

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 532780-
STP00-0111-01(028)
Chatham County
GDOT District 5 - Jesup
SR 204 @ Largo Drive Turn Lanes

OFFICE Design Policy & Support

DATE February 26, 2014

FROM  for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED CONCEPT REPORT

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

Attachment

DISTRIBUTION:

Glenn Bowman, Director of Engineering / State Environmental Administrator
Joe Carpenter, Director of P3/Program Delivery
Genetha Rice-Singleton, Asst. Dir. of P3/Prog. Delivery / State Prog. Delivery Engineer
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Mike Bolden, State Utilities Engineer
Jeff Fletcher, Statewide Location Bureau Chief
Andy Casey, State Roadway Design Engineer
Attn: Joshua Taylor, Design Group Manager
Karon Ivery, District Engineer
William Murphy, District Preconstruction Engineer
Dallory Rozier, District Utilities Engineer
David Moyer, Project Manager
BOARD MEMBER - 1st Congressional District
FHWA – attn: Rodney Barry, Georgia Division Administrator

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

Project Type: <u>Safety</u>	P.I. Number: <u>532780</u>
GDOT District: <u>5</u>	County: <u>Chatham</u>
Federal Route Number: <u>N/A</u>	State Route Number: <u>SR 204</u>
Project Number: <u>STP00-0111-01(028)</u>	

The significant changes to the approved Revised Concept Report include the following:

- Removal of the proposed left-turn lane on the northbound Largo Drive approach to the intersection, eliminating the proposed dual right-turn lanes. The approach will retain the existing configuration of one dedicated lane per the left-turn movement, through movement and right-turn movement.
- Removal of the right-turn lane extension on the southbound Largo Drive approach to the intersection. The approach will retain the existing configuration one dedicated lane per the left-turn movement, through movement and right-turn movement.
- Reduction of the left-turn lane extension on the westbound Abercorn Street to fit within the median constraints set by the left-turn lane extension currently being constructed under PI 0002921.

Submitted for approval:

<u>C. Andy Conway</u> State Roadway Design Engineer, Office of Roadway Design	<u>1/10/14</u> DATE
<u>Pentha Rice</u> <i>Signature</i> <u>BNA</u> State Program Delivery Engineer	<u>1/14/14</u> DATE
<u>David J. Meyer</u> GDOT Project Manager	<u>1/10/14</u> DATE

Recommendation for approval:

<u>GLENN BOWMAN*/EKP</u> State Environmental Administrator	<u>1/20/2014</u> DATE
_____ State Traffic Engineer	DATE

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

<u>CINDY VANDYKE*/EKP</u> State Transportation Planning Administrator	<u>1/29/2014</u> DATE
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PLANNING, APPROVED CONCEPT, AND BACKGROUND

PI# 532780 has been identified in the Savannah MPO's TIP as a Safety Lump Sum project to reduce crash frequency and severity at the intersection of SR204 and Largo Drive and was added to the GDOT program on February 2, 1996. SR204 in Chatham County provides connectivity between I-95 and the City of Savannah and serves as a major commuter route for multiple activity centers. At this location, SR204 is functionally classified as an urban principal arterial; it is also on the National Highway System (NHS) and is designated a hurricane evacuation route. Largo Drive is classified as an urban collector street and provides north-south connectivity between SR204 and surrounding residential areas. Neither of these facilities is on a State Bicycle Route or designated a truck route.

Currently, the intersection of SR204 and Largo Drive is signalized. Eastbound and westbound SR204 consists of three through lanes and a single left turn lane at the intersection. Largo Drive consists of one through lane, one right turn lane, and one left turn lane in both northbound and southbound directions.

According to traffic data approved by the Office of Planning, the SR204 corridor operates at LOS "C" in the current year (2010) and is projected to decline to LOS "D" by year 2036. Traffic along Largo Drive operates at LOS "B" in the current year (2010) and is projected to decline to LOS "C" and "D" by year 2036. The intersection of SR204 and Largo Drive currently operates near capacity with a volume-capacity ratio of 0.81 in the AM peak period and 0.71 in the PM. Without any improvements, the intersection is projected to operate over capacity by the year 2036 with a volume-capacity ratio of 1.14 in the AM and 1.01 in the PM. This capacity analysis indicates unacceptable levels of congestion, as defined by performance measures in the 2035 Statewide Transportation Plan.

For years 2006 through 2008, crash rates at this intersection were significantly greater than the statewide average for similar facility types. Of the crashes during the three year period, approximately 67% were rear-end collisions, 16% were sideswipes, 13% were angle collisions, and 5% involved only one vehicle. A majority of the rear-end crashes involved stopped vehicles, whereas a majority of the sideswipe and angle crashes involved vehicles changing lanes or turning. The crashes at this intersection may be associated with congestion, queuing, and turning movements.

Several other GDOT projects are programmed or under construction near this intersection. Planned for long range, PI# 0002922 proposes to widen SR204 to an eight lane roadway from Rio Road to Harry Truman Parkway. PI# 0002921 is currently under construction and will provide a new alignment roadway connecting SR204 to Whitfield Ave. In addition, the Savannah MPO is using ARRA funds to conduct a planning study that will recommend possible alternatives for reducing congestion along the SR204 corridor.

Improvements are needed to reduce the frequency and severity of crashes at this intersection, where crash rates are above the statewide average. Capacity improvements are also needed at this intersection in order to accommodate the anticipated growth in traffic and improve overall mobility. A project at this intersection is warranted based on the operational conditions stated here.

Existing conditions:

The intersection of SR204/ Abercorn Street at CS1149/ Largo Drive is located in the City of Savannah, Chatham County. SR204/ Abercorn Street provides connectivity between I-95 and the City of Savannah. It is an urban principal arterial and is also on the National Highway System (NHS) and is designated a hurricane evacuation route. CS1149/ Largo Drive provides north-south connectivity between SR204/ Abercorn Street and surrounding residential areas and is classified as an urban collector street. Neither of these facilities is on the State Bicycle Route or designated truck route. CS1149/ Largo Drive is currently listed as Route 15/ Habersham Bikeway on Savannah MPO's adopted bikeway plan.

The existing typical section along SR204/ Abercorn Street is 6 lanes with dedicated left turn lanes, curb & gutter and a 20-ft raised landscaped median. The existing typical section along CS1149/ Largo Drive is 2 lanes with dedicated left and right turn lanes, curb & gutter 5-ft bike lanes, and a 30-ft landscaped median (south side only) with street lighting. Sidewalks are only located on the southern approach along the south bound shoulder.

Description of the approved Concept:

The approved Concept Report, dated March 20, 1996 recommended to improve the safety and operational efficiency of the intersection by providing dual left turn lanes for the movement from westbound SR204/ Abercorn Street to southbound CS1149/ Largo Drive. This required construction of an additional turn lane on SR204, reconstruction of CS1149 and re-configuration of the intersection. The project length was 0.41 mile long from M.P. 16.62 to M.P. 16.88 on SR204 and from M.P. 1.82 to M.P. 1.97 on CS1149. The proposed typical section had three (3) through lanes in each direction, two (2) dual left turn lanes westbound, one (1) left turn lane eastbound, and a 5-ft raised grassed median for SR204. CS1149 (North of SR204) only included radius improvements and re-striping. CS1149 (South of SR204) contained two (2) travel lanes with one (1) 4-ft bike lane southbound, and one (1) travel lane with one (1) left turn lane and one (1) right turn lane northbound separated by a 3-ft grassed median. There are 7 parcels impacted.

Description of the approved Revised Concept (2004):

The approved Revised Concept Report, dated February 5, 2004 recommended to improve the safety and operational efficiency of the intersection to increase the scope of the project by adding two through lanes on SR204, one in each direction, in order to increase the roadway and intersection capacity. The project length was 0.55 mile long from M.P. 16.55 to M.P. 16.95 on SR204 and from M.P. 1.82 to M.P. 1.97 on CS1149. The typical section for SR204 consisted of four (4) through lanes, one (1) right turn lanes in each direction, two (2) left turn lanes westbound, one (1) left turn lane eastbound, and a 5-ft raised grassed median. Due to the additional lanes, the taper lengths extended the project termini on SR204 by approximately 255-ft to the west and 475-ft to the east. The Right of Way impacts increased from seven (7) to eighteen (18) parcels.

Description of the approved Revised Concept (2013):

The approved Revised Concept Report, dated April 2, 2013 recommended to reduce the scope of the project in response to a Traffic Engineering (TE) Study conducted by District 5 Traffic Operations and a traffic

analysis conducted by the Office of Roadway Design. Both the TE Study and traffic analysis indicated the improvements proposed by the 2004 Revised Concept Report would not improve the intersection delay, particularly along the mainline, SR 204/Abercorn Street. The 2013 Revised Concept Report recommended the retention of the existing three through lanes in each direction on SR 204 in lieu of the proposed four through lanes. The report also recommended the removal of all proposed separate right-turn lanes along SR 204. The dual left turn lanes along the westbound approach of SR 204 were recommended to be replaced with a storage length extension of the existing single left-turn. The existing traffic movements on CS 1149 were recommended to be retained with the storage lengths along the southbound approach being extended and one additional right-turn lane being introduced along the northbound approach. Additionally, the 4-ft bike lanes on CS 1149 would be retained. The project length was adjusted to 0.26 miles from M.P. 16.58 to M.P. 16.84 along SR 204. The Right of Way impacts were reduced to no impacts.

Federal Oversight: Full Oversight Exempt State Funded Other

Projected Traffic as shown in the approved Concept Report: AADT

	SR 204	CS 1149
Open Year (2004)	48,000	10,000
Design Year (2024)	75,000	16,600

Updated Traffic: ADT

	SR 204	CS 1149
Open Year (2016)	43,100	10,000
Design Year (2036)	73,300	12,400

Functional Classification:

Roadway	Functional Classification
SR204/ Abercorn Street	Urban Principal Arterial
CS1149/ Largo Drive	Urban Collector Street

VE Study anticipated: No Yes Completed – Date:

PROPOSED REVISIONS

Approved Features:	Proposed Features:
<p>The following features, proposed under the 2013 approved Revised Concept Report, shall be revised.</p> <ul style="list-style-type: none"> • <u>Typical Sections:</u> <ul style="list-style-type: none"> ○ Removal of the proposed left-turn lane on the northbound Largo Drive approach within the existing median. This will also eliminate the proposed dual right-turn lanes proposed for this approach. ○ Removal of the right-turn lane extension on the southbound Largo Drive approach. ○ Reduction of the left-turn lane 	<ul style="list-style-type: none"> • <u>Typical Sections:</u> <ul style="list-style-type: none"> ○ The northbound approach will retain the existing configuration of one dedicated lane for the left-turn movement, through movement and right-turn movement each. ○ The southbound approach will retain the existing configuration of one dedicated lane for the left-turn movement, through movement and right-turn movement each. ○ The westbound left-turn lane

extension on the westbound Abercorn Street approach.	extension will be shortened to fit within the median constraints set by the left-turn lane extension currently being constructed under PI 0002921.
Reason(s) for change: These revisions were necessitated by Chatham County’s desire to not have the trees within the median of Largo Drive and adjacent to the southbound approach of the intersection removed or damaged by proposed construction.	

Design Variances and/or Exceptions needed: N/A

ENVIRONMENTAL AND PERMITS

Potential environmental impacts of proposed revision: N/A

Have proposed revisions been reviewed by environmental staff? No Yes

Environmental responsibilities (Studies/Documents/Permits): All Environmental Studies and reports will be conducted by GDOT personnel.

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
Is a Carbon Monoxide hotspot analysis required? No Yes
Analysis has been completed.

Environmental Comments and Information:

NEPA: Re-evaluation to be completed 01/10/2014.

Ecology: No resources present. No impacts.

Archeology: No resources present. No impacts.

History: No resources present. No impacts.

Air Quality: No impacts.

Noise Effects: No Impacts.

Public Involvement: None.

PROJECT COST AND ADDITIONAL INFORMATION

Item	Estimated Cost	Date of Estimate	Funded By
Base Construction Cost:	\$723,593.76	1/10/2014	
Engineering and Inspection:	\$36,179.69	1/10/2014	
Liquid AC Adjustment:	\$25,807.35	1/10/2014	
Total Construction Cost:	\$785,580.80		
Right-of-Way:	0		
Utilities (reimbursable costs):	0		
Environmental Mitigation:	0		
TOTAL PROJECT COST:	\$785,580.80		

Recommendation: It is the recommendation of the Office of Roadway Design that the proposed revisions to the concept be approved for implementation.

Comments: None.

Attachments:

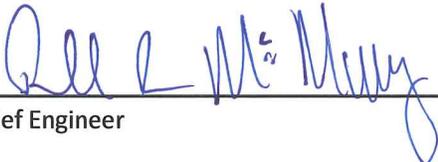
1. Project Lay Out
2. Typical Sections
3. Cost Estimate(s)
4. Traffic Diagrams

APPROVALS

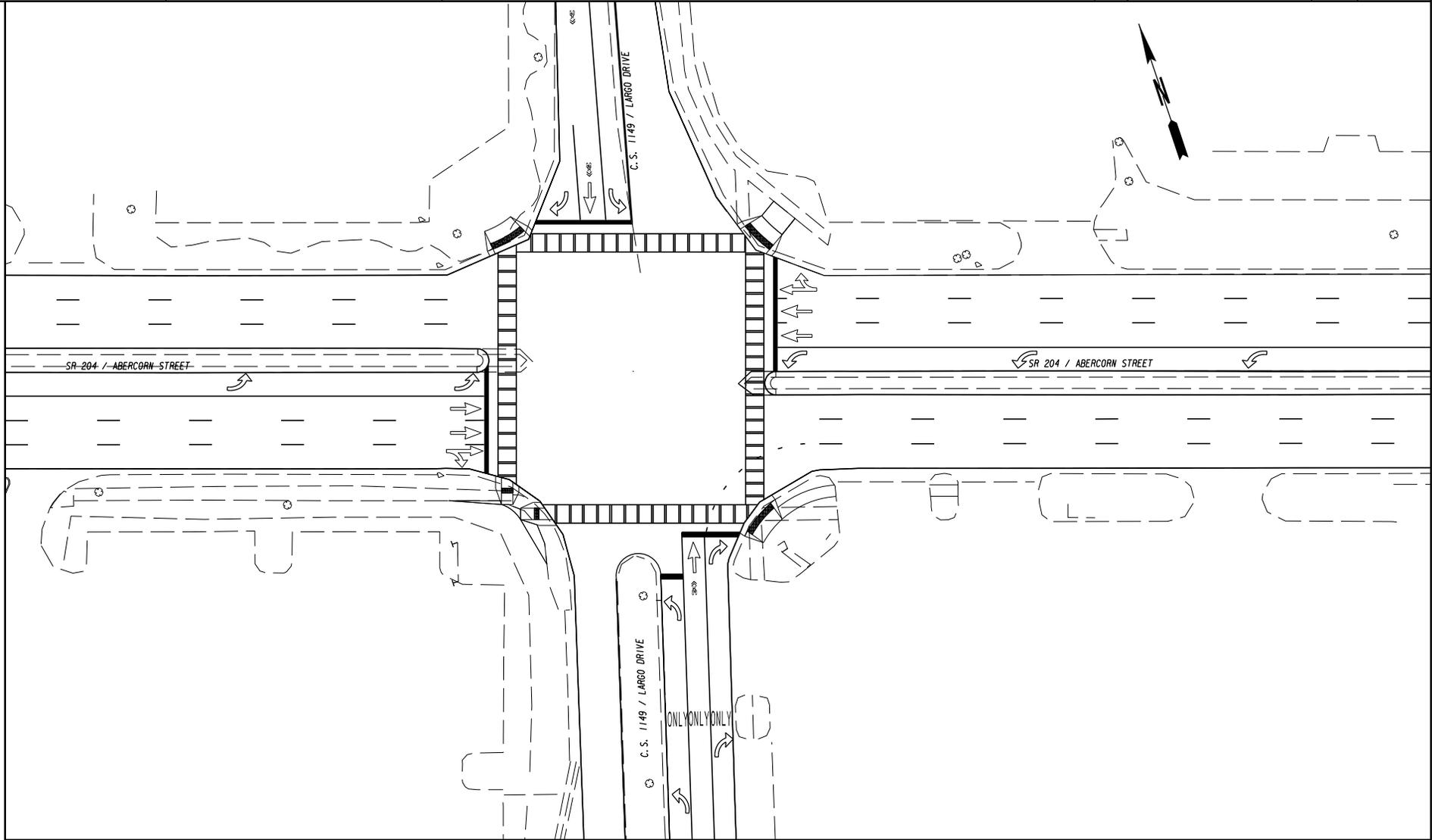
Concur: 
 Director of Engineering

Approve: 
 Division Administrator, FHWA

2/11/14
 Date

Approve: 
 Chief Engineer

2/24/14
 Date

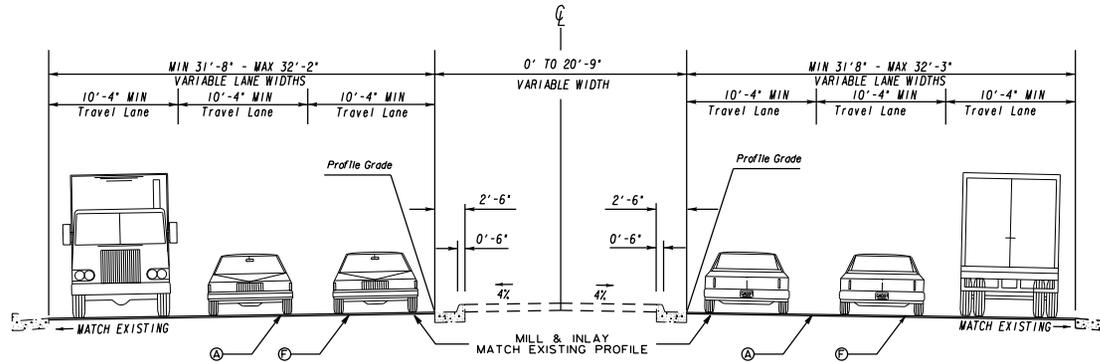


GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES	

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROADWAY DESIGN
MAINLINE PLAN

DRAWING No.

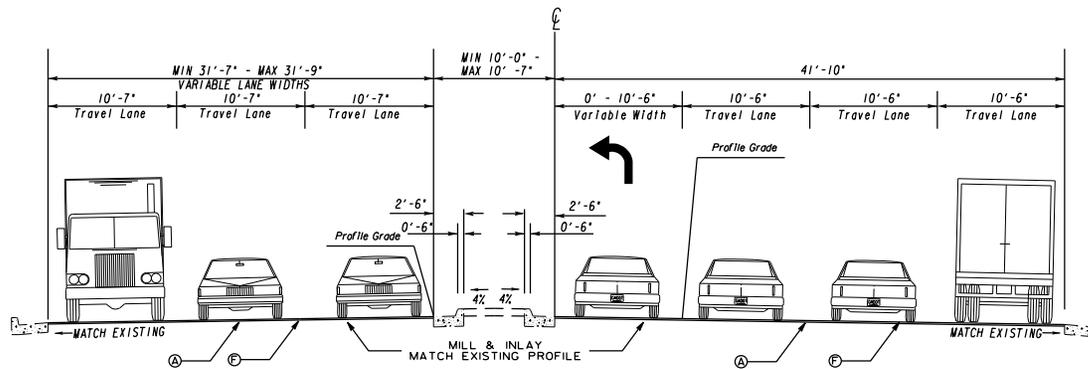


TS-01

S.R. 204
 STA 10+00.00 - 11+00.00
 STA 13+99.00 - 15+07.00

REQUIRED PAVEMENT STRUCTURE

- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME, 165 LB/YD
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LB/YD
- Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 440 LB/YD
- Ⓓ GRADED AGGREGATE BASE CRS, INCL MATL, 12 IN DEPTH
- Ⓔ MILL ASPH CONC PVMT, 1½ IN DEPTH
- Ⓕ CONC CURB & GUTTER, 6 IN X 30 IN, TP 7



TS-02

S.R. 204
 STA 11+00.00 - 13+99.00
 STA 21+69.00 - 24+03.00

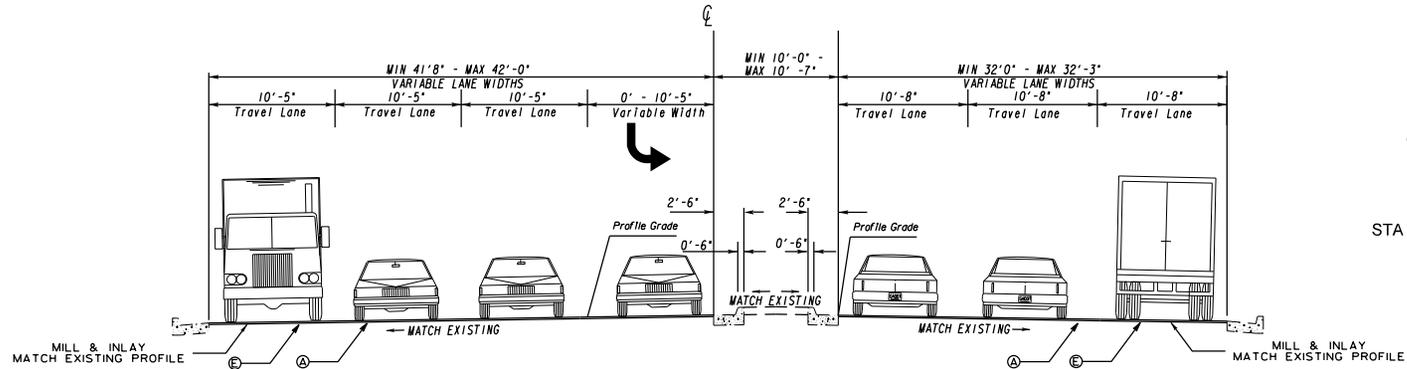
GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: OFFICE OF ROADWAY DESIGN
TYPICAL SECTIONS

SR 204 / ABERCORN ST
 @ LARGO DRIVE

DRAWING No.
05-001



TS-03

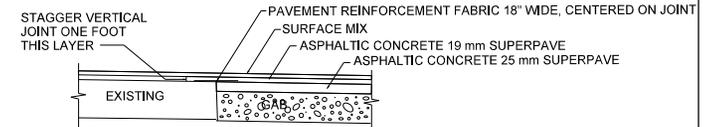
S.R. 204
STA 15+07.00 - 19+37.74

REQUIRED PAVEMENT STRUCTURE

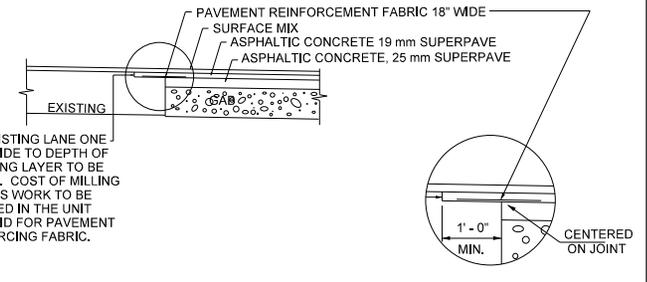
- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME, 165 LB/YD
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LB/YD
- Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 440 LB/YD
- Ⓓ GRADED AGGREGATE BASE CRS, INCL MATL, 12 IN DEPTH
- Ⓔ MILL ASPH CONC PVMT, 1 1/2 IN DEPTH
- Ⓕ CONC CURB & GUTTER, 6 IN X 30 IN, TP 7

PAVEMENT REINFORCEMENT FABRIC DETAIL

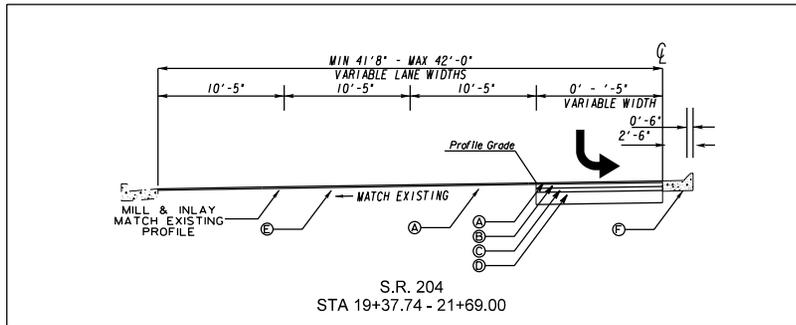
TYPICAL SECTION DETAIL TO BE USED WHEN EXISTING PAVEMENT IS TO BE RESURFACED WITH TWO INCHES OR MORE OF ASPHALTIC CONCRETE



TYPICAL SECTION DETAIL TO BE USED WHEN EXISTING PAVEMENT IS TO BE RESURFACED WITH LESS THAN TWO INCHES OF ASPHALTIC CONCRETE



LEFT TURN BAY EXTENSION DETAIL



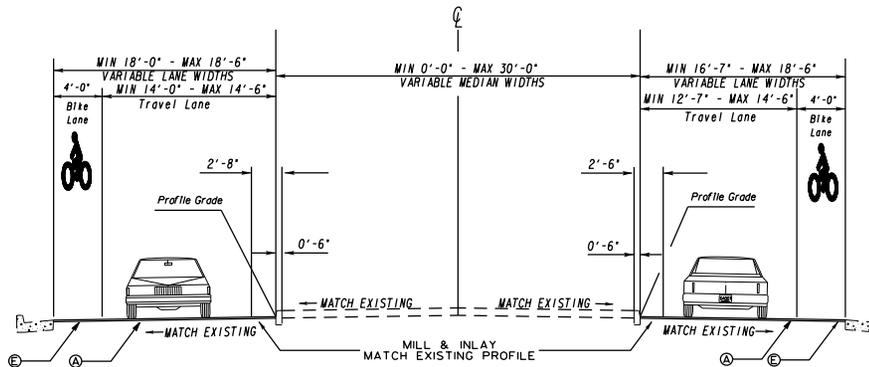
GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: OFFICE OF ROADWAY DESIGN
TYPICAL SECTIONS

SR 204 / ABERCORN ST
@ LARGO DRIVE

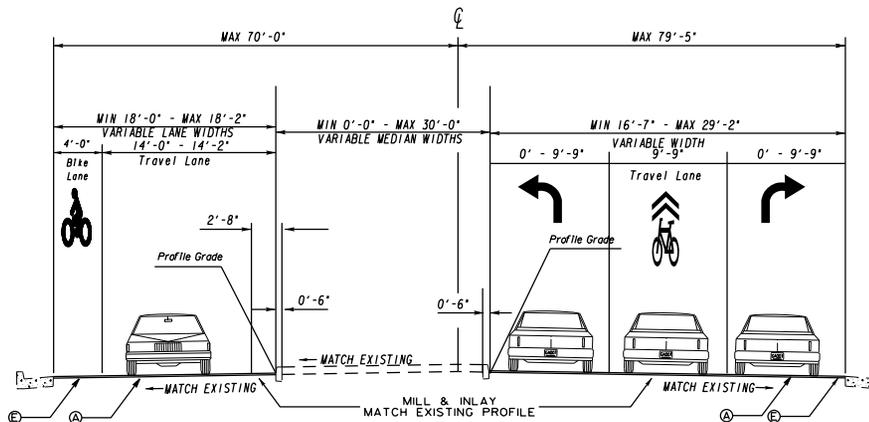
DRAWING No.
05-002



TS-04
LARGO DRIVE
STA 100+00.00 - 103+58.52

REQUIRED PAVEMENT STRUCTURE

- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME, 165 LB/YD
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LB/YD
- Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 440 LB/YD
- Ⓓ GRADED AGGREGATE BASE CRS, INCL MATL, 12 IN DEPTH
- Ⓔ MILL ASPH CONC PVMT, 1½ IN DEPTH
- Ⓕ CONC CURB & GUTTER, 6 IN X 30 IN, TP 7



TS-05
LARGO DRIVE
STA 103+58.52 - 106+00.00

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: OFFICE OF ROADWAY DESIGN
TYPICAL SECTIONS

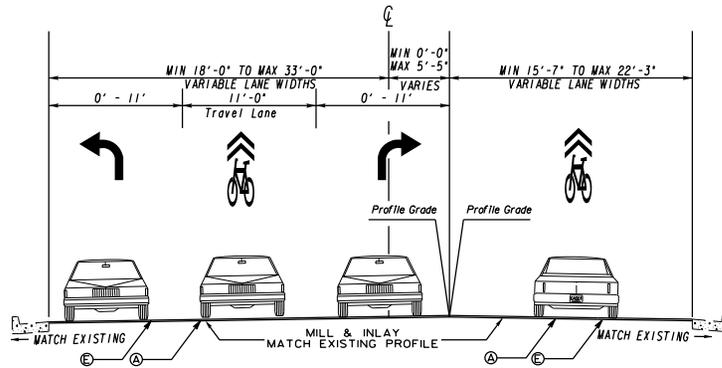
SR 204 / ABERCORN ST
@ LARGO DRIVE

DRAWING No.
05-003

ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO "BEST FIT" EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

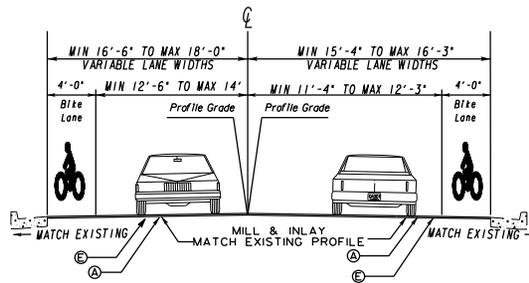
NORMAL CROWN	
SECTION WITH GRADES 0.5% OR GREATER	SECTION WITH GRADES LESS THAN 0.5%
0.0150 FT/FT - MINIMUM	0.0156 FT/FT - MINIMUM
0.0208 FT/FT - DESIRABLE	0.0208 FT/FT - DESIRABLE
0.0250 FT/FT - MAXIMUM	0.0300 FT/FT - MAXIMUM



TS-06
 LARGO DRIVE
 STA 106+84.73 - 108+89.00

REQUIRED PAVEMENT STRUCTURE

- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME, 165 LB/YD
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LB/YD
- Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 440 LB/YD
- Ⓓ GRADED AGGREGATE BASE CRS, INCL MATL, 12 IN DEPTH
- Ⓔ MILL ASPH CONC PVMT, 1½ IN DEPTH
- Ⓕ CONC CURB & GUTTER, 6 IN X 30 IN, TP 7



TS-07
 LARGO DRIVE
 STA 108+89.00 - 110+38.00

GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: OFFICE OF ROADWAY DESIGN
TYPICAL SECTIONS

SR 204 / ABERCORN ST
 @ LARGO DRIVE

DRAWING No.
05-004

DETAILED COST ESTIMATE



Job: 532780

JOB NUMBER 532780

FED/STATE PROJECT NUMBER STP00-0111-01(028)

SPEC YEAR: 01

DESCRIPTION: SR 204/ABERCORN ST. AT LARGO DRIVE IN SAVANNAH

ITEMS FOR JOB 532780

0001 - ROADWAY

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0165	150-1000	1.000	LS	\$150,000.00000	TRAFFIC CONTROL - STP00-0111-01(028)	\$150,000.00
0255	210-0100	1.000	LS	\$200,000.00000	GRADING COMPLETE - STP00-0111-01(028)	\$200,000.00
0155	310-5120	253.000	SY	\$25.13048	GR AGGR BS CRS 12IN INCL MATL	\$6,358.01
0020	402-3121	80.000	TN	\$99.34563	RECYL AC 25MM SP,GP1/2,BM&HL	\$7,947.65
0015	402-3190	40.000	TN	\$110.34391	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	\$4,413.76
0405	402-4510	1347.000	TN	\$89.80584	RECYL AC 12.5 MM SP,GP2ONLY,INC P-MBM&HL	\$120,968.47
0025	413-1000	837.000	GL	\$3.40233	BITUM TACK COAT	\$2,847.75
0030	432-0206	15956.000	SY	\$2.04009	MILL ASPH CONC PVMT/ 1.50" DEP	\$32,551.68
0195	441-0104	111.000	SY	\$41.91652	CONC SIDEWALK, 4 IN	\$4,652.73
0410	441-6022	263.000	LF	\$17.35416	CONC CURB & GUTTER, 6"X30"TP2	\$4,564.14
0415	446-1100	200.000	LF	\$5.96279	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	\$1,192.56
SUBTOTAL FOR ROADWAY:						\$535,496.75

0004 - SIGNING AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0240	636-1020	36.000	SF	\$14.96203	HWY SGN,TP1MAT,REFL SH TP3	\$538.63
0245	636-1033	51.000	SF	\$45.19455	HWY SIGNS, TP1MAT,REFL SH TP 9	\$2,304.92
0250	636-2070	189.000	LF	\$6.55276	GALV STEEL POSTS, TP 7	\$1,238.47
0430	652-0094	4.000	EA	\$53.82842	PVMT MARKING, SYMBOL, TP 4	\$215.31
0215	652-5301	500.000	LF	\$1.04581	SOLID TRAF STRIPE, 6 IN, WHITE	\$522.91
0365	653-0105	8.000	EA	\$100.00000	PAVEMENT MARKING, BIKE SHARED LN SYM	\$800.00
0080	653-0110	4.000	EA	\$77.17374	THERM PVMT MARK, ARROW, TP 1	\$308.69
0085	653-0120	16.000	EA	\$73.47215	THERM PVMT MARK, ARROW, TP 2	\$1,175.55
0225	653-0210	3.000	EA	\$121.04282	THERM PVMT MARK, WORD , TP 1	\$363.13
0075	653-1501	6167.000	LF	\$0.45255	THERMO SOLID TRAF ST 5 IN, WHI	\$2,790.88
0100	653-1704	408.000	LF	\$4.88546	THERM SOLID TRAF STRIPE,24",WH	\$1,993.27
0130	653-2502	1.000	LM	\$1,604.03578	THERMO SOLID TRAF ST, 5 IN YE	\$1,604.04
0170	653-2804	1.000	LM	\$10,418.51938	THERM SOLID TRAF STRIPE, 8",WH	\$10,418.52
0070	653-3501	5142.000	GLF	\$0.25548	THERMO SKIP TRAF ST, 5 IN, WHI	\$1,313.68
0220	653-3502	114.000	GLF	\$0.49940	THERMO SKIP TRAF ST, 5 IN, YEL	\$56.93
0110	654-1001	17.000	EA	\$4.89958	RAISED PVMT MARKERS TP 1	\$83.29
0115	654-1003	116.000	EA	\$4.01134	RAISED PVMT MARKERS TP 3	\$465.32
SUBTOTAL FOR SIGNING AND MARKING:						\$26,193.54

DETAILED COST ESTIMATE



Job: 532780

0005 - EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0400	165-0010	894.000	LF	\$0.55461	MAINT OF TEMP SILT FENCE, TP A	\$495.82
0385	171-0010	1787.000	LF	\$1.95004	TEMPORARY SILT FENCE, TYPE A	\$3,484.72
0420	700-9300	143.000	SY	\$10.40394	SOD	\$1,487.76
SUBTOTAL FOR EROSION CONTROL:						\$5,468.30

0006 - SIGNAL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0290	610-6872	4.000	EA	\$1,000.00000	REM STEEL STRAIN POLE	\$4,000.00
0285	615-1100	370.000	LF	\$50.00000	DIRECTIONAL BORE PIPE - 1-2" TP3 CONDUIT	\$18,500.00
0295	639-3004	2.000	EA	\$14,100.21053	STEEL STRAIN POLE, TP IV	\$28,200.42
0435	647-1000	1.000	LS	\$67,800.00000	TRAF SIGNAL INSTALLATION NO - STP00-0111-01(028)	\$67,800.00
0320	647-2140	1.000	EA	\$890.51218	PULL BOX, PB-4	\$890.51
0325	647-2150	1.000	EA	\$2,700.00000	PULL BOX, PB-5	\$2,700.00
0425	682-6233	370.000	LF	\$4.50000	CONDUIT, NONMETL, TP 3, 2 IN	\$1,665.00
0160	687-1000	1.000	LS	\$25,000.00000	TRAFFIC SIGNAL TIMING - COORDINATE WITH THE CITY OF SAVANNAH	\$25,000.00
0390	935-1521	600.000	LF	\$2.50000	OUT PLNT FBR OPT CBL,DROP,MM,6 FBR	\$1,500.00
0345	935-3203	1.000	EA	\$650.00000	FBR OPTIC CLOSURE,AERL(SLD),24 FBR	\$650.00
0350	935-4010	12.000	EA	\$45.10369	FIBER OPTIC SPLICE, FUSION	\$541.24
0355	935-5060	2.000	EA	\$150.00000	FIBER OPTIC SNOWSHOE	\$300.00
0395	935-6561	1.000	EA	\$1,500.00000	EXT TRNSCVR,DRP&RPT,1300MM,(SIGNAL JOBS)	\$1,500.00
0360	935-8000	1.000	LS	\$3,188.00000	TESTING	\$3,188.00
SUBTOTAL FOR SIGNAL:						\$156,435.17

TOTALS FOR JOB 532780

ITEMS COST:	\$723,593.76
COST GROUP COST:	\$0.00
ESTIMATED COST:	\$723,593.76
CONTINGENCY PERCENT:	0.00
ENGINEERING AND INSPECTION:	0.05
ESTIMATED COST WITH CONTINGENCY AND E&I:	\$759,773.45

PROJ. NO.

STP00-0111-01(028)

CALL NO.

P.I. NO.

532780

DATE

1/9/2014

INDEX (TYPE)

REG. UNLEADED

Dec-12

\$ 3.241

DIESEL

\$ 3.823

LIQUID AC

\$ 559.00

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)

24601.59

\$

24,601.59

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 894.40

Monthly Asphalt Cement Price month project let (APL)

\$ 559.00

Total Monthly Tonnage of asphalt cement (TMT)

73.35

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm	1347	5.0%	67.35
9.5 mm SP		5.0%	0
25 mm SP	80	5.0%	4
19 mm SP	40	5.0%	2
	1467		73.35

BITUMINOUS TACK COAT

Price Adjustment (PA)

\$ 1,205.76

\$

1,205.76

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 894.40

Monthly Asphalt Cement Price month project let (APL)

\$ 559.00

Total Monthly Tonnage of asphalt cement (TMT)

3.594999472

Bitum Tack

Gals	gals/ton	tons
837	232.8234	3.59499947

PROJ. NO.

STP00-0111-01(028)

CALL NO.

P.I. NO.

532780

DATE

1/9/2014

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)						0	\$	-
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$		894.40		
Monthly Asphalt Cement Price month project let (APL)				\$		559.00		
Total Monthly Tonnage of asphalt cement (TMT)						0		

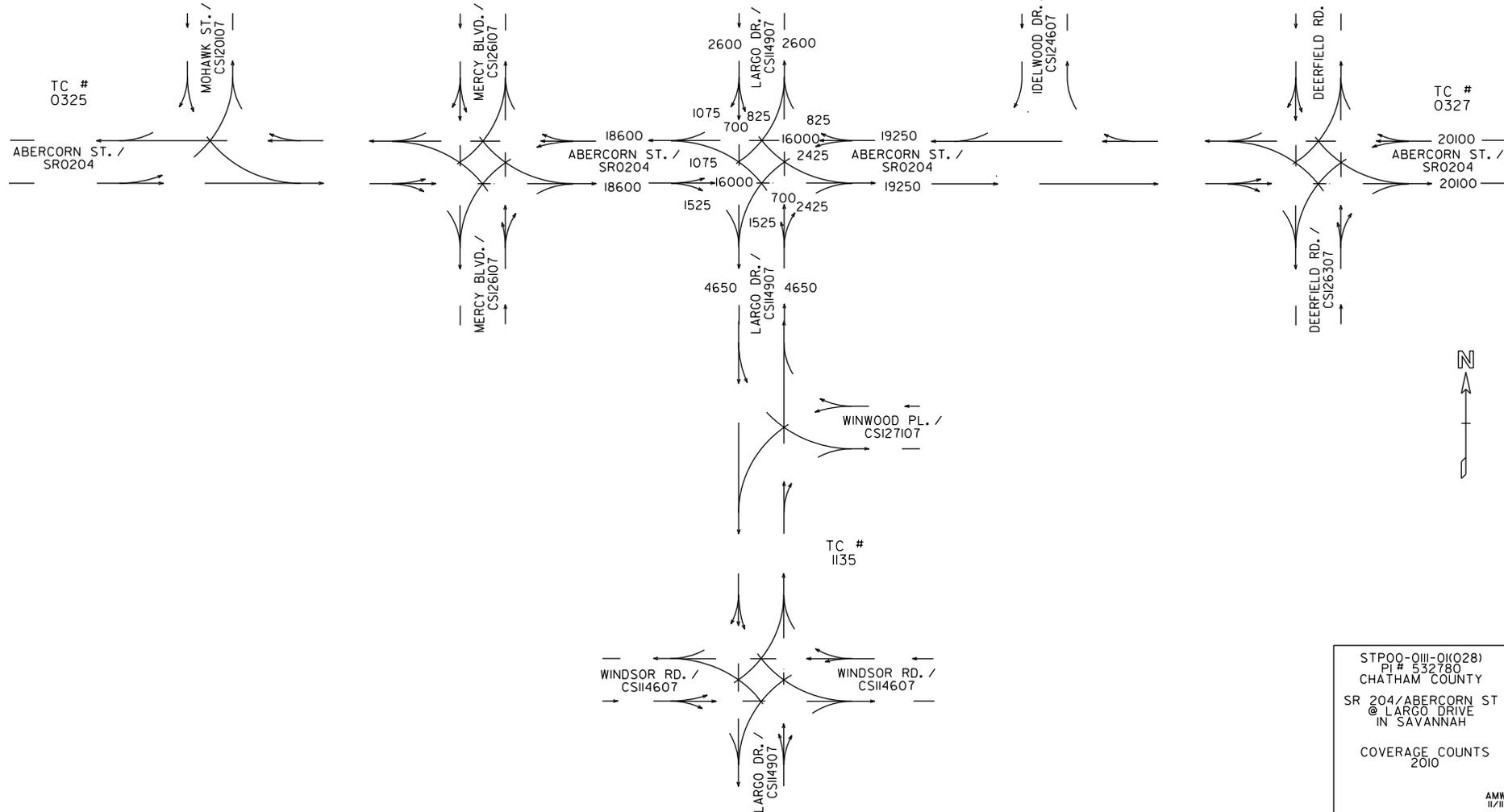
Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT							\$	25,807.35
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SHEET 1 OF 2

CHATHAM COUNTY IN SAVANNAH

GEORGIA DEPARTMENT OF TRANSPORTATION
 OFFICE OF PLANNING



STP00-011-01(028)
 PI # 532780
 CHATHAM COUNTY
 SR 204/ABERCORN ST
 @ LARGO DRIVE
 IN SAVANNAH
 COVERAGE COUNTS
 2010

AMW
 11/11

GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

REVISION DATES	

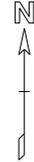
STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: ROADWAY DESIGN
TRAFFIC DIAGRAM

DRAWING No.
10-001

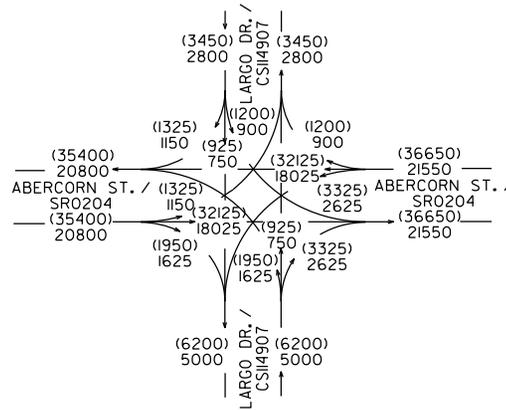
SHEET 1 OF 4

CHATHAM COUNTY IN SAVANNAH

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



24 HR. T = 6.50%
S.U. = 3.25%
COMB. = 3.25%



STPO0-Q111-011(028)
PI # 532780
CHATHAM COUNTY
SR 204/ABERCORN ST
@ LARGO DRIVE
IN SAVANNAH

2036 ADT = (000)
2016 ADT = 000

AMW
11/11

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROADWAY DESIGN
TRAFFIC DIAGRAM

DRAWING No.
10-003

SHEET 2 OF 4

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

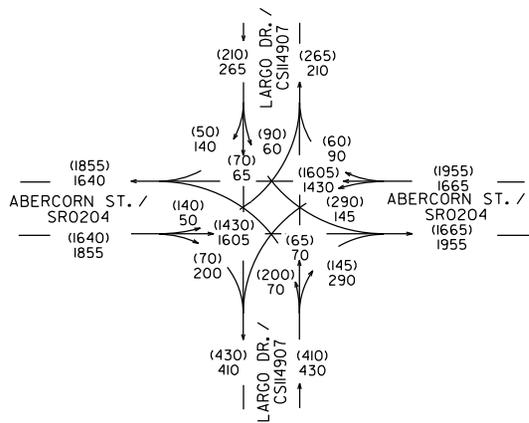
CHATHAM COUNTY
IN SAVANNAH



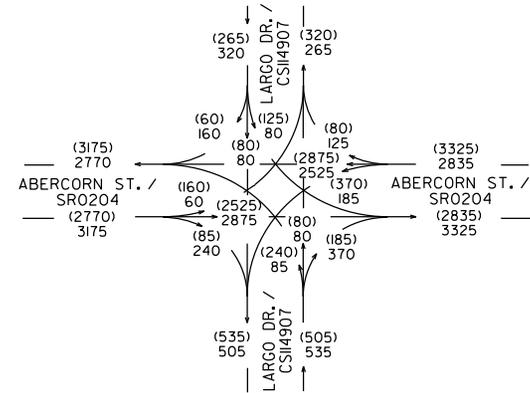
2016 PM DHV = (000)
2016 AM DHV = 000

2036 PM DHV = (000)
2036 AM DHV = 000

T = 7.00%
S.U. = 3.25%
COMB. = 3.75%



T = 7.00%
S.U. = 3.25%
COMB. = 3.75%



STPO0-0111-011(028)
PI # 532780
CHATHAM COUNTY
SR 204/ABERCORN ST
@ LARGO DRIVE
IN SAVANNAH

AMW
11/11

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROADWAY DESIGN
TRAFFIC DIAGRAM

DRAWING No.
10-004

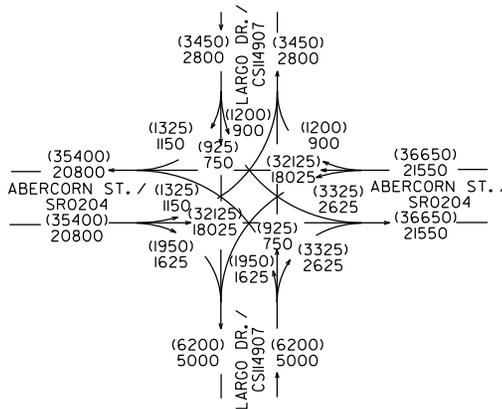
SHEET 3 OF 4

CHATHAM COUNTY IN SAVANNAH NO BUILD

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



24 HR. T = 6.50%
S.U. = 3.25%
COMB. = 3.25%



STPO0-Q111-011(028)
PI # 532780
CHATHAM COUNTY
SR 204 / ABERCORN ST
@ LARGO DRIVE
IN SAVANNAH

2036 ADT = (000)
2016 ADT = 000

AMW
11/11

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROADWAY DESIGN
TRAFFIC DIAGRAM

DRAWING No.
10-005

SHEET 4 OF 4

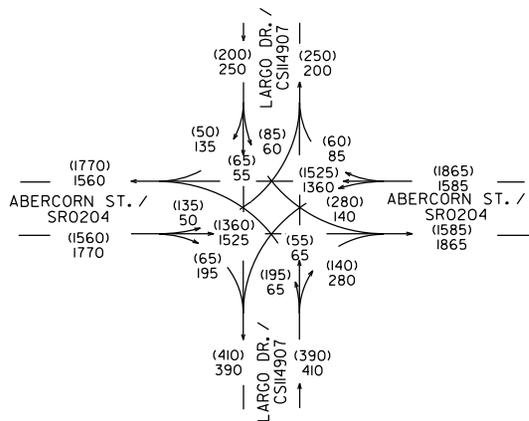
CHATHAM COUNTY IN SAVANNAH NO BUILD

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

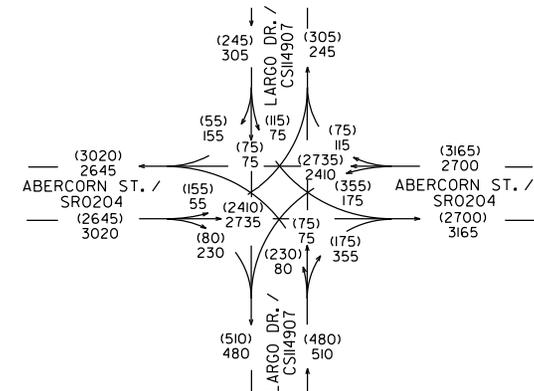
2016 PM DHV = (000)
2016 AM DHV = 000

2036 PM DHV = (000)
2036 AM DHV = 000

T = 7.00%
S.U. = 3.25%
COMB. = 3.75%



T = 7.00%
S.U. = 3.25%
COMB. = 3.75%



STPO0-0111-01(028)
PI # 532780
CHATHAM COUNTY
SR 204/ABERCORN ST
@ LARGO DRIVE
IN SAVANNAH

AMW
11/11

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROADWAY DESIGN
TRAFFIC DIAGRAM

DRAWING No.
10-006