

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 0012833 **OFFICE** Design Policy & Support
Clayton County
GDOT District 7 - Metro Atlanta **DATE** 2/5/2016
Operational Improvements: SR 3/US 19 at
SR 138


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:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3/Program Delivery
Genetha Rice-Singleton, Assistant Director of P3/Program Delivery
Albert Shelby, State Program Delivery Engineer
Darryl VanMeter, State Innovative Delivery Engineer
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Eric Duff, State Environmental Administrator
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Lee Upkins, State Utilities Engineer
Richard Cobb, Statewide Location Bureau Chief
Kathy Zahul, District Engineer
Scott Lee, District Preconstruction Engineer
Nicholas Fields, District Utilities Engineer
Xavier James, Project Manager
BOARD MEMBER - 13th Congressional District

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

Project Type: <u>Operational Improvement</u>	P.I. Number: <u>0012833</u>
GDOT District: <u>7</u>	County: <u>Clayton</u>
Federal Route Number: <u>19</u>	State Route Number: <u>3 & 138</u>
Project Number: _____	(if available)

The addition of operational improvements to the intersection of SR 3/US 19 @ SR 138, including turn lanes and concrete medians.

Submitted for approval:

Clark Patterson Lee	<u>10/29/2015</u>
Consultant Designer & Firm or GDOT Concept/Design Phase Office Head	Date
<u>N/A</u>	<u>---</u>
Local Government Sponsor	Date
<u>Albert V. Shelby III</u>	<u>11-6-15</u>
State Program Delivery Engineer	Date
<u>Xavier James E. D. I. Kunt</u>	<u>10/30/15</u>
GDOT Project Manager	Date

Recommendation for approval:

* <u>HIRAL PATEL</u>	<u>12/17/2015</u>
State Environmental Administrator	Date
* <u>KEN WERTHO</u>	<u>12/1/2015</u>
State Traffic Engineer	Date
* <u>BILL DUVAU</u>	<u>11/29/2015</u>
State Bridge Engineer	Date

- MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement

* <u>CYNTHIA L. VANDYKE</u>	<u>12/2/2015</u>
State Transportation Planning Administrator	Date

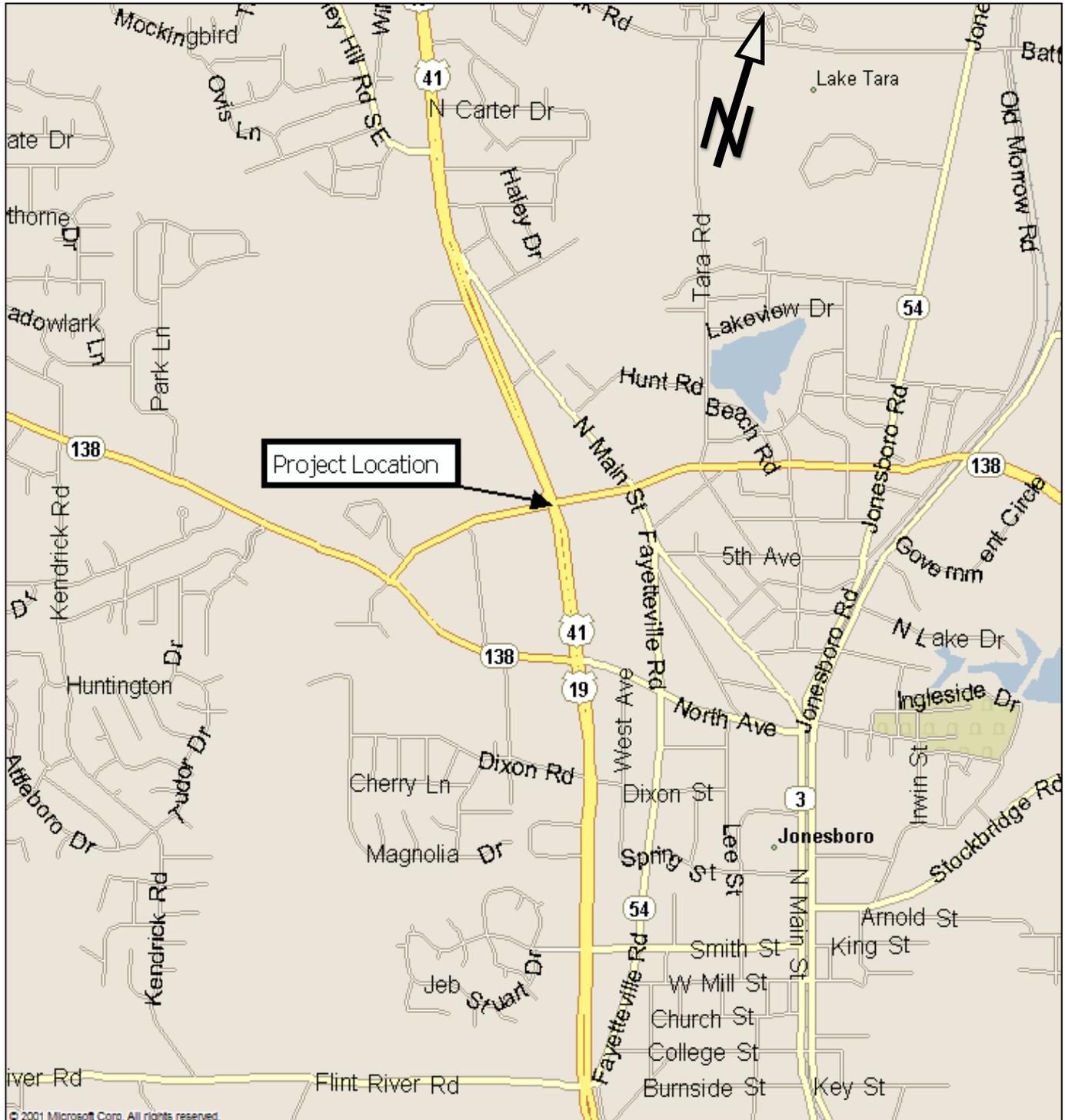
Approval:

Concur: <u>Hiral Patel</u>	<u>02/11/2016</u>
GDOT Director of Engineering	Date

Approve: <u>Margaret B. Pucke</u>	<u>2/3/16</u>
GDOT Chief Engineer	Date

* RECOMMENDATION ON FILE -

PROJECT LOCATION



PLANNING & BACKGROUND DATA

Project Justification Statement State Route (SR) 3/Tara Blvd at SR 138 in Clayton County was identified for intersection improvements. The proposed project is to be included in the GDOT Operational Improvement Lump Sum Program from the Office of Traffic Operations. This proposed project was presented to and approved by the Operational Improvement Committee.

In this region, SR 3 is an urban principal arterial that connects Forest Park to Jonesboro. SR 138 is an urban principal arterial that connects Fairburn to Stockbridge. SR 138 travels east/west and has four 12 foot lanes and a 14 foot two way center turn lane. SR 3 travels north/south with a variable width raised concrete median. The southbound approach of SR 3 has three through lanes, dual left turn lanes, and an auxiliary channelized right turn lane, the northbound approach has three through lanes, a left turn auxiliary lane, and a right turn auxiliary lane. The eastbound approach of SR 138 has a left turn lane and two through lanes, the westbound approach of SR 138 has a left turn lane and two through lanes. The intersection is currently signalized with protected left turn phases on all the approaches. The project limits should not extend more than 1200 feet from the center of the intersection along SR 138 for the east and west legs, and 100 feet from the center of the intersection along SR 3 for the north and the south legs.

GDOT District Traffic Operations staff performed an engineering study of the intersection operations. Field observation and analysis showed the current split phasing of the intersection is not optimal for this location. The observed delays are high (107 seconds) and the level of service is LOS F. This project proposes operational improvements to increase the operational efficiency of the intersection. The proposed improvements to this location include: converting the existing split phasing to standard phasing with protected left turns, widening SR 138 eastbound and westbound to accommodate dual left turns for approximately 500 feet, and exclusive channelized right turn lanes for approximately 200 feet. A concrete median is proposed along SR 138 from the intersection to Main Street (approximately 1100 feet) on the east leg and a concrete median from the intersection to Gross Road Pkwy (approximately 1100 feet) on the west leg. According to an intersection delay and level of service study on this intersection, the proposed improvements will decrease the overall intersection delay in the AM peak hour by 35 seconds and improve the AM peak hour level of service from F to an E. Additionally, the dual left turn lanes will increase storage along SR138 an additional 500 feet on both legs, and the channelized right turn lanes will increase storage an additional 200 feet on both legs. The above mentioned improvements will require acquisition of additional right of way. It is estimated that four parcels will be impacted by this project.

Due to the the right-of-way constraints, existing intersection features (existing roadway width and signal operations) and the scope approved by the Operational Improvement Committee, a roundabout was not recommended for this location.

The project lies within the boundaries of the Atlanta Regional Commission (ARC), Atlanta's Metropolitan Planning Organization (MPO). As an operational improvement project, this project is categorized under the "operational improvement lump sum category" in the MPO's RTP or TIP..

Existing conditions: SR 3/Tara Blvd is a six-lane that runs north/south. SR 3 intersects SR 138 at a four leg signalized intersection. The southbound approach consists of an exclusive left turn lane, three through lanes, and a right-turn lane. The northbound approach consists of dual left-turn lanes, three through lanes and a right turn lane. Each lane is 12 feet wide. The north and south bound lanes are separated by a concrete median at the intersection for approximately 300 feet transitioning to a depressed median. Segments of curb and gutter exist along the outside edge of pavement.

SR 138 runs east and west. SR 138 at this intersection has an exclusive left-turn lane , one through lane and one through-right lane westbound. The eastbound leg has one left-turn lane, one through lane and one through-right lane. East and West of the intersection, SR 138 transitions to a five lane curb and gutter section with two 12 foot lanes in each direction and a two-way center turn lane.

Other projects in the area:

- Widening Project, PI 722030- Clayton County, SR 3/US 19/US 41 FROM S OF CR 504/TARA RD TO S OF SR 54.
- Signal Upgrade, PI 0012670 Clayton County - SR 3 @ 6 LOC; SR 54 @ 1 LOC; SR 138 @ 1 LOC & SR 314 @ 3 LOC.

Description of the proposed project:

Project 0012833 consists of the widening and reconstruction of 0.4 miles of SR 138 existing 5-lane urban section to add an additional eastbound and westbound left turn lanes and right turn lanes with a 4 foot median. The project begins approximately 1355' west of the US 19/41/SR 3 intersection and ends before the intersection of north Main Street approximately 1250' from US 19/41/SR 3 intersection. Also the project will construct an additional northbound left turn lane on US 19/41/SR 3. The lane will utilize the existing pavement and will require the reconstruction of the median to accommodate the required tapers.

MPO: Atlanta Regional Commission (ARC)

TIP #: (if applicable)

TIA Regional Commission: Atlanta Regional Commission

RC Project ID N/A

MPO Name Congressional District(s): 13

Federal Oversight: Exempt State Funded Other

Projected Traffic: ADT 24 HR T: 2.2%
 SR 138 Current Year (2014): 24150 Open Year (2020): 26800 Design Year (2040): 32800
 SR 3 Current Year (2014): 57000 Open Year (2020): 63000 Design Year (2040): 76950

Traffic Projections Performed by: Wilburn Engineering, LLC

Functional Classification (SR 138): Urban Principal Arterial
(SR 3): Urban Principal Arterial

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:

Warrants met: None Bicycle Pedestrian Transit

The SR 3/US 19/41/Tara Boulevard corridor is identified on the Georgia Official Bicycle Map (2010) from SR 138 in Jonesboro to Griffin. However, no bike accommodations need to be included as this is an intersection improvement for SR 138 and improvements in the median of SR 3 south of SR 138.

Pavement Evaluation and Recommendations

Preliminary Pavement Evaluation Summary Report Required? No Yes
 Preliminary Pavement Type Selection Report Required? No Yes
 Feasible Pavement Alternatives: HMA PCC HMA & PCC

DESIGN AND STRUCTURAL

Description of Proposed Project: US 19/ SR 3/Tara Blvd at SR 138 Intersection Improvement Project.
(see description above)

Mainline Design Features: SR 138.

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4	N/A	4
- Lane Width(s)	12 ft	12 ft	12 ft
- Median Width & Type	N/A	N/A	4
- Outside Shoulder or Border Area Width	12	16	12
- Outside Shoulder Slope	N/A	2%	2%
- Inside Shoulder Width	N/A	N/A	N/A
- Sidewalks	N/A	5 ft.	5 ft.
- Auxiliary Lanes	12 ft	12 ft	12 ft
- Bike Lanes	none	4ft	N/A
Posted Speed	35		35
Design Speed	45	45	45
Min Horizontal Curve Radius	1155'	711'	1200'
Maximum Superelevation Rate	N/A	4%	4%
Maximum Grade	4.3%	7%	4.3%
Access Control	Permitted	Permitted	Permitted
Design Vehicle	WB67	WB67	WB67
Pavement Type	Asphalt		Asphalt

*According to current GDOT design policy if applicable

Mainline Design Features: US 19/41/SR 3 - Median Construction Only

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4	N/A	4
- Lane Width(s)	12 ft	12 ft	12 ft
- Median Width & Type	Varies	N/A	Varies
- Outside Shoulder or Border Area Width	12	16	12
- Outside Shoulder Slope	N/A	2%	2%
- Inside Shoulder Width	N/A	N/A	N/A
- Sidewalks	N/A	5 ft.	N/A
- Auxiliary Lanes	12 ft	12 ft	12 ft
- Bike Lanes	none	4ft	N/A
Posted Speed	45		45
Design Speed	45	45	45
Min Horizontal Curve Radius	N/A		
Maximum Superelevation Rate	N/A	4%	4%
Maximum Grade	N/A	7%	N/A
Access Control	Permitted	Permitted	Permitted
Design Vehicle	WB67	WB67	WB67
Pavement Type	Asphalt		Asphalt

*According to current GDOT design policy if applicable

Major Interchanges/Intersections: Intersection of SR 138 and Tara Boulevard (SR 3/ US 19/41)

Lighting required: No Yes

Transportation Management Plan [TMP] Required: No Yes
If Yes: Project classified as: Non-Significant Significant
TMP Components Anticipated: TTC TO PI

Will Context Sensitive Solutions procedures be utilized? No Yes

Design Exceptions to FHWA/AASHTO controlling criteria anticipated: None

Design Variances to GDOT Standard Criteria anticipated: None

UTILITY AND PROPERTY

Temporary State Route Needed: No Yes Undetermined

Railroad Involvement: None

Utility Involvements:

- Atlanta Gas Light Company
- Comcast of Georgia, Inc.
- Charter Communication
- Equinix Global Telecomm
- Georgia Power Company Transmission
- Time Warner Cable
- AT&T/Bellsouth
- Clayton County Water & Sewer Authority
- Clayton County T&D
- Georgia Power Company Distribution
- Reese-Taite Interprise
- Williams Transco

SUE Required: No Yes

Public Interest Determination Policy and Procedure recommended? No Yes

Right-of-Way: Existing width: 80-150ft. Proposed width: 125-175ft.
Required Right-of-Way anticipated: No Yes Undetermined
Easements anticipated: None Temporary Permanent Utility Other

Anticipated total number of impacted parcels: 14
Displacements anticipated: Businesses: 0
Residences: 0
Other: _____
Total Displacements: 0

ENVIRONMENTAL AND PERMITS

Anticipated Environmental Document:

GEPA: NEPA: CE PCE

MS4 Compliance – Is the project located in an MS4 area? No Yes

Environmental Permits, Variances, Commitments, and Coordination anticipated:

Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes
Is the project located in an Ozone Non-attainment area? No Yes
Carbon Monoxide hotspot analysis: Required Not Required TBD

(If any of the above are answered "Yes", additional analysis may be required; see section in Appendix A for further information)

NEPA/GEPA Comments & Information: See attached Environmental Resources Screening Survey Report

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Project Meetings: Kick Off Meeting March 3, 2015

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT Office, Consulting firm, local government, etc.
Design	Consultant
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Utility Owner
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	N/A
Environmental Studies, Documents, & Permits	Consultant
Environmental Mitigation	N/A
Construction Inspection & Materials Testing	GDOT

Other coordination to date:

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$150,000.00	\$1,220,000.00	\$529,600.00	\$1,827,831.83	\$0.0	\$3,727,431.83
Date of Estimate	11/4/2013	7/14/2015	7/23/2015	8/12/2015 10/28/2015		

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

ALTERNATIVES DISCUSSION

Preferred Alternative A: 12' lanes on SR 138			
Estimated Property Impacts:	14	Estimated Total Cost:	\$3,727,431.83
Estimated ROW Cost:	\$1,220,000.00	Estimated CST Time:	24 Months
Rationale: : The preferred alternative fulfills the objectives of the Project Justification Statement for the project which is to include: converting the existing split phasing to standard phasing with protected left turns, widening SR 138 eastbound and westbound to accommodate dual left turns and exclusive channelized right turn lanes.			

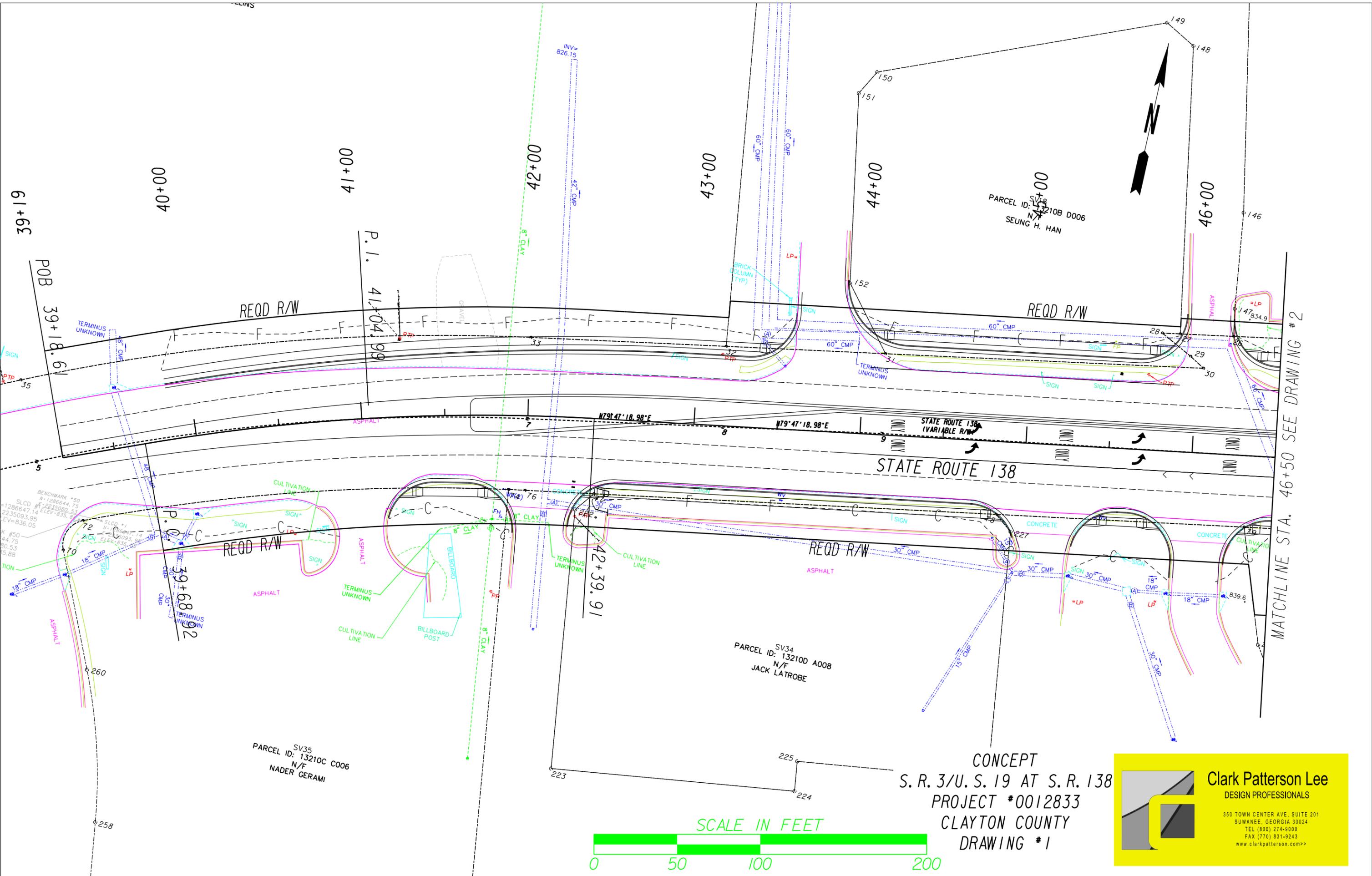
Alternative B 11' lanes on SR 138			
Estimated Property Impacts:	14	Estimated Total Cost:	\$3,663,301.87
Estimated ROW Cost:	\$1,220,000.00	Estimated CST Time:	24 Months
Rationale: : Alternate B construction cost is less however the right of way impacts are the same as Alternate A due to the loss of parking. This alternate is not recommended due to the high percentage of trucks traveling through the intersection.			
No-Build Alternative:			
Estimated Property Impacts:	\$0	Estimated Total Cost:	\$0
Estimated ROW Cost:	\$0	Estimated CST Time:	0
Rationale: The intersection of SR 3 (Tara Boulevard) and SR 138 currently operates poorly during peak conditions. The conditions at the intersection are expected to get worse by 2040 if no improvements are made. The AM Peak Hour LOS improves from F (240.1) in the 2040 No-Build Condition to F (133.5) in the 2040 Build Condition. The PM Peak Hour LOS improves from F (195.6) in the 2040 No-Build Condition to F (107.8) in the 2040 Build Condition. The AM Peak Hour queue length for the eastbound left improves from 632' in the 2040 No-Build Condition to 336' in the 2040 Build Condition. The PM Peak Hour queue length for the eastbound left improves from 807' in the 2040 No-Build Condition to 427' in the 2040 Build Condition. The no-build alternative was discounted as it does not fulfill the objectives of the Project Justification Statement.			

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical sections
3. Cost Estimates
4. Traffic Engineering Study
5. Environmental Resources Screening Survey Report
 Meeting Minutes (Kick Off Meeting, Concept Team Meeting)

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Attachment #1



MATCHLINE STA. 46+50 SEE DRAWING # 2

BENCHMARK #50
 NAD 83
 SV41 296644.75
 SCLD #4-2235080_53
 2235093.95
 ELEV=835.8
 EV=836.05
 K #50
 44.75
 80.53
 75.88

SV35
 PARCEL ID: 13210C C006
 N/F
 NADER GERAMI

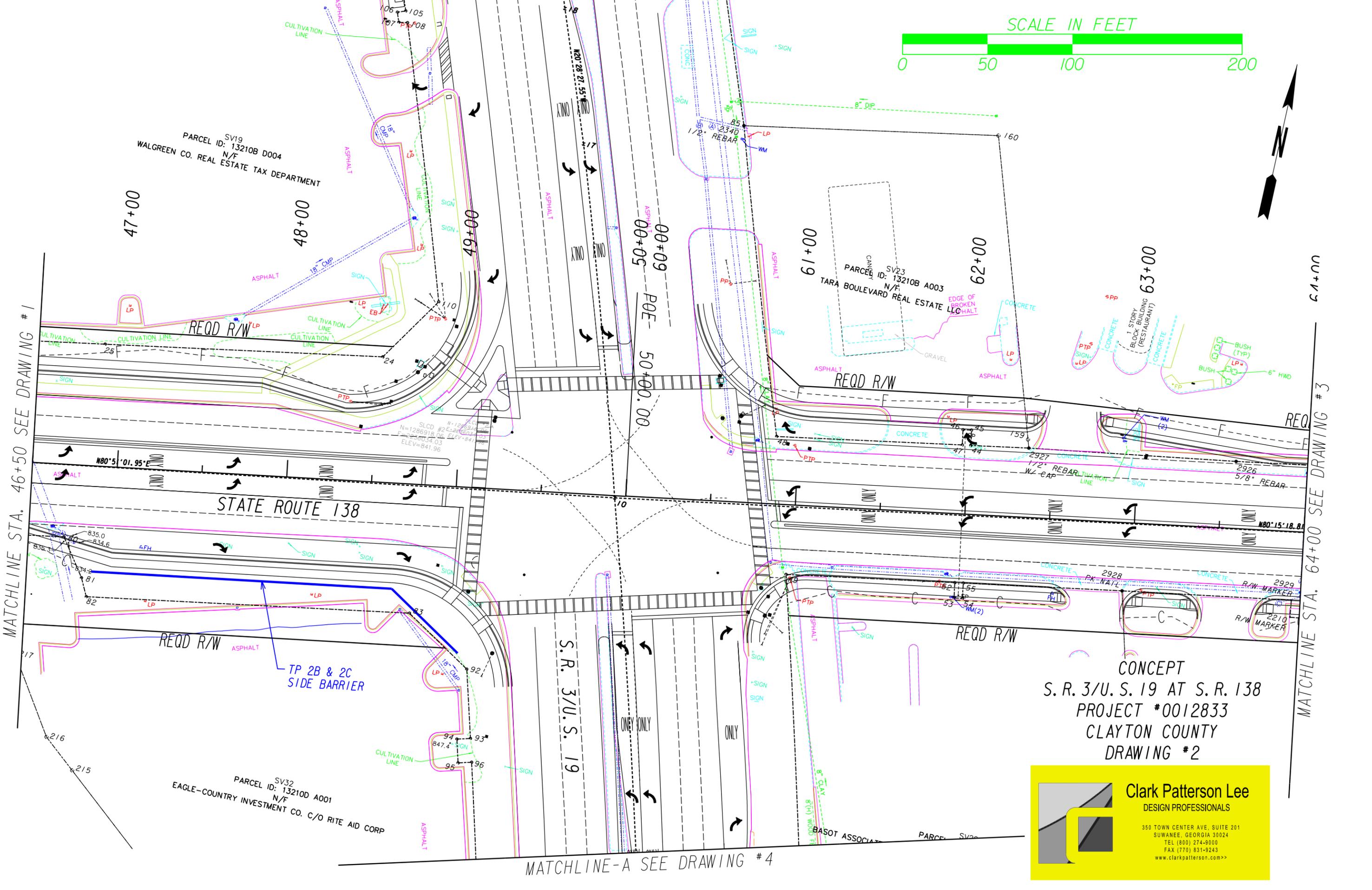
SV34
 PARCEL ID: 13210D A008
 N/F
 JACK LATROBE

SV18
 PARCEL ID: 13210B D006
 N/F
 SEUNG H. HAN

CONCEPT
 S. R. 3/U. S. 19 AT S. R. 138
 PROJECT #0012833
 CLAYTON COUNTY
 DRAWING #1



Clark Patterson Lee
 DESIGN PROFESSIONALS
 350 TOWN CENTER AVE, SUITE 201
 SUWANEE, GEORGIA 30024
 TEL (800) 274-9000
 FAX (770) 831-9243
 www.clarkpatterson.com



MATCHLINE STA. 46+50 SEE DRAWING #1

MATCHLINE STA. 64+00 SEE DRAWING #3

MATCHLINE-A SEE DRAWING #4

CONCEPT
 S. R. 3/U. S. 19 AT S. R. 138
 PROJECT #0012833
 CLAYTON COUNTY
 DRAWING #2

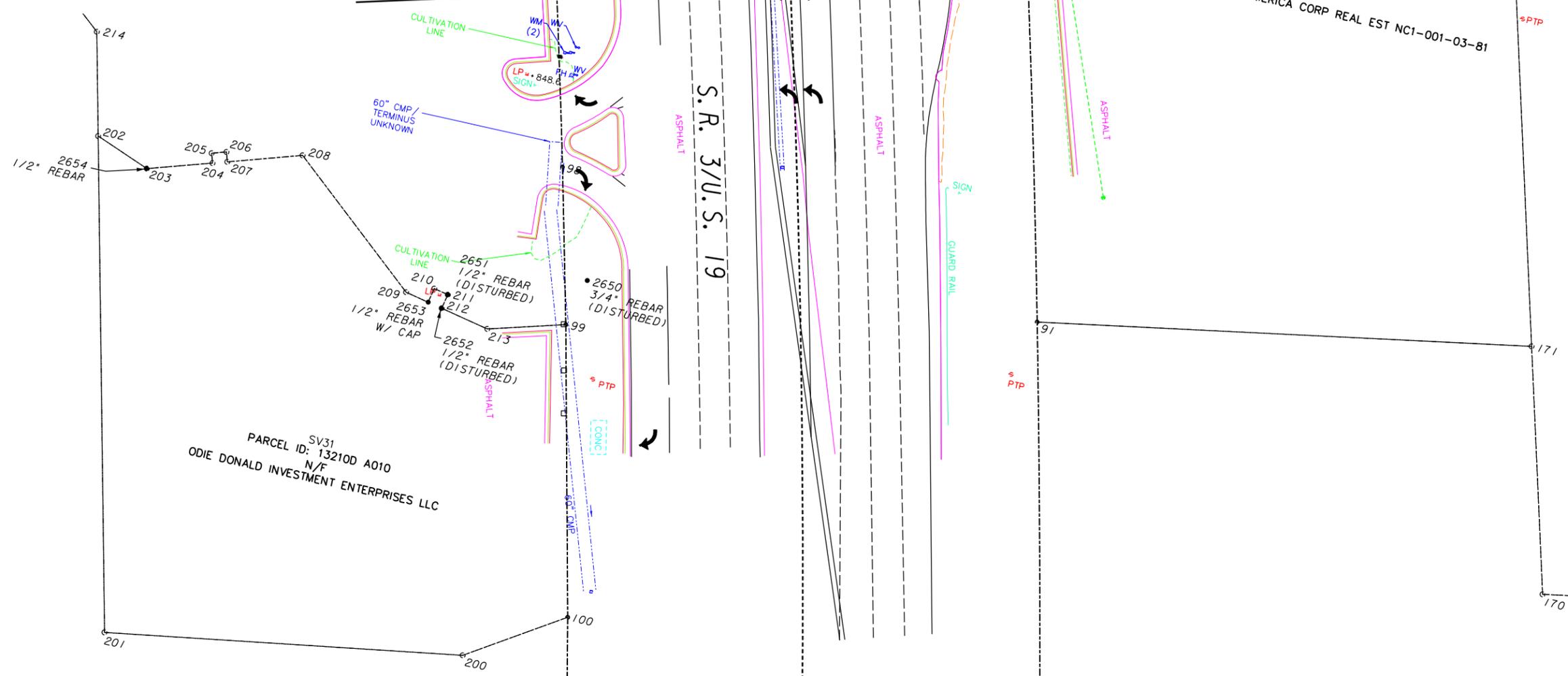


Clark Patterson Lee
 DESIGN PROFESSIONALS

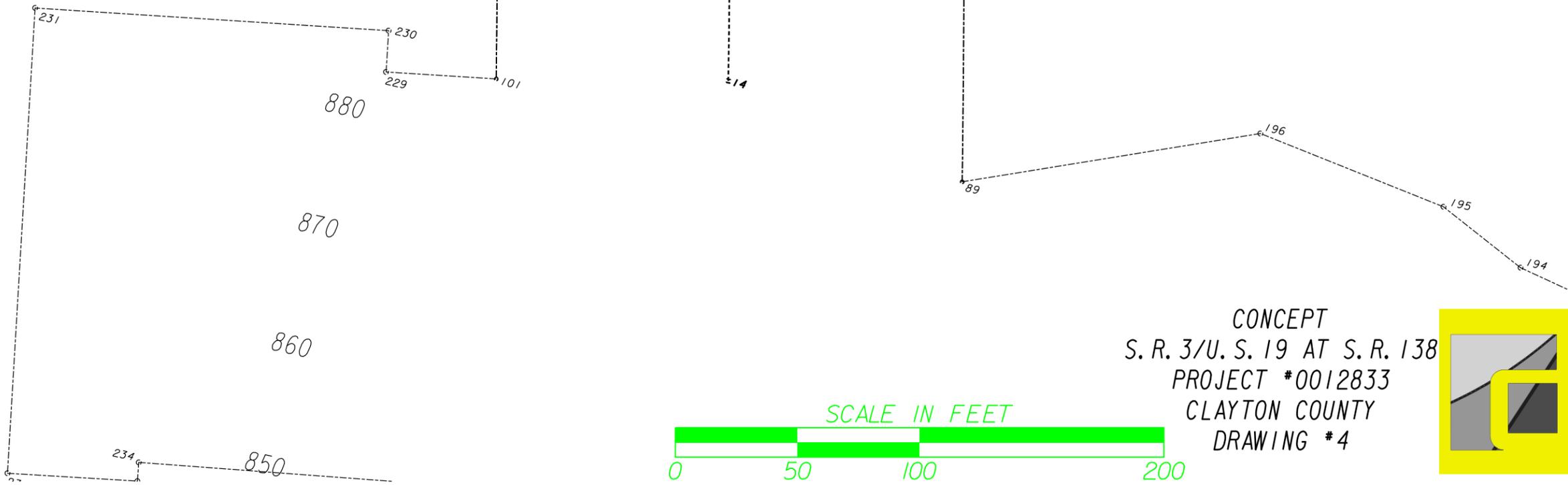
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MATCHLINE-A SEE DRAWING #2

PARCEL ID: 13210D B001
N/F
BANK OF AMERICA CORP REAL EST NC1-001-03-81



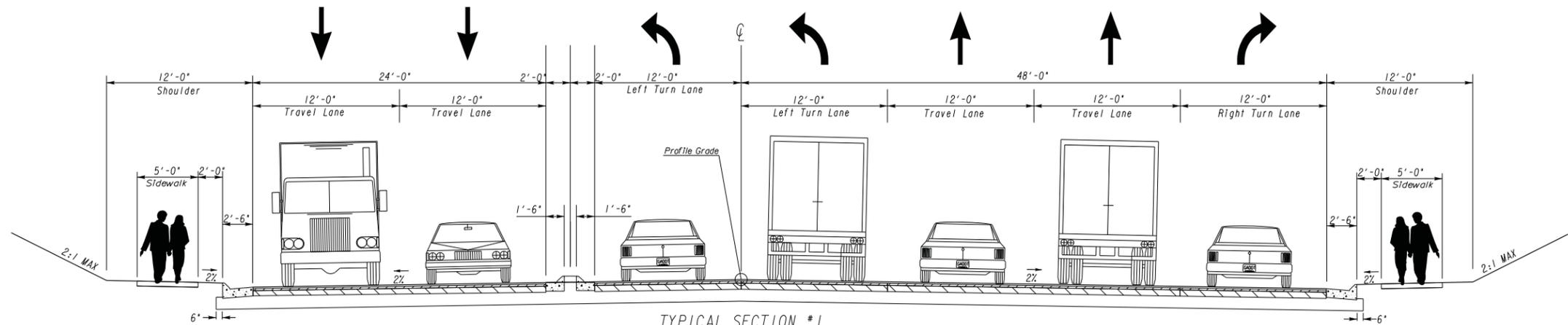
SV31
PARCEL ID: 13210D A010
N/F
ODIE DONALD INVESTMENT ENTERPRISES LLC



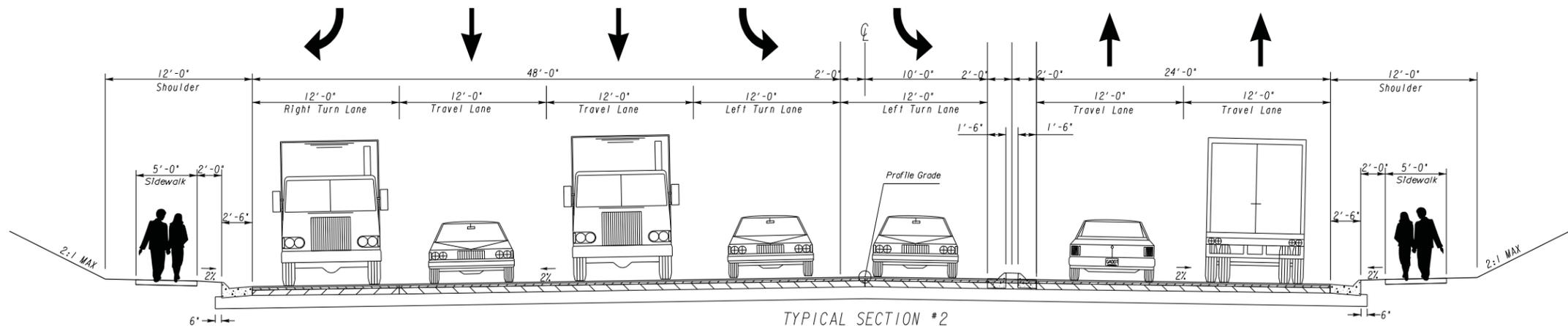
CONCEPT
S. R. 3/U. S. 19 AT S. R. 138
PROJECT #0012833
CLAYTON COUNTY
DRAWING #4

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Attachment #2



TYPICAL SECTION #1
STATE ROUTE 138 EASTBOUND



TYPICAL SECTION #2
STATE ROUTE 138 WESTBOUND



Clark Patterson Lee
DESIGN PROFESSIONALS

350 TOWN CENTER AVE, SUITE 201
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www.clarkpatterson.com

REVISION DATES

NO.	DATE	DESCRIPTION

GWINNETT COUNTY
DEPARTMENT OF TRANSPORTATION

DATE:

TYPICAL SECTIONS

S. R. -US 19 AT S. R. 138
WIDENING

DRAWING No.
05-001

Attachment #3

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$	1,605,063.16	Base Estimate From CES	
B. ENGINEERING AND INSPECTION (E & I):	\$	80,253.16	Base Estimate (A) x	5 %
C. CONTINGENCY:	\$	84,265.82	Base Estimate (A) + E & I (B) x	5 %
			See % Table in "Risk Based Cost Estimation" Memo	
D. TOTAL LIQUID AC ADJUSTMENT:	\$	58,249.69	Total From Liquid AC Spreadsheet	
E. CONSTRUCTION TOTAL:	\$	1,827,831.83	(A + B + C + D = E)	

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
TOTAL	\$ -

ATTACHMENTS:

- Detailed Cost Estimate Printout From TRAQS
- Liquid AC Adjustment Spreadsheet

JOB ESTIMATE REPORT

JOB NUMBER : 0012833 SPEC YEAR: 13
 DESCRIPTION: GDOT SR3-US19 AT SR 138 TASK ORDER #23

ITEMS FOR JOB 0012833

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - PI#-0012833	1.000	300000.00	300000.00
0010	163-0300		EA	CONSTRUCTION EXIT	2.000	1351.83	2703.67
0015	163-0550		EA	CONS & REM INLET SEDIMENT TRAP	13.000	142.25	1849.37
0020	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	8800.000	0.55	4865.96
0025	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	8800.000	2.95	25998.10
0030	207-0203		CY	FOUND BK FILL MATL, TP II	45.000	55.33	2490.26
0035	210-0100		LS	GRADING COMPLETE - PI#-0012833	1.000	200000.00	200000.00
0040	210-0250		CY	UNDERCUT EXCAVATION	1500.000	5.23	7845.00
0045	318-3000		TN	AGGR SURF CRS	200.000	21.86	4373.40
0050	402-1812		TN	RECYL AC LEVELING, INC BM&HL	1200.000	76.81	92179.92
0055	402-3130		TN	RECYL AC 12.5MM SP, GP2, BM&HL	2078.000	86.61	179983.19
0060	402-3190		TN	RECYL AC 19 MM SP, GP 1 OR 2 , INC BM&HL	303.000	87.81	26608.06
0065	402-3121		TN	RECYL AC 25MM SP, GP1/2, BM&HL	605.000	80.94	48970.81
0070	310-5120		SY	GR AGGR BS CRS 12IN INCL MATL	2752.000	22.61	62236.34
0075	413-0750		GL	TACK COAT	1397.000	2.70	3771.90
0080	432-5010		SY	MILL ASPH CONC PVMT, VARB DEPTH	21432.000	2.32	49806.25
0085	441-0104		SY	CONC SIDEWALK, 4 IN	1514.000	33.16	50216.53
0090	441-0108		SY	CONC SIDEWALK, 8 IN	242.000	50.28	12168.95
0095	441-0748		SY	CONC MEDIAN, 6 IN	760.000	40.31	30639.26
0100	441-5002		LF	CONC HEADER CURB, 6, TP 2	1663.000	11.72	19500.32
0105	441-6022		LF	CONC CURB & GUTTER, 6X30TP2	3814.000	14.82	56530.00
0110	500-9999		CY	CL B CONC, BASE OR PVMT WIDEN	300.000	177.38	53214.26
0115	550-1180		LF	STM DR PIPE 18, H 1-10	922.000	41.15	37946.48
0120	550-1240		LF	STM DR PIPE 24, H 1-10	100.000	55.82	5582.09
0125	550-1360		LF	STM DR PIPE 36, H 1-10	80.000	82.34	6587.58
0130	550-1600		LF	STM DR PIPE 60, H 1-10	80.000	192.67	15413.60
0135	621-4022		LF	CONCRETE SIDE BARRIER, TY 2B	150.000	455.94	68391.00
0140	621-4023		LF	CONCRETE SIDE BARRIER, TY 2C	100.000	588.44	58844.00
0145	634-1200		EA	RIGHT OF WAY MARKERS	22.000	114.56	2520.36
0150	653-0120		EA	THERM PVMT MARK, ARROW, TP 2	33.000	75.44	2489.67
0155	653-0210		EA	THERM PVMT MARK, WORD, TP 1	21.000	111.64	2344.47
0160	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	9202.000	0.47	4359.08
0165	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	3721.000	0.52	1965.47
0170	653-1704		LF	THERM SOLID TRAF STRIPE, 24, WH	283.000	6.06	1716.07
0175	653-1804		LF	THERM SOLID TRAF STRIPE, 8, WH	2740.000	2.13	5840.23
0180	653-3501		GLF	THERMO SKIP TRAF ST, 5 IN, WHI	705.000	0.32	232.45
0185	653-6004		SY	THERM TRAF STRIPING, WHITE	92.000	4.15	382.09
0190	654-1003		EA	RAISED PVMT MARKERS TP 3	259.000	3.53	915.92
0195	668-1100		EA	CATCH BASIN, GP 1	13.000	2213.16	28771.17
0200	668-4300		EA	STORM SEW MANHOLE, TP 1	4.000	1882.93	7531.76
0205	639-4004		EA	STRAIN POLE, TP IV	8.000	6894.99	55159.98
0210	639-2002		LF	STEEL WIRE STRAND CABLE, 3/8	300.000	4.39	1318.14
0215	647-1000		LS	TRAF SIGNAL INSTALLATION NO -	1.000	60800.00	60800.00

STATE HIGHWAY AGENCY

JOB ESTIMATE REPORT

ITEM TOTAL 1605063.16
INFLATED ITEM TOTAL 1605063.16

TOTALS FOR JOB 0012833

ESTIMATED COST: 1605063.16
CONTINGENCY PERCENT (0.0): 0.00
ESTIMATED TOTAL: 1605063.16

PROJ. NO.	PI 0012833
P.I. NO.	0012833
DATE	10/28/2015

CALL NO.

9/29/2009

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Oct-15	\$ 2.155
DIESEL		\$ 2.485
LIQUID AC		\$ 429.00

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)					56705.22	\$	56,705.22
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	686.40			
Monthly Asphalt Cement Price month project let (APL)			\$	429.00			
Total Monthly Tonnage of asphalt cement (TMT)					220.3		

ASPHALT	Tons	%AC	AC ton
Leveling	1200	5.0%	60
12.5 OGFC		5.0%	0
12.5 mm	2078	5.0%	103.9
9.5 mm SP		5.0%	0
25 mm SP	825	5.0%	41.25
19 mm SP	303	5.0%	15.15
	4406		220.3

BITUMINOUS TACK COAT

Price Adjustment (PA)					\$	1,544.47	\$	1,544.47
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	686.40				
Monthly Asphalt Cement Price month project let (APL)			\$	429.00				
Total Monthly Tonnage of asphalt cement (TMT)					6.000255988			

Bitum Tack

Gals	gals/ton	tons
1397	232.8234	6.000255988

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)					0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	686.40			
Monthly Asphalt Cement Price month project let (APL)			\$	429.00			
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 \$ **58,249.69**

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 7/13/2015 Project: PI#0012833
 Revised: County: Clayton
 PI: PI#0012833

Description: SR 03/Tara Blvd at SR 138
 Project Termini: SR 03/Tara Blvd at SR 138

Existing ROW: Varies
 Required ROW: Varies
 Parcels: 10

Land and Improvements _____ \$967,500.00

<i>Proximity Damage</i>	<i>\$50,000.00</i>
<i>Consequential Damage</i>	<i>\$75,000.00</i>
<i>Cost to Cures</i>	<i>\$15,000.00</i>
<i>Trade Fixtures</i>	<i>\$0.00</i>
<i>Improvements</i>	<i>\$155,000.00</i>

Valuation Services _____ \$62,500.00

Legal Services _____ \$81,750.00

Relocation _____ \$20,000.00

Demolition _____ \$0.00

Administrative _____ \$87,500.00

TOTAL ESTIMATED COSTS _____ \$1,219,250.00

TOTAL ESTIMATED COSTS (ROUNDED) _____ \$1,220,000.00

Preparation Credits	Hours	Signature

Prepared By: Dashone Alexander CG#: 286999 07/14/2015 (DATE)
 Approved By: Dashone Alexander CG#: 286999 07/14/2015 (DATE)

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

Attachment #4

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE Clayton County
P.I. # 0012833

OFFICE Planning

DATE July 9, 2015

FROM Cynthia L. VanDyke, State Transportation Planning Administrator

TO Albert Shelby, State Program Delivery Engineer
Attention: Xavier James

SUBJECT **Reviewed** Design Traffic Memorandum Document and Design Traffic Diagrams for SR 3/US 19 @ SR 138

Per request, we have reviewed the consultant's traffic memorandum document and design traffic diagrams for the above project. Based on the information furnished, we find the traffic memorandum document and the design traffic projections to be satisfactory, and approve the traffic memorandum document and design traffic volume.

If you have any questions concerning this information please contact Andre Washington at (404) 631-1925.

CLV/AMW

Traffic Engineering Study

SR 3 (TARA BOULEVARD) @ SR 138
P.I. # 0012833

Clayton County, GA
August 2015



<p><i>Title</i></p> <p>Traffic Study SR 3 (Tara Blvd) & SR 138 Operational Improvements P.I. # 0012833 Clayton County, GA</p>	
<p style="text-align: center;"><i>Prepared For</i></p> <p style="text-align: center;">Georgia Department of Transportation</p> <p style="text-align: center;"><i>On Behalf of:</i> Clark Patterson Engineers, Surveyor and Architects, P.C. 350 Town Center Avenue Suwanee, Georgia 30024 Mr. Adolfo A. Guzman, P.E. 800.274.9000</p>	<p style="text-align: center;"><i>Date</i></p> <p style="text-align: center;">August 3, 2015</p>
<p style="text-align: center;"><i>Prepared By</i></p> <p style="text-align: center;">Wilburn Engineering, LLC 931 Lower Fayetteville Rd, Suite I Newnan, Georgia 30263</p> <p style="text-align: center;">770.977.8920</p>	<p style="text-align: center;"><i>Principal Investigator</i></p> <p style="text-align: center;">Speedy Boutwell, PE, PTOE</p> <p style="text-align: center;"><i>Additional Investigators</i></p> <p style="text-align: center;">Christopher Dew, E.I.T. Drew Ritter, E.I.T.</p>
<p><i>Summary</i></p> <p>This study includes traffic projections, crash analysis, capacity analysis, and recommended improvements necessary to address the operational and safety conditions.</p> <p>The intersection of SR 3 (Tara Boulevard) and SR 138 is a signalized intersection that currently operates poorly during peak conditions.</p> <p>If no improvements are made at the intersection it is expected that vehicles will experience significantly longer delays and queues by the Design Year (2040).</p> <p>A number of improvements have been identified to reduce the delay and queue lengths by the Design Year (2040).</p> <p>The recommend improvements are shown on page 15.</p>	

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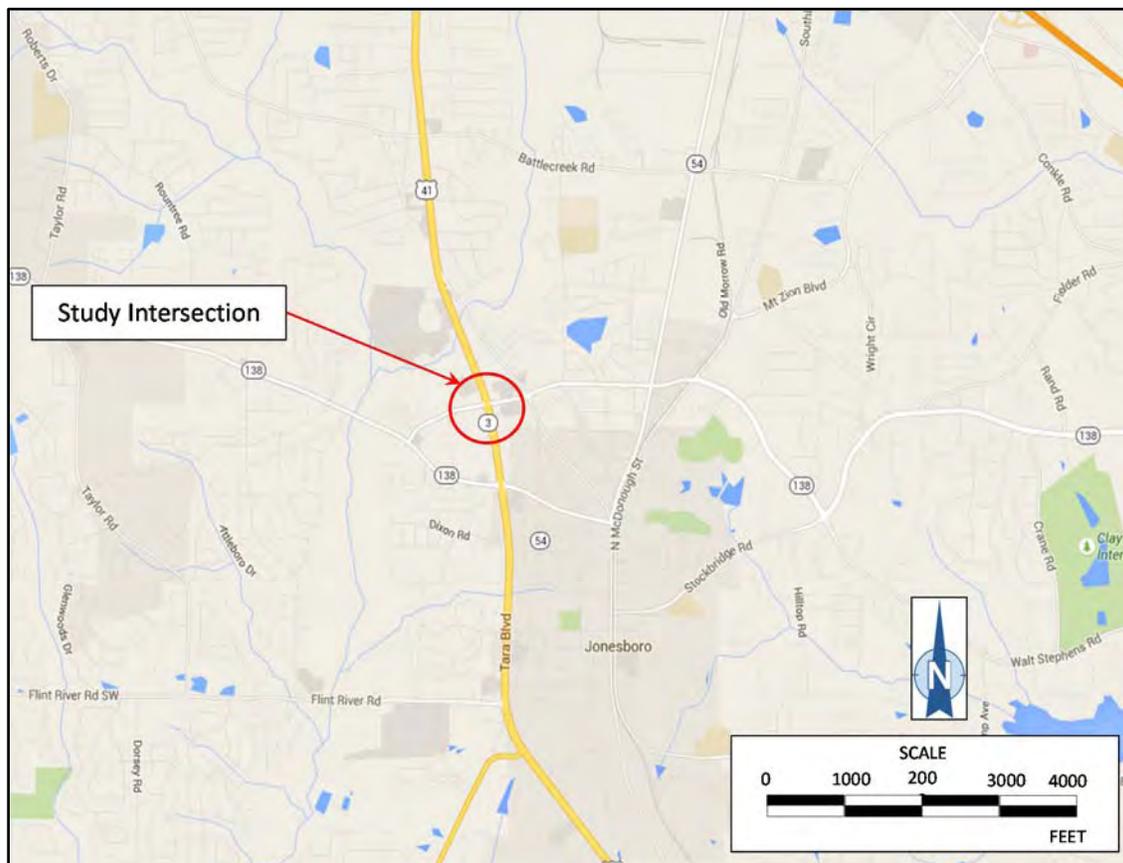
INTRODUCTION

The purpose of this study is to evaluate the operational improvements for the intersection of SR 3 (Tara Boulevard) and SR 138 as identified in the Georgia Department of Transportation’s (GDOT) Traffic Engineering Report dated July 9, 2013. The project is scheduled to be let in 2018.

Project Location

The project is located at mile post 8.24 along SR 3 (Tara Blvd.) in north Clayton County. Figure 1 shows the project location.

Figure 1: PROJECT LOCATION MAP



Study Area

Figure 2 shows the study area in more detail.

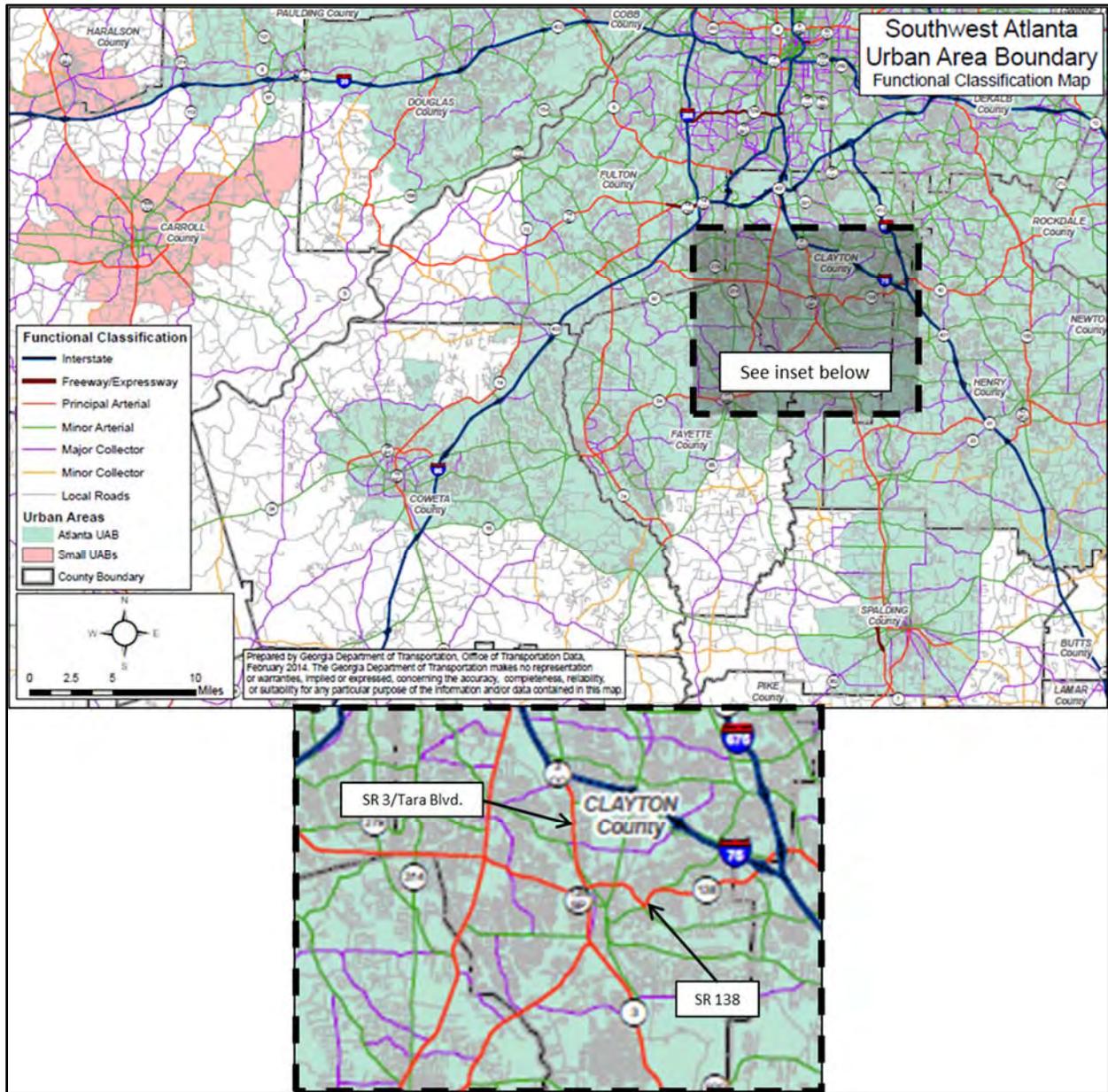
Figure 2: STUDY AREA MAP



FUNCTIONAL CLASSIFICATION

The GDOT provided the functional classification of the roadway facilities in the project area as shown in Figure 3.

Figure 3: FUNCTIONAL CLASSIFICATION MAP

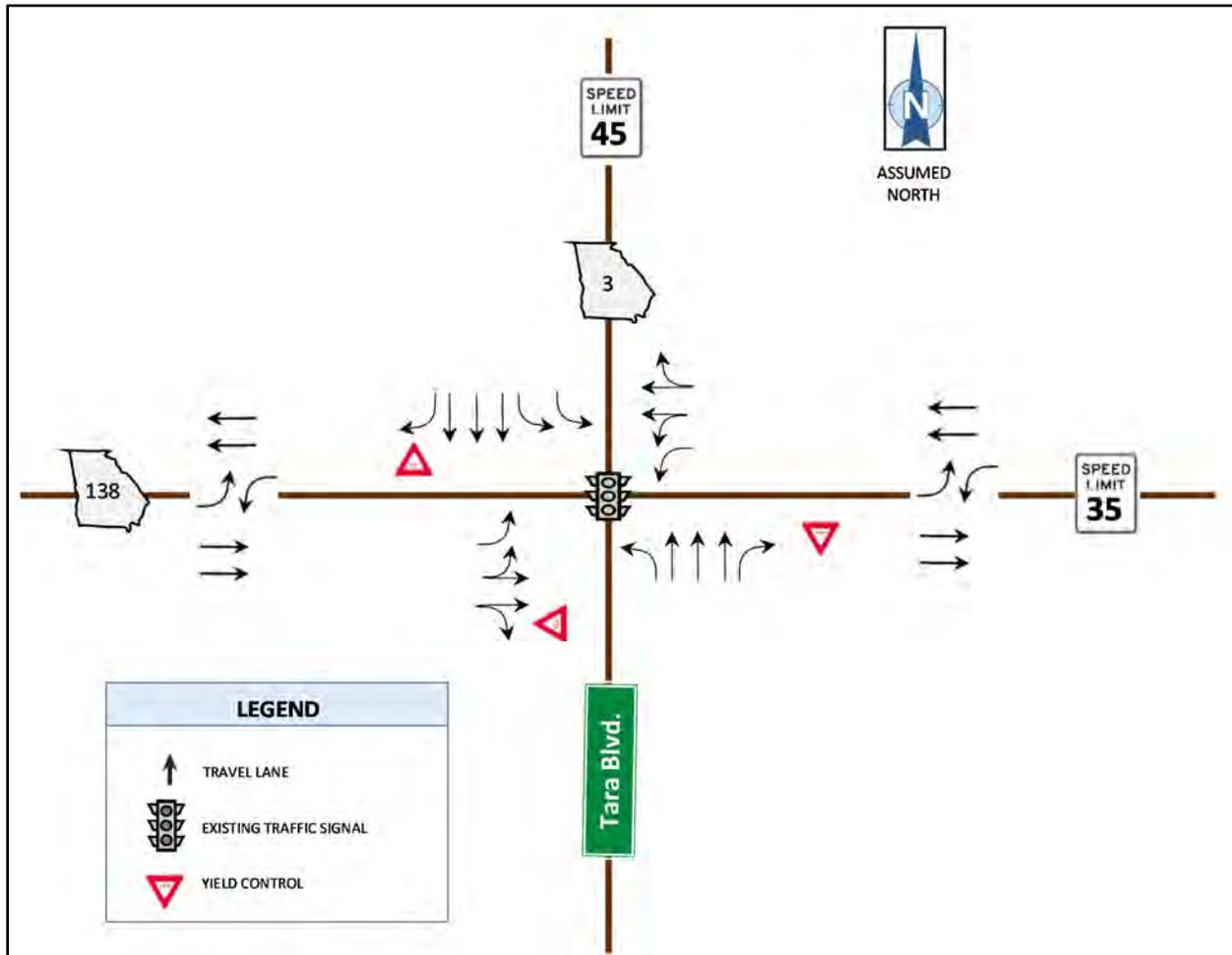


EXISTING CONDITIONS

Inventory of Existing Geometry and Traffic Control

SR 3 (Tara Blvd.) is a six-lane Urban Principal Arterial that runs north/south. SR 138 is a four-lane Urban Principal Arterial that runs east/west. Figure 4 illustrates the existing roadway infrastructure, traffic control, and posted speed limits for each facility at the intersection. A photographic inventory of the area is provided in Appendix A.

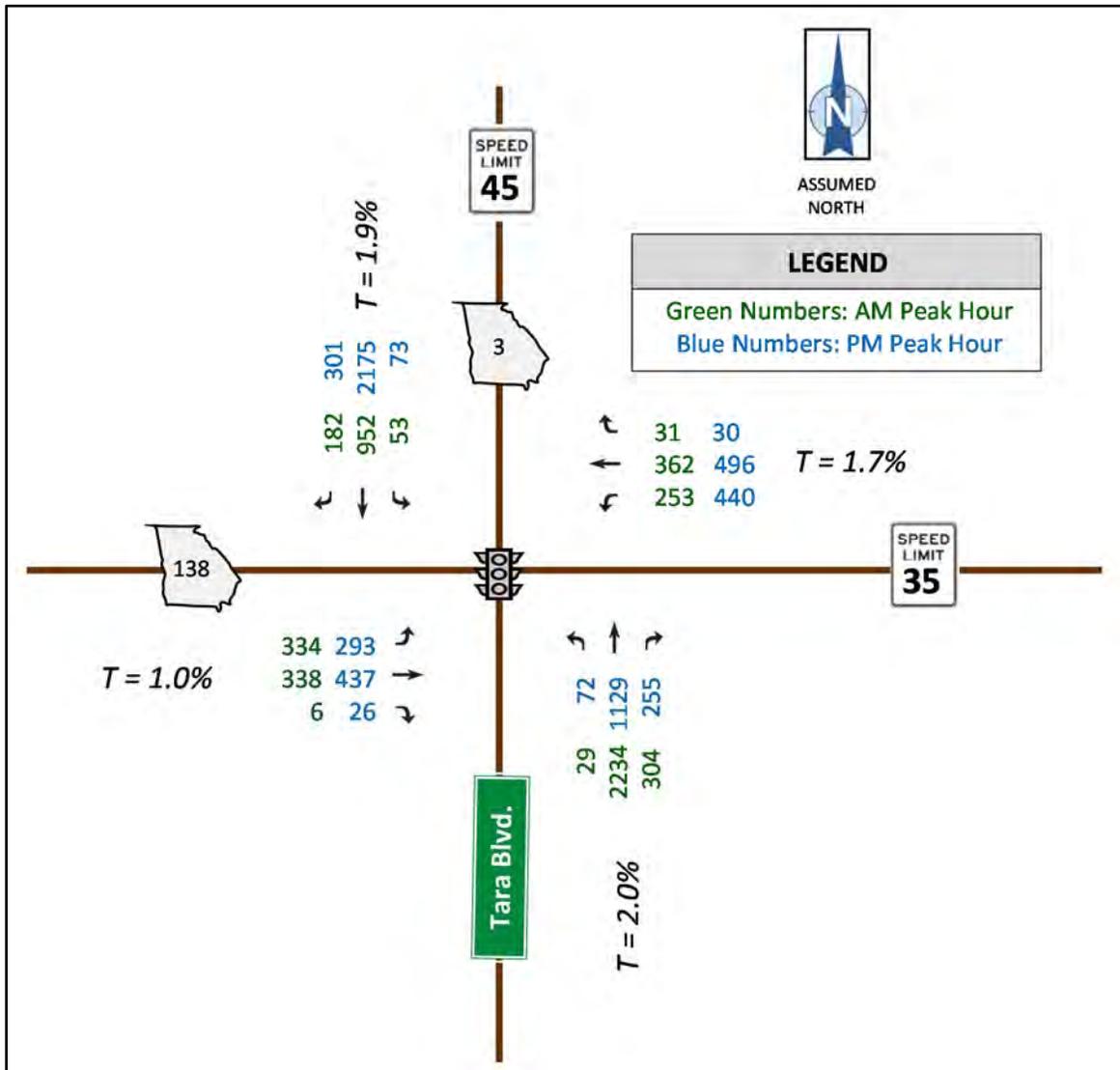
Figure 4: EXISTING TRAFFIC CONDITIONS



Existing Peak Hour Volumes

As directed by GDOT, the existing AM and PM Peak Hour volumes from the approved Traffic Memorandum were used in this analysis. The existing peak hour volumes are shown in Figure 5. Truck and bus percentages were taken from the Traffic Memorandum and are shown in Figure 5. The existing (2014) peak hour turning movement reports are included in Appendix B. The existing (2014) peak hour traffic diagram is provided in Appendix C.

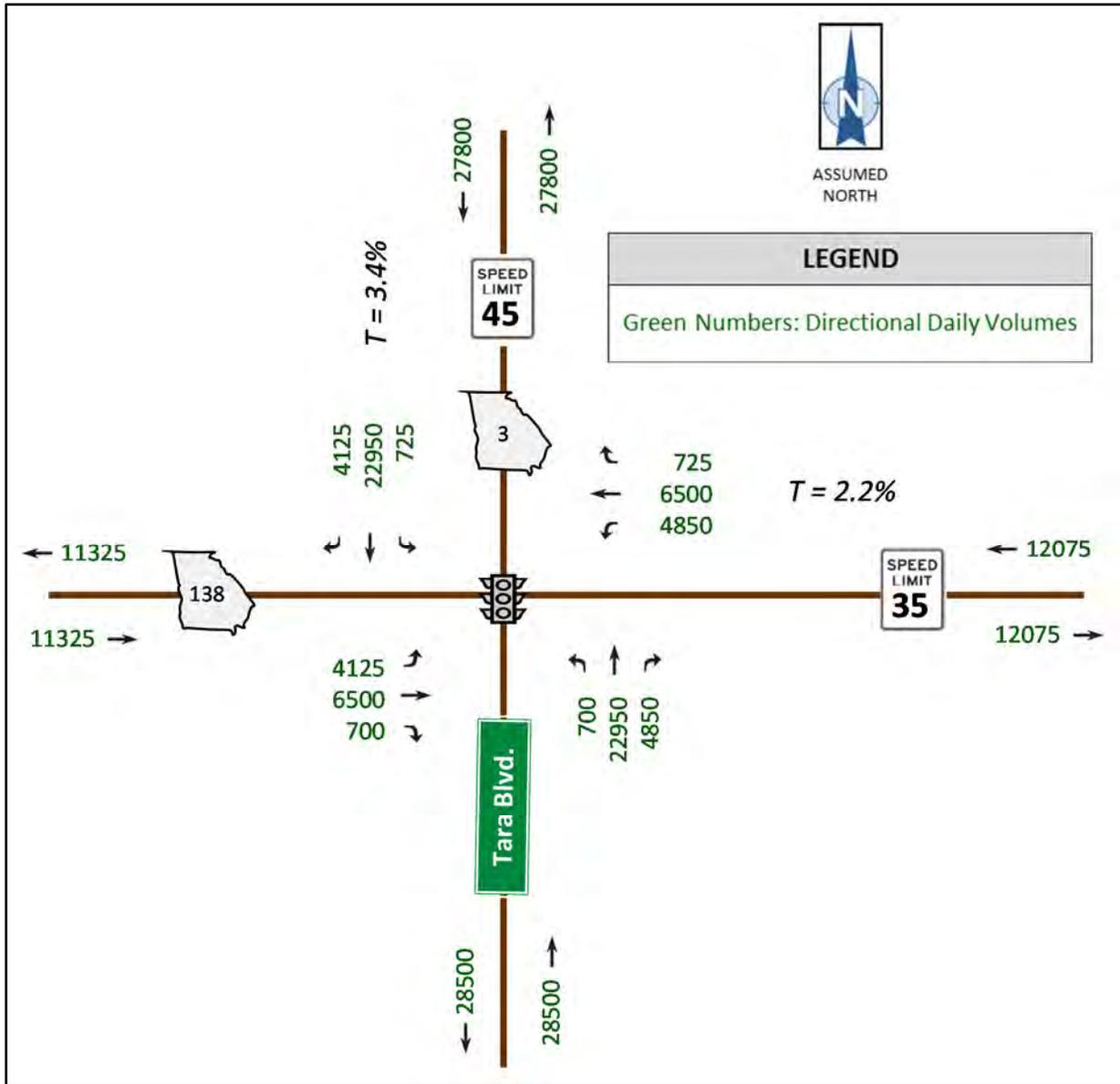
Figure 5: 2014 EXISTING PEAK HOUR TRAFFIC VOLUMES



Existing Daily Volumes

Daily volumes were also provided in the Traffic Memorandum. The 2014 ADT's are shown in Figure 6. Truck and bus percentages are shown. The daily (2014) traffic diagram is provided in Appendix C.

Figure 6: 2014 EXISTING DAILY TRAFFIC VOLUMES



CRASH HISTORY

Crash data for the study intersections was obtained from the Georgia Department of Transportation. Table 1 summarizes the crash frequency at the intersections for the most recent five year period from 2010 through 2014. The totals given in Table 1 include all crashes at both intersections. The raw data is provided in Appendix D.

Table 1: YEARLY CRASH FREQUENCY

YEAR	TOTAL CRASHES	INJURY CRASHES /INJURIES	FATALITIES	VEHICLE COLLISION With OTHER VEHICLE				VEHICLE COLLISION With ANIMAL/STRUCTURE
				RIGHT ANGLE	HEAD ON	REAR END	SIDESWIPE	
2010	44	12/14	0	8	0	28	6	2
2011	87	27/41	0	19	2	51	11	4
2012	100	28/41	0	15	1	67	12	5
2013	104	31/37	0	22	0	68	7	7
2014	109	27/44	0	16	1	74	10	8
Totals	444	125/177	0	80	4	288	46	26

During the analysis period from 2010 through 2014 (5 years), rear end collisions made up 65% and right angle collisions made up 18% of the total crashes at the intersection. The remaining 17% was combination of head on, sideswipe, and collision with something other than a vehicle.

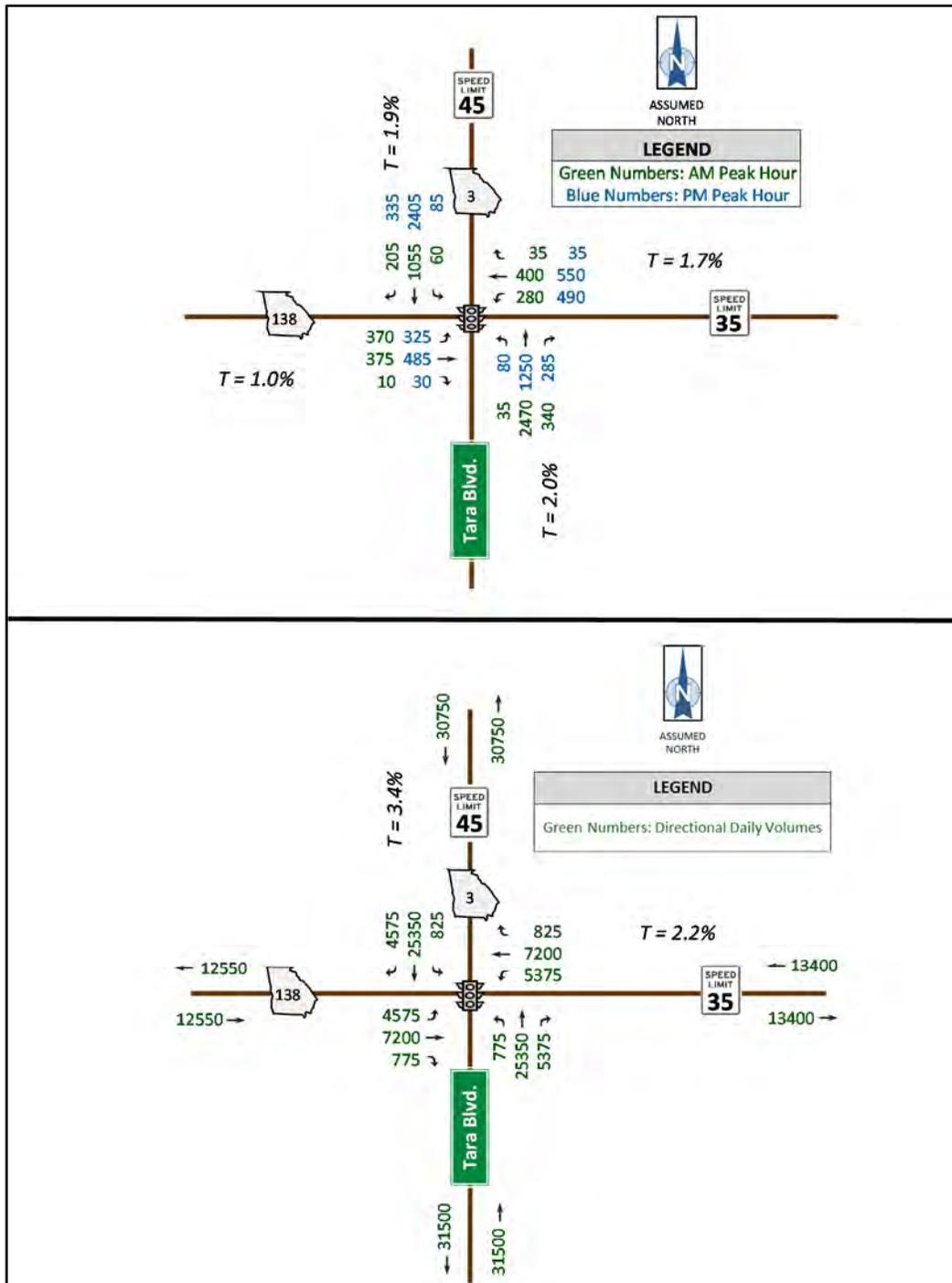
TRAFFIC PROJECTIONS

The traffic at the intersection is expected to be the same whether improvements take place or not, therefore the No-Build volumes would be the same as the Build volumes. The traffic projection methodology is provided in Appendix E. The design hourly volumes (DHVs) were rounded to the nearest 5 and the average daily traffic (ADTs) were rounded to the nearest 25. The traffic projected traffic volumes are provided in Appendix F.

2020 Traffic Projections

Figure 7 shows the 2020 traffic projections. The DHV's are shown in the upper panel and the ADT's are shown in the lower panel.

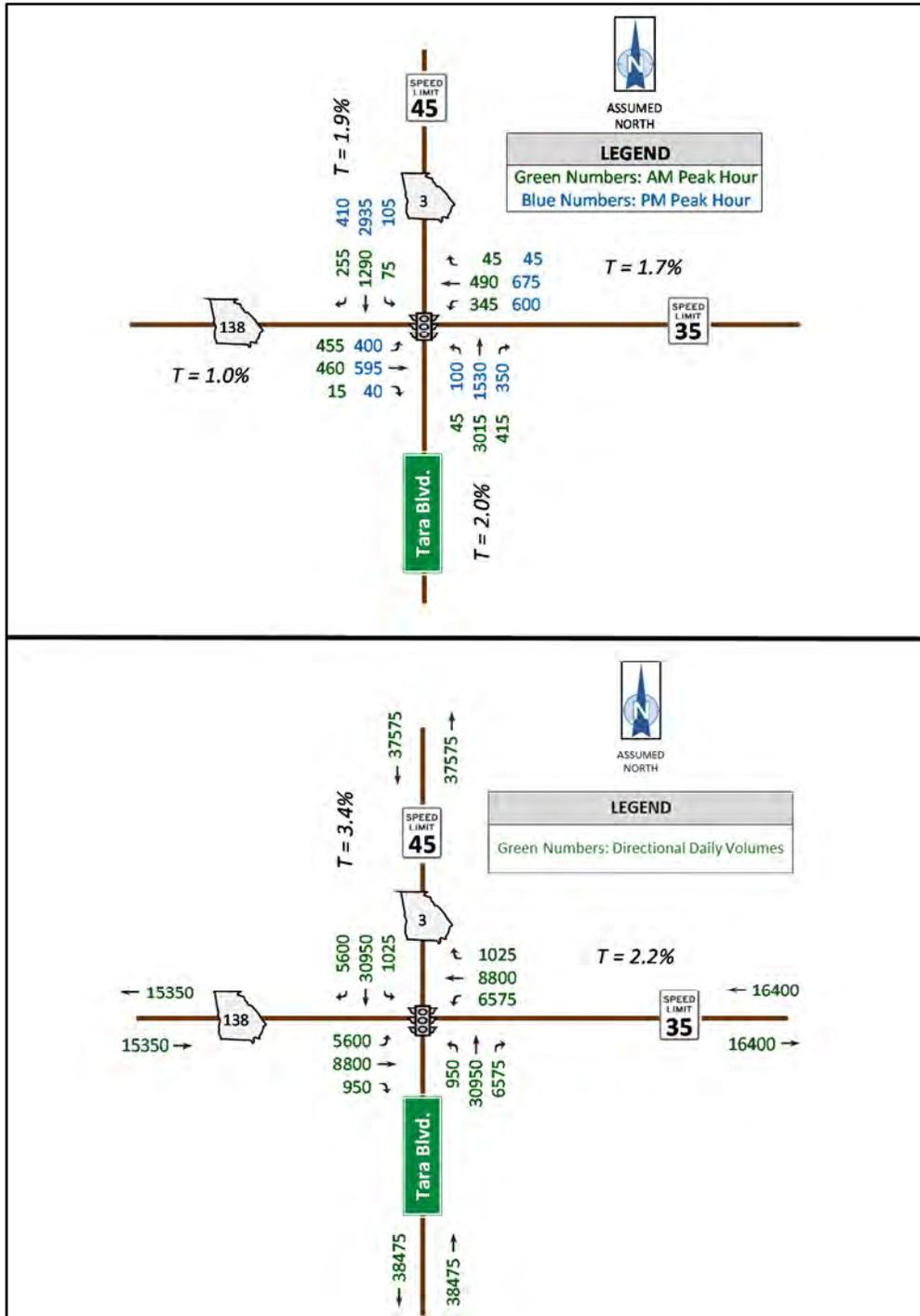
Figure 7: CONST. YEAR (2020) TRAFFIC PROJECTIONS



2040 Traffic Projections

Figure 8 shows the 2040 traffic projections. The DHV's are shown in the upper panel and the ADT's are shown in the lower panel.

Figure 8: DESIGN YEAR (2040) TRAFFIC PROJECTIONS



CAPACITY ANALYSIS

Capacity analysis was used to evaluate both existing and projected traffic volumes under the No-Build and Build conditions. The *Synchro* Program (Version 9) was used to conduct the capacity analysis. This program replicates the procedures outlined in the *Highway Capacity Manual, Special Report 2009* (HCM 2000 & 2010) published by the Transportation Research Board.

The level of service definitions are provided in Table 2.

Table 2: LEVEL OF SERVICE CRITERIA

LEVEL OF SERVICE	SIGNALIZED INTERSECTIONS	STOP CONTROLLED INTERSECTIONS
	STOPPED DELAY PER VEHICLE (SECONDS)	STOPPED DELAY PER VEHICLE (SECONDS)
A	≤10.0	≤10.0
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	>80.0	>50.0

Capacity analysis results for an unsignalized intersection provide estimates of level of service (LOS) for each minor movement that is required to yield to free flow movements. LOS for each movement is shown followed by the estimated delay per vehicle in seconds.

Capacity Analysis Results, Existing and Projected Conditions

The capacity analysis results for Existing, No-Build, and Build Conditions are shown in Table 3. Capacity analysis reports for Existing Conditions are provided in Appendix G. Capacity analysis reports for 2020 and 2040 No-Build Conditions are provided in Appendix H. Capacity analysis reports for 2020 and 2040 Build Conditions are provided in Appendix I. Poor operating conditions are highlighted.

Table 3: CAPACITY ANALYSIS RESULTS, SR 3 (TARA BLVD) & SR 138

INTERSECTION	AM PEAK HOUR					PM PEAK HOUR				
	EXISTING	2020 NO-BUILD	2020 BUILD	2040 NO-BUILD	2040 BUILD	EXISTING	2020 NO-BUILD	2020 BUILD	2040 NO-BUILD	2040 BUILD
SR 3 (Tara Blvd) & SR 138	F (104.8)	F (146.3)	E (71.7)	F (240.1)	F (133.5)	F (93.1)	F (122.1)	E (62.6)	F (195.6)	F (107.8)

The SR 3 and SR 138 intersection is currently operating at LOS F in the AM and PM Peak Hours. The intersection operates at LOS F (240.1) in the AM Peak Hour of the 2040 No-Build Design Year. The Build Condition improves the operation of the intersection to LOS F (107.8) in the 2040 Build Design Year.

The queue lengths for Existing, No-Build, and Build Conditions are shown in Table 4. Movements that show longer queue lengths in the Build Conditions than the No-Build Conditions are highlighted.

Table 4: CAPACITY ANALYSIS RESULTS, QUEUE LENGTHS

INTERSECTION	MOV.	AM PEAK HOUR					PM PEAK HOUR				
		EXIST.	2020 NO-BUILD	2020 BUILD	2040 NO-BUILD	2040 BUILD	EXIST.	2020 NO-BUILD	2020 BUILD	2040 NO-BUILD	2040 BUILD
SR 3 (Tara Blvd) & SR 138	EBL	428'	490'	266'	632'	336'	526'	608'	291'	807'	427'
	EBT	730'	837'	301'	1068'	370'	488'	581'	471'	789'	645'
	EBR	730'	837'	0'	1068'	0'	488'	581'	0'	789'	0'
	WBL	375'	417'	230'	589'	286'	680'	790'	458'	1029'	627'
	WBT	380'	424'	420'	591'	541'	600'	708'	451'	956'	626'
	WBR	380'	424'	0'	591'	0'	600'	708'	0'	956'	0'
	NBL	79'	92'	46'	127'	56'	151'	168'	92'	236'	126'
	NBT	1139'	1354'	1286'	1848'	1823'	479'	549'	445'	720'	583'
	NBR	257'	304'	262'	413'	378'	190'	231'	156'	329'	234'
	SBL	62'	69'	83'	82'	92'	77'	87'	89'	105'	106'
	SBT	352'	398'	389'	515'	504'	1286'	1498'	1207'	1984'	1667'
SBR	0'	0'	0'	19'	14'	254'	304'	201'	427'	282'	

The queue lengths on the eastbound and westbound approaches significantly decrease in with the improvements as opposed to the No-Build Condition. For example, the eastbound left queue length in the PM Peak Hour improves from 807' in the 2040 No-Build Condition to 427' in the 2040 Build Condition. The westbound left queue length in the PM Peak Hour improves from 1029' in the 2040 No-Build Condition to 627' in the 2040 Build Condition.

SUMMARY OF FINDINGS

1. The intersection of SR 3 (Tara Boulevard) and SR 138 currently operates poorly during peak conditions.
2. The conditions at the intersection are expected to get worse by 2040 if no improvements are made.
3. The AM Peak Hour LOS improves from F (240.1) in the 2040 No-Build Condition to F (133.5) in the 2040 Build Condition. The PM Peak Hour LOS improves from F (195.6) in the 2040 No-Build Condition to F (107.8) in the 2040 Build Condition.
4. The AM Peak Hour queue length for the eastbound left improves from 632' in the 2040 No-Build Condition to 336' in the 2040 Build Condition. The PM Peak Hour queue length for the eastbound left improves from 807' in the 2040 No-Build Condition to 427' in the 2040 Build Condition.

RECOMMENDATIONS

The following recommendations are based on the newly developed traffic projections (2020 & 2040), crash analysis, field observations, and capacity analyses.

1. The split phase operation should be removed and replaced with standard phasing with protected left turns.
2. Dual northbound (Tara Blvd) left turn lanes (200') should be constructed.
3. Both the eastbound and westbound approaches of SR 138 should be widened to accommodate dual left turn lanes (500') and an exclusive channelized right turn lane (200').
4. A 2'-4' concrete median should be installed on SR 138 between SR 3 and Cross Road Parkway (eastbound approach) and between SR 3 and Main Street (westbound approach).
5. The driveways at the southeast (35' from intersection) and northeast (102' from intersection) corners along SR 138 should be closed due to their proximity to the intersection.

Figure 9, on the following page, shows the recommended improvements.

PREPARED BY: Speedy Boutwell Date: 8.6.15
 Speedy Boutwell, P.E., PTOE

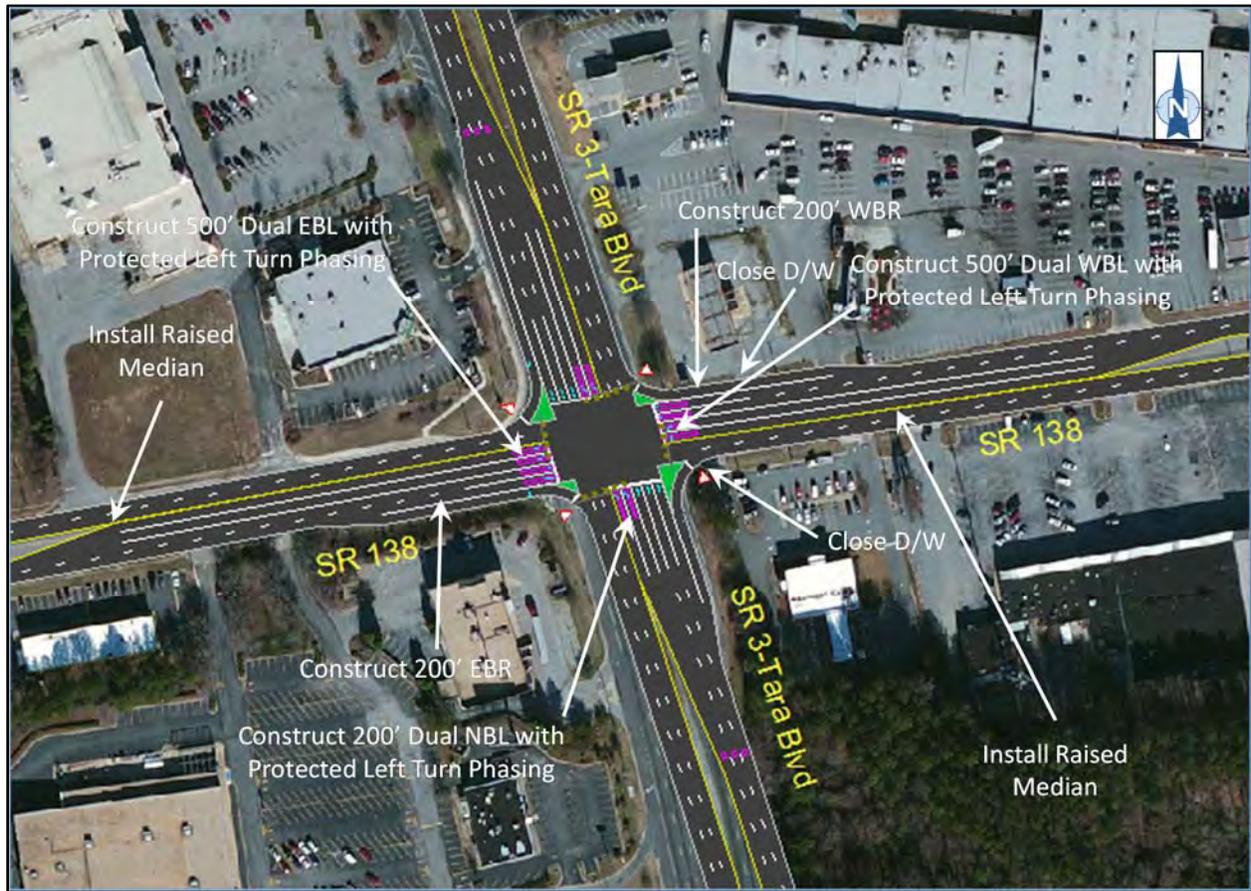
RECOMMENDED BY: _____ Date: _____
 District Traffic Engineer

RECOMMENDED BY: _____ Date: _____
 State Traffic Engineer

APPROVED BY: _____ Date: _____
 Director of Operations



Figure 9: RECOMMENDED IMPROVEMENTS



APPENDICES (NOT INCLUDED IN REPORT)

- A – PHOTOGRAPHIC INVENTORY
- B – TURNING MOVEMENT COUNTS
- C – EXISTING PEAK HOUR AND DAILY TRAFFIC DIAGRAM
- D – CRASH DATA
- E – TRAFFIC PROJECTION METHODOLOGY
- F – PROJECTED (2020 & 2040) PEAK HOUR AND DAILY TRAFFIC DIAGRAM
- G – CAPACITY ANALYSIS REPORTS– EXISTING
- H – CAPACITY ANALYSIS REPORTS– NO-BUILD
- I – CAPACITY ANALYSIS REPORTS– BUILD

Attachment #5

Environmental Resources Screening Survey Report

Proposed US 19/SR 3/Tara Boulevard at SR 138 Intersection Improvements, Clayton County, Georgia

May 5, 2015

This report describes results from desktop research and windshield screening field surveys along US 19/SR 3/Tara Boulevard (SR 3) and SR 138 for the project limits provided to Edwards-Pitman Environmental, Inc. (EPEI). The preliminary findings from these efforts have not been concurred or agreed upon by state and federal agencies, but identify environmental resources that may be impacted by the project and that should be considered in the design process. Field surveys and desktop research were conducted between March 27 and April 17, 2015.

Proposed Project Understanding

The proposed project as understood for purposes of this screening is for operational improvements at the intersection including conversion of the existing split phasing of the traffic signal to standard phasing with protected left turns, widening SR 138 eastbound and westbound lanes to accommodate dual left turns for approximately 500 feet,



Figure 1 – Project Location

and adding exclusive channelized right turn lanes for approximately 200 feet. A concrete median is proposed along SR 138 from the intersection east approximately 1,100 feet to Main Street, and west of the intersection for approximately 1,100 feet to Cross Road Parkway. Other improvements would include construction of Americans With Disabilities Act (ADA) compliant wheelchair ramps at the intersection. The project length would be approximately 0.42 mile.

The survey limits for this environmental screening included approximately 1,200 feet east and west of the intersection on SR 138, and approximately 500 feet north and south of the intersection on SR 3. See Figure 1 for project location.

Land Use

Land use within the screening limits is primarily developed with retail shopping centers, restaurants, automotive repair businesses, and financial institutions (see Figure 2). Shopping centers dominate the bulk of land used in the four quadrants of the intersection and include the Jonesboro Corners, Crossroads South, Southway, and one unnamed shopping center. Outparcel retail stores include Walgreens, Dollar General, and Discount Fabrics. Automotive repair businesses include John's Auto Repair, PN Auto Repair, and a vacant Goodyear facility. Financial institutions include Bank of America and PNC Bank.



Figure 2 – Land Use

Environmental Justice (EJ) Communities

Data from the 2010 US Census was reviewed to identify minority and low income communities in the project area to assess whether there may be a potential disproportionate adverse impact to these communities from the project. According to census data the population in the area of the project is 30-40 percent minority. Between 20-30 percent of the population are considered below the poverty threshold. The proposed intersection improvements do not typically result in separating communities, and in fact provide safer conditions for motorists. There would be temporary, minor inconveniences

during construction, but long term the project would not result in disproportionate adverse effects to minority or low income communities.

Archaeological Resources

On April 1, 2015, a check of the Georgia Archaeological Site File was conducted electronically for the project corridor using the Georgia Natural, Archaeological, and Historic Resources Geographic Information System (GNAHRGIS) database. A total of 7 sites are located within a 1-kilometer radius of the corridor (Figure 3). None of these sites are adjacent to the project corridor. Table 1 summarizes the sites identified and the National Register (NR) eligibility recommendation.

One previous archaeological survey crosses the current survey area at the intersection of SR 3 and SR 138. The survey was performed by Georgia Department of Transportation (GDOT) archaeologists in 2000 for proposed median reconstruction along SR 3. No cultural materials were located during the survey and the findings were documented in an interdepartmental correspondence memo (GDOT 2000). An archaeology survey including shovel testing should be conducted for this project corridor as part of the environmental assessment.

Table 1: Recorded Archaeological Sites within 1 km Radius

Site	Site Type and Cultural Affiliation	National Register Status Recommendation
9CN13	Civil War Trench Work	Unknown
9CN61	Undefined (Mary Stover Griffin Collection)	Unknown
9CN78	Nineteenth Century Historic Mill	Unknown
9CN164	Civil War Earthwork	Unknown
9CN165	Civil War Earthwork and Battlefield	Unknown
9CN170	Nineteenth Century House	Unknown
9CN171	Civil War Earthworks, Battlefield, and House/Field Hospital	Recommended Eligible





Figure 3 – Previously Recorded Archaeological Sites



Historic Resources

Background research and a windshield survey were conducted to identify properties constructed in, or prior to, 1965 as these resources will be recognized as “historic” by NR evaluation standards in 2015. After establishing the spatial and temporal parameters of the screening, Clayton County tax assessor’s records were consulted for all properties adjacent to the survey intersection in order to ascertain each property’s date of construction. In addition to the tax records, the National Park Service’s inventory of National Register-listed properties in Clayton County, NAHRGIS database, and aerial photography were consulted to identify any previously surveyed historic resources located along the corridor. Finally, a windshield survey of the corridor was conducted to determine the validity of the database research.

As a result of these efforts, no NR-listed historic resources were identified along the survey corridor, no previously surveyed historic resources were identified in the NAHRGIS database, no buildings were identified on historic aerial maps prior to 1968, and no historic resources were identified along the corridor based on information obtained from the Clayton County tax assessor’s records. One c. 1965 commercial building is located in the southeast corner of Main Street and SR 138; however, it is sited just outside of the project limits.

The windshield survey revealed the area consists of late-20th century commercial buildings. No historic buildings were identified in the project area.

State Route 3 was part of the Dixie Highway system, a paved north-south roadway that was constructed between 1915 and 1927 and extended from the Canadian border to Miami, Florida. The section within the project area was part of Dixie Highway West which entered Georgia in the northwest corner of the state at Rossville and continued south via Rome, Atlanta and Jonesboro to Macon and points further south. This section of the Dixie Highway at the intersection of SR 3 and SR 138 is not considered eligible for listing in the National Register.

Natural Resources

State and federal databases were researched to determine the current listing of protected species for Clayton County, Georgia. The US Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) database was researched for federally listed species. Table 2 summarizes findings of federally protected species for the project area. No protected species or potential habitat were observed during field surveys; therefore, the project is not expected to affect any federally protected species.

Table 2 – State and Federally Protected Species for Clayton County, Georgia

Federally Protected Species		
Common Name	Scientific Name	Potential Habitat Present
Mussels		
purple bankclimber	<i>Elliptoideus sloatianus</i>	No
shiny-rayed pocketbook	<i>Hamiota subangulata</i>	No
gulf moccasinshell	<i>Medionidus penicillatus</i>	No
oval pigtoe	<i>Pleurobema pyriforme</i>	No
Plants		
Black-spored quillwort	<i>Isoetes melanospora</i>	No

A field screening survey was conducted on April 17, 2015 to identify potential habitat for protected species and jurisdictional waters of the US. A total of two waters of the US were identified within the survey area for the proposed project, consisting of two perennial streams. No intermittent streams or wetlands were identified. A summary of the waters is provided below. Their location is included on Figure 4.

Stream 1 (PS-1) – Perennial – The stream is located on the east side of SR 3 and flows from east to west through a 6-foot box culvert under SR 3. The outflow of the stream was not within the survey limits for this screening, and the outfall may be west of the Crossroads South Shopping Center (see Figure 2).

Stream 2 (PS-2) – Perennial – The stream is located near the eastern terminus of the project along SR 138. The stream flows southeast to northwest through a culvert under SR 138.

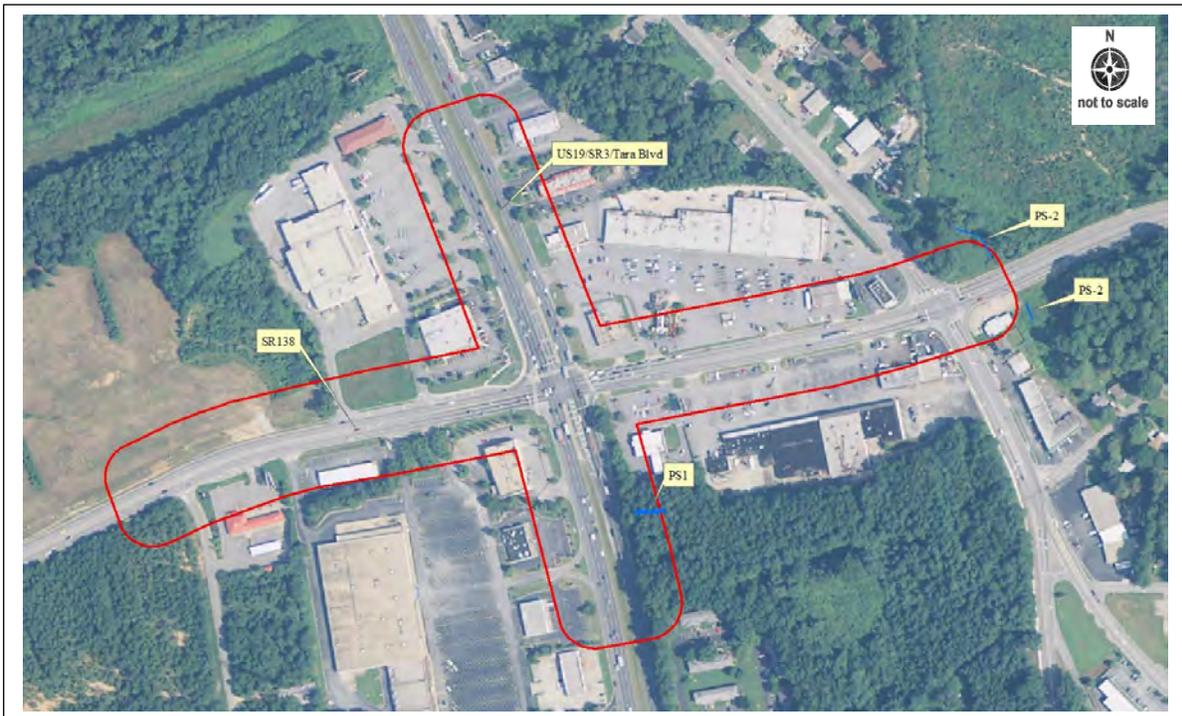


Figure 4 – Waters of the US



Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the project area were reviewed for floodplains or regulatory floodways within the project corridor. The project limits for proposed improvements to SR 138 and SR 3 are not within a floodplain or regulatory floodway.

Noise Impacts

Federal aid projects must be assessed for noise impacts. Federal Highway Administration Policy categorizes projects into three types: I, II, and III. Type I projects include capacity adding or roadway widening projects. Type II projects involve noise abatement on existing highways. Type III projects are projects that do not meet the classification of a Type I or Type II project. Because the proposed project would not involve adding through capacity or move the roadway closer to noise sensitive receivers, or meet classification as a Type I or Type II project, this project would likely be considered a Type III noise project. Type III projects do not require noise analysis.

Air Quality

Clayton County is within ozone and particulate matter (PM_{2.5}) non-attainment areas. The project is not currently within the current 2014-2019 Transportation Improvement Program of the Plan 2040 Regional Transportation Plan and would be required to be in a current adopted plan to show compliance with regional air quality requirements. However, given the scope of the project, it is anticipated that a qualitative assessment would be sufficient to assess air quality impacts from the project.

Possible Underground Storage Tank (UST) and Hazardous Waste Sites

A windshield survey was conducted on March 27, 2015 for sites and businesses that may be potential Underground Storage Tank (UST) or hazardous waste generators or operators. Four potential locations were identified within the project limits and are summarized in Table 3. The locations of these businesses are shown on Figure 2, Land Use. To determine if these or other sites within the project area are UST or hazardous waste locations a search of local, state, and federal databases as part of a Phase I Environmental Site Assessment (Phase I ESA) in accordance with American Society for Testing and Materials standard and practice should be conducted.

Table 3 – Potential UST and Hazardous Waste Locations

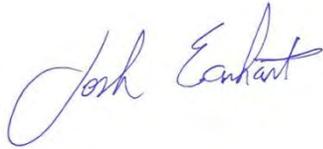
Property/Business Name	Location	Potential Site Type
Vacant Citgo Gas Station	NE quadrant of SR 138 and SR 3	UST
PN Auto Repair	NW quadrant of SR 138 and Main Street	Hazardous Waste and UST
John’s Auto Repair	SW quadrant of SR 138 and Main Street	Hazardous Waste and UST
Vacant Goodyear Tire	SE corner of SR 138 and Cross Road Parkway	Hazardous Waste



Permits

Any impacts to waters of the US would require a permit from the US Army Corps of Engineers. If a permit is required it would likely be a Nationwide Permit. Stream impacts greater than 100 linear feet and wetland impacts greater than 0.1 acre would also require purchase of mitigation credits.

The perennial streams identified in this screening require a 25-foot stream buffer. Non-exempt impacts within this buffer would require a buffer variance from the Georgia Department of Natural Resources-Environmental Protection Division.



Josh Earhart
Edwards-Pitman Environmental, Inc.
Sr. NEPA Planner

Attachment #6



MEETING MINUTES

PROJECT: Clayton County, US 19/ SR 3/Tara Blvd at SR 138 Intersection Improvement Project
TIME & LOCATION: 10:00 AM at Project site

DATE: March 3, 2015

ATTENDEES:

Xavier James – GDOT
Ryan Fernandez – GDOT
Chester Thomas - GDOT
David Borchardt – GDOT
Rich Cobb – GDOT
Benny Walden GDOT
Josh Earhart – Edwards-Pitman Environmental
Jason Dickerson – Wolverton & Associates
Gene Sanford – LandAir Surveying
Adolfo Guzman - Clark Patterson Lee
Joe Garland - Clark Patterson Lee

DISCUSSION:

- Project overview: GDOT Project Manager described the project description, the limits of the projects and the purposed of the task order.
- Project Concept: Clark Patterson Lee (CPL) will develop a 3D concept of the propose project as part of the concept development. The Concept will include profiles, cross sections and construction limits. This will provide an accurate representation of the impact of the project.
- Traffic Counts: GDOT stated that the Department will provide the traffic counts from RTOP database. (Traffic counts have been provided).
- Environmental: Edwards-Pitman will perform the environmental screening. UST investigation will be address on a future task order.
- Survey: LandAir will develop the project database based on the limit established by GDOT preliminary layout of the project.
- Other Issues: Wolverton stated that the left turn volumes on US 19/SR 3 are not an issue, that the issue is the thru traffic volumes on US 19/SR 3.



ACTION ITEMS:

- Proceed with field survey.

The foregoing constitutes our understanding of matters discussed and conclusions reached. If there are any errors or omissions in the basic discussion, please notify the Author in writing within seven days.

Cc: All Attendees
File

F:\GDOT SR 3-US 19 at SR 138 Task Order # 23 - 13398\Meetings & Comments\Kickoff Meeting Minutes Minutes - Mar 2015.doc

US 19 @ SR 130
Kickoff meeting

3/3/2015

<u>Name</u>	<u>Company</u>	<u>Email</u>
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Gene Sanford	Land Air	gsanford@lasurveying.com



CONCEPT MEETING MINUTES

PROJECT: PI# 0012833, S.R.3/U.S.19 at S.R. 138 Clayton County
TIME & LOCATION: GDOT District Office #7, 10:30 AM
CPL PROJECT NO.: 13398.00

DATE: September 22, 2015

ATTENDEES:

- Xavier James – GDOT Office of Program Delivery
- Gabrielle (Gabbie) Williams – GDOT G.O.
- Shun L. Pringle – GDOT District 7 Construction
- Dale Ferris – GDOT District 7
- Matthew Fowler – GDOT Planning
- Bessie Reina – GDOT Planning
- Robert Reid – GDOT Engineering Services
- David Borchardt – GDOT Office of Environmental Services
- Tammera McLin – GDOT District 7
- Josh Earhart – Edwards Pitman Environmental
- Speedy Boutwell – Wilburn Engineering
- Adolfo Guzman – Clark Patterson Lee
- Joe Garland - Clark Patterson Lee
- Mark Hanson - Clark Patterson Lee

INTRODUCTIONS:

- Project Manager commenced meeting by having each attendee introduce themselves
- Consultant introduced themselves and proceeded to begin the review of the Limited Scope Project Concept Report

DISCUSSION:

Project Let Date: March, 2017
Clark Patterson Lee’s contract ends March, 2016.

Project Identification

Project #0012833, Clayton County is an Operational Improvement at the intersection of SR 3 & SR 138.

1. **Project description and details** – Clark Patterson Lee/ Edwards Pitman/ Wilburn Engineering
 - a. PROJECT JUSTIFICATION STATEMENT
 - The intersection of SR3/US19 and SR 138 is heavily traveled and the operational efficiency of the intersection is less than desirable. Need for improved traffic flow.



MEETING MINUTES

PROJECT NAME: SR3/US19 @ SR 138

PI# 0012833

MEETING DATE: September 22, 2015

b. PROPOSED PROJECT DESCRIPTION

- Removing the signal's split phase.
- The addition of another westbound left turn lane.
- A dedicated right turn lane.
- Close the driveways closest to the intersection on the northeast and southeast corners. The affected parcels will still have access.
- Installing a four foot wide median along SR 138 to reduce crashes.

c. OTHER PROJECTS IN AREA

- Widening Project, PI 722030- Clayton County, SR 3/US 19/US 41 FROM S OF CR 504/TARA RD TO S OF SR 54.
- Signal Upgrade, PI 0012670 Clayton County - SR 3 @ 6 LOC; SR 54 @ 1 LOC; SR 138 @ 1 LOC & SR 314 @ 3 LOC.
- Other potential long term projects involve Reversible Lane Project, SR3/US19 corridor. Office of Planning will soon undertake a study for this potential improvement. If a project is recommended it would be long term (20+ years away) so no need to mention in this concept report.

d. TRAFFIC PROJECTIONS (ADT)

- SR 138 Current Year (2014): 24150 Open Year (2020): 26800 Design Year (2040): 32800
- SR 3 Current Year (2014): 57000 Open Year (2020): 63000 Design Year (2040): 76950

e. FUNCTIONAL CLASSIFICATION

- SR 138: Urban Principal Arterial
- SR 3: Urban Principal Arterial

f. DESIGN CRITERIA & DESIGN VARIANCES

- None anticipated.

g. INTERSECTIONS

- Street lighting is not required.

h. UTILITIES

- SUE has been received.
- A preliminary relocation meeting should be held with utility owners.
- Provide enough area of right-of-way for relocation.
- Public Interest Determination Policy is not recommended.

i. ENVIRONMENTAL & PERMITS

- No historical properties within project limits.
- Two streams are located within the project limits. No stream buffer impacts anticipated.
- Projects is within a PM 2.5 and Ozone Non-attainment area. Air quality analysis is required.
- Noise should not be a problem.



- j. CONSTRUCTION
 - A transportation management plan (TMP) is required.
 - Due to heavy daytime traffic volumes, construction will be conducted during nighttime hours.

 - k. PROJECT RESPONSIBILITIES
 - A list of project responsibilities can be found in the draft concept report.

 - l. COST ESTIMATES – PE, R/W, UTL, CST BY PI NUMBER
 - Cost estimate has increased since programming.
 - Traffic Control should be increased to \$300,000 for nighttime construction.

 - m. ALTERNATIVES DISCUSSION
 - Propose an 11-foot wide lane alternate.

 - n. PROPOSED CONCEPTUAL LAYOUT
 - Add westbound left turn lane and dedicated westbound right turn lane on SR 138.
 - Construct 4-foot median along SR 138.
 - Close driveways closest to the intersection on the northeast and southeast corners.
 - Construct retaining wall along eastbound right turn lane to preserve the parking lot of the retail store.
- 2. Additional Items to discuss**
See below.
- 3. Questions and comments**
- A PIOH will need to be conducted. It can be held before the concept report is submitted to include public comment. If the PIOH is held during concept development the schedule for the report submittal could be effected.
 - Truck traffic is high, therefore use 12-foot lanes.
 - Update utility owners list.
 - Include entire cost estimate in report.
- 4. Review Report**
- Only include front end of traffic study in concept report, appendices not required.
- 5. Action Items**
- The PIOH schedule to be determined.
 - Obtain list of projects in the area.
 - Need to review justification statement.
- 6. Adjournment**

SIGN IN SHEET - September 22, 2015

PROJECT: PI 0012833 Clayton County, SR 03/Tara Blvd at SR 138 (Concept Team Meeting)

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