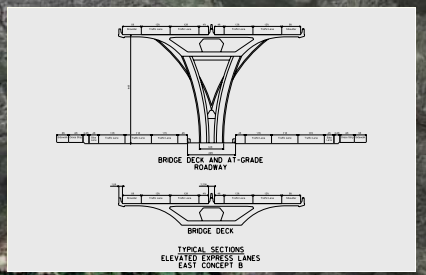
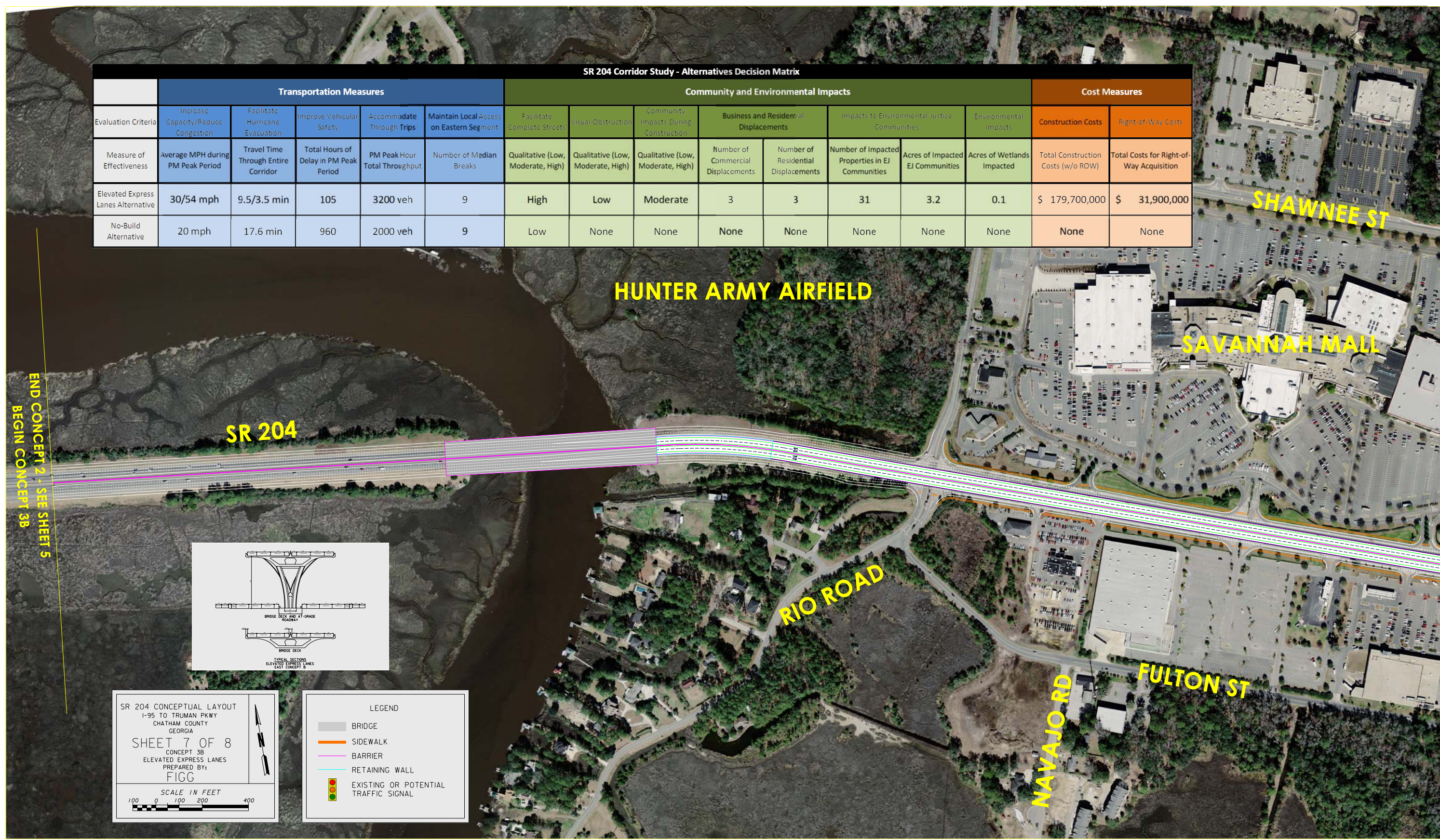


# **Eastern Segment Concept B**

SR 204 Corridor Study - Alternatives Decision Matrix

| Evaluation Criteria                | Transportation Measures             |                                     |  |                               |  | Community and Environmental Impacts |                                   |                                       |  |                                     |   |                                  | Cost Measures              |                                    |  |
|------------------------------------|-------------------------------------|-------------------------------------|--|-------------------------------|--|-------------------------------------|-----------------------------------|---------------------------------------|--|-------------------------------------|---|----------------------------------|----------------------------|------------------------------------|--|
|                                    | Increase Capacity/Reduce Congestion | Facilitate Hurricane Evacuation     | Improve Vehicular Safety               | Accommodate Through Trips     | Maintain Local Access on Eastern Segment | Facilitate Complete Streets         | Visual Obstruction                | Community Impacts During Construction | Business and Residential Displacements |                                     | Impacts to Environmental Justice Communities    |                                  | Environmental Impacts      | Construction Costs                 | Right-of-Way Costs                       |
| Measure of Effectiveness           | Average MPH during PM Peak Period   | Travel Time Through Entire Corridor | Total Hours of Delay in PM Peak Period | PM Peak Hour Total Throughput | Number of Median Breaks                  | Qualitative (Low, Moderate, High)   | Qualitative (Low, Moderate, High) | Qualitative (Low, Moderate, High)     | Number of Commercial Displacements     | Number of Residential Displacements | Number of Impacted Properties in EJ Communities | Acres of Impacted EJ Communities | Acres of Wetlands Impacted | Total Construction Costs (w/o ROW) | Total Costs for Right-of-Way Acquisition |
| Elevated Express Lanes Alternative | 30/54 mph                           | 9.5/3.5 min                         | 105                                    | 3200 veh                      | 9  | High                                | Low                               | Moderate                              | 3                                      | 3                                   | 31  | 3.2                              | 0.1                        | \$ 179,700,000                     | \$ 31,900,000                            |
| No-Build Alternative               | 20 mph                              | 17.6 min                            | 960                                    | 2000 veh                      | 9  | Low                                 | None                              | None                                  | None                                   | None                                | None  | None                             | None                       | None                               | None                                     |



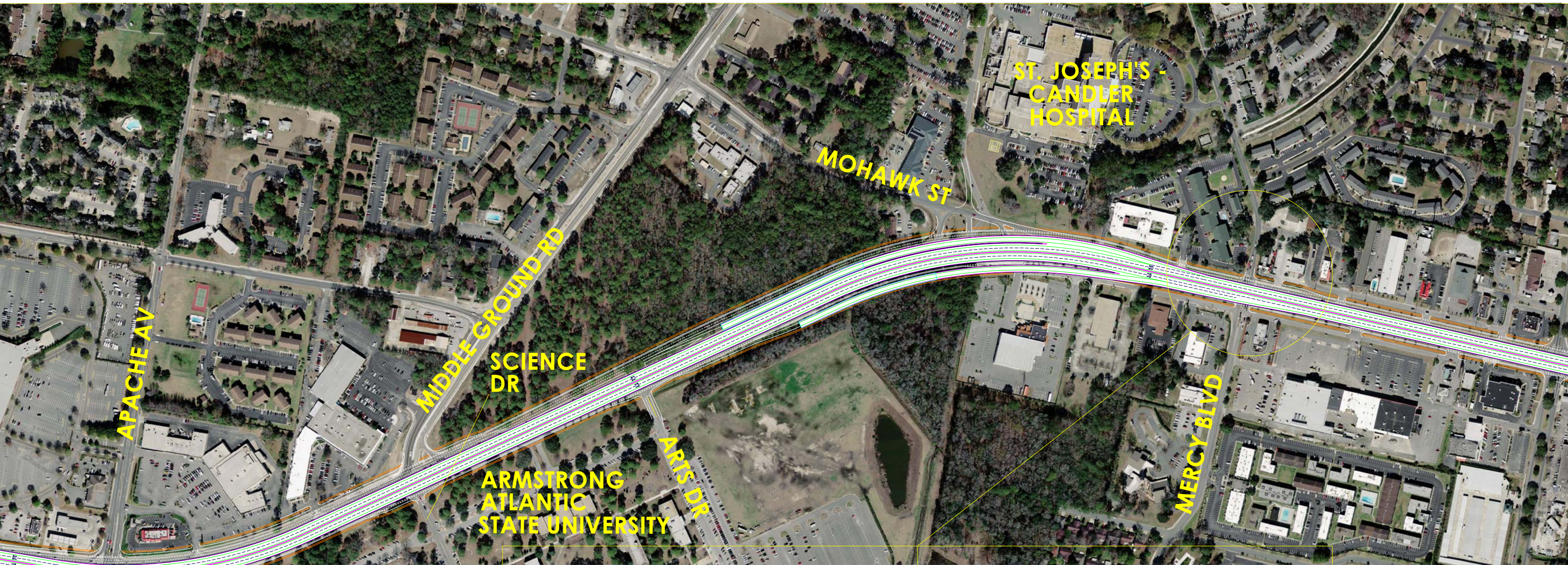
SR 204 CONCEPTUAL LAYOUT  
I-95 TO TRUMAN PKWY  
CHATHAM COUNTY  
GEORGIA

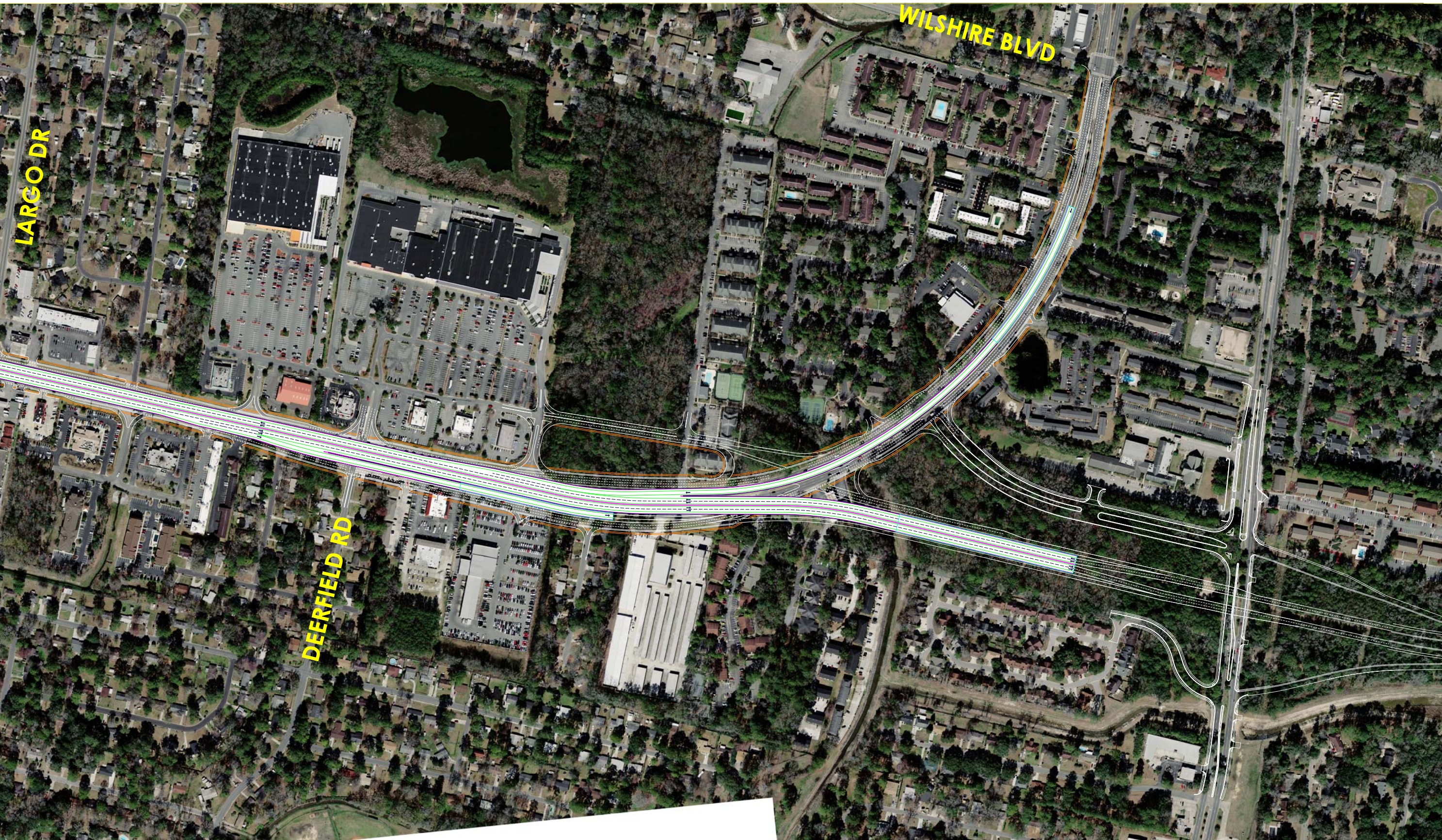
SHEET 7 OF 8  
CONCEPT 3B  
ELEVATED EXPRESS LANES  
PREPARED BY:  
FIGG

SCALE IN FEET  
100 0 100 200 400

LEGEND

- BRIDGE
- SIDEWALK
- BARRIER
- RETAINING WALL
- EXISTING OR POTENTIAL TRAFFIC SIGNAL





LARGO DR

DEERFIELD RD







WILSHIRE BLVD

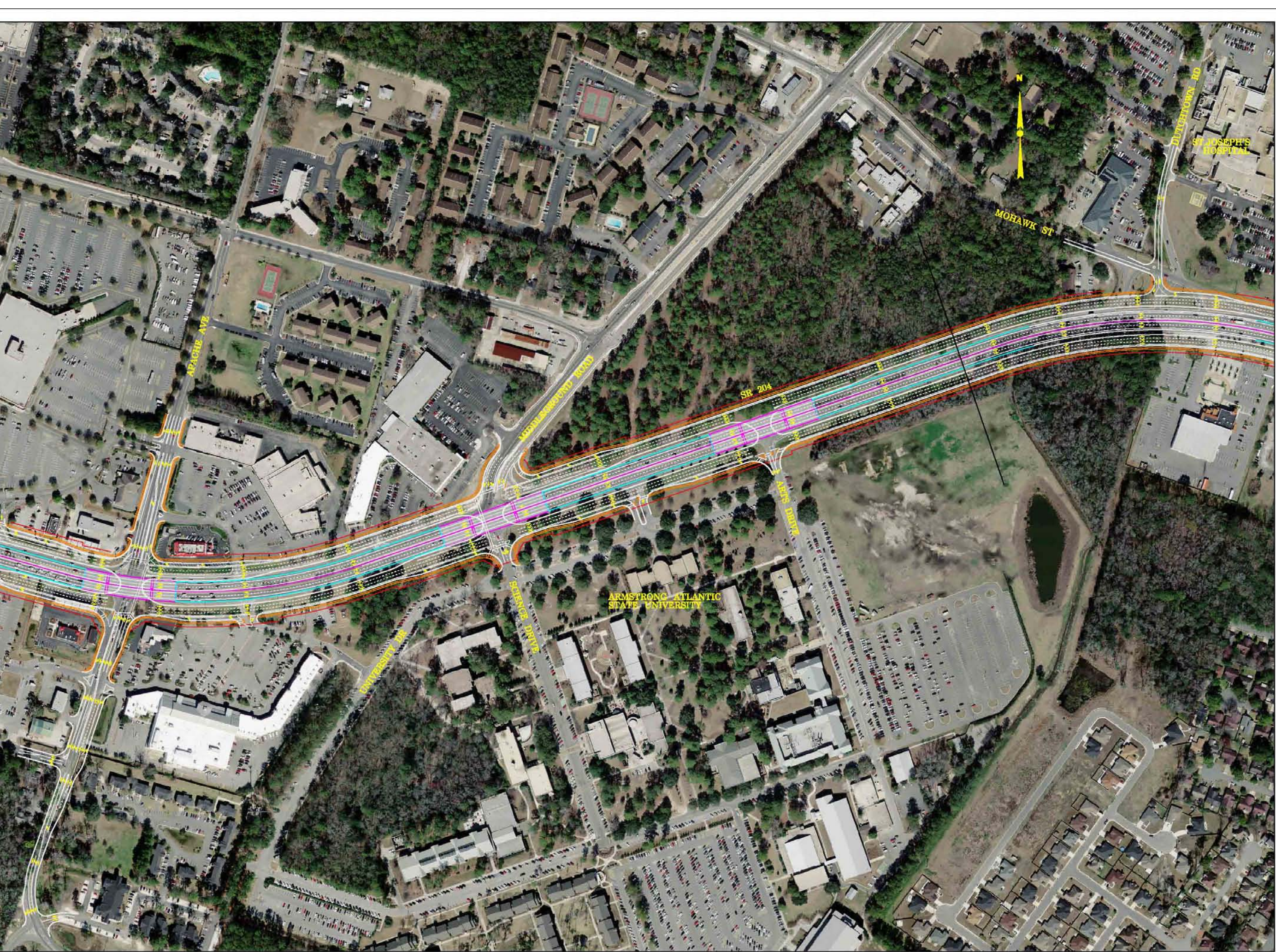
# **Eastern Segment Concept C**

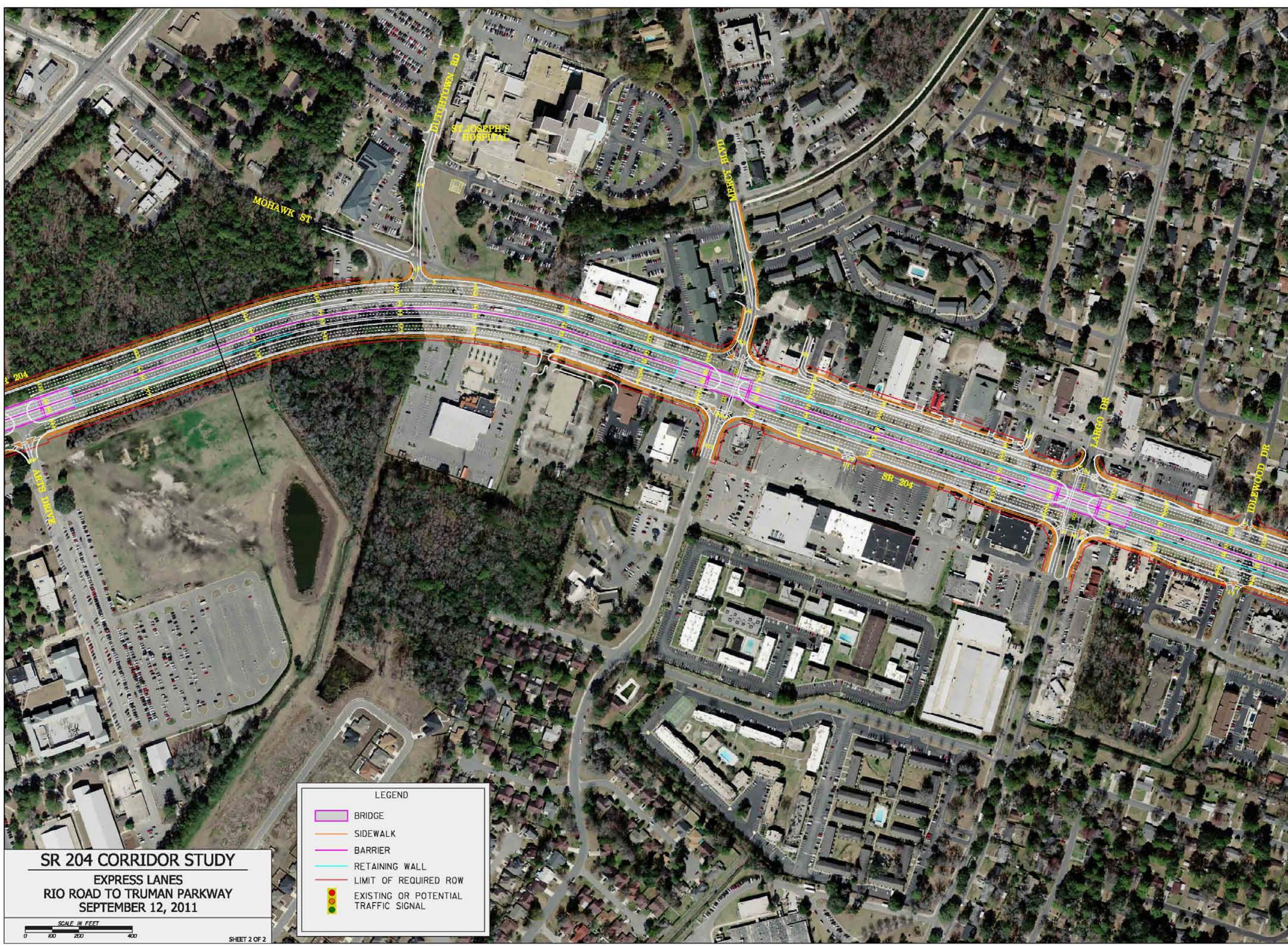


**SR 204 CORRIDOR STUDY**  
**EXPRESS LANES**  
**RIO ROAD TO TRUMAN PARKWAY**  
**SEPTEMBER 12, 2011**









| LEGEND  |                                      |
|---|--------------------------------------|
|  | BRIDGE                               |
|  | SIDEWALK                             |
|  | BARRIER                              |
|  | RETAINING WALL                       |
|  | LIMIT OF REQUIRED ROW                |
|  | EXISTING OR POTENTIAL TRAFFIC SIGNAL |



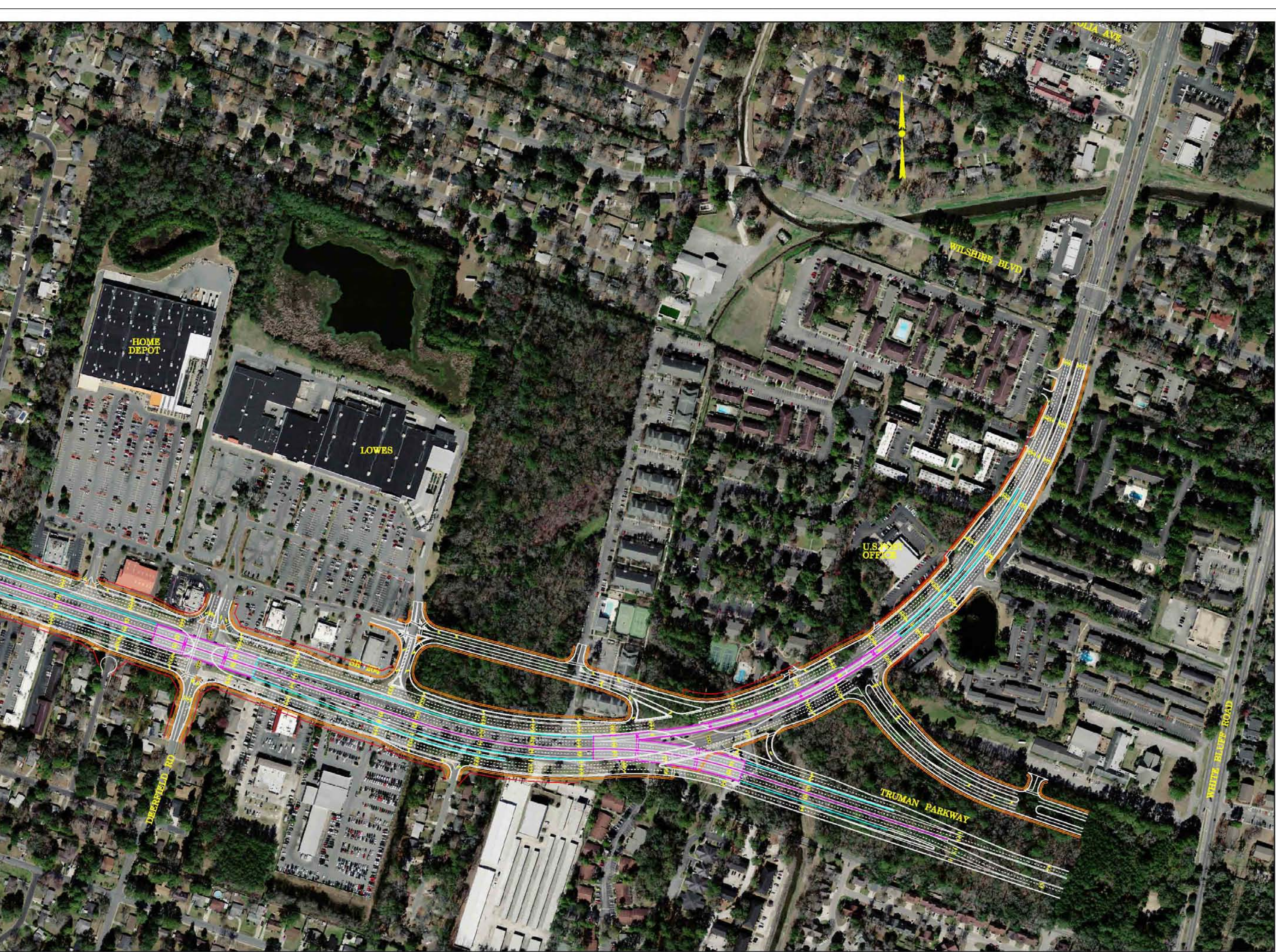


**SR 204 CORRIDOR STUDY**  
EXPRESS LANES  
RIO ROAD TO TRUMAN PARKWAY  
SEPTEMBER 12, 2011

| LEGEND  |                                      |
|---|--------------------------------------|
|  | BRIDGE                               |
|  | SIDEWALK                             |
|  | BARRIER                              |
|  | RETAINING WALL                       |
|  | LIMIT OF REQUIRED ROW                |
|  | EXISTING OR POTENTIAL TRAFFIC SIGNAL |

SCALE IN FEET  
0 100 200 400





HOME DEPOT

LOWES

U.S. OFFICE

WILSHIRE BLVD

DEERFIELD RD

TRUMAN PARKWAY

WHITE BLUFF ROAD



**Appendix D – Evaluation of Lane Requirements for Express Lanes Alternative Memorandum**

**To:** Michael Adams,  
Chatham County-Savannah MPC/CORE MPO

**From:** Robinson Nicol, Jacobs Engineering Group, Inc. (JEG)

**Date:** July 28, 2011

**Subject:** SR 204 Corridor Study - Evaluation of Lane Requirements for Express Lanes Alternative

**Referenced Projects:** P.I. # 0009314 Special Studies Contract: SR 204 Corridor Study

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**cc:** Grady Smith, JEG  
Randall Farwell, JEG  
David Kasbo, JEG  
Amy Diaz, JEG

---

As part of the SR 204 Corridor Study, Jacobs Engineering Group, Inc. (JEG) is evaluating three alternative scenarios for the Build condition. The three alternative scenarios considered along SR 204 are the following:

- Concept A: Six through lanes with collector-distributor roads
- Concept B: Four elevated express lanes
- Concept C: Two express lanes

A typical section for each Build alternative is included in Attachment A. As shown in the typical sections, each alternative provides a different number of limited access lanes. The purpose of this memo is to determine if the number of lanes for the express lanes portion of Concept C is sufficient for anticipated traffic demand.

In the proposed design for Concept C, the two express lanes would be built over the existing SR 204 median and the existing lanes of SR 204 would be shifted to the outside. The express lanes would be barrier separated and would provide access to SR 204 west of Rio Road and tie-in with the terminus of Truman Parkway on the eastern side of the project. A half diamond interchange is also included in Concept C at Arts Drive. At major intersections, the express lanes would be grade-separated in order to maintain continuous flow and also provide eastbound and westbound access to the at-grade lanes. The other Build alternatives have similar concepts; however, they provide four express lanes (Concept B) or six limited access lanes (Concept A) instead of two express lanes.

Traffic volume forecasts have been developed for each alternative for opening year (2015) and design year (2035). The future traffic projections were calculated by applying a growth rate to the existing year (2010) volumes. Because historic growth has been relatively flat in the area, the growth rates used to develop traffic volume forecasts were calculated using the Coastal Region Metropolitan Planning Organization (CORE MPO) 2035 travel demand model (E+C network) and the 2006 base year model. The 2035 model (E+C network) was modified to incorporate geometry proposed for the build conditions. The traffic forecasting methodology

along with balanced traffic flow diagrams are summarized in a memo submitted to the Georgia Department of Transportation (GDOT) Office of Planning on June 21, 2011.

In order to evaluate if the lanes provided by Concept C were sufficient, the Highway Capacity Manual (HCM) 2000 was used to analyze capacity and level of service (LOS) for the proposed roadway geometry. The methodology used for analyzing the at-grade portion is summarized in Chapter 21 – Multilane Highways and the methodology for analyzing the limited access portion is summarized in Chapter 23 – Basic Freeway Segments. The HCM methodology was used to determine LOS for the high point volume on the at-grade lanes and express lanes of Concept C based on the following input data:

- Geometric Data
- Free-flow speed
- Volume

The analysis was performed for two Build conditions (two and four express lanes) in order to determine if added capacity was necessary to improve LOS. In order to perform this planning-level analysis using design (2035) peak hour volumes, the high point 2035 volume was used to calculate an adjusted 15-minute flow rate based on the peak hour factor (PHF), number of lanes (N), heavy vehicle factor ( $f_{HV}$ ), and population factor ( $f_p$ ). This adjusted 15-minute flow rate was compared to the maximum service flow rates reported in the HCM 2000 for multilane and freeway facilities to determine expected LOS.

The results of the analysis are summarized in Table 1 (At-Grade Lanes) and Table 2 (Express Lanes).

**Table 1 – At-Grade Lanes HCM Multilane Highway LOS (2035)**

| Build Condition    | At-Grade Lanes |           |                         |                                     |      |
|--------------------|----------------|-----------|-------------------------|-------------------------------------|------|
|                    | Peak Hour      | Direction | High Point Volume (vph) | Adjusted 15-min flow rate (pc/h/ln) | *LOS |
| Two Express Lanes  | AM             | EB        | 2,778                   | 1,122                               | C    |
| Four Express Lanes | AM             | EB        | 2,703                   | 1,092                               | C    |

*\*Based on LOS thresholds from Exhibit 21-2 in HCM 2000*

**Table 2 – Express Lanes HCM Basic Freeway Segment LOS (2035)**

| Build Condition    | Express Lanes |           |                         |                                     |      |
|--------------------|---------------|-----------|-------------------------|-------------------------------------|------|
|                    | Peak Hour     | Direction | High Point Volume (vph) | Adjusted 15-min flow rate (pc/h/ln) | *LOS |
| Two Express Lanes  | AM            | EB        | 1,602                   | 1,942                               | E    |
| Four Express Lanes | PM            | WB        | 2,307                   | 1,356                               | C    |

*\*Based on LOS thresholds from Exhibit 23-2 in HCM 2000*

As shown in Table 1, the at-grade lanes are expected to have acceptable LOS (LOS C or better) at the high point volume location with both two and four express lanes. Using this methodology, the express lanes are expected to have unacceptable LOS (LOS E) at the high point volume location with two express lanes, as shown in Table 2. However, the Build

condition with four express lanes is expected to have acceptable LOS (LOS C) according to the analysis.

Some caution should be used with these planning-level results, particularly for the two-lane (one travel lane in each direction) freeway segment analysis. The HCM 2000 freeway methodology was researched using facilities with a minimum of two travel lanes in each direction. With one travel lane in each direction, traffic will have no opportunity to move around slower traffic. Decreased maneuverability tends to reduce the average speed of vehicles, so the actual LOS experienced on a two-lane freeway section may be worse than that reported in Table 2.

Additionally, it is important to consider how the traffic volumes were derived. Peak hour and average daily traffic (ADT) volumes were forecasted from growth rates obtained from base year and design year travel demand models. Additionally, the volume split between express lanes and at-grade lanes was determined from the model volume outputs. Because the modeling software considers travel time when determining routes, traffic is assigned to a route based on available capacity. For this reason, traffic in the model will no longer be assigned to the express lanes if capacity is reached and travel times begin to decrease. Therefore because the volume forecasted to utilize the express lanes is constrained by capacity in the model and does not include latent demand, the actual LOS may be worse than predicted by the model volumes.

An additional analysis was performed using the forecasted ADT volumes and comparing them against generalized LOS tables prepared by the Georgia Regional Transportation Authority (GRTA) for use in reviewing Developments of Regional Impact (DRI). These tables are used by GRTA to perform a generalized assessment of traffic conditions based on ADT volumes on roadway segments adjacent to proposed developments. Similar to the HCM analysis, high point 2035 volumes were used to determine expected roadway LOS along the SR 204 facility for two Build conditions (two and four express lanes) using this methodology. Because the volume thresholds for two freeway lanes were not provided in the tables, they were estimated from the thresholds provided using a linear trend matching known data points, using the least squares method. The results of the express lane and at-grade lane analysis are summarized in Table 3.

**Table 3 – Generalized Roadway LOS for Express Lanes and At-Grade Lanes**

| Build Condition    | Express Lanes           |      | At-Grade Lanes          |       |
|--------------------|-------------------------|------|-------------------------|-------|
|                    | High Point Volume (vpd) | *LOS | High Point Volume (vpd) | **LOS |
| Two Express Lanes  | 33,927                  | ***E | 48,500                  | D     |
| Four Express Lanes | 46,741                  | C    | 43,886                  | D     |

\*Based on LOS thresholds for Group II Freeway

\*\*Based on LOS thresholds for Class II Arterial

\*\*\*Extrapolated from data for Group II Freeway and Class II Arterial

As shown in Table 3, the express lanes are expected to experience unacceptable LOS (LOS E) with two express lanes based on forecasted ADT volumes and an extrapolated volume threshold for a two-lane freeway facility. With four express lanes, the LOS is expected to be acceptable (LOS C). For both two and four express lanes, the at-grade lanes are expected to have acceptable segment LOS (LOS D) based on forecasted ADT volumes.

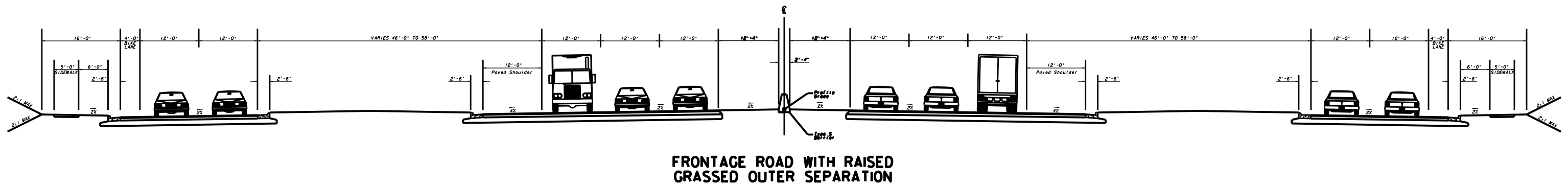
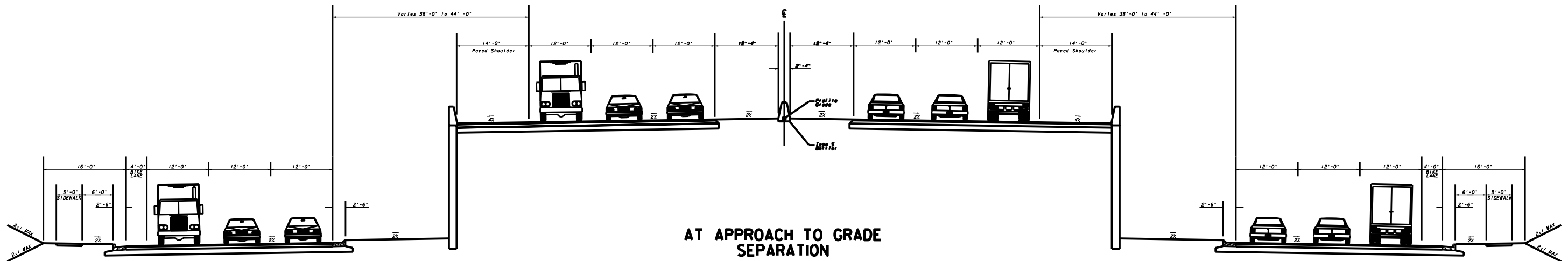
In addition to the traffic volume analysis, other potential issues associated with a two-lane express lane section include the absence of a passing lane and the difficulty of any future widening. Because a two-lane section would not permit passing in either direction, traffic issues could arise from slow vehicles, breakdowns, or wrecks. Also, since the two-lane section in Build Concept C requires shifting and reconstructing the existing lanes along SR 204 to the outside, any future widening of the express lanes would require shifting the newly-constructed SR 204 lanes.

**Conclusion**

From the results of the analysis, a minimum of four limited access lanes is required for acceptable traffic operations. Additional reasons four express lanes are preferable to the two-lane section include the absence of a passing lane and the costs associated with widening if a four-lane express lane section becomes necessary for future traffic. Based on this evaluation, the number of lanes proposed for the express lanes portion of Build Concept C is not expected to be sufficient to serve projected traffic demand adequately. Therefore, it is recommended that Build Concept C is not given further consideration as part of the SR 204 Corridor Study.

**Attachment A -  
Typical Sections for Each Build  
Alternative**

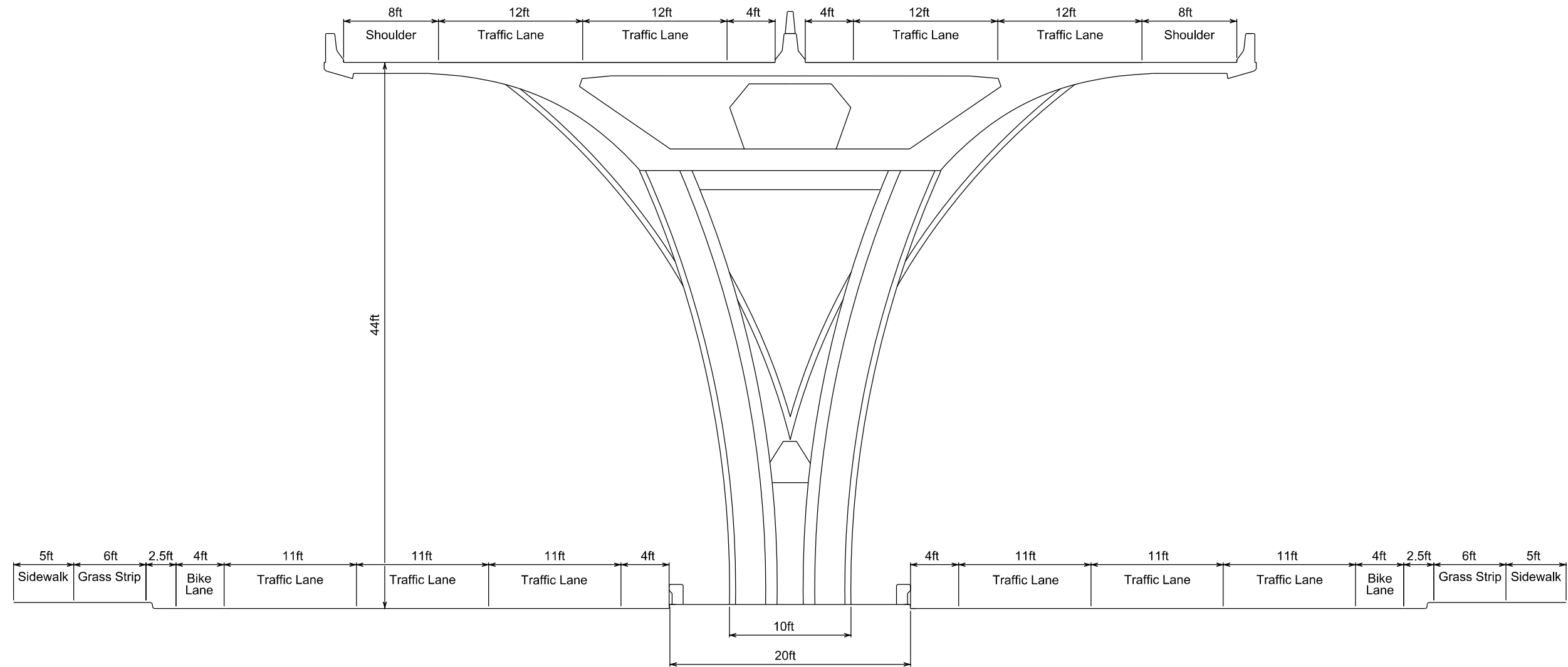
**Concept A: Six through lanes with collector-distributor roads**



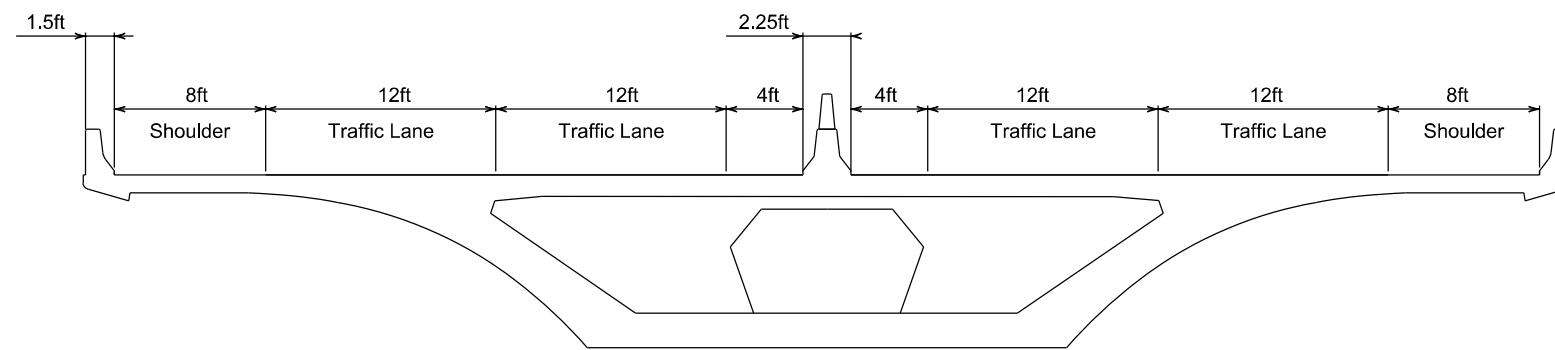
**TYPICAL SECTIONS  
FRONTAGE ROAD SYSTEM  
EAST CONCEPT A**

**Concept B: Four elevated express lanes**





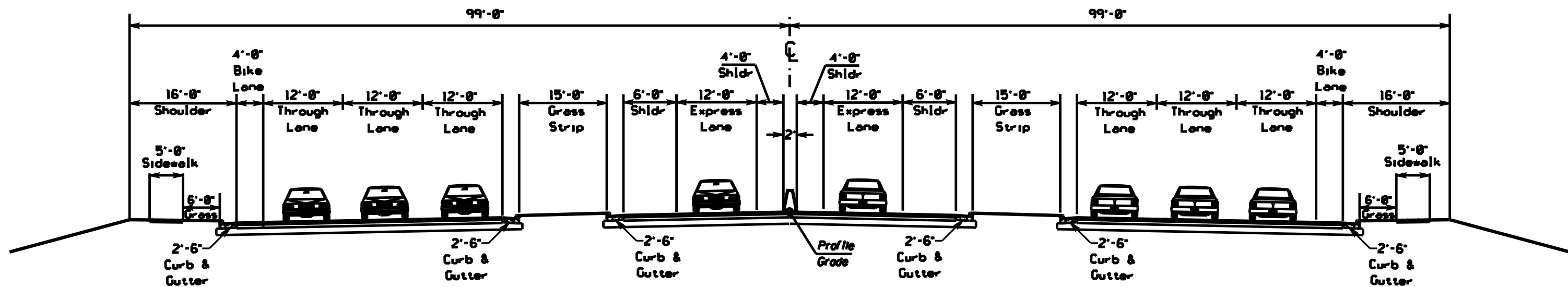
BRIDGE DECK AND AT-GRADE ROADWAY



BRIDGE DECK

TYPICAL SECTIONS  
 ELEVATED EXPRESS LANES  
 EAST CONCEPT B

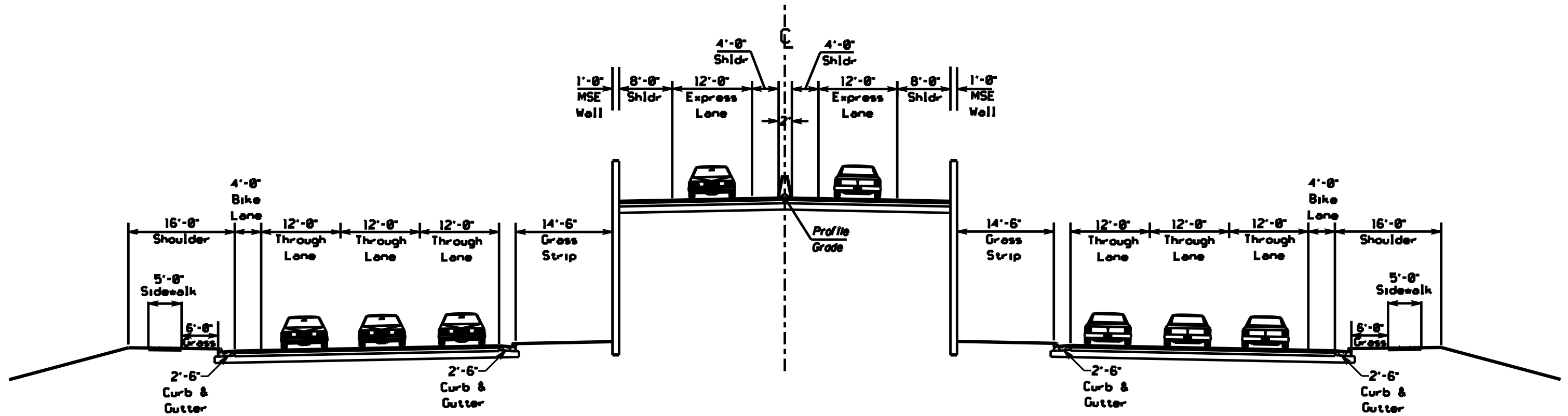
**Concept C: Two express lanes**



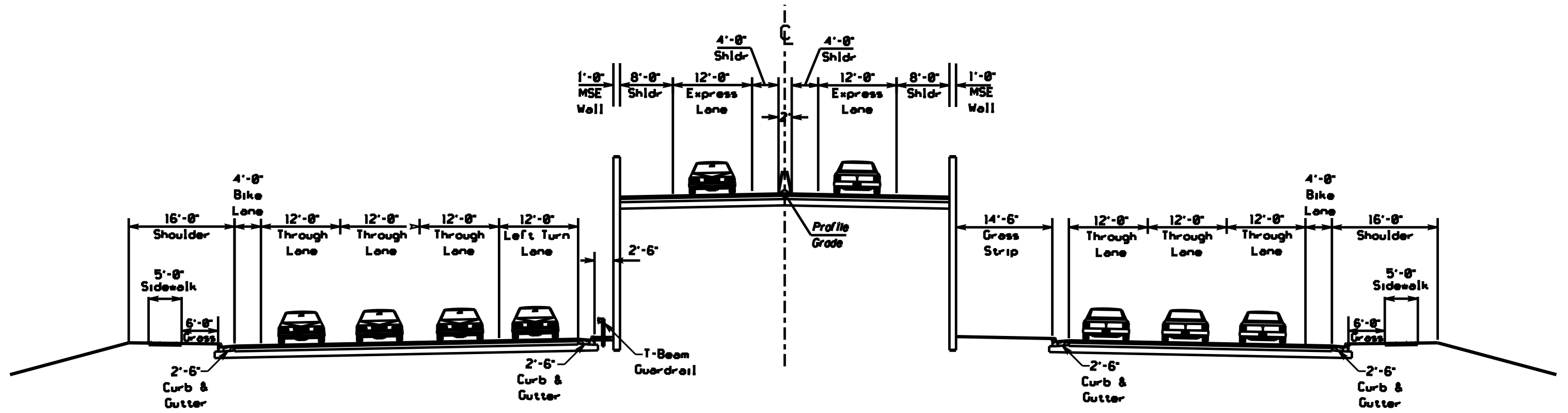
**SR 204 CORRIDOR STUDY  
EXPRESS LANES (RIO ROAD TO TRUMAN PARKWAY)  
TYPICAL SECTION 1  
AT GRADE**

LAST REVISED ON MARCH 23, 2011

NOT TO SCALE



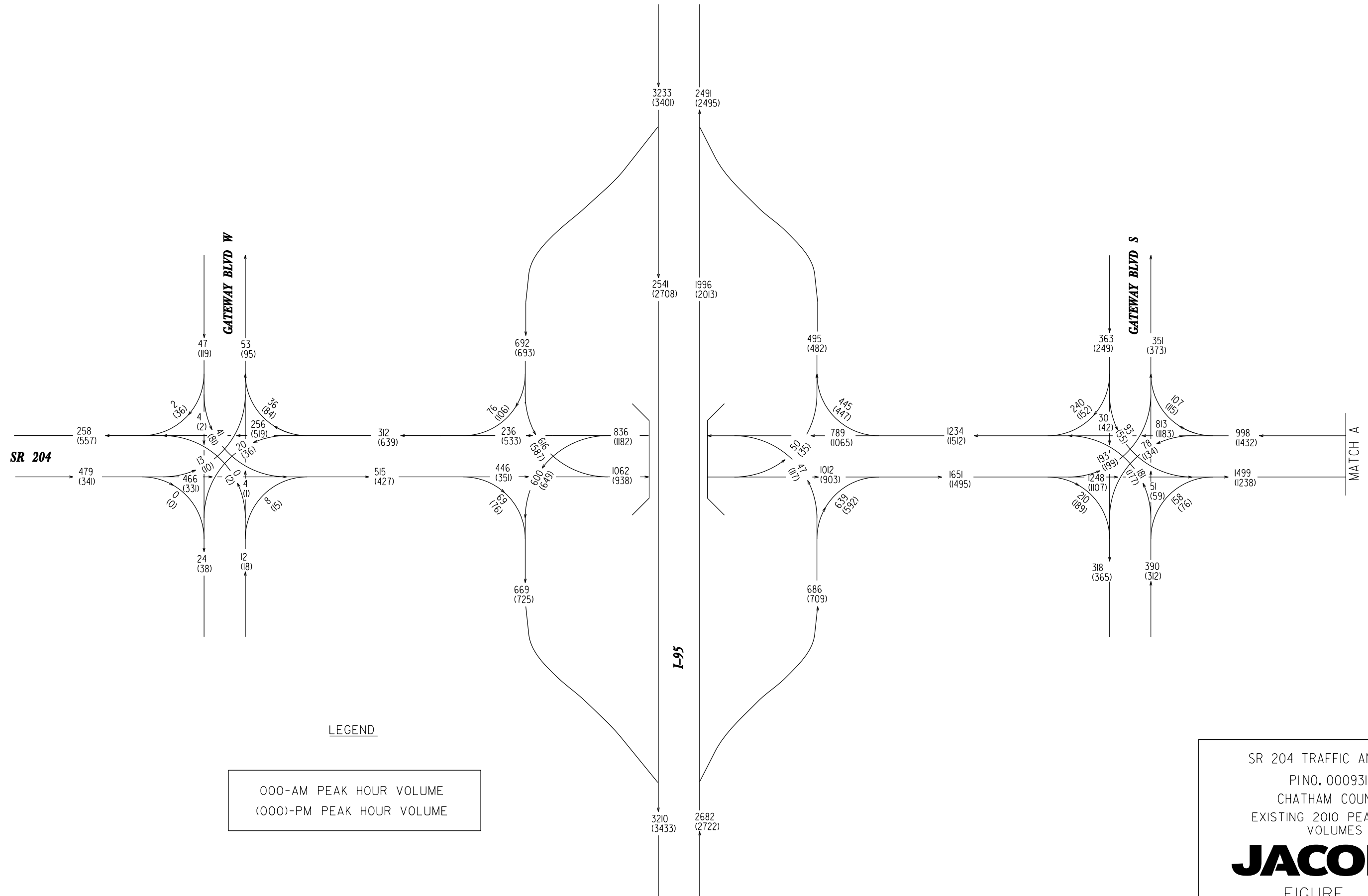
**SR 204 CORRIDOR STUDY**  
**EXPRESS LANES (RIO ROAD TO TRUMAN PARKWAY)**  
**TYPICAL SECTION 2**  
**ELEVATED**



**SR 204 CORRIDOR STUDY**  
**EXPRESS LANES (RIO ROAD TO TRUMAN PARKWAY)**  
**TYPICAL SECTION 3**  
**ELEVATED WITH LEFT TURN LANE**

**Appendix E – Traffic Flow Diagrams**

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |

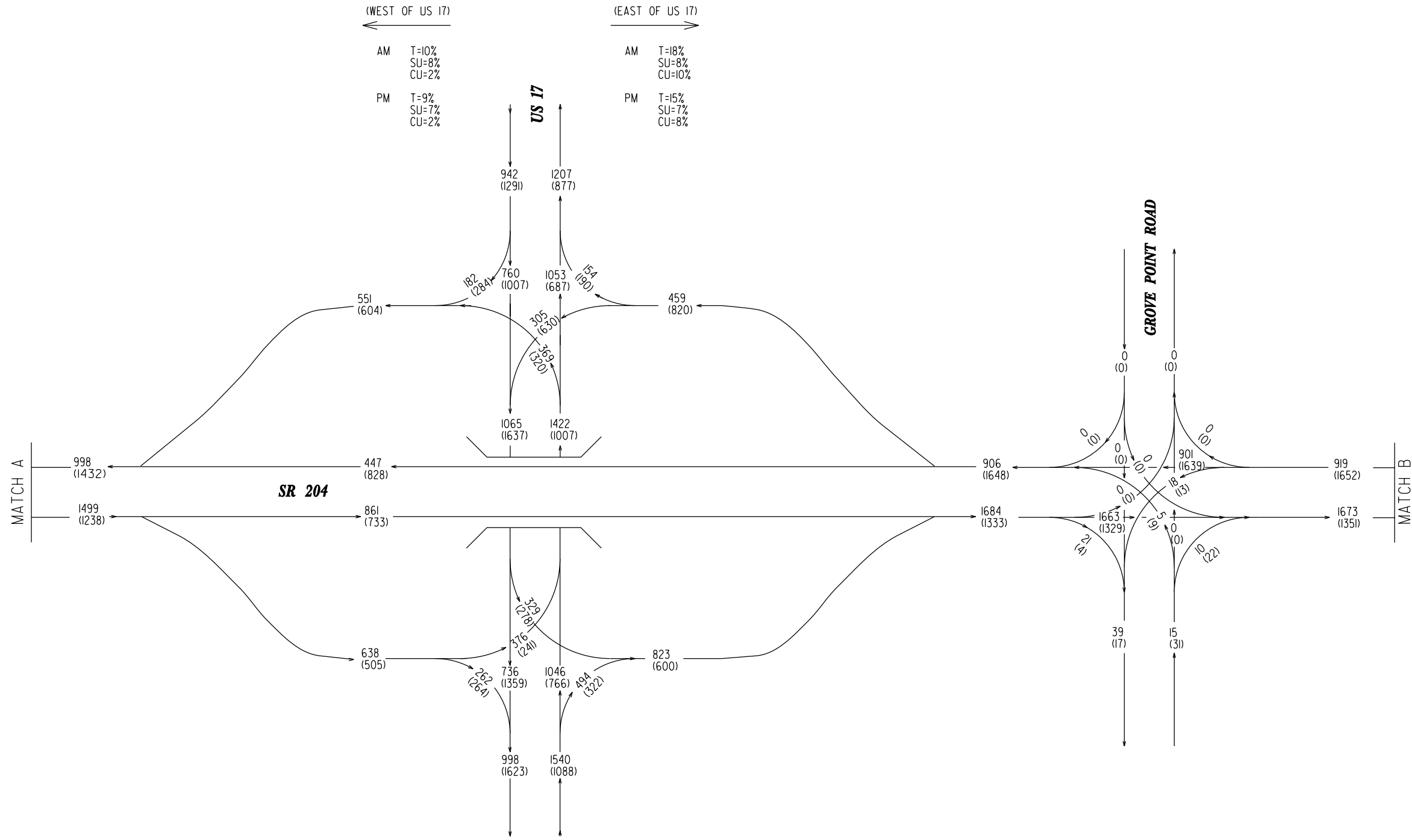


SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010 PEAK HOUR  
 VOLUMES

**JACOBS™**

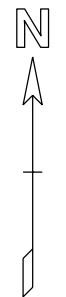
FIGURE I

SCALE: N.T.S.      AUGUST 2011



**LEGEND**

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME



SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010 PEAK HOUR VOLUMES

**JACOBS™**

FIGURE 2

SCALE: N.T.S.      AUGUST 2011



(WEST OF VETERANS PARKWAY)

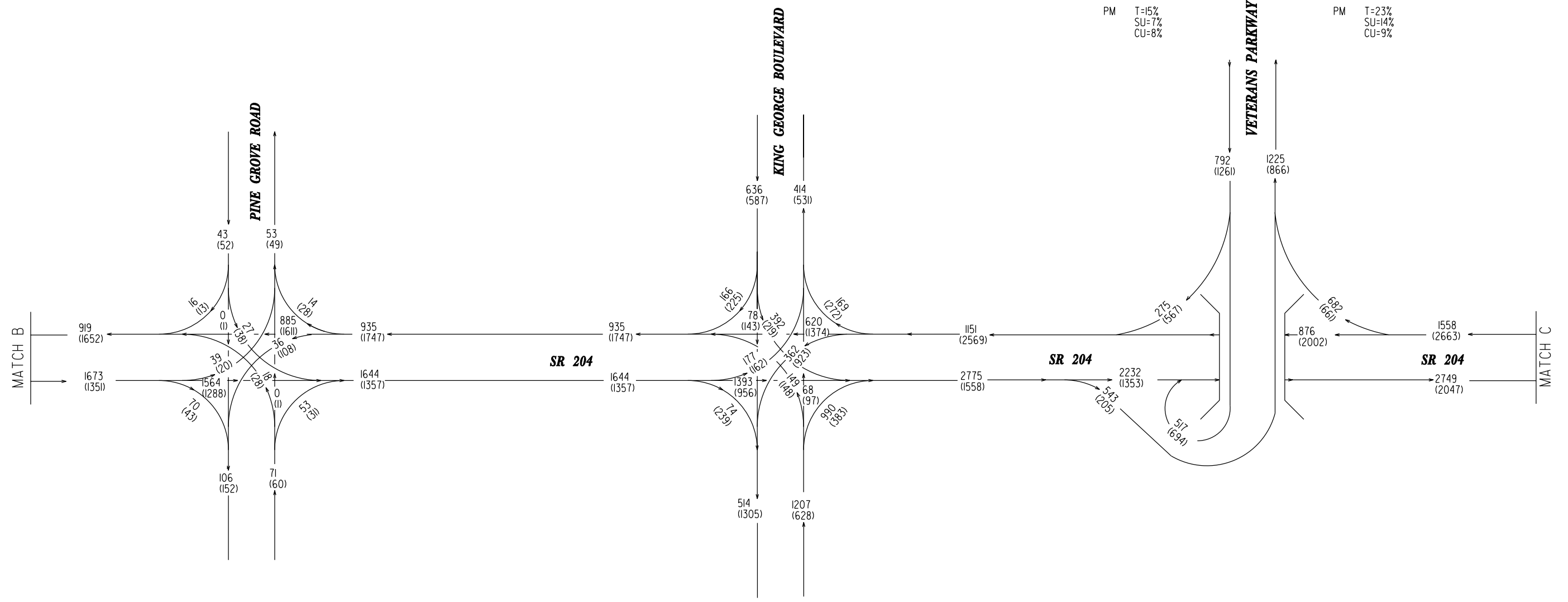
(EAST OF VETERANS PARKWAY)

AM T=18%  
SU=8%  
CU=10%

PM T=15%  
SU=7%  
CU=8%

AM T=21%  
SU=14%  
CU=7%

PM T=23%  
SU=14%  
CU=9%



LEGEND

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME



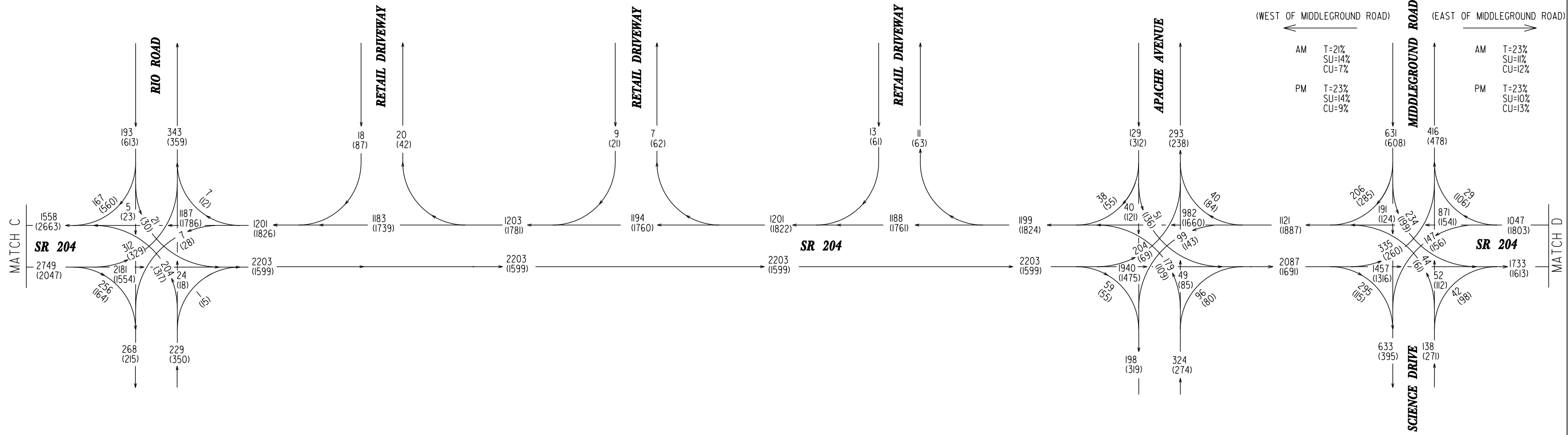
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010 PEAK HOUR  
 VOLUMES

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FIGURE 3

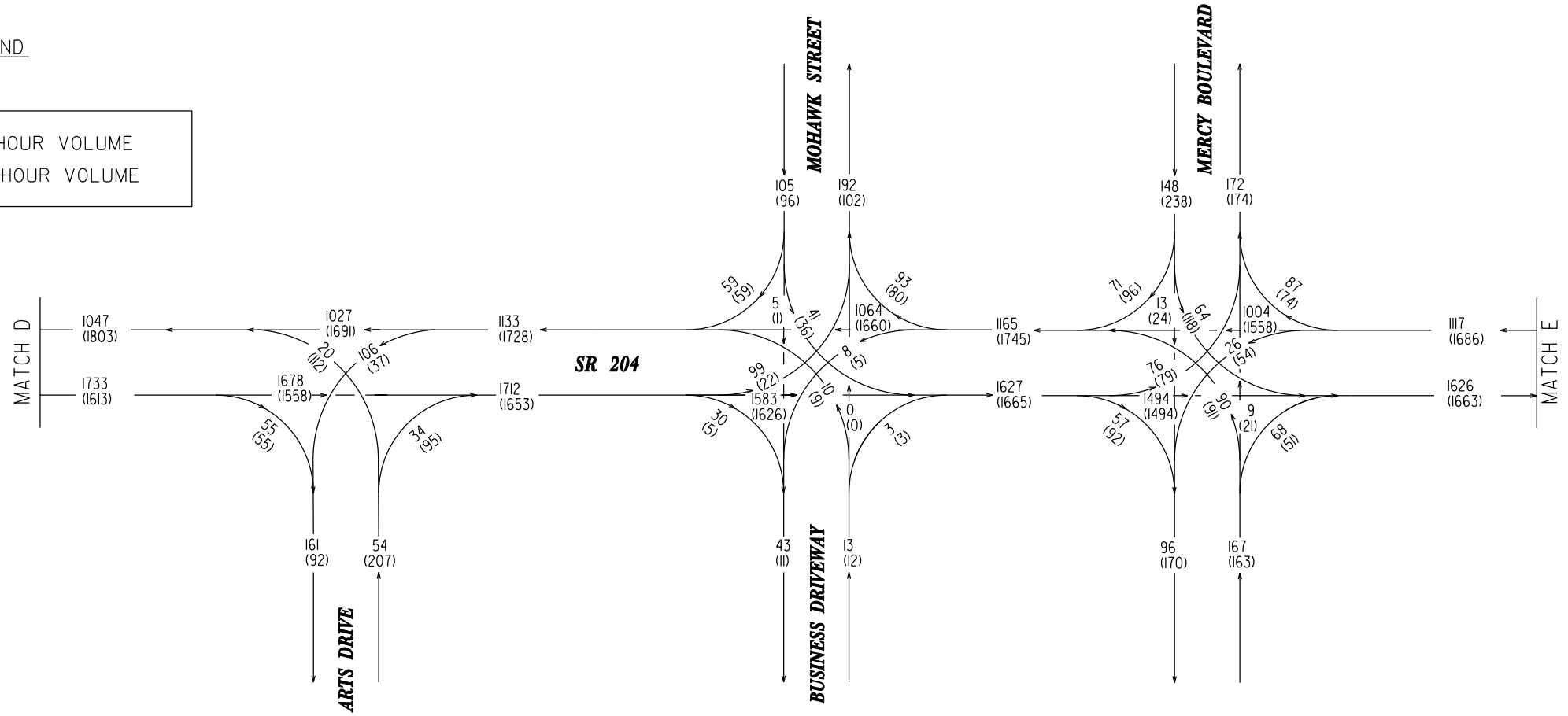
SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



LEGEND

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME



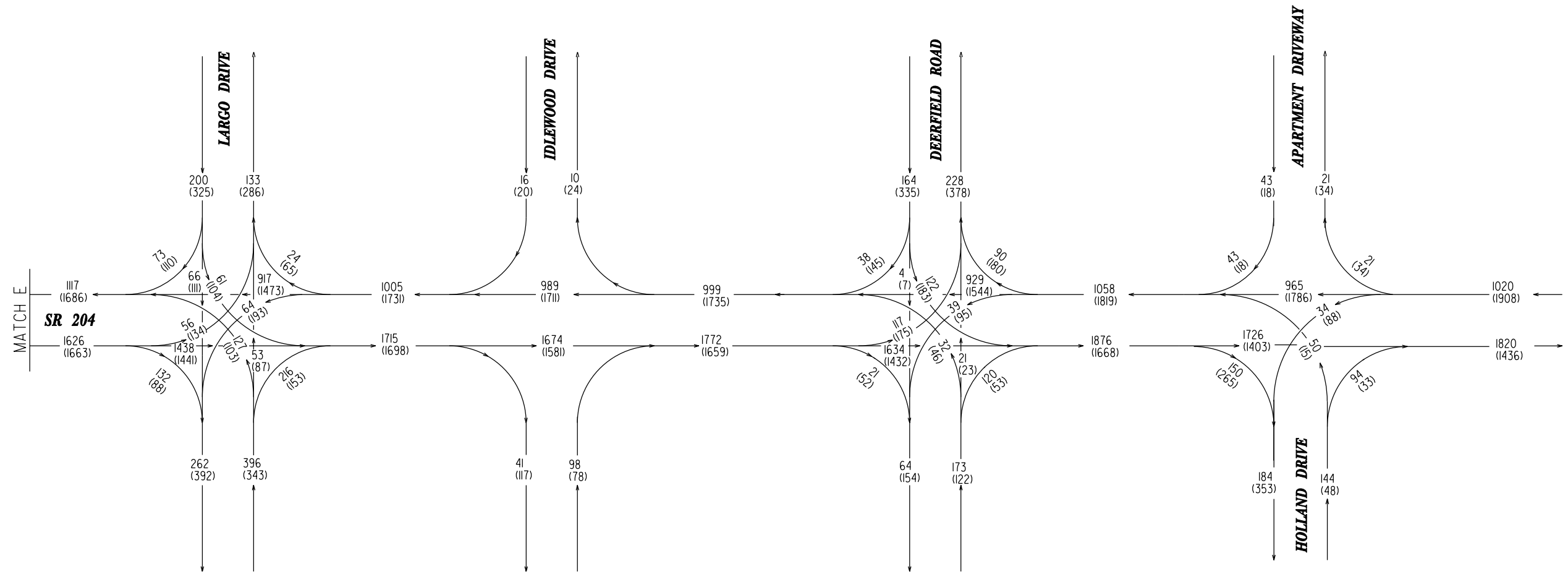
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010 PEAK HOUR  
 VOLUMES

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FIGURE 4

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



LEGEND

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME

SR 204 TRAFFIC ANALYSIS  
PINO. 0009314  
CHATHAM COUNTY  
EXISTING 2010 PEAK HOUR  
VOLUMES

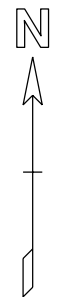
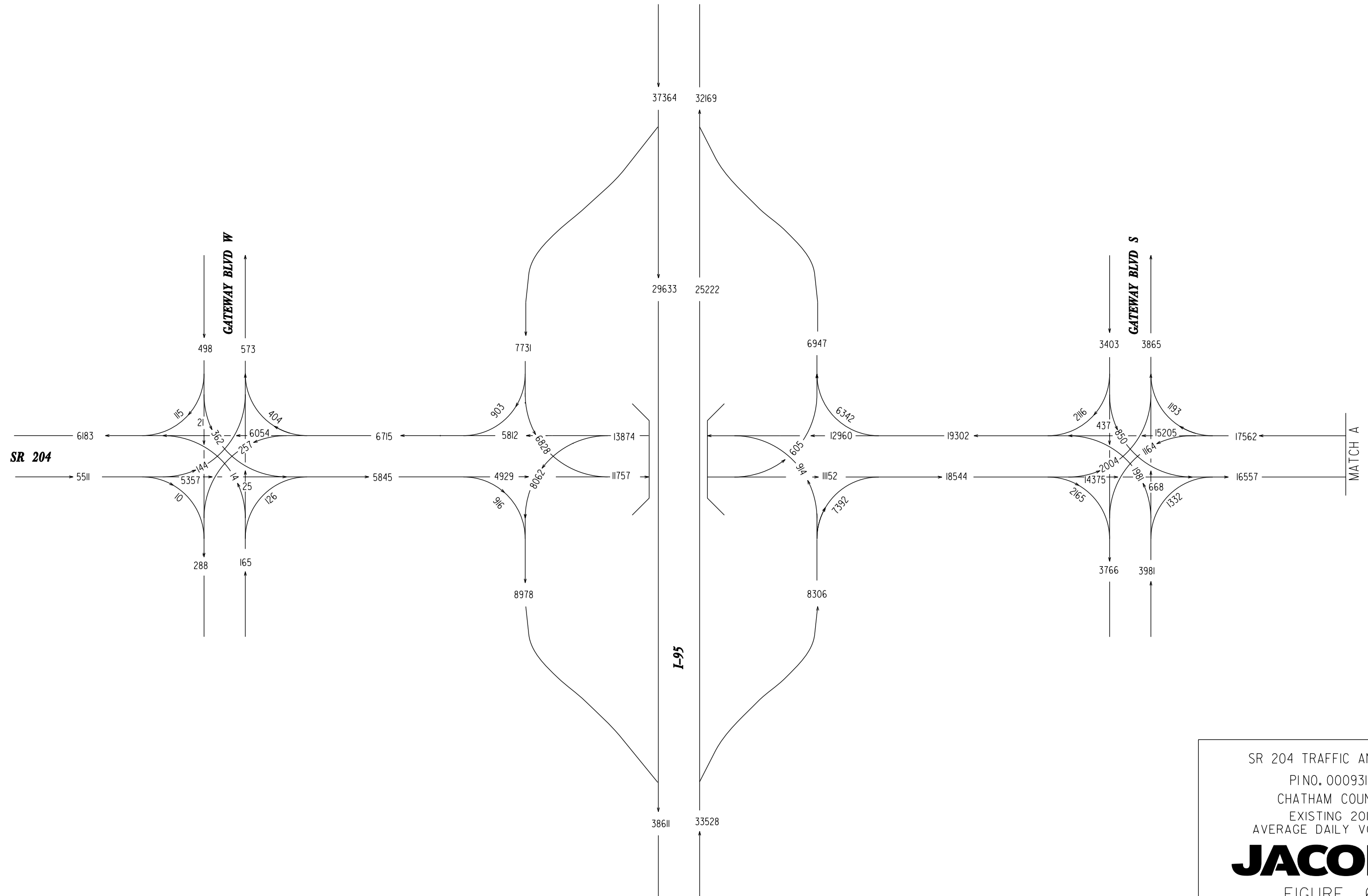
**JACOBS™**

FIGURE 5

SCALE: N.T.S.

AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



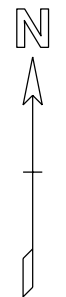
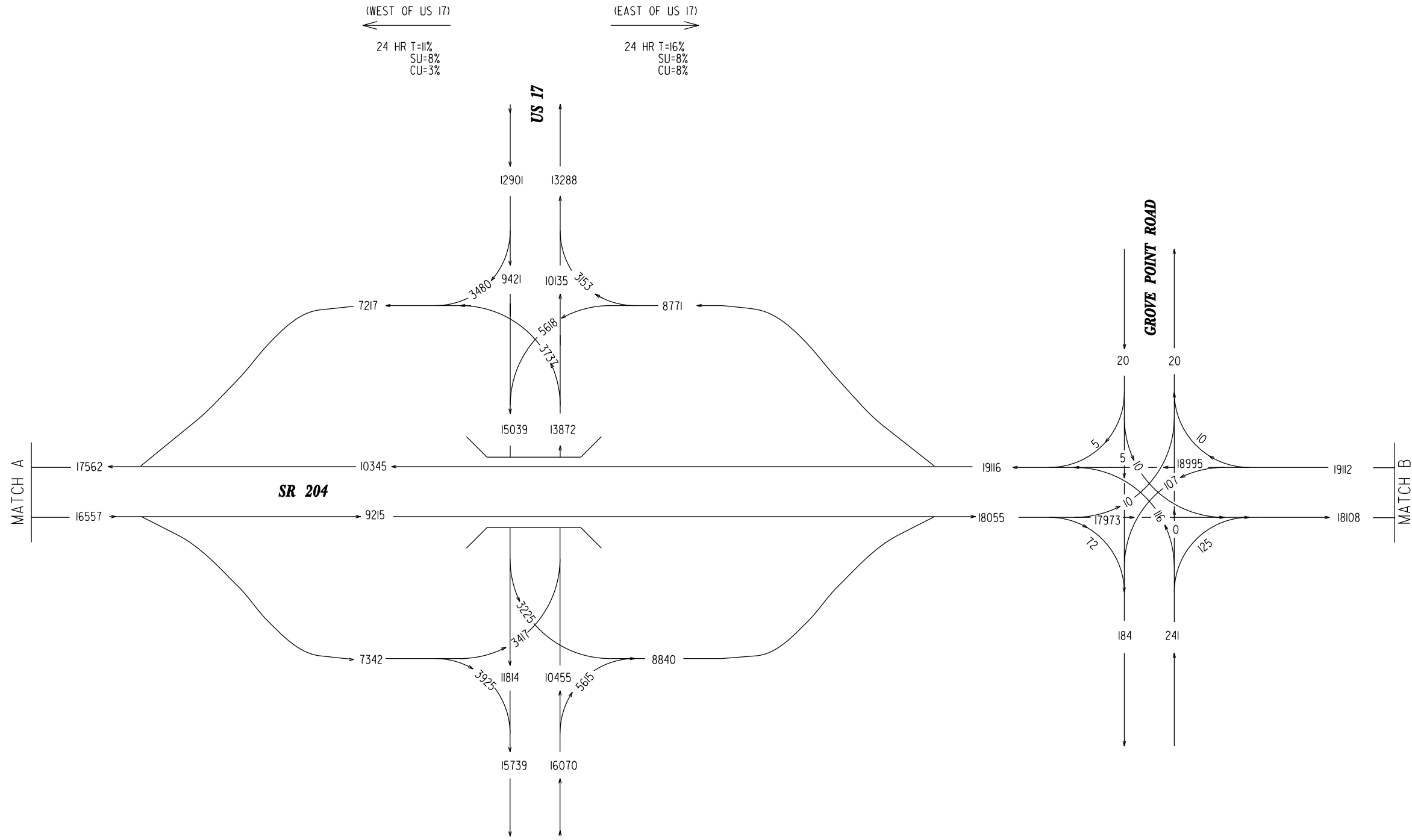
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010  
 AVERAGE DAILY VOLUMES

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FIGURE 6

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



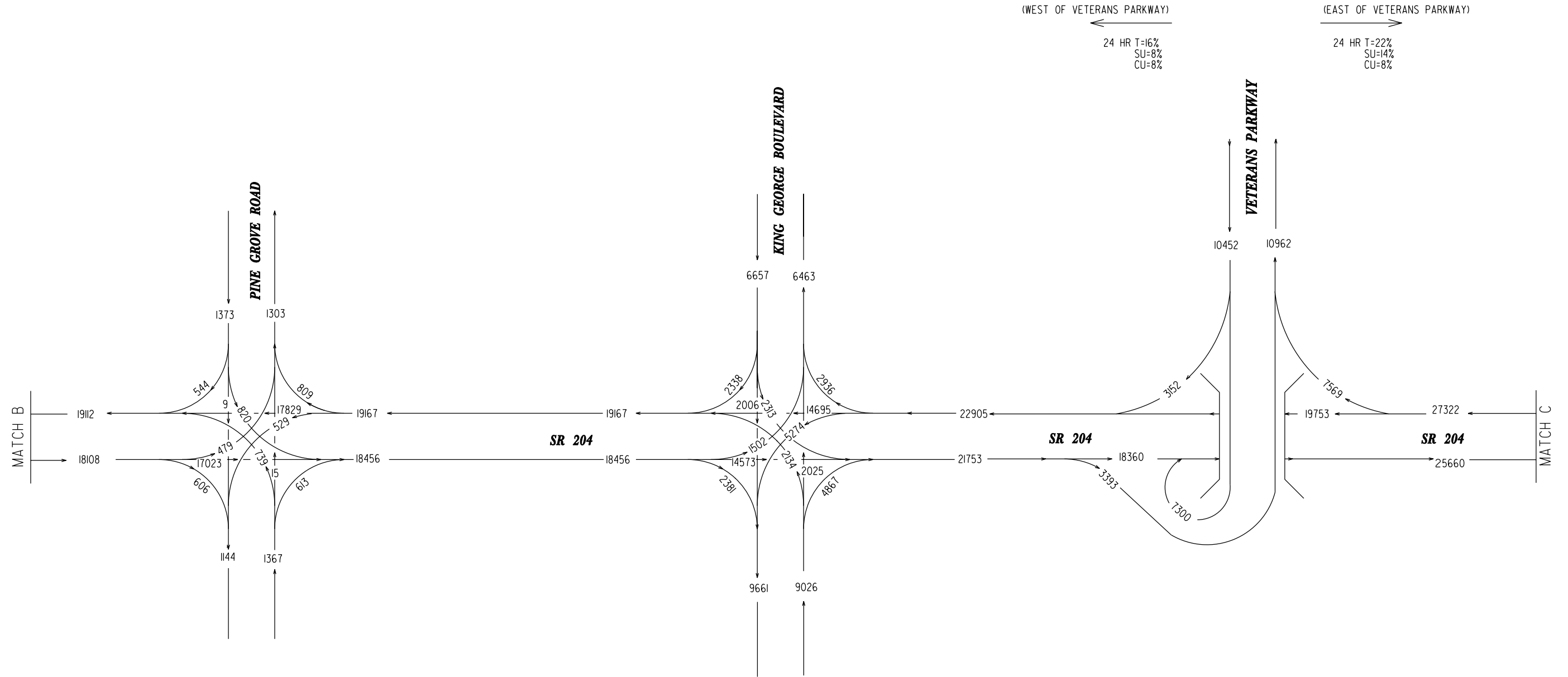
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010  
 AVERAGE DAILY VOLUMES

**JACOBS™**

FIGURE 7

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



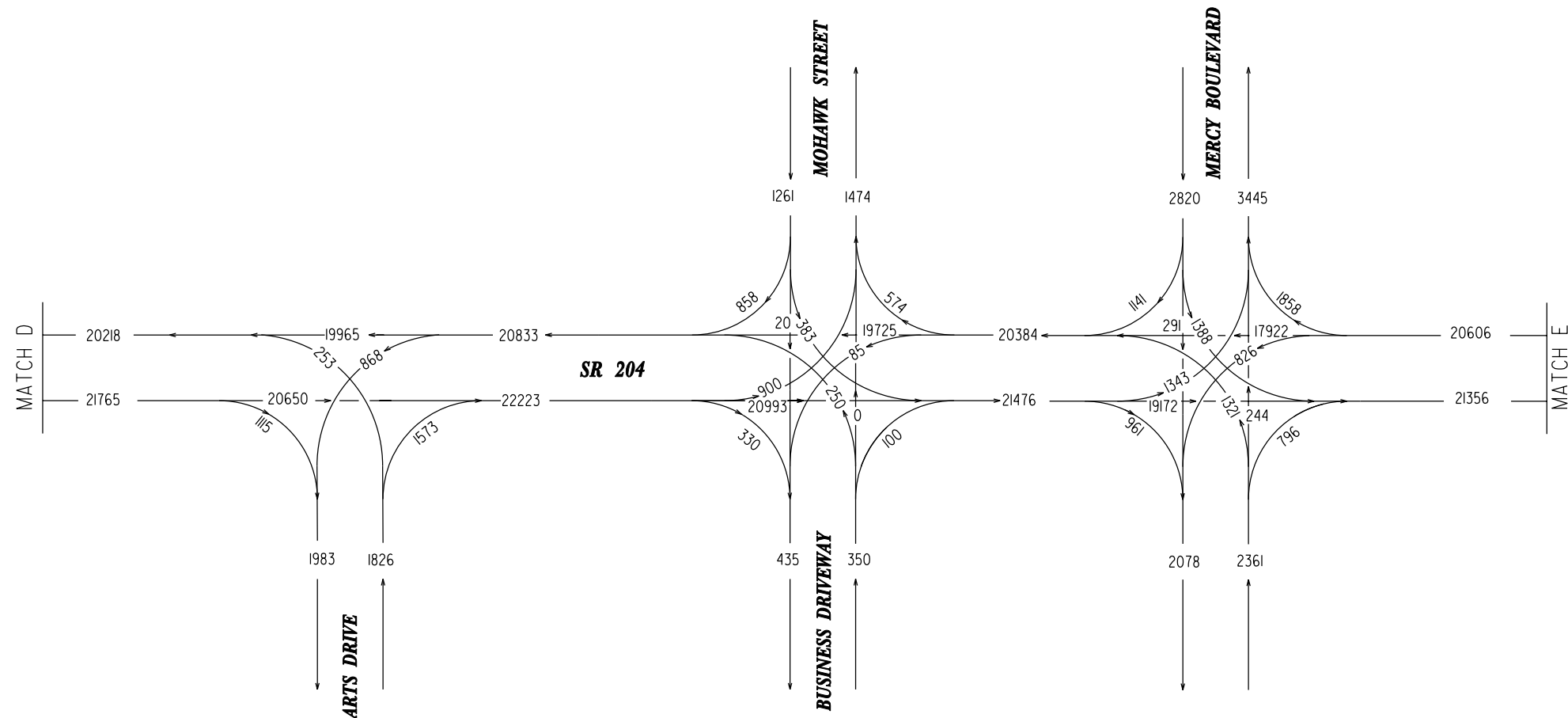
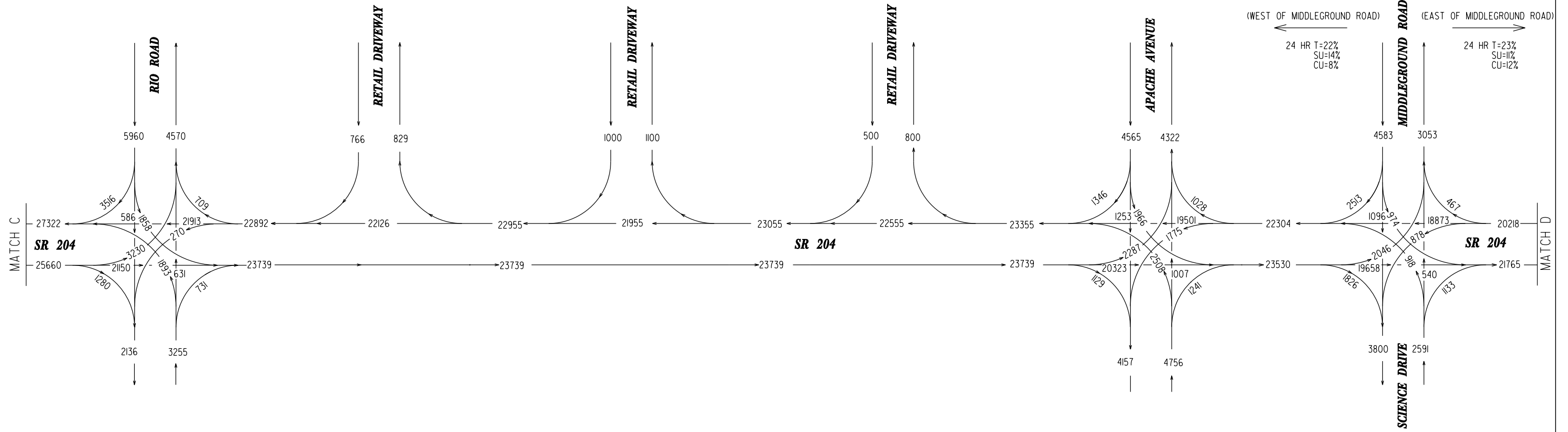
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010  
 AVERAGE DAILY VOLUMES

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FIGURE 8

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



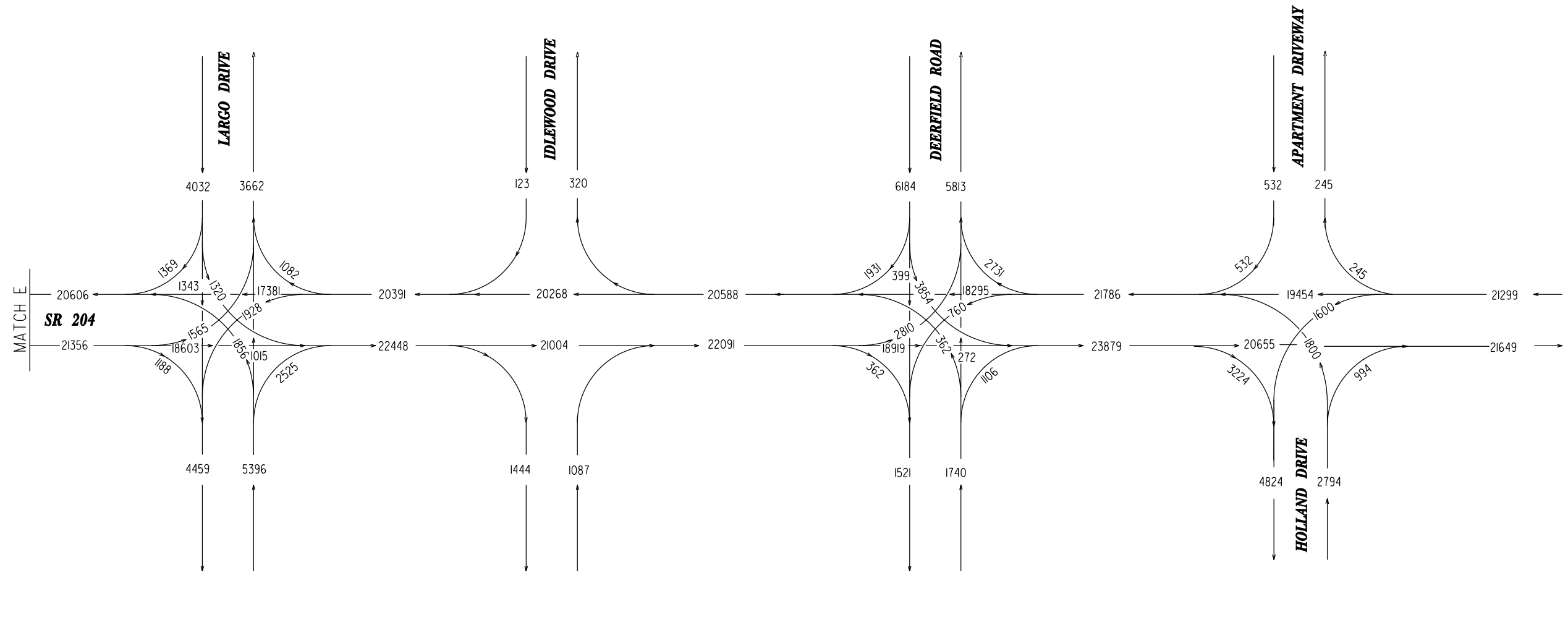
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010  
 AVERAGE DAILY VOLUMES

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FIGURE 9

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 EXISTING 2010  
 AVERAGE DAILY VOLUMES

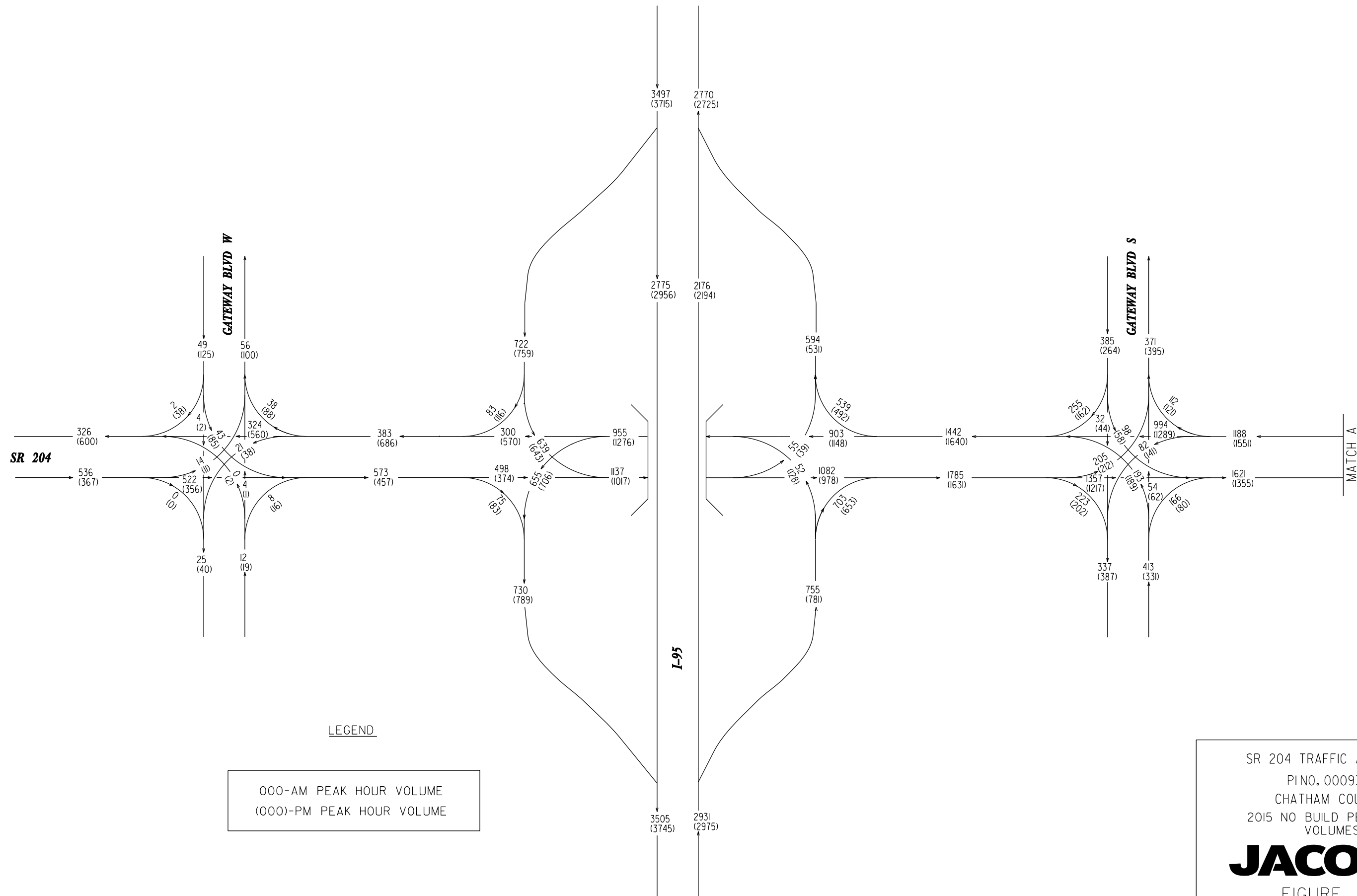
**JACOBS™**

FIGURE 10

SCALE: N.T.S.      AUGUST 2011



| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



**LEGEND**

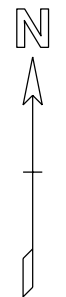
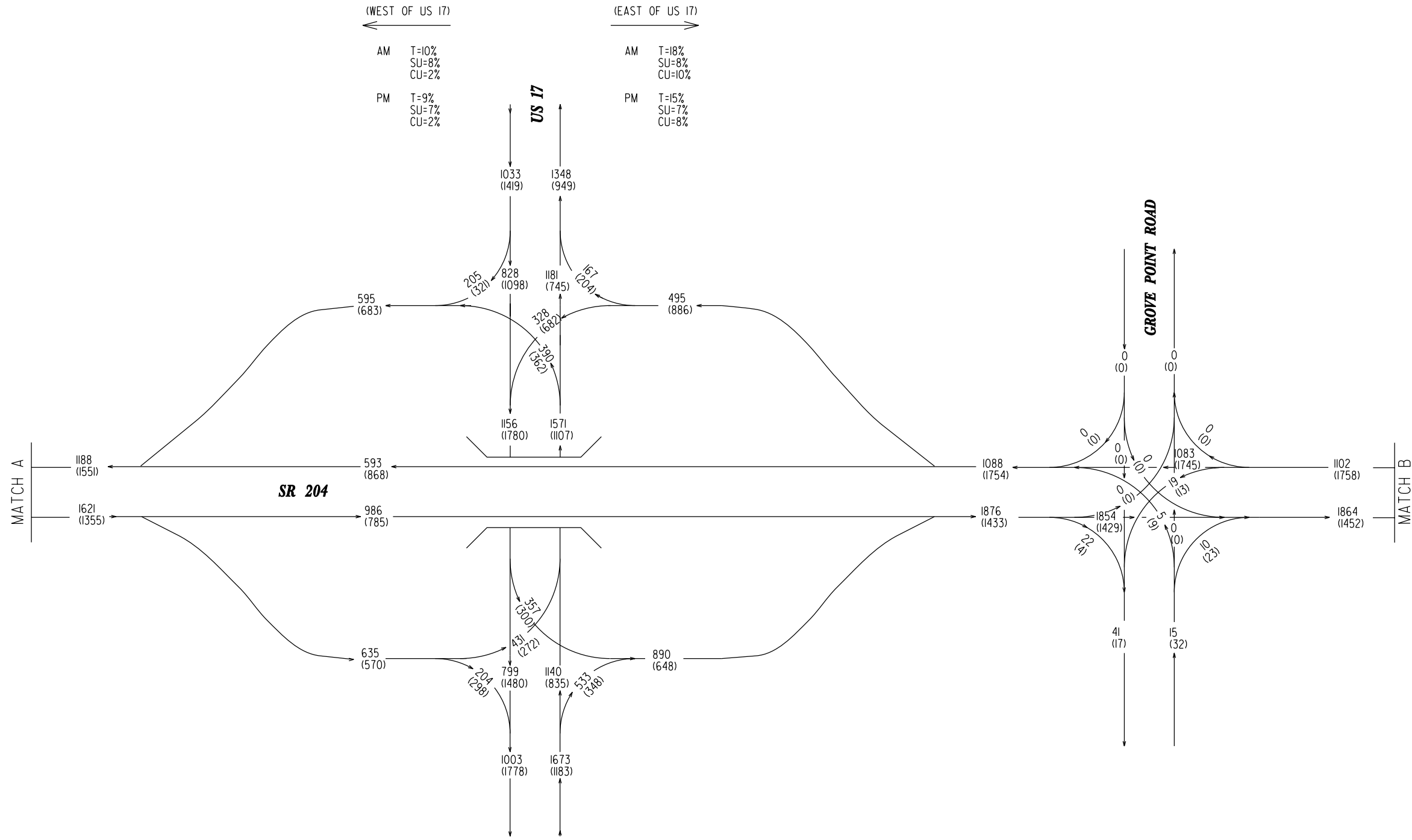
000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME

SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD PEAK HOUR VOLUMES

**JACOBS™**

FIGURE II

SCALE: N.T.S.      AUGUST 2011



SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD PEAK HOUR  
 VOLUMES

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FIGURE 12

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |

(WEST OF VETERANS PARKWAY)

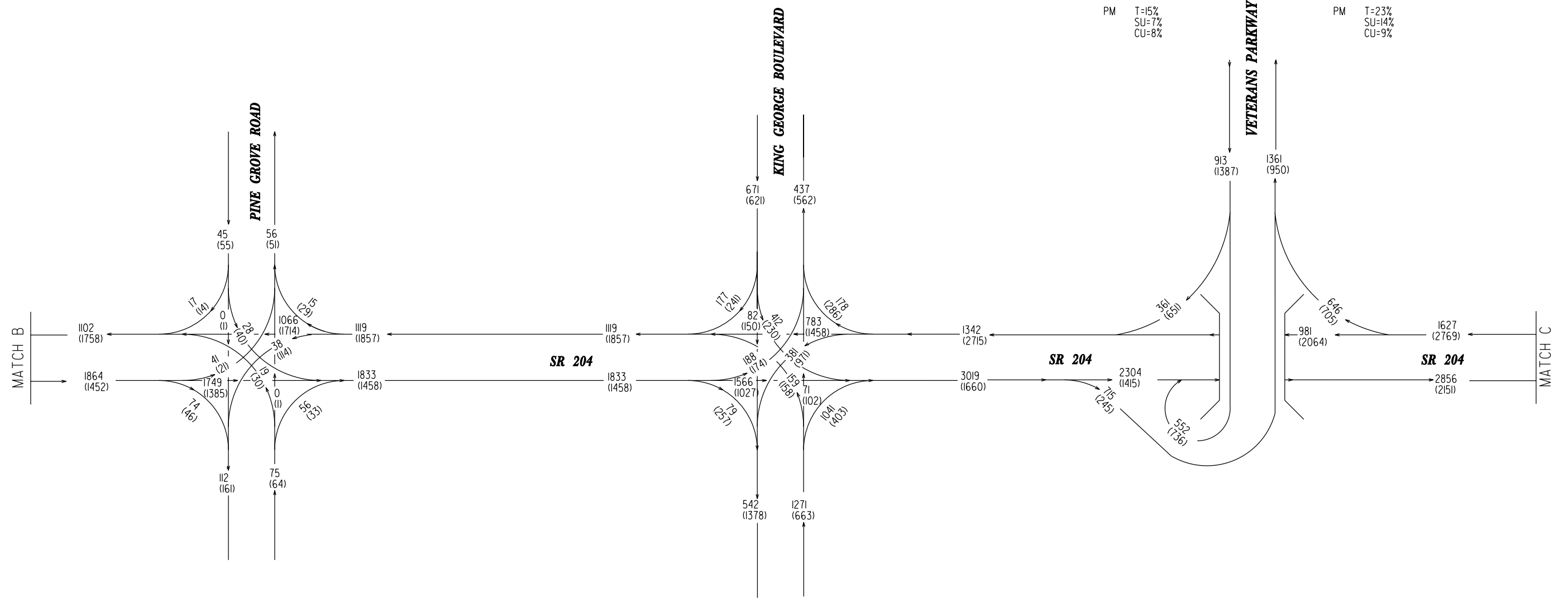
(EAST OF VETERANS PARKWAY)

AM T=18%  
SU=8%  
CU=10%

PM T=15%  
SU=7%  
CU=8%

AM T=21%  
SU=14%  
CU=7%

PM T=23%  
SU=14%  
CU=9%



LEGEND

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME



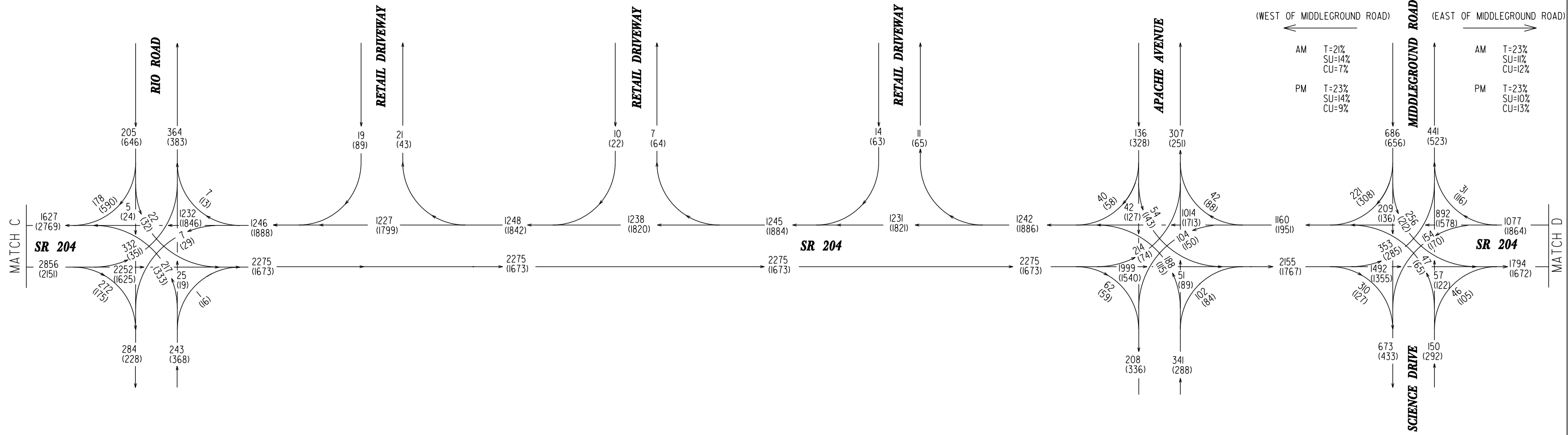
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD PEAK HOUR  
 VOLUMES

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FIGURE 13

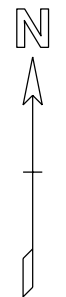
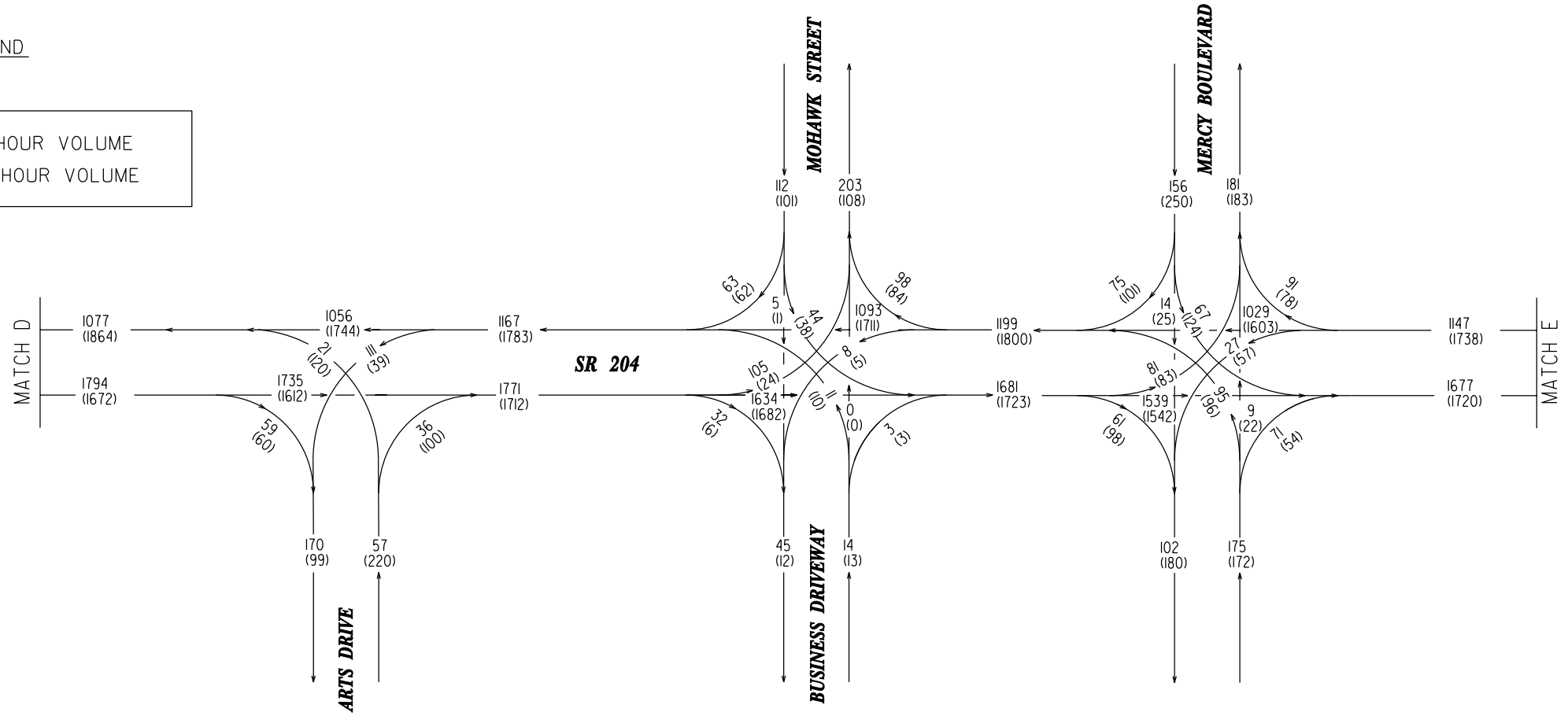
SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| G.A.  | CSSTP-0009-00(314) |           |              |



LEGEND

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME



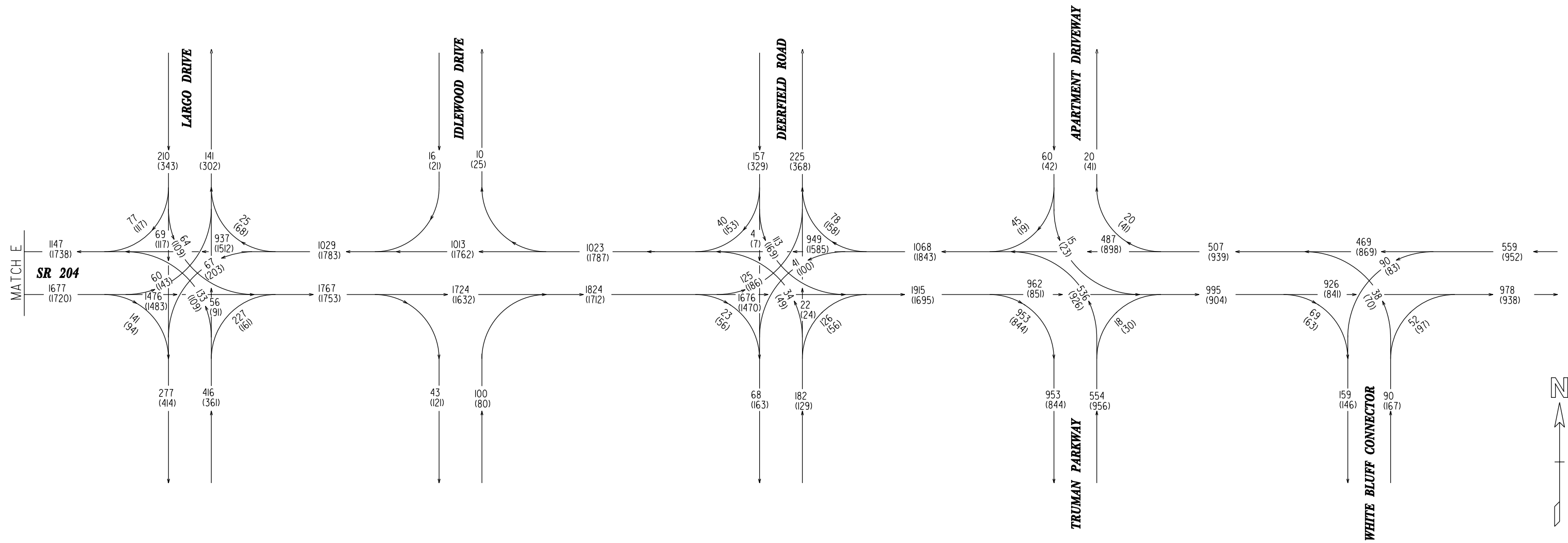
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD PEAK HOUR  
 VOLUMES

**JACOBS™**

FIGURE 14

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



LEGEND

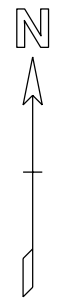
000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME

SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD PEAK HOUR VOLUMES

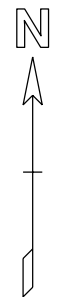
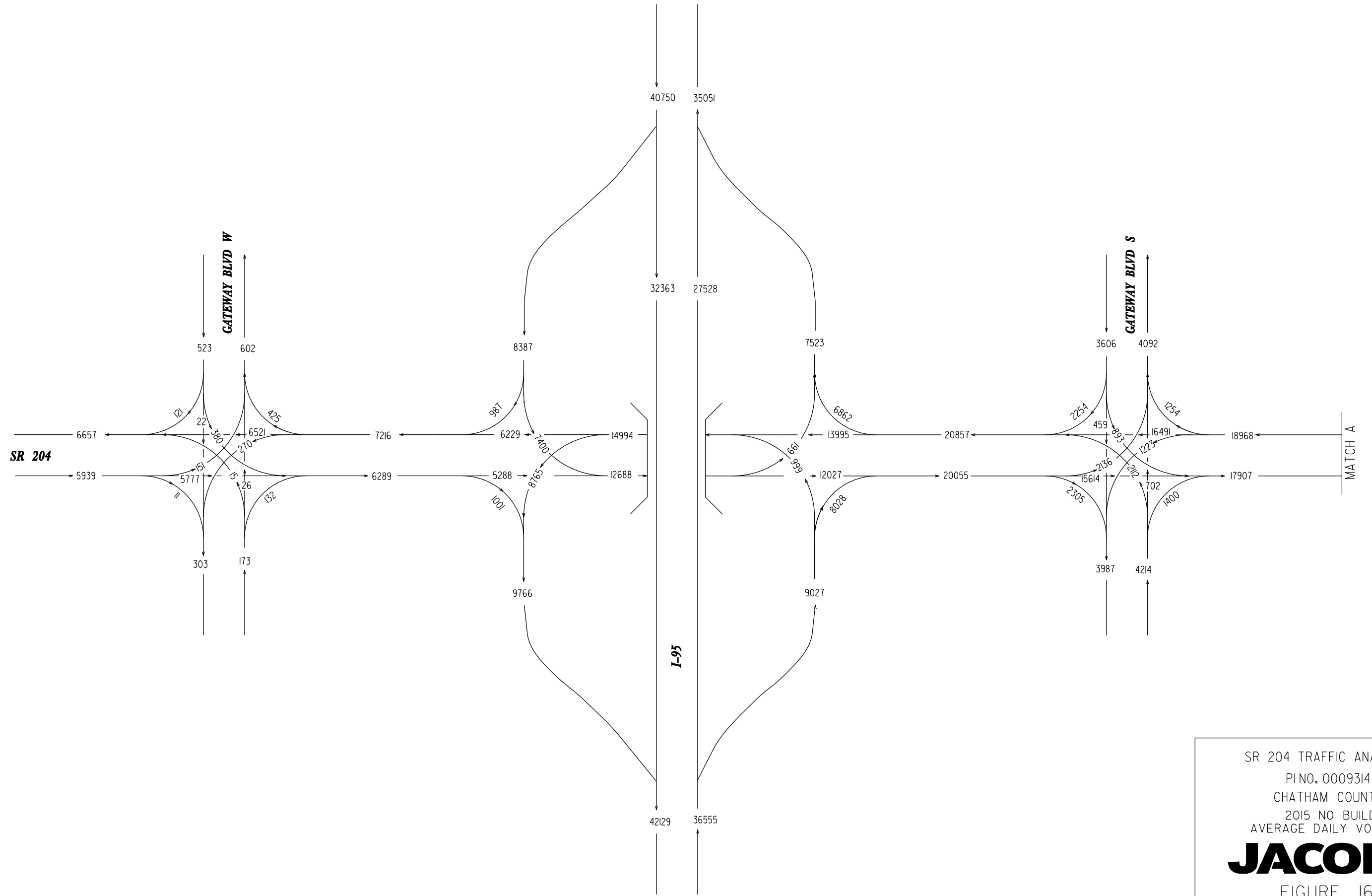
**JACOBS™**

FIGURE 15

SCALE: N.T.S.      AUGUST 2011

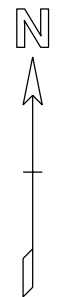
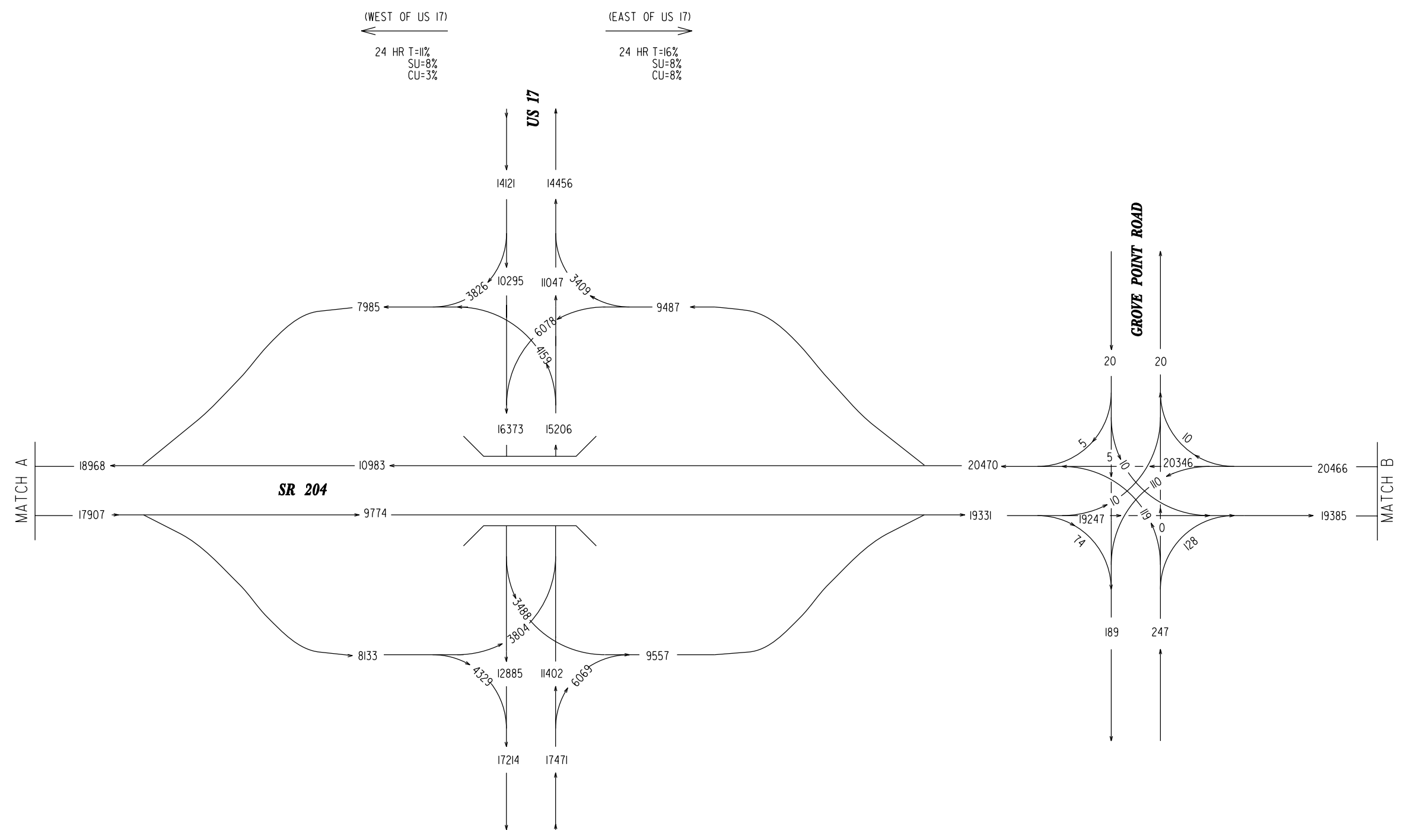


| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD  
 AVERAGE DAILY VOLUMES  
**JACOBS™**  
 FIGURE 16  
 SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



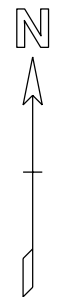
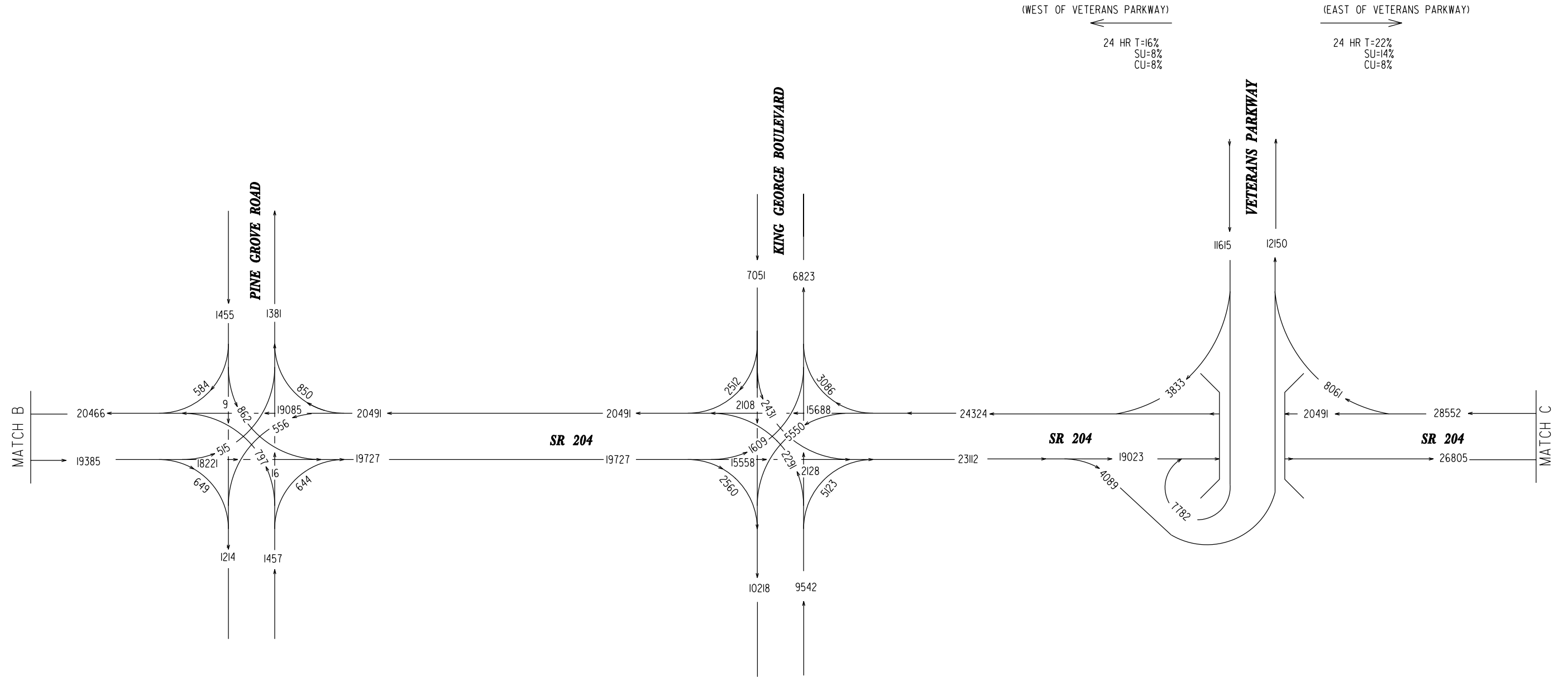
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD  
 AVERAGE DAILY VOLUMES

**JACOBS™**

FIGURE 17

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD  
 AVERAGE DAILY VOLUMES

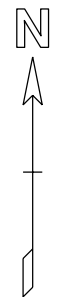
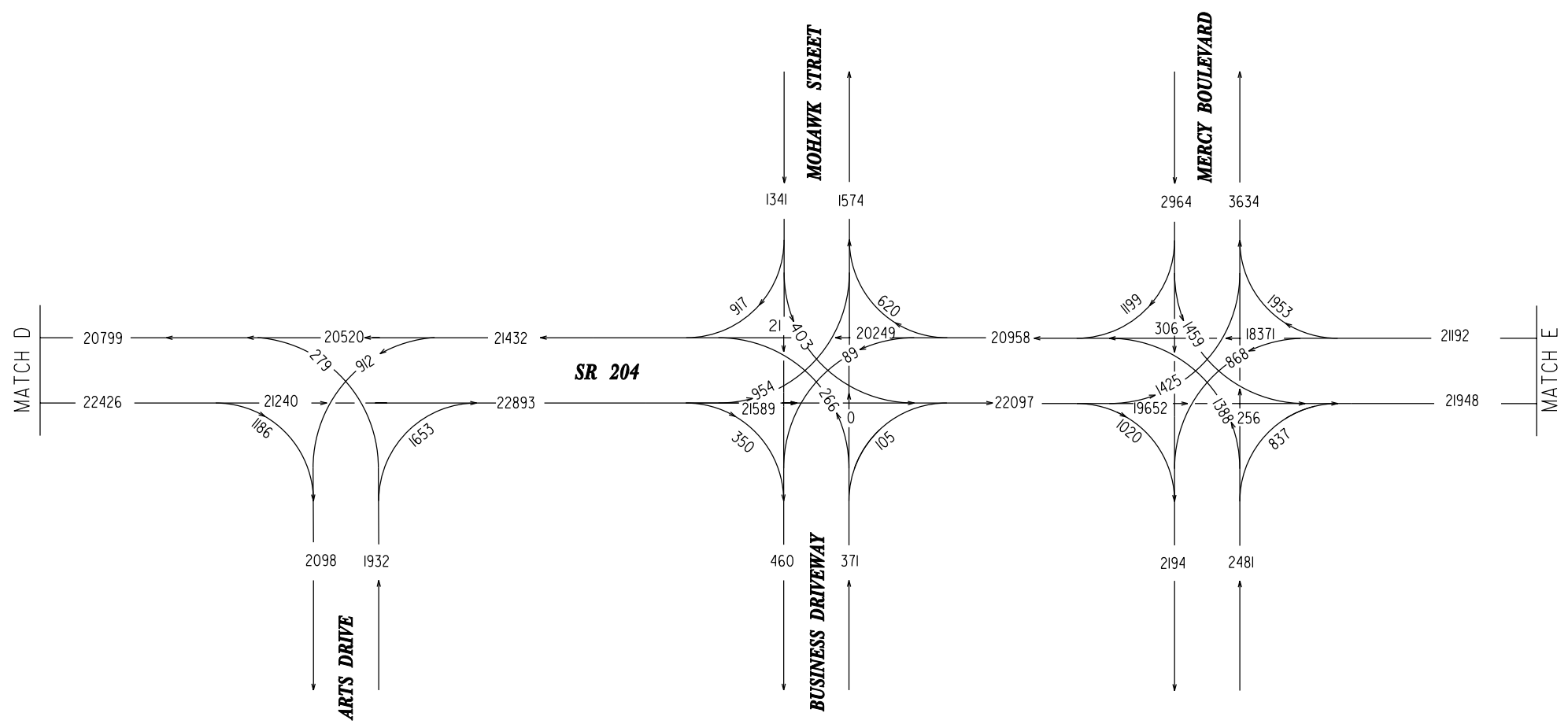
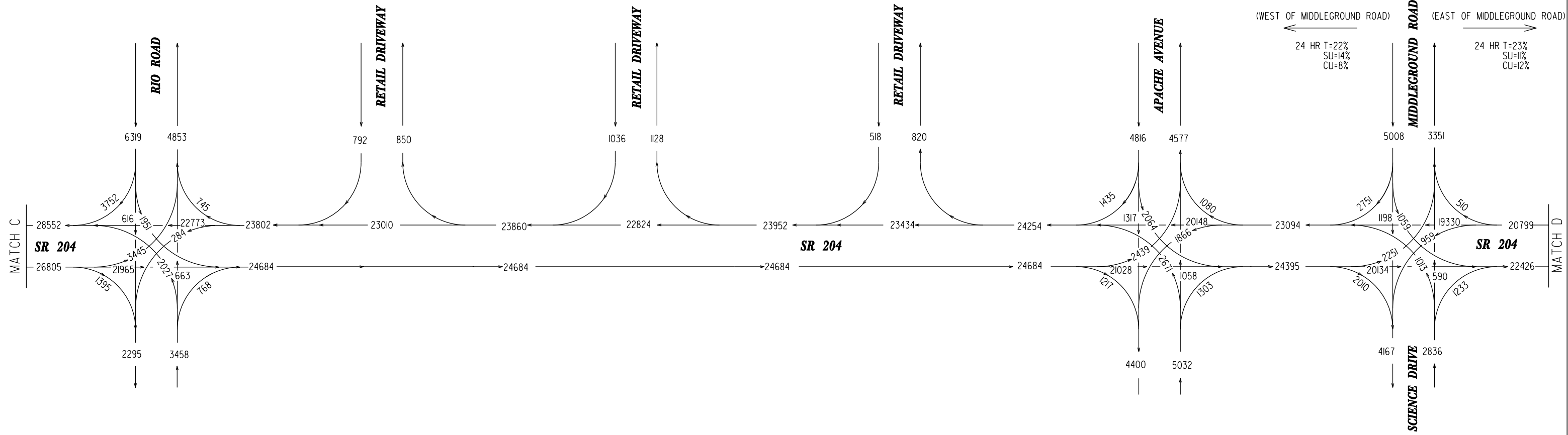
**JACOBS™**

FIGURE 18

SCALE: N.T.S.      AUGUST 2011



| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



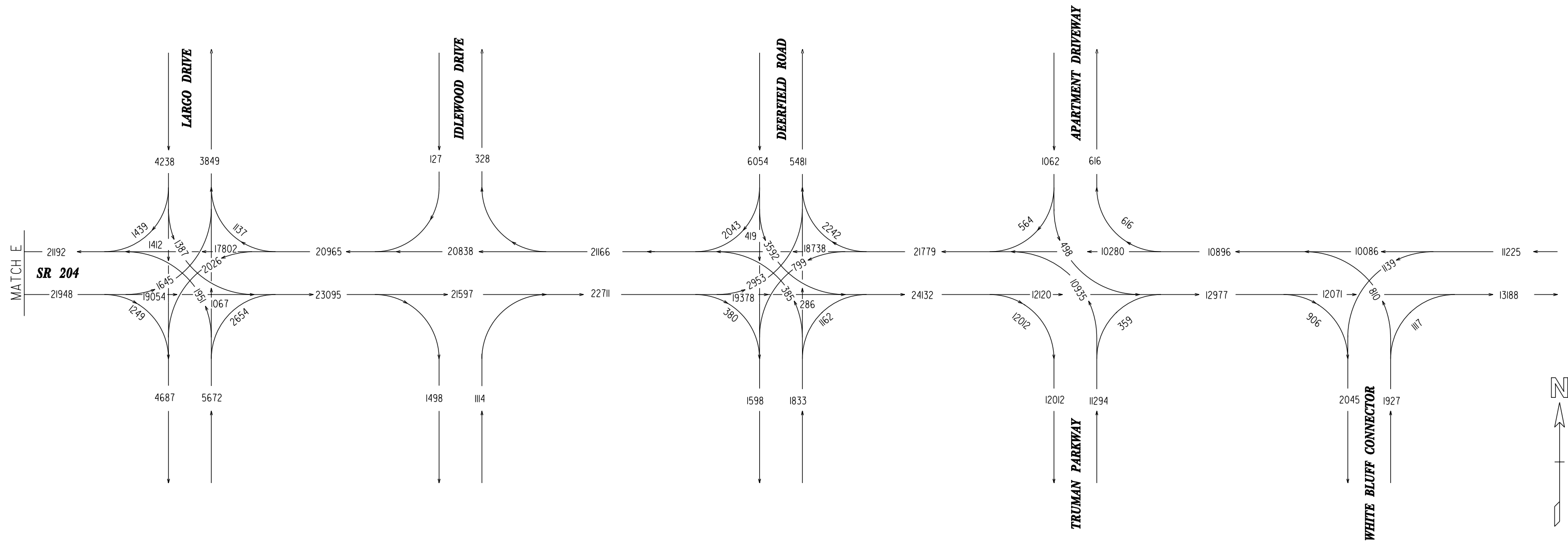
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD  
 AVERAGE DAILY VOLUMES

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FIGURE 19

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



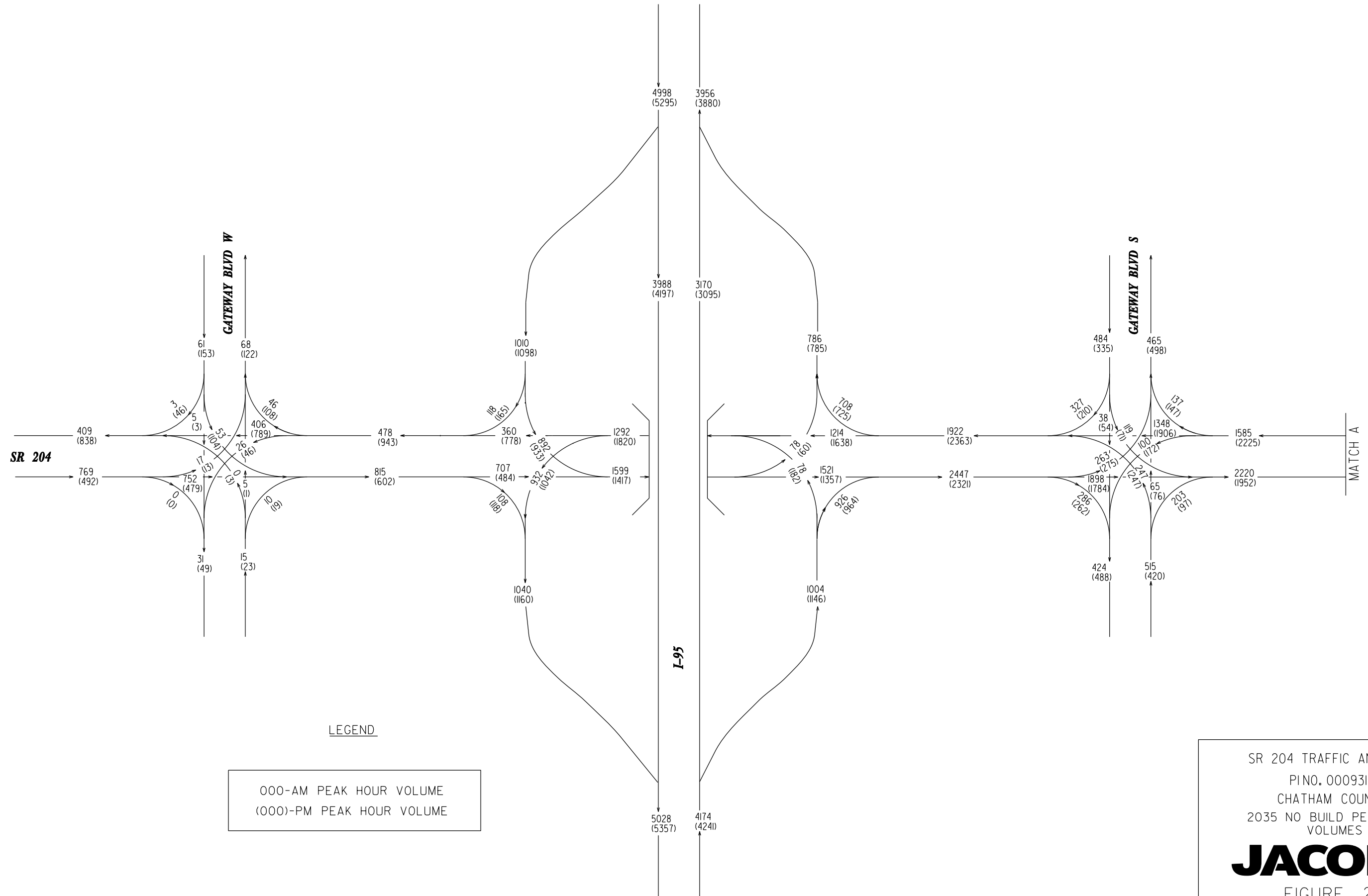
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2015 NO BUILD  
 AVERAGE DAILY VOLUMES

**JACOBS™**

FIGURE 20

SCALE: N.T.S.                      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



**LEGEND**

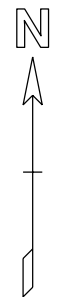
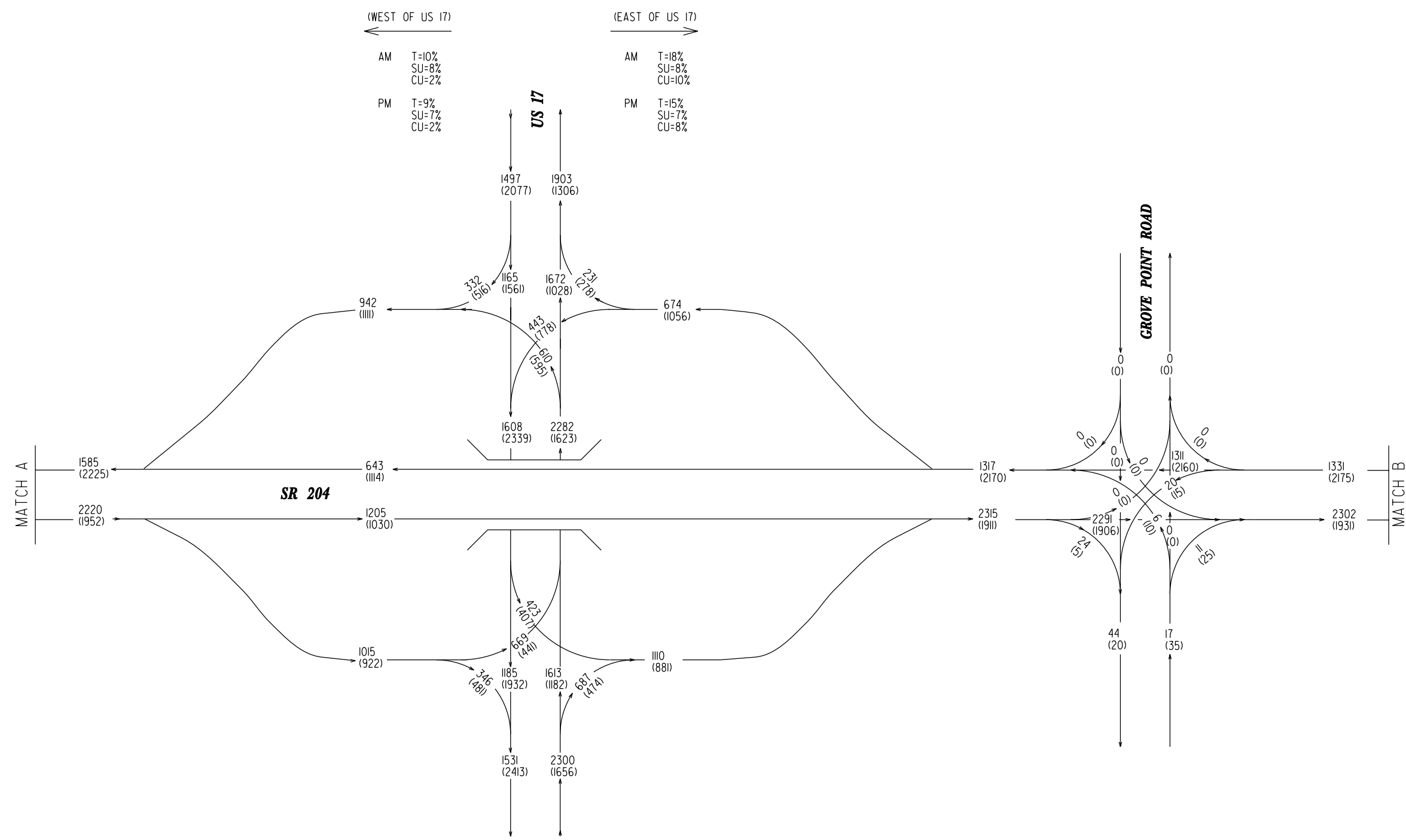
000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME

SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD PEAK HOUR VOLUMES

**JACOBS™**

FIGURE 21

SCALE: N.T.S.      AUGUST 2011



**LEGEND**

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME

SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD PEAK HOUR VOLUMES

**JACOBS™**

FIGURE 22

SCALE: N.T.S.      AUGUST 2011

(WEST OF VETERANS PARKWAY) ←

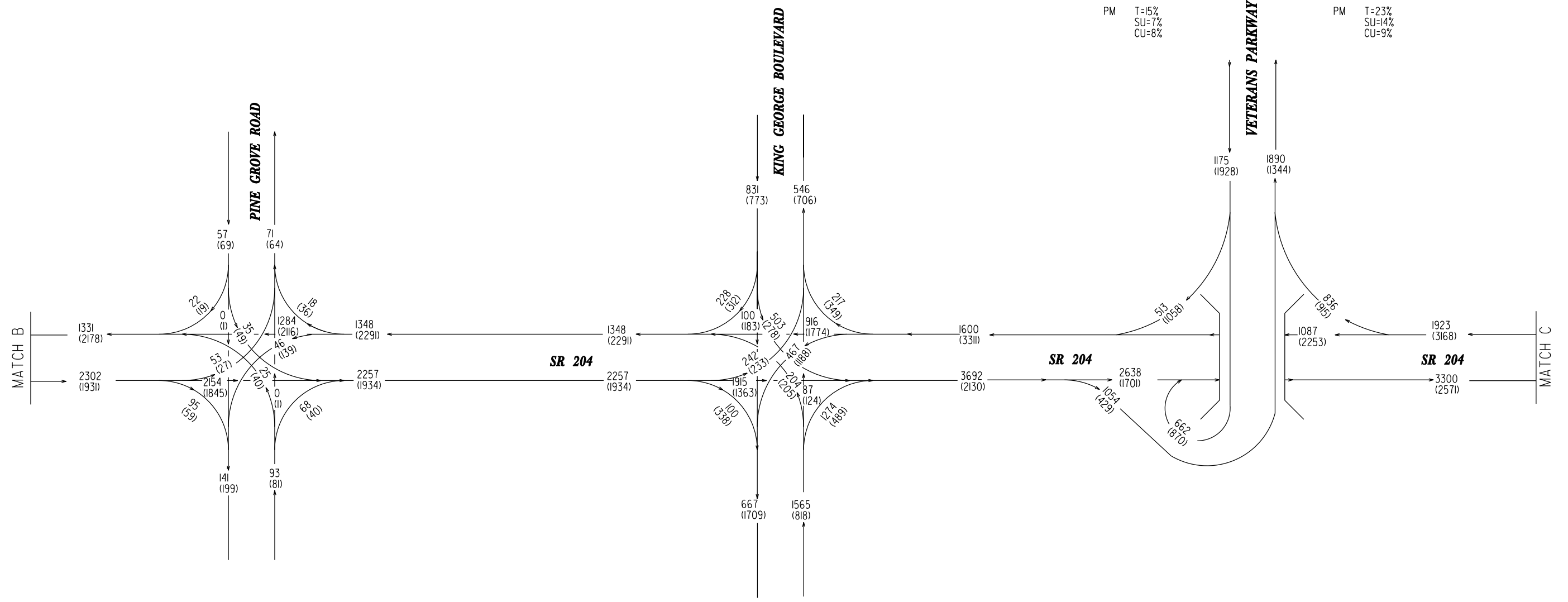
AM T=18%  
SU=8%  
CU=10%

PM T=15%  
SU=7%  
CU=8%

→ (EAST OF VETERANS PARKWAY)

AM T=21%  
SU=14%  
CU=7%

PM T=23%  
SU=14%  
CU=9%



LEGEND

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME

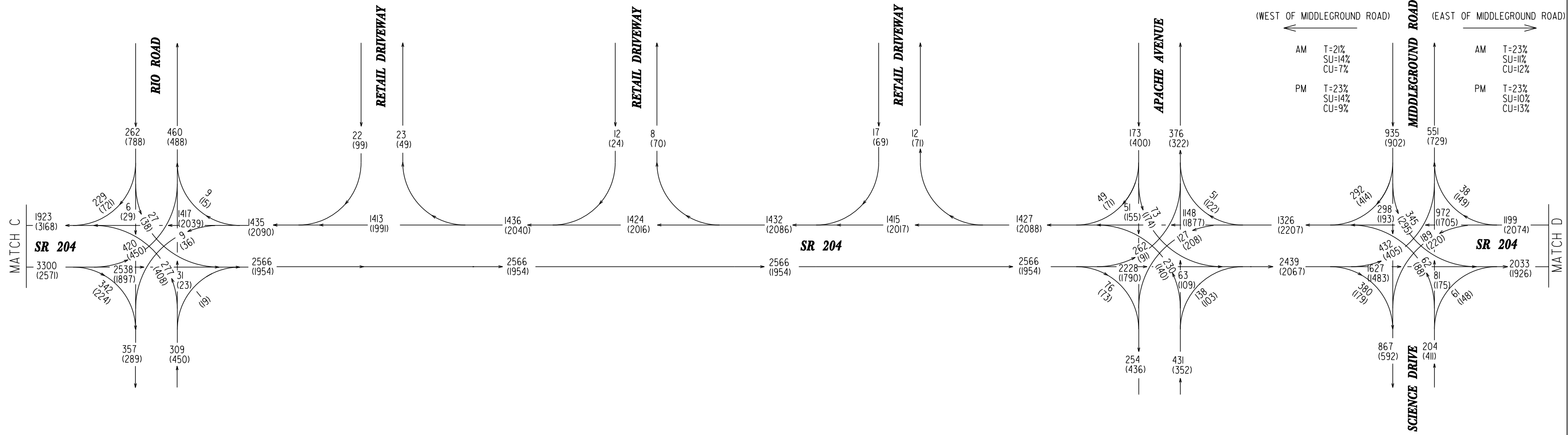
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD PEAK HOUR  
 VOLUMES

**JACOBS™**

FIGURE 23

SCALE: N.T.S.      AUGUST 2011

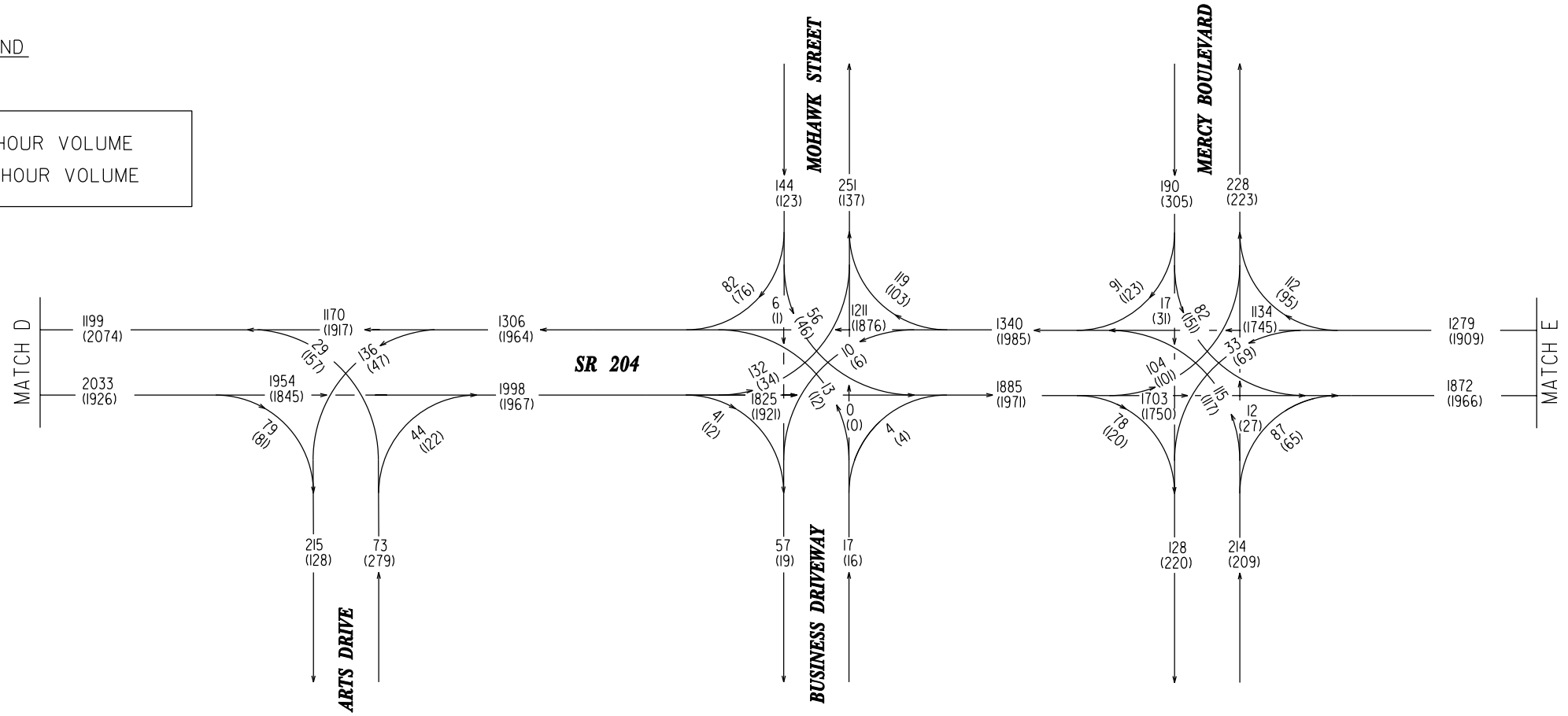
| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



| (WEST OF MIDDLEGROUND ROAD) |                          | (EAST OF MIDDLEGROUND ROAD) |                           |
|-----------------------------|--------------------------|-----------------------------|---------------------------|
| AM                          | T=21%<br>SU=14%<br>CU=7% | AM                          | T=23%<br>SU=11%<br>CU=12% |
| PM                          | T=23%<br>SU=14%<br>CU=9% | PM                          | T=23%<br>SU=10%<br>CU=13% |

**LEGEND**

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME

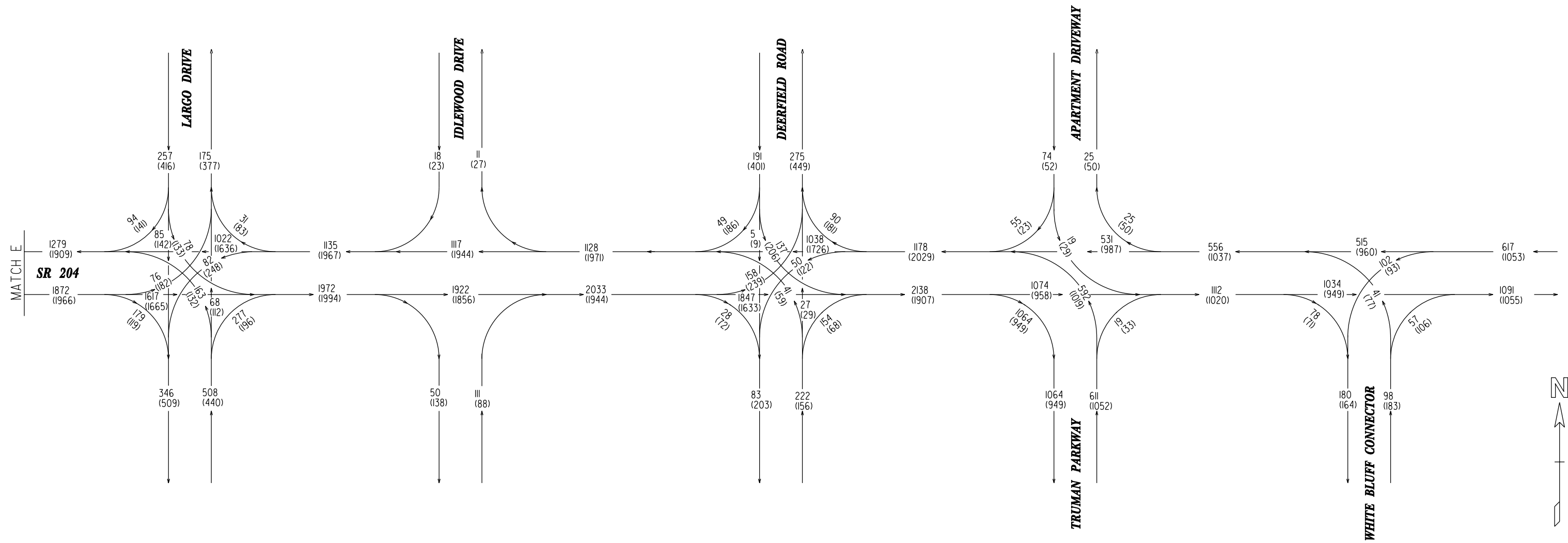


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 CHATHAM COUNTY  
 2035 NO BUILD PEAK HOUR  
 VOLUMES

**JACOBS™**

FIGURE 24

SCALE: N.T.S.      AUGUST 2011



LEGEND

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME

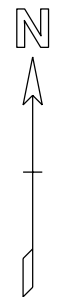
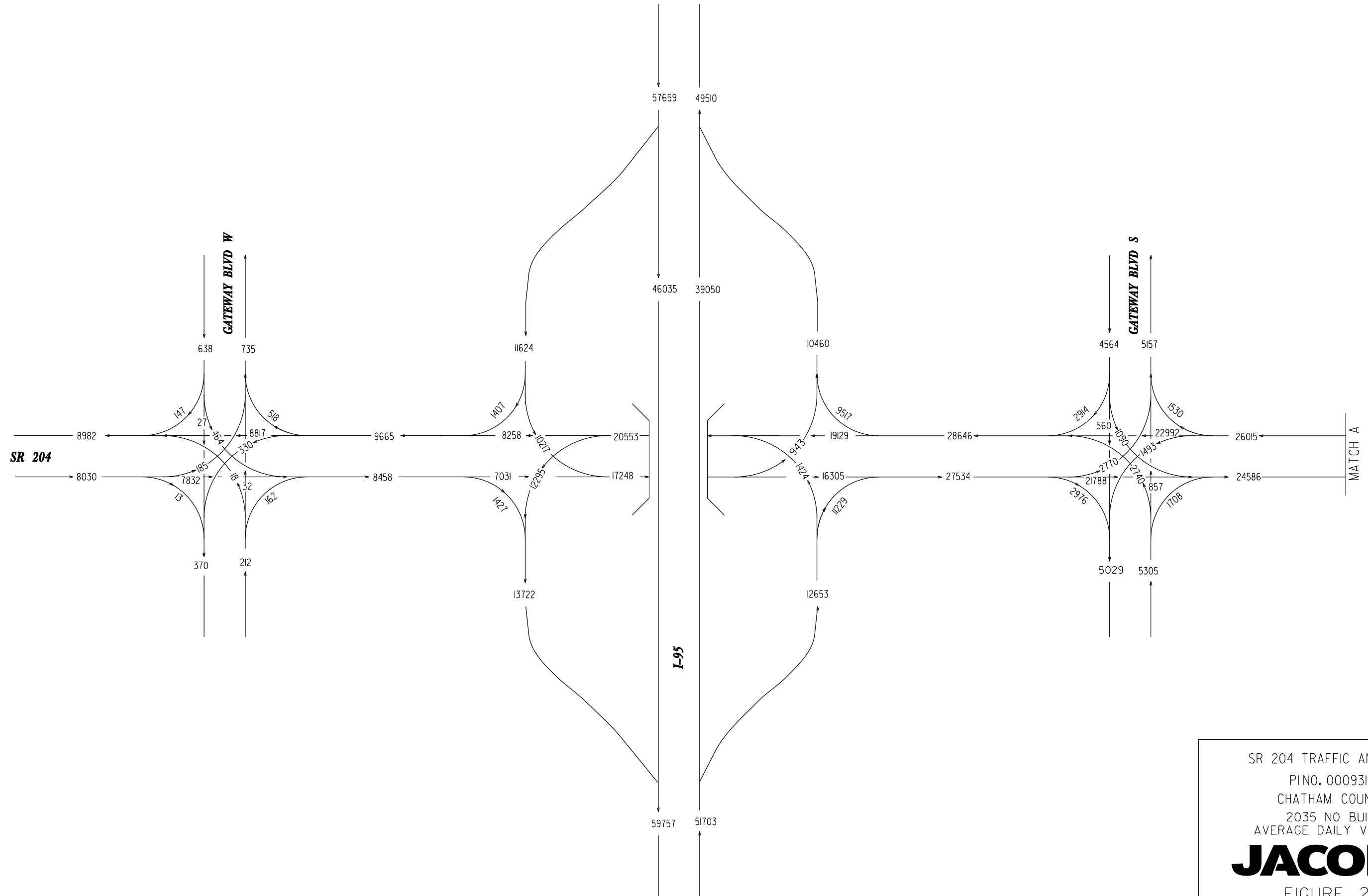
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD PEAK HOUR VOLUMES

**JACOBS™**

FIGURE 25

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



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 CHATHAM COUNTY  
 2035 NO BUILD  
 AVERAGE DAILY VOLUMES

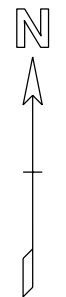
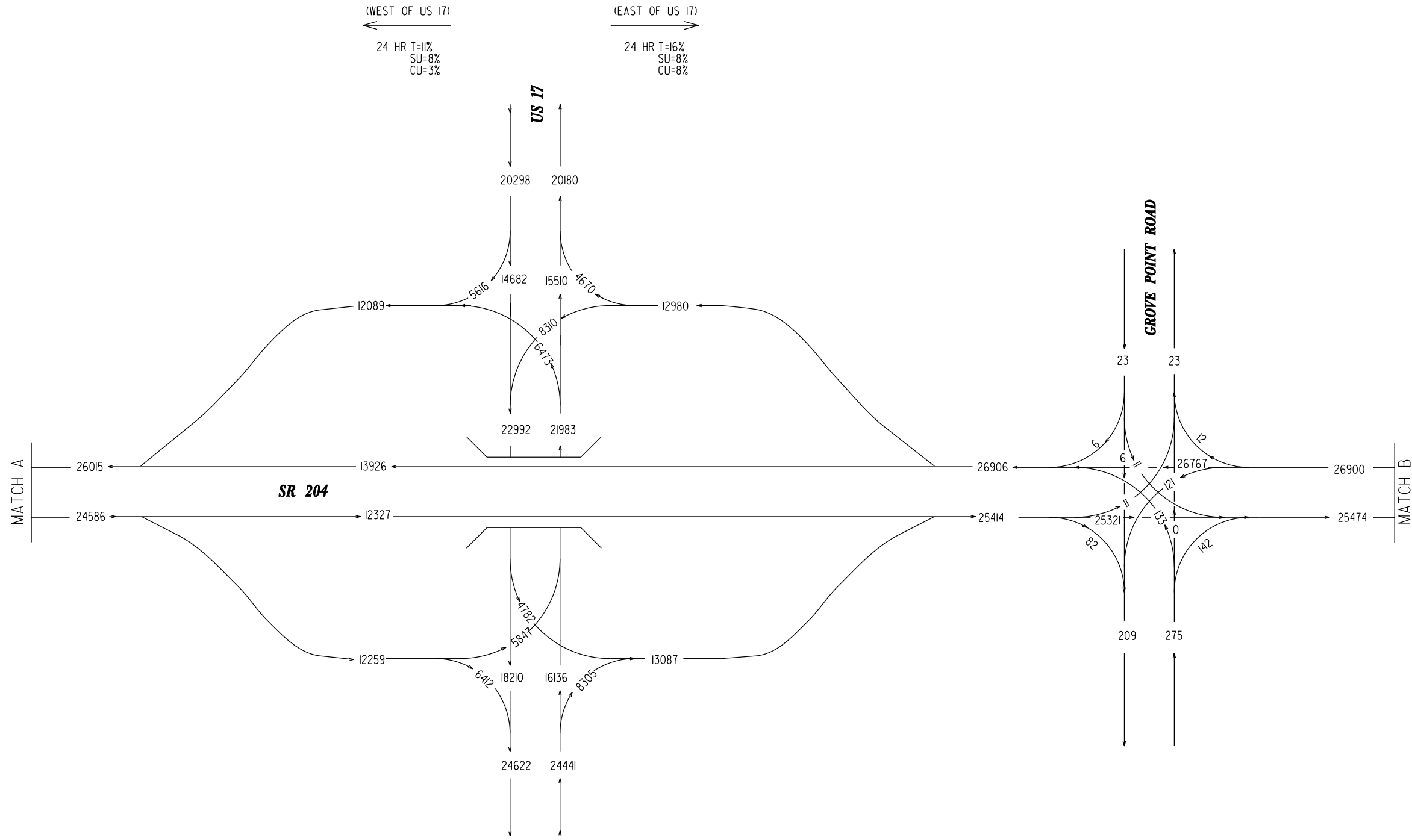
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FIGURE 26

SCALE: N.T.S.      AUGUST 2011



| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



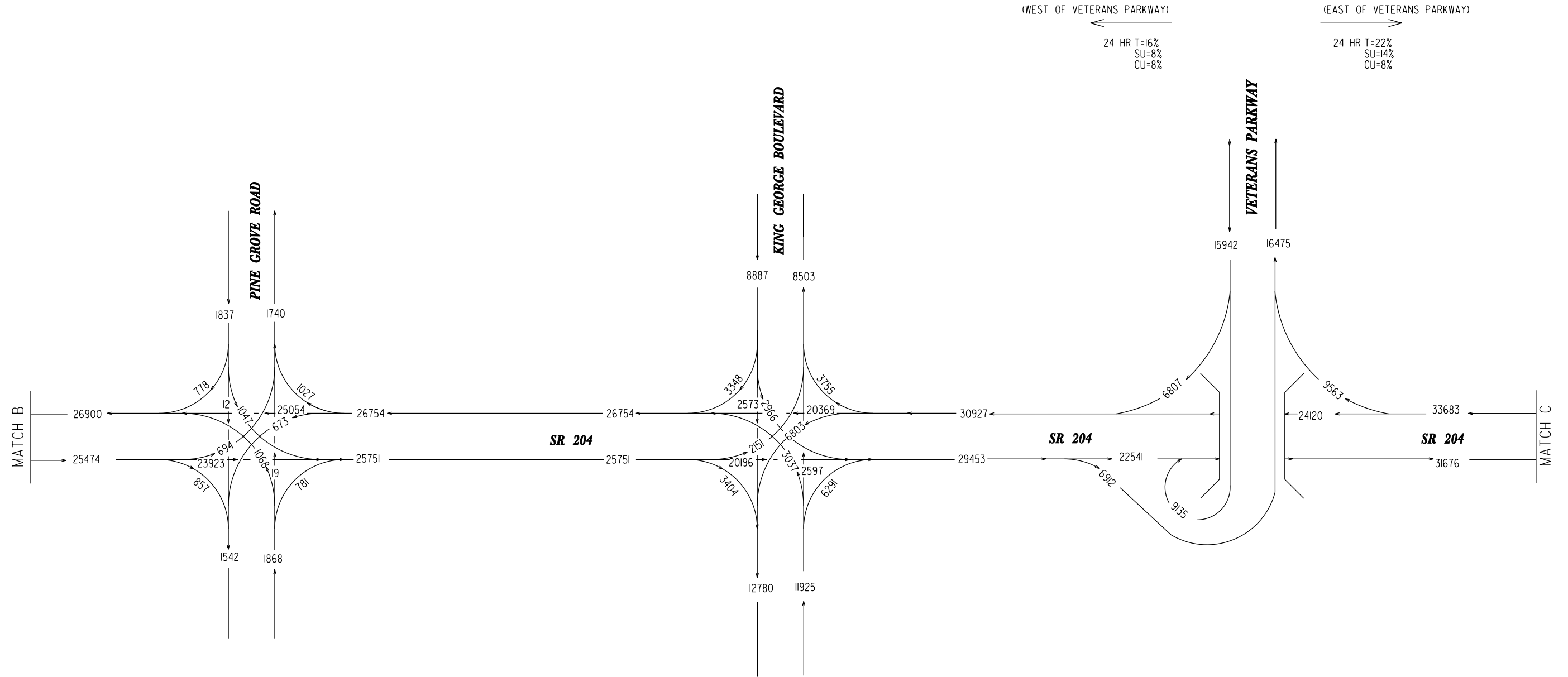
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD  
 AVERAGE DAILY VOLUMES

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FIGURE 27

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| G.A.  | CSSTP-0009-00(314) |           |              |



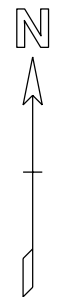
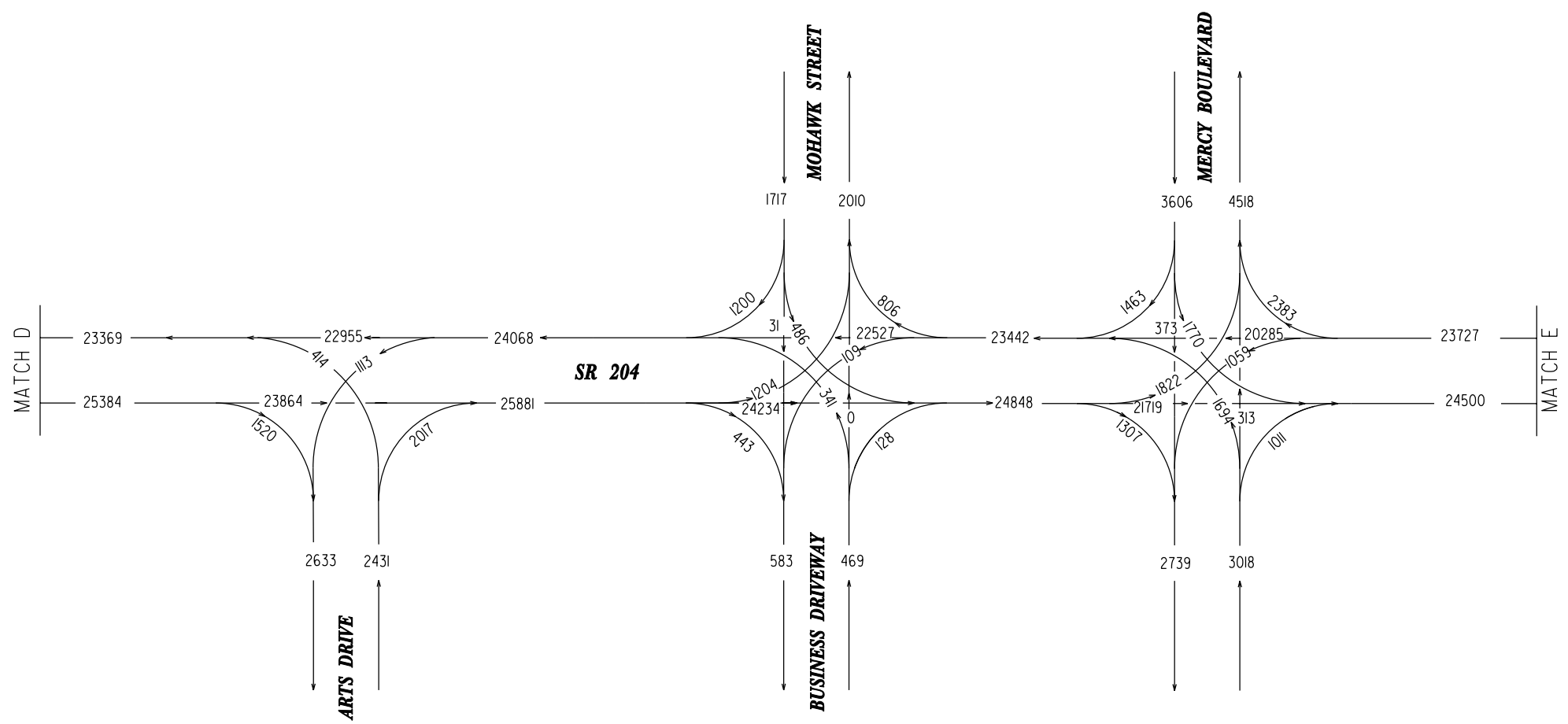
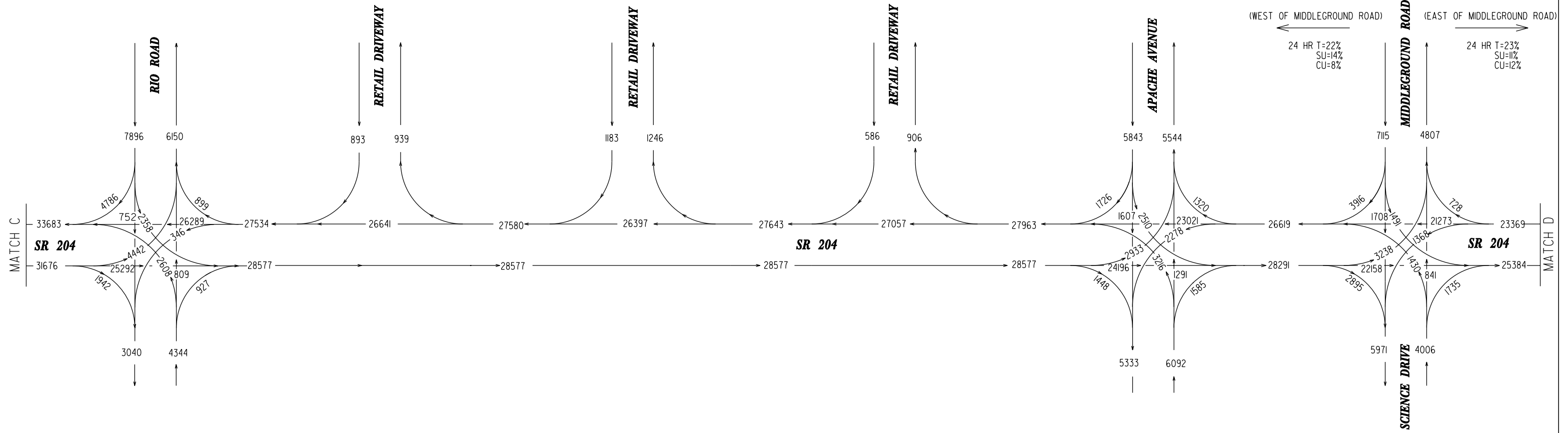
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD  
 AVERAGE DAILY VOLUMES

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FIGURE 28

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| G.A.  | CSSTP-0009-00(314) |           |              |



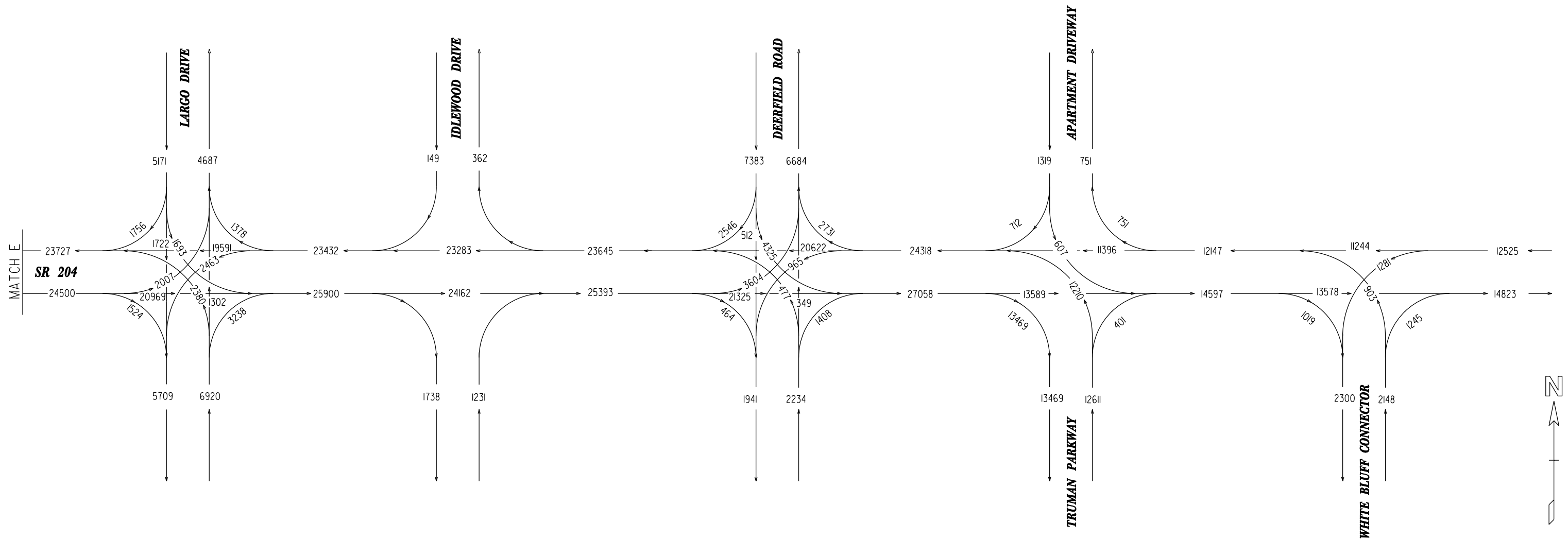
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD  
 AVERAGE DAILY VOLUMES

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FIGURE 29

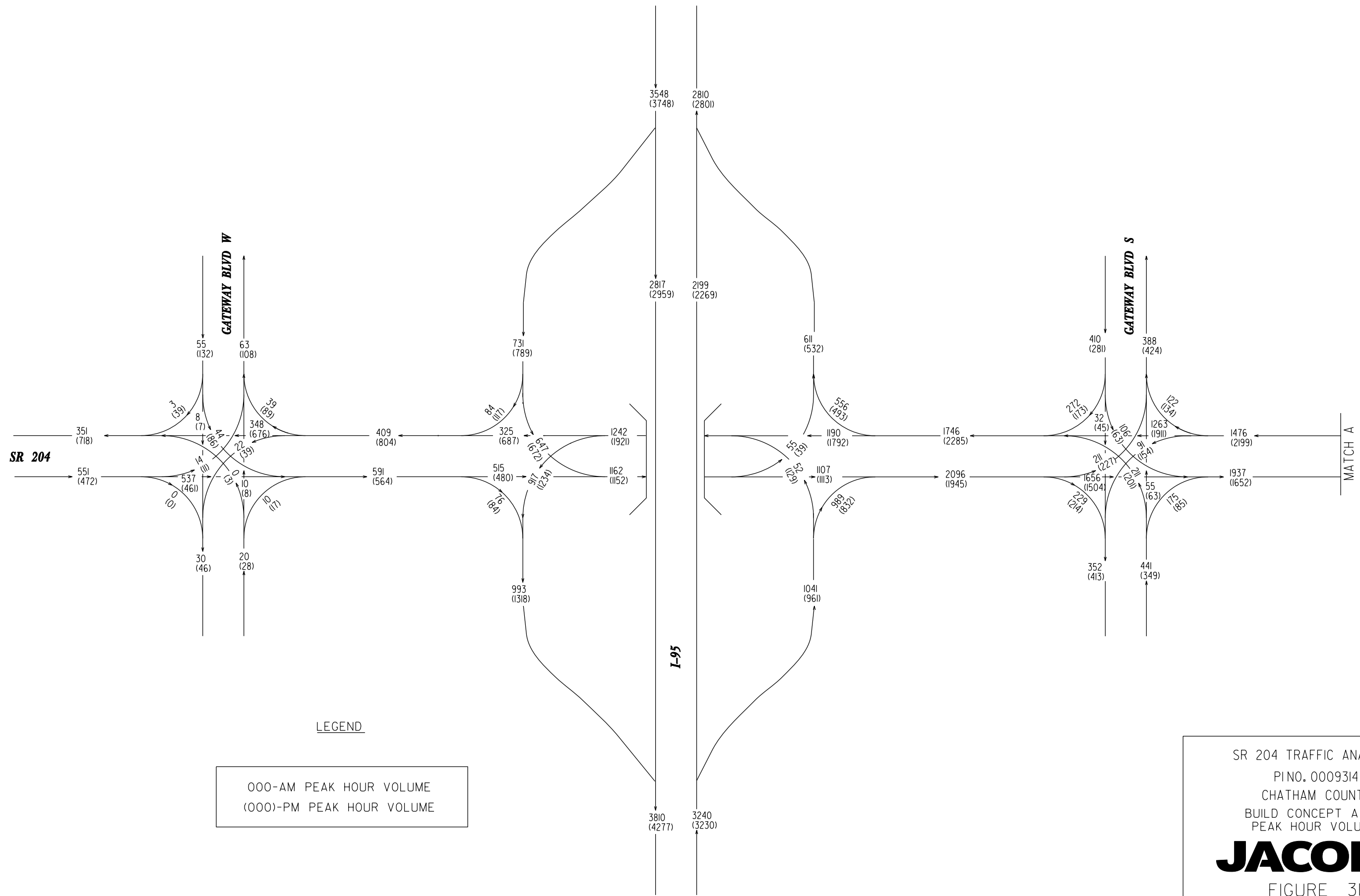
SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER     | SHEET NO. | TOTAL SHEETS |
|-------|--------------------|-----------|--------------|
| GA.   | CSSTP-0009-00(314) |           |              |



SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 2035 NO BUILD  
 AVERAGE DAILY VOLUMES  
**JACOBS™**  
 FIGURE 30  
 SCALE: N.T.S. AUGUST 2011

| STATE | PROJECT NUMBER    | SHEET NO. | TOTAL SHEETS |
|-------|-------------------|-----------|--------------|
| GA.   | PL000-009-00(314) |           |              |



LEGEND

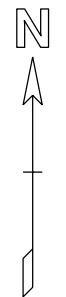
000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME

SR 204 TRAFFIC ANALYSIS  
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 CHATHAM COUNTY  
 BUILD CONCEPT A 2015  
 PEAK HOUR VOLUMES

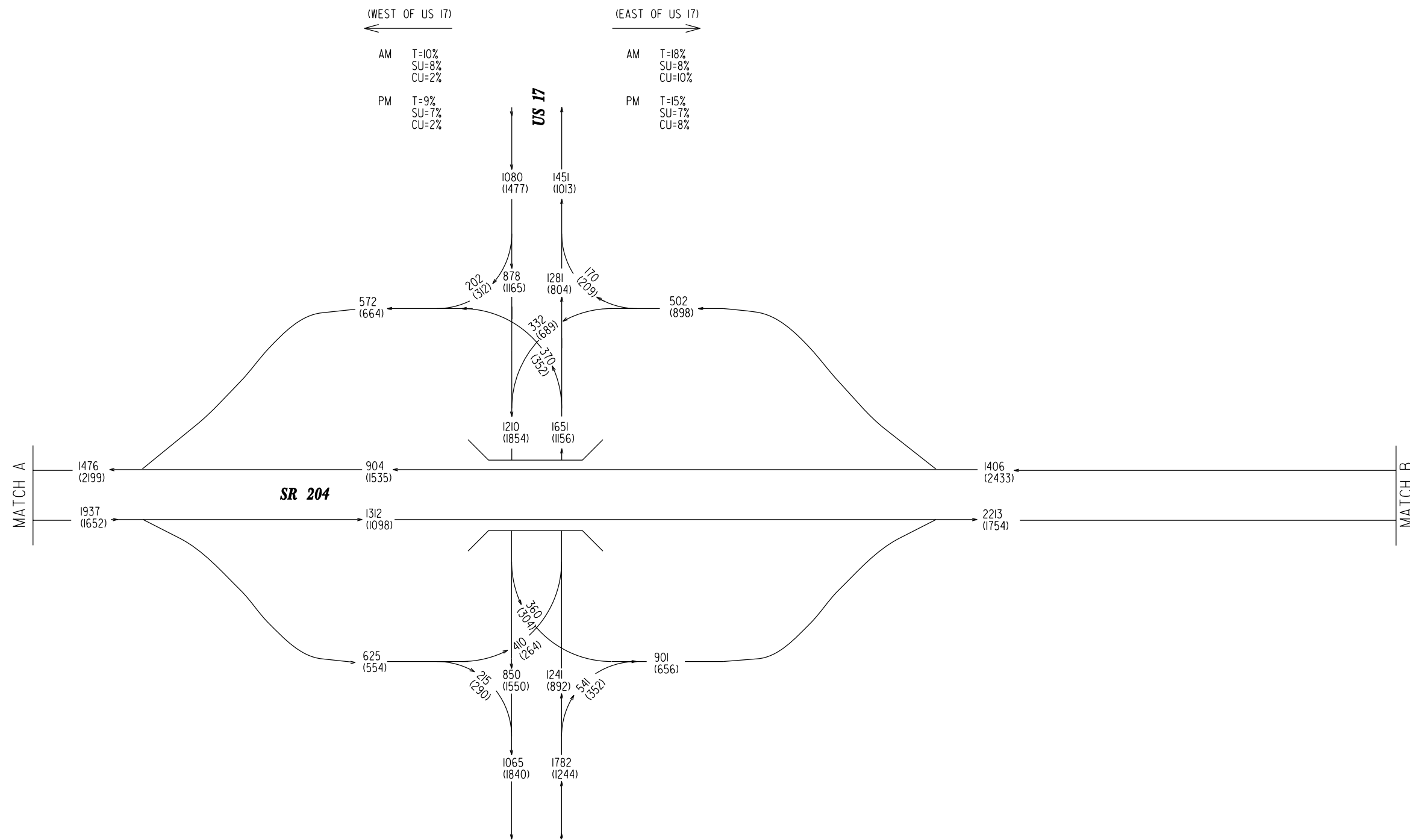
**JACOBS™**

FIGURE 31

SCALE: N.T.S.      AUGUST 2011

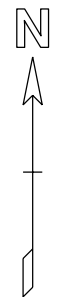


| STATE | PROJECT NUMBER    | SHEET NO. | TOTAL SHEETS |
|-------|-------------------|-----------|--------------|
| GA.   | PL000-009-00(314) |           |              |



**LEGEND**

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME



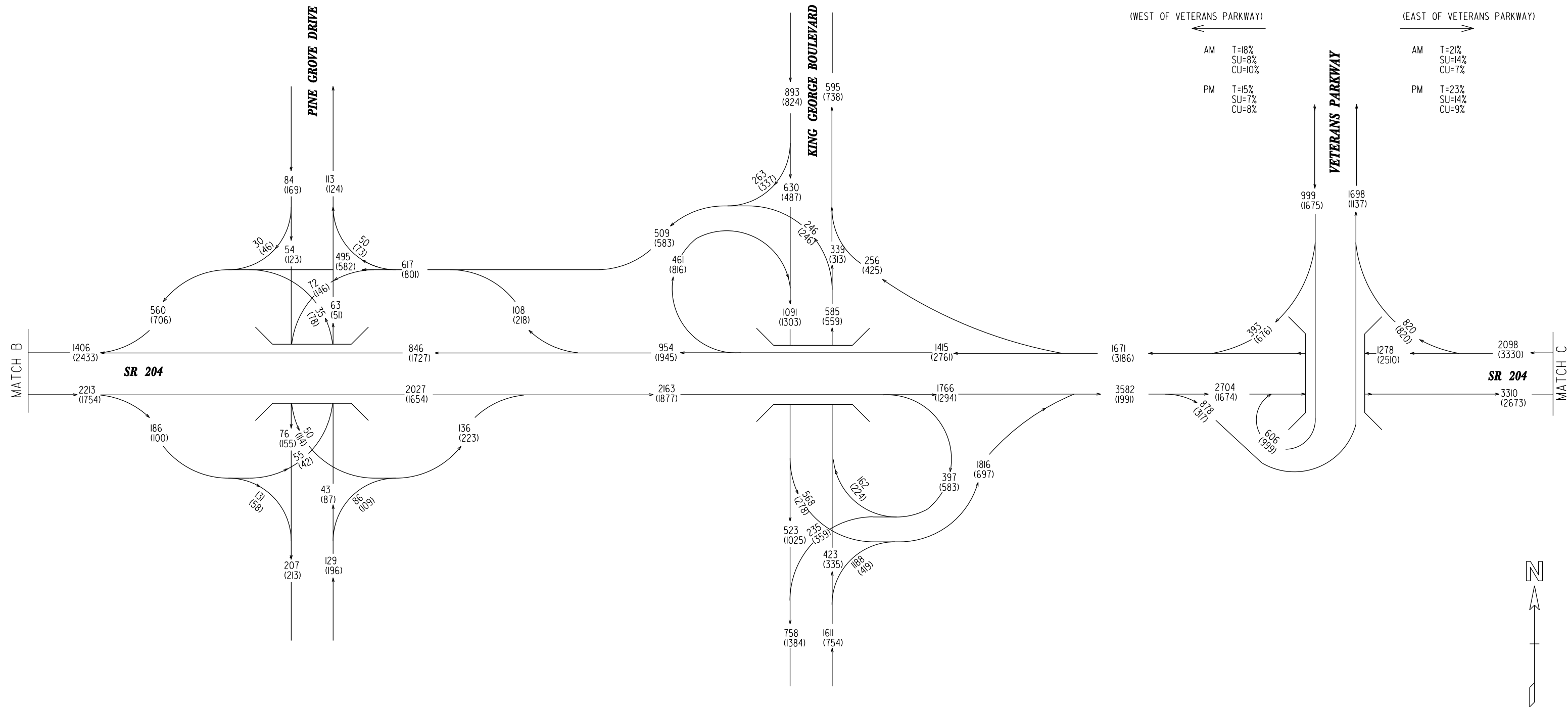
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 BUILD CONCEPT A 2015  
 PEAK HOUR VOLUMES

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FIGURE 32

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER    | SHEET NO. | TOTAL SHEETS |
|-------|-------------------|-----------|--------------|
| G.A.  | PL000-009-00(314) |           |              |



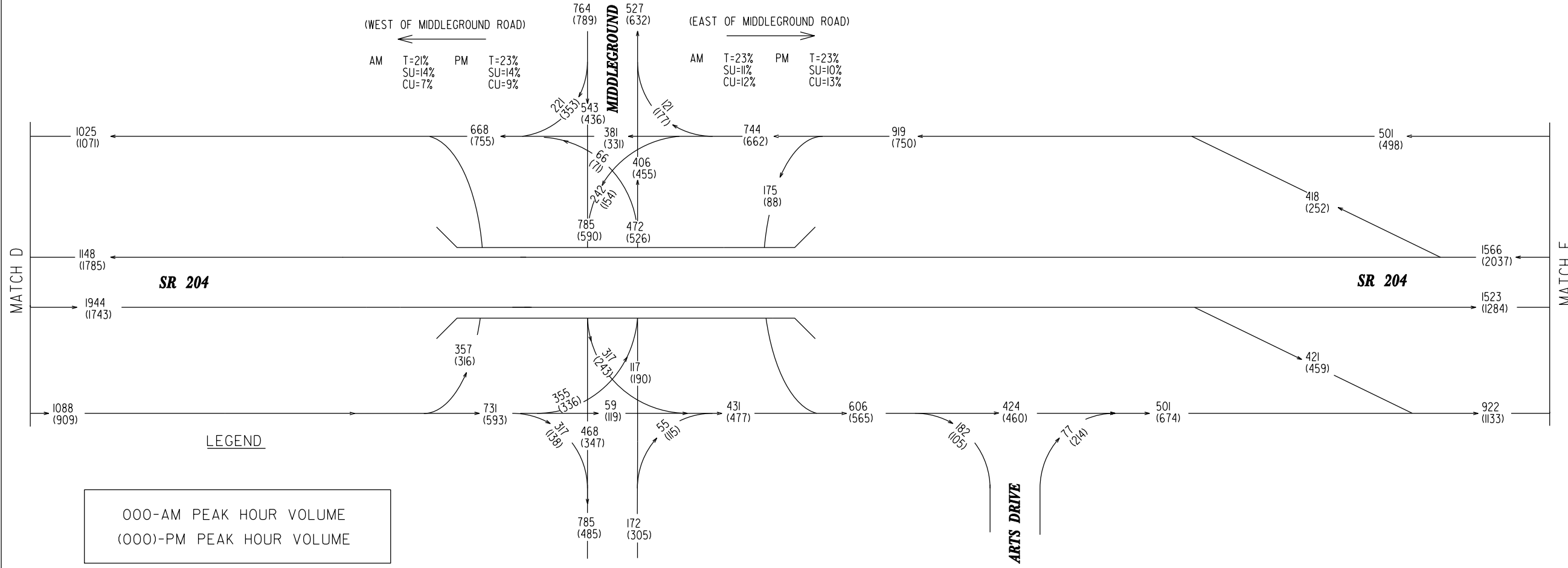
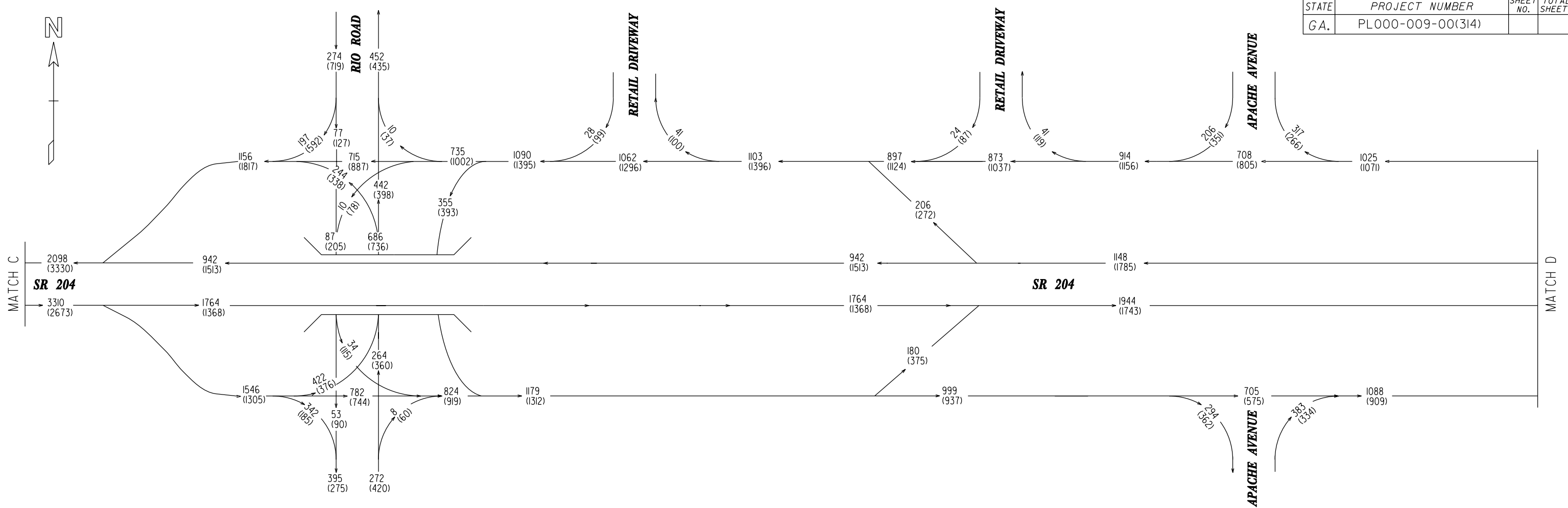
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 BUILD CONCEPT A 2015  
 PEAK HOUR VOLUMES

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FIGURE 33

SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER    | SHEET NO. | TOTAL SHEETS |
|-------|-------------------|-----------|--------------|
| GA.   | PL000-009-00(314) |           |              |



LEGEND

000-AM PEAK HOUR VOLUME  
(000)-PM PEAK HOUR VOLUME

SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 BUILD CONCEPT A 2015  
 PEAK HOUR VOLUMES

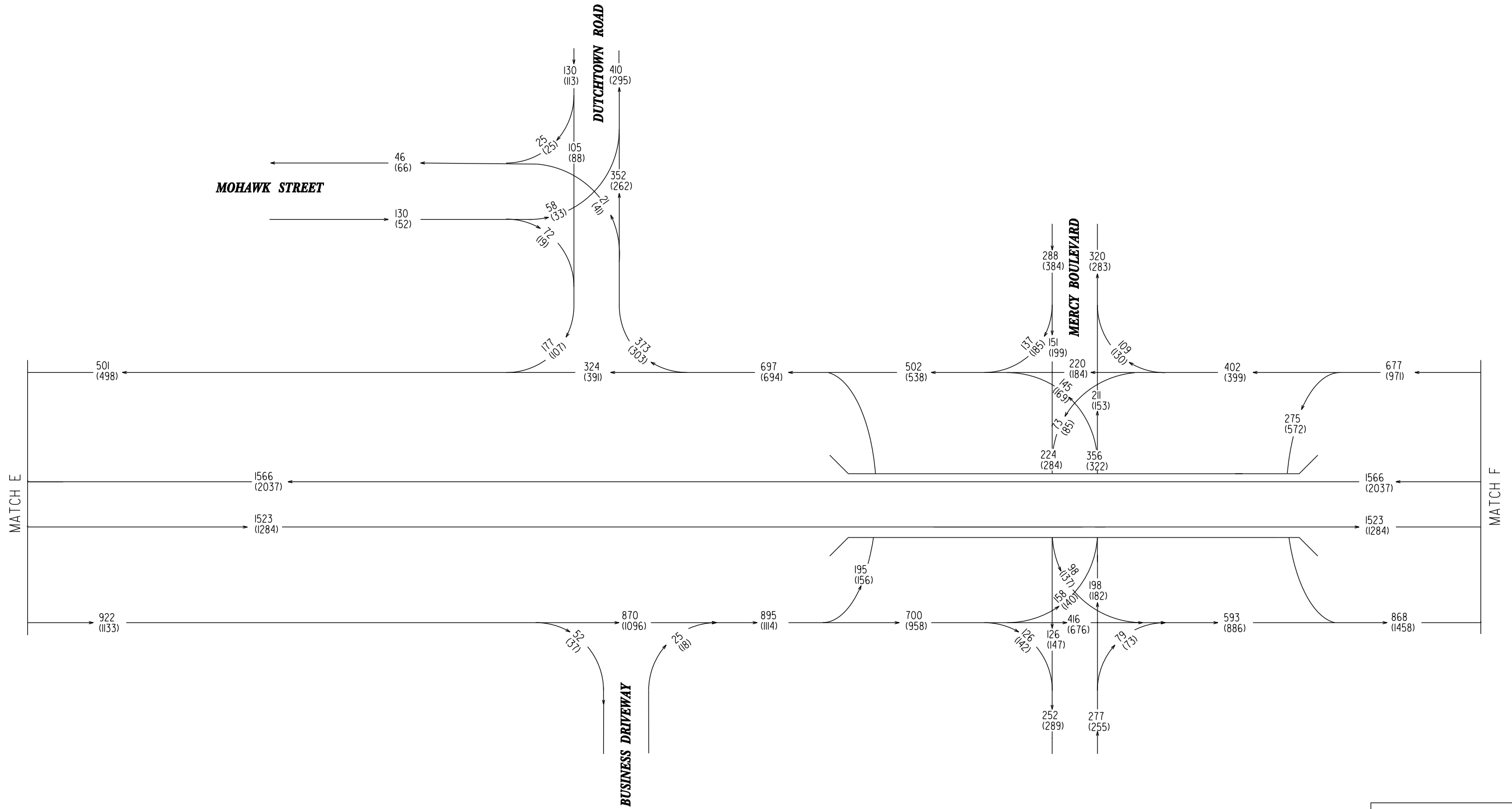
**JACOBS™**

FIGURE 34

SCALE: N.T.S.      AUGUST 2011



| STATE | PROJECT NUMBER    | SHEET NO. | TOTAL SHEETS |
|-------|-------------------|-----------|--------------|
| GA.   | PL000-009-00(314) |           |              |



LEGEND

|                           |
|---------------------------|
| 000-AM PEAK HOUR VOLUME   |
| (000)-PM PEAK HOUR VOLUME |



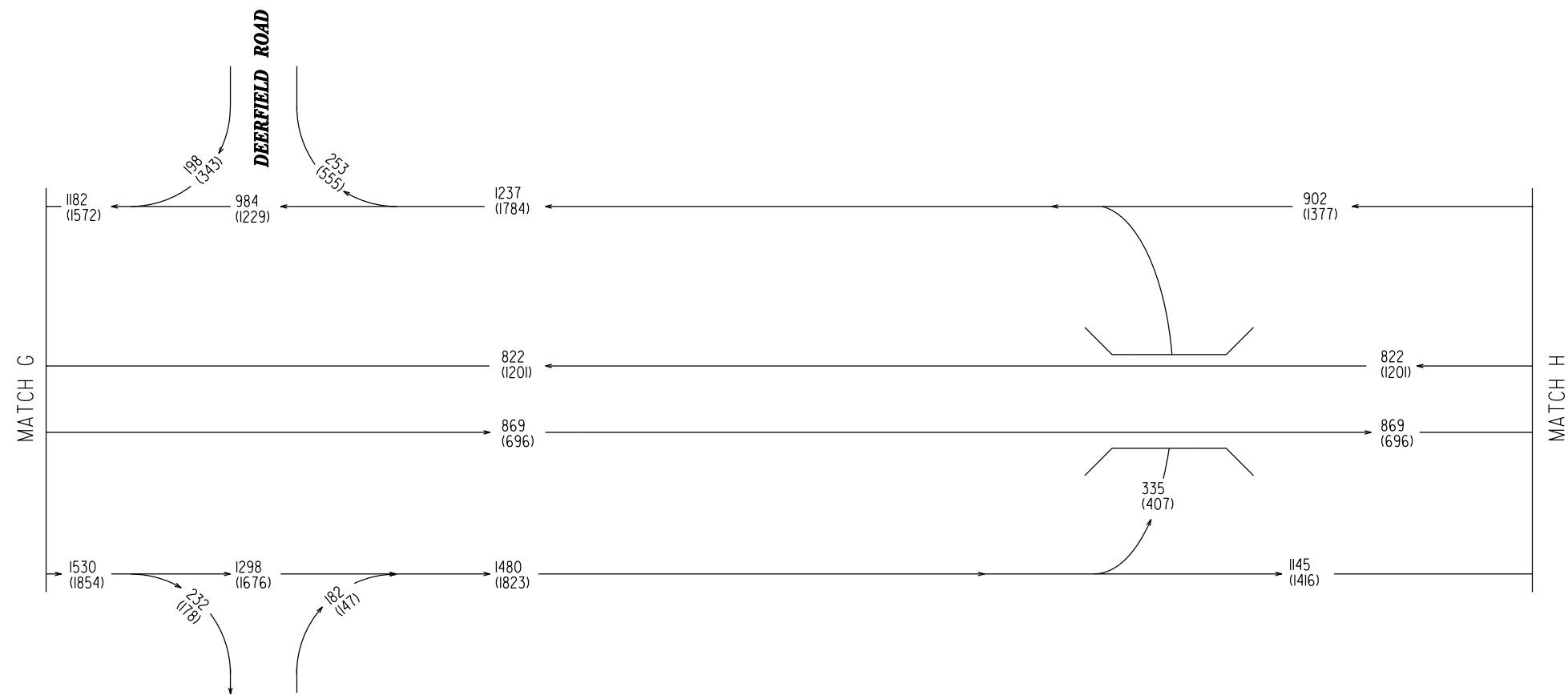
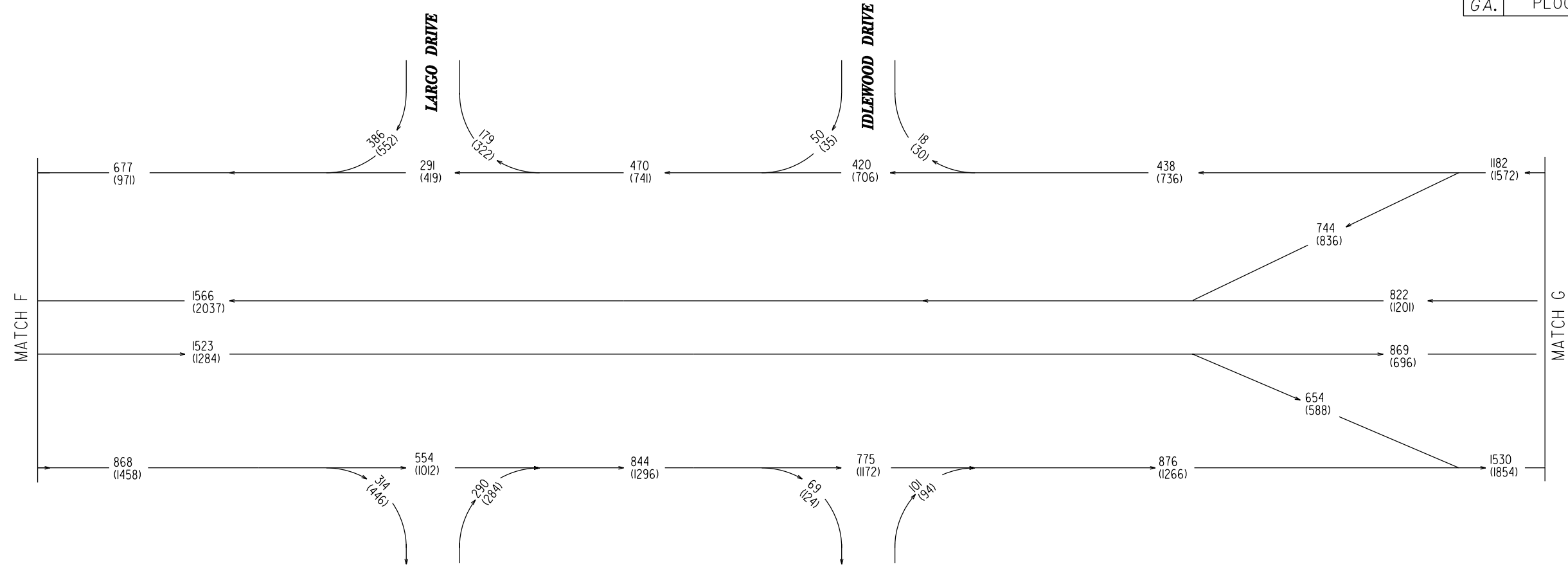
SR 204 TRAFFIC ANALYSIS  
 PINO. 0009314  
 CHATHAM COUNTY  
 BUILD CONCEPT A 2015  
 PEAK HOUR VOLUMES

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FIGURE 35

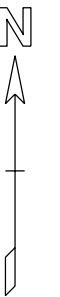
SCALE: N.T.S.      AUGUST 2011

| STATE | PROJECT NUMBER    | SHEET NO. | TOTAL SHEETS |
|-------|-------------------|-----------|--------------|
| GA.   | PL000-009-00(314) |           |              |



LEGEND

000-AM PEAK HOUR VOLUME  
 (000)-PM PEAK HOUR VOLUME



SR 204 TRAFFIC ANALYSIS  
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 BUILD CONCEPT A 2015  
 PEAK HOUR VOLUMES

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FIGURE 36

SCALE: N.T.S.      AUGUST 2011