

ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** STP-7713(650) Fulton County **OFFICE** Preconstruction  
P. I. No. 771365  
**DATE** June 9, 2000  
**FROM** *CWH*  
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:**

Tom Turner  
David Mulling  
David Studstill (ATTN: Harvey Keeper)  
Jerry Hobbs  
Herman Griffin  
Georgene Geary (ATTN: Michael Henry)  
Marion Waters  
Marta Rosen  
Paul Liles  
Don Mills  
Jimmy Chambers (ATTN: Ted Cashin)  
Steve Henry  
FHWA

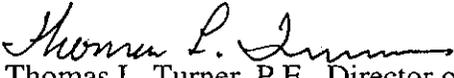
**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE** STP-7713(650) Fulton County **OFFICE** Preconstruction  
P.I. No. 771365

**DATE** April 10, 2000

**FROM**   
Thomas L. Turner, P.E., Director of Preconstruction

**TO** Wayne Shackelford, Commissioner

**SUBJECT** PROJECT CONCEPT REPORT

This project consists of modernizing traffic surveillance and control along the following corridors:

- Northside Drive/New Northside Drive/Powers Ferry Road
- Hammond Drive from Peachtree Dunwoody Road to Glenridge Drive
- Glenridge Drive/Connector from Hammond Drive to Peachtree Dunwoody Road
- Medlock Bridge Road (SR 141) from Chattahoochee River to Johns Creek Parkway
- Fulton Industrial Boulevard from Boatrock Road to Aviation Circle

Currently the above mentioned corridors have either no communication between signals or partial copper interconnect in various stages of disrepair. As a result, communication between traffic signals is virtually nonexistent. In addition, the identified corridors currently do not have nor can they support any ITS elements.

The proposed construction will develop Advanced Transportation Management System (ATMS) communication routes along the above mentioned corridors. This project will provide a fiber optic backbone along the corridors for the implementation of various ITS elements. The fiber will provide traffic signal communication for implementation of signal coordination and monitoring. This coordination will improve existing traffic operations, minimize vehicular delay and improve overall safety along the designated corridors. In addition to signal communication, the fiber backbone will allow for the placement of CCTV cameras. The cameras will primarily be mounted on concrete poles, which will allow Fulton County and GDOT surveillance of the corridors.

Environmental concerns include requiring a Categorical Exclusion be prepared; a public hearing is not required; time saving procedures are appropriate.

STP-7713(650) Fulton  
April 10, 2000

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)	\$2,019,000	\$2,000,000	2000	Local
Right-of-Way & Utilities*	Local	Local		

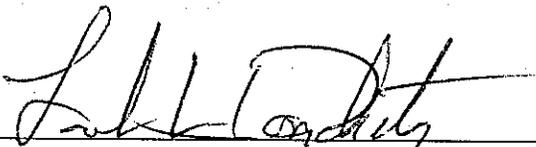
\*LGP)A sent 2-11-00 requesting Fulton County be responsible for right-of-way, utilities, and 20% PE and construction. PE: 2000 \$180,000

This project is in the STIP. I recommend this project concept be approved.

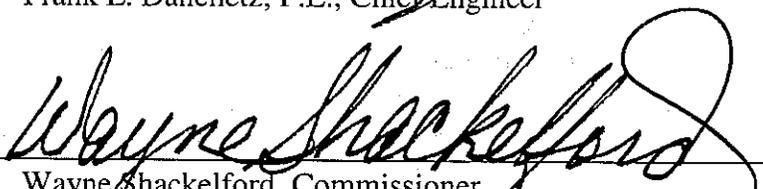
TLT:JDQ/cj

Attachment

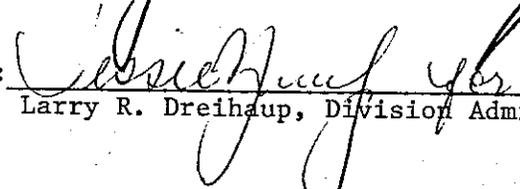
CONCUR

  
\_\_\_\_\_  
Frank L. Danchetz, P.E., Chief Engineer

APPROVE

  
\_\_\_\_\_  
Wayne Shackelford, Commissioner

APPROVED:

  
\_\_\_\_\_  
Larry R. Dreihaupt, Division Administrator, FHWA

6/7/00

see the Fulton County  
letter of commitment  
dated 6/6/00.

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

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INTERDEPARTMENTAL CORRESPONDENCE

**FILE:** STP-7713(650) Fulton  
P.I. Number 771365

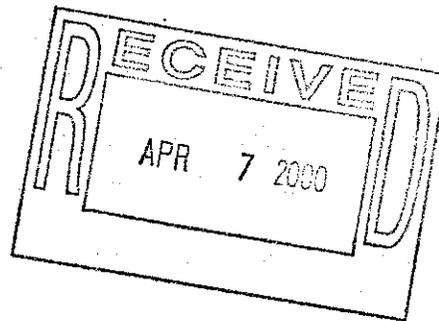
**OFFICE:** Engineering Services

**DATE:** April 6, 2000

**FROM:** David Mulling, Project Review Engineer *DM*

**TO:** Wayne Hutto, Assistant Director of Pre-construction

**SUBJECT:** CONCEPT REPORT



We have reviewed the concept report submitted April 3, 2000 by the letter from Marion Waters dated March 31, 2000, and have no comment.

The costs for the project are:

Construction	\$1,835,000
Inflation	\$ 92,000
E&C	\$ 193,000
Reimbursable Utilities	\$ 0
Right of Way	\$ 0

*total = 2,120,000*

DTM

c: Marion Waters

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
PROJECT CONCEPT REPORT SIGN OFF FORM**

Project Number: STP-7713-00-(650)

Modernizing Traffic Surveillance and Control, Fulton County

Federal Route Number: I-285

State Route Number: SR 120, SR 141, SR 400, SR 407, SR 70

GDOT P.I. Number: 771365

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**RECOMMENDATION FOR APPROVAL**

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3-31-2000 James E. Tolson  
Date Project Manager

This project concept is contained in the Regional Transportation Improvement Program (RTIP) and 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 in the STIP.

3-31-00 Mamon G. Waters III  
Date State Traffic Operations Engineer

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Date State Transportation Planning Administrator

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Date State Transportation Programming Engineer

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Date State Environmental/Location Engineer

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Date District Engineer

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Date Project Review Engineer

## PROJECT CONCEPT REPORT

DATE: March 3, 2000

PROJECT NO.: STP-7713-00-(650), Fulton County

P.I. NO.: 771365

PROJECT NAME: Modernizing Traffic Surveillance and Control

U.S. ROUTE: I-285

STATE ROUTE: SR 120, SR 141, SR 400, SR 407, SR 70

### LOCATION:

Northside Drive/New Northside Drive/Powers Ferry Road  
Hammond Drive from Peachtree Dunwoody Road to Glenridge Drive  
Glenridge Drive/Connector from Hammond Drive to Peachtree Dunwoody Road  
Medlock Bridge Road (SR 141) from Chattahoochee River to Johns Creek  
Parkway  
Fulton Industrial Boulevard from Boat Rock Road to Aviation Circle

### PROJECT TERMINI:

#### 1 - Northside Drive/New Northside Drive: 0.8 miles

Northside Drive from New Northside Drive to Powers Ferry Road, Powers Ferry Road from Northside Drive to New Northside Drive, New Northside Drive from Powers Ferry Road to the I-285 westbound exit ramp.

Fiber will be routed to Fulton's TCC by tying into Hub "B" and making use of existing fibers allocated to Fulton County

#### 2 - Hammond/Glenridge/Peachtree Dunwoody Rd Systems:

- Hammond Drive: 0.8 miles  
From Glenridge Drive to Peachtree Dunwoody Road
- Glenridge Drive/Connector: 1.7 miles  
From Hammond Drive to Peachtree Dunwoody Road
- Peachtree Dunwoody Road: 1.3 miles  
From Hammond Drive to Glenridge Connector

The Hammond Drive/Glenridge Drive/Glenridge Connector and Peachtree Dunwoody systems will be tied back to Hub "B"

#### 3 - Medlock Bridge Road (SR 141): 7.0 miles

From the Chattahoochee River to Johns Creek Road

Fiber will be connected to Fulton's TCC by making use of Gwinnett County's Fiber system in a joint use effort among the Counties.

**4 - Fulton Industrial Boulevard (SR 80): 5.8 miles**

From Boat Rock Road to Aviation Circle

Fiber will be routed to Fulton's TCC by tying into the GDOT fiber trunk line on I-20 at the proposed Changeable Message Sign approximately ¼ mile east of the I-20 /FIB interchange. Details of the fiber tie-in will have to be worked out with the Georgia Department of Transportation

TRAFFIC: N/A

PDP CLASSIFICATION: Major and Minor Principle Arterial

FULL OVERSIGHT( X )      EXEMPT( )      SF( )

**FUNCTIONAL CLASSIFICATION:**

Northside Drive:	Minor Principal Arterial
New Northside Drive:	Minor Principal Arterial
Glenridge Drive:	Minor Principal Arterial
Glenridge Connector:	Minor Principal Arterial
Peachtree Dunwoody Road:	Minor Principal Arterial
Medlock Bridge Road:	Major Principal Arterial
Fulton Industrial Boulevard:	Major Principal Arterial

**EXISTING CONDITIONS**

TYPICAL SECTION: Various

POSTED SPEED LIMIT: Varies per corridor

MAXIMUM DEGREE OF CURVATURE: N/A

MAXIMUM GRADE: N/A

**EXISTING MAJOR STRUCTURES:**

- New Northside Bridge over I-285
- Northside Drive Bridge over I-285
- Hammond Drive Bridge over SR 400
- Glenridge Connector Bridge over SR 400
- I-285 Bridge over Peachtree Dunwoody Road
- I-285 Bridge over Glenridge Drive
- I-20 Bridge over Fulton Industrial Boulevard

ACCIDENT HISTORY: N/A

## PROPOSED DESIGN

PROPOSED TYPICAL SECTION: Existing section will remain.

PROPOSED RIGHT-OF-WAY WIDTH: Existing right-of-way width will remain

DESIGN SPEED: N/A

MAXIMUM DEGREE OF CURVATURE: N/A

MAXIMUM GRADE: N/A

TYPE OF ACCESS: Access is controlled by permit for both County and State roads

TRAFFIC CONTROL DURING CONSTRUCTION: None needed. Presently none of the signals have any closed loop coordinated signal systems that are operational. Fiber optic tie-in to the signal cabinets is not anticipated to require traffic control. CCTV camera installation may require temporary right lane closure on the identified arterials during off-peak periods only.

PROPOSED STRUCTURES: Concrete poles for CCTV cameras inside the existing rights-of-way will be required at locations identified in the concept drawings.

## DESIGN VARIATIONS REQUESTED

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 CURVES:	( )	( )	(X)
BRIDGE WIDTH:	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(X)

NUMBER OF PARCELS: None

DISPLACEMENTS: None

## ESTIMATED COST

<u>ITEM</u>	<u>UNIT COST</u>	<u>NUMBER OF UNITS</u>	<u>TOTAL</u>
CCTV Assembly <sup>1</sup>	\$20,000	16 CCTVS	\$320,000
Fiber Optics <sup>2</sup>	\$15	16.6 miles	\$1,314,720
Network Electronics	\$200,000		\$200,000
CONSTRUCTION COST:	\$1,834,720		
10% CONTINGENCY:	\$183,472		
TOTAL COST:	\$2,018,192		

- (1) CCTV Assembly includes: 50 ft concrete pole, camera, cabinet and all required hardware.
- (2) Fiber optic cable cost is a composite contractor cost that includes cost of single mode cable, pull boxes (Type 4 and Type 5), fiber splicing, and all associated hardware.

## COORDINATION AND SCHEDULING

CONCEPT TEAM MEETING DATE: March 22, 2000

CONFORMS TO TIP/STIP? Yes

MEETS LOGICAL TERMINI REQUIREMENTS? Yes

P.A.R. MEETING: Not required

LEVEL OF ENVIRONMENTAL ANALYSIS: Categorical exclusion. No right-of-way purchase required. No impact to wetland, historical property or displacements is anticipated.

PUBLIC INVOLVEMENT: Fulton County to let project in accordance with Exhibit "A" of the LGPA

PERMITS REQUIRED: Utility approval of fiber optic cable attachments to County/utility company joint use poles will be required.

TIME SAVING PROCEDURES APPROPRIATE: Yes

### INTERAGENCY COORDINATION:

This concept will be the first stage in Fulton County's ATMS master plan, currently being developed in a parallel project. Fulton County will make efforts to arrange use of local agencies existing or proposed fiber system. The joint use will allow Fulton County to expand upon this first stage to develop a comprehensive and redundant ATMS system. The county will coordinate efforts with the City of Roswell, the City of Alpharetta, Gwinnett County and the Georgia Department of Transportation to provide adequate capacity for interagency collaboration.

## SCHEDULING CONSIDERATIONS

TIME TO COMPLETE ENVIRONMENTAL: Complete by 4/28/00

TIME TO COMPLETE PRELIMINARY RD/RW PLANS: Complete by 4/28/00

TIME TO COMPLETE 404 PERMIT: N/A

TIME TO COMPLETE FINAL CONSTRUCTION PLANS: 6/27/00

TIME TO PURCHASE REQUIRED RIGHT-OF-WAY: N/A

LOCAL GOVERNMENT COMMITMENTS: 20% match on federal funds

PROBABLE LOCATIONS OF USTs: None known

PROBABLE LOCATION OF HAZARDOUS WASTE: None known

### OTHER PROJECTS IN AREA:

- Old Alabama Road Widening from Jones Bridge To SR 141/Medlock Bridge Road (PI# 752660, Project # STP-2868(1), Let Year 2003) – Fiber Design will account for Old Alabama Road widening from 2 lanes to 4 lanes in placement of fiber run at SR 141/Old Alabama Road intersection.
- Glenridge Drive From Roswell to Glenridge Connector Improvements (PI# 753054, Project # STP-9258(3), Let Year 2001) – Fiber Design will account for improvements at Glenridge Drive/Glenridge Connector.
- SR 400 Widening from Hammond/Abernathy to Spalding (PI# 721850, Project # NH-056-1(52), Authorized 2001) – Fiber Design will account for SR 400 widening from 8 lanes to 12 lanes including bridge and ramp construction specifically at Hammond Drive/SR 400 where a half diamond with CD roads is proposed. The fiber will be designed to the nearest signalized intersection east and west of the Hammond/SR 400 bridge with expansion capabilities to tie-in the SR 400/ Hammond Drive intersections.
- Medlock Bridge Road bicycle and pedestrian improvements (PI# 770927, Project # CM-00BK(21), Authorized 2000)– Fiber Design will account for addition of bicycle lanes and pedestrian facilities
- Hammond Drive Sidewalks from Glenridge Drive to Dekalb County (PI# 753300, Project # cm-7533-00(000), Let Year 2001) – The intersections of Hammond Drive at Concourse East, Concourse West, and Barfield will have temporary fiber drop cables on existing utility poles along Hammond Drive. The AGM team will provide the sidewalk design consultant with the final underground infrastructure to tie these intersections to the Glenridge Drive/Peachtree Dunwoody backbone.
- SR 70/Fulton Industrial Boulevard widening from Interchange Drive to North Aviation Circle (PI# 751710, Project # MLP-70(25), Let Year 2002) – The design on

FIB will include a temporary fiber drop along existing utilities from the Wendell Drive (through MLK and Aviation Cir) to the Fulton Signal Shop TCC. The proposed FIB widening project will then accommodate the final backbone design to the Fulton Signal Shop TCC.

- Fulton Industrial Boulevard from Camp Creek Parkway to Frederick Drive; Sidewalks, Bus Shelter, Benches (PI# 731890, Project # STP-7318-00(900), Let Year 2002) – Fiber design will accommodate future sidewalk project.
- State Bridge Road Widening (PI# 730880, Project # STP-189-1(26), Authorized 2001) – Fiber Design will account for improvements at intersection of Medlock Bridge Road and State Bridge Road.
- Glenridge Extension (Fulton County Project # T010, Let Year 2001) – Fiber Design will account for the improvements at Glenridge Connector and Peachtree Dunwoody Road.

#### OTHER ALTERNATIVES CONSIDERED:

Alternate 1: Development of fiber backbone and ITS elements along four corridors in Fulton County.

Alternate No. 2: No Build.

ATTACHMENTS: Need and Purpose Statement, Project Location Sketches

## **Need and Purpose Statement**

STP-7713-00-(650), PI # 771365, Fulton County  
Modernizing Traffic Surveillance and Control

The corridors defined in the scope of this project (Northside Drive/New Northside Drive, Hammond Drive/Peachtree Dunwoody/Glenridge Drive/Glenridge Connector/Johnson Ferry Road, Fulton Industrial Boulevard and Medlock Bridge Road) currently have either no communication between signals or partial copper interconnect in various states of disrepair. As a result, communication between traffic signals is virtually non-existent. In addition, the identified corridors currently do not have nor can they support any ITS elements.

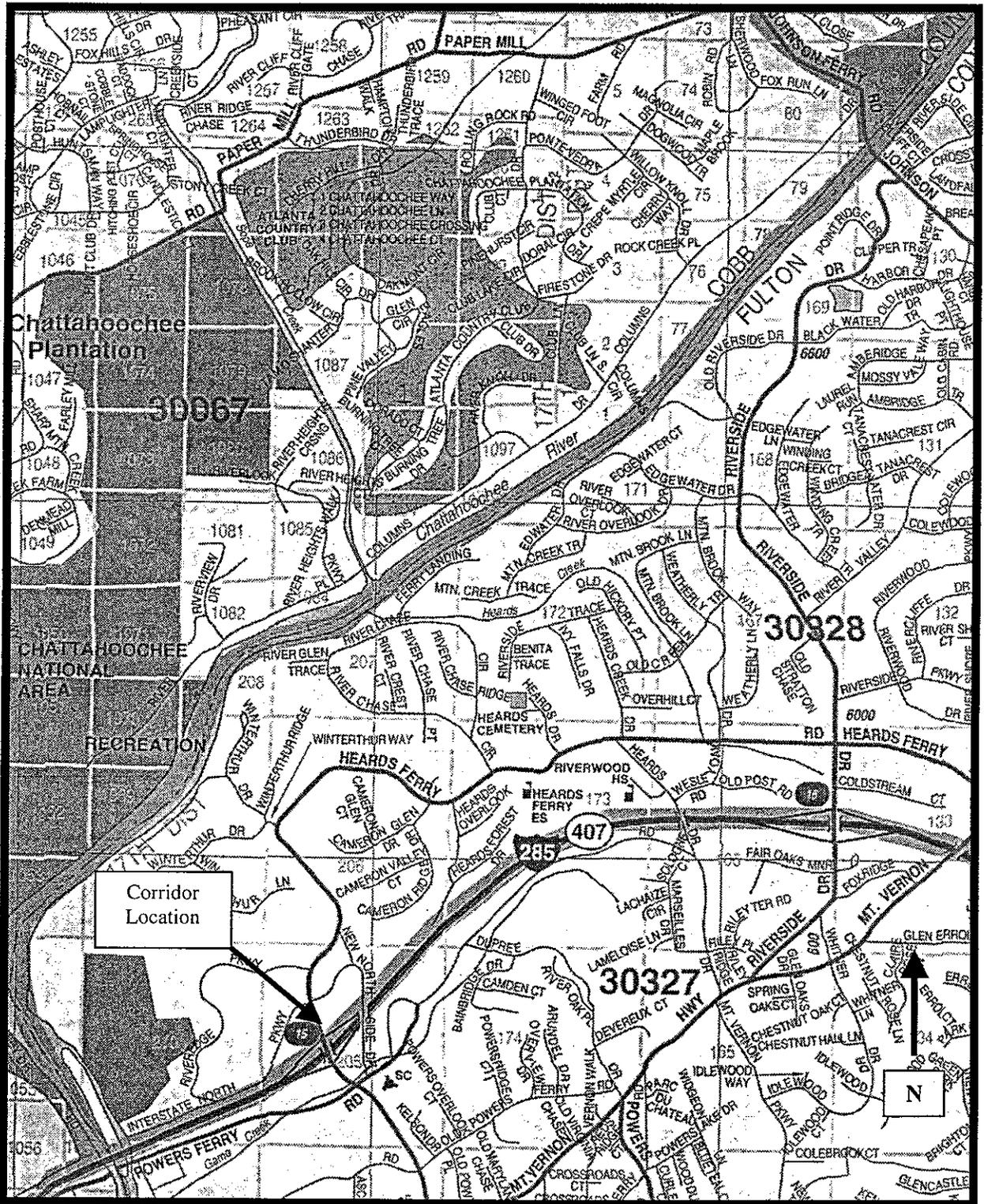
The purpose of the project is to develop Advanced Transportation Management System (ATMS) communication routes along the above mentioned corridors. The project will provide a fiber optic backbone along the corridors for the implementation of various ITS elements.

Additionally, the fiber will provide traffic signal communication for the implementation of signal coordination and monitoring. This coordination will improve existing traffic operations, minimize vehicular delay and improve overall safety along the designated corridors.

In addition to signal communication, the fiber backbone will allow for the placement of CCTV cameras. The cameras will primarily be mounted on concrete poles, which will allow Fulton County and GDOT surveillance of the above mentioned corridors. The addition of CCTVs will improve Fulton County's signal shop personnel and emergency response services response time to incidents. Moreover, the project will provide alternate route monitoring and detour alternatives in the event of an incident, which occur in the coverage area.

It is anticipated that the Fulton County traffic control center (TCC) and the GDOT traffic management center (TMC) are presently equipped to handle the additional ATMS elements proposed in this project. Additional fiber optic capacity will be provided along the identified routes to allow for future expansion and tie-in to other adjoining local jurisdictions such as Forsyth County, Gwinnett County, City of Roswell and City of Alpharetta. It is anticipated that the addition of the ATMS along these corridors in Fulton County will improve overall interjurisdictional and cross-regional cooperation by improving traffic monitoring, control, and coordination.

Project Map  
 STP-7713-00-(650)  
 Northside Drive/New Northside Drive

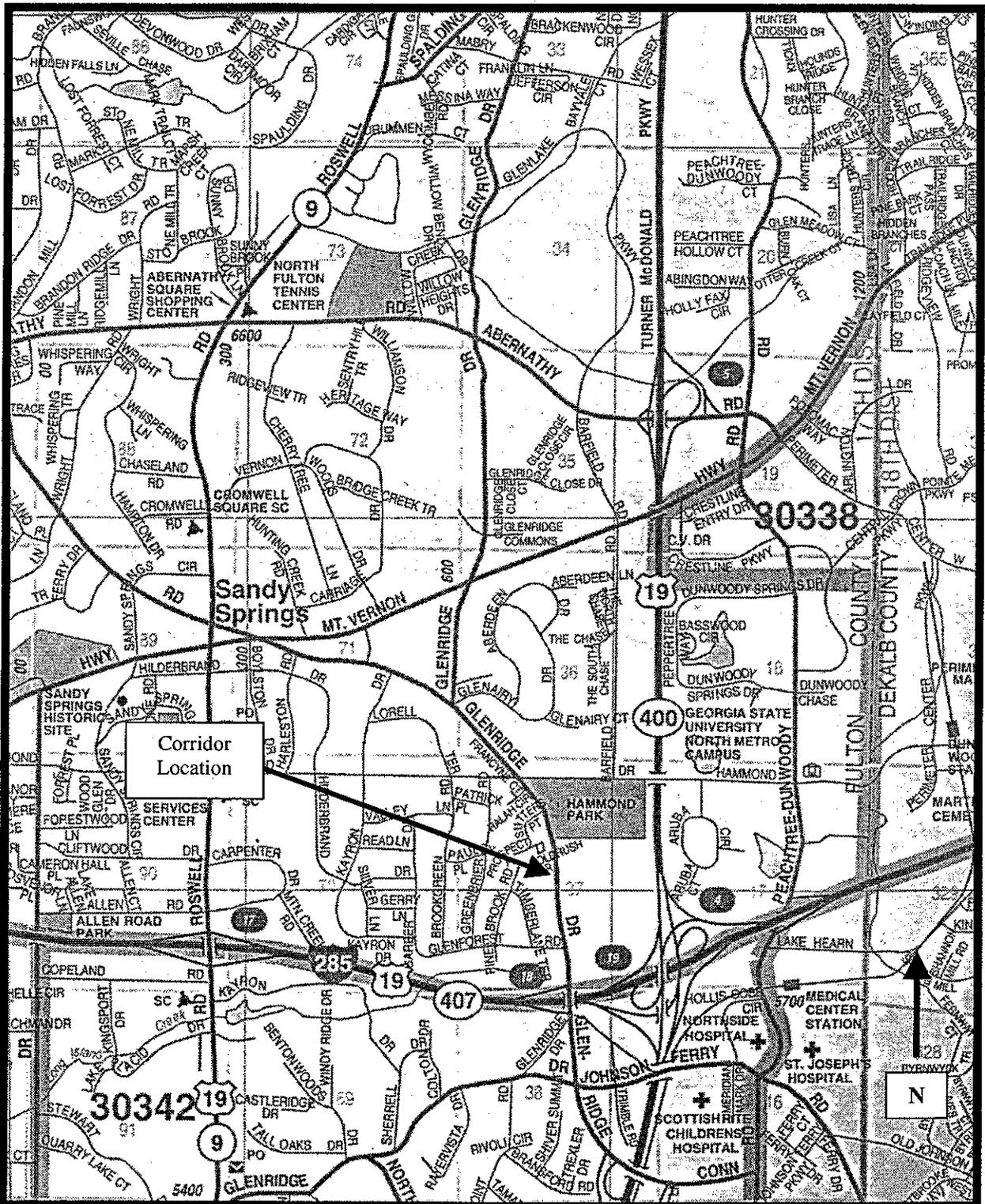


Scale: 1 inch = 0.5 miles

# Project Map

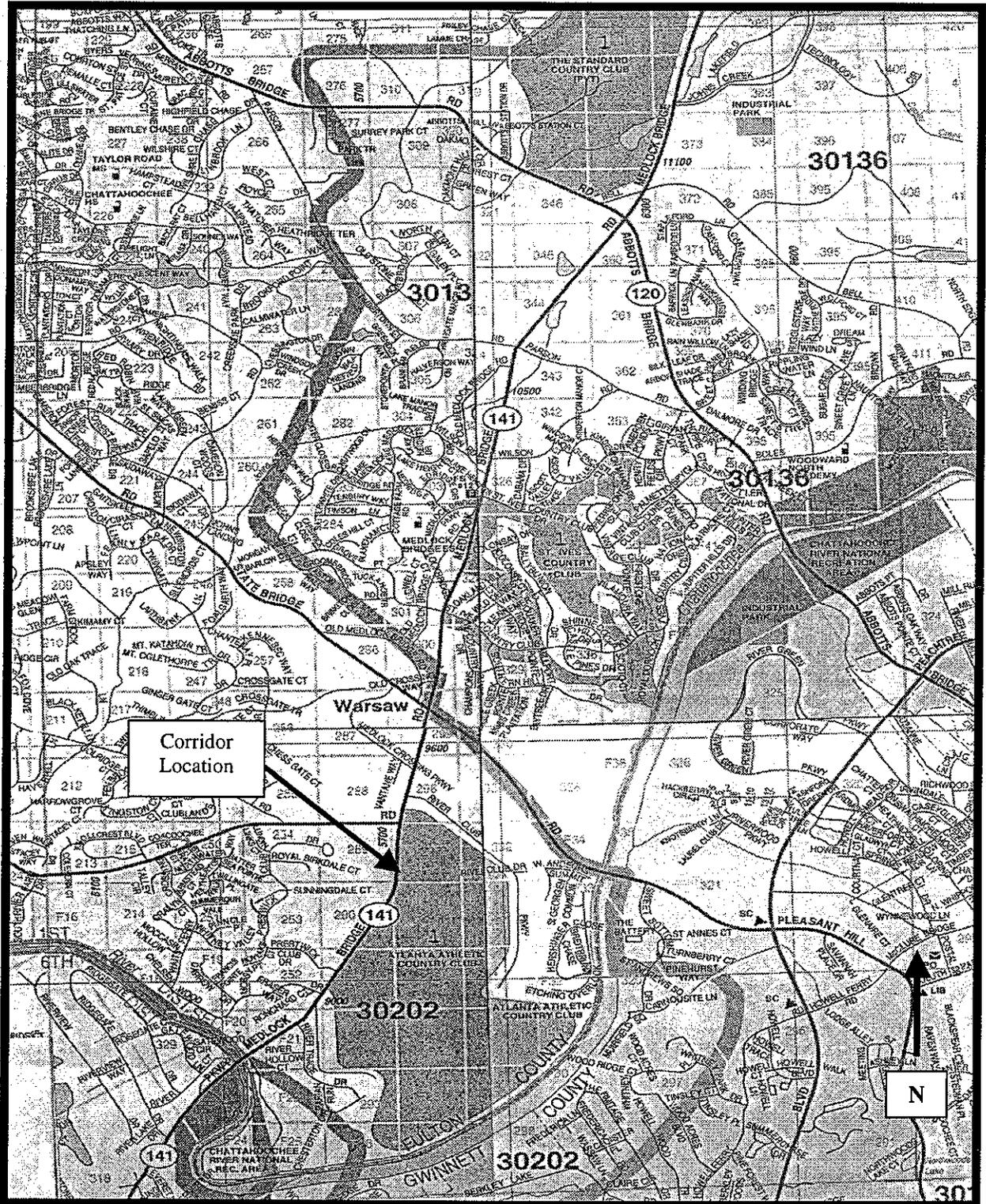
STP-7713-00-(650)

Glenridge Drive/Glenridge Connector/Hammond Drive/Peachtree Dunwoody Road



Scale: 1 inch = 0.5 miles

Project Map  
STP-7713-00-(650)  
Medlock Bridge Road



Scale: 1 inch = 0.75 miles



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
PROJECT CONCEPT REPORT SIGN OFF FORM**

Project Number: STP-7713-00-(650)

Modernizing Traffic Surveillance and Control, Fulton County

Federal Route Number: I-285

State Route Number: SR 120, SR 141, SR 400, SR 407, SR 70

GDOT P.I. Number: 771365

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**RECOMMENDATION FOR APPROVAL**

---

3-31-2000 James E. Tolson  
Date Project Manager

This project concept is contained in the Regional Transportation Improvement Program (RTIP) and 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 in the STIP.

3-31-00 Marion E. Waters III  
Date State Traffic Operations Engineer

4/04/00 Marta V. Rosin  
Date State Transportation Planning Administrator

\_\_\_\_\_  
Date State Transportation Programming Engineer

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

\_\_\_\_\_  
Date District Engineer

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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
PROJECT CONCEPT REPORT SIGN OFF FORM**

Project Number: STP-7713-00-(650)

Modernizing Traffic Surveillance and Control, Fulton County

Federal Route Number: I-285

State Route Number: SR 120, SR 141, SR 400, SR 407, SR 70

GDOT P.I. Number: 771365

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**RECOMMENDATION FOR APPROVAL**

---

3-31-2000

Date

*James E. Tolson*  
Project Manager

This project concept is contained in the Regional Transportation Improvement Program (RTIP) and 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 in the STIP.

3-31-00

Date

*Monica E. Waters III*  
State Traffic Operations Engineer

Date

State Transportation Planning Administrator

Date

State Transportation Programming Engineer

Date

State Environmental/Location Engineer

Date

District Engineer

4/6/00

Date

*C. J. M. [Signature]*  
Project Review Engineer

Department of Public Works  
Fulton County Government Center  
Transportation Engineering  
141 Pryor Street S.W., Suite 6001  
Atlanta, Georgia 30303  
(404) 730-7480 Telephone  
(404) 730-6325 Facsimile



Terry L. Todd  
Director

June 6, 2000

Mr. Larry Dreihaup  
Division Administrator  
USDOT, FHWA  
61 Forsyth Street, SW  
Suite 17 Tower-100  
Atlanta, GA 30303

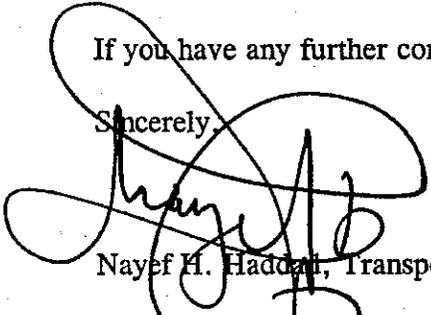
Attn: Mrs. Jessie L. Young  
Traffic Management Engineer

Dear Mr. Dreihaup:

Per a recent Fulton County ITS project meeting, it has been brought to my attention that FHWA needs a commitment from Fulton County in regards to staffing the Fulton County Transportation Communication Center (FCTCC). Fulton County is now ready to commit to this obligation. Prior to the recently approved ITS projects, Fulton County did not maintain any ITS modules such as cameras or CMS. Therefore, there was no critical need to staff the FCTCC. However, due to the soon to be operational cameras on Roswell Road and ITS projects on Medlock Bridge Road, Fulton Industrial Boulevard, Glenridge Drive and Northside Drive we can now justify staffing. It is our plan to employ a TCC Manager by the end of this year. In the interim we will have temporary operators to monitor operations.

If you have any further concerns, please feel free to contact me at (404) 730-7468.

Sincerely,



Nayef H. Haddad, Transportation Administrator

cc: Wyvern Budram, Transportation Projects Manager  
Marion Waters, GDOT, 935 East Confederate Avenue, Office of Traffic Operations,  
Building 24, Atlanta, GA 30316