

ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-285-1(352) DeKalb County **OFFICE** Preconstruction
P. I. No. 713300 **DATE** September 13, 2001
CWH
FROM C. Wayne Hutto, Assistant Director of Preconstruction
TO SEE DISTRIBUTION
SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Tom Turner
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Paul Liles
Jimmy Chambers
Joe Palladi
Steve Henry
BOARD MEMBER
FHWA



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Georgia Division
61 Forsyth Street, S.W., Suite 17T100
Atlanta, Georgia 30303
August 28, 2001

IN REPLY REFER TO
HTM-GA

Mr. J. Tom Coleman, Jr.
Commissioner
Georgia Department of Transportation
No. 2 Capitol Square, S.W.
Atlanta, Georgia 30334-1002

Attn: Wayne Hutto, Preconstruction Division

Subject: IM-285-1(345), IM-285-1(352), IM-285-1(354), and HPP-0000-00(949) Concept Reports

Dear Mr. Coleman:

The subject concept reports are for I-285 Interchanges at Bouldercrest Road, Jonesboro Road, Flat Shoals Road, and a bridge only for Perimeter Center Parkway. We are approving these concept reports under the following condition:

As discussed with your Urban Design Staff, design of these interchanges needs to be coordinated with any future improvements on I-285, including HOV lanes. Therefore, the design of these interchanges should not preclude the future HOV typical section(s) that, we understand, have yet to be determined. Also, as with all projects in the concept stage, the final design will also be dependent on the NEPA process.

If you have any questions, please contact Walter Boyd at (404) 562-3651.

Sincerely,

A handwritten signature in black ink, appearing to read 'Larry R. Dreihaup', is written over a horizontal line.

fn,

Larry R. Dreihaup, P.E.
Division Administrator

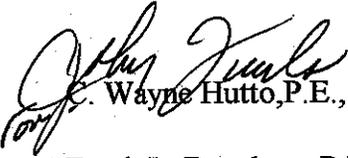
Enclosures

cc: Joe Palladi, Urban Design

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-285-1(352) DeKalb County **OFFICE** Preconstruction
P.I. No. 713300 **DATE** July 19, 2001

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

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

SUBJECT PROJECT CONCEPT REPORT

This project is the reconstruction of the I-285/Bouldercrest Road interchange and the installation of braided ramps from I-675 to Bouldercrest Road along I-285 in DeKalb County. The project length is 2.01 miles on I-285 and 0.92 mile on Bouldercrest Road. The existing interchange is incurring operational problems due to growth in traffic caused by commercial and residential development, tractor-trailer trucks, and turning and through work trips. The problems identified include high accident rates in the area, peak period traffic congestion, and poor operations including short weaving distances between I-285/I-675 and I-285/Bouldercrest Road interchanges. Bouldercrest Road is an existing two lane roadway south of the interchange and a four lane roadway with turn lanes north of the interchange. The existing I-285 consists of four lanes in each direction separated by a concrete median barrier. The existing major structures are:

<u>LOCATION</u>	<u>DIMENSIONS</u>	<u>SUFFICIENCY RATING</u>
Bouldercrest Road over I-285	249' x 73' bridge	86.8
I-285 over Sugar Creek	114' x 137' bridge	76.2
I-285 over Sugar Creek O/F	114' x 137' bridge	76.2

Traffic on Bouldercrest Road north of I-285 is expected to be 32,250 VPD in 2006, while traffic on I-285 approaching the interchange is expected to be 175,900 VPD. By the year 2026, traffic on Bouldercrest Road north of I-285 is expected to be 58,450 VPD and traffic on I-285 approaching the interchange is expected to be 268,900 VPD.

The construction provides for the reconstruction of the I-285/Bouldercrest Road interchange and includes braided ramps between the I-675/I-285 interchange, and the I-285 /Bouldercrest Road interchange. The proposed ramps are variable width (16' to 48' wide) with 8' wide (6' paved) outside shoulders and 6' wide (4' paved) inside shoulders. On Bouldercrest Road, the project extends north from just north of the South River (MP 4.10) to just west of the Bouldercrest Lane/Bouldercrest Road intersection (MP 5.02). On I-285, the project extends from the I-675 southbound exit ramp (MP 52.46) to just east of Sugar Creek (MP 50.45) no improvements are proposed to mainline I-285 as part of this project.

IM-NH-285-1(352) DeKalb

July 19, 2001

The reconstruction of the I-285/Bouldercrest Road interchange will require replacing the existing Bouldercrest Road Bridge over I-285. Bouldercrest Road will be widened to provide for two, 12' lanes in each direction between the I-285/Bouldercrest Road interchange and the Bouldercrest Road/Constitution Road intersection. South of the interchange, Bouldercrest Road will transition to two, 12' lanes (one in each direction). A new connector road (Industrial Drive Connector) will be provided to connect Sugar Creek Golf Drive to Industrial Drive. Whitehall Forest Court will be relocated and its current intersection with Bouldercrest Road will be closed. A new connector road (Continental Way Connector) will be provided to connect Continental Way to Bouldercrest Road at the Bouldercrest Road/Constitution Road intersection in order to improve and facilitate local truck traffic. Sugar Creek Golf Drive, Industrial Drive Connector, Whitehall Forest Court Extension, and Continental Way will have two, 12' wide travel lanes (one lane in each direction).

Bridge construction will be as follows:

1. New Bouldercrest Road bridge over I-285 (230' x 136')
2. Ramp C bridge over South River (195' x 30')
3. Ramp D bridge over South River (195' x 52')
4. Ramp E bridge over Ramp D (300' x 38')
5. Ramp F bridge over South River (200' x 30')
6. Ramp G bridge over South River (210' x 52')
7. Ramp H bridge over Ramp G (300' x 38')
8. Widen two existing I-285 bridges at Sugar Creek Golf Course

Design exceptions will be required to retain the existing 6'9" inside shoulder on I-285 and to retain the existing 9.5° horizontal curve on Bouldercrest Road with a maximum superelevation rate of 4%. Additional right-of-way will be required to implement this project. This road will remain open to traffic during construction.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion 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).	\$19,770,000	\$19,565,000	2002	02-07
Right-of-Way	\$ 9,897,000	\$ 9,897,000		
Utilities*	\$ 25,000	----		

*LGPA sent 10-7-99 requesting DeKalb County do utilities.

Frank L. Danchetz

Page 3

IM-NH-285-1(352) DeKalb

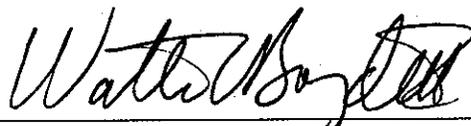
July 19, 2001

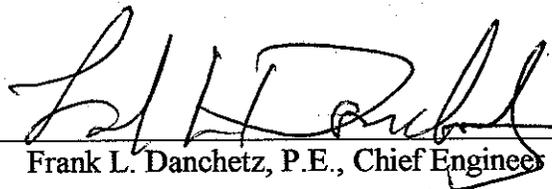
This project conforms to the current RTP model. I recommend this project concept be approved.

CWH:JDQ/cj

Attachment

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

APPROVE 
Larry R. Dreihaup, Division Administrator, FHWA

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE: IM-NH-285-1(352)
P.I. Number 713300-

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

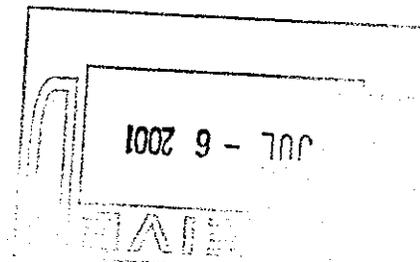
We have reviewed the concept report submitted June 18, 2001 by the letter from Joseph P. Palladi dated June 15, 2001, and have no comment.

The costs for the project are:

Construction	\$16,339,000
Inflation	\$ 1,634,000
E&C	\$ 1,797,000
Reimbursable Utilities	\$ 25,000
Right of Way	\$ 9,897,000

DTM

c: Joe Palladi



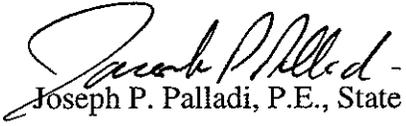
SCORING RESULTS AS PER MOG 2440-2

Project Number: IM-NH-285-1(352)		County: DEKALB		PI No.: 713300-	
Report Date: 6/15/01		Concept By: DOT Office: Urban Design			
<input checked="" type="checkbox"/> CONCEPT		Consultant: Parsons Brinckerhoff Quade & Douglas			
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 checked="" type="checkbox"/> Interchange <input type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input 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**

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-285-1 (352), DeKalb County
P.I. No. 713300
I-285/Bouldercrest Road Interchange Reconstruction

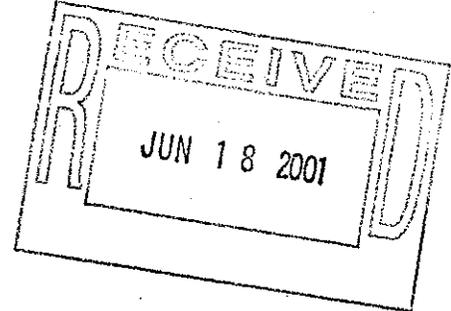
FROM 
Joseph P. Palladi, P.E., State Urban Design Engineer

TO Wayne Hutto, P.E., Assistant Director of Preconstruction

SUBJECT **Project Concept Report**

OFFICE Urban Design

DATE June 15, 2001



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

TLB
JPP:TLB
Attachments

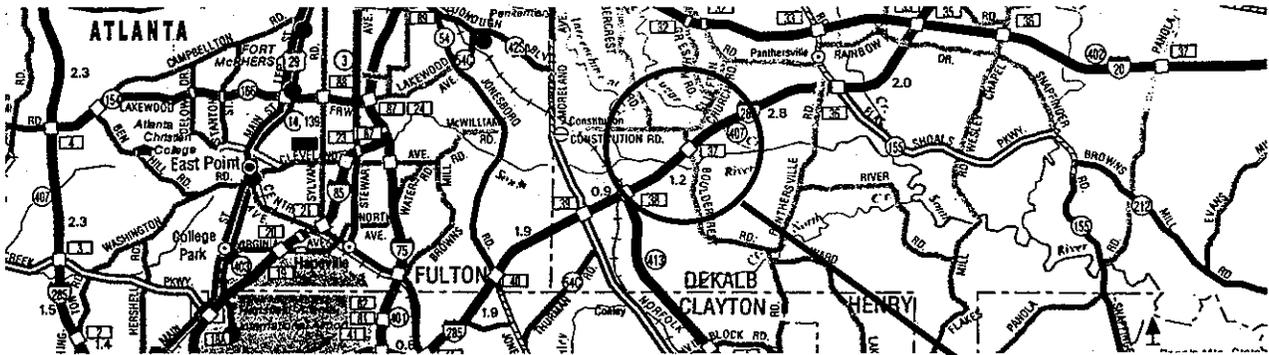
Distribution w/attachment:

David Mulling, P.E.
Harvey D. Keepler
Marion Waters, P.E.
Marta V. Rosen
Herman Griffin, P.E.
Steve Henry
Paul Liles, P.E.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF URBAN DESIGN**

PROJECT CONCEPT REPORT

Project Number: IM-NH-285-1 (352)
County: DeKalb
P. I. Number: 713300
U.S. Route Number: N/A
State Route Number: 407 (I-285), N/A (Bouldercrest Rd)



Project Description: I-285/Bouldercrest Road Interchange Reconstruction

Recommendation for approval:

DATE 6/15/01

Glen Bono
Project Manager

DATE 6/16/01

Joseph P. Allard
State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation-Engineering-Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

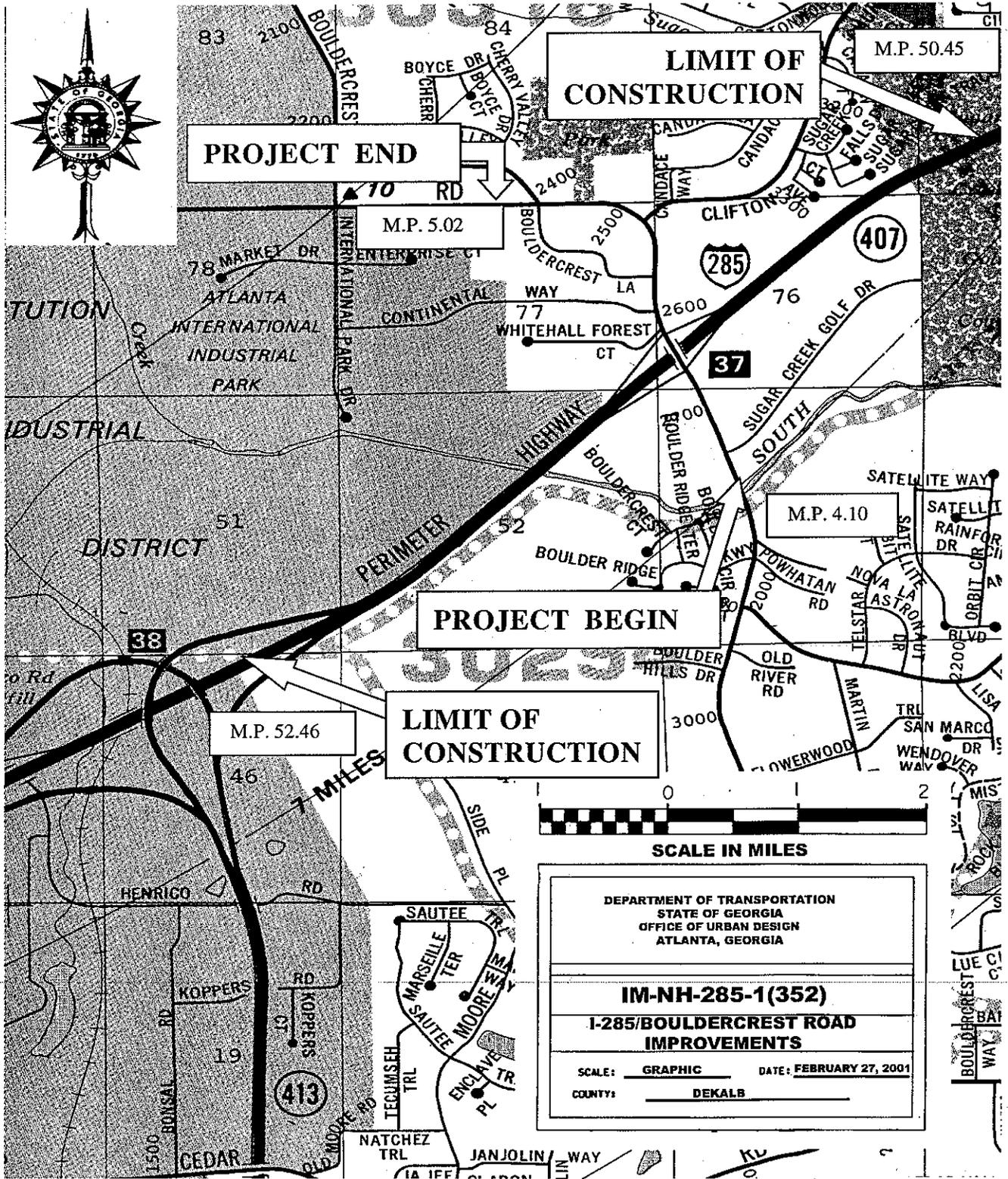
District Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer



PROJECT LOCATION MAP

Need and Purpose: The proposed project would reconstruct and rehabilitate the interchange at I-285 and Bouldercrest Road. The improvements should include left turn lanes from Bouldercrest Road onto the on ramps and auxiliary lanes approaching and leaving the off and on ramps. The existing interchange is incurring operational problems due to growth in traffic caused by commercial and residential development, tractor-trailer trucks, and turning and through work trips. The land use in the corridor is mainly made up of strip commercial and industrial parks. This project was first identified in year 1992 for improvement and approved by the S.H.I.P. committee in 1993 to go forward with submitting it through the planning process to have it placed in the Atlanta Regional Transportation Improvement Program.

The needs identified include high accident rates in the area, peak period traffic congestion, and poor operations including short weaving distances between the I-285/I-675 and I-285/Bouldercrest Road interchanges. Traffic on Bouldercrest Road north of I-285 is expected to be 32,250 vehicles per day in 2006, while traffic on I-285 approaching the interchange is expected to be 175,900 vehicles per day. By the year 2026, traffic on Bouldercrest Road north of I-285 is expected to be 58,450 vehicles per day and traffic on I-285 approaching the interchange is expected to be 268,900 vehicles per day. The project will promote energy conservation through efficient movement of traffic that would otherwise be idled or delayed without the interchange improvements.

The purpose of this project is to correct roadway deficiencies, improve traffic safety and operations, serve the transportation demand generated by the increase in through and turning traffic, and improve the safety of the roadway and interchange.

The project (DK AR 207) is included in the approved State Transportation Improvement Program (FY 2001-2003) and the Transportation Improvement Program (FY 2001-2003) of the adopted Atlanta Regional Transportation Plan (FY 2001-2025).

Description of the proposed project: This project provides for the reconstruction of the I-285/Bouldercrest Road interchange and includes braided ramps between the I-675/I-285 interchange and the I-285/Bouldercrest Road interchange. On Bouldercrest Road, the project extends north from just north of the South River (MP 4.10) to just west of the Bouldercrest Lane/Bouldercrest Road intersection (MP 5.02). On I-285, the project extends from the I-675 southbound exit ramp (MP 52.46) to just east of Sugar Creek (MP 50.45). See the attached Interchange Layout.

The reconstruction of the I-285/Bouldercrest Road interchange will require replacing the existing Bouldercrest Road bridge over I-285. Bouldercrest Road will be widened to provide for two 12-foot wide travel lanes in each direction between the I-285/Bouldercrest Road interchange and the Bouldercrest Road/Constitution Road intersection. South of the interchange, Bouldercrest Road will transition to two 12-foot wide travel lanes (one lane in each direction). A new connector road (Industrial Drive Connector) will be provided to connect Sugar Creek Golf Drive to Industrial Drive in order to allow for direct truck access to Industrial Drive from the median opening on Bouldercrest Road at Sugar Creek Golf Drive. Whitehall Forest Court will be relocated and its current intersection with Bouldercrest Road will be closed. A new connector road (Continental Way Connector) will be provided to connect Continental Way to Bouldercrest Road at the Bouldercrest Road/Constitution

Project Concept Report page 4
Project Number: IM-NH-285-1 (352)
P. I. Number: 713300
County: DeKalb

Road intersection in order to improve and facilitate local truck access. Whitehall Forest Court will intersect Continental Way across from Continental Way Connector. Turn lanes will be provided as required.

The existing traffic signals at the ramp intersections, the Clifton Church Road/Bouldercrest Road intersection and the Bouldercrest Road/Constitution Road intersection will be upgraded.

The termini for the Bouldercrest Road section of the project are determined as follows. The beginning of the project on the southern end is dictated by the safe taper rate to transition from a four-lane roadway to the existing two lanes. The project also overlaps and will be coordinated with project BRS LB-9092(1) that will replace the bridge over the South River. The northern end is dictated by the need for providing Continental Way Connector that will facilitate local truck access.

The terminus along I-285 to the west of the project is determined by the proposed braided ramp connections to the existing I-675 ramps which will eliminate weaving on I-285. The terminus along I-285 to the east is determined by the proposed lengthened entrance and exit ramps which will improve storage, signage, and acceleration/deceleration distances.

This concept will satisfy the project Need and Purpose by improving safety and traffic operations in the I-285 interchange area and serve the transportation demand generated by the increase in through and turning movements. Energy conservation would also be improved because of the more efficient movement of traffic.

The project length is 0.92 miles along Bouldercrest Road and 2.01 miles along I-285.

Is the project located in a Non-attainment area? Yes

This concept conforms to the current RTP model. The RTP model and the concept include four through lanes (two lanes in each direction) on Bouldercrest Road north of I-285 and the roadway width transitions to two travel lanes (one in each direction) south of I-285. The RTP model and this concept retain I-285 as eight travel lanes (four lanes in each direction).

PDP Classification: Major Project on Existing Location.

Project Designation: Full Oversight (X), Exempt (), State Funded (), or Other ()

Functional Classification: Minor Arterial Street (Bouldercrest Road/CR 5187) and Urban Interstate (I-285)

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

State Route Number(s): N/A (Bouldercrest Rd)
SR 407 (I-285)

Traffic (AADT):

Base Year:	(2006) 32,250 (Bouldercrest Rd)	175,900 (I-285)
Design Year:	(2026) 58,450 (Bouldercrest Rd)	268,900 (I-285)

Existing design features:

- Typical Section:
 1. Bouldercrest Road: Two 10-foot wide asphalt concrete pavement travel lanes (one lane in each direction) with 8-foot wide rural shoulders south of Industrial Drive. The existing bridge over I-285 provides for four 12-foot wide travel lanes (two in each direction), 12-foot wide left turn lanes, an 8-foot wide raised median and 5-foot wide sidewalks on both sides of the roadway. North of the I-285 bridge, four 12-foot wide asphalt pavement travel lanes (two lanes in each direction), urban shoulders, a 12-foot wide center left turn lane and 5-foot wide concrete sidewalks on both sides of the roadway are provided.
 2. I-285: Eight 12-foot wide concrete pavement travel lanes (four lanes in each direction) with asphalt concrete overlay. The eastbound and westbound travel lanes are separated by concrete median barrier and 6-foot 9-inch wide paved median shoulders. The outside shoulders are 12-foot wide (10-foot paved).
- Posted speed: 45mph (Bouldercrest Rd) & 55 mph (I-285)
- Maximum degree of curvature: 9.5 Degree (Bouldercrest Rd) & 1.5 Degree (I-285)
- Maximum grade: 4.5% (Bouldercrest Rd) & 2.4% (I-285)
- Width of right of way: 60-100 ft. (Bouldercrest Rd) & 300 ft. and variable (I-285)
- Major structures: Bouldercrest Rd. bridge over I-285 (249'x73') Structure ID: 089-0148-0
Sufficiency Rating 86.8
I-285 bridge over Sugar Creek (114'x137') Structure ID: 089-0100-0
Sufficiency Rating 76.2
I-285 bridge over Sugar Creek Overflow (114'x137')
Structure ID: 089-0101-0
Sufficiency Rating 76.2
- Major interchanges or intersections along the project: I-285/Bouldercrest Road interchange
- Existing length of roadway segment on Bouldercrest Road is approximately 0.91 mile. On I-285, the length of existing interchange is approximately 0.30 mile.

Proposed Design Features:

- Proposed typical section(s):
 1. North of the I-285 interchange to Constitution Road, Bouldercrest Road is proposed to provide four 12-foot wide travel lanes (two lanes in each direction), 12-foot wide urban shoulders, 5-foot wide sidewalks on both sides of the roadway and turn lanes as required. Four-foot wide bicycle lanes are proposed adjacent to the travel lanes along both sides of Bouldercrest Road. The section of Bouldercrest Road through the interchange area is identified in the "ARC 1995 Bike/Pedestrian Plan". The proposed roadway will transition to two lanes (one lane in each direction) approximately 1,450 feet south of the I-285/Bouldercrest Road interchange.
 2. Sugar Creek Golf Drive, Industrial Drive Connector, Whitehall Forest Court Extension, and Continental Way will have two 12-foot wide travel lanes (one lane in each direction)

- with 12-foot wide urban shoulders and 5-foot wide concrete sidewalks on both sides.
3. The new Continental Way Connector road will have four 12-foot wide lanes with 12-foot wide urban shoulders and 5-foot wide concrete sidewalks on both sides of the roadway
 4. The proposed ramps are variable width (16 to 48 feet wide) with 8-foot wide (6-foot paved) outside shoulders and 6-foot wide (4-foot paved) inside shoulders.
 - a) Ramp A: 16-foot wide lane, which will transition to dual left-turn lanes and dual right-turn lanes.
 - b) Ramp B: Two 12-foot wide lanes beginning at Bouldercrest Road, which will transition to a single 16-foot wide lane before merging onto eastbound I-285.
 - c) Ramp C: Two 12-foot wide lanes from the existing northbound I-675 ramp to Ramp D, a 16-foot wide lane from Ramp C continues and merges with Ramp E into three 12-foot wide lanes approaching Bouldercrest Road. Ramp C will then transition to dual left-turn lanes, and dual right-turn lanes.
 - d) Ramp D, Ramp E, Ramp G and Ramp H: Two 12-foot wide lanes.
 - e) Ramp F: Three 12-foot wide lanes from Bouldercrest Road west to Ramp H, a 16-foot wide lane from Ramp F to Ramp G and three 12-foot wide lanes beginning where Ramp G merges with Ramp F. Ramp F will then transition to two 12-foot wide lanes at the existing I-675 ramp to southbound I-675.
 5. The proposed bridges for the entrance and exit ramps are variable width (30 to 50 feet wide) that includes 8-foot wide outside shoulders and 6-foot wide inside shoulders.
 6. The Bouldercrest Road bridge over I-285 is proposed to have four 12 to 15-foot wide travel lanes (two lanes in each direction), four 12-foot wide turn lanes (two lanes in each direction), 6-foot wide sidewalks on both sides, and two 4-foot wide bicycle lanes (one in each direction). The 12-15 foot wide travel lanes are required to accommodate turning traffic from the double left-turn lanes provided at the off-ramp approaches from I-285 to Bouldercrest Road.

It is anticipated that improvements will be required on I-285 in order to accommodate future traffic demand including widening and HOV. The Bouldercrest Road bridge will be constructed so as not to preclude foreseeable future improvements to I-285 (see Comments Section.)

Bouldercrest Road

- Proposed Design Speed Mainline: 45 mph
 - Proposed Maximum grade Mainline: 4.5 % Maximum grade allowable: 9.0 %.
 - Proposed Maximum grade Side Street: 9.5 % Maximum grade allowable: 9.5 %.
 - Proposed Maximum grade driveway: 15 %
 - Proposed Maximum degree of curve: 9.5 deg Maximum degree allowable: 7.5 deg*
- *See Design Exceptions below

I-285 Ramps

- Proposed Design Speed Mainline: 55 mph
- Proposed Maximum grade Mainline: 2.4 % Maximum grade allowable: 4.0 %.
- Proposed Maximum degree of curve: 1.5 deg Maximum degree allowable: 4.75 deg
- Right of way
 - Width: 150-180 ft.(Bouldercrest Rd) & 300-1300 ft.(I-285)
 - Easements: Temporary (), Permanent (x), Utility (), Other ().

- Type of access control: Full (x)(I-285 & Ramps), Partial (),
 By Permit (x)(Bouldercrest Rd), Other ().
- Number of parcels: 35 Number of displacements:
 - Business: 3
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Structures:
 - Bridges:
 1. New Bouldercrest Road bridge over I-285 (230' long x 136' wide)
 2. Ramp C bridge over South River (195' long x 30' wide)
 3. Ramp D bridge over South River (195' long x 52' wide)
 4. Ramp E bridge over Ramp D (300' long x 38' wide)
 5. Ramp F bridge over South River (200' long x 30' wide)
 6. Ramp G bridge over South River (210' long x 52' wide)
 7. Ramp H bridge over Ramp G (300' long x 38' wide)
 8. Widen two existing I-285 bridges by approximately 10 feet at Sugar Creek Golf Course (1@114'long, 1@170'long)
 - Retaining walls: Approx. 1300' (Ramp B)- Possible wall alternates are gravity wall, cantilever wall and MSE wall.
- Major intersections and interchanges.
 1. I-285/Bouldercrest Road interchange
 2. Continental Way Connector/Bouldercrest Road intersection
 3. Clifton Church Road/Bouldercrest Road intersection
 4. Ramp A/Ramp F/Bouldercrest Road intersection
 5. Ramp B/Ramp C/Bouldercrest Road intersection
- Traffic control during construction: Existing number of travel lanes will be maintained during 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)

* Required to retain the existing 6'-9" inside shoulder on I-285. No improvements are proposed to mainline I-285 as a part of this project.
 ** Required to maintain the existing 9.5 degree horizontal curve on Bouldercrest Road with a maximum superelevation rate of 4%.

- Design Variances: A Design Variance is required for the spacing between the median openings at the I-285/Bouldercrest Road ramp termini. The spacing between the median openings will be approximately 470 ft.
- Environmental concerns:
 1. USCOE 404 permit is anticipated.
 2. There are no known historic or archaeological sites within the limits of the project.
 3. Water quality will be addressed in the Erosion and Sediment Control Plans.
 4. Underground storage tanks are located at the following locations:
 - a) Chevron gas station is located in the SW quadrant of the interchange.
 - b) Vacant unnamed gas station located in the SE quadrant of the I-285/Bouldercrest Road Interchange.
 - c) Pilot/Wendy's convenience store is located in the NW quadrant of the interchange.
 - d) Car & Truck Tire Service is located in the NE quadrant of the interchange.
 - e) Amoco station is located at the Bouldercrest Road/Clifton Church Road intersection.
 - f) RMDS Distribution located in the SE quadrant of the interchange.
 5. Hazardous Sites: In addition to the above listed facilities, the following facilities may store diesel fuels, waste oil, and/or other hazardous substances, and may also use chemicals, cleaners, and/or other hazardous materials.
 - a) DeKalb Inn is located in the NE quadrant of the I-285/Bouldercrest Interchange. This facility may have USTs to fuel emergency generators.
 - b) Bouldercrest Cleaners is located near the Bouldercrest Road/Clifton Church intersection.
 6. The DeKalb County Parks and Recreation Department has advised of two park properties located within the limits of the project. Gresham Park, located on the north side of Bouldercrest Road west of Clifton Springs Road and Sugar Creek Golf and Tennis Center located along Sugar Creek Golf Drive. Section 4f applicability will need to be thoroughly investigated during the course of Environmental Analysis.
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (), No (x),
 - Categorical exclusion (x),
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS) ().
- Utility involvement: BellSouth Telecommunications, Atlanta Gas Light Company, Georgia Power company, Dekalb County Water and Sewer, and MediaOne of Colorado, Inc. A LGPA was requested 10-7-99. A signed LGPA has not yet been received.

Project responsibilities:

- Design, Office of Consultant Design
- Right of Way Acquisition, Right of Way Office
- Relocation of Utilities, Utility Owners/DeKalb County
- Letting to contract, Contracts Administration Office
- Supervision of construction, Construction Office
- Providing material pits, Office of Materials and Research

- Providing Detours, N/A

Coordination

- A Concept meeting was held September 19, 2000. See attached minutes.
- P. A. R. is not anticipated for this project.
- FEMA – No-Rise certifications are anticipated.
- Public involvement: Public Information Meeting was held March 27, 2001. See attached summary of comments received.
- Local government comments: See attached concept team meeting minutes.
- Other projects in the area.
 - P.I. No. 713310, IM-NH-285-1 (345) Fulton/Clayton Counties, I-285 @ Jonesboro Road
 - P.I. No. 713290, IM-NH-285-1 (354), Dekalb County, I-285 @ Flat Shoals Road
 - P.I. No. 752930, BRSLB-9092 (1), Dekalb County, Bouldercrest Road @ South River
 - P.I. No. 713373, CM-285-1 (379), Clayton/Dekalb Co., ATMS/I-285 from I-75 SE to I-20
 - P.I. No. 714095, CM-675-1 (1), Clayton/Dekalb Counties, ATMS/I-675 from I-75 to I-285
- Other coordination to date:
 1. Meeting held with Whitehall Forest Court Homeowners Group. Due to their input, the concept was revised to relocate the complex entrance to the rear of the subdivision to intersect at Continental Way across from the proposed Continental Way Connector. See attached meeting notes.
 2. Meeting held with Bouldercrest Business Group. See attached meeting notes.

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 12 Months.
- Time to complete preliminary construction plans: 9 Months.
- Time to complete right of way plans: 2 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.

Other alternates considered:

- A. The Partial Cloverleaf Interchange with Braided Ramps alternative would consist of reconstructing the existing Bouldercrest Road interchange. The reconstruction would include:
1. Realignment of Bouldercrest Road through the interchange and construction of a new bridge over I-285. This would improve the alignment, facilitate stage construction and reduce traffic control problems.
 2. Exit ramps and entrance loop ramps would be provided in the southwest and northeast quadrants.
 3. Braided ramps would be provided along the north and south sides of I-285 between I-675 and Bouldercrest Road.

The Partial Cloverleaf Interchange with Braided Ramps alternative is not recommended because it would require more business displacements and right of way cost would be higher.

B. The Compressed Diamond Interchange with Elongated and Nested Ramps alternative would consist of reconstruction of the existing Bouldercrest Road interchange. The reconstruction would include:

1. Elongated entrance and exit ramps would be provided between I-285 and I-675 east of Bouldercrest Road.
2. Nested ramps (exit and entrance from I-285 to Bouldercrest Road) would be provided.
3. Bouldercrest Road would be widened to provide three (3) travel lanes in each direction.
4. The Bouldercrest Road Bridge over I-285 would be replaced.
5. New bridges would be required over the South River and for the elongated ramps under Bouldercrest Road.

The Compressed Diamond Interchange with Elongated and Nested Ramps alternative is not recommended because the interchange configuration would not meet driver expectations as well as either of the other alternatives. The compact interchange layout would limit future expandability and the three travel lanes in each direction on Bouldercrest Road would not match that which is contained in the RTP.

C. The No Build alternate was rejected because the existing interchange is already operating at a poor level of service and will not accommodate future traffic volumes.

In order to determine a recommended interchange configuration, an Interchange Evaluation Matrix was prepared and is attached. The attached Interchange Layout shows preference for the recommended compressed diamond interchange with braided ramps.

Comments:

The traffic study for this project, based on the capacity analysis and CORSIM simulation modeling, indicates that the traffic movements for the existing Bouldercrest Road/ I-285 Interchange and I-285 weaving section between I-675 and Bouldercrest Road will provide unacceptable levels of service for the 2006 design year traffic. Based on the traffic analysis, the proposed design will provide for adequate LOS in the design year 2026 at the ramp termini, along Bouldercrest Road, and the weave section between I-675 and Bouldercrest Road. Storage queues should not spill back onto I-285 if the preferred alternative is implemented as conceived.

However, I-285 operations are expected to deteriorate and become unacceptable by 2016 due to inadequate capacity on I-285. The recommended future improvements for I-285 include:

- 1) Widening I-285 to 10 travel lanes (5 lanes in each direction)
- 2) 2 HOV lanes (one lane in each direction)

These future improvements to I-285 are not precluded by the proposed design, and they are not a part of this concept and not included in the cost estimate.

By copy of the approved Concept Report, the office of Planning is requested to take the necessary steps to include the above I-285 improvements in the Regional Transportation Plan for implementation prior to 2016.

Attachments: Cost Estimates; Sketch location map; Typical sections; Accident summaries; Capacity analysis and traffic diagrams; Bridge inventory; Minutes of Concept Team Meetings; Minutes of other significant meetings; Conforming plan's network schematics showing thru lanes; Traffic Diagrams; Evaluation Matrix

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: IM-NH-285-1(352)

COUNTY: DEKALB

DATE: February 27, 2001

ESTIMATED LETTING DATE: LR

PREPARED BY: Parsons Brinckerhoff

PROJECT LENGTH: 0.92 Mile

()PROGRAMMING PROCESS (X)CONCEPT DEVELOPMENT ()DURING PROJECT DEV.

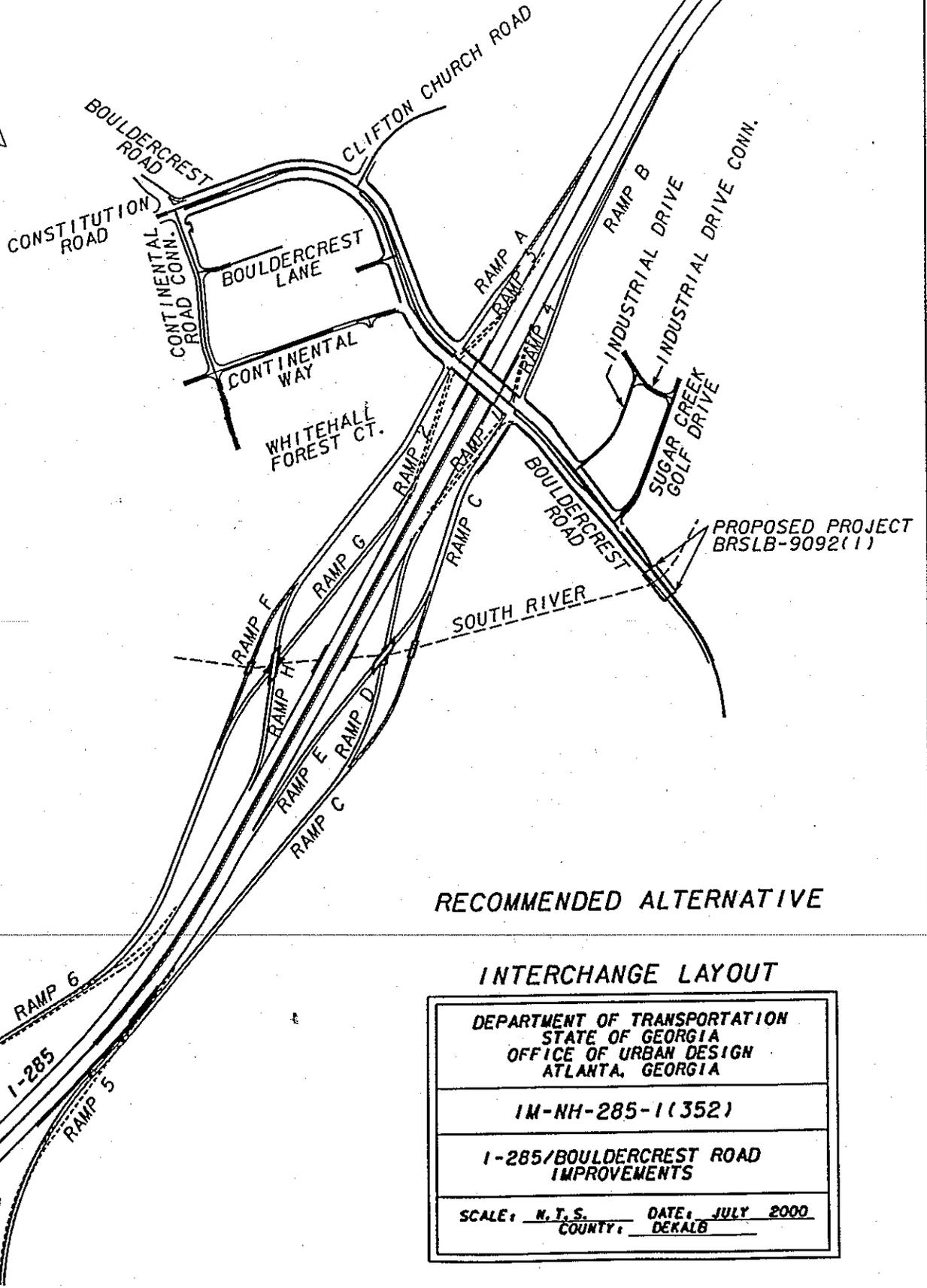
PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (LAND & EASEMENT)	\$ 4,720,000
2. SITE IMPROVEMENTS & CONSEQUENTIAL DAMAGES	\$ 1,466,000
3. OTHER COST (ADM./COST, INFLATION)	\$ 3,711,000
SUBTOTAL:A	\$ 9,897,000
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	\$
2. TRANSMISSION LINES Ga. Power (Distribution)	\$ 25,000
3. Non-reimbursable utilities (For information only) \$216,000	\$
SUBTOTAL:B	\$ 25,000
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	
a. Ramp Bridges 56850 SF @ \$65/SF (Ramps C, D, E, F, G & H)	\$ 3,695,250
b. Bouldercrest Rd Bridge (230' long x 136' wide) over I-285 31280 SF @ \$65/SF	\$ 2,033,200
c. Widen two I-285 Bridges at Sugar Creek Golf Course	\$ 134,225
b. OTHER	
SUBTOTAL:C-1	\$ 5,862,675
2. GRADING AND DRAINAGE:	
a. EARTHWORK- Braided Ramps 80,000 CY Uncl Exc @\$5.00 Interchange 30,000 CY Uncl Exc @\$5.00	\$ 550,000
b. DRAINAGE:	
1) Curb and Gutter- 19,500 LF @ \$10/LF	\$ 195,000

PROJECT COST		
2) Longitudinal System (incl catch basins) CB's 40 ea. @ \$1600 ea., 5500 LF 15" Pipe @ \$28/LF, 500 LF 18" Pipe @ \$ 29/LF, 300 LF 24" Pipe @ \$35/LF		\$ 243,000
SUBTOTAL:C-2		\$ 988,000
3. BASE AND PAVING:		
a. AGGREGATE BASE-Ramps 82740 TN @\$18/TN, Bouldercrest Rd 23342 TN @\$18/TN		\$ 1,909,476
b. ASPHALT PAVING: Surface-4872 TN. @\$35/TN Bit. Tack Coat 4500 gal \$1/gal		\$ 175,020
Binder—6495 TN-@\$35/TN		\$ 227,325
Base—Bouldercrest Rd 12138 TN @\$38/TN, Ramps 35850 @ \$38/TN		\$ 1,823,544
SUBTOTAL:C-3.b		\$ 2,225,889
c. CONCRETE PAVING- Ramps 122540 SY @ \$21/SY		\$2,573,340
OTHER- Dr'way Valley Gutter 600 SY @\$38, Sidewalk 6090 SY @ \$23, Retaining Wall 13000 SF @ \$30, Appr. Slabs 2435 SF @\$90/SF		\$ 778,020
SUBTOTAL:C-3.c		\$ 3,351,360
4. LUMP ITEMS:		
a. GRASSING- 40 Acs @ \$1000/Acs		\$ 40,000
b. CLEARING AND GRUBBING		\$ 500,000
c. LANDSCAPING		\$
d. EROSION CONTROL		\$ 500,000
e. TRAFFIC CONTROL		\$ 250,000
SUBTOTAL:C-4		\$ 1,290,000
5. MISCELLANEOUS:		
a. LIGHTING		\$
b. SIGNING - MARKING \$100,000 Signals 4 @\$75000		\$ 400,000
c. GUARDRAIL - 12300 LF @\$11/LF, Type 12 Anch 15 each @\$1700 ea,		\$ 167,550

PROJECT COST	
Type 1 Anch. 15 each @\$450 each	
SUBTOTAL:C-5	\$ 567,550
4. SPECIAL FEATURES- Field Engineers Office Type 3 \$64000 Remove Existing Bridge \$80000	\$ 144,000
SUBTOTAL:C-6	\$ 144,000

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	\$ 9,897,000	
B. REIMBURSABLE UTILITIES	\$ 25,000	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$ 5,862,675	
2. GRADING AND DRAINAGE	\$ 988,000	
3. BASE AND PAVING	\$ 7,486,725	
4. LUMP ITEMS	\$ 1,290,000	
5. MISCELLANEOUS	\$ 567,550	
6. SPECIAL FEATURES	\$ 144,000	
SUBTOTAL CONSTRUCTION COST	\$16,338,950	
E. & C. (10%)	\$ 1,633,895	
INFLATION (5% PER YEAR)	\$ 1,797,285	
NUMBER OF YEARS	2	
TOTAL CONSTRUCTION COST		\$ 19,770,130
GRAND TOTAL PROJECT COST		\$ 29,692,130

PROJECT MAP-Project No. :IM-NH-285-1(352)



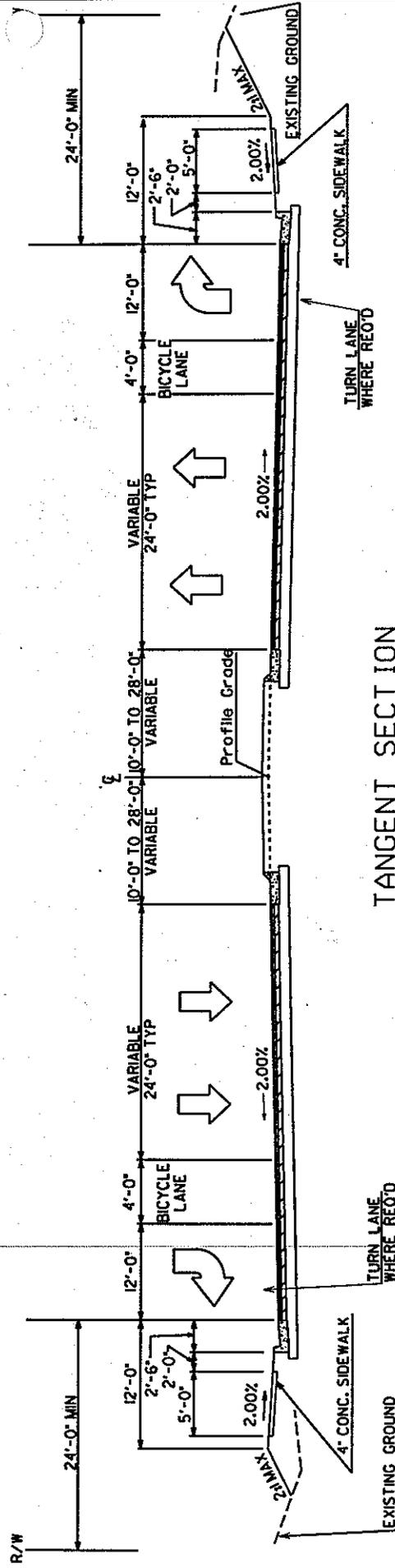
RECOMMENDED ALTERNATIVE

INTERCHANGE LAYOUT

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA OFFICE OF URBAN DESIGN ATLANTA, GEORGIA	
IM-NH-285-1(352)	
I-285/BOULDERCREST ROAD IMPROVEMENTS	
SCALE: N.T.S.	DATE: JULY 2000
COUNTY: DEKALB	

STATE	PROJECT NUMBER	DATE
GA.	14-M-285-11352	

TYPICAL SECTION NO. 1

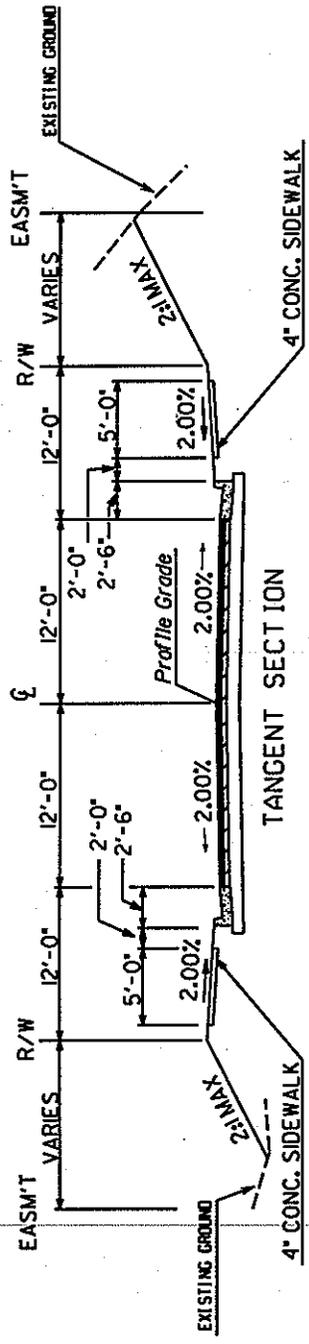


TANGENT SECTION BOULDERCREST ROAD

NOT TO SCALE

STATE	PROJECT NUMBER	DATE	BY	CHECKED
GA.	IM-NH-285-1(352)			

TYPICAL SECTION NO. 2

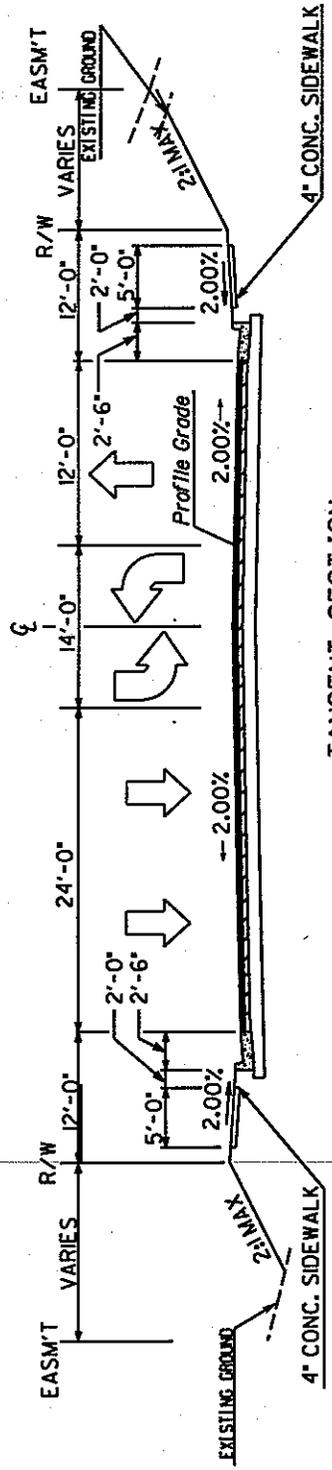


CONTINENTAL WAY •
 WHITEHALL FOREST COURT
 INDUSTRIAL DRIVE CONNECTOR
 SUGAR CREEK GOLF DRIVE

• CONTINENTAL WAY IS TURN LANES AND MEDIAN WHERE REQ'D

** CONTINENTAL WAY CONNECTOR IS 2 12 FOOT SOUTHBOUND, 1 LANE NORTHBOUND WITH A 14 FOOT FLUSH CENTER TURN LANE

TYPICAL SECTION NO. 3

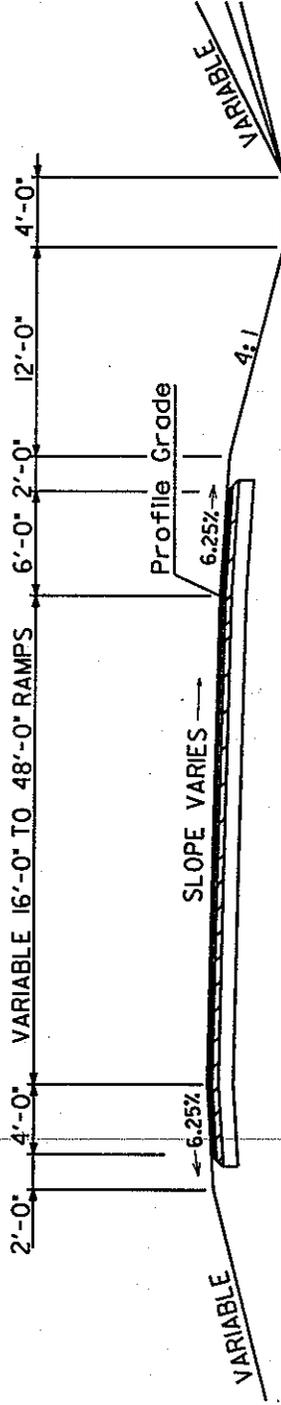


TANGENT SECTION
 CONTINENTAL WAY CONNECTOR ••
 NORTH OF BOULDERCREST LANE, CONNECTOR
 IS 2 SOUTHBOUND THRU LANES, CENTER LEFT TURN
 LANE WITH 4' RAISED MEDIAN, 1 NORTHBOUND THRU LANE, ONE
 NORTHBOUND RIGHT TURN LANE

NOT TO SCALE

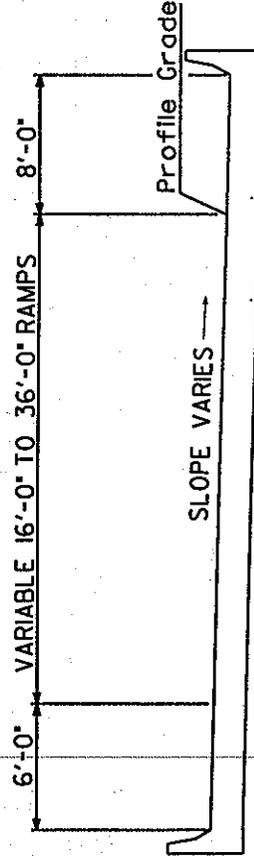
STATE	PROJECT NUMBER	SHEET NUMBER
GA.	14-MT-285-11.352	11

TYPICAL SECTION NO. 4



TANGENT SECTION
ENTRANCE & EXIT RAMPS

TYPICAL SECTION NO. 5

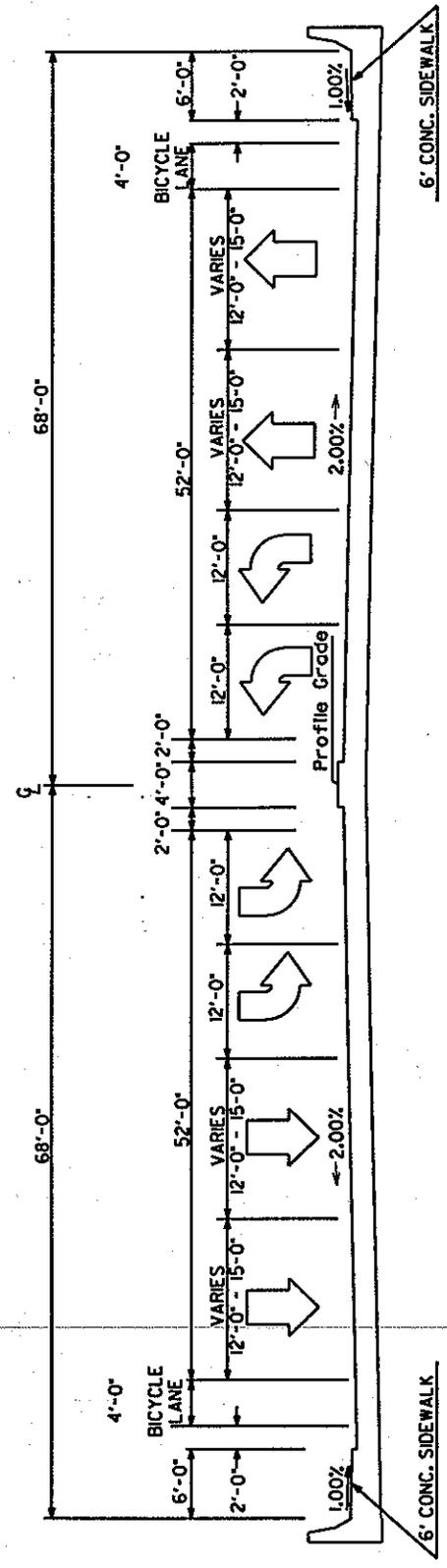


TANGENT SECTION
BRIDGES FOR ENTRANCE & EXIT RAMPS

NOT TO SCALE

STATE	PROJECT NUMBER	DRAWING NO.
GA.	I-75-285-1.352	1

TYPICAL SECTION NO. 6



TANGENT SECTION
BOULDERCREST ROAD
BRIDGE OVER I-285

NOT TO SCALE

ACCIDENT HISTORY ANALYSIS DATA (1995-1997)

The accident analysis indicates that this section of roadway experiences accident rates that are approximately two times higher than the statewide averages for similar roadways.

	1995	1996	1997
Total Accidents	54	69	52
Total Injuries	31	35	51
Total Fatalities	0	0	0
Accident Rate	889	1145	1025
Injury Rate	510	581	1005
Fatality Rate	0	0	0
Statewide Accident Rate	549	525	549
Statewide Injury Rate	263	246	249
Statewide Fatality Rate	1.39	1.56	1.41

* Note: Based on Rates for Urban Minor Arterial. Rates are Per 100 Million Vehicle Miles.

*Supplementary Traffic Analysis of Improvements in Compliance with
Lane Configurations used for Air Quality Conformity Modeling
I-285 Bouldercrest Road Traffic Interchange*

DeKalb County, Georgia

Revised 3-9-2001

Introduction

The purpose of this traffic analysis report is to supplement a previous traffic analysis report for the I-285 / Bouldercrest Road interchange in DeKalb County, Georgia for the Georgia Department of Transportation (GDOT). The previous report was prepared for GDOT by Parsons Brinckerhoff (PB) on July 27, 2000. The previous analysis validated the traffic operations performance of a diamond interchange with 3 lanes in each direction on Bouldercrest Road with a raised median and turn lanes as required. Braided ramps were proposed between I-675 and the Bouldercrest Road interchange. This concept is referred to as the *six-lane concept*.

This report documents the results of a traffic operations analysis that investigates the consequences of reducing the number of through lanes on the preferred concept such that the number of through lanes matches the number assumed by the Atlanta Regional Commission (ARC) for purposes of air quality conformity modeling. According to the ARC regional travel demand model, Bouldercrest Road would have two lanes in each direction through and north of the interchange, and one lane in each direction south of the interchange. This concept is referred to as the *four-lane concept*.

The objective of this study is to determine whether the four-lane concept will function at Level of Service (LOS) D or better during both peak hours in the year 2026. If not, the study is to determine when various elements of the study area roadway network will fail (operate at LOS F). In the process of determining which elements are to fail, traffic signal timing and operational strategies should attempt to achieve the following goals in order of most important to least important:

1. Prevent spillback of Bouldercrest Interchange congestion onto the mainline of I-285 or the directional ramps to I-675.
2. Prevent congestion among the signalized intersections of the interchange, especially if such congestion results in operational problems on the freeway.
3. Prevent congestion for through traffic along Bouldercrest Road within the study area.
4. Prevent side-street congestion (or excessive delay).

Modifications to the Six-Lane Design Concept

The table below summarizes the change in the number of through lanes on each study area roadway segment between the six-lane concept and the four-lane concept. Note that the Bouldercrest Road bridge over I-285 is modeled with four through lanes.

**Comparison of Through Lanes by Roadway Segment
Six-Lane versus Four-Lane Concept**

Roadway Segment	Through Lanes – Six-lane Concept	Through Lanes- Four-lane Concept
Bouldercrest Road		
North of Constitution Rd.	4	2
Constitution Rd to I-285 EB Ramps	6	4
South of I-285 EB Ramps	4	2
Clifton Church Road	4	2
Constitution Road	4	4

The line diagram in the appendix illustrates the lane configurations for the four-lane concept. The appendix also shows not-to-scale illustrations of lane configurations for intersections along Bouldercrest Road that conform to the ARC model. These configurations were used to model the traffic operations implications of the four-lane concept.

Traffic Forecasts

The traffic forecasts for year 2026 conditions were developed by the PB/G&O team and approved by GDOT. No changes were made to the design hour volumes for purposes of analyzing the four-lane concept. A peak hour factor of 0.92 was applied to the design hour volumes for purposes of traffic analysis and simulation modeling. Appendix A contains diagrams illustrating the traffic forecasts for the opening year (2006) and the design year (2026).

Methods and Assumptions

The four-lane concept was analyzed using different sketch planning, analysis and simulation methods. FHWA's CORSIM traffic microsimulation model was used to assess delay and level of service among intersections along Bouldercrest Road. These intersections were also analyzed using the *Highway Capacity Manual* Signalized Intersection Planning Method. This method enables a systematic comparison of the critical volume to capacity ratios at signalized intersections to determine how the reduction in the number of traffic lanes will affect intersection capacity. Since this study only investigates changes to Bouldercrest Road and other minor connecting roads and ramps, conclusions regarding operations on I-285 and I-675 are not reported here, but are the same as those presented in the previous study. Appendix B contains illustrations of intersection geometry and lane configurations for the entire project. A cross section concept for the Bouldercrest Road bridge deck over I-285 is also included. The measures of performance and level of service thresholds for different roadway elements were based on current HCM guidelines. These guidelines are summarized in the table below:

**Measures of Performance and Level of Service Thresholds
for Different Roadway Elements**

Roadway Element	Measure of Performance	LOS A	LOS B	LOS C	LOS D	LOS E	LOS F
Signalized Intersections	Total Control Delay (seconds per vehicle)	<=10	20	35	50	80	>80
Unsignalized Intersections	Total Control Delay (seconds per vehicle)	<=10	15	25	35	50	>50
Basic Freeway Segments	Density (pass. cars per mile per lane)	<=10	16	24	32	46	>46
Ramps and Weaving	Density (pass. cars per mile per lane)	<=10	20	28	35	43	>43
Ramp Roadways and CD Roads	Density (pass. cars per mile per lane)	<=12	24	32	36	40	>40

The following traffic parameter assumptions were applied in the analysis:

- Peak Hour Factor – 0.92
- Percentage of Trucks –5% on Bouldercrest Road and Constitution Road; 20% on Continental Way and Industrial Drive; 2% on Clifton Church Road; 0% on Sugar Creek Golf Course Drive and Bouldercrest Lane.
- Traffic Signal Cycle Length – 90 seconds
- Free Flow Speeds – 50-60 mph on ramps (depending on curvature, lanes and proximity to at-grade intersections), 45 mph on principal roadways, 30 mph on collector roadways and driveways.
- Lane Capacity – Default values for CORSIM traffic simulation. 1,900 passenger cars per hour of green time for signalized intersection capacity analysis based on HCM procedures.

The diamond interchange phasing consisted of three basic phases. The first phase unloads both off ramps. The second accommodates through movements on Bouldercrest Road while loading left turn bays on the bridge deck. The final phase serves left turns from the bridge deck to the freeway on ramps using a protected lagging left turn phase with appropriate overlaps. Several overlapped phases were included in the interchange timing plan to better accommodate the heavy left turn flows on or off the freeway ramps.

Traffic Analysis Results

The following page contains a table summarizing the average delay and level of service of each signalized and unsignalized intersection approach along Bouldercrest Road. For each signalized intersection, the intersection delay, level of service and critical volume to capacity ratio are shown. The analysis results present a comparison between the six-lane concept and the four-lane concept.

Bouldercrest Road Signalized and Unsignalized Intersection Operations - I-285 to Clifton Church Road Year 2026 GDOT Design Hour Volumes

	AM Peak Hour				PM Peak Hour					
	Delay and Level of Service				Delay and Level of Service					
	4-Lane Bouldercrest Delay	LOS	V/C	6-Lane Bouldercrest Delay	LOS	V/C	4-Lane Bouldercrest Delay	LOS	6-Lane Bouldercrest Delay	V/C
<u>Bouldercrest Road at Clifton Church Road (Signalized)</u>										
Northbound	27.3	C	-	20.2	C	-	40.0	D	23.8	C
Southbound	17.3	B	-	16.9	B	-	16.6	B	16.1	B
Westbound	33.8	C	-	24.5	C	-	43.0	D	24.7	C
Total	25.0	C	0.90	19.9	B	0.84	33.1	C	21.5	C
<u>Bouldercrest Road at Continental Way (One Way Stop - Eastbound)</u>										
Eastbound	15.2	C	-	12.6	B	-	34.9	D	17.5	C
<u>Bouldercrest Road at I-285 Westbound Ramps (Signalized)</u>										
Northbound	13.5	B	-	10.4	B	-	18.7	B	9.6	A
Southbound	18.4	B	-	19.1	B	-	14.4	B	15.0	B
Westbound	40.0	D	-	40.7	D	-	36.7	D	36.3	D
Total	19.6	B	0.96	18.3	B	0.89	19.1	B	15.4	B
<u>Bouldercrest Road at I-285 Eastbound Ramps (Signalized)</u>										
Northbound	26.0	C	-	29.3	C	-	25.8	C	22.7	C
Southbound	30.0	C	-	22.0	C	-	25.0	C	22.3	C
Eastbound	54.0	E	-	45.5	D	-	28.0	C	39.3	D
Total	35.2	D	0.89	32.1	C	0.81	26.4	C	29.2	C
<u>Bouldercrest Road at Industrial Drive (One Way Stop - Westbound)</u>										
Westbound	49.2	E	-	4.1	A	-	7.5	A	5.0	A
<u>Bouldercrest Road at Sugar Creek Golf Drive (One Way Stop - Westbound)</u>										
Westbound	26.9	D	-	30.3	D	-	34.1	D	42.4	E

V/C - Volume to Capacity Ratio Cycle Length - 90 seconds LOS - Level of Service PHF - 0.92 Delay - Seconds per Vehicle

Delay and Level of Service based on CORSIM microsimulation of traffic operations.
Intersection V/C ratio based on Highway Capacity Manual Signalized Intersection Planning Methodology.

The traffic analysis results basically conclude that the four-lane concept will barely accommodate design hour traffic flows at LOS D or better in the year 2026. This result is counter-intuitive relative to common experience. Bouldercrest Road is expected to carry nearly 60,000 vehicles per day in 2026. Based on transportation planning guidelines, six lanes are required on a signalized arterial carrying volumes over 45,000 vehicles per day. The reasons this section of Bouldercrest Road can function with four lanes are as follows:

- All three signalized intersections in the study area operate with three fundamental signal phases, whereas the typical signalized major street is expected to provide four fundamental phases at intersections with major cross streets. In the case of the Clifton Church intersection, the tee configuration eliminates the need for a side street through phase. In the case of the I-285 ramp intersections, the grade separation eliminates the I-285 through movement. Fewer signal phases allow for a larger allocation of green time to the primary through movements.
- The portion of traffic turning on and off of the I-285 ramps is large compared to the total traffic traveling through the interchange on Bouldercrest Road. This increases the relative effectiveness of the turn channelization enhancements included in the interchange design concept (left and right turn bays, additional ramp turn lanes and advanced left turn storage lanes). In some cases the turn movements at intersections along Bouldercrest Road are higher than the through movements.

Despite the apparent success of the four-lane concept, average delays at signalized intersections are up to 12 seconds per vehicle higher. Also, the intersection volume-to-capacity ratios under the six-lane concept are 0.89 or less. With the four-lane concept, intersection v/c ratios are as high as 0.98 at Clifton Church Road, and 0.96 at the I-285 westbound ramp intersection. This indicates that these intersections may begin to experience peak hour operational problems within a few years after the design year. Delays will grow significantly as volumes exceed capacity, and the lack of reserve capacity will significantly reduce the ability to accommodate day-to-day fluctuations in demand.

Even though it was possible to address operational problems at the signalized intersections along Bouldercrest Road, other operational problems were noted during traffic simulation modeling efforts. Noted operational problems on the four-lane Bouldercrest concept are as follows:

- Platoons of vehicles on southbound Bouldercrest Road leaving the signalized intersection at the eastbound I-285 ramps form a queue at the point where the number of through lanes drops from two to one. This queue occasionally backs through the intersection for short periods of time, but tends to dissipate after each signal cycle.
- Platoons of vehicles departing the intersection of Clifton Church Road and Bouldercrest Road in the eastbound direction encounter similar delays where two lanes drop to one. The two-lane segment is necessary to accommodate turns from

the southbound double left turn lanes on Bouldercrest Road. However, this queue rarely backs up into the intersection, and dissipates quickly.

- Delays on unsignalized side streets in the four-lane concept generally grow worse wherever side street turning movements are dominated by right turns. This is due to the reduction in usable right turn gaps caused by reducing the number of through lanes.
- Unsignalized intersection approach delays for the four-lane Bouldercrest alternative are often slightly better wherever there is significant left turning traffic from the side street. This is because it is easier to find an acceptable left turn gap across fewer conflicting through lanes. However, very little traffic is affected by these delays, and peak hour delays remain at LOS E or better for the stop sign-controlled approach at Sugar Creek Golf Drive and Bouldercrest Road.

Recommendations

The project to reconstruct the Bouldercrest interchange could be advanced using the four-lane concept without exceeding the capacity of the roadway in the design year. The four-lane concept will provide LOS D or better at signalized intersections. However, the signalized intersections along Bouldercrest Road will be operating near capacity in the design year, and there will be operational problems along roadway segments where four-lane roadways converge to two lanes.

Despite the apparent need for additional improvements along Bouldercrest Road within a few years after the design year, it would be prudent to move forward with the four-lane concept so that more-critical operational improvements along I-285 can be expedited. Therefore, the four-lane concept, which conforms to the current ARC long range plan, is recommended.

In the event that improvements along Bouldercrest cannot be implemented soon after 2026, limited opportunities will exist for increasing capacity among Bouldercrest Road intersections using the following systems management strategies:

- If the signalized intersection cycle length is increased from 90 seconds to a practical maximum of 120 seconds, intersection capacity can be increased by about 5 percent. Though this strategy may help mitigate saturation delays (major delays that occur when traffic demand exceeds roadway capacity), longer uniform delays (smaller delays caused by the length of “red light” time on any given intersection approach) can be expected to occur.
- If the patterns of traffic demand during the peak hour are spread such that the intersections are carrying more-uniform traffic flows, additional traffic can be accommodated. These traffic *throughput** benefits are commonly achieved through congested-corridor signal timing strategies for balancing the capacity

* “throughput” refers to the practice of maximizing the use of available roadway capacity using traffic management strategies to improve roadway utilization over levels commonly achieved without traffic management.

continuity along a corridor. Reducing the peak hour factor from 0.92 to 0.96 increases intersection throughput by over 4 percent. If the peak hour factor approaches 1.00, throughput can increase up to 9 percent. However, moderate levels of congestion will be experienced along the corridor as traffic flows fluctuate from day-to-day and month-to-month.

Furthermore, segments of Bouldercrest Road north and south of the I-285 interchange could be widened beyond 2026 without overwhelming the interchange. This is possible since two-thirds of the traffic entering and exiting the interchange turn to or from the I-285 ramps. These volumes are accommodated by the turn channelization enhancements that are still incorporated into the four-lane concept.

For purposes of construction staging, the new Bouldercrest Road overpass over I-285 should be able to accommodate five traffic lanes on the eastern half of the bridge. This will enable interim traffic relief at this congested interchange by matching the number of lanes on the bridge with the current cross section of Bouldercrest Road north of I-285 while construction continues on the other half of the bridge. Five 12-foot lanes with a temporary barrier buffer of 4 feet will allow for two through lanes in each direction and a back-to-back left turn storage lane.

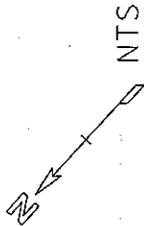
The ultimate use of this bridge width would consist of two 12-foot left turn lanes, two through lanes with a width varying from 12 to 15 feet, a 4-foot bike lane and a 2-foot separation buffer between the bike lane and the sidewalk. The variable width of the through lanes is required to accommodate turning trucks from the double left turn lanes provided at the off ramp approaches from I-285 to the Bouldercrest Road bridge deck. Lane widths will transition from 15 to 12 feet using striped tapers. Truck activity in the area is already significant, and there is still a considerable amount of undeveloped land around the interchange zoned for light industrial and warehouse uses. The Appendix includes an illustration of the ultimate cross section of the bridge deck, including medians, sidewalks and shoulders.

Appendix A

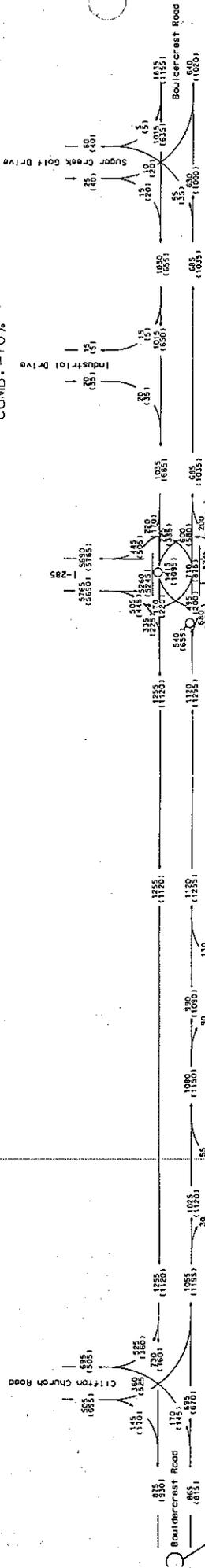
**Traffic Volume Forecasts – Opening Year (2006) and Design Year (2026)
I-285 / Bouldercrest Road Interchange**

Appendix B

Lane Configurations and Cross Sections of the Four-lane Bouldercrest Concept

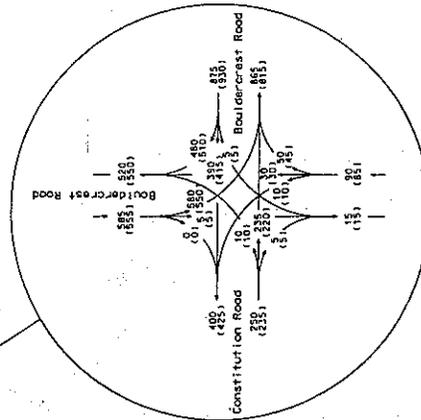


Industrial Drive
 2006 AM DHV=000
 2006 PM DHV=(000)
 T=10%
 24 HR. T=14%
 S.U.=4%
 COMB.=10%

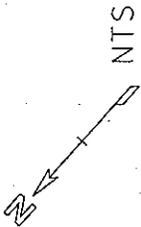


Continental Way
 2006 AM DHV=000
 2006 PM DHV=(000)
 T=20%
 24 HR. T=30%
 S.U.=10%
 COMB.=20%

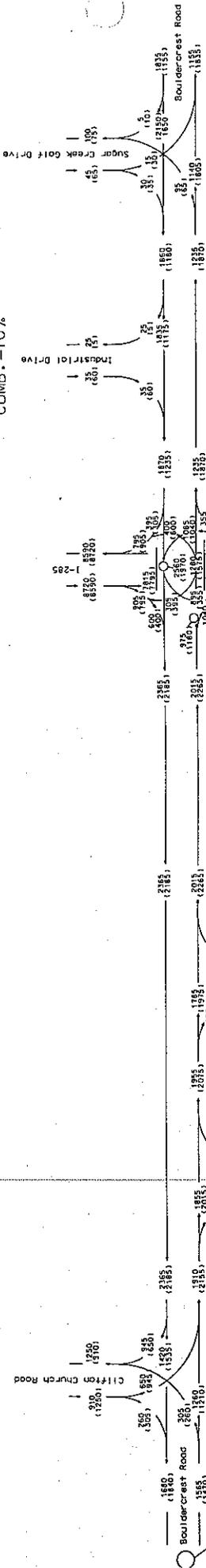
I-285
 2006 AM DHV=000
 2006 PM DHV=(000)
 T=10%
 24 HR. T=14%
 S.U.=4%
 COMB.=10%



I-285 at
 Bouldercrest Road
 Interchange
 IM-NH-285-1 (352)
 P.I.# 713300
 Dekalb County

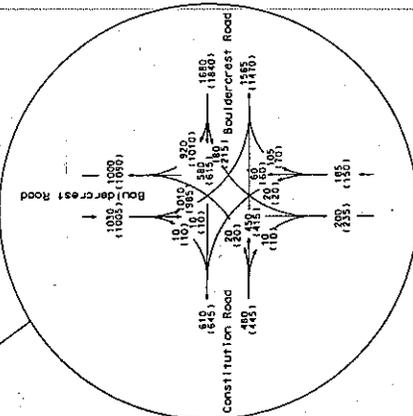


Industrial Drive
 2026 AM DHV=000
 2026 PM DHV=(000)
 T=10%
 24 HR. T=14%
 S.U.=4%
 COMB.=10%



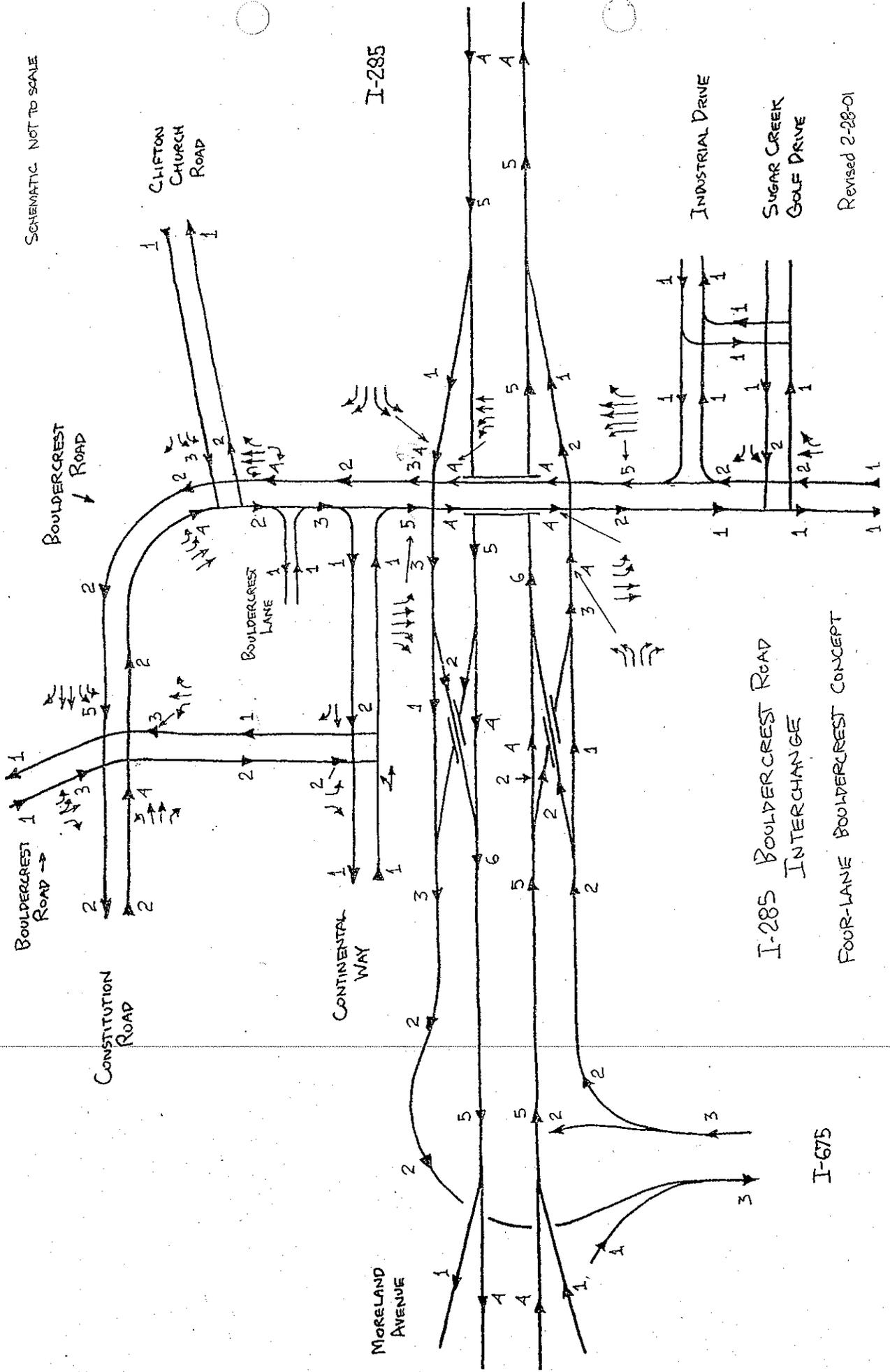
Continental Way
 2026 AM DHV=000
 2026 PM DHV=(000)
 T=20%
 24 HR. T=30%
 S.U.=10%
 COMB.=20%

I-285
 2026 AM DHV=000
 2026 PM DHV=(000)
 T=10%
 24 HR. T=14%
 S.U.=4%
 COMB.=10%



I-285 at
 Bouldercrest Road
 interchange
 IM-NH-285-1 (352)
 P.I.# 713300
 DeKalb County

SCHEMATIC NOT TO SCALE



I-285 BOULDERCREST ROAD INTERCHANGE
FOUR-LANE BOULDERCREST CONCEPT

I-675

Revised 2-28-01



PARSONS BRINCKERHOFF COMPUTATION SHEET

Page 1 of 4

Made by _____

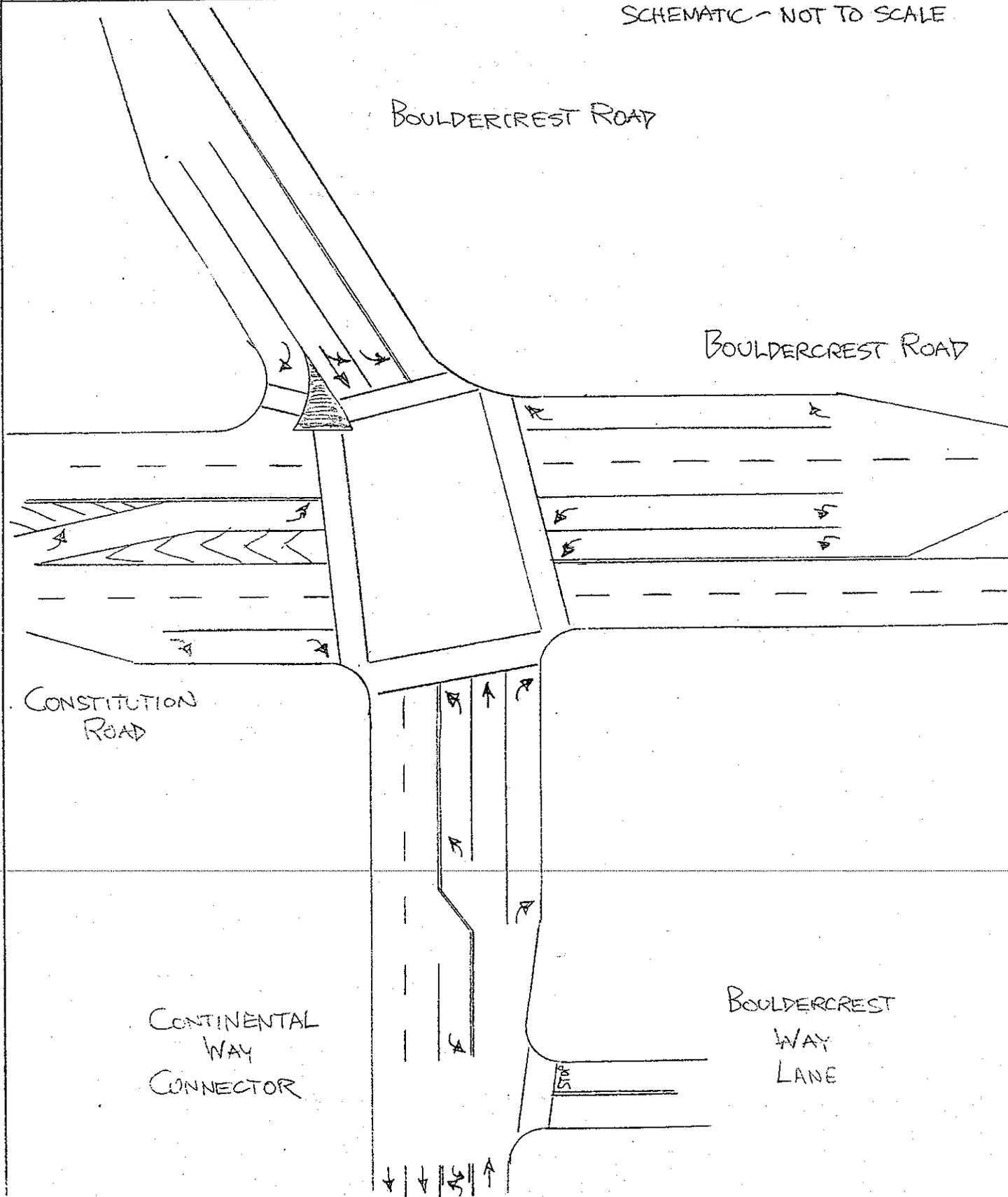
Date _____

Checked by _____

Date Revised 3-9-01

Subject I-285 - BOULDERCREST ROAD
4-LANE CONCEPT

SCHMATIC - NOT TO SCALE





PARSONS BRINCKERHOFF COMPUTATION SHEET

Page 2 of 4

Made by _____

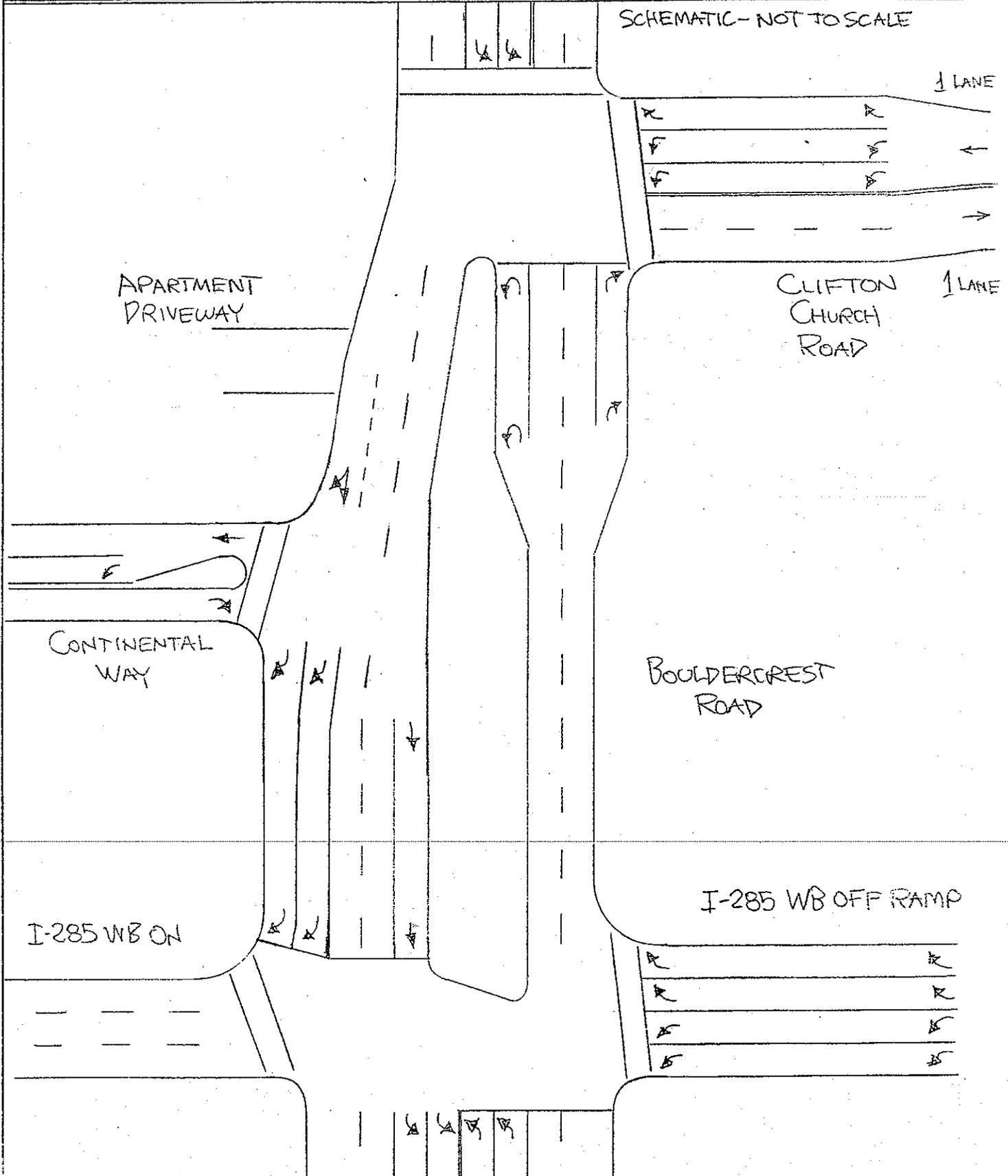
Date _____

Checked by _____

Date Revised 3-9-01

Subject I-285 - BOULDERCREST ROAD
A-LANE CONCEPT

SCHEMATIC - NOT TO SCALE





PARSONS BRINCKERHOFF COMPUTATION SHEET

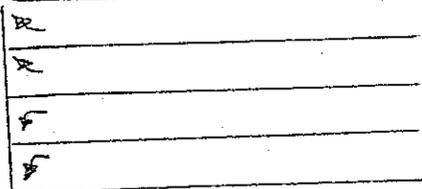
Page 3 of 4
 Made by _____
 Date _____
 Checked by _____
 Date Revised 3-9-01

Subject I-285 - BOULDERCREST ROAD
4-LANE CONCEPT

SCHMATIC - NOT TO SCALE

I-285 WB ON

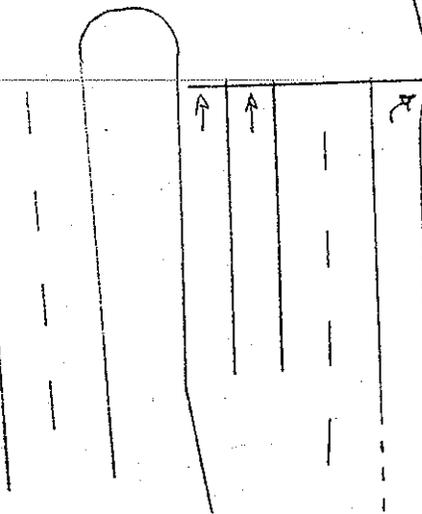
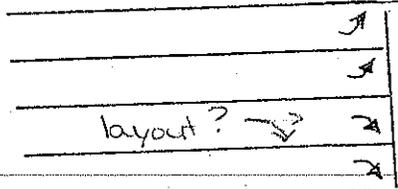
I-285 WB OFF



I-285 EB OFF

BOULDERCREST
ROAD

I-285 EB ON





PARSONS RINCKERHOFF COMPUTATION SHEET

Page A of 4

Made by _____

Date _____

Checked by _____

Date Revised 3-9-01

Subject I-285 - BOULDERCREST ROAD
A-LANE CONCEPT

I-285 EB OFF

SCHEMATIC - NOT TO SCALE

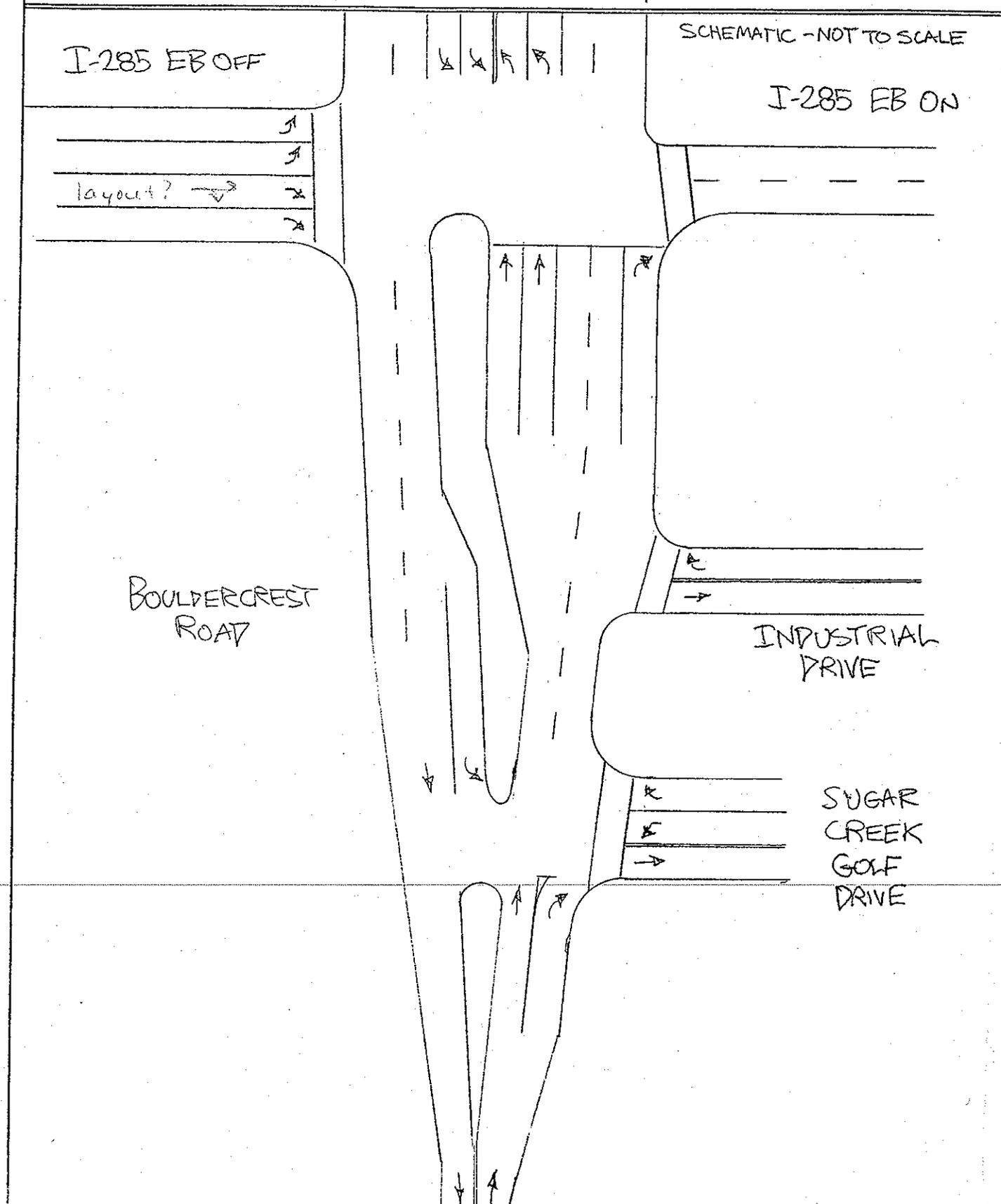
I-285 EB ON

↑
↑
layout? →
↑

BOULDERCREST
ROAD

INDUSTRIAL
DRIVE

SUGAR
CREEK
GOLF
DRIVE

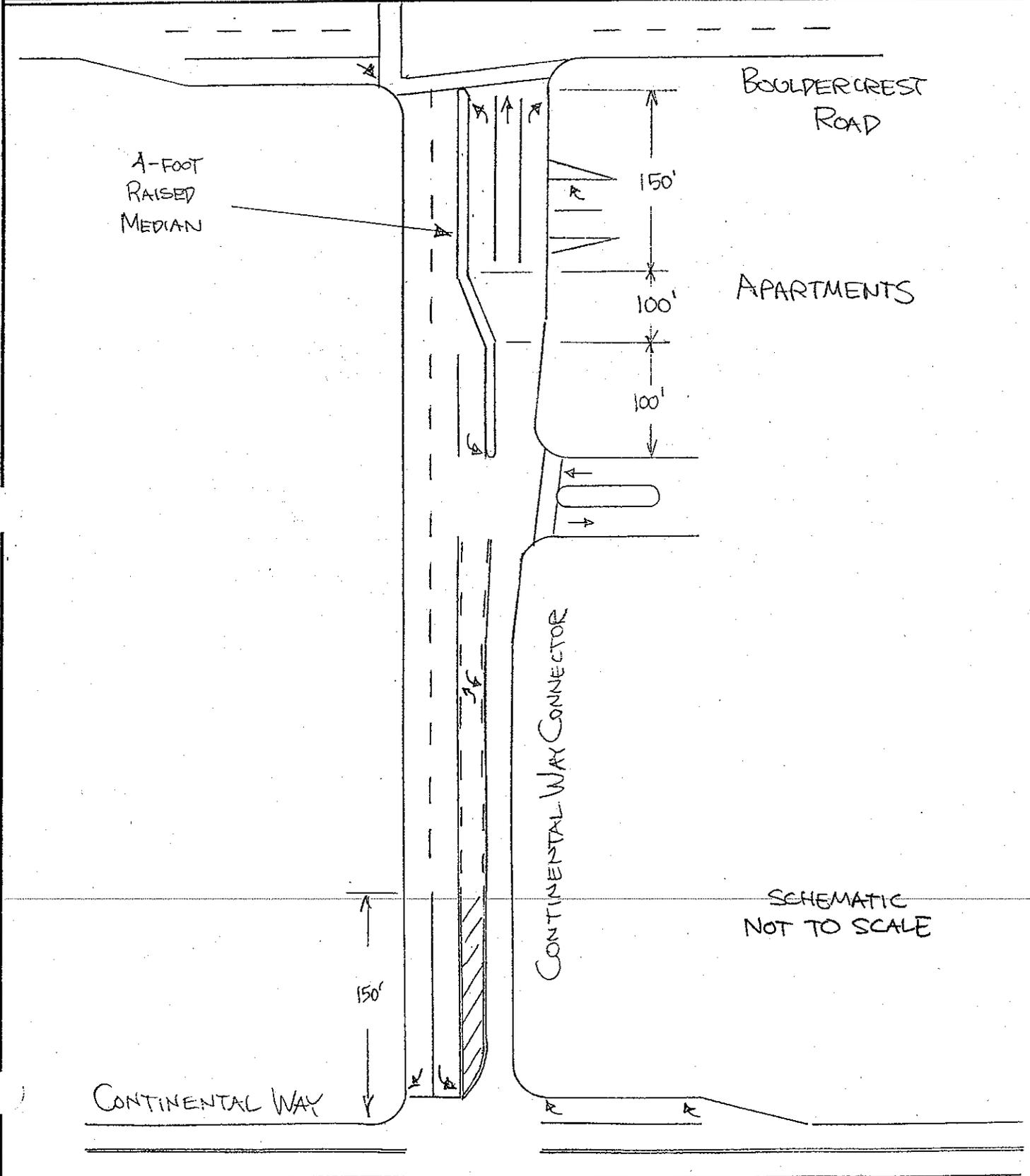




PARSONS BRINCKERHOFF METRIC COMPUTATION SHEET

subject CONTINENTAL WAY CONNECTOR
REVISED LANE GEOMETRY

Page of
Made by
Date
Checked by
Date 2-28-01



GEORGIA DEPARTMENT OF TRANSPORTATION

Bridge Inspection Report

District: 7
 Bridge Inspector: DAS
 Location ID: 089-00407D-050.45C
 Structure ID: 089-0101-0

Inspection Date: 03/27/00
 Over: SUGAR CREEK OVERFLOW
 County: DeKalb
 Road Name: I-285

Inspection Area: 07
 Bridge Status: 07

EVALUATION & DEFICIENCIES

SubStructure:

Year Painted: 0000

Abutments # 1 & 4 are concrete caps with minor hairline cracks. Minor settlement under cap at abutment # 4 right.
 Bents # 2 & 3 are concrete on driven concrete piles.

SuperStructure:

Year Painted: 0000

Three spans concrete T- beams with minor deflection cracks. No other problems.

Deck:

7" Concrete slab with 3.5" asphalt overlay.
 Two square foot pot hole in asphalt at abutment # 1 left in lane # 1 CCBL.
 Asphalt is cracking and raveling at joints in lanes # 1 & 2 CBL.

General:

Built in 1966 & widened in 1979. HS - 20 +M design. Project # I-FI-285-1 (138) 126 CT. 2
 Bridge is in overall good condition. Used ladder to inspect top of caps and bearings areas at bents # 2 & 3.

Condition Rating

Component	Material	Rating
Substructure	Concrete	7
Superstructure	Concrete	7
Deck	Concrete	7

Temp Shored: No

Truck Type	Gross/H-Mod	HMod	Tand	3-S-2	Log	Piggy
Calculated Posting	20	25	28	40	36	40
Posting Required						
Existing Posting	00	00	00	00	00	00

Not a School Bus Route

Structure Does Not Require Posting

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

SUFF. RATING: 76.2

DeKalb County

Signs & Attachments

Location & Geography

Structure I.D. No.: 089-0101-0	Highway System: I	Expansion Joint Type: 02
200 Bridge Information: 07	* 26 Functional Classification: 11	242 Deck Drains: 1
	* 204 Federal Route Type: I No: 285-1	
	* 110 Truck Route: 1	
6A Feature Int.: SUGAR CREEK OVERFLOW	206 School Bus Route: 0	243 Parapet Location: 3
6B Critical Bridge: 0	217 Benchmark Elevation: 0.00	Height: 1.3
7A Route Number Carried: SR00407	218 Datum: 0	Width: 1.1
7B Facility Carried: I-285	* 19 Bypass Length: 10	238 Curb: 0 0 0
9 Location: 2.2 MI W OF SR 155	* 20 Toll: 3	239 Handrail: 7 7
2 DOT District: 7	* 21 Maintenance: 01	* 240 Median Barrier Rail: 1
207 Year Photo: 1998	* 22 Owner: 01	
	* 31 Design Load: 6	241 Bridge Median Height: 0
91 Inspection Frequency: 24 Date: 03/27/2000	37 Historical Significance: 5	Width: 0
92A Fract Crit Insp Freq: 0 00 Date: 0000	205 Congressional District: 11	
92B Underwater Insp Freq: 0 00 Date: 0000	* 27 Year Constructed: 1966	
92C Other Spc. Insp Freq: 0 00 Date: 0000	106 Year Reconstructed: 1979	* 230 Guardrail Loc Dir Rear: 6
	33 Bridge Median: 3	Fwr'd: 6
4 Place Code: 00000	34 Skew: 15	Oppo Dir Rear: 6
	35 Structure Flared: 0	Fwr'd: 6
5 Inventory Route (O/U): I	38 Navigation Control: 0	
Type: I	213 Special Steel Design: 0	244 Approach Slab: 3
Designer: I	267 Type of Paint: 0	224 Retaining Wall: 0
Number: 00285		
Direction: 0		233 Posted Speed Limit: 55
	* 42 Type Service On: 1	236 Warning Sign: 0
	Under: 9	234 Delineator: 0
16 Latitude: 33-41.4	214 Movable Bridge: 00	235 Hazard Boards: 0
17 Longitude: 84-18.0	203 Type Bridge: D-O-O-O	
	259 Pile Encasement: 3	237 Utilities Gas: 00
98 Border Bridge: 000 %Shared: 00	* 43 Structure Type Main: 1 04	Water: 00
99 ID Number: 0000000000000000	45 No. Spans Main: 003	Electric: 23
	44 Structure Type Appr: 0 0	Telephone: 00
100 Defense Highway: I	46 No. Spans Appr: 0000	Sewer: 00
101 Parallel Structure: N	226 Bridge Curve Horz: 0	
102 Direction of Traffic: 2	111 Pier Protection: 0	247 Lighting Street: 0
264 Road Inventory Mile Post: 023.03	107 Deck Structure Type: I	Navigation: 0
		Aerial: 0
208 Inspection Area: 07 Initials: DAS	108 Wearing Surface Type: 6	
	Membrane: I	* 248 County Continuity No: 00
Location I.D. No: 089-00407D-050.45C	Protection: 8	
XReferen I.D. No: 000-000000-000.000		

Programming Data

201 Project No: I-FI-285-1 (138) 126 CT.2.
 202 Plans Available: 2
 249 Prop. Proj No:
 250 Approval Status: 0000
 251 P.I. No: 000000
 252 Contract Date: 0000
 260 Seismic No: 00000
 75 Type Work: 00 0
 94 Bridge Imp. Cost: \$ 0
 95 Roadway Imp. Cost: \$ 0
 96 Total Imp. Cost: \$ 0
 76 Imp. Length: 000000
 97 Imp. Year: 0000
 114 Future ADT: 184500 Year: 2019

Hydraulic Data

215 Waterway Data
 Highwater Elev: 0000.0 Year: 0000
 Flood Elev: 0000.0 Freq: 00
 Avg. Streambed Elev: 0000.0
 Drainage Area: 00000
 Area of Opening: 5
 113 Scour Critical: 5
 216 Water Depth: 00.0 Br Height: 20.0
 222 Slope Protection: 1
 221 Spur Dikes Rear: 0 Fwd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No Barrels: 0
 Width: 0.0
 Height: 0.0
 Length: 0
 Apron: 0
 265 U/W Insp. Area: 0 Diver: ZZZ

Location I.D. No: 089-00407D-050.45C
 XRreferen I.D. No: 000-000000-000.000

Measurements

• 29 ADT: 123000 Year: 1999
 • 109 % Trucks: 12
 • 28 Lanes On: 08 Under: 00
 • 210 No. Tracks On: 00 Under: 00
 • 48 Max. Span Length: 0038
 • 49 Structure Length: 114
 51 Br. Rdwy. Width: 134.9
 52 Deck Width: 137.2
 • 47 Tot. Horz. Cl: 64.0
 50 Curb/Sdewik Width: 0.0/0.0
 32 Approach Rdwy Width: 128
 • 229 Shlder Width:
 Rear Lt: 6.0 Type: 2 Rt: 10.0
 Fwd Lt: 6.0 Type: 2 Rt: 10.0
 Pymnt Width:
 Rear: 48.0 Type: 2
 Fwd: 48.0 Type: 2
 Intersection Rear: 0 Fwd: 0
 36 Safety Features Br. Rail: 1
 Transition: 1
 App. G. Rail: 1
 App. Rail End: 1
 53 Minimum Cl. Over: 99' 99"
 Under: N 00' 00"
 • 228 Min. Vert. Cl
 Act. Odm. Dir: 99' 99"
 Oppo. Dir: 99' 99"
 Posted Odm. Dir: 00' 00"
 Oppo. Dir: 00' 00"
 55 Lateral Undercl. Rt: N 99.9
 56 Lateral Undercl. Lt: 0.0
 • 10 Max Min Vert Cl: 99' 99" Dir: 0
 39 Nav Vert Cl: 000 Horz: 0000
 116 Nav Vert Cl Closed: 7.0
 245 Deck Thickness Main: 7.0
 Deck Thick Approach: 0.0
 246 Overlay Thickness: 3.5
 211 Tons Structural Steel: 0.0
 212 Year Last Painted: Sup: 0000 Sub: 0000

Ratings

66 Inventory Type: 2 Rating: 26
 64 Operating Type: 2 Rating: 44
 231 Calculated Loads
 H-Modified: 20 0
 HS-Modified: 25 0
 Type 3: 28 0
 Type 3S2: 40 0
 Timber: 36 0
 Piggyback: 40 0
 261 H Inventory Rating: 20
 262 H Operating Rating: 28
 67 Structural Evaluation: 5
 58 Deck Condition: 7
 59 Superstructure Condition: 7
 • 227 Collision Damage: 0
 60A Substructure Condition: 7
 60B Scour Condition: 8
 60C Underwater Condition: N
 71 Waterway Adequacy: 8
 61 Channel Protection Cond: 8
 68 Deck Geometry: 9
 69 UnderClr. Horz/Vert: N
 72 Aprt. Alignment: 8
 62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
 41 Struct Open, Posted, Cl: A
 • 103 Temporary Structure: 0
 232 Posted Loads H-Modified: 00
 HS-Modified: 00
 Type 3: 00
 Type 3S2: 00
 Timber: 00
 Piggyback: 00
 253 Notification Date: 0000
 253 Fed Notify Date: 0000 0

GEORGIA DEPARTMENT OF TRANSPORTATION

Bridge Inspection Report

District: 7
 Bridge Inspector: DAS
 Location ID: 089-00407D-050.35C
 Structure ID: 089-0100-0

Inspection Date: 03/27/00
 Over: SUGAR CREEK
 County: DeKalb
 Road Name: I-285
EVALUATION & DEFICIENCIES

Inspection Area: 07
 Bridge Status: 07

SubStructure:

Abutments # 1 & 4 are concrete caps.
 Settlement at both ends of abutment #1 with exposed concrete piles.
 Bents # 2 & 3 are concrete caps on driven concrete piles.
 Minor cracks in caps at all bents.

Year Painted: 0000

SuperStructure:

Three span concrete T- beams.
 Minor deflection cracks in all spans.

Year Painted: 0000

Deck:

7" Concrete deck with 3.5" asphalt overlay.
 Minor cracks in overlay.
 Deck drains are stoped up with dirt and trash.

General:

Built in 1966 & widened in 1979.
 This bridge is in overall good condition.
 Erosion down & along side of concrete paved ditch 25' rear right.

HS 20 + M Design

Project # I-FI-285-1 (138) 126 CT. 2

Condition Rating

Component	Material	Rating
Substructure	Concrete	7
Superstructure	Concrete	7
Deck	Concrete	7

Temp Shored: No

Truck Type	Gross/H-Mod	HSMOD	Tand	3-S-2	Log	Piggy
Calculated Posting	20	25	28	40	36	40
Posting Required						
Existing Posting	00	00	00	00	00	00

*** School Bus Route ****

Structure Does Not Require Posting

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 089-0100-0

DeKalb County

SUFF. RATING: 76.2

Location & Geography

Structure I.D. No.: 089-0100-0
 200 Bridge Information: 07
 6A Feature Int.: SUGAR CREEK
 6B Critical Bridge: 0
 7A Route Number Carried: SR00407
 7B Facility Carried: I-285
 9 Location: 2.1 MI WEST OF SR 155
 2 DOT District: 7
 207 Year Photo: 1998

91 Inspection Frequency: 24 Date: 03/27/2000
 92A Fract Crit Insp Freq: 0 00 Date: 0000
 92B Underwater Insp Freq: 0 00 Date: 0000
 92C Other Spc. Insp Freq: 0 00 Date: 0000

4 Place Code: 00000

5 Inventory Route (O/U): 1
 Type: 1
 Designator: 1
 Number: 00285
 Direction: 0

16 Latitude: 33-41.4
 17 Longitude: 84 -18.0

98 Border Bridge: 000 %Shared: 00
 99 ID Number: 0000000000000000

100 Defense Highway: 1
 101 Parallel Structure: N
 102 Direction of Traffic: 2
 264 Road Inventory Mile Post: 022.93

208 Inspection Area: 07 Initials: DAS

Location I.D. No: 089-00407D-050.35C
 XReferen I.D. No: 000-000000-000.000

Signs & Attachments

* 104 Highway System: 1
 * 26 Functional Classification: 11
 * 204 Federal Route Type: 1 No: 285-1
 * 110 Truck Route: 1
 206 School Bus Route: 1
 217 Benchmark Elevation: 0.00
 218 Datum: 0
 * 19 Bypass Length: 12
 * 20 Toll: 3
 * 21 Maintenance: 01
 * 22 Owner: 01
 * 31 Design Load: 6
 37 Historical Significance: 5
 205 Congressional District: 11
 * 27 Year Constructed: 1966
 106 Year Reconstructed: 1979
 33 Bridge Median: 3
 34 Skew: 00
 35 Structure Flared: 0
 38 Navigation Control: 0
 213 Special Steel Design: 0
 267 Type of Paint: 0
 * 42 Type Service On: 1 Under: 5
 214 Movable Bridge: 00
 203 Type Bridge: D-O-O-O
 259 Pile Encasement: 3
 * 43 Structure Type Main: 1 04
 45 No. Spans Main: 003
 44 Structure Type Appr: 0 0
 46 No. Spans Appr: 0000
 226 Bridge Curve Horz: 0 Vert: 0
 111 Pier Protection: 0
 107 Deck Structure Type: 1
 108 Wearing Surface Type: 6 Membrane: 1 Protection: 8
 223 Expansion Joint Type: 02
 242 Deck Drains: 1
 243 Parapet Location: 3
 Height: 1.3
 Width: 1.1
 238 Curb: 0.0 0
 239 Handrail: 7 7
 * 240 Median Barrier Rail: 1
 241 Bridge Median Height: 0
 Width: 0
 * 230 Guardrail Loc Dir Rear: 6
 Fwrd: 6
 Oppo Dir Rear: 6
 Fwrd: 6
 244 Approach Slab: 3
 224 Retaining Wall: 0
 233 Posted Speed Limit: 55
 236 Warning Sign: 0
 234 Delineator: 1
 235 Hazard Boards: 0
 237 Utilities Gas: 00
 Water: 00
 Electric: 23
 Telephone: 00
 Sewer: 00
 247 Lighting Street: 0
 Navigation: 0
 Aerial: 0
 * 248 County Continuity No: 00

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 089-0100-0

DeKalb County

SUFF. RATING: 76.2

Programming Data

201 Project No: I-FI-285-1 (138) 126 CT.2
 202 Plans Available: 2
 249 Prop. Proj No: 0000
 250 Approval Status: 0000
 251 P.I. No: 000000
 252 Contract Date: 0000
 260 Seismic No: 00000
 75 Type Work: 00 0
 94 Bridge Imp. Cost: \$ 0
 95 Roadway Imp. Cost: \$ 0
 96 Total Imp. Cost: \$ 0
 76 Imp. Length: 000000
 97 Imp. Year: 0000
 114 Future ADT: 184500 Year: 2019

Measurements

* 29 ADT: 123000 Year: 1999
 * 109 % Trucks: 12
 * 28 Lanes On: 08 Under: 00
 * 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0038
 * 49 Structure Length: 114
 * 51 Br. Rdwy. Width: 134.9
 * 52 Deck Width: 137.2
 * 47 Tot. Horz. Cl: 64.0
 * 50 Curb/Sdewlk Width: 0.0/0.0
 * 32 Approach Rdwy Width: 128
 * 229 Shldr Width:
 Rear Lt: 6.0 Type: 2 Rc: 10.0
 Fwd Lt: 6.0 Type: 2 Rc: 10.0
 Pymnt Width:
 Rear: 48.0 Type: 2
 Fwd: 48.0 Type: 2
 Intersection Rear: 0 Fwd: 0
 36 Safety Features Br. Rail: 1
 Transition: 1
 App. G. Rail: 1
 App. Rail End: 1
 53 Minimum Cl. Over: 99'99"
 Under: N 00'00"
 * 228 Min. Vert. Cl
 Act. Odm. Dir: 99'99"
 Oppo. Dir: 99'99"
 Posted Odm. Dir: 00'00"
 Oppo. Dir: 00'00"
 55 Lateral Undercl. Rt: N 99.9
 56 Lateral Undercl. Lt: 0.0
 * 10 Max Min Vert Cl: 99'99" Dir: 0
 39 Nav Vert Cl: 000 Horiz: 0000
 116 Nav Vert Cl Closed: 000
 245 Deck Thickness Main: 7.0
 Deck Thick Approach: 0.0
 246 Overlay Thickness: 3.5
 211 Tons Structural Steel: 0.0
 212 Year Last Painted: Sup: 0000 Sub: 0000

Ratings

66 Inventory Type: 2 Rating: 26
 64 Operating Type: 2 Rating: 44
 231 Calculated Loads
 H-Modified: 20 0
 HS-Modified: 25 0
 Type 3: 28 0
 Type 3s2: 40 0
 Timber: 36 0
 Piggyback: 40 0
 261 H Inventory Rating: 20
 262 H Operating Rating: 28
 67 Structural Evaluation: 5
 58 Deck Condition: 7
 59 Superstructure Condition: 7
 * 227 Collision Damage: 0
 60A Substructure Condition: 7
 60B Scour Condition: 6
 60C Underwater Condition: N
 71 Waterway Adequacy: 8
 61 Channel Protection Cond: 7
 68 Deck Geometry: 9
 69 UnderClr. Horz/Vert: N
 72 Appr. Alignment: 8
 62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
 41 Struct Open, Posted, Cl: A
 * 103 Temporary Structure: 0
 232 Posted Loads H-Modified: 00
 HS-Modified: 00
 Type 3: 00
 Type 3S2: 00
 Timber: 00
 Piggyback: 00
 253 Notification Date: 0000
 253 Fed Notify Date: 0000 0

Hydraulic Data

215 Waterway Data
 Highwater Elev: 0000.0 Year: 0000
 Flood Elev: 0000.0 Freq: 00
 Avg. Streambed Elev: 0000.0
 Drainage Area: 00000
 Area of Opening: 000000
 113 Scour Critical: 5
 216 Water Depth: 02.0 Br Height: 22.0
 222 Slope Protection: 1
 221 Spur Dikes Rear: 0 Fwd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No Barrels: 0
 Width: 0.0
 Height: 0.0
 Length: 0
 Apron: 0
 265 U/W Insp. Area: 0 Diver: ZZZZ

Location I.D. No: 089-00407D-050.35C
 XReferen I.D. No: 000-000000-000.000

GEORGIA DEPARTMENT OF TRANSPORTATION

Bridge Inspection Report

District: 7
 Bridge Inspector: DAS
 Location ID: 089-00407D-051.27C
 Structure ID: 089-0102-0

Inspection Date: 04/01/98
 Over: SOUTH RIVER
 County: DeKalb
 Road Name: I-285

Inspection Area: 07
 Bridge Status: 04

EVALUATION & DEFICIENCIES

SubStructure:

Year Painted: 0000

Abutments # 1 & 6 are concrete caps.

Bents # 2,3,4 & 5 are concrete caps and concrete piles.

Minor cracks in caps at both abutments.

Bent # 3 minor spalls in cap under beams # 9 & 11.

SuperStructure:

Year Painted: 0000

Five span concrete T beams & widened with P.S.C. I- beams.

HS 20 + M Design.

Minor deflection cracks in T-beams.

Minor shear type cracks as follows : Bent # 2 beams # 4 forward & beam # 9 rear.

: Bent # 3 beam # 20 rear.

: Bent # 4 beam # 17 forward.

Spall type cracks at bent # 5 beams # 8,10 & 13 forward.

Spall type cracks at bent # 3 beams # 9 & 11 rear.

Deck:

7.5" Concrete slab with 3.5" asphalt overlay.

HS 20 + M Design.

Minor cracks on bottom.

General:

Built in 1966 & widened in 1980 & 1984.

Project #I-ID-675-1 (137) CT.16

This bridge was involved in Emmert move.

Condition Rating

Component	Material	Rating
Substructure	Concrete	7
Superstructure	Concrete	6
Deck	Concrete	7

Temp Shored: No

Truck Type	Gross/H-Mod	HMod	Tand	3-S-2	Log	Piggy
Calculated Posting	20	25	28	40	36	40
Posting Required						
Existing Posting	00	00	00	00	00	00

*** School Bus Route ***

Structure Does Not Require Posting

Location & Geography

* Structure I.D. No.: 089-0102-0
 * 200 Bridge Information: 04
 * 6A Feature Int.: SOUTH RIVER
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: SR00407
 * 7B Facility Carried: I-285
 * 9 Location: 3 MI W OF SR 155
 * 2 DOT District: 7
 * 207 Year Photo: 1998
 * 91 Inspection Frequency: 24 Date: 04/01/1998
 * 1 Fract Crit Insp Freq: 0 00 Date: 0000
 * 92B Underwater Insp Freq: 0 00 Date: 0000
 * 92C Other Spc. Insp Freq: 0 00 Date: 0000
 * 4 Place Code: 00000
 * 5 Inventory Route (O/U): 1
 Type: 1
 Designator: 1
 Number: 00285
 Direction: 0
 * 16 Latitude: 33-40.8
 * 17 Longitude: 84-18.8
 * 98 Border Bridge: 000 %Shared: 00
 * 99 ID Number: 0000000000000000

Signs & Attachments

* 104 Highway System: 1
 * 26 Functional Classification: 11
 * 204 Federal Route Type: 1 No: 285-1
 * 110 Truck Route: 1
 * 206 School Bus Route: 1
 * 217 Benchmark Elevation: 0.00
 * 218 Datum: 0
 * 19 Bypass Length: 1
 * 20 Toll: 3
 * 21 Maintenance: 01
 * 22 Owner: 01
 * 31 Design Load: 6
 * 37 Historical Significance: 5
 * 205 Congressional District: 11
 * 27 Year Constructed: 1966
 * 106 Year Reconstructed: 1984
 * 33 Bridge Median: 3
 * 34 Skew: 33
 * 35 Structure Flared: 0
 * 38 Navigation Control: 0
 * 213 Special Steel Design: 0
 * 267 Type of Paint: 0
 * 42 Type Service On: 1
 Under: 5
 * 214 Movable Bridge: 00
 * 203 Type Bridge: D-O-O-O
 * 259 Pile Encasement: 3
 * 43 Structure Type Main: 1 04
 * 45 No. Spans Main: 005
 * 44 Structure Type Appr: 0 0
 * 46 No. Spans Appr: 0000
 * 226 Bridge Curve Horiz: 0 Vert: 0
 * 111 Pier Protection: 0
 * 107 Deck Structure Type: 1
 * 108 Wearing Surface Type: 6
 Membrane: 1
 Protection: 8
 * 223 Expansion Joint Type: 02
 * 242 Deck Drains: 1
 * 243 Parapet Location: 3
 Height: 1.3
 Width: 1.1
 * 238 Curb: 0.0 0
 * 239 Handrail: 9 9
 * 240 Median Barrier Rail: 1
 * 241 Bridge Median Height: 0
 Width: 0
 * 230 Guardrail Loc Dir Rear: 6
 Fwr: 4
 Oppo Dir Rear: 6
 Fwr: 6
 * 244 Approach Slab: 3
 * 224 Retaining Wall: 0
 * 233 Posted Speed Limit: 55
 * 236 Warning Sign: 0
 * 234 Delineator: 0
 * 235 Hazard Boards: 0
 * 237 Utilities Gas: 00
 Water: 00
 Electric: 00
 Telephone: 00
 Sewer: 00
 * 247 Lighting Street: 0
 Navigation: 0
 Aerial: 0
 * 248 County Continuity No: 00

Programming Data

201 Project No: I-ID-675-1 (137) CT.16
 202 Plans Available: 2
 249 Prop. Proj No:
 250 Approval Status: 0000
 251 P.I. No: 000000
 252 Contract Date: 0000
 260 Seismic No: 000000
 75 Type Work: 00 0
 94 Bridge Imp. Cost: \$ 0
 95 Roadway Imp. Cost: \$ 0
 96 Total Imp. Cost: \$ 0
 76 Imp. Length: 0000000
 97 Imp. Year: 0000
 114 Future ADT: 173400 Year: 2017

Hydraulic Data

215 Waterway Data
 Highwater Elev: 0000.0 Year: 0000
 Flood Elev: 0000.0 Freq: 00
 Avg. Streambed Elev: 0000.0
 Drainage Area: 00000
 Area of Opening: 000000

113 Scour Critical: 5
 216 Water Depth: 04.0 Br Height: 26.0
 222 Slope Protection: 1
 221 Spur Dikes Rear: 0 Fwrd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No Barrels: 0
 Width: 0.0
 Height: 0.0
 Length: 0
 Apron: 0
 * 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No: 089-00407D-051.27C
 * XReferen I.D. No: 000-0000000-000.000

Report Date: 01/10/2000

Measurements

* 29 ADT: 115600 Year: 1997
 109 % Trucks: 9
 * 28 Lanes On: 10 Under: 00
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0039
 * 49 Structure Length: 195
 51 Br. Rdwy. Width: 156.8
 52 Deck Width: 163.2
 * 47 Tot. Horz. Cl: 78.4
 50 Curb/Sdewlk Width: 0.0/0.0
 32 Approach Rdwy Width: 152
 * 229 Shlder Width:
 Rear Lt: 6.0 Type: 2 Rt: 10.0
 Fwrd Lt: 6.0 Type: 2 Rt: 10.0
 Pymnt Width:
 Rear: 60.0 Type: 2
 Fwrd: 60.0 Type: 2

36 Safety Features Br. Rail: 1 Fwrd: 1
 Intersection Rear: 1 Type: 2
 Transition: 1
 App. G. Rail: 1
 App. Rail End: 1
 53 Minimum Cl. Over: 99' 99"
 Under: N 00' 00"
 * 228 Min. Vert. Cl
 Act. Odm. Dir: 99' 99"
 Oppo. Dir: 99' 99"
 Posted Odm. Dir: 00' 00"
 Oppo. Dir: 00' 00"

55 Lateral Undercl. Rt: N 99.9
 56 Lateral Undercl. Lt: 0.0
 * 10 Max Min Vert Cl: 99' 99" Dir: 0
 39 Nav Vert Cl: 000 Horz: 0000
 116 Nav Vert Cl Closed: 000
 245 Deck Thickness Main: 7.5
 Deck Thick Approach: 0.0
 246 Overlay Thickness: 3.5
 211 Tons Structural Steel: 0.0
 212 Year Last Painted: Sup: 0000 Sub: 0000

Ratings

66 Inventory Type: 2 Rating: 36
 64 Operating Type: 2 Rating: 50
 231 Calculated Loads

H-Modified: 20 0
 HS-Modified: 25 0
 Type 3: 28 0
 Type 3s2: 40 0
 Timber: 36 0
 Piggyback: 40 0

261 H Inventory Rating: 20
 262 H Operating Rating: 28
 67 Structural Evaluation: 6
 58 Deck Condition: 7
 59 Superstructure Condition: 6
 * 227 Collision Damage: 0

60A Substructure Condition: 7
 60B Scour Condition: 7
 60C Underwater Condition: N
 71 Waterway Adequacy: 8
 61 Channel Protection Cond: 6
 68 Deck Geometry: 9
 69 UnderCl. Horz/Vert: N
 72 Appr. Alignment: 8
 62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
 41 Struct Open, Posted, Cl: A
 * 103 Temporary Structure: 0

232 Posted Loads H-Modified: 00
 HS-Modified: 00
 Type 3: 00
 Type 3S2: 00
 Timber: 00
 Piggyback: 00

253 Notification Date: 0000
 253 Fed Notify Date: 0000

0

GEORGIA DEPARTMENT OF TRANSPORTATION

Bridge Inspection Report

District: 7
Bridge Inspector: DAS
Location ID: 089-09092M-001.50N
Structure ID: 089-0147-0

Inspection Date: 09/01/98
Over: SOUTH RIVER
County: DeKalb
Road Name: BOULDERCREST ROAD
EVALUATION & DEFICIENCIES

Inspection Area: 07
Bridge Status: 06

SubStructure:

Abutment # 1 is concrete cap.

Bents # 2 & 3 are concrete piers.

Bents # 4,5,6,7,8 & abutment # 9 are all timber - Caps and piles.

Minor crack at bent #3 right.

Timber piles are in fair to satisfactory condition.

Year Painted: 0000

SuperStructure:

Eight spans steel beams.

Simple and continuous spans.

Corrosion and minor section loss.

Beams # 1,2 & 3 at bent # 3 are shimmed.

Deck:

6" Concrete deck with 1.5" asphalt overlay.

Minor deck sag at bent # 3 left in south bound lane. Needs to be watched.

Minor cracks and asphalt breaking up at joints. 1' x 5' At bent # 4 in overlay of south bound lane

General:

Built in 1938. H - 15 design. Project # Unknown.

Minor deck sag at bent # 3 left in south bound lane. Needs to be watched.

Minor cracks and asphalt breaking up at joints. 1' x 5' At bent # 4 in overlay of south bound lane

Corrosion and minor section loss.

Beams # 1,2 & 3 at bent # 3 are shimmed.

Minor crack at bent #3 right.

Timber piles are in fair to satisfactory condition.

Guard rail as hand rail on both sides with scattered damage and several concrete post demolished.

Repairs : Clean and paint all steel beams and bearings.

: Patch pothole at bent # 4 in south bound lane.

: Repair all hand rail damage.

Year Painted: 1977

GEORGIA DEPARTMENT OF TRANSPORTATION
Bridge Inspection Report

EVALUATION & DEFICIENCIES

Condition Rating

Component	Material	Rating
Substructure	Concrete,timber	4
Superstructure	Steel	7
Deck	Concrete	6

Temp Shored: No

Truck Type	Gross/H-Mod	HMod	Tand	3-S-2	Log	Piggy
Calculated Posting	09	15	11	20	16	00
Posting Required	X	X	X	X	X	
Existing Posting	09	15	11	20	16	00

*** School Bus Route ****

Structure Requires Posting

Structure & Geography

* Structure I.D. No.: 089-0147-0
 * 200 Bridge Information: 06
 * 6A Feature Int.: SOUTH RIVER
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: CR05187
 * 7B Facility Carried: BOULDERCREST ROAD
 * 9 Location: .5 MI S OF INT I-285
 * 2 DOT District: 7
 * 207 Year Photo: 1998
 * 91 Inspection Frequency: 24 Date: 09/01/1998
 * Fract Crit Insp Freq: 0 00 Date: 0000
 * 92B Underwater Insp Freq: 0 00 Date: 0000
 * 92C Other Spc. Insp Freq: 0 00 Date: 0000
 * 4 Place Code: 00000
 * 5 Inventory Route (O/U): 1
 * Type: 5
 * Designator: 1
 * Number: 09092
 * Direction: 0
 * 16 Latitude: 33-40.8
 * 17 Longitude: 084-18.5
 * 98 Border Bridge: 000 %Shared: 00
 * 99 ID Number: 000000000000000

* 104 Highway System: 0
 * 26 Functional Classification: 16
 * 204 Federal Route Type: M No: 09092
 * 110 Truck Route: 0
 * 206 School Bus Route: 1
 * 217 Benchmark Elevation: 0.00
 * 218 Datum: 0
 * 19 Bypass Length: 4
 * 20 Toll: 3
 * 21 Maintenance: 02
 * 22 Owner: 02
 * 31 Design Load: 2
 * 37 Historical Significance: 5
 * 205 Congressional District: 05
 * 27 Year Constructed: 1938
 * 106 Year Reconstructed: 0000
 * 33 Bridge Median: 0
 * 34 Skew: 00
 * 35 Structure Flared: 0
 * 38 Navigation Control: 0
 * 213 Special Steel Design: 0
 * 267 Type of Paint: 1
 * 42 Type Service On: 1
 * 214 Movable Bridge: Under: 5
 * 203 Type Bridge: 00
 * 259 Pile Encasement: O-K-M-O
 * 43 Structure Type Main: 3
 * 45 No. Spans Main: 4 02
 * 44 Structure Type Appr: 002
 * 46 No. Spans Appr: 3 3
 * 226 Bridge Curve Horz: 0 0006
 * 111 Pier Protection: Vert: 0
 * 107 Deck Structure Type: 0
 * 108 Wearing Surface Type: 6
 * Membrane: 0
 * Protection: 0

Signs & Attachments

* 223 Expansion Joint Type: 02
 * 242 Deck Drains: 1
 * 243 Parapet Location: 0
 * Height: 0
 * Width: 0
 * 238 Curt: 1.0 1
 * 239 Handrail: 5 5
 * 240 Median Barrier Rail: 0
 * 241 Bridge Median Height: 0
 * Width: 0
 * 230 Guardrail Loc Dir Rear: 6
 * Fwrd: 6
 * Oppo Dir Rear: 0
 * Fwrd: 0
 * 244 Approach Slab: 3
 * 224 Retaining Wall: 0
 * 233 Posted Speed Limit: 50
 * 236 Warning Sign: 0
 * 234 Delinuator: 0
 * 235 Hazard Boards: 1
 * 237 Utilities Gas: 31
 * Water: 32
 * Electric: 00
 * Telephone: 22
 * Sewer: 22
 * 247 Lighting Street: 0
 * Navigation: 0
 * Aerial: 0
 * 248 County Continuity No: 00

Programming Data

201 Project No: UNKNOWN
 202 Plans Available: 0
 249 Prop. Proj No: BRSLB-9092 (1)
 250 Approval Status: 0000
 251 P.I. No: 752930
 252 Contract Date: 02/01/2001
 260 Seismic No: 00000
 75 Type Work: 311
 94 Bridge Imp. Cost: \$ 393
 95 Roadway Imp. Cost: \$ 110
 96 Total Imp. Cost: \$ 593
 76 Imp. Length: 000431
 97 Imp. Year: 1990
 114 Future ADT: 017100 Year: 2017

Hydraulic Data

215 Waterway Data
 Highwater Elev: 0000.0 Year: 0000
 Flood Elev: 0000.0 Freq: 00
 Avg. Streambed Elev: 0000.0
 Drainage Area: 00000
 Area of Opening: 000000
 113 Scour Critical: 6
 216 Water Depth: 01.6 Br Height: 25.8
 222 Slope Protection: 1
 221 Spur Dikes Rear: 0 Fwrd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No Barrels: 0
 Width: 0.0
 Height: 0.0
 Length: 0
 Apron: 0
 * 265 U/W Insp. Area: 0 Diver: ZZZ

Measurements

* 29 ADT: 011400 Year: 1997
 109 % Trucks: 11
 * 28 Lanes On: 02 Under: 00
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0050
 * 49 Structure Length: 220
 51 Br. Rdwy. Width: 24.0
 52 Deck Width: 27.0
 * 47 Tot. Horz. Cl: 24.0
 50 Curb/Sdewlk Width: 0.0/0.0
 32 Approach Rdwy Width: 020
 * 229 Shlder Width:
 Rear Lt: 6.0 Type: 8 Rt: 6.0
 Fwrd Lt: 6.0 Type: 8 Rt: 6.0
 Pmnt Width:
 Rear: 20.0 Type: 2
 Fwrd: 20.0 Type: 2
 Intersection Rear: 0 Fwrd: 1
 36 Safety Features Br. Rail: 3
 Transition: 2
 App. G. Rail: 2
 App. Rail End: 2
 53 Minimum Cl. Over: 99' 99"
 Under: N 00' 00"

Ratings

66 Inventory Type: 2 Rating: 14
 64 Operating Type: 2 Rating: 18
 231 Calculated Loads
 H-Modified: 09 1
 HS-Modified: 15 1
 Type 3: 11 1
 Type 3S2: 20 1
 Timber: 16 1
 Piggyback: 00 0
 261 H Inventory Rating: 09
 262 H Operating Rating: 12
 67 Structural Evaluation: 2
 58 Deck Condition: 6
 59 Superstructure Condition: 7
 * 227 Collision Damage: 0
 60A Substructure Condition: 4
 60B Scour Condition: 8
 60C Underwater Condition: N
 71 Waterway Adequacy: 9
 61 Channel Protection Cond: 8
 68 Deck Geometry: 2
 69 UnderCl. Horz/Vert: N
 72 Appr. Alignment: 8
 62 Culvert: N

Posting Data

70 Bridge Posting Required: 0
 41 Struct Open, Posted, Cl: P
 * 103 Temporary Structure: 0
 232 Posted Loads H-Modified: 09
 HS-Modified: 15
 Type 3: 11
 Type 3S2: 20
 Timber: 16
 Piggyback: 00
 253 Notification Date: 05/02/1996
 253 Fed Notify Date: 0000 0

GEORGIA DEPARTMENT OF TRANSPORTATION

Bridge Inspection Report

District: 7
Bridge Inspector: DAS
Location ID: 089-09092M-001.83N
Structure ID: 089-0148-0

Inspection Date: 04/01/98
Over: I-285 (SR 407)
County: DeKalb
Road Name: BOULDERCREST ROAD
EVALUATION & DEFICIENCIES

Inspection Area: 07
Bridge Status: 07

SubStructure:

Year Painted: 0000

Abutments # 1 & 5 are concrete caps.

Bents # 2,3 & 4 are concrete caps and columns.

Minor cracks in caps at both abutments.

Minor cracks and exposed rebar at intermediate bents.

SuperStructure:

Year Painted: 1997

Four span continuous steel beams

HS 20 + M Design.

New paint in 1997.

Minor accident damage in CCBL.

Deck:

7" Concrete slab with minor cracks and exposed rebar. (shallow cover)

HS 20 +M Design.

Armored joints loose and popping at both abutments.

Poured joint pulled loose and leaking.

General:

Built in 1966.

Project # I-285-1 (42) 117 CT. 2

Condition Rating

Temp Shored: No

Component	Material	Rating
Substructure	Concrete	7
Superstructure	Steel	7
Deck	Concrete	7

Truck Type	Gross/H-Mod	HSMOD	Tand	3-S-2	Log	Piggy
Calculated Posting	20	25	28	40	36	00
Posting Required						
Existing Posting	00	00	00	00	00	00

*** School Bus Route ****

Structure Does Not Require Posting

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 089-0148-0

DeKalb County

SUFF. RATING: 86.8

Location & Geography

* Structure I.D. No.: 089-0148-0
 * 200 Bridge Information: 07
 * 6A Feature Int.: I-285 (SR 407)
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: CR05187
 * 7B Facility Carried: BOULDERCREST ROAD
 * 9 Location: 2.7 MI W OF SR 155
 * 2 DOT District: 7
 * 207 Year Photo: 1998
 * 91 Inspection Frequency: 24 Date: 04/01/1998
 * 92A Fract Crit Insp Freq: 0 00 Date: 0000
 * 92B Underwater Insp Freq: 0 00 Date: 0000
 * 92C Other Spc. Insp Freq: 0 00 Date: 0000
 * 4 Place Code: 00000
 * 5 Inventory Route (O/U): 1
 * Type: 5
 * Designator: 1
 * Number: 09092
 * Direction: 0
 * 16 Latitude: 33-41.0
 * 17 Longitude: 84 -18.6
 * 98 Border Bridge: 000 %Shared: 00
 * 99 ID Number: 0000000000000000
 * 100 Defense Highway: 0
 * 101 Parallel Structure: N
 * 102 Direction of Traffic: 2
 * 264 Road Inventory Mile Post: 004.34
 * 208 Inspection Area: 07 Initials: DAS
 * Location I.D. No: 089-09092M-001.83N
 * XReferen I.D. No: 000-0000000-000.000

Signs & Attachments

* 104 Highway System: 0
 * 26 Functional Classification: 16
 * 204 Federal Route Type: M No: 09092
 * 110 Truck Route: 0
 * 206 School Bus Route: 1
 * 217 Benchmark Elevation: 0.00
 * 218 Datum: 0
 * 19 Bypass Length: 5
 * 20 Toll: 3
 * 21 Maintenance: 01
 * 22 Owner: 01
 * 31 Design Load: 6
 * 37 Historical Significance: 5
 * 205 Congressional District: 11
 * 27 Year Constructed: 1966
 * 106 Year Reconstructed: 0000
 * 33 Bridge Median: 3
 * 34 Skew: 12
 * 35 Structure Flared: 0
 * 38 Navigation Control: N
 * 213 Special Steel Design: 0
 * 267 Type of Paint: 1
 * 42 Type Service On: 5 Under: 1
 * 214 Movable Bridge: 00
 * 203 Type Bridge: Z-O-M-O
 * 259 Pile Encasement: 3
 * 43 Structure Type Main: 4 02
 * 45 No. Spans Main: 004
 * 44 Structure Type Appr: 0 0
 * 46 No. Spans Appr: 0000
 * 226 Bridge Curve Horz: 0 Vert: 0
 * 111 Pier Protection: 0
 * 107 Deck Structure Type: 1
 * 108 Wearing Surface Type: 1 Membrane: 0 Protection: 8
 * 223 Expansion Joint Type: 04
 * 242 Deck Drains: 0
 * 243 Parapet Location: 0 Height: 0 Width: 0
 * 238 Curb: 0.81
 * 239 Handrail: 77
 * 240 Median Barrier Rail: 0
 * 241 Bridge Median Height: 0.7 Width: 4
 * 230 Guardrail Loc Dir Rear: 2 Fwrd: 2
 * Oppo Dir Rear: 2 Fwrd: 2
 * 244 Approach Slab: 3
 * 224 Retaining Wall: 0
 * 233 Posted Speed Limit: 45
 * 236 Warning Sign: 0
 * 234 Delineator: 1
 * 235 Hazard Boards: 0
 * 237 Utilities Gas: 21 Water: 22 Electric: 00 Telephone: 21 Sewer: 00
 * 247 Lighting Street: 0 Navigation: 0 Aerial: 0
 * 248 County Continuity No: 00

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 089-0148-0

DeKalb County

SUFF. RATING: 86.8

Programming Data

201 Project No: I-285-1 (42) 117 CT.2
 202 Plans Available: 2
 249 Prop. Proj No: 0000
 250 Approval Status: 0000
 251 P.I. No: 000000
 252 Contract Date: 0000
 260 Seismic No: 00000
 75 Type Work: 00 0
 94 Bridge Imp. Cost: \$ 0
 95 Roadway Imp. Cost: \$ 0
 96 Total Imp. Cost: \$ 0
 76 Imp. Length: 000000
 97 Imp. Year: 0000
 114 Future ADT: 028350 Year: 2017

Measurements

* 29 ADT: 018900 Year: 1997
 * 109 % Trucks: 4
 * 28 Lanes On: 04 Under: 08
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0072
 * 49 Structure Length: 249
 51 Br. Rdwy. Width: 56.0
 52 Deck Width: 72.4
 * 47 Tot. Horz. Cl: 28.0
 50 Curb/Sdewlk Width: 5.0/5.0
 32 Approach Rdwy Width: 054
 * 229 Shldr Width:

Rear Lt: 2.0 Type: 1 Rt: 2.0
 Fwd Lt: 2.0 Type: 1 Rt: 2.0
 Pvmnt Width:
 Rear: 23.0 Type: 2
 Fwd: 23.0 Type: 2
 Intersection Rear: 1 Fwd: 1
 36 Safety Features Br. Rail: 2
 Transition: 2
 App. G. Rail: 2
 App. Rail End: 2
 53 Minimum Cl. Over: 99' 99"
 Under: H 16' 01"
 * 228 Min. Vert. Cl

Hydraulic Data

215 Waterway Data
 Highwater Elev: 0000.0 Year: 0000
 Flood Elev: 0000.0 Freq: 000
 Avg. Streambed Elev: 0000.0
 Drainage Area: 00000
 Area of Opening: 000000
 113 Scour Critical: N
 216 Water Depth: 00.0 Br Height: 00.0
 222 Slope Protection: 4
 221 Spur Dikes Rear: 0 Fwd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No Barrels: 0
 Width: 0.0
 Height: 0.0
 Length: 0
 Apron: 0
 * 265 U/W Insp. Area: 0 Diver: ZZZ
 * Location I.D. No: 089-09092M-001.83N
 * XReferen I.D. No: 000-000000-000.000

Ratings

66 Inventory Type: 2 Rating: 36
 64 Operating Type: 2 Rating: 51
 231 Calculated Loads
 H-Modified: 20 0
 HS-Modified: 25 0
 Type 3: 28 0
 Type 3S2: 40 0
 Timber: 36 0
 Piggyback: 00 0
 261 H Inventory Rating: 20
 262 H Operating Rating: 28
 67 Structural Evaluation: 7
 58 Deck Condition: 7
 59 Superstructure Condition: 7
 * 227 Collision Damage: 1
 60A Substructure Condition: 7
 60B Scour Condition: N
 60C Underwater Condition: N
 71 Waterway Adequacy: N
 61 Channel Protection Cond: N
 68 Deck Geometry: 2
 69 UnderClr. Horz/Vert: 4
 72 Appr. Alignment: 8
 62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
 41 Struct Open, Posted, Cl: A
 * 103 Temporary Structure: 0
 232 Posted Loads H-Modified: 00
 HS-Modified: 00
 Type 3: 00
 Type 3S2: 00
 Timber: 00
 Piggyback: 00
 253 Notification Date: 0000
 253 Fed Notify Date: 0000



**Parsons
Brinckerhoff**

3340 Peachtree Road, NE
Suite 2400, Tower Place
Atlanta, GA 30326-1001
404-237-2115
Fax 404-237-3015

Memorandum of Meeting

Date: October 18, 2000

Date of Meeting: September 19, 2000

Project: IM-NH-285-1(352), PI No. 713300
PBQD Project No. 15846A Work Order #51

Purpose of Meeting: Concept Team Meeting

Meeting Location: GDOT Urban Design Conference Room 1:30 pm.

Attendees: Joe Palladi, GDOT, Urban Design Office
Glenn Bowman, GDOT, Urban Design Office
Daveitta Jenkins, GDOT, Urban Design Office
Kim Phillips, GDOT, Urban Design Office
Robert Holmes, GDOT, Urban Design Office
Donald Mills, GDOT, Planning
David Mulling, GDOT, Review Services
Mike Malcom, GDOT, Dist. 7 Preconstruction
Darlene Parker, GDOT, Dist. 7 Utilities
Katie Mullins, GDOT, Programming
Tim Smith, GDOT, Traffic Operations
John Hutton, GDOT, Environment/Location
Richard Williams, GDOT, Environment/Location
Jerry Wylie, GA. Power Co.
Sev Burkhalter, Bell South
Jack Kovalski, AT&T Broadband
Daniel Hall, Dekalb Public Works
John Gurbal, Dekalb Public Works
David Pelton, Dekalb Public Works
Roger Palmer, Parsons Brinckerhoff
Bill Ferguson, Parsons Brinckerhoff
Sean Johnston, Parsons Brinckerhoff
Michael Penic, Parsons Brinckerhoff
Jim Graybeal, Parsons Brinckerhoff

Distribution: Attendees
Jimmy Chambers, GDOT, Consultant Design Services
Dom Saulino, Parsons Brinckerhoff
Terry Kazmerzak, Parsons Brinckerhoff
Herman Griffin, GDOT Programming
Walter Boyd, FHWA



Discussion:

1. Introductions and welcome's were presented by Daveitta Jenkins. She indicated that a "sign- in " sheet was being passed around for everyone to sign. She identified Parsons Brinckerhoff as the consulting firm hired by the Department to provide the concept for the project. Daveitta then turned the meeting over to Bill Ferguson, with PB.
2. Bill began by providing opening comments and orientation of the concept layout drawing developed by PB. Bill discussed the project description and location with regards to project lengths and proposed interchange improvement. He stated that the project consisted of 0.8 miles of construction on Bouldercrest and 2 miles of construction on I-285. He stated that the existing 2006 and the design year 2026 traffic volumes were developed by Greenhorne & O'Mara, a sub consultant to PB. He indicated that the accident history data furnished by DOT shows the accident rate through the project limits to be about twice as high as the statewide average. Don Mills briefly introduced the need and purpose statement. Bill indicated that PB would get with the planning office to revise the traffic volumes shown in the statement. Bill turned the meeting over to Michael Penic.
3. Michael stated that Greenhorne & O'Mara, a PB sub consultant working on the project, prepared the initial traffic study. Mike went over a traffic volume diagram showing the projected ADT volumes. He pointed out the operational deficiencies in the existing interchange and congestion on the bridge related to level of service and also indicated that the interchange would experience unacceptable levels of service in year 2007; Bouldercrest Road in year 2011; and weaving movements between the ramps and I-675 in 2014. He said that the accident rates along Bouldercrest Road are significant and stated that better access management along Bouldercrest is proposed. Utilizing properly spaced median openings is essential. He stated that the existing signalized intersections north of I-285 would be upgraded and that no signals were proposed on the south side of I-285. Signals would be placed at ramp terminals, Constitution Road and Clifton Church Road. By closing up the median at Continental Way, the project limits were pushed north to the intersection of Bouldercrest and Constitution Blvd. to provide access for large trucks. Michael discussed the need for a ten (10) lane wide bridge (3 thru lanes, 2 left turn in each direction) based on the projected traffic volumes and the large volume of trucks turning at the ramp intersections. Michael stated that the existing four (4) lanes on the bridge simply would not provide enough storage space for the turning volumes. Michael discussed briefly the other interchange design alternates that were considered with regards to partial cloverleaf designs and other diamond interchanges.



Minutes of Meeting
Page 3

4. Daveitta asked Mike to discuss the three lane ramps proposed for the I-675 braided ramps. Michael stated this was done to provide some years of design life in the proposed ramp bridges that sometimes have a service life of around fifty (50) years.
- 4a. Mike mentioned that turn radii for trucks are accommodated at the interchange. He also stated that 3 lanes are needed through the heart of the interchange to get proper phase timing, and that four lanes interfered with signal phasing to feed and store left turns at the on and off ramps.
5. Mike then turned the meeting back over to Bill Ferguson who continued to address the design items and issues covered in the draft concept report. Bill addressed the R/W impacts with regards to required limits of 150 to 180 feet of R/W needed along Bouldercrest Road and 300 to 1300 feet of R/W needed in the areas of the braided I-675/I-285 ramps. Bill indicated that three (3) businesses would be displaced by the project: a service station, a tire service store and the rest of a motel already partially removed. He discussed the controlled access along Bouldercrest Road and the 100 to 300 feet of limited access beyond each ramp radii proposed at the ramp intersections and Bouldercrest Road. A nationwide 404 permit will be required for this, and individual permits were discussed. He stated that there would be approximately 35 parcels of R/W to acquire. It was stated that staging will be necessary since traffic must be maintained during construction. A Public Information Meeting and a Public Hearing will be required on the project. In addition, a design exception will be required for the existing 6.75 ft inside shoulder on I-285 and the existing 9 degree 30 minute curve between Clifton Church and Bouldercrest Road. Bill discussed a possible UST and Hazardous Waste site involvement at an apartment complex and dry cleaning business, respectively, along the project that might be affected by additional R/W requirements. Bill summarized the project costs as follows: \$20 million construction, \$10 million R/W, for a total project cost of approximately \$30 million.
6. Bill turned the meeting back over to Daveitta Jenkins. Daveitta ask the Office of Programming about the project schedule. Katie Mullins stated that the current let date for the project is July 2001, but that probably needed to be revised to reflect a 2001 R/W and 2002 construction date. Mr. Mulling asked about the south bridge over the South River on Bouldercrest Road. Daveitta asked the Dekalb County representatives about their schedule for the bridge over the South River on Bouldercrest Road. Mr. Mulling suggested the 2 lane bridge replacement will need to be coordinated w/ county project.
- 6a. Bill asked if it was possible to get the bridge replacement in the project. It was stated that the interchange project did not appear to require additional through lanes on the bridge over the south river and the current modeled bridge replacement project could only replace the existing number of through lanes. Since the two projects do overlap because of tapers, close coordination will be required.



7. John Gurbal with Dekalb County stated that the bridge project had a 2001 let date. He also indicated that the County plans to secure a Consultant by the middle of October to begin the concept work. He said that preliminary thoughts were to shift the alignment and construct a new bridge, but that the plan was only to replace the two lane bridge with two lanes. Daveitta indicated that the County's design will need to be reviewed to establish how it will influence the interchange design.
8. Michael Penic was asked to discuss the required lanes for I-285 under the Bouldercrest Road overpass. Based on the year 2026 forecasts, the Bouldercrest overpass will need to span two eastbound accelerations lanes from I-675, one westbound auxiliary lane to I-675, four general use lanes in each direction, and one HOV (carpool) lane in each direction on I-285. These features would not be precluded by the proposed design. This is a total of 13 lanes. If a two span structure is used with piers in the median, the bridges should span seven lanes of eastbound I-285 and six lanes of westbound I-285.
9. David Mulling asked if the proposed Bouldercrest Road bridge would accommodate future I-285 design. Bill Ferguson and Michael Penic stated that it would. David also ask if the proposed lanes line up through the intersection with the existing lanes on Constitution and Bouldercrest Road, and if "U-turns" would be permitted. Michael stated that the through lanes line up in the intersection and that "U-turns" could be made from the proposed signalized left turn lane. Tim Smith questioned if the westbound right would be free flow or a merge lane.
10. Tim questioned if the free flow right turn lane at the intersection of Constitution and Bouldercrest Road would have enough lane width to allow the right turn onto Bouldercrest or would a lane transition need to be developed to taper out the lane. Mr. Penic suggested that this should be studied in more detail in this area. Mr. Smith also asked if u-turns were provided at the apartments and Continental Way. The response was yes.
11. Richard Williams from the Environment/Location office stated that, previously a PAR was not needed, but it will now be required based on stream impacts shown on the proposed layout. Also, he indicated that the project would need a reassessment based on the realignments proposed and that an individual permit would be required.
12. Greenhorn and O'Mara's environmental assessment did not seem to account for wetlands where anticipated ramp braids are located.
13. Richard Williams asked if it had been determined if sound barriers would be required for this project as required on the Flat Shoals Road project. Bill Ferguson pointed out that a study would be required based on the approved alignment and concept.



14. Don Mills from the Office of Planning stated that the transportation model only provided for two (2) lanes, one in each direction, south of the interchange on Bouldercrest Road and four (4) lanes, two lanes in each direction, north of the interchange. Mr. Bowman said the FHWA had informed him that the coding in the RTP model must agree with the proposed design. Any differences would require that the project be placed on hold until the model is updated, in 2003 at the earliest. This was noted as a critical issue and further engineering analysis would probably be required. It was stated that the 2002 let date is a very aggressive schedule.
15. Daveitta Jenkins asked if any one was present from the Right-of-Way Office. No one was present.
16. The District Office representative had no comments.
17. Jerry Wylie with Georgia Power Company stated that they would have a reimbursable claim, mainly east of Bouldercrest, for distribution lines, since the Power Company had moved in 1960 for the freeway construction. He stated that most of their distribution lines would be affected by the proposed project. He said they can and will use higher poles if necessary. He also indicated they had additional easement in the area already. He said he would provide the district with a cost estimate. He also said they would accommodate signal attachments.
18. Sev Burkhalter with Bell South requested hanger/conduit space on the new bridge. He indicated that Bell South had joint use on the Ga. Power poles. He stated that it would be a total rebuild for their facility.
19. Jerry Wylie with Georgia Power Company stated that they preferred that the signal heads at the signalized intersections be attached to the power poles rather than on new stain poles.
20. Jack Kovalski with AT&T Broadband stated that their facilities were attached and riding the Ga. Power poles and that they would have the same conflicts as Bell South. AT&T will have all new coax and fiber to replace their existing facilities.
21. Darlene Parker with the District Utility Office requested that Georgia Power Company furnish a cost estimate for their facilities as soon as possible.
22. Glenn Bowman stated that the cost estimate needed to be transmitted to urban design for reimbursable and non-reimbursable utility conflicts for inclusion in the final concept report.



Minutes of Meeting
Page 6

23. John Gurbal with Dekalb County Public Works Department asked about the additional number of lanes added to Bouldercrest Road. He indicated that there is a neighborhood concern about additional traffic in the area. Historically they have fought added truck traffic. This may be of concern at a public meeting with the design shown. Continental Way Connector may encourage more traffic to use Bouldercrest Road to go north. He indicated that through the limits of the project the zoning is mixed use. The area closer to Moreland Ave is non-residential, but Bouldercrest Rd is mainly residential.
- 23a. It was noted that the neighborhood had wanted International to be cul-de-saced. The median openings, closure and rerouting of Continental Way was also noted. Truck traffic may be encouraged by these changes. The Dekalb County representative indicated that he was in favor of the new connector between Constitution and Continental because trucks could utilize this route instead of travelling further down Constitution and turning onto Industrial Park Drive.
24. John Gurbal recommended that the local business association should be contacted early about the proposed design. John also mentioned that a meeting with the people in the area to show the R/W impacts would be beneficial.
25. Bell South asked about the construction schedule.
26. Don Mills stated that it would be 2003 before any changes could be made to the RTP model and probably 2004 or 2005 before the proposed concept could be modeled. Without a temporary fix it would not be possible to make a 2001 R/W date.

Daveitta Jenkins stated that any additional comments to the meeting needed to be submitted within two weeks. Parsons Brinckerhoff is responsible for the official minutes. Daveitta then adjourned the meeting.

The foregoing is my understanding of the topics discussed. If you have any corrections or comments, please fax them to me at 404-237-3015.

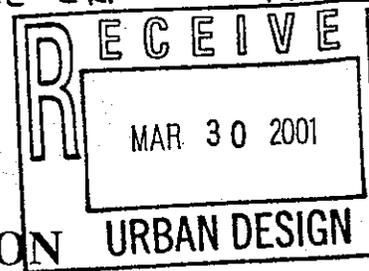
Sincerely,

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
Dominic Saulino
Project Manager

*Over a Century of
Engineering Excellence*

PALLADI _____
BUCHAN Glenn
ALEXANDER _____
OTHER _____
GROUPS _____
FILE _____

VGB JML KKP KIT



STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No's. 713300 & 752930 OFFICE Environmental/Location
DeKalb County

DATE March 28, 2001

FROM ^{HDK JIC} Harvey D. Keepler, State Environmental/Location Engineer

TO **DISTRIBUTION BELOW**

SUBJECT: PUBLIC INFORMATION MEEETING SYNOPSIS

PROJECT NUMBER: IM-NH-285-1(352) and BRS LB-9092

PROJECT NAME: Bouldercrest Road at I-285 (Interchange improvements) and Bouldercrest Road bridge over the South River

DATE: March 27, 2001

NUMBER IN ATTENDANCE: 74

FOR: 24

CONDITIONAL: 3

AGAINST: 3

OFFICIALS IN ATTENDANCE: Rep. Brad Hubbard, Rep. George Maddox and Rep. Henrietta Turnquist

ADDITIONAL COMMENTS: A lot of citizens were concerned that the project did not extend to and include a turn lane at River Road.

PREPARED BY: Frances C. Anglin

TELEPHONE NO.: 770-986-1050

cc: Frank L. Danchetz, P. E.
Thomas L. Turner, P. E.
Steve Henry

Darby Beach
Michael Malcom
Joe Palladi, P.E.

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-285-1(352), Dekalb County
I-285 at Bouldercrest Road
P.I. No. 713300

OFFICE Urban Design

DATE March 29, 2001

FROM *Teresa Brandenburg*
Teresa Brandenburg, Transportation Engineering Associate

TO The Files

SUBJECT Meeting Notes-PIM Debriefing

A Public Information Meeting (PIM) was held at the Cedar Grove High School in Dekalb County, GA from 5 PM to 7 PM on March 27, 2001 for the subject project. The following afternoon, the attendees of the PIM from Urban Design met at 2:30 PM in the Urban Design Conference Room to discuss comments heard from the public. Urban Design personnel heard the following comments:

- Many citizens wanted the project limits to extend south past River Road
- Some people recommended that Ramp A be aligned with Continental Way
- Some citizens commented that they liked the right turn lane onto Ramp B
- Many people commented that they liked the braided ramps
- A citizen from the NAPA Trucking Company commented that he liked the proposed design and that he has approximately 50 trucks per day that all use the Interstate. He also stated that he liked the braided ramps and that the EB off ramp routinely backs up.
- Some citizens expressed concerns about the landfill west of Ramp C/D diverge
- Many people stated that the trucks were using the subdivisions as turnarounds
- Some citizens commented that cars would be prohibited from leaving Whitehall Forest Court due to the queuing of the trucks at the truck stop
- Some people expressed concern about the weight of the trucks and the load limit on the South River Bridge
- Many citizens suggested better signage for the trucks
- Some people commented that Sugar Creek Golf Drive would not support trucks due to the soft soil underneath
- Many citizens commented that the trucks turning out of the truck stop block the lanes to get onto I-285
- Some people did not want trucks to be put on Sugar Creek Golf Drive
- Many citizens commented that the sight distance at Bouldercrest Road and River Road needed improvement

- Some people expressed concern about increased traffic on River Road
- Some citizens were concerned about this project putting more traffic on Clifton Church Road
- One citizen wanted a left hand turn signal for U-turns heading north on Bouldercrest Road at the Clifton Church Intersection
- Some people commented on the driveway location in respect to the shopping center on Clifton Church Road
- Some citizens expressed concern about trucks from NAPA Auto Parts using Sugar Creek Golf Drive
- Some people wanted to know who would maintain Sugar Creek Golf Drive after the project was completed
- Many citizens were concerned about the noise impacts
- Some people wanted to know if street lighting would be included on this project
- Some citizens commented about standing water on the Bouldercrest Bridge over I-285
- One citizen commented that the raised medians were hard to see
- Some citizens commented on a turn lane for Industrial Drive
- Some people commented that the Industrial Drive Connector may be too steep and not vertically feasible
- Some citizens wanted to know if the construction work would be done during daytime hours
- Some people commented that a church was being planned in the southwest quadrant of the interchange around the wetland area
- There was a request made for "separate median openings" at Industrial Drive and Sugar Creek Golf Drive
- It was suggested to realign Bouldercrest Road to 90° to line up with the Continental Way Connector at the north end of the project
- A concern was expressed about the lane width going from 4 lanes to 2 lanes on either end of the project
- A concern was voiced about showing easement through the apartments near Bouldercrest Lane

Action to be taken:

- Researching the profiles of Industrial Drive and Sugar Creek Golf Drive and the possibility of a median opening at Industrial Drive [Design]
- Researching the profiles of Whitehall Forest Court and the possibility of a driveway off the west end of Whitehall Forest Court [Design]
- Researching the possibility of not using Sugar Creek Drive as an access to NAPA Auto Parts Distribution Center [Design]
- Environmental concerns should be addressed during project development [OEL]

TLB

cc: Tom Turner; Joe Palladi; Ben Buchan; Glenn Bowman; Mike Lobdell;
Harvey Keepler, Attn: Jim Schell

p. 03.

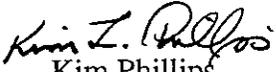
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-285-1(352), DeKalb County
I-285 @ Bouldercrest Road
P. I. No. 713300

OFFICE Urban Design

DATE May 4, 2001

FROM 
Kim Phillips
Design Engineer II

TO The File

SUBJECT Meeting Notes – May 4, 2001

Glenn Bowman, Mike Lobdell, and Kim Phillips met with the members of the Bouldercrest Business Group. The meeting was held in the conference room at Rayloc Merchandise Distribution Service and went from approximately 12:00 PM to 1:45 PM on May 4, 2001. A list of attendees is attached. The meeting allowed the Department an opportunity to present the current project concept to the business group, to answer the membership's questions, and to note the membership's concerns.

Phil Potts began the meeting by having everyone introduce himself or herself. The meeting began with a Code Enforcement Official for DeKalb County, Ernie Blow, detailing the current status of the DeKalb Inn as a public health concern. Attached is a letter circulated from Jerry Silver Jr., Sr. Officer Code Enforcement detailing their ongoing investigation and management of these concerns.

Special guest Jennifer Parker, Publisher/Editor of the CrossRoadsNews of South DeKalb County, was introduced.

Mr. Potts then introduced Glenn Bowman. Mr. Bowman began his presentation using a display from the March 27, 2001 Public Information Meeting. He stated that the first thing he wished to make clear was that this was a proposed concept and was not finalized, but looking to implement and incorporate ideas. Mr. Bowman's speech notes are attached. He began by orienting everyone to the project's location. He then began to give the project's description. He stressed that this was a safety and operational project for the interchange. He discussed problems with the entrance at Whitehall Forest Court. He discussed the benefits of raised medians. He explained that raised medians are used to control access. Raised medians are considered a public safety enhancement, because a 30 to 50 percent reduction in accident rates is attributed to them where implemented. A possible 36 conflict points are reduced to 4 when comparing typical 4-leg intersections of two-way center turn lane roads

with median divided roads. Accidents are greatly reduced by this reduction of conflict points. Future lighting and landscaping enhancements can be accommodated in raised medians if local governments commit to maintaining them. A problem with medians is that turning movements by tractor-trailers are restricted, since they can not make a direct left so alternate access has to be provided for them. He explained that better intersection spacing gave better progression of traffic. He pointed out the improved bicycle and pedestrian accommodations such as the proposed bike lanes and sidewalks on both sides of the roadway from end to end of the project. After the description, he opened the floor for questions and comments.

The following were questions or comments:

1. Currently, turning left off Bouldercrest onto I-285 captures vehicles in a trapped left, gridlock results when the vehicle tries to merge into the through lane.
2. There is no median opening proposed directly to RMDS.
3. There is no median opening proposed at Continental Way.
4. Question from Sarah Copelin-Wood: Where are school bus stops located and will cars stop? Was the board of education contacted when the concept was being designed?
Answer: School bus stops have not been located. The Department will inform the board of education of the project and be available to discuss the issue if requested.
5. The fire station is located on Constitution Road outside the project limits.
6. Question: Why do the ramps bridges at the river cross at the river?
Answer: The bridges cross there so that only one set of bridges is needed.
7. An industrial park is planned around the Kroger Distribution Center.
8. Paul Williams stated there is an existing sight distance problem at Sugar Creek Golf Drive.
9. Question from Paul Williams: Will there be a signal at Sugar Creek Golf Drive?
Answer: Existing signal lights will be retained. A signal warrant study must be done before future signals can be set up.
11. Phil Potts stated there is already a backup problem in the industrial park area.
There are times when trucks are having to park on the street.
12. Phil Potts stated that Phase II of the Industrial Park is planned for the northwest quadrant (west of Whitehall Forest Court). Right of way and limited access will cut into the industrial property.
13. Gresham Park was not identified on the layout and this will be investigated
14. A median opening was requested at the Days Inn in the southeast quadrant of the interchange.
15. There appears to be a ridge along Sugar Creek Golf Drive and the proposed drive to RMDS may be problematic.
16. Question: How soon will project begin?
Answer: After the concept approval, it may take six to eight months or more to get environmental approval. Hopefully, by next spring or summer land acquisition will begin. If everything goes as scheduled ground should be broken spring or summer of 2003.
17. Question from Phil Potts: Will there be any more public meetings?

Answer: There are no other Public Information Meetings scheduled at this time, but may be needed in the future.

18. Question from Phil Potts: Will traffic be maintained?

Answer: Yes.

19. Question: What are the project costs?

Answer: The project estimated costs are 20 million for construction 10 million for right of way. It is a federal aid project. For projects of this type, typically, eighty percent of the project is federally funded and twenty percent is state funded.

20. Question from Paul Williams: When would be the best time to contact the Department for an update?

Answer: Probably in about six months.

After the meeting was adjourned, business cards were provided for further contacted with the Department.

KLP

cc: Joe Palladi
Ben Buchan
Glenn Bowman
Mike Lobdell
The Bouldercrest Business Group, Attn. Phillip Potts

**IM-NH-285-1(352) DEKALB COUNTY
P.I. NO. 713300
I-285/BOULDERCREST ROAD INTERCHANGE EVALUATION MATRIX**

Interchange Type	Relative Cost-ROW	Relative Cost-Constr.	Env	Social Impact-Displacements	Traffic Operations	Expandability	Constructability	Safety	Driver Expectancy	Total
Wt. factor	1	1	2	3	4	1	2	5	5	
Partial cloverleaf with braided ramps	1	1	1	1	2	2	3	3	2	48
Compressed Diamond with elongated and nested ramps	3	2	3	1	2	1	1	1	1	35
Compressed Diamond with braided ramps	2	3	2	2	2	1	2	2	3	53

TOTAL = SUMMATION OF WEIGHT FACTOR X RATING

RATING SCALE 1-3

- 3 – Most Desirable
- 2 – Average
- 1 – Least Desirable

WEIGHT FACTOR: 1-5 Based on degree of importance

- 5 – Most Important
- 1 – Least Important



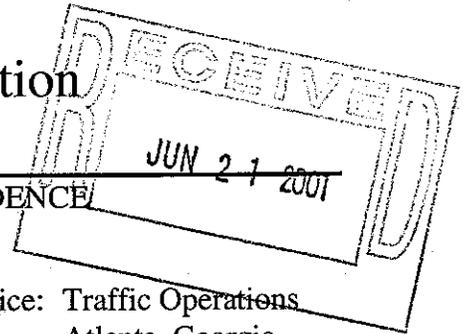
April 18, 2000

Attachment (Signature Page)

Cc: Harvey Keepler, State Environment/Location Engineer
Joseph Palladi, State Urban Design Engineer
Stephen Henry, District Engineer-Chamblee
 Attention: Yancy Bachmann, District Traffic Engineer
David Mulling, State Review Engineer, w/ attachment
Marta Rosen, State Transportation Planning Administrator
Paul Liles, State Bridge Design Engineer
Chuck Hasty, TMC
General Files

Department of Transportation
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE



File: IM-NH-285-1 (352) / DeKalb County
P.I. No. 713300

Office: Traffic Operations
Atlanta, Georgia
Date: June 20, 2001

From: ^{MGW/lls} 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 reconstruction of the I-285/Bouldercrest Road interchange and the installation of braided ramps from I-675 to Bouldercrest Road along I-285 in DeKalb County. The project length is 2.01 miles on I-285 and 0.92 miles on Bouldercrest Road.

Bouldercrest Road is an existing 2-lane roadway south of the interchange and a 4-lane roadway with turn lanes north of the interchange. Bouldercrest Road has a current AADT of 32,250 vehicles and a posted speed limit of 45mph.

This concept proposes to widen Bouldercrest Road to a 4-lane urban roadway with 12-foot travel lanes, a 4-foot bicycle lane, 12-foot shoulders and 5-foot sidewalks with curb & gutter. The bridge over I-285 on Bouldercrest Road will be replaced. The proposed braided ramps between I-675 and Bouldercrest Road along I-285 will eliminate weaving on I-285.

We request conduit be installed on the bridge as part of this project. The conduit will be used to interconnect the signals at the interchange and for other Advanced Transportation Management System components in this area. Our Traffic Operations Design Office can provide details and cost estimates for inclusion in the project.

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

MGW/BM

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF URBAN DESIGN**

PROJECT CONCEPT REPORT

Project Number: IM-NH-285-1 (352)
County: DeKalb
P. I. Number: 713300
U.S. Route Number: N/A
State Route Number: 407 (I-285), N/A (Bouldercrest Rd)



Project Description: I-285/Bouldercrest Road Interchange Reconstruction

Recommendation for approval:

DATE 6/15/01

Glen Bono
Project Manager

DATE 6/16/01

Joseph P. Allard
State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Engineering Administrator

DATE _____

State Environmental/Location Engineer

DATE 6/20/01

Marion G. Waters
State Traffic Operations Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF URBAN DESIGN**

PROJECT CONCEPT REPORT

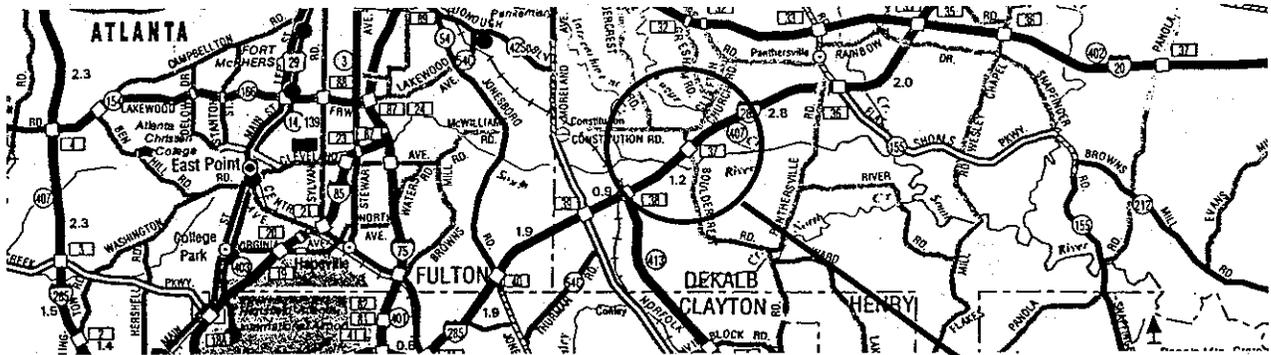
Project Number: IM-NH-285-1 (352)

County: DeKalb

P. I. Number: 713300

U.S. Route Number: N/A

State Route Number: 407 (I-285), N/A (Bouldercrest Rd)



Project Description: I-285/Bouldercrest Road Interchange Reconstruction

Recommendation for approval:

DATE 6/15/01

Glen Bowen
Project Manager

DATE 6/16/01

Joseph M. Wood
State Urban Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).³

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Engineering Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

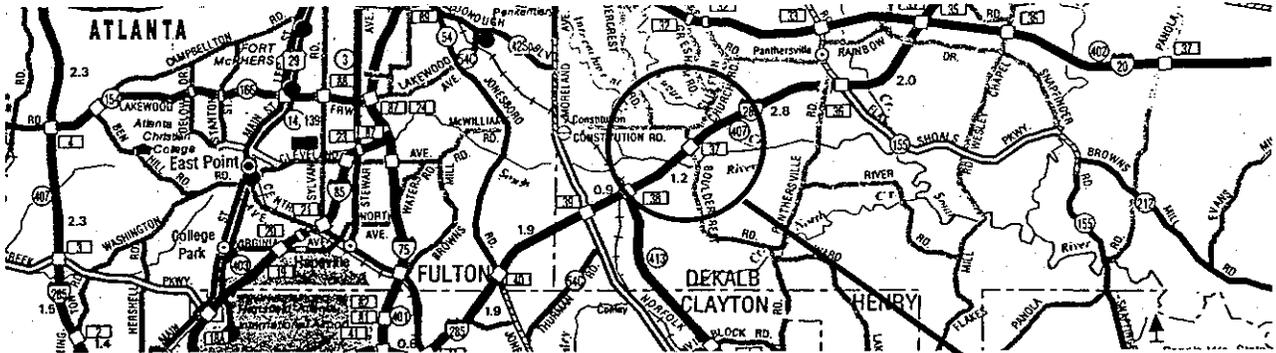
DATE 6/18/01

Paul V. Kelly Jr.
State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF URBAN DESIGN**

PROJECT CONCEPT REPORT

Project Number: IM-NH-285-1 (352)
County: DeKalb
P. I. Number: 713300
U.S. Route Number: N/A
State Route Number: 407 (I-285), N/A (Bouldercrest Rd)



Project Description: I-285/Bouldercrest Road Interchange Reconstruction

Recommendation for approval:

DATE 6/15/01

Glen Bonn
Project Manager

DATE 6/16/01

Joseph M. Allen
State Urban Design Engineer

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

DATE 6-26-01

Mante V. Rosen ^{SAP}
State Transportation Planning Administrator

DATE _____

State Transportation Engineering Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

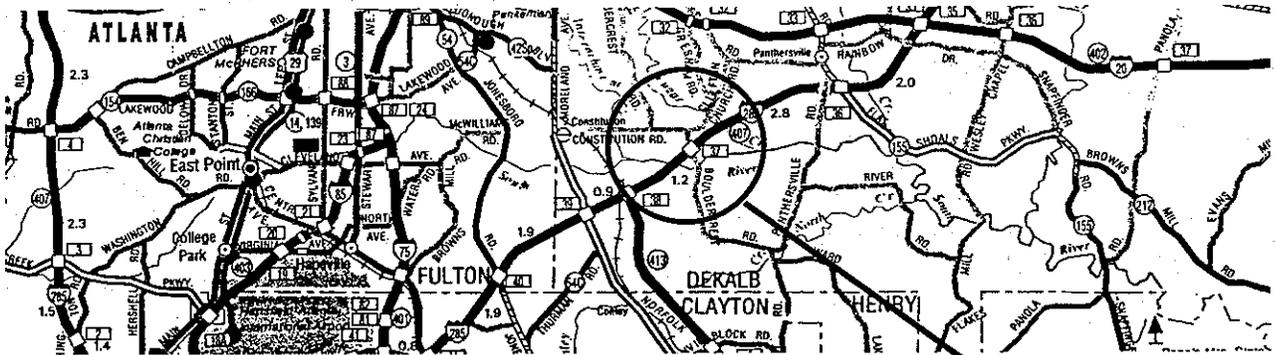
DATE _____

State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF URBAN DESIGN**

PROJECT CONCEPT REPORT

Project Number: IM-NH-285-1 (352)
County: DeKalb
P. I. Number: 713300
U.S. Route Number: N/A
State Route Number: 407 (I-285), N/A (Bouldercrest Rd)



Project Description: I-285/Bouldercrest Road Interchange Reconstruction

Recommendation for approval:

DATE 6/15/01

Glen Bonn
Project Manager

DATE 6/16/01

Joseph Milled
State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Engineering Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE 7-10-01

Stephen T. Harvey
District Engineer

DATE _____

Project Review Engineer

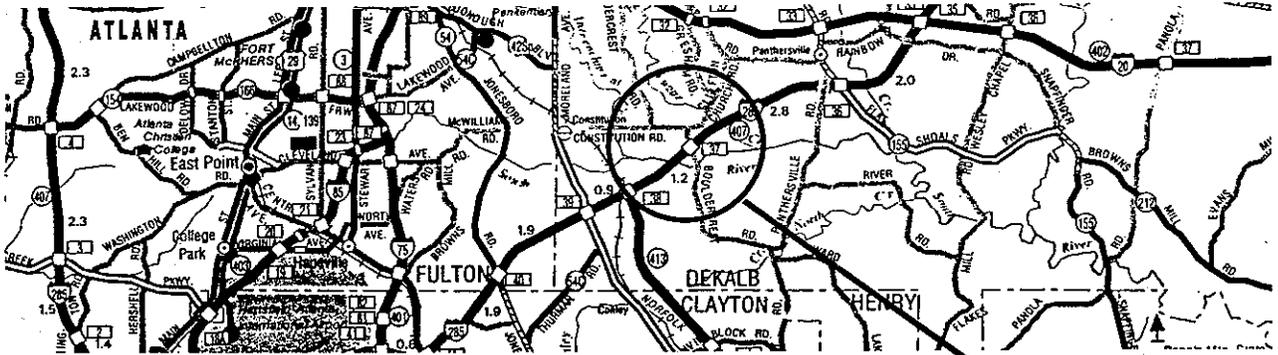
DATE _____

State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF URBAN DESIGN**

PROJECT CONCEPT REPORT

Project Number: IM-NH-285-1 (352)
County: DeKalb
P. I. Number: 713300
U.S. Route Number: N/A
State Route Number: 407 (I-285), N/A (Bouldercrest Rd)



Project Description: I-285/Bouldercrest Road Interchange Reconstruction

Recommendation for approval:

DATE 6/15/01

Glen Bonn
Project Manager

DATE 6/16/01

Joseph M. Hall
State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Engineering Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

District Engineer

DATE 7/5/01

Chris Malin
Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer