

ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-75-2(211) Bibb County **OFFICE** Preconstruction
P.I. No. 312090 **DATE** July 27, 2001
CWHutto
FROM C. Wayne Hutto, Assistant Director of Preconstruction
TO SEE DISTRIBUTION
SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

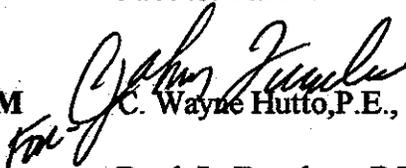
Attachment

DISTRIBUTION:

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**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA****INTERDEPARTMENT CORRESPONDENCE**

FILE NH-IM-75-2(211) Bibb County **OFFICE** Preconstruction
P.I. No. 312090
DATE June 14, 2001

FROM  C. Wayne Hutto, P.E., Assistant Director of Preconstruction

TO Frank L. Danchetz, P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the widening and reconstruction of I-75 from 2,000'± south of Pierce Avenue to 3,000'± north of Arkwright Road for a total of 3.30 miles. I-75 is currently a four lane roadway with 40' to 64' depressed grassed median. Between Pierce Avenue and Arkwright Road, current land use along the west side of I-75 is mostly commercial with residential development located west of I-75. A substantial increase in development and employment north of the project is expected to result in significant growth in through traffic along I-75. Based on future traffic, Level of Service (LOS) will deteriorate along I-75 between Pierce Avenue and Arkwright Road as a result of this growth. The existing daily volume along I-75 within the project corridor is 67,970 VPD. Traffic is projected to increase to 96,100 VPD in the design year 2025. The proposed improvements will allow the existing interstate system to operate at acceptable and improved LOS and safety throughout its design life.

The southern terminus of this project ties into project NH-IM-75-2(177) and NH-16-1(104) Bibb County, consisting of widening I-75 to four lanes in each direction and the reconstruction of the I-16/I-75 interchange.

The construction proposes to widen I-75 from two lanes in each direction to three lanes in each direction for the entire project length. The Pierce Avenue interchange will be reconstructed by moving the southbound exit ramp 900'± to the north and the southbound entrance ramp approximately 2,300' to the north to form a four leg, signalized intersection with Riverside Drive at the Riverside Plaza Mall entrance. The current northbound exit ramp will be lengthened to provide for proper deceleration length. The northbound entrance ramp will also be lengthened to provide adequate acceleration length and to comply with current design criteria.

The existing I-75 bridges over utilities, just north of Pierce Avenue, the bridge over Pierce Avenue, the existing Riverview Road Bridge over I-75, and the I-75 bridges over Sabbath Creek will be replaced as part of this project.

The existing Arkwright Road interchange will be reconstructed to a tight urban diamond and improvements will be made to Arkwright Road from the Riverside Drive intersection to 1,500'±

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: NH-IM-75-2(211) **OFFICE:** Atlanta, Georgia
P.I. Number 312090- **DATE:** May 25, 2001

FROM: David Mulling, ^{DTM} Project Review Engineer

TO: Wayne Hutto, Assistant Director of Pre-construction

SUBJECT: CONCEPT REPORT

We have reviewed the concept report submitted May 18, 2001 by the letter from Joseph P. Palladi dated May 8, 2001, and have no comment.

The costs for the project are:

Construction	\$36,441,000
Inflation	\$ 5,744,000
E&C	\$ 4,219,000
Reimbursable Utilities	\$ 150,000
Right of Way	\$ 64,000

DTM

c: Joe Palladi – Attention: Genetha Rice-Singleton

Frank L. Danchetz

Page 2

NH-IM-75-2(211) Bibb

June 14, 2001

north of Sheraton Road. The existing I-75 bridges over Arkwright Road will be replaced to accommodate the widening of Arkwright Road.

Several alternatives were considered during concept development with the two most favorable alternatives thoroughly analyzed by the project development team. Alternative #2 was chosen as the preferred alternative.

Environmental concerns include requiring a COE 404 Permit; an Environmental Assessment will be prepared; a public hearing will be held; time saving procedures are not appropriate.

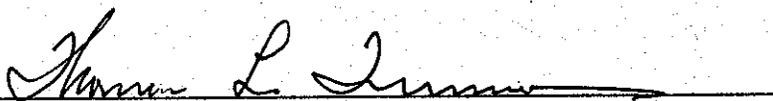
The estimated costs for this project are:

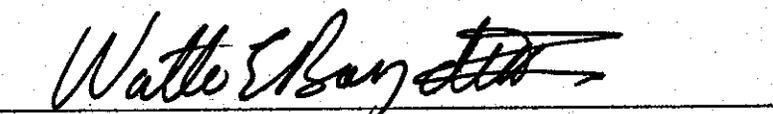
	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$46,404,000	\$9,000,000	2003	02-12
Right-of-Way	\$ 64,000	\$2,000,000		
Utilities*	\$ 150,000	---		

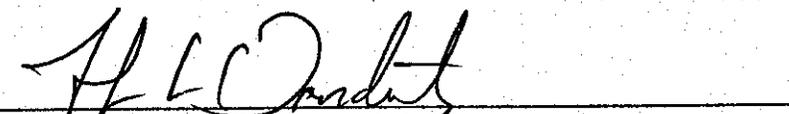
This project will increase capacity, enhance safety, and reduce congestion along this portion of I-75. This project is in the STIP. I recommend this project concept be approved.

CWH:JDQ/cj

Attachment

CONCUR 
Thomas L. Turner, P.E., Director of Preconstruction

APPROVE 
Larry R. Dreihaup, Division Administrator, FHWA

APPROVE 
Frank L. Danchetz, P.E., Chief Engineer

SCORING RESULTS AS PER MOG 2440-2

Project Number: NH-IM-75-2(211)		County: BIBB		PI No.: 312090	
Report Date: 5/8/01		Concept By: DOT Office: URBAN			
<input checked="" type="checkbox"/> CONCEPT		DOT Project Manager: GENETHA RICE-SINGLETON			
		Consultant: PBS&J			
Project Type: Choose One From Each Column		<input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input type="checkbox"/> Bridge <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input type="checkbox"/> Intersection Improvement <input checked="" type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
FOCUS AREAS	SCORE	RESULTS			
Presentation	100%				
Judgement	100%				
Environmental	100%				
Right of Way	100%				
Utility	100%				
Constructability	100%				
Schedule	100%				

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE



FILE NH-IM-75-2(211), Bibb County
P.I. # 312090
I-75 Widening from Pierce Avenue
to Arkwright Road

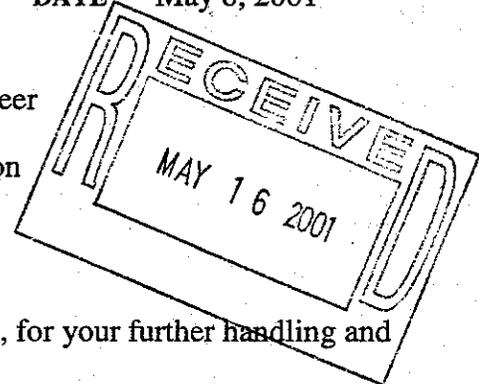
OFFICE Urban Design

DATE May 8, 2001

Joseph P. Palladi
FROM: Joseph P. Palladi, P.E., State Urban Design Engineer

TO: Wayne Hutto, Assistant Director of Preconstruction

SUBJECT: Project Concept Report



Attached is the concept report, on the above listed project, for your further handling and approval in accordance with the PDP.

If you have any questions please contact Marlo Clowers or Genetha Rice-Singleton at 404-656-5444.

JPP:GRS *GRS*

cc: Harvey Keepler, State Environment/Location Engineer
Glenn Durrence, District Three Engineer
Ronald Morris, PSB&J
Bob Fountain, Bibb County

DAVID MULLING - PROJECT REVIEW ENGINEER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF URBAN DESIGN
PROJECT CONCEPT REPORT

INTERSTATE 75 IMPROVEMENTS
FROM PIERCE AVENUE TO ARKWRIGHT ROAD

Project number: NH-IM-75-2(211)
County: Bibb
P.I. Number: 312090
US Route Number: I-75
State Route Number: 401

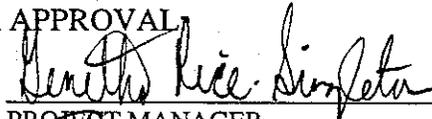
RECOMMENDATION FOR APPROVAL

5/1/01

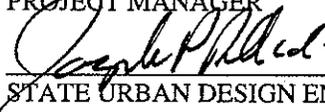
DATE

5/14/01

DATE



PROJECT MANAGER



STATE URBAN DESIGN ENGINEER

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

DATE

STATE PLANNING ADMINISTRATOR

DATE

STATE TRANSPORTATION PROGRAMMING ENGINEER

DATE

STATE ENVIRONMENTAL / LOCATION ENGINEER

DATE

STATE TRAFFIC OPERATIONS ENGINEER

DATE

DISTRICT ENGINEER

5/25/01

DATE



PROJECT REVIEW ENGINEER

DATE

BRIDGE DESIGN ENGINEER

NEED & PURPOSE STATEMENT

NH-IM-75-2(211), P.I. Number 312090-, Bibb County

I-75 from Pierce Avenue to Arkwright Road

The primary need for the project is to provide safety and capacity improvements to the existing Interstate 75 approximately 3.5 miles from the Pierce Avenue interchange through the Arkwright Road interchange in Macon, Georgia. The improvement includes widening I-75 from 2 lanes in each direction to 3 lanes in each direction, reconstruction of the two interchanges, and replacement of the Riverview Road bridge over I-75. These improvements will allow the existing interstate system to operate at acceptable and improved level of service and safety throughout its design life. This project is currently included in both the local transportation plan (MATS) and the state transportation plan (TIP).

The existing daily volume along I-75 within the project corridor is 67,970. Traffic is projected to increase to 96,100 by the design year 2025. There are three freeway sections that currently operate at a deficient level of service (i.e. a level of service E or F) on I-75:

- The I-75 NB basic section located south of Pierce Avenue in the P.M. peak hour
- The I-75 NB exit ramp section located south of Pierce Ave in the P.M. peak hour
- The I-75 NB ramp section located south of Arkwright Road in the P.M. peak hour

In the design year, all I-75 freeway sections will operate at a deficient level of service without proposed improvements. The only section north of Arkwright Road that will operate at a deficient level of service is the I-75 SB exit ramp to Arkwright Road, which will be caused by congestion downstream of this section. All I-75 freeway sections will operate at an acceptable level of service (i.e. a level of service D or better) in the design year with the proposed improvements. (See attached level of service tables)

Interstate 75 is scheduled to be widened to four lanes in each direction as part of project NH-IM-75-2(177). The four lane section will end east of the proposed Pierce Avenue interchange location, and will tie into the proposed three lane section. The three lane section will continue north to Arkwright Road where current commercial development ends, resulting in a drop-off of traffic on I-75.

Between Pierce Avenue and Arkwright Road, current land use along the west side of I-75 is mostly commercial with residential development located east of I-75. A substantial increase in development and employment north of the project is expected to result in significant growth in through traffic along I-75. Based on future traffic, level of service will deteriorate along I-75 between Pierce Avenue and Arkwright Road as a result of this growth.

The Pierce Avenue interchange will be reconstructed as part of the project. The current interchange configuration at Pierce Avenue includes a sub-standard intersection of the I-75 SB exit ramp and Riverside Drive. This intersection, at its existing location, is being blocked by the left turning queue at the Pierce Avenue intersection. The high volume of through traffic at this sight also makes it difficult to make a left turn onto Riverside Drive. This intersection currently exceeds the statewide average for yearly accident rates (see attached accident history).

The intersection of Riverside Drive at the I-75 on-ramp will also be improved with the Pierce Avenue interchange reconfiguration. The current intersection is too close to the Pierce Avenue intersection to provide adequate left turn queue lengths.

The Arkwright Road interchange will also be reconstructed as part of the project. Traffic to this interchange is expected to increase due to continued development along Arkwright Road east of I-75 and north of Arkwright Road along Riverside Drive. The widening of Arkwright Road to four lanes and providing turn lanes, as well as the interchange reconfiguration would accommodate the increased volume in the area.

The current Arkwright Road interchange includes a sub-standard intersection of the southbound exit and entrance ramps with Arkwright Road. Through traffic currently backs up from the Riverside Drive intersection, which blocks traffic from I-75 SB. Sight distance for vehicles turning left onto Arkwright Road is insufficient as well. This intersection currently exceeds the state-wide average for yearly accident rates (see attached diagram). The safety of this intersection will be greatly improved with the addition of a traffic signal and turn lanes.

The interchange improvements at Pierce Avenue and Arkwright Road will provide a safer driving environment and allow I-75 to operate at an acceptable level of service throughout the project area. All improvements will meet or exceed current design criteria.

For further description of the proposed improvements, see the alternatives considered on the following pages.

PROJECT LOCATION AND DESCRIPTION

The proposed project consists of improvements to I-75 from approximately 2000 feet south of Pierce Avenue to approximately 3000 feet north of Arkwright Road, a distance of 3.3 miles. I-75 will be widened from 2 lanes in each direction to 3 lanes in each direction.

The Pierce Avenue interchange will be reconstructed by moving the southbound exit ramp approximately 900 feet to the north and the southbound entrance ramp approximately 2300 feet to the north to form a four leg, signalized intersection with Riverside Drive at the Riverside Plaza mall entrance. The current northbound exit ramp will be lengthened to provide for proper deceleration length. The northbound entrance ramp will also be lengthened to provide adequate acceleration length and to comply with current design criteria.

The existing I-75 bridges over utilities, just south of Pierce Ave, the bridge over Pierce Avenue, the existing Riverview Road bridge over I-75, and the I-75 Bridges over Sabbath Creek will be replaced as part of the project.

The existing Arkwright Road interchange will be reconstructed to a Tight Urban Diamond and improvements will be made to Arkwright Road from the Riverside Drive intersection to approximately 1500' north of Sheraton Road. The existing I-75 Bridges over Arkwright Road will be replaced to accommodate the widening of Arkwright Road.

Is the project located in a Non-attainment area: ___ Yes No

PDP CLASSIFICATION: Urban Principal

FULL OVERSIGHT (X) EXEMPT () SF () OTHER ()

FUNCTIONAL CLASSIFICATION: Interstate

U.S. ROUTE NUMBER: I-75 **STATE ROUTE NUMBER:** 401

TRAFFIC (AADT):

CURRENT YEAR: (2000) 67970 DESIGN YEAR: (2025) 96100

EXISTING DESIGN FEATURES:

TYPICAL SECTION: Four lane divided interstate with a 40' to 64' depressed median sections

POSTED SPEED	MIN. RADIUS OF CURVE	MAX. GRADE	WIDTH OF RIGHT-OF-WAY
<u>55 MPH</u>	<u>5729.58'</u>	<u>3.4%</u>	<u>VARIES (440' TYP.)</u>

EXISTING MAJOR STRUCTURES:

1. Bridges – I-75 over utilities near Pierce Ave
2. Bridges – I-75 over Pierce Avenue
3. Bridge – Riverview Road over I-75
4. Bridges – I-75 over Sabbath Creek
5. Bridges – I-75 over Arkwright Road
6. Bridge – Redoak Drive over I-75
7. Box Culverts:
 - DBL 10'x 10' – Riverside Drive approx. 750' south of Riverview Road intersection
 - DBL 10'x 10' – I-75 approx. 750' south of Riverview Road Bridge
 - 5' x 4' – I-75 approx. 1280' south of bridge over Arkwright Road
 - 5' x 4' – I-75 approx. 925' south of bridge over Arkwright Road
 - 6' x 4' – Arkwright Road approx. 220' north of Riverside Drive intersection

MAJOR INTERCHANGES: Pierce Avenue at I-75; and Arkwright Road at I-75

EXISTING LENGTH: 3.5 miles
Beginning mile log 14.14; Ending mile log 17.44

PROPOSED DESIGN FEATURES

PROPOSED TYPICAL SECTION: See following sheets:

- Sheets 1 & 2 – One-Lane Ramps
- Sheets 3 & 4 – Two-Lane Ramps
- Sheets 5 & 6 – Three-Lane Ramps
- Sheets 7 & 8 – I-75, Existing 40' median locations
- Sheets 9 & 10 – I-75, Existing 64' median locations

DESIGN SPEED: 55 M.P.H.

MAX. GRADE ALLOWABLE: 5.0% PROPOSED: 3.4%

MIN. RADIUS OF CURVE: ALLOWABLE: 954.93' PROPOSED: 5729.58'

PROPOSED RIGHT-OF-WAY :

WIDTH: VARIES
EASEMENTS: TEMPORARY () PERMANENT (X) UTILITY () OTHER ()
TYPE OF ACCESS CONTROL: LIMITED
NUMBER OF PARCELS: 30
NUMBER OF DISPLACEMENTS: 0

PROPOSED STRUCTURES

1. Bridge 1, I-75 over utilities near Pierce Ave
2. Bridge 2, I-75 over Pierce Avenue
3. Bridge 3, Riverview Road over I-75
4. Bridge 4, I-75 over Sabbath Creek
5. Bridge 5, I-75 over Arkwright Road

6. Concrete Box Culvert Extensions:
 DBL 10' x 10' - Riverside Drive approx. 750' south of Riverview Road intersection
 DBL 10' x 10' - I-75 approx. 750' south of Riverview Road Bridge
 5' x 4' - I-75 approx. 1280' south of bridge over Arkwright Road
 5' x 4' - I-75 approx. 925' south of bridge over Arkwright Road
 6' x 4' - Arkwright Road approx. 220' north of Riverside Drive intersection
8. Retaining Walls:
 Along I-75, Rt. - South of utilities bridge to bridge over Pierce Ave
 Along I-75, Lt. - Between I-75 and ramps to Riverside Dr.
 Along I-75, Lt & Rt. - Abutment walls for Riverview Road bridge
 Along Pierce Ave. - Abutment walls for Pierce Ave bridge

MAJOR INTERCHANGES: Pierce Avenue at I-75; and Arkwright Road at I-75

TRAFFIC CONTROL DURING CONSTRUCTION: I-75 to be widened and reconstructed under traffic. Arkwright Road, Pierce Avenue and Riverside Drive to remain open during construction. The Riverview Road bridge will be closed during construction and traffic detoured to the Red Oak Drive bridge.

DESIGN EXCEPTIONS REQUIRED FOR CONTROLLING CRITERIA

	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)
BRIDGES STRUCTURAL CAPACITY	()	()	(X)

ENVIRONMENTAL CONCERNS:

PERMITS REQUIRED (COE 404, WATER QUALITY, TVA): COE 404 (Nationwide)
 PROBABLE LOCATION OF UST'S: Texaco, Conoco
 PROBABLE LOCATION OF HAZARDOUS WASTE: None known

LEVEL OF ENVIRONMENTAL ANALYSIS: Environmental Assessment

TIME SAVINGS PROCEDURES APPROPRIATE?: YES X NO

COORDINATION:

INITIAL CONCEPT MEETINGS: Kick-off Meeting held December 6, 1999 (Minutes Attached)

CONCEPT TEAM MEETING DATE: March 28, 2001 (Minutes to be Attached)

P.A.R. MEETING: Currently Unscheduled

CONFORMS TO TIP/STIP? Yes MEETS LOGICAL TERMINI REQUIREMENTS? Yes

PUBLIC INVOLVEMENT: Public Hearing Required

Three Project Development Team Workshops have been held. (Minutes Attached)

Workshop No. 1 – April 6, 2000

Workshop No. 2 – May 23, 2000

Workshop No. 3 – July 20, 2000

Two Concept Public Information Meetings have been held

PIM No. 1 – March 7, 2000

PIM No. 2 – June 6, 2000

Two Public Information Meetings and three alternative development workshops with the Project Development Team (PDT) have been held for this project. The PDT consisted of 20 members that represented a varied cross-section of the community, including residents, business owners, local government representatives, GDOT, and members of CAUTION-Macon.

The PDT workshops were held in order to develop alternatives for the project. Based on input from team members and utilizing design criteria in accordance with AASHTO and GDOT, four (4) alternatives were developed for the Pierce Avenue Interchange and three (3) alternatives for the Arkwright Road Interchange.

These alternatives were looked at in more detail by the Department's consultant and presented to the PDT. The PDT evaluated the alternates for each interchange and decided on two alternatives for each location, to be presented at the second Public Information Meeting.

Based on discussions among PDT members and comments taken at the Public Information Meetings, the final alternatives were evaluated for operational efficiency, overall safety, impacts to adjacent properties, environmental concerns, etc. An alternate at each interchange was then selected for further development.

OTHER PROJECTS IN THE AREA:

1. Riverside Drive from Northside Drive to Hall Road. Project No. STP-037-1(18), P.I. No. 322000
2. Riverside Drive at Sabbath Creek Bridge Replacement. Project No. BHF-037-1(19), P.I. No. 322005
3. I-75 from Pierce Avenue to I-16. Project No. NH-IM-75-2(177), P.I. No. 311400

SCHEDULING:

TIME TO COMPLETE ENVIRONMENTAL: (MONTHS) 8

TIME TO COMPLETE PRELIMINARY CONSTRUCTION PLANS: (MONTHS) 12

TIME TO COMPLETE RIGHT-OF-WAY PLANS: (MONTHS) 12

TIME TO COMPLETE 404-PERMIT PROCESS: (MONTHS) 6

TIME TO COMPLETE FINAL CONSTRUCTION PLANS: (MONTHS) 12

TIME TO COMPLETE PURCHASE OF RIGHT OF WAY: (MONTHS) 12

OTHER MAJOR ITEMS THAT WILL AFFECT THE PROJECT SCHEDULE: (MONTHS) _____

SCHEDULING CONSIDERATIONS: Project to be coordinated with project NH-IM-75-2(211) - I-16/I-75

ALTERNATIVES CONSIDERED

Pierce Avenue Interchange

Several alternatives were considered for the Pierce Avenue interchange. Each involved improvement of the existing southbound exit "button-hook" ramp and the northbound exit loop ramp. The two most favorable alternatives were chosen by the Project Development Team and thoroughly analyzed.

Alternative 2

This alternative is similar to the existing configuration in that the southbound exit and southbound entrance to Riverside Drive remain as "button-hook" ramps. Also, the northbound exit loop ramp and northbound entrance ramp retain the existing configuration.

In the southbound direction the exit and entrance ramps are moved north to form a single 4-leg signalized intersection with Riverside Drive and the access road to Riverside Plaza. The southbound exit ramp would be lengthened to allow adequate deceleration and queuing on the ramp and to increase decision sight distance to the gore. The southbound entrance ramp is relocated approximately 2000' to the north, greatly increasing the weaving distance to the I-16 interchange.

In the northbound direction the exit loop is retained; however, the exit gore is moved approximately 500' south to allow adequate deceleration on the ramp before a driver would negotiate the 150' radius loop and to increase decision sight distance to the exit gore. The northbound entrance ramp acceleration lane would be lengthened to comply with present design criteria.

Riverside Plaza and Pierce Avenue intersection improvements would provide acceptable level of services along Riverside Drive.

The advantages and disadvantages of this alternative are listed below:

Advantages - Alternative 2:

- Some traffic removed from Pierce Intersection
- Minimal property acquisition
- Relatively low cost improvement

Disadvantages - Alternative 2:

- Does not remove "button-hook" ramps
- Sharper curves of "button-hook" ramps at intersection
- "Button-hook" ramps adjacent - potential safety issue
- Widen Riverside Drive two to three lanes at Riverside Plaza
- Several business access modifications
- Possible impact on Creek (northbound exit ramp)

Alternative 4

Alternative 4 is a variation of a single point diamond interchange. In this design the two exit ramps and two entrance ramps are brought together to form a single signalized intersection on the east side of I-75. This intersection is then connected to Riverside Drive and Riverside Plaza with a 6-lane roadway over I-75. The two signalized intersections would be approximately 300' apart and the signalization coordinated to minimize queuing. Riverside Drive would be widened through the intersection on the east side to provide an acceptable level of service and eliminate right-of-way acquisition on the west side. With this alternative, existing Pierce Avenue would only provide access to the residential area and the Executive Office Park on the east side of I-75.

To accomplish this design, I-75 would be lowered 8 feet (maximum) through the interchange area. This would not only improve the existing profile of I-75, but would eliminate the need to acquire right-of-way and displace businesses along Riverside Drive.

With this design, the "button-hook" ramps are eliminated, ramp radii increased, accel/decel lengths increased and decision sight distance provided for the two exit ramp gores.

The advantages and disadvantages of this alternative are listed below:

Advantages:

- Removes "button-hook" ramps
- No grade change on Riverside Drive
- No residential impacts
- Reduces traffic at Pierce Intersection
- Lower grade at I-75 opposite Executive Park and residential area to north

Disadvantages:

- Extensive bridge construction
- High retaining wall opposite executive park

- Widen Riverside Drive two to three lanes at Riverside Plaza
- Several business access modifications along Riverside Drive
- Property acquisition (Executive Park)
- Very high construction cost
- Visual and noise impact - Executive Park
- Extensive maintenance of traffic due to I-75 grade change

Other Alternative Interchange Concepts - Pierce Avenue

Three other alternative interchange concepts were considered; however, dismissed early in the study process because of obvious "fatal flaws".

Alternative 1 – It was similar to Alternative 2 describe here; however, the southbound entrance ramp was left in its existing location.

Alternative 3 – It was similar to Alternative 4; however, the intersection of the ramps was opposite Burrus Road. This required the raising of the I-75 profile 15 feet. Also, there would be encroachment into the drainage channel and acquisition of residential property on the eastside of I-75.

Alternative 5 – It was a complete departure from all other concepts. The northbound exit and entrance ramps would remain essentially as existing. The southbound exit ramp would be a loop ramp (250 foot radius) passing over Riverside Drive and "looping" back to intersect with it. The southbound entrance ramp would begin at the same intersection as the southbound exit ramp at Riverside Drive and pass around the exit loop ramp and then over Riverside Drive and merge onto I-75 southbound at approximately the same location as the existing southbound entrance ramp. This alternative would not only have a high construction cost, but tremendous right-of-way impacts including acquisition of several commercial establishments including a gasoline station and high-rise motel among others.

Arkwright Road Interchange

The Arkwright Road Interchange has several improvement concepts also. Each addressed the issue of the closely spaced intersection along Arkwright Road, including the ramp intersections and the intersection of Arkwright Road with Riverside Drive. The two most favorable alternatives were chosen by the Project Development Team and thoroughly analyzed.

Alternative 2

This alternative includes construction of a Tight Urban Diamond with the two ramp intersections spaced approximately 400 feet apart. The intersection of Arkwright Road and Riverside Drive is eliminated with a grade separation carrying Riverside over Arkwright. The movements between the two arterials would be accomplished through the surface streets north of Tom Hill Sr. Boulevard and through a constructed roadway south of Arkwright that would intersect with Riverside Drive. Holiday Drive would intersect with this roadway providing access to/from properties along Holiday Drive and existing Riverside south of Arkwright with Arkwright Road and Riverside Drive.

Arkwright Road through the interchange area would be improved and the ramp intersections signalized to provide an acceptable level of service. The two intersections along the grade-separated section of Riverside Drive would be signalized and adequate turn lanes provided for an acceptable level of service. Improvement to the ramp accel/decel lengths would be improved and adequate decision sight distance to the southbound exit gore provided.

The advantages and disadvantages of this alternative are listed:

Advantages - Alternative 2:

- Grade separating Riverside Drive over Arkwright Road greatly reduces traffic at Riverside Drive/Arkwright Road
- North Holiday Drive intersects with Arkwright Road at existing Riverside/Arkwright intersection
- Access to/from I-75 and North Holiday Drive retained
- Minimal property acquisition

Disadvantages - Alternative 2:

- Significant change in access for development along Riverside Drive, Tom Hill Sr. Boulevard, North Holiday Drive and Riverside Parkway
- Access between Arkwright Road/Tom Hill Sr. Boulevard and Riverside Drive is circuitous requiring additional travel distance and travel time
- Visual impact of elevated Riverside Drive on commercial properties
- Signalize Tom Hill Sr. Boulevard/Riverside Parkway intersection and widen

Alternative 3

This alternative involves the construction of a Tight Urban Diamond and improvements along Arkwright Road and Riverside Drive. The existing location of the

Arkwright/Riverside intersection would remain with improvements and signalization coordination between the interchange signalized intersections. The geometric improvements and coordinated signalization would provide an acceptable level of service. Improvements to the ramp accel/decel lengths would also be accomplished as well as adequate decision sight distance to the southbound exit gore.

Alternative 3 could be an initial phase of construction for Alternative 2, if the grade separation of Riverside Drive is ever warranted because of intersection "failure" at the Riverside/Arkwright intersection. If failure did occur it would be in the distant future.

Below are the advantages and disadvantages of Alternative 3:

Advantages - Alternative 3:

- Increases distance between Arkwright Road/ Riverside Drive Intersection and Southbound Ramp Termini.
- In comparison with Alternatives 1 and 2, little if any change in access for development along Riverside Drive, Tom Hill Sr. Boulevard, and North Holiday Drive
- In comparison to Alternatives 1 and 2, no visual impact to commercial properties
- In comparison to Alternatives 1 and 2, lower construction costs
- Minimal property acquisition

Disadvantages - Alternative 3:

- Arkwright Road/ Riverside Drive and Southbound Ramp Termini still closely spaced
- Intersection of Arkwright Road/ Riverside Drive would require significant improvements and widening.

Other Alternative Interchange Concepts - Arkwright Road

Two other alternative interchange concepts were considered for improvement to the Arkwright interchange. These were dismissed early in the study process because of "fatal flaws".

Alternative 1 - was similar to Alternative 2 except all turning movements between Arkwright Road and Riverside Drive was through the surface street system north of Tom Hill Senior Boulevard and a single intersection at Riverside Parkway and Riverside Drive. Holiday Drive would intersect with Riverside Drive; however, this only provides access to/from properties on Holiday Drive with Riverside Drive.

Alternative 4 - was a departure from the tight urban diamond. To improve operations related to the closely spaced intersections along Arkwright Road, the west intersection of the existing interchange was eliminated. This was accomplished by: 1) providing a loop ramp for the existing westbound Arkwright to southbound I-75 left turn, and 2) developing the southbound exit ramp as a "button-hook" ramp intersecting with Riverside Drive north of the Riverside/Arkwright intersection. The loop ramp would have a radius of approximately 125 feet and a grade of 7% - 8%. The "button-hook" ramp would have a controlling radius of 100'-125' on approximately a 4% downgrade to the intersection with Riverside Drive. The northbound exit and entrance ramps would be improved as well as Arkwright Road and Riverside Drive to provide an acceptable level of service.

COMMENTS

ATTACHMENTS: Cost Estimate, Project Location Sketch Map, Project Development Team Workshop # 1 minutes (04/06/00), Project Development Team Workshop # 2 minutes (05/23/00), Project Development Team Workshop # 3 minutes (08/15/00), Alternatives sketches, Traffic Diagram, Level-of-service tables, Accident History Table, Typical Sections, and Concept Team Meeting minutes

APPROVALS:

Concur: _____
Director of Preconstruction

Approve: _____
Division Administrator, FHWA

Approve: _____
Chief Engineer

**PRELIMINARY COST ESTIMATE
URBAN DESIGN OFFICE**

DATE: June 8, 2000 PREPARED BY: PBS&J

PROJECT NO.: NH-IM-75-2(211)

P.I. NO.: 312090- MILEAGE: 3.3 miles

PROJECT DESCRIPTION: Widening of I-75 from two to three lanes, and the reconfiguration of the
Pierce Avenue and Arkwright Road interchanges

PROPOSED CONCEPT: Three 12' basic lanes with a variable width median

EXISTING ROADWAY (If Applicable): I-75

TRAFFIC: Existing: 56,940 (2000) Design: 84,700 (2025)

() PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT

() DURING PROJECT DEVELOPMENT

PROJECT COSTS

A. RIGHT-OF-WAY

1. PROPERTY (Land and Easements)

_____ \$ _____
SUBTOTAL \$ 63,500.00

B. REIMBURSABLE UTILITIES

1. SERVICES

_____ \$ _____
SUBTOTAL \$ 150,000.00

C. MAJOR STRUCTURES

1. BRIDGES

Bridge – I-75 Utility bridges near Pierce Ave
27,000 SF x \$60/SF \$ 1,620,000.00
Bridge – I-75 over Pierce Avenue
43,000 SF x \$80/SF \$ 3,440,000.00
Bridge – Riverview Road over I-75
5,100 SF x \$ 80/SF \$ 408,000.00
Bridges – I-75 over Sabbath Creek
22,000 SF x \$60/SF \$ 1,320,000.00
Bridges – I-75 over Arkwright Road
59,000 SF x \$80/SF \$ 4,720,000.00

2. CULVERTS

Miscellaneous culvert extensions \$ 220,000.00

3. MISCELLANEOUS

Retaining Walls - 61,000 SF @ \$40/SF \$ 2,440,000.00

SUBTOTAL \$ 14,168,000.00

D. GRADING AND EARTHWORK

1. BORROW: 211,000.00 cu.yds. @ \$ 7.00 \$ 1,477,000.00

2. EXCAVATION:

SOIL: 105,000.00 cu.yds. @ \$ 4.50 \$ 472,500.00

ROCK: _____ yds. @ \$ _____ \$ _____

SUBTOTAL \$ 1,949,500.00

E. DRAINAGE

1. STORM DRAIN PIPE

6500 lf of 18" dia @ \$ 28.85 \$ 187,525.00

3100 lf of 24" dia @ \$ 35.00 \$ 108,500.00

250 lf of 30" dia @ \$ 45.00 \$ 11,250.00

15 FES 18" dia @ \$ 391.00 \$ 5,865.00

18 FES 24" dia @ \$ 481.00 \$ 8,658.00

2. SIDE DRAIN PIPE

_____ lf of _____ dia @ \$ _____ \$ _____

_____ lf of _____ dia @ \$ _____ \$ _____

_____ FES _____ dia @ \$ _____ \$ _____

_____ FES _____ dia @ \$ _____ \$ _____

3. MINOR STRUCTURES

26 ea. Catch basin @ \$ 1750.00 \$ 45,000.00

5 lf. Manhole @ \$ 1750.00 \$ 8,750.00

78 ea. Drop Inlet @ \$ 1671.00 \$ 130,338.00

4. MISCELLANEOUS

10,000 lf 6" dia. Under Drain Pipe @ \$ 6.00 \$ 60,000.00

SUBTOTAL \$ 566,386.00

F. BASE AND PAVING

1. AGGEGATE BASE

151,100 tons @ 15.51 \$ 2,343,561.00

2. ASPHALT PAVING

<u>9,900</u> tons of <u>12.5 mm OGFC</u>	@ \$ <u>55.00</u>	\$ <u>544,500.00</u>
<u>37,700</u> tons of <u>12.5 mm Superpave</u>	@ \$ <u>42.00</u>	\$ <u>1,583,400.00</u>
<u>40,700</u> tons of <u>19 mm Superpave</u>	@ \$ <u>35.00</u>	\$ <u>1,424,500.00</u>
<u>80,900</u> tons of <u>25 mm Superpave</u>	@ \$ <u>37.00</u>	\$ <u>2,993,300.00</u>
<u>10,000</u> tons of <u>LEVELING</u>	@ \$ <u>38.00</u>	\$ <u>380,000.00</u>
<u>28,300</u> gals of <u>TACK COAT</u>	@ \$ <u>1.00</u>	\$ <u>28,300.00</u>

3. CONCRETE PAVING

<u>32,600</u> SY of <u>12" PC Conc. Pvmnt</u>	@ \$ <u>58.00</u>	\$ <u>1,890,800.00</u>
<u>32,600</u> SY of <u>PC Conc. Subbase</u>	@ \$ <u>20.00</u>	\$ <u>652,000.00</u>

4. MISCELLANEOUS

_____ \$ _____

SUBTOTAL \$ 11,840,361.00

G. CONCRETE WORK

1. CURB AND GUTTER

36,400 lf @ \$ 10.00 \$ 364,000.00

2. SIDEWALKS

3800 sy @ \$ 22.00 \$ 83,600.00

3. MISCELLANEOUS

<u>4500 sy - Concrete Median @ \$28.00/ft</u>	\$ <u>126,000.00</u>
<u>8000 lf - Concrete Barrier @ \$50.00/ft</u>	\$ <u>400,000.00</u>

3000 lf – Concrete Side Barrier @ \$60.00/ft	\$	180,000.00
6000 sy – Concrete Approach Slab @ \$95.00/ft	\$	570,000.00
Noise Walls 60,000 sf @ \$16.00/st	\$	960,000.00
	SUBTOTAL	\$ 2,683,600.00

H. SIGN/ STRIPE/ SIGNAL

46,000 lf Striping 5" Solid Yellow @ 0.20	\$	9,200.00
75,000 lf Striping 5" Solid White @ 0.20	\$	15,000.00
500 lf Striping - 24" Solid White @ 3.30	\$	1,650.00
79,000 lf Striping - Skip White @ 0.10	\$	7,900.00
4,000 lf Striping - Skip Yellow @ 0.10	\$	400.00
75 ea. - Arrow @ 52.00	\$	3,900.00
35 ea. - Word @ 80.00	\$	2,800.00
13,000 sy Striping - Yellow @ 5.00	\$	65,000.00
10,000 ft Interconnect conduit and wire @ 35.00	\$	350,000.00
5 - Traffic Signals @ 75,000.00	\$	375,000.00
Highway signs - Lump	\$	200,000.00
	SUBTOTAL	\$ 1,030,850.00

I. GUARDRAIL

9000 lf Ty W @ \$ 12.00	\$	108,000.00
lf Ty @ \$	\$	
8 Anchors Ty 12 @ \$ 1,500.00	\$	12,000.00
7 Anchors Ty 1 @ \$ 450.00	\$	3,150.00
1500 lf Dbl faced guardrail, TP W @ 15.00	\$	22,500.00
	SUBTOTAL	\$ 145,650.00

J. TRAFFIC CONTROL

1. TEMPORARY BARRIER

3,500 lf Ty Method 2 @ \$ 25.00	\$	87,500.00
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2. SIGN/LIGHT/ BARRICADES/ ETC.

Barrels, signs and lighting	\$	50,000.00
Temporary walls - 15,000 sf @ \$40.00/sf	\$	600,000.00

3. TRAFFIC CONTROL - LUMP

\$	1,250,000.00
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SUBTOTAL	\$ 1,987,500.00
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K. LUMP ITEMS

1. CLEARING AND GRUBBING		
<u>95 Acres @ \$ 15,000.00</u>		\$ <u>1,425,000.00</u>
2. LANDSCAPE/ GRASSING		
<u>35 Acres @ \$500.00</u>		\$ <u>17,500.00</u>
3. EROSION CONTROL		
<u>35 Acres @ 5,000.00</u>		\$ <u>275,000.00</u>
	SUBTOTAL	\$ <u>1,717,500.00</u>

L. MISCELLANEOUS

1. FENCING		
<u>5000 lf @ \$ 15/ft</u>		\$ <u>75,000.00</u>
2. OTHER/ SPECIAL FEATURES		
<u>20 Right-of-Way markers @ \$74.00</u>		\$ <u>1,480.00</u>
<u>2000 sy of Rip-Rap @ \$35.00</u>		\$ <u>70,000.00</u>
<u>Field Engineers Office - Lump</u>		\$ <u>35,000.00</u>
<u>Wetland Mitigation - Lump</u>		\$ <u>20,000.00</u>
<u>ATMS adjustments - Lump</u>		\$ <u>150,000.00</u>
	SUBTOTAL	\$ <u>351,480.00</u>

NOTES/ COMMENTS: _____

ESTIMATE SUMMARY

RIGHT-OF-WAY	\$ <u>63,500.00</u>
REIMBURSABLE UTILITIES	\$ <u>150,000.00</u>

CONSTRUCTION COST SUMMARY

CLEARING AND GRUBBING	\$ <u>1,425,000.00</u>
EARTHWORK	\$ <u>1,949,500.00</u>
BASE AND PAVING	\$ <u>11,840,400.00</u>
DRAINAGE	\$ <u>566,400.00</u>
CONCRETE WORK	\$ <u>2,683,600.00</u>
TRAFFIC CONTROL	\$ <u>1,987,500.00</u>
EROSION CONTROL	\$ <u>275,000.00</u>
GUARDRAIL	\$ <u>145,700.00</u>
SIGN/ STRIPE/ SIGNAL	\$ <u>1,030,900.00</u>
LANDSCAPING/ GRASSING	\$ <u>17,500.00</u>
MISCELLANEOUS	\$ <u>351,500.00</u>
SUBTOTAL ROADWAY ITEMS	\$ <u>22,273,000.00</u>
MAJOR STRUCTURES	\$ <u>14,168,000.00</u>
TOTAL CONSTRUCTION ESTIMATES	\$ <u>36,441,000.00</u>
5 % INFLATION FOR <u>3</u> YRS	\$ <u>5,744,100.00</u>
10 % E&C	\$ <u>4,218,600.00</u>
TOTAL	\$ <u>46,403,700.00</u>

END PROJECT
NH-IM-75-2(211)

BEGIN PROJECT
NH-IM-75-2(211)





Project Development Team
Workshop #1

SUMMARY

April 6, 2000

**Holiday Inn Macon Conference Center
DeSoto Room I & II
3590 Riverside Drive
Macon, Georgia 31210
(912) 474-7746**

I. **Welcome & Introduction**

Joel Leisch, P.E., who served as the Workshop facilitator, welcomed the participants and introduced the Project Development Team Members and Advisors. The following were in attendance:

Charles Reid
13WMAZ-TV

Sandra Bush
Resident

Mark Roadarmel
Resident

Harry Oliver
Resident

Charles Jones
Riverstreet Corners, LLC

Allen Moore
Walthall Oil Company

J.A. Smith, III
S & S Cafeteria

Ronny Fuerniss
Fuerniss Furniture

R. Allen Akin
Northwoods Plaza

N. Pietrzak
Resident

Paul Nagle
Greater Macon
Chamber of Commerce

Vernon Ryle
Macon-Bibb County
Planning & Zoning

Phil Clark
Regional Development
Comm.

Tom Queen
Georgia D.O.T.

Susan Hanberry
CAUTION - Macon

Daniel Fischer
CAUTION - Macon

Joel Leisch, P.E.
PBS&J

Denny Meier, P.E.
PBS&J

Ron Morris, P.E.
PBS&J

Taylor Wright, P.E.
PBS&J

Scott Rumble, P.E.
PBS&J

Jim Evans
PBS&J

Angela Alexander
Georgia D.O.T.

Marlo Clowers
Georgia D.O.T.

II. Project Description and Schedule, "Mission Statement", Draft Goal and Objectives

A brief discussion was held regarding the Project Description and Schedule, the Mission Statement, and the Draft Goal and Objectives. Participants were asked to review the Mission Statement, the Goals and Objectives and be prepared to finalize at Workshop No. 2.

III. Bus Tour of the Project Area

The Macon Transit Authority provided a bus and tour. Attached is a route map. The following items were observed:

1. Traffic queue on Arkwright WB to SB Riverside blocks SB I-75 exit (verified in CORSIM by J. Evans)
2. Queue SB on Riverside to I-75 SB backs up through storage bay south of Pierce Avenue
3. Difficult to enter Riverside from I-75 SB button-hook ramp at Pierce Avenue due to congestion. The left-turn onto Riverside Drive is especially difficult.
4. The majority of NB I-75 traffic exiting at Pierce is headed NB on Riverside.
5. Comment - a lot of traffic (out of state) exits at Arkwright to get gas/food heading to/from Florida and I-16.
7. Eckerd's driveway close to Riverside/Forest Hill. Left-turning traffic into Eckerd's blocks thru traffic.
8. Comment - Consider grade-separating Riverside and Arkwright due to observed high thru traffic on Riverside, much more than there used to be. Separate Tom Hill Sr. commercial traffic from thru traffic.
9. SB I-75 traffic sometimes backs up thru Pierce Interchange - may be due to I-16 interchange related back-ups.
10. Unconventional interchange type at Pierce may cause problems, especially during summer (tourist) months due to "unfamiliar" drivers.

11. Environmental concerns - stream crossings, flood plain areas observed.
12. Grade on Northside approaching Riverside is fairly steep.
13. Comment - sight distance at I-75 ramps at Arwright Road is impeded by the I-75 overpass bridge.

IV. Summary of Existing & Future Conditions and the Project Area Issues

Jim Evans of PBS&J gave a brief presentation with respect to the in-progress development of the Macon area traffic demand model and preliminary Socioeconomic Data through the year 2025. He also presented CORSIM analysis of existing conditions at Arkwright/I-75/Riverside area and Pierce/I-75 area.

A. Existing Conditions

1. Arkwright Interchange Issues

a. Transportation:

1. Congestion at Arkwright/Riverside and ramp intersections.
2. Tight conditions under I-75 bridges
3. Extraneous Traffic - pm: I-75 NB exiting traffic wanting to get to Northside residential areas and having to go thru commercial area.
4. No Provisions for Close Intersection Spacing - signalized & unsignalized
5. No Provisions for Pedestrians
6. No Provisions for Transit
7. No Access Management - Safety Concern

a. Environmental/Social:

1. Noise
2. Air

3. Drainage/Water Quality
 4. Visual/Aesthetics
 5. Residential Preservation
 6. Commercial Viability
3. ¹⁻⁴ Pierce Interchange Issues
- a. Transportation:
 1. Button Hook Ramp - Safety
 2. Congestion along Riverside at Pierce
 - a. Five-leg intersection, left to southbound on-ramp queue backs up.
 - b. SB Riverside queue blocks Burrus Street.
 - c. Eckerd driveway - left-in blocks thru traffic.
 4. Access
 - a. Many driveway cuts north of Pierce
 - b. Need good/safe access for businesses
 5. NB Exit - Safety - NB loop exit has insufficient decision sight distance at diverge and tight radius
 6. Lack of Pedestrian Facilities (i.e. sidewalks along Riverside)
 7. Lack of Transit Accommodation
 - b. Environmental/Social:
 1. Drainage/Water Quality
 2. Noise
 3. Air Quality
 4. Neighborhood Preservation - maintain character and quality of life

5. Commercial Viability - improve access without destroying businesses

6. Visual Aesthetic - noise barriers in particular, landscaping

V. Identification of Alternate Concept Solutions

Joel explained the different types of interchanges and although there are over 20 variations, the diamond and partial cloverleaf interchanges are appropriate for consideration on this project. Based on his experience and involvement with many other similar projects, Joel discussed the types that would be appropriate for this project.

The following solutions were discussed:

A. Arkwright Road Solutions

1. Half Diamond at Northside, SB entrance and NB exit, to reduce traffic at Arkwright. Creating the half-diamond would require raising the grade of Riverside Drive and Northside Drive, which may cut off access to some businesses.
2. Adding a half diamond to Red Oak. This was discussed in great detail. This concept has operational problems on I-75 due to proximity to Pierce ramps. Other problems include impacts to residential areas and the addition of turning movements and traffic on Riverside, which are considered fatal flaws.
3. Grade separate Riverside and Arkwright - look at access, right-of-way impacts, circulation, etc.
4. Replace I-75 bridges to provide more of an opening and better operational efficiency
5. Eliminate SB entrance ramp at Arkwright Interchange - replace with loop ramp to SB 75 and buttonhook SB to Riverside (see attached diagram).
6. Add new SB exit, over Arkwright to tie into Riverside at Holiday Drive.

D. Riverside Solutions

1. Look at reducing Riverside to three lanes for access to commercial development and adding two express lanes between I-75 and the reduced three lane section. These express lanes would begin at Northside Drive and continue south of Pierce. Discussion related to how much traffic the express lanes would serve and if congestion would be created on the three-lane roadway accessing development. This concept will be considered and discussed in Workshop No. 2.
2. Control access points on Riverside, north of Arkwright (possible raised median), improvements compatible with existing improved sections north and south of project.

VI. Tasks To Be Completed

TASKS	PERSON RESPONSIBLE
1. Traffic Counts	PBS&J
2. Development of Alternatives for Project Area, including Pierce Avenue area, Riverside Drive area, I-75, and Riverside Drive	PBS&J
3. Review of Project Mission Statement	PDT Members
4. Review of Project Goals	PDT Members
5. Review of Project Objectives	PDT Members
6. Distribution of Workshop Summary to all PDT Members	PBS&J
7. Distribution of materials for Workshop No. 2	PBS&J
8. Confirm date for next workshop	PBS&J

Workshop No. 2 will be held on May 22, May 23 or May 24 from 5:30 p.m. until 9:00 p.m. at the Holiday Inn Macon Conference Center, located at 3590 Riverside Drive. PDT members will be advised by May 1, 2000.

Any questions or comments regarding this project, should be directed to Cindy Barnett at the following:

Mail: PBS&J
1575 Northside Drive, N.W.
Suite 350
Atlanta, Georgia 30318-4203
Phone: (404) 351-5608 ext. 214
Fax: (404) 351-0936
E-Mail: ccbarnett@pbsj.com

Attachments: Bus Tour Map
Partial Cloverleaf at Arkwright
"Transposed" Single Point Diamond at Pierce



Project Development Team

Workshop #2

SUMMARY

May 23, 2000

Holiday Inn Macon Conference Center
DeSoto Room I & II
3590 Riverside Drive
Macon, Georgia 31210
(912) 474-7746

I. Welcome & Introduction

Joel Leisch, P.E., who served as the Workshop facilitator, welcomed the participants and introduced the Project Development Team Members and Advisors. The following were in attendance:

Charles Reid 13WMAZ-TV	Sandra Bush Resident	Charles Jones Riverstreet Corners, LLC
Larry Brown PZDM	Ronny Fuerniss Fuerniss Furniture	R. Allen Akin Northwoods Plaza
N. Pietrzak Resident	Paul Nagle Greater Macon Chamber of Commerce	Vernon Ryle Macon-Bibb County Planning & Zoning
Phil Clark Regional Development Commission	David Millen Georgia D.O.T.	Susan Hanberry CAUTION - Macon
Lee Martin CAUTION - Macon	Joel Leisch, P.E. PBS&J	Denny Meier, P.E. PBS&J
Ron Morris, P.E. PBS&J	Taylor Wright, P.E. PBS&J	Scott Rumble, P.E. PBS&J
Joseph P. Palladi, P.E. Georgia D.O.T.	Angela Alexander Georgia D.O.T.	Marlo Clowers Georgia D.O.T.
Genetha Rice-Singleton Georgia D.O.T.	Tom Schull (Observer) CAUTION - Macon	

II. Draft "Mission Statement", Goals, and Objectives

The draft Mission Statement, Goals, and Objectives were finalized. These are attached.

III. Workshop No. 1 Summary

The summary from Workshop No. 1 was briefly reviewed. No comments or corrections were made to the summary.

IV. Notice of Public Information Meeting (P.I.M.) No. 2

PDT members were notified of the second Public Information Meeting, which will be held on Tuesday, June 6, 2000 at Tinsley Elementary School from 4:00 p.m. - 7:00 p.m. The Public Information Meeting advertisement is attached. PDT members should attend and actively participate.

V. Discussion of Alternates

A. Pierce Avenue

1. Alternate No. 1

- Southbound entrance ramp is the number one source of accidents (could lengthen acceleration lane)
- Wrong-way movements on ramp from shopping center could occur
- Can Castlewood Forest be eliminated at Pierce intersection? This has neighborhood traffic implications.
- Signal phasing is important.
- This alternative was not recommended for further consideration by PDT members.

2. Alternate No. 2

- Problems with signals on ramp to east.
- Access for park would have less of a direct route. Could the North Pierce access be left? Yes, it can be left.
- Could the southbound entrance to south be left? Yes, it can; however, it was decided not to be in this alternative.
- Could Alternate 1 have a new buttonhook northbound?
- Take out existing southbound entrance.

- This alternate was recommended to carry forward.

3. Alternate No. 3

- Can you go over I-75 instead of under? Yes, however, Riverside would be raised 25 feet.
- Noise pollution would be increased if the interstate is raised. However, it would be easier to control.
- If you raise I-75, it will act as a levy and cause flooding problems. This is not true - it will be the same as today.
- Lowering Riverside Drive would affect businesses in the immediate area of the grade change.
- This alternate was not recommended for further consideration.

4. Alternate No. 4

- Highest construction cost of the four.
- Difficult stage construction and maintenance of traffic.
- Could separate residential and commercial by following existing ramp and making connection.
- This alternate was recommended to carry forward with the addition of a Sheraton connection.

5. Alternate No. 4A

- Concept GDOT developed several years ago and was used to estimate study budget.
- Extensive property impacts and high construction cost.
- This alternate was not recommended for further consideration.

B. Proposed Northside Drive Half Interchange

1. Alternate No. 1

- Extensive right-of-way impacts.
- Difficult stage construction and maintenance of traffic.
- Could possibly result in reconstruction of Red Oak Drive Bridge.
- Not necessary to choose alternate. This alternate shall be carried forward.

2. Alternate No. 2
 - Slightly less extensive right-of-way impacts.
 - Eliminates skew of intersection with Riverside Drive.
 - Not necessary to choose alternate. This alternate shall be carried forward.

C. Arkwright Road

1. Alternate No. 1
 - Improvements to Riverside Parkway and other streets would have to occur.
 - Circuitry of travel.
 - This alternate was not recommended for further consideration.
2. Alternate No. 2
 - Another signalized intersection with Riverside Drive and a connector road from North Holiday Drive that ties to Arkwright Road could be provided.
 - Complicated, circuitry of travel.
 - This alternate was recommended to carry forward.
3. Alternate No. 3
 - Loop ramp would be sub-standard.
 - Buttonhook ramp would be undesirable.
 - This alternate was not recommended for further consideration.
4. Alternate No. 4
 - Joel presented an option for consideration by the PDT of a compressed-diamond configuration, whereby distance between southbound exit ramp intersection with Arkwright and Arkwright/Riverside intersection would be maximized.
 - Preliminary traffic numbers would be developed and analyzed prior to the P.I.M. to determine if this configuration would function acceptably.
 - The PDT recommended this alternate be further evaluated and if found to function in an acceptable manner, to include at the P.I.M.
 - PBS&J will analyze and develop this alternate and attempt to distribute the results and copies to the PDT prior to the P.I.M.

D. Riverside Drive

I. Alternate No. 1

- Median is safer and can help control development.
- A five-lane roadway is easier for access.
- No decision required at this time.

VI. Discussion of Workshop No. 3

The tentative date for the third workshop was discussed. The tentative date was scheduled for Thursday, June 22, 2000 from 5:30 - 9:30 p.m. This date will be confirmed by June 6, 2000.

A lengthy discussion took place concerning the format for the P.I.M. The GDOT will make a decision as to whether it will be an "Open House", as advertised, or whether there will be a time at the end for public statements and comments. The decision was made by GDOT that the P.I.M. will be an "Open House", as advertised.

Any questions or comments regarding this project, should be directed to Cindy Barnett at the following:

Mail: PBS&J
1575 Northside Drive, N.W.
Suite 350
Atlanta, Georgia 30318-4203
Phone: (404) 351-5608 ext. 214
Fax: (404) 351-0936
E-Mail: ccbarnett@pbsj.com

Attachments: Revised Arkwright Alternative
Final Mission Statement
Final Goals
Final Objectives
Traffic Diagram
Public Information Meeting Advertisement

MEMORANDUM

TO: Project Development Team Members and Advisors

FROM: Joel Leisch, P.E.

DATE: August 15, 2000

RE: PDT Workshop No. 3

First, I would like to thank one and all for your participation in the Project Development Team, for the I-75/Riverside Drive Corridor Transportation Improvement Project. It was truly a pleasant and easy task for me to facilitate such an enthusiastic, dedicated, and informed group through the process.

Let's keep in mind, as Joe Palladi indicated, the public involvement is not concluded. It will continue through the environmental screening and design process.

Enclosed you will find the following related to PDT Workshop No. 3:

- List of Attendees
- Agenda
- Workshop Minutes
- Summary of Public Comments - PIM No. 2
- Noise Barrier Criteria
- Northside Drive Proposed Interchange Volumes
- Possible Phased Implementation
- Construction Costs
- Alternatives' Comparison - Pierce Interchange
- Recommendations
- PDT Member Comments

PDT Workshop No. 3
August 15, 2000
Page 2

I would like to remind you to forward comments concerning this public involvement process to:

Cindy Barnett
PBS&J
1575 Northside Drive
Suite 350
Atlanta, Georgia 30318-4203
Phone: (404) 351-5608 ext. 214
Fax: (404) 351-0936
E-Mail: ccbarnett@pbsj.com

Attachments

cc: File

PDT WORKSHOP NO. 3 MINUTES

The Workshop commenced at 5:40 p.m.

1. Minutes of PDT Workshop No. 2 were approved.
2. Review of PIM No. 2 comments:
 - a. Joel Leisch presented a summary of the 57 comments received (see attached)
 - b. The following PDT members and advisors summarized verbal comments made to them during PIM No. 2:
 - Sandra Bush
 - Paul Nagle
 - Larry Brown
 - David Millen
 - Susan Hanberry
 - Joe Palladi

These summaries generally confirmed the comment summary attached. Particular emphasis was placed on the need for implementation of noise barriers, in conjunction with transportation improvements. Mr. Joe Palladi explained the criteria for noise barrier implementation (see attached). Mr. Palladi and Mr. Leisch commended the PDT members for the proactive role each played in participating in the Public Information Meeting.

3. Mr. Scott Rumble presented the results of the license plate survey to assist in developing the possible Northside half interchange. Mr. Scott Rumble described the process used to forecast 2025 traffic and presented these volumes (see attached). Mr. Dan Fischer suggested that the forecast volumes might be underestimated - this was noted. It was also noted that if the Northside Drive Interchange were constructed, it would divert some traffic from both the Arkwright and Pierce Interchanges.
4. The lengthy discussion then ensued concerning the assessment, comparison, and preference of alternatives for the Arkwright Rd. and Pierce Ave. Interchanges. This included consideration of phase implementation, construction costs, and traffic operations. Mr. Rumble presented the simulation of traffic operations for the alternatives and the "No-Build".

Arkwright Interchange

The discussion was relatively brief with the PDT members quickly demonstrating a unanimous preference for Alternative 3. It was brought out that in the distant future, if needed, the grade separation of Riverside over Arkwright could be implemented. The benefits and disadvantages were noted.

Pierce Interchange

A lengthy discussion took place with nearly all PDT members commenting and citing their opinions related to benefits and disadvantages of Alternatives 2 and 4. The primary concerns of the PDT members during this discussion related to the following:

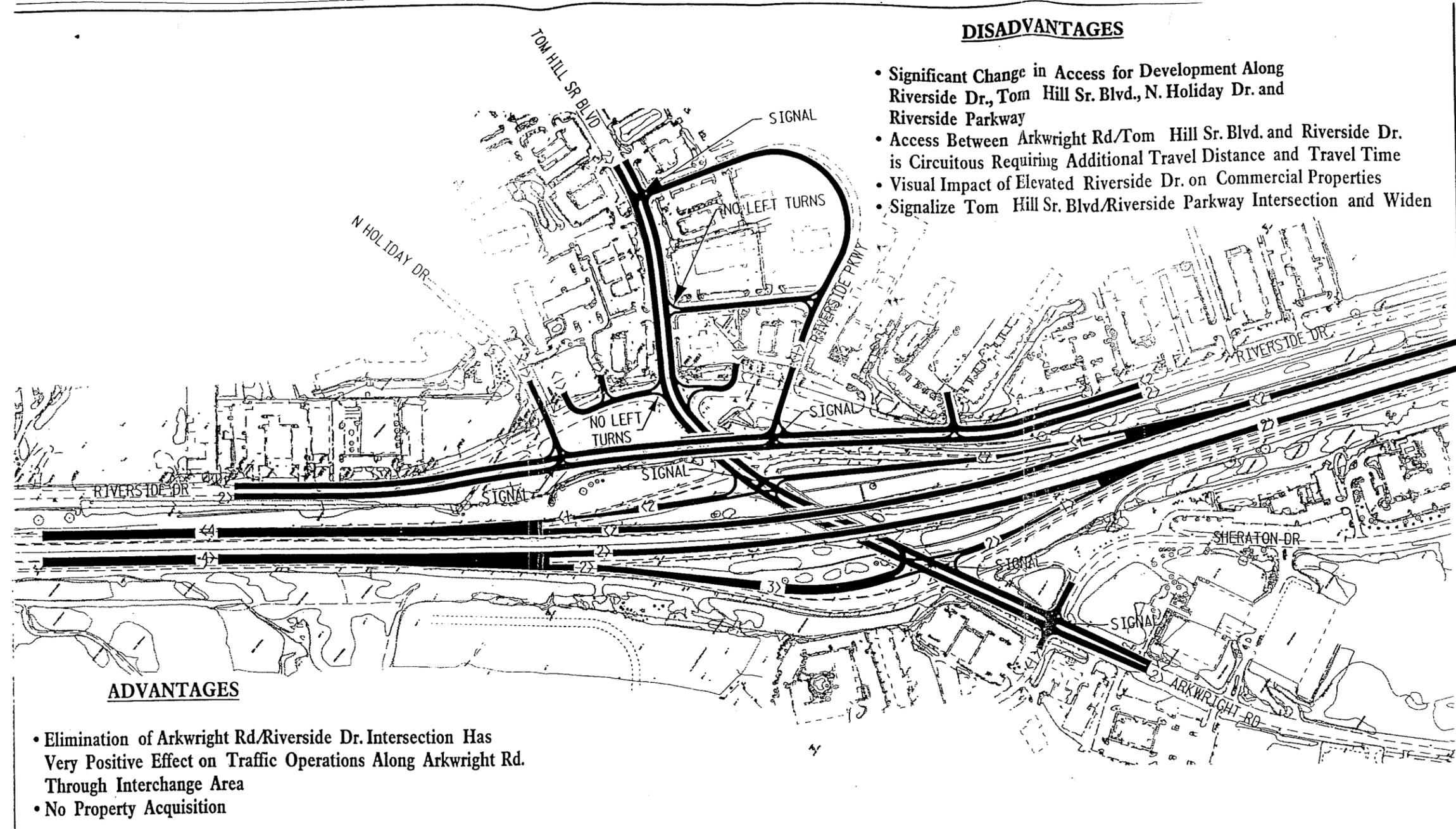
- Construction Costs
- Safety (Button-Hook Ramps)
- Driver Expectations
- Quality of Traffic Flow and Operations

Ms. Sandra Bush asked if it was possible to have the access to the Executive Park with Alternative 2 as it is in Alternative 4. Mr. Leisch's response was "yes, it is possible". However, the ramps on the east side of I-75 would take a different form - there could be potential operational disadvantages to this design.

A comparative assessment of the Alternatives was performed with input from all PDT members and advisors (see attached Alternatives Comparison). The 15 PDT members present indicated a 9 to 6 preference for Alternative 4 at the Pierce Interchange.

5. The remaining discussion concerned development of all PDT consensus recommendations for the project corridor (see attached PDT Recommendations).
6. The Workshop concluded at 10:15 p.m. with Mr. Leisch and Mr. Palladi applauding the PDT members for the energy, enthusiasm, and time contributed to this unique public participation process. Mr. Leisch asked the PDT members to please forward their comments/critique with suggestions for improvement to:

Cindy Barnett
PBS&J
1575 Northside Drive
Suite 350
Atlanta, Georgia 30318-4203
Phone: (404) 351-5608 ext. 214
Fax: (404) 351-0936
E-Mail: ccbarnett@pbsj.com

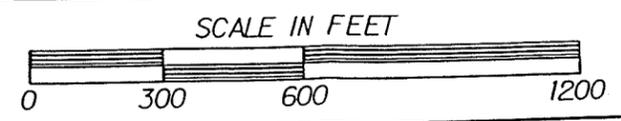


DISADVANTAGES

- Significant Change in Access for Development Along Riverside Dr., Tom Hill Sr. Blvd., N. Holiday Dr. and Riverside Parkway
- Access Between Arkwright Rd/Tom Hill Sr. Blvd. and Riverside Dr. is Circuitous Requiring Additional Travel Distance and Travel Time
- Visual Impact of Elevated Riverside Dr. on Commercial Properties
- Signalize Tom Hill Sr. Blvd/Riverside Parkway Intersection and Widen

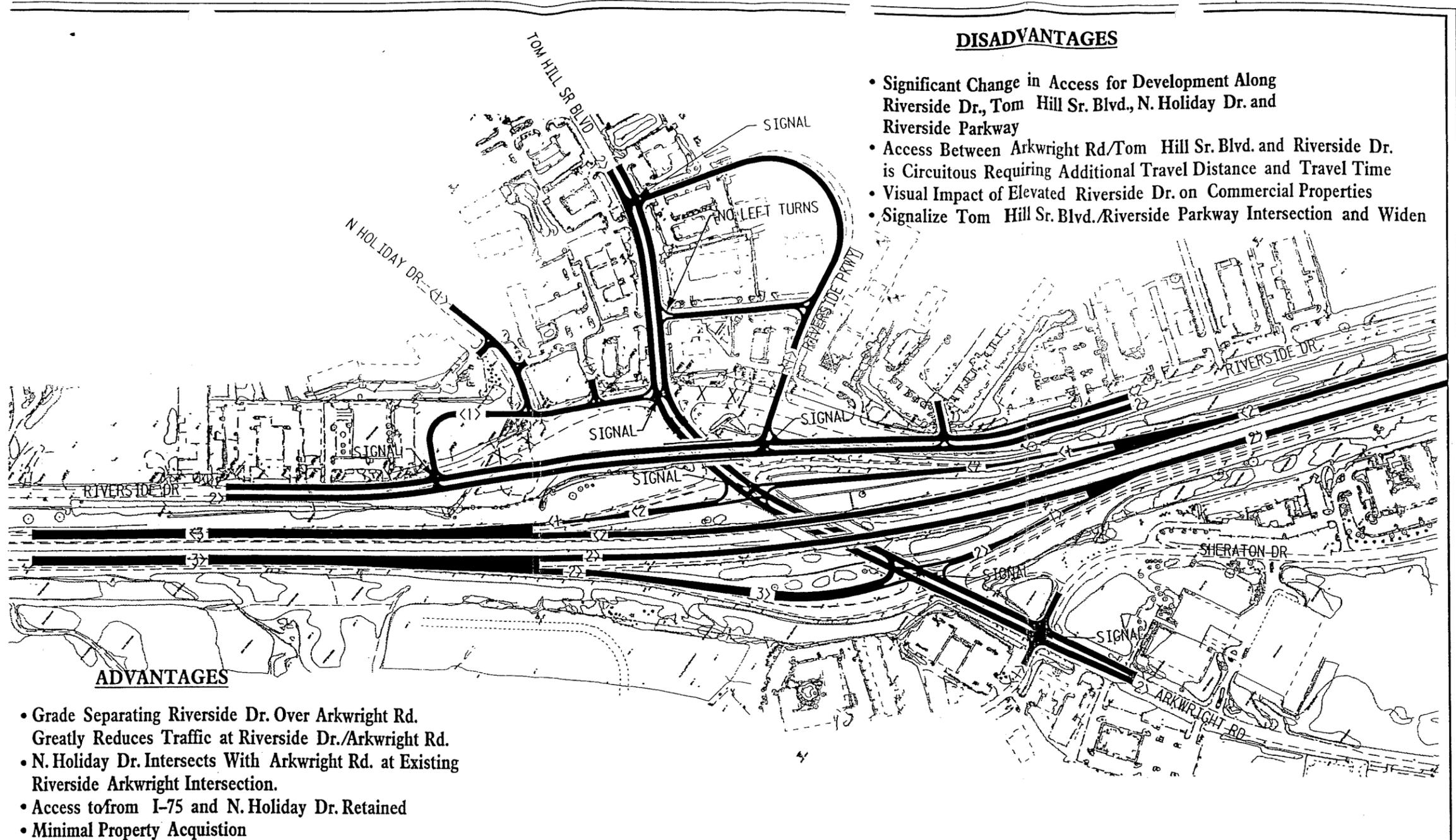
ADVANTAGES

- Elimination of Arkwright Rd/Riverside Dr. Intersection Has Very Positive Effect on Traffic Operations Along Arkwright Rd. Through Interchange Area
- No Property Acquisition



Georgia Department of Transportation
I-75 CORRIDOR STUDY
 Arkwright Alternative 1

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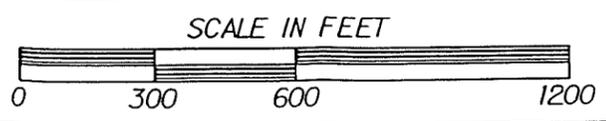


DISADVANTAGES

- Significant Change in Access for Development Along Riverside Dr., Tom Hill Sr. Blvd., N. Holiday Dr. and Riverside Parkway
- Access Between Arkwright Rd/Tom Hill Sr. Blvd. and Riverside Dr. is Circuitous Requiring Additional Travel Distance and Travel Time
- Visual Impact of Elevated Riverside Dr. on Commercial Properties
- Signalize Tom Hill Sr. Blvd./Riverside Parkway Intersection and Widen

ADVANTAGES

- Grade Separating Riverside Dr. Over Arkwright Rd. Greatly Reduces Traffic at Riverside Dr./Arkwright Rd.
- N. Holiday Dr. Intersects With Arkwright Rd. at Existing Riverside Arkwright Intersection.
- Access to/from I-75 and N. Holiday Dr. Retained
- Minimal Property Acquisition

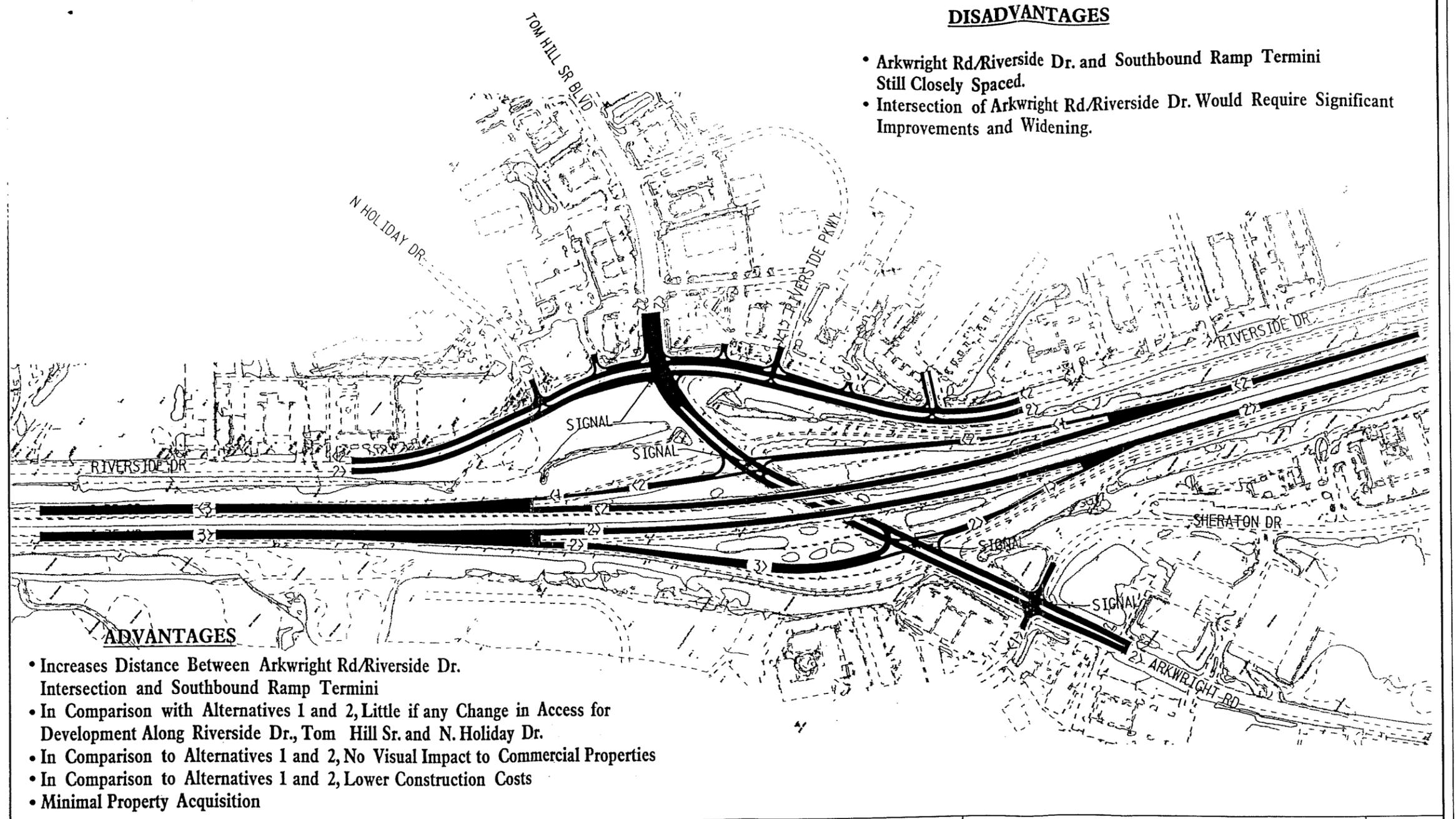


Georgia Department of Transportation
I-75 CORRIDOR STUDY
 Arkwright Alternative 2

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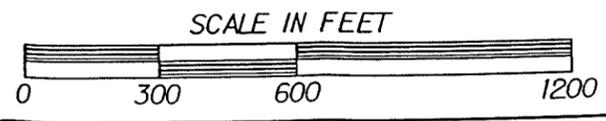
DISADVANTAGES

- Arkwright Rd/Riverside Dr. and Southbound Ramp Termini Still Closely Spaced.
- Intersection of Arkwright Rd/Riverside Dr. Would Require Significant Improvements and Widening.



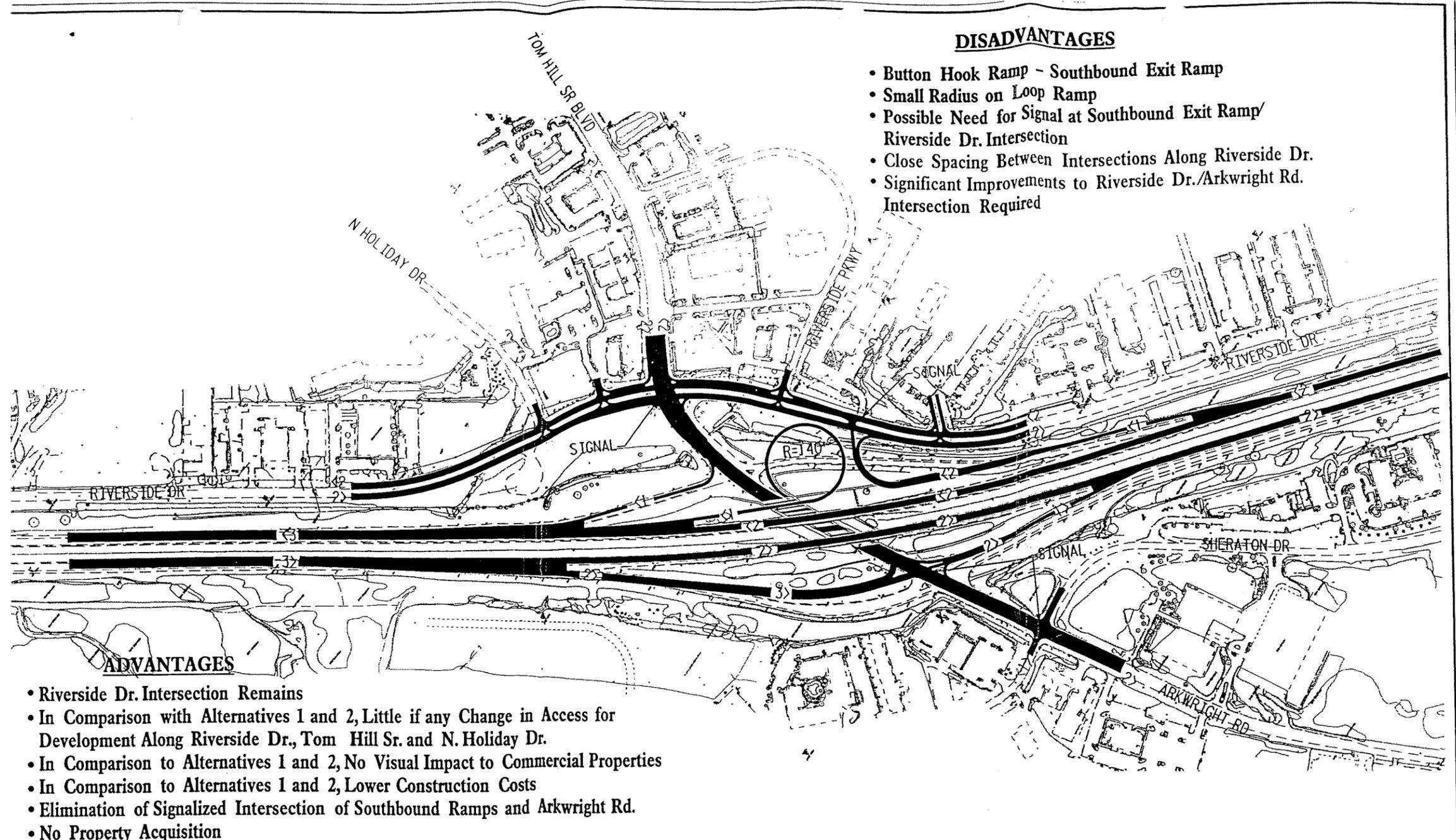
ADVANTAGES

- Increases Distance Between Arkwright Rd/Riverside Dr. Intersection and Southbound Ramp Termini
- In Comparison with Alternatives 1 and 2, Little if any Change in Access for Development Along Riverside Dr., Tom Hill Sr. and N. Holiday Dr.
- In Comparison to Alternatives 1 and 2, No Visual Impact to Commercial Properties
- In Comparison to Alternatives 1 and 2, Lower Construction Costs
- Minimal Property Acquisition



Georgia Department of Transportation
I-75 CORRIDOR STUDY
 Arkwright Alternative 3

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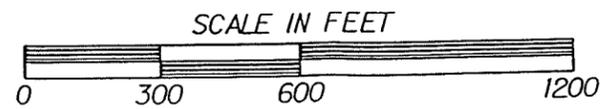


DISADVANTAGES

- Button Hook Ramp - Southbound Exit Ramp
- Small Radius on Loop Ramp
- Possible Need for Signal at Southbound Exit Ramp/Riverside Dr. Intersection
- Close Spacing Between Intersections Along Riverside Dr.
- Significant Improvements to Riverside Dr./Arkwright Rd. Intersection Required

ADVANTAGES

- Riverside Dr. Intersection Remains
- In Comparison with Alternatives 1 and 2, Little if any Change in Access for Development Along Riverside Dr., Tom Hill Sr. and N. Holiday Dr.
- In Comparison to Alternatives 1 and 2, No Visual Impact to Commercial Properties
- In Comparison to Alternatives 1 and 2, Lower Construction Costs
- Elimination of Signalized Intersection of Southbound Ramps and Arkwright Rd.
- No Property Acquisition



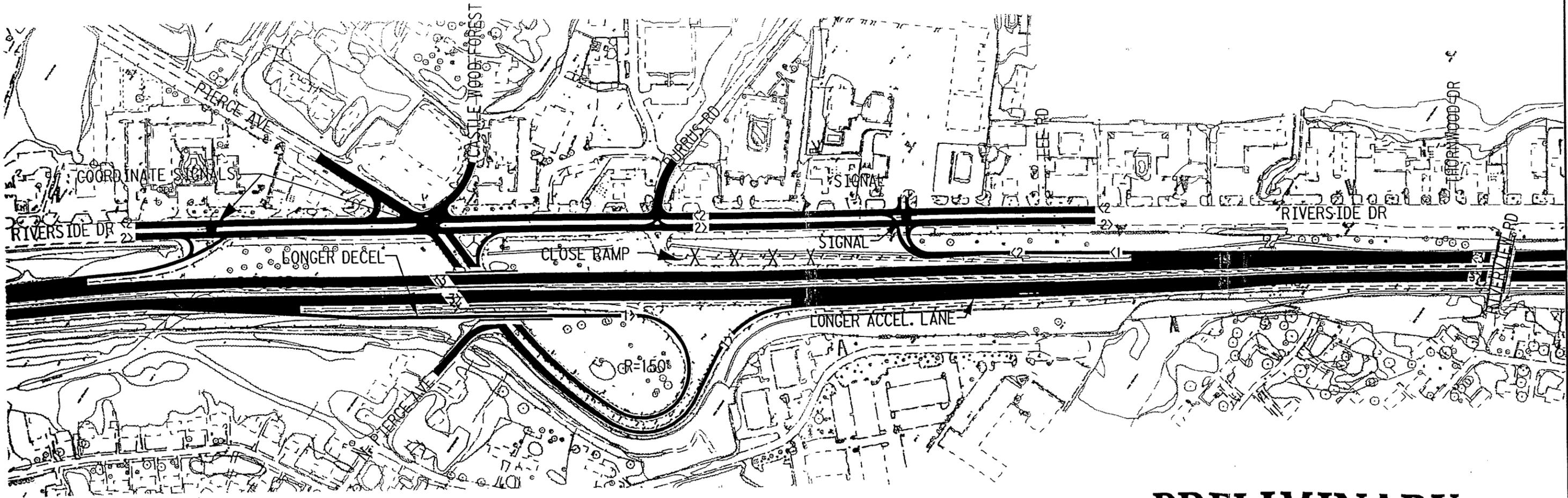
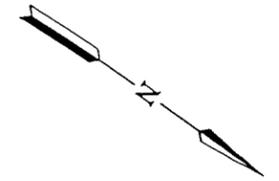
Georgia Department of Transportation
I-75 CORRIDOR STUDY
 Arkwright Alternative 4

ADVANTAGES

- Southbound Exit Ramp Moved Opposite Riverside Plaza at Signal
- Southbound Exit Ramp on Upgrade to Slow Vehicles Approaching Intersection
- No Change in Traffic Pattern
- Northbound and Southbound Exit Ramps Improved for Safety
- Low Cost Improvement
- No Property Acquisition

DISADVANTAGES

- Does Not Remove "Button Hook" Ramps
- Same Traffic at Pierce Intersection
- Possible Impact on Creek (Northbound Exit Ramp)



PRELIMINARY



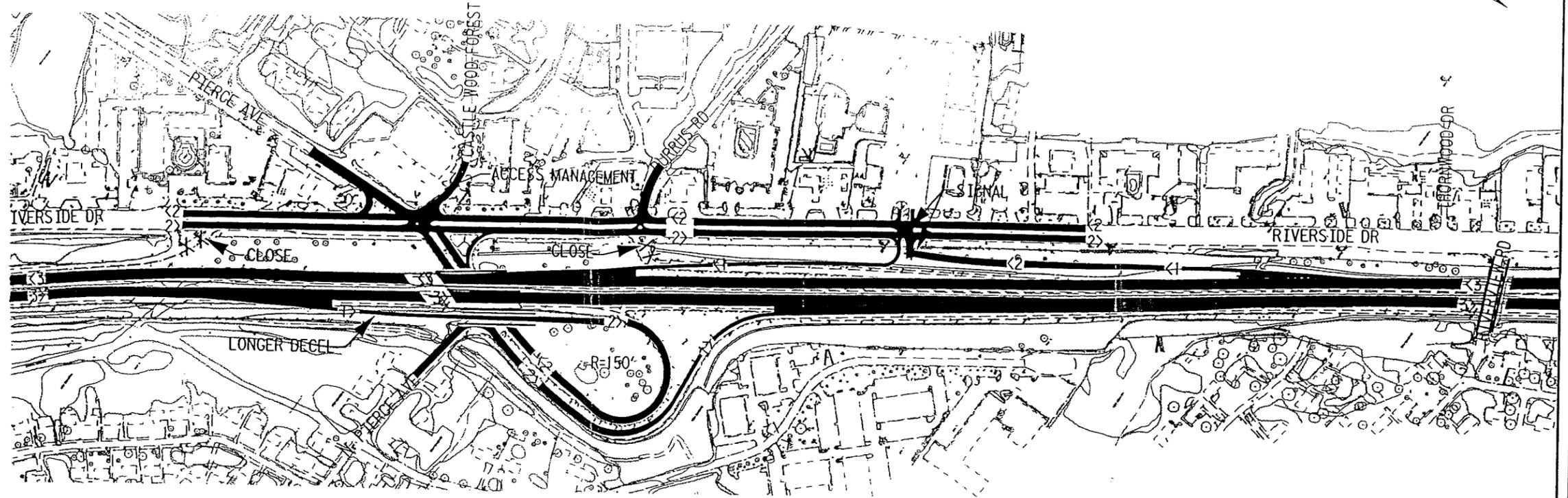
Georgia Department of Transportation
I-75 CORRIDOR STUDY
 Pierce Alternative 1

ADVANTAGES

- Some Traffic Removed from Pierce Intersection
- Possibly No Property Acquisition
- Relatively Low Cost Improvement

DISADVANTAGES

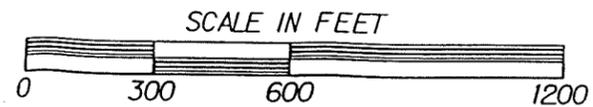
- Does Not Remove "Button Hook" Ramps
- Sharper Curves of "Button Hook" Ramps at Intersection
- "Button Hook" Ramps Adjacent - Potential Safety Issue
- Widen Riverside Drive 2-3 Lanes at Riverside Plaza
- Several Business Access Modifications
- Possible Impact on Creek (Northbound Exit Ramp)



PRELIMINARY



PDT
PROJECT DEVELOPMENT
TEAM



Georgia Department of Transportation
I-75 CORRIDOR STUDY
Pierce Alternative 2

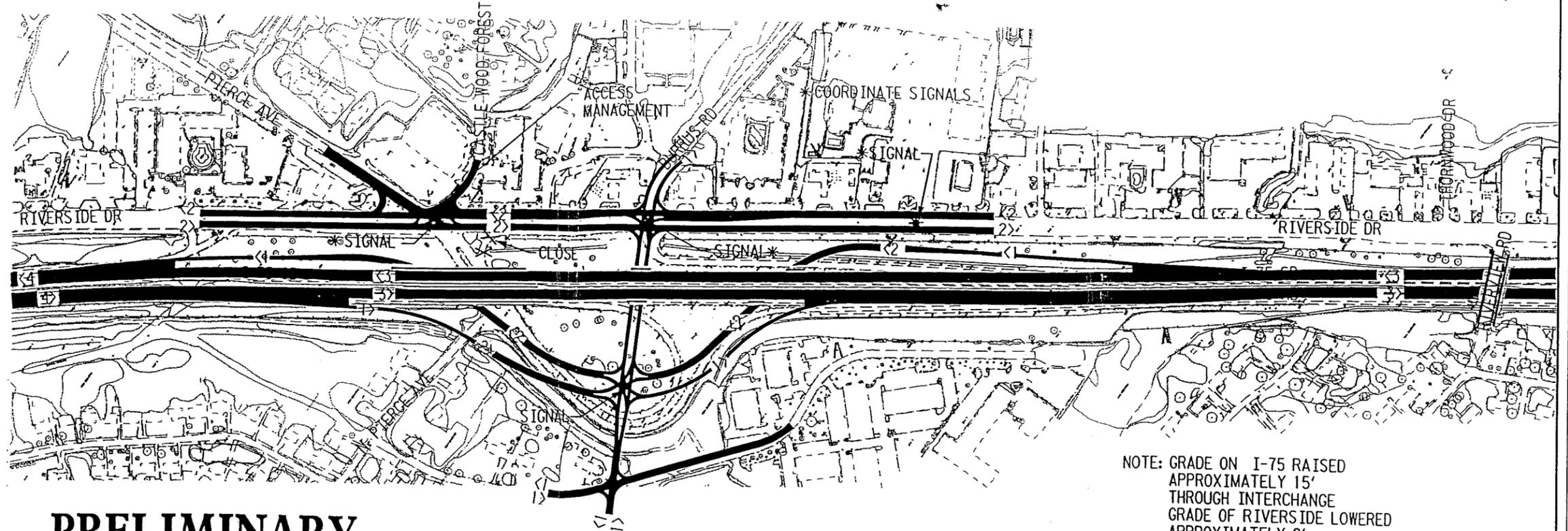
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ADVANTAGES

- Reduces Traffic at Pierce Intersection
- Removes "Button Hook" Ramps
- Eliminates Executive Park Traffic thru Neighborhood
- Possibly no Property Acquisition
- Separation of Executive Park Traffic and Residential Traffic

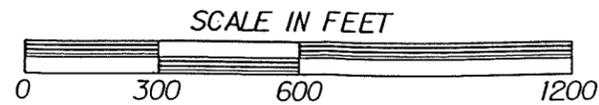
DISADVANTAGES

- Grade of I-75 Must be Raised Approximately 15 feet
- Grade of Riverside Dr. Must be Lowered Approximately 8 feet
- Possible Impact on Creek (Northbound Exit Ramp)
- High Cost of Construction and Traffic Control
- Removal of Access for Some Commercial Development Along Riverside Dr. Near Burrus



PRELIMINARY

NOTE: GRADE ON I-75 RAISED
APPROXIMATELY 15'
THROUGH INTERCHANGE
GRADE OF RIVERSIDE LOWERED
APPROXIMATELY 8'



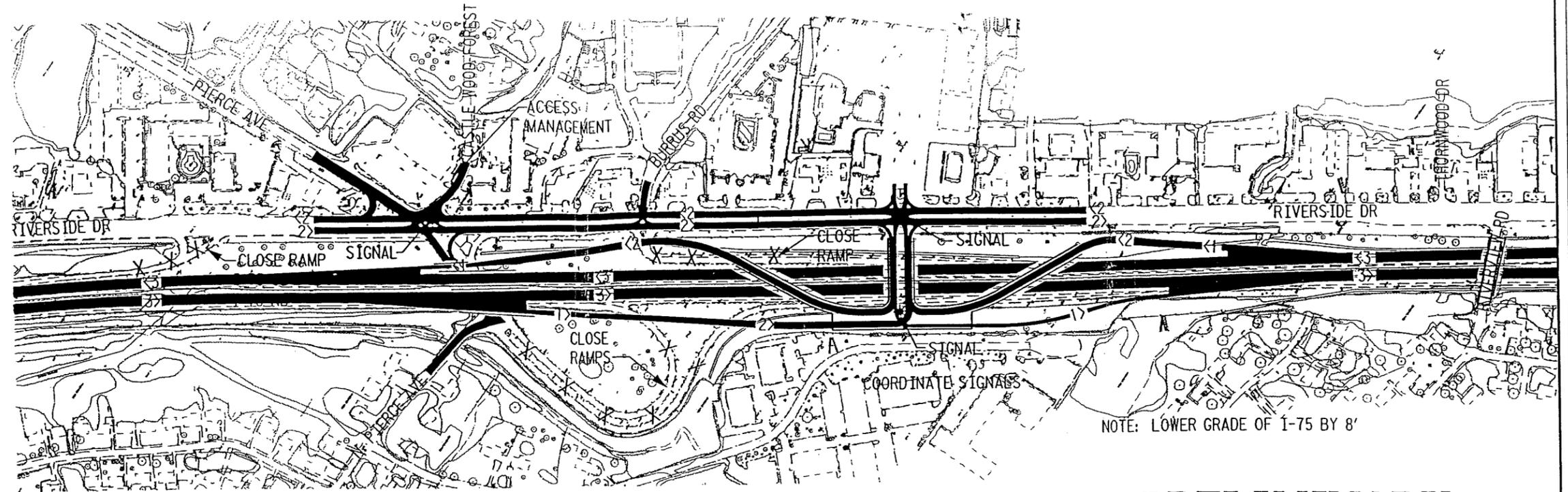
Georgia Department of Transportation
I-75 CORRIDOR STUDY
Pierce Alternative 3

ADVANTAGES

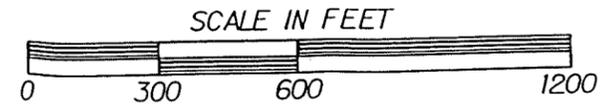
- Removes "Button Hook" Ramps
- No Grade Change on Riverside Drive
- No Residential Impacts
- Reduces Traffic at Pierce Intersection
- Lower Grade of I-75 Opposite Executive Park and Residential Area to North

DISADVANTAGES

- Extensive Bridge Construction
- High Retaining Wall Opposite Executive Park
- Widen Riverside Drive 2-3 Lanes at Riverside Plaza
- Several Business Access Modifications along Riverside Dr.
- Property Acquisition (Executive Park)
- Very High Construction Costs
- Visual and Noise Impact - Executive Park
- Extensive Maintenance of Traffic due to I-75 Grade Change



PRELIMINARY



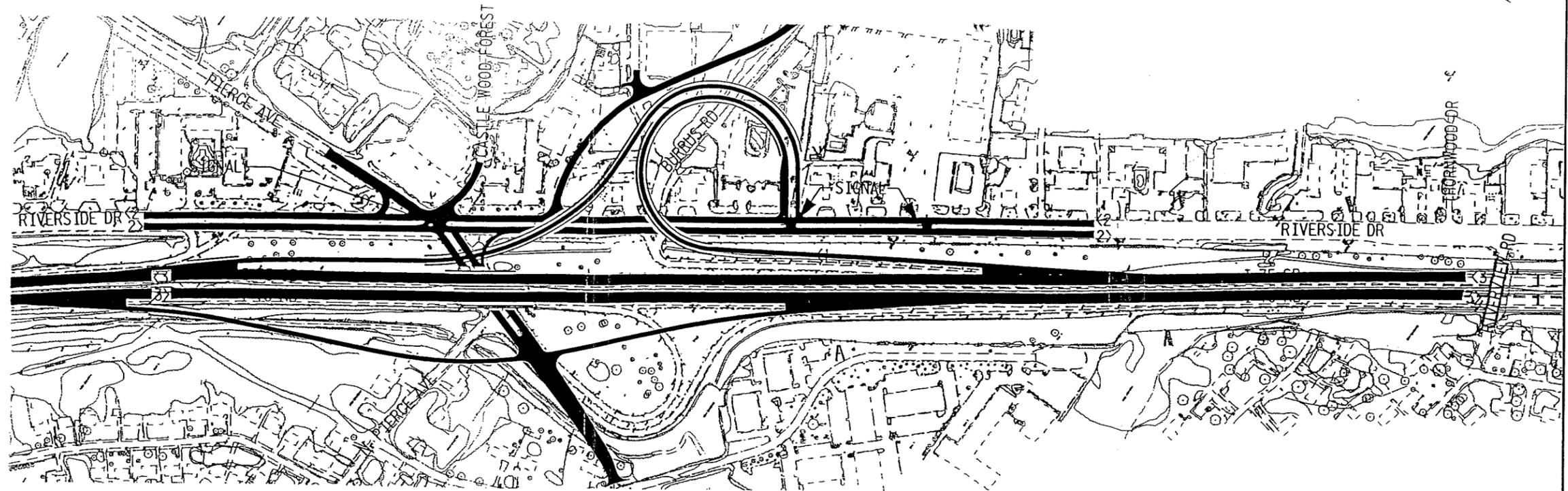
Georgia Department of Transportation
I-75 CORRIDOR STUDY
 Pierce Alternative 4

ADVANTAGES

- Reduces Traffic at Pierce Intersection
- Removes "Button Hook" Ramps
- No Grade Change on I-75
- Eliminates Executive Park Traffic thru Neighborhood

DISADVANTAGES

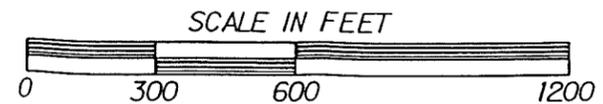
- Extensive Impacts to Commercial Property Along Riverside Drive
- Impacts to Residential Property to the East
- High Right-of-Way Cost
- Visual Impacts Along Riverside Drive
- Possible Impact on Creek (Northbound Exit Ramp)
- Moderate to High Construction Cost
- Closely Spaced Signals



PRELIMINARY

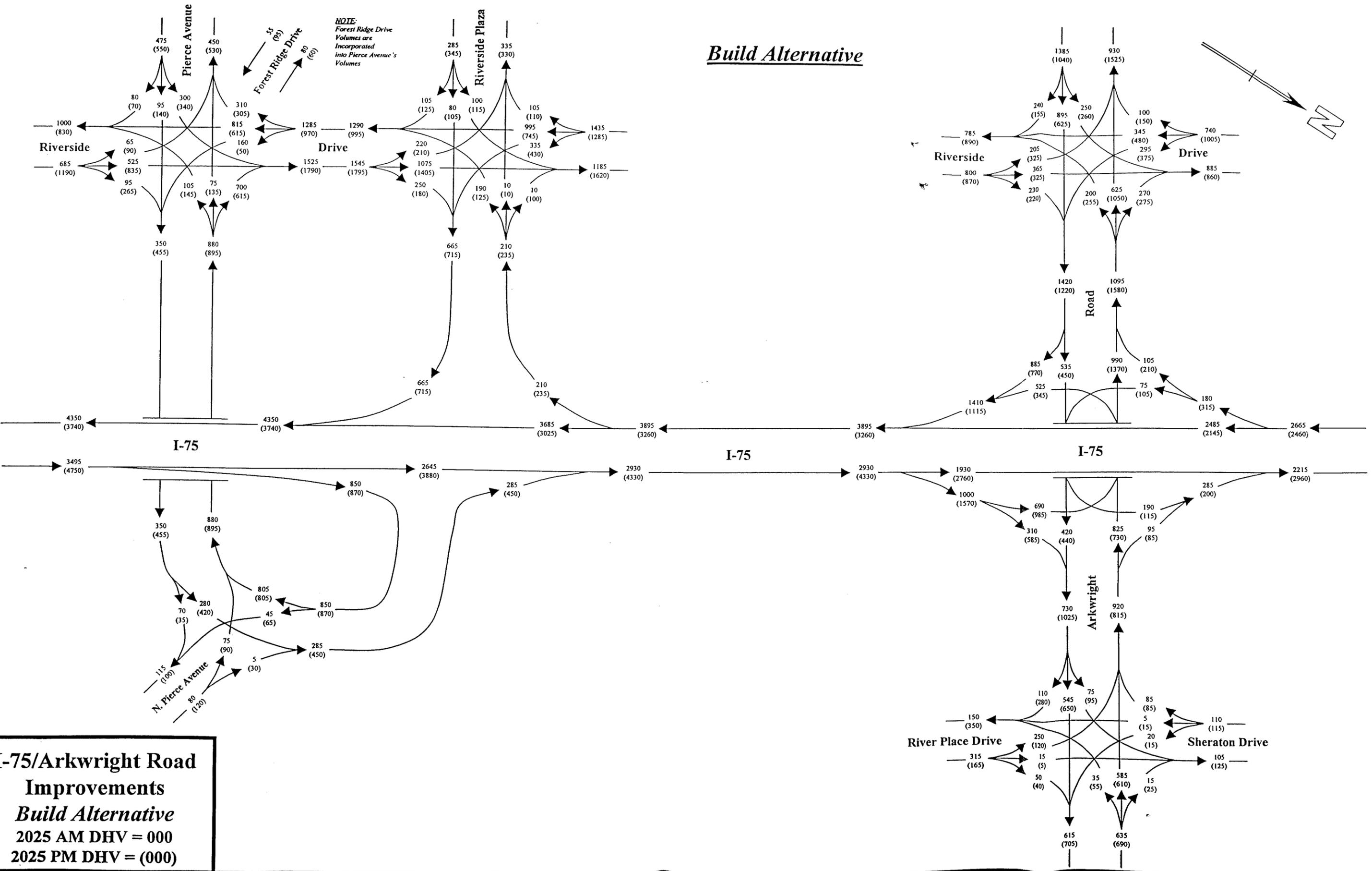


PDT
PROJECT DEVELOPMENT
TEAM

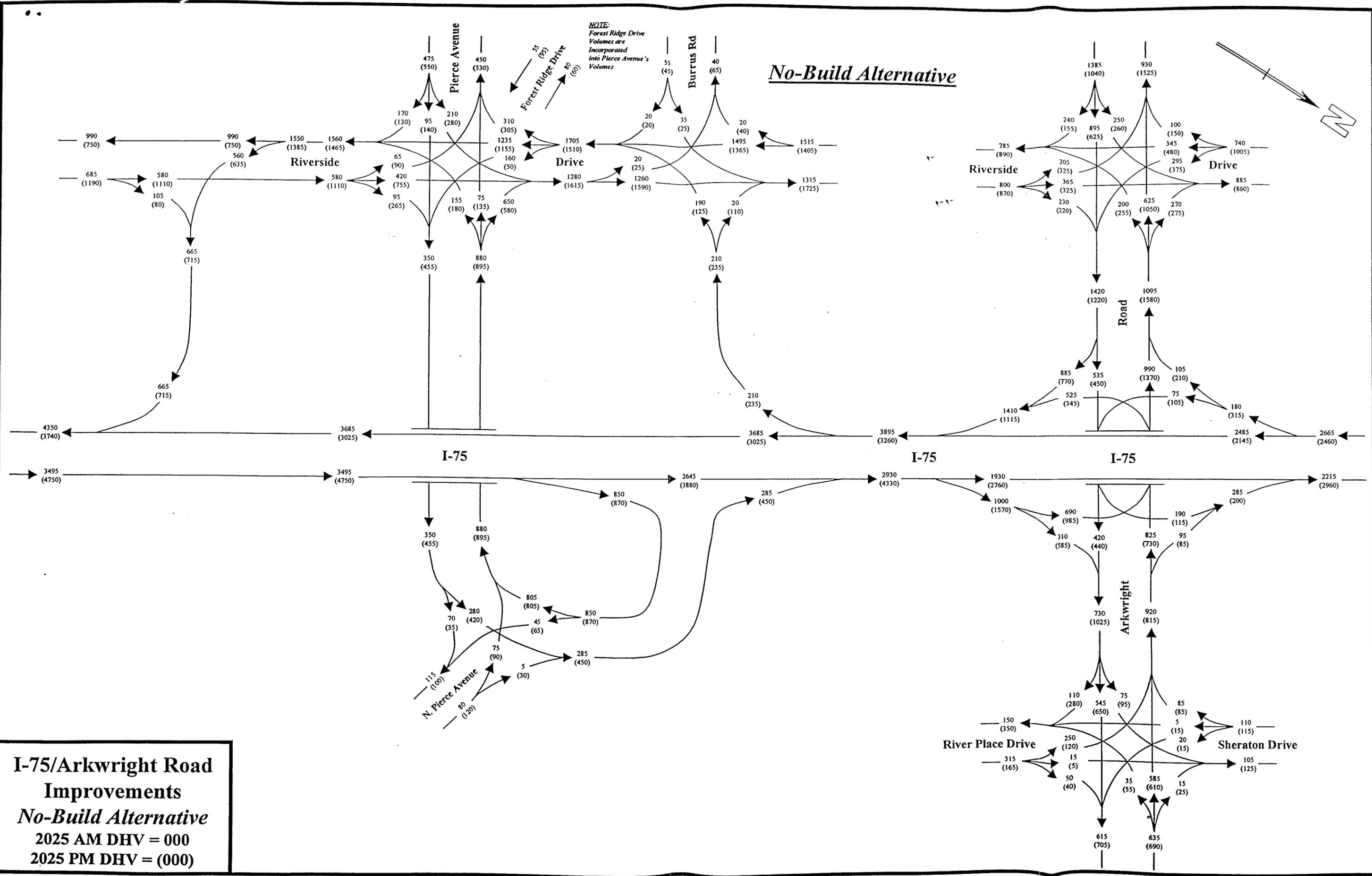


Georgia Department of Transportation
I-75 CORRIDOR STUDY
Pierce Alternative 5

Build Alternative

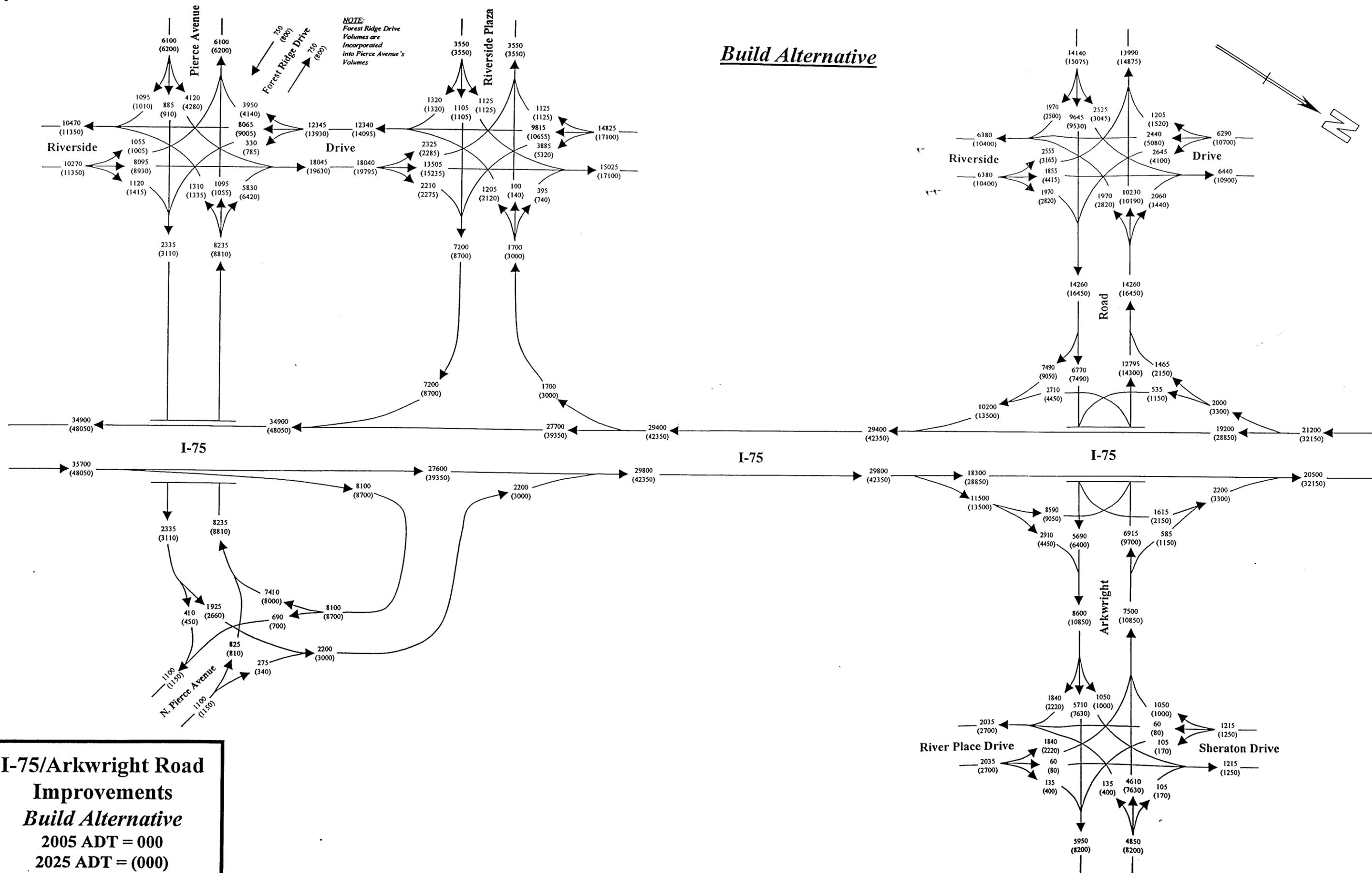


**I-75/Arkwright Road
Improvements
Build Alternative
2025 AM DHV = 000
2025 PM DHV = (000)**



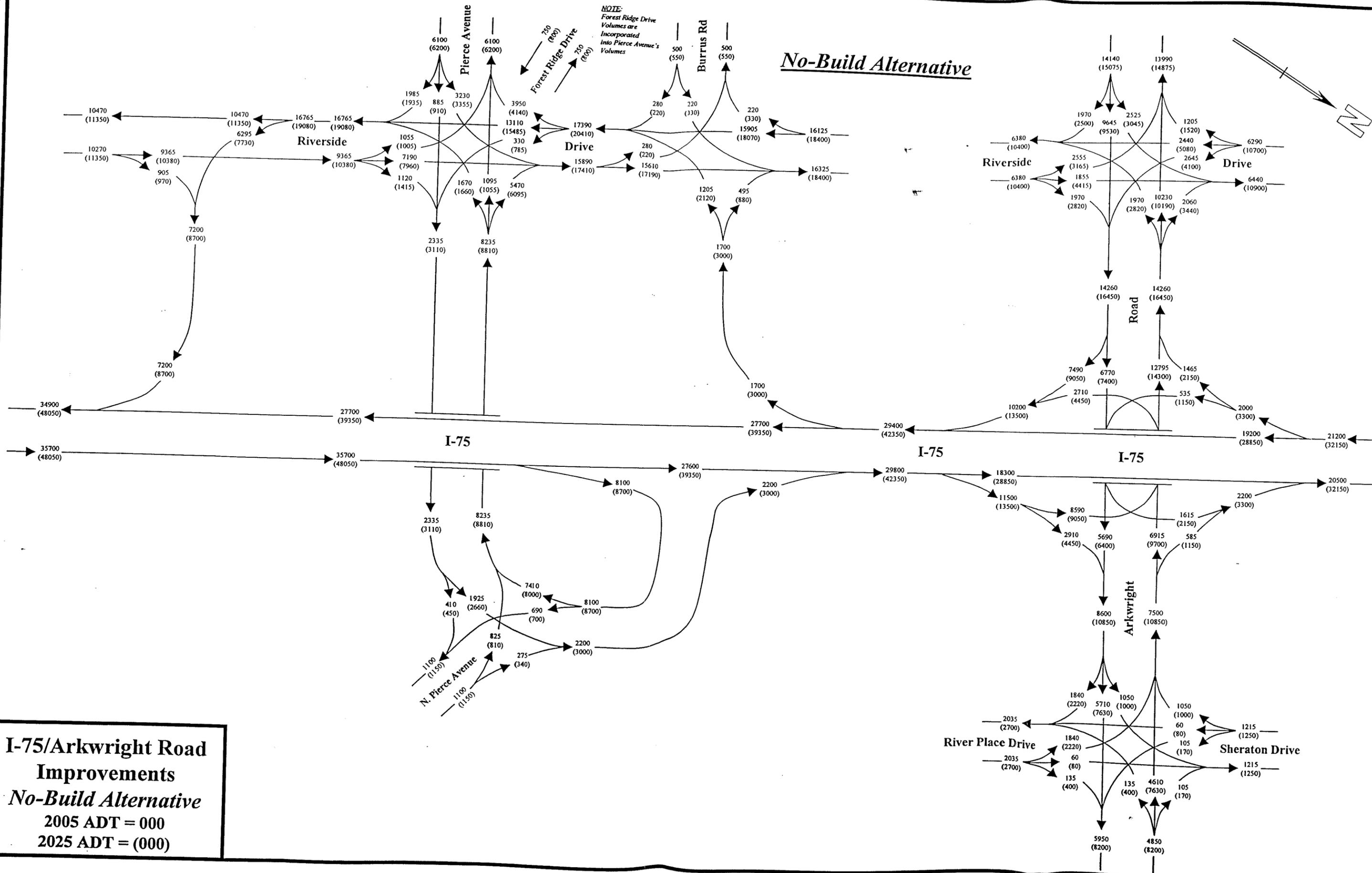
**I-75/Arkwright Road
Improvements
No-Build Alternative
2025 AM DHV = 000
2025 PM DHV = (000)**

Build Alternative



**I-75/Arkwright Road
Improvements
Build Alternative
2005 ADT = 000
2025 ADT = (000)**

No-Build Alternative



NOTE:
Forest Ridge Drive
Volumes are
Incorporated
into Pierce Avenue's
Volumes

**I-75/Arkwright Road
Improvements
No-Build Alternative
2005 ADT = 000
2025 ADT = (000)**

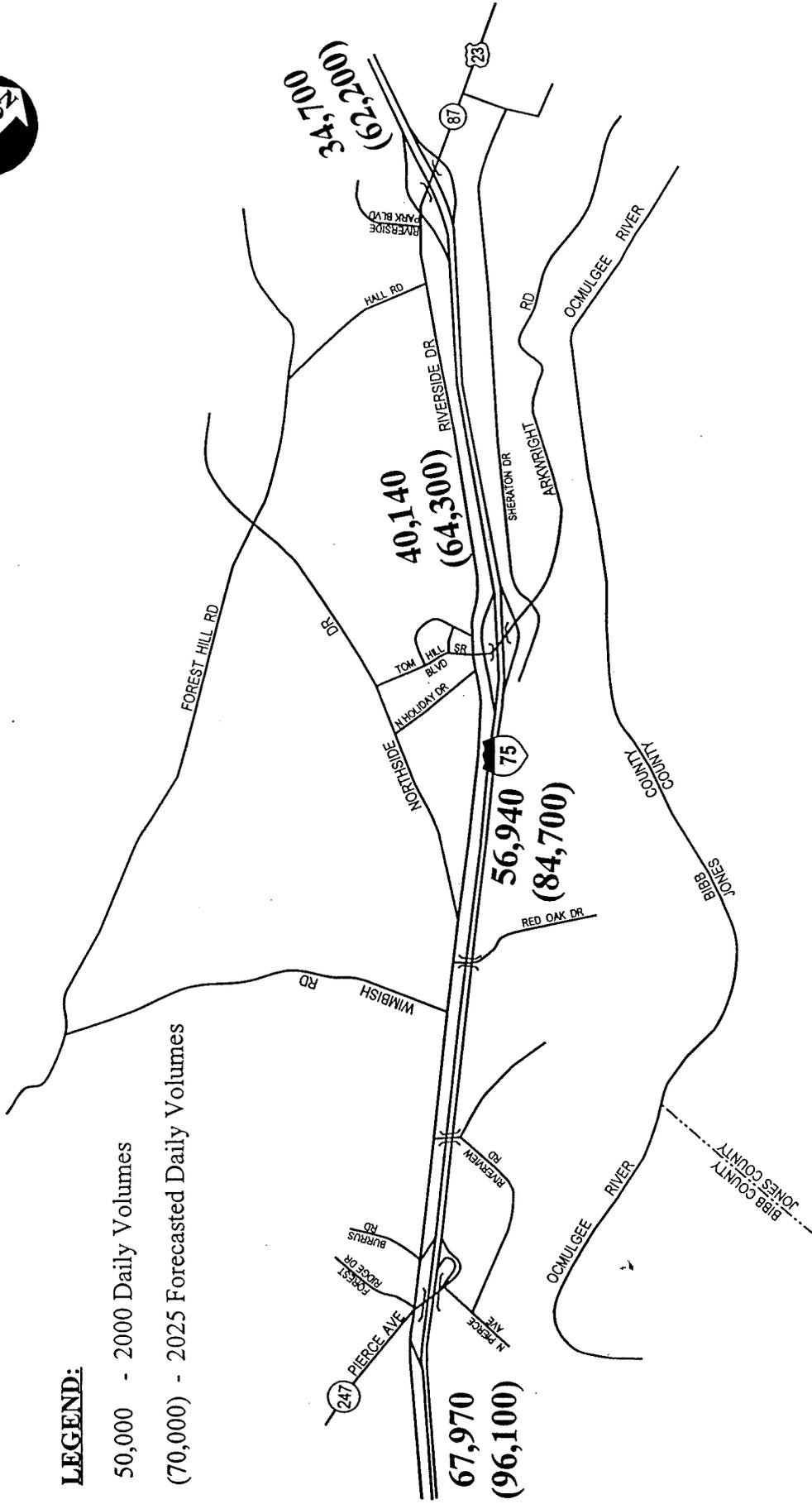
Daily Volumes on I-75



LEGEND:

50,000 - 2000 Daily Volumes

(70,000) - 2025 Forecasted Daily Volumes





MEMORANDUM

TO: Taylor Wright

FROM: Scott Rumble

SUBJ: I-75 (Pierce Ave to Arkwright Rd) Level of Service Analysis
Project: 06 0133.12

DATE: February 13, 2001

I-75 Level of Service Analysis

Peak hour (A.M. and P.M.) level of service analysis was completed for existing conditions as well as for the design year (2025) with the No-Build Alternative and the design year with the Build (Improvement) Alternative. See the attached tables for a complete summary of the level of service results.

Existing Conditions

There are three freeway sections that currently operate at a deficient level of service (i.e. a level of service E or F) on I-75: the I-75 NB basic section located south of Pierce Avenue in the P.M. peak hour, the I-75 NB exit ramp section located south of Pierce Avenue in the P.M. peak hour, and the I-75 NB exit ramp section located south of Arkwright Road in the P.M. peak hour.

Design Year (2025) with No-Build Alternative

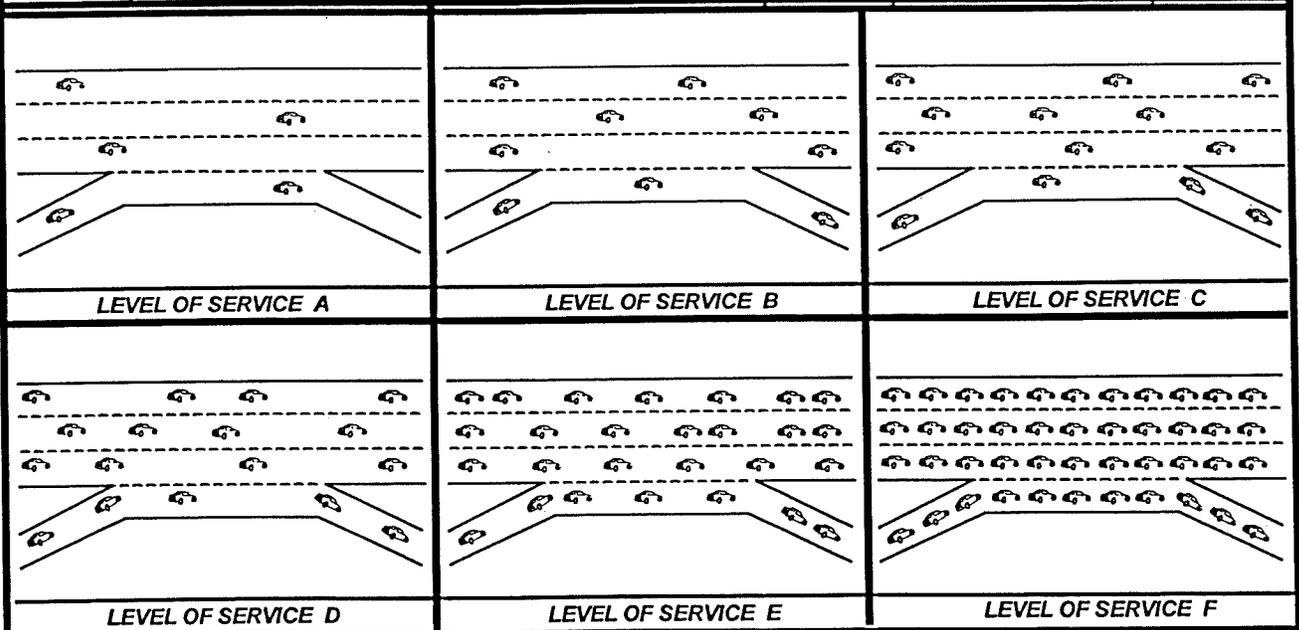
In the design year (2025), all I-75 freeway sections south of Arkwright Road will operate at a deficient level of service.

The only I-75 freeway segment north of Arkwright Road that will operate at a deficient level of service is the I-75 SB exit ramp section located north of Arkwright Road. It will operate at a level of service E (due to congestion caused by the traffic "bottle-neck" located downstream of this section).

Design Year (2025) with Build (Improvement) Alternative

All I-75 freeway sections will operate at an acceptable level of service in the design year (2025) with the Build (Improvement) Alternative.

LEVEL OF SERVICE	DESCRIPTION	BASIC FREEWAY SECTION MAXIMUM DENSITY (pc/l/mi)	FREEWAY RAMP SECTION MAXIMUM DENSITY (pc/l/mi)	FREEWAY WEAVING SECTION MAXIMUM DENSITY (pc/l/mi)	CD/HWY WEAVING SECTION MAXIMUM DENSITY (pc/l/mi)
A	FREE-FLOW OPERATIONS. Vehicles are almost completely unrestricted in their ability to maneuver within the traffic stream. The average spacing between vehicles is 26 car lengths.	10.0	10.0	10.0	12.0
B	REASONABLY FREE-FLOW. Free-flow speeds are still maintained at this level. The lowest average spacing between vehicles is approximately 17 car lengths. The ability to change lanes is only slightly restricted.	16.0	20.0	20.0	24.0
C	NOTICEABLE CONGESTION. Traffic flow still occurs at or near free-flow speeds. However, lane changes require more care and attention on the part of the driver. Minimum average spacings between vehicles are in the range of 11 car lengths.	24.0	28.0	28.0	32.0
D	SPEEDS DECLINE. Freedom to maneuver within the traffic stream is more noticeably limited. Even minor incidents can be expected to create queuing, because the traffic stream has little room to absorb disruptions. The minimum average vehicle spacings are about 8 car lengths.	32.0	35.0	35.0	36.0
E	AT CAPACITY. Operations are volatile, with essentially no useable gaps in the traffic flow. Vehicles are spaced at approximately 6 car lengths, leaving little room to make lane changes within the traffic stream.	45.0	43.0	43.0	40.0
F	BREAKDOWN CONDITIONS. The capacity of the freeway has been exceeded resulting in long queues and extremely high levels of congestion.	>45.0	>43.0	>43.0	>40.0



NOTE: Level of Service Definitions and Criteria are based on HCM, 1997 Update



I-75 CONCEPT STUDY
**Level of Service Definitions and Criteria
for Freeway Facilities**

I-75 Concept Study

2025 A.M. & P.M. Peak Hour Freeway Level of Service

Build (Improvement) Alternative

Freeway Section	Direction	Type of Freeway Section	A.M. Peak Hour				P.M. Peak Hour			
			Build (Improvement) Alternative		LOS	Build (Improvement) Alternative		LOS		
			Volumes (vph) Mainline	Volumes (vph) Ramp		Density (pc/ln/mi)	Volumes (vph) Mainline		Volumes (vph) Ramp	Density (pc/ln/mi)
I-75 North of Riverside Dr	NB	Basic	2,110	-	18.8	2,720	-	25.0	D	
I-75 North of Riverside Dr	SB	Basic	2,450	-	20.8	2,340	-	20.9	C	
I-75 Exit Ramp to Riverside Drive	NB	Ramp	1,600	615	18.5	2,100	860	25.4	C	
I-75 Entrance Ramp from Riverside Drive	NB	Ramp	1,600	510	15.7	2,100	620	22.2	C	
I-75 Exit Ramp to Riverside Drive	SB	Ramp	1,890	560	18.1	1,775	565	18.2	B	
I-75 Entrance Ramp from Riverside Drive	SB	Ramp	1,890	775	20.7	1,775	685	20.4	C	
I-75 between Riverside Dr & Arkwright Rd	NB	Basic	2,215	-	21.2	2,960	-	30.1	D	
I-75 between Riverside Dr & Arkwright Rd	SB	Basic	2,665	-	24.4	2,460	-	24.7	D	
I-75 Exit Ramp to Arkwright Rd	NB	Ramp	1,930	1,000	14.6	2,760	1,570	22.4	C	
I-75 Entrance Ramp from Arkwright Rd	NB	Ramp	1,930	285	18.7	2,760	200	26.5	C	
I-75 Exit Ramp to Arkwright Rd	SB	Ramp	2,485	180	20.7	2,145	315	21.4	C	
I-75 Entrance Ramp from Arkwright Rd	SB	Ramp	2,485	1,410	21.4	2,145	1,115	18.0	B	
I-75 between Arkwright Rd & Pierce Ave	NB	Basic	2,930	-	17.5	4,330	-	26.7	D	
I-75 between Arkwright Rd & Pierce Ave	SB	Basic	3,895	-	24.5	3,260	-	21.2	C	
I-75 Exit Ramp to Pierce Ave	NB	Ramp	2,645	850	15.1	3,880	870	22.0	C	
I-75 Entrance Ramp from Pierce Ave	NB	Ramp	2,645	285	15.2	3,880	450	23.8	C	
I-75 Exit Ramp to Riverside Dr (at Pierce Ave)	SB	Ramp	3,685	210	20.8	3,025	235	17.7	B	
I-75 Entrance Ramp from Riverside Dr (at Pierce Ave)	SB	Ramp	3,685	665	18.9	3,025	715	16.7	B	
I-75 South of Pierce Ave	NB	Basic	3,495	-	15.1	4,750	-	20.7	C	
I-75 South of Pierce Ave	SB	Basic	4,350	-	18.6	3,740	-	16.3	C	

I-75 Concept Study

Existing Conditions A.M. & P.M. Peak Hour

Freeway Level of Service

Freeway Section	Direction	Type of Freeway Section	A.M. Peak Hour				P.M. Peak Hour			
			Existing Conditions (No-Build)		Existing Conditions (No-Build)		Existing Conditions (No-Build)		Existing Conditions (No-Build)	
			Volumes (vph)	Density (pc/in/mi)	LOS	LOS	Volumes (vph)	Density (pc/in/mi)	LOS	LOS
I-75 North of Riverside Dr	NB	Basic	905	7.7	A	1,580	13.7	B	B	
	SB	Basic	1,350	11.1	B	1,360	11.7	B	B	
I-75 Exit Ramp to Riverside Drive	NB	Ramp	810	11.2	B	1,440	16.1	B	B	
	NB	Ramp	810	6.3	A	1,440	11.2	B	B	
I-75 Entrance Ramp from Riverside Drive	SB	Ramp	1,150	9.6	A	1,180	10.1	B	B	
	SB	Ramp	1,150	12.7	B	1,180	11.4	B	B	
I-75 between Riverside Dr & Arkwright Rd	NB	Basic	1,345	12.2	B	1,920	17.4	C	C	
	SB	Basic	1,815	15.3	B	1,600	13.8	B	B	
I-75 between Riverside Dr & Arkwright Rd	NB	Ramp	1,215	19.3	B	1,760	16.0	B	B	
	NB	Ramp	1,215	10.9	B	1,760	16.0	B	B	
I-75 Exit Ramp to Arkwright Rd	SB	Ramp	1,685	14.7	B	1,420	13.3	B	B	
	SB	Ramp	1,685	22.0	C	1,420	16.9	B	B	
I-75 Entrance Ramp from Arkwright Rd	NB	Basic	2,040	18.6	C	3,020	29.9	D	D	
	SB	Basic	2,830	26.6	D	2,275	20.3	C	C	
I-75 between Arkwright Rd & Pierce Ave	NB	Ramp	1,890	21.0	C	2,690	27.0	C	C	
	NB	Ramp	1,890	15.9	B	2,690	27.0	C	C	
I-75 Exit Ramp to Riverside Dr (at Pierce Ave)	SB	Ramp	2,675	24.7	C	2,150	19.1	B	B	
	SB	Ramp	2,675	30.8	D	2,150	20.5	C	C	
I-75 Entrance Ramp from Riverside Dr (at Pierce Ave)	NB	Basic	2,615	22.1	C	2,500	25.0	C	C	
	SB	Basic	3,295	30.5	D	2,760	23.3	C	C	

NOTE:  - Highlighted Entries Indicate Freeway Sections that Operate at a Deficient Level of Service

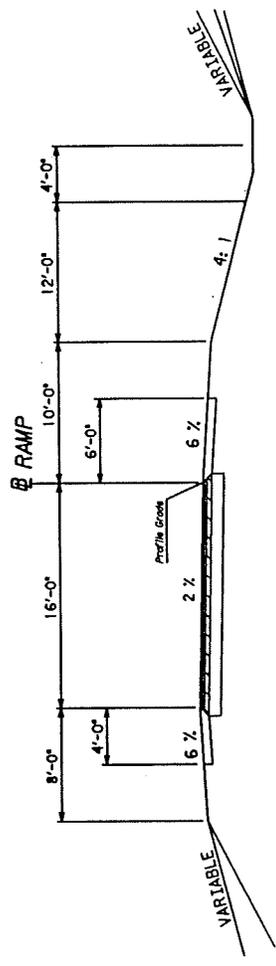
ACCIDENT HISTORY

Location	Accident Rate/ Statewide Average*	Injury Rates/ Statewide Average*	Fatalities
I-75 (I-16 to Pierce Avenue)	123/162	56/65	0
I-75 (Pierce Avenue to Arkwright Road)	88/162	38/65	0
I-75 (Arkwright Road to Riverside Drive)	58/162	25/65	0

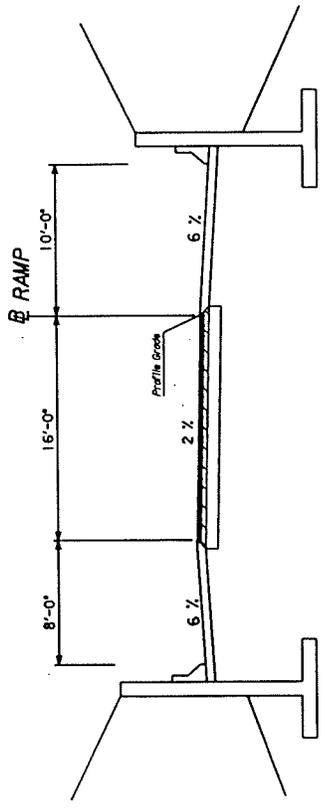
Location	Yearly Accidents/ Statewide Average	Injuries ('98 & '99)	Fatalities ('98 & '99)
Riverside Drive at I-75 On-Ramp	3.5/7.4	4	0
Riverside Drive at I-75 Off-Ramp	16.5/11.9	6	0
Riverside Drive at Pierce Avenue	21.0/26.9	14	0
Riverside Drive at Arkwright Road	16.5/26.9	7	0
I-75 SB at Arkwright Road	13.3/10.9	10	0
I-75 NB at Arkwright Road	12.3/13.3	4	0

* Accident and Injury Rates are per 100 million vehicle miles.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	MI-11-75-2 (177), 51P-037-1 (181) 84P-037-1 (191)	1	1



TANGENT SECTION
ONE - LANE RAMP



TANGENT SECTION W/ WALLS
ONE - LANE RAMP

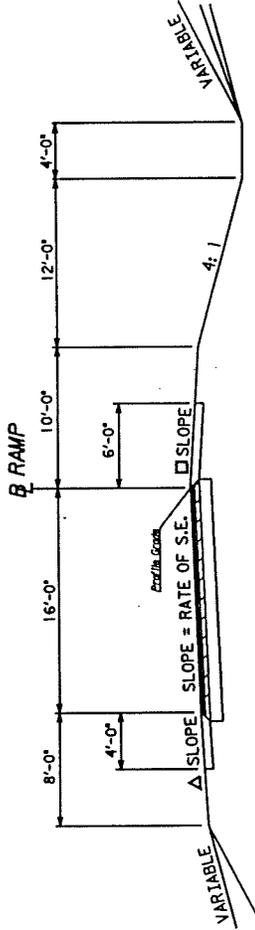
SHEET 1 OF 10

TYPICAL SECTIONS

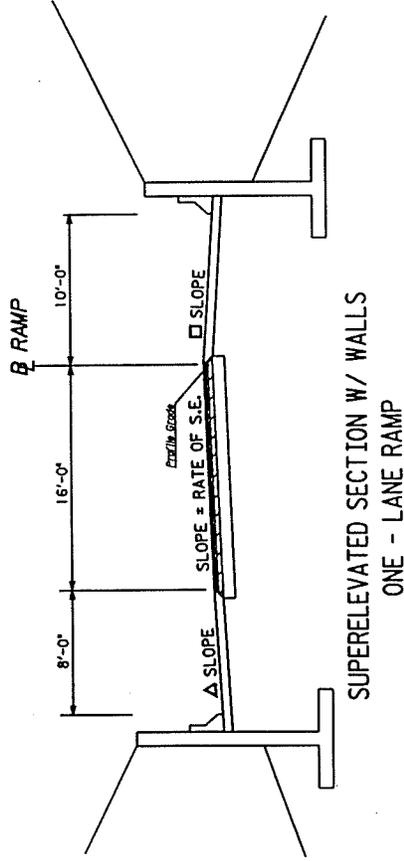
ONE-LANE RAMPS
TANGENT SECTIONS

NOT TO SCALE

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	MA-14-75-2 (177) STP-037-1(18) B&E-037-1(19)	-2-	



SUPERELEVATED SECTION
ONE - LANE RAMP



SUPERELEVATED SECTION W/ WALLS
ONE - LANE RAMP

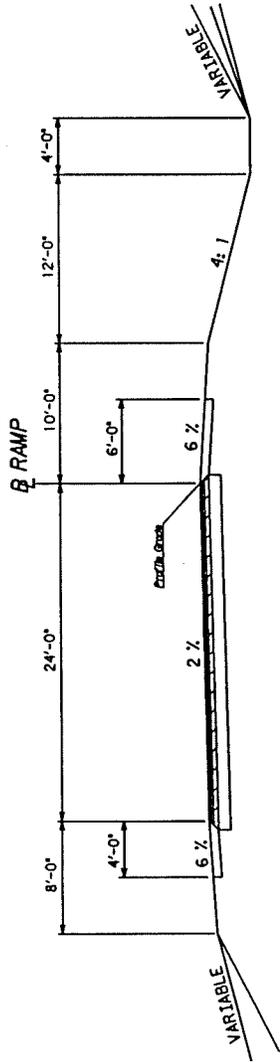
SLOPE 6 X OR RATE OF S.E. WHICHEVER IS GREATER
 CROSS SLOPE AS FOLLOWS:
 S.E. RATE OF 0.098ft/ft OR LESS USE 0.131ft/ft
 S.E. RATE OF 0.131ft/ft USE 0.098ft/ft
 S.E. RATE OF 0.164ft/ft USE 0.065ft/ft
 S.E. RATE OF 0.196ft/ft USE 0.032ft/ft
 S.E. RATE OF 0.264ft/ft USE +0.032ft/ft
 ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER
 SLOPES NOT TO EXCEED 0.230ft/ft

SHEET 2 OF 10

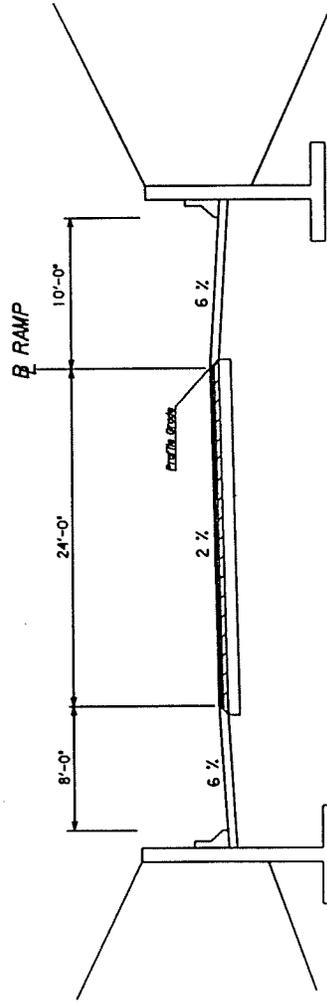
TYPICAL SECTIONS
 ONE-LANE RAMPS
 SUPERELEVATED SECTIONS

NOT TO SCALE

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	HA-14-75-2 (177), SIP-037-1(118) BE-037-1(119)	3	3



TANGENT SECTION
TWO - LANE RAMP



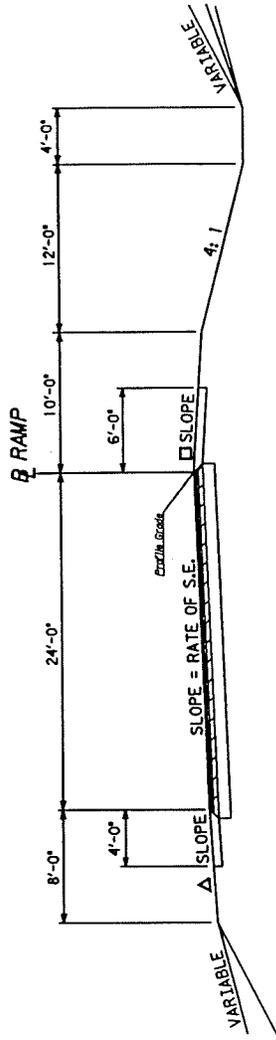
TANGENT SECTION W/ WALLS
TWO - LANE RAMP

SHEET 3 OF 10

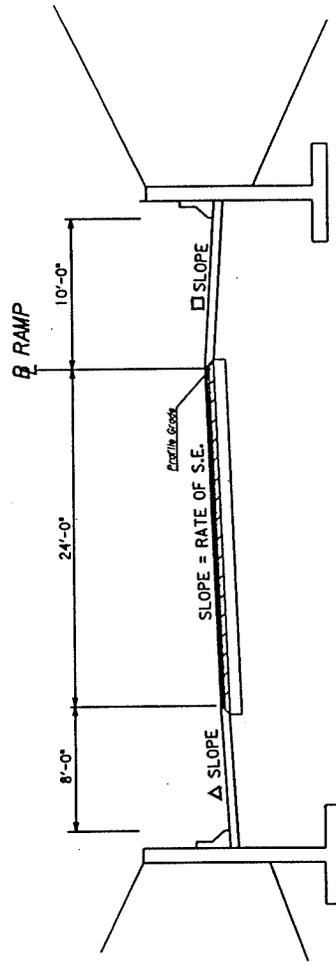
TYPICAL SECTIONS
TWO-LANE RAMPS
TANGENT SECTIONS

NOT TO SCALE

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	MI-11-75-2 (177) STP-037-11(18) BF-037-1(19)	4	4



SUPERELEVATED SECTION
TWO - LANE RAMP



SUPERELEVATED SECTION W/ WALLS
TWO - LANE RAMP

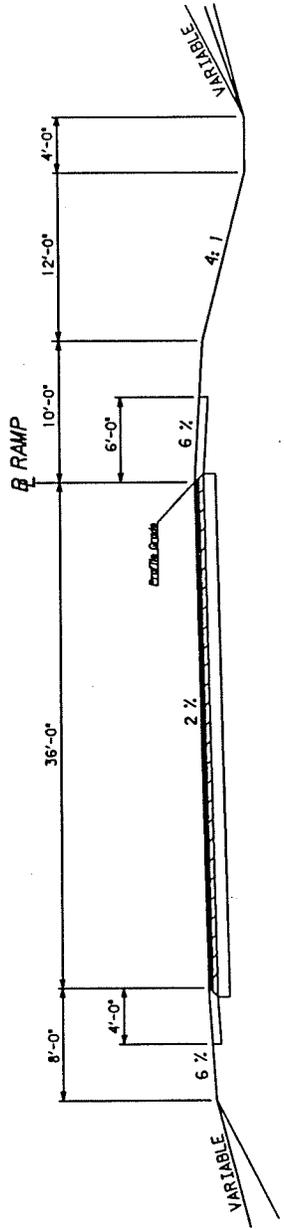
SHEET 4 OF 10

TYPICAL SECTIONS
TWO-LANE RAMPS
SUPERELEVATED SECTIONS

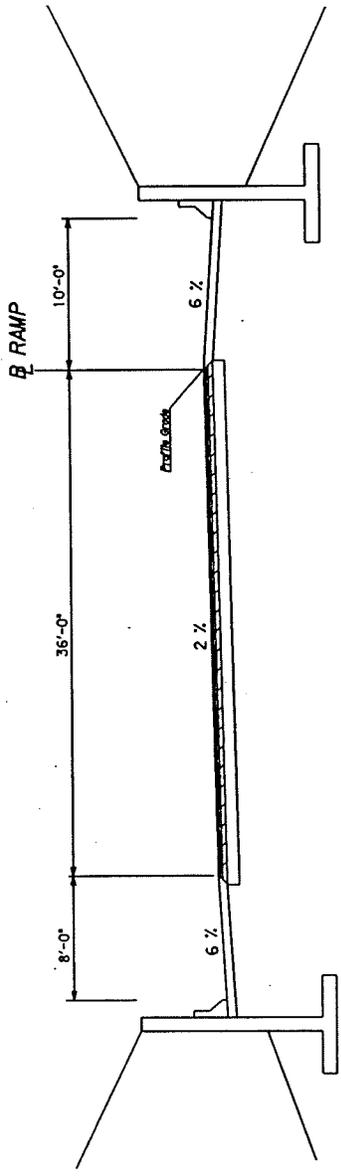
NOT TO SCALE

ΔSLOPE 6 % OR RATE OF S.E. WHICHEVER IS GREATER
 DISLOPE AS FOLLOWS:
 S.E. RATE OF 0.098ft/ft OR LESS USE 0.131ft/ft
 S.E. RATE OF 0.131ft/ft USE 0.098ft/ft
 S.E. RATE OF 0.164ft/ft USE 0.065ft/ft
 S.E. RATE OF 0.196ft/ft USE 0.032ft/ft
 S.E. RATE OF 0.264ft/ft USE +0.032ft/ft
 ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER
 SLOPES NOT TO EXCEED 0.230ft/ft

STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
GA.	HA-14-75-2 (177) 675-037-1(18) 68-037-1(18)	3	3



TANGENT SECTION
THREE - LANE RAMP



TANGENT SECTION W/ WALLS
THREE - LANE RAMP

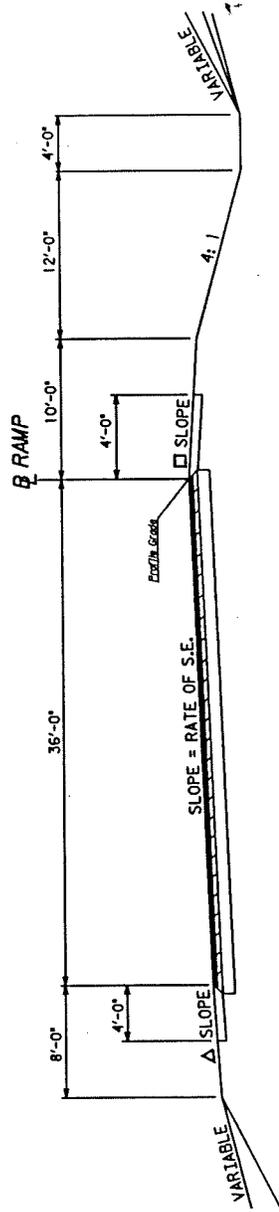
SHEET 5 OF 10

TYPICAL SECTIONS

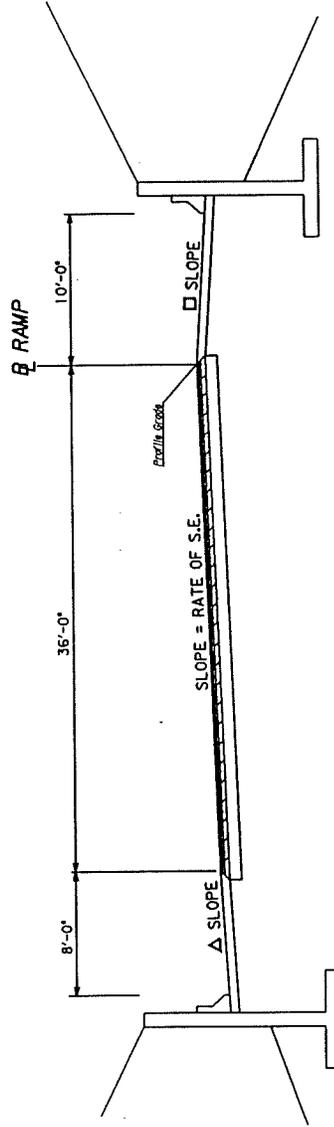
THREE-LANE RAMPS
TANGENT SECTIONS

NOT TO SCALE

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	MI-111-75-2 (177) STP-037-1(118) BF-037-1(119)	6.	6.



SUPERELEVATED SECTION
THREE - LANE RAMP



SUPERELEVATED SECTION W/ WALLS
THREE - LANE RAMP

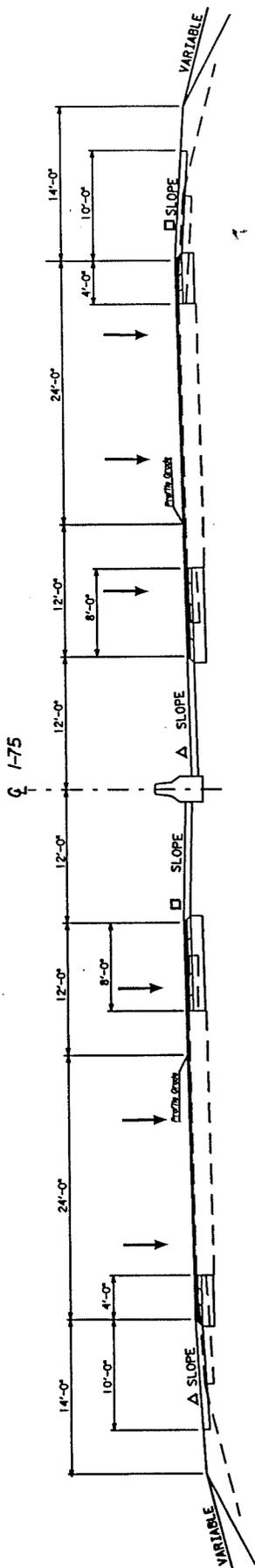
SHEET 6 OF 10

TYPICAL SECTIONS
THREE-LANE RAMPS
SUPERELEVATED SECTIONS

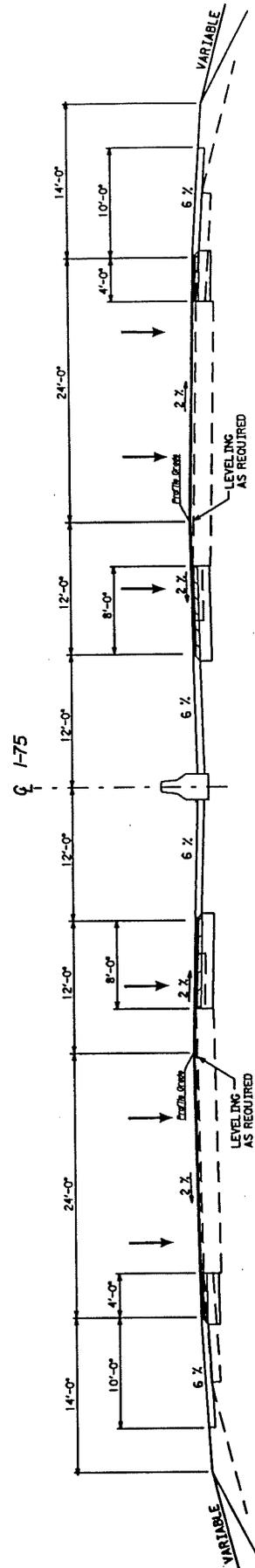
NOT TO SCALE

ΔSLOPE 6 % OR RATE OF S.E. WHICHEVER IS GREATER
 OSLOPE AS FOLLOWS:
 S.E. RATE OF 0.098ft/ft OR LESS USE 0.131ft/ft
 S.E. RATE OF 0.131ft/ft USE 0.098ft/ft
 S.E. RATE OF 0.164ft/ft USE 0.065ft/ft
 S.E. RATE OF 0.196ft/ft USE 0.032ft/ft
 S.E. RATE OF 0.264ft/ft USE +0.032ft/ft
 ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER
 SLOPES NOT TO EXCEED 0.230ft/ft

STATE	PROJECT NUMBER	SHEET TOTAL SHEETS
GA.	HH-111-75-2 (177), STP-007-1(118) 84F-037-1(113)	10



SUPERELEVATION SECTION
WIDENING & OVERLAY LOCATION



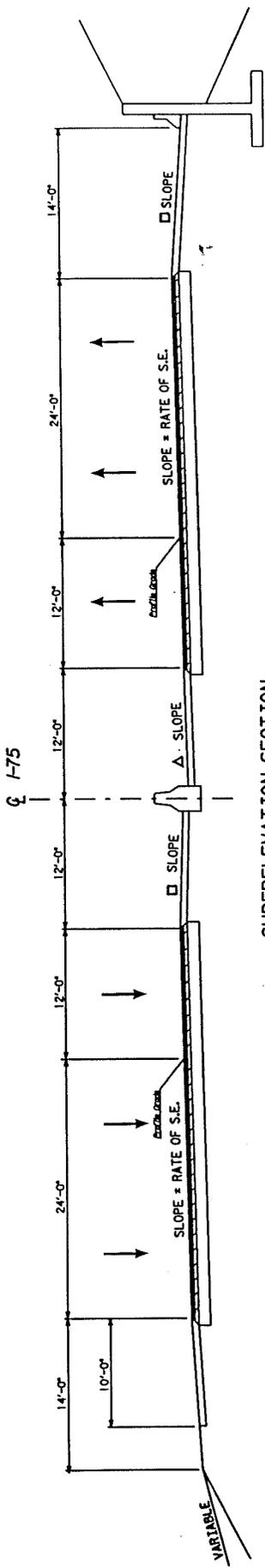
TANGENT SECTION
WIDENING & OVERLAY LOCATION

SHEET 7 OF 10

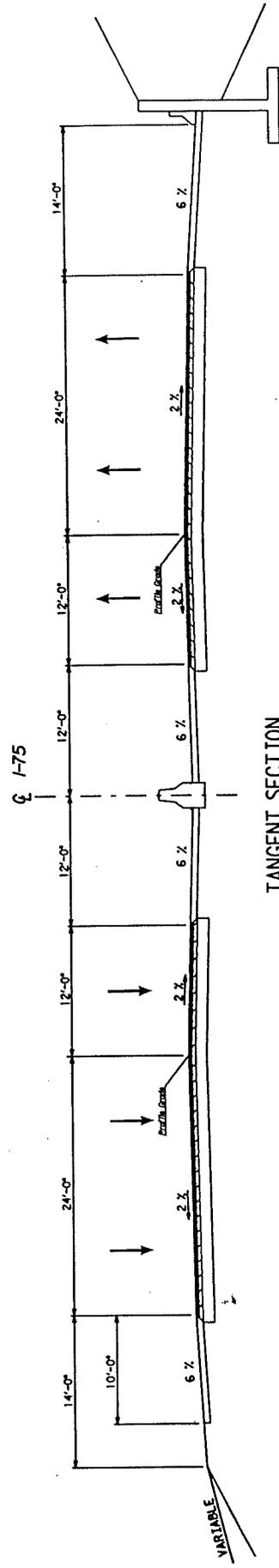
TYPICAL SECTIONS
I-75 WIDENING
EXISTING 40' MEDIAN LOCATIONS
NOT TO SCALE

ASLOPE 6% OR RATE OF S.E. WHICHEVER IS GREATER
 SLOPE AS FOLLOWS:
 S.E. RATE OF 0.098ft/ft OR LESS USE 0.131ft/ft
 S.E. RATE OF 0.131ft/ft, USE 0.098ft/ft
 S.E. RATE OF 0.164ft/ft, USE 0.065ft/ft
 S.E. RATE OF 0.196ft/ft, USE 0.032ft/ft
 S.E. RATE OF 0.264ft/ft, USE +0.032ft/ft
 ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER
 SLOPES NOT TO EXCEED 0.230ft/ft

STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
GA.	MI-11-75-2 (177) STA 037-1(18) RF-033-1(18)	3	3



SUPERELEVATION SECTION
NEW PAVEMENT LOCATION



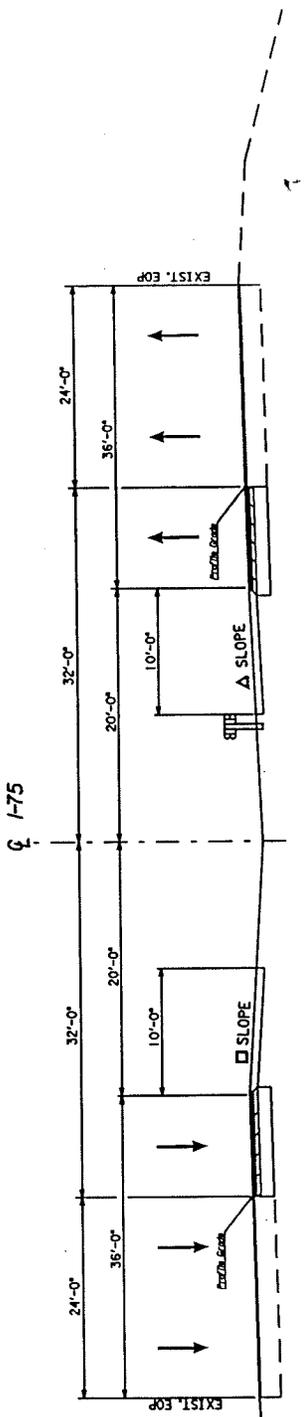
TANGENT SECTION
NEW PAVEMENT LOCATION

SHEET 8 OF 10

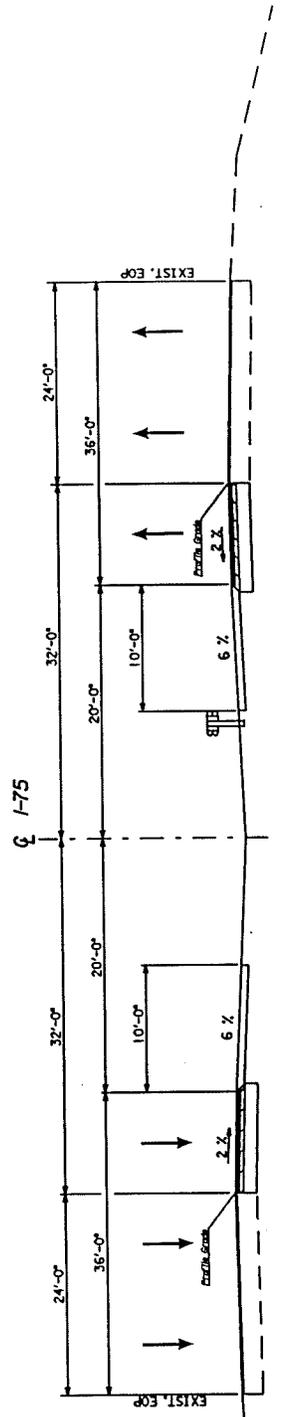
TYPICAL SECTIONS
I-75 RECONSTRUCTION
EXISTING 40' MEDIAN LOCATIONS
NOT TO SCALE

ASLOPE 6% OR RATE OF S.E. WHICHEVER IS GREATER
 DISLOPE AS FOLLOWS:
 S.E. RATE OF 0.096ft/ft OR LESS USE 0.131ft/ft
 S.E. RATE OF 0.131ft/ft, USE 0.096ft/ft
 S.E. RATE OF 0.164ft/ft, USE 0.065ft/ft
 S.E. RATE OF 0.196ft/ft, USE 0.032ft/ft
 S.E. RATE OF 0.264ft/ft, USE +0.032ft/ft
 ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER
 SLOPES NOT TO EXCEED 0.230ft/ft

STATE	PROJECT NUMBER	SHEET TOTAL SHEETS
GA.	HI-14-75-2 (177), SR-037-1(18) SR-037-1(18)	8



SUPERELEVATION SECTION
WIDENING & OVERLAY LOCATION



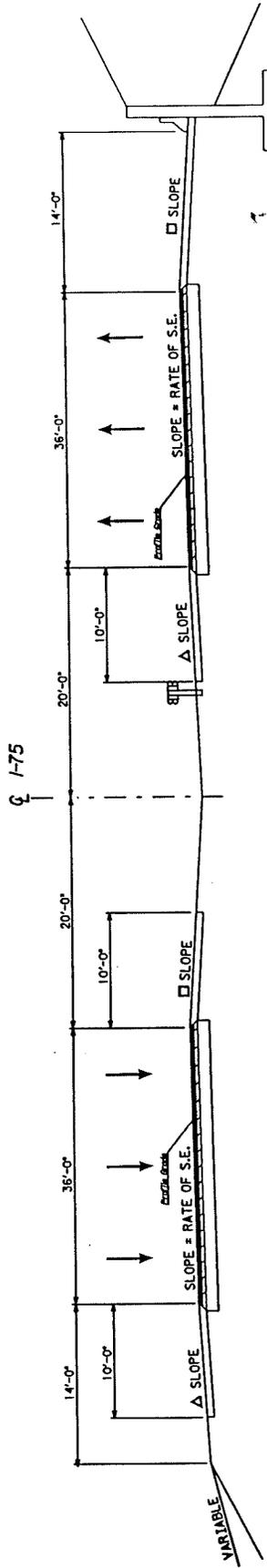
TANGENT SECTION
WIDENING & OVERLAY LOCATION

SHEET 9 OF 10

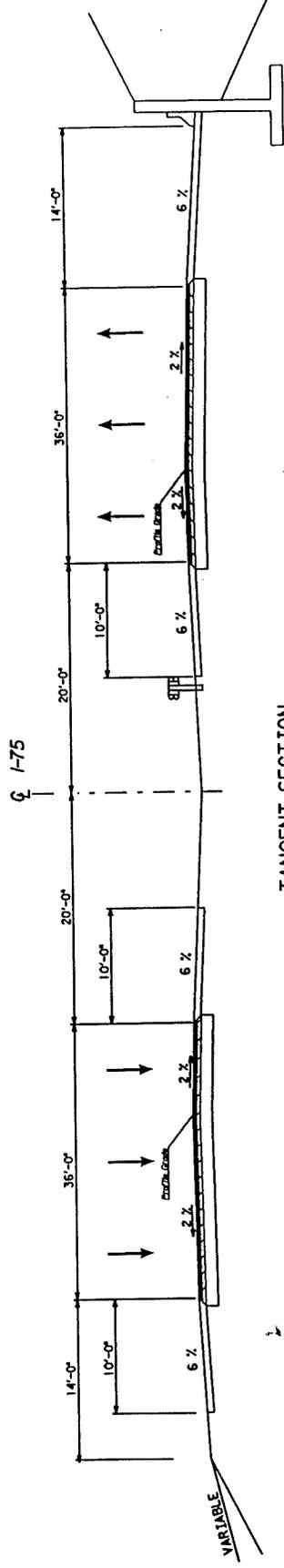
TYPICAL SECTIONS
I-75 WIDENING
EXISTING 64' MEDIAN LOCATIONS
NOT TO SCALE

ASLOPE 6% OR RATE OF S.E. WHICHEVER IS GREATER
 OSLOPE AS FOLLOWS:
 S.E. RATE OF 0.098ft/ft OR LESS USE 0.131ft/ft
 S.E. RATE OF 0.131ft/ft, USE 0.098ft/ft
 S.E. RATE OF 0.164ft/ft, USE 0.065ft/ft
 S.E. RATE OF 0.196ft/ft, USE 0.032ft/ft
 S.E. RATE OF 0.264ft/ft, USE +0.032ft/ft
 ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER
 SLOPES NOT TO EXCEED 0.230ft/ft

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	MI-14-75-2 (177), SIP-037-1(18) 84-037-1(19)	7	7



SUPERELEVATION SECTION
NEW PAVEMENT LOCATION



TANGENT SECTION
NEW PAVEMENT LOCATION

SHEET 10 OF 10

TYPICAL SECTIONS
I-75 RECONSTRUCTION
EXISTING 64' MEDIAN LOCATIONS

NOT TO SCALE

ΔSLOPE 6 % OR RATE OF S.E. WHICHEVER IS GREATER
 CROWN AS FOLLOWS
 S.E. RATE OF 0.098ft/ft OR LESS USE 0.131ft/ft
 S.E. RATE OF 0.131ft/ft, USE 0.098ft/ft
 S.E. RATE OF 0.164ft/ft, USE 0.065ft/ft
 S.E. RATE OF 0.196ft/ft, USE 0.032ft/ft
 S.E. RATE OF 0.264ft/ft, USE +0.032ft/ft
 ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER
 SLOPES NOT TO EXCEED 0.230ft/ft

Concept Team Meeting Minutes

Project: I-75 from Pierce Avenue to Arkwright Road
Project No.: NH-IM-75-2(211)
P.I. No.: 312090
Date: March 26, 2001
Attendees: Attached

- Taylor Wright of PBS&J presented the concept for the widening of I-75 from approximately 2000' south of Pierce Avenue to approximately 3000' north of Arkwright Road, and the reconfigurations of the interchanges at Pierce Avenue and Arkwright Road. It was pointed out that the proposed intersection at Arkwright Road would not preclude a future grade separation of Riverside Drive at Arkwright Road, which was part of the original concept of Riverside Drive.
- Walter Boyd of FHWA asked why the proposed buttonhook interchange (Alt 2) at Pierce Avenue was proposed instead of the Alternative 4 design shown in the concept report. Joe Palladi of GDOT listed issues related to Alternate 4, such as driver expectancy, confusing signing, no improvements in level of service in comparison to Alternate 2 and considerably increased construction cost were reasons that GDOT supported Alternate 2 over Alternate 4. The project development team originally supported Alternative 4 by a slight margin, but when GDOT outlined the concerns and suggested that the cost savings could be used for features such as sound walls and landscaping, Alternate 2 was agreed upon by the project development team.
- Ken Sheets of Bibb County questioned locating the intersection of the Pierce Avenue interchange at Riverside Plaza as opposed to Lee Road. Some reasons given for this design were:
 1. Moving I-75 off ramp north could cause conflict with Riverview Road bridge over I-75
 2. Intersection at Lee Road could encourage cut-through traffic through residential neighborhood
 3. Riverside Plaza is greater traffic generator

It was agreed that PBS&J would look at this issue in further detail.

- The Bibb County and Macon representatives also questioned the benefit to the Riverside Drive at Pierce Avenue intersection and expressed concerns regarding traffic problems related to left turns into commercial drives along Riverside Drive. Also of concern was the possibility of impeding left turn movement from Lee Road due the queue along Riverside Drive. It was pointed out that the CORSIM traffic analysis showed a substantial improvement to operations at the Riverside Drive at Pierce Avenue intersection. PBS&J will study the area and make recommendations for access control along Riverside Drive. It was discussed that Lee Road could possibly be converted to right-in/right-out only.
- Joe Palladi mentioned that a half-diamond interchange was studied for Northside Drive at I-75. Although this interchange is not currently planned, the design of I-75 will not preclude a future project at this location.
- David Mulling of GDOT Engineering Services asked if traffic can be maintained at the I-75 grade change south of Pierce Avenue. It was stated that traffic will be maintained during construction.
- ✶ ▪ A value engineering study should begin as soon as possible. PBS&J will supply the necessary information for this study.
- Joe Palladi of GDOT Urban Design requested that fiber optic conduit be included for the length of the project.
- Walter Boyd of FHWA questioned the need for an IJR for this project and suggested combining this project with the I-16 at I-75 IJR. Joe Palladi stated that the projects should be kept separate so that one does not hold up the other. Walter Boyd concurred with Mr. Palladi's recommendation.
- Angela Alexander of GDOT Urban Design stated that if further studies indicated that the Pierce Avenue southbound exit/entrance ramp intersection should move to Lee Road, another Public Information Meeting should be held.
- Angela Alexander suggested that the Riverview Road Bridge over I-75 could be shifted north. This could help with grade problems at Riverside Drive or conflicts with the I-75 off ramp to Pierce Avenue. PBS&J will investigate.

MEETING/CONFERENCE RECORD OF ATTENDEES

PURPOSE: Concept Meeting
 LOCATION: Urban Design Conf.
 DATE: March 26, 2001 TIME: 10:00 a.m.
 MODERATOR: Taylor Wright

NAME	ORGANIZATION	PHONE NO.	E-MAIL ADDRESS
1. <u>Ganetha Rice-Singleton</u>	<u>GDOT-Urban Design</u>	<u>404-656-5444</u>	
2. <u>Joe Johnson</u>	<u>MAAI-Bibb Co.</u>	<u>478 755-0000</u>	<u>mamacon@bellsouth.net</u>
3. <u>KEN SHEETS</u>	<u>BIBB COUNTY</u>	<u>478-749-6660</u>	<u>KENSHEETS@Co.BIBB.GA.</u>
4. <u>BROOK MARTIN</u>	<u>GA DOT TRAFFIC OPS</u>	<u>404-635-8127</u>	<u>BROOK.MARTIN</u>
5. <u>Katie Mullins</u>	<u>GA DOT Programming</u>	<u>404-651-7043</u>	<u>Katie.mullins@dot.state.ga.us</u>
6. <u>WALTER BOYD</u>	<u>FHWA</u>	<u>404-562-3651</u>	<u>walter.boyd@fhwa.dot</u>
7. <u>Ron Morris</u>	<u>PBS&T</u>	<u>404-351-5608</u>	<u>rhmorris@pbsj.com</u>
8. <u>TAYLOR WRIGHT</u>	<u>PBS&T</u>	<u>404 351-5608</u>	<u>TPWRIGHT@PBSJ.COM</u>
9. <u>DENNY MEIER</u>	<u>PBS&T</u>	" "	<u>WDMEIER@PBSJ.COM</u>
10. <u>Joe Palladi</u>	<u>GDOT Urban</u>	<u>404 656 5446</u>	<u>joe.palladi@dot.STATE.GA.US</u>
11. <u>Angelika T. Alexander</u>	<u>GDOT-UD</u>	<u>(404)657-9872</u>	<u>angelika.alexander@dot.state.ga.us</u>
12. <u>JOHNNY QUARLES</u>	<u>GDOT Proest.</u>	<u>4-657-0771</u>	<u>@DOT.STATE.GA.US</u>
13. <u>David Mulling</u>	<u>GDOT-Eng.Serv.</u>	<u>6-6846</u>	<u>David.mulling@dot.state.ga.us</u>
14. <u>Jud Young</u>	<u>Ga DOT Urban Design</u>	<u>6-5444</u>	<u>judson.young@dot.state.ga.us</u>
15. <u>HELEN HAWKINS</u>	<u>GDOT URBAN</u>	<u>6-5444</u>	
16.			
17.			
18.			
19.			
20.			