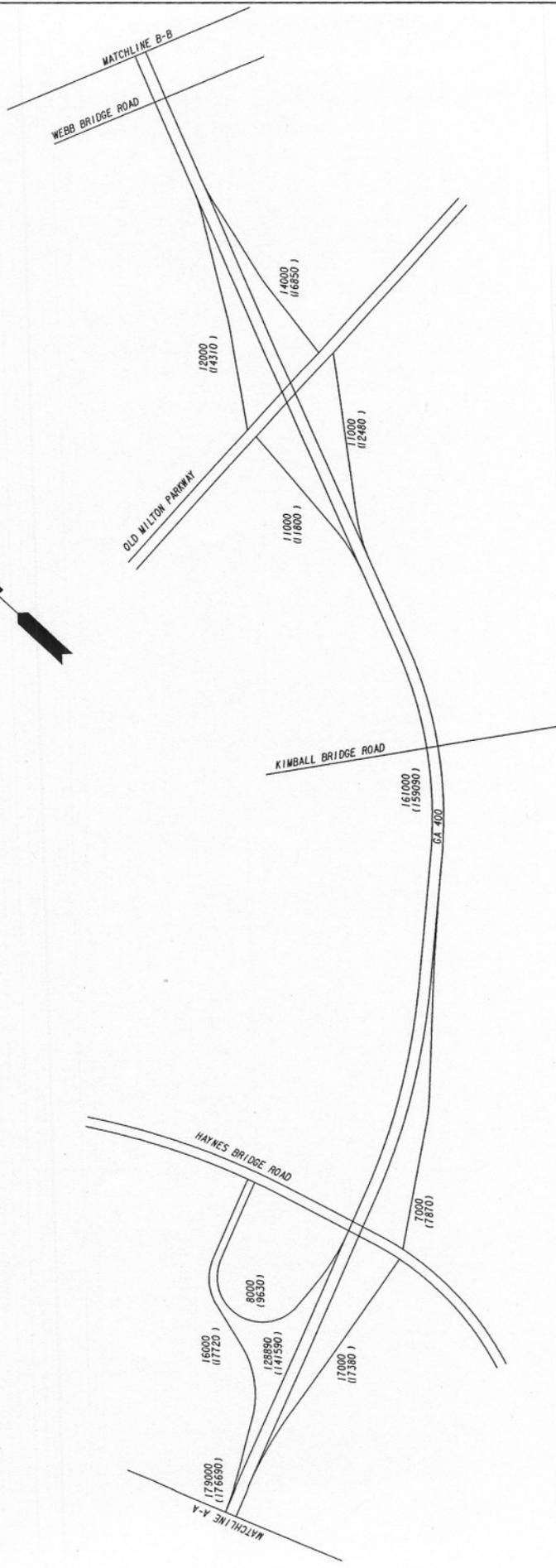
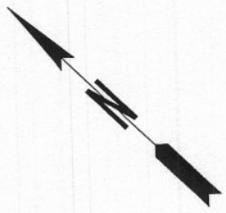
PURPOSE: Concept Team Meeting; GA 400 from Holcomb Bridge to M. Ferland  
 LOCATION: URBAN Rm 352  
 DATE: Mar 9, 2005 TIME: 10:00 Am  
 MODERATOR: Darrell Richardson 2 of 2

NAME	ORGANIZATION	PHONE NO.	E-MAIL ADDRESS
1. <u>BRIAN LEAVELL</u>	<u>AGL RESOURCES</u>	<u>404-584-4702</u>	<u>bleavell@AGLResources.com</u> <small>[DOT employees do not list e-mail]</small>
2. <u>BRYANT POOLE</u>	<u>GDOT</u>	<u>770-986-1001</u>	<u>bryant.poole@dot.state.ga.us</u>
3. <u>JOHN CUNARD</u>	<u>FORSYTH COUNTY</u>	<u>770-886-2785</u>	<u>JVCUNARD@FORSYTH.CO.COM</u>
4. <u>ANTONIO VALENZUELA</u>	<u>FULTON COUNTY</u>	<u>4-224-0520</u>	<u>Antonio.Valenzuela@CO.FULTON.GA.US</u>
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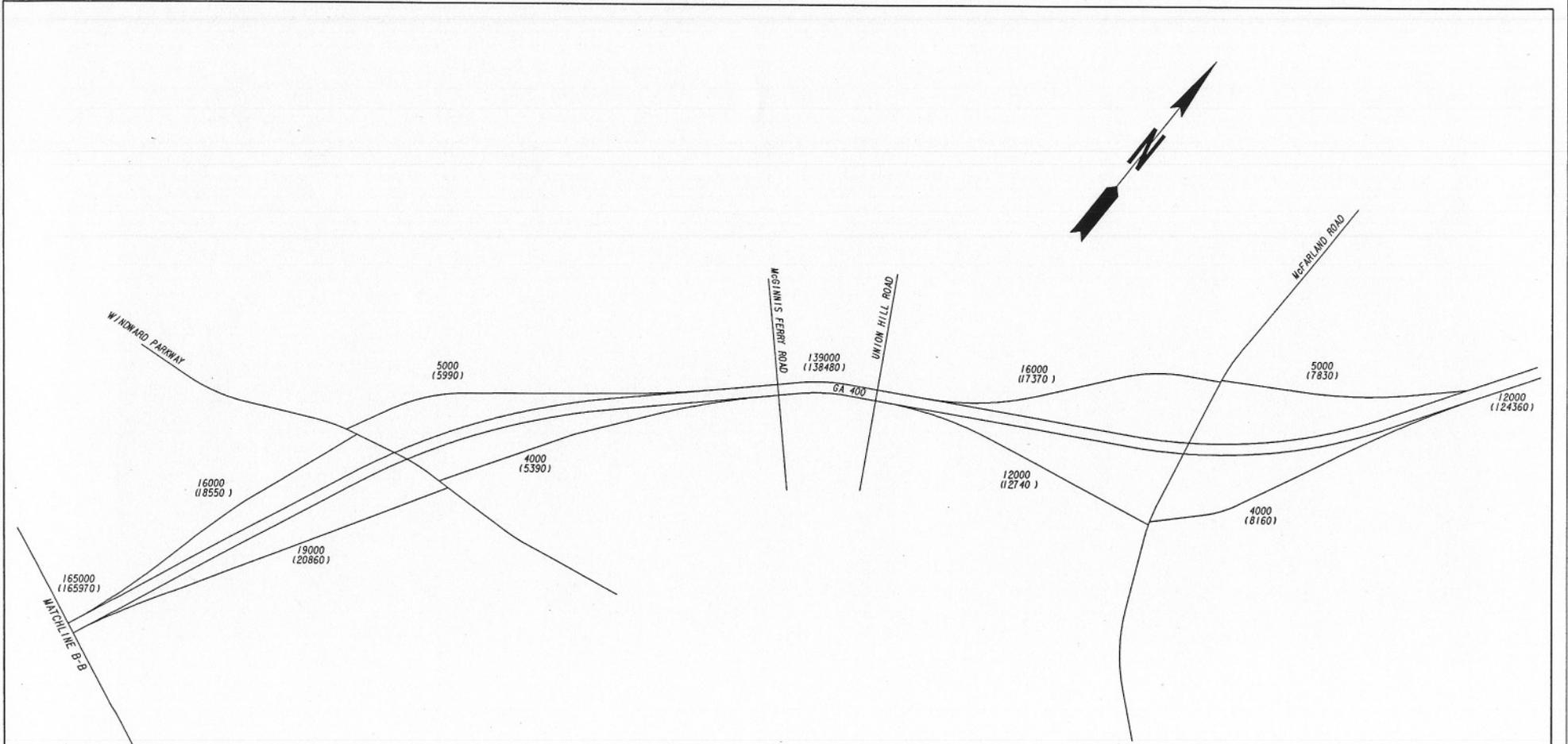
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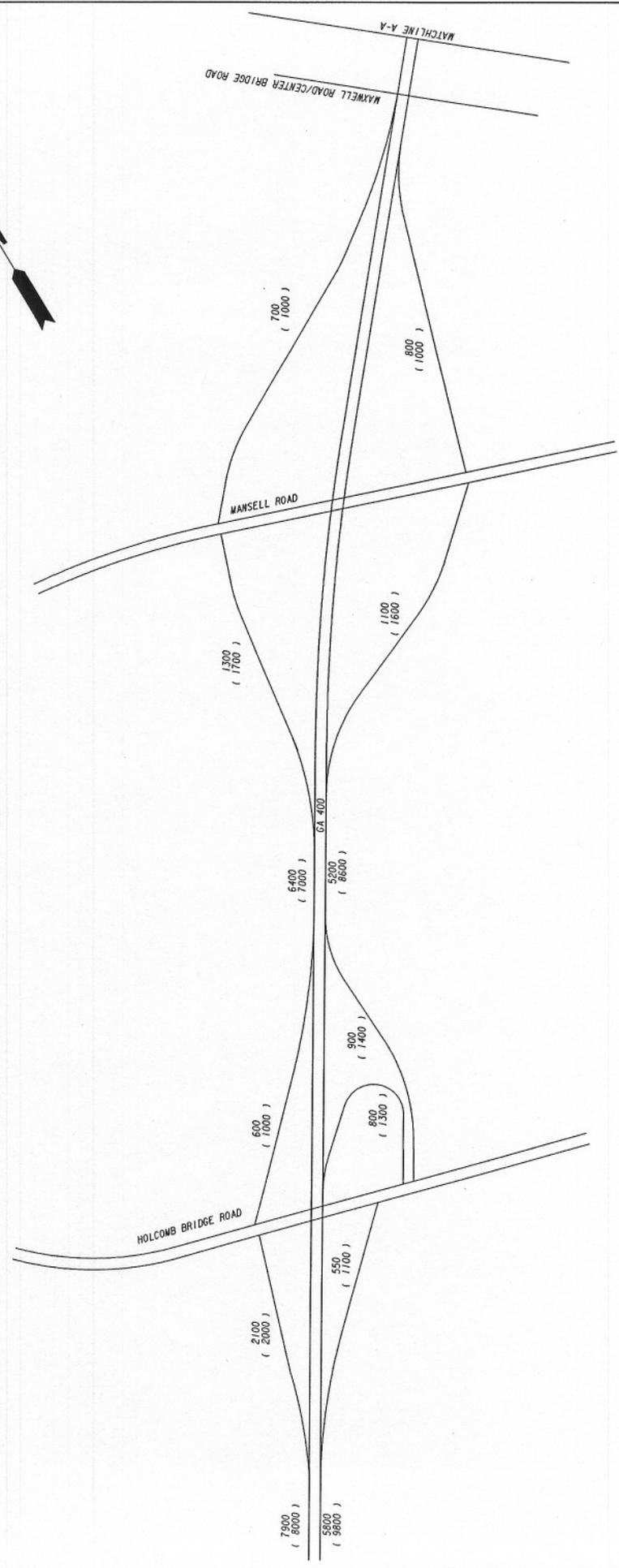
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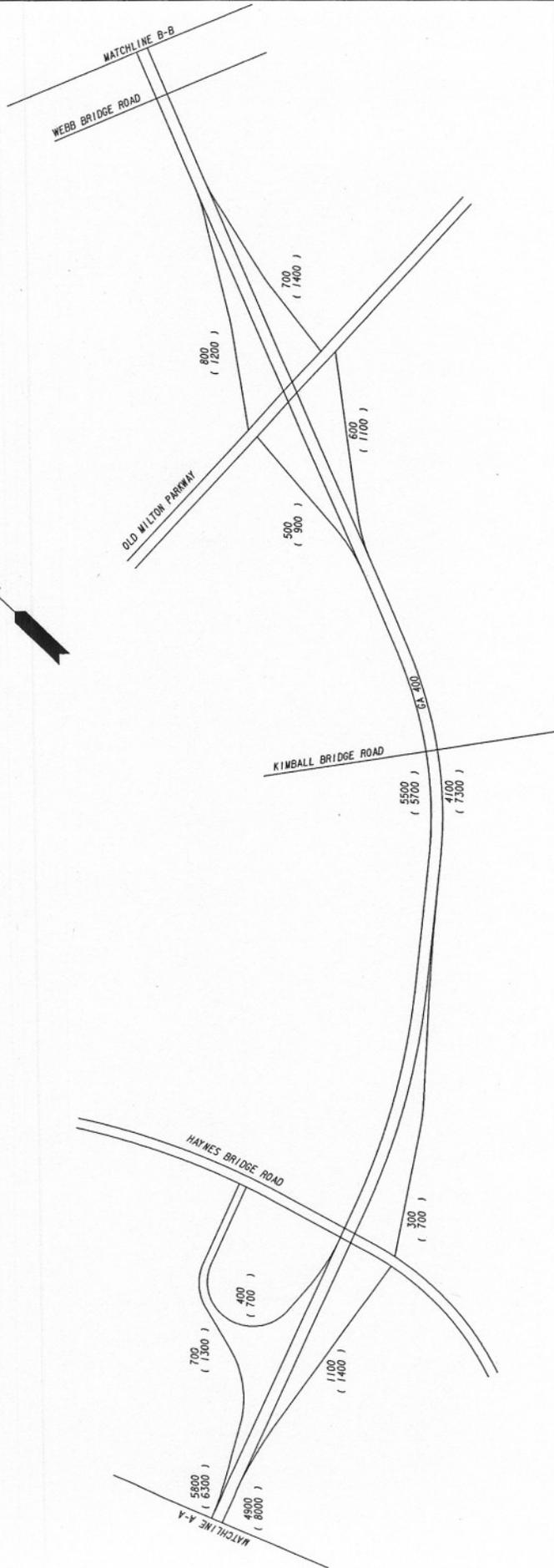
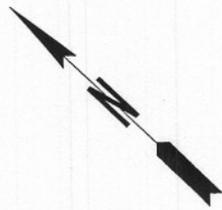
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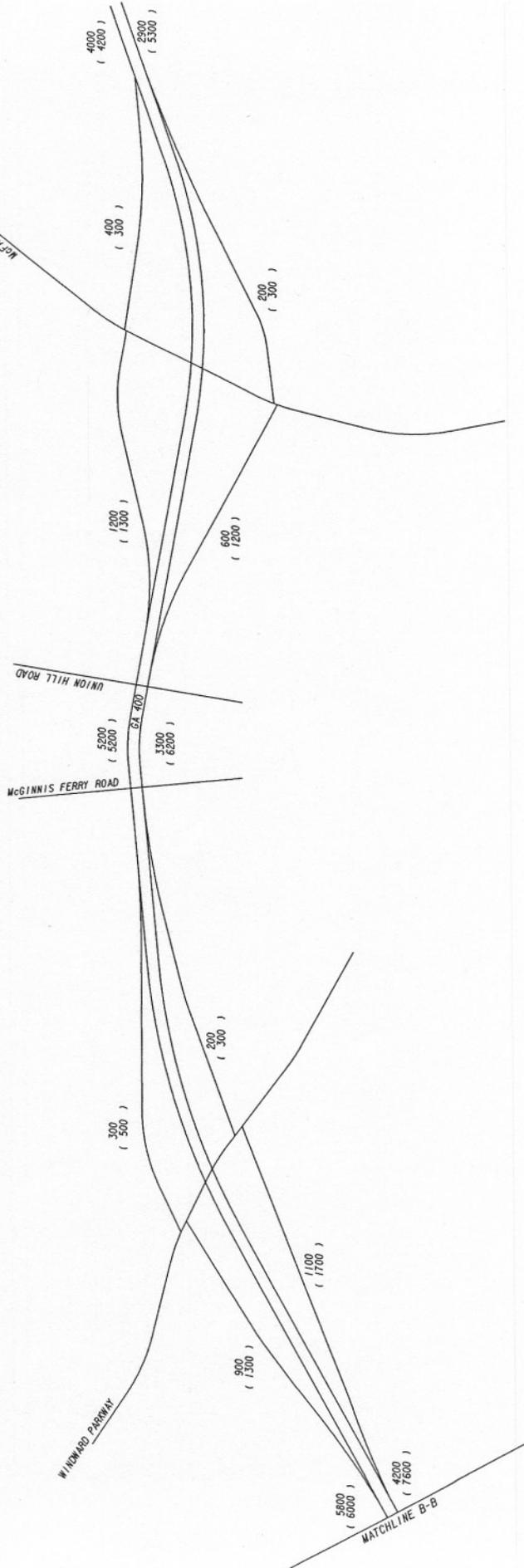
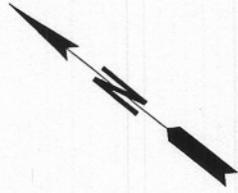
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GA 400 TRAFFIC

DATE: 1/5/05

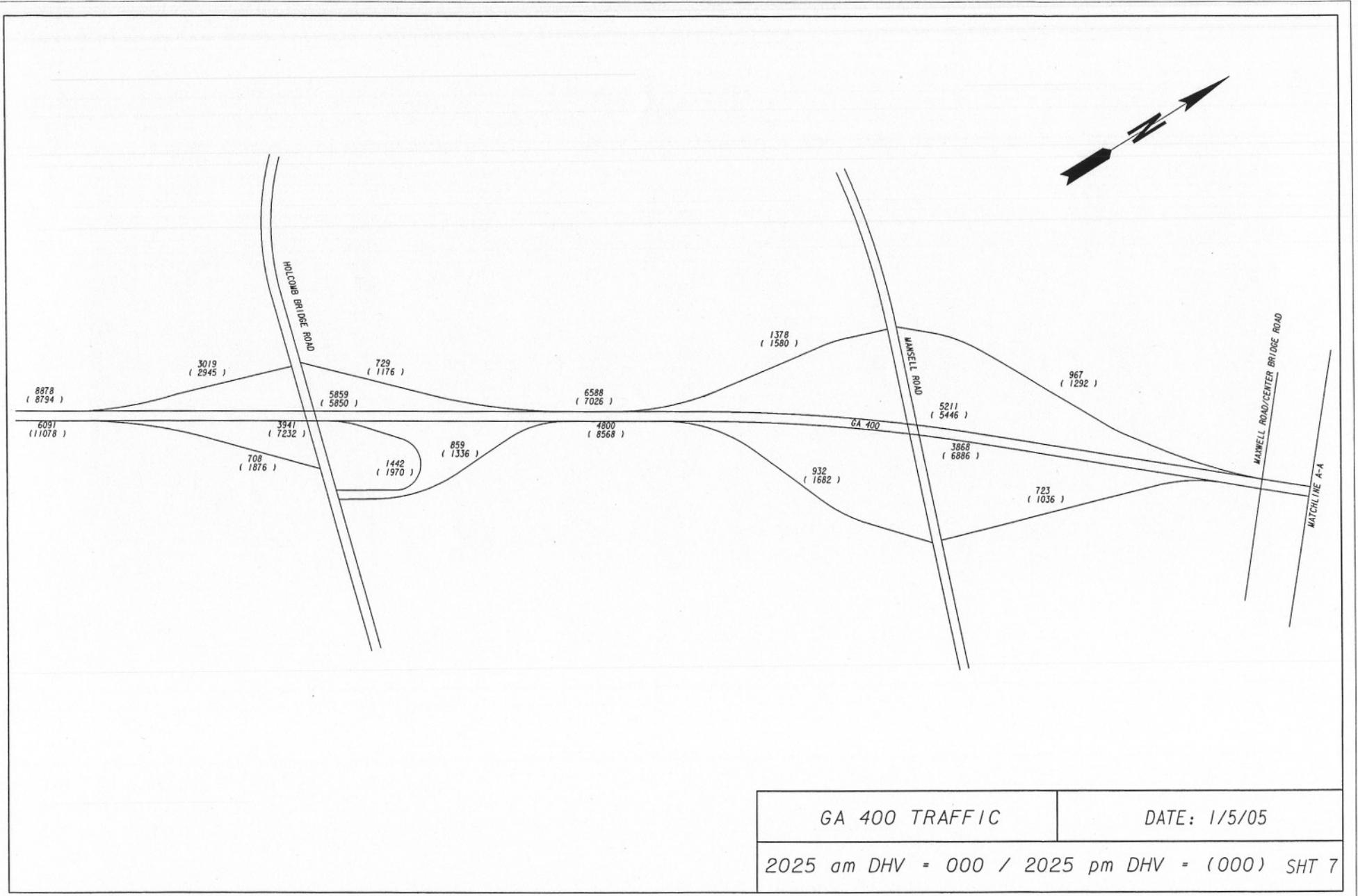
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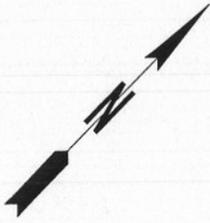


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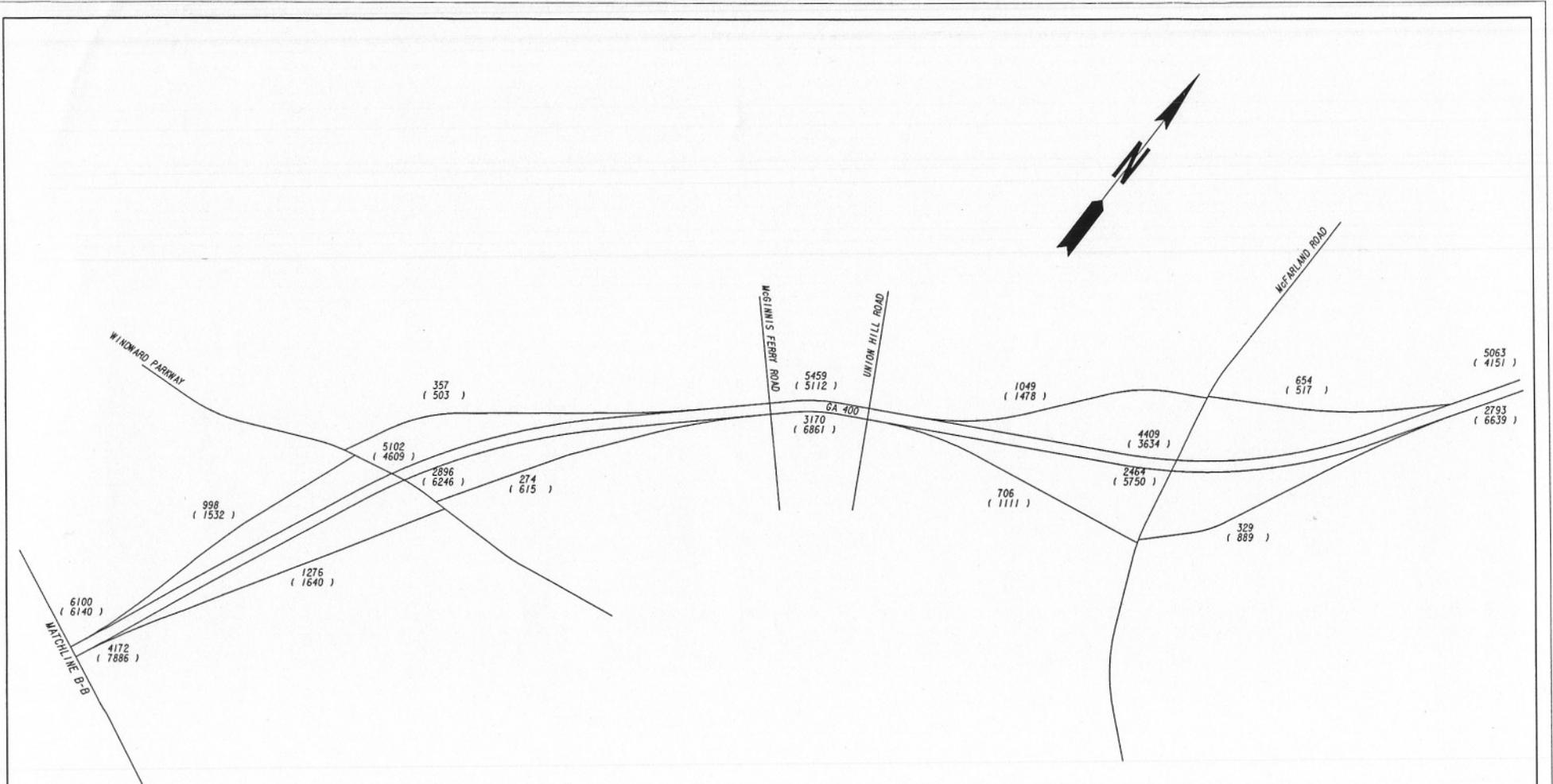
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GA 400 TRAFFIC	DATE: 1/5/05
2025 am DHV = 000 / 2025 pm DHV = (000) SHT 8	



GA 400 TRAFFIC	DATE: 1/5/05
2025 am DHV = 000 / 2025 pm DHV = (000) SHT 9	

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN  
PROJECT CONCEPT REPORT**

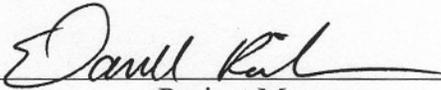
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Fulton/Forsyth County  
P. I. Number: 722010**

**Federal Route Number: U.S. 19  
State Route Number: S.R. 400**

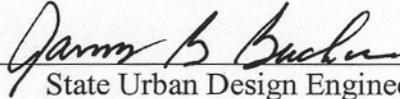
**GA 400 from south of Holcomb Bridge Road/Fulton County north to McFarland Road/Forsyth County**

Recommendation for approval:

DATE April 19, 2005

  
\_\_\_\_\_  
Project Manager

DATE April 14, 2005

  
\_\_\_\_\_  
State Urban Design Engineer

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 4-19-05

  
\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Financial Management Administration

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental/Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
District 7 Engineer, Chamblee

DATE \_\_\_\_\_

\_\_\_\_\_  
District 1 Engineer, Gainesville

DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

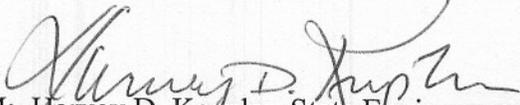
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**INTERDEPARTMENT CORRESPONDENCE**

FILE: P.I. # 722010

OFFICE: Environment/Location

DATE: April 20, 2005

  
FROM: Harvey D. Keepler, State Environmental/Location Engineer

TO: Meg Pirkle, Assistant Director of Preconstruction

SUBJECT: **PROJECT CONCEPT REPORT  
NH-056-1(59)/Fulton & Forsyth Counties/P.I. # 722010**

The above subject concept report has been reviewed. This office has no comments at this time.

If you have any questions please contact me at (404) 699-4401.

HDK/sdw

Attachment

cc: David Mulling, P.E.  
James B. Buchan

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN  
PROJECT CONCEPT REPORT**

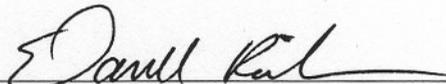
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Fulton/Forsyth County  
P. I. Number: 722010**

**Federal Route Number: U.S. 19  
State Route Number: S.R. 400**

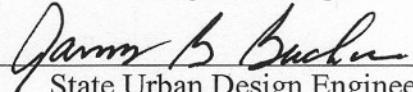
**GA 400 from south of Holcomb Bridge Road/Fulton County north to McFarland Road/Forsyth County**

Recommendation for approval:

DATE April 14, 2005

  
Project Manager

DATE April 14, 2005

  
State Urban Design Engineer

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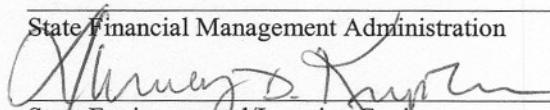
DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Financial Management Administration

DATE 4.19.05

  
State Environmental/Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
District 7 Engineer, Chamblee

DATE \_\_\_\_\_

\_\_\_\_\_  
District 1 Engineer, Gainesville

DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN  
PROJECT CONCEPT REPORT**

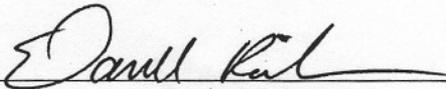
**NH-056-1(59)  
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P. I. Number: 722010**

**Federal Route Number: U.S. 19  
State Route Number: S.R. 400**

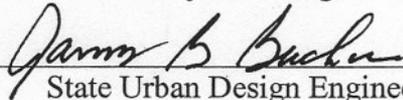
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Project Manager

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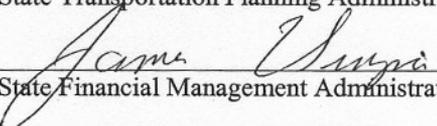
  
State Urban Design Engineer

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DATE \_\_\_\_\_

State Transportation Planning Administrator

DATE 4-15-05

  
State Financial Management Administration

DATE \_\_\_\_\_

State Environmental/Location Engineer

DATE \_\_\_\_\_

State Traffic Safety and Design Engineer

DATE \_\_\_\_\_

District 7 Engineer, Chamblee

DATE \_\_\_\_\_

District 1 Engineer, Gainesville

DATE \_\_\_\_\_

Project Review Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN  
PROJECT CONCEPT REPORT

NH-056-1(59)  
Fulton/Forsyth County  
P. I. Number: 722010

Federal Route Number: U.S. 19  
State Route Number: S.R. 400

GA 400 from south of Holcomb Bridge Road/Fulton County north to McFarland Road/Forsyth County

Recommendation for approval:

DATE April 14, 2005

David Kull  
Project Manager

DATE April 14, 2005

James B. Bucher  
State Urban Design Engineer

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 \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Financial Management Administration

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental/Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE 4/21/05

Bryant Hoole  
District 7 Engineer, Chamblee

DATE \_\_\_\_\_

\_\_\_\_\_  
District 1 Engineer, Gainesville

DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer