

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

**OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE**

FILE P.I. # 721290 - 721295 **OFFICE** Design Policy & Support
STP00-0074-02(021)
STP00-0074-02(022)
Clayton-Fayette Counties
GDOT District 3 - Thomaston **DATE** 4/29/2013
GDOT District 7 - Metro Atlanta

FROM *Keith Pears*
for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT *REVISED*
APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Bobby Hilliard, Program Control Administrator
Genetha Rice-Singleton, State Program Delivery Engineer
Glenn Bowman, State Environmental Administrator
Cindy VanDyke, State Transportation Planning Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Mike Bolden, State Utilities Engineer
Paul Tanner, Asst. State Transportation Data Administrator
Attn: Systems & Classification Branch
Ken Thompson, Statewide Location Bureau Chief
Thomas Howell, District Engineer
Bill Rountree, District Preconstruction Engineer
Kerry Gore, District Utilities Engineer
Rachel Brown, District Engineer
Scott Lee, District Preconstruction Engineer
Jonathan Walker, District Utilities Engineer
Chad White, Project Manager
BOARD MEMBER - 13th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT**

Project Type: Reconstruction/
Rehabilitation P.I. Number: 721290 and 721295
 GDOT District: 3 and 7 County: Clayton/ Fayette
 Federal Route Number: _____ State Route Number: 85

Project Description: This project proposes to improve the shoulder on both directions of SR 85 from the beginning of the project at SR 279 to Pointe South Parkway and to add an additional lane in each direction on SR 85 from Pointe South Parkway to the end of the project. The shoulder work requires the existing southbound bridge for SR 85 over Camp Creek to be improved and the northbound bridge for SR 85 over Camp Creek to be replaced.

Submitted for approval:

T. Benoit 1/3/13
 Heath and Lineback Engineers DATE
Harold Rice 1/11/13
 Office Head DATE
Chad White 1/10/13
 GDOT Project Manager **CHAD WHITE** DATE

Recommendation for approval:

 Program Control Administrator DATE 1/25/2013
GLENN BOWMAN *T.J.
 State Environmental Administrator DATE 1/18/2013
LISA MYERS *T.J.
 Project Review Engineer DATE

 State Utilities Engineer DATE

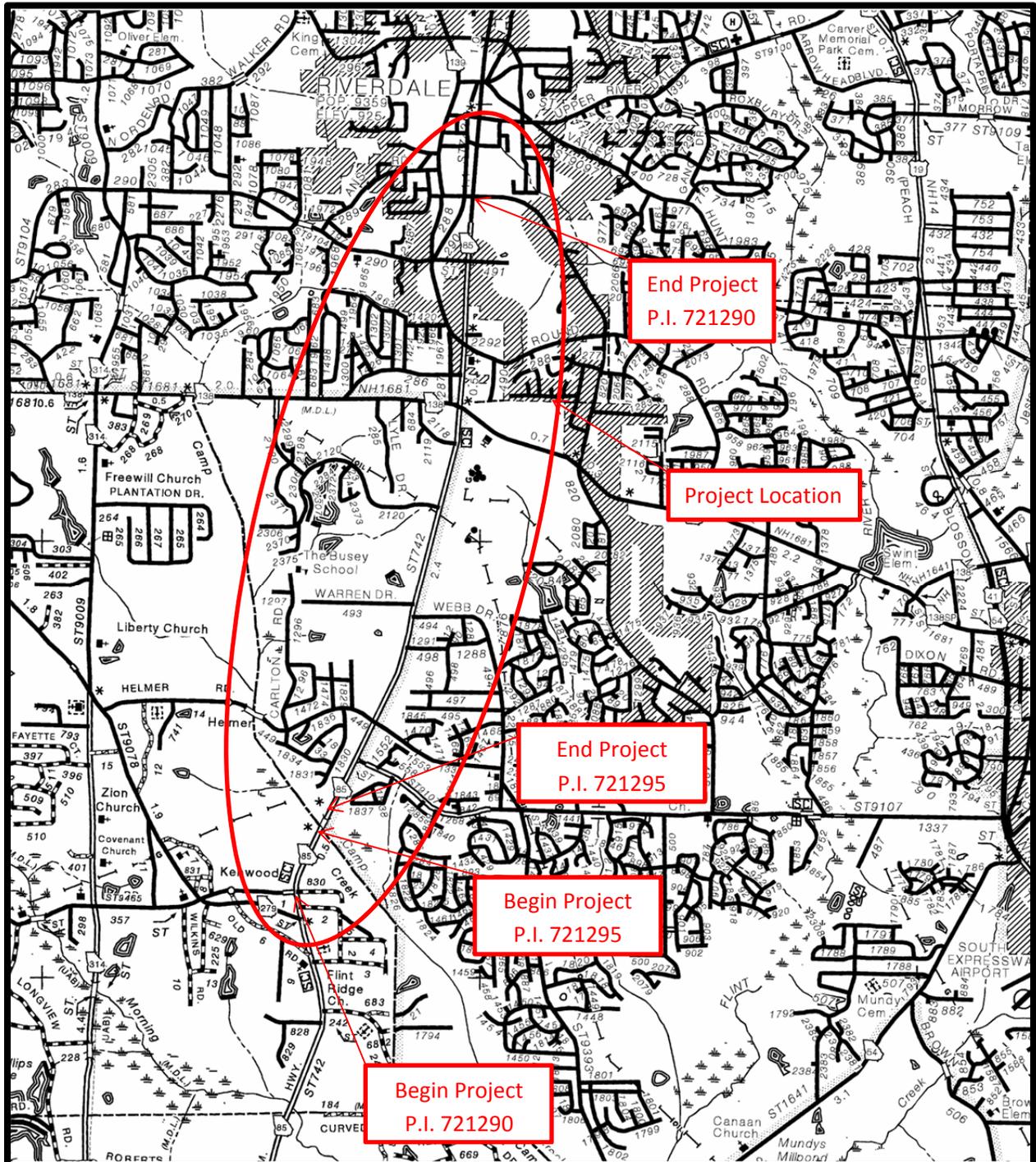
 District Engineer DATE 3/23/2013
Ben Rabun *T.J.
 State Bridge Design Engineer DATE

 State Transportation Financial Management Administrator DATE

 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).
Cynthia P. Varke 1-24-13
 State Transportation Planning Administrator DATE

** RECOMMENDATION ON FILE*

PROJECT LOCATION



PLANNING & BACKGROUND DATA

Project Justification Statement:

P.I. Number 721290

SR 85 in Clayton and Fayette Counties is a vital north/south corridor. This project is identified in the Atlanta Regional Transportation Plan (RTP/"PLAN 2040"). Currently, SR 85 from SR 279 north to Lamar Hutcheson Parkway is a four or five lane facility and SR 85 north of Lamar Hutcheson to Roberts Drive is a six lane facility. The level of service, LOS, for the existing corridor ranges from "A" to "D" with peak traffic counts at Rountree Road (50,550).

On SR 85, the traffic volumes decrease south of Pointe South Parkway, which is north of SR 279, and the corridor operates at LOS "A", under the no-build condition in 2041. Also in 2041, SR 85 north of Lamar Hutcheson Parkway has a no-build LOS "C".

The Office of Planning recommends that the northern project limits be revised from Roberts Drive (as currently programmed) south to Lamar Hutcheson Parkway. In addition, the Office of Planning recommends that the southern project limits be revised from SR 279 north to Pointe South Parkway.

The SR 85 corridor has consistently had a higher crash rate than the statewide average for a similarly classified facility. The statewide average crash rates for 2007, 2008, and 2009 for an urban principal arterial were 649, 612, and 603 crashes per million vehicle miles traveled (MVMT) and the SR 85 corridor crash rates were 952, 952, 753 crashes per million vehicle miles traveled (MVMT).

The Statewide Transportation Plan defines congestion as a level of service of "D" to "F" with a LOS "E" sometimes used to define congestion in large urban areas. The goal of this project is to alleviate traffic congestion on SR 85 while also reducing crash frequency along the corridor.

Location		Existing (2011)		No Build (2041)	
Begin	End	AADT	LOS	AADT	LOS
Corinth Road	SR 279	30,790	C	41,810	D
SR 279	Pointe South Parkway	29,540	A	38,870	A
Pointe South Parkway	Helmer Road	29,540	C	42,040	D
Helmer Road	Webb Road	34,070	B	44,820	C
Webb Road	Lake Ridge Parkway	43,740	C	57,310	C
Lake Ridge Parkway	SR 138	43,360	C	57,020	C

SR 138	Rountree Road	50,550	C	66,480	D
Rountree Road	Lamar Hutcheson Parkway	48,140	D	63,310	E
Lamar Hutcheson Parkway	Roberts Drive	43,600	C	57,350	C

P.I. Number 721295

One of the bridges (Structure ID 113-0013-0; SR 85 (NBL) over Camp Creek) was built in 1947. The bridge consists of six spans of steel beams on concrete caps and fully encased H-piles. This bridge was designed using a truck configuration (H-15) that weighs less than the current state legal truck weights. The overall condition of this bridge would be classified as satisfactory. The deck is in fair condition due to concrete cracking in the deck and spalling of the edge beams. The superstructure members are in satisfactory condition due to some minor deterioration. The substructure members are in fair condition due to cracking in the caps. The sufficiency rating of the bridge is 50.50. Due to the structural integrity, based on the design, replacement of the bridge is recommended. The other bridge (Structural ID 113-0014-0; SR 85 (SBL) over Camp Creek) was built in 1976. The bridge consists of 6 T-beam spans on PSC pile bents. This bridge was designed using the HS20 truck configuration, and although the bridge has a sufficiency rating of 92.94, the bents are located in Camp Creek at a skew not parallel with the direction of flow which causes maintenance issues. The Bridge Office recommends replacing this structure as well.

Description of the proposed project:

While the Project Justification Statement encompasses the section of SR 85 between Pointe South Parkway and Lamar Hutcheson Parkway; its focus is based on future traffic capacity. The traffic data does not support widening of SR 85 between SR 279 and Pointe South Parkway, but there is a need to connect pedestrian traffic from the SR 279 intersection to Pointe South Parkway. The same reasoning holds true for the section of the project between Lamar Hutcheson Parkway and Roberts Drive. The shoulder improvements between SR 279 and Pointe South Parkway will also tie the bridge replacement for northbound SR 85 to the widening section of the project. Because of this, the beginning of the project will be set at the SR 279 intersection, and the end of the project will be set at the Roberts Drive intersection.

Project P.I. 721290 will encompass work along the length of existing SR 85 between SR 279 and Roberts Drive. SR 85 has four 12-foot lanes, two in each direction, separated with a depressed median from the beginning of the project at the intersection with SR 279 to just south of the intersection with Bethsaida Road/Lamar Hutcheson Parkway where SR 85 transitions to three lanes in each direction to the northern project terminus at Roberts Drive. The proposed project would provide shoulder improvements between SR 279 to Pointe South Parkway adding sidewalk and curb and gutter. This will include adding sidewalk to the southbound bridge on SR 85 over Camp Creek

mobility 

and reconstructing the existing outside barrier to ensure pedestrian safety. Then an additional lane in each direction will be added to provide a continuous three lane section in each direction between Pointe South Parkway and Roberts Drive. Project P.I. 721290 will reconstruct both the northbound and southbound bridges on SR 85 over Camp Creek. The existing right of way is approximately 170 feet wide. The total project length is approximately 4.13 miles.

Federal Oversight: Full Oversight Exempt State Funded Other

MPO: N/A MPO – Atlanta TMA
 MPO Project TIP # CL-015
 (For P.I. 721290)

Regional Commission: N/A RC – Atlanta Regional Commission
 RC Project ID # CL-015

Congressional District(s): 3 and 13

Projected Traffic: ADT

P.I. 721290

Current Year (2011): 50,550 Open Year (2021): 59,570 Design Year (2041): 72,670

P.I. 721295

Current Year (2011): 29,500 Open Year (2021): 34,950 Design Year (2041): 42,620

Functional Classification (Mainline): Urban Principal Arterial

Is this project on a designated bike route? No YES

Is this project located on a pedestrian plan? No YES

Is this project located on or part of a transit network? No YES

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: None

Context Sensitive Solutions: Sidewalks were added to the corridor from the beginning of the project at the intersection of SR 85 with SR 279 to tie the existing sidewalks at the intersection with the widening section of SR 85 to facilitate pedestrian flow along the project limits.

DESIGN AND STRUCTURAL DATA

Mainline Design Features for P.I. 721290 approaching proposed bridges to be constructed under P.I. 721295:

Roadway Name/Identification: SR 85

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4/6		4/6

- Lane Width(s)	12'	12'	11'
- Median Width & Type	32' Depressed Grass	20' raised	Varies 8' to 20' raised
- Outside Shoulder Width & Type	10' Paved rural, 12' urban curb and gutter	16'-0" (5' sidewalk, 2'-6" curb and gutter)	16'- 0' 5' sidewalk, curb and gutter
- Outside Shoulder Slope		N/A	Urban
- Inside Shoulder Width & Type	4' Paved (urban), rural	Urban	4' paved (urban)/Urban-raised median
- Sidewalks	Yes	Yes	Yes
- Auxiliary Lanes	N/A	N/A	N/A
- Bike Lanes	No	No	No
Posted Speed	45/55 MPH		45 MPH
Design Speed	55 MPH?	45 MPH	45 MPH
Min Horizontal Curve Radius	2800'	711'	2800'
Superelevation Rate	4%	4%	4%
Grade	4%	6%	6%
Access Control	By permit	By permit	By permit
Right-of-Way Width	170'		170'
Maximum Grade – Crossroad		6%	6%
Design Vehicle		WB-40 or WB-62	WB-40 or WB-62

Major Structures

Structure	Existing	Proposed
ID# 113-0013-0 SR 85 NBL over Camp Creek	Year Constructed 1947 Length- 162' Deck Width -32.30' Br. Rdway width-25.80 Sufficiency Rating-50.50	Length- 200' Width -26'-0" inside eop to gutter with 5'-6" sidewalks on the outside
ID# 113-0014-0 SR 85 SBL over Camp Creek	Year Constructed 1976 Length- 162' Deck Width -44.30' Br. Rdway width-40.50 Sufficiency Rating-92.94	Length- 200' Width -26'-0" inside eop to gutter with 5'-6" sidewalks on the outside

Major Interchanges/Intersections:

SR 85 intersection with SR 279

Crosswalks will be added to the existing intersection.

SR 85 intersection with SR 138

The proposed intersection will be a 4-way signalized; all approaches will have auxiliary turn lanes as warranted by traffic projections.

Utility Involvements:

Utility	Owner
Gas	AGL Resources (AGL)
Telecommunication	AT&T
Water & Sewer	Clayton Co. Water Authority (CCWA)
Power	Georgia Power
Transmission	Georgia Power Transmission
Cable TV	Comcast
Gas	Southern Natural Gas
Water	Fayette Co. Water (FCW)
Gas	Transcontinental Gas Pipeline
Cable TV	Charter Communications
Traffic Signals	Clayton County Transportation Development

Public Interest Determination Policy and Procedure recommended (Utilities)? YES NO

SUE Required: Yes No

Railroad Involvement: None

Right-of-Way:

Required Right-of-Way anticipated: YES NO Undetermined
Easements anticipated: Temporary Permanent Utility Other

Anticipated number of impacted parcels: 97

Anticipated number of displacements (Total): 0

Businesses:

Residences:

Other:

Location and Design approval: Not Required Required

Off-site Detours Anticipated: No Yes Undetermined

Transportation Management Plan Anticipated: YES NO

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	Appvl Date (if applicable)		
	YES	NO	Undetermined
1. Design Speed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Lane Width	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Shoulder Width	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Bridge Width	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Horizontal Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Superelevation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Vertical Alignment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Grade	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Stopping Sight Distance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Cross Slope	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Vertical Clearance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Lateral Offset to Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Bridge Structural Capacity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Horizontal Alignment

- A design exception will be required for the intersection skew angle between SR 85 and Church Street. The existing and proposed skew angle is 57 degrees. This is less than the required minimum of 60 degree skew per AAHSTO *“Geometric Design of Highway and Streets”*.

Design Variances to GDOT standard criteria anticipated:

GDOT Standard Criteria	Reviewing Office	Appvl Date (if applicable)		
		YES	NO	Undetermined
1. Access Control - Median Opening Spacing	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Median Usage & Width	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Intersection Skew Angle	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Intersection Sight Distance	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Bike & Pedestrian Accommodations	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. GDOT Drainage Manual	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Georgia Standard Drawings	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. GDOT Bridge & Structural Manual	Bridge Design	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Roundabout Illumination	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Rumble Strips	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Safety Edge	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Intersection Skew Angle:

- A design variance will be required for the intersection skew angle between SR 85 and SR 279. The existing and proposed skew angle is 62 degrees. This is less than the required minimum of 70 degree skew per GDOT’s Design Policy Manual.

VE Study anticipated: No Yes Completed – Date:

ENVIRONMENTAL DATA

Anticipated Environmental Document:

GEPA: **NEPA:** Categorical Exclusion EA/FONSI EIS

Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes
 Is the project located in an Ozone Non-attainment area? No Yes

Environmental Permits/Variances/Commitments/Coordination anticipated:

Permit/ Variance/ Commitment/ Coordination Anticipated	YES	NO	Remarks
1. U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. CWA Section 404 Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. FEMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other Permits	<input type="checkbox"/>	<input type="checkbox"/>	
11. Other Commitments	<input type="checkbox"/>	<input type="checkbox"/>	
12. Other Coordination	<input type="checkbox"/>	<input type="checkbox"/>	

Is a PAR required? No Yes Completed – Date:

NEPA/GEPA: Pending

Ecology: The Ecology assessment was submitted to GDOT on September 25,2012. The project requires a USACE permit for stream impacts. No effect to state and federal protected species. Migratory birds special provisions were included for the bridges over Camp Creek.

History:

The draft for Historic Resources did not find any historic resources in the project area. There are ten properties over 50 years of age or older in the project’s APE (Area of Potential effects) but they are not recommended for the inclusion in the National Register for Historic Places. The HRSR was approved by SHPO on 7/11/12.

Archeology: Pending

Air & Noise: Pending

Public Involvement:

Public Information Meetings are expected.

Major stakeholders:

Clayton County
Fayette County
City of Riverdale

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: Traffic volumes and working in commercial retail area.

Early Completion Incentives recommended for consideration: No Yes

PROJECT RESPONSIBILITIES

Project Activities:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT OPD/ Heath & Lineback Engineers
Design	OPD
Right-of-Way Acquisition	GDOT/ District 7 Right of Way
Utility Relocation	Utility Owners
Letting to Contract	GDOT/OPD/ Construction Bidding Administration
Construction Supervision	GDOT/ District 7
Providing Material Pits	Construction Contractor
Providing Detours	Construction Contractor
Environmental Studies, Documents, and Permits	GDOT OES/ Edwards Pitman Environmental
Environmental Mitigation	GDOT/OES
Construction Inspection & Materials Testing	GDOT/ District 7

Lighting required: No Yes

Concept Meeting: *The concept meeting was held on August 29, 2012. See attached meeting minutes.*

Other projects in the area:

- **East Fayetteville Bypass from SR 54 to South Jeff Davis Road- Phase I-PI 0006904**
This project proposes to build a bypass on the east side of the City of Fayetteville. The project begins at the intersection of South Jeff Davis Road and County Line Road. The project will widen County Line Road and utilize it as part of the bypass to its intersection with County Line Court. From this point the project will be constructed on new location to connect with Corinth Road at its intersection with SR 54.
- **East Fayetteville Bypass from SR 54 to SR 85 Phase II-PI 0008517**
This project proposes to build a bypass on the east side of the City of Fayetteville. The project begins at the intersection of Corinth Road at SR 85 and ends at the intersection of SR 54 with Corinth Road.
- **CR 357/Kenwood Road at Morning Creek – PI 0008599**

This project proposes to replace the existing bridge on Kenwood Road over Morning Creek.

- **SR 314 from SR 279 to CR 1346-PI 751850**
 This is a reconstruction and rehabilitation project. The project will widen SR 314.
- **SR 85 from CR 491 to South of CS 924 – PI 0009009**
 This is an enhancement project.

Project Cost Estimate and Funding Responsibilities: For P.I. 721290-721295

	Breakdown of PE	ROW	Utility	CST*	Environment al Mitigation	Total Cost
By Whom	GDOT	GDOT	GDOT	H&L		
\$ Amount	\$457,462.92	\$3,540,000.00	\$983,200.00	\$17,738,809.23	N/A	\$23,137,143.26
Date of Estimate	6/11/1992	10/9/2012	10/23/2012	3/11/2013		

*CST Cost includes: Construction, Engineering and Inspection, and Liquid AC Cost Adjustment.

ALTERNATIVES DISCUSSION

Alternative selection: For P.I. 721290

Preferred Alternative: This alternate proposes to improve the shoulder on both directions of SR 85 from the beginning of the project at SR 279 to Pointe South Parkway and to add an additional lane in each direction on SR 85 from Pointe South Parkway to the end of the project. The existing southbound and northbound bridges for SR 85 over Camp Creek are to be replaced. This alternate alleviates traffic congestion on SR 85 while also reducing crash frequency along the corridor.

Estimated Property Impacts:	97 parcels	Estimated Total Cost:	\$23,137,143.26
Estimated ROW Cost:	\$3,540,000.00	Estimated CST Time:	24 months

Rationale:

This alternate was selected because it met the goals outlined in the Project Justification. This alternate also minimizes impacts on private property and has lower construction costs.

No-Build Alternative: This alternate uses the existing 2 lanes in each direction on SR 85 from Corinth Road to just south of Bethesda Road.

Estimated Property Impacts:	None	Estimated Total Cost:	None
Estimated ROW Cost:	None	Estimated CST Time:	None

Rationale: This alternate was not selected because it fails to meet the goals in the Project Justification Statement. This alternate does not alleviate the traffic congestion on SR 85.

Alternative 1: This alternate widens 12' to the outside in each direction

Estimated Property Impacts:	176 parcels	Estimated Total Cost:	\$29,565,584.15
Estimated ROW Cost:	\$6,078,350.08	Estimated CST Time:	24 months

Rationale:

This alternate was not selected because it does not best meet the goals in the Project Justification Statement. This alternate also has significant impacts on private property. Right of Way costs associated with this alternate are substantially higher than the preferred alternate.

Alternative 2: This alternate widens 3' to the inside and 9' to the outside in each direction.			
Estimated Property Impacts:	176 parcels	Estimated Total Cost:	\$31,186,361.19
Estimated ROW Cost:	\$6,078,350.08	Estimated CST Time:	24 months
Rationale: This alternate was not selected because it does not best meet the goals in the Project Justification Statement. This alternate also has significant impacts to private property. Right of Way costs associated with this alternate are substantially higher than the preferred alternate.			

Attachments:

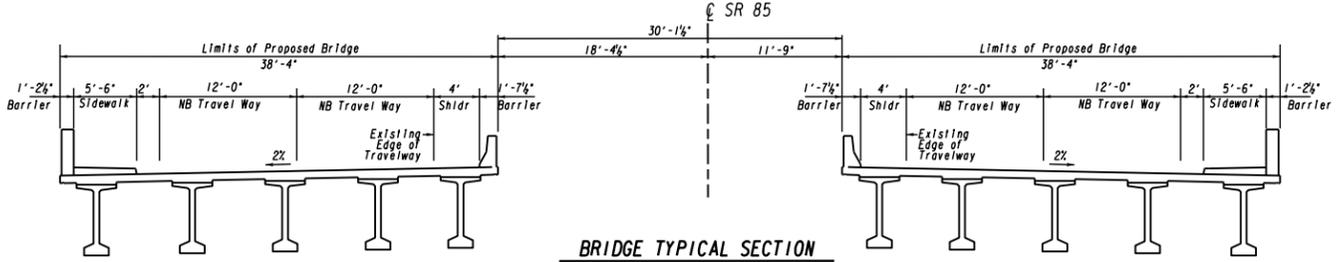
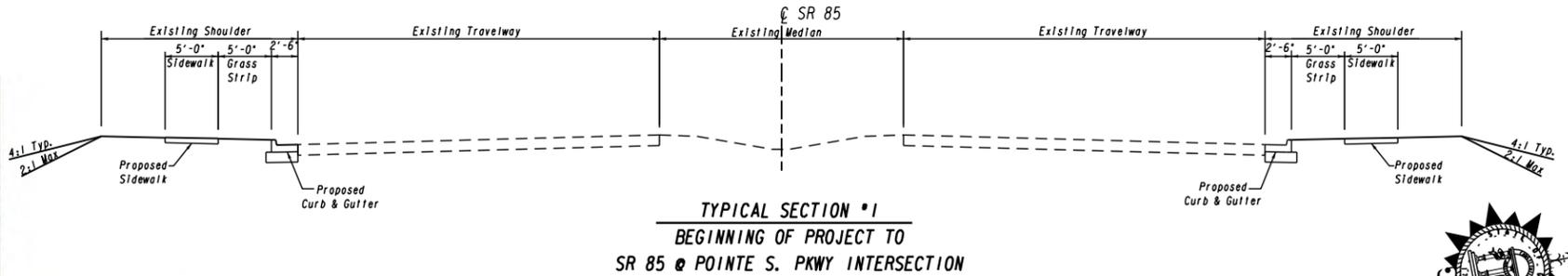
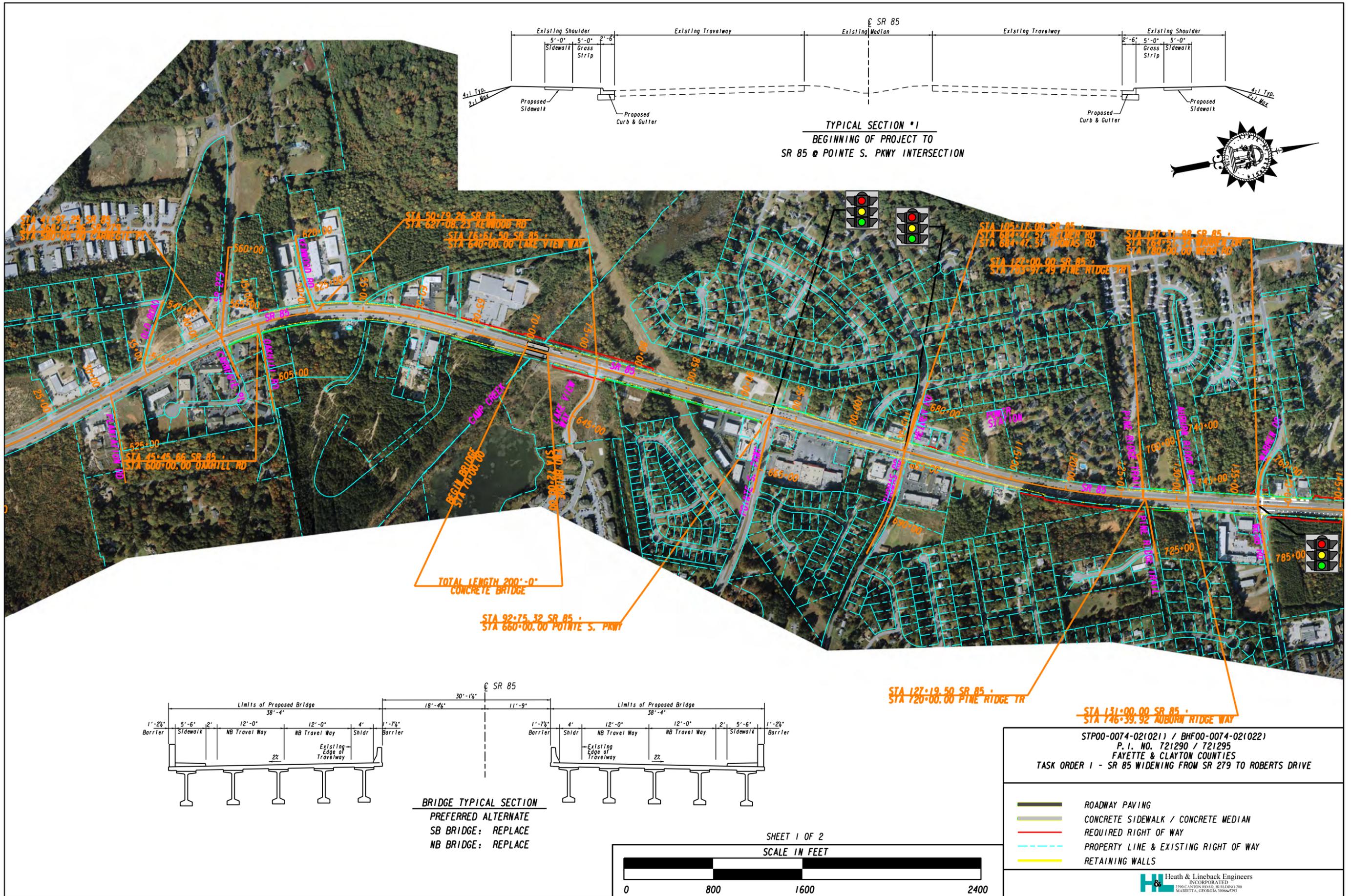
1. Concept Layout with Typical Sections
2. Typical Sections
3. Bridge Inventory
4. Detailed Cost Estimates:
 - a. Construction including Engineering and Inspection
 - b. Completed Fuel & Asphalt Price Adjustment forms
 - c. Right-of-Way
5. Crash Summaries (see traffic study)
6. Traffic Diagrams (see traffic study)
7. Capacity Analysis Summary (see traffic study)
8. Summary of TE Study and/or Signal Warrant Analysis (see traffic study)
9. Conforming plan's network schematics showing thru lanes (see traffic study)
10. Minutes of Team Concept Meeting

APPROVALS

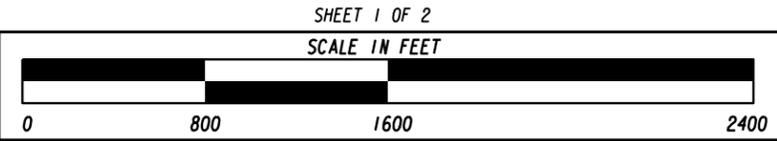
Concur:  4/3/2013
Director of Engineering

Approve: 
Chief Engineer

4/20/13
Date



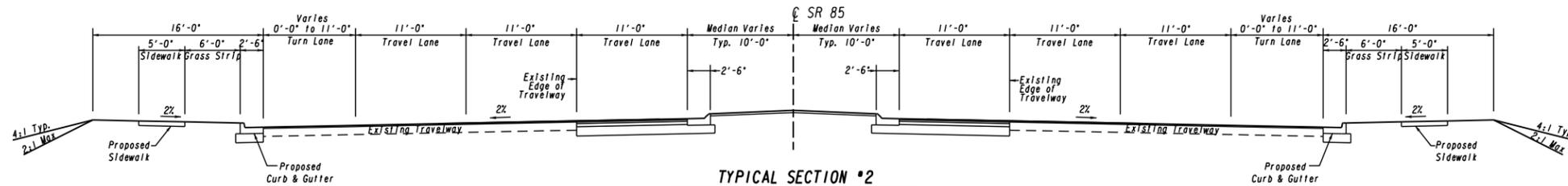
BRIDGE TYPICAL SECTION
 PREFERRED ALTERNATE
 SB BRIDGE: REPLACE
 NB BRIDGE: REPLACE



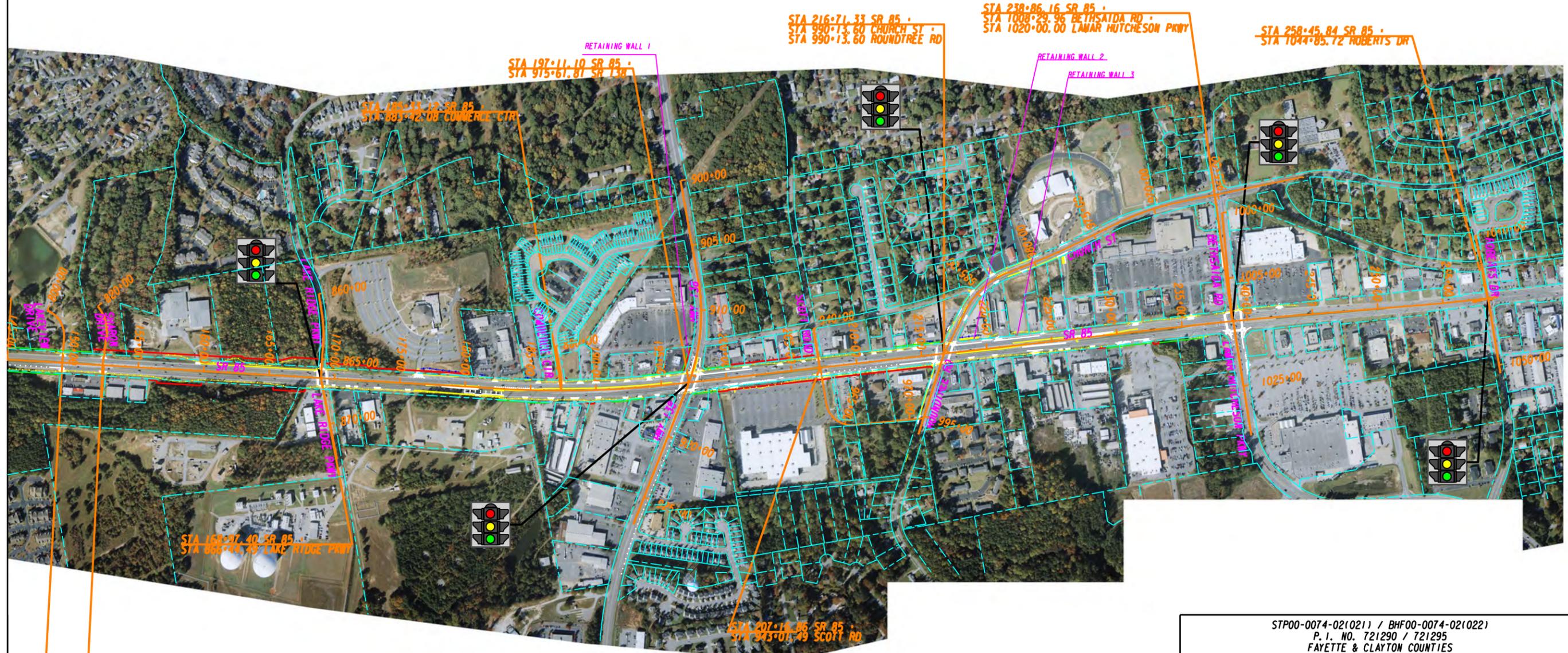
STPOO-0074-02(021) / BHF00-0074-02(022)
 P. I. NO. 721290 / 721295
 FAYETTE & CLAYTON COUNTIES
 TASK ORDER 1 - SR 85 WIDENING FROM SR 279 TO ROBERTS DRIVE

- ROADWAY PAVING
- CONCRETE SIDEWALK / CONCRETE MEDIAN
- REQUIRED RIGHT OF WAY
- - - PROPERTY LINE & EXISTING RIGHT OF WAY
- RETAINING WALLS

Heath & Lineback Engineers
 INCORPORATED
 2300 CANTON BRIDGE BUILDING 300
 MARIETTA, GEORGIA 30066-2393



TYPICAL SECTION #2
PREFERRED ALTERNATE, WIDEN TO INSIDE
SR 85 @ POINTE S. PKWY INTERSECTION
TO END OF PROJECT



STA 152-27.35 SR 85
 STA 824-66.68 SHARON DR
 STA 149-19.00 SR 85
 STA 804-52.22 LAKEVIEW DR

STA 168-27.40 SR 85
 STA 865-44.43 LAKE RIDGE PKWY

STA 180-11.12 SR 85
 STA 889-42.08 COMMENCE LTR

STA 197-11.10 SR 85
 STA 915-61.81 SR 138

STA 207-16.86 SR 85
 STA 843-01.49 SCOTT RD

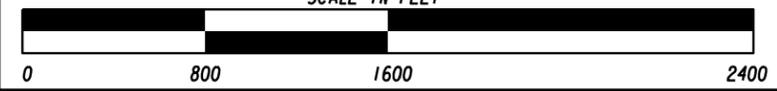
STA 216-71.33 SR 85
 STA 990-13.60 CHURCH ST
 STA 990-13.60 ROUNDTREE RD

STA 238-86.16 SR 85
 STA 1008-29.96 BETHSAIDA RD
 STA 1020-00.00 LAMAR HUTCHESON PKWY

STA 258-45.84 SR 85
 STA 1044-85.72 ROBERTS DR

SHEET 2 OF 2

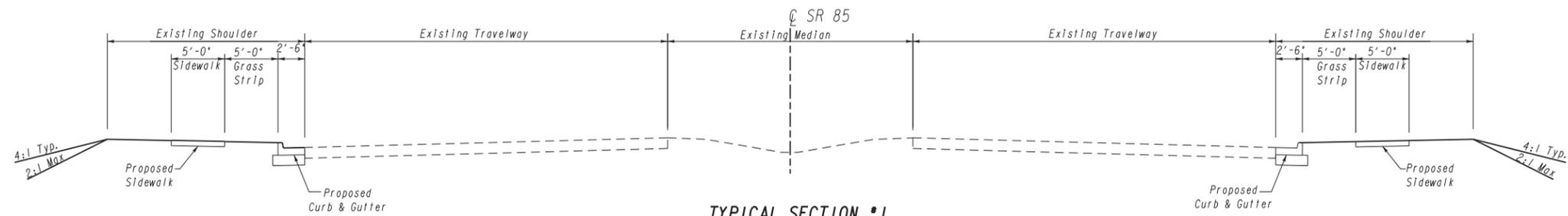
SCALE IN FEET



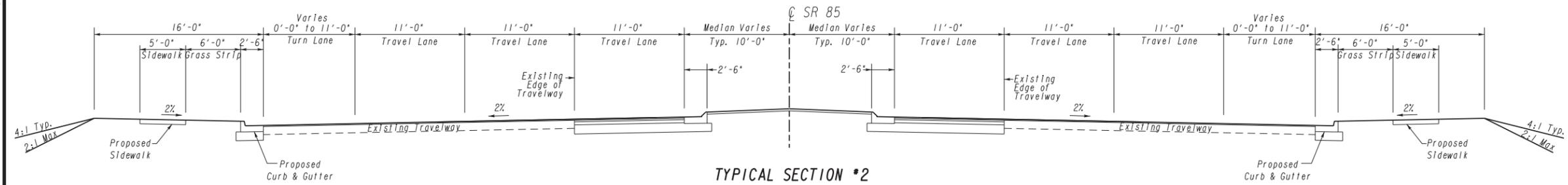
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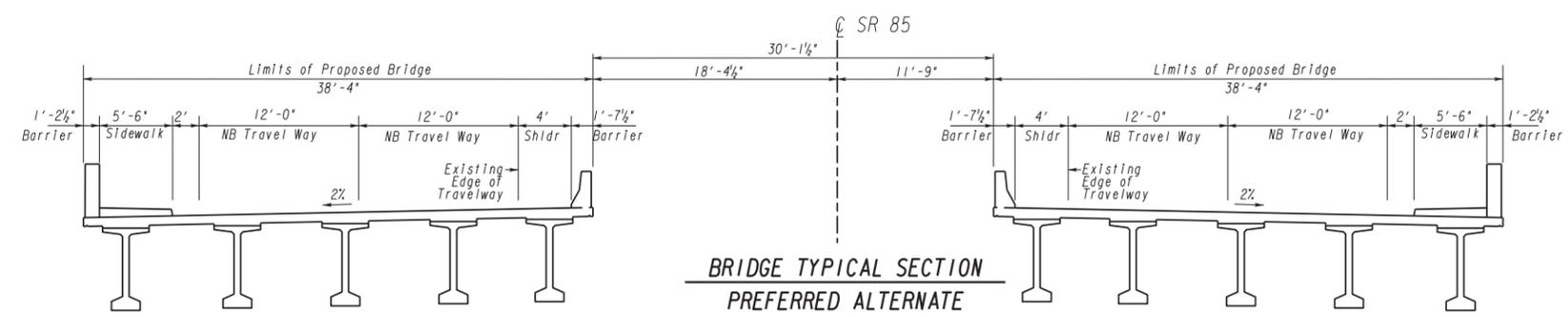
Heath & Lineback Engineers
 INCORPORATED
 2380 CANTON ROAD, BUILDING 200
 MARIETTA, GEORGIA 30066-5393



TYPICAL SECTION #1
BEGINNING OF PROJECT TO
SR 85 @ POINTE S. PKWY INTERSECTION



TYPICAL SECTION #2
PREFERRED ALTERNATE, WIDEN TO INSIDE
SR 85 @ POINTE S. PKWY INTERSECTION
TO END OF PROJECT



BRIDGE TYPICAL SECTION
PREFERRED ALTERNATE
SB BRIDGE: REPLACE
NB BRIDGE: REPLACE

	Heath & Lineback Engineers INCORPORATED 2390 CANTON ROAD, BUILDING 200 MARIETTA, GEORGIA 30066-5393 (770)424-1668	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><th style="text-align: left;">REVISION DATES</th></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>	REVISION DATES							STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: OFFICE OF PROGRAM DELIVERY TYPICAL SECTIONS SR 85 WIDENING FROM CORINTH ROAD TO ROBERTS DRIVE	DRAWING No. 5-001
REVISION DATES											

Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:113-0013-0

Fayette

SUFF. RATING: 50.50

Location & Geography				Signs & Attachments	
Structure ID:	113-0013-0	*104 Highway System:	0	225 Expansion Joint Type:	02
200 Bridge Information:	07	*26 Functional Classification:	14	242 Deck Drains:	1
*6A Feature Int:	CAMP CREEK	*204 Federal Route Type:	F No: 00742	243 Parapet Location:	0
*6B Critical Bridge:	0	105 Federal Lands Highway:	0	Height:	0
*7A Route No Carried:	SR00085	*110 Truck Route:	0	Width:	0
*7B Facility Carried:	SR 85 NBL	2006 School Bus Route:	0	238 Curb Height:	1
9 Location:	5 MI N OF FAYETTEVILLE	217 Benchmark Elevation:	0000.00	Curb Material:	1
2 Dot District:	3	218 Datum:	0	239 Handrail:	11
207 Year Photo:	2010	*19 Bypass Length:	01	*240 Medium Barrier Rail:	0
*91 Inspection Frequency:	24 Date: 06/29/2010	*20 Toll:	3	241 Bridge Median Height:	0
92A Fract Crit Insp Freq:	0 Date: 02/01/1901	*21 Maintanance:	01	* Bridge Median Width:	0
92B Underwater Insp Freq:	1 Date: 10/04/2011	*22 Owner:	01	230 Guardrail Loc. Dir. Rear:	3
92C Other Spc. Insp Freq:	0 Date: 02/01/1901	*31 Design Load:	2	Fwrd:	3
* 4 Place Code:	00000	37 Historical Significance:	5	Oppo. Dir. Rear:	0
*5 Inventory Route(O/U):	1	205 Congressional District:	03	Oppo. Fwrd:	0
Type:	3	27 Year Constructed:	1947	244 Aproach Slab:	3
Designation:	1	106 Year Reonstructed:	0000	224 Retaining Wall:	0
Number:	00085	33 Bridge Medium:	1	233Posted Speed Limit:	55
Direction:	0	34 Skew:	00	236 Warning Sign:	0.00
*16 Latitude:	33 31.0157 HMMS Prefix:SR	35 Structure Flared:	0	234 Delineator:	1.00
*17 Longtitude:	84 -25.6448 HMMS Suffix:00 MP:15.13	38 Navigation Control:	0	235 Hazzard Boards:	0
98 Border Bridge:	000%Shared:00	213 Special Steel Design:	0	237 Utilities Gas:	32
99 ID Number:	0000000000000000	267 Type of Paint:	1	Water:	00
*100 STRAHNET:	0	*42 Type of Service On:	1	Electric:	00
12 Base Highway Network:	1	Type of Service Under:	5	Telephone:	00
13A LRS Inventory Route:	1131008500	214 Movable Bridge:	0	Sewer:	00
13B Sub Inventory Route:	0	203 Type Bridge:	E	247 Lighting Street:	0
101 pallel Structure:	R	259 Pile Encasement:	1	Navigation:	0
*102 Direction of Traffic:	1	*43 Structure Type Main:	4 02	Aerial:	0
*264 Road Inventory Mile Post:	015.13	45 No.Spans Main:	006	*248 County Continuity No.:	00
*208 Inspection Area:	3 Initials: EFP	44 Structure Type Appr:	0 00		
Engineer's Initials:	sgm	46 No Spans Appr:	0000		
* Location ID No:	113-00085D-015.84N	226 Bridge Curve Horz:	0 Vert: 0		
		111 pier Protection:	0		
		107 Deck Structure Type:	1		
		108 Wearing Structure Type:	6		
		Membrane Type:	8		
		Deck Protection:	8		

Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:113-0013-0

Programming Data		Measurements:				
201 Project No:	F-2730 (2)	*29ADT	025050	Year:2010	65 Inventory Rating Method:	2
202 Plans Available:	4	109%Trucks:	0		63 Operating Rating Method:	2
249 Prop Proj No:	BHF-074-2 (22)	* 28 Lanes On:	02	Under:00	66 Inventory Type:	2 Rating: 22
250 Approval Status:	0000	210 No. Tracks On:	00	Under:00	64 Operating Type:	2 Rating: 22
251 PI Number:	721295-	* 48 Max. Span Length	0027		231 Calculated Loads:	
252 Contract Date:	02/01/1901	* 49 Structure Length:	162		H-Modified:	20 0
260 Seismic No:	00000	51 Br. Rwdy. Width	25.80		HS-Modified:	25 0
75 Type Work:	34 1	52 Deck Width:	32.30		Type 3:	27 0
94 Bridge Imp. Cost:	\$106	* 47 Tot. Horiz. Cl:	26		Type 3s2:	39 0
95 Roadway Imp. Cost:	67	50 Curb / Sidewalk Width	2.00 / 2.00		Timber:	35 0
96 Total Imp Cost:	244	32 Approach Rdwy. Width	038		Piggyback:	40 0
76 Imp Length:	000373	*229 Shoulder Width:			261 H Inventory Rating:	15
97 Imp Year:	1990	Rear Lt:	4.00	Type:2 Rt:10.00	262 H Operating Rating	21
114Furure ADT:	037575 Year:2030	Fwd. Lt:	4.00	Type:2 Rt:10.00	67 Structural Evaluation:	5
Hydraulic Data		Permanent Width:			58 Deck Condition:	6
215Waterway Data:		Rear:	24.00	Type:2	59 Superstructure Condition:	6
High Water Elev:	0000.0 Year:1900		24.00	Type:2	* 227 Collision Damage:	0
Flood Elev:	0000.0 Freq:00	Intersection Rear:	0	Fwd: 0	60A Substructure Condition:	5
Avg Streambed Elev:	0000.0	36Safety Features Br. Rail:	2		60B Scour Condition:	7
Drainage Area:	00015	Transition:	2		60C Underwater Condition	6
Area of Opening:	000840	App. G. Rail:	1		71 Waterway Adequacy:	8
113 Scour Critical	U	App. Rail End:	1		61 Channel Protection Cond.:	6
216Water Depth:	07.2 Br.Height:11.1	53 Minimum Cl. Over:	99' 99 "		68 Deck Geometry:	2
222Slope Protection:	1	Under:			69 UnderClr. Horz/Vert:	N
221Slope Protection	0 Fwd:0	*228 Minimum Vertical Cl			72 Appr. Alignment:	8
219Fender System	0	Act. Odm Dir.:	99' 99"		62 Culvert:	N
220Dolphin:	0	Oppo. Dir:	99' 99"		Posting Data	
223Current Cover:	000	Posted Odm. Dir:	00' 00"		70 Bridge Posting Required	5
Type:	0	Oppo. Dir:	00' 00"		41 Struct Open, Posted, CL:	A
No. Barrels:	0	55 Lateral Undercl. Rt:	N 0 0		* 103 Temporary Structure:	0
* Width:	0.00 Height:0.00	56 Lateral Undercl. Lt:	0.00		232 Posted Loads	
* Length:	0 Apron:0	*10 Max Min Vert Cl:	99' 99" Dir:0		H-Modified:	00
265 U/W Insp. Area	1 Diver:JWO	39 Nav Vert Cl:	000 Horiz:0000		HS-Modified:	00
Location ID No:	113-00085D-015.84N	116 Nav Vert Cl Closed:	000		Type 3:	00
		245 Deck Thickness Main Deck Thick Approach:	6.00		Type 3s2:	00
		246 Overlay Thickness:	0.00		Timber:	00
		212 Year Last Painted:	Sup:1984Sub:0000		Piggyback	00
					253 Notification Date:	02/01/1901
					258 Fed Notify Date:	2/1/1901 12:00:00AM

Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:113-0014-0

Fayette

SUFF. RATING: 92.94

Location & Geography				Signs & Attachments	
Structure ID:	113-0014-0	*104 Highway System:	0	225 Expansion Joint Type:	02
200 Bridge Information:	07	*26 Functional Classification:	14	242 Deck Drains:	1
*6A Feature Int:	CAMP CREEK	*204 Federal Route Type:	F No: 00742	243 Parapet Location:	0
*6B Critical Bridge:	0	105 Federal Lands Highway:	0	Height:	0
*7A Route No Carried:	SR00085	*110 Truck Route:	0	Width:	0
*7B Facility Carried:	SR 85 SBL	2006 School Bus Route:	0	238 Curb Height:	1
9 Location:	5 MI N OF FAYETTEVILLE	217 Benchmark Elevation:	0000.00	Curb Material:	1
2 Dot District:	3	218 Datum:	0	239 Handrail:	11
207 Year Photo:	2010	*19 Bypass Length:	01	*240 Medium Barrier Rail:	0
*91 Inspection Frequency:	24 Date: 06/29/2010	*20 Toll:	3	241 Bridge Median Height:	0
92A Fract Crit Insp Freq:	0 Date: 02/01/1901	*21 Maintanance:	01	* Bridge Median Width:	0
92B Underwater Insp Freq:	1 Date: 10/04/2011	*22 Owner:	01	230 Guardrail Loc. Dir. Rear:	3
92C Other Spc. Insp Freq:	0 Date: 02/01/1901	*31 Design Load:	6	Fwrd:	3
* 4 Place Code:	00000	37 Historical Significance:	5	Oppo. Dir. Rear:	0
*5 Inventory Route(O/U):	1	205 Congressional District:	03	Oppo. Fwrd:	0
Type:	3	27 Year Constructed:	1976	244 Aproach Slab:	3
Designation:	1	106 Year Reonstrcted:	0000	224 Retaining Wall:	0
Number:	00085	33 Bridge Medium:	1	233Posted Speed Limit:	55
Direction:	0	34 Skew:	00	236 Warning Sign:	0.00
*16 Latitude:	33 31.0207 HMMS Prefix:SR	35 Structure Flared:	0	234 Delineator:	1.00
*17 Longtitude:	84 -25.6563 HMMS Suffix:00 MP:15.14	38 Navigation Control:	0	235 Hazzard Boards:	1
98 Border Bridge:	000%Shared:00	213 Special Steel Design:	0	237 Utilities Gas:	00
99 ID Number:	0000000000000000	267 Type of Paint:	0	Water:	00
*100 STRAHNET:	0	*42 Type of Service On:	1	Electric:	00
12 Base Highway Network:	1	Type of Service Under:	5	Telephone:	00
13A LRS Inventory Route:	1131008500	214 Movable Bridge:	0	Sewer:	00
13B Sub Inventory Route:	0	203 Type Bridge:	D	247 Lighting Street:	0
101 parallel Structure:	L	259 Pile Encasement:	3	Navigation:	0
*102 Direction of Traffic:	1	*43 Structure Type Main:	1 04	Aerial:	0
*264 Road Inventory Mile Post:	015.14	45 No.Spans Main:	006	*248 County Continuity No.:	00
*208 Inspection Area:	3 Initials: EFP	44 Structure Type Appr:	0 00		
Engineer's Initials:	sgm	46 No Spans Appr:	0000		
* Location ID No:	113-00085D-015.85N	226 Bridge Curve Horz:	0 Vert: 0		
		111 pier Protection:	0		
		107 Deck Structure Type:	1		
		108 Wearing Structure Type:	1		
		Membrane Type:	0		
		Deck Protection:	0		

Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:113-0014-0

Programming Data		Measurements:				
201 Project No:	MLP 85 (8) CT.2	*29ADT	025050	Year:2010	65 Inventory Rating Method:	1
202 Plans Available:	4	109%Trucks:	0		63 Operating Rating Method:	1
249 Prop Proj No:	STP-074-2 (21)	* 28 Lanes On:	02	Under:00	66 Inventory Type:	2 Rating: 30
250 Approval Status:	0000	210 No. Tracks On:	00	Under:00	64 Operating Type:	2 Rating: 30
251 PI Number:	721290-	* 48 Max. Span Length	0027		231 Calculated Loads:	
252 Contract Date:	02/01/2007	* 49 Structure Length:	162		H-Modified:	20 0
260 Seismic No:	00000	51 Br. Rwdy. Width	40.50		HS-Modified:	25 0
75 Type Work:	00 1	52 Deck Width:	44.30		Type 3:	28 0
94 Bridge Imp. Cost:	\$0	* 47 Tot. Horiz. Cl:	41		Type 3s2:	40 0
95 Roadway Imp. Cost:	0	50 Curb / Sidewalk Width	0.60 / 0.60		Timber:	36 0
96 Total Imp Cost:	0	32 Approach Rdwy. Width	038		Piggyback:	40 0
76 Imp Length:	000000	*229 Shoulder Width:			261 H Inventory Rating:	20
97 Imp Year:	0000	Rear Lt:	4.00	Type:2 Rt:10.00	262 H Operating Rating	28
114Furure ADT:	037575 Year:2030	Fwd. Lt:	4.00	Type:2 Rt:10.00	67 Structural Evaluation:	6
Hydraulic Data		Permanent Width:			58 Deck Condition:	7
215Waterway Data:		Rear:	24.00	Type:2	59 Superstructure Condition:	7
High Water Elev:	0812.3 Year:1900		24.00	Type:2	* 227 Collision Damage:	0
Flood Elev:	0000.0 Freq:00	Intersection Rear:	0	Fwd: 0	60A Substructure Condition:	7
Avg Streambed Elev:	0000.0	36Safety Features Br. Rail:	2		60B Scour Condition:	7
Drainage Area:	00017	Transition:	2		60C Underwater Condition	7
Area of Opening:	000950	App. G. Rail:	1		71 Waterway Adequacy:	8
113 Scour Critical	5	App. Rail End:	1		61 Channel Protection Cond.:	7
216Water Depth:	03.2 Br.Height:10.5	53 Minimum Cl. Over:	99' 99 "		68 Deck Geometry:	7
222Slope Protection:	1	Under:			69 UnderClr. Horz/Vert:	N
221Slope Protection	0 Fwd:0	*228 Minimum Vertical Cl			72 Appr. Alignment:	8
219Fender System	0	Act. Odm Dir::	99' 99"		62 Culvert:	N
220Dolphin:	0	Oppo. Dir:	99' 99"		Posting Data	
223Current Cover:	000	Posted Odm. Dir:	00' 00"		70 Bridge Posting Required	5
Type:	0	Oppo. Dir:	00' 00"		41 Struct Open, Posted, CL:	A
No. Barrels:	0	55 Lateral Undercl. Rt:	N 0 0		* 103 Temporary Structure:	0
* Width:	0.00 Height:0.00	56 Lateral Undercl. Lt:	0.00		232 Posted Loads	
* Length:	0 Apron:0	*10 Max Min Vert Cl:	99' 99" Dir:0		H-Modified:	00
265 U/W Insp. Area	1 Diver:JWO	39 Nav Vert Cl:	000 Horiz:0000		HS-Modified:	00
Location ID No:	113-00085D-015.85N	116 Nav Vert Cl Closed:	000		Type 3:	00
		245 Deck Thickness Main Deck Thick Approach:	7.70		Type 3s2:	00
		246 Overlay Thickness:	0.00		Timber:	00
		212 Year Last Painted:	Sup:0000Sub:0000		Piggyback	00
					253 Notification Date:	02/01/1901
					258 Fed Notify Date:	2/1/1901 12:00:00AM

STATE HIGHWAY AGENCY

DATE : 03/11/2013

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JOB DETAIL ESTIMATE

JOB NUMBER : 71290 SPEC YEAR: 01
 DESCRIPTION: STP00-0074-02(021)/BHF00-0074-02(022)
 SR85 WIDENING FROM SR279 TO ROBERTS DRIVE

ITEMS FOR JOB 71290

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - STP00-0074-02(021)	1.000	500000.00	500000.00
0010	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	76032.91	76032.91
0015	150-5010		EA	TRAF CTRL,PORTABLE IMPACT ATTN	75.000	6189.90	464242.81
0020	205-0001		CY	UNCLASS EXCAV	34652.000	2.21	76796.80
0025	208-0100		CY	IN PLACE EMBANKMENT	87588.000	5.00	437940.00
0030	201-1500		LS	CLEARING & GRUBBING - STP00-0074-02(021)	1.000	2650000.00	2650000.00
0035	310-1101		TN	GR AGGR BASE CRS, INCL MATL	26585.000	15.17	403516.70
0040	318-3000		TN	AGGR SURF CRS	3500.000	18.80	65810.57
0045	402-1812		TN	RECYL AC LEVELING,INC BM&HL	9651.000	66.07	637717.91
0050	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	4332.000	62.38	270237.44
0055	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	2888.000	66.45	191914.27
0060	402-4510		TN	RECYL AC 12.5 MM SP,GP2ONLY,INC P-MBM&HL	12783.000	67.17	858721.55
0065	413-1000		GL	BITUM TACK COAT	24894.000	2.35	58517.08
0070	441-0016		SY	DRIVEWAY CONCRETE, 6 IN TK	1120.000	36.26	40620.66
0075	441-0106		SY	CONC SIDEWALK, 6 IN	17429.000	19.47	339342.63
0080	441-0204		SY	PLAIN CONC DITCH PAVING, 4 IN	7090.000	24.01	170301.16
0085	441-0740		SY	CONC MEDIAN, 4 IN	24691.000	25.70	634607.09
0090	441-6222		LF	CONC CURB & GUTTER/ 8"X30"TP2	43692.000	10.24	447726.34
0095	441-6720		LF	CONC CURB & GUTTER/ 6"X30"TP7	26866.000	11.14	299512.65
0100	446-1100		LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	43693.000	1.48	64927.36
0105	620-0100		LF	TEMP BARRIER, METHOD NO. 1	100000.000	18.14	1814051.00
0110	634-1200		EA	RIGHT OF WAY MARKERS	100.000	101.48	10148.62
0115	641-1100		LF	GUARDRAIL, TP T	100.000	57.26	5726.75
0120	641-1200		LF	GUARDRAIL, TP W	2000.000	16.16	32338.28
0125	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	5.000	639.85	3199.28
0130	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	5.000	1876.79	9383.99
0135	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	10000.000	1.30	13088.90
0140	550-1180		LF	STM DR PIPE 18",H 1-10	20200.000	25.39	512946.28
0145	550-1181		LF	STM DR PIPE 18",H 10-15	1004.000	28.64	28761.58
0150	550-1240		LF	STM DR PIPE 24",H 1-10	1616.000	35.99	58175.47
0155	550-1241		LF	STM DR PIPE 24",H 10-15	66.000	47.67	3146.46
0160	550-1300		LF	STM DR PIPE 30",H 1-10	293.000	45.85	13434.21
0165	550-1361		LF	STM DR PIPE 36",H 10-15	228.000	59.32	13525.44
0170	550-4218		EA	FLARED END SECT 18 IN, ST DR	176.000	446.73	78626.12
0175	668-1100		EA	CATCH BASIN, GP 1	223.000	1931.32	430685.41
0180	668-1110		LF	CATCH BASIN, GP 1, ADDL DEPTH	20.000	144.87	2897.55
0185	668-2100		EA	DROP INLET, GP 1	45.000	1782.57	80215.67
0190	668-2110		LF	DROP INLET, GP 1, ADDL DEPTH	20.000	212.43	4248.72
0195	668-4300		EA	STORM SEW MANHOLE, TP 1	20.000	1666.89	33337.80

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JOB DETAIL ESTIMATE

0200	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	1550.000	18.75	29071.46
0205	636-2070	LF	GALV STEEL POSTS, TP 7	4000.000	6.01	24046.20
0210	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	125000.00	125000.00
0214	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	125000.00	125000.00
0215	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 3	1.000	125000.00	125000.00
0219	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 4	1.000	125000.00	125000.00
0220	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 5	1.000	125000.00	125000.00
0224	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 6	1.000	125000.00	125000.00
0225	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 7	1.000	125000.00	125000.00
0229	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 8	1.000	125000.00	125000.00
0230	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 9	1.000	125000.00	125000.00
0235	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 10	1.000	125000.00	125000.00
0240	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	310.000	68.84	21343.22
0245	653-0170	EA	THERM PVMT MARK, ARROW, TP 7	25.000	81.99	2049.83
0250	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	62250.000	0.39	24565.72
0255	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	53025.000	0.28	14936.08
0260	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	1640.000	4.02	6595.49
0265	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	17350.000	1.76	30687.64
0270	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	124500.000	0.39	49263.41
0275	653-6004	SY	THERM TRAF STRIPING, WHITE	9200.000	2.95	27155.27
0280	653-6006	SY	THERM TRAF STRIPING, YELLOW	1100.000	3.20	3527.24
0285	654-1003	EA	RAISED PVMT MARKERS TP 3	1500.000	3.29	4948.14
0290	657-1054	LF	PRF PL SD PVMT MKG,5",WH,TP PB	340.000	3.68	1252.20
0295	657-3054	GLF	PRF PL SK PVMT MKG,5",WH,TP PB	680.000	5.00	3400.00
0300	657-6054	LF	PRF PL SD PVMT MKG,5",YW,TP PB	340.000	4.37	1487.63
0305	163-0232	AC	TEMPORARY GRASSING	34.000	32.26	1096.93
0310	163-0240	TN	MULCH	827.000	179.64	148563.89
0315	163-0300	EA	CONSTRUCTION EXIT	22.000	1201.38	26430.48
0320	163-0503	EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 3	88.000	256.10	22537.07
0325	163-0527	EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	1400.000	226.72	317414.61
0330	163-0529	LF	CNST/REM TEMP SED BAR OR BLD STRW CK DM	11000.000	4.14	45568.60
0335	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	268.000	144.53	38736.55
0340	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	21000.000	0.83	17486.70
0345	165-0071	LF	MAINT OF SEDIMENT BARRIER - BALED STRAW	11000.000	0.40	4452.47
0350	165-0087	EA	MAINT OF SILT CONTROL GATE, TP 3	88.000	63.62	5598.87
0355	165-0101	EA	MAINT OF CONST EXIT	22.000	452.93	9964.67
0360	165-0105	EA	MAINT OF INLET SEDIMENT TRAP	268.000	49.60	13295.27
0365	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	7.000	228.40	1598.84
0370	167-1500	MO	WATER QUALITY INSPECTIONS	24.000	314.07	7537.86
0375	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	50000.000	2.79	139508.50
0380	603-2024	SY	STN DUMPED RIP RAP, TP 1, 24"	2600.000	34.67	90152.43
0385	603-2181	SY	STN DUMPED RIP RAP, TP 3, 18"	2400.000	28.26	67839.94
0390	603-7000	SY	PLASTIC FILTER FABRIC	5000.000	3.25	16276.70
0395	700-6910	AC	PERMANENT GRASSING	67.000	477.99	32025.60
0400	700-7000	TN	AGRICULTURAL LIME	198.000	29.11	5764.43
0405	700-8000	TN	FERTILIZER MIXED GRADE	67.000	394.29	26417.84
0410	700-8100	LB	FERTILIZER NITROGEN CONTENT	3305.000	1.93	6396.03
0415	700-9300	SY	SOD	39900.000	3.24	129418.84
0420	716-2000	SY	EROSION CONTROL MATS, SLOPES	135510.000	0.68	92264.69

STATE HIGHWAY AGENCY

DATE : 03/11/2013

PAGE : 3

JOB DETAIL ESTIMATE

0425	500-3201	CY	CL B CONC, RET WALL	200.000	440.60	88121.73
0430	540-1101	LS	REM OF EX BR, STA NO - 1 RT	1.000	100000.00	100000.00
0435	540-1101	LS	REM OF EX BR, STA NO - 1 LT	1.000	100000.00	100000.00
0435	540-1101	LS	REM OF EX BR, STA NO - 1 LT	1.000	100000.00	100000.00
0440	543-9000	LS	CONSTR OF BRIDGE COMPLETE - BR 1 LT SB - REPLACEMENT	1.000	843326.00	843326.00
0445	543-9000	LS	CONSTR OF BRIDGE COMPLETE - BR 1 RT NB - REPLACEMENT	1.000	843326.00	843326.00

ITEM TOTAL						16571874.54
INFLATED ITEM TOTAL						16571874.53

TOTALS FOR JOB 71290						

ESTIMATED COST:						16571874.53
CONTINGENCY PERCENT (0.0):						0.00
ESTIMATED TOTAL:						16571874.53

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. , **OFFICE**
 DATE

P.I. No.

FROM

TO Lisa L. Myers, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER

MNGT LET DATE

MNGT R/W DATE

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$

DATE

RIGHT OF WAY \$

DATE

UTILITIES \$

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$

RIGHT OF WAY \$

UTILITIES \$

* Costs contain % Engineering and Inspection

REASON FOR COST INCREASE

Increased construction cost due to added liquid AC adjustments, increased length of the project, and updated general construction costs compared to last estimate date.

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$ 16,571,874.54	(Base Estimate)
Engineering and Inspection:	\$ 828,593.73	(Base Estimate x 5 %)
Total Liquid AC Adjustment	\$ 756,012.07	(From attached worksheet)
Construction Total:	\$ 18,156,480.34	

REIMBURSABLE UTILITY COST

Utility Owner

Reimbursable Cost

Atlanta Gas Light Company

\$33,200.00

AT&T Formerly Bellsouth

\$950,000.00

Attachments

PROJ. NO.

STP00-0074-02(021)

CALL NO.

P.I. NO.

721290

DATE

3/11/2013

INDEX (TYPE)

REG. UNLEADED

Mar-13 \$ 3.683

DIESEL

\$ 4.092

LIQUID AC

\$ 567.00

Link to Fuel and AC Index:

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)

504414.54

\$

504,414.54

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 907.20

Monthly Asphalt Cement Price month project let (APL)

\$ 567.00

Total Monthly Tonnage of asphalt cement (TMT)

1482.7

ASPHALT	Tons	%AC	AC ton
Leveling	9651	5.0%	482.55
12.5 OGFC		5.0%	0
12.5 mm	12783	5.0%	639.15
9.5 mm SP		5.0%	0
25 mm SP	4332	5.0%	216.6
19 mm SP	2888	5.0%	144.4
	29654		1482.7

BITUMINOUS TACK COAT

Price Adjustment (PA)

\$ 36,374.95

\$

36,374.95

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 907.20

Monthly Asphalt Cement Price month project let (APL)

\$ 567.00

Total Monthly Tonnage of asphalt cement (TMT)

106.9222424

Bitum Tack

Gals	gals/ton	tons
24894	232.8234	106.922242

PROJ. NO.

STP00-0074-02(021)

CALL NO.

P.I. NO.

721290

DATE

3/11/2013

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)						215222.5853	\$	215,222.59
Monthly Asphalt Cement Price month placed (APM)			Max. Cap	60%	\$	907.20		
Monthly Asphalt Cement Price month project let (APL)					\$	567.00		
Total Monthly Tonnage of asphalt cement (TMT)						632.6354653		

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt	207454	0.71	147292.34	232.8234	632.6354653
					632.6354653

TOTAL LIQUID AC ADJUSTMENT	\$	756,012.07
-----------------------------------	----	-------------------

**GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 10/9/2012 Project: 721290
 Revised: County: Fayette/Clayton
 PI: 721290

Description: SR 85 from Corinth Rd to Roberts Drive
 Project Termini: SR 85 from Corinth Rd to Roberts Drive

Existing ROW: Varies
 Required ROW: Varies
 Parcels: 97

Land and Improvements _____ \$1,590,000.00

Proximity Damage	\$0.00
Consequential Damage	\$0.00
Cost to Cures	\$0.00
Trade Fixtures	\$0.00
Improvements	\$115,000.00

Valuation Services _____ \$121,250.00

Legal Services _____ \$627,975.00

Relocation _____ \$194,000.00

Demolition _____ \$0.00

Administrative _____ \$816,500.00

TOTAL ESTIMATED COSTS _____ \$3,349,725.00

TOTAL ESTIMATED COSTS (ROUNDED) _____ \$3,350,000.00

Preparation Credits	Hours	Signature

Prepared By: Lashone Alexander CG#: 2556999 10/09/2012
 Approved By: [Signature] CG#: 2556999 10/09/2012

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

**GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 10/9/2012 Project: 721295
 Revised: County: Fayette/Clayton
 PI: 721295

Description: Bridge Replacement SR 85
 Project Termini: Bridge Replacement SR 85

Existing ROW: Varies
 Required ROW: Varies
 Parcels: 4

Land and Improvements _____ \$102,000.00

Proximity Damage	\$0.00
Consequential Damage	\$0.00
Cost to Cures	\$0.00
Trade Fixtures	\$0.00
Improvements	\$8,000.00

Valuation Services _____ \$4,000.00

Legal Services _____ \$40,200.00

Relocation _____ \$8,000.00

Demolition _____ \$0.00

Administrative _____ \$35,500.00

TOTAL ESTIMATED COSTS _____ \$189,700.00

TOTAL ESTIMATED COSTS (ROUNDED) _____ \$190,000.00

Preparation Credits	Hours	Signature

Prepared By: LaShone Alexander CG# 286999 10/09/2012
 Approved By: LaShone Alexander CG# 286999 10/09/2012

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0074-02(021)& (022) Clayton, Fayette County
SR 85 FM SR 279/FAYETTE N TO 6-LN @ ROBERTS DR
SR 85 NBL @ CAMP CREEK @ CLAYTON/FAYETTE CO LINE
P.I. No. 721290 / 721295

OFFICE District 7
Chamblee

DATE October 23, 2012

FROM  Jonathan Walker
District Utilities Engineer

TO Chad White, Project Manager

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost Estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE	GRAND TOTAL
Atlanta Gas Light Company	\$3,070,310.00	\$ 33,200.00	
AT&T Formerly BellSouth	\$2,814,342.00	\$950,000.00	
Clayton County Water & Sewer Authority	\$2,511,710.00	\$000,000.00	
Comcast of Georgia, Inc.	\$ 196,100.00	\$000,000.00	
Georgia Power Company Distribution	\$4,120,000.00	\$000,000.00	
Georgia Power Company Transmission	\$ 000,000.00	\$000,000.00	
Totals:	\$12,712,462.00	\$983,200.00	<u>\$13,695,662.00</u>

This estimate is appropriate, provided we avoid transmission which is a reimbursable utility. There are over 70 transmission structures within the project limits. Transmission relocation costs are NOT included in the estimate above.

If you have any questions, please contact Yulonda Pride-Foster, Metro Utilities Engineer at 770-986-1117.

JW/YPF

C: Jeff Baker, P.E., State Utilities Engineer

Traffic Study

SR 85 Widening

Clayton and Fayette Counties
STP00-0074-02(021)
PI 721290

January 2012

Prepared for:

GDOT

Prepared by:

Kimley-Horn and Associates, Inc.
Atlanta, Georgia



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015905010

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- Appendix B:** Turning Movement Count Data
- Appendix C:** Future Traffic Growth Projections Assumptions
- Appendix D:** Peak Hour and Daily Traffic Volume Diagrams
- Appendix E:** Existing Year 2011 Capacity Analysis
- Appendix F:** Base Year 2021 No-Build Capacity Analysis
- Appendix G:** Base Year 2041 No-Build Capacity Analysis
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- Appendix J:** MUTCD Signal Warrant Analysis
- Appendix K:** *Synchro* 95th Percentile Queue Length Analysis

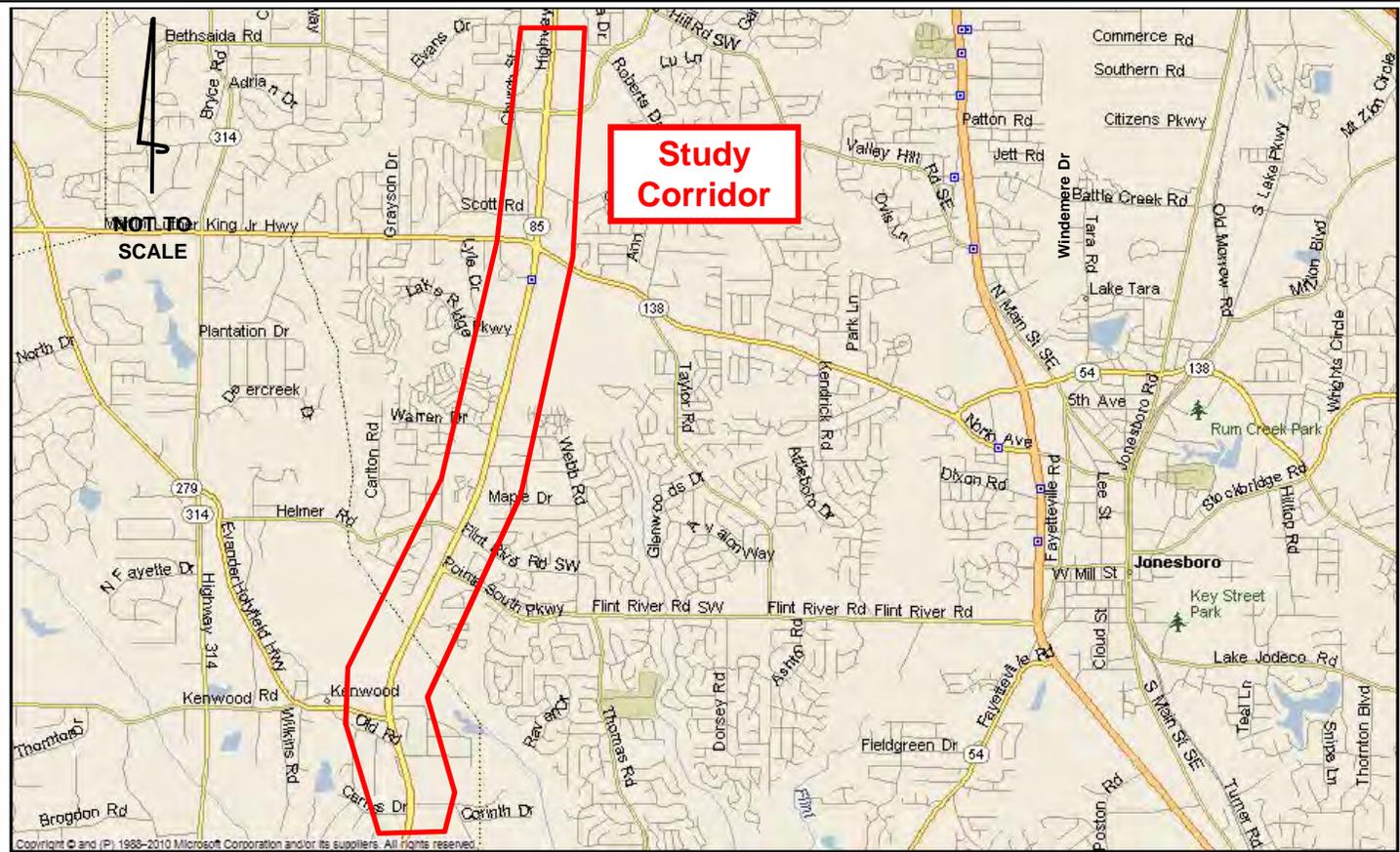
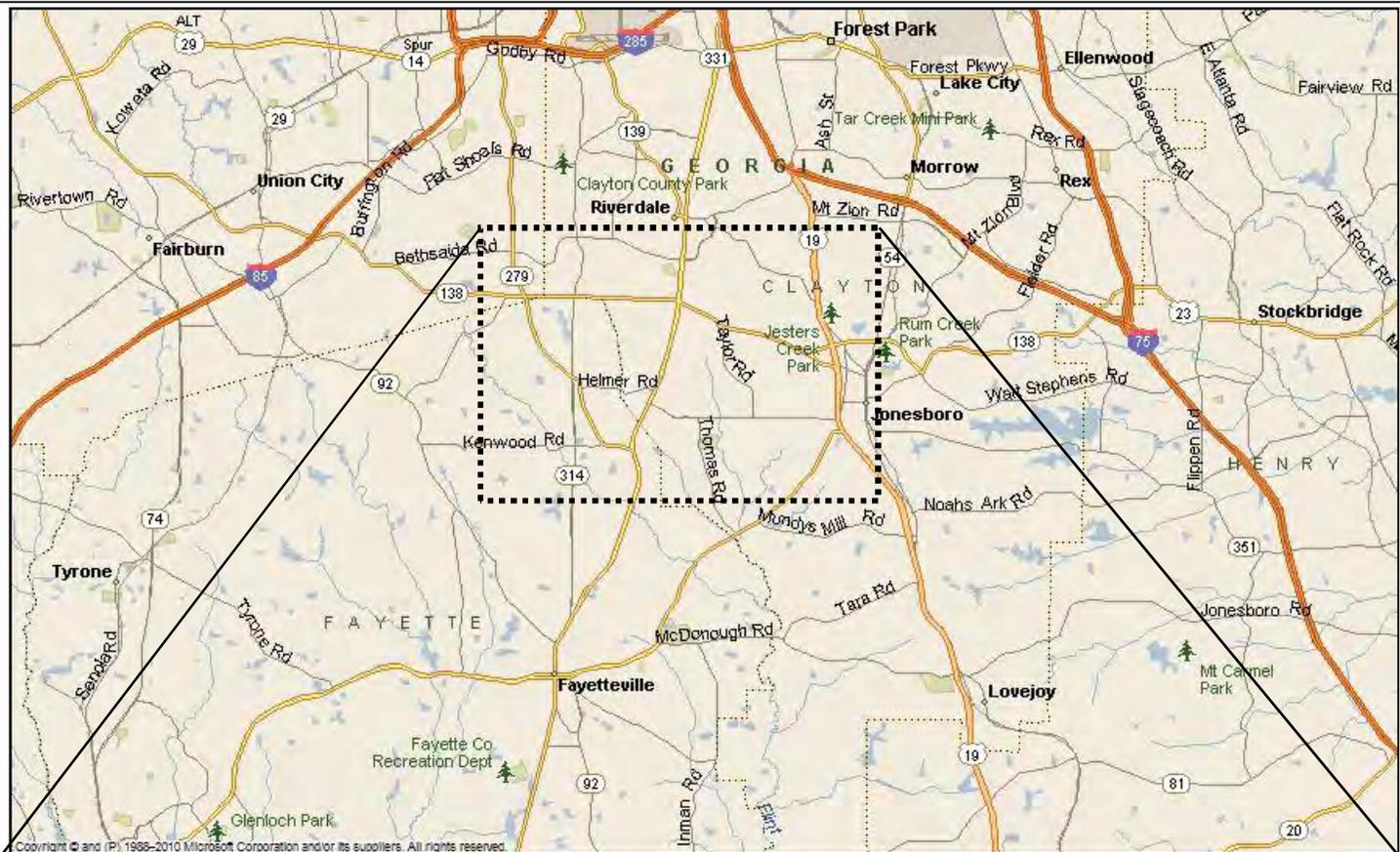
1.0 INTRODUCTION

The segment of SR 85 between Bethsaida Road and Corinth Road in Clayton and Fayette Counties has been identified for roadway widening by the Georgia Department of Transportation (GDOT). This transportation study is being performed to analyze traffic conditions along the SR 85 corridor to determine what geometric and operational improvements could be made to improve capacity issues. Furthermore, the operations of the corridor will be assessed for future traffic conditions and alternatives to help relieve projected congestion levels and to improve traffic flow will be proposed.

The SR 85 corridor serves as a primary north-south thoroughfare through the Clayton and Fayette Counties. SR 85 is a major connection to I-75 and Atlanta for Clayton and Fayette County commuters, and this portion of SR 85 is also a significant commercial corridor.

The proposed improvements are planned to be constructed and open to traffic by year 2021 (Base Year) with a 20-year design horizon of 2041 (Design Year). The project limits along SR 85 are from the intersections Bethsaida Road to Corinth Road and covers approximately 4.2 miles.

This report summarizes the data collection, accident data, analysis of projected traffic conditions, and conclusions from the analysis of Existing Year 2011, No-Build Year 2021, No-Build Year 2041, Base Year 2021, and Design Year 2041. For purposes of this report, the SR 85 corridor will be considered a north-south oriented roadway. A project location map is depicted on **Figure 1**.



2.0 DATA COLLECTION

The following twenty-five (25) intersections are included in the study network:

Table 1 Study Intersections SR 85	
Intersection ID	Signalized Intersections
1	SR 85 at Roberts Drive
2	SR 85 at Bethsaida Road
3	SR 85 at Church Street / Roundtree Road
4	SR 85 at SR 138
5	SR 85 at Lake Ridge Parkway
6	SR 85 at Warren Drive / Webb Road
7	SR 85 at Helmer Road / Thomas Road
8	SR 85 at Pointe South Parkway
9	SR 85 at Lake View Way
10	SR 85 at SR 279
11	SR 85 at Corinth Road
Intersection ID	Unsignalized Intersections
101	SR 85 at Town Center Drive
102	SR 85 at Scott Road
103	SR 85 at Publix Entrance
104	SR 85 at Commerce Boulevard
105	SR 85 at Sharon Drive
106	SR 85 at Lake View Drive
107	SR 85 at Auburn Ridge Way
108	SR 85 at Pine Ridge Drive
109	SR 85 at Chase Ridge Drive
110	SR 85 at Median Opening (South of County Line)
111	SR 85 at Median Opening (Gas Station)
112	SR 85 at Kenwood Road
113	SR 85 at Old Road
114	SR 85 at Plantation Road

Vehicle turning movement volume counts were collected in October 2011 at all intersections during the AM peak and PM peak hours to quantify existing peak hour traffic conditions and patterns. The AM peak hour counts were conducted between 7:00 AM – 9:00 AM, and the PM peak hour counts were conducted between 4:00 PM – 6:00 PM.

Three (3) 24-hour automatic classification tube counts were conducted along SR 85 in October 2011, November 2011, and December 2011. **Table 2** summarizes the Average Daily Traffic (ADT) from the tube counts.

Table 2 Average Daily Traffic (ADT) – Weekday SR 85	
ADT Tube Count Location	ADT
SR 85 <i>South of Roberts Drive</i>	44,543
SR 85 <i>South of Lake Ridge Pkwy</i>	39,674
SR 85 <i>South of Carnes Drive</i>	30,367

The peak hour turning movement counts and 24-hour tube count data are located in **Appendices A and B**.

Table 3 summarizes the existing peak hour truck percentages along SR 85 (south of Carnes Drive) for December 2011. This bi-directional automatic classification tube count resulted in a heavy vehicle percentage of approximately 7.0% for the daily traffic, and 6.0% for the peak hour, which is within an acceptable range of nearby GDOT count stations.

Table 3 Truck Percentages SR 85		
	Peak Hour	24-Hour Total
Single Unit (SU)	3.5%	4.0%
Multi Unit (MU)	2.5%	3.0%
Total	6.0%	7.0%

Table 4 summarizes AADT recorded along SR 85 by GDOT at four (4) count stations.

Table 4 GDOT AADT Count Stations SR 85				
Roadway Location	SR 85 North of Bethsaida Road	SR 85 North of Sharon Road	SR 85 South of Pointe South Parkway	SR 85 South of Clayton County Line
Count Station	#1098	#0096	#0094	#0158
Year 2005	23,570	36,530	28,410	24,560
Year 2006	30,730	35,170	28,650	27,910
Year 2007	34,660	34,940	27,350	27,940
Year 2008	34,740	32,370	26,240	27,520
Year 2009	33,870	32,920	23,110	25,000
Year 2010	41,920	32,920	23,140	25,050
Average Annual Growth Rate	12.2%	-2.1%	-4.0%	0.4%

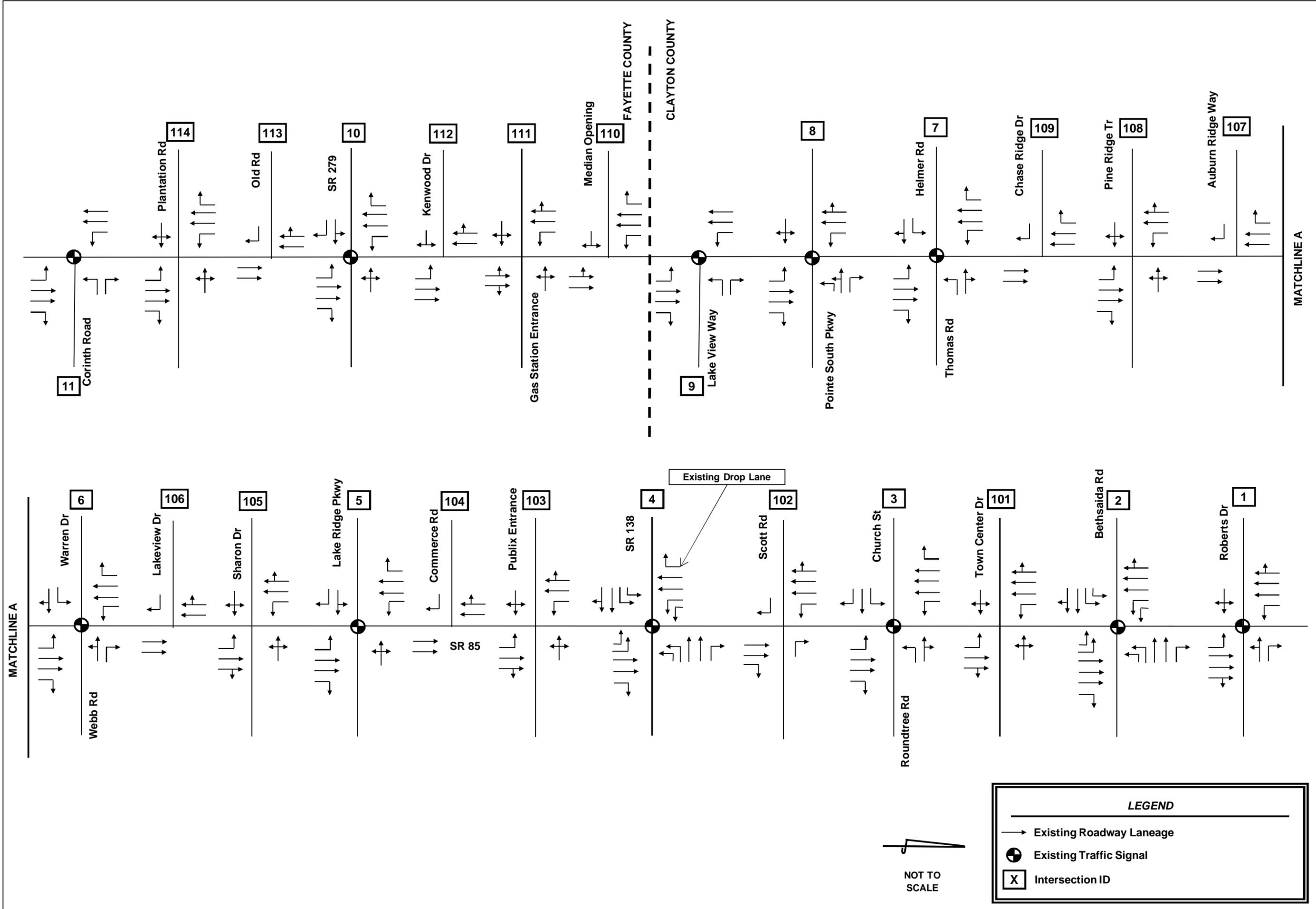
3.0 EXISTING CONDITIONS

The SR 85 corridor has a functional classification of an Urban Principal Arterial and is a four-lane divided facility for the majority of the corridor. The corridor is a six-lane divided facility from the intersections of Roberts Drive to Bethsaida Road (TWLTL at Roberts Drive, raised median for remainder of corridor), and is a five-lane divided facility (three southbound travel lanes, and two northbound travel lanes) from Bethsaida Road to SR 138. SR 85 has a posted speed limit of 45 MPH from the intersection of Roberts Drive to Lake Ridge Parkway, and a posted speed limit of 55 MPH from the intersection of Lake Ridge Parkway to Corinth Road. There is no paved shoulder and curb and gutter along SR 85 from Roberts Drive south to SR 138, and there is typically a 12 feet wide paved shoulder from SR 138 south to Corinth Road. There are multiple commercial driveways along the entire length of the corridor. **Table 5** gives a summary of the geometry and signalization for each study intersection, and the existing laneage along the SR 85 corridor is shown in **Figure 2**.

Table 5 Study Intersections – Geometry and Signalization SR 85				
ID	Intersection	Exclusive Mainline Turn Lanes	Side Street Geometry	Signalization Type
1	SR 85 at Roberts Drive	Exclusive NB/SB left-turn lanes	EB – shared left/through/right WB – shared left/through lane, exclusive right-turn lane	Protected/permissive NB/SB phasing Permissive EB/WB phasing
2	SR 85 at Bethsaida Road	Exclusive NB/SB dual left- turn lanes; Exclusive NB right-turn lane	EB – exclusive dual left-turn lanes, a through lane and a shared through/right-turn lane WB - exclusive dual left-turn lanes, two through lanes and an exclusive right-turn lane	Protected only NB/SB phasing Protected only EB/WB phasing
3	SR 85 at Church Street / Roundtree Road	Exclusive NB/SB left-turn lanes; Exclusive NB/SB right-turn lanes	EB – exclusive left-turn, though, and right-turn lanes WB – exclusive left-turn lane, shared through/right lane	Protected only NB/SB phasing Permissive EB/WB phasing
4	SR 85 at SR 138	Exclusive NB/SB dual left- turn lanes; Exclusive NB right-turn lane, SB drop right-turn lane	EB – exclusive dual left-turn lanes, a through lane and a shared through/right-turn lane WB – exclusive dual left-turn lanes, two through lanes and an exclusive right-turn lane	Protected only NB/SB phasing Protected only EB/WB phasing
5	SR 85 at Lake Ridge Parkway	Exclusive NB/SB left-turn lanes; Exclusive NB/SB right-turn lanes	EB – shared left/through lane, exclusive right-turn lane WB – shared left/through/right	Protected/permissive NB/SB phasing Permissive EB/WB phasing
6	SR 85 at Warren Drive / Webb Road	Exclusive NB/SB left-turn lanes; Exclusive NB/SB right-turn lanes	EB – exclusive left-turn lane, shared through/right-turn lane WB – shared left/through lane, exclusive right-turn lane	Protected/permissive NB/SB phasing Permissive EB/WB phasing

Table 5 (Continued)
Study Intersections – Geometry and Signalization
SR 85

ID	Intersection	Exclusive Mainline Turn Lanes	Side Street Geometry	Signalization Type
7	SR 85 at Helmer Road / Thomas Road	Exclusive NB/SB left-turn lanes; Exclusive NB/SB right-turn lanes	EB – exclusive left-turn lane, shared through/right-turn lane WB – exclusive left-turn lane, shared through/right-turn lane	Protected only NB/SB phasing Protected/permmissive EB, permmissive WB phasing
8	SR 85 at Pointe South Parkway	Exclusive SB dual left-turn lanes; Exclusive NB left-turn lane; Exclusive NB right-turn lane	EB – shared left/ through/right-turn lane WB – exclusive left-turn lane, shared left/through lane, exclusive right-turn lane	Protected only SB phasing, permmissive NB phasing Split phase EB and WB
9	SR 85 at Lake View Way	Exclusive NB/SB left-turn lanes	WB – exclusive left-turn lane, exclusive right-turn lane (T-intersection)	Protected/permmissive SB phasing WB protected phase (T-intersection)
10	SR 85 at SR 279	Exclusive NB/SB left-turn lanes; Exclusive NB/SB right-turn lanes	EB – shared left/through lane, exclusive right-turn lane WB – shared left/through/right	Protected only NB/SB phasing Permmissive EB/WB phasing
11	SR 85 at Corinth Road	Exclusive NB/SB left-turn lanes; Exclusive NB right-turn lane	WB – exclusive left-turn lane, exclusive right-turn lane (T-intersection)	Protected/permmissive SB phasing WB protected phase (T-intersection)
101	SR 85 at Town Center Drive	Exclusive NB/SB left-turn lanes	EB/WB – shared left/through/right lanes	Unsignalized
102	SR 85 at Scott Road	Exclusive NB left-turn and right-turn lanes (into Lowe's)	EB/WB – right only	Unsignalized
103	SR 85 at Publix Entrance	Exclusive NB/SB left-turn lanes	EB/WB – shared left/through/right lanes	Unsignalized
104	SR 85 at Commerce Boulevard	N/A	EB – right only	Unsignalized
105	SR 85 at Sharon Drive	Exclusive NB/SB left-turn lanes	EB/WB – shared left/through/right lanes	Unsignalized
106	SR 85 at Lake View Drive	N/A	EB – right only	Unsignalized
107	SR 85 at Auburn Ridge Way	SB – exclusive right-turn lane	EB – right only	Unsignalized
108	SR 85 at Pine Ridge Drive	Exclusive NB/SB left-turn lanes, exclusive NB right-turn lane	EB/WB – shared left/through/right lanes	Unsignalized
109	SR 85 at Chase Ridge Drive	SB – exclusive right-turn lane	EB – right only	Unsignalized
110	SR 85 at Median Opening (South of County Line)	Exclusive SB left-turn lane, exclusive SB right-turn lane	EB– shared left/right lane	Unsignalized
111	SR 85 at Median Opening (Gas Station)	Exclusive SB left-turn lane	EB/WB – shared left/through/right lanes	Unsignalized
112	SR 85 at Kenwood Road	Exclusive NB left-turn lane	EB– shared left/right lane	Unsignalized
113	SR 85 at Old Road	N/A	EB – right only	Unsignalized
114	SR 85 at Plantation Road	Exclusive NB/SB left-turn lanes, exclusive NB/SB right-turn lanes	EB/WB – shared left/through/right lanes	Unsignalized



4.0 EAST FAYETTEVILLE BYPASS

The East Fayetteville Bypass is a long range programmed improvement in Clayton County. This project will improve the Corinth Road corridor from SR 85 south to SR 54 (to be renamed East Fayetteville Bypass), including minor realignments, horizontal and vertical curve improvements, and intersection optimization. The improvements along Corinth Road will not increase roadway capacity, but the project will include the acquisition of 120-ft right-of-way to accommodate potential future widening of the bypass. Design work is underway for the project, and the construction is planned within the 2018-2030 timeframe. The project's Transportation Investment Act number is TIA-FA-004.

Based upon a review of the ARC Travel Demand model, which includes the proposed East Fayetteville Bypass and SR 85 widening, it is anticipated that the East Fayetteville Bypass project will divert additional north-south traffic from the SR 85 corridor onto the East Fayetteville Bypass during the Design Year 2041. The anticipated traffic diversion was accounted for in this traffic study and was included within the background traffic growth rate for the No-Build Year 2041 and Design Year 2041 for this study.

5.0 ACCIDENT DATA

Accident data for the SR 85 study corridor was obtained from the Georgia Department of Transportation for the years 2007, 2008, and 2009. SR 85 is classified by GDOT to be an Urban Principal Arterial. **Table 6** summarizes the number of accidents, injuries, fatalities, study corridor rates, and Georgia statewide average rates.

Table 6 GDOT Accident History SR 85 – Bethsaida Road to Corinth Road									
Year	Study Corridor Quantity			Study Corridor Rates			Georgia Statewide Average Rates		
	Accidents	Injuries	Fatalities	Accidents	Injuries	Fatalities	Accidents	Injuries	Fatalities
2007	500	195	1	736	287	1.47	649	227	1.53
2008	489	195	2	720	287	2.94	612	213	1.33
2009	373	137	1	549	202	1.47	536	200	1.32
Total	1362	527	4	-	-	-	-	-	-

NOTE: Segment accident rates are number of accidents per 100 million vehicle miles

As **Table 6** shows, the accident rates for SR 85 are approximately 10% higher than the statewide average rates for similar facilities. The number of accidents along this corridor remained constant for 2007 and 2008 and decreased in 2009. The number of injuries has remained relatively constant of the three year period. In 2007 and 2008, the injury rate along SR 85 was approximately 30% higher than the statewide average. Of the 91 total accidents in the three-year period, approximately 60% of the accidents were rear-end accidents, approximately 23% were angle accidents, approximately 8% were sideswipe accidents, approximately 7% of the accidents did not involve a collision with another motor vehicle, and approximately 2% were head-on accidents. With numerous driveways and side streets along the project corridor, turning vehicles are struck in the rear or at an angle by faster moving through traffic. The proposed project would potentially reduce these accidents by providing an additional through lane in each direction for a portion of the corridor, as well as turn lanes where warranted (see **Section 13.0 – Recommendations**). By separating turning traffic from through traffic at critical intersections, the project will improve traffic flow along SR 85.

6.0 BACKGROUND TRAFFIC GROWTH

The intersection traffic growth projections were determined from an evaluation of the ARC Travel Demand Model for the SR 85 corridor, population projections, and historical traffic growth for the ADT count stations in the project vicinity.

A growth rate of **1.25%** per year for 10 years was applied to the Existing Year 2011 peak hour traffic volumes to account for background growth in traffic to determine Base Year 2021 No Build traffic volumes, and a growth rate of **1.5%** per year was applied to determine the Base Year 2021 Build traffic volumes. Additionally, a growth rate of **0.75%** per year for 20 years was applied to the Base Year 2021 peak hour traffic volumes to account for background growth in traffic to determine the Design Year 2041 No Build traffic volumes, and a growth rate of **1.0%** per year was applied to determine the Design Year 2041 Build traffic volumes.

The following is a summary of the methodology used to generate the traffic volumes for this SR 85 project:

- Growth rate calculations and assumptions are shown in **Appendix C**, which includes an analysis of historical traffic growth in the area, census population projects, and the ARC Travel Demand Model projections.
- Traffic data was collected in 2011.
- The approved background growth rate from 2011 to 2021 was 1.25% per year for 10 years for the No Build scenario and 1.5% per year for 10 years for the Build scenario. The approved background growth rate from 2021 to 2041 was 0.75% per year for 20 years the No Build scenario and 1.0% per year for 20 years for the Build scenario.

7.0 TRAFFIC ASSIGNMENTS

The estimated traffic assignments were determined from the ADT tube counts and background growth rate calculations, and these assignments (shown below in **Table 7**) are to be used for the SR 85 widening design (PI. No. 0000837). These traffic assignments were approved by the GDOT Office of Planning in December 2011.

Table 7 Traffic Assignments SR 85 – Clayton / Fayette Counties STP00-0074-02(201); PI No. 721290	
Base Year Growth Rate (<i>No Build</i>) – 2011 to 2021	1.25% per year
Design Year Growth Rate (<i>No Build</i>) – 2021 to 2041	0.75% per year
Base Year Growth Rate (<i>Build</i>) – 2011 to 2021	1.50% per year
Design Year Growth Rate (<i>Build</i>) – 2021 to 2041	1.00% per year
AM Peak Period K Factor (<i>Existing / No Build</i>)	6%
PM Peak Period K Factor (<i>Existing / No Build</i>)	8%
AM Peak Period K Factor (<i>Build</i>)	6.5%
PM Peak Period K Factor (<i>Build</i>)	8.5%
D	61%
Peak Hour Trucks	6.0%
Single Unit (SU)	3.5%
Multi Unit (MU)	2.5%
24 Hour Trucks	7.0%
Single Unit (SU)	4.0%
Multi Unit (MU)	3.0%

8.0 INTERSECTION CAPACITY ANALYSIS

8.1 Introduction

Level of service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists perceptions with a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS A through LOS F, with A being the best and F the worst. Intersection analyses were performed using *Synchro Professional, Version 7.0* (signalization optimization and analysis program).

The *HCM* and the *Geometric Design of Highways and Streets* ("Green Book") list the following levels of service:

- A Free flow
- B Reasonably free flow
- C Stable flow
- D Approaching unstable flow
- E Unstable flow
- F Forced or breakdown flow

Additionally, LOS at intersections can be defined as a function of the average overall wait time for a vehicle to pass through the intersection. This way, LOS can be quantitatively measured at any intersection. Shown below are the LOS criteria as defined by the *HCM*.

Signalized Intersections	Unsignalized Intersections
A ≤ 10 sec	A ≤ 10 sec
B 10-20 sec	B 10-15 sec
C 20-35 sec	C 15-25 sec
D 35-55 sec	D 25-35 sec
E 55-80 sec	E 35-50 sec
F ≥ 80 sec	F ≥ 50 sec

Levels of service for signalized intersections are reported for individual movements as well as for the intersection as a whole. One or more movements at an intersection may experience a low level of service, while the intersection as a whole may operate acceptably. A signalized intersection LOS of D or better is generally the accepted minimum threshold for operating conditions.

Levels of service for unsignalized intersections, with stop control on the minor street only, are reported for the side street approaches. An unsignalized side street approach LOS of E or better is generally the accepted minimum threshold for operating conditions. However, low and failing levels of service for side street approaches are not uncommon, as vehicles may experience delay in turning onto a major roadway.

Existing Year 2011 conditions were analyzed at the study intersections. Level of service determinations were made during the weekday AM and PM peak hours, and were based on Existing Year 2011 traffic conditions. **Figure 4** and **Figure 9** (located in **Appendix D**) illustrate the traffic volumes for the AM peak, PM peak, and 24-hour periods.

The No-Build traffic conditions were developed by applying a 1.25% annual growth rate for 10 years (Base Year 2021) and a 0.75% annual growth rate for 20 years (Design Year 2041). Future background (No-Build) traffic is defined as expected traffic at the study intersections in the future years absent the construction and opening of the proposed intersection improvements. **Figure 5**, **Figure 6**, and **Figure 10** (located in **Appendix D**) illustrate the traffic volumes for the AM peak, PM peak, and 24-hour periods.

The Base Year 2021 Build traffic conditions were developed by were developed by applying a 1.5% annual growth rate for 10 years and applying the proposed improvements that are recommended in **Section 13.0 – Recommendations**. The proposed improvements are expected to be constructed by the year 2021. **Figure 7** and **Figure 11** (located in **Appendix D**) illustrate the Base Year 2021 traffic volumes for the AM peak, PM peak, and 24-hour periods.

The Design Year 2041 Build traffic conditions were developed by applying a 1.5% annual growth rate for 10 years and a 1.0% annual growth rate for 20 years, and applying the proposed improvements that are recommended in **Section 13.0 – Recommendations**. The proposed improvements are expected to be constructed by the year 2021, with a 20-year design horizon of year 2041. **Figure 8** and **Figure 11**

(located in **Appendix D**) illustrate the Design Year 2041 traffic volumes for the AM peak, PM peak, and 24-hour periods.

8.2 Intersection Capacity Analysis

Capacity analysis was performed at 15 of the 25 study intersections for the AM and PM peak hours. Capacity analysis was not performed at the six (6) right-in/right-out only driveways and at six (6) of the remaining unsignalized intersections. Capacity analyses of unsignalized intersections is not typically used to develop proposed alternatives for roadway improvements, as unsignalized intersections typically show failing levels of service for large, multi-lane highways such as SR 85. Therefore, only signalized intersections and two (2) primary unsignalized intersections were included within the AM and PM peak hour capacity analyses.

Additionally, the Build scenarios have higher volumes for all study intersections than the No Build scenarios due to the different approved growth rates as discussed in **Section 6.0 – Background Traffic Growth**. Therefore, if the level of service is similar for a No Build and Build scenario, the Build is actually carrying more traffic with the same vehicular delay as the No Build scenario with less traffic.

Table 8 summarizes the levels of service and delay in seconds (per vehicle) during the AM peak hour, and **Table 9** summarizes the same information for the PM peak hour. The Base 2021 and the Design 2041 Build scenarios include the proposed improvements that are recommended in **Section 13.0 – Recommendations**. Copies of the *Synchro* intersection capacity analyses are found in **Appendix E** through **Appendix I**.

Table 8 Level of Service Summary AM Peak Hour						
Intersection ID	Intersection	Overall LOS (Delay in Seconds)				
		Existing 2011	No- Build 2021	No- Build 2041	Base Build 2021	Design Build 2041
1	SR 85 at Roberts Drive - signalized*	B (16.7)	C (20.4)	C (25.3)	C (21.2)	C (34.2)
2	SR 85 at Bethsaida Road – signalized	C (28.0)	C (30.1)	C (33.4)	C (32.4)	D (42.2)
101	SR 85 at Town Center Drive – unsignalized	EB – C (23.8)	EB – F (56.6)	EB – F (237.4)	EB – B (11.1)	EB – B (12.4)
		WB – F (105.9)	WB – F (630.4)	WB – F (**)	WB – F (51.9)	WB – F (388.9)
3	SR 85 at Church Street / Roundtree Street – signalized	E (61.3)	F (105.9)	F (163.1)	C (32.3)	E (78.2)
4	SR 85 at SR 138 – signalized	E (78.1)	F (102.4)	F (149.0)	E (64.3)	F (108.6)
103	SR 85 at Publix Driveway- unsignalized	EB – E (40.5)	EB – F (112.9)	EB – F (409.5)	EB – F (56.4)	EB – F (175.7)
		WB – F (314.4)	WB – F (1111.5)	WB – F (**)	WB – F (1031.6)	WB – F (**)
5	SR 85 at Lake Ridge Parkway – signalized	B (12.7)	B (15.7)	B (18.7)	B (14.5)	B (14.5)
6	SR 85 at Warren Drive / Webb Road – signalized	D (41.5)	E (64.8)	F (106.5)	B (16.9)	C (28.2)
7	SR 85 at Helmer Road / Thomas Road – signalized	C (25.8)	C (30.6)	D (49.3)	C (26.3)	C (34.8)
8	SR 85 at Pointe South Parkway – signalized	C (28.6)	C (28.8)	C (33.0)	C (30.2)	C (34.3)
9	SR 85 at Lake View Way – signalized	A (5.6)	A (6.9)	A (7.5)	A (4.8)	A (4.8)
10	SR 85 at SR 279 – signalized	C (32.4)	D (35.8)	D (40.0)	C (26.2)	C (33.9)
11	SR 85 at Corinth Road - signalized	C (21.6)	C (26.6)	D (44.2)	B (14.2)	B (16.2)

Note: EB/WB = Eastbound/Westbound Approach

* - Intersection is outside of the project limits.

** - Delay is too excessive to measure

The intersection of SR 85 at Church Street / Roundtree Street is projected to operate at a LOS F during for all No Build scenarios (Base Year 2021 and Design Year 2041). The intersection is improved to a LOS C during the Base Year 2021 Build condition, and is a LOS E during the Design Year 2041 Build condition, which is the current LOS during the Existing Year 2011.

The intersection of SR 85 at SR 138 is projected to operate at a LOS F during for all No Build scenarios (Base Year 2021 and Design Year 2041), as well as the Design Year 2041 Build scenario. This intersection is currently near full capacity during the Existing Year 2011 (LOS E with 78.1 seconds of delay), and the Base Year 2021 Build condition improves upon this delay (64.3 seconds of delay). Furthermore, while the Design Year 2041 Build condition is at a LOS F, the delay is improved by 30% from the No Build condition. This intersection is the critical intersection in the system, and experiences extreme volumes of traffic during the peak periods. Improvements at this intersection are recommended in **Section 13.0 – Recommendations**

The intersections of SR 85 at Warren Drive / Webb Road show considerable improvement from the Design Year 2041 No Build conditions to the Build conditions due to the capacity improvements that are recommended in **Section 13.0 – Recommendations**. Both intersections are at LOS F during the Design Year 2041 No Build scenario, and the LOS improves to acceptable operation (\leq LOS D) for the Design Year 2041 Build scenarios.

The stop-controlled side street movements at the analyzed unsignalized intersections show improvement for the side street total delay, but many side streets operate at a LOS F for all scenarios. As discussed above, it is typical for unsignalized intersections to show extreme delay for the side street movements along a multi-lane facility such as SR 85.

Table 8 Level of Service Summary PM Peak Hour						
Intersection ID	Intersection	Overall LOS (Delay in Seconds)				
		Existing 2011	No- Build 2021	No- Build 2041	Base Build 2021	Design Build 2041
1	SR 85 at Roberts Drive - signalized*	C (22.4)	C (28.7)	D (40.0)	C (25.1)	C (32.1)
2	SR 85 at Bethsaida Road – signalized	D (54.1)	E (67.2)	F (84.3)	E (67.7)	F (85.3)
101	SR 85 at Town Center Drive – unsignalized	EB – C (18.8)	EB – D (31.7)	EB – D (28.6)	EB – D (33.7)	EB – F (**)
		WB – E (39.0)	WB – F (91.1)	WB – F (107.4)	WB – F (190.8)	WB – F (**)
3	SR 85 at Church Street / Roundtree Street – signalized	E (55.0)	E (65.5)	F (102.3)	D (54.2)	F (88.2)
4	SR 85 at SR 138 – signalized	E (57.0)	F (83.9)	F (132.5)	D (53.9)	F (95.1)
103	SR 85 at Publix Driveway- unsignalized	EB – F (**)	EB – F (**)	EB – F (**)	EB – F (**)	EB – F (**)
		WB – F (**)	WB – F (**)	WB – F (**)	WB – F (**)	WB – F (**)
5	SR 85 at Lake Ridge Parkway – signalized	B (12.9)	B (18.7)	D (42.2)	B (15.8)	C (20.3)
6	SR 85 at Warren Drive / Webb Road – signalized	B (18.4)	C (29.7)	E (73.7)	B (16.7)	C (23.2)
7	SR 85 at Helmer Road / Thomas Road – signalized	C (27.7)	C (32.7)	D (52.4)	C (30.2)	D (37.4)
8	SR 85 at Pointe South Parkway – signalized	C (30.1)	D (38.0)	D (48.3)	C (28.5)	C (32.9)
9	SR 85 at Lake View Way – signalized	A (5.7)	A (5.2)	A (4.0)	A (5.3)	A (3.1)
10	SR 85 at SR 279 – signalized	D (35.2)	D (46.2)	E (60.7)	D (39.8)	D (53.2)
11	SR 85 at Corinth Road - signalized	B (13.5)	B (18.2)	C (30.8)	B (17.2)	C (25.7)

Note: EB/WB/NB/SB = Eastbound/Westbound/Northbound/Southbound Approach

* - Intersection is outside of the project limits.

** - Delay is too excessive to measure

The intersection of SR 85 at Bethsaida Road is projected to operate at a LOS F during the No Build and Build Design Year 2041 scenarios. The LOS and the delay at this intersection remain constant for the No Build and the Build conditions. This intersection is the northern logical termini for this project, as the SR 85 corridor is a 6-lane segment to the north of this corridor. Furthermore, this intersection currently has 3-lane northbound and southbound approaches, and the future widening will take place to the south of this intersection. As discussed above, the Build scenario has higher traffic than the No Build scenario as well, so more vehicles are using the roadway during the Build scenario at the same vehicular delay as less vehicles during the No Build scenario.

The intersection of SR 85 at Church Street / Roundtree Street is projected to operate at a LOS F during the Design Year 2041 No Build and Build scenarios. However, the intersection is improved from a LOS E to a LOS D for the Base Year 2021 No Build and Build scenarios, and the vehicular delay is approximately 15 percent less with more vehicles entering the intersection for Build scenario during the Design Year 2041.

The intersection of SR 85 at SR 138 is projected to operate at a LOS F during the Base Year 2021 No Build scenario and the Design Year 2041 No Build and Build scenarios. However, the intersection is improved from a LOS E to a LOS D for the Base Year 2021 No Build and Build scenarios, and the vehicular delay is approximately 30 percent less with more vehicles entering the intersection for Build scenario during the Design Year 2041.

The intersections of SR 85 at Warren Drive / Webb Road and SR 279 show considerable improvement for the Design Year 2041 scenarios. The Design Year 2041 No Build is projected to operate at a LOS E for these intersections, while the Build scenario is projected to operate at a LOS C.

The stop-controlled side street movements at the analyzed unsignalized intersections show improvement for the side street total delay, but many side streets operate at a LOS F for all scenarios. As discussed above, it is typical for unsignalized intersections to show extreme delay for the side street movements along a multi-lane facility such as SR 85.

9.0 PRELIMINARY TRAFFIC SIGNAL WARRANT ANALYSIS

9.1 Introduction

A preliminary traffic signal warrant analysis was performed for the unsignalized intersection. The analysis was conducted based on the criteria contained in the *Manual on Uniform Traffic Control Devices (MUTCD)*, 2009 Edition published by the Federal Highway Administration (FHWA). According to the MUTCD, the investigation of the need for a traffic control signal shall include an analysis of the applicable factors contained in the following traffic signal warrants and other factors related to existing operation and safety at the study location:

- Warrant 1, Eight-Hour Peak Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network

A traffic control signal should not be installed unless one or more of the above warrants are met. However, the satisfaction of a traffic signal warrant or warrants should not in itself require the installation of a traffic control signal.

A full traffic signal warrant analysis will include analysis on at least 12 hours of traffic data. This preliminary analysis evaluated the AM and PM peak periods only (4 hours of traffic data).

This traffic signal warrant analysis evaluated projected traffic conditions to determine if they satisfy the minimum vehicular volume warrants established by the MUTCD. Warrants 1, 2, and 3 are the vehicular volume warrants and are based on mainline traffic volumes, side street traffic volumes, and number of travel lanes.

Warrant 1 (Eight Hour Vehicular Volume) Condition 1A is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic signal.

Warrant 1 (Eight Hour Vehicular Volume) Condition 1B is intended for application where Condition 1A is not satisfied and where the traffic volume on a major street is so heavy that traffic on the intersecting minor street suffers excessive delay or conflict in entering or crossing the major street.

Warrant 1 (Eight Hour Vehicular Volume) Condition 1C is intended for application when both Condition 1A and Condition 1B are 80% satisfied.

Warrant 2 (Four Hour Vehicular Volume) is intended at locations where the volume of intersecting traffic is the principal reason to consider installing a traffic signal.

Warrant 3 (Peak Hour) is intended at locations where traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

9.2 Traffic Signal Warrant Analysis

The side street volumes of all of the unsignalized intersections were preliminarily evaluated to determine if a traffic signal warrant analysis should be conducted. The side street volume threshold that was used was 60 vph, as more than 60 vph on the side street will satisfy one hour of Warrants 1C and 2. The results of this preliminary analysis under Existing Year 2011, Base Year 2021, and Design Year 2041 conditions indicate that only two (2) unsignalized intersections are above the preliminary threshold; the northbound left-turn for the SR 85 at Town Center Drive intersection and the SR 85 at Publix Entrance intersection. **Table 10** shows the signal warrant analysis for the SR 85 at Town Center Drive intersection, and **Table 11** shows the signal warrant analysis for the SR 85 at Publix Entrance intersection. The major street (SR 85) was assigned as a 2-lane approach during the Existing Year 2011 and a 3-lane roadway approach during the Base Year 2021 and Design Year 2041, and the minor streets (northbound left turn at Town Center Drive, and westbound Publix Entrance) were assigned to have a 1-lane approach.

Table 10 Traffic Signal Volume Warrant Analysis Results SR 85 at Town Center Drive (Intersection #101)			
Year	Warrant	Criteria Satisfied	Hrs Met/ Required
Existing Year 2011	1A*	Not Met	0 / 8
	1B*	Not Met	2 / 8
	1C*	Not Met	0 / 8
	2	Not Met	1 / 4
	3	Not Met	0 / 1
Base Year 2021	1A*	Not Met	0 / 8
	1B*	Not Met	2 / 8
	1C*	Not Met	0 / 8
	2	Not Met	2 / 4
	3	Not Met	0 / 1
Design Year 2041	1A*	Not Met	0 / 8
	1B*	Not Met	3 / 8
	1C*	Not Met	0 / 8
	2	Not Met	3 / 4
	3	Met	2 / 1

* - Only 4 hours of traffic data was used for this analysis.

As shown in **Table 10**, Warrants 1A, 1B, 1C, 2, and 3 are not satisfied under Existing Year 2011 or Base Year 2021 traffic conditions. Additionally, Warrants 1A, 1B, 1C, and 2 are not satisfied and Warrant 3 is satisfied under Design Year 2041 traffic conditions. While Warrant 3 is not typically used alone when determining if a traffic signal is warranted, Warrant 2 is one hour from being satisfied for the Design Year 2041 traffic conditions. This signal is within 1000 feet of the SR 85 at Church Street signalized intersection, which is the minimum signal spacing distance according to *GDOT's Regulations for Driveway and Encroachment Control*. However, it is also noted that “better operation may result from the introduction of signals with less spacing if the alternative forces high volumes of traffic to an adjacent intersection. When the applicant can show, through alternatives analysis, that better operations can be achieved with less spacing, the Department will consider an exception to the provision of Table 3-3.”¹ It is recommended that traffic signal warrants be conducted at this location once the SR 85 corridor has been opened to traffic for more than six months, so that traffic has the opportunity to settle into typical traffic patterns.

¹ *GDOT's Regulations for Driveway and Encroachment Control* – pg. 3-7

Table 11 Traffic Signal Volume Warrant Analysis Results SR 85 at Publix Entrance (Intersection #103)			
Year	Warrant	Criteria Satisfied	Hrs Met/ Required
Existing Year 2011	1A*	Not Met	0 / 8
	1B*	Not Met	0 / 8
	1C*	Not Met	0 / 8
	2	Not Met	0 / 4
	3	Not Met	0 / 1
Base Year 2021	1A*	Not Met	0 / 8
	1B*	Not Met	1 / 8
	1C*	Not Met	0 / 8
	2	Not Met	1 / 4
	3	Not Met	0 / 1
Design Year 2041	1A*	Not Met	0 / 8
	1B*	Not Met	1 / 8
	1C*	Not Met	0 / 8
	2	Not Met	1 / 4
	3	Not Met	0 / 1

* - Only 4 hours of traffic data was used for this analysis.

As shown in **Table 11**, Warrants 1A, 1B, 1C, 2, and 3 are not satisfied under Existing Year 2011 or Base Year 2021 traffic conditions. Additionally, Warrants 1A, 1B, 1C, 2, and 3 are not satisfied under Design Year 2041 traffic conditions. The traffic signal warrant analyses are included in **Appendix J**.

10.0 ROUNDABOUT CONSIDERATION

According to the guidance statement/application provided by GDOT, “a roundabout shall be considered as an alternative for all intersections that are being reconstructed”. **For single-lane roundabouts, the total ADT entering the intersection should be less than 25,000 vpd; for multi-lane roundabouts, the threshold is 45,000 vpd. For all roundabouts, the percentage of total traffic along the major road should be less than 90%.** From the traffic data collected and forecasted, **Table 12** below shows the approximate Existing Year 2011 and Design Year 2041 daily entering traffic volumes for each of the study intersections to be reconstructed.

Table 12 GDOT Roundabout Analysis Tool Preliminary Analysis					
Intersection	GDOT Threshold	2011 Daily Entering	2041 Daily Entering	Major Street %	GDOT Criteria Satisfied?
SR 85 at Bethsaida Road – signalized	45,000	60,930	86,320	N/A	NO
SR 85 at Town Center Drive – unsignalized	45,000	48,945	69,960	N/A	NO
SR 85 at Church Street / Roundtree Street – signalized	45,000	59,515	85,130	N/A	NO
SR 85 at SR 138 – signalized	45,000	73,840	104,790	N/A	NO
SR 85 at Publix Driveway- unsignalized	45,000	44,325	63,010	N/A	NO
SR 85 at Lake Ridge Parkway – signalized	45,000	46,370	65,690	N/A	NO
SR 85 at Sharon Driveway- unsignalized	45,000	44,060	62,420	N/A	NO
SR 85 at Warren Drive / Webb Road – signalized	45,000	44,150	62,555	N/A	NO
SR 85 at Pine Ridge Trail - unsignalized	45,000	35,235	49,935	N/A	NO
SR 85 at Helmer Road / Thomas Road – signalized	45,000	39,025	55,300	N/A	NO
SR 85 at Pointe South Parkway – signalized	45,000	37,905	53,920	N/A	NO
SR 85 at Lake View Way – signalized	45,000	30,290	43,130	98%	NO
SR 85 at Median Opening (South of County Line) - unsignalized	45,000	29,580	41,905	99%	NO
SR 85 at Median Opening (Gas Station) - unsignalized	45,000	29,860	42,300	99%	NO
SR 85 at Kenwood Road - unsignalized	45,000	30,035	42,550	98%	NO
SR 85 at SR 279 – signalized	45,000	36,715	52,025	N/A	NO
SR 85 at Plantation Road - unsignalized	45,000	32,340	45,820	N/A	NO
SR 85 at Corinth Road - signalized	45,000	34,115	48,325	N/A	NO

Based upon the analyses conducted in **Table 12**, no roundabouts are recommended for the improved SR 85 corridor.

11.0 QUEUE LENGTH ANALYSIS

The storage bay lengths required for existing and proposed exclusive lanes that are warranted for the signalized intersections were analyzed using *Synchro*. **Table 13** below summarizes the results of this analysis using *Synchro*'s 95th percentile queue lengths for the Design Year 2041 Build conditions. Many of the intersections require new exclusive turn lanes or a lengthening of the existing storage bays; these improvements are discussed in **Section 13.0 – Recommendations**. Copies of the *Synchro* queue length analyses are included in **Appendix K**.

Table 13 Synchro Queue Length Analysis Design Year 2041 Build Conditions						
Intersection ID	Intersection	Vehicle Movement	Existing Storage	AM Peak Hour 95 th % Queue	PM Peak Hour 95 th % Queue	Recommended Storage Lengths
2	SR 85 at Bethesda Road	NB Left	Dual 200'	0'	400'	Dual 400'
		NB Right	285'	6'	312'	325'
		SB Left	Dual 225'	161'	224'	Existing
		SB Right	--	39'	63'	175'
		EB Left	Dual 120'	277'	360'	Dual 375'
		EB Right	--	54'	126'	150'
		WB Left	Dual 200'	309'	594'	Dual 600'
		WB Right	150'	32'	63'	Existing
3	SR 85 at Church Street / Roundtree Street	NB Left	460'	75'	196'	Dual 235'
		NB Right	280'	5'	7'	Existing
		SB Left	510'	160'	157'	Dual 235'
		SB Right	230'	27'	6'	Existing
		EB Left	250'	162'	247'	Existing
		EB Right	150'	190'	1065'	1100'
		WB Left	110'	140'	310'	Dual 325'
		WB Right	--	335'	284'	350'

Table 13 (Continued)
Synchro Queue Length Analysis
Design Year 2041 Build Conditions

Intersection ID	Intersection	Vehicle Movement	Existing Storage	AM Peak Hour 95 th % Queue	PM Peak Hour 95 th % Queue	Recommended Storage Lengths
4	SR 85 at SR 138	NB Left	Dual 270'	101'	244'	Existing
		NB Right	200'	123'	316'	325'
		SB Left	Dual 325'	449'	326'	Dual 450'
		SB Right	Continuous	83'	194'	200'
		EB Left	Dual 410'	397'	368'	Existing
		EB Right	--	72'	120'	175'
		WB Left	Dual 225'	319'	470'	Dual 475'
		WB Right	300'	1398'	494'	1400'
5	SR 85 at Lake Ridge Parkway	NB Left	310'	23'	245'	Existing
		NB Right	245'	1'	5'	Existing
		SB Left	310'	63'	9'	Existing
		SB Right	140'	32'	1'	Existing
		EB Right	240'	83'	168'	Existing
6	SR 85 at Warren Drive / Webb Road	NB Left	460'	29'	78'	Existing
		NB Right	160'	35'	44'	Existing
		SB Left	460'	496'	636'	650'
		SB Right	130'	15'	1'	Existing
		EB Through/Right	130'	104'	65'	Existing
		WB Right	170'	0'	0'	Free Flow
7	SR 85 at Helmer Road / Thomas Road	NB Left	150'	132'	196'	310'
		NB Right	150'	8'	63'	Existing
		SB Left	160'	229'	306'	310'
		SB Right	250'	32'	28'	Existing
		WB Left	90'	69'	125'	160'

Table 13 (Continued)
Synchro Queue Length Analysis
Design Year 2041 Build Conditions

Intersection ID	Intersection	Vehicle Movement	Existing Storage	AM Peak Hour 95th % Queue	PM Peak Hour 95th % Queue	Recommended Storage Lengths
8	SR 85 at Pointe South Pkwy	NB Left	190'	24'	47'	Existing
		NB Right	250'	61'	82'	Existing
		SB Left	Dual 220'	169'	424'	Dual 450'
		SB Right	--	0'	0'	250'
		WB Right	530'	309'	290'	Existing
9	SR 85 at Lake View Way	NB Left	260'	2'	4'	Existing
		NB Right	250'	0'	0'	Existing
		SB Left	310'	7'	3'	Existing
		WB Right	190'	15'	18'	Existing
10	SR 85 at SR 279	NB Left	180'	442'	648'	650'
		NB Right	150'	7'	41'	Existing
		SB Left	160'	106'	126'	Existing
		SB Right	140'	80'	87'	Existing
		EB Right	530'	35'	243'	Existing
11	SR 85 at Corinth Road	NB Left	140'	44'	26'	Existing
		NB Right	180'	16'	102'	Existing
		SB Left	150'	99'	363'	Dual 375'
		WB Right	260'	0'	0'	Free Flow

12.0 CONCLUSION

The segment of SR 85 between Bethsaida Road and Corinth Road in Clayton and Fayette Counties has been identified for roadway widening by the GDOT. The SR 85 corridor serves as a primary north-south thoroughfare through the Clayton and Fayette Counties. SR 85 is a major connection to I-75 and Atlanta for Clayton and Fayette County commuters, and this portion of SR85 is also a significant commercial corridor.

The proposed improvements are planned to be constructed and open to traffic by year 2021 (Base Year) with a 20-year design horizon of 2041 (Design Year). The project limits along SR 85 are from the intersections Bethsaida Road to Corinth Road and covers approximately 4.2 miles.

This report summarizes the data collection, accident data, analysis of projected traffic conditions, and conclusions from the analysis of Existing Year 2011, No-Build Year 2021, No-Build Year 2041, Base Year 2021, and Design Year 2041. Based upon the results of the analysis, the SR 85 corridor is recommended to be widened from 4-lanes divided to 6-lanes divided from Bethsaida Road south to Corinth Road. The recommended improvements are further discussed in **Section 13.0 – Recommendations**. For future scenarios and future traffic volume projections, the construction of this project was assumed to be completed by year 2021.

13.0 RECOMMENDATIONS

Based on the projected Base Year 2021 and Design Year 2041 conditions, we offer the following:

Overall Corridor

- The SR 85 is programmed to be widened from 4-lanes divided to 6-lanes divided highway, and the capacity analysis confirms this improvement. The SR 85 corridor is recommended to be widened from 4-lanes divided to 6-lanes divided from Bethsaida Road south to Corinth Road.
- Signal timing optimization will be required for both the Base Year 2021 and Design Year 2041, and was included in the overall *Synchro* analysis for the Build conditions. Typically, the need for signal retiming should be analyzed every three (3) years, and the signals along the corridor were recently retimed in 2011.

SR 85 at Bethsaida Road

- Lengthen existing dual northbound left-turn lanes to 400' total storage, and lengthen existing northbound right-turn lane to 325' total storage.
- Construct a 175' southbound right-turn lane along SR 85.
- Construct a 150' eastbound right-turn lane along Bethsaida Road, and length existing dual eastbound left-turn lanes to 375' total storage.
- Lengthen existing dual westbound left-turn lanes to 600' total storage.
- Install northbound and southbound right-turn overlap signal heads.

SR 85 at Church Street / Roundtree Street

- Construct 235' dual northbound and southbound left-turn lanes. The eastbound and westbound departure lanes along Church Street / Roundtree Street must have two receiving lanes, and be full width for a minimum of 800' before they are tapered.
- Lengthen existing eastbound right-turn lane to 1100' total storage
- Construct 325' dual westbound left-turn lanes, and construct 350' westbound right-turn lane.

- Install eastbound and westbound right-turn overlap signal heads, and prohibit northbound and southbound U-turns.

SR 85 at SR 138

- Lengthen existing northbound right-turn lane to 325' total storage.
- Lengthen existing dual southbound left-turn lanes to 450' total storage, and construct a 200' southbound right-turn lane.
- Construct 175' eastbound right-turn lane.
- Lengthen existing dual westbound left-turn lanes to 475' total storage, and length existing westbound right-turn lane to 1400' total storage.
- Install westbound, northbound, and southbound right-turn overlap signal heads, and prohibit eastbound, westbound, and southbound U-turns.

SR 85 at Warren Drive / Webb Road

- Lengthen existing southbound left-turn to 650' total storage.
- Convert existing westbound right-turn lane along Webb Road from a yield condition turn lane into a free flowing add lane onto SR 85. Add lane must be full width along SR 85 width for a minimum of 1000' before it is tapered.

SR 85 at Helmer Road / Thomas Road

- Lengthen existing northbound and southbound left-turn lanes to 310' total storage.
- Lengthen existing westbound left-turn to 160' total storage.

SR 85 at Pointe South Parkway

- Lengthen existing southbound dual left-turn lanes to 450' total storage.
- Construct 250' southbound right-turn lane.
- Install westbound right-turn overlap, and prohibit southbound U-turns.

SR 85 at Median Opening (South of County Line)

- Construct 310' northbound left-turn lane.

SR 85 at Median Opening (Gas Station)

- Close median opening.
 - Median opening is 400' from a median opening to the south, and 800' from a median opening to the north. GDOT standard urban median opening distance is 2000' preferred or 1000' minimum.
 - Convert side streets to right-in/right-out driveways.
- Construct 250' northbound right-turn lane.

SR 85 at Kenwood Drive

- Construct 310' southbound U-turn lane.

SR 85 at SR 279

- Lengthen existing northbound left-turn lane to 650' total storage.

SR 85 at Corinth Road

- Construct 375' dual southbound left-turn lanes, and make outside dual left-turn lane the drop lane to transition from 3-lanes through to 2-lanes through southbound. The eastbound and westbound departure lanes along Corinth Road must have two receiving lanes, and be full width for a minimum of 800' before they are tapered.
- Convert existing westbound right-turn lane along Corinth Road from a yield condition turn lane into a free flowing add lane onto SR 85. Lane will become the third travel lane along northbound SR 85.

The proposed improvements along the SR 85 corridor are shown in **Figure 3**.

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0074-02(021) **OFFICE** Planning
Clayton & Fayette Counties
P.I. # 721290
DATE January 3, 2012

FROM Cindy VanDyke, State Transportation Planning Administrator

TO Bobby K. Hilliard, P.E., State Program Delivery Engineer
Attention: Chad White

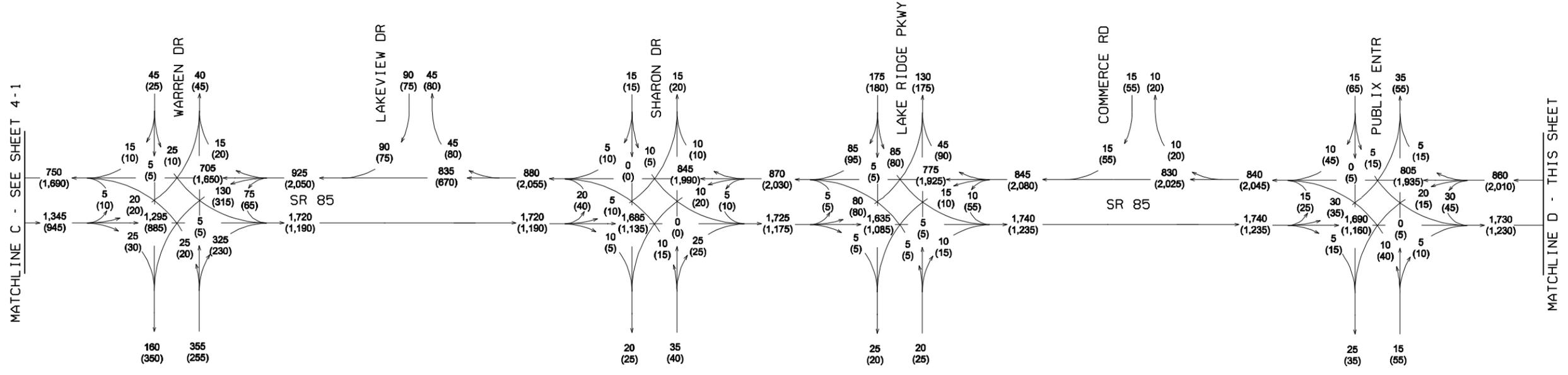
SUBJECT **Reviewed** Updated Design Traffic for SR 85 FM SR 279/FAYETTE N TO 6-LN @ ROBERTS DR/CLAYTON.

We have reviewed the consultant's traffic for the above project.

The traffic is approved based on the information furnished. If you have any questions concerning this information please contact Abby Ebodaghe at (404) 631-1923.

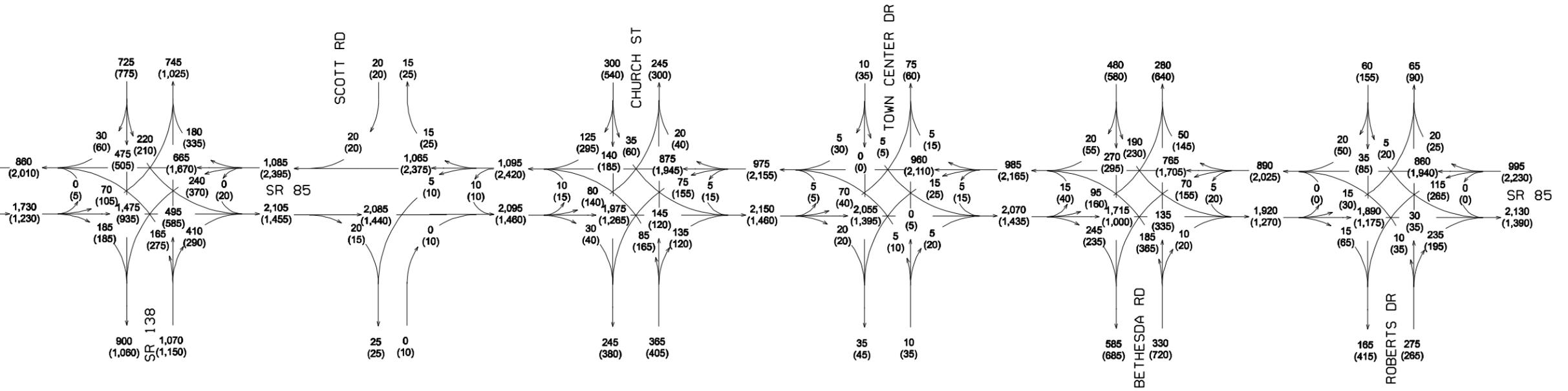
CLV/AFE

MATCHLINE C - SEE SHEET 4-1



MATCHLINE D - THIS SHEET

MATCHLINE D - THIS SHEET



DHV TRAFFIC VOLUMES
EXISTING YEAR 2011
AM PEAK HOUR - XXX
PM PEAK HOUR - (XXX)

PEAK HOUR TRUCK - 6.0%
S.U. - 3.5%
M.U. - 2.5%

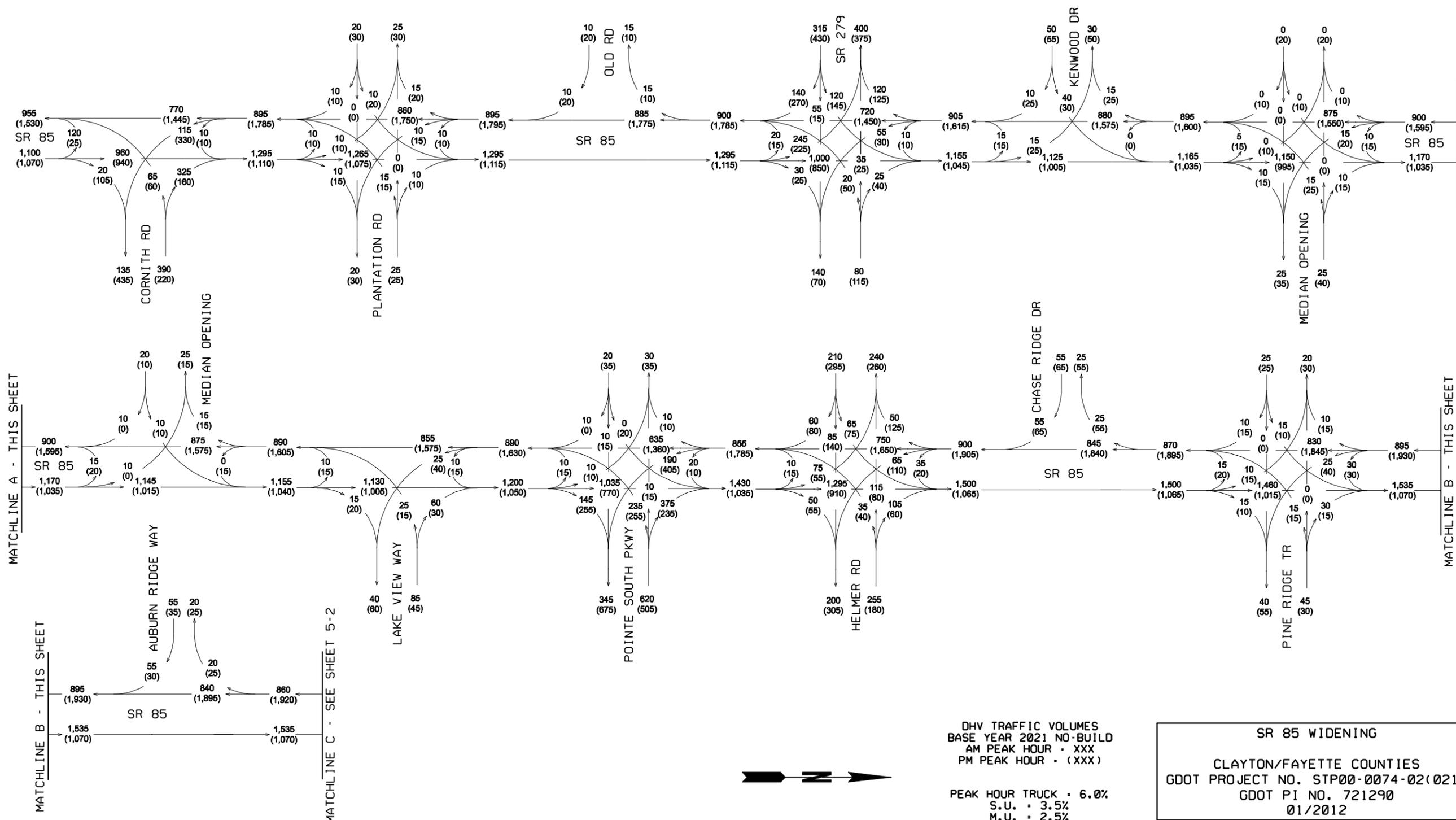
SR 85 WIDENING
CLAYTON/FAYETTE COUNTIES
GDOT PROJECT NO. STP00-0074-02(021)
GDOT PI NO. 721290
01/2012



Kimley-Horn and Associates, Inc.
Engineering, Planning, and Environmental Consultants
Suite 601, 817 West Peachtree Street, NW
Atlanta, Georgia 30308

REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
	OFFICE:
	TRAFFIC DIAGRAM
	EXISTING (2011) DHV
	SHEET 2 OF 2

DRAWING No.
4-2



DHV TRAFFIC VOLUMES
 BASE YEAR 2021 NO-BUILD
 AM PEAK HOUR - XXX
 PM PEAK HOUR - (XXX)
 PEAK HOUR TRUCK - 6.0%
 S.U. : 3.5%
 M.U. : 2.5%

SR 85 WIDENING
 CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012



1/21/2007
 C/P/L
 1/21/2007
 C/P/L
 1/21/2007
 C/P/L

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		OFFICE:	
		TRAFFIC DIAGRAM	
		NO-BUILD (2021) DHV	
		SHEET 1 OF 2	
		DRAWING No. 5-1	

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MATCHLINE D - THIS SHEET

MATCHLINE D - THIS SHEET



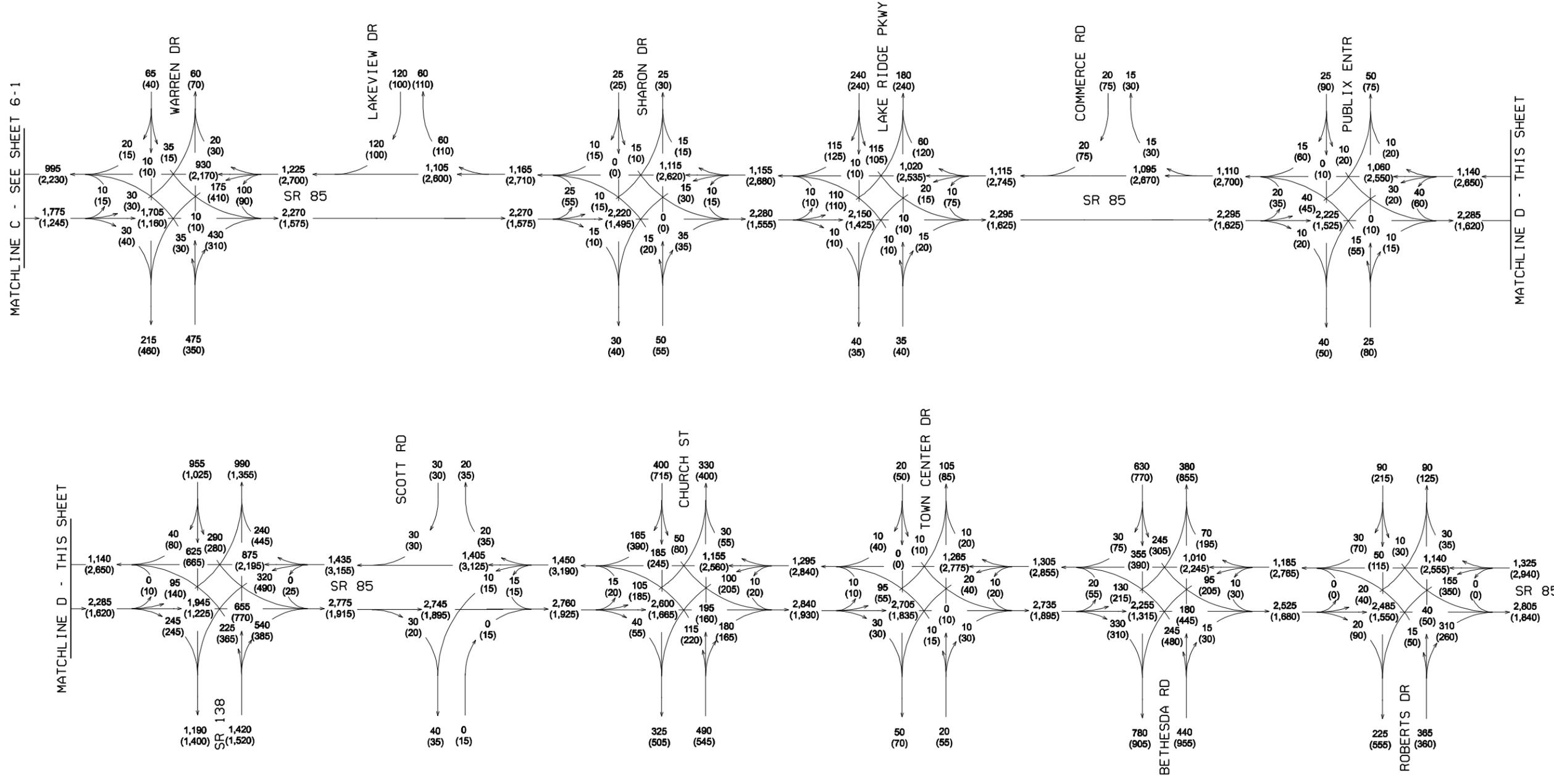
DHV TRAFFIC VOLUMES
 BASE YEAR 2021 NO-BUILD
 AM PEAK HOUR - XXX
 PM PEAK HOUR - (XXX)
 PEAK HOUR TRUCK - 6.0%
 S.U. : 3.5%
 M.U. : 2.5%

SR 85 WIDENING
 CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012



MATCHLINE C - SEE SHEET 6-1

MATCHLINE D - THIS SHEET



MATCHLINE D - THIS SHEET

DHV TRAFFIC VOLUMES
 DESIGN YEAR 2041 NO-BUILD
 AM PEAK HOUR - XXX
 PM PEAK HOUR - (XXX)
 PEAK HOUR TRUCK - 6.0%
 S.U. : 3.5%
 M.U. : 2.5%

SR 85 WIDENING
 CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012



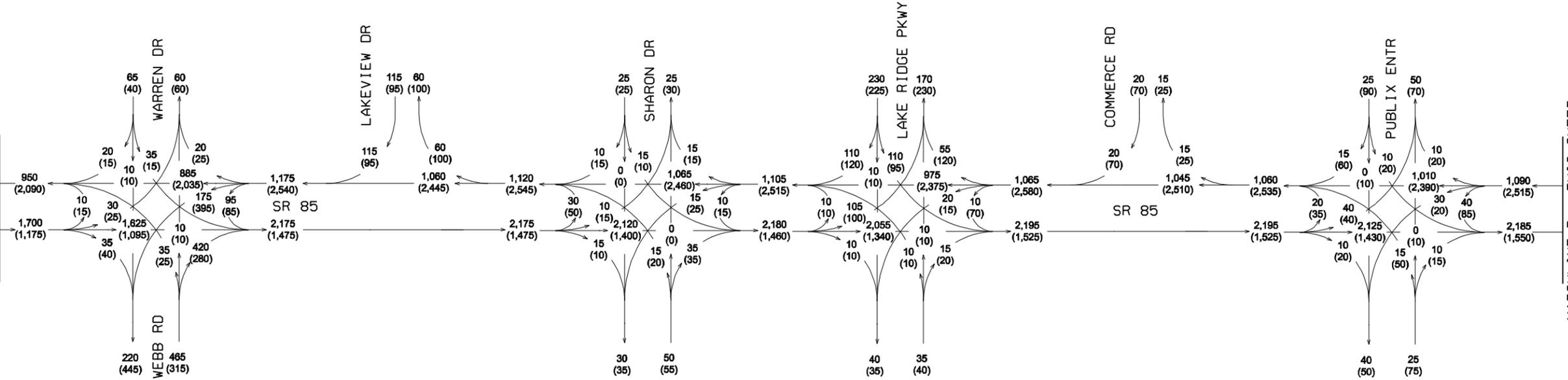
REVISIONS
 NO. DATE BY
 1 1/21/2012 JPL/ML
 2 1/21/2012 JPL/ML
 3 1/21/2012 JPL/ML
 4 1/21/2012 JPL/ML
 5 1/21/2012 JPL/ML

3/21/2012 JPL/ML

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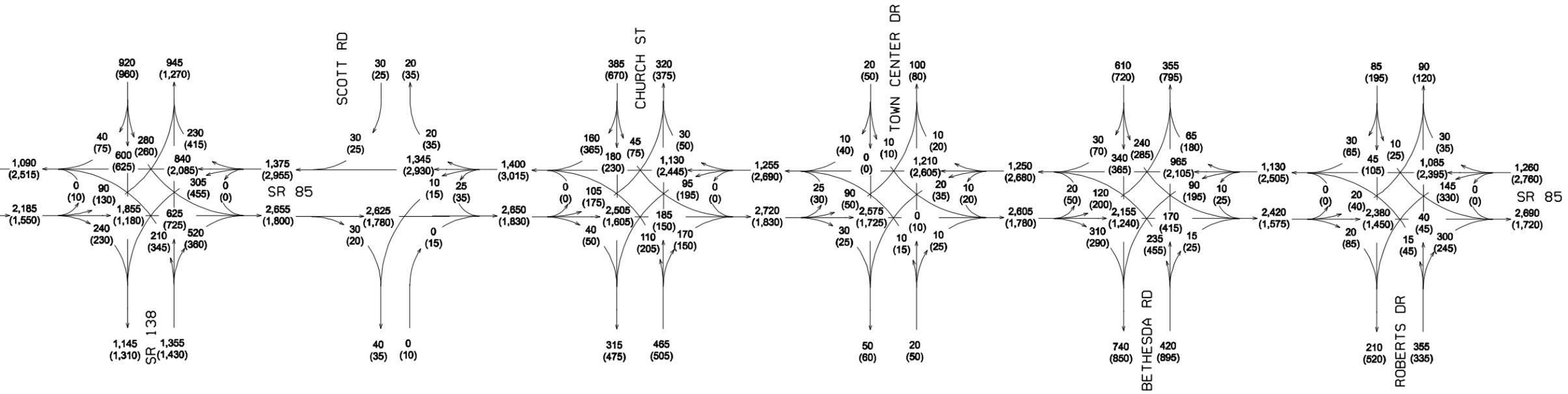
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		OFFICE:	
		TRAFFIC DIAGRAM	
		NO BUILD (2041) DHV	
		SHEET 2 OF 2	
		DRAWING No. 6-2	

MATCHLINE C - SEE SHEET 7-1



MATCHLINE D - THIS SHEET

MATCHLINE D - THIS SHEET



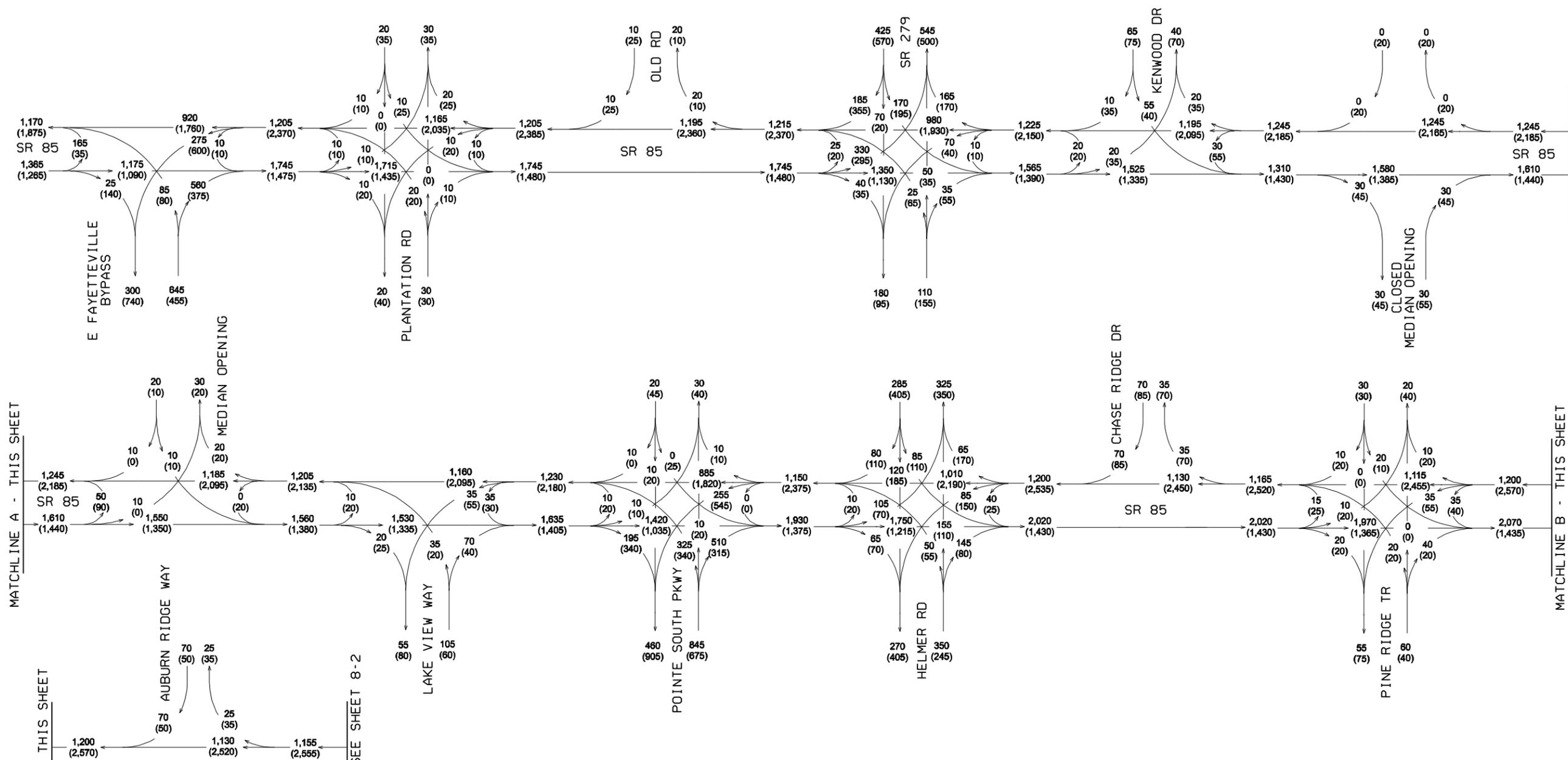
DHV TRAFFIC VOLUMES
 BASE YEAR 2021 BUILD
 AM PEAK HOUR - XXX
 PM PEAK HOUR - (XXX)
 PEAK HOUR TRUCK - 6.0%
 S.U. - 3.5%
 M.U. - 2.5%

SR 85 WIDENING
 CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012



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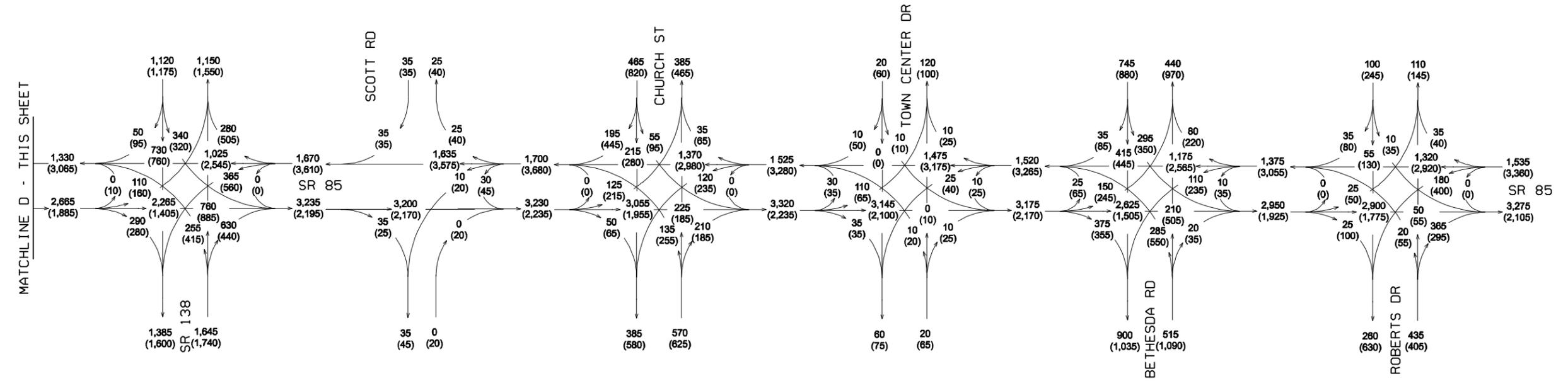
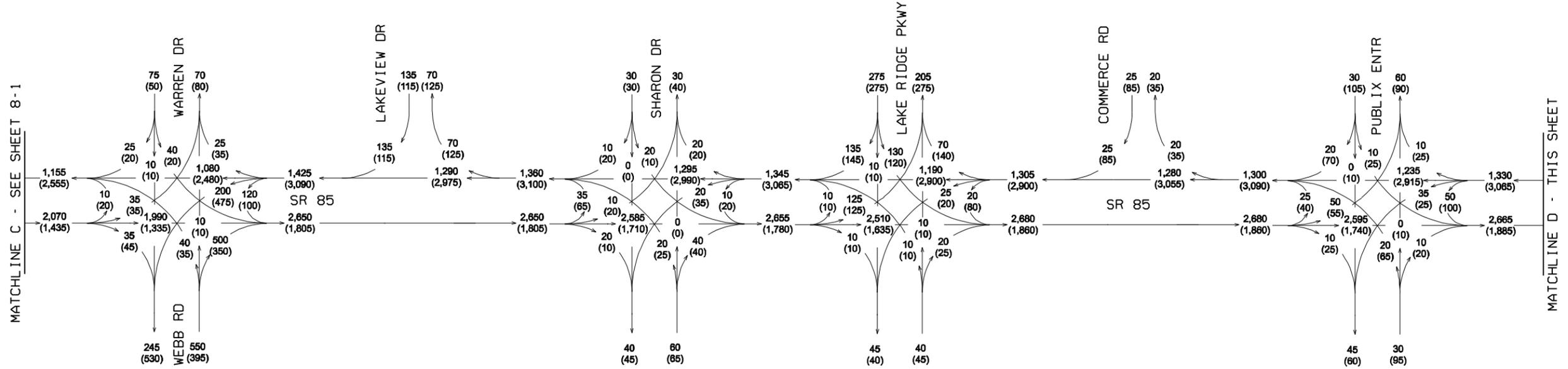
REVISION DATES		STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION	
		OFFICE:	
		TRAFFIC DIAGRAM	
		BUILD (2021) DHV	
		SHEET 2 OF 2	
		DRAWING No. 7-2	



DHV TRAFFIC VOLUMES
 DESIGN YEAR 2041 BUILD
 AM PEAK HOUR - XXX
 PM PEAK HOUR - (XXX)
 PEAK HOUR TRUCK - 6.0%
 S.U. : 3.5%
 M.U. : 2.5%

SR 85 WIDENING
 CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012





DHV TRAFFIC VOLUMES
 DESIGN YEAR 2041 BUILD
 AM PEAK HOUR - XXX
 PM PEAK HOUR - (XXX)

PEAK HOUR TRUCK - 6.0%
 S.U. : 3.5%
 M.U. : 2.5%

SR 85 WIDENING
 CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012

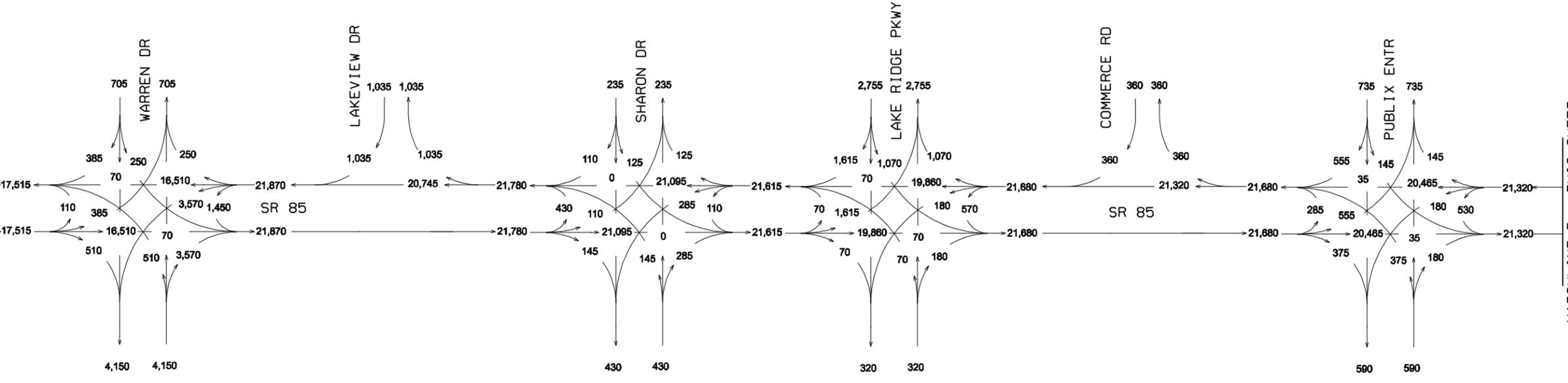


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 Suite 601, 817 West Peachtree Street, NW
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	REVISION DATES		STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
			OFFICE:
			TRAFFIC DIAGRAM
			BUILD (2041) DHV
			SHEET 2 OF 2

DRAWING No.
8-2

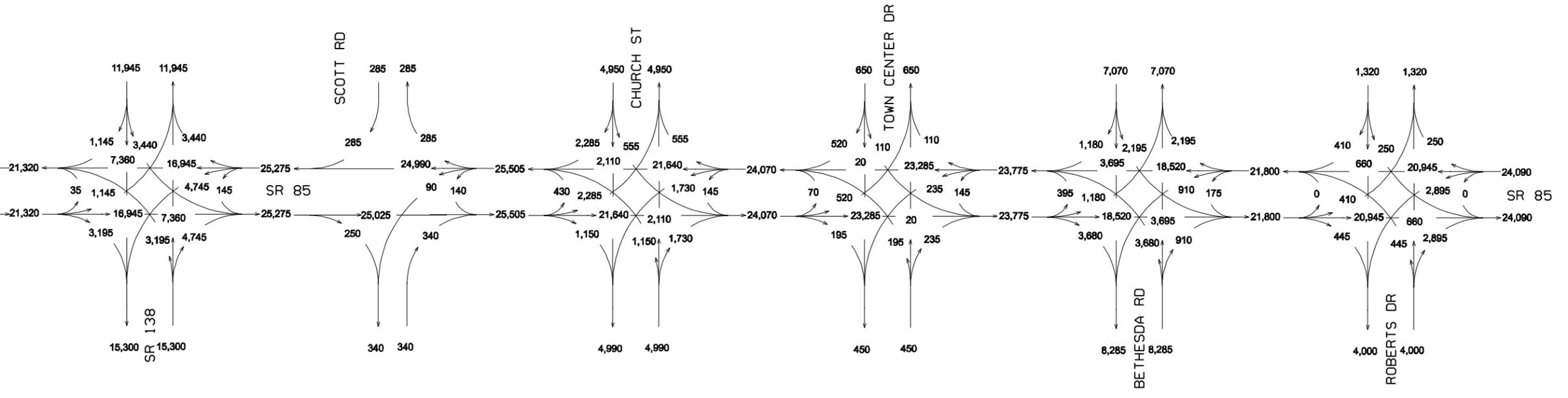
MATCHLINE C - SEE SHEET 9-1



MATCHLINE D - THIS SHEET

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MATCHLINE D - THIS SHEET



11/11/11
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ADT TRAFFIC VOLUMES
EXISTING YEAR 2011

DAILY TRUCK = 7.0%
S.U. = 4.0%
M.U. = 3.0%

SR 85 WIDENING CLAYTON/FAYETTE COUNTIES GDOT PROJECT NO. STP00-0074-02(021) GDOT PI NO. 721290 01/2012

11/11/11
 11/11/11
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REVISION DATES	

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: **TRAFFIC DIAGRAM**

EXISTING (2011) ADT
SHEET 2 OF 2

DRAWING No. 9-2

MATCHLINE C - SEE SHEET 10-1

MATCHLINE D - THIS SHEET

MATCHLINE D - THIS SHEET



ADT TRAFFIC VOLUMES
 BASE YEAR 2021 NO-BUILD
 DESIGN YEAR 2041 NO-BUILD
 2021 NO-BUILD ADT - XXX
 2041 NO-BUILD ADT - (XXX)

DAILY TRUCK - 7.0%
 S.U. - 4.0%
 M.U. - 3.0%

SR 85 WIDENING

CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012



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	REVISION DATES		STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
			OFFICE:
			TRAFFIC DIAGRAM
			NO-BUILD (2021/2041) ADT
			SHEET 2 OF 2

DRAWING No.
10-2

MATCHLINE C - SEE SHEET 11-1

MATCHLINE D - THIS SHEET

MATCHLINE D - THIS SHEET



ADT TRAFFIC VOLUMES
 BASE YEAR 2021 BUILD
 DESIGN YEAR 2041 BUILD
 2021 BUILD ADT - XXX
 2041 BUILD ADT - (XXX)

DAILY TRUCK - 7.0%
 S.U. - 4.0%
 M.U. - 3.0%

SR 85 WIDENING

CLAYTON/FAYETTE COUNTIES
 GDOT PROJECT NO. STP00-0074-02(021)
 GDOT PI NO. 721290
 01/2012

	REVISION DATES		STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
			OFFICE:
			TRAFFIC DIAGRAM
			BUILD (2021/2041) ADT
			SHEET 2 OF 2

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 Atlanta, Georgia 30308

DRAWING No.
11-2

Concept Team Meeting Notes

To: Chad White, GDOT

From: Tom Barwick, HLE

CC: Allen Krivsky, HLE

Date: 8/29/12

Re: SR 85 Widening from Corinth Road to Roberts Drive
STP00-0074-02(021) – Clayton/Fayette, PI No. 721290
BHF00-0074-02(022) - Clayton/Fayette, PI No. 721295

Project Concept Meeting Held on 08/29/12

The meeting was held to discuss conceptual layout and draft Concept Report for the project.

Chad White opened the meeting by thanking everyone for attending and asking that everyone introduce themselves. He then explained the schedule for both projects and turned the meeting over to Tom Barwick.

Tom Barwick began by reading from the draft concept report. Tom mentioned the project functional classification, read over the Project Justification Statement, and the Project Description. Tom stated that there is a difference between the logical termini proposed by the Office of Planning and the one recommended by the traffic report. Tom noted that the traffic study prepared by Kimley-Horn and Associates did not significantly show a drop of traffic volume at SR 279 therefore they justify their project termini to be at Corinth Road. He also mentioned the meeting held on March 21, 2012 to coordinate the logical termini for the SR 85 widening and the East Fayetteville Bypass project where it was agreed that Corinth Road is a better location for the logical termini. Paul Alimia recommended involving FHWA as soon as possible to resolve the discrepancy on the logical termini.

Tom Barwick continued to discuss the draft concept report by covering the existing and proposed characteristics of the project including the design criteria, required design variances and exceptions, utilities, number of impacted parcels, the level of environmental analysis and environmental concerns, and traffic volumes. Paul Alimia noted that he doesn't believe there would be any environmental issues.

Tom Barwick discussed the different alternates that had been studied. He commented on the preferred alternate and why the other alternates were recommended for elimination.

The meeting was then opened to comments from the attendees. No concerns were noted from the attendees. Clayton County comments were received via email on August 30, 2012.

Clayton County Comments

General- Clarification is needed between the two reports. There is a considerable amount of overlap between the descriptions and project limits. If PI #721295 only addresses the bridge widening at Camp Creek, then the concept report should be limited to this project, eliminating any language that implies the project extends to the project limits identified for PI #721290. Since these two projects are so interrelated, a suggestion would be to combine the two reports into one comprehensive report, if this practice is acceptable to Georgia DOT and FHWA.

PI #721290

General – The correct spelling of the two roadways are Rountree Road and Pointe South Parkway. These roadways are misspelled throughout the report.

Page 2 – The project location map doesn't accurately depict the full project limits.

Page 3 – Project Justification Statement – the reference to the Office of Planning's recommendation to revise the project limits is confusing since several references throughout the report identify Roberts Drive and SR 279 and in some instances Corinth Road.

Page 3 – Project Justification Statement – At the end of the first paragraph, a traffic count is reported as 55,550, but in the table at the bottom of the page the same location count is reported as 50,550.

Page 4 – Description of the Proposed Project – Statements concerning the Corinth Road location are outside the current project limits. Clarification is needed.

Page 4 – Projected ADT Traffic – The traffic count identified for 2011 is 24,090. However, all the existing counts provided in the preceding table in the Project Justification Statement section exceed this value. The highest value shown in the table is in excess of 50,000. Clarification is needed in this discrepancy.

Page 6 – Utility Involvements – Clayton County Transportation and Development is the operating and maintaining agency for the traffic signals and ITS elements along SR 85. At times on other projects, this information is included in the utility section of the concept report. Whether this is incorporated at this location or not, the relationship should be identified and incorporated into the project in both engineering and construction phases.

Page 8 – Access Control – The third bullet in this section refers to the relocation of an existing median just north of Commerce Circle to south of Commerce Circle. This suggested relocation should warrant additional study to fully estimate the impact on

traffic movements accessing the commercial properties on both the west and east sides of SR 85 along with any required turning movements at the new median location. Currently, this opening services existing commercial developments on both sides of SR 85. Furthermore, these commercial developments have interparcel access among parcels extending to SR 138 and along SR 138. Relocation of this opening from its present location will have an adverse affect on the access to these parcels. Increased U-turn demands will be placed on SR 85 as well as increased turning movements at the signalized intersection of SR 85 and SR 138.

Page 8 – Access Control – The fourth bullet in this section refers to a median opening between SR 138 and Scott Road. There is not an existing median opening between these two roads; however, there is a modified median opening at Scott Road. This opening only allows southbound left turning movements accessing a private driveway on the east side of SR 85.

Page 8 – Access Control – The fifth bullet in this section refers to a median opening between Church Street and the access road south of Lamar Hutcheson Pkwy. The location description provided could be clarified since the median location is for the access road. Further discussion with the City of Riverdale concerning this proposed median closure is warranted since this was recently constructed/modified in conjunction with their Riverdale Town Center development. The premise of the access road was to provide direct access from SR 85 to the Town Center development and the potential closure of this median will eliminate this concept. Also, the City of Riverdale may have additional redevelopment plans for this area that may affect future traffic demands and access needs.

Page 10 – Other Projects in the Area – Clarification in the descriptions is needed between the projects identified in the second and third bullets. The second bullet describes items outside the project limits for PI #0006904. These items should be incorporated into the description for PI #0008517 under the third bullet.

Page 10 – Other Projects in the Area – There is another project in the area not listed. The City of Riverdale has a Transportation Enhancement (TE) project, PI #0009009, on SR 85 from Lamar Hutcheson Pkwy north. This SR 85 Widening project and the TE project should be coordinated to eliminate potential overlaps and to ensure the improvements proposed between the two projects are consistent and complement each other.

General – Before a decision is made concerning adjusting the northern project limits from Roberts Drive to Lamar Hutcheson Pkwy, it is suggested a complete review of this section be performed. Although from a roadway lane perspective, the limits might be adjusted, consideration should be given to pedestrian movements in this area. A review should reveal if there is existing ADA compliant sidewalk and standard roadway shoulders along this section of SR 85.

General – Since Clayton County Transportation and Development is responsible for operations and maintenance of the traffic signals and ITS devices along SR 85, Clayton County's specifications for these items should be incorporated into the project. Clayton County maintains specifications for these devices that have been incorporated into previous

Georgia DOT projects and this practice should continue on this project. The existing traffic signals are designed and operated consistent for driver expectation in Clayton County. If any modifications are required to the existing traffic signal supports, it is recommended that mast arm signal supports be utilized, which is consistent with the existing equipment along the SR 85 corridor.

PI #721295

General – Similar to PI #721290, clarification is needed in the report as to where one project begins and another ends. The overlapping of information is confusing.

General – Similar to PI #721290, clarification is needed to the project limits.

Page 3 – MPO – This project is identified as MPO Project TIP #CL-015. Technically, CL-015 corresponds to PI #721290, not #721295.

Action items

Paul Alimia will set a meeting with the FHWA as soon as possible to discuss the logical termini for the project.

Attendees List- See attached list