

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

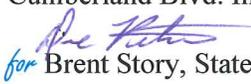
**OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE**

FILE P.I. #0010008
GDOT District 7 - Metro Atlanta
Cobb County

OFFICE Design Policy & Support

DATE January 18, 2012

Cumberland Blvd. Intersection & Streetscape Improvement - PH III

FROM  for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

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

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Bryant Poole, District Engineer
Scott Lee, District Preconstruction Engineer
Jonathan Walker, District Utilities Engineer
Jeremy Busby, Project Manager
BOARD MEMBER - 6th & 13th Congressional Districts

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

County: Cobb
P. I. Number: 0010008
Federal Route Number: N/A
State Route Numbers: N/A

CUMBERLAND BLVD - INTERSECTION IMPROVEMENT & STREETScape - PH III

Submitted for approval:

DATE 9/19/2011

[Signature]
Design Consultant

DATE 9-19-2011

[Signature]
Local Government

DATE 9-19-2011

[Signature]
Office Head

DATE 9/19/2011

[Signature]
Project Manager

Recommendation for approval:

DATE _____

Program Control Administrator

DATE 12/5/2011

* [Signature] / KLP
State Environmental Administrator

DATE 12/2/2011

* [Signature] / KLP
State Traffic Engineer

DATE 11/10/2011

* [Signature] / KLP
Project Review Engineer

DATE 11/23/2011

* [Signature] / KLP
State Utilities Engineer

DATE 12/2/2011

* [Signature] / KLP
District Engineer / District Utilities Engineer

DATE 12/8/2011

* [Signature] / KLP
State Bridge Design Engineer

DATE _____

State Transportation Financial Management Administrator

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

DATE 11-17-11

[Signature]
State Transportation Planning Administrator

* This project is locally funded + is NOT required to be included in the TIP/RTP. However, this project is included in ARC's "Other Recognized Projects" list.

Need and Purpose:

The need and purpose of the proposed project is to reduce congestion and improve level of service at the intersection of Cumberland Boulevard and Cumberland Parkway, reduce the accident rate along Cumberland Boulevard between Spring Road and Akers Mill Road, and to improve the pedestrian facilities on the northern side of the roadway along this corridor. To achieve this objective an additional travel lane will be added to Cumberland Boulevard westbound from Akers Mill Road to Cumberland Parkway. Pedestrian improvements and streetscape features will be constructed on the northern side of Cumberland Boulevard from Spring Road to Akers Mill Road. Lane reconfiguration will be implemented across the I-285 bridge to Spring Hill Parkway to reduce accident potential and to accommodate pedestrian improvements across the northern side of the existing bridge.

Description of the proposed project:

The project consists of the widening of Cumberland Boulevard between Akers Mill Road and Cumberland Parkway from two lanes to three lanes in the westbound direction. This additional lane will allow for a free-flow right turn movement from Akers Mill Road southbound to Cumberland Boulevard westbound. Additional left turn lane improvements will be made where Cumberland Boulevard intersects with Cumberland Parkway, the Cumberland Mall entrance, and Akers Mill Road. Cumberland Blvd. will be widened to the northern side of the roadway so that the Cobb County Transit transfer station is not impacted. West of the I-285 bridge, Cumberland Boulevard will be restriped and resigned to better delineate which lanes become the left turn lanes for Spring Road and which lanes continue through the Spring Road intersection on Cumberland Boulevard. Minimal widening will be required to accommodate the through lane transition tapers.

New sidewalk will be constructed along the northern side of Cumberland Boulevard. Retaining walls will be required to minimize impacts to the Cumberland Mall parking lots and the Cumberland Place Shopping Center parking lots. The project will include installing streetscape features such as street trees and landscaping, street and pedestrian lighting, street furniture, pedestrian plazas, corner treatments, and stamped asphalt crosswalks along both sides of Cumberland Boulevard from Akers Mill Road to Spring Road. The existing bridge over 285 will be restriped with 11 foot lanes. A new sidewalk and bridge parapet will be constructed on the northern side of the bridge.

The additional westbound lane on Cumberland Boulevard from Akers Mill Road to Cumberland Parkway will reduce congestion and improve LOS. The restriping and reconfiguration of the northbound lanes of Cumberland Boulevard will reduce driver confusion and improve LOS. The additional sidewalk along the northern side of Cumberland Boulevard will improve pedestrian facilities in the area satisfying the need and purpose objective for this project. The project length will be 0.85 miles.

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

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

The conforming model shows two through lanes in each direction within the project limits. This project adds a third westbound lane between Cumberland Parkway and Akers Mill Road. This third lane will serve as an auxiliary lane, not a through lane, thus the project is consistent with the model.

PDP Classification: Major _____ Minor X

Federal Oversight: Full Oversight () Exempt (X) State Funded () or Other ()

Functional Classification: Urban Collector Street

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

State Route Number(s): N/A

Traffic (AADT):

Open Year (2015): 22,200 VPD

Design Year (2035): 25,990 VPD

Existing Design Features:

- Typical Section:
 - Varies from an 8 lane flush median urban section, with 24-inch curb & gutter, 1.5-foot grass strip, and 5-foot sidewalk to a 4 lane raised median urban section with 24-inch curb & gutter, 8-foot sidewalk on the southern side of the roadway and no sidewalk on the northern side of the roadway. The existing lane widths vary from 11 to 12 feet in width, but the typical lane is 12-foot in width.
- Posted speed:
35 mph
- Minimum radius for curve:
615'
- Maximum super-elevation rate for curve:
4.00%
- Maximum grade:
Mainline: 9.00%
Crossroads: 9.00%
Driveways: 7.00%
- Width of right of way:
 - Varies from 80' to 100'
- Major structures:
 - Bridge over Interstate 285 (Structure ID: 067-0129-0)
 - Length: 319.50' Width: 58'-8"
 - Sufficiency Rating: 60.85
- Major Intersections:
 - Spring Road at Cumberland Boulevard
 - Spring Hill Road at Cumberland Boulevard
 - Cumberland Parkway at Cumberland Boulevard
 - Akers Mill Road at Cumberland Boulevard
- Existing Length of Roadway Segment:
0.85 miles

- Major Intersections, median openings and signal locations:
 - Spring Road at Cumberland Boulevard – Existing signalized intersection
 - No intersection modifications
 - Spring Hill Parkway at Cumberland Boulevard – Existing signalized intersection
 - Lane configuration adjustments for the northbound approach of Cumberland Boulevard
 - Cumberland Parkway at Cumberland Boulevard – Existing signalized intersection
 - Additional left turn lane from Cumberland Boulevard westbound to Cumberland Parkway Southbound
 - Median Opening – Cumberland Mall Entrance – Existing signalized intersection
 - Median opening located 1000’ from Cumberland Parkway at Cumberland Boulevard intersection
 - Additional westbound lane to be added to Cumberland Boulevard.
 - Median Opening – Cumberland Mall Entrance/Marriot Hotel & Office Park Entrance – Existing unsignalized median opening.
 - Median opening located 400’ from Akers Mill Road at Cumberland Boulevard intersection.
 - Additional westbound lane to be added to Cumberland Boulevard.
 - Akers Mill Road at Cumberland Boulevard – Existing Signalized Intersection
 - Free flow right turn lane will be added from Akers Mill southbound to Cumberland Boulevard Westbound.
- Transportation Management Plan Anticipated: Yes () No (X)
- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
DESIGN SPEED:			X
LANE WIDTH:			X
SHOULDER WIDTH:			X
BRIDGE WIDTH:			X
HORIZONTAL ALIGNMENT:			X
SUPERELEVATION:			X
VERTICAL ALIGNMENT:			X
GRADE:			X
STOPPING SIGHT DISTANCE:			X
CROSS SLOPE:			X
VERTICAL CLEARANCE:			X
LATERAL OFFSET TO OBSTRUCTION:			X
BRIDGE STRUCTURAL CAPACITY:			X

Note: Eleven foot travel lanes will be utilized to minimize right-of-way impacts.

- Design Variances: *Lateral Offset to Obstruction for lighting in border area.*

AKP

- Environmental Concerns: None
- Anticipated Level of environmental analysis:
 - Are Time Saving Procedures Appropriate: Yes () No ()
 - Categorical exclusion anticipated: Yes () No ()
 - Environmental Assessment/Finding of No Significant Impact anticipated: Yes () No ()
 - Environmental Impact Statement (EIS) Yes () No ()
- Utility Involvements:
 - Communications
 - § American Fiber Systems
 - § AT&T
 - § Fiberlight, LLC
 - § Level 3 Communications
 - § MCI Network Services, Inc.
 - § Sunesys, LLC
 - § Teleport Communications Group
 - § Time Warner Communications
 - § US Carrier Telecom, LLC
 - Power
 - § Georgia Power
 - Gas
 - § Atlanta Gas Light
 - ITS
 - § Cobb County DOT Traffic Signal Fiber
 - Cable
 - § Comcast
 - Water
 - § Cobb County Marietta Water Authority
 - § Cobb County Water System
- Public Interest Determination Policy and Procedure Required?: Yes () No ()
- VE Study Anticipated: Yes () No ()

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST	MITIGATION
By Whom	Local Gov.	Local Gov.	Local Gov.	Local Gov.	Local Gov.
\$ Amount	\$788,416	\$1,015,864	\$338,991	\$ 5,936,059	N/A

Project Activities Responsibilities:

- Design: Cumberland CID / ARCADIS
- Right-of-Way Acquisition: Cobb County DOT
- Right-of-Way funding (real property): TBD
- Relocation of Utilities: TBD
- Railroad Coordination (if required): Cobb County DOT
- Letting of Contract: Cobb County DOT
- Supervision of construction: Cobb County DOT
- Providing Material Pits: Contractor
- Providing detours: Contractor
- Environmental Studies/Documents/Permits: Cumberland CID / ARCADIS
- Environmental Mitigation: N/A

Coordination

- Concept meeting date and brief summary: March 31, 2009 (minutes attached)
- P A R meetings, dates and results: N/A
- FEMA, USCG and/or TVA: N/A
- Public Involvement: A Public Meeting is not required.
- Local Government Comments: N/A
- Other projects in the area:
 - Spring Road Multi-use Trail
 - Akers Mill Streetscapes
 - Other phases of Cumberland Loop Road Streetscapes
 - Cumberland Parkway at Paces Ferry Road Intersection Improvements
- Railroads: CSX – No anticipated impacts
- Other coordination to date: Have coordinated with utility companies to obtain existing locations and have coordinated with Georgia Power regarding the street and pedestrian lighting.

Scheduling – Responsible Parties’ Estimate

- | | | |
|--|------------------|---------------|
| • Time to complete the environmental process: | Begin: Nov. 2010 | End: May 2012 |
| • Time to complete preliminary construction plans: | Begin: TBD | End: TBD |
| • Time to complete right-of-way plans: | Begin: TBD | End: TBD |
| • Time to complete the Section 404 Permit: | Begin: TBD | End: TBD |
| • Time to complete final construction plans: | Begin: TBD | End: TBD |
| • Time to complete to purchase right-of-way: | Begin: TBD | End: TBD |
| • Other major items that will affect the project schedule: | N/A | |

Other alternatives considered:

- No build – Would not meet the need and purpose of the project.
- No pedestrian improvements over 285 – Eliminating the pedestrian improvements on the northern side of Cumberland Boulevard between Spring Hill Parkway and Cumberland Parkway would eliminate the need for improvements to the existing bridge over I-285. Signs would be erected instructing pedestrians to cross to the southern side of

Project Concept Report page 9
P.I. Number: 0010008
County: Cobb

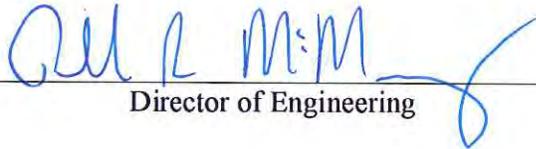
Cumberland Boulevard at the intersections of Spring Hill Parkway and Cumberland Parkway to utilize the existing pedestrian facilities already in place over I-285.

Comments: None

Attachments:

1. Detailed Cost Estimate
 - a. Construction including Engineering and Inspection
 - b. Completed Liquid AC Adjustment form
 - c. Right-of-Way
 - d. Utilities
2. Concept Layout
3. Existing Conditions Layout
4. Typical Sections
5. Accident Summaries
6. Traffic Diagrams
7. Capacity analysis summary
8. Bridge inventory
9. Existing Bridge Plans
10. Minutes from two Cobb County DOT concept meetings
11. Traffic memo referred to in second Cobb County DOT concept meeting minutes
12. PFA
13. Conforming plan's network schematics showing thru lanes
14. Local Government Lighting Agreement

Concur:



Director of Engineering

Approve:



Chief Engineer

Date:

1-11-12

STATE HIGHWAY AGENCY

DATE : 10/20/2011

PAGE : 1

JOB ESTIMATE REPORT

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JOB NUMBER : 0010008 SPEC YEAR: 01
 DESCRIPTION: CUMBERLAND BLVD IMPROVEMENT
 PI 0010008

ITEMS FOR JOB 0010008

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0001	009-3500		LS	MISC LANDSCAPE ITEMS	1.000	515000.00	515000.00
0004	109-0300		*\$*	PRICE ADJ - ASPHALT CEMENT	1.000	85195.59	85195.59
0005	150-1000		LS	TRAFFIC CONTROL - 0010008	1.000	590000.00	590000.00
0010	210-0100		LS	GRADING COMPLETE - 0010008	1.000	1400000.00	1400000.00
0015	310-5060		SY	GR AGGR BS CRS 6IN INCL MATL	290.000	15.12	4385.10
0020	310-5120		SY	GR AGGR BS CRS 12IN INCL MATL	6100.000	30.76	187649.66
0025	402-1802		TN	RECYL AC PATCHING, INCL BM&HL	110.000	112.89	12418.61
0030	402-1812		TN	RECYL AC LEVELING, INC BM&HL	460.000	66.44	30565.15
0035	402-3121		TN	RECYL AC 25MM SP, GP1/2, BM&HL	998.000	64.01	63889.94
0040	402-3130		TN	RECYL AC 12.5MM SP, GP2, BM&HL	2673.000	63.80	170547.40
0045	402-3190		TN	RECYL AC 19 MM SP, GP 1 OR 2 , INC BM&HL	499.000	67.36	33613.02
0050	413-1000		GL	BITUM TACK COAT	4100.000	2.11	8682.32
0055	432-5010		SY	MILL ASPH CONC PVMT, VARB DEPTH	7200.000	2.57	18515.95
0060	441-0104		SY	CONC SIDEWALK, 4 IN	2000.000	31.93	63862.94
0065	441-0740		SY	CONC MEDIAN, 4 IN	800.000	23.45	18764.46
0070	441-5008		LF	CONC HEADER CURB, 6 IN, TP 7	48.000	11.97	574.56
0075	441-6216		LF	CONC CURB & GUTTER/ 8"X24"TP2	5600.000	11.27	63166.15
0080	441-6730		LF	CONC CURB & GUTTER/ 12"X30"TP7	5400.000	20.00	108000.00
0095	441-9000		EA	PRECAST BUMPER BLOCK	33.000	72.93	2406.81
0100	446-1100		LF	PVMT REF FAB STRIPS, TP2, 18 INCH WIDTH	6100.000	3.04	18584.32
0105	500-3101		CY	CLASS A CONCRETE	1.000	350.66	350.66
0110	500-3800		CY	CL A CONC, INCL REINF STEEL	481.000	615.51	296060.52
0115	500-9999		CY	CL B CONC, BASE OR PVMT WIDEN	210.000	149.05	31300.52
0120	540-1202		LS	REM OF PARTS OF EX BR, BR NO - 0010008	1.000	84479.25	84479.25
0125	543-1500		LS	REPAIR OF BRIDGE - COMPLETE	1.000	230000.00	230000.00
0130	550-1180		LF	STM DR PIPE 18", H 1-10	2000.000	28.76	57538.68
0135	550-1181		LF	STM DR PIPE 18", H 10-15	780.000	33.26	25949.83
0140	550-1240		LF	STM DR PIPE 24", H 1-10	410.000	33.76	13844.41
0145	550-1300		LF	STM DR PIPE 30", H 1-10	89.000	49.10	4370.26
0150	550-1362		LF	STM DR PIPE 36", H 15-20	11.000	62.31	685.43
0155	550-1424		LF	STM DR PIPE 42", H 25-30	590.000	113.34	66873.60
0160	550-1484		LF	STM DR PIPE 48", H 25-30	53.000	107.59	5702.74
0165	600-0001		CY	FLOWABLE FILL	600.000	148.67	89205.92
0170	610-1880		LF	REM STORM DRAIN PIPE	1000.000	16.07	16070.00
0175	610-5705		EA	REM CATCH BASIN	6.000	300.00	1800.00
0180	611-3030		EA	REC STORM SEW MANHOLE, TYPE 1	2.000	1661.81	3323.63
0185	611-8000		EA	ADJUST CATCH BASIN TO GRADE	2.000	1467.99	2935.99

STATE HIGHWAY AGENCY

DATE : 10/20/2011

PAGE : 2

JOB ESTIMATE REPORT

0190	621-4021	LF	CONCRETE SIDE BARRIER, TY 2A	530.000	310.39	164509.59
0195	634-1200	EA	RIGHT OF WAY MARKERS	26.000	103.35	2687.10
0200	641-1100	LF	GUARDRAIL, TP T	500.000	35.64	17822.45
0205	641-5006	EA	GUARDRAIL ANCHORAGE, TP 6	1.000	375.55	375.56
0210	641-5012	EA	GUARDRAIL ANCHORAGE, TP 12	2.000	1736.88	3473.78
0215	643-8300	LF	ORNAMENTAL FENCE	2400.000	48.76	117044.78
0220	668-1100	EA	CATCH BASIN, GP 1	29.000	1959.89	56836.82
0225	668-1110	LF	CATCH BASIN, GP 1, ADDL DEPTH	82.000	153.69	12602.76
0230	668-2100	EA	DROP INLET, GP 1	5.000	1668.00	8340.01
0235	668-2110	LF	DROP INLET, GP 1, ADDL DEPTH	14.000	152.22	2131.22
0240	668-4300	EA	STORM SEW MANHOLE, TP 1	7.000	1789.01	12523.11
0245	668-4311	LF	ST SEW MANHOLE,TP 1,A DEP,CL 1	60.000	180.71	10842.68
0250	682-9030	LS	LIGHTING SYSTEM	1.000	400000.00	400000.00
0260	163-0232	AC	TEMPORARY GRASSING	1.000	432.95	432.95
0265	163-0240	TN	MULCH	31.000	235.06	7287.02
0270	163-0300	EA	CONSTRUCTION EXIT	1.000	1254.89	1254.90
0275	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	160.000	120.53	19285.97
0280	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	1500.000	0.69	1044.05
0285	165-0101	EA	MAINT OF CONST EXIT	1.000	513.62	513.63
0290	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	12.000	306.58	3679.08
0295	167-1500	MO	WATER QUALITY INSPECTIONS	12.000	561.31	6735.78
0300	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	2900.000	2.76	8026.16
0305	700-6910	AC	PERMANENT GRASSING	2.000	471.63	943.27
0310	700-7000	TN	AGRICULTURAL LIME	4.000	26.50	106.00
0315	700-7010	GL	LIQUID LIME	4.000	22.83	91.32
0320	700-8000	TN	FERTILIZER MIXED GRADE	2.000	406.69	813.40
0325	700-8100	LB	FERTILIZER NITROGEN CONTENT	79.000	1.92	152.14
0330	716-2000	SY	EROSION CONTROL MATS, SLOPES	1400.000	0.98	1373.46
0335	615-1200	LF	DIRECTIONAL BORE - 0010008	370.000	9.51	3519.44
0340	636-1020	SF	HWY SGN,TP1MAT,REFL SH TP3	155.000	13.30	2062.41
0345	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	18.000	20.88	375.85
0350	636-1041	SF	HWY SIGNS,TP 2MAT,REFL SH TP 9	117.000	26.36	3084.24
0355	636-2070	LF	GALV STEEL POSTS, TP 7	343.000	7.11	2442.13
0360	636-2090	LF	GALV STEEL POSTS, TP 9	27.000	7.71	208.22
0365	639-2002	LF	STEEL WIRE STRAND CABLE, 3/8"	226.000	3.71	840.44
0370	639-3004	EA	STEEL STRAIN POLE, TP IV	1.000	15000.00	15000.00
0375	639-3004	EA	STEEL STRAIN POLE, TP IV	3.000	16000.00	48000.00
0380	639-3004	EA	STEEL STRAIN POLE, TP IV	1.000	25000.00	25000.00
0385	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	93300.00	93300.00
0390	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	61100.00	61100.00
0395	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 3	1.000	73100.00	73100.00
0400	647-2160	EA	PULL BOX, PB-6	5.000	1448.28	7241.43
0405	647-2170	EA	PULL BOX, PB-7	6.000	1615.44	9692.69
0410	653-0110	EA	THERM PVMT MARK, ARROW, TP 1	2.000	68.50	137.00
0415	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	46.000	66.01	3036.79

STATE HIGHWAY AGENCY

DATE : 10/20/2011

PAGE : 3

JOB ESTIMATE REPORT

0420	653-0210	EA	THERM PVMT MARK, WORD , TP 1	15.000	99.02	1485.31
0425	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	9300.000	0.36	3432.35
0430	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	7700.000	0.35	2722.87
0435	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	285.000	3.47	989.70
0440	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	4560.000	1.69	7709.04
0445	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	9600.000	0.21	2083.68
0450	653-3502	GLF	THERMO SKIP TRAF ST, 5 IN, YEL	900.000	0.31	285.88
0455	653-6004	SY	THERM TRAF STRIPING, WHITE	347.000	2.91	1010.08
0460	653-6006	SY	THERM TRAF STRIPING, YELLOW	270.000	2.98	806.13
0465	654-1001	EA	RAISED PVMT MARKERS TP 1	43.000	3.99	171.66
0470	654-1003	EA	RAISED PVMT MARKERS TP 3	132.000	3.37	445.56
0475	657-1085	LF	PRF PL SD PVT MKG,8",B/W,TP PB	660.000	6.05	3994.31
0480	657-3085	GLF	PRF PL SK PVMT MKG,8",B/W,TPPB	660.000	3.52	2327.24
0485	657-6054	LF	PRF PL SD PVMT MKG,5",YW,TP PB	660.000	4.42	2923.10
0490	682-6233	LF	CONDUIT, NONMETL, TP 3, 2 IN	3900.000	1.88	7336.56
0495	682-9010	EA	SVC POLE RISER	1.000	603.31	603.31
0500	935-1113	LF	OUT PLNT FBR OPT CBL,LOOSE TB,SM,24 FBR	3000.000	1.44	4342.20
0505	935-1511	LF	OUT PLNT FBR OPT CBL,DROP,SM,6 FBR	125.000	1.79	223.78
0510	935-3101	EA	FIBER OPTIC CLOSURE,UNDRGRD,6 FIBER	3.000	477.77	1433.33
0515	935-3103	EA	FIBER OPTIC CLOSURE,UNDRGRD,24 FBR	2.000	418.46	836.93
0520	935-3401	EA	FBR OPTIC CLOSURE,FDC(RACK MTD),6 FBR	3.000	656.25	1968.75
0525	935-4010	EA	FIBER OPTIC SPLICE, FUSION	12.000	62.61	751.41
0530	935-5050	EA	FIBER OPTIC PATCH CORD, SM	3.000	96.78	290.35
0535	935-8000	LS	TESTING	1.000	1823.73	1823.73
0540	935-8000	LS	TESTING	1.000	558.37	558.37
0545	938-1100	EA	INT VIDEO DET SYS ASMBLY, TP A	12.000	4824.33	57892.00
0550	938-1200	EA	PROGRAMMING MONITOR, TYPE A	1.000	356.03	356.03
0555	938-8000	LS	TESTING	1.000	2039.82	2039.82
0560	938-8500	LS	TRAINING	1.000	2710.42	2710.42
0565	939-2305	EA	FIELD SWITCH, TYPE C	1.000	2202.14	2202.15
0570	939-8000	LS	TESTING	1.000	2250.00	2250.00

ITEM TOTAL

5653389.11

INFLATED ITEM TOTAL

5653389.10

TOTALS FOR JOB 0010008

ESTIMATED COST:

5653389.10

E & I (5.0):

282669.46

ESTIMATED TOTAL:

5936058.55

PROJ. NO.	TBD
P.I. NO.	0010008
DATE	9/14/2011

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Sep-11	\$ 3.582
DIESEL		\$ 3.873
LIQUID AC		\$ 570.00

Link to Fuel and AC Index:
<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

LIQUID AC ADJUSTMENTS

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

Asphalt					
Price Adjustment (PA)				79173	\$ 79,173.00
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	912.00	
Monthly Asphalt Cement Price month project let (APL)			\$	570.00	
Total Monthly Tonnage of asphalt cement (TMT)				231.5	

ASPHALT	Tons	%AC	AC ton
Leveling	460	5.0%	23
12.5 OGFC	0	5.0%	0
12.5 mm	2673	5.0%	133.65
9.5 mm SP	0	5.0%	0
25 mm SP	998	5.0%	49.9
19 mm SP	499	5.0%	24.95
	4630		231.5

BITUMINOUS TACK COAT					
Price Adjustment (PA)			\$	6,022.59	\$ 6,022.59
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	912.00	
Monthly Asphalt Cement Price month project let (APL)			\$	570.00	
Total Monthly Tonnage of asphalt cement (TMT)				17.60991378	

Bitum Tack		
Gals	gals/ton	tons
4100	232.8234	17.6099138

PROJ. NO.	TBD
P.I. NO.	0010008
DATE	9/14/2011

CALL NO.

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)					0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	912.00			
Monthly Asphalt Cement Price month project let (APL)			\$	570.00			
Total Monthly Tonnage of asphalt cement (TMT)				0			

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

TOTAL LIQUID AC ADJUSTMENT						\$	85,195.59
-----------------------------------	--	--	--	--	--	----	------------------

Preliminary Right of Way Cost Estimate

Date: June 28, 2011

Project: TBD

Existing/Required R/W: 0.51 acres

Project Termini: Spring Road to Akers Mill Road

Project Description: Cumberland Boulevard Improvements

P.I. Number: 0010008

No. Parcels: 7

Right of Way

Land:

Commercial 20,141 s.f @ \$ 23 /s.f. = \$ 463,243

Residential 0 s.f @ \$ 10 /s.f. = \$ 0

TOTAL

\$ 463,243

Construction Easement

Land:

Commercial 64,051 s.f @ \$ 3 /s.f. = \$ 192,153

Residential 0 s.f @ \$ 10 /s.f. = \$ 0

TOTAL

\$ 192,153

Improvements: N/A

Relocation:

Commercial 0 @ \$25,000/parcel = \$ 0

Residential 0 @ \$40,000/parcel = \$ 0

TOTAL

\$ 0

Damages: Proximity

Consequential

Misc damages due to RW impacts

Parking Spaces

Cost to Cure

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

TOTAL

\$ 0

SUB-TOTAL:

\$ 655,396

Net Cost

\$ 655,396

Scheduling Contingency 10 %

\$ 65,540

Adm/Court Cost 45 %

\$ 294,928

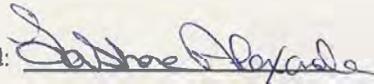
TOTAL

\$ 1,015,864

Total Cost

\$ 1,015,864

Prepared By: ARCADIS

Reviewed / Approved: 

Note: Accuracy of estimate is the sole responsibility of the Preparer.

Note: The Market Appreciation(40%) is not included in this Preliminary Cost Estimate.

Preliminary Utility Cost Estimate

Date: June 28, 2011

Project: TBD

P.I. Number: 0010008

Net Project Length: 0.85 miles

Project Termini: Spring Road to Akers Mill Road

Project Description: Cumberland Boulevard Improvements

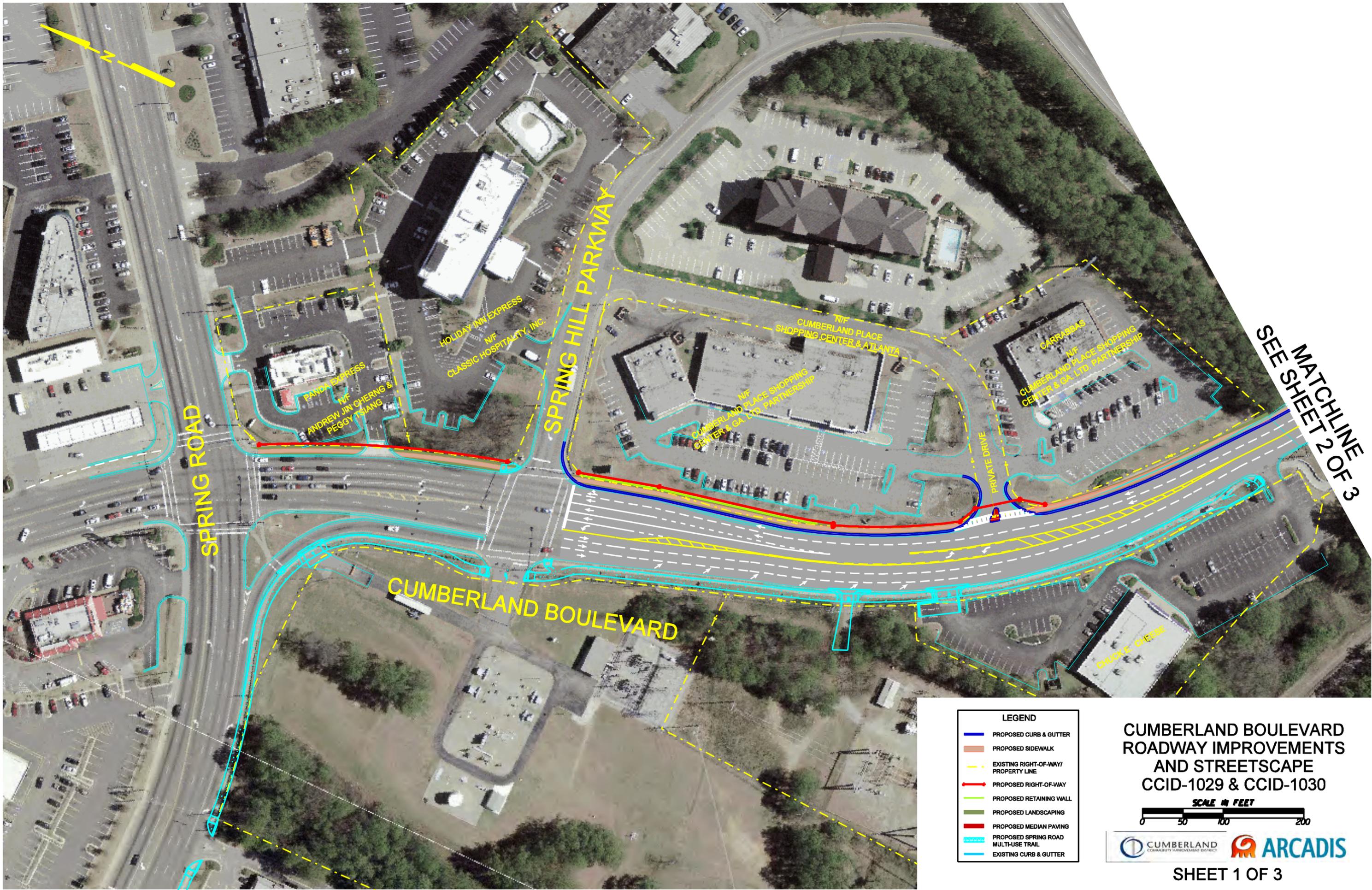
The following companies have facilities that occupy the public Right-of-way and prior rights have not been determined at this time:

- American Fiber Systems
- AT&T
- Fiberlight, LLC
- Level 3 Communications
- MCI Network Services, Inc.
- Sunesys, LLC
- Teleport Communications Group
- Time Warner Communications
- US Carrier Telecom, LLC
- Georgia Power
- Atlanta Gas Light
- Cobb County DOT Traffic Signal Fiber
- Comcast
- Cobb County Marietta Water Authority
- Cobb County Water System

The estimated reimbursable utility cost for the project is:

\$ 338,991

Prepared By: ARCADIS



MATCHLINE
SEE SHEET 2 OF 3

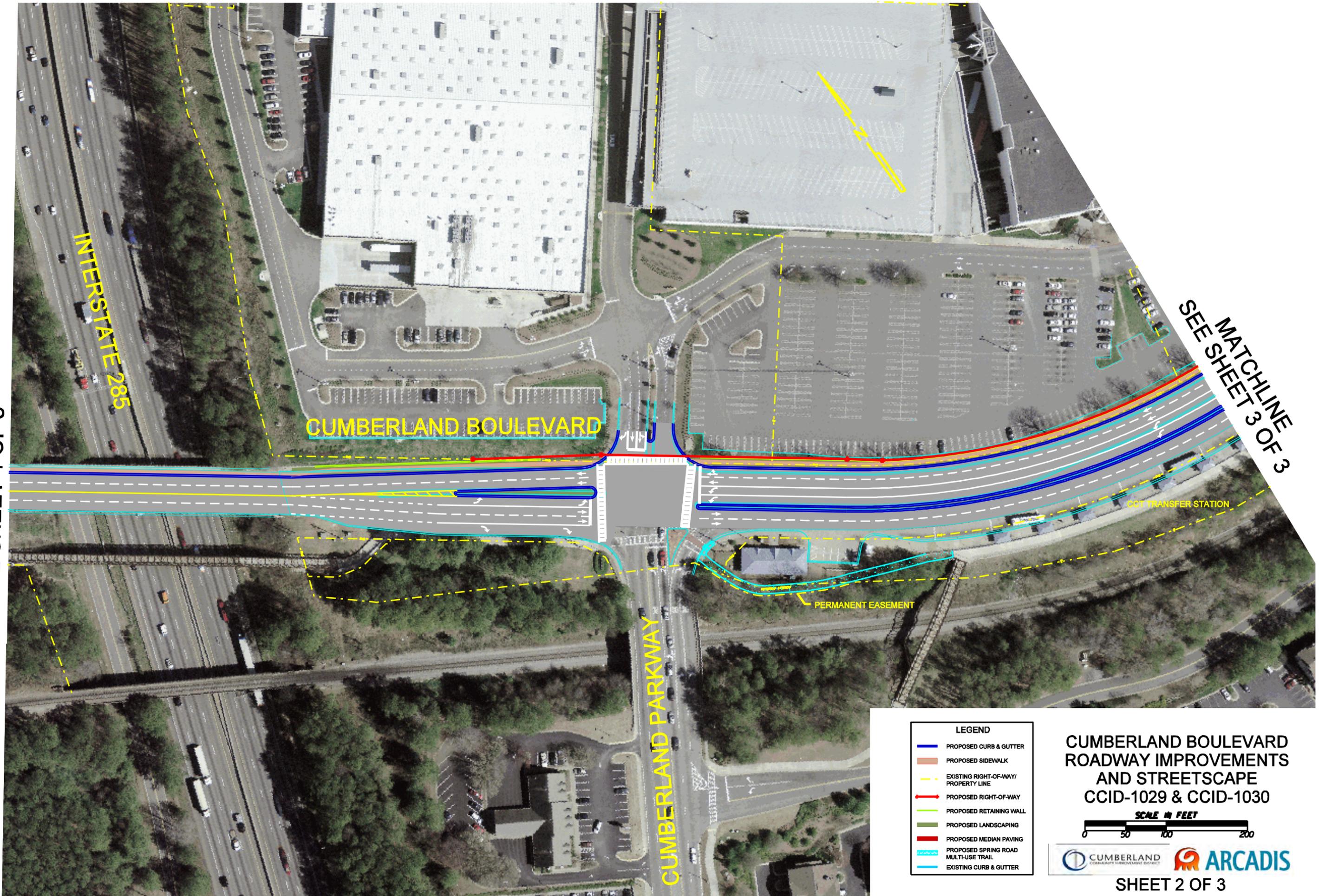
LEGEND	
	PROPOSED CURB & GUTTER
	PROPOSED SIDEWALK
	EXISTING RIGHT-OF-WAY/ PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED RETAINING WALL
	PROPOSED LANDSCAPING
	PROPOSED MEDIAN PAVING
	PROPOSED SPRING ROAD MULTI-USE TRAIL
	EXISTING CURB & GUTTER

**CUMBERLAND BOULEVARD
ROADWAY IMPROVEMENTS
AND STREETScape**
CCID-1029 & CCID-1030



MATCHLINE
SEE SHEET 1 OF 3

MATCHLINE
SEE SHEET 3 OF 3

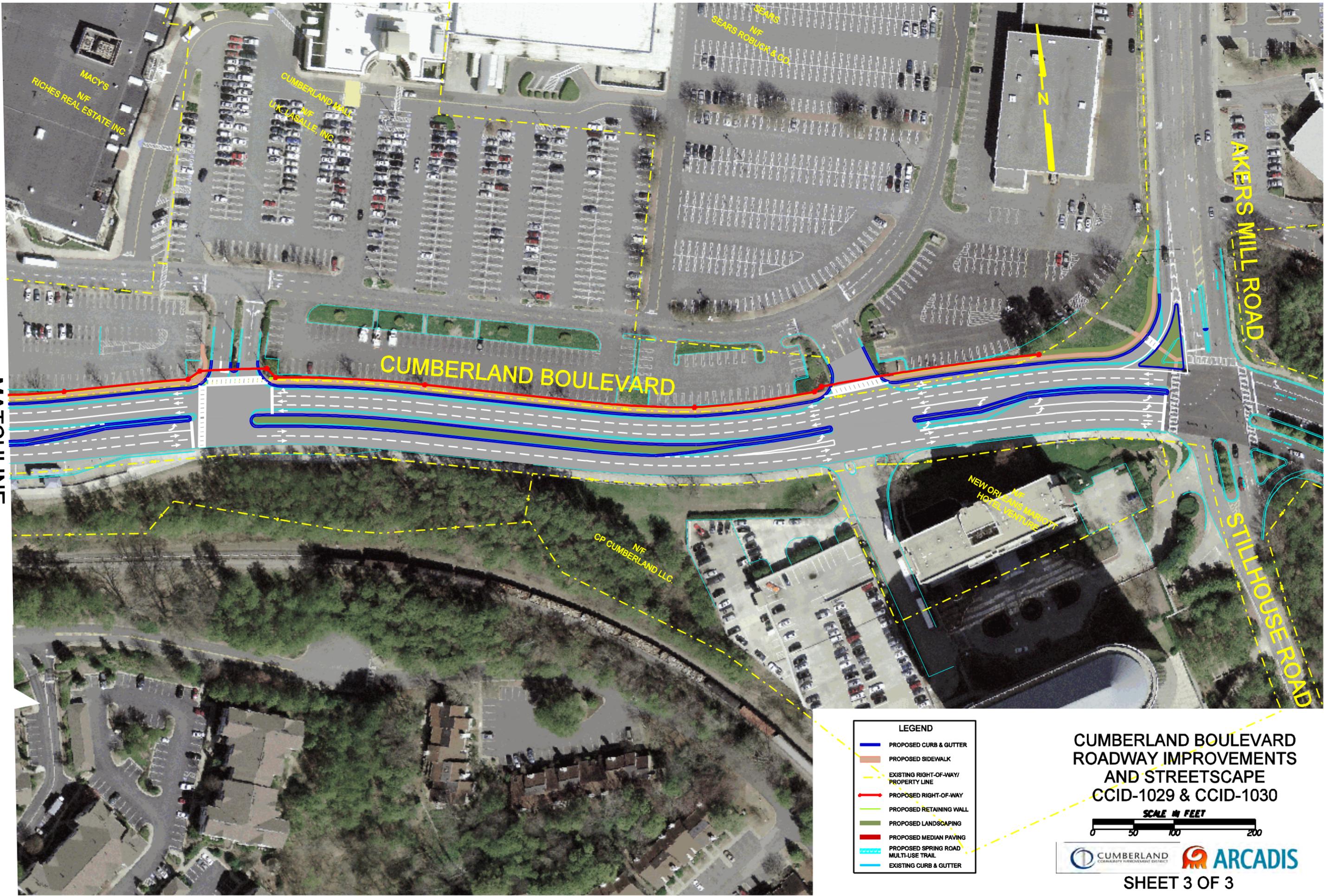


LEGEND	
	PROPOSED CURB & GUTTER
	PROPOSED SIDEWALK
	EXISTING RIGHT-OF-WAY/ PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED RETAINING WALL
	PROPOSED LANDSCAPING
	PROPOSED MEDIAN PAVING
	PROPOSED SPRING ROAD MULTI-USE TRAIL
	EXISTING CURB & GUTTER

**CUMBERLAND BOULEVARD
ROADWAY IMPROVEMENTS
AND STREETScape
CCID-1029 & CCID-1030**

SCALE IN FEET
0 50 100 200

SHEET 2 OF 3

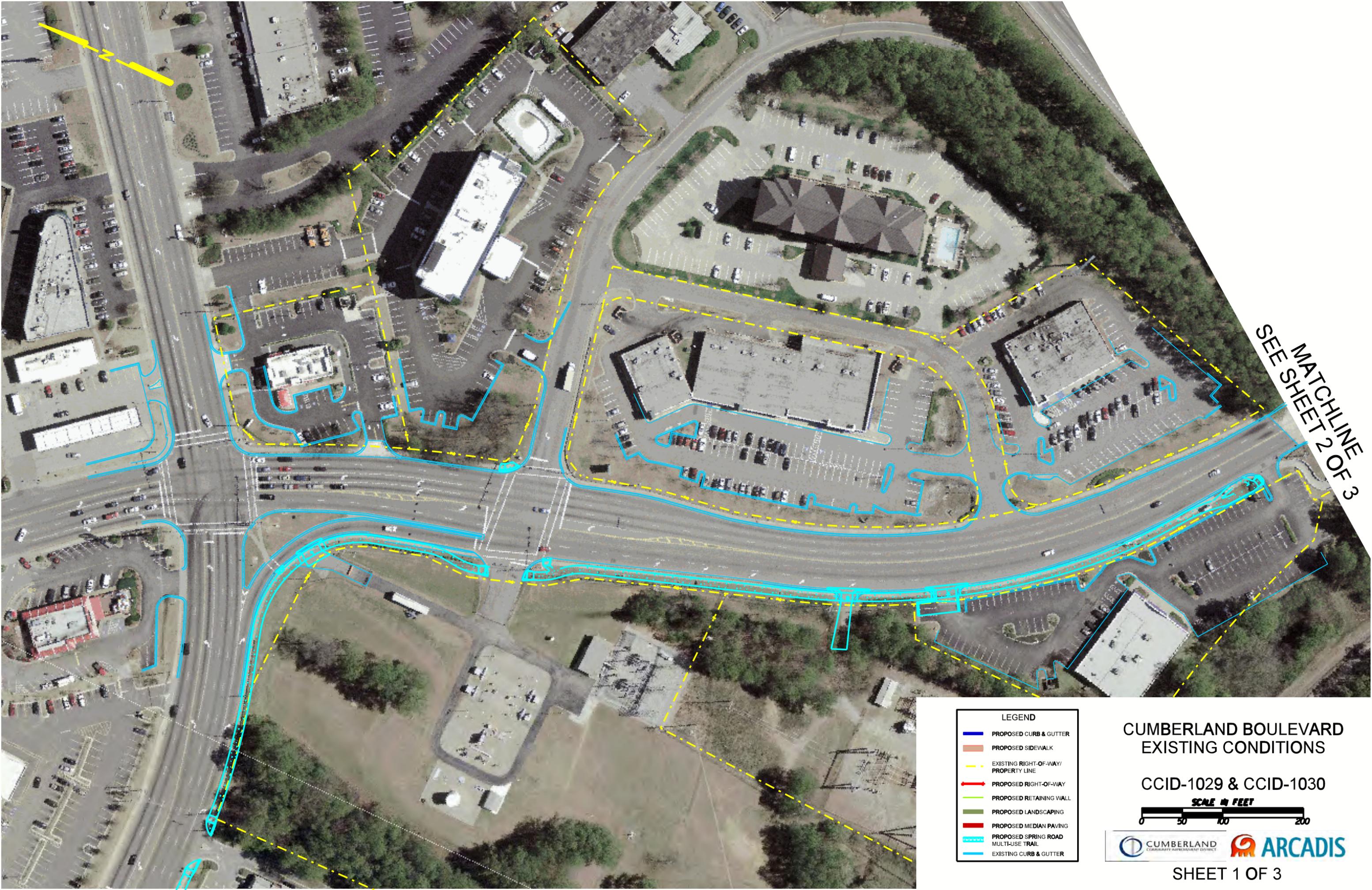


MATCHLINE
SEE SHEET 2 OF 3

LEGEND	
	PROPOSED CURB & GUTTER
	PROPOSED SIDEWALK
	EXISTING RIGHT-OF-WAY/ PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED RETAINING WALL
	PROPOSED LANDSCAPING
	PROPOSED MEDIAN PAVING
	PROPOSED SPRING ROAD MULTI-USE TRAIL
	EXISTING CURB & GUTTER

**CUMBERLAND BOULEVARD
ROADWAY IMPROVEMENTS
AND STREETSCAPE
CCID-1029 & CCID-1030**





MATCHLINE
SEE SHEET 2 OF 3

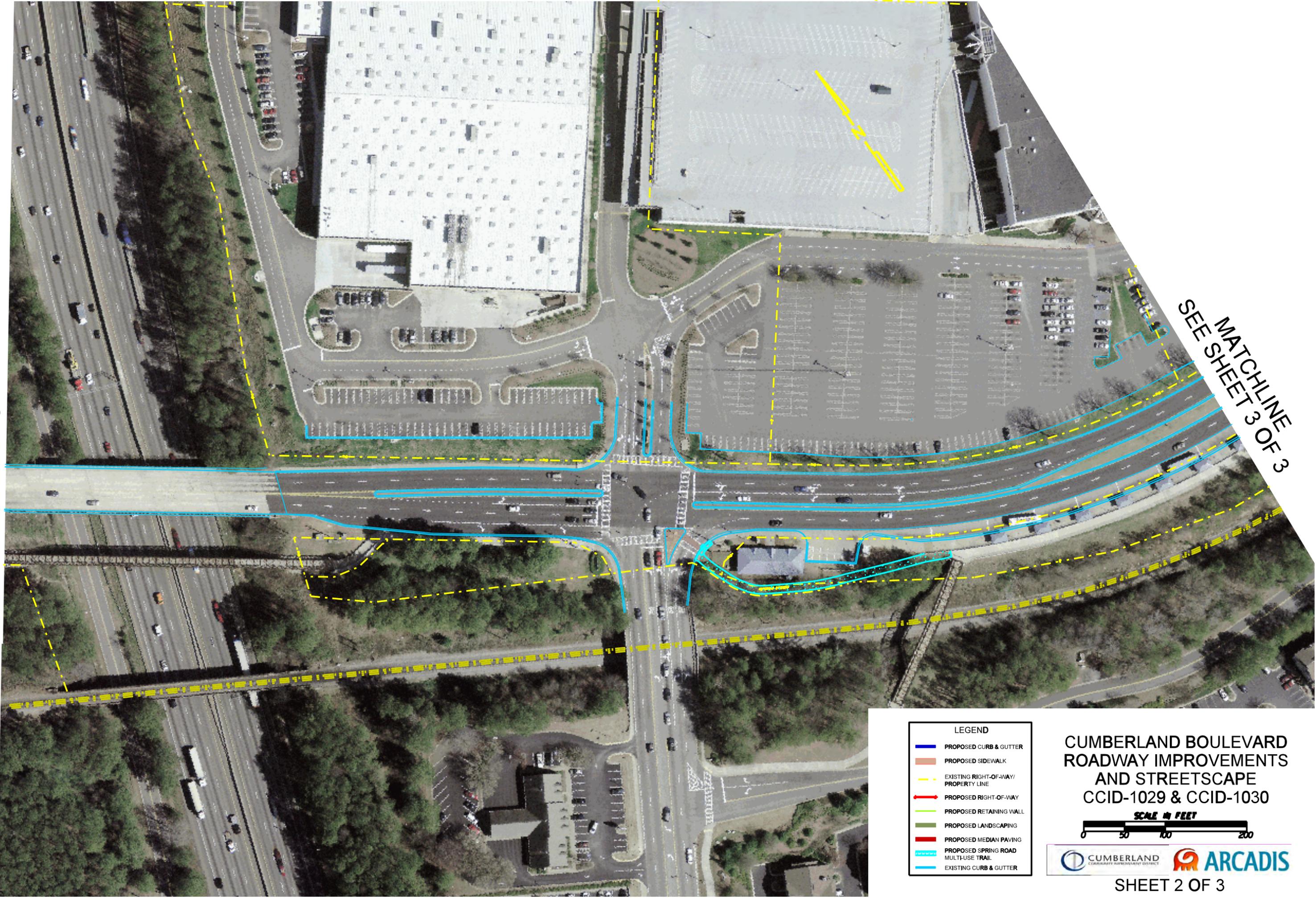
LEGEND	
	PROPOSED CURB & GUTTER
	PROPOSED SIDEWALK
	EXISTING RIGHT-OF-WAY/ PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED RETAINING WALL
	PROPOSED LANDSCAPING
	PROPOSED MEDIAN PAVING
	PROPOSED SPRING ROAD MULTI-USE TRAIL
	EXISTING CURB & GUTTER

CUMBERLAND BOULEVARD EXISTING CONDITIONS

CCID-1029 & CCID-1030



MATCHLINE
SEE SHEET 1 OF 3



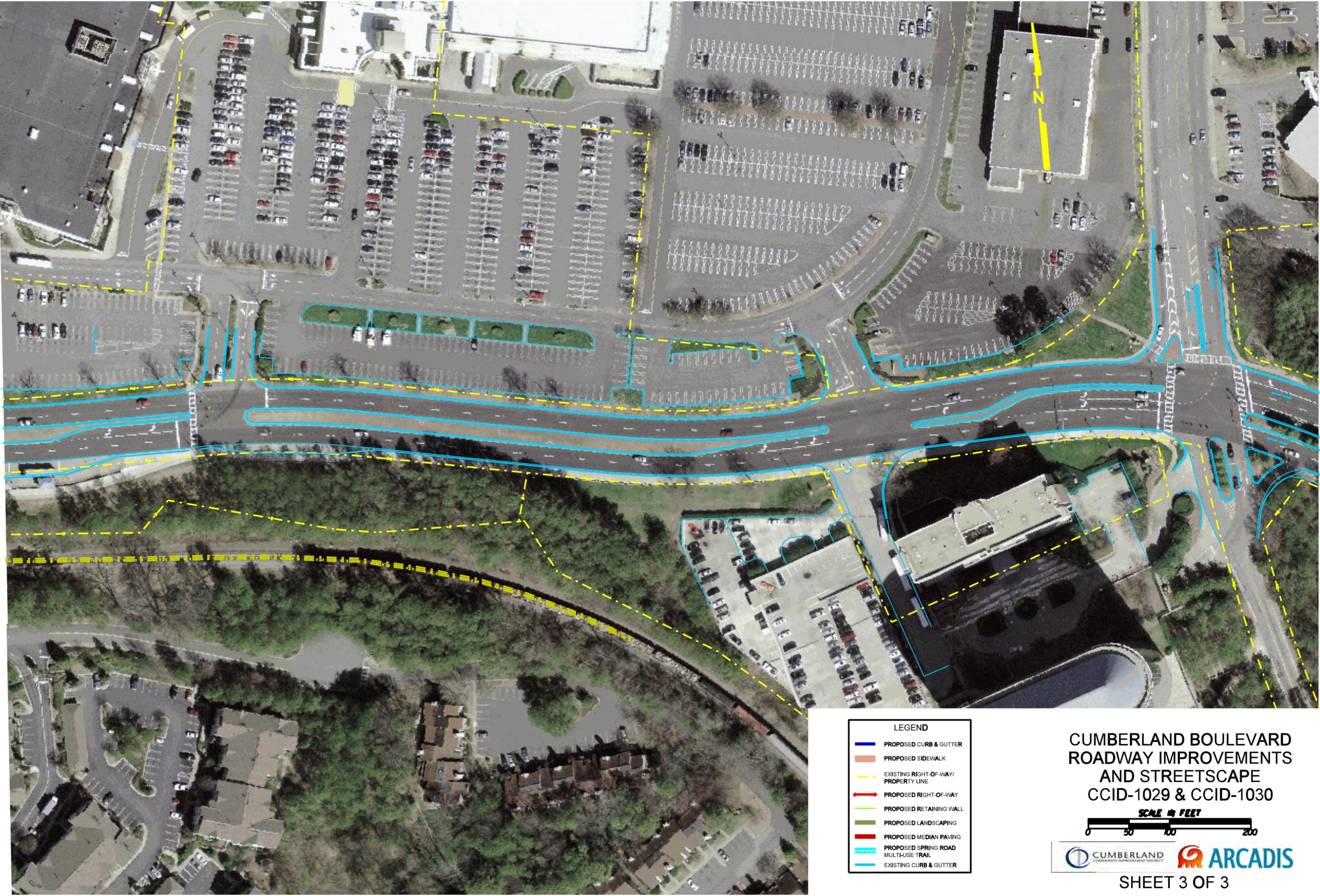
MATCHLINE
SEE SHEET 3 OF 3

LEGEND	
	PROPOSED CURB & GUTTER
	PROPOSED SIDEWALK
	EXISTING RIGHT-OF-WAY/ PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED RETAINING WALL
	PROPOSED LANDSCAPING
	PROPOSED SPRING ROAD MULTI-USE TRAIL
	EXISTING CURB & GUTTER

CUMBERLAND BOULEVARD ROADWAY IMPROVEMENTS AND STREETSCAPE CCID-1029 & CCID-1030



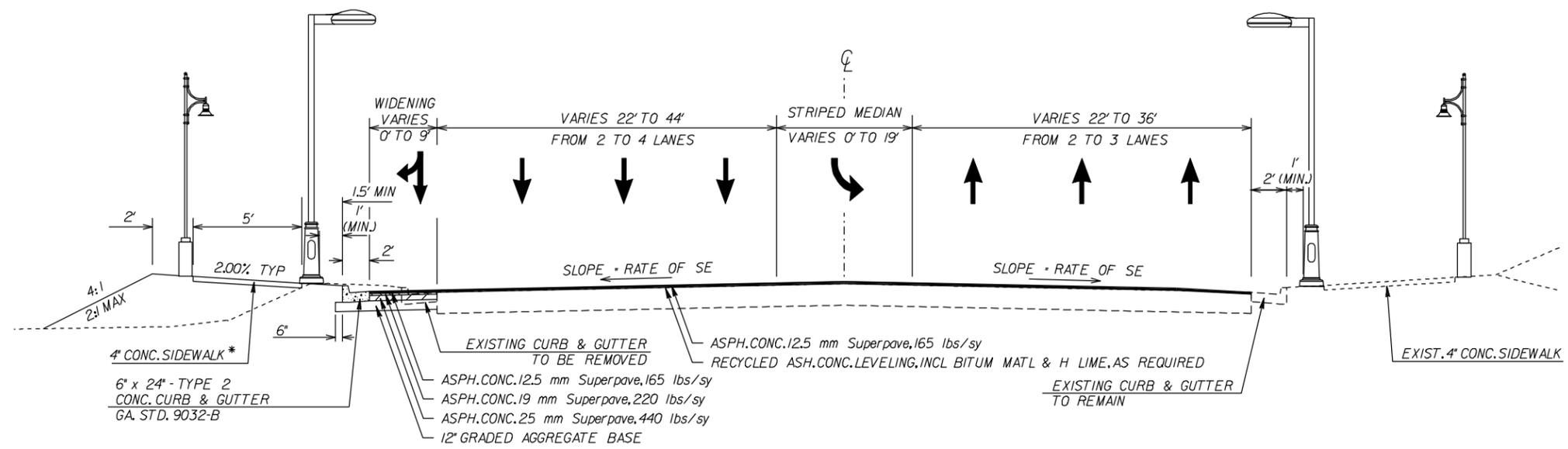
MATCHLINE
SEE SHEET 2 OF 3



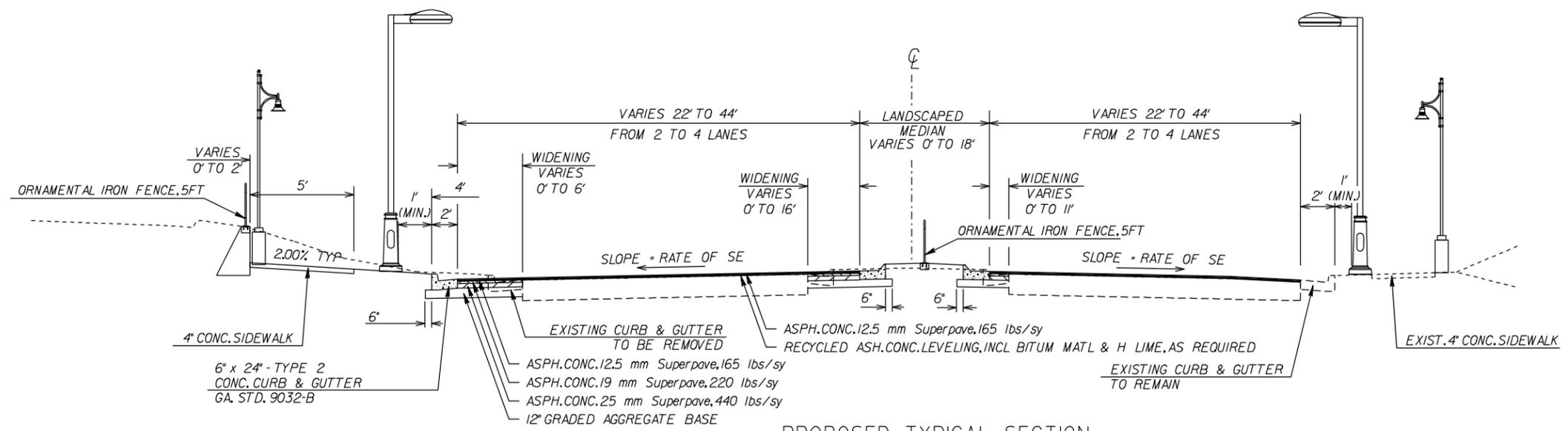
LEGEND	
	PROPOSED CURB & GUTTER
	PROPOSED SIDEWALK
	EXISTING RIGHT-OF-WAY/ PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED RETAINING WALL
	PROPOSED LANDSCAPING
	PROPOSED MEDIAN PAVING
	PROPOSED SPRING ROAD MULTI-USE TRAIL
	EXISTING CURB & GUTTER

CUMBERLAND BOULEVARD
ROADWAY IMPROVEMENTS
AND STREETSCAPE
CCID-1029 & CCID-1030





PROPOSED TYPICAL SECTION
 CUMBERLAND BOULEVARD
 FROM SPRING ROAD TO I-285



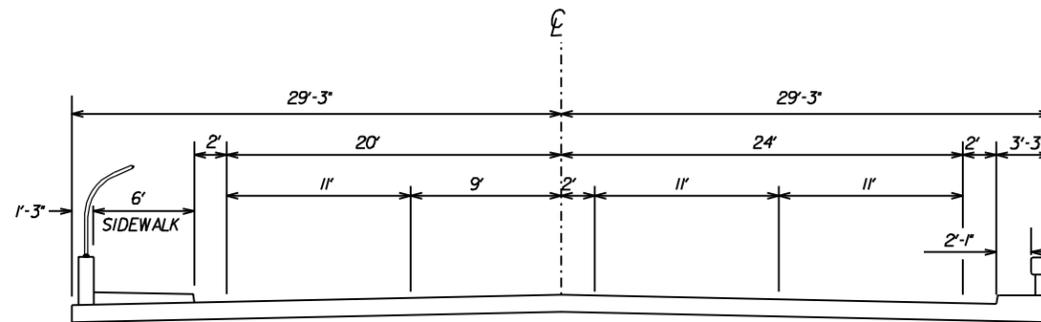
PROPOSED TYPICAL SECTION
 CUMBERLAND BOULEVARD
 FROM I-285 TO AKERS MILL ROAD



PRELIMINARY

REVISION DATES			

COBB COUNTY
 DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTIONS



PROPOSED TYPICAL SECTION
CUMBERLAND BOULEVARD
PROPOSED BRIDGE OVER I-285

1/22/2010
 4:11:57 PM
 63875
 AGMENG.tbl

1/22/2010
 4:11:57 PM
 63875
 AGMENG.tbl

1/22/2010
 4:11:57 PM
 63875
 AGMENG.tbl



PRELIMINARY

REVISION DATES

COBB COUNTY
 DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS

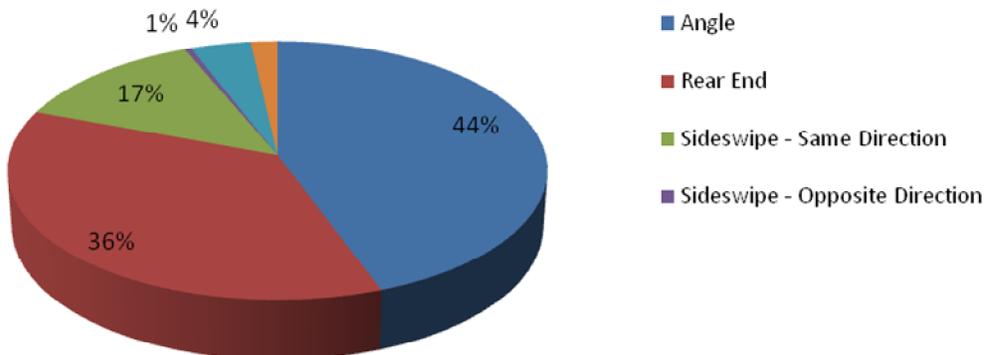
CUMBERLAND BLVD IMPROVEMENTS

DRAWING No.
5-02

Accident History for Cumberland Boulevard from Spring Road to I-285:

Item/Year		Year		
		2005	2006	2007
Crash Types	Angle	28	39	32
	Rear End	33	19	29
	Sideswipe - Same Direction	10	8	11
	Sideswipe - Opposite Direction	0	1	0
	Not A Collision With A Motor Vehicle	3	4	2
	Head On	0	1	3
Total Accidents		74	72	77
Total Non-Fatal Injuries		19	25	28
Total Fatalities		0	0	0
AADT		15970	12240	14430
Accident Rate (per 100 MVMT)		927	1176	1067
Statewide Accident Rate (per 100 MVMT)		510	475	475
Non-Fatality Injury Rate (per 100 MVMT)		238	408	388
Statewide Non-Fatality Injury Rate (per 100 MVMT)		123	114	114
Fatality Rate (per 100 MVMT)		0	0	0
Statewide Fatality Rate (per 100 MVMT)		1.60	1.25	1.25

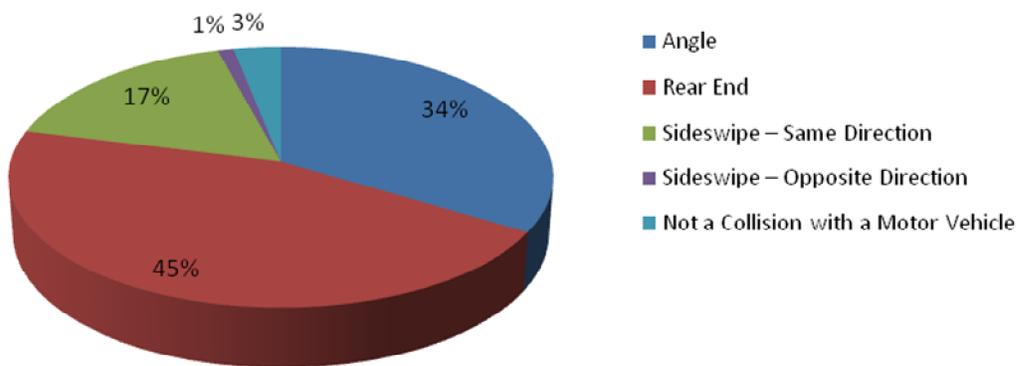
ACCIDENT SUMMARY- CUMBERLAND BOULEVARD



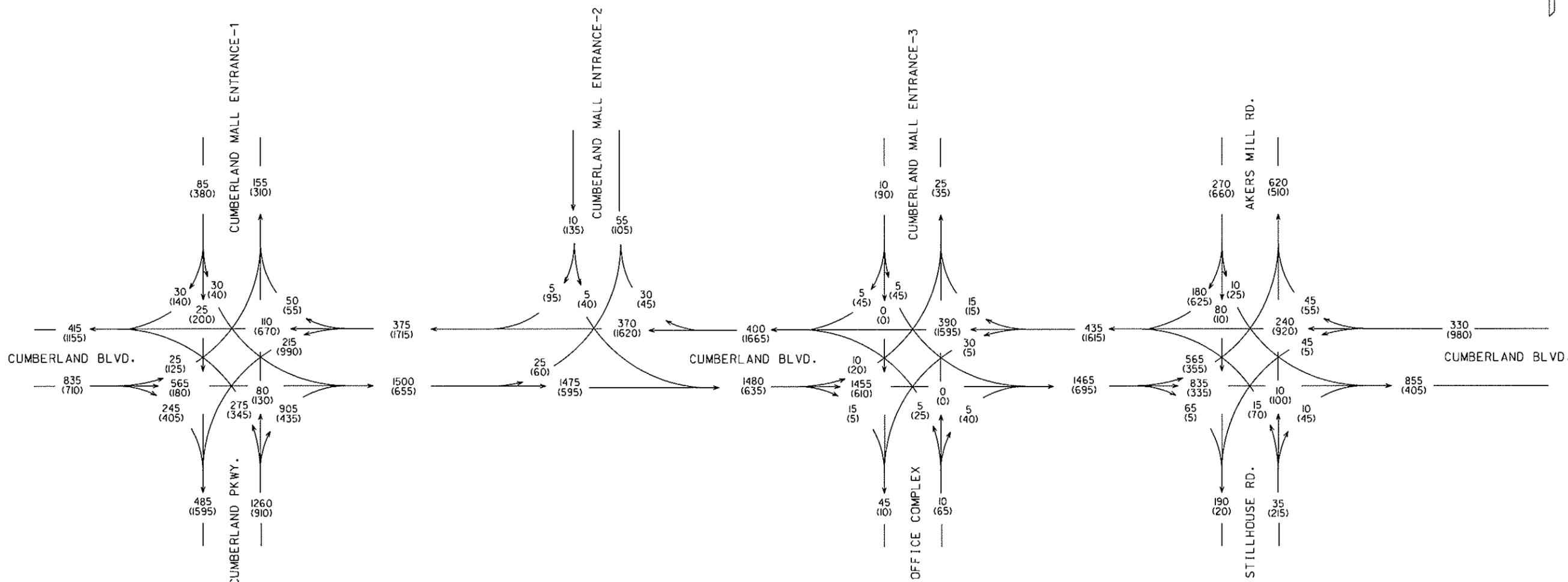
Accident History for Cumberland Boulevard from I-285 to Akers Mill Road:

Item/Year		Year		
		2006	2007	2008
Crash Types	Angle	15	11	6
	Rear End	14	15	14
	Sideswipe - Same Direction	8	4	4
	Sideswipe - Opposite Direction	1	0	0
	Not A Collision With A Motor Vehicle	0	0	3
	Head On	0	0	0
Total Accidents		38	30	27
Total Non-Fatal Injuries		5	3	2
Total Fatalities		0	0	0
AADT		12240	14430	21799
Accident Rate (per 100 MVMT)		621	416	248
Statewide Accident Rate (per 100 MVMT)		510	475	475
Non-Fatality Injury Rate (per 100 MVMT)		82	42	18
Statewide Non-Fatality Injury Rate (per 100 MVMT)		123	114	114
Fatality Rate (per 100 MVMT)		0	0	0
Statewide Fatality Rate (per 100 MVMT)		1.60	1.25	1.25

ACCIDENT SUMMARY- CUMBERLAND BOULEVARD



EXISTING YEAR (2011) DESIGN HOURLY VOLUMES (DHV)

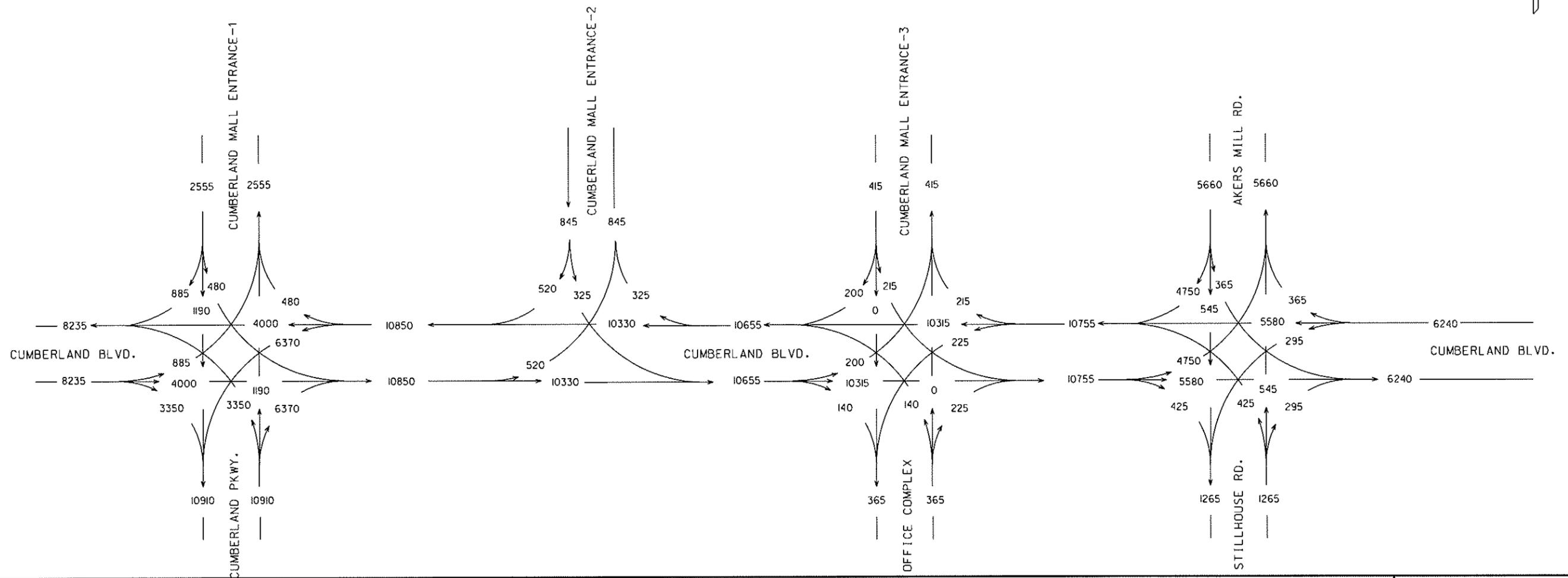


AM PEAK
T = 8.0%
S.U. = 3.0%
COMB. = 5.0%

PM PEAK
T = 8.3%
S.U. = 3.0%
COMB. = 5.3%

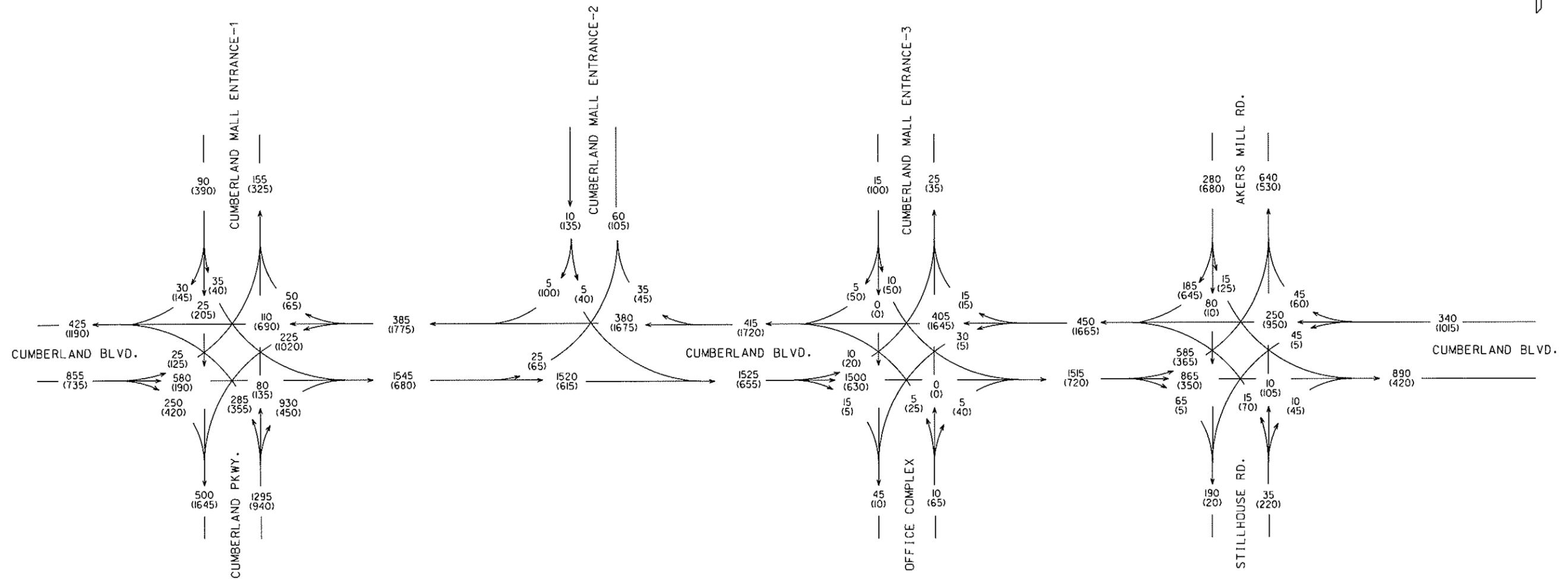
P. I. # 0010008
COBB COUNTY
CUMBERLAND BOULEVARD
ROAD IMPROVEMENTS
2011 AM DHV = 000
2011 PM DHV = (000)

EXISTING YEAR (2011) AVERAGE DAILY TRAFFIC (ADT)



P. I. # 0010008
COBB COUNTY
CUMBERLAND BOULEVARD
ROAD IMPROVEMENTS
2011 ADT = 000
24 HR T = 5.0%
S.U. = 2.0%
COMB. = 3.0%

NO-BUILD & BUILD DESIGN HOURLY VOLUMES (DHV) - OPEN YEAR (2015)

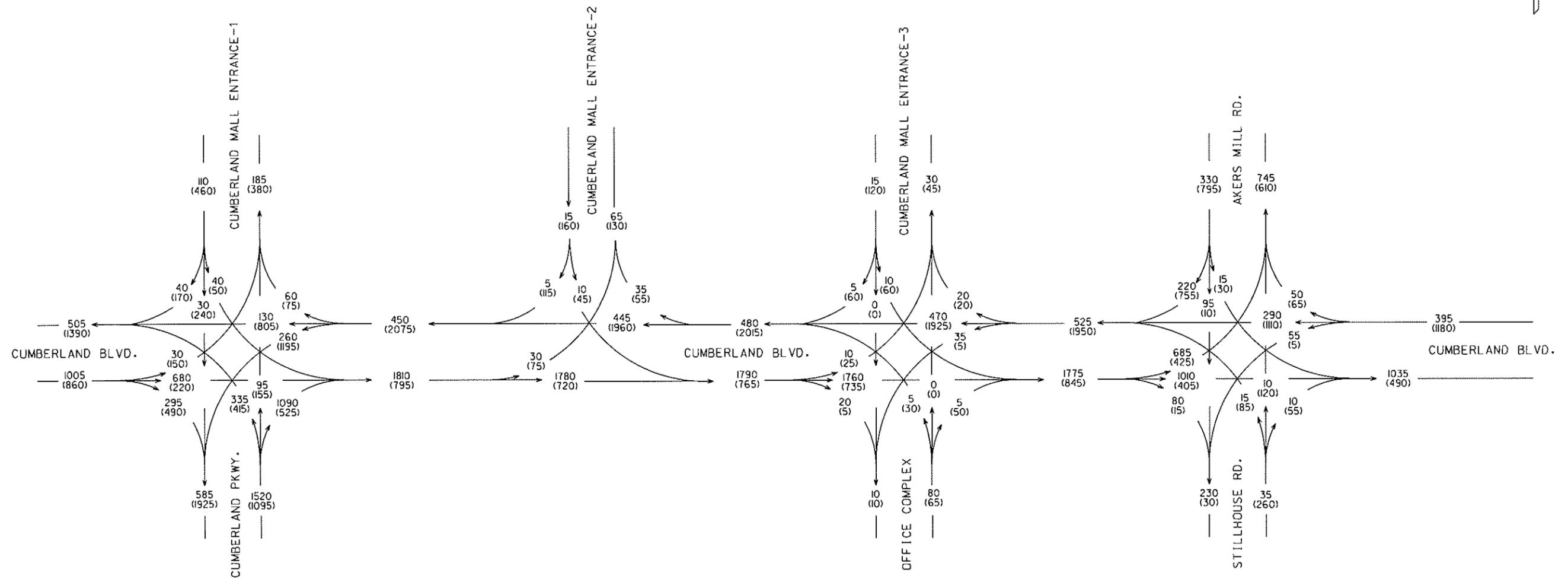


AM PEAK
T = 8.0%
S.U. = 3.0%
COMB. = 5.0%

PM PEAK
T = 8.3%
S.U. = 3.0%
COMB. = 5.3%

P. I. # 0010008
COBB COUNTY
CUMBERLAND BOULEVARD
ROAD IMPROVEMENTS
2015 AM DHV = 000
2015 PM DHV = 000

NO-BUILD & BUILD DESIGN HOURLY VOLUMES (DHV) - DESIGN YEAR (2035)

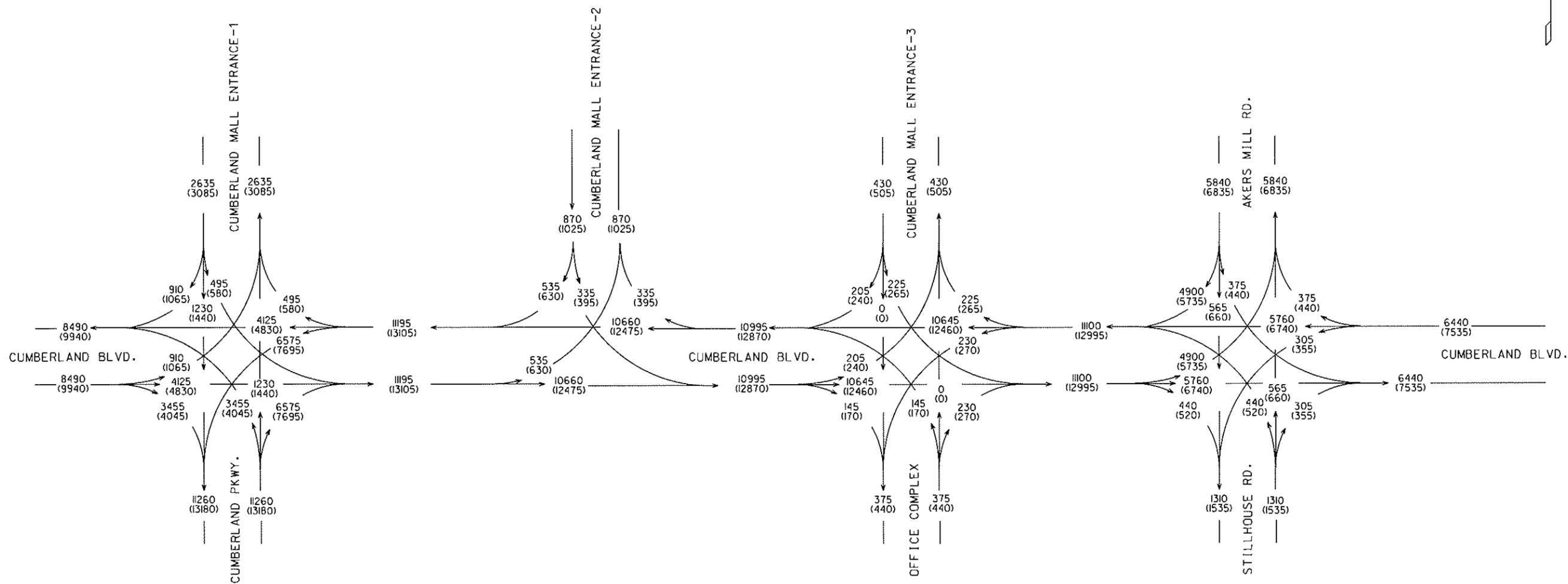


AM PEAK
T = 8.0%
S.U. = 3.0%
COMB. = 5.0%

PM PEAK
T = 8.3%
S.U. = 3.0%
COMB. = 5.3%

P.I. # 0010008
COBB COUNTY
CUMBERLAND BOULEVARD
ROAD IMPROVEMENTS
2035 AM DHV = 000
2035 PM DHV = (000)

NO-BUILD & BUILD AVERAGE DAILY TRAFFIC (ADT) - OPEN YEAR (2015) & DESIGN YEAR (2035)



P.I. # 0010008
COBB COUNTY
CUMBERLAND BOULEVARD
ROAD IMPROVEMENTS
2015 ADT = 000
2035 ADT = (000)
24 HR T = 5.0%
S.U.=2.0%
COMB.= 3.0%

Existing Conditions Analysis

The existing conditions analysis indicates that all of the study intersections operate at LOS D or better during the morning peak hours. Queue spillback was observed for the eastbound approach to the intersection of Cumberland Boulevard at Akers Mill Road/ Stillhouse Road. During the afternoon peak hours, Cumberland Boulevard at Cumberland Parkway operates at LOS E primarily because of heavy westbound left-turning movements. Queue spillback was also observed for this heavy movement, and its effect is profound, resulting in a shockwave of queue delays downstream of this intersection. The results of the analysis for the existing conditions are shown in Table 1.

Table 1: Existing Conditions (2009)

Intersection	Existing (2009)			
	A.M.		P.M.	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Cumberland Boulevard at Cumberland Parkway/Mall Entrance (west)	D	45.6	E	57.5
Cumberland Boulevard at Cumberland Mall Entrance (middle)	A	3.3	A	4.5
Cumberland Boulevard at Akers Mill Road/ Stillhouse Road	B	17.7	C	20.9

Open Year (2015) Analysis

The traffic analysis for the open year was performed based on projected open year traffic. Refer to Appendix C for the open year design hourly volumes. The results of the existing conditions and the 2015 no-build conditions analyses indicate that major improvements are required to accommodate heavy westbound left-turning movements at the intersection of Cumberland Boulevard at Cumberland Parkway and heavy eastbound left-turning movements at the intersection of Cumberland Boulevard at Akers Mill Road/Stillhouse Road. The results of the open year analysis for the no-build and build conditions are summarized in Table 2.

Table 2: Open Year (2015) Analysis Summary

	Open Year (2015) No-Build				Open Year (2015) Build				Reduction in Delay			
	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
Intersection	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	Sec	%	Sec	%
Cumberland Boulevard at Cumberland Parkway/Mall Entrance (west)	D	39.4	F	104.6	D	39.2	D	51.6	0.2	0.5	53.0	50.7
Cumberland Boulevard at Cumberland Mall Entrance (middle)	A	2.6	A	5.1	A	2.6	A	3.7	0.0	0.0	1.4	27.5
Cumberland Boulevard at Akers Mill Road/Stillhouse Road	C	20.8	C	23.9	C	20.9	C	23.9	-0.1	-0.5	0.0	0.0

*Delay measured in seconds/vehicle

The results of the no-build open year analysis indicate that the intersection of Cumberland Boulevard at Cumberland Parkway will operate at LOS F during the afternoon peak hours. The traffic simulation shows significant spillback from heavy westbound left-turning traffic from Cumberland Boulevard onto Cumberland Parkway and incremental delay from the spillback on westbound Cumberland Boulevard during the afternoon peak hours. During morning peak hours, spillback was observed for the eastbound Cumberland Boulevard approach to Akers Mill Road/Stillhouse Road. The results of the build open year analysis indicate that the proposed improvements along Cumberland Boulevard will address the key deficiencies along Cumberland Boulevard, which is reflected in decreased intersection delay at most study intersections along Cumberland Boulevard. The intersection delay for the intersection of Cumberland Boulevard at Cumberland Parkway will be reduced by approximately 51 percent. A list of recommendations based on the results of the open year analysis can be found in the Conclusions and Recommendations section of this report.

Design Year (2035) Analysis

The traffic analysis for the design year was performed based on projected design year traffic. Refer to Appendix C for the design year design hourly volumes. The results of the design year analysis for the no-build and build conditions are summarized in Table 3.

Table 3: Design Year (2035) No-Build and Build Analysis

	Design Year (2035) No-Build				Design Year (2035) Build				Reduction in Delay			
	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
Intersection	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	Sec	%	Sec	%
Cumberland Boulevard at Cumberland Parkway/Mall Entrance (west)	D	44.8	F	172.0	D	44.6	E	61.0	0.2	0.4	111.0	64.5
Cumberland Boulevard at Cumberland Mall Entrance (middle)	A	3.2	A	5.9	A	3.2	A	3.9	0.0	0.0	2.0	33.9
Cumberland Boulevard at Akers Mill Road/ Stillhouse Road	C	21.5	C	26.0	C	21.5	C	26.0	0.0	0.0	0.0	0.0

*Delay measured in seconds/vehicle

The proposed improvements will reduce the intersection delay for the intersection of Cumberland Boulevard at Cumberland Parkway by 111.0 seconds (65 percent) in the build scenario over the no-build condition. The significant reduction in delay for this critical intersection will greatly improve traffic operations along Cumberland Boulevard and has the potential to reduce the incidence of frequent stop-and-go conditions and rear-end crashes. A list of recommendations based on the results of the design year analysis can be found in the Conclusions and Recommendations section of the report.

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 067-0129-0

Cobb

SUFF. RATING

60.85

Location & Geography

* Structure I.D.No: 067-0129-0
 200 Bridge Information 06
 * 6A Feature Int: I-285-CR1951 SPRING HILL
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: CR02026
 * 7B Facility Carried: HARGROVE ROAD
 * 9 Location: 3.2 MI E OF SMYRNA
 2 DOT District: 7
 207 Year Photo: 2005
 * 91 Inspection Frequency: 24 Date: 08/04/2005
 92A Fract Crit Insp Freq: 00 Date: 02/01/1901
 92B Underwater Insp Freq: 00 Date: 02/01/1901
 92C Other Spc. Insp Freq: 00 Date: 02/01/1901
 * 4 Place Code: 00000
 * 5 Inventory Route (O/U): 1
 Type: 5
 Designation: 1
 Number: 09016
 Direction: 0
 * 16 Latitude: 33-52.8 MMS Prefix: 00
 * 17 Longitude: 84-28.4 MMS Suffix: 000 MP: 0.00
 98 Border Bridge: 000 %Shared: 00
 99 ID Number: 0000000000000000
 * 100 STRAHNET: 0
 12 Base Highway Network: 0
 13A LRS Inventory Route: 0
 13B Sub Inventory Route: 0
 * 101 Parallel Structure: N
 * 102 Direction of Traffic: 2
 * 264 Road Inventory Mile Post: 000.75
 * 208 Inspection Area: 09 Initials: JMC
 Engineer's Initial: jal
 * Location I.D. No.: 067-09016M-000.26E

Signs & Attachments

* 104 Highway System: 0
 * 26 Functional Classification: 17
 * 204 Federal Route Type: M No.: 09016
 105 Federal Lands Highway: 0
 * 110 Truck Route: 0
 206 School Bus Route: 0
 217 Benchmark Elevation: 0000.00
 218 Datum: 0
 * 19 Bypass Length: 02
 * 20 Toll: 3
 * 21 Maintenance: 01
 * 22 Owner: 01
 * 31 Design Load: 6
 37 Historical Significance: 5
 205 Congressional District: 06
 27 Year Constructed: 1969
 106 Year Reconstructed: 0000
 33 Bridge Median: 0
 34 Skew: 20
 35 Structure Flared: 0
 38 Navigation Control: N
 213 Special Steel Design: 0
 267 Type of Paint: 5
 * 42 Type of Service on: 1
 1
 214 Movable Bridge: 0
 203 Type Bridge: Z-O-M-O
 259 Pile Encasement: 3
 * 43 Structure Type Main: 3 02
 45 No. Spans Main: 005
 44 Structure Type Appr: 0 00
 46 No. Spans Appr: 0000
 226 Bridge Curve Horz: 0 Vert: 1
 111 Pier Protection: 0
 107 Deck Structure Type: 1
 108 Wearing Surface Type: 1
 Mc 0
 F 0
 225 Expansion Joint Type: 02
 242 Deck Drains: 0
 243 Parapet Location: 0
 Height: 0.00
 Width: 0.00
 238 Curb: 0.50 1
 239 Handrail: 1 1
 * 240 Median Barrier Rail: 0
 241 Bridge Median Height: 0.00
 Width: 0.00
 * 230 Guardrail Loc Dir Rear: 2
 Fwr: 0
 Oppo Dir Rear: 0
 Fwr: 0
 244 Approach Slab: 3
 224 Retaining Wall: 0
 233 Posted Speed Limit: 45
 236 Warning Sign: 0
 234 Delineator: 0
 235 Hazard Boards: 0
 237 Utilities Gas: 22
 W 00
 Ele 00
 Telephone: 22
 Se 00
 247 Lighting Street: 0
 Navigtion: 0
 Aerial: 0
 * 248 County Continuity No.: 00

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 067-0129-0

Cobb

SUFF. RATING

60.85

Programming Data

201 Project No.: PR 7003-1
 202 Plans Available: 1
 249 Prop. Proj. No. 0000000000000000
 250 Approval Status: 0000
 251 P.I. No.: 0000000
 252 Contract Date: 02/01/1901
 260 Seismic No.: 00000
 75 Type Work: 00 0
 94 Bridge Imp. Cost: \$ 0
 95 Roadway Imp. Cost: \$ 0
 96 Total Imp Cost: \$ 0
 76 Imp. Length: 000000
 97 Imp. Year: 0000
 114 Future ADT: 25710 Year: 2018

Measurements

* 29 ADT: 017140 Year: 2002
 109 % Trucks: 2
 * 28 Lanes On: 04 Under: 10
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0076
 * 49 Structure Length: 320
 51 Br. Rwdy. Width: 52.20
 52 Deck Width: 58.00
 * 47 Tot. Horz. Cl: 52.20
 50 Curb/Sdewlk Width: 2.20/2.20
 32 Approach Rdwy Width: 052
 * 229 Shoulder Width:
 Rear Lt: 2.00 Type: 1 Rt: 2.00
 Fwrd Lt: 2.00 Type: 1 Rt: 2.00
 Pavement Width:
 Rear: 48.00 Type: 2
 Fwrd: 48.00 Type: 2
 Intersection Rear: 0 Fwrd: 1
 36 Safety Features Br. Rail: 2
 Transition: 2
 App. G. Rail: 2
 App. Rail End: 2
 53 Minimum Cl.Over: 99 ' 99 "
 Under: H 16 ' 03 "
 * 228 Min. Vertical Cl
 Act. Odm Dir: 99 ' 99 "
 Oppo. Dir: 99 ' 99 "
 Posted Odm. Dir: 00 ' 00 "
 Oppo. Dir: 00 ' 00 "
 55 Lateral Undercl. Rt: H 10.00
 56 Lateral Undercl. Lt: 4.00
 * 10 Max Min Vert Cl: 99 ' 99 " Dir: 0
 39 Nav Vert Cl: 000 Horz: 0000
 116 Nav Vert Cl Closed: 000
 245 Deck Thickness Main: 6.80
 Deck Thick Approach: 0.00
 246 Overlay Thickness: 0.00
 212 Year Last Painted: Sup: 1997 Sub: 0000

Ratings

65 Inventory Rating Method: 1
 63 Inventory Rating Method: 1
 66 Inventory Type: 2 Rating: 23
 64 Operating Type: 2 Rating: 38
 231 Calculated Loads
 H-Modified: 21 0
 HS-Modified: 26 0
 Type 3: 25 0
 Type 3s2: 31 0
 Timber: 28 0
 Piggyback: 00 0
 261 H Inventory Rating: 24
 262 H Operating Rating: 41
 67 Structural Evaluation: 5
 58 Deck Condition: 7
 59 Superstructure Condition: 8
 * 227 Collision Damage: 1
 60A Substructure Condition: 7
 60B Scour Condition: N
 60C Underwater Condition: N
 71 Waterway Adequacy: N
 61 Channel Protection Cond: N
 68 Deck Geometry: 4
 69 UnderClr. Horz/Vert: 5
 72 Appr. Alignment: 8
 62 Culvert: N

Hydraulic Data

215 Waterway Data
 Highwater Elev.: 0000.0 Year: 1900
 Avg. Streambed Elev.: 0000.0 Freq.: 00
 Drainage Area: 00000
 Area Of Opening: 000000
 113 Scour Critical: N
 216 Water Depth: 00.0 Br. Height: 00.0
 222 Slope Protection: 4
 221 Spur Dikes Rear: 0 Fwrd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No. Barrels: 0
 Width: 0.00 Height: 0.00
 Length: 0 Apron: 0
 * 265 U/W Insp. Area: 0 Diver: ZZZ

Posting Data

70 Bridge Posting Required: 5
 41 Struct Open, Posted, Cl: A
 * 103 Temporary Structure: 0
 232 Posted Loads H-Modified: 00
 HS-Modified: 00
 Type 3: 00
 Type3s2: 00
 Timber: 00
 Piggyback: 00
 253 Notification Date 02/01/1901
 253 Fed Notify Date: 02/01/1901 0

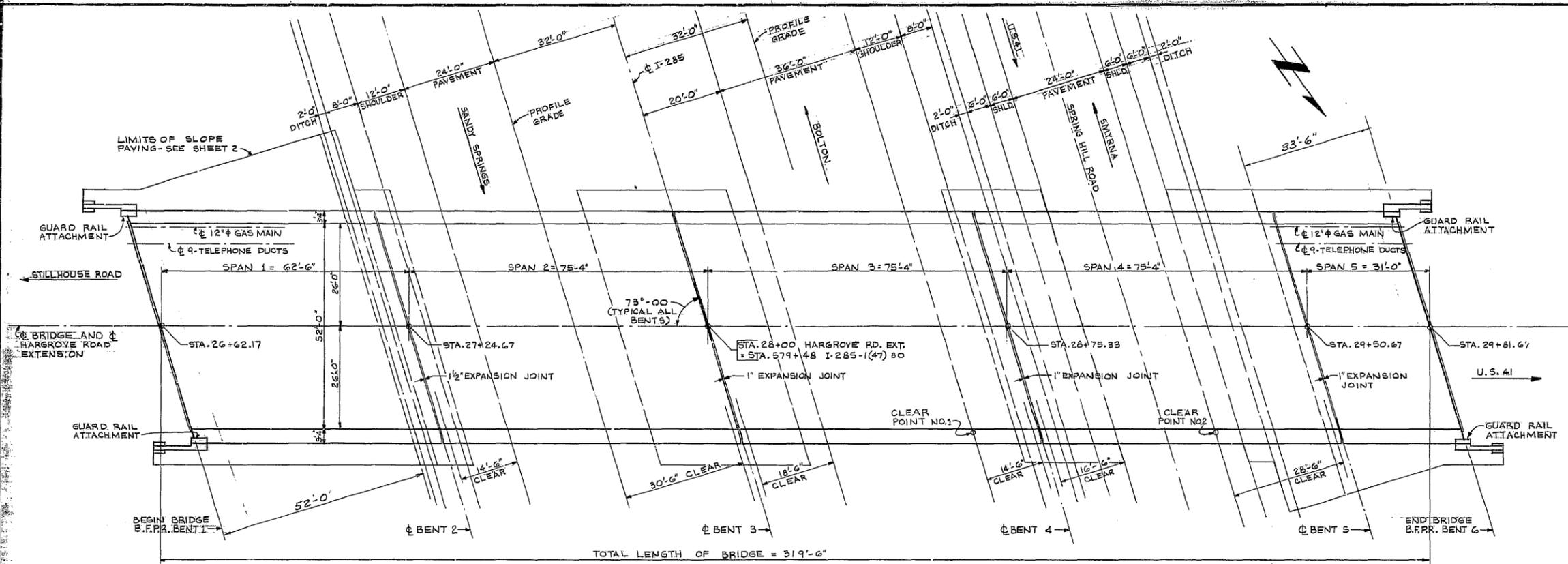
FED. ROAD DIV. No.	STATE	FED. AID PROJ. No.	STATE AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
			7003-01	1969	3	20

GENERAL NOTES

- SPECIFICATIONS - GEORGIA STANDARD.
- CONCRETE - ALL CONCRETE SHALL BE CLASS "A" UNLESS OTHERWISE NOTED.
- STRUCTURAL STEEL - STRUCTURAL STEEL SHALL BE OF THE TYPE DESIGNATED ON THE PLANS.
- END BENT EXCAVATION - THE COST OF ANY EXCAVATION NECESSARY FOR END BENT CONSTRUCTION SHALL BE INCLUDED IN THE OVERALL BID SUBMITTED, EXCEPT AS OTHERWISE PROVIDED IN ARTICLE 105.04.A.
- FINISH - FOR THOSE AREAS REQUIRING A TYPE III RUBBED FINISH, SEE PAGE 452 OF THE STANDARD SPECIFICATIONS.
- PAINT - THOSE STRUCTURAL STEEL AREAS WHICH ARE REQUIRED TO BE PAINTED SHALL BE PAINTED WITH THE SYSTEM III PAINTS, AS SHOWN ON PAGES 722-723 OF THE STANDARD SPECIFICATIONS.
- CHAMFER - CHAMFER EXPOSED EDGES 3/8" UNLESS NOTED.
- OTHER REQUIREMENTS - FOR OTHER GENERAL NOTES AND CONTRACT REQUIREMENTS, SEE THE STANDARD PLANS (NO. 3633, 9052), SPECIAL PLANS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
- TEST PILES - DRIVE ONE STEEL "H" TEST PILE OF LENGTHS SHOWN:
 - 75 FEET AT BENT 1 (12BP53)
 - 40 FEET AT BENT 6 (10BP42)
- PLA' DRIVING OBJECTIVE - SEE END BENT SHEET.
- EXPANSION MATERIAL - SHALL BE PREFORMED JOINT FILLER TYPE II.
- PROTECTIVE SCREENS - SEE SPECIAL PROVISIONS FOR REQUIREMENT OF PROTECTIVE SCREENS LOCATED OVER SPRING HILL RD. ONLY.
- PROTECTIVE SURFACE TREATMENT - SEE SPECIAL PROVISIONS FOR REQUIREMENTS FOR PLACEMENT OF LINSEED OIL MIXTURE.

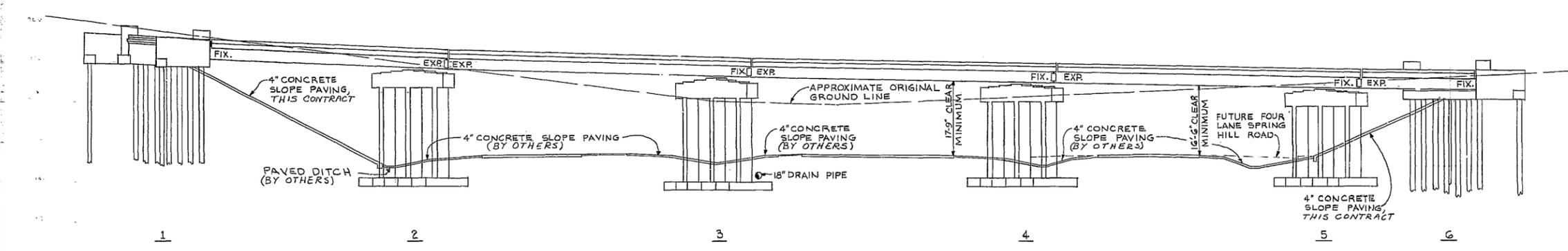
SUMMARY OF QUANTITIES

707	CU YD	BRIDGE EXCAVATION, GRADE SEPARATION STRUCTURE
805	SQ YD	CONC. SLOPE PAVING, 4 IN.
LUMP		SUPERSTRUCTURE CONC. - BRIDGE NO.1
622	LN FT	CONC. HANDRAIL, STD. 3635
325	CU YD	CLASS A CONC.
LUMP		STRUCT. STEEL - BRIDGE NO.1
LUMP		SUPERSTRUCTURE REINF. STEEL - BRIDGE NO.1
53,314	LB	BAR REINF. STEEL
280	LN FT	PILING FURNISHED, STEEL H, 10BP42
560	LN FT	PILING FURNISHED, STEEL H, 12BP53
272	LN FT	PILING DRIVEN, STEEL H, 10BP42
552	LN FT	PILING DRIVEN, STEEL H, 12BP53
40	LN FT	TEST PILE, STEEL H, 10BP42
15	LN FT	TEST PILE, STEEL H, 12BP53
1	EACH	LOADING TEST, STEEL H, 10BP42 (IF REQUIRED)
1	EACH	LOADING TEST, STEEL H, 12BP53 (IF REQUIRED)
16	EACH	PILE TIP REINF.
Δ Δ LUMP		PROTECTIVE SCREENS - BRIDGE NO.1 (IF REQUIRED)



NOTE: HANDRAILING IS NOT SHOWN IN PLAN OR ELEVATION.

PLAN



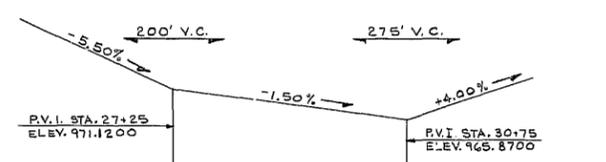
ELEVATION

BRIDGE CONSISTS OF

- 1-62'-6" W/ BEAM COMPOSITE SPAN - SPECIAL DESIGN
- 3-75'-4" W/ BEAM COMPOSITE SPANS - SPECIAL DESIGN
- 1-31'-0" W/ BEAM SPAN - SPECIAL DESIGN
- 4-CONCRETE INTERMEDIATE BENTS - SPECIAL DESIGN
- 2-STEEL "H" PILE END BENTS - SPECIAL DESIGN
- CONCRETE HANDRAILING - GEORGIA STANDARD NO. 3633
- END POST AND ENDPOST GUARD RAIL ATTACHMENT DETAIL - GEORGIA STANDARD NO. 9052
- BAR BENDING DETAILS - GEORGIA STANDARD NO. 3900 (7-2-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE - GEORGIA STANDARD NO. 9037 (6-9-60)

DESIGN DATA

- SPECIFICATIONS - A.A.S.H.O. 1967
- TYPICAL HS20-44 AND/OR MILITARY LOADING - IMPACT ALLOWED.
- FUTURE PAVING ALLOWANCE = 15 LBS. PER SQ. FT.



GRADE DATA - HARGROVE ROAD EXTENSION



GRADE DATA - I-285

LOCATION	STATION	ELEVATION
B.F.P.R. BENT 1	STA. 26+62.17	974.7139
☉ BENT 2	STA. 27+24.67	972.1316
☉ BENT 3	STA. 28+00	970.0575
☉ BENT 4	STA. 28+75.33	968.8650
☉ BENT 5	STA. 29+50.67	967.7523
B.F.P.R. BENT 6	STA. 29+81.67	967.4650



BRIDGE NO.1

STATE HIGHWAY DEPARTMENT OF GEORGIA

BRIDGE DEPARTMENT

EASTERN ENGINEERING COMPANY
ATLANTA, GEORGIA

PLAN AND ELEVATION

HARGROVE ROAD EXT. BRIDGE OVER I-285
STA. 26+62.17 TO STA. 29+81.67
COBB COUNTY PR-7003 (1)
SCALE: 1"=15'
FEBRUARY, 1969

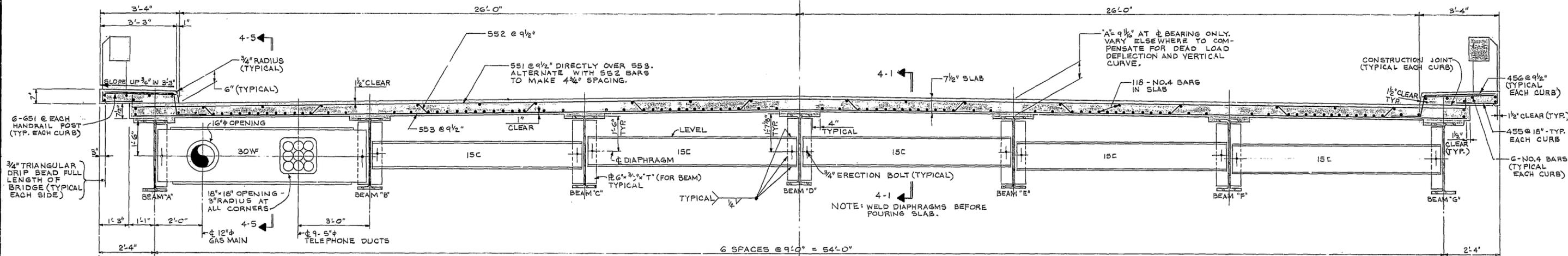
DESIGNED: J. R. H.	TRACED: _____	REVIEWED: _____
DRAWN: E. L. J.	CHECKED: J. A. G., J. H.	APPROVED: _____

EEOC 68/470

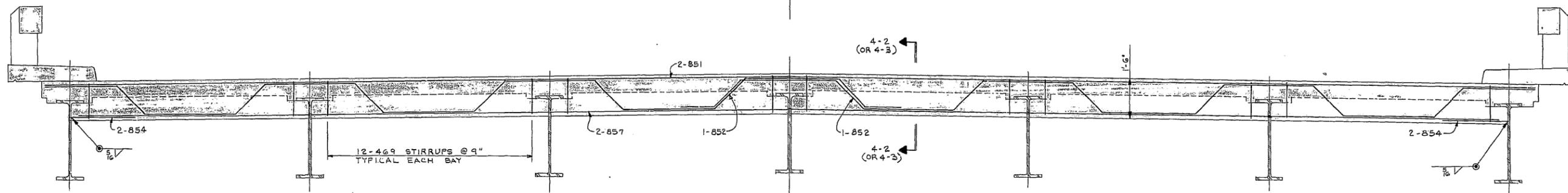
BRIDGE SHEET 1 OF 13

FED. ROAD DIV. No.	STATE	FED. AID PROJ. No.	STATE AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
			7003(1)	1969	7	20

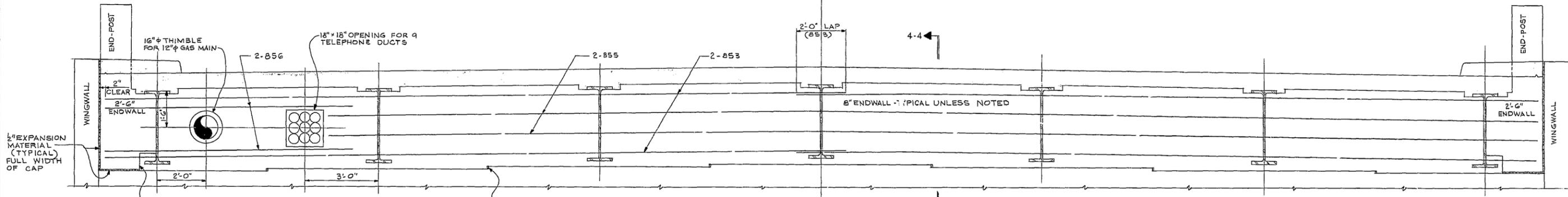
BRIDGE AND HARGROVE ROAD EXT.



SECTION AT MID-SPAN
SCALE: 1/2" = 1'-0"



SECTION AT EDGE BEAM
SCALE: 1/2" = 1'-0"



SECTION AT END BENT
SCALE: 1/2" = 1'-0"

{ END BENT 6 SHOWN
END BENT 1 OPPOSITE HAND }

NOTE: FOR SECTIONS 4-1, 4-2, 4-3, 4-4 & 4-5, SEE SHEET 4

BRIDGE NO. 1
STATE HIGHWAY DEPARTMENT OF GEORGIA
BRIDGE DEPARTMENT

EASTERN ENGINEERING COMPANY
ATLANTA GEORGIA
DECK SECTIONS
HARGROVE ROAD EXT. BRIDGE OVER I-285
STA. 26+62.17 TO STA. 29+81.67
COBB COUNTY PR-7003(1)
SCALE: AS NOTED FEBRUARY, 1969

EECO 68/470

DESIGNED J.A.G.	TRACED	REVIEWED
DRAWN E.L.J.	CHECKED T.H.	APPROVED

BRIDGE SHEET
5 OF 13



ARCADIS
2849 Paces Ferry Road
Suite 400
Atlanta
Georgia 30339
Tel 770.431.8666
Fax 770.435.2666

MEETING REPORT

Subject:

Cumberland Boulevard Improvements from Akers
Mill Road to Cumberland Parkway and
Cumberland Boulevard Loop Streetscape W
(Phase III)
(CCID-1029 & CCID-1030)

Department:
Transportation

ARCADIS Project No.:
GA063875

Place/Date of Meeting:
Cobb County Department of Transportation
March 30, 2009

Report No.:
1

Minutes by:
Ryan Graves

Issue Date:
March 31, 2009

Participants:
Jane Stricklin
John Morey
James Hudgins
Brook Martin
Matt McDow
Koushik Arunachalam
Ryan Graves
David Montanye
Bob Galante
Chris Pruit
Mike Wright
Ron Cooper
Daniel McDuff
Tom Boland
Malaika Rivers

Copies:

The concept team meeting for Cumberland Boulevard Improvements from Akers Mill Road to Cumberland Parkway and Cumberland Boulevard Loop & Streetscape (Phase III) was held on March 30, 2009 at Cobb County DOT. The following is a summary of the issues discussed and the actions to be undertaken to address them.

1. ARCADIS will develop a concept alternative to remove the split phase signal for the Cumberland Boulevard at Cumberland Parkway intersection
 - o Examine alternates to determine the most effective intersection configuration
 - o Determine if an additional right-turn only lane exiting Cumberland Mall would be warranted.
2. ARCADIS will contact GDOT to discuss proposed bridge typical section.
3. A midblock crosswalk will not be added adjacent to the Marriot Hotel crossing Cumberland Blvd. to Cumberland Mall. Instead signs shall be installed to indicate that pedestrians should cross at the intersection of Akers Mill and Cumberland Boulevard.
4. The fence in the median of Cumberland Blvd. adjacent to the CCT Transfer Station shall be reinstalled to dissuade midblock crossings in this area.
5. ARCADIS will determine if it is possible and feasible to maintain existing landscape features in the proposed Cumberland Boulevard Median Landscape plans
6. ARCADIS will move streetlights from the buffer between the back of curb and sidewalk to the back of sidewalk.
 - o Existing streetlights in the area of the CCT Transfer Station are to remain. No new lighting will be added in this area.
7. ARCADIS will develop an alternate for a two-way left turn lane in the area adjacent to Carrabbas and Chuck E. Cheese and a show revised island in the Cumberland Place Shopping Center driveway to allow left turn access from Cumberland Blvd. eastbound into the shopping center.
8. Overhead signs will be installed on Cumberland Boulevard westbound approaching the Cumberland Parkway intersection to indicate that a through lane becomes a left turn lane onto Cumberland Parkway.
9. ARCADIS would like to meet with interested Cumberland CID board members to solicit input on the proposed concept. A meeting will be scheduled at a later date.



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Fax 770.435.2666

MEETING REPORT

Subject:

Cumberland Boulevard Improvements from Akers
Mill Road to Cumberland Parkway and
Cumberland Boulevard Loop Streetscape W
(Phase III)
(CCID-1029 & CCID-1030)

Department:
Transportation

ARCADIS Project No.:
GA063875

Place/Date of Meeting:
Cobb County Department of Transportation
May 19, 2009

Report No.:
1

Minutes by:
Ryan Graves

Issue Date:
May 22, 2009

Participants:
Jane Stricklin
John Morey
James Hudgins
Brook Martin
Matt McDow
Koushik Arunachalam
Ryan Graves
Chris Pruitt
John Shern
Ron Cooper
Daniel McDuff
Tom Boland
Tim McKay

The final concept team meeting for Cumberland Boulevard Improvements from Akers Mill Road to Cumberland Parkway and Cumberland Boulevard Loop & Streetscape (Phase III) was held on May 19, 2009 at Cobb County DOT. The following is a summary of the issues discussed and the actions to be undertaken to address them.

1. ARCADIS presented a memo analyzing alternates to replace the split phasing at the intersection of Cumberland Boulevard and Cumberland Parkway. The conclusion of this memo was that the configuration as presented at the original concept team meeting, with split phasing on all approaches, is the preferred alternate. After reviewing the memo, the meeting attendees agreed with this conclusion. ARCADIS will proceed with this design.
2. ARCADIS will remove the island from the Cumberland Place Shopping Center (Carrabba's) driveway to allow full access to the shopping center
 - o ARCADIS will determine the minimum width of the two way left turn lane to allow safe left turn movements from the Cumberland Place Shopping Center driveway to Cumberland Boulevard eastbound.
 - o ARCADIS will provide adequate site distance for the Cumberland Place Shopping Center driveway and will incorporate sight line easement in the design as necessary.
 - o Landscaping in the area of the Cumberland Place Shopping Center driveway will be such that it will not impede sight distance.
3. ARCADIS will remove the proposed sidewalk along the northern side of Cumberland Boulevard from Springhill Parkway to Cumberland Parkway. ARCADIS will also remove the proposed sidewalk from the northern side of the Cumberland Boulevard bridge over I-285.
 - o An inquiry was made to GDOT regarding narrowing the travel lanes on the Cumberland Boulevard bridge over I-285 to accommodate a six foot sidewalk on the northern side of the bridge. GDOT's response stated that the parapet on the northern side of the bridge would have to be replaced. This work was deemed to be too costly for the county to pursue.
 - o To dissuade pedestrians from attempting to cross on the northern side of the bridge, sidewalk will not be installed on the approaches to the bridge on the northern side of Cumberland Boulevard from Spring Hill Parkway to Cumberland Parkway. Signs will be installed at the intersections of Spring Hill Parkway and Cumberland Parkway indicating that pedestrians should utilize the sidewalk on the southern side of Cumberland Boulevard and the existing pedestrian bridge over I-285 on this side of the roadway.
 - o The existing sidewalk on the northern side of Cumberland Boulevard at the I-285 bridge approaches will be removed and landscaping to dissuade pedestrians will be installed.
 - o ARCADIS will provide a cost estimate for installing sidewalk on the northern side of Cumberland Boulevard from Springhill Parkway to the Cumberland Place Shopping Center driveway. The County will review this cost estimate and determine whether the sidewalk should be included in the project.
4. ARCADIS will update the streetlights shown on the typical sections to show Cumberland CID standard lights. Specifications for these streetlights will be provided by Tom Boland.



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Tel 770.431.8666
Fax 770.435.2666

MEMO

To:
Jane Stricklin, PE
Cobb County Department of Transportation
1890 County Services Parkway
Marietta, GA 30008

From:
Matt McDow, PE

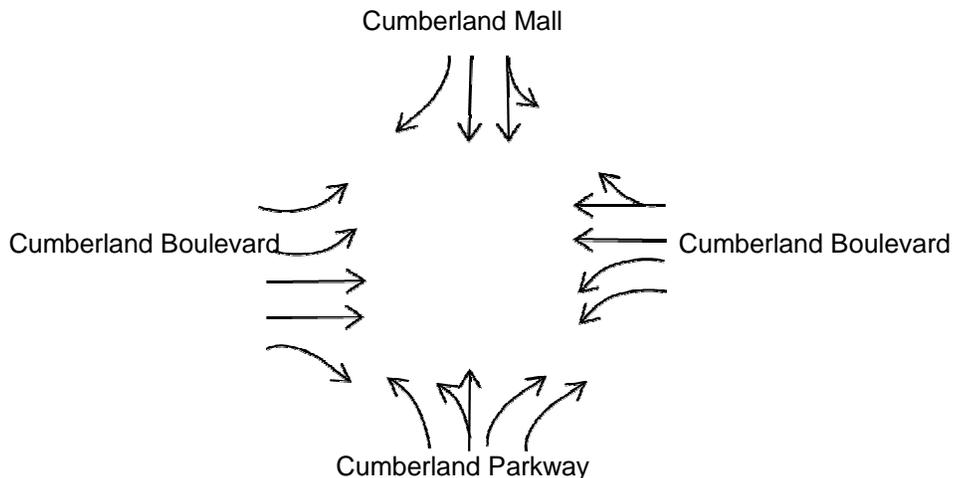
Date:
April 29, 2009

ARCADIS Project No.:
GA063875

Subject:
Cumberland Boulevard at
Cumberland Parkway

The scope of this memorandum is to identify and evaluate alternatives to potentially replace the split phasing at the intersection of Cumberland Boulevard and Cumberland Parkway. The alternatives identified include modifications to the current proposed lane configuration and a combination of signal phasing. Cumberland Boulevard at Cumberland Parkway is currently operating as a split-phased intersection at all four approaches. Three alternatives, shown below, were developed in conjunction with split and protected phasing. Alternative 1 is the current proposed build scenario.

Alternative 1



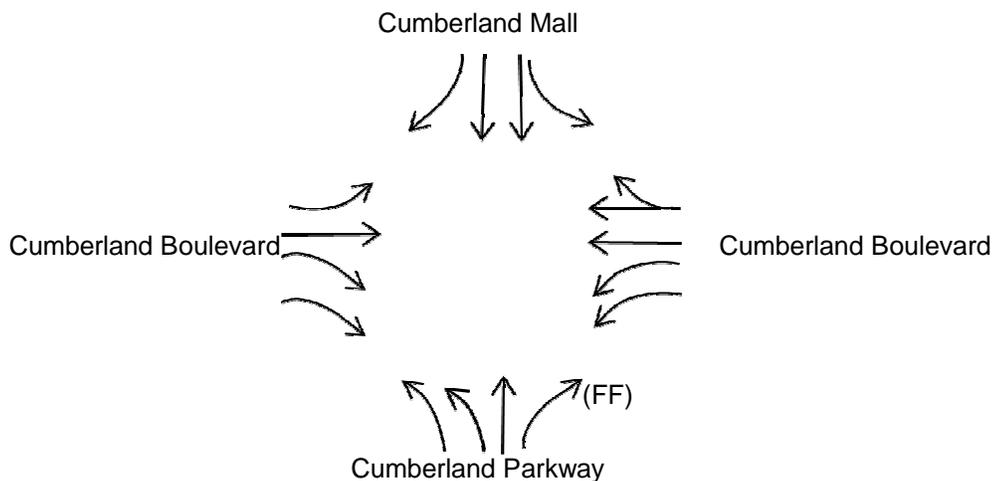
Under this alternative, the lane geometry at the intersection of Cumberland Boulevard and Cumberland Parkway will be consistent with the recommendations for the Cumberland Boulevard widening improvements. The sub-alternatives within Alternative 1 include signal phasing modifications. Alternative 1A maintains the current split phasing on all four approaches. Alternative 1B includes protected phasing along Cumberland Boulevard and split phasing along Cumberland Parkway and the Cumberland Mall access road. The results of the intersection capacity analysis for Alternative 1 are summarized in Table 1.

Table 1. Summary of Alternative 1 Traffic Analysis

Phasing Condition	Open Year (2012) Alternative 1 Build Condition				Design Year (2032) Alternative 1 Build Condition			
	A.M.		P.M.		A.M.		P.M.	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
1A: Split Phasing	D	39.2	D	51.4	D	46.0	E	59.5
1B: Northbound and Southbound Approach – Split Phasing Eastbound and Westbound Approach – Lead/Lag Phasing	D	39.4	D	47.7	D	51.4	E	62.3

Split phasing is required to be maintained along Cumberland Parkway and the Cumberland Mall access road because of the restriction in lane geometry with a shared left/through lane on both approaches. The intersection operates at a comparable level of service under both sub-alternatives, with a slightly lower delay with the split phasing on all approaches.

Alternative 2



The lane configuration for Alternative 2 is described below:

- Restripe the outermost eastbound through lane along Cumberland Boulevard to a right-turn-only lane. This lane reassignment is to provide a free-flow right-turn movement for heavy a.m. traffic from Cumberland Parkway to eastbound Cumberland Boulevard.
- Modify the northbound dual right-turn lanes to one free-flow right-turning lane.
- Restripe the shared through/left-turn lane to a left-turn lane.
- Restripe the innermost right-turn lane along the northbound Cumberland Parkway approach to a through lane.
- Add a southbound left-turn lane along the Cumberland Mall access road.

This alternative focuses on feasible measures to eliminate split phasing along Cumberland Parkway and the Cumberland Mall access road by separating the left and through lane movements. The sub-alternatives within Alternative 2 include signal phasing modifications. Alternative 2A maintains the current split phasing on all four approaches. Alternative 2B has protected phasing along Cumberland Boulevard and split phasing along Cumberland Parkway and the Cumberland Mall access road. Alternative 2C has protected phasing for all approaches.

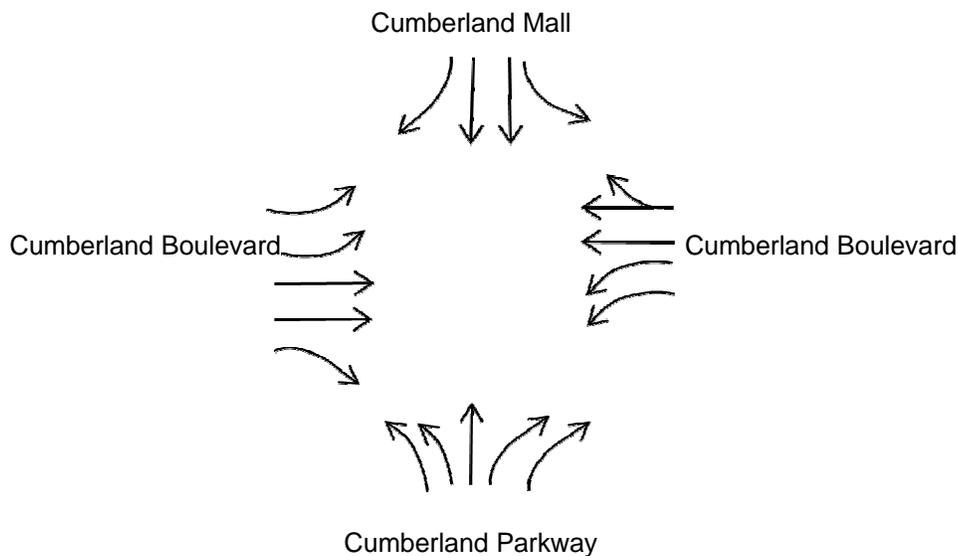
The results of the intersection capacity analysis for Alternative 2 are summarized in Table 2.

Table 2. Summary of Alternative 2 Traffic Analysis

Phasing Condition	Open Year (2012) Alternative 2 Build Condition				Design Year (2032) Alternative 2 Build Condition			
	A.M.		P.M.		A.M.		P.M.	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
2A: Split Phasing	D	36.8	D	46.4	D	41.1	D	51.5
2B: Northbound and Southbound Approach – Split Phasing Eastbound and Westbound Approach – Lead/Lag Phasing	C	30.9	D	44.6	C	31.5	D	51.2
2C: Lead/Lag Phasing	C	30.9	D	44.6	D	35.1	D	49.2

The lane configuration in Alternative 2 reduces the delay for all signal phasing sub-alternatives. However, the restriping of the eastbound approach from two lanes to one through lane increases queue lengths significantly. This restriping creates queue lengths in the eastbound through lane of approximately 800 feet and 1,400 feet during the morning peak hours for the open year and the design year, respectively. Alternatives 2B and 2C have better level of service during the morning peak hours, and the level of service is the same for all three sub-alternatives during the afternoon peak hours.

Alternative 3



Alternative 3 evaluates the effect of capacity improvements without resigning or removing capacity from the lane configuration developed as part of the Cumberland Boulevard widening improvements. The changes to the lane configuration for Alternative 3 are described below:

- Add a southbound left-turn lane along the Cumberland Mall access road.
- Widen Cumberland Parkway in the vicinity of the study intersection to accommodate dual left-turn lanes, one through lane, and dual right-turn lanes.

The sub-alternatives within Alternative 3 include modifications to the signal phasing. Alternative 3A maintains the current split phasing on all four approaches. Alternative 3B has protected phasing along Cumberland Boulevard and split phasing along Cumberland Parkway and the Cumberland Mall access road. Alternative 3C has protected phasing (lead/lag) along Cumberland Boulevard, Cumberland Parkway, and the Cumberland Mall access road.

Table 3. Summary of Alternative 3 Traffic Analysis

Phasing Condition	Open Year (2012) Alternative 3 Build Condition				Design Year (2032) Alternative 3 Build Condition			
	A.M.		P.M.		A.M.		P.M.	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
3A: Split Phasing	D	36.9	D	48.9	D	46.0	E	55.5
3B: Northbound and Southbound Approach – Split Phasing Eastbound and Westbound Approach – Lead/Lag Phasing	D	37.8	D	46.0	D	38.3	E	57.3
3C: Lead/Lag Phasing	C	34.9	D	39.7	D	41.1	D	50.2

The results of the Alternative 3 analysis indicate that Alternative 3C provides a better level of service as compared to Alternatives 3A and 3B. The widening along Cumberland Parkway helps reduce delay, although not significantly, by approximately 6 seconds as compared to the split phasing option.

Conclusion and Recommendations

As part of this traffic analysis, ARCADIS reviewed, identified, and evaluated the various alternatives that could potentially eliminate the split phasing at the intersection of Cumberland Boulevard and Cumberland Parkway. Three alternatives and multiple sub-alternatives were developed and tested to compare traffic operations. The traffic analysis resulted in the following findings:

- During the morning peak hours, the eastbound through movement along Cumberland Boulevard and the northbound right-turn movement from Cumberland Parkway onto Cumberland Boulevard are the critical movements.
- During the afternoon peak hour, the traffic pattern is such that approximately 45 percent of the green time is required to service the critical movement from westbound Cumberland Boulevard onto Cumberland Parkway.
- Alternative 1A and 1B operates at a better level of service than most of the other alternatives. The delay differential between these scenarios is not very significant
- Alternative 2 and its sub-alternatives result in significantly long queues along eastbound Cumberland Boulevard and thereby Alternative 2 is not an efficient alternative.

- Alternative 3 provides a reduction in delay, but would require some roadway widening. Design exceptions in terms of lane width and feasibility of widening should be reviewed to build this alternative.
- Comparing the overall benefit as a function of reduction in delay, cost, and feasibility of the project construction, Alternative 1A, split phasing on all approaches to the intersection of Cumberland Boulevard and Cumberland Parkway is the preferred alternative.

AGREEMENT

Reference No. 11618

BETWEEN

Scanned Date: _____

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

DO NOT OBLIGATE

AND

COBB COUNTY

FOR

TRANSPORTATION FACILITY IMPROVEMENTS

This Framework Agreement is made and entered into this 16th day of June, 2011, by and between the DEPARTMENT OF TRANSPORTATION, an agency of the State of Georgia, hereinafter called the "DEPARTMENT", and COBB COUNTY, acting by and through its Board of Commissioners, hereinafter called the "LOCAL GOVERNMENT".

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to improve the transportation facility described in Attachment A, attached and incorporated herein by reference and hereinafter referred to as the "PROJECT"; and

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to participate in certain activities including the funding of certain portions of the PROJECT and the DEPARTMENT has relied upon such representations; and

**COUNTY CLERK'S
ORIGINAL
(Return this document to the
Cobb County Clerk's Office)**

WHEREAS, the DEPARTMENT has expressed a willingness to participate in certain activities of the PROJECT as set forth in this Agreement; and

WHEREAS, the Constitution authorizes intergovernmental agreements whereby state and local entities may contract with one another "for joint services, for the provision of services, or for the joint or separate use of facilities or equipment; but such contracts must deal with activities, services or facilities which the parties are authorized by law to undertake or provide." Ga. Constitution Article IX, §III, ¶II(a).

NOW THEREFORE, in consideration of the mutual promises made and of the benefits to flow from one to the other, the DEPARTMENT and the LOCAL GOVERNMENT hereby agree each with the other as follows:

1. The LOCAL GOVERNMENT has applied for and received "Qualification Certification" to administer federal-aid projects. The GDOT Certification Committee has reviewed, confirmed and approved the certification for the Local Government to develop federal project(s) within the scope of its certification using the DEPARTMENT'S Local Administered Project Manual procedures. The Local Government shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design) activities, hereinafter referred to as "PE", all reimburseable utility relocations, all non-reimburseable utilities owned by the LOCAL GOVERNMENT, railroad costs, right of way acquisitions and construction, as specified in Attachment A, attached hereto and incorporated herein by reference. Expenditures incurred by the LOCAL GOVERNMENT prior to the execution of this AGREEMENT or

subsequent funding agreements shall not be considered for reimbursement by the DEPARTMENT. PE expenditures incurred by the LOCAL GOVERNMENT after execution of this AGREEMENT shall be reimbursed by the DEPARTMENT once a written notice to proceed is given by the DEPARTMENT.

2. The DEPARTMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the PE, right of way acquisitions, reimbursable utility relocations, railroad costs, or construction as specified in Attachment A.

3. It is understood and agreed by the DEPARTMENT and the LOCAL GOVERNMENT that the funding portion as identified in Attachment "A" of this Agreement only applies to the PE. The Right of Way and Construction funding estimate levels as specified in Attachment "A" are provided herein for planning purposes and do not constitute a funding commitment for right of way and construction. The DEPARTMENT will prepare LOCAL GOVERNMENT Specific Activity Agreements for funding applicable to Right of Way or Construction when appropriate.

Further, the LOCAL GOVERNMENT shall be responsible for repayment of any expended federal funds if the PROJECT does not proceed forward to completion due to a lack of available funding in future PROJECT phases, changes in local priorities or cancellation of the PROJECT by the LOCAL GOVERNMENT without concurrence by the DEPARTMENT.

4. The LOCAL GOVERNMENT shall be responsible for all costs for the continual maintenance and operations of any and all sidewalks and the grass strip between the curb and sidewalk within the PROJECT limits.

5. Both the LOCAL GOVERNMENT and the DEPARTMENT hereby acknowledge that Time is of the Essence. It is agreed that both parties shall adhere to the schedule of activities currently established in the approved Transportation Improvement Program/State Transportation Improvement Program, hereinafter referred to as "TIP/STIP". Furthermore, all parties shall adhere to the detailed project schedule as approved by the DEPARTMENT, attached as Attachment B and incorporated herein by reference. In the completion of respective commitments contained herein, if a change in the schedule is needed, the LOCAL GOVERNMENT shall notify the DEPARTMENT in writing of the proposed schedule change and the DEPARTMENT shall acknowledge the change through written response letter; provided that the DEPARTMENT shall have final authority for approving any change.

If, for any reason, the LOCAL GOVERNMENT does not produce acceptable deliverables in accordance with the approved schedule, the DEPARTMENT reserves the right to delay the PROJECT's implementation until funds can be re-identified for right of way or construction, as applicable.

6. The LOCAL GOVERNMENT shall certify that the regulations for "CERTIFICATION OF COMPLIANCES WITH FEDERAL PROCUREMENT REQUIREMENTS, STATE AUDIT REQUIREMENTS, and FEDERAL AUDIT REQUIREMENTS" are understood and will comply in full with said provisions.

7. The LOCAL GOVERNMENT shall accomplish the PE activities for the PROJECT. The PE activities shall be accomplished in accordance with the DEPARTMENT's Plan Development Process hereinafter referred to as "PDP", the applicable guidelines of the American Association of State Highway and Transportation Officials, hereinafter referred to as "AASHTO", the DEPARTMENT's Standard Specifications Construction of Transportation Systems, and all applicable design guidelines and policies of the DEPARTMENT to produce a cost effective PROJECT. Failure to follow the PDP and all applicable guidelines and policies will jeopardize the use of Federal Funds in some or all categories outlined in this agreement, and it shall be the responsibility of the LOCAL GOVERNMENT to make up the loss of that funding. The LOCAL GOVERNMENT's responsibility for PE activities shall include, but is not limited to the following items:

a. Prepare the PROJECT Concept Report and Design Data Book in accordance with the format used by the DEPARTMENT. The concept for the PROJECT shall be developed to accommodate the future traffic volumes as generated by the LOCAL GOVERNMENT as provided for in paragraph 7b and approved by the DEPARTMENT. The concept report shall be approved by the DEPARTMENT prior to the LOCAL GOVERNMENT beginning further

development of the PROJECT plans. It is recognized by the parties that the approved concept may be updated or modified by the LOCAL GOVERNMENT as required by the DEPARTMENT and re-approved by the DEPARTMENT during the course of PE due to updated guidelines, public input, environmental requirements, Value Engineering recommendations, Public Interest Determination (PID) for utilities, utility/railroad conflicts, or right of way considerations.

b. Prepare a Traffic Study for the PROJECT that includes Average Daily Traffic, hereinafter referred to as "ADT", volumes for the base year (year the PROJECT is expected to be open to traffic) and design year (base year plus 20 years) along with Design Hour Volumes, hereinafter referred to as "DHV", for the design year. DHV includes morning (AM) and evening (PM) peaks and other significant peak times. The Study shall show all through and turning movement volumes at intersections for the ADT and DHV volumes and shall indicate the percentage of trucks on the facility. The Study shall also include signal warrant evaluations for any additional proposed signals on the PROJECT.

c. Prepare environmental studies, documentation; reports and complete Environmental Document for the PROJECT along with all environmental re-evaluations required that show the PROJECT is in compliance with the provisions of the National Environmental Policy Act or the Georgia Environmental Policy Act as per the DEPARTMENT's Environmental Procedures Manual, as appropriate to the PROJECT funding. This shall include any and all

archaeological, historical, ecological, air, noise, community involvement, environmental justice, flood plains, underground storage tanks, and hazardous waste site studies required. The completed Environmental Document approval shall occur prior to Right of Way funding authorization. A re-evaluation is required for any design change as described in Chapter 7 of the Environmental Procedures Manual. In addition, a re-evaluation document approval shall occur prior to any Federal funding authorizations if the latest approved document is more than 6 months old. The LOCAL GOVERNMENT shall submit to the DEPARTMENT all studies, documents and reports for review and approval by the DEPARTMENT, the FHWA and other environmental resource agencies. The LOCAL GOVERNMENT shall provide Environmental staff to attend all PROJECTS related meetings where Environmental issues are discussed. Meetings include, but are not limited to, concept, field plan reviews and value engineering studies.

d. Prepare all PROJECT public hearing and public information displays and conduct all required public hearings and public information meetings with appropriate staff in accordance with DEPARTMENT practice.

e. Perform all surveys, mapping, soil investigations and pavement evaluations needed for design of the PROJECT as per the appropriate DEPARTMENT Manual.

f. Perform all work required to obtain all applicable PROJECT permits, including, but not limited to, Cemetery, TVA and US Army Corps of Engineers permits, Stream Buffer Variances and Federal Emergency Management Agency (FEMA) approvals. The LOCAL GOVERNMENT shall provide all mitigation required for the project, including but not limited to permit related mitigation. All mitigation costs are considered PE costs. PROJECT permits and non-construction related mitigation must be obtained and completed 3 months prior to the scheduled let date. These efforts shall be coordinated with the DEPARTMENT.

g. Prepare the storm water drainage design for the PROJECT and any required hydraulic studies for FEMA Floodways within the PROJECT limits. Acquire of all necessary permits associated with the Hydraulic Study or drainage design.

h. Prepare utility relocation plans for the PROJECT following the DEPARTMENT's policies and procedures for identification, coordination and conflict resolution of existing and proposed utility facilities on the PROJECT. These policies and procedures, in part, require the Local Government to submit all requests for existing, proposed, and relocated facilities to each utility owner within the project area. Copies of all such correspondence, including executed agreements for reimbursable utility/railroad relocations, shall be forwarded to the DEPARTMENT's Project Manager and the District Utilities Engineer and require that any conflicts with the PROJECT be resolved by the LOCAL

GOVERNMENT. If it is determined that the PROJECT is located on an on-system route or is a DEPARTMENT LET PROJECT, the LOCAL GOVERNMENT and the District Utilities Engineer shall ensure that permit applications are approved for each utility company in conflict with the project. If it is determined through the DEPARTMENT's Project Manager and State Utilities Office during the concept or design phases the need to utilize Overhead/Subsurface Utility Engineering, hereinafter referred to as "SUE", to obtain the existing utilities, the LOCAL GOVERNMENT shall be responsible for acquiring those services. SUE costs are considered PE costs.

i. Prepare, in English units, Preliminary Construction plans, Right of Way plans and Final Construction plans that include the appropriate sections listed in the Plan Presentation Guide, hereinafter referred to as "PPG", for all phases of the PDP. All drafting and design work performed on the project shall be done utilizing Microstation and CAICE software respectively using the DEPARTMENT's Electronic Data Guidelines. The LOCAL GOVERNMENT shall further be responsible for making all revisions to the final right of way plans and construction plans, as deemed necessary by the DEPARTMENT, for whatever reason, as needed to acquire the right of way and construct the PROJECT.

j. Prepare PROJECT cost estimates for construction, Right of Way and Utility/railroad relocation along with a Benefit Cost, hereinafter referred to as "B/C ratio" at the following project stages: Concept, Preliminary Field Plan Review, Right of Way plan approval (Right of Way cost only), Final Field Plan

Review and Final Plan submission using the applicable method approved by the DEPARTMENT. The cost estimates and B/C ratio shall also be updated yearly if the noted project stages occur at a longer frequency. Failure of the LOCAL GOVERNMENT to provide timely and accurate cost estimates and B/C ratio may delay the PROJECT's implementation until additional funds can be identified for right of way or construction, as applicable.

k. Provide certification, by a Georgia Registered Professional Engineer, that the Design and Construction plans have been prepared under the guidance of the professional engineer and are in accordance with AASHTO and DEPARTMENT Design Policies.

l. Provide certification, by a Level II Certified Design Professional that the Erosion Control Plans have been prepared under the guidance of the certified professional in accordance with the current Georgia National Pollutant Discharge Elimination System.

m. Provide a written certification that all appropriate staff (employees and consultants) involved in the PROJECT have attended or are scheduled to attend the Department's PDP Training Course and Local Administered Project Training. The written certification shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

8. The Primary Consultant firm or subconsultants hired by the LOCAL GOVERNMENT to provide services on the PROJECT shall be prequalified with the DEPARTMENT in the appropriate area-classes. The DEPARTMENT shall, on request, furnish the LOCAL GOVERNMENT with a list of prequalified consultant firms in the appropriate area-classes. The LOCAL GOVERNMENT shall comply with all applicable state and federal regulations for the procurement of design services and in accordance with the Brooks Architect-Engineers Act of 1972, better known as the Brooks Act, for any consultant hired to perform work on the PROJECT.

9. The DEPARTMENT shall review and has approval authority for all aspects of the PROJECT provided however this review and approval does not relieve the LOCAL GOVERNMENT of its responsibilities under the terms of this agreement. The DEPARTMENT will work with the FHWA to obtain all needed approvals as deemed necessary with information furnished by the LOCAL GOVERNMENT.

10. The LOCAL GOVERNMENT shall be responsible for the design of all bridge(s) and preparation of any required hydraulic and hydrological studies within the limits of this PROJECT in accordance with the DEPARTMENT's policies and guidelines. The LOCAL GOVERNMENT shall perform all necessary survey efforts in order to complete the hydraulic and hydrological studies and the design of the bridge(s). The final bridge plans shall be incorporated into this PROJECT as a part of this Agreement.

11. The LOCAL GOVERNMENT unless otherwise noted in attachment "A" shall be responsible for funding all LOCAL GOVERNMENT owned utility relocations and all

other reimbursable utility/railroad costs. The costs include but are not limited to PE, easement acquisition, and construction activities necessary for the utility/railroad to accommodate the PROJECT. The terms for any such reimbursable relocations shall be laid out in an agreement that is supported by plans, specifications, and itemized costs of the work agreed upon and shall be executed prior to certification by the DEPARTMENT. The LOCAL GOVERNMENT shall certify via written letter to the DEPARTMENT's Project Manager and District Utilities Engineer that all Utility owners' existing and proposed facilities are shown on the plans with no conflicts 3 months prior to advertising the PROJECT for bids and that any required agreements for reimbursable utility/railroad costs have been fully executed. Further, this certification letter shall state that the LOCAL GOVERNMENT understands that it is responsible for the costs of any additional reimbursable utility/railroad conflicts that arise on construction.

12. The DEPARTMENT will be responsible for all railroad coordination on DEPARTMENT Let and/or State Route (On-System) projects; the LOCAL GOVERNMENT shall address concerns, comments, and requirements to the satisfaction of the Railroad and the DEPARTMENT. If the LOCAL GOVERNMENT is shown to LET the construction in Attachment "A" on off-system routes, the LOCAL GOVERNMENT shall be responsible for all railroad coordination and addressing concerns, comments, and requirements to the satisfaction of the Railroad and the DEPARTMENT for PROJECT.

13. The LOCAL GOVERNMENT shall be responsible for acquiring a Value Engineering Consultant for the DEPARTMENT to conduct a Value Engineering Study if

the total estimated PROJECT cost is \$10 million or more. The Value Engineering Study cost is considered a PE cost. The LOCAL GOVERNMENT shall provide project related design data and plans to be evaluated in the study along with appropriate staff to present and answer questions about the PROJECT to the study team. The LOCAL GOVERNMENT shall provide responses to the study recommendations indicating whether they will be implemented or not. If not, a valid response for not implementing shall be provided. Total project costs include PE, right of way, and construction, reimbursable utility/railroad costs.

14. The LOCAL GOVERNMENT, unless shown otherwise on Attachment A, shall acquire the Right of way in accordance with the law and the rules and regulations of the FHWA including, but not limited to, Title 23, United States Code; 23 CFR 710, et. Seq., and 49 CFR Part 24 and the rules and regulations of the DEPARTMENT. Upon the DEPARTMENT's approval of the PROJECT right of way plans, verification that the approved environmental document is valid and current, a written notice to proceed will be provided by the DEPARTMENT for the LOCAL GOVERNMENT to stake the right of way and proceed with all pre-acquisition right of way activities. The LOCAL GOVERNMENT shall not proceed to property negotiation and acquisition whether or not the right of way funding is Federal, State or Local, until the right of way agreement named "Contract for the Acquisition of Right of Way" prepared by the DEPARTMENT's Office of Right of Way is executed between the LOCAL GOVERNMENT and the DEPARTMENT. Failure of the LOCAL GOVERNMENT to adhere to the provisions and requirements specified in the acquisition contract may result in the loss of Federal funding for the PROJECT and it will be the responsibility of the LOCAL GOVERNMENT

to make up the loss of that funding. Right of way costs eligible for reimbursement include land and improvement costs, property damage values, relocation assistance expenses and contracted property management costs. Non reimbursable right of way costs include administrative expenses such as appraisal, consultant, attorney fees and any in-house property management or staff expenses. The LOCAL GOVERNMENT shall certify that all required right of way is obtained and cleared of obstructions, including underground storage tanks, 3 months prior to advertising the PROJECT for bids.

15. The DEPARTMENT unless otherwise shown in Attachment "A" shall be responsible for Letting the PROJECT to construction, solely responsible for executing any agreements with all applicable utility/railroad companies and securing and awarding the construction contract for the PROJECT when the following items have been completed and submitted by the LOCAL GOVERNMENT:

- a. Submittal of acceptable PROJECT PE activity deliverables noted in this agreement.
- b. Certification that all needed rights of way have been obtained and cleared of obstructions.
- c. Certification that the environmental document is current and all needed permits and mitigation for the PROJECT have been obtained.

d. Certification that all Utility/Railroad facilities, existing and proposed, within the PROJECT limits are shown, any conflicts have been resolved and reimbursable agreements, if applicable, are executed.

If the LOCAL GOVERNMENT is shown to LET the construction in Attachment "A", the LOCAL GOVERNMENT shall provide the above deliverables and certifications and shall follow the requirements stated in Chapter 10 of the DEPARTMENT's Local Administered Project Manual.

16. The LOCAL GOVERNMENT shall provide a review and recommendation by the engineer of record concerning all shop drawings prior to the DEPARTMENT review and approval. The DEPARTMENT shall have final authority concerning all shop drawings.

17. The LOCAL GOVERNMENT agrees that all reports, plans, drawings, studies, specifications, estimates, maps, computations, computer files and printouts, and any other data prepared under the terms of this Agreement shall become the property of the DEPARTMENT if the PROJECT is being let by the DEPARTMENT. This data shall be organized, indexed, bound, and delivered to the DEPARTMENT no later than the advertisement of the PROJECT for letting. The DEPARTMENT shall have the right to use this material without restriction or limitation and without compensation to the LOCAL GOVERNMENT.

18. The LOCAL GOVERNMENT shall be responsible for the professional quality, technical accuracy, and the coordination of all reports, designs, drawings,

specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement. The LOCAL GOVERNMENT shall correct or revise, or cause to be corrected or revised, any errors or deficiencies in the reports, designs, drawings, specifications, and other services furnished for this PROJECT. Failure by the LOCAL GOVERNMENT to address the errors or deficiencies within 30 days of notification shall cause the LOCAL GOVERNMENT to assume all responsibility for construction delays caused by the errors and deficiencies. All revisions shall be coordinated with the DEPARTMENT prior to issuance. The LOCAL GOVERNMENT shall also be responsible for any claim, damage, loss or expense, to the extent allowed by law that is attributable to errors, omissions, or negligent acts related to the designs, drawings, specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement.

This Agreement is made and entered into in FULTON COUNTY, GEORGIA, and shall be governed and construed under the laws of the State of Georgia.

The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the DEPARTMENT and the LOCAL GOVERNMENT have caused these presents to be executed under seal by their duly authorized representatives.

DEPARTMENT OF TRANSPORTATION

COBB COUNTY

BY: *Vance Smith*
Commissioner

BY: *Timothy D. Lee*
Timothy D. Lee
Board of Commissioners
Chairman

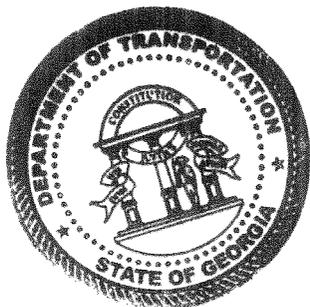
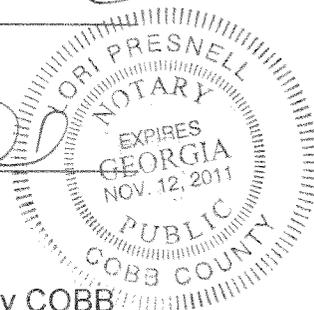


ATTEST: *Angela Whitworth*
Treasurer

Signed, sealed and delivered this 15th day of March, 2011, in the presence of:

Aranya Vahral
Witness

Dei Ronald
Notary Public



This Agreement approved by COBB COUNTY, the 8th day of March, 2011.

Attest

Karen L. King
Candace W. Ellison, County Clerk
Karen L. King
Assistant County Clerk

FEIN: 58-6000804

ATTACHMENT "A"
Project Number: 0010005 – Cobb County
Project Number: 0010006 – Cobb County
Project Number: 0010007 – Cobb County
Project Number: 0010008 – Cobb County
Project Number: 0010009 – Cobb County

CC10
1025/26

CC10-1022

CC10-1024

CC10
1029/30

Project (PI#, Project #, Description)	Preliminary Engineering		Right of Way			Construction		Utility Relocation	
	Funding	PE Activity by	*Funding of Real Property	Acq. by	Acq. Fund by	*Funding	Letting by	Utility Funding by	Railroad Funding by
P.I. # 0010005 Windy Hill – East & West Side Improvements	100% Local Gov. GDOT Review (\$35,000 Local Gov.)	Local Gov.	N/A	N/A	N/A	100% Local Gov.	Local Gov.	100% Local Gov.	100% Local Gov.
P.I. # 0010006 Leland Drive Extension	100% Local Gov. GDOT Review (\$50,000 Local Gov.)	Local Gov.	N/A	N/A	N/A	100% Local Gov.	Local Gov.	100% Local Gov.	100% Local Gov.
P.I. # 0010007 I-285 Eastbound Off Ramp Restriping	100% Local Gov.	Local Gov.	N/A	N/A	N/A	(80%) Federal (\$129,180) (20%) State (\$32,295) >(\$161,475) 100% Local Gov.	GDOT	100% Local Gov.	100% Local Gov.
P.I. # 0010008 Cumberland Blvd – Intersection Imp. & Streetscape – Phase III	100% Local Gov. GDOT Review (\$12,000 Local Gov.)	Local Gov.	N/A	N/A	N/A	100% Local Gov.	Local Gov.	100% Local Gov.	100% Local Gov.

CCW-1023

P.I. # 0010009 Bob Callan Trunk Trail – Phase II	100% Local Gov. GDOT Review (\$12,000 Local Gov.)	Local Gov.	N/A	N/A	N/A	100% Local Gov.	Local Gov.	100% Local Gov.	100% Local Gov.
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Note: Maximum allowable GDOT participating amounts for PE category shall be shown above. Local Government will only be reimbursed the percentage of the accrued invoiced amounts up to but not to exceed the maximum amount indicated. *R/W and Construction amounts shown are estimates for budget planning purposes only.

ATTACHMENT "B"
0010005 – Cobb County

*Wing Hill Road east
&
West*

Proposed Project Schedule

Environmental Phase					
Concept Phase					
Preliminary Plan Phase					
Right of Way Phase					

Deadlines for Responsible Parties	Execute Agreement	Month/Year (Approve Concept)	Month/Year (Approve Env. Document)	Month/Year (Authorize Right of Way funds)	Month/Year (Authorize Const. funds)
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Annual Reporting Requirements

<i>August 2011</i>	<i>May 2012</i>	<i>June 2012</i>	<i>JUNE 2013</i>
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The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

ATTACHMENT "B"
0010006 – Cobb County

Leona D.

Proposed Project Schedule

Environmental Phase					
Concept Phase					
Preliminary Plan Phase					
Right of Way Phase					

Deadlines for Responsible Parties	Execute Agreement	Month/Year (Approve Concept)	Month/Year (Approve Env. Document)	Month/Year (Authorize Right of Way funds)	Month/Year (Authorize Const. funds)
<u>Annual Reporting Requirements</u>		August 2011	June 2012	August 2012	December 2013

The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

ATTACHMENT "B"
0010007 – Cobb County

J. 205 63

Proposed Project Schedule

Environmental Phase					
Concept Phase					
Preliminary Plan Phase					
Right of Way Phase					

Deadlines for Responsible Parties	Execute Agreement	Month/Year (Approve Concept)	Month/Year (Approve Env. Document)	Month/Year (Authorize Right of Way funds)	Month/Year (Authorize Const. funds)
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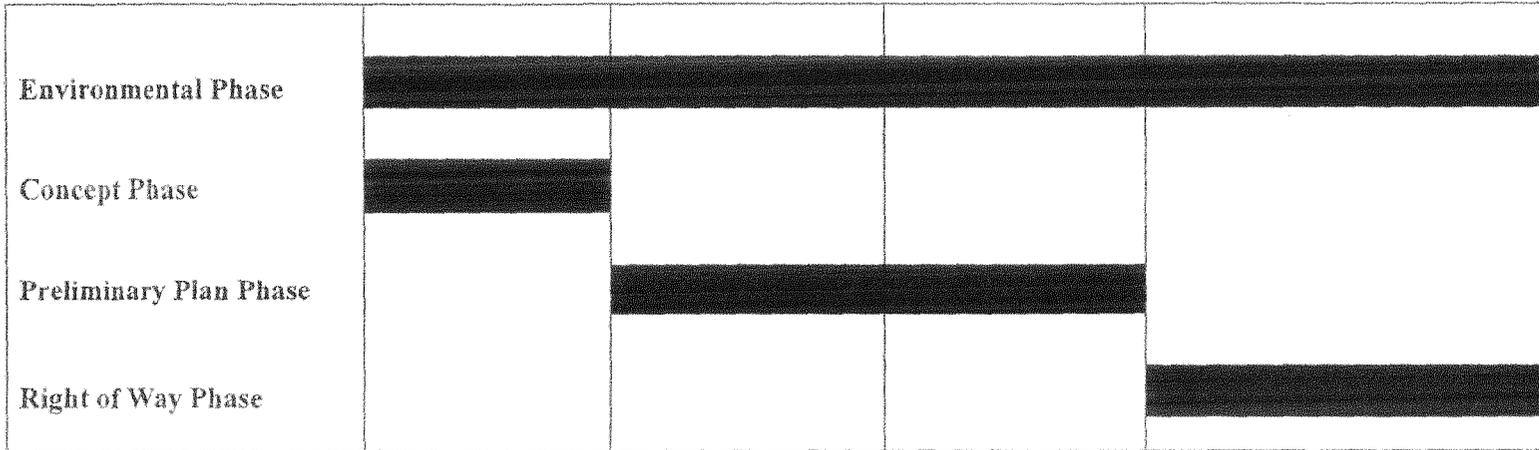
<u>Annual Reporting Requirements</u>	<i>Complete</i>	<i>Complete</i>	<i>N/A</i>	<i>JUNE 2011</i>
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The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

*Cumulative Bids
Schedule for phase III*

ATTACHMENT "B"
0010008 – Cobb County

Proposed Project Schedule



Deadlines for Responsible Parties	Execute Agreement	Month/Year (Approve Concept)	Month/Year (Approve Env. Document)	Month/Year (Authorize Right of Way funds)	Month/Year (Authorize Const. funds)
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Annual Reporting Requirements

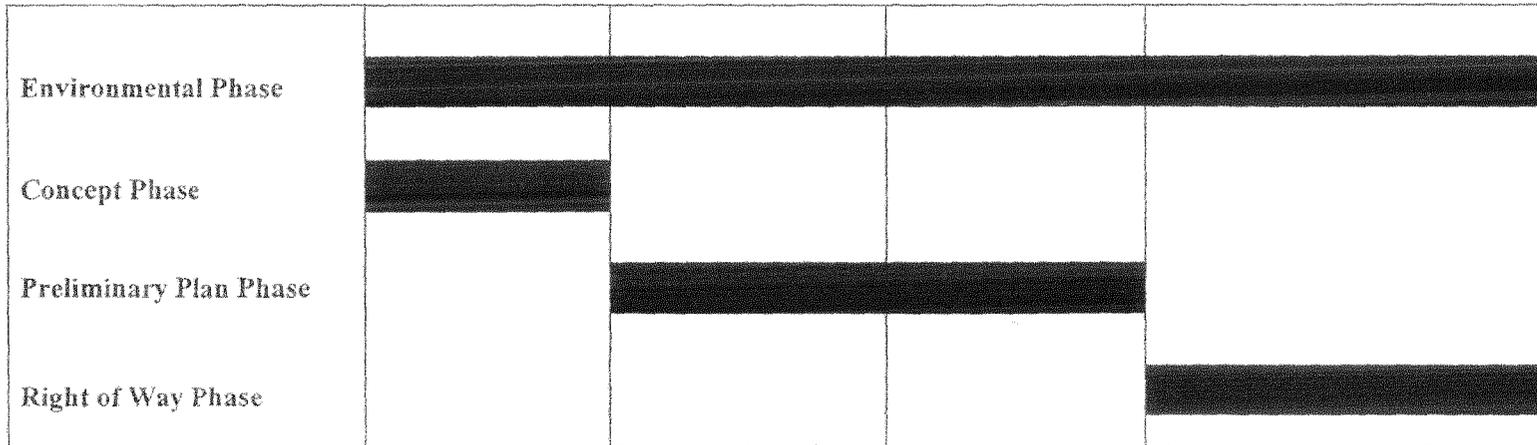
June 2011 July 2012 July 2012 August 2013

The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

ATTACHMENT "B"
0010009 – Cobb County

Bob Gann Phase II

Proposed Project Schedule



Deadlines for Responsible Parties	Execute Agreement	Month/Year (Approve Concept)	Month/Year (Approve Env. Document)	Month/Year (Authorize Right of Way funds)	Month/Year (Authorize Const. funds)
<u>Annual Reporting Requirements</u>		<i>SEPT/2011</i>	<i>JUNE 2012</i>	<i>AUGUST 2012</i>	<i>AUGUST 2013</i>

The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.



COBB COUNTY
DEPARTMENT OF TRANSPORTATION

1890 County Services Parkway
Marietta, Georgia 30008-4014
(770) 528-1600 • fax: (770) 528-1601

November 11, 2011

Mr. Lynn Rainey
358 Roswell Street, Suite 1130
Marietta, Georgia 30060

Re: Amendment to Cooperation Agreement

Dear Lynn:

Attached is an executed original of the *Amendment to Cooperation Agreement* between Cobb County and the Cumberland Community Improvement District. The document has been signed by the Chairman of the Cobb County Board of Commissioners and is being returned to you for your records.

The document outlines the responsibilities of each entity for the provision of street lighting and pedestrian lighting services within the Cumberland Community Improvement District.

Please let me know if you have any questions and thanks for all your efforts in helping to craft this document.

Sincerely,

Jeffrey Burns
Street Light Program Administrator

Enclosure

STATE OF GEORGIA
COUNTY OF COBB

AMENDMENT TO COOPERATION AGREEMENT

THIS AMENDMENT TO COOPERATION AGREEMENT is made and entered into the date approved by the most recent signatory below, by and between **COBB COUNTY**, a political subdivision of the State of Georgia (hereinafter called the "County"), and the **CUMBERLAND COMMUNITY IMPROVEMENT DISTRICT BOARD** (hereinafter called the "CID Board").

WHEREAS, on April 14, 1988, the Cumberland Community Improvement District was created pursuant to Ga. Laws 1985, p. 4009, as amended, all of which lies wholly within unincorporated Cobb County (the "District"); and

WHEREAS, State law requires that services and facilities shall be provided for in a Cooperation Agreement executed jointly by the CID Board and the Board of Commissioners of Cobb County; and

WHEREAS, a Cooperation Agreement was executed between the County and CID Board and filed November 3, 2006 for certain services and facilities; and

WHEREAS, the CID Board intends to provide for the installation of street lights and pedestrian lights within portions of the District; and

WHEREAS, the County has adopted amendments to the Official Code of Cobb County providing for the creation of a street light district (Sec. 106-48(d)) and a pedestrian light district (Sec. 106-162(c)) within a community improvement district, conditioned upon the approval of a resolution by the governing body of a community improvement district, with the cost to be determined by agreement between the County and the community improvement district, and final approval by the County Board of Commissioners.

NOW, THEREFORE, in consideration of the mutual covenants and benefits flowing to the parties, the County and the CID Board do agree as follows:

1.

The County Board of Commissioners and the CID Board create and designate the entire Cumberland Community Improvement District as a street light district and a pedestrian light district pursuant to resolution of the CID Board, and approval by a majority of the electors and a majority of the equity electors present and voting at a duly advertised caucus of electors of the Cumberland Community Improvement District. No other street light district or pedestrian light district may be created in the District, with the exception that the owner of a real estate development is not prohibited from requesting and obtaining approval from the County and the CID to establish its own street light district and/or pedestrian light district along the interior streets of a development which would not be subject to this Agreement. Should a developer install street lights and/or pedestrian lights along public streets and sidewalks adjacent to the outside borders of a development, but within the District, they must be consistent with the design and quality of those installed by the CID.

2.

The Cooperation Agreement shall be governed by the Cobb County Government Street Light Program Policies, Procedures, and Guidelines ("Policy") except to the extent that the Policy is inconsistent with the Cooperation Agreement, as amended, in which case the terms of the latter shall control.

3.

The CID Board will provide for the installation of street lights and pedestrian lights in locations designated by the CID Board, subject to approval by the County. Accordingly, the installation surcharges in the Policy are inapplicable. The County retains authority and control over where lights may be placed within its right of way, but shall not require the CID to fund or erect lights. All street and pedestrian lights shall comply with, or may exceed, the minimal County standards. The CID shall submit to

the County for approval the selected design of the lights, so that the County may identify any extraordinary maintenance or energy costs. Should the County elect to install street lights and/or pedestrian lights in the District at its own cost or at the cost of a third party ("County Lights"), the CID will be provided the option of paying the incremental cost of upgrading the lights to the design and quality of those installed by the CID ("Incremental Cost"). For County Lights installed in the District at the time of the execution of this Amendment to the Cooperation Agreement, that the CID elects to upgrade to the design and quality of those installed in the CID, the CID shall pay the full cost of upgrading the lights.

4.

The County itself or through a third party, not the CID, is responsible for maintenance ("Maintenance") of lights installed pursuant to this Agreement including light poles, electrical power circuits and devices, lamps, and globes (collectively "Light Fixture").

5.

In the event a Light Fixture is physically damaged due to being struck by a motor vehicle, or due to inclement weather, or due to other reasons to the extent, in the reasonable opinion of the CID, it must be replaced, with the exception of the replacement of a lamp, it will no longer be considered a Maintenance issue and the CID will replace the Light Fixture with one of consistent design and quality (with the exception of County Lights for which the CID will only pay the Incremental Cost), after which the replacement Light Fixture will become the responsibility of the County to maintain. The County will use its best efforts to recover the cost of replacement from any person and/or entity responsible for the damage or that may have funds allocated for such events (e.g., FEMA), and promptly remit to the CID any restitution collected.

6.

The County, not the CID, is responsible for the electrical energy (“Energy”) costs to illuminate and cause to be operational the lights installed pursuant to this Agreement.

7.

The County will recover its Maintenance costs, Energy costs, “Administrative Costs”, “Indirect Costs”, and “Water System Costs” (the latter three terms as defined in the Policy) through a monthly “Lighting Charge” on the water bills of the owners of improved real property that are located on a section of right of way illuminated with a Light Fixture installed pursuant to this Agreement, excluding County Lights. At the time of the execution of this Amendment, the Lighting Charge for street lights is \$5.88 per month per 50 feet of road frontage and for pedestrian lights \$3.77 per month per 50 feet of road frontage, regardless of which side of the right of way the street lights and pedestrian lights are located. For each of the ensuing 3 years after the first Light Fixtures become operational, and then at least every 3 years thereafter, the actual cost of providing Maintenance and Energy to the Light Fixtures within the District must be analyzed and recalculated by the County without consideration of the cost of maintenance and energy to other street light districts or to County Lights. The Lighting Charge after each recalculation will reflect the actual cost of Maintenance and Energy +/-5%, plus Administrative Costs, Indirect Costs, and Water System Costs, divided by the road frontage of improved real property located on a section of right of way illuminated with a Light Fixture, excluding County Lights. The County will make available to the CID documents and calculations related to such analysis and will provide the CID at least 60 days prior notice to respond to any recommended change to the then current Lighting Charge prior to the Commission enacting a revised Lighting Charge. In the event of significant development of real property on a portion of right of way illuminated with a Light Fixture installed pursuant to this Agreement, upon the request of the CID, not more than annually, the Lighting Charge for the District will be analyzed and revised, as appropriate. The payments for Lighting Charges in the

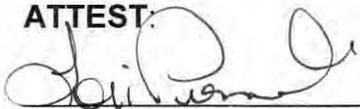
District shall be accounted for separately from the funds generated from other street light districts and may only be expended for the costs of non-County Lights in the District governed by this Agreement. No Lighting Charge will be billed to property owners whose property is not located on a section of right of way illuminated by a Light Fixture nor to owners of real estate without water meters. Billing for Lighting Charges will not begin before the Light Fixtures are fully operational. Billing will be administered by the Cobb County Water System.

8.

Section 11 of the Cooperation Agreement, dated November 3, 2006, is stricken and replaced with: "This Agreement shall terminate upon expiration of all extensions of the life of the District, but in no event exceeding 50 years, and shall not be modified except by formal written action of the parties."

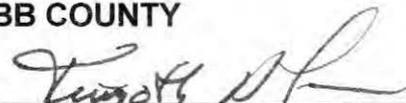
WHEREFORE, the parties have caused this Amendment to Cooperation Agreement to be executed under seal by authorized representatives of each entity. All other provisions of the existing November 3, 2006 Cooperation Agreement shall remain unchanged and in full force and effect.

ATTEST:

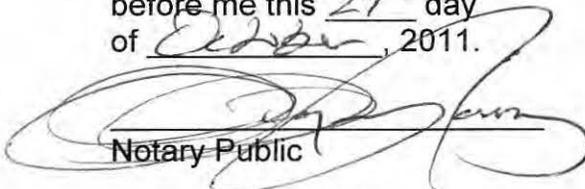

County Clerk *Lori Presnell*
Deputy County Clerk



COBB COUNTY

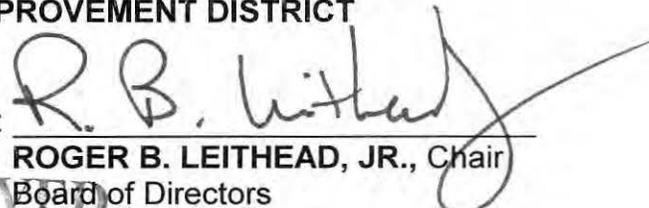
By: 
TIMOTHY D. LEE, Chairman
Board of Commissioners
Date: 11-8-11

Sworn to and subscribed
before me this 27th day
of October, 2011.


Notary Public

JAMES LYNN RAINEY
Notary Public, Cobb County
State of Georgia
Comm. Exp. Jan. 16, 2013

**CUMBERLAND COMMUNITY
IMPROVEMENT DISTRICT**

By: 
ROGER B. LEITHEAD, JR., Chair
Board of Directors

APPROVED
PER MINUTES OF
COBB COUNTY
BOARD OF COMMISSIONERS
10/25/11