

Section 3B:

College Street Corridor



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INTRODUCTION

This section documents the results of traffic operations evaluations for the College Street Corridor from Farmville Road to Shell Toomer Parkway in Auburn, Alabama. The intersections analyzed in this corridor include:

- N. College Street at Farmville Road
- N. College Street at Asheton Lane
- N. College Street at East University Drive/Shug Jordan Parkway
- N. College Street at Shelton Mill Road
- N. College Street at Drake Avenue
- N. College Street at Bragg Avenue
- N. College Street at Mitcham Avenue
- N. College Street at Glenn Avenue
- N. College Street at Tichenor Avenue
- College Street at Magnolia Avenue
- S. College Street at Thach Avenue
- S. College Street at Miller Avenue/Roosevelt Drive
- S. College Street at Samford Avenue
- S. College Street at Woodfield Drive
- S. College Street at Kimberly Drive
- S. College Street at S. Donahue Drive
- S. College Street at East University Drive/Shug Jordan Parkway
- S. College Street at Lingleaf Drive
- S. College Street at Harmon Drive
- S. College Street at Veterans Boulevard
- S. College Street at I-85 Southbound Ramps
- S. College Street at I-85 Northbound Ramps
- S. College Street at Shell Toomer Parkway

The locations of the study intersections along the College Street Corridor are illustrated in **Figures 1A (North College Street)** and **Figure 1B (South College Street)**.

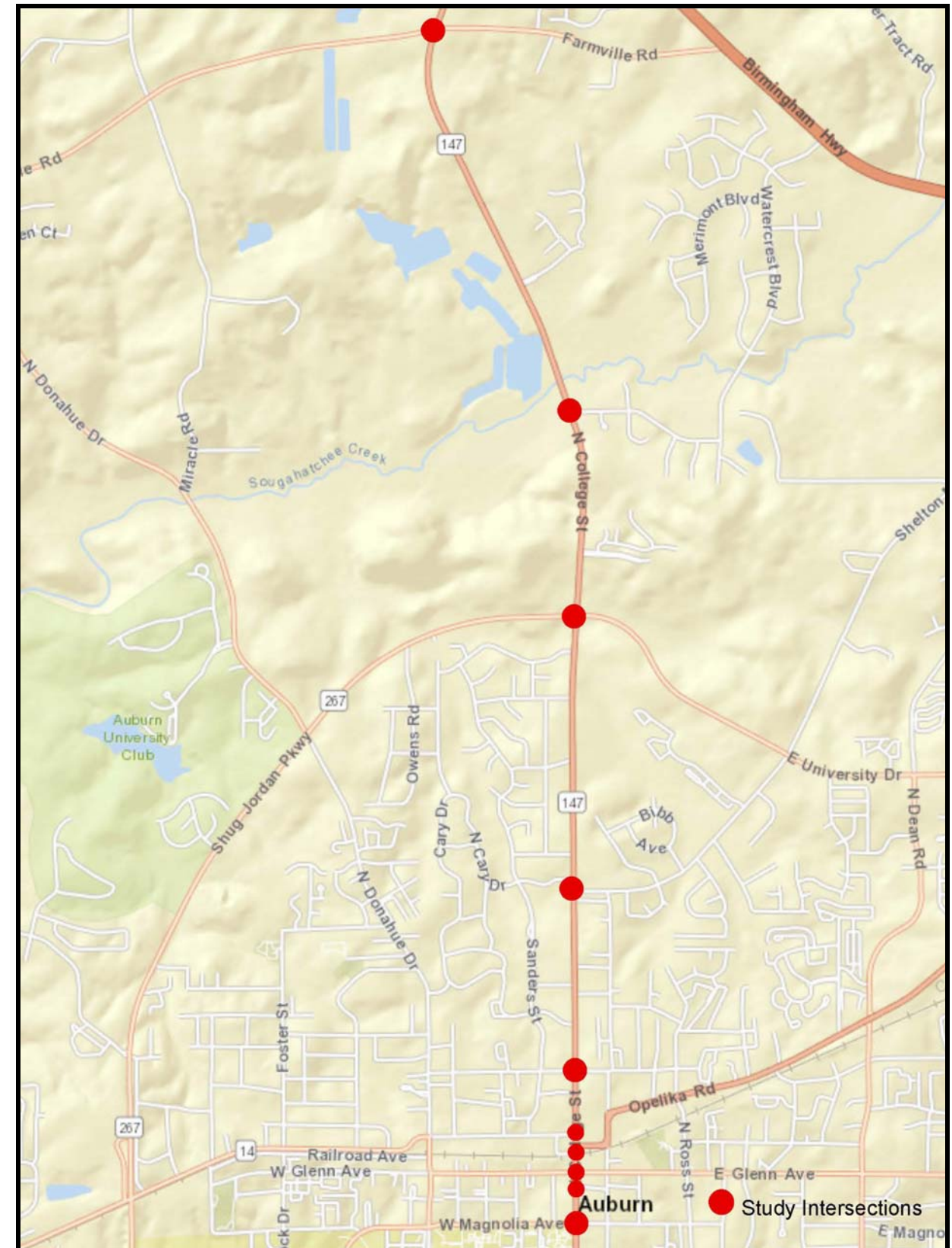


Figure 1A –College Street Corridor and Study Intersections

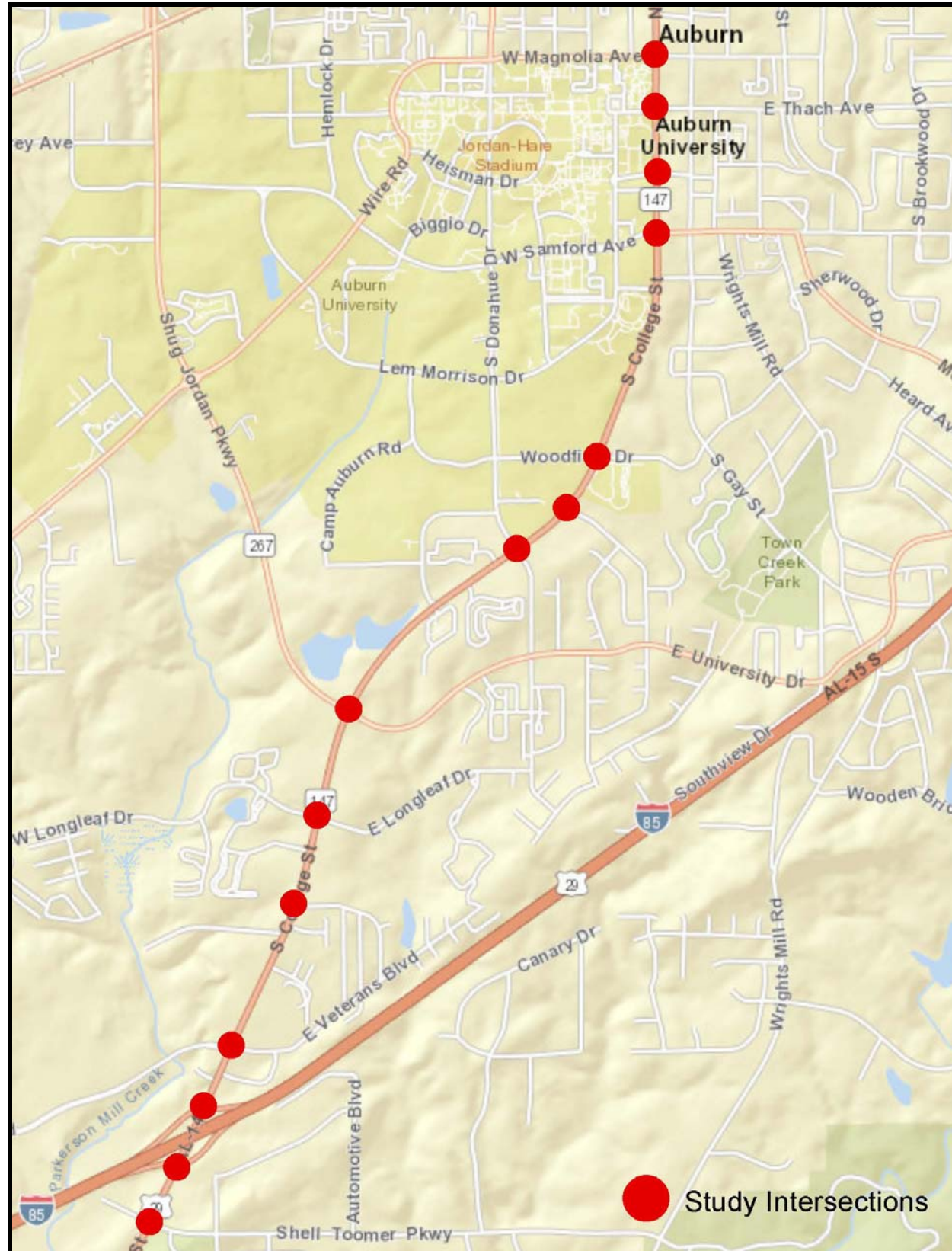


Figure 1B –College Street Corridor and Study Intersections

To accomplish the traffic operations evaluations for the College Street Corridor, the following tasks were undertaken:

- existing peak hour turning movement counts were conducted for the study intersections;
- drive times were collected for the morning and afternoon commuter peak periods;
- capacity analyses were conducted for the study intersections;
- arterial capacity analyses were conducted for College Street;
- turn lane warrant evaluations were conducted;
- traffic signal warrant evaluations were conducted for unsignalized intersections;
- current traffic operational deficiencies were identified;
- projections for ten (10) year growth in traffic through the corridor were developed; and
- geometric and traffic control improvements were developed for the study intersections to address traffic operational and safety deficiencies for existing and projected ten (10) year conditions.

Sources of information used in this section include: The City of Auburn, Alabama; the Institute of Transportation Engineers; American Association of State Highway and Transportation Officials; the Manual on Uniform Traffic Control Devices; the Transportation Research Board; and the files and field reconnaissance efforts of Skipper Consulting, Inc.

BACKGROUND INFORMATION

Study Area Roadways

College Street is classified as either a major or minor arterial roadway from U.S. Highway 280 south through Shell Toomer Parkway. From U.S. Highway 280 south to Shug Jordan Parkway/East University Drive (north), College Street is a two-lane roadway designated as Alabama Highway 147. From Shug Jordan Parkway to Mitcham Avenue, College Street is a two-lane City of Auburn roadway. From Mitcham Avenue south to Shug Jordan Parkway, College Street’s cross-section varies between four and five lanes and is a City of Auburn roadway. From Shug Jordan Parkway south to Interstate 85, College Street is a five-lane roadway designated as Alabama Highway 147. To the south of Interstate 85, College Street is a five-lane roadway designated as Alabama Highway 147 as well as U.S. Highway 29. College Street is designated as Alabama Highway 147 from U.S. Highway 280 to Shug Jordan Parkway (north) and from Shug Jordan Parkway (south) through Interstate 85 and Shell Toomer Parkway.

It should be noted that College Street is considered N. College Street to the north of Magnolia Avenue and S. College Street to the south of Magnolia Avenue. College Street from Farmville Road to Shell Toomer Parkway is approximately 8.2 miles in length. Characteristics of College Street are summarized in **Table 1**.

Peak Hour Traffic Counts

Morning (7:00-9:00 am) and afternoon (4:00-6:00 pm) peak period turning movement counts were conducted along the College Street Corridor at study intersections. From these counts, the morning peak hour and afternoon peak hour was determined for each intersection. Peak hour traffic counts utilized for the analyses of the study intersections are summarized in **Figure 2** and **Figure 3**.

Table 1 – College Street Roadway Characteristics

Roadway	Parking	# of Lanes	Travel Direction	Travel Speeds (MPH)	Classification
S. College Street (S. of Shell Toomer Parkway)	No	5	North/South	50-55	Minor Arterial
S. College Street (Shell Toomer Pkwy. to I-85)	No	4-5	North/South	45-50	Minor Arterial
S. College Street (I-85 to Woodfield)	No	4-5	North/South	45	Principal Arterial
S. College Street (Woodfield Dr. to Samford Ave.)	No	4	North/South	35-45	Principal Arterial
S. College Street (Samford Ave. to Roosevelt Dr.)	No	4	North/South	25-35	Principal Arterial
S. College Street (Roosevelt Dr. to Thach Ave.)	No	5	North/South	25	Principal Arterial
S. College Street (Thach Ave. to Magnolia Ave.)	Parallel NB	4 w/Median	North/South	25	Principal Arterial
S. College Street (Magnolia Ave. to Tichenor Ave.)	NB & SB Angle	2	North/South	25	Principal Arterial
S. College Street (Tichenor Ave. to Glenn Ave)	No	1 SB, 3 NB	North/South	25	Principal Arterial
S. College Street (Glenn Ave to Mitcham Ave.)	NB & SB Angle	4	North/South	25	Principal Arterial
S. College Street (Mitcham Ave. to Bragg Ave.)	No	4	North/South	25	Minor Arterial
S. College Street (Bragg Ave. to Drake Ave.)	No	2	North/South	35	Minor Arterial
S. College Street (Drake Ave. to Shelton Mill Rd.)	No	2	North/South	45	Minor Arterial
S. College Street (Shelton Mill Rd. to EUD/Shug Jordan N)	No	2	North/South	45	Minor Arterial
S. College Street (EUD/Shug Jordan N to Farmville Rd.)	No	2	North/South	55	Principal Arterial
Shell Toomer Parkway	No	2	East/West	45	Major Collector
I-85	No	4 w/Median	North/South	70	Interstate
Veterans Boulevard	No	2-3	East/West	30	Local
E. Longleaf Drive	No	3	East/West	35	Major Collector
Shug Jordan Parkway	No	4	E W N S	55	Principal Arterial
E. University Dr.	No	3	E W N S	35	Minor Arterial
S. Donahue Drive (N of College St.)	No	4	North/South	35	Minor Arterial
S. Donahue Drive (S of College St.)	No	3	North/South	35	Major Collector
Woodfield Drive	No	2	East/West	25	Major Collector
Samford Avenue	No	2-3	East/West	25-30	Minor Arterial
Roosevelt Drive/Miller Avenue	No	2-3	East/West	20-25	Local
E. Thach Avenue	No	2	East/West	25	Major Collector
Magnolia Avenue	Yes	2-3	East/West	25	Minor Arterial
Tichenor Avenue	Yes	2	East/West	25	Local
Glenn Avenue	No	3-5	East/West	25-45	Minor Arterial
Mitcham Avenue	No	4	East/West	30	Principal Arterial
Bragg Avenue	No	2	East/West	30	Major Collector
Drake Avenue	No	2	East/West	30	Major Collector
Shelton Mill Road	No	2	East/West	35	Minor Arterial
Shug Jordan Parkway	No	4	E W N S	55	Principal Arterial
E. University Dr.	No	4	E W N S	45	Minor Arterial
Asheton Lane	No	2	East/West	25	Local
Farmville Road	No	2	East/West	45	Major Collector

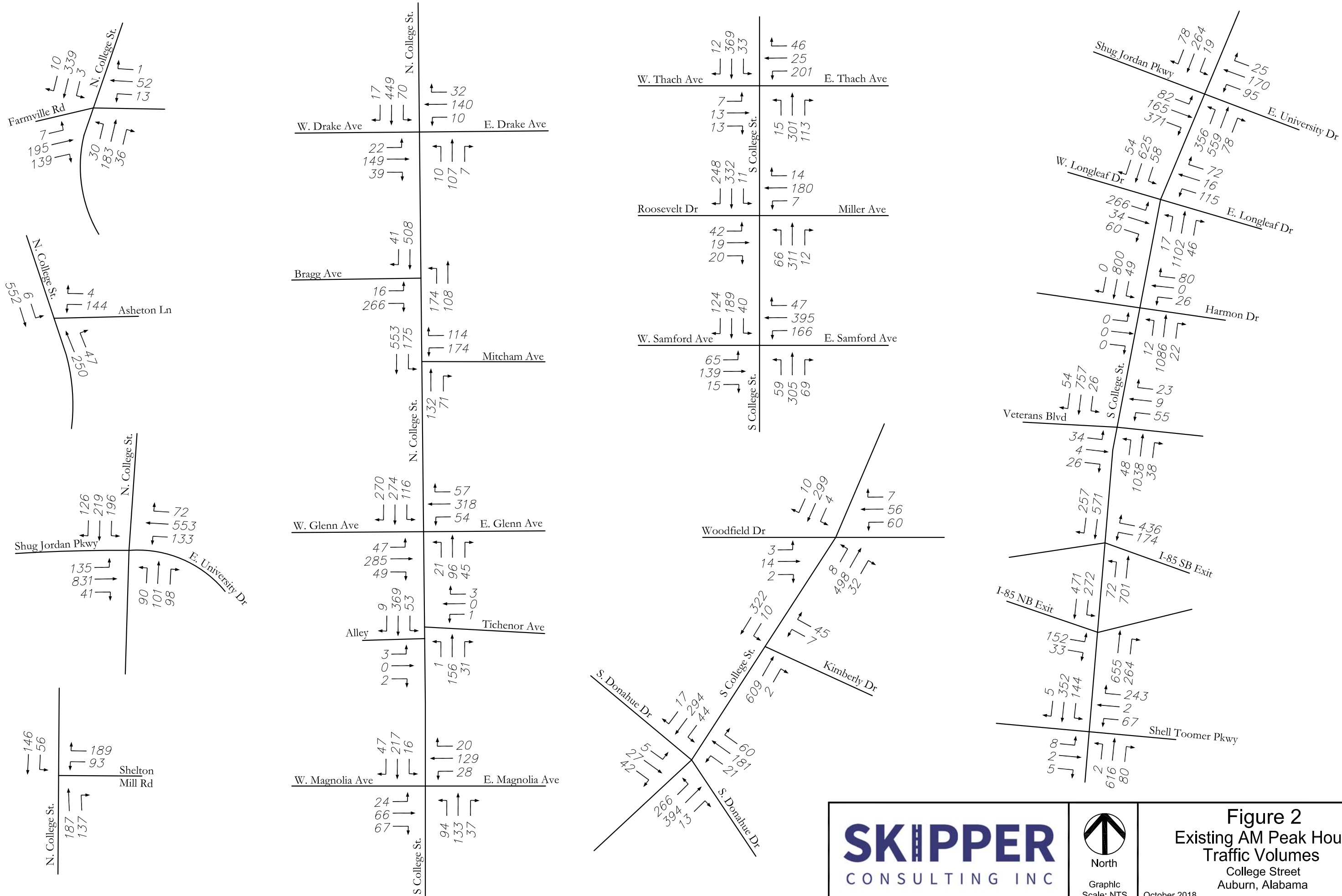


Figure 2
Existing AM Peak Hour
Traffic Volumes
 College Street
 Auburn, Alabama

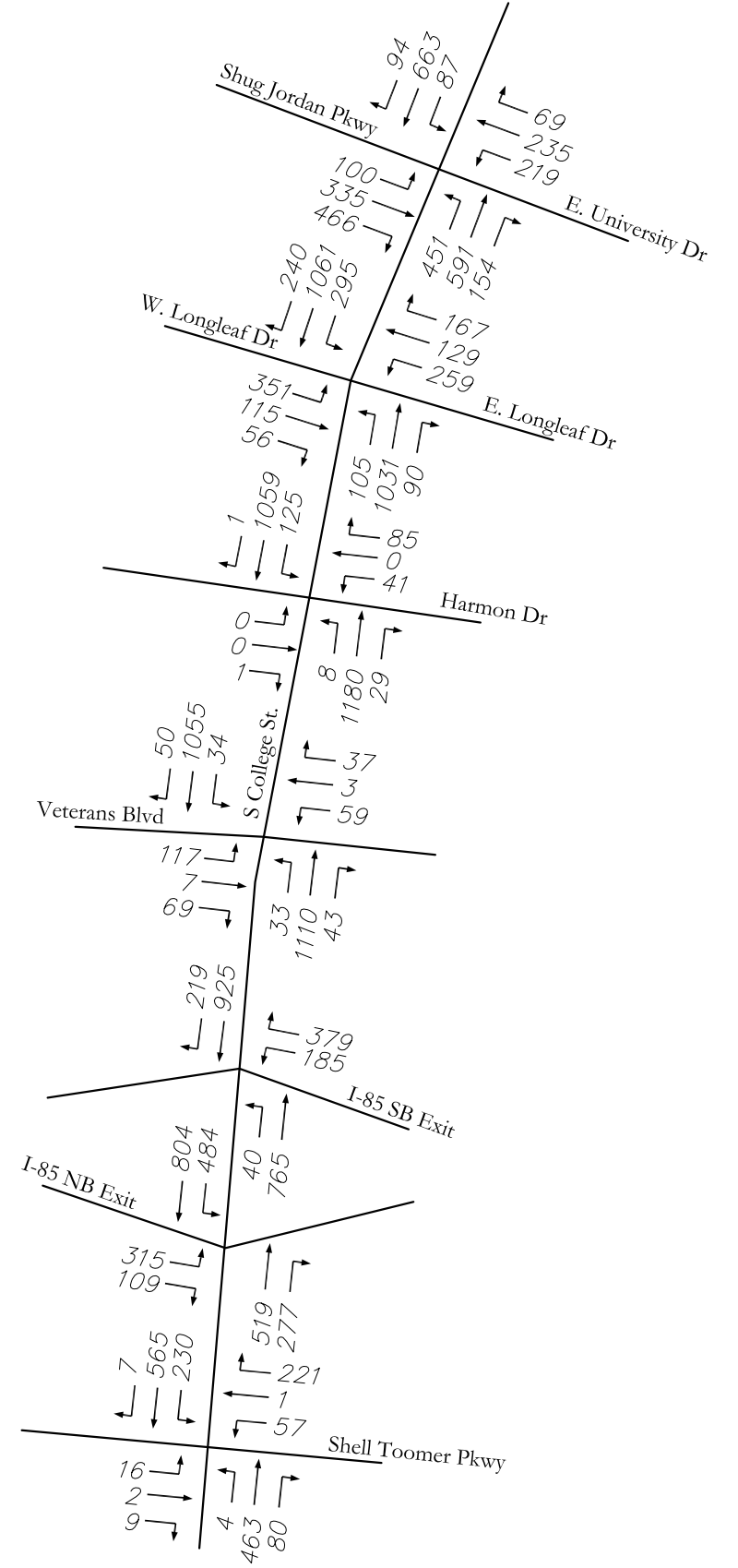
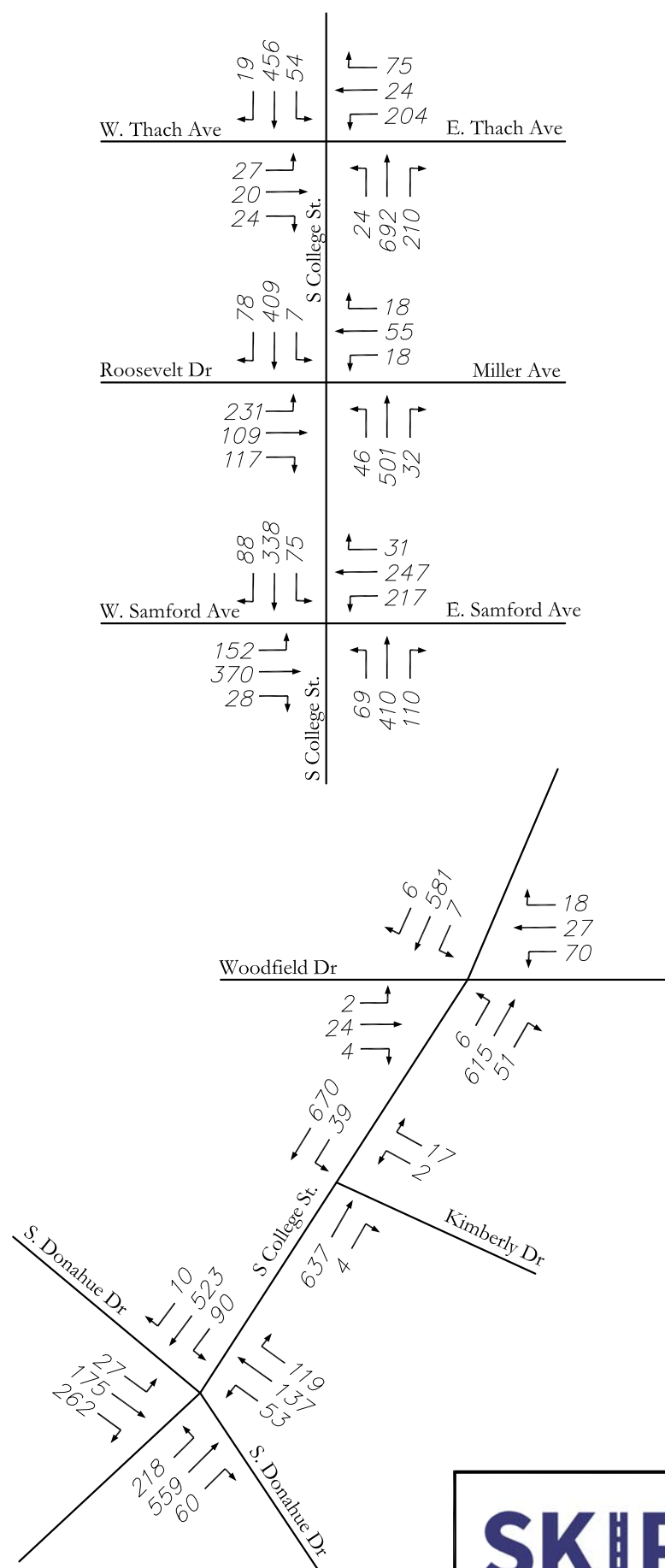
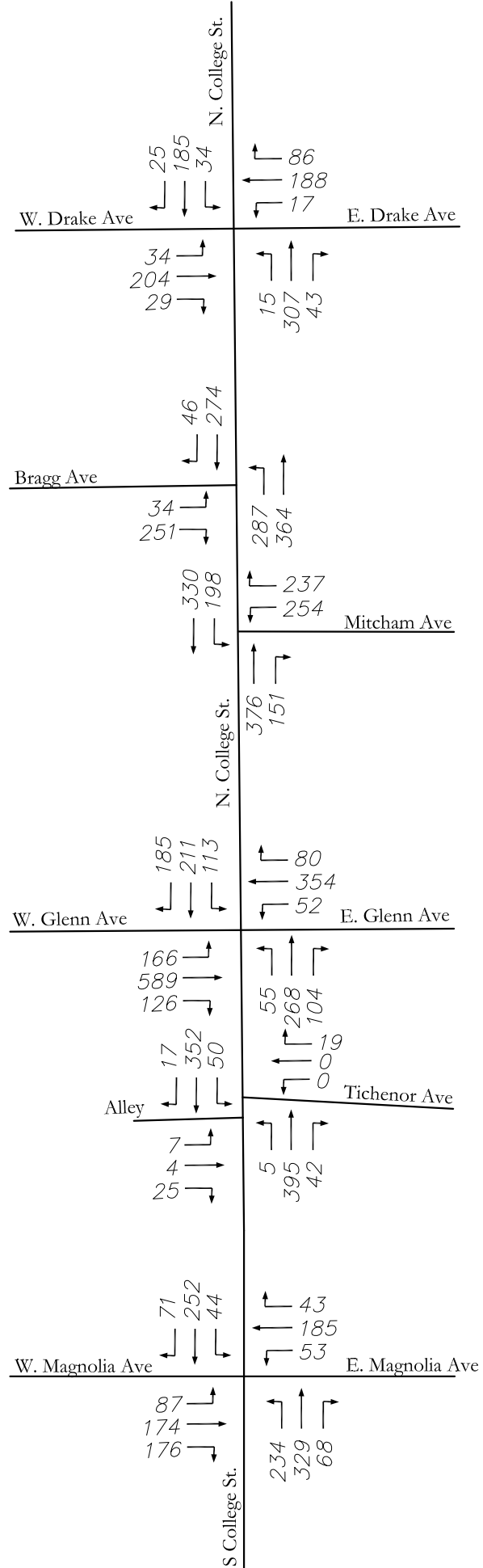
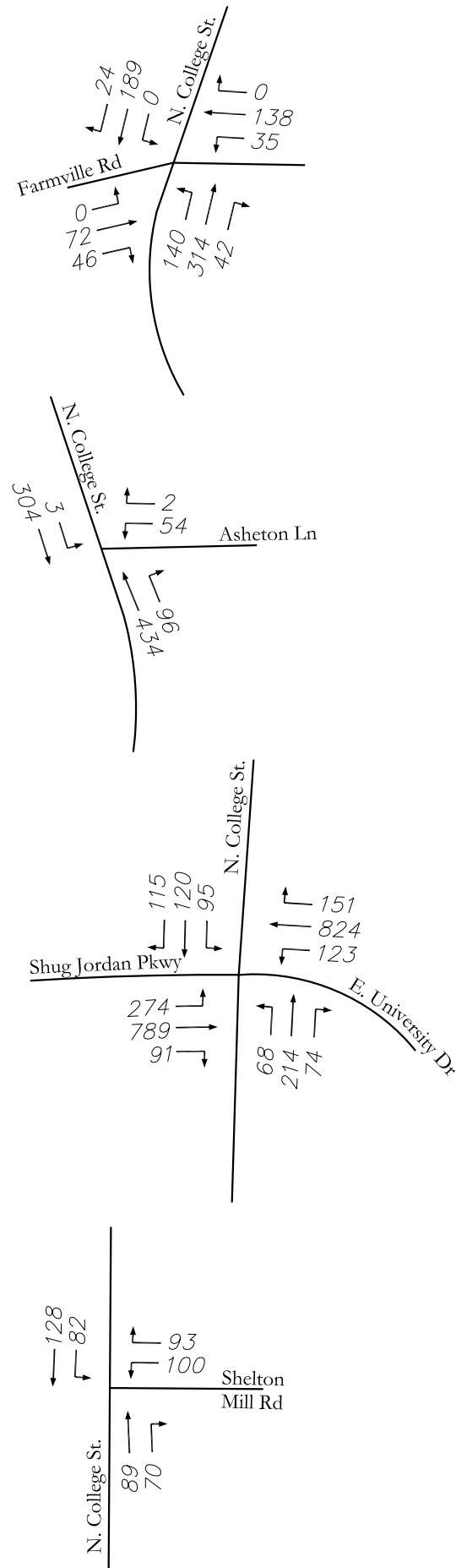


Figure 3
Existing PM Peak Hour
Traffic Volumes
 College Street
 Auburn, Alabama
 October 2018

Peak Period Observations

Observations of traffic operations were conducted along College Street during the morning and afternoon peak periods. The following items were noted in these observations:

- The westbound left-turn and through movements from Shell Toomer Parkway experienced some delay accessing S. College Street during peak periods of the day.
- Some delay was observed on Harmon Drive for vehicles attempting to access S. College Street.
- Side street delay was observed on Longleaf Drive during peak periods of the day as well as some queueing and delay for the southbound left-turn from S. College Street onto Longleaf Drive.
- At the S. College Street and E. University Drive/Shug Jordan Parkway intersection, some delay and queueing were observed on the side streets and the northbound left-turn movement. In general, vehicular queues appeared to clear for these movements.
- Some delay for the eastbound right-turn movement from S. Donahue Drive onto S. College Street was observed during the afternoon peak hour.
- Traffic travelling eastbound on Samford Avenue frequently backs-up from Gay Street into the S. College Street intersection. When this occurs, traffic from S. College Street (northbound right-turn and southbound left-turn) and eastbound traffic on Samford Avenue must wait on clearing for the eastbound departure leg of the intersection. This occurs often and causes significant operational issues at the S. College Street and Samford Avenue intersection. In addition, relatively heavy pedestrian traffic was observed which causes some vehicular delays.
- Pedestrian traffic at the Roosevelt Drive/Miller Avenue and Thach Avenue intersections crossing both S. College Street and the side streets was observed causing some vehicular delays during peak periods.
- At the Magnolia Avenue intersection with College Street, heavy pedestrian crossing traffic was observed causing delay for right-turn movements. The primary issues were observed on the eastbound, westbound, and southbound approaches which do not have right-turn lanes which blocks the through movements.
- Some delay and queueing were noted on the eastbound and westbound approaches of Glenn Avenue at N. College Street during peak periods.
- Some delay and queueing were observed for the eastbound left-turn movement from Shug Jordan Parkway onto N. College Street. Some minor delay was also noted for the through movements on N. College Street.
- On eastbound Farmville Road at N. College Street, some side street delay was observed during peak periods, primarily the morning peak period. During most times of the day, it was observed that side street turning movements were difficult due to the sight distance to the south and travel speeds on N. College Street.

EXISTING CONDITIONS ANALYSES

Existing Intersection Capacity Analysis

Capacity analyses for peak hour conditions at the study intersections along the College Street Corridor were conducted for the morning and afternoon peak hour periods using methods outlined in the *Highway Capacity Manual, 2010*. According to methods of the *Highway Capacity Manual*, capacity is expressed as levels of service ranging from “A” (best) through “F” (worst). In general, a level of service “C” is considered desirable while a level of service “D” is considered acceptable during peak hour operations. Results of these capacity analyses for existing conditions are summarized in **Table 2**.

As shown in **Table 2**, most of the study intersections along the College Street Corridor operate at acceptable levels of service for both peak periods evaluated. The following lists the movements, lane groups, or overall intersections which operate at levels of service “E” or “F” during either or both peak periods for current conditions.

S. College Street at Shell Toomer Parkway

- Side street stop sign controlled left-turn and through movements from Shell Toomer Parkway

S. College Street at Longleaf Drive

- EB left-turn from Longleaf Drive
- NB left-turn from S. College Street
- NB through movement on S. College Street
- SB left-turn from S. College Street
- Overall intersection LOS “E” during the morning peak hour.

S. College Street at EUD/Shug Jordan Parkway

- SB left-turn from S. College Street

S. College Street at Harmon Drive

- WB side street stop sign controlled approach of Harmon Drive

College Street at Magnolia Avenue

- EB through/right-turn lane on Magnolia Avenue (primarily due to pedestrian demand)

N. College Street at Bragg Avenue

- EB side street stop sign controlled left-turn movement from Bragg Avenue

N. College Street at Asheton Lane

- WB side street stop sign controlled approach of Asheton Lane

N. College Street at Farmville Road

- EB side street stop sign controlled left-turn/through lane from Farmville Road
- WB side street stop sign controlled approach from Farmville Road

Table 2 - Existing Intersection Levels of Service

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service		
			AM Peak	PM Peak	
S. College Street at Shell Toomer Parkway (side street stop)	EB Park Access	Left	F	F	
		Through/Right	C	C	
	WB Shell Toomer Pkwy.	Left	F	F	
		Through	E	F	
		Right	C	B	
	NB College St.	Left	A	A	
SB College St.	Left	B	B		
S. College Street at I-85 NB Ramps (traffic signal)	I-85 NB Exit Ramp	Left	C	C	
		Right	-	-	
	NB College St.	Through	B	B	
		Right	-	-	
	SB College St.	Left	C	C	
		Through	A	A	
	Overall LOS			B	B
	S. College Street at I-85 SB Ramps (traffic signal)	I-85 SB Exit Ramp	Left	C	C
Right			-	-	
NB College St.		Left	A	A	
		Through	A	A	
SB College St.		Through	B	B	
		Right	-	-	
Overall LOS			B	B	

Table 2 (continued) - Existing Intersection Levels of Service

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Veterans Boulevard (traffic signal)	EB Veterans Blvd.	Left	C	C
		Through	C	C
		Right	C	C
	WB Veterans Blvd.	Left	C	C
		Through/Right	C	C
	NB College St.	Left	B	B
		Through/Right	B	B
	SB College St.	Left	B	B
		Through/Right	B	B
	Overall LOS			B
S. College Street at Harmon Drive (side street stop)	EB Mason Jar	Left/Thru/Right	A	B
	WB Harmon Dr.	Left/Through	F	F
		Right	C	C
	NB College St.	Left	A	B
	SB College St.	Left	B	B
S. College Street at Longleaf Drive (traffic signal)	EB Longleaf Dr.	Left	E	D
		Through/Right	C	D
	WB Longleaf Dr.	Left	C	D
		Through	C	D
		Right	-	-
	NB College St.	Left	D	E
		Through	F	C
	SB College St.	Right	-	-
		Left	C	E
		Through	B	C
Overall LOS			E	D

Table 2 (continued) - Existing Intersection Levels of Service

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	C	D
		Through	C	D
		Right	-	-
	WB E. University Dr.	Left	C	D
		Through/Right	C	D
	NB College St.	Left	D	D
		Through	C	C
		Right	-	-
	SB College St.	Left	D	E
		Through	C	D
		Right	-	-
	Overall LOS			C
S. College Street at S. Donahue Drive (traffic signal)	EB Donahue Dr.	Left	B	B
		Through/Right	B	B
	WB S. Donahue Dr.	Left	B	B
		Through	B	B
		Right	-	-
	NB College St.	Left	A	A
		Through/Right	A	B
	SB College St.	Left	A	A
		Through/Right	B	B
	Overall LOS			B
S. College Street at Kimberly Drive (side street stop)	WB Kimberly Dr.	Left/Right	B	B
	SB College St.	Left	A	A
S. College Street at Woodfield Drive (traffic signal)	EB Woodfield Dr.	Left/Through	C	C
		Right	-	-
	WB Woodfield Dr.	Left/Through/Right	C	C
	NB College St.	Left	A	A
		Through/Right	A	A
	SB College St.	Left	A	A
		Through/Right	A	A
	Overall LOS			B

Table 2 (continued) - Existing Intersection Levels of Service

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service		
			AM Peak	PM Peak	
S. College Street at Samford Avenue (traffic signal)	EB Samford Ave.	Left	B	B	
		Through	C	C	
		Right	-	-	
	WB Samford Ave.	Left	B	C	
		Through/Right	C	C	
	NB College St.	Left	B	C	
		Through/Right	C	C	
	SB College St.	Left	B	C	
		Through	C	C	
		Right	-	-	
	Overall LOS			C	C
	S. College Street at Roosevelt Drive/ Miller Avenue (traffic signal)	EB Roosevelt Dr.	Left	B	B
Through/Right			B	B	
WB Miller Ave.		Left/Thru/Right	B	A	
		NB College St.	Left/Through	B	B
Through/Right			B	B	
SB College St.		Left/Through	B	B	
		Through/Right	B	B	
Overall LOS			B	B	
S. College Street at Thach Avenue (traffic signal)	EB Thach Ave.	Left	C	D	
		Through/Right	C	D	
	WB Thach Ave.	Left	B	C	
		Through	B	C	
	NB College St.	Right	B	C	
		Left	C	D	
	SB College St.	Through/Right	C	D	
		Left	C	C	
SB College St.	Through/Right	C	C		
	Overall LOS			C	C

Table 2 (continued) - Existing Intersection Levels of Service

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
College Street at Magnolia Avenue (traffic signal)	EB Magnolia Ave.	Left	B	C
		Through/Right	C	E
	WB Magnolia Ave.	Left	B	C
		Through/Right	C	C
	NB College St.	Left	B	C
		Through	B	C
		Right	B	B
	SB College St.	Left	B	C
		Through/Right	C	C
	Overall LOS			B
N. College Street at Tichenor Avenue (side street stop)	EB Alley	Left/Thru/Right	C	C
	WB Tichenor Ave.	Left/Thru/Right	B	B
	NB College St.	Left	A	A
	SB College St.	Left	A	A
N. College Street at Glenn Avenue (traffic signal)	EB Glenn Ave.	Left	C	C
		Through/Right	C	C
	WB Glenn Ave.	Left	B	C
		Through/Right	C	C
	NB College St.	Left	C	C
		Through	C	D
		Right	C	D
	SB College St.	Left	C	D
		Through	C	D
		Right	C	C
Overall LOS			C	C
N. College Street at Mitcham Avenue (traffic signal)	WB Mitcham Ave.	Left	B	B
		Right	B	B
	NB College St.	Through	B	B
		Right	A	A
	SB College St.	Left	B	A
		Through	B	A
	Overall LOS			B
N. College Street at Bragg Avenue (side street stop)	EB Bragg Ave.	Left	C	E
		Right	C	B
	NB College St.	Left	A	A

Table 2 (continued) - Existing Intersection Levels of Service

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
N. College Street at Drake Avenue (traffic signal)	EB Drake Ave.	Left/Thru/Right	B	A
	WB Drake Ave.	Left/Thru/Right	B	A
	NB College St.	Left/Thru/Right	A	A
	SB College St.	Left/Thru/Right	A	A
	Overall LOS			B
N. College Street at Shelton Mill Road (traffic signal)	WB Shelton Mill Rd.	Left	B	A
		Right	B	A
	NB College St.	Through/Right	A	A
	SB College St.	Left/Through	A	A
Overall LOS			A	A
N. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	B	B
		Through/Right	B	B
	WB E. University Dr.	Left	B	B
		Through/Right	B	B
	NB College St.	Left	C	C
		Through/Right	D	D
		Right	-	-
	SB College St.	Left	C	C
Through		D	C	
Overall LOS			C	B
N. College Street at Asheton Lane (side street stop)	WB Asheton Ln.	Left/Right	E	C
	SB College St.	Left	A	A
N. College Street at Farmville Road (side street stop)	EB Farmville Rd.	Left/Through	E	D
		Right	A	A
	WB Farmville Rd.	Left/Thru/Right	C	F
	SB College St.	Left	A	A

Existing Peak Hour Arterial Segment Capacity Analysis

Arterial segment capacity analyses for peak hour conditions along the College Street Corridor were conducted for the morning and afternoon peak hour periods using methods outlined in the *Highway Capacity Manual, 2010*. Levels of service for the arterial analyses conducted for College Street are summarized in **Table 3**.

Table 3 shows that arterial analyses indicates levels of service “E” or “F” for northbound travel on College Street occurs on the segments of College Street from Roosevelt Drive/Miller Avenue through Mitcham Avenue. For the southbound travel on College Street, arterial analyses indicate the segments from Mitcham Avenue through Thach Avenue operate at levels of service “E” or “F”. The segment from Roosevelt Drive through Samford Avenue also operates at levels of service “E”. These levels of service are a result of signal spacing between and extended cycle lengths to accommodate the pedestrian demand at these locations which results in lower travel speeds along College Street.

On the southern end of S. College Street, the segment from Veterans Boulevard through the I-85 SB Ramps operates at a level of service “E” for the southbound direction. The two-lane segments of N. College Street from Drake Avenue to E. University Drive/Shug Jordan and E. University Drive/Shug Jordan Parkway to Farmville Road operate with acceptable levels of service.

Table 3 - Existing Arterial Segment Levels of Service

Northbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
I-85 NB Ramps	I-85 SB Ramps	0.19	D	D
I-85 SB Ramps	Veterans Boulevard	0.20	D	D
Veterans Boulevard	Longleaf Drive	0.75	C	C
Longleaf Drive	EUD/Shug Jordan (S)	0.33	D	D
EUD/Shug Jordan (S)	Donahue Drive	0.72	A	A
Donahue Drive	Woodfield Drive	0.38	B	B
Woodfield Drive	Samford Avenue	0.71	C	D
Samford Avenue	Roosevelt Dr./Miller Ave.	0.18	B	C
Roosevelt Dr./Miller Ave.	Thach Avenue	0.19	C	E
Thach Avenue	Magnolia Avenue	0.17	C	E
Magnolia Avenue	Glenn Avenue	0.18	E	F
Glenn Avenue	Mitcham Avenue	0.09	E	F
Mitcham Avenue	Drake Avenue	0.26	B	C

Southbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	Mitcham Avenue	0.26	C	B
Mitcham Avenue	Glenn Avenue	0.09	F	F
Glenn Avenue	Magnolia Avenue	0.18	E	F
Magnolia Avenue	Thach Avenue	0.17	E	E
Thach Avenue	Roosevelt Dr./Miller Ave.	0.19	C	C
Roosevelt Dr./Miller Ave.	Samford Avenue	0.18	E	E
Samford Avenue	Woodfield Drive	0.71	A	B
Woodfield Drive	Donahue Drive	0.38	C	C
Donahue Drive	EUD/Shug Jordan (S)	0.72	C	C
EUD/Shug Jordan (S)	Longleaf Drive	0.33	C	D
Longleaf Drive	Veterans Boulevard	0.75	A	A
Veterans Boulevard	I-85 SB Ramps	0.20	E	E
I-85 SB Ramps	I-85 NB Ramps	0.19	C	C

N. College Street Two-Lane Highway Analysis				
From	To	Segment Length (miles)	Two-Way LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	EUD/Shug Jordan (N)	1.56	C	C
EUD/Shug Jordan (N)	Farmville Road	2.13	D	D

Existing Daily Roadway Segment Capacity Analysis

Roadway segment capacity analyses for daily traffic conditions along the College Street Corridor were performed using the daily capacity and level of service chart obtained from the Alabama Department of Transportation. This chart is included in **Table 4**. The following is a summary of the functional classification of sections of College Street:

- US-280 to East University Drive/Shug Jordan Parkway (north) – PRINCIPAL ARTERIAL
- East University Drive/Shug Jordan Parkway (north) to Mitcham Avenue – MINOR ARTERIAL
- Mitcham Avenue to I-85 – PRINCIPAL ARTERIAL
- I-85 and southward – MINOR ARTERIAL

Table 4 – Daily Capacity and Level of Service Chart

Functional Classification	Number of Lanes	Maximum Daily Flow Rate Related to Level of Service					
		A	B	C	D	E	F
Freeway	4	23,800	34,000	42,160	51,000	68,000	>68,000
	6	35,700	51,000	63,240	76,500	102,000	>102,000
	8	47,600	68,000	84,320	102,000	136,000	>136,000
	10	59,500	85,000	105,400	127,500	170,000	>170,000
Expressway	4	17,500	25,000	31,000	37,500	50,000	>50,000
	6	26,250	37,500	46,500	56,250	75,000	>75,000
	8	35,000	50,000	62,000	75,000	100,000	>100,000
Arterial (Divided)	2	7,700	11,000	13,640	16,500	22,000	>22,000
	4	11,865	16,950	21,018	25,425	33,900	>33,900
	6	17,500	25,000	31,000	37,500	50,000	>50,000
	8	25,760	36,800	45,632	55,200	73,600	>73,600
Arterial (Undivided)	2	6,230	8,900	11,036	13,350	17,800	>17,800
	4	10,850	15,500	19,220	23,250	31,000	>31,000
	6	16,030	22,900	28,396	34,350	45,800	>45,800
	8	22,085	31,550	39,122	47,325	63,100	>63,100
Collector (Divided)	2	7,280	10,400	12,896	15,600	20,800	>20,800
	4	9,975	14,250	17,670	21,375	28,500	>28,500
	6	14,700	21,000	26,040	31,500	42,000	>42,000
Collector (Undivided)	2	5,810	8,300	10,292	12,450	16,600	>16,600
	4	9,170	13,100	16,244	19,650	26,200	>26,200
	6	13,545	19,350	23,994	29,025	38,700	>38,700

Levels of service for the daily roadway segment capacity analyses conducted for College Street are summarized in **Table 5**.

Table 5 – Existing Daily Roadway Segment Levels of Service

College Street					
From	To	Segment Length (miles)	Cross Section	Daily Volume	Roadway LOS by Segment
US-280	Farmville Rd	0.75	2 lane	7,521	B
Farmville Rd	Asheton Ln	1.40	2 lane	9,803	C
Asheton Ln	Shug Jordan/EUD	0.69	2 lane	10,099	C
Shug Jordan/EUD	Shelton Mill Rd	0.93	2 lane	7,782	B
Bragg Ave	Glenn Avenue	0.13	2 lane	10,645	C
Samford Ave	Woodfield Dr	0.71	4 lane	14,811	B
Woodfield Dr	Kimberly Dr	0.19	4 lane divided	16,544	B
Shug Jordan/EUD	Longleaf Dr	0.32	4 lane divided	33,626	F
Longleaf Dr	Harmon Dr	0.21	4 lane divided	31,298	E
I-85	Shell Toomer Pkwy	0.30	4 lane divided	17,141	C

Right-Turn Lane Warrant Evaluations

Existing peak hour traffic volumes were compared with the right-turn lane warrant criteria outlined in the National Cooperative Highway Research Program (NCHRP) Report 457 *Evaluating Intersection Improvements: An Engineering Study Guide*, published by the Transportation Research Board. For evaluation purposes, the posted speed limit was utilized for roadways. Evaluations were conducted for each approach along College Street and the approaches for the major intersecting roadways throughout the corridor. The results of the right-turn lane warrant evaluations indicate the following right-turn lanes are warranted for existing conditions:

- NB S. College Street at Shell Toomer Parkway
- NB and SB S. College Street at Veterans Parkway
- NB S. College Street at Harmon Drive
- NB N. College Street at Shelton Mill Road
- NB N. College Street at Farmville Road
- EB Shug Jordan Parkway at N. College Street
- WB E. University Drive at N. College Street

Table 6 – Traffic Signal Warrant Evaluations Summary

Intersecting Roadway	1 - Eight Hour Vehicular Volumes			2 - Four Hour Volumes
	1A - Minimum Vehicular Volume	1B - Interruption of Continuous Traffic	1C - Combination of Warrants	
Shell Toomer Parkway	No	Yes	No	Yes
Harmon Drive	No	No	No	No
Kimberly Drive	No	No	No	No
Bragg Avenue	No	No	No	No
Asheton Lane	No	Yes	No	No
Farmville Road	No	No	No	No

Left-Turn Lane Warrant Evaluations

Existing peak hour traffic volumes were compared with the left-turn lane warrant criteria outlined in the National Cooperative Highway Research Program (NCHRP) Report 457 *Evaluating Intersection Improvements: An Engineering Study Guide*, published by the Transportation Research Board. For evaluation purposes, the posted speed limit was utilized for roadways. Evaluations were conducted for each approach along College Street which does not have a left-turn lane. The results of the left-turn lane warrant evaluations indicate the following left-turn lanes are warranted for existing conditions:

- NB S. College Street at Roosevelt Drive/Miller Avenue
- SB N. College Street at Drake Avenue

Traffic Signal Warrant Evaluations

Traffic signal warrant evaluations were conducted for the unsignalized study intersections along the College Street corridor. These study intersections include: Shell Toomer Parkway; Harmon Drive; Kimberly Drive; Bragg Avenue; Asheton Lane; and Farmville Road. Traffic signal warrant evaluations were conducted using methods presented in the Federal Highway Administration's *Manual on Uniform Traffic Control Devices, 2009 Edition* (MUTCD) for applicable warrants based on traffic volumes (Warrants 1 and 2). Additionally, right-turn reduction factors for the side street approaches were applied based on methods outlined in the ALDOT's *Traffic Signal Design Guide & Timing Manual, June 2015*. Summaries of the traffic signal warrant evaluations conducted are provided in **Table 6** which indicates sufficient traffic volumes are present to meet parts of Warrant 1 (Eight Hour Vehicular Volumes) at the Shell Toomer Parkway and Asheton Lane intersections with College Street to warrant traffic signalization.

Intersection Crash Evaluation

Skipper Consulting, Inc. performed a citywide crash study for intersections and roadway segments maintained by the City of Auburn. The results of this crash study have been documented in a separate bound report. The citywide crash study included the study intersections along College Street. Screening procedures and crash analyses were conducted to determine any locations that are worthy of safety-based roadway improvements. The crash analysis indicated the following:

- Low Priority Intersections - this indicates the crash experience should be considered when completing other roadway improvements at this location. However, the crash experience does not warrant an immediate safety improvement project.
 - S. College Street at Shell Toomer Parkway
 - S. College Street at I-85
 - N. College Street at Tichenor Avenue
 - N. College Street at Bragg Avenue
 - N. College Street at Asheton Lane
- Moderate Priority Intersections - this indicates the crash experience should be monitored in the near future and could be worthy of a safety-based roadway improvement if crash experience trends upward. This does not warrant a safety-based improvement at this time, but a safety-based improvement should be incorporated in any roadway improvement at this location.
 - S. College Street at Thach Avenue

- High Priority Intersections – this indicates that improvements are recommended for each location identified based upon the detailed crash evaluation.
 - S. College Street at Longleaf Drive
 - S. College Street at E. University Drive/Shug Jordan Parkway
 - S. College Street at S. Donahue Drive
 - N. College at Magnolia Avenue
 - N. College Street at Glenn Avenue
 - N. College Street at E. University Drive/Shug Jordan Parkway
 - N. College Street at Farmville Road

The Citywide Crash Study made recommendations for safety-based improvements to study intersections which were also high-priority crash locations. The following is a listing of the high priority study intersections and the recommended improvements:

High Priority Crash Locations

S. College Street at Longleaf Drive

- Restrict and modify accesses within the influence area of the signaled intersection; and
- Review and adjust, as needed, signal clearance timings.

S. College Street at E. University Drive/Shug Jordan Parkway

- Restrict and modify accesses within the influence area of the signaled intersection;
- Implement eastbound and westbound Flashing Yellow Arrow (FYA) left-turn phasing; and
- Review and adjust, as needed, signal clearance timings.

S. College Street at S. Donahue Drive

- Widen S. College Street to provide for offset left-turn lanes on northbound and southbound approaches;
- Implement northbound and southbound Flashing Yellow Arrow (FYA) left-turn phasing;
- Widen the eastbound approach of S. Donahue Drive to provide a full width right-turn lane; and
- Review and adjust, as needed, signal clearance timings.

N. College at Magnolia Avenue

As indicated in the Auburn Citywide Crash Evaluation document, crashes occurring at this intersection are mostly related to traffic entering and exiting on-street parking spaces. For the most part crashes are low speed low severity. Potential strategies to address this crash experience include:

- Removing/prohibiting on-street parking
- Converting from angled parking to parallel parking

Each potential strategy has its benefits and constraints. Based upon information presented in the Crash Modification Factors Clearinghouse, it is reasonable to anticipate a reduction in crash experience of approximately:

- 35% for crashes of all severity levels based upon the conversion of angle parking to parallel parking
- 42% for crashes of all severity levels based upon the prohibition of on-street parking.

Each potential solution reduces the amount of on-street parking available. Considering this is located within a business district the removal of any or all on-street parking would likely be an unreasonable solution for the City of Auburn. At this time, there are no recommendations to address the crash experience at this intersection. If the City of Auburn wishes to implement a strategy to address crash experience at this intersection, the strategies listed above would be recommended for consideration by the City of Auburn.

N. College Street at Glenn Avenue

- Review and adjust, as needed, signal clearance timings.

N. College Street at E. University Drive/Shug Jordan Parkway

- Review and adjust, as needed, signal clearance timings.
- Construct right turn lanes

N. College Street at Farmville Road

- Proceed with project through ALDOT for construction of a Roundabout.

Travel Time

GPS-based Travel time runs were performed on College Street between Shell Toomer Parkway and Farmville Road. The typical distance of the travel time runs was approximately 8.52 miles. Travel time runs were performed during the a.m., midday, and p.m. peak periods of traffic flow on February 20, 2018, March 27 & 29, 2018, and April 4 & 23, 2018. Six runs were performed in each direction during each period. The results of the travel time runs are shown in **Table 7**.

Table 7 – Existing Travel Time Runs

AM Peak				Midday Peak				PM Peak			
Start Time	Dir.	Elapsed Time	Avg. Speed	Start Time	Dir.	Elapsed Time	Avg. Speed	Start Time	Dir.	Elapsed Time	Avg. Speed
7:00	SB	14:31	37.9	11:21	SB	17:07	32.3	4:00	SB	19:32	28.3
7:16	NB	13:51	38.3	11:00	NB	17:44	30.6	4:23	NB	22:27	23.9
7:31	SB	15:13	35.6	11:39	SB	17:14	30.5	4:46	SB	22:13	23.9
7:47	NB	16:10	33.6	11:43	NB	19:40	26.5	5:01	NB	27:16	19.9
8:04	SB	18:28	28.8	11:57	SB	19:42	26.8	5:37	SB	22:06	23.9
8:24	NB	18:28	29.1	12:19	NB	21:54	24.7	6:01	NB	22:58	23.7
8:44	SB	20:30	25.8	12:41	SB	18:38	28.3	4:45	SB	25:20	21.4
7:00	NB	17:26	30.8	11:00	NB	17:27	30.7	5:11	NB	22:00	23.9
7:18	SB	23:54	22.2	11:19	SB	19:23	28.5	5:35	SB	20:52	25.7
7:44	NB	20:39	25.7	11:40	NB	18:15	29.6	5:56	NB	21:03	24.8
8:05	SB	18:08	29.2	12:17	SB	20:06	27.4	5:47	SB	19:46	26.2
8:28	NB	16:00	32.4	12:37	NB	19:43	28.0	5:02	NB	24:00	21.6

EXISTING CONDITIONS ANALYSES WITH IMPROVEMENTS

Recommended Improvements

Roadway and traffic control improvements have been developed to help address capacity deficiencies identified in the capacity analyses conducted, traffic operational issues observed during peak periods, signal warrants evaluations conducted, or turn lane warrant evaluations conducted along the College Street corridor. These improvements include the recommended safety-based improvements as noted previously in this document. The following outlines the recommended improvements for existing conditions along College Street.

College Street Signal Systems

It is recommended that coordinated traffic signal systems be implemented on College Street. The following outlines the recommended systems along College Street.

Sub-System 1

- Shell Toomer Pkwy. (when installed), I-85 NB Ramps, I-85 SB Ramps and Veterans Pkwy.

Sub-System 2

- Longleaf Drive and EUD/Shug Jordan Parkway

Sub-System 3

- S. Donahue Drive and Woodfield Drive

Sub-System 4

- Samford Avenue at S. College Street is planned to be included in a signal system to include signals along Gay Street resulting in coordination along Samford Avenue. As noted in the observations, a primary cause of congestion at the S. College Street and Samford Avenue intersection is the inability of eastbound traffic traveling to Gay Street to accommodate traffic demand which is due to delays and queueing at the Gay Street intersection. With coordination of signals along Samford Avenue, Samford Avenue should have the ability to accept the traffic from S. College Street which would reduce congestion and delay.

S. College Street at Shell Toomer Parkway

Improvements were developed for the S. College Street at Shell Toomer Parkway intersection as summarized in the following and illustrated in **Figure 4**.

- Installation of a traffic signal and inclusion of the traffic signal in Sub-System 1 along S. College Street (as noted existing traffic volumes are sufficient to meet signal warrant criteria); and
- Construct a right-turn lane on northbound S. College Street;
- Install a painted channelizing island with “Yield” sign for the westbound right-turn; and
- Install a painted channelizing island with “Yield” sign for the eastbound right-turn to provide storage for one vehicle to allow the right-turn movement to by-pass one waiting through vehicle.

S. College Street at I-85 NB Ramps

- Inclusion of the traffic signal in Sub-System 1 along S. College Street.

S. College Street at I-85 SB Ramps

Improvements were developed for the S. College Street at the I-85 SB Ramps intersection as summarized in the following and illustrated in **Figure 5**.

- Modifying the right-turn from the exit ramps to reduce the radius;
- Review and adjust, as needed, signal clearance timings; and
- Inclusion of the traffic signal in Sub-System 1 along S. College Street.

S. College Street at Veterans Parkway

Improvements were developed for the S. College Street at Veterans Parkway intersection as summarized in the following:

- Construct a northbound right turn lane on S. College Street;
- Construct a right-turn lane on southbound S. College Street to include reconstruction of the adjacent sidewalk.

Proposed improvements at the intersection of S. College Street at Veterans Boulevard are depicted in the corridor drawings for the access management plan for South College Street from I-85 to East University Drive/Shug Jordan Parkway.

S. College Street at Harmon Drive

Improvements were developed for the S. College Street at Harmon Drive intersection as summarized in the following:

- Construct a right-turn lane on northbound S. College Street to include reconstruction of the adjacent sidewalk.

Proposed improvements at the intersection of S. College Street at Harmon Drive are depicted in the corridor drawings for the access management plan for South College Street from I-85 to East University Drive/Shug Jordan Parkway.

S. College Street at Longleaf Drive

Improvements were developed for the S. College Street at Longleaf Drive intersection as summarized in the following and illustrated in **Figure 6**.

- Implement access restrictions within the influence area of the signalized intersection;
- Review and adjust, as needed, signal clearance timings; and
- Inclusion of the traffic signal in Sub-System 2 along S. College Street.

S. College Street at East University Drive/Shug Jordan Parkway

Improvements were developed for the S. College Street at East University Drive/Shug Jordan Parkway intersection as summarized in the following and illustrated in **Figure 7**.

- Implement access restrictions within the influence area of the signalized intersection;
- Review and adjust, as needed, signal clearance timings;
- Implement eastbound (Shug Jordan Pkwy.) and westbound (EUD) Flashing Yellow Arrow (FYA) left-turn phasing; and
- Inclusion of the traffic signal in Sub-System 2 along S. College Street.

S. College Street – I-85 to Shug Jordan Pkwy./EUD Access Management Concept

Access Management is recommended along S. College Street from I-85 north to Shug Jordan Parkway/East University Drive. The concepts recommended for implementing Access Management along this segment of S. College Street include construction of raised medians and raised channelizing islands. These elements of access management would help to manage access along S. College Street and restrict some movements within the influence area of signalized intersections. The Access Management Concept is illustrated in **Figure 8A** through **Figure 8E**.

S. College Street at S. Donahue Drive

Improvements were developed for the S. College Street at S. Donahue Drive intersection as summarized in the following and illustrated in **Figure 9**.

- Widen S. College Street to provide for offset left-turn lanes on northbound and southbound approaches;
- Implement northbound and southbound Flashing Yellow Arrow (FYA) left-turn phasing;
- Widen the eastbound approach of S. Donahue Drive to provide a full width right-turn lane;
- Review and adjust, as needed, signal clearance timings; and
- Inclusion of the traffic signal in Sub-System 3 along S. College Street.

It should be noted that properties along the western leg of S. Donahue Drive belong to Auburn University. Coordination for improvements along this segment of roadway should be coordinated with Auburn University.

S. College Street at Woodfield Drive

Improvements were developed for the S. College Street at Woodfield Drive intersection as summarized in the following:

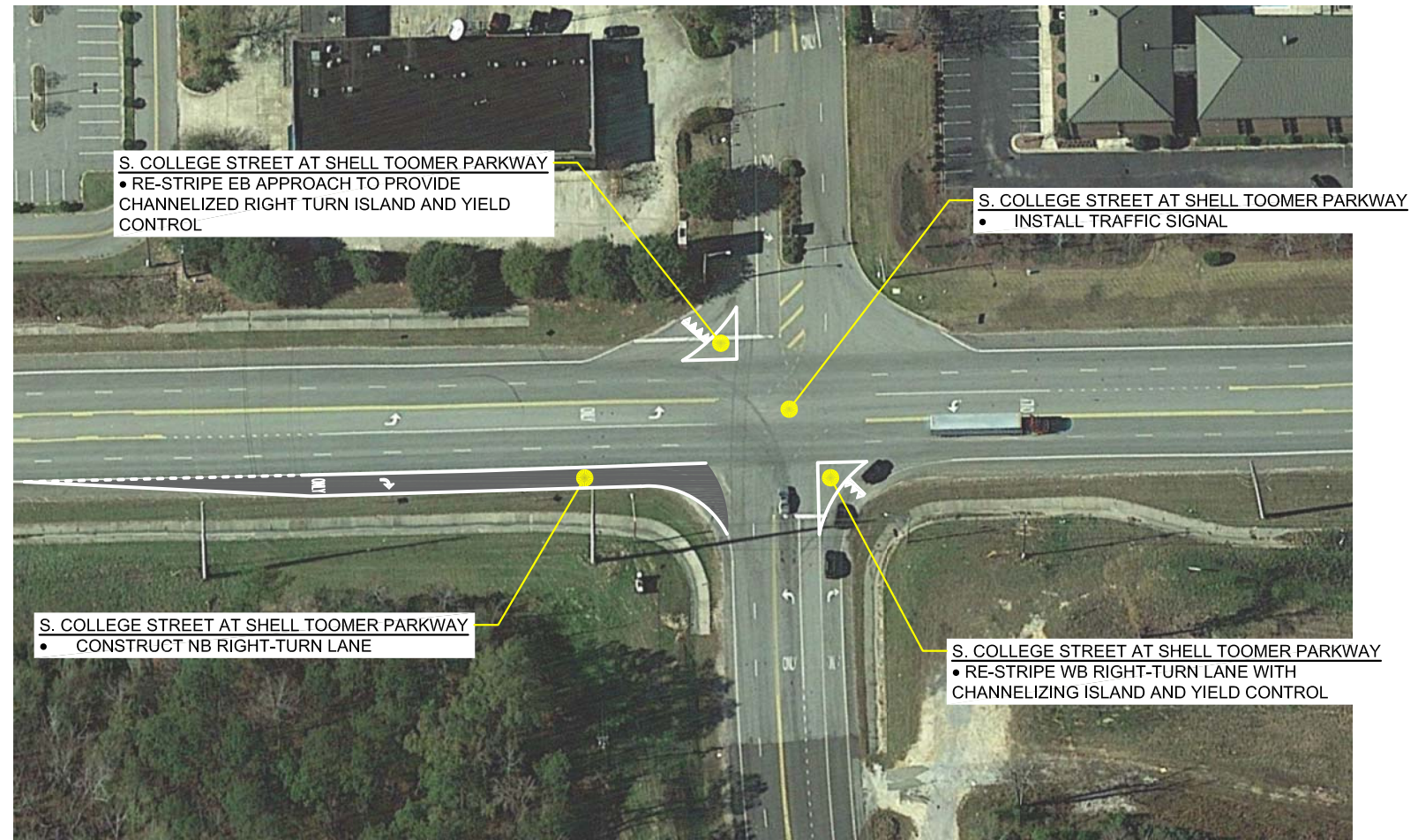
- Construct a northbound right turn lane on S. College Street at Woodfield Drive
- Inclusion of the traffic signal in Sub-System 3 along S. College Street

Proposed improvements at the intersection of S. College Street at Harmon Drive are depicted in the corridor drawings for the access management plan for South College Street from East University Drive/Shug Jordan Parkway to Woodfield Drive.

S. College Street from Shug Jordan Parkway/EUD to Woodfield Drive

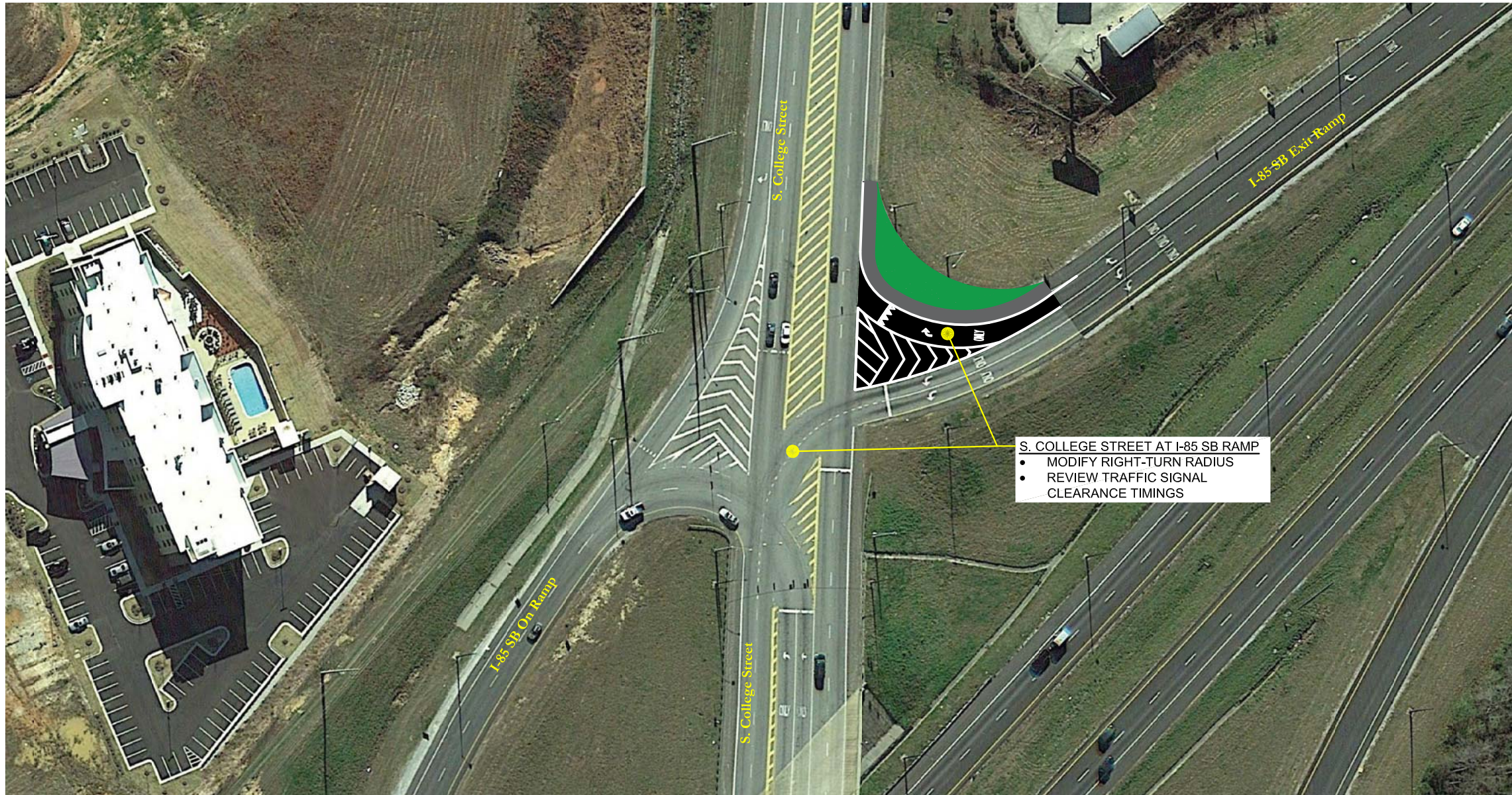
Access management and pedestrian and bicycle improvements are being proposed along S. College Street from Shug Jordan Parkway/East University Drive to S. Donahue Drive. These improvements are summarized in the following and illustrated in **Figure 10A-10C**

- Construct a raised median from north of the Clarion Inn & Suites to the existing median (approximately 600 feet to the north); and
- Construct a multi-use path along the west side of S. College Street.



Signal System Note:
 Signals at Shell Toomer Pkwy., I-85 NB
 Ramps, I-85 SB Ramps, and Veterans
 Parkway to be coordinated.

	<p>Legend</p> <p> Required Pavement</p>	<p>North</p> <p>Graphic Scale: 1"-100'</p>	<p>Figure 4 S. College St. at Shell Toomer Parkway Existing Improvements College Street Auburn, Alabama</p> <p>October 2018 Page 16</p>
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Signal System Note:
 Signals at Shell Toomer Pkwy., I-85 NB
 Ramps, I-85 SB Ramps, and Veterans
 Parkway to be coordinated.





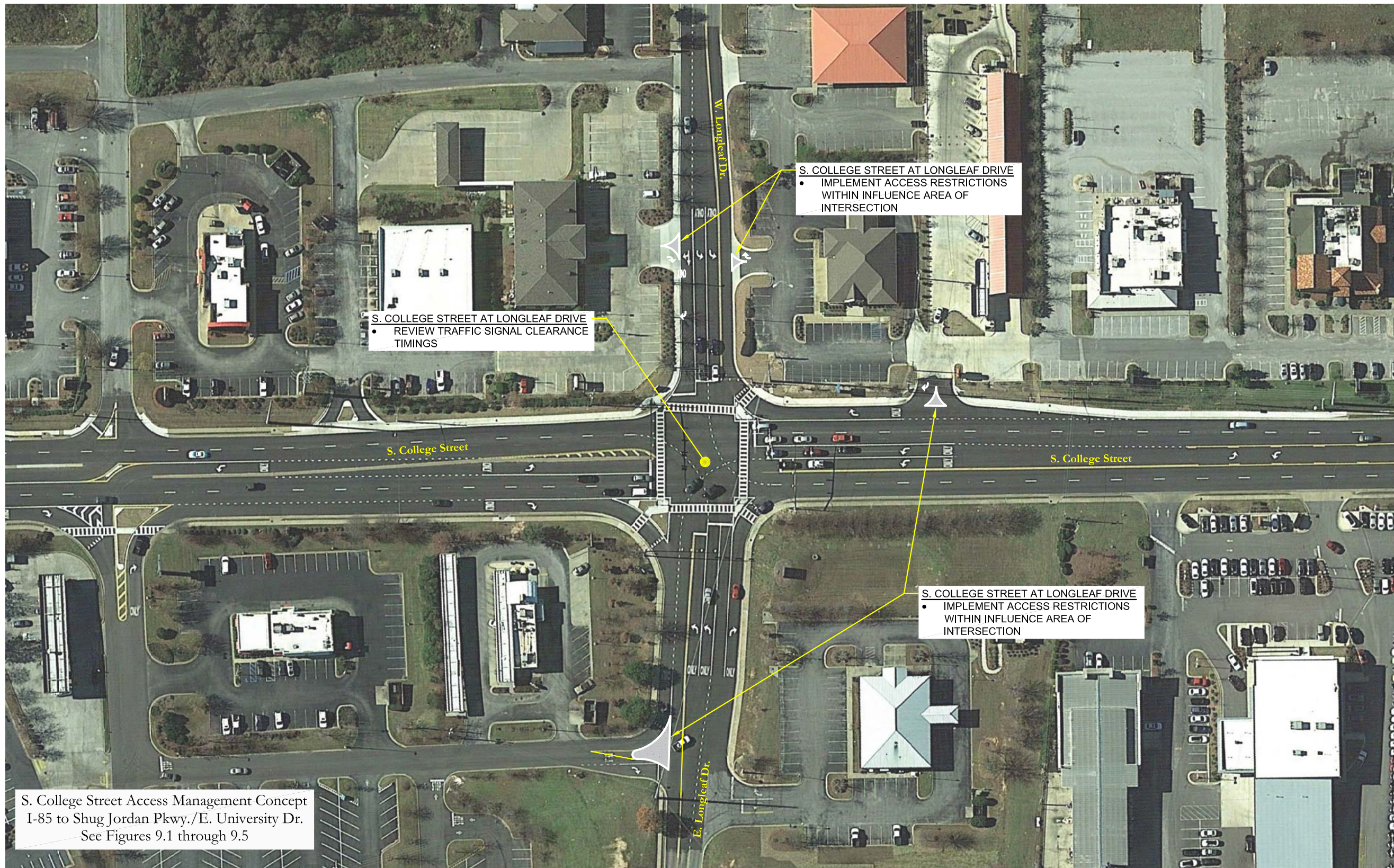
Legend	
	Required Pavement
	Required Grass



Figure 5
S. College St. at I-85 SB Ramps
 Existing Improvements
 College Street
 Auburn, Alabama
 October 2018



Signal System Note:
Signals at Longleaf Drive and EUD/Shug Jordan Parkway to be coordinated.





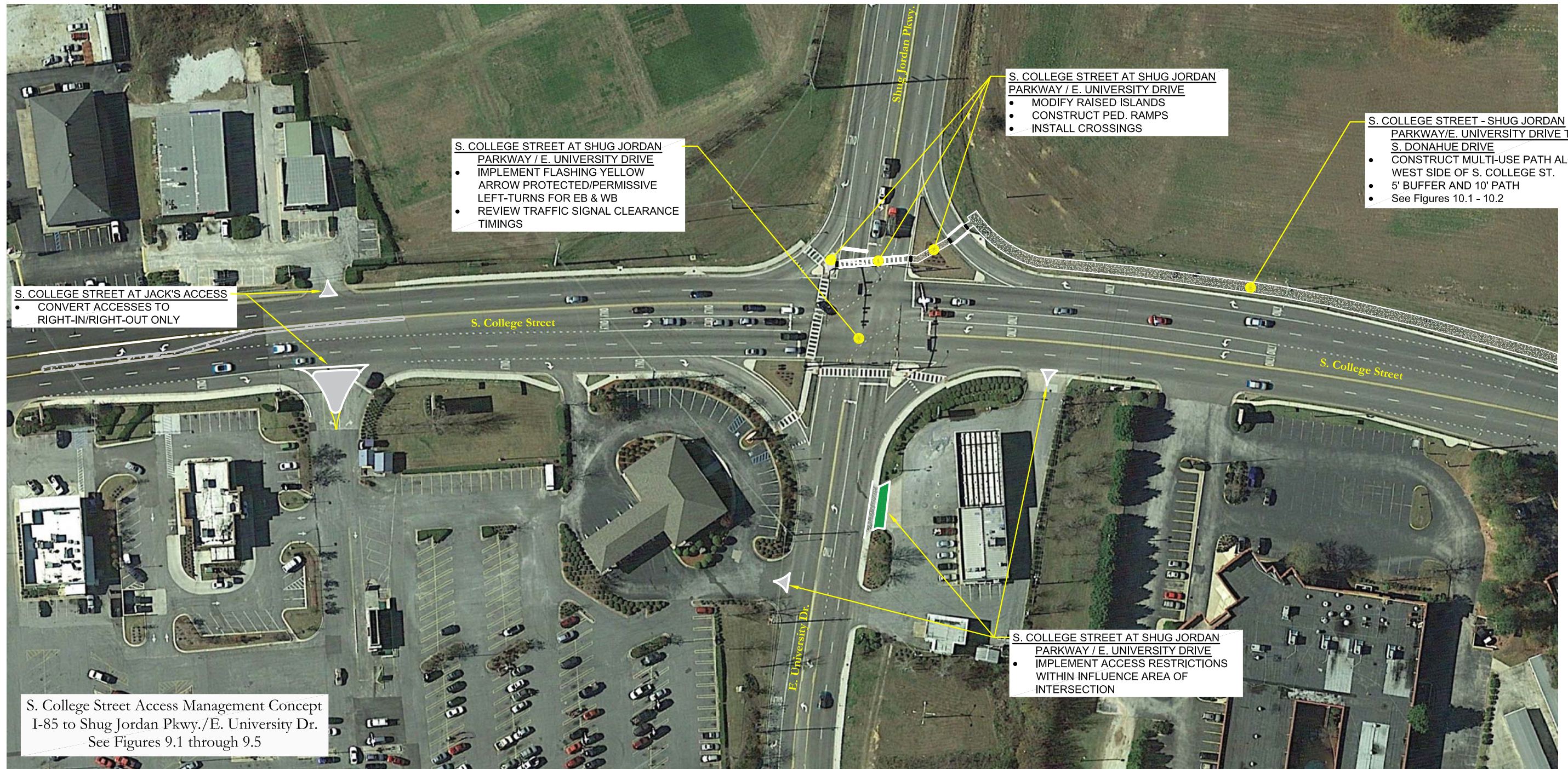
Legend	
	Required Pavement
	Raised Concrete Island



Figure 6
S. College St. at Longleaf Dr.
Existing Improvements
College Street
Auburn, Alabama

October 2018



S. College Street Access Management Concept
 I-85 to Shug Jordan Pkwy./E. University Dr.
 See Figures 9.1 through 9.5

Note: Pedestrian ramps shall include tactile warning strips and truncated domes per ADA.

Signal System Note:
 Signals at Longleaf Drive and EUD/Shug Jordan Parkway to be coordinated.



Legend	
	Required Pavement
	Required Grass
	Required Multi-Use Path/Sidewalk
	Required Ped. Ramp

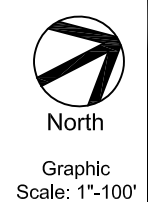
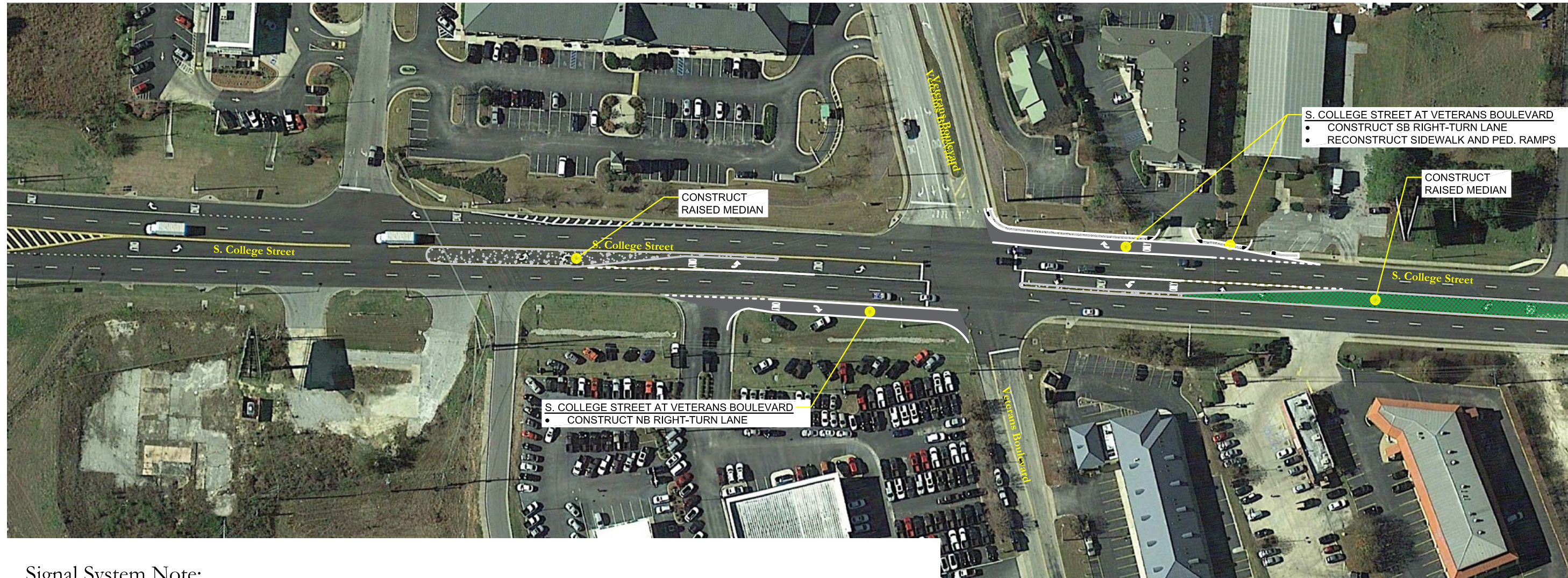


Figure 7
 S. College St. at Shug Jordan Parkway / E. University Drive
 Existing Improvements
 College Street
 Auburn, Alabama
 February 2019



Signal System Note:
 Signals at Shell Toomer Pkwy., I-85 NB Ramps, I-85 SB Ramps, and Veterans Parkway to be coordinated.

Note: Pedestrian ramps shall include tactile warning strips and truncated domes per ADA.

	Legend Required Grass/Median Required Raised Median	 North Graphic Scale: 1"=100'	Figure 8A S. College St. - I-85 to Shug Jordan Parkway / E. University Drive Access Management Concept College Street Auburn, Alabama February 2019	Page 20



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CONSULTING INC

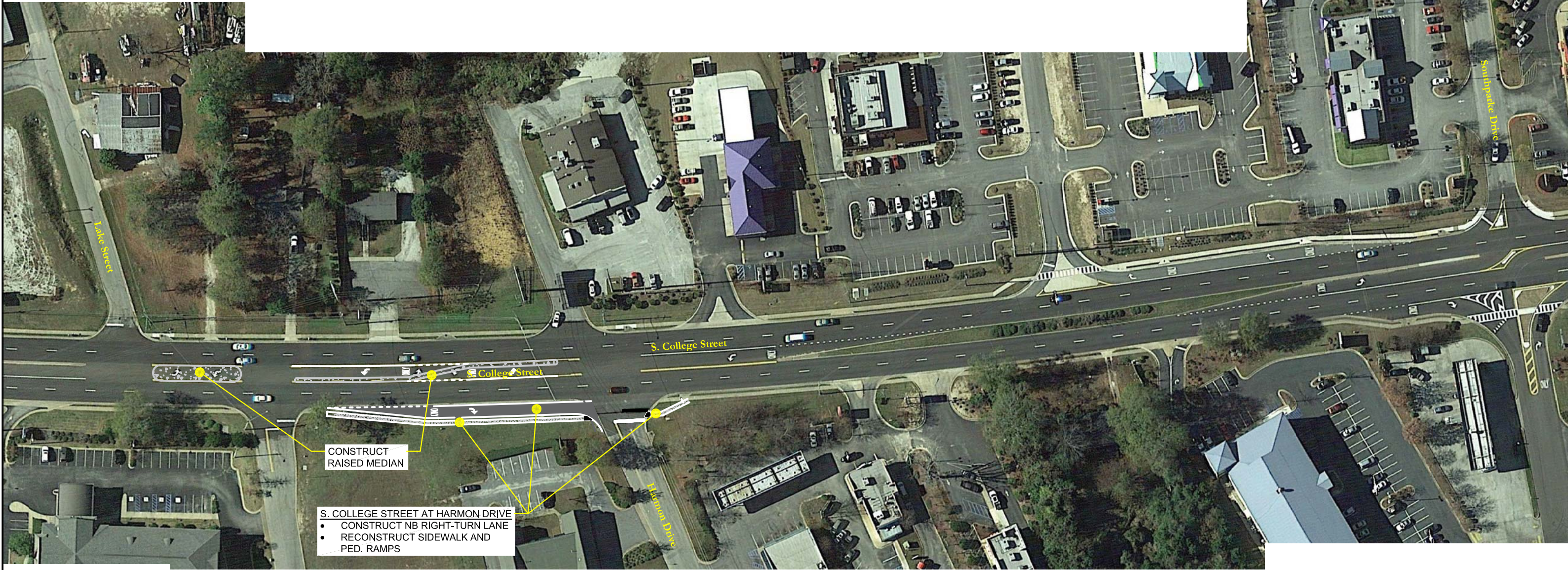
- Legend**
-  Required Grass/Median
 -  Required Raised Median



Graphic
Scale: 1"=100'

Figure 8B
S. College St. - I-85 to Shug Jordan
Parkway / E. University Drive
Access Management Concept
College Street
Auburn, Alabama

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CONSTRUCT
RAISED MEDIAN

S. COLLEGE STREET AT HARMON DRIVE

- CONSTRUCT NB RIGHT-TURN LANE
- RECONSTRUCT SIDEWALK AND PED. RAMPS



Legend

	Required Grass/Median
	Required Raised Median



Graphic
Scale: 1"=100'

Figure 8C
S. College St. - I-85 to Shug Jordan
Parkway / E. University Drive
Access Management Concept



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CONSULTING INC



- Legend**
-  Required Grass/Median
 -  Required Raised Median



Figure 8D
S. College St. - I-85 to Shug Jordan Parkway / E. University Drive Access Management Concept
College Street
Auburn, Alabama

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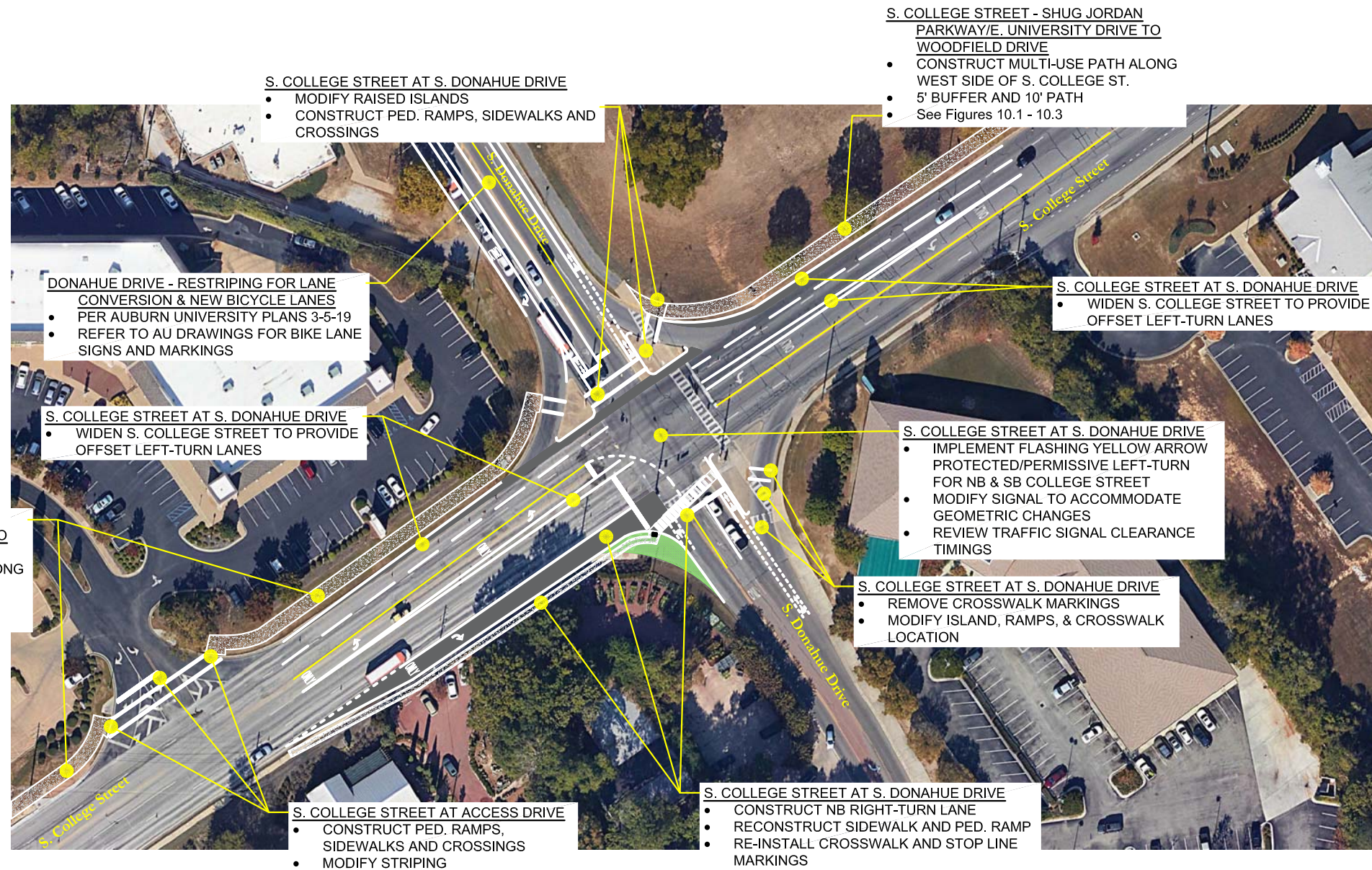
Legend	
	Required Grass/Median
	Required Raised Median



Figure 8E
 S. College St. - I-85 to Shug Jordan Parkway / E. University Drive Access Management Concept
 College Street
 Auburn, Alabama

February 2019 Page 25



Note: Pedestrian ramps shall include tactile warning strips and truncated domes per ADA.

Signal System Note:
Signals at S. Donahue Drive and Woodfield Drive to be coordinated.

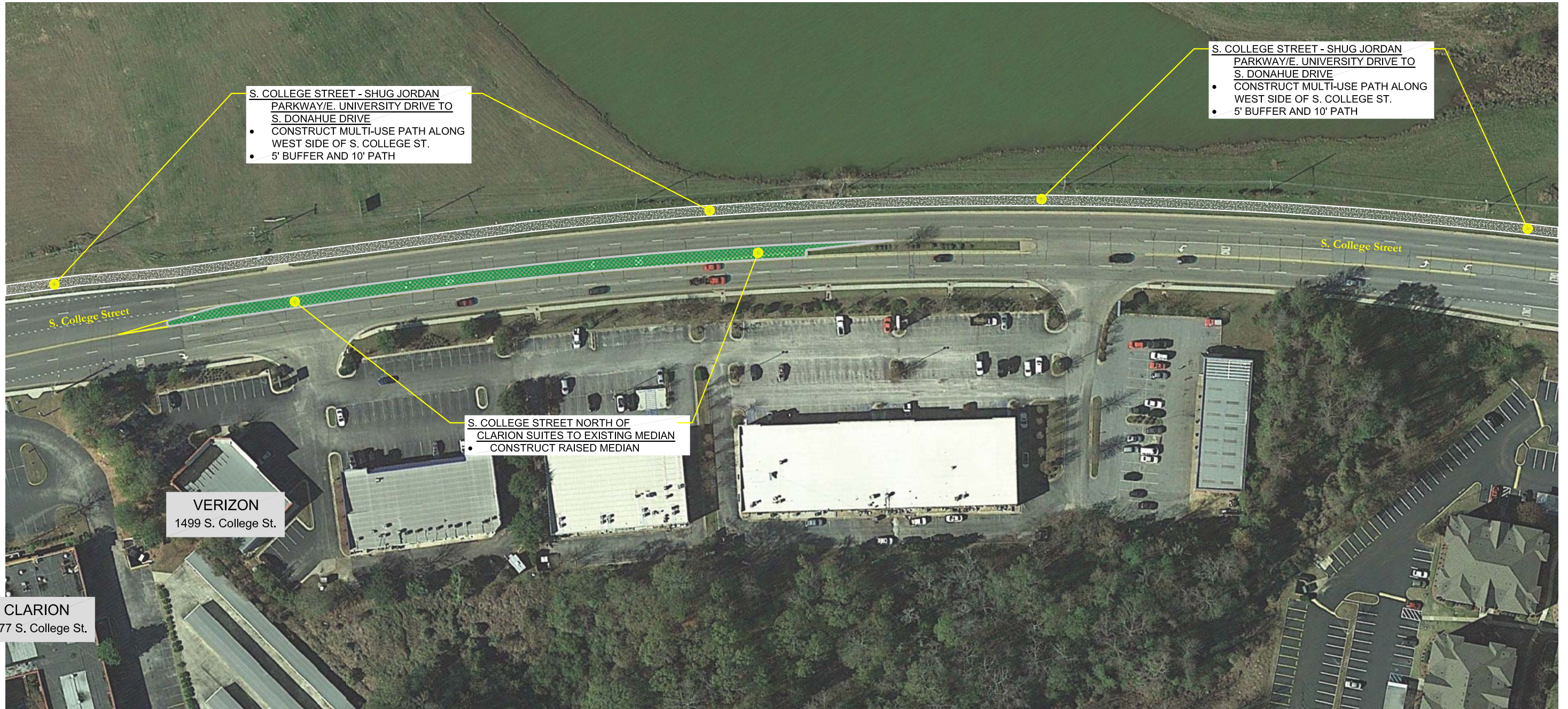
SKIPPER
CONSULTING INC

Legend	
	Required Pavement
	Required Grass
	Required Multi-Use Path/Sidewalk
	Required Ped. Ramp



Graphic Scale: 1"-100'

Figure 9
S. College St. at S. Donahue Dr.
Existing Improvements



SKIPPER
CONSULTING INC




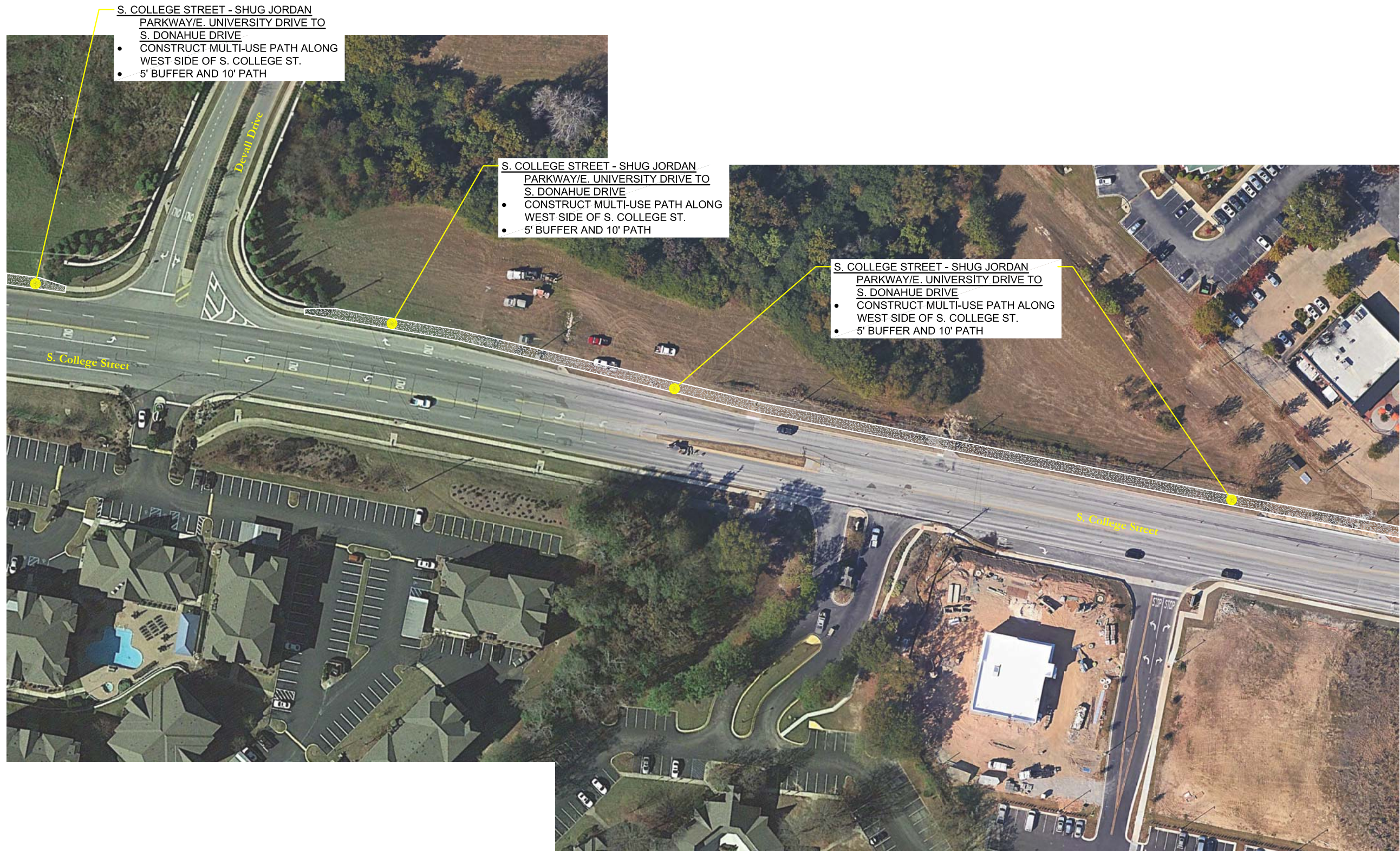
Legend	
	Required Pavement
	Required Grass
	Required Multi-Use Path/Sidewalk



Figure 10A
S. College St. - Shug Jordan Pkwy./
East University Dr. to Woodfield Dr.
Existing Improvements
College Street
Auburn, Alabama





S. COLLEGE STREET - SHUG JORDAN PARKWAY/E. UNIVERSITY DRIVE TO WOODFIELD DRIVE

- CONSTRUCT MULTI-USE PATH ALONG WEST SIDE OF S. COLLEGE ST.
- 5' BUFFER AND 10' PATH

S. COLLEGE STREET AT WOODFIELD DRIVE

- CONSTRUCT NB RIGHT-TURN LANE
- RECONSTRUCT SIDEWALK AND PED. RAMPS

S. COLLEGE STREET

- ACCESS MANAGEMENT CURRENTLY UNDER CONSTRUCTION



Legend




	Required Pavement
	Required Grass
	Required Multi-Use Path/Sidewalk



Figure 10C
 S. College St. - Shug Jordan Pkwy./
 East University Dr. to Woodfield Dr.
 Existing Improvements
 College Street
 Auburn, Alabama
 February 2019

S. College Street – S. Donahue Drive to Woodfield Drive

The City of Auburn is presently constructing a raised median along S. College Street from S. Donahue Drive to just south of Woodfield Drive. The project includes a full median opening at the northernmost access to The Church of Jesus Christ of Latter-day Saints, a full median opening at Kimberly Drive, and a partial median opening (no left-turns from the side streets) at The Jule Collins Smith Museum of Fine Arts access. The remaining accesses intersecting along this segment of S. College Street would become right-in/right-out only intersections with the raised median along S. College Street. The median is being constructed to provide full width left-turn lanes on S. College Street at each median opening as well as S. Donahue Drive and Woodfield Drive. A graphic depiction of this project is provided in **Figure 11** below.



Figure 11 - S. College Street – S. Donahue Drive to Woodfield Drive Access – Existing Median Construction Project

S. College Street at Samford Avenue

- Inclusion of the traffic signal in Sub-System 4 along S. College Street.

The City of Auburn has a proposed project to improve S. College Street and Samford Avenue. Within the limits of the Samford Avenue corridor, this improvement includes widening of College Street to allow for dual southbound through lanes. The proposed work is shown in **Figure 12** (drawing provided by the City of Auburn).

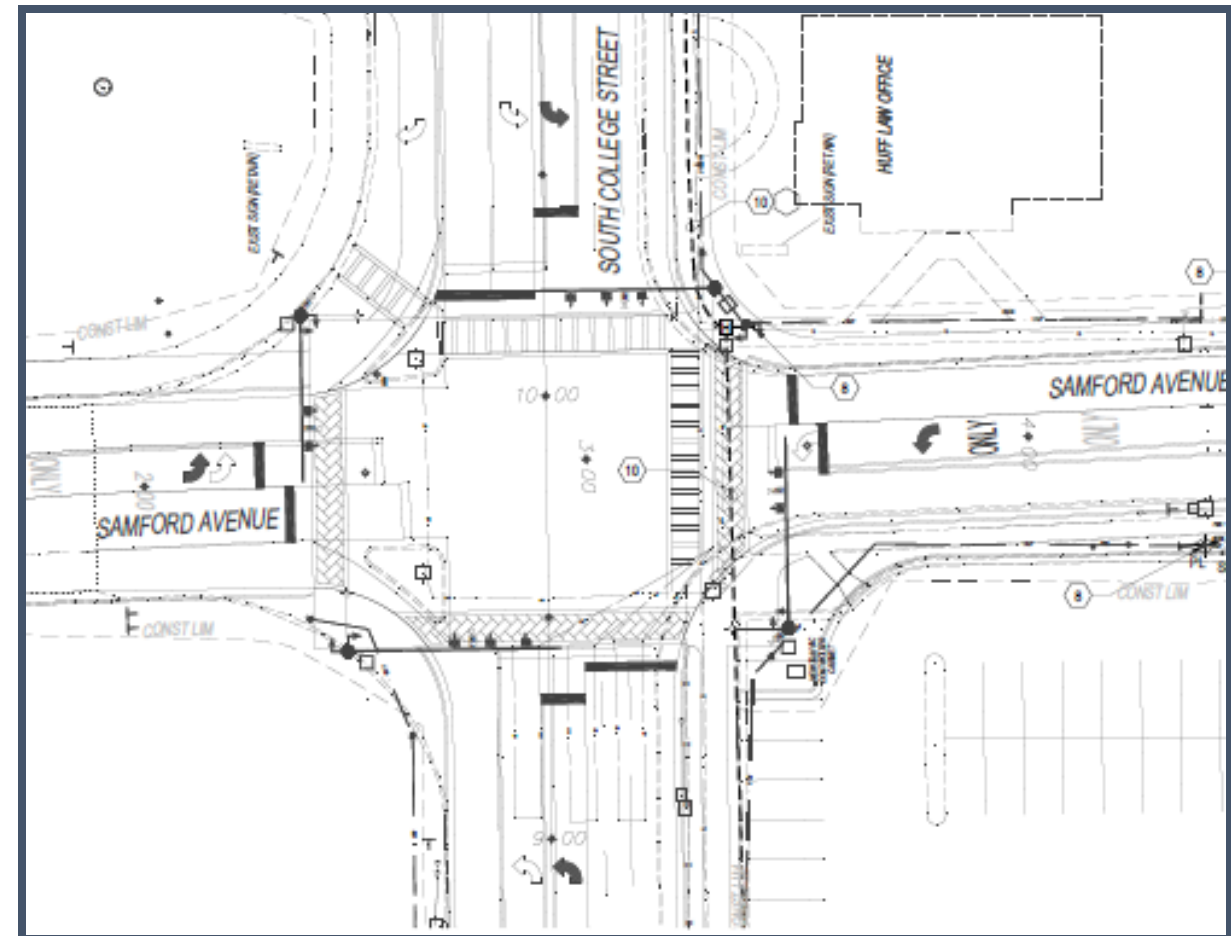


Figure 12 – S. College Street/Samford Avenue Improvements

S. College Street at Roosevelt Drive/Miller Avenue

- Inclusion of the traffic signal in Sub-System 4 along S. College Street.

The City of Auburn has a proposed project to improve College Street at Roosevelt Drive/Miller Avenue. Within the limits of the College Street corridor, this improvement includes widening of S. College Street to provide northbound and southbound left-turn lanes and maintain two through lanes. The proposed work is shown in **Figure 13** (drawing provided by the City of Auburn).

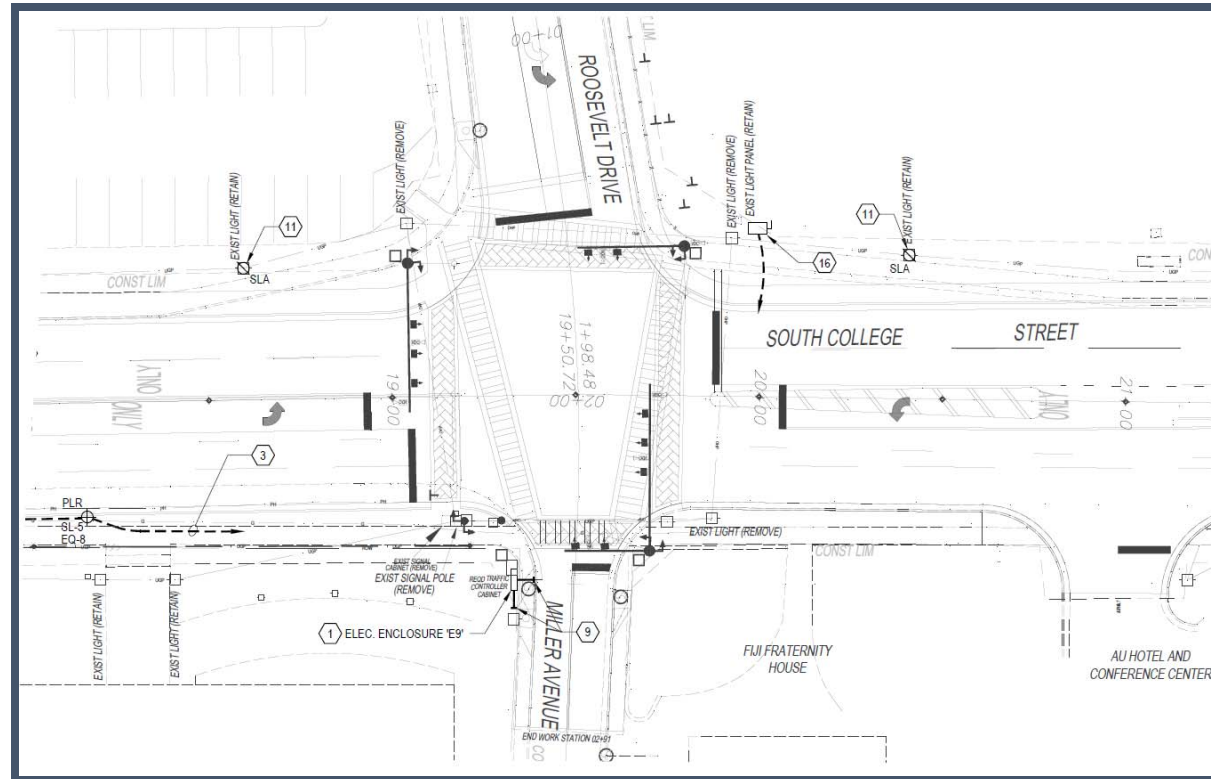


Figure 13 – S. College Street at Roosevelt Dr./Miller Ave. Improvements

S. College Street at Thach Avenue

It is recommended as development occurs adjacent to this intersection that efforts be made to obtain property in the southeast quadrant of the intersection to extend the bike lane along the south side of Thach Avenue back to College Street. Present roadway width does not provide sufficient space for the existing bike lane to extend to S. College Street. It should be noted that Auburn University owns the property in this corner. Coordination efforts with Auburn University would be required to obtain the property in this corner, as needed.

N. College Street at Glenn Avenue

- Review and adjust, as needed, signal clearance timings.

N. College Street at Drake Avenue

Improvements were developed for the N. College Street at Drake Avenue intersection as summarized in the following and illustrated in **Figure 14**.

- Widen N. College Street to provide left-turn lanes on the northbound and southbound approaches.
- Widen Drake Avenue to provide left turn lanes on the eastbound and westbound approaches.

N. College Street at Shelton Mill Road

Improvements were developed for the N. College Street at Shelton Mill Road intersection as summarized in the following and illustrated in **Figure 15**.

- Construct a right-turn lane on northbound N. College Street.
- Construct a left-turn lane on southbound N. College Street. Although a left-turn lane for is not warranted based on existing traffic volumes, with traffic signalization in place improved traffic operations would result with a left-turn lane.

N. College Street at E. University Drive/Shug Jordan Parkway

The City of Auburn has an active project to construct improvements at the N. College Street at E. University Drive/Shug Jordan Parkway intersection. The improvements project proposed by the City of Auburn is provided in **Figure 16** and includes the following:

- Construction of a right-turn lane on eastbound E. University Drive;
- Construction of a right-turn lane on westbound Shug Jordan Parkway; and
- Implementation of Flashing Yellow Arrow (FYA) left-turn phasing for all approaches.
- A northbound right-turn lane is also recommended and is planned for construction in a Future Phase by the City of Auburn. In addition, a sidewalk along the south side of E. University Drive to the east is planned as part of a Future Phase.

In addition to the lane improvements outlined above, it is recommended striping modification be done for the eastbound approach of Shug Jordan Parkway's left-turn lane to provide additional storage. **Figure 16** also illustrates the striping modifications for the eastbound left-turn lane.

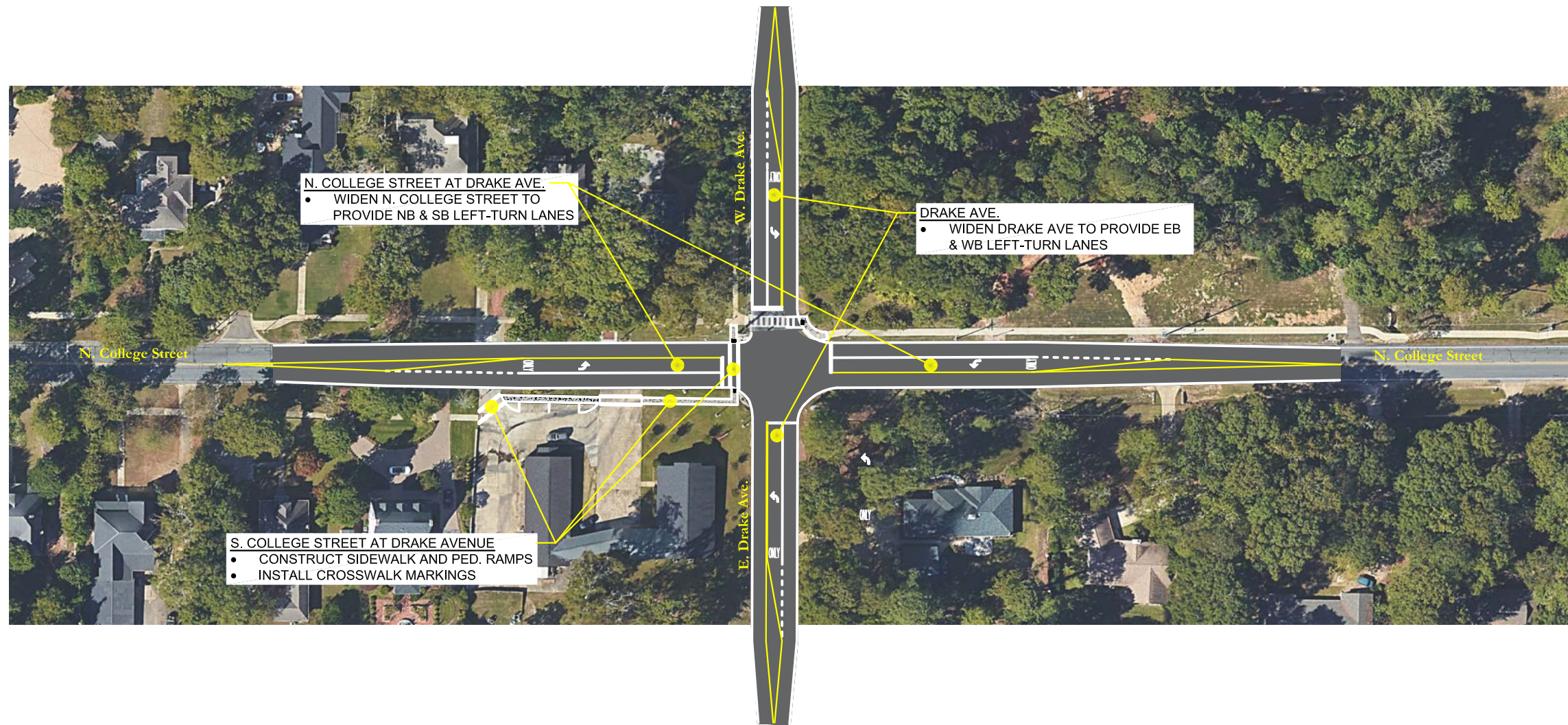
N. College Street at Asheton Lane





Improvements were developed for the N. College Street at Asheton Lane intersection as summarized in the following and illustrated in **Figure 17**.

- As noted previously, existing volumes were sufficient to meet signal warrant criteria. It is recommended that traffic signalization be pursued at this location.
- With installation of a traffic signal, it is recommended that a southbound left-turn lane be constructed.

N. College Street at Farmville Road

The Alabama Department of Transportation (ALDOT) is presently considering a project to construct a roundabout at this intersection. Based on observations, crash analysis, and traffic operations evaluations conducted as part of this study effort, the roundabout improvement option would improve traffic operations and help to address capacity and safety concerns. For reference, **Figure 18** illustrates the concept for the planned roundabout at this intersection. It should be noted the concept included in **Figure 18** was provided by the City of Auburn and ALDOT.



Legend	
	Required Pavement
	Required Grass
	Required Sidewalk
	Required Ped. Ramp

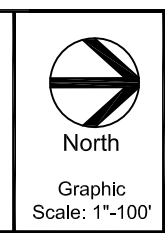
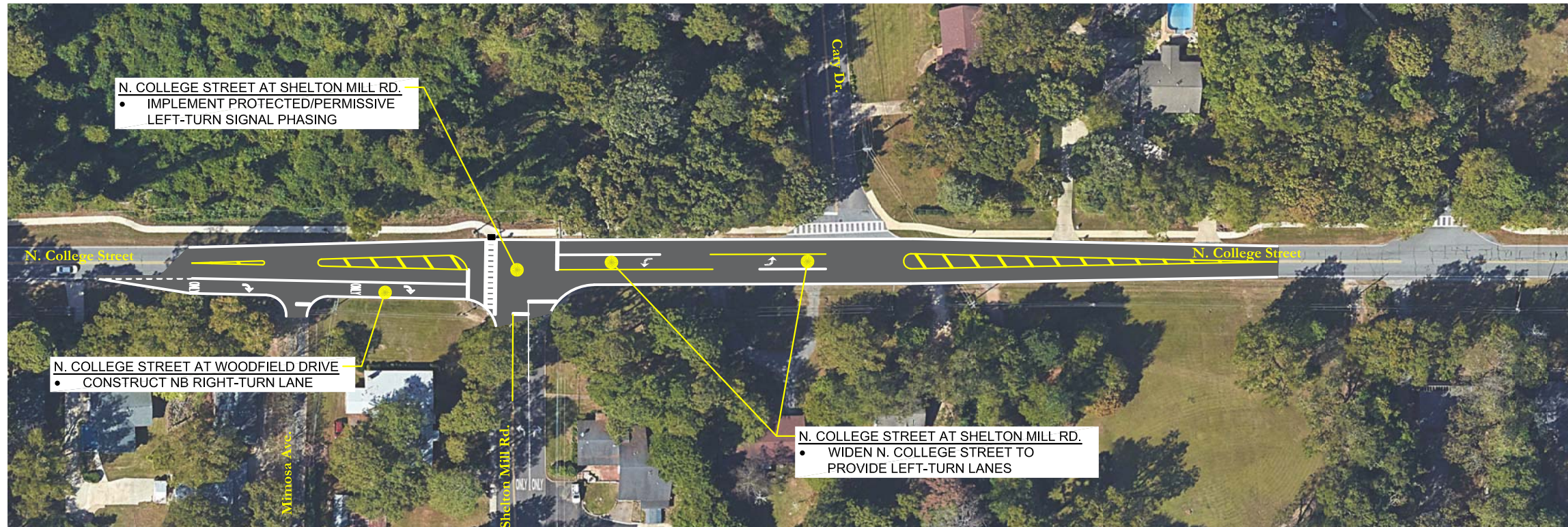


Figure 14
N. College St. at Drake Ave.
Existing Improvements

College Street
 Auburn, Alabama


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	Legend Required Pavement Required Grass	 North Graphic Scale: 1"=100'	Figure 15 N. College St. at Shelton Mill Rd. Existing Improvements College Street Auburn, Alabama February 2019	Page 33



Legend

 Required Pavement


North

Graphic
Scale: 1"=100'

Figure 17
N. College St. at Asheton Ln.
Existing Improvements

College Street
Auburn, Alabama

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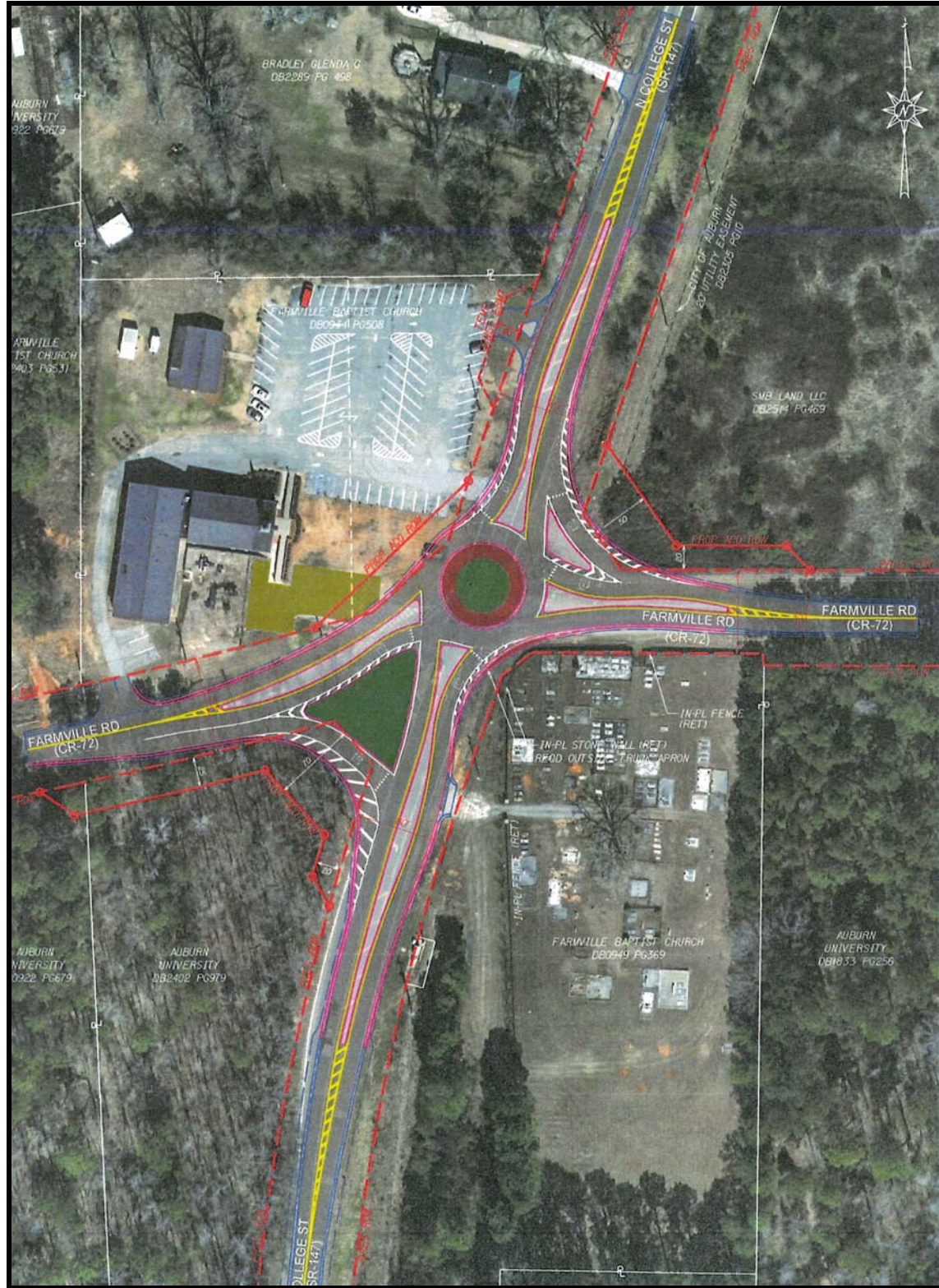


Figure 18 –ALDOT Roundabout Concept (N. College St. at Farmville Rd.)

Existing Intersection Capacity Analysis with Improvements

Capacity analyses for peak hour conditions at the study intersections along the College Street Corridor were conducted assuming improvements for existing conditions would be in place. Capacity analyses were conducted using methods outlined in the *Highway Capacity Manual, 2010*. Results of these capacity analyses are summarized in **Table 8**.

Table 8 – Existing Intersection Levels of Service with Improvements

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service		
			AM Peak	PM Peak	
S. College Street at Shell Toomer Parkway (traffic signal)	EB Park Access	Left	D	D	
		Through/Right	D	D	
	WB Shell Toomer Pkwy/	Left	D	D	
		Through	D	D	
	NB College St.	Right	-	-	
		Left	A	A	
	SB College St.	Through	A	A	
		Right	A	A	
	Overall LOS			A	A
	S. College Street at I-85 NB Ramps (traffic signal)	I-85 NB Exit Ramp	Left	D	D
Right			-	-	
NB College St.		Through	A	B	
		Right	-	-	
SB College St.		Left	D	D	
		Through	A	A	
Overall LOS			B	C	
S. College Street at I-85 SB Ramps (traffic signal)	I-85 SB Exit Ramp	Left	D	D	
		Right	-	-	
	NB College St.	Left	A	A	
		Through	A	A	
	SB College St.	Through	A	A	
		Right	-	-	
Overall LOS			A	A	

Table 8 (continued) – Existing Intersection Levels of Service with Improvements

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Veterans Boulevard (traffic signal)	EB Veterans Blvd.	Left	D	D
		Through	D	D
		Right	D	D
	WB Veterans Blvd.	Left	D	D
		Through/Right	D	D
	NB College St.	Left	A	A
		Through	A	A
		Right	A	A
	SB College St.	Left	A	A
		Through	B	B
		Right	A	A
Overall LOS			A	B
S. College Street at Harmon Drive (side street stop)	EB Mason Jar	Left/Thru/Right	A	B
	WB Harmon Dr.	Left/Through	F	F
		Right	C	C
	NB College St.	Left	A	B
SB College St.	Left	B	B	
S. College Street at Longleaf Drive (traffic signal)	EB Longleaf Dr.	Left	E	E
		Through/Right	D	A
	WB Longleaf Dr.	Left	D	D
		Through	D	D
		Right	-	-
	NB College St.	Left	D	E
		Through	C	C
		Right	-	-
	SB College St.	Left	D	D
		Through	B	C
		Right	-	-
Overall LOS			C	D

Table 8 (continued) – Existing Intersection Levels of Service with Improvements

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	C	C
		Through	D	D
		Right	-	-
	WB E. University Dr.	Left	C	D
		Through/Right	D	D
	NB College St.	Left	D	D
		Through	A	B
		Right	-	-
	SB College St.	Left	D	D
		Through	C	C
		Right	-	-
Overall LOS			C	C
S. College Street at S. Donahue Drive (traffic signal)	EB Donahue Dr.	Left	C	D
		Through	D	C
		Right	-	-
	WB S. Donahue Dr.	Left	D	C
		Through	C	C
		Right	C	D
	NB College St.	Left	A	A
		Through/Right	A	B
		SB College St.	Left	A
	Through/Right		A	B
Overall LOS			B	B
S. College Street at Kimberly Drive (side street stop)	WB Kimberly Dr.	Left/Right	B	B
	SB College St.	Left	A	A
S. College Street at Woodfield Drive (traffic signal)	EB Woodfield Dr.	Left/Through	C	C
		Right	-	-
	WB Woodfield Dr.	Left/Through/Right	D	D
	NB College St.	Left	A	A
		Through	A	A
		Right	A	A
	SB College St.	Left	A	A
		Through/Right	A	A
Overall LOS			B	B

Table 8 (continued) – Existing Intersection Levels of Service with Improvements

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Samford Avenue (traffic signal)	EB Samford Ave.	Left	B	B
		Through	C	C
		Right	B	C
	WB Samford Ave.	Left	B	B
		Through/Right	C	C
	NB College St.	Left	B	C
		Through/Right	C	C
	SB College St.	Left	B	C
		Through/Right	C	C
Overall LOS			C	C
S. College Street at Roosevelt Drive/ Miller Avenue (traffic signal)	EB Roosevelt Dr.	Left	B	B
		Through/Right	B	B
	WB Miller Ave.	Left/Thru/Right	B	A
	NB College St.	Left	B	B
		Through/Right	B	B
	SB College St.	Left	B	B
		Through/Right	B	B
Overall LOS			B	B
S. College Street at Thach Avenue (traffic signal)	EB Thach Ave.	Left	C	D
		Through/Right	C	D
	WB Thach Ave.	Left	B	C
		Through	B	C
		Right	B	C
	NB College St.	Left	C	C
		Through/Right	C	D
	SB College St.	Left	C	C
		Through/Right	C	C
Overall LOS			C	C

Table 8 (continued) – Existing Intersection Levels of Service with Improvements

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
College Street at Magnolia Avenue (traffic signal)	EB Magnolia Ave.	Left	B	C
		Through/Right	C	E
	WB Magnolia Ave.	Left	B	C
		Through/Right	C	C
	NB College St.	Left	B	C
		Through	B	C
		Right	B	B
	SB College St.	Left	B	C
		Through/Right	C	C
	Overall LOS			B
N. College Street at Tichenor Avenue (side street stop)	EB Alley	Left/Thru/Right	C	C
	WB Tichenor Ave.	Left/Thru/Right	B	B
	NB College St.	Left	A	A
	SB College St.	Left	A	A
N. College Street at Glenn Avenue (traffic signal)	EB Glenn Ave.	Left	B	C
		Through/Right	C	C
	WB Glenn Ave.	Left	B	B
		Through/Right	C	C
	NB College St.	Left	C	C
		Through	C	D
		Right	C	C
	SB College St.	Left	C	C
		Through	C	C
		Right	C	C
Overall LOS			C	C
N. College Street at Mitcham Avenue (traffic signal)	WB Mitcham Ave.	Left	B	B
		Right	B	B
	NB College St.	Through	B	B
		Right	A	A
	SB College St.	Left	B	A
		Through	B	A
Overall LOS			B	B
N. College Street at Bragg Avenue (side street stop)	EB Bragg Ave.	Left	C	E
		Right	C	B
	NB College St.	Left	A	A

Table 8 (continued) – Existing Intersection Levels of Service with Improvements

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service		
			AM Peak	PM Peak	
N. College Street at Drake Avenue (traffic signal)	EB Drake Ave.	Left	B	B	
		Thru/Right	B	A	
	WB Drake Ave.	Left	B	B	
		Thru/Right	B	A	
	NB College St.	Left	B	A	
		Through/Right	B	A	
	SB College St.	Left	A	B	
		Through/Right	A	A	
Overall LOS			B	A	
N. College Street at Shelton Mill Road (traffic signal)	WB Shelton Mill Rd.	Left	B	B	
		Right	B	B	
	NB College St.	Through	B	B	
		Right	B	B	
	SB College St.	Left	A	A	
		Through	A	A	
	Overall LOS			B	A
	N. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	B	B
Through			B	B	
Right			-	-	
WB E. University Dr.		Left	B	B	
		Through	B	B	
		Right	-	-	
NB College St.		Left	C	C	
		Through/Right	D	D	
SB College St.		Left	C	C	
		Through	D	C	
	Right	-	-		
Overall LOS			C	B	
N. College Street at Asheton Lane (side street stop)	WB Asheton Ln.	Left/Right	B	B	
	NB College St.	Through	A	A	
		Right	A	A	
	SB College St.	Left	A	A	
		Through	A	A	
Overall LOS			A	A	

Table 8 (continued) – Existing Intersection Levels of Service with Improvements

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
N. College Street at Farmville Road (roundabout)	EB Farmville Rd.	Left/Thru + Right	A	A
	WB Farmville Rd.	Left/Thru + Right	A	A
	NB College St.	Left/Thru/Right	A	B
	SB College St.	Left/Thru/Right	A	A

As shown in **Table 8**, all signalized study intersections evaluated along the College Street Corridor operate at acceptable overall levels of service for both peak periods evaluated. The following lists the movements which would operate with less than desirable levels of service for existing conditions with existing improvements:

- At the S. College Street and Longleaf Drive intersection, the eastbound left-turn from Longleaf Drive and the northbound left-turn from S. College Street onto Longleaf Drive would operate at levels of service “E”. This is primarily attributable to the cycle length required for the coordination on S. College Street. Although some delay would be realized for these left-turning movements, the coordination timings would aid the movement of traffic along S. College Street.
- The stop sign controlled side street approaches of Harmon Drive and Bragg Avenue would operate with less than desirable levels of service.
- The eastbound through/right-turn lane on Magnolia Avenue at College Street would operate at a level of service “E” during the afternoon peak hour.

Existing Arterial Segment Capacity Analysis with Improvements

Arterial segment capacity analyses for peak hour conditions along the College Street Corridor were conducted for the morning and afternoon peak hour periods using methods outlined in the *Highway Capacity Manual, 2010*. Levels of service for the arterial analyses conducted for College Street are summarized in **Table 9**.

Table 9 indicates coordinated signal system timings along S. College Street from Shell Toomer Parkway through Veterans Boulevard would improve arterial levels of service by enhancing travel on S. College Street. The results of arterial analyses indicate levels of service “E” or “F” for travel on College Street for various segments in the downtown Auburn area. These levels of service are a result of spacing between signalized intersections and extended cycle lengths to accommodate the pedestrian demand in the downtown Auburn area which results in lower travel speeds along College Street.

Table 9 - Existing Arterial Segment Levels of Service with Improvements

Northbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
Shell Toomer Pkwy.	I-85 NB Ramps	0.20	C	D
I-85 NB Ramps	I-85 SB Ramps	0.19	D	C
I-85 SB Ramps	Veterans Boulevard	0.20	C	D
Veterans Boulevard	Longleaf Drive	0.75	B	C
Longleaf Drive	EUD/Shug Jordan (S)	0.33	D	D
EUD/Shug Jordan (S)	Donahue Drive	0.72	A	A
Donahue Drive	Woodfield Drive	0.38	B	B
Woodfield Drive	Samford Avenue	0.71	C	C
Samford Avenue	Roosevelt Dr./Miller Ave.	0.18	C	C
Roosevelt Dr./Miller Ave.	Thach Avenue	0.19	C	D
Thach Avenue	Magnolia Avenue	0.17	C	D
Magnolia Avenue	Glenn Avenue	0.18	E	E
Glenn Avenue	Mitcham Avenue	0.09	E	E
Mitcham Avenue	Drake Avenue	0.26	B	B

Southbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	Mitcham Avenue	0.26	C	B
Mitcham Avenue	Glenn Avenue	0.09	F	F
Glenn Avenue	Magnolia Avenue	0.18	E	F
Magnolia Avenue	Thach Avenue	0.17	E	E
Thach Avenue	Roosevelt Dr./Miller Ave.	0.19	C	D
Roosevelt Dr./Miller Ave.	Samford Avenue	0.18	D	E
Samford Avenue	Woodfield Drive	0.71	A	A
Woodfield Drive	Donahue Drive	0.38	B	B
Donahue Drive	EUD/Shug Jordan (S)	0.72	B	C
EUD/Shug Jordan (S)	Longleaf Drive	0.33	C	E
Longleaf Drive	Veterans Boulevard	0.75	A	B
Veterans Boulevard	I-85 SB Ramps	0.20	D	C
I-85 SB Ramps	I-85 NB Ramps	0.19	B	C
I-85 NB Ramps	Shell Toomer Pkwy.	0.20	B	B

N. College Street Two-Lane Highway Analysis				
From	To	Segment Length (miles)	Two-Way LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	EUD/Shug Jordan (N)	1.56	C	C
EUD/Shug Jordan (N)	Farmville Road	2.13	D	D

PROJECTED TRAFFIC GROWTH

Growth rates were calculated for the study roadways based on historical traffic volumes and growth trends. The historical growth rate calculated for roadways in the vicinity of College Street varies throughout the College Street corridor. The following summarizes the annual growth rate and the subsequent growth anticipated for a ten (10) year period for study area traffic volumes.

- S. College Street from Shell Toomer Parkway through E. University Drive/Shug Jordan Parkway is projected to have annual growth of approximately 0.9% per year for a ten (10) year growth rate of approximately 9%.
- S. College Street from E. University Drive/Shug Jordan Parkway through Thach Avenue is projected to have annual growth of approximately 1.4% per year for a ten (10) year growth rate of approximately 14%.
- N. College Street from Magnolia Avenue through Drake Avenue is projected to have annual growth of approximately 3.2% per year for a ten (10) year growth rate of approximately 32%.
- N. College Street at Shelton Mill Road is projected to have annual growth of approximately 1.4% per year for a ten (10) year growth rate of approximately 14%.
- N. College Street from E. University Drive/Shug Jordan Parkway to Farmville Road is projected to have annual growth of approximately 3.4% per year for a ten (10) year growth rate of approximately 34%.

Existing peak hour traffic volumes were increased by the respective growth rate to reflect ten (10) year projected traffic volumes for the College Street corridor. **Figure 19** and **Figure 20** illustrate projected 2028 peak hour traffic volumes for the College Street corridor. Analyses were conducted utilizing projected peak hour traffic volumes for the study area roadways and intersection to assess traffic operations within the corridor. Capacity deficiencies were identified for projected conditions to aid in development of potential roadway and traffic control improvements within the corridor to address capacity and traffic operations.

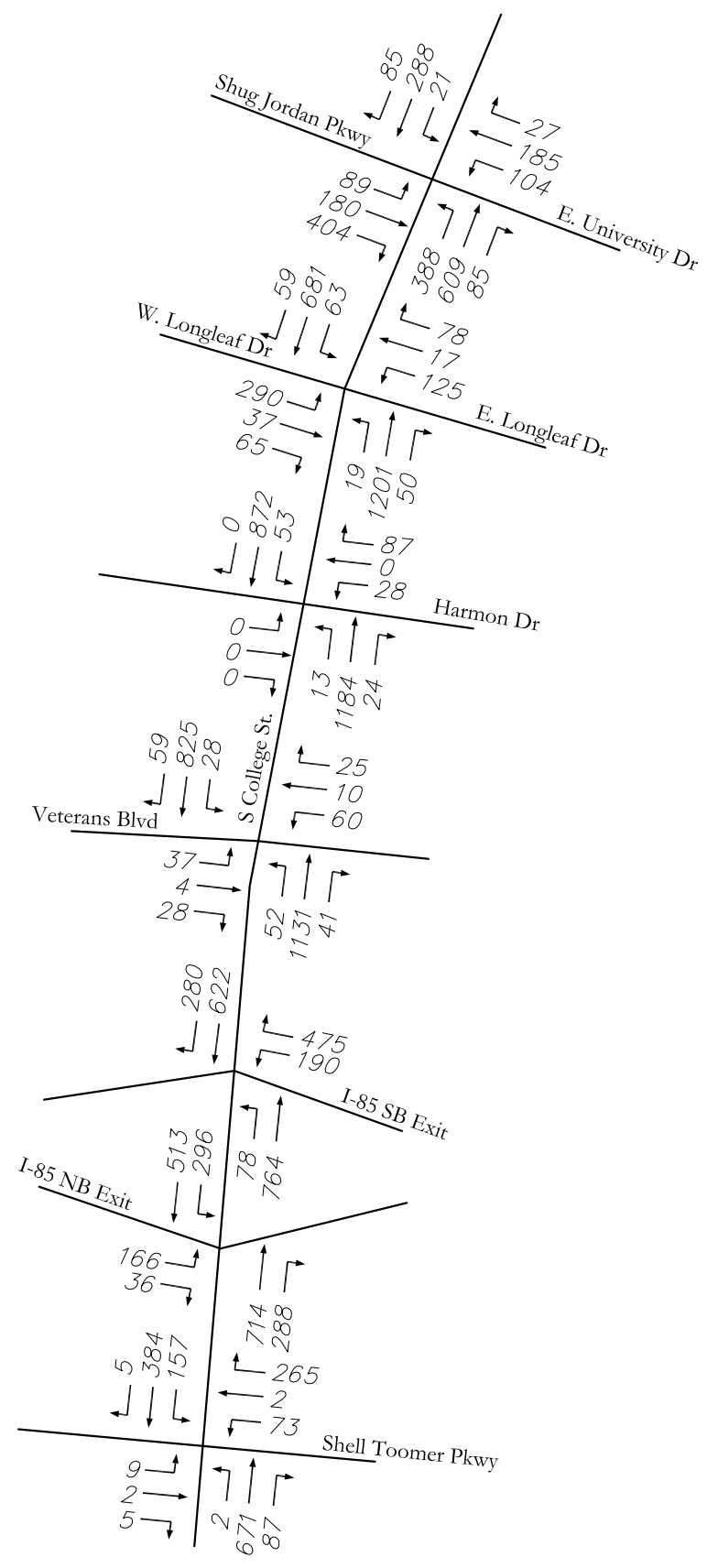
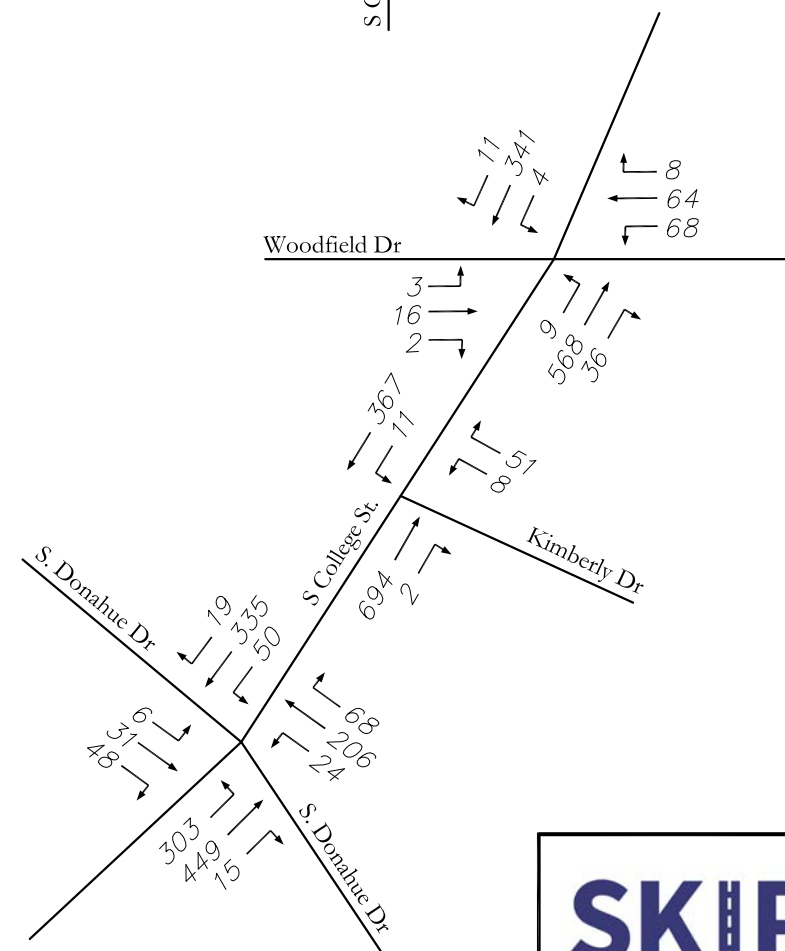
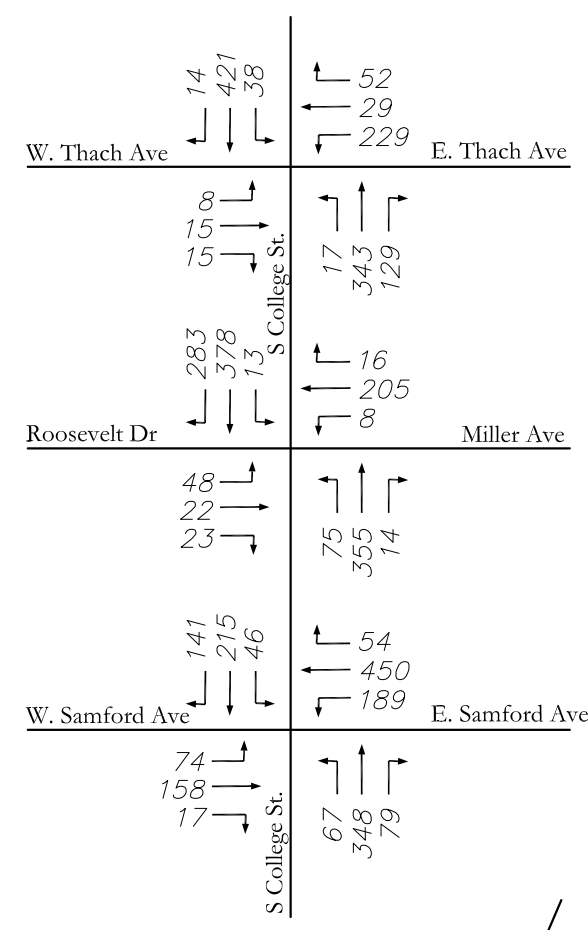
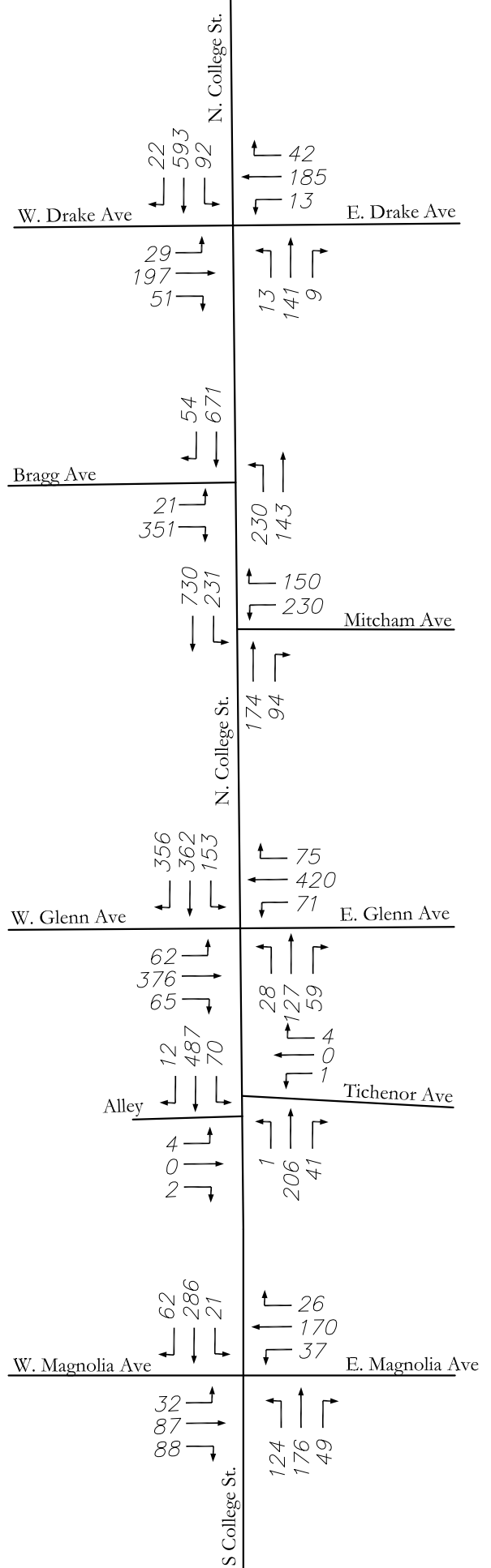
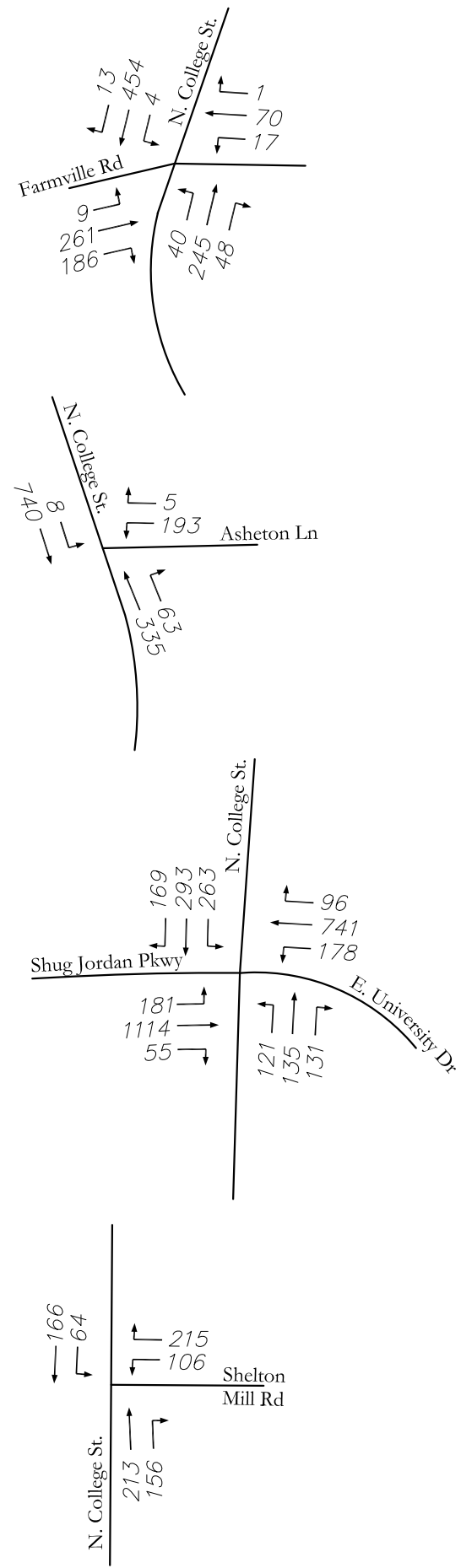


Figure 19
2028 AM Peak Hour
Traffic Volumes
 College Street
 Auburn, Alabama
 February 2019

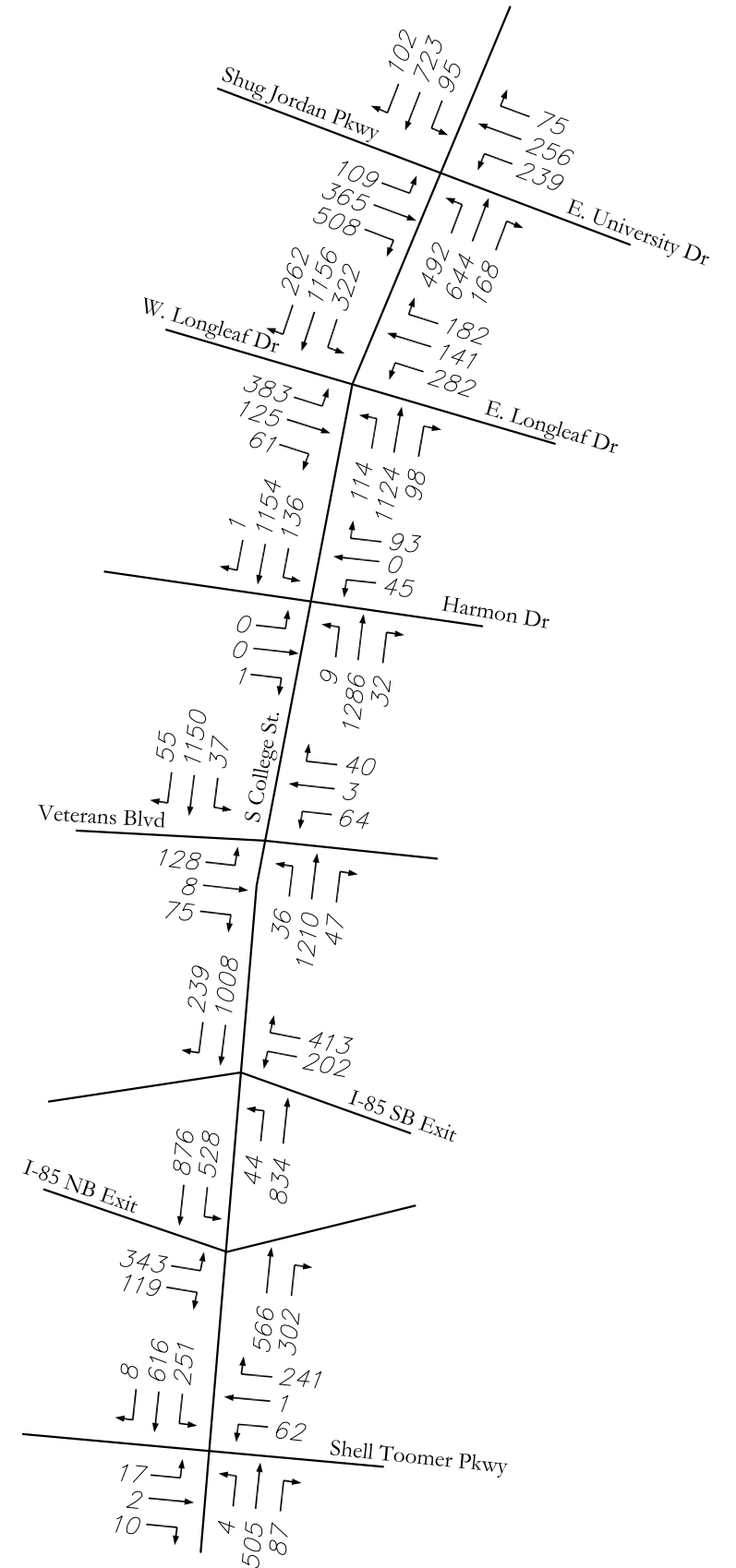
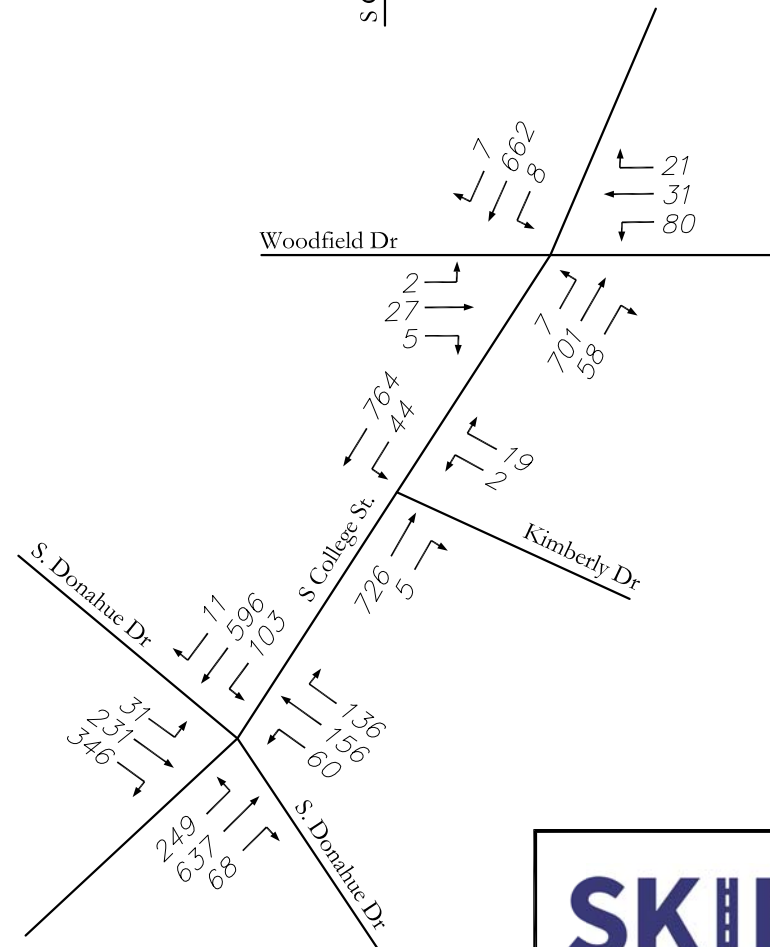
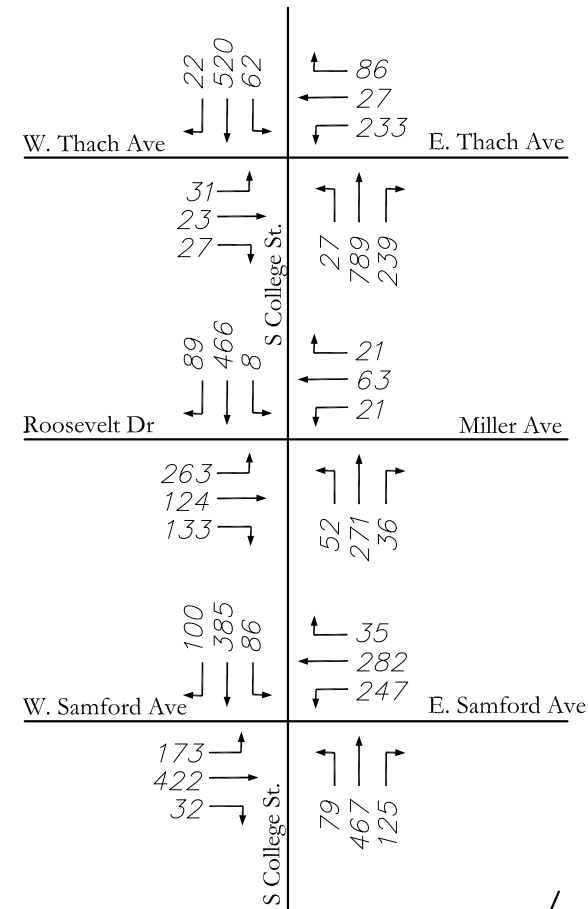
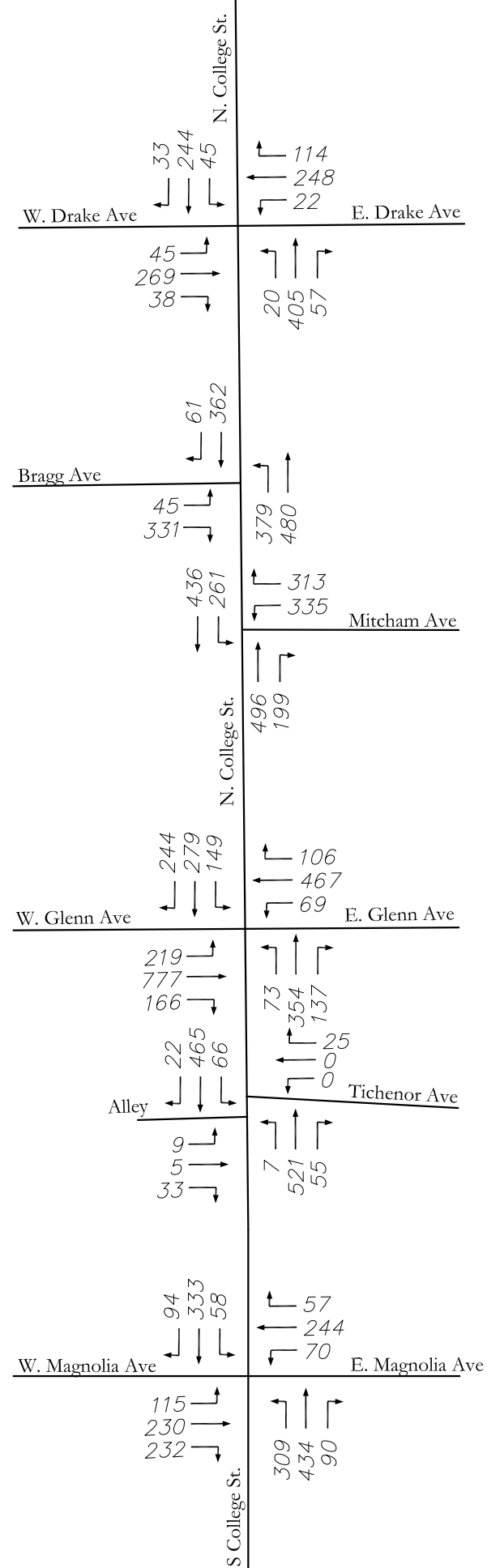
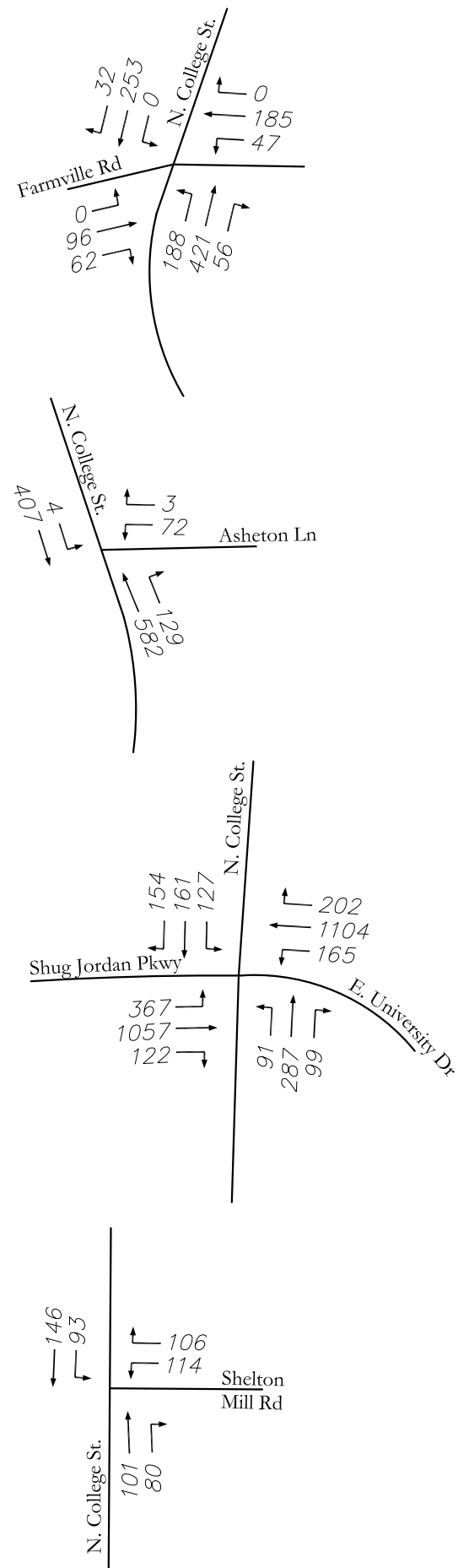


Figure 20
2028 PM Peak Hour
Traffic Volumes
 College Street
 Auburn, Alabama
 February 2019

ANALYSES WITH PROJECTED TRAFFIC GROWTH

Analyses conducted for this scenario assumes projected traffic volumes for ten (10) years would be in place and the intersection improvements recommended for existing conditions (previously introduced and illustrated in **Figures 4-18**) would also be in place.

Intersection Capacity Analysis with Projected Traffic Growth

Capacity analyses for projected ten (10) year peak hour conditions were conducted for the study intersections along the College Street Corridor using methods outlined in the *Highway Capacity Manual, 2010*. Results of capacity analyses are summarized in **Table 10**.

Table 10 - Intersection Levels of Service with Projected Traffic Growth

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Shell Toomer Parkway (traffic signal)	EB Park Access	Left	D	D
		Through/Right	D	D
	WB Shell Toomer Pkwy/	Left	D	D
		Through	D	D
		Right	-	-
	NB College St.	Left	A	A
		Through	A	A
		Right	A	A
	SB College St.	Left	A	A
		Through/Right	A	A
Overall LOS			A	A
S. College Street at I-85 NB Ramps (traffic signal)	I-85 NB Exit Ramp	Left	D	D
		Right	-	-
	NB College St.	Through	B	B
		Right	-	-
	SB College St.	Left	D	D
		Through	A	A
	Overall LOS			B

Table 10 (continued) - Intersection Levels of Service with Projected Traffic Growth

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at I-85 SB Ramps (traffic signal)	I-85 SB Exit Ramp	Left	D	D
		Right	-	-
	NB College St.	Left	A	A
		Through	A	A
	SB College St.	Through	A	A
		Right	-	-
Overall LOS			A	A
S. College Street at Veterans Boulevard (traffic signal)	EB Veterans Blvd.	Left	D	D
		Through	D	D
		Right	D	D
	WB Veterans Blvd.	Left	D	D
		Through/Right	D	D
	NB College St.	Left	A	A
		Through	A	A
		Right	A	A
	SB College St.	Left	A	A
		Through	B	B
Right		A	A	
Overall LOS			A	B
S. College Street at Harmon Drive (side street stop)	EB Mason Jar	Left/Through/Right	A	B
	WB Harmon Dr.	Left/Through	F	F
		Right	C	C
	NB College St.	Left	A	B
	SB College St.	Left	B	B
S. College Street at Longleaf Drive (traffic signal)	EB Longleaf Dr.	Left	E	E
		Through/Right	D	D
	WB Longleaf Dr.	Left	D	D
		Through	D	D
		Right	-	-
	NB College St.	Left	D	E
		Through	C	D
		Right	-	-
	SB College St.	Left	D	D
		Through	B	C
Right		-	-	
Overall LOS			D	D

Table 10 (continued) - Intersection Levels of Service with Projected Traffic Growth

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service		
			AM Peak	PM Peak	
S. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	C	C	
		Through	D	D	
		Right	-	-	
	WB E. University Dr.	Left	C	D	
		Through/Right	D	D	
	NB College St.	Left	D	D	
		Through	A	B	
		Right	-	-	
	SB College St.	Left	D	D	
		Through	C	D	
		Right	-	-	
	Overall LOS			C	C
S. College Street at S. Donahue Drive (traffic signal)	EB Donahue Dr.	Left	C	D	
		Through	D	C	
		Right	-	-	
	WB S. Donahue Dr.	Left	D	C	
		Through	C	C	
		Right	C	D	
	NB College St.	Left	A	B	
		Through/Right	A	B	
	SB College St.	Left	A	B	
		Through/Right	B	B	
	Overall LOS			B	C
	S. College Street at Kimberly Drive (side street stop)	WB Kimberly Dr.	Left/Right	B	B
SB College St.		Left	B	A	
S. College Street at Woodfield Drive (traffic signal)	EB Woodfield Dr.	Left/Through	C	C	
		Right	-	-	
	WB Woodfield Dr.	Left/Through/Right	D	D	
	NB College St.	Left	A	A	
		Through	A	A	
		Right	A	A	
	SB College St.	Left	A	A	
		Through/Right	A	A	
Overall LOS			B	B	

Table 10 (continued) - Intersection Levels of Service with Projected Traffic Growth

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Samford Avenue (traffic signal)	EB Samford Ave.	Left	B	B
		Through	C	C
		Right	B	C
	WB Samford Ave.	Left	B	C
		Through/Right	C	C
	NB College St.	Left	C	C
		Through/Right	C	C
	SB College St.	Left	C	C
		Through/Right	C	C
	Overall LOS			C
S. College Street at Roosevelt Drive/ Miller Avenue (traffic signal)	EB Roosevelt Dr.	Left	B	B
		Through/Right	B	B
	WB Miller Ave.	Left/Thru/Right	B	B
	NB College St.	Left	C	B
		Through/Right	A	B
	SB College St.	Left	B	B
Overall LOS			B	B
S. College Street at Thach Avenue (traffic signal)	EB Thach Ave.	Left	C	D
		Through/Right	C	D
	WB Thach Ave.	Left	B	C
		Through	B	C
		Right	B	C
	NB College St.	Left	C	C
		Through/Right	C	D
	SB College St.	Left	C	C
Through/Right		C	C	
Overall LOS			C	C

Table 10 (continued) - Intersection Levels of Service with Projected Traffic Growth

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
College Street at Magnolia Avenue (traffic signal)	EB Magnolia Ave.	Left	C	D
		Through/Right	C	F
	WB Magnolia Ave.	Left	C	D
		Through/Right	C	F
	NB College St.	Left	B	D
		Through	B	C
		Right	B	B
	SB College St.	Left	B	C
		Through/Right	C	D
	Overall LOS			C
N. College Street at Tichenor Avenue (side street stop)	EB Alley	Left/Thru/Right	C	C
	WB Tichenor Ave.	Left/Thru/Right	B	B
	NB College St.	Left	A	A
	SB College St.	Left	A	A
N. College Street at Glenn Avenue (traffic signal)	EB Glenn Ave.	Left	C	D
		Through/Right	C	D
	WB Glenn Ave.	Left	C	C
		Through/Right	D	E
	NB College St.	Left	C	C
		Through	C	D
	Right	C	D	
		Left	C	D
	SB College St.	Through	D	D
		Right	D	D
Overall LOS			C	D
N. College Street at Mitcham Avenue (traffic signal)	WB Mitcham Ave.	Left	B	B
		Right	B	C
	NB College St.	Through	B	C
		Right	A	A
	SB College St.	Left	A	B
		Through	B	A
Overall LOS			B	B
N. College Street at Bragg Avenue (side street stop)	EB Bragg Ave.	Left	E	F
		Right	F	C
	NB College St.	Left	B	B

Table 10 (continued) - Intersection Levels of Service with Projected Traffic Growth

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service		
			AM Peak	PM Peak	
N. College Street at Drake Avenue (traffic signal)	EB Drake Ave.	Left	B	B	
		Thru/Right	B	B	
	WB Drake Ave.	Left	B	B	
		Thru/Right	B	B	
	NB College St.	Left	B	B	
		Through/Right	A	B	
	SB College St.	Left	A	B	
		Through/Right	B	A	
	Overall LOS			B	B
	N. College Street at Shelton Mill Road (traffic signal)	WB Shelton Mill Rd.	Left	B	B
Right			B	B	
NB College St.		Through	B	B	
		Right	B	B	
SB College St.		Left	A	A	
		Through	A	A	
Overall LOS			B	A	
N. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	B	D	
		Through	C	C	
		Right	-	-	
	WB E. University Dr.	Left	C	C	
		Through	C	C	
	Right	-	-		
		Left	D	D	
	NB College St.	Through/Right	D	D	
		Left	D	D	
	SB College St.	Through	D	D	
		Right	-	-	
		Overall LOS			C
N. College Street at Asheton Lane (side street stop)	WB Asheton Ln.	Left/Right	C	D	
	NB N. College St.	Through	A	A	
		Right	A	A	
	SB College St.	Left	A	A	
		Through	A	A	
	Overall LOS			A	A

Table 10 (continued) - Intersection Levels of Service with Projected Traffic Growth

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
N. College Street at Farmville Road (roundabout)	EB Farmville Rd.	Left/Thru + Right	B	A
	WB Farmville Rd.	Left/Thru + Right	A	B
	NB College St.	Left/Thru/Right	B	C
	SB College St.	Left/Thru/Right	B	B

As shown in **Table 10**, all but one of the signalized study intersections (Magnolia Avenue) evaluated along the College Street Corridor would operate at acceptable overall levels of service for both peak periods evaluated. The following lists the movements which would operate with less than desirable levels of service for projected traffic volumes with existing improvements in place:

- At the S. College Street and Longleaf Drive intersection, the eastbound left-turn from Longleaf Drive and the northbound left-turn from S. College Street onto Longleaf Drive would operate at levels of service “E”. This is primarily attributable to the cycle length required for the coordination on S. College Street. Although some delay would be realized for these left-turning movements, the coordination timings would aid the movement of traffic along S. College Street.
- The stop sign controlled side street approaches of Harmon Drive and Bragg Avenue would operate with less than desirable levels of service.
- The eastbound and westbound through/right-turn lanes on Magnolia Avenue at College Street would operate at a level of service “F” during the afternoon peak hour as well as the intersection overall operating at a level of service “F” during the afternoon peak hour.
- The westbound through/right-turn lane on Glenn Avenue would operate at a level of service “E” during the afternoon peak hour.

Arterial Segment Capacity Analysis with Projected Traffic Growth

Arterial segment capacity analyses for peak hour conditions along the College Street Corridor were conducted for the morning and afternoon peak hour periods using methods outlined in the *Highway Capacity Manual, 2010*. Levels of service for the arterial analyses conducted for College Street are summarized in **Table 11**.

Table 9 indicates that implementation and maintaining coordinated signal system timings along S. College Street from Shell Toomer Parkway through Veterans Boulevard would help improve arterial

levels of service by enhancing travel speeds on S. College Street. However, as traffic densities increase along S. College Street, travel speeds are expected to decrease especially in segments with close signal spacing such as between Veterans Boulevard and the I-85 SB ramps AND Shug Jordan Parkway to Longleaf Drive. The results of arterial analyses indicate levels of service “E” or “F” as a result of lower travel speeds on various segments of College Street in downtown Auburn (Mitcham Avenue to Samford Avenue). These levels of service are anticipated as a result of signal spacing and extended cycle lengths to accommodate pedestrian demand in the downtown Auburn area.

Table 11 - Arterial Segment Levels of Service w/Projected Traffic Growth

Northbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
Shell Toomer Pkwy.	I-85 NB Ramps	0.20	D	D
I-85 NB Ramps	I-85 SB Ramps	0.19	E	D
I-85 SB Ramps	Veterans Boulevard	0.20	C	C
Veterans Boulevard	Longleaf Drive	0.75	B	C
Longleaf Drive	EUD/Shug Jordan (S)	0.33	D	E
EUD/Shug Jordan (S)	Donahue Drive	0.72	A	A
Donahue Drive	Woodfield Drive	0.38	C	B
Woodfield Drive	Samford Avenue	0.71	C	C
Samford Avenue	Roosevelt Dr./Miller Ave.	0.18	C	C
Roosevelt Dr./Miller Ave.	Thach Avenue	0.19	D	D
Thach Avenue	Magnolia Avenue	0.17	D	D
Magnolia Avenue	Glenn Avenue	0.18	E	F
Glenn Avenue	Mitcham Avenue	0.09	E	F
Mitcham Avenue	Drake Avenue	0.26	B	B
Southbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	Mitcham Avenue	0.26	C	C
Mitcham Avenue	Glenn Avenue	0.09	F	F
Glenn Avenue	Magnolia Avenue	0.18	F	F
Magnolia Avenue	Thach Avenue	0.17	E	E
Thach Avenue	Roosevelt Dr./Miller Ave.	0.19	D	D
Roosevelt Dr./Miller Ave.	Samford Avenue	0.18	E	E
Samford Avenue	Woodfield Drive	0.71	A	B
Woodfield Drive	Donahue Drive	0.38	B	B
Donahue Drive	EUD/Shug Jordan (S)	0.72	B	C
EUD/Shug Jordan (S)	Longleaf Drive	0.33	C	E
Longleaf Drive	Veterans Boulevard	0.75	A	B
Veterans Boulevard	I-85 SB Ramps	0.20	E	C
I-85 SB Ramps	I-85 NB Ramps	0.19	C	C
I-85 NB Ramps	Shell Toomer Pkwy.	0.20	B	B
N. College Street Two-Lane Highway Analysis				
From	To	Segment Length (miles)	Two-Way LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	EUD/Shug Jordan (N)	1.56	D	D
EUD/Shug Jordan (N)	Farmville Road	2.13	D	D

Right-Turn Lane Warrant Evaluations with Projected Traffic Growth

Projected peak hour traffic volumes were compared with the turn lane warrant criteria outlined in the National Cooperative Highway Research Program (NCHRP) Report 457 *Evaluating Intersection Improvements: An Engineering Study Guide*, published by the Transportation Research Board. As with existing conditions, the posted speed limit was utilized for right-turn lane evaluations along the College Street. It should be noted the right-turn lanes shown as warranted below are in addition to any right-turn lanes warranted for existing conditions. The following outlines the right-turn lanes that would be warranted based on projected peak hour traffic volumes.

- NB S. College Street at S. Donahue Drive
- NB S. College Street at Woodfield Drive
- NB S. College Street at Thach Avenue
- SB N. College Street at Magnolia Avenue
- NB N. College Street at EUD/Shug Jordan Pkwy. (included as future phase of City project)
- SB N. College at Farmville Road
- EB Glenn Avenue at N. College Street

Left-Turn Lane Warrant Evaluations with Projected Traffic Growth

Projected peak hour traffic volumes were compared with the left-turn lane warrant criteria outlined in the National Cooperative Highway Research Program (NCHRP) Report 457 *Evaluating Intersection Improvements: An Engineering Study Guide*, published by the Transportation Research Board. The results of the left-turn lane warrant evaluations for projected peak hour volumes indicates left-turn lanes would not be warranted at any other intersections than those listed as warranted in the existing conditions left-turn lane evaluations.

RECOMMENDED IMPROVEMENTS WITH PROJECTED TRAFFIC GROWTH

Based upon the analyses and evaluations conducted for the College Street Corridor for existing conditions and projected ten (10) year conditions, recommendations are made to help improve traffic operations along the corridor at study intersections and to address any capacity or safety deficiencies identified. These improvements are in addition to the improvements recommended for existing conditions.

S. College Street at East University Drive/Shug Jordan Parkway

Improvements were developed for the S. College Street at East University Drive/Shug Jordan Parkway intersection as summarized in the following and illustrated in **Figure 21**.

- Widen E. University Drive and Shug Jordan Parkway approaches to provide for offset left-turn lanes to improve visibility.

S. College Street at S. Donahue Drive

Improvements were developed for the S. College Street at S. Donahue Drive intersection as summarized in the following and illustrated in **Figure 22**.

- Construct a right-turn lane on northbound S. College Street.

S. College Street at Thach Avenue

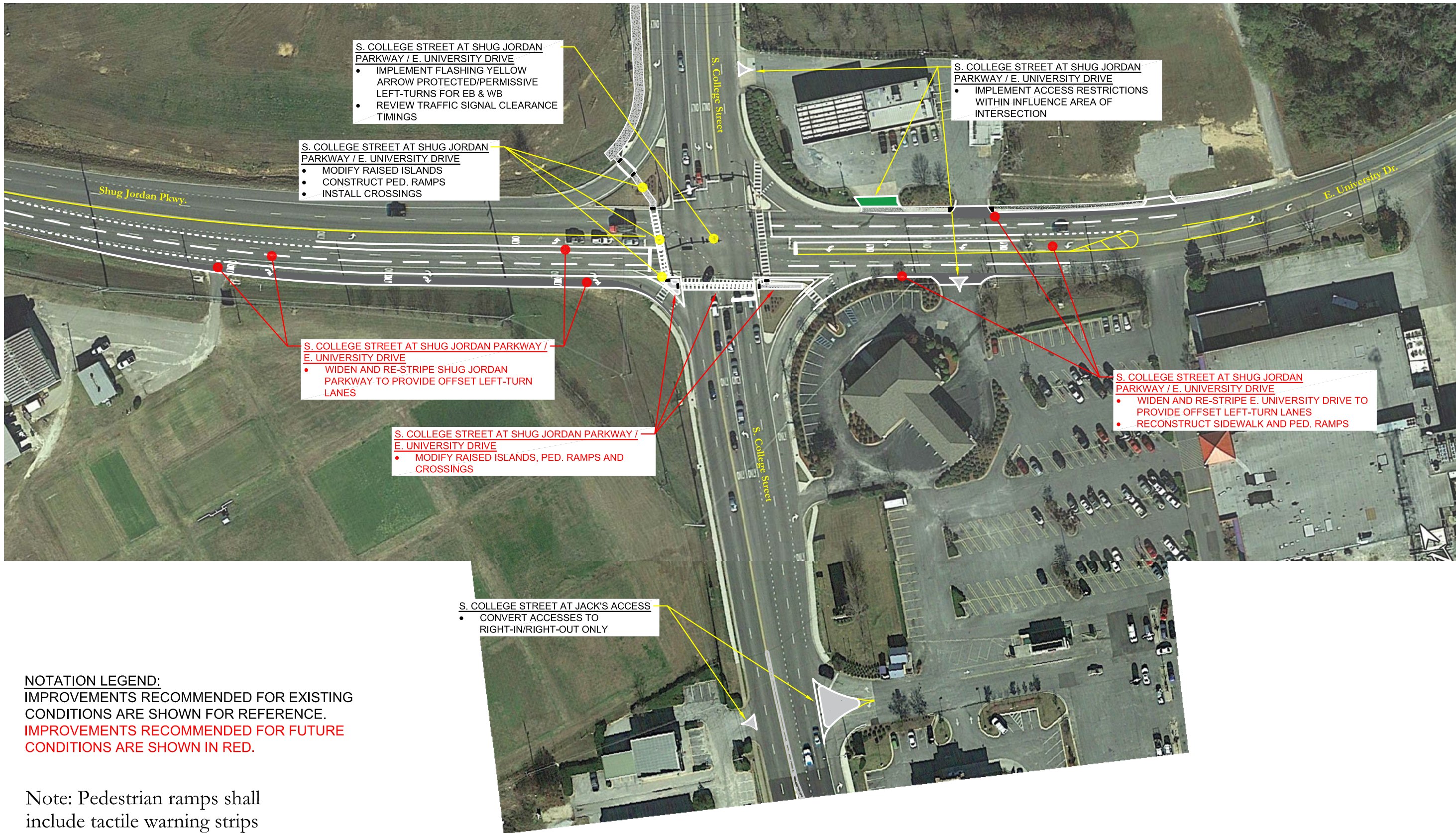
Improvements were developed for the S. College Street at Thach Avenue intersection as summarized in the following and illustrated in **Figure 23**.

- Construct a right-turn lane on northbound S. College Street.

N. College Street at Glenn Avenue

Improvements were developed for the N. College Street at Glenn Avenue intersection as summarized in the following and illustrated in **Figure 24**.

- Construct a westbound left-turn lane on Glenn Avenue.
- It should be noted that a right-turn lane would be warranted for the eastbound approach of Glenn Avenue, however a right-turn lane would not be constructible due to the close proximity of an adjacent building structure.

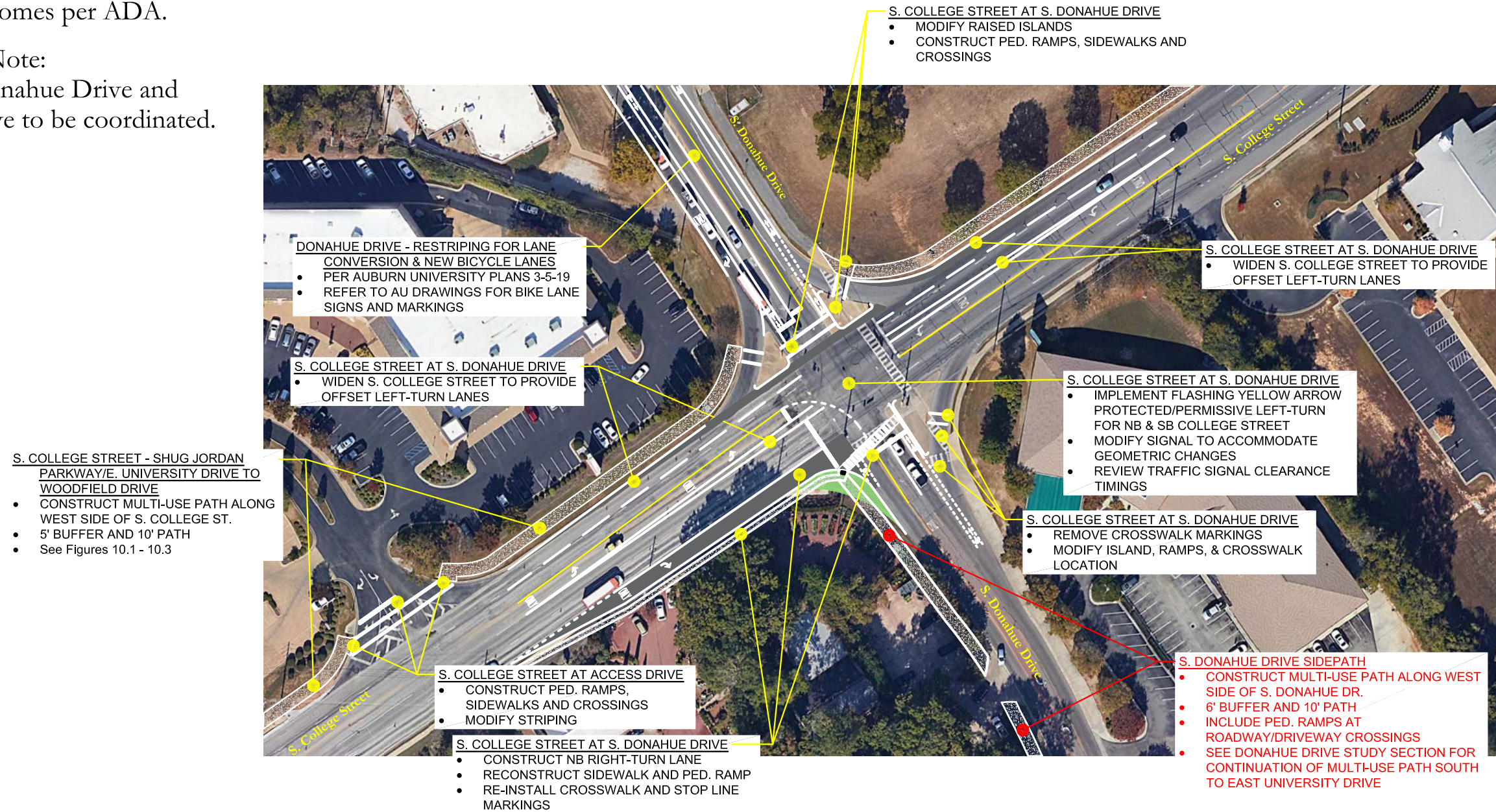


NOTATION LEGEND:
 IMPROVEMENTS RECOMMENDED FOR EXISTING CONDITIONS ARE SHOWN FOR REFERENCE.
 IMPROVEMENTS RECOMMENDED FOR FUTURE CONDITIONS ARE SHOWN IN RED.

Note: Pedestrian ramps shall include tactile warning strips and truncated domes per ADA.

Note: Pedestrian ramps shall include tactile warning strips and truncated domes per ADA.

Signal System Note:
Signals at S. Donahue Drive and Woodfield Drive to be coordinated.



NOTATION LEGEND:
IMPROVEMENTS RECOMMENDED FOR EXISTING CONDITIONS ARE SHOWN FOR REFERENCE.
IMPROVEMENTS RECOMMENDED FOR FUTURE CONDITIONS ARE SHOWN IN RED.

SKIPPER
CONSULTING INC

Legend	
	Required Pavement
	Required Grass
	Required Multi-Use Path/Sidewalk
	Required Ped. Ramp





- S. COLLEGE STREET AT THACH AVENUE**
- CONSTRUCT WB RIGHT-TURN LANE
 - RECONSTRUCT SIDEWALK AND PED. RAMPS
 - RELOCATE CROSSWALK MARKINGS

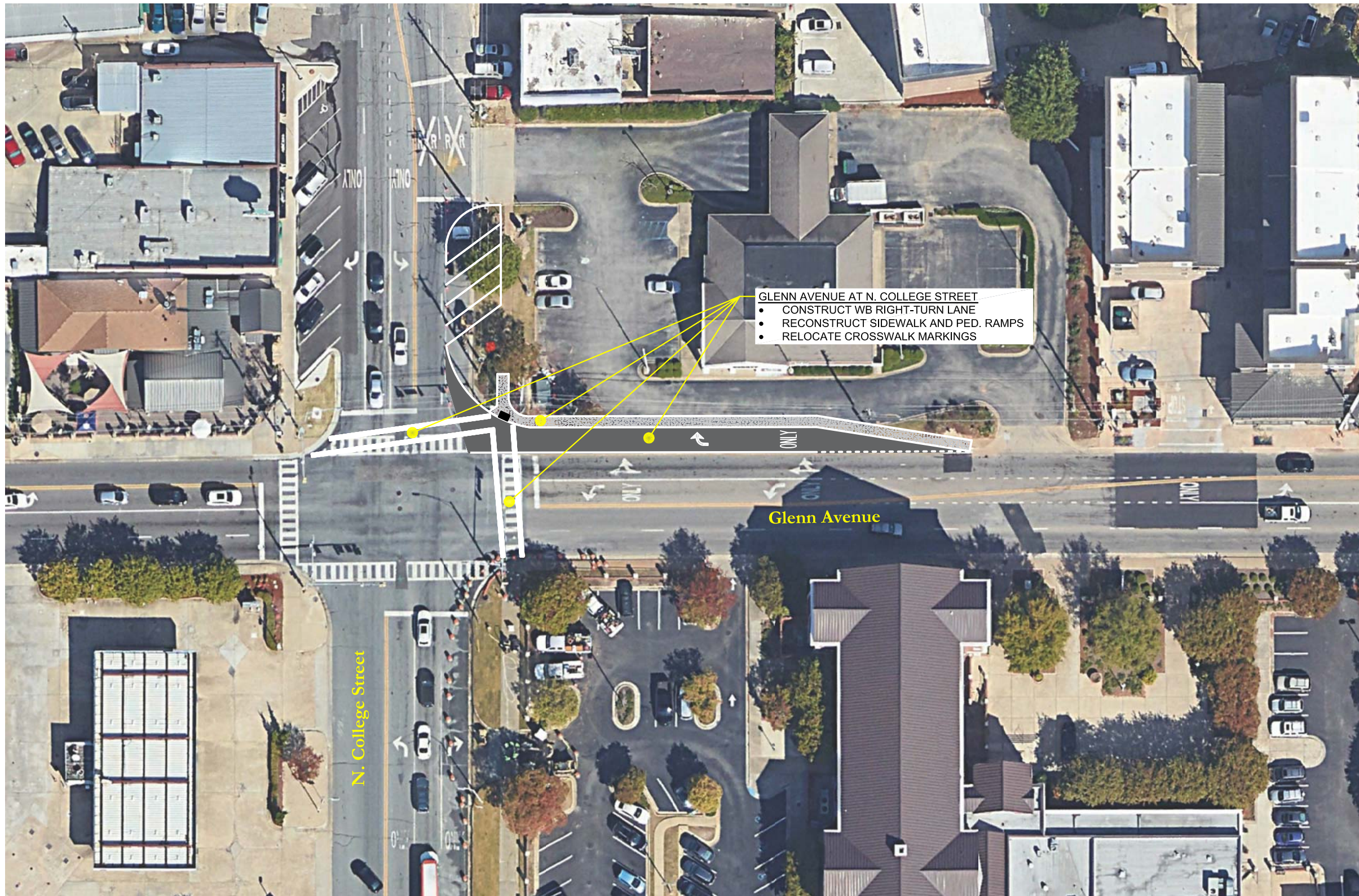
Note: Pedestrian ramps shall include tactile warning strips and truncated domes per ADA.

SKIPPER
CONSULTING INC

- Legend**
- Required Pavement
 - Required Grass
 - Required Sidewalk
 - Required Ped. Ramp



Figure 23
S. College St. at Thach Avenue
Future Improvements



GLENN AVENUE AT N. COLLEGE STREET

- CONSTRUCT WB RIGHT-TURN LANE
- RECONSTRUCT SIDEWALK AND PED. RAMPS
- RELOCATE CROSSWALK MARKINGS

Note: Pedestrian ramps shall include tactile warning strips and truncated domes per ADA.

SKIPPER
CONSULTING INC





Legend	
	Required Pavement
	Required Grass
	Required Sidewalk
	Required Ped. Ramp



Figure 24
Glenn Ave. at N. College St.
Future Improvements

N. College Street at E. University Drive/Shug Jordan Parkway

As mentioned previously, the City of Auburn has an active project to construct improvements at the N. College Street at E. University Drive/Shug Jordan Parkway intersection to include construction of eastbound and westbound right-turn lanes. In addition, Flashing Yellow Arrow (FYA) left-turn phasing for all approaches is planned. A northbound right-turn lane is recommended and is planned for construction in a Future Phase by the City of Auburn. For analysis purposes, the northbound right-turn lane was included. In addition, a sidewalk along the south side of E. University Drive to the east is planned as part of a Future Phase.

In addition to the City of Auburn project for improvements as outlined above for existing conditions and future phase improvements, it is recommended the eastbound approach of Shug Jordan Parkway be widened to provide additional left-turn lane storage (approximately 450 feet of storage). **Figure 25** illustrates the recommended improvements.

ANALYSES WITH RECOMMENDED IMPROVEMENTS AND PROJECTED TRAFFIC GROWTH

Intersection Capacity Analysis with Improvements and Projected Traffic Growth

Capacity analyses were conducted for the study intersections assuming existing improvements (**Figures 4-16**), recommended future improvements (outlined above and illustrated in **Figures 21-25**) and projected ten (10) traffic volumes (presented in **Figures 19** and **Figure 20**) would be in place. Capacity analyses were conducted using methods of the *Highway Capacity Manual*, as previously introduced. **Table 12** provides levels of service for study intersections with recommended improvements and projected ten (10) traffic volumes in place.

Table 12 indicates each of the study intersections would operate with overall levels of service “D” or better with the recommended improvements and projected traffic volumes in place. The only exception would be the College Street at Magnolia Avenue intersection which is expected to operate at a level of service “F” during the afternoon peak hour, with several traffic movements operating at a level of service “E” and “F”. For existing conditions, the only less than acceptable level of service was a level of service “E” for the Magnolia Avenue eastbound through/right lane. The significant increase in failing levels of service over the next ten years reflects the significant increase in traffic volumes due to continued development in the area, particularly redevelopment of lower-density parcels on Glenn Avenue. The inadequate levels of service are due in large part to the high pedestrian traffic flows at the intersection. If all pedestrian traffic were removed, all movements at the intersection would operate at acceptable levels of service for future 2028 conditions. Due to the environment at this intersection (limited right of way, intense development, pedestrian traffic) any roadway improvements which would be beneficial to traffic flow would be detrimental to the operation of other modes of transportation and adjacent land uses.

Table 12 also indicates the eastbound left-turn from Longleaf Drive and the northbound left-turn from S. College Street onto Longleaf Drive would operate at levels of service “E”. This is primarily attributable to the cycle length required for the coordination on S. College Street. Although some delay would be realized for these left-turning movements, the coordination timings would aid the movement of traffic along S. College Street. The delay for these movements would be related to cycle length requirements of the coordinated signal system to accommodate the travel demand on S. College Street and the purpose of the coordinated signal system to more effectively move traffic along S. College Street. Although the improvements outlined for these intersections do not reflect improved levels of service, it is anticipated improved operations would be realized with the access restrictions within the influence area of the intersections and the recommended offset left-turn lanes on E. University Drive and Shug Jordan Parkway.

As indicated in **Table 12** poor level of service on some side streets at unsignalized intersections are anticipated. These levels of service reflect the delay vehicles attempting to turn left from the side street experience while waiting for gaps in the College Street traffic flow. This is typical for a minor roadway at a side street stop condition intersecting a major roadway such as College Street. One such intersection to note would be westbound Harmon Drive which would operate at a level of service “F” for both peak hours evaluated. Should delay become excessive for the motorists attempting to turn left onto S. College Street, Harmon Drive connects to Veterans Parkway where motorists could access S. College Street via a traffic signal. Similarly, motorists on eastbound Bragg Avenue have the option through public roadways to access Drake Avenue to access N. College Street via a traffic signal. Should issues worsen for the side street approaches at these and other locations, restricting the side street left-turn movements would be an option.

Table 12 - Intersection Levels of Service with Improvements and Projected Traffic

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Shell Toomer Parkway (traffic signal)	EB Park Access	Left	D	D
		Through/Right	D	D
	WB Shell Toomer Pkwy/	Left	D	D
		Through	D	D
	NB College St.	Right	-	-
		Left	A	A
		Through	A	A
	SB College St.	Right	A	A
		Left	A	A
	Overall LOS			A
S. College Street at I-85 NB Ramps (traffic signal)	I-85 NB Exit Ramp	Left	D	D
		Right	-	-
	NB College St.	Through	B	B
		Right	-	-
	SB College St.	Left	D	D
		Through	A	A
Overall LOS			B	C
S. College Street at I-85 SB Ramps (traffic signal)	I-85 SB Exit Ramp	Left	D	D
		Right	-	-
	NB College St.	Left	A	A
		Through	A	A
	SB College St.	Through	A	A
		Right	-	-
Overall LOS			A	A
S. College Street at Veterans Boulevard (traffic signal)	EB Veterans Blvd.	Left	D	D
		Through	D	D
		Right	D	D
	WB Veterans Blvd.	Left	D	D
		Through/Right	D	D
	NB College St.	Left	A	A
		Through	A	A
		Right	A	A
	SB College St.	Left	A	A
		Through	B	B
Right		A	A	
Overall LOS			A	B

Table 12 (continued) - Intersection Levels of Service with Improvements and Projected Traffic

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Longleaf Drive (traffic signal)	EB Longleaf Dr.	Left	E	E
		Through/Right	D	D
	WB Longleaf Dr.	Left	D	D
		Through	D	D
	NB College St.	Right	-	-
		Left	D	E
		Through	C	D
	SB College St.	Right	-	-
		Left	D	D
		Through	B	C
Overall LOS			D	D
S. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	C	C
		Through	D	D
		Right	-	-
	WB E. University Dr.	Left	C	D
		Through/Right	D	D
	NB College St.	Left	D	D
		Through	A	B
		Right	-	-
	SB College St.	Left	D	D
		Through	C	D
		Right	A	-
	Overall LOS			C
S. College Street at Harmon Drive (side street stop)	EB Mason Jar	Left/Thru/Right	A	B
	WB Harmon Dr.	Left/Through	F	F
		Right	C	C
	SB College St.	Left	B	B

Table 12 (continued) - Intersection Levels of Service with Improvements and Projected Traffic

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at S. Donahue Drive (traffic signal)	EB Donahue Dr.	Left	C	D
		Through	D	C
		Right	-	-
	WB S. Donahue Dr.	Left	D	C
		Through	C	C
		Right	C	D
	NB College St.	Left	A	B
		Through	A	B
		Right	-	-
	SB College St.	Left	A	B
Through/Right		B	B	
Overall LOS			B	C
S. College Street at Kimberly Drive (side street stop)	WB Kimberly Dr.	Left/Right	B	B
	SB College St.	Left	B	A
S. College Street at Woodfield Drive (traffic signal)	EB Woodfield Dr.	Left/Through	C	C
		Right	-	-
	WB Woodfield Dr.	Left/Through/Right	D	D
	NB College St.	Left	A	A
		Through	A	A
		Right	A	A
	SB College St.	Left	A	A
		Through/Right	A	A
Overall LOS			B	B
S. College Street at Samford Avenue (traffic signal)	EB Samford Ave.	Left	B	B
		Through	C	C
		Right	B	C
	WB Samford Ave.	Left	B	C
		Through/Right	C	C
	NB College St.	Left	C	C
		Through/Right	C	C
	SB College St.	Left	C	C
Through/Right		C	C	
Overall LOS			C	C

Table 12 (continued) - Intersection Levels of Service with Improvements and Projected Traffic

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
S. College Street at Roosevelt Drive/ Miller Avenue (traffic signal)	EB Roosevelt Dr.	Left	B	B
		Through/Right	B	B
	WB Miller Ave.	Left/Thru/Right	B	B
	NB College St.	Left	C	B
		Through/Right	A	B
	SB College St.	Left	B	B
		Through/Right	B	B
Overall LOS			B	B
S. College Street at Thach Avenue (traffic signal)	EB Thach Ave.	Left	C	D
		Through/Right	C	D
	WB Thach Ave.	Left	B	C
		Through	B	B
	NB College St.	Right	B	C
		Left	C	C
	NB College St.	Through	C	C
		Right	C	C
	SB College St.	Left	C	C
		Through/Right	C	C
Overall LOS			C	C
College Street at Magnolia Avenue (traffic signal)	EB Magnolia Ave.	Left	C	C
		Through/Right	C	F
	WB Magnolia Ave.	Left	C	D
		Through/Right	C	F
	NB College St.	Left	B	D
		Through	B	C
	NB College St.	Right	B	B
		Left	B	C
SB College St.	Through/Right	C	D	
	Overall LOS			C
N. College Street at Tichenor Avenue (side street stop)	EB Alley	Left/Thru/Right	C	C
	WB Tichenor Ave.	Left/Thru/Right	B	B
	NB College St.	Left	A	A
	SB College St.	Left	A	A

Table 12 (continued) - Intersection Levels of Service with Improvements and Projected Traffic

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service	
			AM Peak	PM Peak
N. College Street at Glenn Avenue (traffic signal)	EB Glenn Ave.	Left	C	C
		Through/Right	C	D
	WB Glenn Ave.	Left	C	C
		Through	C	D
	NB College St.	Right	C	C
		Left	C	C
	NB College St.	Through	C	D
		Right	C	D
	SB College St.	Left	C	C
		Through	C	D
SB College St.	Right	D	D	
	Overall LOS			C
N. College Street at Mitcham Avenue (traffic signal)	WB Mitcham Ave.	Left	B	B
		Right	B	C
	NB College St.	Through	B	C
		Right	A	A
	SB College St.	Left	A	B
		Through	B	A
Overall LOS			B	B
N. College Street at Bragg Avenue (side street stop)	EB Bragg Ave.	Left	E	F
	EB Bragg Ave.	Right	F	C
N. College Street at Bragg Avenue (side street stop)	NB College St.	Left	B	B
	NB College St.	Left	B	B
N. College Street at Drake Avenue (traffic signal)	EB Drake Ave.	Left	B	B
		Thru/Right	B	B
	WB Drake Ave.	Left	B	B
		Thru/Right	B	B
	NB College St.	Left	B	B
		Through/Right	A	B
	NB College St.	Left	A	B
		Through/Right	A	B
SB College St.	Left	A	B	
	Through/Right	B	A	
Overall LOS			B	B

Table 12 (continued) - Intersection Levels of Service with Improvements and Projected Traffic

Intersection (traffic control)	Approach	Movement/Lane Group	Level of Service		
			AM Peak	PM Peak	
N. College Street at Shelton Mill Road (traffic signal)	WB Shelton Mill Rd.	Left	B	B	
		Right	B	B	
	NB College St.	Through	B	B	
		Right	B	B	
	SB College St.	Left	A	A	
		Through	A	A	
	Overall LOS			B	A
N. College Street at East University Drive/ Shug Jordan Parkway (traffic signal)	EB Shug Jordan Pkwy.	Left	B	D	
		Through	C	C	
		Right	-	-	
	WB E. University Dr.	Left	C	C	
		Through	C	C	
		Right	-	-	
	NB College St.	Left	D	D	
		Through	D	D	
		Right	-	-	
	SB College St.	Left	D	D	
		Through	D	D	
		Right	-	-	
	Overall LOS			C	C
	N. College Street at Asheton Lane (traffic signal)	WB Asheton Ln.	Left/Right	C	D
		Northbound	Through	A	A
Right			A	A	
SB College St.		Left	A	A	
		Through	A	A	
Overall LOS			A	A	
N. College Street at Farmville Road (roundabout)	EB Farmville Rd.	Left/Thru + Right	B	A	
	WB Farmville Rd.	Left/Thru + Right	A	B	
	NB College St.	Left/Thru/Right	B	C	
	SB College St.	Left/Thru/Right	B	B	

Arterial Segment Capacity Analysis with Recommended Improvements Arterial segment capacity analyses for peak hour conditions along the College Street Corridor were conducted assuming the recommended improvements, outlined above, and projected traffic growth would be in place along the College Street corridor. These capacity analyses were conducted using methods outlined in the

Highway Capacity Manual, as previously introduced. Levels of service for the arterial analyses conducted for the College Street corridor are summarized in **Table 13**.

Table 13 - Arterial Segment LOS with Improvements and Projected Traffic

Northbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
Shell Toomer Pkwy.	I-85 NB Ramps	0.20	D	D
I-85 NB Ramps	I-85 SB Ramps	0.19	E	D
I-85 SB Ramps	Veterans Boulevard	0.20	C	C
Veterans Boulevard	Lingleaf Drive	0.75	B	C
Lingleaf Drive	EUD/Shug Jordan (S)	0.33	D	E
EUD/Shug Jordan (S)	Donahue Drive	0.72	A	A
Donahue Drive	Woodfield Drive	0.38	C	B
Woodfield Drive	Samford Avenue	0.71	C	C
Samford Avenue	Roosevelt Dr./Miller Ave.	0.18	C	C
Roosevelt Dr./Miller Ave.	Thach Avenue	0.19	D	D
Thach Avenue	Magnolia Avenue	0.17	D	D
Magnolia Avenue	Glenn Avenue	0.18	E	F
Glenn Avenue	Mitcham Avenue	0.09	E	F
Mitcham Avenue	Drake Avenue	0.26	B	B

Southbound College Street Arterial Analysis				
From	To	Segment Length (miles)	Arterial LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	Mitcham Avenue	0.26	C	C
Mitcham Avenue	Glenn Avenue	0.09	F	F
Glenn Avenue	Magnolia Avenue	0.18	F	F
Magnolia Avenue	Thach Avenue	0.17	E	E
Thach Avenue	Roosevelt Dr./Miller Ave.	0.19	D	D
Roosevelt Dr./Miller Ave.	Samford Avenue	0.18	E	E
Samford Avenue	Woodfield Drive	0.71	A	B
Woodfield Drive	Donahue Drive	0.38	B	B
Donahue Drive	EUD/Shug Jordan (S)	0.72	B	C
EUD/Shug Jordan (S)	Lingleaf Drive	0.33	C	E
Lingleaf Drive	Veterans Boulevard	0.75	A	B
Veterans Boulevard	I-85 SB Ramps	0.20	E	C
I-85 SB Ramps	I-85 NB Ramps	0.19	C	C
I-85 NB Ramps	Shell Toomer Pkwy.	0.20	B	B

N. College Street Two-Lane Highway Analysis				
From	To	Segment Length (miles)	Two-Way LOS by Segment	
			AM Peak	PM Peak
Drake Avenue	EUD/Shug Jordan (N)	1.56	D	D
EUD/Shug Jordan (N)	Farmville Road	2.13	D	D

As presented in **Table 13**, arterial levels of service for this analysis scenario indicate that levels of service would be similar to conditions with projected traffic volumes and existing improvements as the recommended future improvements generally include intersection capacity improvements and no additional through capacity on S. College Street. However, implementation and maintaining coordinated signal system timings along S. College Street would help improve travel on S. College Street. As traffic volumes increase along S. College Street, travel speeds are expected to decrease especially in segments with close signal spacing. The results of arterial analyses indicate many of the segments along College Street in downtown Auburn (Mitcham Avenue to Samford Avenue) are expected to experience lower travel speeds and resultant levels of service “E” or “F” with regard to the arterial analyses. These levels of service are anticipated as a result of signal spacing and extended cycle lengths to accommodate pedestrian demand in the downtown Auburn area.

Table 14 – Future Daily Roadway Segment Levels of Service

College Street					
From	To	Segment Length (miles)	Cross Section	Future Daily Volume	Roadway LOS by Segment
US-280	Farmville Rd	0.75	2 lane	10,100	C
Farmville Rd	Asheton Ln	1.40	2 lane	13,100	D
Asheton Ln	Shug Jordan/EUD	0.69	2 lane	13,500	E
Shug Jordan/EUD	Shelton Mill Rd	0.93	2 lane	8,900	B
Bragg Ave	Glenn Avenue	0.13	2 lane	14,050	E
Samford Ave	Woodfield Dr	0.71	4 lane	16,900	C
Woodfield Dr	Kimberly Dr	0.19	4 lane divided	18,900	C
Shug Jordan/EUD	Longleaf Dr	0.32	4 lane divided	36,700	F
Longleaf Dr	Harmon Dr	0.21	4 lane divided	34,100	F
I-85	Shell Toomer Pkwy	0.30	4 lane divided	18,700	C

The two-lane segments on N. College Street from Drake Avenue to E. University Drive/Shug Jordan Parkway and E. University Drive/Shug Jordan Parkway to Farmville Road has the capacity to carry projected through traffic volumes. However, when opportunities arise for the addition of left-turn and/or right-turn lanes, it is recommended consideration be given for construction of such lanes at roadways or driveways with significant traffic flows. In addition, left-turn lanes and right-turn lanes should be evaluated for any new accesses or intersections along these segments of N. College Street.

Future Daily Roadway Segment Capacity Analysis

Roadway segment capacity analyses for future 2028 daily traffic conditions along the College Street Corridor were performed using the daily capacity and level of service chart obtained from the Alabama Department of Transportation. This chart is included in **Table 4**, included in a previous section of this report.

Levels of service for the daily roadway segment capacity analyses conducted for College Street are summarized in **Table 14**.