ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) Bibb County
P.I. No. 311560

OFFICE Preconstruction

DATE March 5, 1996

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:

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

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) Bibb County
P.I. No. 311560

OFFICE Preconstruction

DATE January 22, 1996

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

TO Wayne Shackelford, Commissioner

SUBJECT PROJECT CONCEPT REPORT

This project is the intersection improvements at Georgia Avenue and Hardeman Avenue/SR 19 along with interchange modifications at I-75 with Hardeman Avenue and Forsyth Street. The I-75/Forsyth Street/Hardeman Avenue interchange is a split diamond design connected by one-way frontage roads serving the one-way paired arterials of Forsyth Street and Hardeman Avenue. Accident history for three years within the limits of the proposed project indicate the accident rates for both Forsyth Street and Hardeman Avenue exceed the statewide average for similar urban facilities. This is attributable to the combined effect of existing lane configurations, limited section lengths, and weaving movements from the cross streets to both the interstate ramps and connecting frontage roads. The existing typical sections are as follows:

- Hardeman Avenue: four, 3.6m lanes with curb and gutter and sidewalks on both sides of the bridge; three, 3.6m westbound lanes with curb and gutter and sidewalks on both sides from the I-75 north entrance to Monroe Street; and four, 3.6m lanes (two in each direction) with curb and gutter and sidewalks on both sides from Monroe Street to Madison Street.

- Forsyth Street: three, 3.6m lanes with curb and gutter and sidewalks on both sides eastbound from the I-75 north entrance ramp to Monroe Street and two, 5.4m lanes with curb and gutter and sidewalks west of I-75.

- Monroe Street: three, 3.6m lanes with curb and gutter on both sides and sidewalk on the west side.

- Georgia Avenue: two, 3.6m lanes with curb and gutter, westbound.

- Madison Street: two, 3.6m lanes with curb and gutter, southbound.

There are two major bridges within the project limits: (1) Forsyth Street: 61.5m x 15.8m bridge with a sufficiency rating of 96.9, and (2) Hardeman Avenue: 64.0m x 15.8m bridge with a sufficiency rating of 96.8. The base year traffic (1997) is 23,500 VPD and the design year traffic (2017) is 29,600 VPD. The posted speed and the design speed are 50km/h.

January 22, 1996
IM-NH-75-1(214) Bibb

The project proposes to extend on new location Georgia Avenue west to I-75 and construct a barrier/median between Georgia Avenue and Hardeman Avenue from Monroe Street to the I-75 northbound entrance ramp. This will alleviate accidents resulting from this weaving movement and signing will be modified to direct motorists on the proper path to I-75 northbound and southbound. Georgia Avenue will be converted to a one-way westbound street from Monroe Street to the I-75 northbound entrance ramp. Hardeman Avenue and Forsyth Street will be modified to contain four lanes, westbound and eastbound, and a third lane for right turns only will be added to the I-75 southbound exit ramp. No additional widening is required for the existing bridges on Forsyth Street and Hardeman Avenue. No design exceptions will be required. Traffic will be maintained during construction.

Environmental concerns include requiring a Categorical Exclusion be prepared; possible impact to National Register historic districts; historic survey is required; potential 106/4F involvement; one(1) business displaced; a public information meeting will be held; time saving procedures are not appropriate.

The estimated costs for this project are:

	PROPOSED	APPROVED	PROPOSED PROG DATE	LET DATE
Construction (includes E&C and inflation)	$1,021,000	$830,000	1998	98-08
Right-of-Way	$1,000,000	$190,000	1997	
Utilities*	$1,300,000	-----		

*LGPA sent 1-23-95 requesting Bibb County and the City of Macon be responsible for utility relocations.

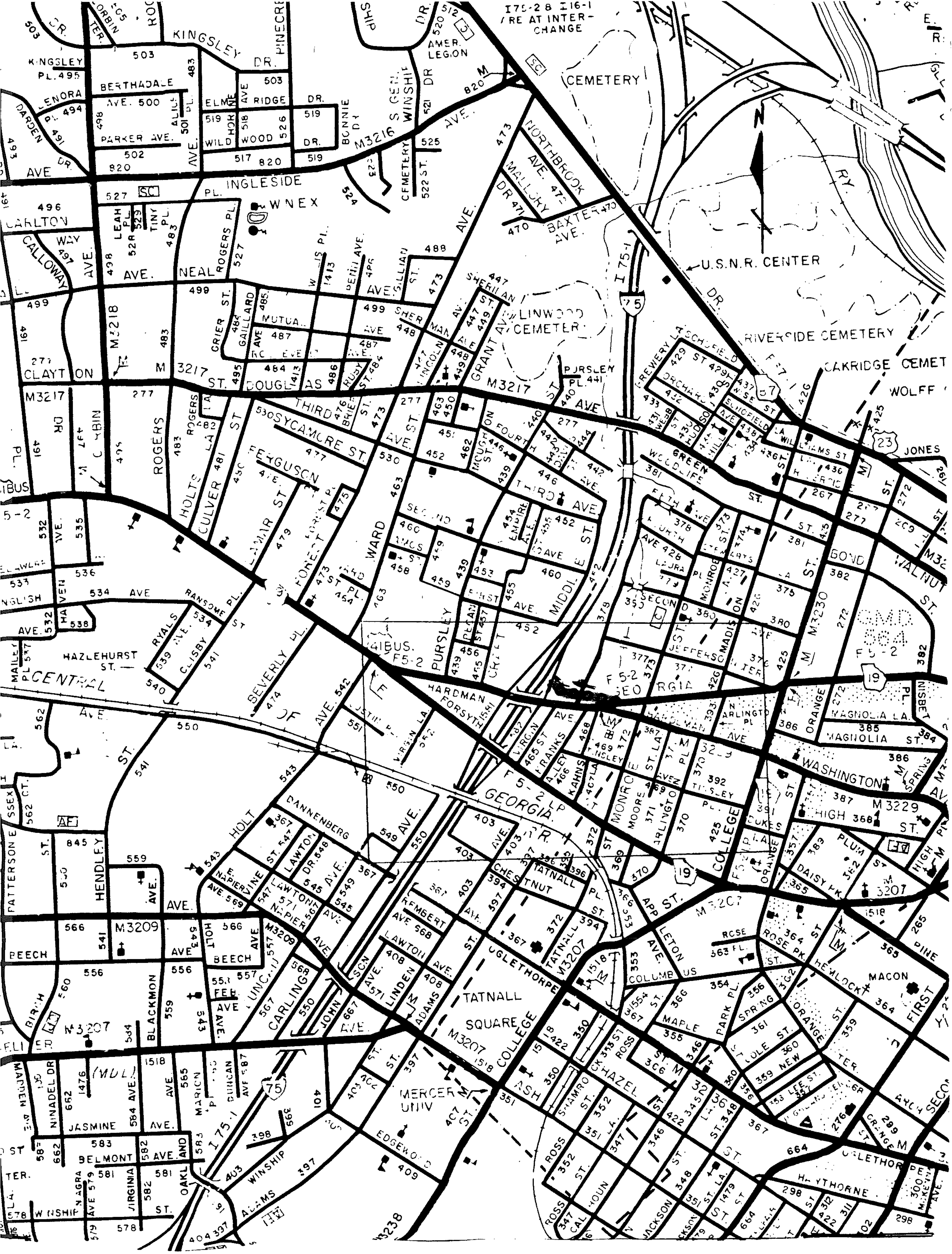
The proposed project will improve operations and safety by redirecting traffic and prohibiting particular weaving movements. This project is in the STIP. I recommend this project concept be approved.

WWS:JDQ/cj
Attachment

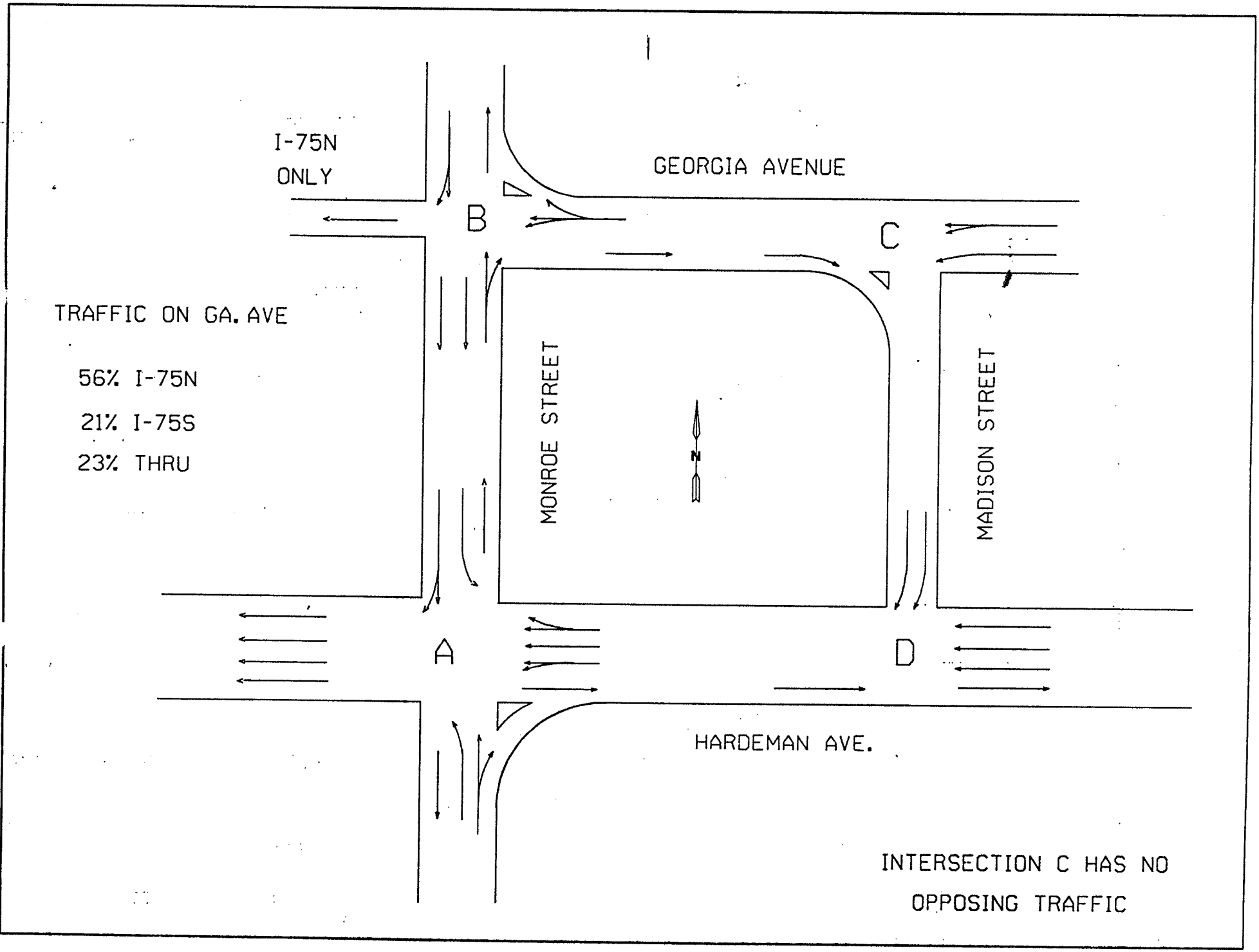
CONCUR _____
Frank L. Danchetz, P.E., Chief Engineer

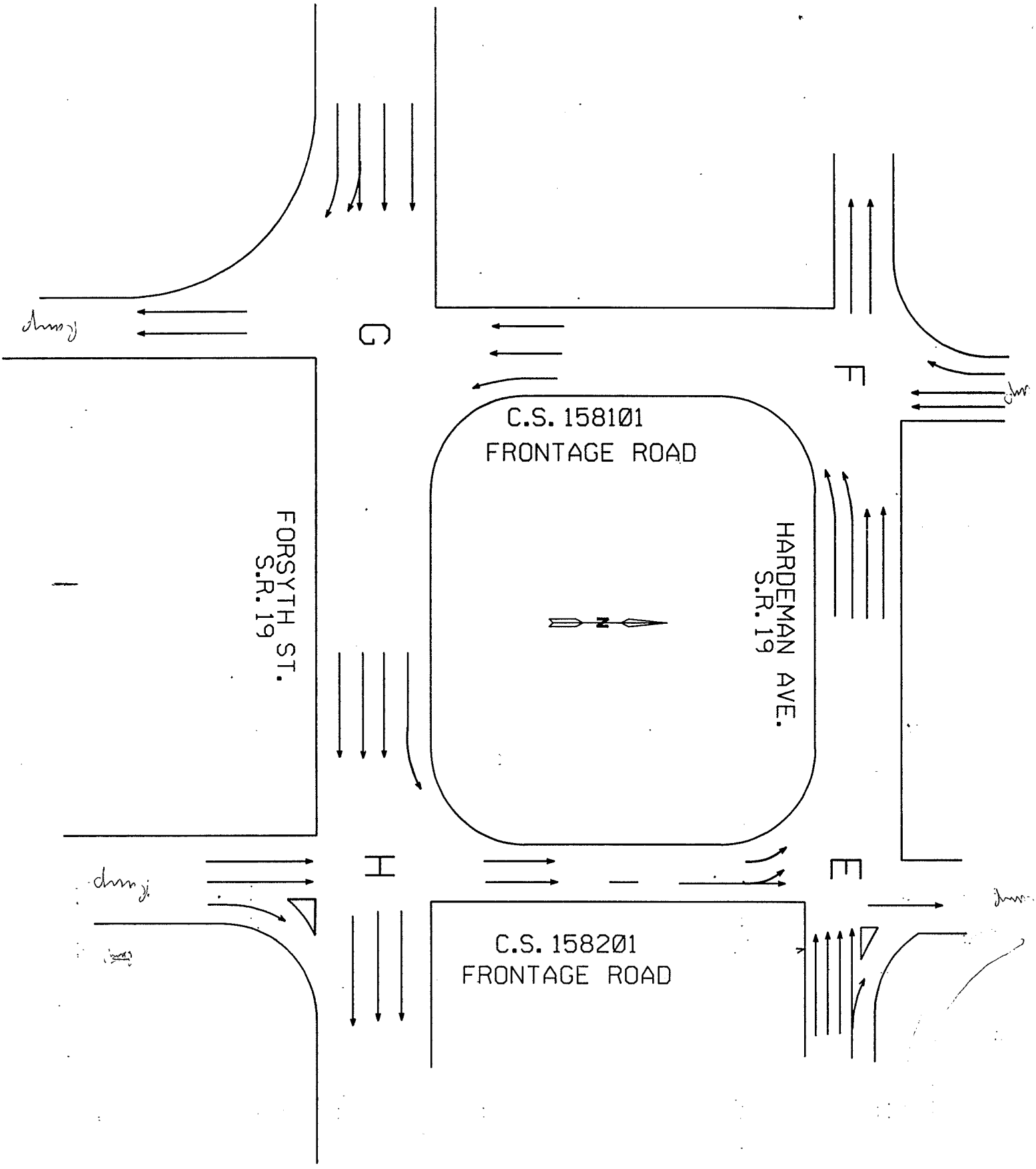
APPROVE _____
for Larry R. Dreihaup, Division Administrator, FHWA

APPROVE _____
Wayne Shackelford, Commissioner



CEMETERY
U.S.N.R. CENTER
RIVERSIDE CEMETERY
OAKRIDGE CEMET
LINWOOD CEMETERY
WNEX
AMER. LEGION
KINGSLEY DR.
KINGSLEY PL. 495
BERTHADALE
LENORA PL.
PARKER AVE.
INGLESIDE
CARLTON
CALLOWAY WAY
NEAL AVE.
ROGERS PL.
CLAYTON
M3217
DOUGLAS
THIRD
SYCAMORE ST.
FERGUSON
CULVER
ROGERS
LAMAR ST.
FOREST
WARD
SEVERLY PL.
HAZLEHURST ST.
CENTRAL OF GEORGIA
HARDMAN
FORSYTH
RANSOME PL.
RYALS
CLISBY
HOLT
DANNENBERG
LAWTON
NAPIER
BEECH
M3209
HENDLEY
BLACKMON
M3207
JASMINE AVE.
BELMONT
WINSHIP
ADAMS
EDGEWOOD
MERCER UNIV
TATNALL SQUARE
COLLEGE
OGLETHORPE
CHESTNUT
TATNALL
ASH
HAZEL
ROSS
CALHOUN
JACKSON
COLUMBUS
MAPLE
SPRING
ORANGE
HEMLOCK
ROSE PK.
MACON
FIRST
NEW
COLE ST.
DAISY PK.
PLUM
HIGH
M3229
WASHINGTON
MAGNOLIA
MAGNOLIA LA.
ARLINGTON PL.
GEORGIA
MONROE
MOORE
JEFFERSON
MADISON
SECOND
FOURTH
LAURA
BOND
WALNUT
M3230
GMD 564
F5-2
JONES
WILLIAMS ST.
GREEN
WOODLIFE
NORTHBROOK AVE.
MALLORY DR.
BAXTER AVE.
PURSLEY PL.
SHERIDAN
GRANT AVE.
LINCOLN
ORCHARD
SCHOFIELD
BREWERY LA.
M3216
S. GEN. WINSHIP DR.
CEMETERY ST.
BONNIE DR.
PATTERSON
ESSEX CT.
MIDDLE ST.
PECAN ST.
PURSLEY
CRAFT
HAYTHORNE
McKENZIE
I 75
I 75-1
I 75-2 I 16-1 RE AT INTERCHANGE
ALLEY
FRANKS
KAHNS
TINSLEY
APPLETON AVE.
ROSE PL.
DUNCAN
MARION
LINDEN
JOHN
CARLING
OAKLAND
NIAGRA AVE.
VIRGINIA
NINADEL DR.
MADDEN AVE.


I-75N
ONLY
GEORGIA AVENUE
B
C
TRAFFIC ON GA. AVE
56% I-75N
21% I-75S
23% THRU
MONROE STREET
MADISON STREET
N
A
D
HARDEMAN AVE.
INTERSECTION C HAS NO
OPPOSING TRAFFIC


C.S. 158101
FRONTAGE ROAD
FORSYTH ST.
S.R. 19
HARDEMAN AVE.
S.R. 19
C.S. 158201
FRONTAGE ROAD
G
F
H
E

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) BIBB
P.I. NO. 311560

OFFICE Atlanta, Georgia

DATE NOVEMBER 8, 1995

FROM Bob Mustin, Project Review Engineer

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

The concept report submitted October 31, 1995 by the letter from Walker Scott dated October 31, 1995 has been reviewed and is considered satisfactory.

The estimated costs for the project are as follows:

Construction	$	844,000
Inflation	$	84,000
E & C	$	93,000
Right of Way	$	1,000,000
Reimbursable Utilities	$	1,300,000

DTM

c: Walker Scott

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) Bibb County
I-75 @ Hardeman Ave & Forsyth St.
P.I. No. 311560

OFFICE Atlanta, Georgia

DATE October 31, 1995

FROM Walker W. Scott, Jr., P.E., State Urban Design Engineer

TO Wayne Hutto, Asst. Director of Pre-Construction

SUBJECT **Proposed Project Concept Report**

Transmitted is the proposed project Concept Report for the Intersection improvements at Georgia Avenue and Hardeman Avenue. Also included in this concept are the interchange modifications at I-75 and Hardeman Avenue and at I-75 and Forsyth Street.

Please take the necessary steps to process the report through the Department in accordance with the project review process.

WWS:ATA
Attachment

cc: David Studstill, w/attachment
Marion Waters, w/attachment
Joe Street, w/attachment
Bobby Mustin, w/attachment
Paul Liles, w/attachment
Charles Lewis
Hoyt J. Lively, Jr.

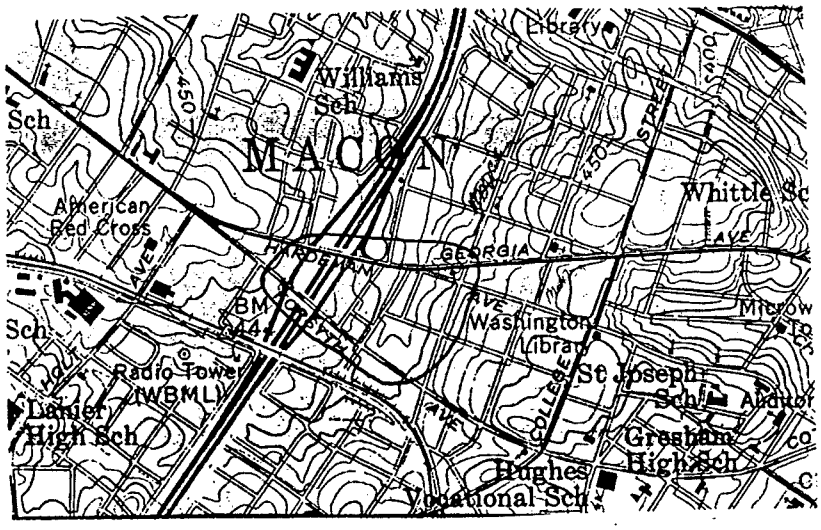
C:\WPWIN60\WPDOCS\311560SC.DOC

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

PROJECT CONCEPT REPORT
IM-NH-75-1(214)
BIBB COUNTY.
I-75 AT HARDEMAN AVE. AND FORSYTH ST.
DATE: October 13, 1995

Federal Route No.:
State Route No.: SR 19
Ga DOT P.I. No.: 311560



RECOMMENDATIONS FOR APPROVAL

10/30/95 — Walter W. Cook
Date — State Urban Design Engineer

Date — State Environmental Engineer

Date — State Traffic Operations Engineer

Date — District Engineer

Date — State Bridge & Structural Design Engineer

PROJECT CONCEPT REPORT

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

P.I. NO.:311560

PROJECT DESCRIPTION: Intersection Improvement at Hardeman Ave. and Forsyth St.

STATE ROUTE NO.:SR 19

LOCATION:HARDEMEN AVE. AND FORSYTH ST. OVERPASS AT I-75

TRAFFIC:	CURRENT ADT (1997)	PROJECTED ADT (2017)
	23500	29600

PDP CLASS: ___NON-CA ___CA _X_EXEMPT

FUNCTIONAL CLASS: Forsyth St. - Urban Minor Arterial
Hardeman Ave. - Urban Principal Arterial

EXISTING CONDITIONS

TYPICAL SECTION: The existing Hardeman Ave. and Forsyth St. have three 3.6 m (12 ft) lanes, 3.6 m (12 ft) shoulder with curb and gutter and sidewalk.

MAXIMUM DEGREE OF CURVE: R(min) = 100m (MAX DEG OF CURVE - 3 DEG)

MAXIMUM GRADE: **6.07 %**

POSTED SPEED LIMIT: **50**_ km/h (30 mph)

MAJOR STRUCTURES:. There are two bridges within the project limits, Hardeman Ave. and Forsyth St., both of which crosses over I-75. The existing bridges are 4 spans steel beam.

FORSYTH ST.

ID# 021-00019D-01064N	SUFF. RATING - 96.9	LENGTH 202	WIDTH - 52

HARDEMAN AVE.

ID# 021-00019D-01063N	SUFF. RATING - 96.8	LENGTH 210	WIDTH - 52

ACCIDENT HISTORY:

SR 19 FORSYTH ST.	**1991**	**1992**	1993
ACCIDENTS	11	26	31
INJURIES	3	14	13
FATALITIES	0	0	0
ACCIDENT RATE	348	714	914
INJURY RATE	95	385	383
SR 19 HARDEMAN AV.			
ACCIDENTS	96	97	65
INJURIES	25	27	23
FATALITIES	0	0	0
ACCIDENT RATE	2711	2589	1740
INJURY RATE	706	721	616
STATEWIDE AVERAGE FOR URBAN FAP SECTION (per 100 mi veh miles of travel)			
ACCIDENT RATE	561	505	585
INJURY RATE	234	213	256

STATEMENT OF NEED AND PURPOSE OF PROJECT: See Attachment

PROPOSED PROJECT CONCEPT

LENGTH: 1.207_km (_**0.75** miles)

LOCATION: Hardeman Ave. and Forsyth St. overpass at I-75

	MIN RADIUS OF CURVE	MAX GRADE	DESIGN SPEED
PROPOSED	**100 m** (295 ft)	**6.07%**	**50** km/h (30 mph)
ALLOWABLE	* 35 m (103 ft)	8.00 %	50 km/h (30 mph)

* Minimum radius for both Hardeman Ave. and Forsyth St.

PROPOSED TYPICAL SECTION: The Proposed typical section has four 3.6m (12ft.) lanes, and a 3.6 m (12ft.) shoulder with curb and gutter. Please see the attached typical sections.

PROPOSED MAJOR STRU ..URES: None. Retain existing bridge; ..tripe Hardeman Bridge.

TYPE ACCESS: Limited

TRAFFIC CONTROL DURING CONSTRUCTION: Traffic will be maintained at existing location during construction.

DESIGN VARIANCES REQUIRED:

	YES	NO	UNDETERMINED
HORIZONTAL ALIGNMENT		x	
VERTICAL GRADES		x	
STOPPING SIGHT DISTANCE		x	
SPEED DESIGN		x	
ROADWAY WIDTH		x	
SHOULDER WIDTH		x	
CROSS SLOPES		x	
SUPERELEVATION RATES		x	
HORIZONTAL CLEARANCE		x	
VERTICAL CLEARANCE		x	
BRIDGE WIDTH		x	
BRIDGE STRUCT. CAPACITY		x	

ESTIMATED COST:

R/W	$1,000,000.00
UTILITIES	$1,300,000.00
SUBTOTAL	**$2,300,000.00**
CONSTRUCTION	$ 844,000.00
INFLATION 2 years at 5%	$ 86,510.00
E & C 10%	$ 93,051.00
TOTAL COST	**$3,323,561.00**

DISPLACEMENTS: One business at the Northeastern corner of I-75 North and Hardeman Ave. Some parking modifications.

PERMITS REQUIRED (COE 404, ETC.): None

LEVEL OF ENVIRONMENTAL ANALYSIS: ~~Environmental assessment~~ CATEGORICAL EXCLUSION

LEVEL OF PUBLIC INVOLVEMENT: Public Information meeting will be required.

TIME SAVINGS PROCEDURES APPROPRIATE __YES _X_NO

OTHER PROJECTS IN AREA:

PI 311410 - I-16 from I-75 at Hardeman Ave. to Spring St.
Pi 311400 - Widening I-75 from Pierce Ave. to I-16 interchange
PI 311000 - Intersection modifications at SR 11 (Spring St.), SR 22
PI 311415 - I-16 from SR 11 (Spring St.) to SR 87 (Coliseum Dr.)
PI 350960 - I-475 from Log Cabin Drive to Columbus Road

CONCEPT TEAM MEETING DATE: September 15, 1995

LOCATION INSPECTION DATE: The site was visited by the designer on March 1, 1995.

RAILROAD INVOLVEMENT: No

POSSIBLE UNDERGROUND STORAGE TANK SITES: Yes, at the northeastern corner of I-75 North and Hardeman Ave.

POSSIBLE HAZARDOUS WASTE SITES: None known of at this time.

ALTERNATIVES CONSIDERED: No Build.

COMMENTS:

1. This project will be designed in Metric Units.

2. Permanent roadway signs need to be located at the intersection of Madison and Georgia Ave., to direct I-75 South traffic to use Madison Street. This will prevent any congestion problems that may occur at the intersection of Hardeman Ave. and Monroe Street., due to the Historical Fire Station.

ATTACHMENTS: Typical Sections, Traffic Diagrams, Cost Estimates (Standard and Metric), Need & Purpose Statement, Concept Team Meeting Minutes, Concept Meeting Attendees List.

Forsyth Street and Hardeman Avenue Intersection Improvement Project
Concept Meeting Minutes
September 22, 1995
10:30 A.M.
Department of Transportation
Room 356

A concept meeting was held on September 22, 1995 to discuss project number IM-NH-75-1(214) in Bibb County (PI 311560). This project involves the intersection improvements at Georgia Avenue and Hardeman Avenue, as well as the interchange modification at I-75 and Hardeman Avenue and I-75 and Forsyth Street. The attendance list is attached. The following are the minutes of the meeting:

Angela Alexander: Welcome and introduction.

Genetha Rice-Singleton: Good Morning. As stated earlier this concept meeting is for the intersection improvement of Georgia Avenue at Hardeman Avenue, as well as the I-75 interchange. The project number is IM-NH-75-1(214). The project identification number is 311560. It is located in Bibb County.

This project will be designed in metric units, but for this meeting all units will be given in English.

The project limits are from Virgin Lane to East of Madison Street, with a total length of 0.75 miles (1.207 kilometers). The functional classification of Hardeman Avenue is Urban Principal Arterial and Forsyth Street is Urban Minor Arterial.

Cora Cook:
NEED AND PURPOSE STATEMENT: See need and purpose statement attached.

Genetha Rice-Singleton:
EXISTING TYPICAL SECTIONS: The existing typical sections are as follows:

Hardeman Avenue - four twelve foot lanes with curb and gutter and sidewalk on both sides of the bridge, three twelve foot westbound lanes with curb and gutter and sidewalk on both sides from the I-75 North entrance ramp to Monroe Street, and four twelve foot lanes (two in each direction) with curb and gutter and sidewalk on both sides from Monroe Street to Madison Street.

Forsyth Street - three twelve foot lanes with curb and gutter and sidewalk on both sides traveling eastbound from the I-75 North exit ramp to Monroe Street and two eighteen foot lanes with curb and gutter and sidewalk west of I-75.

Monroe Street - Three twelve foot lanes with curb and gutter on both sides and sidewalk on the west side

Georgia Avenue - Two twelve foot lanes, with curb and gutter, westbound

Madison Street - Two twelve foot lanes, with curb and gutter, southbound

TRAFFIC COUNTS: The traffic count for Hardeman Avenue is 23,500 vehicles per day for the year 1997 and 29,600 for the year 2017. The traffic count for Forsyth Street is 19,850 vehicles per day for the year 1997 and 24, 950 for the year 2017.

ACCIDENT HISTORY: The accident history is as follows:

Hardeman Avenue - the accident rate for 1991 was 2711, the state wide rate for 1991 was 561; in 1992 the accident rate was 2589 and the state wide rate was 505; and in 1993 the accident rate was 1748 and the state wide rate was 585.

Forsyth Street - the accident rate for 1991 was 348, the state wide rate was 561; for 1992 the accident rate was 714 and the state wide rate was 505; and the accident rate for 1993 was 1740 compared to a state wide rate of 585.

The accident rate for Hardeman Avenue is more than three times the state wide rate. Forty-four percent of the accidents on Hardeman Avenue were sideswiping and another forty-four percent were from angle intersecting. Most of these accidents are due to the traffic at Georgia Avenue and Hardeman Avenue weaving to I-75 S and I-75 N, respectively.

PROPOSED PROJECT DESCRIPTION: It is proposed to construct a barrier/median between Georgia Avenue and Hardeman Avenue from Monroe Street to the I-75 Northbound entrance ramp. Georgia Avenue will be converted to a two way street from Monroe Street to Madison Street. At the intersection of Georgia Avenue and Madison Street signs will be posted directing traffic to travel west to access I-75 N and to travel south on Madison Street to reach Hardeman Avenue and I-75 South. This will prevent any congestion problems from occurring at the northeastern corner of Hardeman Avenue and Monroe Street, where a historical fire station is to remain in service.

PROPOSED TYPICAL SECTIONS: The proposed typical sections are as follows:

Hardeman Avenue - four twelve foot lanes with curb and gutter and ten foot shoulders with sidewalk from the bridge to Monroe Street traveling west; four twelve foot lanes with curb and gutter and ten foot shoulders with sidewalk from Monroe Street to Madison Street, one lane traveling eastbound and three lanes traveling westbound.

Forsyth Street - four twelve foot lanes with sidewalk on the bridge. The bridge is currently fifty-two feet wide with the fourth lane striped out. Therefore, the bridge will not have to be widened for an additional lane. The approach slabs will accomodate four lanes of traffic. The length of the existing right turn lane from Forsyth Street onto I-75 South will be extended 250 feet.

We propose to add a twelve foot lane to the I-75 South exit ramp, providing one exclusive right and two thru lanes.

DESIGN CRITERIA: The posted speed is 30 mph. The proposed design will at least meet the 30 mph design criteria. The maximum radii is 295 feet proposed and existing; the maximum grade is 6.07% proposed and existing.

The access control will be limited at the extended ramp ending at Georgia Avenue and the other areas will be by permit.

The drainage will be designed for an urban section, and no design variances are anticipated.

MAJOR STRUCTURES: There are two major structures on the project, the Hardeman Avenue bridge and the Forsyth Street bridge. The sufficiency rating of Hardeman Avenue is 96.8 and for the Forsyth Street Bridge is 96.9.

RIGHT OF WAY DISPLACEMENTS: One business, a gas station, at the Northeastern corner of I-75 North and Hardeman Avenue will be displaced and there will be a few parking modifications. Parking on Hardeman Avenue from Monroe Street to Madison Street will be removed. The right of way cost is estimated at $1,000,000. The right of way will be purchased by Ga DOT.

UTILITIES: The estimated Utilities cost is $317,000. The utility companies involved are Atlanta Gas Light Company, Bell South, Cox Cables, Georgia Power and Macon Water.

ALTERNATES: No build

TRAFFIC HANDLING: Traffic will be maintained at existing location during construction.

EROSION CONTROL: A set of erosion control plans will be provided as part of the final plans.

LEVEL OF ENVIRONMENTAL ANALYSIS: An environmental assessment will be required.

ENVIRONMENTAL CONCERNS: There is a possibility that one underground storage tank is located on the project at the northeastern corner of I-75 and Hardeman Avenue.

There is a historical fire station, as stated earlier, at the northeastern corner of Monroe Street and Hardeman Avenue. This station is presently in use.

PUBLIC HEARING: A Public Information meeting will be held.

PERMITS REQUIRED: No permits will be required.

OTHER PROJECTS IN THE AREA:
I-16 from I-75 at Hardeman Avenue to Spring Street
Widening I-75 from Pierce Avenue to I-16 interchange
Intersection modifications at SR 11 (Spring Street), SR 22
I-16 from SR 11 (Spring Street) to SR 87 (Coliseum Drive)
I-475 from Log Cabin Drive to Columbus Road

Questions and comments were requested.

QUESTIONS AND COMMENTS:

David Mulling, GDOT Engineering Services: *What is the justification for separating Georgia Avenue with a barrier?* Currently there is a lot of sideswiping and angle accidents occurring at the merge of Georgia Avenue and Hardeman Avenue. A barrier would segregate the Georgia Avenue I-75 North bound traffic and alleviate congestion at the ramps.

Reba P. Scott, GDOT Programming: Requested a copy of the updated cost estimate and questioned the change from the DOT to the locals paying for right of way costs. As a note, this was checked and DOT is responsible for the right of way acquisition.

Del Clippard, GDOT Traffic Operations: *Will there be a yield or a control light signal on the ramp for the merging traffic from Georgia Avenue and Hardeman Avenue?* A yield for the traffic from Georgia Avenue and Hardeman Avenue onto the I-75 N entrance ramp will be examined. Further examination of the merge design on the ramp will occur during design.

Joe Leoni, GDOT Thomaston: Suggested making the I-75 N entrance ramp two lanes to help with the traffic merging from Hardeman Avenue and Georgia Avenue.

Cora Cook, GDOT Planning: *Why is two way flow proposed for Georgia Avenue?* Two way flow is needed to provide for traffic for the Post Office and the other businesses in that area. Also, signs will be posted, beginning at College Street, to direct I-75 Southbound traffic on Georgia Avenue to take Madison Street to Hardeman Avenue in order to access I-75; this will provide a longer weave distance.

Fred Moody, GA Power: Foresees some problems with some additional right of way that has been added on the south side of Forsyth Street and Middle Street.

Marie Piper, Bell South Telecommunications: Also foresees some minor facilities along additional right of way on the Georgia Avenue ramp.

Vernon Ryle, Macon- Bibb MPO: Does not think that Madison Street is a publicly owned street which would make right of way costs increase. He agreed to verify this information.

Cora Cook, GDOT Planning: Suggests directing traffic along College Street if Madison Street is not publicly owned.

Beverly Moore, GDOT Local Government: Concerned about the relocation of the gas station and the environmental aspect of the historical fire station. Also expressed concern over working with the Post Office about easements because working with the Post Office is usually a long process.

David Mulling, GDOT Engineering Services: *Concerned over the Monroe Street at Georgia Avenue and Hardeman Avenue intersections being so close. Could lanes be provided to and on Hardeman Avenue, from Monroe Street, to alleviate the Georgia Avenue traffic so that Georgia Avenue would be only local traffic?* This would cause stacking to occur in front of the Fire Station which would not allow the fire trucks access out. Also, an additional lane on Hardeman Avenue would add to the weaving problem occurring on Hardeman Avenue.

Gene Goins, GDOT Utilities: *Is the cost of the ramp justifiable with the increase in cost of right of way?* The numbers will be provided to prove the need for the ramp. Adding the ramp reduces the affect of the weave on Hardeman Avenue for the other traffic.

Gene Goins, GDOT Utilities: Suggested one map of the proposed project be given to utilities and one given to local government. This was agreed upon by Joe Palladi; concepts were provided at the close of the meeting to Gene Goins, who is responsible for providing the map to the Macon area engineer, and to Bill Wikle.

Bill Wikle, Macon-Bibb Co.: *Is it possible to relocate the historical fire station?* This option is highly unlikely because there are alternate routes available, as shown on the concept.

Vernon Ryle, Macon-Bibb MPO: *Will provisions be made for the extensive pedestrian traffic on Georgia Avenue?* Sidewalks can be added to Hardeman Avenue, the north side of the new ramp, and to Georgia Avenue to provide pedestrian access.

Del Clippard, GDOT Traffic Operation: *Isn't there a concern that drivers will not observe the signing to the Georgia Avenue ramp and then back up on the ramp in order to go to I-75 South?* There will be signing in two areas for I-75 South. Once at Madison Street and again at Monroe Street.

Bill Wikle, Macon-Bibb Co.: *Signing might be difficult because of the historical area.* Coordination of the design and right of way impacts will be required.

Bill Wikle, Macon-Bibb Co.: *Requests a copy of the costs and the traffic.* This information will be provided.

Del Clippard, GDOT Traffic Operation: Georgia Avenue is state route 19, therefore state route 19 will have to reconnect to Hardeman Avenue, possibly across College Street which is already state route 19 eastbound via Forsyth Street, or at Madison Street. This will be dependent on the final design.

Bill Wikle, Macon-Bibb Co.: *When is the concept report coming out and when must comments be turned in?* The concept report will go out in the next few weeks based on the proposed concept shown. Comments need to be returned as soon as possible.

Need and Purpose Statement
IM-NH-75-1(214)
P.I. 311560
Bibb County

The proposed improvement originated separate from, but is an integral part of, the general upgrading of Macon's original Interstate System. The I-75/Forsyth/Hardeman interchange is a split diamond design connected by one-way frontage roads and serving the one-way paired arterials of Forsyth Street and Hardeman Avenue. Since I-75 bisects the City of Macon, it functions as a cross-movement barrier funneling all such movements to grade separations and interchanges. As such, the I-75/Forsyth/Hardeman split diamond interchange is a primary connector between the employment centers of downtown Macon and rapidly growing sections of western and northern Bibb County.

Traffic accident history indicates the accident rates for both Forsyth Street and Hardeman Avenue, in the vicinity of I-75, exceed the Statewide average for similar urban facilities. This is attributable to the combined effect of existing lane configurations, limited section lengths, and weaving movements from the cross-streets to both the Interstate ramps and connecting frontage roads.

To address these concerns, the Department proposes to improve operating conditions by providing additional through and turning movement capacity, redirecting traffic, and prohibiting particular weaving movements. In essence, the proposed redesign of this interchange will enable separation of cross-street through traffic from traffic desiring access to I-75.

The proposed improvement is included in the adopted Macon Area Transportation Study and current Transportation Improvement Program. Proposed improvements to the interchange will improve operations and safety in the immediate vicinity while improving the overall quality and safety of transportation within the Macon area.

PRELIMINARY COST ESTIMATE
URBAN DESIGN OFFICE

DATE: 10/18/95 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		$1,000,000.00
			SUBTOTAL	**$1,000,000.00**
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				

Aggregate Base				
Graded Aggregate	2710	tons @	$6.10	$16,531.00
Asphalt Paving				
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	925	linear feet @	$30.00	$27,750.00
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	**$160,390.00**
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
Box Culverts				
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	$1,000,000.00
B.	Reimbursable Utilities	$1,300,000.00
	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	$161,000.00
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	**$844,000.00**
N.	Major Structures	$0.00
	SUBTOTAL	**$3,144,000.00**
2	Years of Inflation at 5 %	$86,510.00
10	% E & C	$93,051.00
	TOTAL COST ESTIMATE	**$3,323,561.00**

HCM: SIGNALIZED INTERSECTION SUMMARY 10-26-1995

Center For Microcomputers In Transportation

Streets: (E-W) HARDEMAN (N-S) MONROE
Analyst: ALEXANDER File Name: HARDMANA.HC9
Area Type: Other 10-26-95
Comment: IM-NH-75-1(214) PI 311460 BIBB CO. INTERSECTION "A" PM

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes					> 3	1	2	> 1	1	1	1 <	
Volumes				210	2240	135	400	45	355	155	65	35
Lane Width					12.0	12.0	12.0	12.0	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	70.0A				Green	10.0A	33.0A		
Yellow/A-R	4.0				Yellow/A-	4.0	4.0		
Lost Time	3.0				Lost Time	3.0	3.0		

Cycle Length: 125.0 secsPhase combination order: #1 #5 #6

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	LT	3037	5346	0.93	0.57	20.0	C	19.4	C
	R	856	1507	0.17	0.57	8.3	B		
NB	L	287	3262	0.41	0.38	21.9	C	30.5	D
	LT	591	1539	0.26	0.38	17.1	C		
	R	410	1507	0.91	0.27	43.2	E		
SB	L	166	431	0.98	0.38	78.3	F	56.6	E
	TR	457	1680	0.23	0.27	22.9	C		

Intersection Delay = 24.1 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.955

HCM: SIGNALIZED INTERSECTION SUMMARY 10-26-1995

Center For Microcomputers In Transportation

Streets: (E-W) GA. AVE. (N-S) MONROE
Analyst: ALEXANDER File Name: HARDMANB.HC9
Area Type: Other 4-11-95
Comment: IM-NH-75-1(214) PI 311560 BIBB CO. INTERSECTION "B" PM

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes					1	1		1	1		1	<
Volumes					1280	175		155	25		57	28
Lane Width					12.0	12.0		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	%0.0A				Green 12.0A			
Yellow/A-R	4.0				Yellow/A- 4.0			
Lost Time	3.0				Lost Time 3.0			

Cycle Length: 120.0 secsPhase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	T	1500	1782	0.90	0.84	8.7	B	7.7	B
	R	1268	1507	0.15	0.84	1.1	A		
NB	T	192	1773	0.85	0.11	50.3	E	47.7	E
	R	163	1507	0.16	0.11	31.4	D		
SB	TR	164	1517	0.54	0.11	35.1	D	35.1	D

Intersection Delay = 13.3 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.892

HCM: SIGNALIZED INTERS TION SUMMARY 10-26-1995
Center For Microcomputers In Transportation

Streets: (E-W) HARDEMAN (N-S) MONROE
Analyst: ALEXANDER File Name: HARDMAND.HC9
Area Type: Other 4-11-95
Comment: IM-NH-75-1(214) PI 311460 BIBB CO. INTERSECTION "D" PM

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		1			3							2
Volumes		510			1950							610
Lane Width		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	37.0A				Green	15.0A			
Yellow/A-R	4.0				Yellow/A-	4.0			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 60.0 secsPhase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	T	1129	1782	0.48	0.63	3.9	A	3.9	A
WB	T	3369	5319	0.67	0.63	4.8	A	4.8	A
SB	R	709	2660	0.91	0.27	23.0	C	23.0	C

Intersection Delay = 8.1 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.740

HCM: SIGNALIZED INTERSECTI(SUMMARY 10-27-1995

Center For Microcomputers In Transportation

Streets: (E-W) HARDEMAN (N-S) FRONTAGE RD NE

Analyst: GRS File Name: NORTHEA.HC9

Area Type: Other 10-16-95 2017 am

Comment: IM-NH-75-1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "E"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes					4	1	1	> 1				
Volumes					750	315	875	325				
Lane Width					12.0	12.0	12.0	12.0				
RTOR Vols						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		26.0A			Green	26.0A			
Yellow/A-R		4.0			Yellow/A-	4.0			
Lost Time		3.0			Lost Time	3.0			

Cycle Length: 60.0 secsPhase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	T	3208	7128	0.27	0.45	6.7	B	4.8	A
	R	1515	1515	0.22	1.00	0.0	A		
NB	L	762	1693	0.82	0.45	16.0	C	14.5	B
	LT	784	1742	0.81	0.45	13.1	B		

Intersection Delay = 9.8 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.546

HCM: SIGNALIZED INTERSECTI SUMMARY 10-27-1995
Center For Microcomputers In Transportation

Streets: (E-W) HARDEMAN (N-S) FRONTAGE RD NE
Analyst: GRS File Name: NORTHE.HC9
Area Type: Other 10-16-95 2017 PM
Comment: IM-NH-75-1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "E"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes					4	1	1	> 1				
Volumes					2770	670	625	690				
Lane Width					12.0	12.0	12.0	12.0				
RTOR Vols						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	26.0A				Green	26.0A			
Yellow/A-R	4.0				Yellow/A-	4.0			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 60.0 secsPhase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	T	3208	7128	1.00	0.45	21.1	C	17.3	C
	R	1515	1515	0.47	1.00	0.1	A		
NB	L	762	1693	0.86	0.45	18.4	C	18.4	C
	LT	802	1782	0.91	0.45	18.3	C		

Intersection Delay = 17.6 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.953

HCM: SIGNALIZED INTERSECTI SUMMARY 10-30-1995
Center For Microcomputers In Transportation

Streets: (E-W) HARDEMAN AVE. (N-S) FRONTAGE RD NW
Analyst: GRS File Name: NORTHWA.HC9
Area Type: Other 10-16-95 2017 am
Comment: IM-NH-75-1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "F"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				2	2						2	1
Volumes				385	1240						585	600
Lane Width				12.0	12.0						12.0	12.0
RTOR Vols						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	35.0A				Green	17.0A		
Yellow/A-R	4.0				Yellow/A-	4.0		
Lost Time	3.0				Lost Time	3.0		

Cycle Length: 60.0 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	L	1967	3279	0.21	0.60	4.2	A	5.1	B
	T	2138	3564	0.64	0.60	5.4	B		
SB	T	1069	3564	0.61	0.30	12.2	B	6.2	B
	R	1515	1515	0.42	1.00	0.1	A		

Intersection Delay = 5.6 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.629

HCM: SIGNALIZED INTERSECTI SUMMARY 10-30-1995

Center For Microcomputers In Transportation

Streets: (E-W) HARDEMAN AVE. (N-S) FRONTAGE RD NW

Analyst: GRS File Name: NORTHW.HC9

Area Type: Other 10-16-95 2017 PM

Comment: IM-NH-75-1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "F"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				2	2						2	1
Volumes				1350	2035						350	360
Lane Width				12.0	12.0						12.0	12.0
RTOR Vols						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	35.0A				Green	17.0A		
Yellow/A-R	4.0				Yellow/A-	4.0		
Lost Time	3.0				Lost Time	3.0		

Cycle Length: 60.0 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
WB	L	1967	3279	0.72	0.60	7.4	B	23.4	C
	T	2138	3564	1.05	0.60	33.5	D		
SB	T	1069	3564	0.36	0.30	10.7	B	5.4	B
	R	1515	1515	0.25	1.00	0.0	A		

Intersection Delay = 20.3 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.821

HCM: SIGNALIZED INTERSECTI SUMMARY 10-26-1995

Center For Microcomputers In Transportation

Streets: (E-W) FORSYTH ST (N-S) FRONTAGE RD SOUTH

Analyst: GRS File Name: SOUTHWA.HC9

Area Type: Other 10-16-95 2017 am

Comment: IM-NH-75- 1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "G"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		3	< 1							1	2	
Volumes		2055	330							435	535	
Lane Width		12.0	12.0							12.0	12.0	
RTOR Vols			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	42.0A				Green	40.0A		
Yellow/A-R	4.0				Yellow/A-	4.0		
Lost Time	3.0				Lost Time	3.0		

Cycle Length: 90.0 secsPhase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	2529	5293	1.03	0.48	32.9	D	31.6	D
	R	724	1515	0.21	0.48	8.8	B		
SB	L	771	1693	0.59	0.46	14.8	B	12.3	B
	T	1624	3564	0.36	0.46	10.4	B		

Intersection Delay = 26.3 sec/veh Intersection LOS = D

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.816

HCM: SIGNALIZED INTERSECTI SUMMARY 10-26-1995

Center For Microcomputers In Transportation

Streets: (E-W) FORSYTH ST (N-S) FRONTAGE RD SOUTH

Analyst: GRS File Name: SOUTHW.HC9

Area Type: Other 10-16-95 2017 PM

Comment: IM-NH-75- 1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "G"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		3	< 1							1	2	
Volumes		660	870							300	1410	
Lane Width		12.0	12.0							12.0	12.0	
RTOR Vols			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	42.0A				Green	40.0A		
Yellow/A-R	4.0				Yellow/A-	4.0		
Lost Time	3.0				Lost Time	3.0		

Cycle Length: 90.0 secsPhase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	2390	5002	0.56	0.48	11.0	B	11.1	B
	R	724	1515	0.54	0.48	11.3	B		
SB	L	771	1693	0.41	0.46	12.7	B	22.2	C
	T	1624	3564	0.96	0.46	24.1	C		

Intersection Delay = 16.8 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.755

HCM: SIGNALIZED INTERSECTI SUMMARY 10-16-1995
Center For Microcomputers In Transportation

Streets: (E-W) FORSYTH ST (N-S) FRONTAGE RD SOUTH
Analyst: GRS File Name: SOUTHE.HC9
Area Type: Other 10-16-95 2017 AM
Comment: IM-NH-75-1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "H"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	3						2	1			
Volumes	585	1905						615	1345			
Lane Width	12.0	12.0						12.0	12.0			
RTOR Vols			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	42.0A				Green	40.0A			
Yellow/A-R	4.0				Yellow/A-	4.0			
Lost Time	3.0				Lost Time	3.0			

Cycle Length: 90.0 secsPhase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	809	1693	0.76	0.48	17.6	C	16.0	C
	T	2554	5346	0.86	0.48	15.5	C		
NB	T	1624	3564	0.42	0.46	10.7	B	8.1	B
	R	1515	1515	0.93	1.00	6.9	B		

Intersection Delay = 12.6 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.935

HCM: SIGNALIZED INTERSECTION SUMMARY 10-26-1995

Center For Microcomputers In Transportation

Streets: (E-W) FORSYTH ST (N-S) FRONTAGE RD SOUTH
Analyst: GRS File Name: SOUTHEP.HC9
Area Type: Other 10-16-95 2017 pm
Comment: IM-NH-75-1(214) PI 311560 SR 19 BIBB COUNTY INTERSECTION "H"

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	3						2	1			
Volumes	640	320						675	845			
Lane Width	12.0	12.0						12.0	12.0			
RTOR Vols			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	42.0A				Green	40.0A		
Yellow/A-R	4.0				Yellow/A-	4.0		
Lost Time	3.0				Lost Time	3.0		

Cycle Length: 90.0 secs Phase combination order: #1 #5

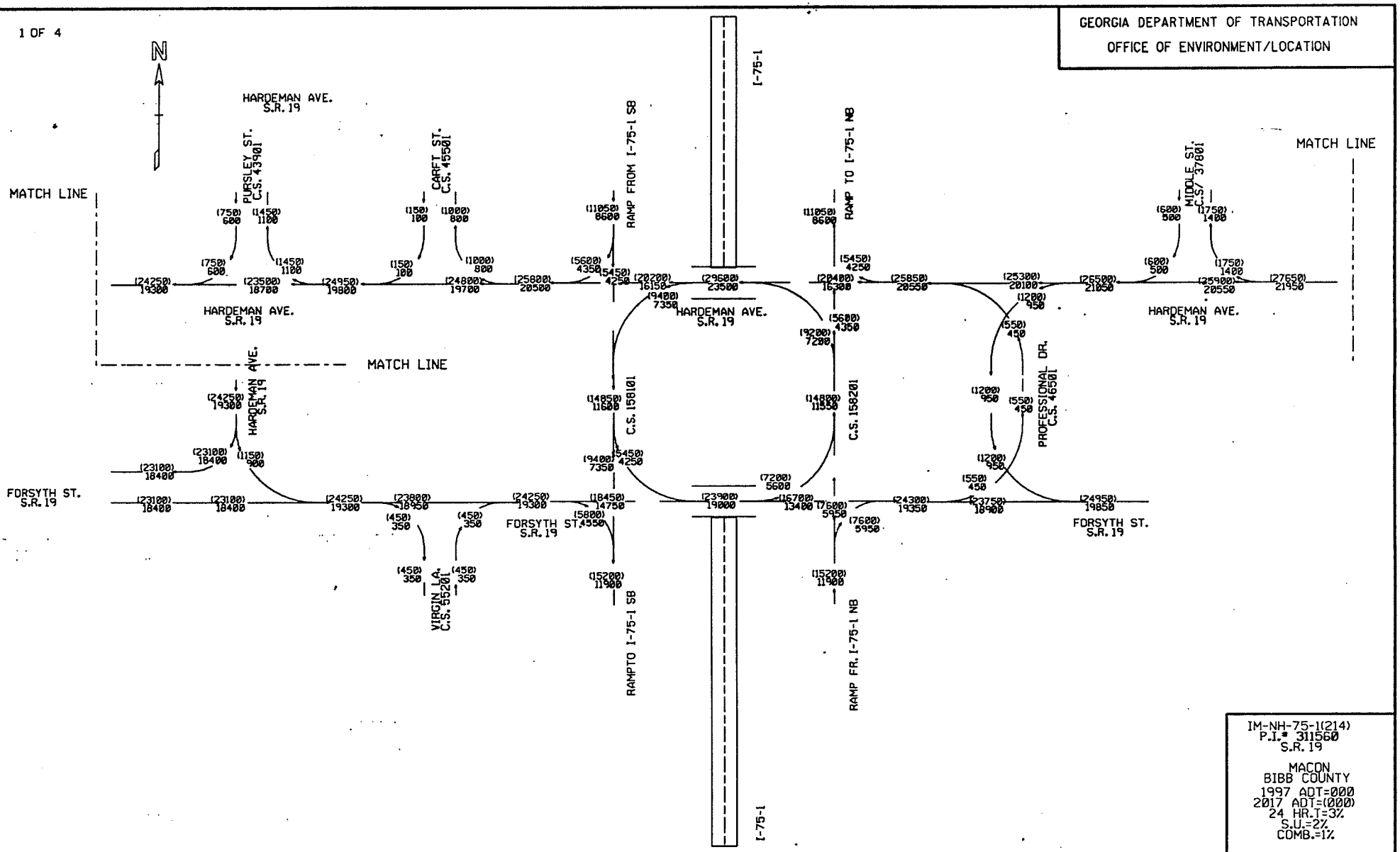
Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	809	1693	0.83	0.48	20.7	C	16.4	C
	T	2554	5346	0.15	0.48	8.5	B		
NB	T	1624	3564	0.46	0.46	11.0	B	5.2	B
	R	1515	1515	0.59	1.00	0.4	A		

Intersection Delay = 9.6 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.651

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

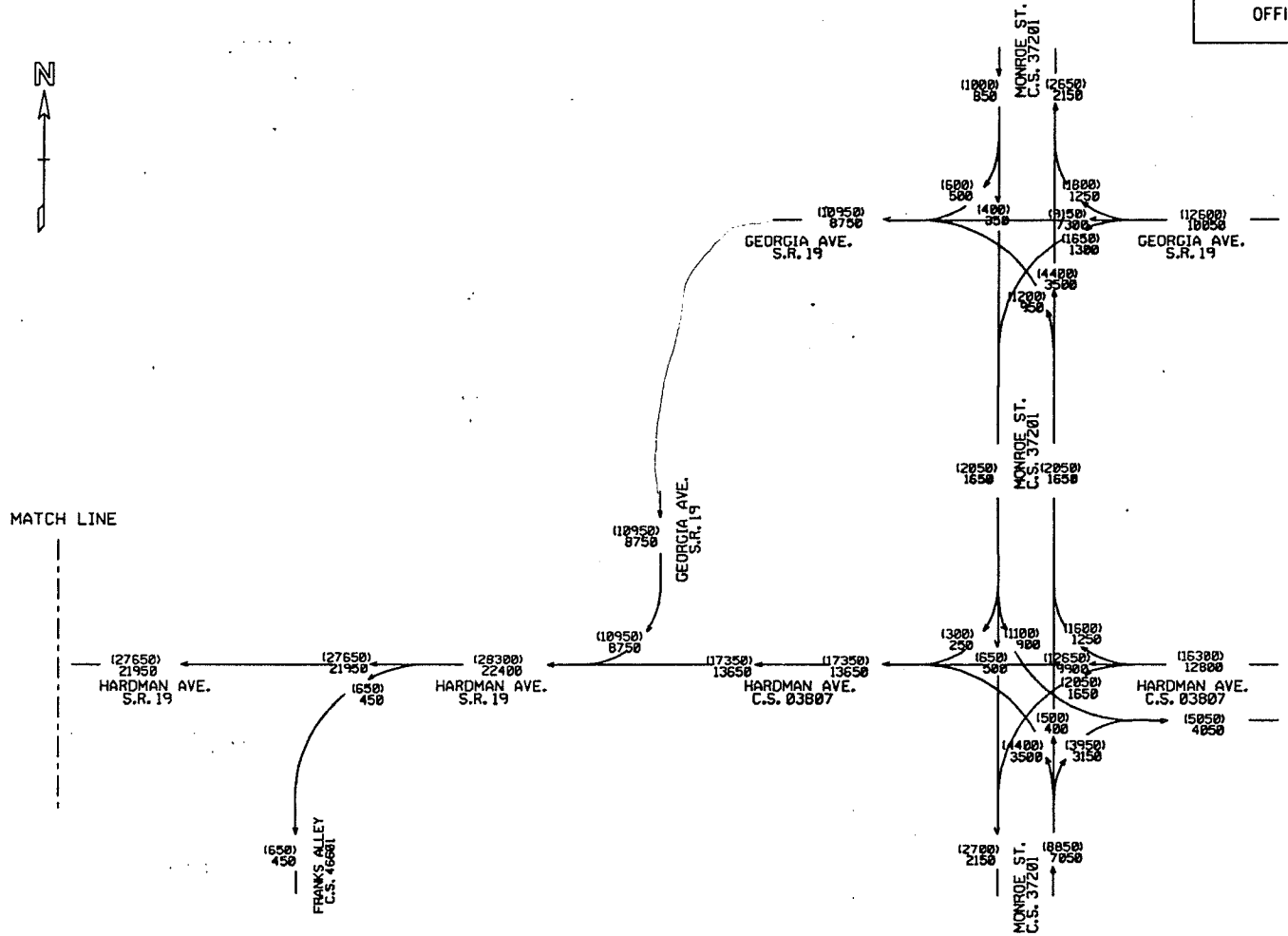


IM-NH-75-1(214)
P.I.# 311560
S.R. 19

MACON
BIBB COUNTY
1997 ADT=000
2017 ADT=(000)
24 HR.T=3%
S.U.=2%
COMB.=1%

WGS
10-93

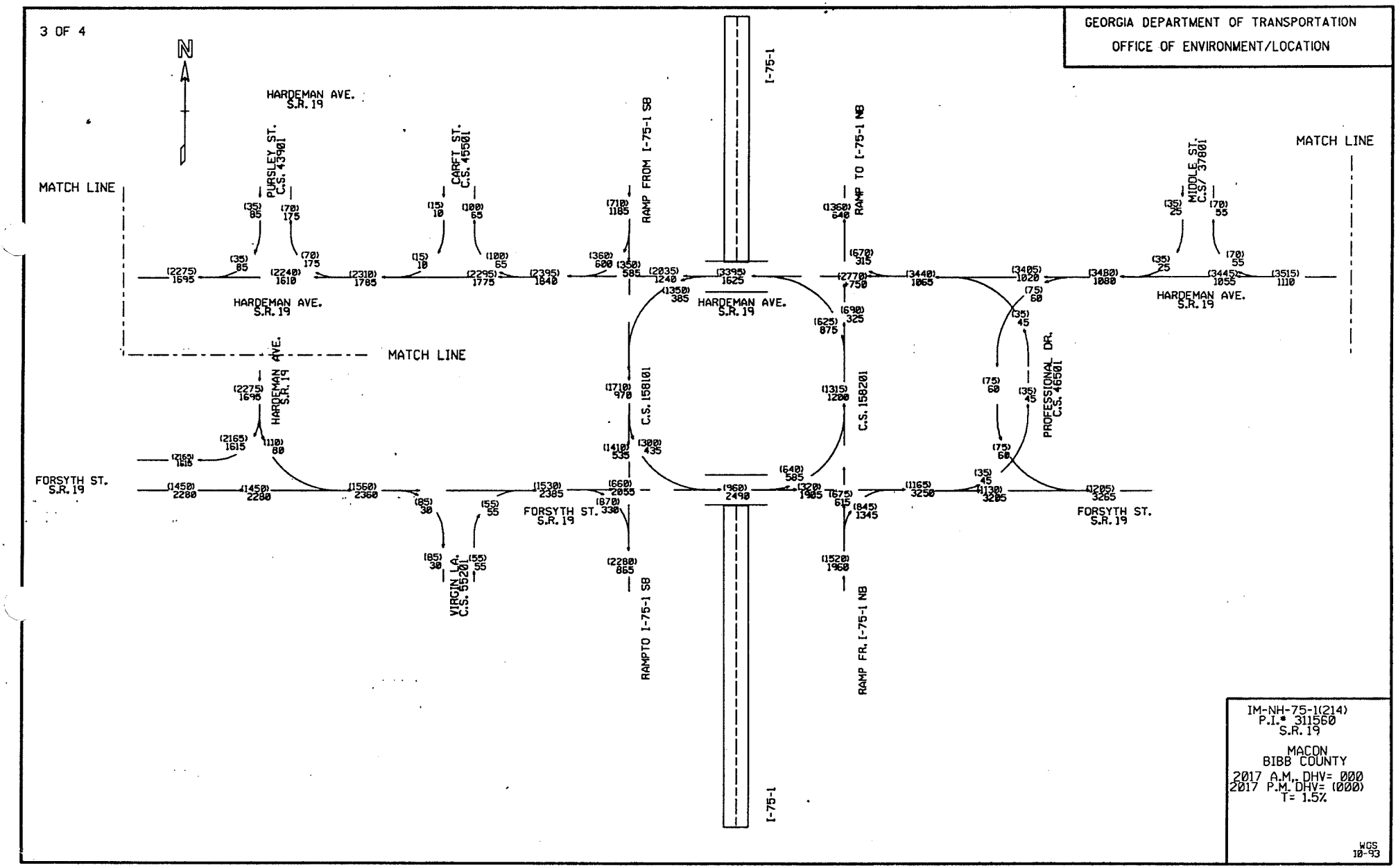
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



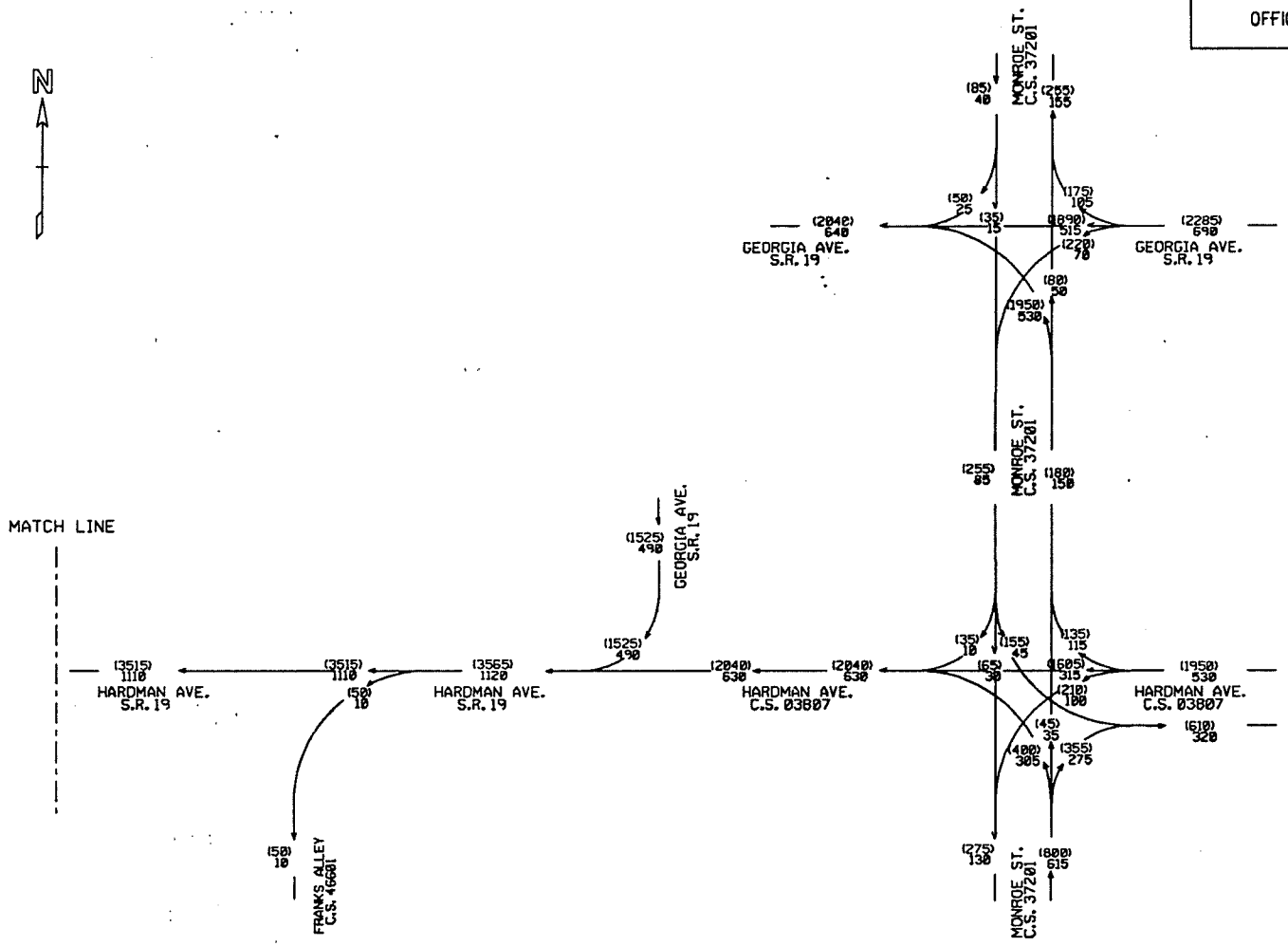
IM-NH-75-1(214)
P.I.# 311560
S.R. 19
MACON
BIBB COUNTY

1997 ADT=000
2017 ADT=(000)
24 HR.T=3%
S.U.=2%
COMB.=1%

WGS
10-93


3 OF 4
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION
N
HARDEMAN AVE.
S.R. 19
PURSLEY ST.
C.S. 43901
CARFT ST.
C.S. 45501
RAMP FROM I-75-1 SB
I-75-1
RAMP TO I-75-1 NB
MIDDLE ST.
C.S. 37801
MATCH LINE
MATCH LINE
MATCH LINE
HARDEMAN AVE.
S.R. 19
HARDEMAN AVE.
S.R. 19
HARDEMAN AVE.
S.R. 19
HARDEMAN AVE.
S.R. 19
C.S. 158101
C.S. 158201
PROFESSIONAL DR.
C.S. 46501
FORSYTH ST.
S.R. 19
FORSYTH ST.
S.R. 19
FORSYTH ST.
S.R. 19
VIRGIN LA.
C.S. 55201
RAMP TO I-75-1 SB
RAMP FR. I-75-1 NB
I-75-1
IM-NH-75-1(214)
P.I.# 311560
S.R. 19
MACON
BIBB COUNTY
2017 A.M. DHV= 000
2017 P.M. DHV= (000)
T= 1.5%
WGS
10-93

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



IM-NH-75-1(214)
P.I.# 311560
S.R. 19
MACON
BIBB COUNTY
2017 A.M. DHV= 000
2017 P.M. DHV= (000)
T= 1.5%

WGS
10-93

MEETING/CONFERENCE RECORD OF ATTENDEES

PURPOSE: Concept Meeting for Project IM-NH-75-1(214)

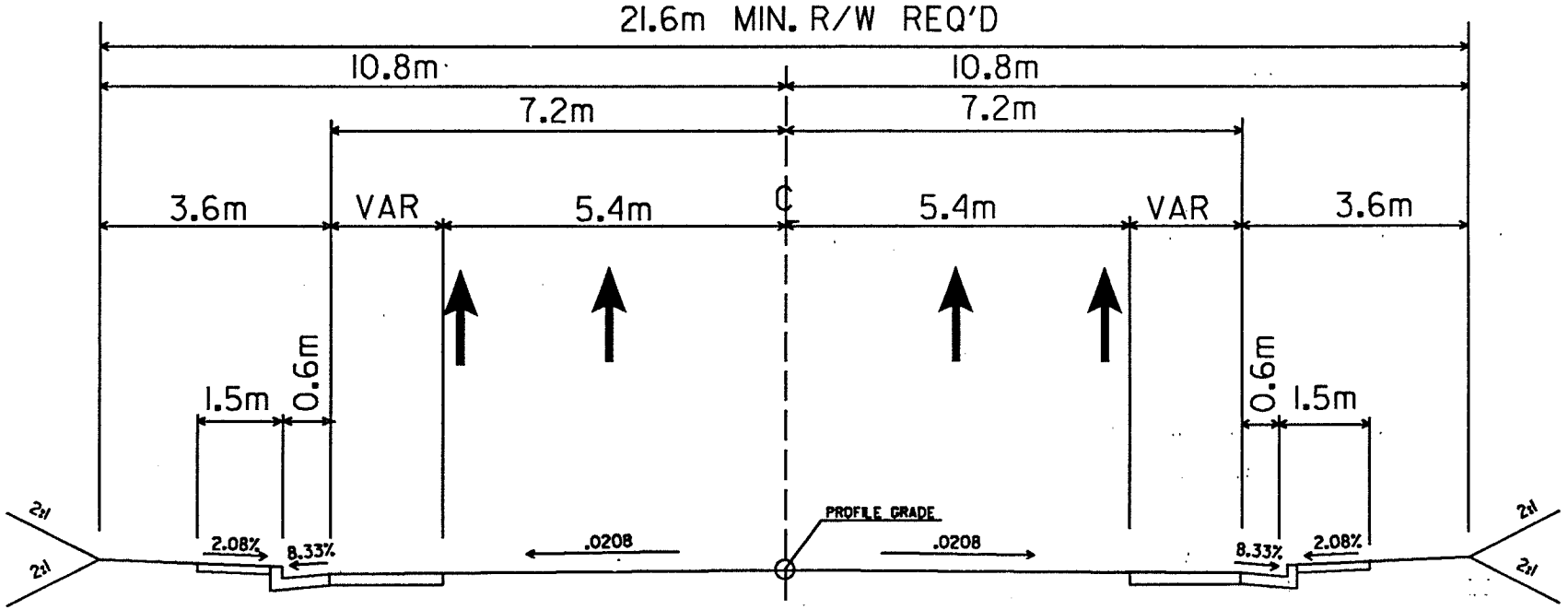
LOCATION: Urban Design Conference Room

DATE: Sept. 22, 1995 HOUR: 10:30

MODERATOR: Angela. T. Alexander.

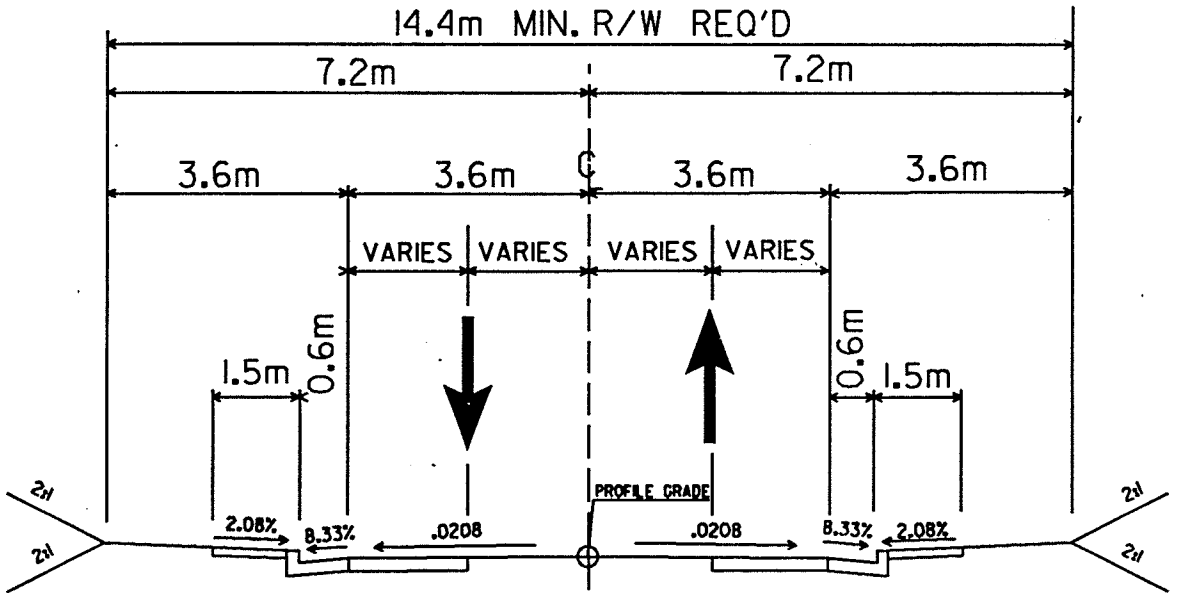
	NAME	ORGANIZATION	TELEPHONE NO.
1.	Gerldha Rice-Singleton	Urban Design	656-5444
2.	TERESA ROBINSON	URBAN DESIGN	0560-5444
3.	Joe Leoni	DOT Thomaston	(G)256-1099
4.	KERRY GORE	DOT - UTILITIES	(6) 256-1023
5.	DeBoard	Ga Power	754-5003
6.	Fred Moody	" "	754-5945
7.	TONY WILLIAMSON	D.O.T. - ENVIRONMENTAL	256-1057
8.	Lewis Walker	DOT- Thomaston	(GIST) 256-1070
9.	GENE GUINS	DOT UTILITIES	GIST 256-1020
10.	Reba P. Scott	DOT- Programming	656-3481
11.	Jim Huffstetler	FISS	351-5608
12.	David Mulling	GA DOT ENG. SERVICES	656-6847
13.	CORA COOK	GDOT - Planning	657-6687
14.	JOHNNY CHARLES	GDOT - PRECONST	6-5313
15.	Joe Palladi	DOT Urban Design	6 5439
16.	Beverly J. Moore	GDOT - local Govt	6-8482
17.	BILL MIKLE	MACON - BIBB CO.	(912) 751-7430
18.	Vernon Ryle	Macon-Bibb MPO	(912) 751-7460
19.	MARIE PIPER	BELLSOUTH TELECOMMUNICATIONS	(770) 391-3977
20.	Del Clippard	GDOT - Traffic Operations	651-9599
	Walker Scott		

REMARKS:



FORSYTH ST. AND HARDEMAN AVE.

TYPICAL SECTION



MADISON ST. AND GEORGIA AVE.

TYPICAL SECTION

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
NOV 27 1995
PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) Bibb County
P.I. No. 311560
I-75 @ Hardeman Ave & Forsyth ST

OFFICE Environmental/Location

DATE November 20, 1995

FROM David E. Studstill, P.E., State Environmental/Location Engineer

TO Bobby Mustin, Project Review Engineer

SUBJECT CONCEPT REPORT

The concept report for the above listed project has been reviewed. This project is located just outside several National Register Historic Districts; the Mason Historic District, the Vineville Historic District, and the Pleasant Hill Historic District. Plans are needed with construction limits for history field surveys. Depending upon construction limits, the potential for needing 106/4(f) clearance is high. Also, the Level of Environmental Analysis is stated as being an Environmental Assessment. We may be able to clear with a Categorical Exclusion.

If you have any questions, please let me know.

DES/JSS/jaf

cc: Walker W. Scott

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) Bibb County
I-75 @ Hardeman Ave & Forsyth St.
P.I. No. 311560

OFFICE Atlanta, Georgia

DATE October 31, 1995

FROM Walker W. Scott, Jr., P.E., State Urban Design Engineer

TO Wayne Hutto, Asst. Director of Pre-Construction

SUBJECT **Proposed Project Concept Report**

Transmitted is the proposed project Concept Report for the Intersection improvements at Georgia Avenue and Hardeman Avenue. Also included in this concept are the interchange modifications at I-75 and Hardeman Avenue and at I-75 and Forsyth Street.

Please take the necessary steps to process the report through the Department in accordance with the project review process.

WWS:ATA
Attachment

cc: David Studstill, w/attachment
Marion Waters, w/attachment
Joe Street, w/attachment
Bobby Mustin, w/attachment
Paul Liles, w/attachment
Charles Lewis
Hoyt J. Lively, Jr.

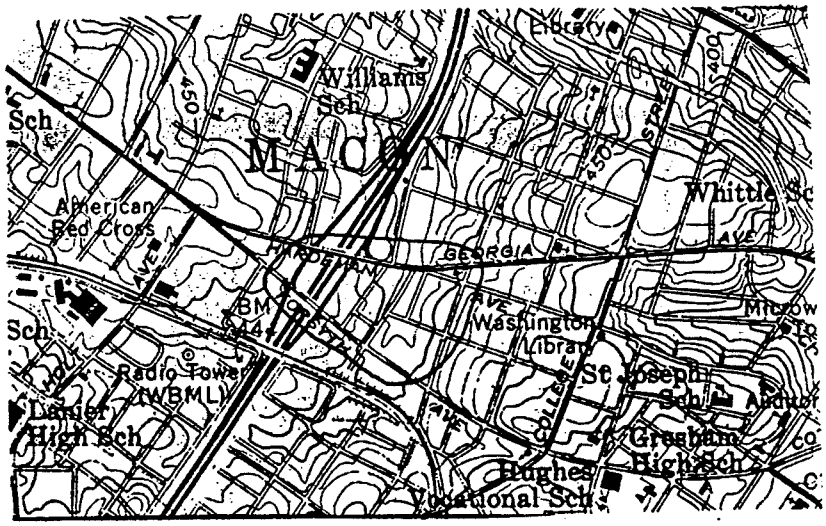
C:\WPWIN60\WPDOCS\311560SC.DOC

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

PROJECT CONCEPT REPORT
IM-NH-75-1(214)
BIBB COUNTY.
I-75 AT HARDEMAN AVE. AND FORSYTH ST.
DATE: October 13, 1995

Federal Route No.:
State Route No.: SR 19
Ga DOT P.I. No.: 311560



RECOMMENDATIONS FOR APPROVAL

10/30/95 — Date — William M. Cook — State Urban Design Engineer

11/15/95 — Date — [signature] — State Environmental Engineer

Date — State Traffic Operations Engineer

Date — District Engineer

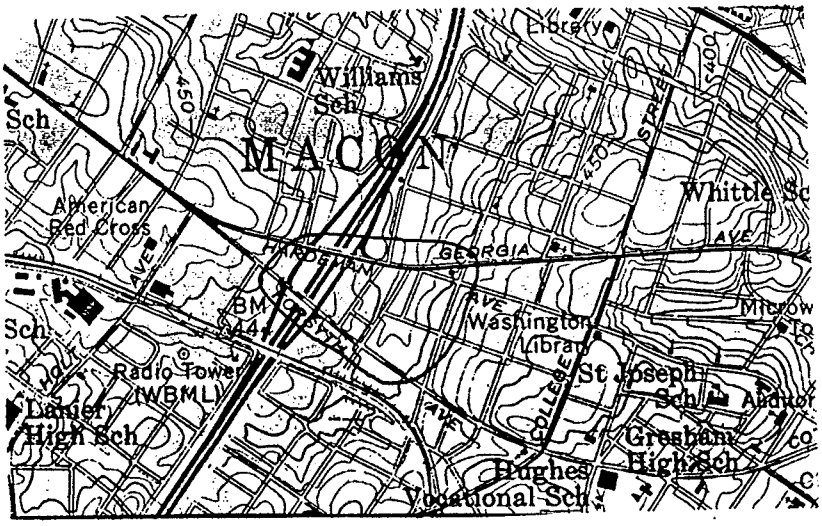
Date — State Bridge & Structural Design Engineer

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

PROJECT CONCEPT REPORT
IM-NH-75-1(214)
BIBB COUNTY.
I-75 AT HARDEMAN AVE. AND FORSYTH ST.
DATE: October 13, 1995

Federal Route No.:
State Route No.: SR 19
Ga DOT P.I. No.: 311560



RECOMMENDATIONS FOR APPROVAL

10/30/95 — Walter W. Wood
Date — State Urban Design Engineer

Date — State Environmental Engineer

11/21/95 — M. G. Waters, PK
Date — State Traffic Operations Engineer

Date — District Engineer

Date — State Bridge & Structural Design Engineer

D.O.T.66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-75-1(214) Bibb County
P.I. No. 311560
I-75 at Hardeman Ave. & Forsyth St.

OFFICE Traffic Operations
Atlanta, Georgia
DATE November 21, 1995

FROM MBR for Marion G. Waters, III, P.E., State Traffic Operations Engineer

TO Wayne Hutto, Assistant Director of Preconstruction

SUBJECT Project Concept Report Review

We have reviewed the concept report on the above project for the intersection improvements at Georgia Avenue and Hardeman Avenue (State Route 19) along with interchange modifications at I-75 with Hardeman Avenue and Forsyth Street. It is proposed to construct a barrier/median between Georgia Avenue and Hardeman Avenue to alleviate accidents resulting from weaving movements and modify signing to direct motorists on the proper path to I-75 northbound and southbound. Hardeman Avenue and Forsyth Street will be modified to contain four lanes, westbound and eastbound respectively, and a third lane for right turns only will be added to the I-75 southbound exit ramp.

Clear, consistent signing will be critical to the proper operation of these improvements, therefore signing needs should be addressed early in the project plans development.

Subject to the above comment, we find this report satisfactory for approval.

MGW:TOC:dc

Attachment (signature page)

cc: David Studstill
Walker Scott (Attn: Angela Alexander)
Bob Mustin, w/attachment
General Files