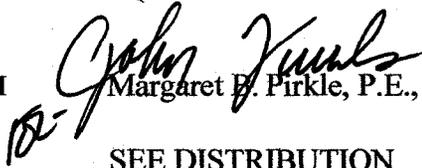


DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

**FILE** P. I. No. 721940-, DeKalb-Gwinnett Counties **OFFICE** Preconstruction  
CM-061-1(106)  
ATMS Expansion on US 78 **DATE** August 21, 2006  
(Stone Mountain Freeway)

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

**TO** SEE DISTRIBUTION

**SUBJECT** APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

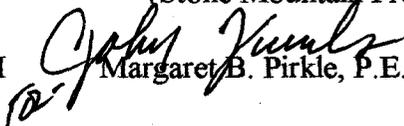
Brian Summers  
Harvey Keepler  
Ken Thompson  
Michael Henry  
Keith Golden  
Joe Palladi  
Paul Liles  
Bryant Poole  
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** P. I. No. 721940-, DeKalb-Gwinnett Counties      **OFFICE** Preconstruction  
CM-061-1(106)  
ATMS Expansion on US 78  
(Stone Mountain Freeway)      **DATE** July 31, 2006

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

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

**SUBJECT** PROJECT CONCEPT REPORT

This project is the expansion of Georgia DOT's Navigator system on US 78 (Stone Mountain Freeway) from US 29/Lawrenceville Highway to East Park Place Boulevard. The Navigator system has nearly reached full integration inside the I-285 perimeter highway. It is currently being extended along SR 166 in Fulton County and SR 141 in DeKalb and Gwinnett counties with further projects on I-20, I-75, I-85, I-675, I-985, SR 316, SR 400, and SR 410 planned as part of the Fast Forward Program. The expansion of the Navigator system in this region will help alleviate the congestion being experienced along this corridor during peak hours.

Fiber optic trunk lines will be located on the eastbound and westbound sides of US 78 as close to the back of the right-of-way as possible. The trunk lines may enter the paved shoulder to cross bridges and at other locations where it is not feasible to locate outside the paved shoulder. The trunk lines will be carried within continuous conduit duct banks, which have four, 2" conduits.

Type B done CCTV cameras will be designed to provide continuous coverage of US 78 within the project limits. These cameras will be mounted on 80' concrete poles located off the shoulder of the highway. However, where appropriate, some cameras may be mounted behind guardrail, on bridge overpasses, or on overhead sign structures. This project will include surveillance cameras to provide interchange coverage as well as at ramp meter locations.

Microwave radar detection system units will provide vehicle data for the mainline and ramp lanes on this project. The RDS units will be installed at ½ mile intervals along the mainline Stone Mountain Freeway lanes. As much as possible, microwave radar will be installed on CCTV poles to minimize poles installed on this project.

A total of 6 CMS are proposed for this project. Four CMS will be located for the Stone Mountain Freeway eastbound lanes. Two CMS will be located for the Stone Mountain Freeway westbound lanes.

David Studstill

Page 2

P. I. No. 721940-, DeKalb-Gwinnett

July 31, 2006

Ramp meters will be installed along US 78 at all eastbound and westbound entrance ramps except for those at I-285, Memorial Drive, and Jefferson Davis Drive. Meters will be installed at the following interchanges: Valley Brook Road/North Druid Hills eastbound, Brockett Road/Cooledge Road eastbound and westbound, and West Park Place Boulevard westbound. Each ramp meter will require at least an IVDS camera to monitor freeway operations, as well as CCTV for visual coverage of each ramp. All supporting hardware, devices, poles and/or mast arms, lane markings, traffic signal equipment, and signage for the installation of ramp meters are in this project.

This project will use the new digital communications architecture. The video data and control communications from the new devices will be sent via GIG ethernet network. All network electronics required to operate and communicate with the devices in this project are included as well.

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

The estimated costs for this project are:

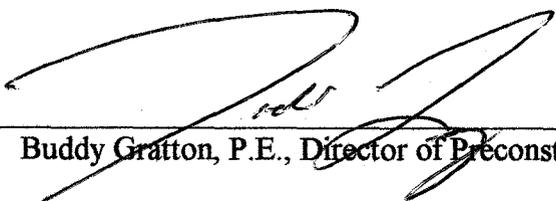
	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C and inflation)	\$8,296,000	\$7,541,000	GRVA	2007
Right-of-Way & Utilities*	-0-	-0-		

Expanding Navigator to this corridor will allow quicker detection and verification of incidents at the TMC, resulting in better information to travelers, quicker response by Highway Emergency Response Operators (HEROs), and improved highway safety. I recommend this project concept be approved.

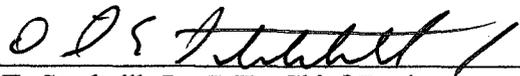
MBP:JDQ/cj

Attachment

CONCUR

  
Buddy Grafton, P.E., Director of Preconstruction

APPROVE

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

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

-----  
INTERDEPARTMENTAL CORRESPONDENCE

**FILE:** CM-061-1(106) DeKalb/Gwinnett **OFFICE:** Engineering Services  
P.I. No. 721940  
U.S. 78 ATMS

**DATE:**

July 27, 2006

JUL 27 2006

**FROM:** Brian K. Summers, P.E., Project Review Engineer

**TO:** Meg Pirkle, P.E., Assistant Director of Preconstruction

**SUBJECT: CONCEPT REPORT**

We have reviewed the Concept Report submitted July 11, 2006 from Keith Golden, and have no comments:

The costs for this project are:

Construction	\$7,541,100
Inflation	\$0.00
E & C	\$754,110
Reimbursable Utilities	\$0.00
Right of Way	\$0.00

REW

c: Keith Golden, Attn.: Jim Tolson

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**PROJECT CONCEPT REPORT**

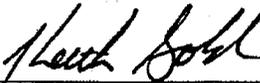
**CM-061-1(106)  
DEKALB AND GWINNETT COUNTIES  
P.I. NO. 721940**

**FEDERAL ROUTE NUMBER: 78  
STATE ROUTE NUMBER: 410**

*NaviGator ATMS Expansion on US 78 (Stone Mountain Freeway)  
from US 29 / Lawrenceville Highway to East Park Place Boulevard*

**Recommendation for approval:**

DATE 7-11-06

  
\_\_\_\_\_  
State Traffic Safety & Design Engineer

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Operations Engineer

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Financial Management Administrator

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE 7/27/06

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

## SCORING RESULTS AS PER TOPPS 2440-2

<b>Project Number:</b> CM-061-1(106)		<b>County:</b> DeKalb/Gwinnett		<b>PI No.:</b> 721940	
<b>Report Date:</b> July 11, 2006		<b>Concept By:</b> DOT Office: Traffic Safety and Design			
<input checked="" type="checkbox"/> Concept Stage		Consultant: Gresham Smith and Partners			
<b>Project Type:</b> Choose One From Each Column		<input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural	<input checked="" type="checkbox"/> ATMS <input type="checkbox"/> Bridge Replacement <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
<b>FOCUS AREAS</b>	<b>SCORE</b>	<b>RESULTS</b>			
<b>Presentation</b>	100				
<b>Judgement</b>	100				
<b>Environmental</b>	100				
<b>Right of Way</b>	100				
<b>Utility</b>	100				
<b>Constructability</b>	100				
<b>Schedule</b>	100				

Project Concept Report  
Project Number: CM-061-1(106)  
P.I. Number: 721940  
Counties: DeKalb / Gwinnett

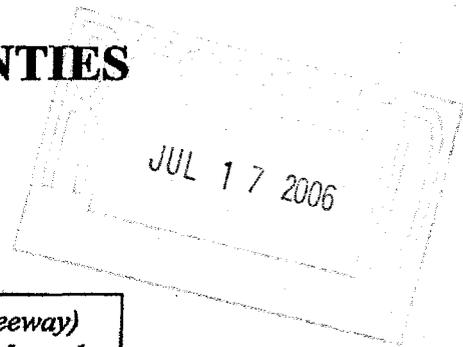
7/11/06  
Page 1 of 14  
*WKS*

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

PROJECT CONCEPT REPORT

CM-061-1(106)  
DEKALB AND GWINNETT COUNTIES  
P.I. NO. 721940

FEDERAL ROUTE NUMBER: 78  
STATE ROUTE NUMBER: 410



*NaviGator ATMS Expansion on US 78 (Stone Mountain Freeway)  
from US 29 / Lawrenceville Highway to East Park Place Boulevard*

Recommendation for approval:

DATE 7-11-06

*Heath Gold*  
\_\_\_\_\_  
State Traffic Safety & Design Engineer

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Operations Engineer

DATE \_\_\_\_\_

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

DATE 7/12/06

*James T. Simpson*  
\_\_\_\_\_  
State Transportation Financial Management Administrator

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**PROJECT CONCEPT REPORT**  
**CM-061-1(106)**  
**DEKALB AND GWINNETT COUNTIES**  
**P.I. NO. 721940**

**FEDERAL ROUTE NUMBER: 78**  
**STATE ROUTE NUMBER: 410**

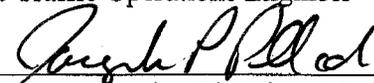
*NaviGator ATMS Expansion on US 78 (Stone Mountain Freeway)  
from US 29 / Lawrenceville Highway to East Park Place Boulevard*

**Recommendation for approval:**

DATE 7-11-06   
State Traffic Safety & Design Engineer

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

DATE \_\_\_\_\_  
State Traffic Operations Engineer

DATE 7/12/16   
State Transportation Planning Administrator

DATE \_\_\_\_\_  
State Transportation Financial Management Administrator

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

DATE \_\_\_\_\_  
District Engineer

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

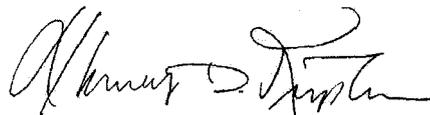
**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** P.I. No. 721940

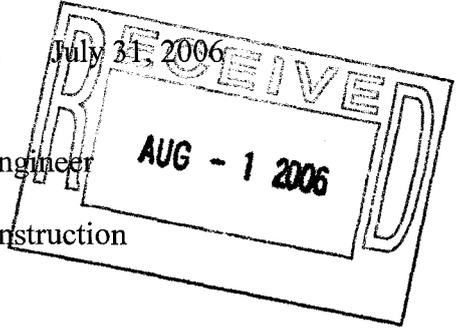
**OFFICE:** Environment/Location

**DATE:** July 31, 2006

**FROM:**   
Harvey D. Keeper, State Environmental/Location Engineer

**TO:** Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**SUBJECT: PROJECT CONCEPT REPORT  
CM-061-1(106) / DeKalb & Gwinnett Counties**



The above subject concept report has been reviewed. This Office has no comment at this time.

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

HDK/lc

Attachment

cc: Brian Summers  
Keith Golden  
Carla Holmes  
Joe Palladi  
Jamie Simpson  
Bryant Poole

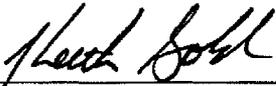
**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**PROJECT CONCEPT REPORT**  
**CM-061-1(106)**  
**DEKALB AND GWINNETT COUNTIES**  
**P.I. NO. 721940**

**FEDERAL ROUTE NUMBER: 78**  
**STATE ROUTE NUMBER: 410**

*NaviGator ATMS Expansion on US 78 (Stone Mountain Freeway)  
from US 29 / Lawrenceville Highway to East Park Place Boulevard*

**Recommendation for approval:**

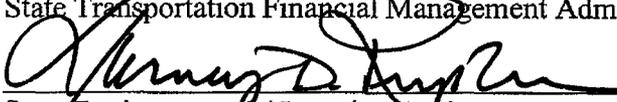
DATE 7-11-06   
State Traffic Safety & Design Engineer

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

DATE \_\_\_\_\_  
State Traffic Operations Engineer

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

DATE \_\_\_\_\_  
State Transportation Financial Management Administrator

DATE 7.31.06   
State Environmental / Location Engineer

DATE \_\_\_\_\_  
District Engineer

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

## NOTICE OF LOCATION AND DESIGN APPROVAL

### PROJECT: CM-061-1(106) – DEKALB AND GWINNETT COUNTIES P. I. NO. 721940

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of the above projects.

Date of Location and Design Approval: AUGUST 21, 2006

Project CM-061-1(106) in DeKalb and Gwinnett Counties will expand the NaviGator system in DeKalb and Gwinnett Counties to provide coverage on US 78 from the intersection with Lawrenceville Highway / US 29 to the intersection with East Park Place Boulevard. The project consists of complete CCTV and RDS coverage necessary to provide roadway condition information to the NaviGator system. CMS are to be installed to communicate roadway information to drivers. This project will extend the fiber optic trunk line along US 78 from Lawrenceville Highway / US 29 (western project limit) utilizing existing Hub 'S'. This fiber network extension will reach East Park Place Boulevard (eastern project limit), which will serve future fiber optic communications needs in Gwinnett County.

Drawings of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Mr. Jim Tolson, Traffic Design Manager  
935 E. Confederate Avenue  
Wayne Shackelford Building  
Atlanta, GA 30316  
(404) 635-8139  
email: [jim.tolson@dot.state.ga.us](mailto:jim.tolson@dot.state.ga.us)

Any interested party may obtain a copy of the drawings or portions thereof by paying a nominal fee and requesting in writing to:

Keith Golden, P.E.  
Office of Traffic Safety & Design  
935 E. Confederate Avenue  
Building 24  
Atlanta, GA 30316  
email: [keith.golden@dot.state.ga.us](mailto:keith.golden@dot.state.ga.us)

Any written request or communication in reference to this project or notice should include the Project and P.I. Number as noted at the top of this notice.

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**PROJECT CONCEPT REPORT**

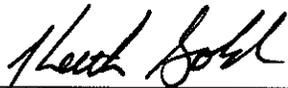
**CM-061-1(106)  
DEKALB AND GWINNETT COUNTIES  
P.I. NO. 721940**

**FEDERAL ROUTE NUMBER: 78  
STATE ROUTE NUMBER: 410**

*NaviGator ATMS Expansion on US 78 (Stone Mountain Freeway)  
from US 29 / Lawrenceville Highway to East Park Place Boulevard*

**Recommendation for approval:**

DATE 7-11-06

  
\_\_\_\_\_  
State Traffic Safety & Design Engineer

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

DATE \_\_\_\_\_  
\_\_\_\_\_  
State Traffic Operations Engineer

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

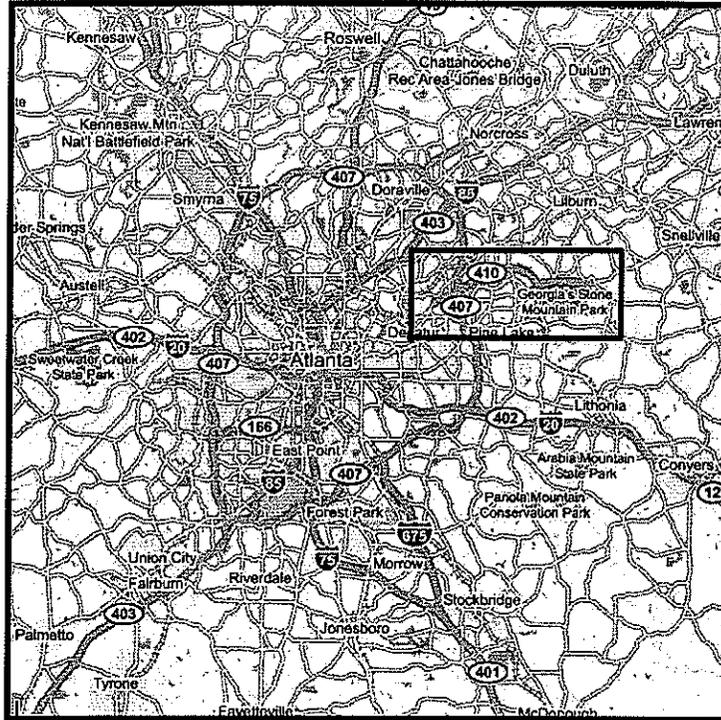
DATE \_\_\_\_\_  
\_\_\_\_\_  
State Transportation Financial Management Administrator

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

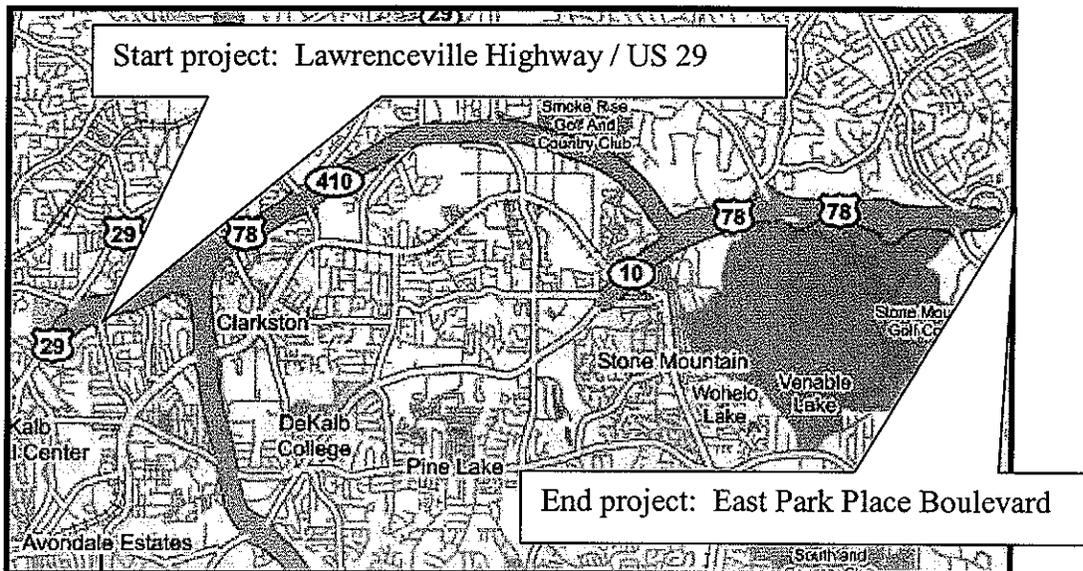
DATE \_\_\_\_\_  
\_\_\_\_\_  
District Engineer

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

## PROJECT LOCATION MAPS



Location of Project in DeKalb / Gwinnett Counties



Detail Map of Stone Mountain Freeway Project

### **Need and Purpose:**

The purpose of this project is to increase the efficiency and safety of the corridor by expanding the NaviGator system in DeKalb and Gwinnett Counties providing traffic monitoring and surveillance and ramp meters on US 78 (Stone Mountain Freeway) from the Lawrenceville Highway / US 29 interchange to the intersection with East Park Place Boulevard. The expansion of the NaviGator system in this region will help mitigate the congestion currently experienced along this corridor during peak hours. Efficiency and safety will be improved by reducing incident response/clearance times, prevention of secondary accidents, and providing information to motorists of roadway/traffic conditions. Ramp meters will control the release of vehicles onto the corridor during peak hours, stabilizing the flow of traffic and reducing congestion that typically occurs at heavy volume merge locations. The operation of the ramp meters will create a smoother flow of traffic and reduce the potential for traffic crashes during peak hours.

The Georgia DOT's NaviGator – Intelligent Transportation System has been in operation since April 1996. Initially providing coverage on Interstates 75 and 85, primarily within the I-285 Perimeter Highway, it is currently being extended along Langford Parkway (SR 166) in Fulton County and Peachtree Industrial Boulevard (SR 141) in DeKalb and Gwinnett counties, with additional projects on I-75, I-85, I-285, I-575, I-675, and SR 400 planned as part of the Fast Forward Program. The system consists of surveillance cameras (CCTV), microwave radar detection systems (RDS), Changeable Message Signs (CMS), and ramp meters. By use of a fiber optic communications backbone, all the devices are tied to the Transportation Management Center (TMC) and various Traffic Control Centers (TCCs) in the Metro Atlanta area. Operators located at the TMC are able to detect incidents and dispatch, with minimal delay, appropriate response teams. The NaviGator program benefits the trucking industry and motorists by reducing incident response/clearance times, and providing better information with consequential safety improvements.

On April 14, 2004 Governor Sonny Perdue introduced the Fast Forward Congestion Relief Program which includes accelerated growth of the NaviGator system throughout the Metro Atlanta region. The Fast Forward Program provides \$211 million to expand the Navigator and Highway Emergency Response Operator (HERO) coverage with a goal of reducing peak hour delays by 30%. This project covers US 78 (Stone Mountain Freeway) from the Lawrenceville Highway/US 29 interchange to the intersection with East Park Place Boulevard. This work will assist in faster incident detection at the TMC, resulting in quicker response by emergency personnel, better information to travelers, and improved highway safety. This project includes new field device connections to Hub S in DeKalb County.

### **Description of the proposed project:**

#### **Coverage**

This project will include complete CCTV and RDS coverage necessary to provide roadway condition information to the NaviGator system. CMS are to be installed to communicate roadway condition information to drivers. This project will install fiber trunk lines eastward along US 78 (Stone Mountain Freeway) from Lawrenceville Highway, to the existing Hub S, and to East Park Place Boulevard.

#### **Communications Plan**

This project will use the new digital communications architecture. The video data and control communications from the new devices will be sent via Gig Ethernet network, as opposed to the older

analog method involving switches and multiplexers. All network electronics required to operate and communicate with the devices in this project are included as well.

Fiber optic trunk lines will be located on the eastbound and westbound sides of US 78 as close to the back of the right-of-way as possible. The trunk lines may enter the paved shoulder to cross bridges and at other locations where it is not feasible to locate outside the paved shoulder. The trunk lines will be carried within continuous conduit duct banks, which will have 4-2" conduits.

### **CCTV**

Type B dome CCTV cameras will be designed to provide continuous coverage of US 78 within the project limits. These cameras will be mounted on eighty-foot concrete poles located off the shoulder of the highway. However, where appropriate, some cameras may be mounted behind guardrail, on bridge overpasses, or on overhead sign structures. This project will include surveillance cameras to provide interchange coverage as well as at ramp meter locations. Typical spacing between cameras will be every 1/2 to 2/3 mile with cameras placed closer together where there are sight obstructions. The poles or other mounting apparatus for the cameras are included in this project.

### **RDS**

Microwave radar detection system units will provide vehicle data for the mainline and ramp lanes on this project. The RDS units will be installed at 1/2 mile intervals along the mainline Stone Mountain Freeway lanes. As much as possible, microwave radar will be installed on CCTV poles to minimize poles installed on this project.

### **Changeable Message Signs (CMS)**

A total of six CMS are proposed for this project. Four CMS will be located for the Stone Mountain Freeway eastbound lanes. Two CMS will be located for the Stone Mountain Freeway westbound lanes.

### **Hubs**

A mini hub will be needed at the eastern end of the project to provide for future communications to devices on the arterial US 78 section in Gwinnett County. The mini hub consists of a cabinet housing an ethernet switch and several FDCs (fiber distribution panels) for terminating fiber optic cables.

### **Ramp Meters**

Ramp Meters will be installed along US 78 at all eastbound and westbound entrance ramps except for those at I-285, Memorial Drive, and Jefferson Davis Drive. Meters will be installed at the following interchanges: Valley Brook Road/ North Druid Hills eastbound, Brockett Road/ Cooledge Road eastbound and westbound, Mountain Industrial Boulevard eastbound and westbound, Hugh Howell Road eastbound and westbound and West Park Place Boulevard westbound. Each ramp meter will require at least an IVDS camera to monitor freeway operations, as well as CCTV for visual coverage of each ramp. All supporting hardware, devices, poles and/or mast arms, lane markings, traffic signal equipment, and signage for the installation of ramp meters are in this project.

All ramp meters will be designed based upon the AASHTO recommended acceleration distance criteria established in its *Policy on Geometric Design of Highways and Streets, 5<sup>th</sup> Ed.*, Exhibit 10-70. Interchanges east of Brockett Road/ Cooledge Road on US 78, with the exception of East Park Place Boulevard westbound will be designed using criteria for 65 mph posted speeds, which specifies a 1410'

acceleration distance. West Park Place westbound, as well as all interchanges west of Mountain Industrial Boulevard are being designed using criteria for 55 mph posted speeds, which specifies a 960' acceleration distance.

Is the project located in a Non-attainment area? Yes  No .

PDP Classification: Major  Minor

Federal Oversight: Full Oversight , Exempt , State Funded , or Other

Functional Classification: Urban Principal Arterial

U. S. Route Number(s): US 78

State Route Number(s): SR 410

**Traffic (2004 AADT)**

source: [http://www.dot.state.ga.us/dot/plan-prog/transportation\\_data/traffic\\_counts/index.shtml](http://www.dot.state.ga.us/dot/plan-prog/transportation_data/traffic_counts/index.shtml)

US 78 from Valley Brook Road to I-285.....	67,060
US 78 from I-285 to Brockett Road/ Cooledge Road.....	110,480
US 78 from Brockett Road/ Cooledge Road to Mountain Industrial Boulevard.....	102,760
US 78 from Mountain Industrial Boulevard to Memorial Drive.....	85,200
US 78 from Memorial Drive to Hugh Howell Road.....	32,020
US 78 from Hugh Howell Road to Jefferson Davis Drive.....	96,940
US 78 from Jefferson Davis Drive to West Park Place Boulevard.....	84,520

**Existing design features:**

- Typical Sections:
  - *US 78 from Lawrenceville Highway/ US 29 to East Park Place Boulevard: 6 lanes divided*
- Posted speeds:
  - 45 mph eb and wb:
    - *US 78 from West Park Place Boulevard to East Park Place Boulevard*
  - 55 mph eb and wb:
    - *US 78 from Lawrenceville Highway/ US 29 to Brockett Road/ Cooledge Road*
    - *US 78 from Jefferson Davis Drive to West Park Place Boulevard*
  - 65 mph eb and wb:
    - *US 78 from Brockett Road/ Cooledge Road to Mountain Industrial Boulevard*
    - *US 78 from Mountain Industrial Boulevard to Memorial Drive*
- Minimum Radius: *N/A*
- Maximum Grade: *N/A*
- Major structures along US 78:
  - *US 78 over North Druid Hills Road/ Valley Brook Road*
  - *US 78 under McLendon Drive*
  - *US 78 under I-285 SB*

- *US 78 under I-285 NB*
- *US 78 under Montreal Road*
- *US 78 over Brockett Road/ Cooledge Road*
- *US 78 under Idlewood Road*
- *US 78 under Mountain Industrial Road*
- *US 78 under Juliette Drive*
- *US 78 over Memorial Drive*
- *US 78 under Silver Hill Road*
- *US 78 over Hugh Howell Road*
- *US 78 under Jefferson Davis Drive*
- *US 78 over West Park Place Boulevard*
  
- Major interchanges or intersections along US 78:
  - *US 78 @ Lawrenceville Hwy / US 29*
  - *US 78 @ North Druid Hills Road / Valley Brook Road*
  - *US 78 @ I-285*
  - *US 78 @ Brockett Road/ Cooledge Road*
  - *US 78 @ Mountain Industrial Boulevard*
  - *US 78 @ Memorial Drive*
  - *US 78 @ Hugh Howell Road*
  - *US 78 @ Jefferson Davis Drive*
  - *US 78 @ West Park Place Boulevard*
  - *US 78 @ East Park Place Boulevard*
  
- Existing lengths:
  - *US 78 from Lawrenceville Highway/US 29 to Druid Hills Road/Valley Brook Rd.: 1.3 miles*
  - *US 78 from North Druid Hills Road/Valley Brook Road to I-285: .3 miles*
  - *US 78 from I-285 to Brockett Road/ Cooledge Road: 1.2 miles*
  - *US 78 from Brockett Road/ Cooledge Road to Mountain Industrial Boulevard: 1.7 miles*
  - *US 78 from Mountain Industrial Boulevard to Memorial Drive: 2.1 miles*
  - *US 78 from Memorial Drive to Hugh Howell Road: 1.0 miles*
  - *US 78 from Hugh Howell Road to Jefferson Davis Drive: 1.2 miles*
  - *US 78 from Jefferson Davis Drive to West Park Place Boulevard: .7 miles*
  - *US 78 from West Park Place Boulevard to East Park Place Boulevard: .5 miles*

*Total Project Length: 10.0 miles*

**Proposed Design Features:**

- Typical Sections: Existing section to remain. There will be no change to the lanes or typical sections.
- Posted speeds: Existing posted speeds to remain.
- Minimum Radius: *N/A*
- Maximum grade: *N/A*
- Proposed Maximum grade Mainline: *N/A*                      Maximum grade allowable: *N/A*
- Proposed Maximum grade Side Street: *N/A*                      Maximum grade allowable: *N/A*
- Proposed Maximum grade driveway : *N/A*

- Proposed Minimum Radius Mainline: *N/A*                      Minimum Radius allowable: *N/A*
- Proposed Minimum Radius Side Street: *N/A*                      Minimum Radius allowable: *N/A*
- Type of Access: *Limited Access*
- Right of way: *Project will be constructed within the existing Limited Access Right of Way. No additional right of way and/or easements will be required.*
  - Number of parcels: *0*                      Number of displacements: *0*
    - Business: *0*
    - Residences: *0*
    - Mobile homes: *0*
    - Other: *0*
- Structures:
  - Strain poles for CCTV and RDS, and strain poles with mast arms for Traffic Signals
- Major intersections and interchanges along US 78:
  - *US 78 @ Lawrenceville Hwy / US 29*
  - *US 78 @ North Druid Hills Road / Valley Brook Road*
  - *US 78 @ I-285*
  - *US 78 @ Brockett/ Cooledge Road*
  - *US 78 @ Mountain Industrial Boulevard*
  - *US 78 @ Memorial Drive*
  - *US 78 @ Hugh Howell Road*
  - *US 78 @ Jefferson Davis Drive*
  - *US 78 @ West Park Place Boulevard*
  - *US 78 @ East Park Place Boulevard*
- Traffic control during construction: *Shoulder closures and/ or lane closures will be necessary during installation of conduit, fiber optic cables and strain poles.*
- Design Exceptions to controlling criteria anticipated: *Design exceptions for reduced ramp acceleration distance/ ramp speed design*

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ROADWAY WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOULDER WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VERTICAL GRADES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CROSS SLOPES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
STOPPING SIGHT DISTANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUPERELEVATION RATES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HORIZONTAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPEED DESIGN:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VERTICAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE STRUCTURAL CAPACITY:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- Design Variances: *None known*
- Environmental Concerns: *None known*
- Probable Locations of UST's: *N/A*
- Probable Locations of Hazardous Waste: *None*
- Level of environmental analysis:

- Are Time Savings Procedures appropriate? Yes , No ,
- Categorical Exclusion ,
- Environmental Assessment/Finding of No Significant Impact (FONSI) , or
- Environmental Impact Statement (EIS) .
- Utility involvements: *Power service will be required for all hub locations, CMS signs, CCTV cameras, RDS and ramp meter equipment.*
- Meets Logical Termini Requirements: *Yes*
- Conforms to TIP/STIP: *Yes*

**Project responsibilities:**

- Design: *Gresham Smith and Partners on Behalf of the Georgia DOT.*
- Right of Way Acquisition: *N/A*
- Relocation of Utilities: *GDOT*
- Letting to contract: *GDOT*
- Supervision of construction: *GDOT*
- Providing material pits: *None Required*
- Providing detours: *None Anticipated*

**Coordination**

- Pre-Concept Meeting: *To be determined.*
- Initial Concept Meeting date and brief summary: *To be determined.*
- Concept meeting date and brief summary: *To be determined.*
- P. A. R. meetings, dates and results: *None Required*
- Public involvement: *No public meetings are anticipated.*
- Local government comments: *N/A*
- Other projects in the area: *See attached list*
- Other coordination to date: *None*

**Scheduling – Responsible Parties' Estimate**

- Time to complete the environmental process: *6 Months*
- Time to complete preliminary construction plans: *6 Months*
- Time to complete right of way plans: *N/A*
- Time to complete the Section 404 Permit: *N/A*
- Time to complete final construction plans: *3 Months*
- Time to complete to purchase right of way: *N/A*

**Other alternates considered:**

*Alternative #1: No Build*

**Comments:** *Extension of NaviGator system, current fiscal year FY 06*

**Attachments:**

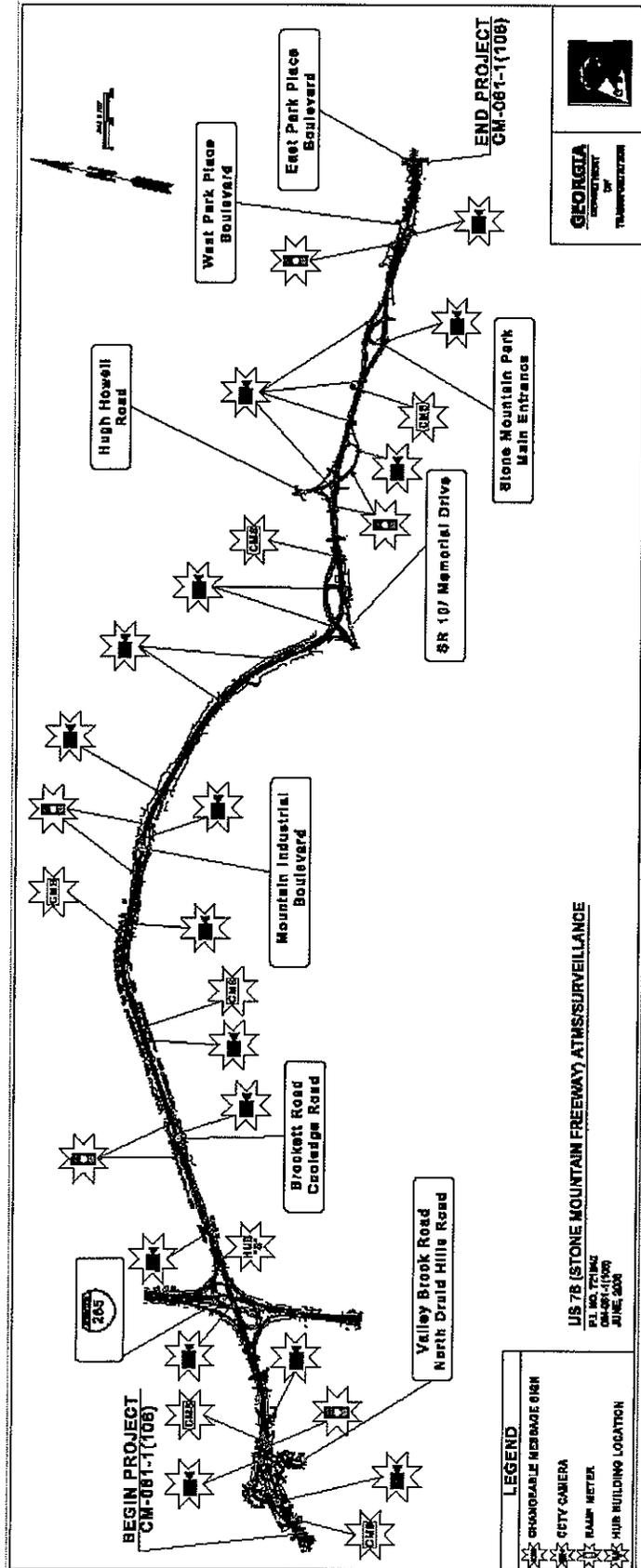
1. List of other projects in the area (Projects in Area summarized below)
2. Concept Report Rating Form

3. Concept Layout Illustration
4. Cost Estimate including E & C

**Projects in Area:**

1. **Pedestrian and landscape enhancements along PATH trail from Hambrick Road to Stone Mountain Park (Phase II)**  
PI 0005947; DK-325; CST: 2005
2. **Operating assistance for BRT service in the Memorial Drive corridor from Stone Mountain Park and Ride Lot to the Avondale Mall**  
PI 0006851; M-AR-283B; CST: 2007
3. **I-285 ramp meters (existing concurrent Fast Forward project)**  
PI 0006395; CST: 2006
4. **Removal of existing reversible lanes on US 78 – from East Park Place to SR 124**  
PI 0003406; GW-078A; CST: 2006
5. **Memorial Drive Rapid Transit (BRT) from Stone Mountain Park and Ride lot to Avondale Mall Area**  
PI 0006847; M-AR-283A; CST: 2006
6. **US 78 Guardrail Replacement and Shoulder Clearing**  
PI 0003773; CST: 2005
7. **I-285 HOV lanes – I-20 North to I-85 North**  
PI 0003432; CST: 2019

See attachments for detailed project summaries of each of these projects.



Project Concept Report  
 Project Number: CM-061-1(106)  
 P.I. Number: 721940  
 Counties: DeKalb / Gwinnett

US 78 (SR 410) FROM US 29 (SR 8) TO EAST PARK PLACE - ATMS DESIGN  
 CM-061-1(106), PI 721940  
 DEKALB AND GWINNETT COUNTIES  
 QUANTITIES AND COST SUMMARY  
 CONCEPT COST ESTIMATE

ITEM CODE	ITEM DESCRIPTION	UNIT	QUANTITY	ENGINEER ESTIMATE	
				UNIT PRICE (\$)	AMOUNT (\$)
150-1000	TRAFFIC CONTROL CM-85-2(176)	LS	LUMP		200,000
153-1300	FIELD ENGINEER'S OFFICE, TYPE 3	EA	1	80,000.00	80,000
610-0716	REM CONC MEDIAN BARRIER	LF	160	85.00	13,600
615-1200	DIRECTIONAL BORE, 5 IN	LF	10,000	15.00	150,000
621-3150	CONCRETE BARRIER, TYPE 26	LF	160	400.00	64,000
631-2343	LED PIXEL CMS, NON-WALK IN, 3 X 15, 18 IN, TYPE B	EA	2	73,000.00	146,000
631-2463	LED PIXEL CMS, WALK IN, 3 X 21, 18 IN, TYPE B	EA	4	95,000.00	380,000
631-8000	TESTING	LS	LUMP		12,000
632-0003	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	EA	4	18,000.00	72,000
638-1001	STRUCTURAL SUPPORT FOR OVERHEAD SIGN, TP 1, STA. XXXX+XX	LS	LUMP		70,000
638-1001	STRUCTURAL SUPPORT FOR OVERHEAD SIGN, TP 1, STA. XXXX+XX	LS	LUMP		70,000
638-1001	STRUCTURAL SUPPORT FOR OVERHEAD SIGN, TP 1, STA. XXXX+XX	LS	LUMP		70,000
638-1001	STRUCTURAL SUPPORT FOR OVERHEAD SIGN, TP 1, STA. XXXX+XX	LS	LUMP		70,000
638-1003	STRUCTURAL SUPPORT FOR OVERHEAD SIGN, TP 3, STA. XXXX+XX	LS	LUMP		35,000
638-1003	STRUCTURAL SUPPORT FOR OVERHEAD SIGN, TP 3, STA. XXXX+XX	LS	LUMP		35,000
639-3004	STEEL STRAIN POLE, TYPE IV, WITH 40 FT MAST ARM	EA	2	7,000.00	14,000
639-4004	STRAIN POLE, TYPE IV	EA	12	8,000.00	96,000
639-4004	30' STRAIN POLE, TYPE IV	EA	39	4,500.00	175,500
647-1000	TRAFFIC SIGNAL INSTALLATION #1	LS	LUMP		30,000
647-1000	TRAFFIC SIGNAL INSTALLATION #2	LS	LUMP		30,000
647-1000	TRAFFIC SIGNAL INSTALLATION #3	LS	LUMP		30,000
647-1000	TRAFFIC SIGNAL INSTALLATION #4	LS	LUMP		30,000
647-1000	TRAFFIC SIGNAL INSTALLATION #5	LS	LUMP		30,000
647-1000	TRAFFIC SIGNAL INSTALLATION #6	LS	LUMP		30,000
647-1000	TRAFFIC SIGNAL INSTALLATION #7	LS	LUMP		30,000
647-1000	TRAFFIC SIGNAL INSTALLATION #8	LS	LUMP		30,000
647-2141	PULL BOX, PB-4S	LS	LUMP		30,000
647-2170	PULL BOX, PB-7	EA	56	1,500.00	84,000
653-1704	THERMOPLASTIC SOLID TRAFFIC STRIPE, 24 IN, WHITE	EA	90	2,000.00	180,000
		LF	150	4.00	600

Project Concept Report  
 Project Number: CM-061-1(106)  
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682-6222	CONDUIT, NONMETL, TP 2, 2 IN	LF	1,200	8.00	9,600
682-6233	CONDUIT, NONMETL, TP 3, 2 IN	LF	40,000	4.00	160,000
682-6520	CONDUIT, FIBERGLASS, 2 IN	LF	3,600	45.00	162,000
682-7062	CONDUIT DUCT BANK, TYPE 3	LF	95,000	30.00	2,850,000
682-9028	ELECTRICAL COMMUNICATION BOX, TYPE 5	EA	10	6,000.00	60,000
682-9029	ELECTRICAL COMMUNICATION BOX REHABILITATION	EA	26	1,000.00	26,000
797-2200	MINI HUB	EA	1	75,000.00	75,000
935-1118	OUTSIDE PLANT FIBER OPTIC CABLE, LOOSE TUBE, SINGLE MODE, 144 FIBER	LF	116,160	2.50	290,400
935-1513	OUTSIDE PLANT FIBER OPTIC CABLE, DROP, SINGLE MODE, 24 FIBER	LF	4,000	2.50	10,000
935-3103	FIBER OPTIC CLOSURE, UNDERGROUND, 24 FIBER	EA	40	800.00	32,000
935-3108	FIBER OPTIC CLOSURE, UNDERGROUND, 144 FIBER	EA	8	1,600.00	12,800
935-3403	FIBER OPTIC CLOSURE, FDC (RACK MOUNTED), 24 FIBER	EA	40	1,000.00	40,000
935-3601	FIBER OPTIC CLOSURE, FDC PRE-TERMINATED, TYPE A, 4-FIBER	EA	9	900.00	8,100
935-4010	FIBER OPTIC SPLICE, FUSION	EA	2,500	40.00	100,000
935-8000	TESTING	LS	LUMP		20,000
936-1001	CCTV SYSTEM, TYPE B	EA	19	7,000.00	133,000
936-8000	TESTING	LS	LUMP		5,000
937-1000	VIDEO CAMERA SENSOR ASSEMBLY	EA	0	2,500.00	0
937-3010	VDS SYSTEM PROCESSOR, TYPE A	EA	0	10,000.00	0
937-8000	TESTING	LS	LUMP		6,000
938-1100	INTERSECTION VIDEO DETECTION SYSTEM ASSEMBLY, TYPE A	EA	9	4,000.00	36,000
938-0503	MICROWAVE RADAR DETECTION ASSEMBLY	EA	59	4,000.00	236,000
938-8000	TESTING	LS	LUMP		5,000
939-1190	VIDEO ENCODER, TYPE A	EA	19	6,000.00	114,000
939-1195	VIDEO DECODER, TYPE A	EA	5	5,000.00	25,000
939-2211	NETWORK SWITCH, LAYER 3 GIGE, TYPE A (FOUR SM 17DB GBICS)	EA	1	80,000.00	80,000
939-2221	GBIC ENTERPRISE ROUTING SWITCH MODULE, 8 PORT	EA	2	20,000.00	40,000
939-2232	GBIC, TYPE B	EA	20	3,000.00	60,000
939-2300	FIELD SWITCH, TYPE A	EA	50	4,500.00	225,000
939-2301	FIELD SWITCH, TYPE B	EA	6	6,000.00	36,000
939-2305	FIELD SWITCH, TYPE C	EA	8	3,500.00	28,000
939-4040	TYPE D CABINET	EA	50	5,000.00	250,000
939-5010	ELECTRICAL POWER SERVICE ASSEMBLY, AERIAL SERVICE POINT	EA	50	2,500.00	125,000
939-6000	HUB UNINTERRUPTIBLE POWER SUPPLY	EA	1	3,500.00	3,500
939-8000	TESTING	LS	LUMP		20,000

Total					\$7,541,100
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