

ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) Bibb County **OFFICE** Preconstruction
P. I. No. 311560 **DATE** December 31, 1996

FROM *CW Hutto*
C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Walker Scott
Bobby Mustin
David Studstill (ATTN: Harvey Keeper)
Jerry Hobbs
Herman Griffin
Darrell Elwell (ATTN: Michael Henry)
Marion Waters
Toni Dunagan
Paul Liles
Joe Palladi
Joe Street
FHWA

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PRECONSTRUCTION

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214), Bibb County OFFICE Atlanta, Georgia
 P.I. No. 311560
 I-75 @ Hardeman Avenue & Forsyth Street DATE October 30, 1996

FROM *Joseph Palladi*
 Joseph Palladi, P.E., State Urban Design Engineer
 TO Walker W. Scott, Jr., P.E., Director of Preconstruction

SUBJECT Revised Project Concept Report

The approved concept for IM-NH-75-1(214) is to improve the intersection of Georgia Avenue and Hardeman Avenue and modify the interchanges at I-75 and Hardeman Avenue and at I-75 and Forsyth Street. The length of the project is 1.207 km.

The approved concept provides a direct connection to the I-75 Northbound ramp from Georgia Avenue. This alleviates the current weaving problem. Traffic utilizing Georgia Avenue to reach Hardeman Avenue was proposed to be redirected to Madison Street.

After the concept was approved it was determined that Madison Street is no longer available as public right-of-way. As a result, a new concept was examined which relocates Monroe Drive and Georgia Avenue as outlined on Attachment "A". The redefinition of the concept has been recommended by representatives of Macon/Bibb County and coordinated with them. This office recommends that the current concept be revised.

Estimated Costs:	Proposed	Approved	Prog. Date
Construction (Includes E&C and Inflation)	\$ 987,360	\$1,021,000	1998
Right-of-Way	\$1,600,000	\$1,000,000	
Utilities	-----	-----	

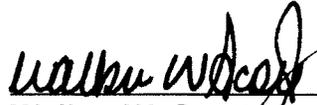
It is recommended that the proposed revision to the concept report be approved for implementation.

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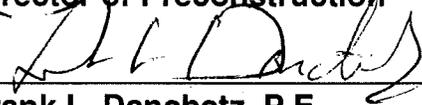
PRECONSTRUCTION

Concur:



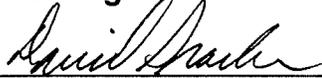
Walker W. Scott, Jr., P.E.
Director of Preconstruction

Concur:



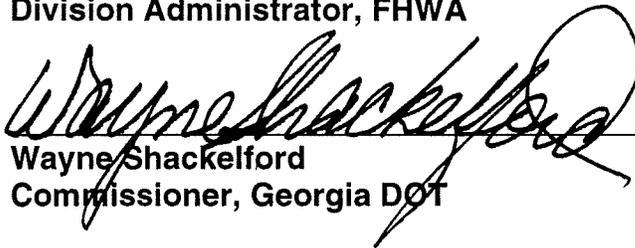
Frank L. Danchetz, P.E.
Chief Engineer

Approve:



for Larry Dreihaup
Division Administrator, FHWA

Approve:



Wayne Shackelford
Commissioner, Georgia DOT

JPP:GRS *ata.*

Attachments: Sketch Map, Cost Estimate, Traffic

PRELIMINARY COST ESTIMATE
URBAN DESIGN OFFICE

DATE: 10/08/96

PREPARED BY: GRS

PROJECT NO: IM-NH-75-1(214)

FILE NAME: 311560.WK4

P.I. NO: 311560

MILEAGE: 0.75

PROJECT DESCRIPTION/CONCEPT: FORSYTH ST. & HARDEMAN DR.

EXISTING ROADWAY: YES

TRAFFIC: CURRENT ADT
23500

PROJECTED ADT
29600

- () PROGRAMMING PROCESS
X CONCEPT DEVELOPMENT
() DURING PROJECT DEVELOPMENT

PROJECT COSTS

A. RIGHT OF WAY lump sum \$1,600,000.00
SUBTOTAL \$1,600,000.00

B. UTILITIES lump sum \$1,300,000.00
SUBTOTAL \$1,300,000.00

C. CLEARING AND GRUBBING 7 acres @ \$2,000.00 \$14,000.00
SUBTOTAL \$14,000.00

D. EARTHWORK

Embankment

In-Place Embankment 4164 cubic yards @ \$7.00 \$29,148.00
Borrow Incl Haul 0 cubic yards @ \$6.00 \$0.00

Excavation

Soil 2000 cubic yards @ \$6.00 \$12,000.00
Rock 2000 cubic yards @ \$10.00 \$20,000.00

Miscellaneous

Wick Drains 0 linear feet @ \$1.00 \$0.00
Filter Fabric 0 square yards @ \$7.00 \$0.00
Drainage Material 0 cubic yards @ \$6.00 \$0.00
Drill Holes 0 linear feet @ \$2.00 \$0.00
SUBTOTAL \$61,148.00

E. BASE AND PAVING

<u>Aggregate Base</u>			
Graded Aggregate	2710 tons @	\$6.10	\$16,531.00
<u>Asphalt Paving</u>			
Asph Conc E	1590 tons @	\$34.00	\$54,060.00
Asph Conc B	410 tons @	\$34.00	\$13,940.00
Asph Conc Base	1580 tons @	\$30.00	\$47,400.00
Leveling	1480 tons @	\$34.00	\$50,320.00
Tack Coat	2710 gallons @	\$1.00	\$2,710.00
		SUBTOTAL	\$184,961.00

F. DRAINAGE

Cross Drain System

15" Conc. Pipe	100 linear feet @	\$17.54	\$1,754.00
18" Conc. Pipe	100 linear feet @	\$24.43	\$2,443.00
24" Conc. Pipe	100 linear feet @	\$31.10	\$3,110.00
30" Conc. Pipe	100 linear feet @	\$43.50	\$4,350.00
36" Conc. Pipe	100 linear feet @	\$53.22	\$5,322.00
42" Conc. Pipe	100 linear feet @	\$63.10	\$6,310.00
48" Conc. Pipe	100 linear feet @	\$72.84	\$7,284.00
15" F.E.S.	1 each @	\$289.01	\$289.01
18" F.E.S.	1 each @	\$317.91	\$317.91
24" F.E.S.	1 each @	\$390.96	\$390.96
30" F.E.S.	1 each @	\$519.30	\$519.30
36" F.E.S.	1 each @	\$628.51	\$628.51
42" F.E.S.	1 each @	\$752.59	\$752.59
48" F.E.S.	1 each @	\$1,300.00	\$1,300.00

Longitudinal System

15" Conc. Pipe	700 linear feet @	\$15.12	\$10,581.20
18" Conc. Pipe	350 linear feet @	\$16.50	\$5,775.70
24" Conc. Pipe	180 linear feet @	\$30.00	\$5,400.00

Drainage Structures

Catch Basins	20 each @	\$1,273.74	\$25,474.80
Drop Inlets	2 each @	\$1,189.51	\$2,379.02
Manholes	1 each @	\$1,229.49	\$1,229.49

Drainage Lump Sum

Cost per Mile	0 miles @	\$0.00	\$0.00
		SUBTOTAL	\$85,611.49

G. CONCRETE WORK

Approach Slabs	0 square yards @	\$75.98	\$0.00
Concrete Median Barrier (Tp. 21	0 linear feet @	\$30.00	\$0.00
Curb and Gutter (Type 2)	7510 linear feet @	\$9.00	\$67,590.00
Valley Gutter	520 square yards @	\$25.00	\$13,000.00
Sidewalk	3470 square yards @	\$15.00	\$52,050.00
Median Paving	0 square yards @	\$18.00	\$0.00
Ditch Paving	0 square yards @	\$30.00	\$0.00

			SUBTOTAL	\$132,640.00
H. TRAFFIC CONTROL	1 lump sum	50,000		\$50,000.00
			SUBTOTAL	\$50,000.00
I. EROSION CONTROL	1 lump sum	25,000		\$25,000.00
			SUBTOTAL	\$25,000.00
J. GUARDRAIL				
W-Beam Rail	250 linear feet @	\$12.00		\$3,000.00
T-Beam Rail	21 linear feet @	\$35.51		\$745.71
Type 1 Anchors	1 each @	\$361.67		\$361.67
Type 9 Anchors	1 each @	\$877.37		\$877.37
			SUBTOTAL	\$4,984.75
K. SIGNS, STRIPING, SIGNALS, LIGHTING				
Striping	1 lump sum	20,000		\$20,000.00
Roadside Signs	1 lump sum	10,000		\$10,000.00
Overhead Signs w/ Lights	0 each @	\$0.00		\$0.00
Traffic Signals	4 each @	\$40,000.00		\$160,000.00
Lighting	1 lump sum	\$21,000		\$0.00
			SUBTOTAL	\$190,000.00
L. GRASSING/LANDSCAPING	3 lump sum	15000		\$45,000.00
			SUBTOTAL	\$45,000.00
M. MISCELLANEOUS				
Field Engineer Office	1 each @	\$20,000.00		\$20,000.00
Fencing	0 linear feet @	\$8.00		\$0.00
Right-of-Way Markers	8 each @	\$50.73		\$405.84
			SUBTOTAL	\$20,405.84
N. MAJOR STRUCTURES				
Bridges	0 square feet @	\$45.00		\$0.00
Retaining Walls	0 square feet @	\$35.00		\$0.00
<u>Box Culverts</u>				
Concrete	0 cubic yards @	\$300.00		\$0.00
Bar Reinf. Steel	0 pounds @	\$1.00		\$0.00
			SUBTOTAL	\$0.00

ESTIMATE SUMMARY

A. Right of Way	\$1,600,000.00
B. Reimbursable Utilities	\$ 0.00

CONSTRUCTION COST SUMMARY

C. Clearing and Grubbing	\$14,000.00
D. Earthwork	\$62,000.00
E. Base and Paving	\$185,000.00
F. Drainage	\$86,000.00
G. Concrete Work	\$133,000.00
H. Traffic Control	\$50,000.00
I. Erosion Control	\$25,000.00
J. Guardrail	\$5,000.00
K. Signs, Striping, Signals, Lighting	\$190,000.00
L. Grassing/Landscaping	\$45,000.00
M. Miscellaneous	\$21,000.00

SUBTOTAL CONSTRUCTION \$816,000.00

N. Major Structures	\$0.00
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SUBTOTAL \$816,000.00

2 Years of Inflation at 5 %	\$81,600.00
10 % E & C	\$89,760.00

TOTAL COST ESTIMATE \$987,360.00

Streets: (E-W) HARDEMAN

(N-S) MONROE

Analyst: SLP

File Name: MONROEA.HC9

Area Type: Other

6-12-96 2020 PM

Comment: IM-NH-1(214) PI 311560 BIBB CO. INTERSECTION "A"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				> 3		<	1	> 1		1	1	<
Volumes				210	1605	135	400	45		35	220	155
Lane Width				12.0			10.0	12.0		12.0	12.0	
RTOR Vols						0				0		0

Signal Operations

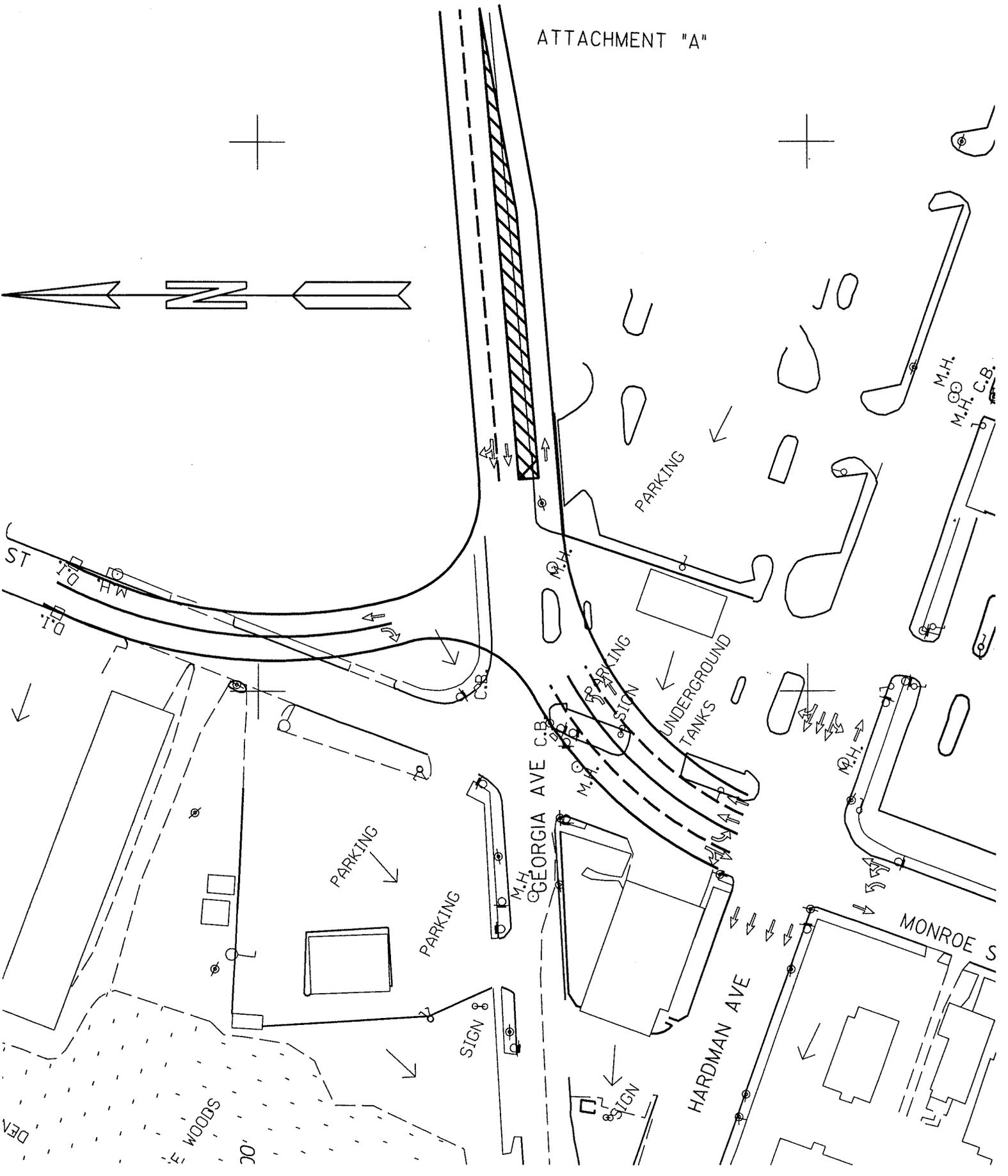
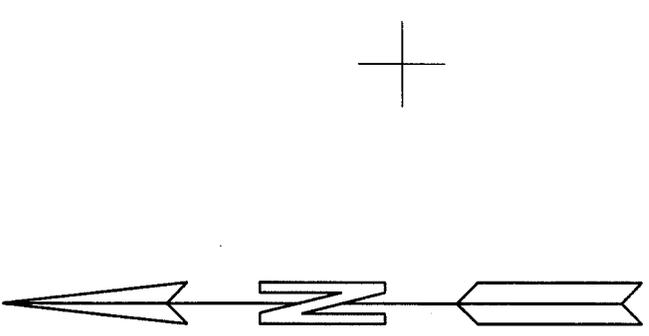
Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left *			
Thru					Thru *			
Right					Right			
Peds					Peds			
WB Left		*			SB Left *			
Thru		*			Thru *			
Right		*			Right *			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	40.0A				Green 40.0A			
Yellow/A-R	5.0				Yellow/A- 5.0			
Lost Time	3.0				Lost Time 3.0			
Cycle Length:	90.0 secs Phase combination order: #1 #5							

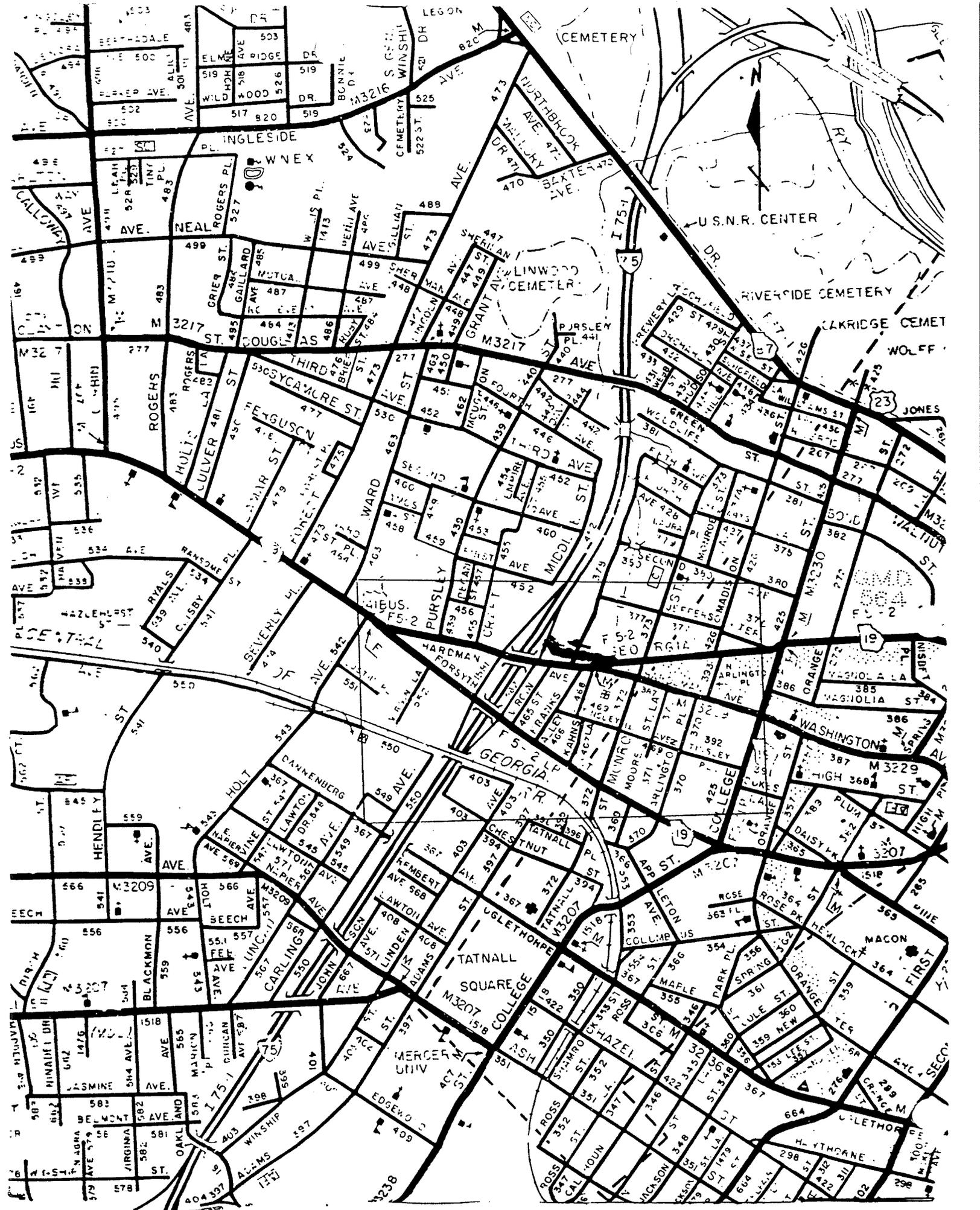
Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
WB	LTR	2445	5240	0.92	0.47	18.6	C	18.6	C
NB	L	367	786	0.64	0.47	16.4	C	14.2	B
	LT	427	915	0.55	0.47	12.1	B		
SB	L	525	1125	0.07	0.47	10.1	B	11.1	B
	TR	780	1672	0.51	0.47	11.2	B		

Intersection Delay = 16.9 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.779

ATTACHMENT "A"





DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

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INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) BIBB OFFICE Atlanta, Georgia
P.I. NO. 311560 DATE NOVEMBER 19, 1996

FROM Bob Mustin, Project Review Engineer *DTM*

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **REVISED CONCEPT REPORT**

The cost estimate has been review, as requested by your
November 9, 1996 submittal, and is satisfactory.

DTM