

ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE STP-1111(11) Catoosa County **OFFICE** Preconstruction
P.I. No. 642220
DATE July 30, 2001
FROM *CWH Hutto*
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

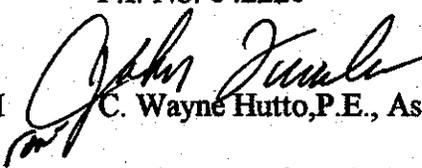
DISTRIBUTION:

Tom Turner
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Marion Waters
Marta Rosen
Paul Liles
Jimmy Chambers
Kent Sager
Jim Kennerly
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE STP-1111(11) Catoosa County **OFFICE** Preconstruction
P.I. No. 642220
DATE June 27, 2001

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

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

SUBJECT PROJECT CONCEPT REPORT

This project is the widening and reconstruction of Cloud Springs Road/SR 146 from US 27/SR 1 to CR 553/Lakeview Road for a total of 2.20 miles. The existing SR 146 consists of a two lane roadway with rural shoulders on a variable 40' - 90' of existing right-of-way. Cloud Springs Road/SR 146 is classified as an urban minor arterial route, providing a connection between US 41, I-75, and the Fort Oglethorpe/Rossville areas of northwestern Georgia. Traffic is projected to be 23,400 and 29,300 VPD in the years 2006 and 2026 respectively. The project corridor is presently operating at Level of Service (LOS) "D." With no improvements the corridor will operate at LOS "E" by 2025. Widening and improving Cloud Springs Road from US 27 to Lakeview Drive will improve the corridor to LOS "B." The posted speed is 35 MPH and the design speed is 45 MPH.

The construction proposes to widen SR 146 to an urban section, four lane roadway with a 20' raised median and curb and gutter for the entire project length. There are no design exceptions anticipated for this project. Traffic will be maintained via staging during construction.

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

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$5,317,000	\$6,862,000	2005	FY-07
Right-of-Way	\$8,371,000	\$1,256,000		
Utilities*	\$3,164,000	----		

*LGPA to be sent.

Frank L. Danchetz
Page 2

STP-1111(11) Catoosa
June 27, 2001

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

CWH:JDQ/cj

Attachment

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

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE: STP-1111(11) Catoosa
P.I. Number 642220-

OFFICE: Engineering Services

DATE: July 5, 2001

FROM: *DM*
David Mulling, Project Review Engineer

TO: Wayne Hutto, Assistant Director of Pre-construction

SUBJECT: CONCEPT REPORT

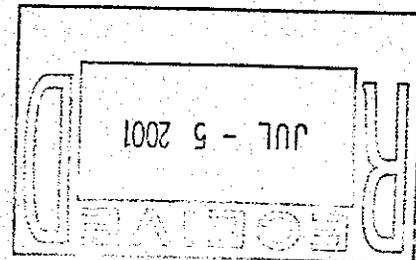
We have reviewed the concept report submitted June 15, 2001 by the letter from James A. Kennerly dated June 8, 2001, and have no comment.

The costs for the project are:

Construction	\$4,423,000
Inflation	\$ 442,000
E&C	\$ 487,000
Reimbursable Utilities	\$3,164,000
Right of Way	\$8,371,000

DTM

c: Jim Kennerly



SCORING RESULTS AS PER MOG 2440-2

Project Number: STP1111(11)		County: Catoosa		PI No.: 642220-	
Report Date: 6/8/01		Concept By: DOT Office: Road Design			
<input checked="" type="checkbox"/> CONCEPT		Consultant: Arcadis Geraghty & Miller			
Project Type: Choose One From Each Column		<input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input type="checkbox"/> Bridge <input type="checkbox"/> Building <input type="checkbox"/> Interchange <input type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input checked="" type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
FOCUS AREAS	SCORE	RESULTS			
Presentation	100%				
Judgement	100%				
Environmental	100%				
Right of Way	100%				
Utility	100%				
Constructability	100%				
Schedule	100%				

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

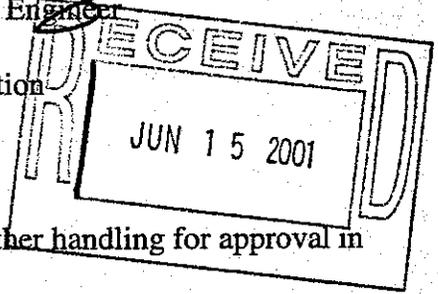
FILE STP-1111(11) Catoosa County OFFICE Atlanta, Georgia
P.I. No. 642220

DATE June 8, 2001

FROM *for* *James A. Kennerly* James A. Kennerly, State Road & Airport Design Engineer

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT PROJECT CONCEPT REPORT



Attached is the original copy of the Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

JAK:JSS:lc

Attachment

- cc: Tom Turner
Marta Rosen, w/attachment
Herman Griffin, w/attachment
Harvey Keeper, w/attachment
Kent Sager, w/attachment
David Mulling, w/attachment
Marion Waters, w/attachment

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD DESIGN

PROJECT CONCEPT REPORT

Project Number: STP-1111(11)
County: CATOOSA
P. I. Number: 642220

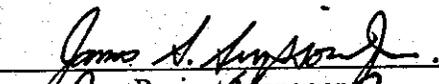
Federal Route Number: N/A
State Route Number: 146

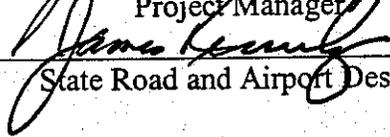
Widening of SR 146 from US 27/SR 1 to CR
553/Lakeview Rd.

Recommendation for approval:

DATE 6/7/01

DATE 6/11/01



Project Manager


State Road and Airport Design Engineer

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

DATE _____
DATE _____
DATE _____
DATE _____
DATE _____
DATE _____

State Transportation Planning Administrator

State Transportation Programming Engineer

State Environmental/Location Engineer

State Traffic Operations Engineer

District Engineer

Project Review Engineer

Need and Purpose:

The need exists to provide local and through traffic an improved travel way on Cloud Springs Road. The purpose of the proposed improvement is to provide a facility that will adequately serve current and future travel demand; and provide a safer travel environment for pedestrians, autos and school buses.

Background

In 2000, the Chattanooga Urban Area Transportation Study adopted its 2025 Regional Transportation Plan. The RTP addresses travel needs through the year 2025. This adopted Year 2025 Chattanooga Urban Area RTP is the direct result of a comprehensive, cooperative, and continuous planning process conducted by the local governments and the Georgia and Tennessee Departments of Transportation in cooperation with the Federal Highway and Federal Transit Administrations. The Chattanooga Urban Area Transportation Study (CUATS) recommends in its 2025 Regional Transportation Plan (RTP) the widening of SR 146/Cloud Springs Road, from US 27 to Lakeview Drive/CR 553 in Catoosa County. The RTP recommendation is to widen the road from two to four through lanes and to improve the horizontal alignment of the roadway.

Design

Cloud Springs Road/SR 146 is currently a two lane road between US 27 and Lakeview Drive. The proposed improvement will widen SR 146 to four twelve foot wide lanes with a twenty foot wide raised median. Curbs, gutters, and sidewalks will also be incorporated into the project on both sides of the road.

Travel Demand and Operational Conditions:

Cloud Springs Road/SR 146 is classified as an Urban Minor Arterial route, providing a connection between US 41, I-75 and the Fort Oglethorpe/Rossville areas of northwestern Georgia. In 1998, the segment of Cloud Springs Road from US 27 to Cross Street carried 23,400 vehicles per day. By 2025, the road will carry 29,300 vehicles per day on the same segment. From Cross Street to Proctor Road, Cloud Springs Road carried 18,800 vehicles per day in 1998, with an increase to 23,500 by 2025. From Proctor Road to Cedar Lane, SR 146 carried 14,400 and 18,200 vehicles per day in 1998 and 2025 respectively. From Cedar Lane to Lakeview Drive, SR 146 carried 6,100 and 7,600 vehicles per day in 1998 and 2025 respectively. On average, the project corridor is presently operating at LOS D. With no improvements the Cloud Springs Road corridor will operate at LOS E by 2025. Widening and improving Cloud Springs Road from US 27 to Lakeview Drive would improve the corridor to LOS B. The following table summarizes traffic volumes and Level of Service (LOS) on Cloud Springs Road/SR 146.

Roadway Segment	Existing Traffic/LOS No-Build	Future Traffic/LOS No-Build	Future Traffic/LOS Build
US 27 to Cross Street	23,400/E	29,300/F	29,300/C
Cross Street to Proctor Road	18,800/D	23,500/E	23,500/B
Proctor Road to Cedar Lane	14,400/D	18,200/E	18,200/B
Cedar Lane to Lakeview Drive	6,100/B	7,600/C	7,600/A

Land Use

The land use along Cloud Springs Road/SR 146 is predominantly residential. However, the SR 146/US 27 intersection and the SR 146/Patterson Road intersection are zoned for commercial uses. A large, two hundred unit apartment complex is currently planned for construction on Cloud Springs Road, between Westside Drive and Cedar Lane and will generate additional traffic on the roadway.

Community Issues

The United States Environmental Protection Agency (U.S. EPA) defines Environmental Justice as "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations or policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies."

Forty-four percent of the households along the Cloud Springs Road corridor earn less than \$20,000 per year. Sixty-four percent of the households earn less than \$30,000 per year. The proposed improvement would provide improved access between the residents and their jobs in the community. Twenty-one percent of the population along this corridor are age sixty and above. Proposed sidewalks along both sides of the roadway would provide improved access to services located in the community.

Lastly, this project will provide improved access for school students, employees and buses. The following four schools are located within one mile of the proposed project:

1. Cloud Springs Elementary
2. West Side Elementary
3. Lakeview Middle
4. Lakeview-Fort Oglethorpe High

Safety

Accident rates along Cloud Springs Road/SR 146 are below the statewide average For Urban Minor Arterials. However, in 1997, rear end collisions accounted for 55% of all accidents on Cloud Springs Road. This high percentage of rear end collisions indicates a need for turn bays and additional travel lanes.

Other Projects in the Area

Project Number	Project Description	FY 01-03 TIP Schedule
TIP# STP-98(7) P.I. No. 650520 Project # STP-1119(1)	Widen Dietz Rd from from SR 146 to Post Road.	PE-Authorized ROW-LONG RANGE CST-LONG RANGE
TIP# STP-99-2 P.I. No. 650440-65Y440 Project # STP-1111(7)	Widen SR 146 from Lakeview Drive to I-75. Widen to 4 lanes with turn lanes as needed.	PE-AUTHORIZED ROW-FY01 CST-FY 02
TIP# GA-01 P.I. No. 611210 Project # NH-STP-75-3(239)	I-75 Bridge and ramp reconstruction at SR 146 interchange.	PE-Authorized ROW-FY01 CST-FY05
TIP # STP-98(3) P.I. No. 642210 Project # STP-1111(10)	Widen SR 146 from 2 to 4 lanes. From I-75 to US 41.	PE-Authorized ROW-FY01 CST-FY03
TIP # STP-98(2) P.I. No. 642200 Project # STP-1100(2)	Widen Lakeview Drive from 2 to 4 lanes. From US 27 to SR 146.	PE-FY04 ROW-Long Range CST-Long Range

Description of the proposed project: This roadway project consists of the widening of S.R. 146 from its intersection with S.R. 1/ U.S. 27 to the intersection with Lakeview Road / C.R. 553. This project is located in Catoosa County. The concept report recommends widening S.R. 146 to allow for a 4-lane urban section with a 20' raised median. Substandard horizontal and vertical alignments will be corrected to meet the proposed 45 mph speed design. Curb and gutter will be used to minimize right of way impacts.

The project length is 2.2 miles.

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

PDP Classification:

Full Oversight (), Exempt(X), State Funded(), or Other ()

Functional Classification: Urban Minor Arterial

U. S. Route Number(s): N/A

State Route Number(s): 146

Traffic (AADT): Current Year: (2006) 23,400 Design Year: (2026) 29,300

Existing design features:

- Typical Section: Two lanes with varied width shoulders.
- Posted speed 35 mph Maximum degree of curvature: 12° 00'
- Maximum grade: 6.00 % Side-streets 2-5% Driveways 2-5%
- Width of right of way: 40-90 ft.
- Major structures: Quadruple box culvert including length, width, and sufficient rating).
- Major interchanges or intersections along the project: SR 146 @ US 27/SR 1

Proposed Design Features:

- Proposed typical section(s): 4-12' lanes with a 20' raised median. Section has curb and gutter for the length of the project.
- Proposed Design Speed Mainline: 45 mph
- Proposed Maximum grade Mainline: 6.00% Maximum grade allowable: 6.00%.
- Proposed Maximum grade Side Street: 7.00% Maximum grade allowable: 7.00%.
- Proposed Maximum grade driveway: 28.00%
- Proposed Maximum degree of curve 9° 45'. Maximum degree allowable 9° 52' 30".
- Right of way
 - Width 120-150.
 - Easements: TBD
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: 139
 - Number of displacements:
 - Business: 4
 - Residences: 55
 - Mobile homes: 0
 - Other: N/A
- Structures:
 - Bridges N/A
 - Retaining walls N/A
- Major intersections and interchanges: SR 146 @ US 27/ SR 1
- Traffic control during construction: Staged construction.

- Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

- Design Variances: N/A
- Environmental concerns:
 - UST's (Underground Storage Tanks): An existing gas station is located adjacent to S.R. 146 near the Fernwood Drive intersection. There are no proposed impacts to the existing station. Additionally, there is a former gas station across from Fernwood Drive. Since there is evidence of new pavement, it is suggested that the UST's may have been removed from this site.
 - Hazardous Waste Sites: None known within the project limits.
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (), No (X),
 - Categorical exclusion (),
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS) (X).
- Utility involvements: Standard distribution utilities within project limits. No known transmission lines or other major utility within project limits.

Project responsibilities:

- Design, GDOT
- Right of Way Acquisition, GDOT
- Relocation of Utilities, Local Utilities
- Letting to contract, GDOT
- Supervision of construction, GDOT
- Providing material pits, Contractor
- Providing detours, Contractor

Coordination:

- Concept meeting date: 03/22/01.
- P. A. R. meeting: TBD
- FEMA, USCG, and/or TVA: TBD
- Level of Public involvement: PIM and Public Hearing
- Local government comments: N/A
- Other projects in the area:
 - Project STP-1111(7) – Widen SR 146 from Lakeview Dr. to I-75 in Catoosa County
 - Project STP-75-3(239) – Replacement of I-75 bridge over SR 146 in Catoosa County
 - Project STP-111(10) – Widen SR 146 from I-75 to SR 3/US 41 in Catoosa County
 - Project STP-1119(1) – Widen C.R. 384 (Dietz) Road in Catoosa County
- Other coordination to date: N/A

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 18 Months.
- Time to complete preliminary construction plans: 10 Months.
- Time to complete right of way plans: 4 Months.
- Time to complete the Section 404 Permit: 6 Months.
- Time to complete final construction plans: 6 Months.
- Time to complete to purchase right of way: 18 Months.
- List other major items that will affect the project schedule: 0 Months.

Other alternates considered:

- Widen symmetrical with 20' raised median, urban section
- Widen to the north from US 27 to Greenway Drive and Brown Circle to West Side Drive. Widen to the south from Greenway Drive to Brown Circle. Widen symmetrically from West Side Drive to Red Bud Avenue. **(preferred alternate)**
- Widen to the north from Fant Drive to Westside Drive with 20' raised median, urban section.
- Widen to north from Relocated Fernwood Dr. to Westside Dr. with 20' raised median, urban section.
- No Build

Comments: None

Attachments:

1. Cost Estimates:
 - a. Construction including E&C,
 - b. Right of Way, and
 - c. Utilities.
2. Environmental Scan
3. Sketch location map (see report)
4. Typical sections,
5. Accident summaries (see report)
6. Capacity analysis (see report)
7. Bridge inventory: N/A
8. Minutes of Concept meetings
9. Minutes of any meetings that show support or objection to the concept: N/A
10. LGPA's or PMA's: N/A
11. Location and Design Notice (On Minor Projects): N/A
12. Conforming plan's network schematics showing thru lanes: N/A
13. Other items referred to in the body of the report.

Approval:

Concur: _____
Director of Preconstruction

Approve: _____
Chief Engineer

[Handwritten signature]

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: STP-1111(11)

COUNTY: CATOOSA

DATE: 02/26/01

ESTIMATED LETTING DATE: FY05

PREPARED BY: ARCADIS Geraghty & Miller

PROJECT LENGTH : 2.2 miles

() PROGRAMMING PROCESS (X) CONCEPT DEV.

() DURING PROJECT DEV.

PROJECT COST		
A. RIGHT-OF-WAY:		
1.	PROPERTY (LAND & EASEMENT)	\$623,050
2.	DISPLACEMENTS; RES: 55, BUS: 4, M.H.: 0	\$4,625,000
3.	OTHER COST (DAMAGES, ADM. / COURT, INFL., ETC.)	\$3,122,591
	SUBTOTAL: A	\$8,370,700
B. REIMBURSABLE UTILITIES:		
1.	RAILROAD	\$0
2.	TRANSMISSION LINES	\$0
3.	SERVICES	\$0
	SUBTOTAL: B	\$3,164,000
C. CONSTRUCTION:		
1. MAJOR STRUCTURES:		
a.	Retaining Wall @ Cloud Springs Baptist Church - 3360 sf (\$45/sf)	\$151,200
b.	Extend Box Culvert @ Black Branch Creek	\$71,990
	SUBTOTAL: C-1	\$223,190
2. GRADING AND DRAINAGE:		
a.	EARTHWORK - In Place Embankment 75790 cu. yds. (\$4/cu. yd)	\$303,160
b.	DRAINAGE - 2.2 miles (\$100,000 / mile)	\$220,000
	SUBTOTAL: C-2	\$523,160
3. BASE AND PAVING:		
a.	10" Graded Aggr. Base Course - (70310 sy @ \$9 / sy)	\$632,790

	b. ASPHALT PAVING:	
	1. Asph Conc, 4" superpave base (15820 tons x \$40)	\$632,800
	2. Asph Conc, 2" superpave binder (7960 tons x \$40)	\$318,400
	3. Asph Conc, 1 1/2" superpave surface (8950 tons x \$40)	\$358,000
	SUBTOTAL: C-3.b	\$1,309,200
	c. Bituminous Tack Coat - (32300 gal x \$1)	\$32,300
	d. Milling, Asph Conc, 1 1/2" (32230 sy x \$1.50)	\$48,345
	SUBTOTAL: C-3	\$2,022,635
	4. LUMP ITEMS:	
	a. TRAFFIC CONTROL	\$300,000
	b. CLEARING AND GRUBBING	\$300,000
	c. GRASSING	\$60,000
	d. EROSION CONTROL	\$100,000
	e. SIGNALS	
	1. S.R. 146 & S.R. 1/U.S. 27	\$60,000
	2. S.R. 146 & Cross Street	\$60,000
	3. S.R. 146 & Fant Drive	\$60,000
	3. S.R. 146 & Cedar Lane	\$60,000
	3. S.R. 146 & Lakeview Road/C.R. 553	\$60,000
	SUBTOTAL: C-4.e	\$300,000
	SUBTOTAL: C-4	\$1,060,000
	5. MISCELLANEOUS:	
	a. SIGNING & STRIPING	\$100,000
	b. FIELD OFFICE	\$30,000
	c. CONCRETE CURB AND GUTTER - 31800 ft (\$10 / ft)	\$318,000
	d. CONCRETE MEDIAN - 2860 sy (\$30 / sy)	\$85,800
	e. GUARDRAIL	\$60,000
	SUBTOTAL: C-5	\$593,800

ESTIMATE SUMMARY			
A. RIGHT-OF-WAY:			\$8,370,700
B. REIMBURSABLE UTILITIES:			\$3,164,000
C. CONSTRUCTION:			
	1. MAJOR STRUCTURES	\$223,190	
	2. GRADING AND DRAINAGE	\$523,160	
	3. BASE AND PAVING	\$2,022,635	
	4. LUMP ITEMS	\$1,060,000	
	5. MISCELLANEOUS	\$593,800	
	SUBTOTAL CONSTRUCTION COST	\$4,422,785	
	E. & C. (10%)	\$442,279	
	INFLATION (3% PER YEAR)	\$451,123	
	NUMBER OF YEARS: 3		
	TOTAL CONSTRUCTION COST	\$5,316,200	
	TOTAL PROJECT COST	\$16,850,900	

ENVIRONMENTAL SCAN

Jurisdictional Wetlands and Surface Waters

An on-site inspection of the project corridor was conducted to determine if any jurisdictional wetlands or other surface waters were present within the project corridor. During this inspection five areas were identified. These areas consist of one jurisdictional wetland, an unnamed tributary to Black Branch, Black Branch, a small drainage ditch, and Spring Creek.

Both the jurisdictional wetland and the unnamed tributary to Black Branch are located near the intersection of S.R. 146 and Fernwood Drive. On the upstream side of the tributary, a road is being constructed for a residential subdivision. This road has diverted flow of the stream and has separated the jurisdictional wetland from the tributary. At the location of the project corridor the tributary is characterized as being two to three feet wide and steeply incised two to three feet. With the construction of the residential road there are no wetlands associated with the tributary. However, the jurisdictional wetland is approximately 80 feet from the tributary and is approximately 50 feet off the existing right-of-way (ROW) of S.R. 146.

This jurisdictional wetland is characterized as a bottomland hardwood system and varies in width between 5 and 15 feet. The wetland parallels the residential road for a distance of approximately 800 feet where it then rejoins the tributary. The vegetation in the jurisdictional wetland consists of *Sagittaria australis* (Arrow-head), *Echinodorus cordifolius* (Creeping bur-head), *Cornus ammomum* (Swamp dogwood), and *Carya ovata* (Shagbark hickory).

Black Branch is located near Fant Drive. At this location Black Branch is approximately 35 feet wide and is steeply incised three to five feet. The water level is elevated on the inlet side of the culvert due to debris blockage. While the adjacent lands are floodplain, there are no wetlands associated with this crossing.

The small drainage ditch parallels Tulip Lane on the south side of S.R. 146 and Park Lake Road on the north. There is a limited but noticeable flow of surface water within this system. The system is characterized as being one to two feet wide and has a flat bottom. There are no wetlands associated with this system within the project corridor.

Spring Creek parallels Beaver Road on the south side of S.R. 146 and is between Park Lake Road and Lakeview Road (CR553) on the north. Spring Creek is characterized as being five to six feet wide and incised three to four feet. The bottom of this creek is flat. There are no wetlands associated with Spring Creek within the project corridor.

All five of the areas identified are subject to US Army Corps of Engineers (COE) regulation and would require a section 404 permit if there is any impacts to these areas. The precise COE permit will vary based on the location and type of impact anticipated.

Environmental Concerns

An on-site inspection of the project corridor was conducted to determine if any recognized environmental concerns were readily identifiable. During this inspection two sites were identified. Both sites are associated with fuel stations.

The first site is located on the south side of S.R. 146 near the intersection of Fernwood Drive. At this location the fuel station is no longer in use and it appears that the underground storage tanks (UST) have been removed. The asphalt pavement in front of the establishment has been repaired in a manner indicative of the UST removal. The area of disturbance or repaired asphalt is located approximately 25 feet from the edge of the existing ROW.

The second site is located at the Amoco station north of S.R. 146 at the intersection of Fernwood Drive. This facility is currently in operation and has 4 UST's in the rear of the facility. These tanks are located approximately 50 feet from the existing ROW. Additionally, a Kerosene pump and tank is located between the structure and the ROW. The pump and tank are approximately 15 feet from the existing ROW.

Residential and Business Impacts

There are seven areas, which could have potential impacts depending on the exact location and alignment of the proposed road improvements. The first is at a church located at the intersection of Cross Street and S.R. 146. The building is approximately 40 feet south of the existing ROW. It is anticipated that the construction of a retaining wall will prevent the taking of this structure.

The second area is an apartment complex located on the north side of S.R. 146 between Cross Street and Greenway Street. The proposed widening and improving of S.R. 146 will most likely impact the units directly facing S.R. 146. The remainder of the units not directly facing S.R. 146 will not be impacted.

The third area involves the two businesses that were identified in the environmental section. This is the Amoco and the former fuel station. If widening occurs on the south side of the existing alignment the parking for the former fuel station will be eliminated. If widening occurs to the north parking and the kerosene pump and potentially the tank will be impacted.

The fourth area is a residential subdivision located on Colony Circle. The proposed widening will impact the units directly accessing S.R. 146.

The fifth area is government housing located between Cedar Lane and Tulip Lane. The housing is approximately 25 feet from the existing ROW.

There are two churches located adjacent to and across S.R. 146 from the Government housing. The church adjacent to the housing is located approximately 60 feet from the existing ROW. The church on the opposite side of S.R. 146 is approximately 70 feet from the existing ROW. The construction of retaining walls could reduce or eliminate the impacts to these structures.

All residential communities, churches, and businesses are likely to have some adverse noise impacts due to the close proximity of the corridor. These noise impacts will be at the greatest during construction. A detailed noise study will be needed to analyze and address the potential adverse noise impacts to these areas. Buffers may be necessary to mitigate the potential noise impacts. A community impact analysis addressing environmental justice including disproportionate and adverse impacts to the minority communities would be included in the environmental document.

Protected Species

A list of Threatened and Endangered Species for Catoosa County, Georgia was obtained from the US Fish and Wildlife Service. After reviewing the literature, nine federally listed species, six state listed species, and six species of concern were found potentially occur in Catoosa County. During the investigation, no evidence of any listed species or their suitable habitat was found.

Final Conclusions and Recommendations (Summary of entire environmental scan)

A Categorical Exclusion (CE) should cover the requirements for this project in order to comply with the National Environmental Policy Act (NEPA). Within this document, community impacts analyzing for environmental justice including disproportionate and adverse impacts to the minority communities and a detailed noise analysis should be addressed.

If impacts to wetlands or other jurisdictional areas is anticipated a formal jurisdictional wetland delineation and subsequent COE verification should be conducted. It will be necessary to permit through the COE any impacts. The precise COE permit will vary based on the location and type of impact anticipated.



ARCADIS Geraghty & Miller, Inc.
2849 Paces Ferry Road
Suite 400
Atlanta
Georgia 30339
Tel 770 431 8666
Fax 770 435 2666

MEETING REPORT

Participants:

Jim Simpson, GDOT Road Design
Robert Hughes, GDOT Road Design
Tom McQueen, GDOT Planning
Brook Martin, GDOT Traffic Operations
Katie Mullins, GDOT Programming
Harry Maddox, GDOT District 6
Emily Olin, GDOT Historian
Keisha Jackson, GDOT OEL NEPA
Jack Grant, GDOT Road Design
DeWayne Comer, GDOT Pre-Construction
District 6
Steve Sanders, GDOT Traffic Operations
District 6
Joe Ciavarro, GDOT Road Design District 6
David Mulling, GDOT Engineering Services
Nasser Rad, GDOT Road Design
Jess Billmeyer, ARCADIS Geraghty & Miller
Keith Franklin, ARCADIS Geraghty & Miller
Adam Smith, ARCADIS Geraghty & Miller

Copies:
Participants

TRANSPORTATION

Place/date of meeting:

GDOT Office of Road Design, Room 444A
March 22, 2001, 10:00 a.m.

Minutes by:
Adam Smith

Subject:

Concept Team Meeting
STP-1111(11)
Catoosa County

ARCADIS Geraghty & Miller Project No.:
GA062571.0420

This document should be reviewed by all recipients. Any additions, revisions, or deletions should be called to the attention of the writer within ten (10) days.

A concept team meeting was held regarding the above-referenced project, and the following items were discussed:

1. Jim Simpson began the meeting by welcoming all present. Those present introduced themselves.
2. Adam Smith from ARCADIS Geraghty & Miller (ARCADIS) gave a brief overview of the project.

3. Keith Franklin from ARCADIS gave a point-by-point discussion of the Concept Report from the GDOT Plan Development Process (PDP) guidelines for concept team meetings. His discussion focused on the following items:

a. Purpose of Project

The purpose of this project is to provide an improved travel way on SR 146, including alignment improvements and traffic capacity improvements, to meet future demand.

b. Planning Concept/Conforming Project Description and Network Schematic Showing Through Lanes/STIP Project Definition

This project conforms to the GDOT State Transportation Improvement Program (STIP). The corridor has been identified and planned for improvements.

c. Project Background

SR 146 is part of the Chattanooga Urban Area Transportation Study. The regional transportation plan (RTP) adopted goes through year 2025. The RTP recommended widening SR 146 from two to four lanes and improving the horizontal alignment.

d. Location of Environmental Resources

- i) There are two sites associated with gas stations that have underground storage tanks (USTs).
- ii) There is one wetland affected and three streams (see discussion below).
- iii) There are nine identified historic properties that are eligible for listing in the National Historic Register.
- iv) There is one site that potentially contains hazardous waste (see discussion below).

e. Public Input to Date

There was public comment on the Chattanooga RTP that included this project.

f. Alternatives

Alternatives considered and rejected to date sufficient for inclusion into the environmental document include the following:

- i) Symmetrical widening throughout
- ii) Widening to the north from Fant Drive to Westside Drive

- iii) Widening to the north from relocated Fernwood Drive to Westside Drive
- iv) No build
- g. Design Guidelines Proposed
 - i) Design speed mainline is proposed at 45 mph.
 - ii) The right-of-way will be 120 to 150 feet wide. A TBD easement will be obtained. The right-of-way will include 139 parcels and will displace four businesses and 55 residences.
- h. Horizontal and Vertical Alignments
 - i) The proposed maximum grade mainline is 6 percent.
 - ii) The proposed maximum grade side street 7 percent.
 - iii) The proposed maximum grade driveway is 28 percent.
 - iv) The proposed maximum degree of curve is 9 degrees, 45 minutes.
- i. Typical Sections

The proposed typical section(s) include four 12-foot lanes with a 20-foot raised median. The section has curb and gutter and sidewalk for the length of the project.
- j. Access Control

The type of access control will be determined by permit.
- k. Practical Alternatives Report (PAR)

To be determined.
- l. Environmental Documents

An environmental assessment (EA) will be required.
- m. Environmental Permits/Studies Required
 - i) Permits required include 4(f), Nationwide 14 and TVA.
 - ii) A fish and mussel study will be required.

n. LGPA Agreements/Project Management Agreements

There are none at this time.

o. Right-of-Way Requirements and Estimate

i) See right-of-way requirements as stated above.

ii) The estimate for the right-of-way is \$8,370,700.

p. Utilities

There are standard distribution utilities within the project. There are no known transmission lines or other major utilities within the project.

q. Preliminary Bridge Assessments and Structural Needs

There are none at this time.

r. Accident History

Accident rates are above the statewide average, and rear-end collisions accounted for 55 percent of all accidents along SR 146 in 1997.

s. Potential Soil Conditions

No special conditions are known at this time.

t. Construction Limits

The right-of-way shown on the concept plan is outside the estimated construction limits.

u. Maintenance of Traffic Issues

Staging should not be an issue. Most of the widening occurs to one side or the other of the existing road.

v. Maintenance Problems Along Existing Road

There are none known at this time.

w. Preliminary Traffic Capacity Analysis

The table below summarizes the traffic analysis:

Roadway Segment	Existing Traffic/LOS No-Build	Future Traffic/LOS No-Build	Future Traffic/LOS Build
U.S. 27 to Cross Street	23,400/E	29,300/F	29,300/C
Cross Street to Proctor Road	18,800/D	23,500/E	23,500/B
Proctor Road to Cedar Lane	14,400/D	18,200/E	18,200/B
Cedar Lane to Lakeview Drive	6,100/B	7,600/C	7,600/A

x. Potential Intersection Improvements

- i) Many intersections are made closer to 90 degrees.
- ii) Fernwood Drive has been improved to eliminate the sharp skew angle.

y. Constructability Issues

Staging should not be an issue.

z. Preliminary Construction Cost Estimate

Total construction cost is \$5,316,200.

aa. Project Assignments

This will likely be a consultant-designed project.

bb. Project Schedule

Begin right-of-way acquisition in fiscal year 2002.

4. Tom McQueen of GDOT Planning stated that there had been public input for the Chattanooga RTP that included this project. Environmental justice may be a major issue because of the public housing being impacted.
5. DeWayne Comer of District 6 stated that the utilities cost estimate was being worked on and would be sent to ARCADIS for inclusion in the concept report. He also stated that a public information meeting should be scheduled soon after the concept team meeting because of the high level of public interest in this project.
6. Emily Olin, GDOT Historian, stated the following:
 - a. There were originally ten historically eligible structures identified in the historic survey. Of those ten, one was determined later to not be a historic resource. This was identified as resource no. 5 (Alice Epperson's house).

- b. Two of the historic boundaries shown on the concept plan were incorrect. Emily will transmit these corrections to ARCADIS.
 - c. There are environmental justice issues regarding this project. For now, GDOT will approach this project as an EA and will upgrade this to an environmental impact statement, if necessary. The EA will require a 4(f) permit.
 - d. The parcel labeled "Catoosa Properties" located east of Cedar Lane appears to be public housing. This resource should be avoided if possible.
7. Keisha Jackson of the Office of Environment and Location with the National Environmental Protection Agency (OEL NEPA) stated the following:
- a. The USEPA environmental permits required include a Nationwide 14 and TVA.
 - b. There has been no archeology done for this project.
 - c. There is one potential hazardous waste site due to old tires and a repair shop with old cars everywhere. This site is located just east of Colony Circle.
 - d. There is one wetland affected (0.06 acre) with no mitigation.
 - e. There are three streams affected (250 lf impacted) with mitigation required.
 - f. The project is in the 100-year floodplain of the waters of the U.S.
 - g. To determine if there are endangered species impacts, a fish and mussel survey needs to be performed.
8. GDOT Traffic Operations questioned the skew on Proctor Street. They would like the intersection to be realigned if possible.
9. David Mulling of GDOT Engineering Services asked the following questions:
- a. Can the existing pavement be retained? According to Keith Franklin, it likely can be retained because the existing grades on the road will not require much change in the existing vertical alignment. Additionally, the road is being widened to one side or the other, which will help in using the existing pavement in the proposed construction.
 - b. What kind of grade change will there be in the one cut-section near the Cloud Springs Baptist Church? Keith Franklin said that it would be 4 to 5 feet, in all likelihood.
 - c. Is the widening symmetrical in this cut-section? Keith Franklin said that it is nearly symmetrical.

- d. Are the homes in the cut-section on septic tanks? Keith Franklin said that if they are, this will have to be addressed in preliminary design.
 - e. Will the front of the Cloud Springs Baptist church require additional right-of-way and easement? This will be determined in preliminary design.
 - f. Will there be any need for drainage detention? According to Keith Franklin, it may require some kind of drainage detention because this corridor is heavily urbanized. However, this will not be determined until preliminary design.
10. After each office represented had the opportunity to comment on their concerns and questions, the floor was opened to any general discussion and questions. The following was discussed:
- a. Nasser Rad of GDOT Road Design asked if the curve at the end of the project could be flattened? Keith Franklin replied that it can be flattened if the needed superelevation runoff can be maintained. The curve shown on the concept plan does meet the 45 mph speed design. Also, the curve at Lakeview Drive is a sharper curve.
 - b. A representative of the Office of Environment and Location asked if they could get a more detailed description of how ARCADIS chose the preferred alternate shown on the concept plan. ARCADIS agreed to provide them with this information.
 - c. Mr. Comer asked if this project would be a consultant project or a GDOT in-house project? Jim Simpson replied that this will likely be a consultant design project.
 - d. Mr. Comer also stated that his office would schedule a meeting with local officials to get their feedback on the concept before scheduling the public information meeting.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD DESIGN

PROJECT CONCEPT REPORT

Project Number: STP-1111(11)
County: CATOOSA
P. I. Number: 642220

Federal Route Number: N/A
State Route Number: 146

Widening of SR 146 from US 27/SR 1 to CR
553/Lakeview Rd.

Recommendation for approval:

DATE 6/7/01

DATE 6/11/01

James A. [Signature]
Project Manager
James [Signature]
State Road and Airport Design Engineer

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

DATE _____

DATE _____

DATE _____

DATE _____

DATE 6/21/01

DATE _____

State Transportation Planning Administrator

State Transportation Programming Engineer

State Environmental/Location Engineer

State Traffic Operations Engineer

[Signature]
District Engineer

Project Review Engineer

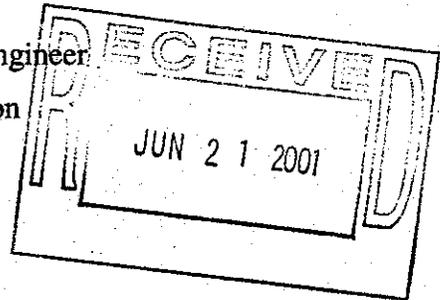
Department of Transportation
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE

File: STP-1111 (11) / Catoosa County
P.I. No. 642220

Office: Traffic Operations
Atlanta, Georgia
Date: June 19, 2001

From: ^{MGW} M.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 above referenced concept report for the widening of SR 146/Cloud Springs Road in Catoosa County. The project length is 2.2 miles.

SR 146 is an existing 2-lane roadway with a current AADT of 23,400 vehicles and a posted speed limit of 35mph. This concept proposes to widen SR 146 to an urban section 4-lane roadway with a 20-foot raised median and curb & gutter from SR 1/US 27 to CR 553/Laveview Road. Traffic will be maintained via staging during construction. There are no design exceptions anticipated for this project.

We believe this concept will improve safety and traffic operations within this area, therefore find this report satisfactory for approval.

MGW/BM

Attachment (signature page)

Cc: Harvey Keepler, State Environmental/Location Engineer
James A. Kennerly, State Road & Airport Design Engineer
David Mulling, Engineering Services, w/ attachment
Marta Rosen, State Transportation Planning Administrator
Kent Sager, District Engineer-Cartersville
Attention: Harry Maddox, District Traffic Engineer
Chuck Hasty, TMC
General Files

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD DESIGN

PROJECT CONCEPT REPORT

Project Number: STP-1111(11)
County: CATOOSA
P. I. Number: 642220

Federal Route Number: N/A
State Route Number: 146

Widening of SR 146 from US 27/SR 1 to CR
553/Lakeview Rd.

Recommendation for approval:

DATE 6/7/01

DATE 6/11/01

James A. Simpson
Project Manager
James Keenly
State Road and Airport Design Engineer

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

DATE _____

DATE _____

DATE _____

DATE 6/19/01

DATE _____

DATE _____

State Transportation Planning Administrator

State Transportation Programming Engineer

State Environmental/Location Engineer

Marion B. Waters, P.E.
State Traffic Operations Engineer

District Engineer

Project Review Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD DESIGN

PROJECT CONCEPT REPORT

Project Number: STP-1111(11)
County: CATOOSA
P. I. Number: 642220

Federal Route Number: N/A
State Route Number: 146

Widening of SR 146 from US 27/SR 1 to CR
553/Lakeview Rd.

Recommendation for approval:

DATE 6/7/01

DATE 6/11/01

James S. Simpson
Project Manager
James K. Smith
State Road and Airport Design Engineer

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

DATE _____

DATE 6-19-01

DATE _____

DATE _____

DATE _____

DATE _____

State Transportation Planning Administrator
William J. Sullivan
State Transportation Programming Engineer

State Environmental/Location Engineer

State Traffic Operations Engineer

District Engineer

Project Review Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD DESIGN

PROJECT CONCEPT REPORT

Project Number: STP-1111(11)
County: CATOOSA
P. I. Number: 642220

Federal Route Number: N/A
State Route Number: 146

Widening of SR 146 from US 27/SR 1 to CR
553/Lakeview Rd.

Recommendation for approval:

DATE 6/7/01

DATE 6/11/01

James A. Simpson
Project Manager
James Beaulieu
State Road and Airport Design Engineer

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

DATE _____

DATE _____

DATE _____

DATE _____

DATE _____

DATE 7/5/01

State Transportation Planning Administrator

State Transportation Programming Engineer

State Environmental/Location Engineer

State Traffic Operations Engineer

District Engineer

John J. Macey
Project Review Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ROAD DESIGN

PROJECT CONCEPT REPORT

Project Number: STP-1111(11)
County: CATOOSA
P. I. Number: 642220

Federal Route Number: N/A
State Route Number: 146

Widening of SR 146 from US 27/SR 1 to CR
553/Lakeview Rd.

Recommendation for approval:

DATE 6/7/01
DATE 6/11/01

James A. Simpson
Project Manager
James L. Smith
State Road and Airport Design Engineer

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

DATE 7-16-01
DATE _____
DATE _____
DATE _____
DATE _____
DATE _____

Marta V. Rosen
State Transportation Planning Administrator

State Transportation Programming Engineer

State Environmental/Location Engineer

State Traffic Operations Engineer

District Engineer

Project Review Engineer