Brightseat Tech Park

Prince George's County, Maryland
August 21, 2023

Traffic Impact Analysis

Prepared for:
Lerner Enterprises

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The Traffic Group®

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Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21803, Expiration Date: 12/9/2023.

Prepared by:	Wes Guckert, PTP Shulin Li, P.E., PTOE, RSP

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INTRODUCTION AND SUMMARY OF FINDINGS

Study Purpose

This Traffic Impact Analysis (TIA) was prepared to determine what impact the proposed development of Brightseat Tech Park, located along in the northwest quadrant of I-95 and MD 202 (Landover Road), north of MD 202 and east of Brightseat Road could have on the adjacent road network.

Study Criteria/Methodology

This TIA is in accordance with the Transportation Review Guidelines established by the Maryland-National Capital Park and Planning Commission (M-NCPPC). The methodology used for this analysis is in accordance with the requirements of the region. A Scoping Agreement was prepared, submitted, and approved by the Transportation Planning staff. A copy of the approved Scoping Agreement is contained in Appendix A.

The trip generation determinations made in this report are based on the trip generation tables contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual for data centers.

Scope of Services

The following is the scope of services undertaken as part of this report:

- Field investigation to collect physical information concerning the road system.
- Conduct intersection turning movement counts from 6:30–9:30 AM and 4–7 PM on a weekday when schools are in session and operating on a normal schedule.
- Obtain information for nearby approved developments planned in the vicinity of this property.
- Conduct a trip generation and trip distribution analysis for the other nearby developments.
- Conduct a trip generation and trip distribution analysis for the proposed development of the data center.
- Conduct intersection capacity analyses to determine existing and projected levels of service at the study intersections.

- Provide recommendations necessary to accommodate the proposed development of the property assuming full development of the property and assuming full development of the background subdivisions and assuming the growth rates that are used (larger than normal) hold true through to the year 2029 (6 years into the future).

Summary of Findings and Recommendations

This Traffic Impact Analysis was prepared in accordance with the Transportation Review Guidelines established by M-NCPPC. The proposed development of Brightseat Tech Park will require improvements at the intersection of MD 202 and Brightseat Road and at the intersection of MD 202 and the northbound off-ramp of I-95.

The methodology used to undertake this analysis is contained in the sections that follow.

EXISTING TRAFFIC CONDITIONS

Site Information

The property is located along the east side of Brightseat Road, south of Evarts Street, west of I-95, and north of MD 202 (Landover Road). This property was previously the Landover Regional Mall.

This project is planned to contain up to 4,132,500 sq ft of data center space located in multiple buildings with access to Evarts Street on the north and Brightseat Road on the west. No access is proposed along MD 202 (Landover Road).

Study Area

MD 202 in this area is a multi-lane arterial typically with two to three lanes in each direction, left turn lanes at all intersections, and right turn lanes at some intersections. Figure 1 is a site location map.

The study area includes the following signalized intersections:

- Brightseat Road and Evarts Street
- MD 202 and Brightseat Road
- MD 202 and southbound ramp to I-95
- MD 202 and northbound ramp from I-95
- MD 202 and McCormick Drive and St. Joseph's Drive

All five study intersections are signalized and are the study areas that were agreed to in the scoping document.

Figure 2 details existing lane use for the study area intersections.

Traffic Volumes

The Traffic Group conducted intersection turning movement counts at each of the study area intersections discussed above. Those traffic counts were conducted in April and May of 2023.

The total vehicles observed during these counts are shown in summary sheets contained in Appendix A.

Existing peak hour traffic volumes for the study intersections as well as the count date and the peak hour of each intersection are shown in Figure 3.

Figure 1. Site Location Map

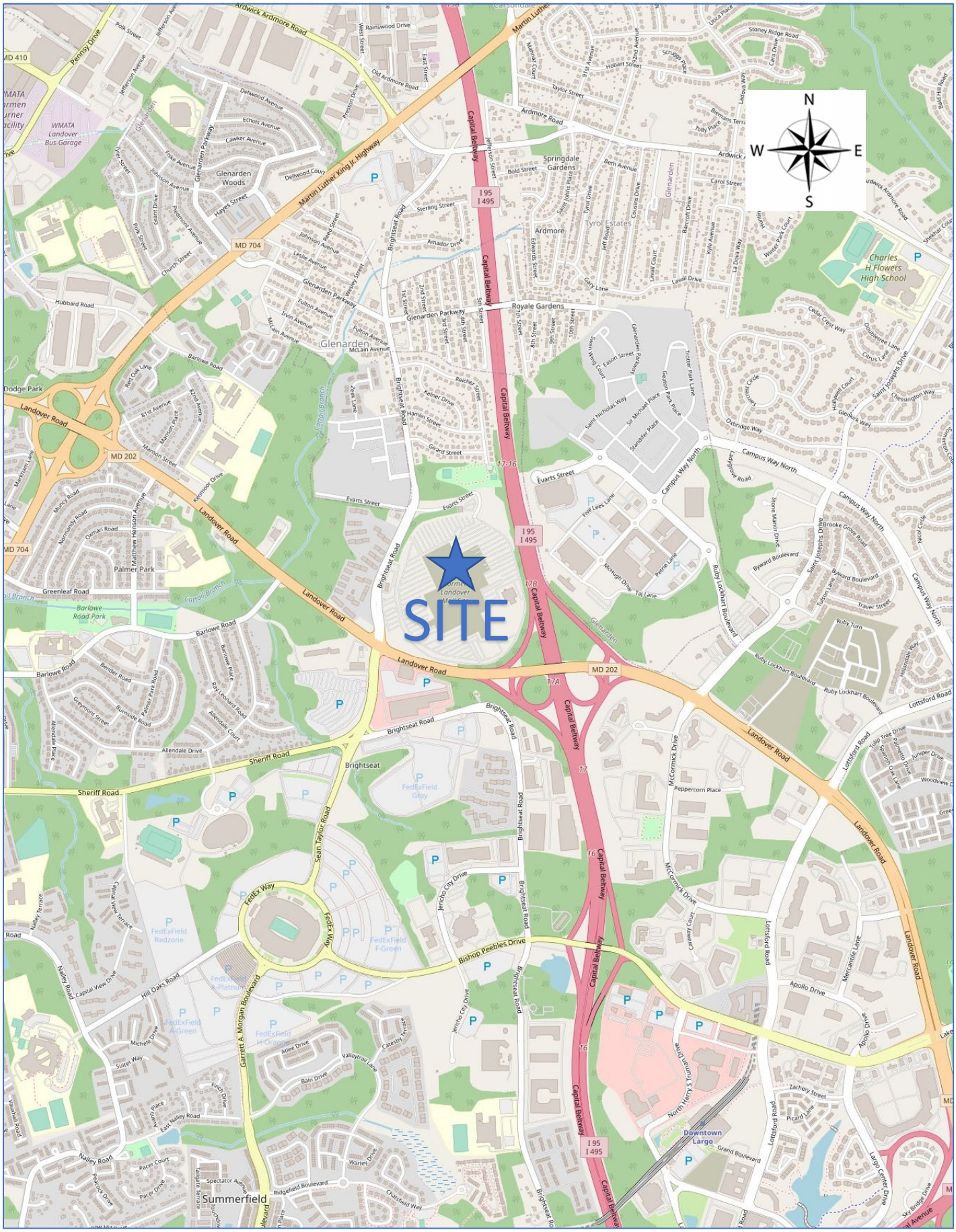

Figure 2. Existing Lane Use

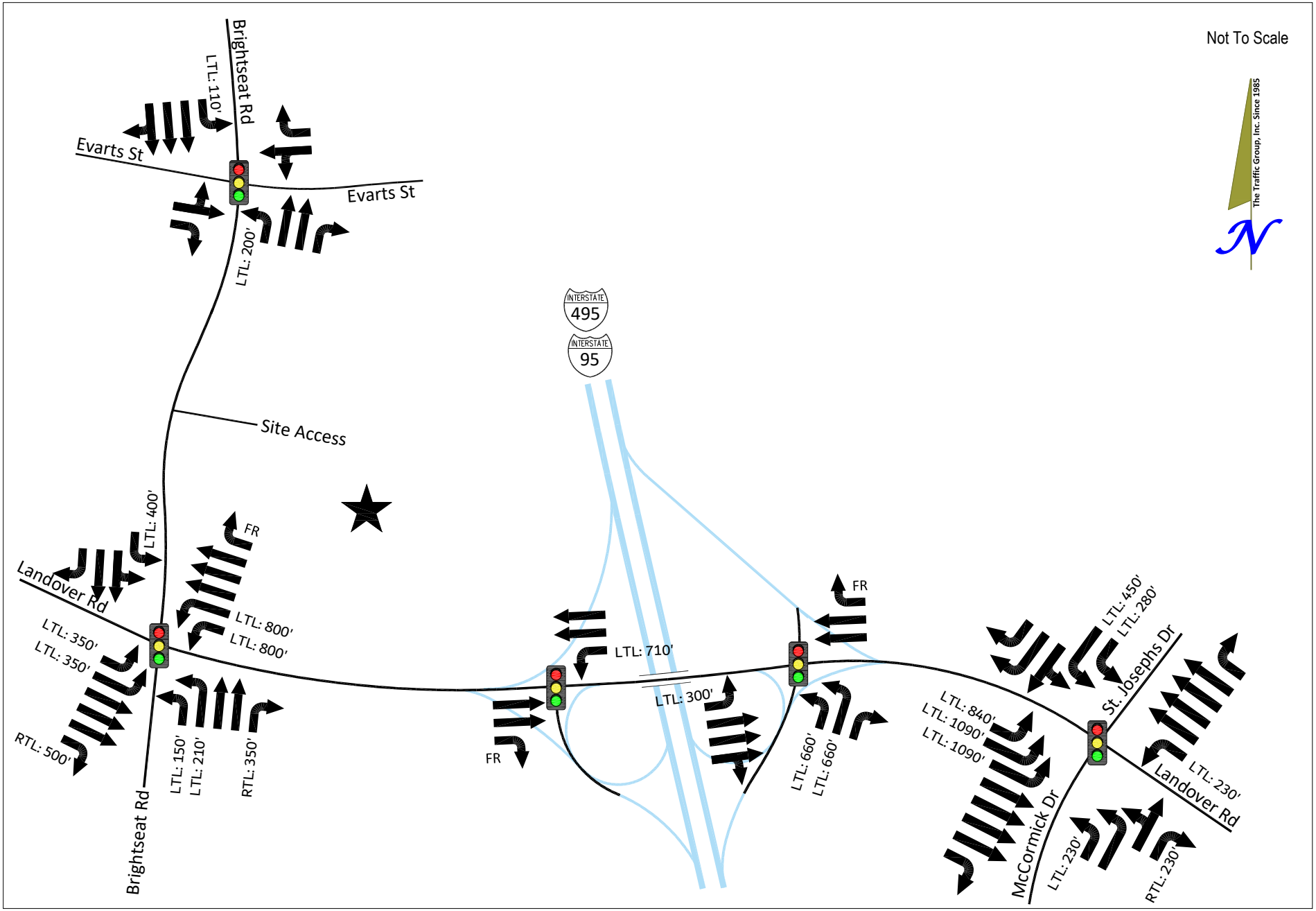

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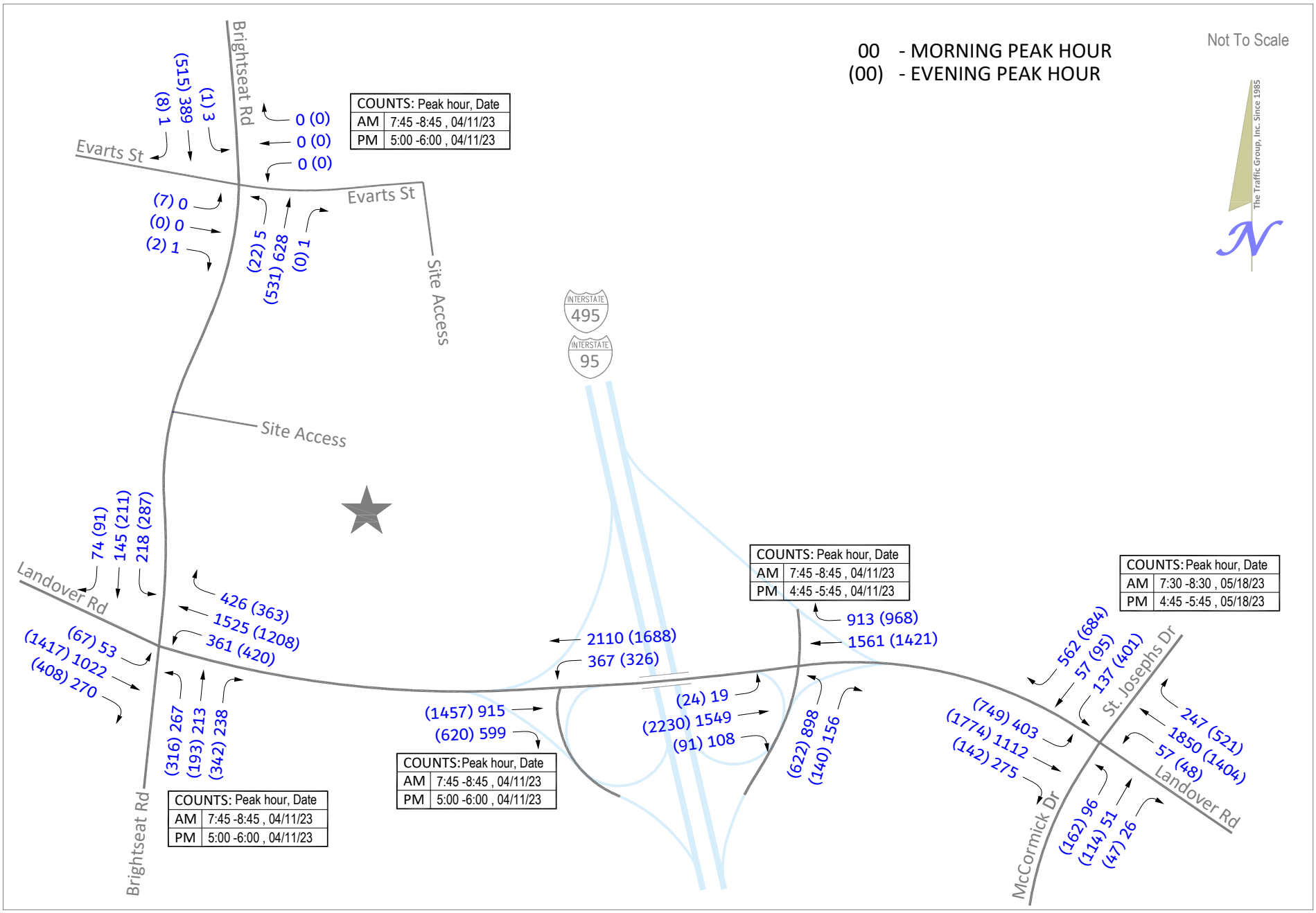
Figure 3. Existing Peak Hour Traffic Volumes



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Analysis of Existing Traffic Conditions

Intersection capacity analyses were conducted for each of the study area intersections, and the results are shown in Table 3. Copies of the capacity worksheets are contained in Appendix B. All five study area intersections for existing 2023 conditions are operating at a Level of Service "A," "B," "C," or "D" during both the morning and evening peak hours.

BACKGROUND TRAFFIC CONDITIONS

Design Year

As required by the Transportation Review Guidelines, regional growth and traffic projected to be generated by other approved developments must be considered in a traffic study.

For MD 202, we assumed thru traffic growth at 3.74% per year for 6 years. For Brightseat Road north of MD 202, we assumed 3.94% growth per year for 6 years.

These traffic growth percentages are significantly higher than what has been found on most other roadways in the region. For most other roadways, traffic growth varies between 0% and 2%.

Figure 4 details the 2029 base peak hour volumes assuming the traffic growth percentages listed above.

Nearby Approved Developments

In addition to regional growth, traffic projected to be generated by other approved developments must also be taken into consideration. Based on information obtained from M-NCPPC, PGAtlas, and our knowledge of the area, we compiled a list of 25 developments which have already received approval in the study area. These projects are depicted in Figure 5 as it relates to location and detailed on Tables 1A and 1B.

Trip Generation for Nearby Developments

We consulted the Prince George's County trip generation tables and the ITE Trip Generation Manual to prepare Tables 1A and 1B. These tables show the trip generation rates and the peak hour trips projected to be generated by each of the nearby developments. The peak hour trips were then distributed and assigned to the road system on the figures contained in Appendix C. Figure 6 was prepared to show the combined peak hour trips projected to be generated at the study intersections. Figure 7 is the 2029 background volumes.

Figure 4. 2029 Base Peak Hour Traffic Volumes

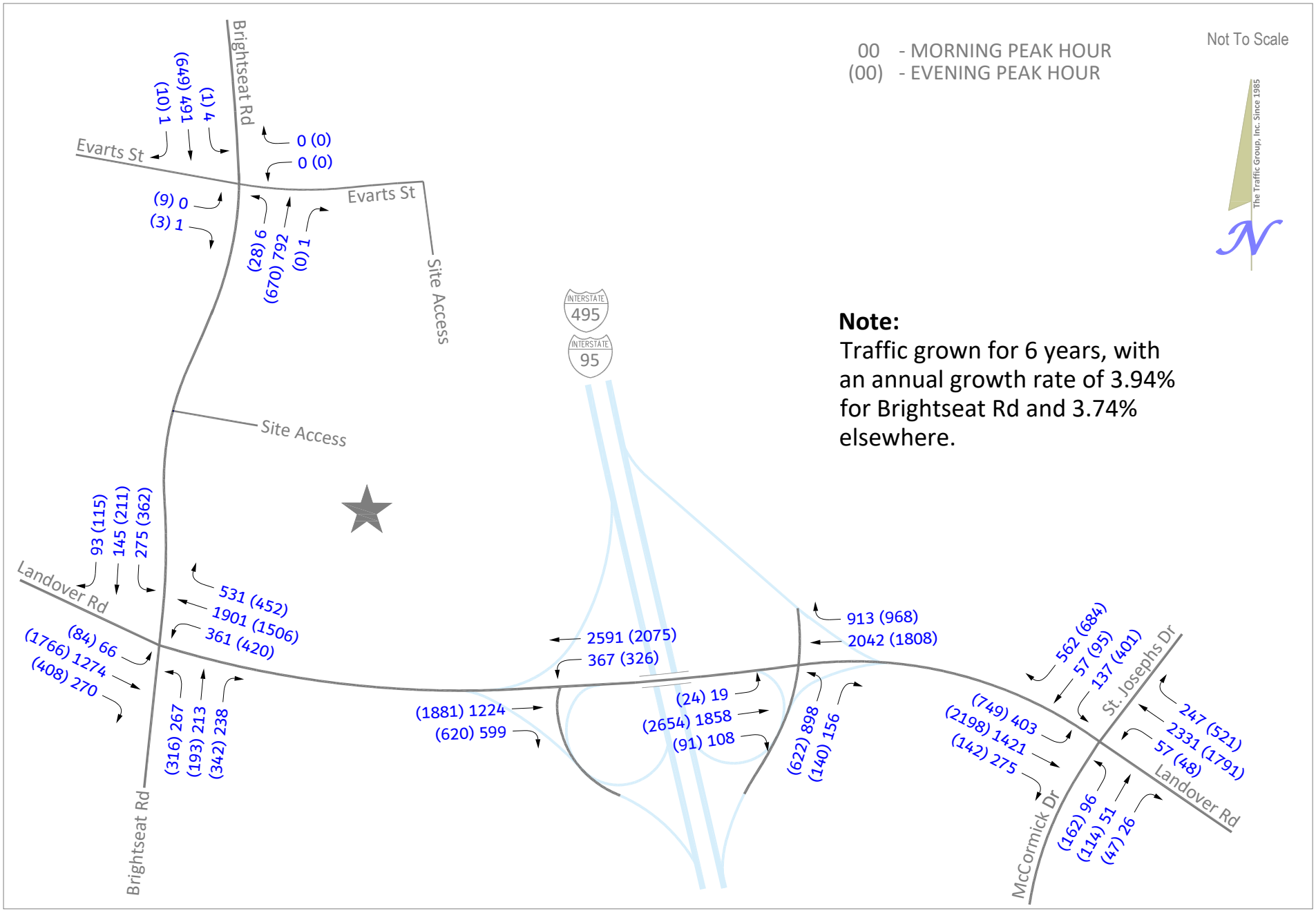

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Figure 5. Location Map for Background Developments

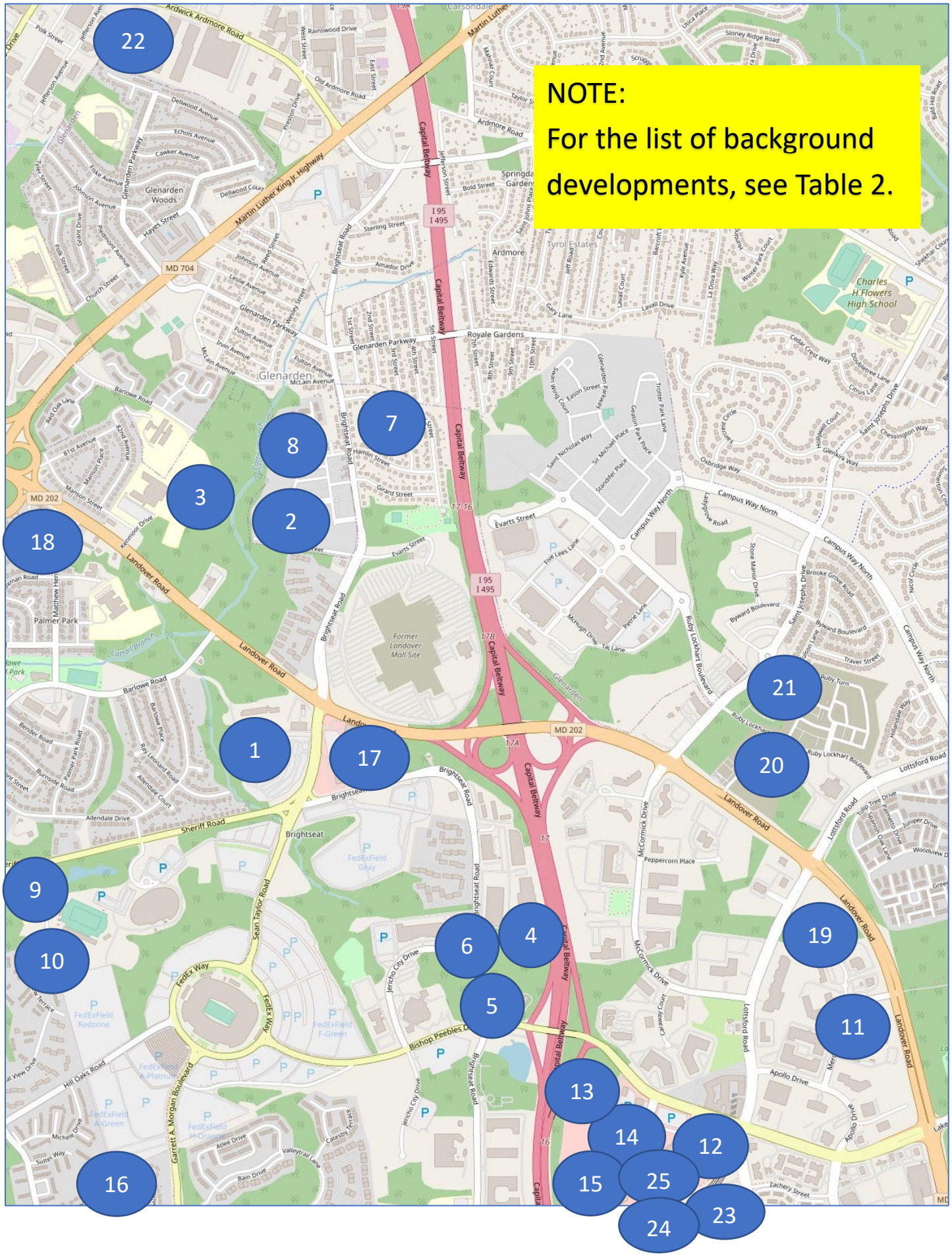


Table 1A. Trip Generation Rates for Background Developments

Trip Rates / Formulae	In/Out %
Townhouses (Prince Georges County Rates)	
AM Peak Hour Trips = 0.70 x Units	20/80
PM Peak Hour Trips = 0.80 x Units	65/35
Apartments (garden and mid-rise, Prince Georges County Rates)	
AM Peak Hour Trips = 0.52 x Units	19/81
PM Peak Hour Trips = 0.60 x Units	65/35
Senior Adult Housing - Multifamily (ITE-252, Units)	
AM Peak Hour Trips = 0.19 x Units + 0.90	34/66
PM Peak Hour Trips = 0.25 x Units + 0.07	56/44
Middle/Junior High School (students, ITE-522)	
AM Peak Hour Trips = 0.67 x Students	54/46
PM Peak Hour Trips = 0.15 x Students	48/52
Industrial (Light Service, Prince Georges County Rates)	
AM Peak Hour Trips = 0.86 x ksf	80/20
PM Peak Hour Trips = 0.86 x ksf	20/80
Convenience Store/Gas Station (4-5.5 ksf, ITE-945)	
AM Peak Hour Trips = 27.04 x VFP	50/50
PM Peak Hour Trips = 22.76 x VFP	50/50
General Office (0.4 FAR, Prince Georges County Rates)	
AM Peak Hour Trips = 2.0 x ksf	90/10
PM Peak Hour Trips = 1.85 x ksf	19/81
Single-Family Housing (Prince Georges County Rates)	
AM Peak Hour Trips = 0.75 x Units	20/80
PM Peak Hour Trips = 0.90 x Units	66/34
Senior Adult Housing - Single-Family (ITE-251, Units)	
Ln(AM Peak Hour Trips) = 0.76 x Ln(Units) + 0.16	33/67
Ln(PM Peak Hour Trips) = 0.78 x Ln(Units) + 0.20	61/39
Office (Medical/Professional, Prince Georges County Rates)	
AM Peak Hour Trips = 2.85 x ksf	81/19
PM Peak Hour Trips = 3.8 x ksf	32/68
Strip Retail Plaza, <40 ksf (ITE-822)	
Ln(AM Peak Hour Trips) = 0.66 Ln(X) + 1.84	60/40
PM Peak Hour Trips = Ln(T) = 0.71 Ln(ksf) + 2.72	50/50
Shopping plaza, 40-150 ksf - no supermarket (ITE-821)	
AM Peak Hour Trips =1.73 x ksf	62/38
PM Peak Hour Trips = 5.19 x ksf	49/51
Hotel Rooms (Rooms, ITE-310)	
AM Peak Hour Trips = 0.50 x Rooms - 7.45	56/44
PM Peak Hour Trips = 0.74 x Rooms - 27.89	51/49
Hospital (beds, ITE-610)	
AM Peak Hour Trips = 1.79 x beds	72/28
PM Peak Hour Trips = 1.69 x beds	33/67

Table 1B. Trip Generation Trips for Background Developments

TRIP TOTALS		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1. 1990 Brightseat Road Property							
Townhouses (Prince Georges County Rates)							
170	units	24	95	119	88	48	136
2. Glenarden Redevelopment							
Apartments (garden and mid-rise, Prince Georges County Rates)							
232	units	23	98	121	90	49	139
Senior Adult Housing - Multifamily (ITE-252, Units)							
101	units	7	13	20	14	11	25
Townhouses (Prince Georges County Rates)							
97	units	14	54	68	51	27	78
3. Kenmoor Middle School (to expand to 1200 students from 962)							
Middle/Junior High School (students, ITE-522)							
238	students	86	73	159	17	19	36
4. Brightseat Industrial							
Industrial (Light Service, Prince Georges County Rates)							
152,080	sq.ft.	105	26	131	26	105	131
5. Brightseat Road 7-Eleven							
Convenience Store/Gas Station (4-5.5 ksf, ITE-945)							
16	VFP	216	217	433	182	182	364
Pass-by Trips		-164	-165	-329	-137	-137	-274
New Trips		**52**	**52**	**104**	**45**	**45**	**90**
6. Hyattsville Brightseat Road							
General Office (0.4 FAR, Prince Georges County Rates)							
51,563	sq.ft.	93	10	103	18	77	95
7. Glenarden Heights, Lots 3 & 4							
Single-Family Housing (Prince Georges County Rates)							
2	units	0	2	2	1	1	2
8. Glenarden Plat 3, Lots 1-24							
Townhouses (Prince Georges County Rates)							
24	units	3	14	17	12	7	19

Table 1B (cont'd). Trip Generation Trips for Background Developments

TRIP TOTALS		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
9. Gopi Mandela Property, Lots 23-27							
Single-Family Housing (Prince Georges County Rates)							
2	units	0	2	2	1	1	2
10. First Baptist Church of Highland Park							
Senior Adult Housing - Single-Family (ITE-251, Units)							
63	units	9	18	27	19	12	31
11. Kaiser Permanente							
Office (Medical/Professional, Prince Georges County Rates)							
90,000	sq.ft.	207	50	257	108	234	342
12. Ascend Apollo							
Phase 1							
Apartments (garden and mid-rise, Prince Georges County Rates)							
594	units	59	250	309	231	125	356
General Office (0.4 FAR, Prince Georges County Rates)							
35,511	sq.ft.	64	7	71	12	54	66
Phase 2							
Apartments (garden and mid-rise, Prince Georges County Rates)							
379	units	38	159	197	148	79	227
Strip Retail Plaza, <40 ksf (ITE-822)							
4,489	sq.ft.	10	7	17	22	22	44
	Pass-by Trips	0	0	0	-13	-13	-26
	New Trips	**10**	**7**	**17**	**9**	**9**	**18**
13. Carillon Prince George'S County (Boulevard at The Capital Centre)							
Shopping plaza, 40-150 ksf - no supermarket (ITE-821)							
50,000	sq.ft.	54	33	87	127	133	260
	Pass-by Trips	0	0	0	-51	-53	-104
	New Trips	**54**	**33**	**87**	**76**	**80**	**156**
General Office (0.4 FAR, Prince Georges County Rates)							
521,000	sq.ft.	938	104	1042	182	782	964

Table 1B (cont'd). Trip Generation Trips for Background Developments

TRIP TOTALS	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Apartments (garden and mid-rise, Prince Georges County Rates)						
3,000 units	300	1260	1560	1170	630	1800
Hotel Rooms (Rooms, ITE-310)						
300 Rooms	80	63	143	99	95	194
14. Prince George'S Regional Hospital						
Hospital (beds, ITE-610)						
231 beds	297	116	413	129	261	390
15. Largo Town Center						
Apartments (garden and mid-rise, Prince Georges County Rates)						
532 units	53	224	277	207	112	319
Strip Retail Plaza, <40 ksf (ITE-822)						
7,952 sq.ft.	15	10	25	33	33	66
Pass-by Trips	0	0	0	-20	-20	-40
New Trips	**15**	**10**	**25**	**13**	**13**	**26**
16. Summerfield at Morgan Station Plat						
Townhouses (Prince Georges County Rates)						
52 units	7	29	36	27	15	42
17. Landover Crossing Shopping Center						
Shopping plaza, 40-150 ksf - no supermarket (ITE-821)						
93,477 sq.ft.	100	62	162	238	247	485
Pass-by Trips	0	0	0	-95	-99	-194
New Trips	**100**	**62**	**162**	**143**	**148**	**291**
18. Royal Farms #411, Kent Village						
Convenience Store/Gas Station (4-5.5 ksf, ITE-945)						
16 VFP	216	217	433	182	182	364
Pass-by Trips	-164	-165	-329	-137	-137	-274
New Trips	**52**	**52**	**104**	**45**	**45**	**90**
19. 9611 Lottsford Road						
General Office (0.4 FAR, Prince Georges County Rates)						
88,050 sq.ft.	158	18	176	31	132	163

Table 1B (cont'd). Trip Generation Trips for Background Developments

TRIP TOTALS	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
20. Woodmore Overlook Commercial						
Apartments (garden and mid-rise, Prince Georges County Rates)						
164 units	16	69	85	64	34	98
Convenience Store/Gas Station in use						
21. Balk Hill Centre						
Townhouses occupied.						
Convenience Store/Gas Station (4-5.5 ksf, ITE-945)						
16 VFP	216	217	433	182	182	364
Pass-by Trips	-164	-165	-329	-137	-137	-274
New Trips	**52**	**52**	**104**	**45**	**45**	**90**
22. WMATA Repair and Overhaul Facility						
Trips have minimal impact to study Intersections.						
23. Crescents at Largo Town Center						
Apartments (garden and mid-rise, Prince Georges County Rates)						
352 units	35	148	183	137	74	211
Townhouses (Prince Georges County Rates)						
84 units	12	47	59	44	23	67
24. Metropolitan of Largo						
Apartments (garden and mid-rise, Prince Georges County Rates)						
240 units	24	101	125	94	50	144
25. Largo Parcel O-ETOD						
Apartments (garden and mid-rise, Prince Georges County Rates)						
269 units	27	113	140	105	56	161
Strip Retail Plaza, <40 ksf (ITE-822)						
1,990 sq.ft.	6	4	10	12	13	25
Pass-by Trips	0	0	0	-7	-8	-15
New Trips	**6**	**4**	**10**	**5**	**5**	**10**

Figure 6. Combined Trip Assignment for Background Developments

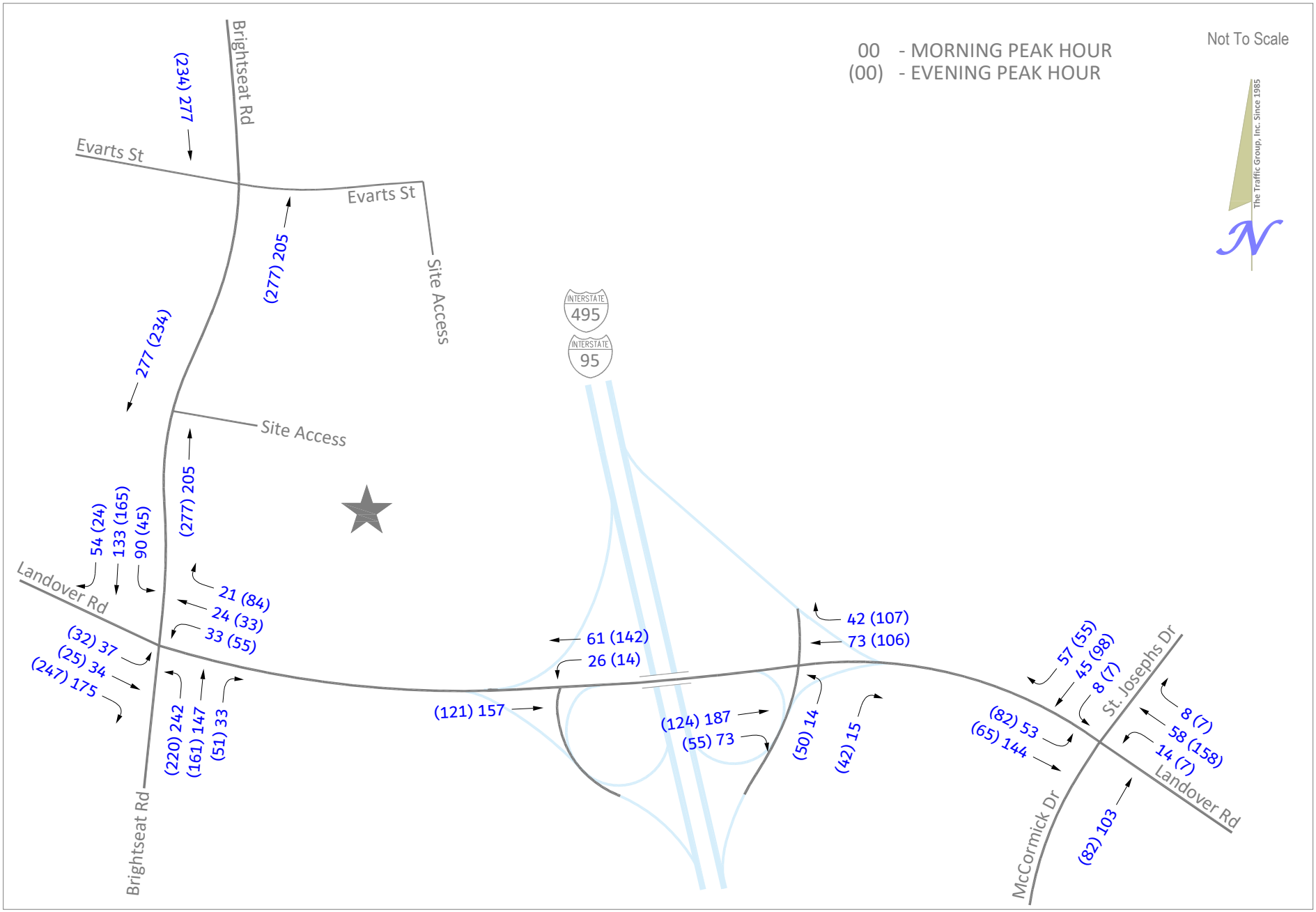
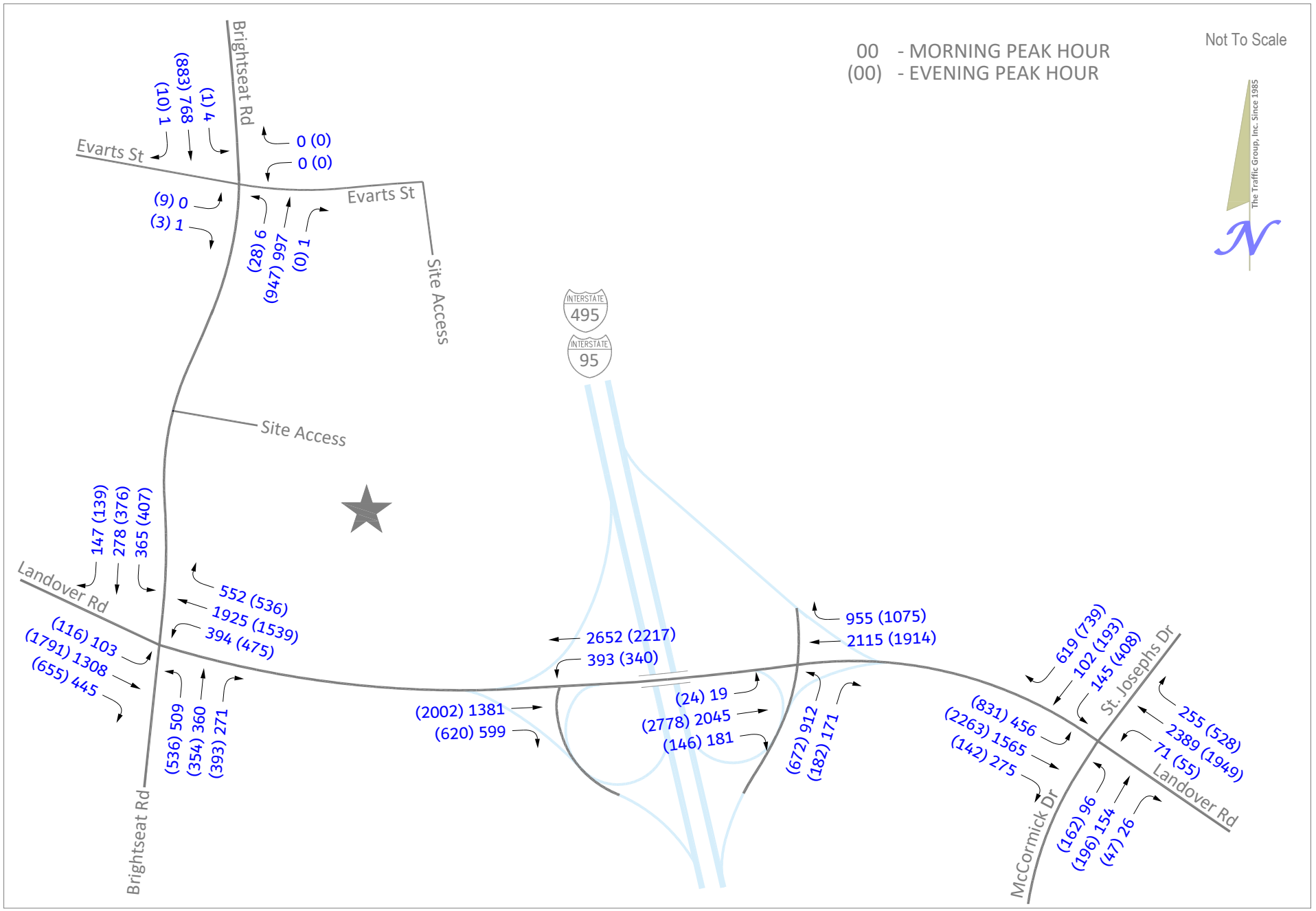


Figure 7. 2029 Background Peak Hour Traffic Volumes



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Analysis of Background Traffic Conditions

Intersection capacity analyses were conducted for each of the five study area intersections, and the results are shown in Table 3 for the year 2029 background peak hour conditions.

A review of Table 3 indicates that based on background traffic conditions (without the Data Center), the intersection of MD 202 and the I-95 northbound ramps exceeds the Critical Lane Volume (CLV) threshold of 1,600. That means that improvement is needed at this intersection even without the development of the proposed Brightseat Tech Park. Copies of the capacity worksheets are contained in Appendix B.

TOTAL TRAFFIC CONDITIONS

Site Information

As detailed previously, the property is located in the northwest quadrant of I-95 and MD 202. Parking is expected to be minimal, and the overall development is proposed at 4,132,500 sq ft. It is expected there will be a site access along Evarts Street on the north end of the site and one access point along Brightseat Road on the west side of the property.

Trip Generation/Distribution

Table 2 details the trip generation rates for Brightseat Tech Park based upon ITE Land Use Code 160 using the formula contained in the ITE Trip Generation Manual. Based on the 11th Edition of the Manual, the 4,132,500-sq ft data center would generate a combined 532 morning peak hour trips and 449 evening peak hour trips.

The assignment and trip distribution of the trips are shown in Figure 8 with over 71% of the traffic expected to be oriented to and from the beltway (I-95). The trip distribution was approved by the staff in the scoping agreement and is based upon information relating to where employees in the region currently originate.

Analysis of Total Traffic Conditions

Figure 9 details the year 2029 total peak hour traffic volumes taking into consideration existing 2023 conditions, a large growth additive for 6 years to the year 2029, and the traffic projected to be generated by the proposed Data Center.

Intersection capacity analyses were once again conducted for the study area intersections, and the results are shown in Table 3. Copies of the capacity worksheets are contained in Appendix B.

As shown in Table 3, improvements are needed at two intersections with the Data Center even though a minimal amount of traffic is added to the intersections with the Data Center.

Figure 10 contains the required improvements at:

1. MD 202 & Brightseat Road
   a. Restripe SB lane use on Brightseat Road
   b. Add a third NB left turn lane on Brightseat Road

2. MD 202 & I-95 NB ramps
   a. Add a third WB thru lane on MD 202

Table 2. Trip Generation for Brightseat Tech Park

Trip Rates / Formulae	In/Out %
Data Center (ksf, ITE-160)	
AM Peak Hour Trips = 0.13 x ksf - 5.63	55/45
PM Peak Hour Trips = 0.11 x ksf - 5.56	30/70

TRIP TOTALS	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Proposed Data Center						
4,132,500 sq. ft. Data Center	293	239	532	135	314	449

NOTE: ITE Trip Generation 11th Edition

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Figure 8. Trip Assignment for Subject Site

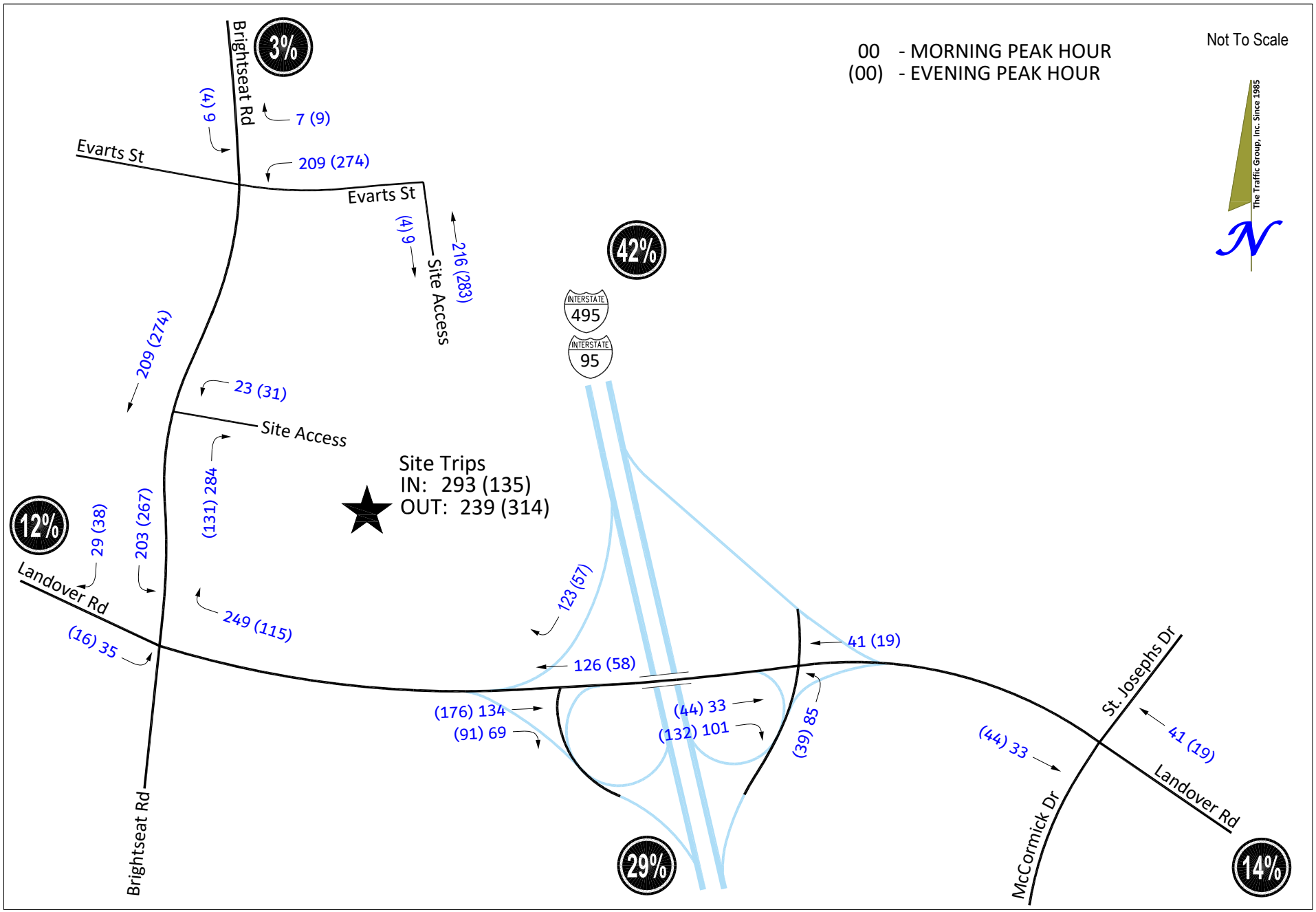

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Figure 9. 2029 Total Peak Hour Traffic Volumes

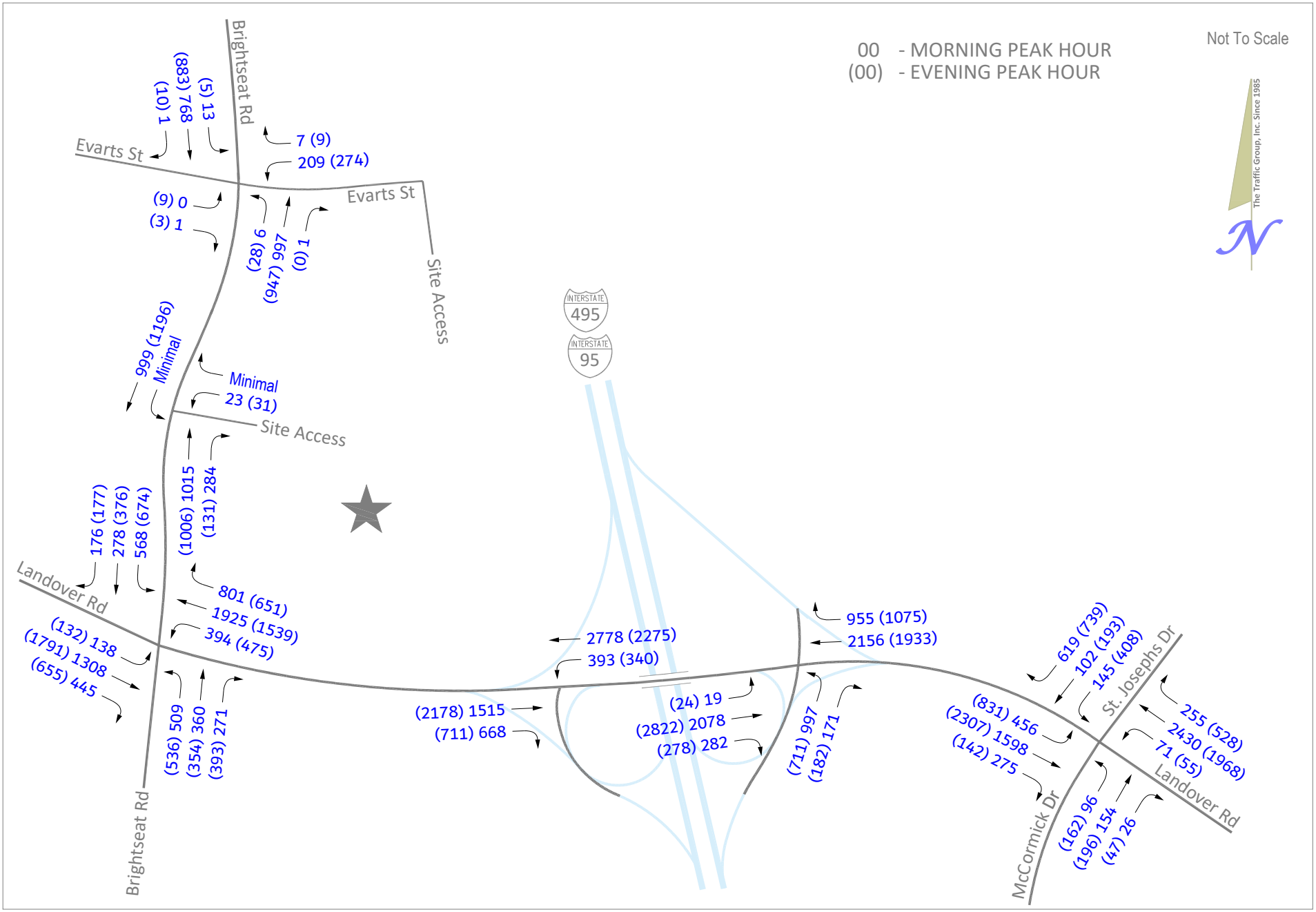

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Table 3. Results of Intersection Capacity Analysis

	Existing	Year 2029 Background	Year 2029 Total
Morning Peak Hour Traffic			
1. Brightseat Road & Evarts Street	A/348	A/552	A/791
2. MD 202 & Brightseat Road	A/901	D/1336	D/1441
with improvement	----	----	D/1365
3. MD 202 & I-495 SB Onramp	C/1161	E/1459	E/1528
4. MD 202 & I-495 NB Ramps	D/1417	**F/1729**	**F/1803**
with improvement	----	----	E/1471
5. MD 202 & St. Josephs Dr	A/884	C/1179	C/1191
6. Brightseat Road & Site Access (HCM Unsignalized worst movement)			D/32.9
Evening Peak Hour Traffic			
1. Brightseat Road & Evarts Street	A/300	A/531	A/836
2. MD 202 & Brightseat Road	C/1165	E/1583	**F/1690**
with improvement	----	----	E/1593
3. MD 202 & I-495 SB Onramp	B/1127	D/1441	E/1538
4. MD 202 & I-495 NB Ramps	C/1232	E/1485	E/1574
with improvement	----	----	E/1574
5. MD 202 & St. Josephs Dr	B/1060	D/1359	D/1365
6. Brightseat Road & Site Access (HCM Unsignalized worst movement)			E/38.4

NOTE:

1. Background Traffic is derived from combining Existing Traffic, growth and traffic to be generated by approved developments.
2. Total Traffic is derived from combining Background Traffic and traffic to be generated by site.

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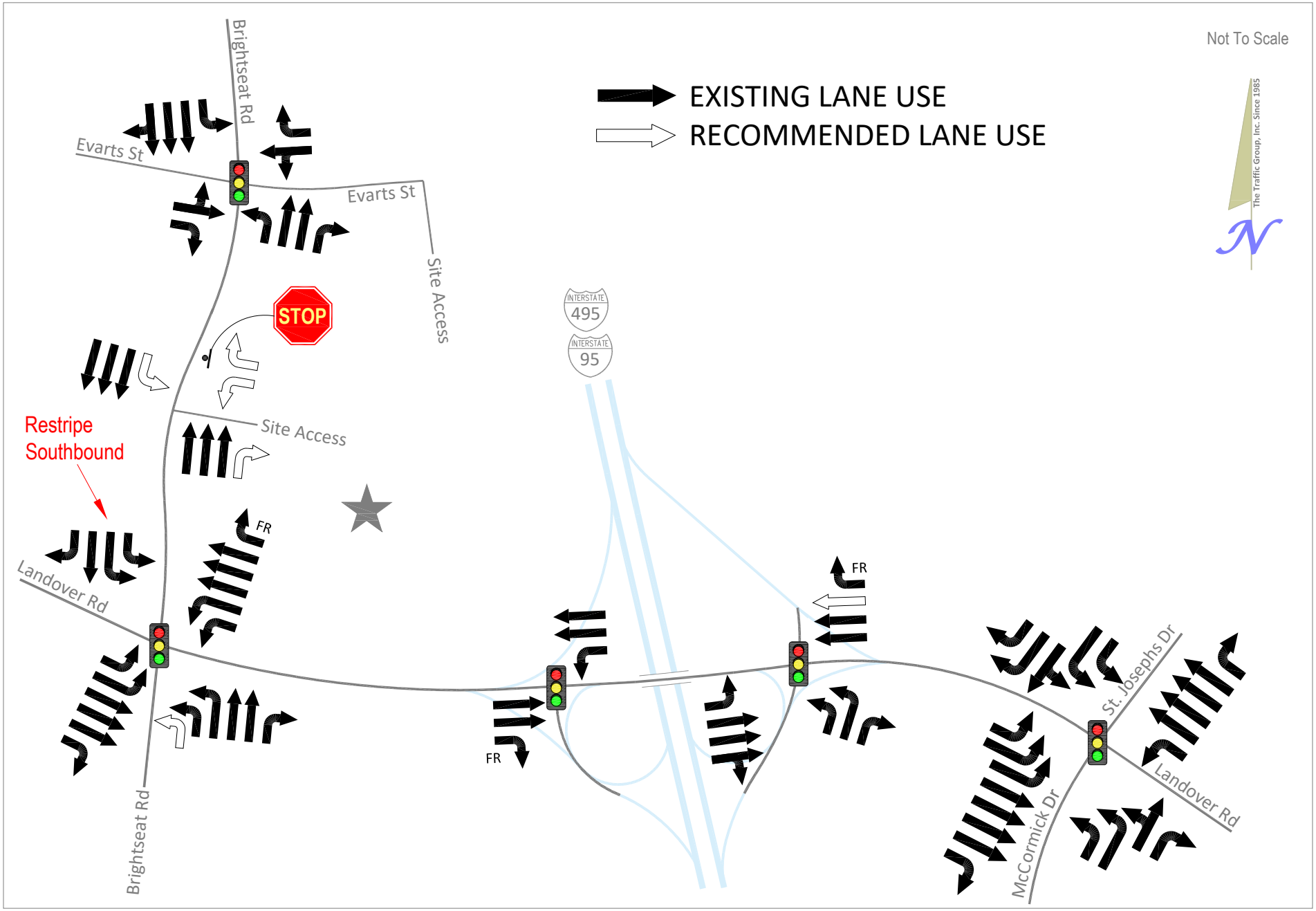
Figure 10. Recommended Future Lane Use and Traffic Control



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RESULTS, RECOMMENDATIONS, AND CONCLUSIONS

See Appendix D for the results of the queuing analysis.

Based on the findings of this report, the proposed development of Brightseat Tech Park will require the following improvements to meet the Planning Commission study guidelines:

1. MD 202 and Brightseat Road

    a. Construct a third northbound to westbound triple left turn lane along Brightseat Road at MD 202.

    b. Restripe southbound to provide a thru lane and double left turn lanes along Brightseat Road at MD 202.

2. MD 202 and Northbound I-95 Off Ramp

    a. Modify and utilize the shoulder along the north side of MD 202 for westbound 202 traffic by restriping and using the shoulder as a third westbound thru lane. By restriping, it will not be necessary to widen the bridge of MD 202 over I-95.

Figure 10 was prepared to show the recommended future lane use and traffic control.

APPENDIX A

Scoping Agreement,

Turning Movement Counts,

and Intersection Aerials

Table 1:
List of Attachments for TIS Scoping Agreement

The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department
Transportation Planning Section, Countywide Planning Division

This form must be completed prior to commencing a traffic impact study (TIS). The completed and signed scoping agreement should be submitted to the Transportation Planning Section (TPS) by the traffic consultant for concurrence and signature. TPS will return a signed copy, with any comments, to the traffic consultant for inclusion in the TIS. Failure to conduct the study in accordance with the guidelines and the signed scoping agreement may be grounds for rejection of the study and thereby necessitate an addendum or a new study prior to the start of the staff review.

Project Name:	Landover Mall Data Center
Transportation Service Area (TSA): Please note if in Local Center or Regional Transit District (Map of TSAs in Appendix)	Local Center TSA 1
Zoning Classification per the new Ordinance and, if this application is submitted under the prior Ordinance, Zoning Classification under the prior Ordinance:	TAC-C
Proposed Zoning Classification (if rezoning was requested as part of application)	N/A
Type of Application (see Table 4):	Preliminary Plan of Subdivision
Project Location:	NE quadrant of MD 202 & Brightseat Road
Traffic Consultant Name: Contact Number(s): Email Address(es):	Wes Guckert The Traffic Group, Inc. 410-931-6600

Describe the Proposal Under Study: Residential—Number and Type of Units: Commercial—Amount and Type of Space: Other Uses and Quantity:	Data Center 3,000,000 Sq.Ft. ITE LUC #160

Are pass-by trip rates in accordance with the Transportation Review Guidelines? (select one)	Yes	No N/A	If no, please provide explanation on separate sheet.
Are there diverted trips? (select one)	Yes	No	If yes, please provide explanation on separate sheet.
Will a transit-oriented development (TOD) credit be used? (Section 4 of the Transportation Review Guidelines) (select one)	Yes	No	Note that all development in TSAs and Regional Transit Districts Centers will be evaluated for TOD.
Will a transit facilities credit be used? (Section 5 of the Transportation Review Guidelines) (select one)	Yes	No	Need/nexus must be justified in study and supported by operating agency.
Will a bike/ped facilities credit be used? (Section 6 of the Transportation Review Guidelines) (select one)	Yes	No	Need/nexus must be justified in study and supported by operating agency.
Are additional trip reductions (internal trips, transit trips, etc.) proposed? (select one)	Yes	No	If yes, please provide explanation on separate sheet.

Attach one or more maps showing the study area network including intersections and links, estimated site trip distribution, and growth factors for through traffic.

Maryland State Highway Administration (SHA) and Department of Public Works and Transportation (DPW&T) capital program improvements assumed:	NONE		
Other improvements assumed:	NONE		
Regional growth assumed:	Yes MP 202 3.74% ORIGIN. 3.94% 6 YEARS		
Is mitigation (Section 8 of the Transportation Review Guidelines) to be proffered? (select one)	Yes	No ONLY IF REQD BY ANALYSIS	Note the locational criteria in Section 8, and please note the clarifications regarding mitigation included in Section 3, Subsection E.

Is a cooperative funding arrangement such as a Surplus Capacity Reimbursement Procedure (SCRP), Public Facilities Financing and Implementation Program (PFFIP), or some other pro rata to be used? (select one)	Yes	(No)	If yes, please provide explanation on separate sheet, and note limitations in Section 3, Subsection E.
Will summer counts be used? (select one)	Yes	(No)	The use of summer counts must have specific concurrence of TPS staff.
Have there been discussions with the permitting agency (SHA and/or DPW&T) regarding access to this site and the analysis requirements? (select one)	Yes	(No)	Section 1, Subsection E strongly advises that these discussions occur early in the development review process. Note that driveway access onto arterial facilities must be justified and approved by the Planning Board as a part of the subdivision process.
Has a listing of background development been developed? (select one)	(Yes)	No	If yes, please provide the list so that TPS staff may either concur or provide changes.
Has a list of attachments been completed and attached (Table 2)?	(Yes)	No	

SIGNED: _____ 5.6.23
Traffic Consultant — Date

APPROVED: Jun Gang — 5/8/2023
TPS Coordinator (or Supervisor) — Date

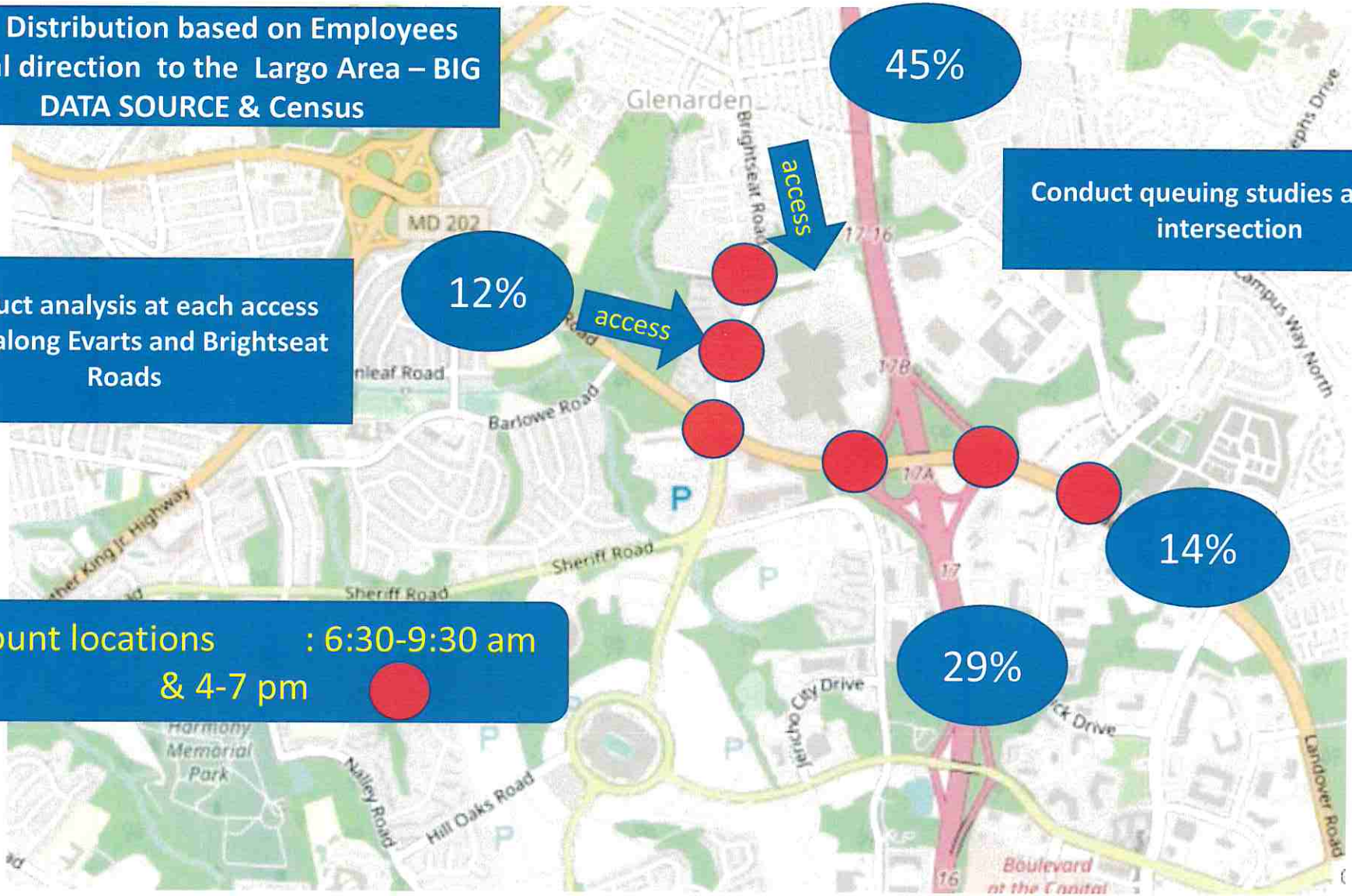
This form is not required for sites that do not require a TIS.

Table 2: List of Attachments for TIS Scoping Agreement

No.	Attachment Description	Yes	No	N/A
1.	List of meeting attendees at scoping meeting:		X	
2.	Aerial (map of project site):	X		
3.	List and map of critical intersections:	X		
4.	Map of site access:	X		
5.	Diagram and memo of trip distribution:	X		
6.	List and map of trip credits and locations:		X	
7.	List and map of background developments in study area:	X		

Figure 1. Site Location Map

Trip Distribution based on Employees arrival direction to the Largo Area – BIG DATA SOURCE & Census



Conduct queuing studies at each intersection

Conduct analysis at each access point along Evarts and Brightseat Roads

6 count locations : 6:30-9:30 am & 4-7 pm

Table 1. Trip Generation for Landover Data Center

Trip Rates / Formulae	In/Out %
Data Center (ksf, ITE-160)	
AM Peak Hour Trips = 0.13 x ksf - 5.63	55/45
PM Peak Hour Trips = 0.11 x ksf - 5.56	30/70

TRIP TOTALS	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
3,000,000 sq. ft. Data Center	211	173	384	97	227	324

NOTE: ITE Trip Generation 11th Edition

Figure 4. Location Map for Background Developments

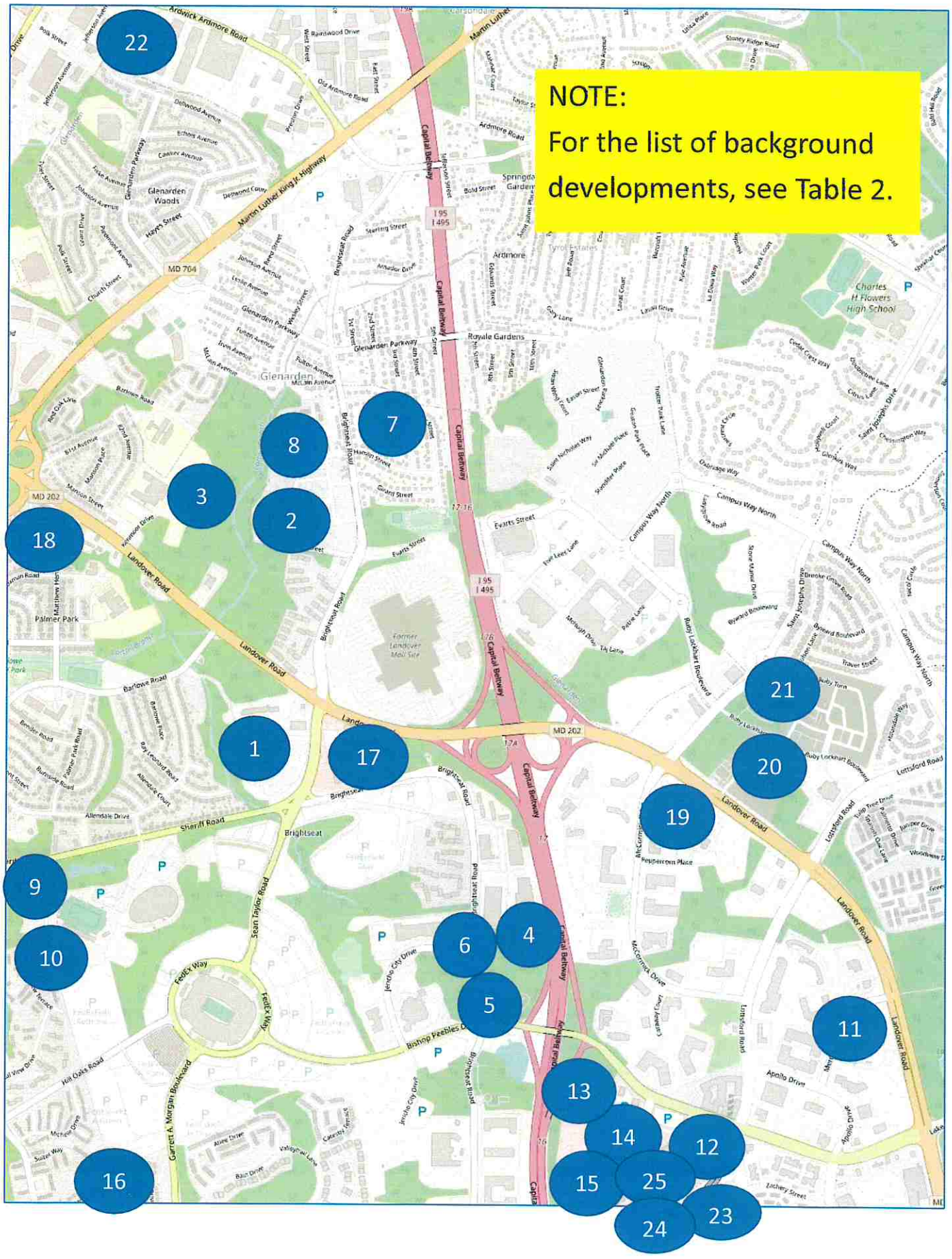


Table 2. List of Background Developments

1. 1990 Brightseat Road Property	170 Townhouse Units
2. Glenarden Redevelopment	232 Apts, 101 Age-Restricted Apt Units and 97 Townhouse Units
3. Kenmoor Middle School	145,000 Sq.Ft Middle School
4. Brightseat Industrial	152,080 Sq.Ft. Industrial
5. Brightseat Road 7-Eleven	4,050 Sq.Ft. Conv. Store with Gas Station of 16 Fueling Stations
6. Hyattsville Brightseat Road	51,563 Sq.Ft of Office
7. Glenarden Heights, Lots 3 & 4	2 Single Family Detached Units
8. Glenarden Plat 3, Lots 1-24	24 Townhouse Units
9. Gopi Mandela Property, Lots 23-27	2 Single Family Detached Units
10. First Baptist Church of Highland Park	63 Elderly SFDu
11. Kaiser Permanente	90,000 Sq.Ft Medical Office
12. Ascend Apollo	1187 Multi-Family Dwelling Units and 35,511 Sf of Office
13. Carillon Prince George'S County (Boulevard at The Capital Centre)	50,000 Sq.Ft. Retail, 521,000 Sq.Ft. General Office, 3,000 Apt Units and a 300 Room Hotel
14. Prince George'S Regional Hospital	231-Bed Hospital
15. Largo Town Center	532 Units and 7952 Square Feet of Ground Retail
16. Summerfield at Morgan Station Plat	52 Townhouse Units
17. Landover Crossing Shopping Center	93,477 Sq.Ft. Retail
18. Royal Farms #411, Kent Village	4,649 Sq.Ft. Conv. Store with Gas Station of 16 Fueling Stations
19. 9611 Lottsford Road	88,050 Sq.Ft. Office
20. Woodmore Overlook Commercial	164 Apts, 4,649 Sq.Ft. Store with Gas (in use)
21. Balk Hill Centre	284 Townhouse Units, 7-11 Store (completed but not in use)
22. WMATA Repair and Overhaul Facility	Repair and Overhaul Facility to Service 40 Rail Cars
23. Crescents at Largo Town Center	352 Apartments and 84 townhouses
24. Metropolitan of Largo	240 Apartments
25. Largo Parcel O-ETOD	269 Apartments, 1,990 Sq.Ft. retail

Figure 1. Historical Traffic Data for MD 202 East of I-95

Average Growth: 3.73779512480272% (year 2019)
Mathematical Growth: 2.14% (2012 to 2021)

Year	ADT Volume	Vol. increase	% increase	Average %
2012	56,032			
2013	52,190	-3,842	-6.86%	-6.86%
2014	52,031	-159	-0.30%	-3.58%
2015	53,382	1,351	2.60%	-1.52%
2016	64,530	11,148	20.88%	4.08%
2017	66,081	1,551	2.40%	3.74%
2018	65,492	-589	-0.89%	2.97%
2019	70,950	5,458	8.33%	3.74%
2020				
2021	67,772			

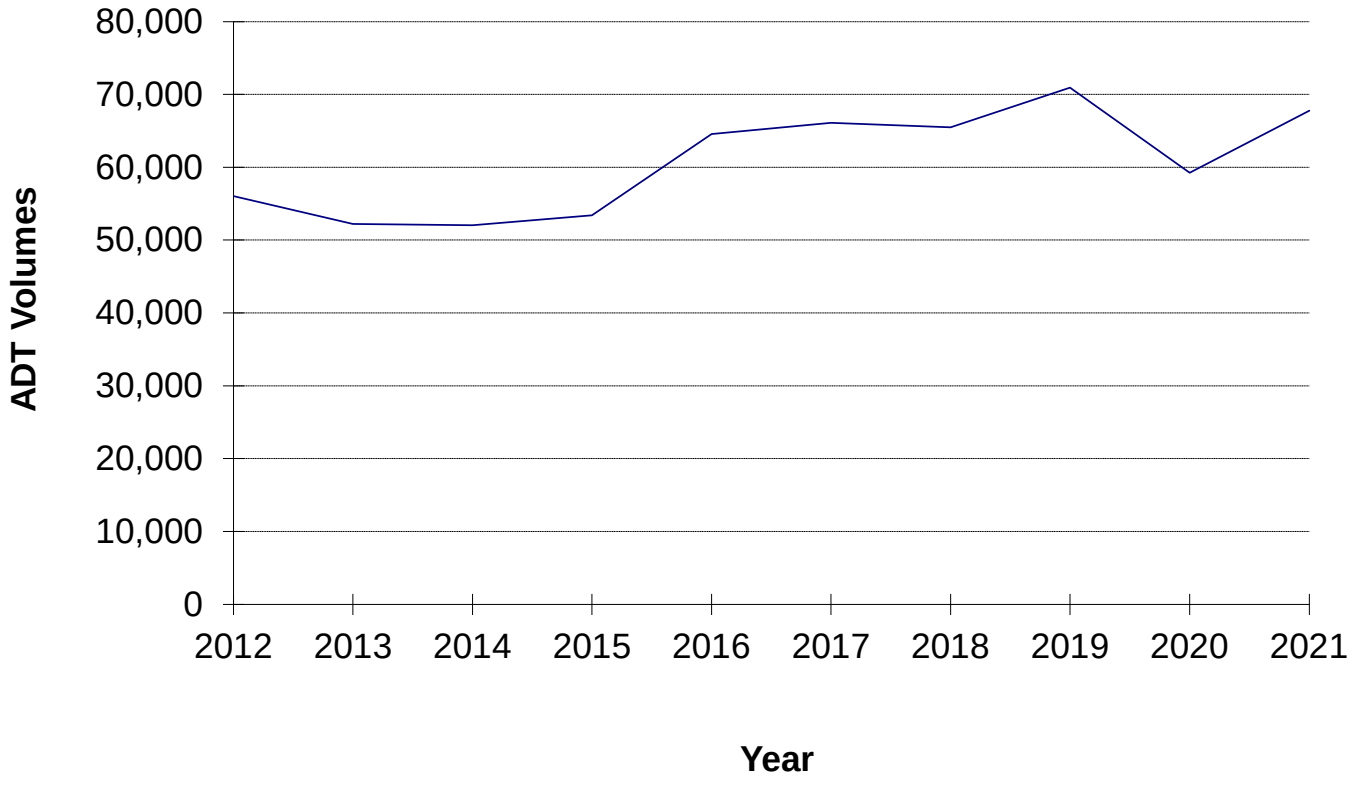
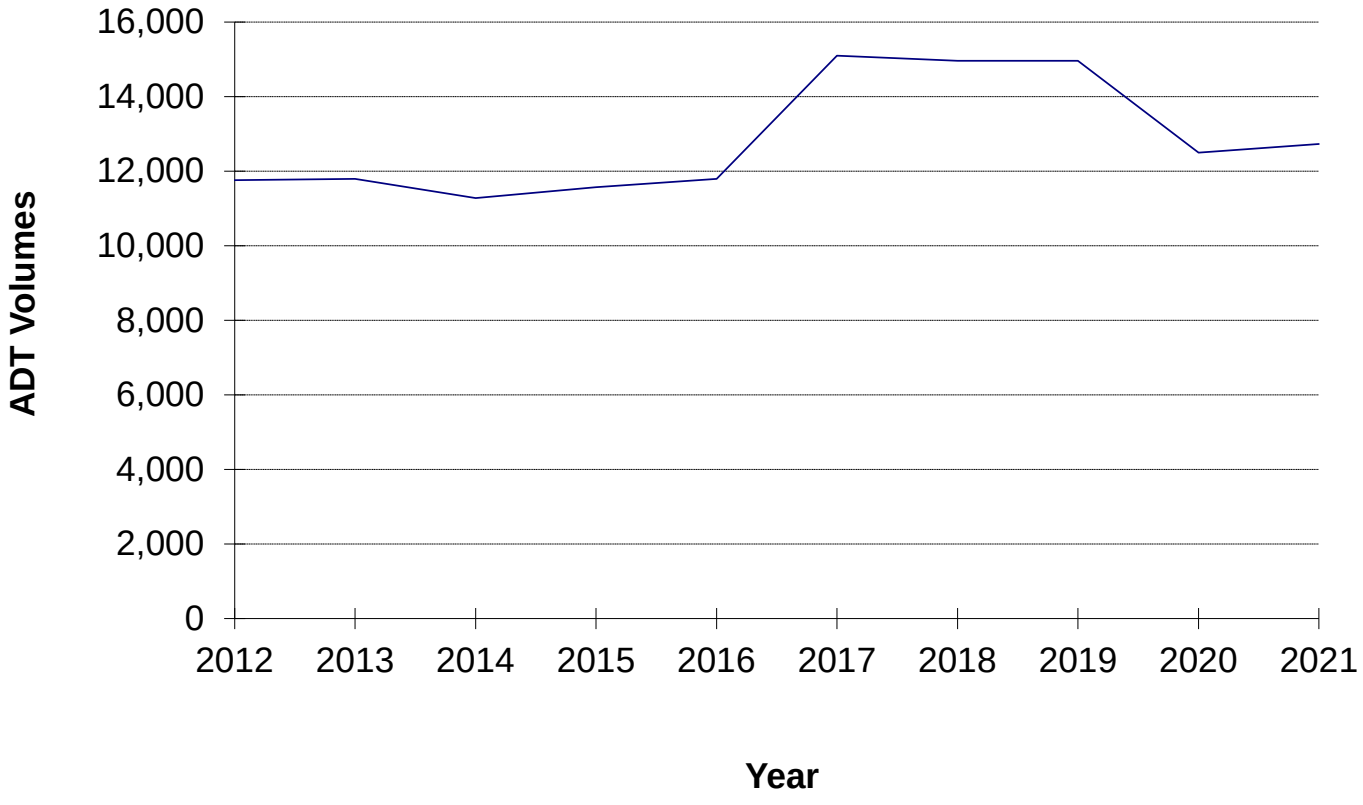


Figure 2. Historical Traffic Data for Brightseat Rd North of MD 202

Average Growth: 3.93578032722709% (year 2019)
Mathematical Growth: 0.88% (2012 to 2021)

Year	ADT Volume	Vol. increase	% increase	Average %
2012	11,761			
2013	11,792	31	0.26%	0.26%
2014	11,280	-512	-4.34%	-2.04%
2015	11,571	291	2.58%	-0.50%
2016	11,792	221	1.91%	0.10%
2017	15,100	3,308	28.05%	5.69%
2018	14,961	-139	-0.92%	4.59%
2019	14,962	1	0.01%	3.94%
2020				
2021	12,730			



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

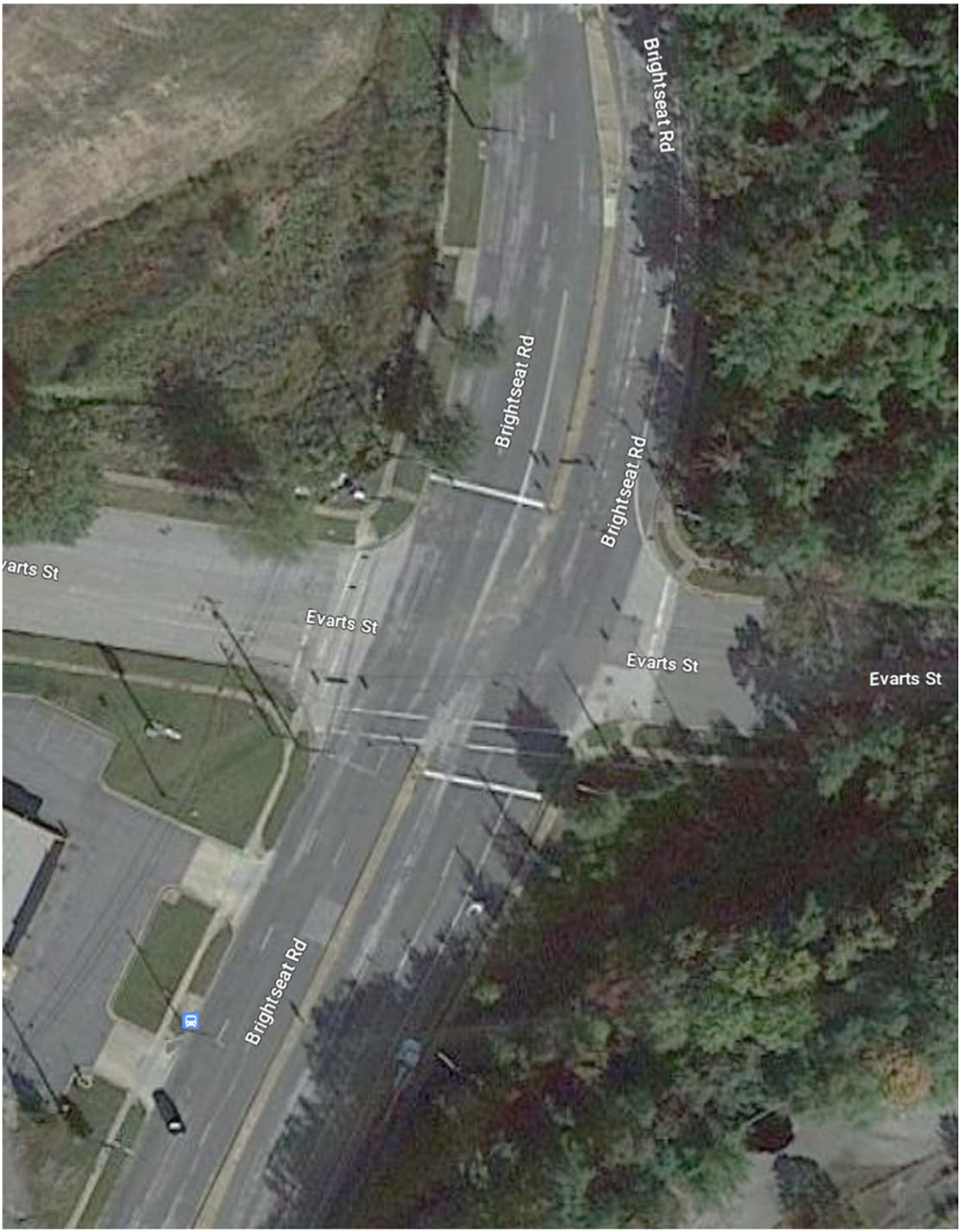
Intersection of: Brightseat Road | Date: April 11, 2023 | Tuesday

and: Evarts Street | Weather: Sunny/Warm

Location: Prince George's County, Maryland | Entered by: SN | Star Rating: 4

TIME	TRAFFIC FROM NORTH on: Brightseat Road					TRAFFIC FROM SOUTH on: Brightseat Road					TRAFFIC FROM EAST on: Evarts Street					TRAFFIC FROM WEST on: Evarts Street					TOT N + S
	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	E + W
AM																					
6:30 - 6:45	0	57	0	0	57	0	53	2	0	55	1	0	0	0	1	0	0	0	0	0	113
6:45 - 7:00	0	67	0	0	67	0	60	1	1	62	0	0	0	0	0	0	0	0	0	0	129
7:00 - 7:15	0	61	0	0	61	0	77	2	1	80	0	0	0	0	0	1	0	0	0	1	142
7:15 - 7:30	0	64	0	0	64	0	82	1	0	83	0	0	0	0	0	0	0	0	0	0	147
7:30 - 7:45	0	94	0	0	94	0	123	0	2	125	0	0	0	0	0	0	0	0	0	0	219
7:45 - 8:00	0	107	0	0	107	1	158	0	2	161	0	0	0	0	0	0	0	0	0	0	268
8:00 - 8:15	0	93	0	2	95	0	142	0	1	143	0	0	0	0	0	0	0	0	0	0	238
8:15 - 8:30	1	94	0	1	96	0	125	0	0	125	0	0	0	0	0	0	0	0	0	0	221
8:30 - 8:45	0	95	0	0	95	0	203	0	2	205	0	0	0	0	0	1	0	0	0	1	301
8:45 - 9:00	0	130	0	0	130	0	130	0	1	131	0	0	0	0	0	0	0	0	0	0	261
9:00 - 9:15	0	114	0	0	114	0	79	0	0	79	0	0	0	0	0	0	0	0	0	0	193
9:15 - 9:30	0	114	0	0	114	0	82	0	2	84	0	0	0	0	0	0	0	1	0	1	199
3 Hr Totals	1	1090	0	3	1094	1	1314	6	12	1333	1	0	0	0	1	2	0	1	0	3	2431
1 Hr Totals																					
6:30 - 7:30	0	249	0	0	249	0	272	6	2	280	1	0	0	0	1	1	0	0	0	1	531
6:45 - 7:45	0	286	0	0	286	0	342	4	4	350	0	0	0	0	0	1	0	0	0	1	637
7:00 - 8:00	0	326	0	0	326	1	440	3	5	449	0	0	0	0	0	1	0	0	0	1	776
7:15 - 8:15	0	358	0	2	360	1	505	1	5	512	0	0	0	0	0	0	0	0	0	0	872
7:30 - 8:30	1	388	0	3	392	1	548	0	5	554	0	0	0	0	0	0	0	0	0	0	946
7:45 - 8:45	1	389	0	3	393	1	628	0	5	634	0	0	0	0	0	1	0	0	0	1	1028
8:00 - 9:00	1	412	0	3	416	0	600	0	4	604	0	0	0	0	0	1	0	0	0	1	1021
8:15 - 9:15	1	433	0	1	435	0	537	0	3	540	0	0	0	0	0	1	0	0	0	1	976
8:30 - 9:30	0	453	0	0	453	0	494	0	5	499	0	0	0	0	0	1	0	1	0	2	954
PEAK HOUR																					
7:45 - 8:45	1	389	0	3	393	1	628	0	5	634	0	0	0	0	0	1	0	0	0	1	1028
PM																					
4:00 - 4:15	0	117	0	0	117	0	119	3	5	127	0	0	0	0	0	0	0	3	0	3	247
4:15 - 4:30	0	140	0	0	140	0	126	4	1	131	0	0	0	0	0	0	0	4	0	4	275
4:30 - 4:45	4	108	0	0	112	0	155	1	7	163	0	0	0	0	0	0	0	1	0	1	276
4:45 - 5:00	0	107	0	0	107	0	141	5	3	149	0	0	0	0	0	2	0	4	0	6	262
5:00 - 5:15	4	125	0	0	129	0	128	1	6	135	0	0	0	0	0	0	0	2	0	2	266
5:15 - 5:30	0	129	0	1	130	0	126	2	4	132	0	0	0	0	0	2	0	2	0	4	266
5:30 - 5:45	4	134	0	0	138	0	144	0	4	148	0	0	0	0	0	0	0	2	0	2	288
5:45 - 6:00	0	127	0	0	127	0	133	2	3	138	0	0	0	0	0	0	0	1	0	1	266
6:00 - 6:15	2	95	0	0	97	0	118	2	9	129	0	0	0	0	0	1	0	2	0	3	229
6:15 - 6:30	1	99	0	0	100	0	119	1	4	124	0	0	0	0	0	1	0	4	0	5	229
6:30 - 6:45	1	92	0	0	93	0	98	2	4	104	0	0	0	0	0	0	0	4	0	4	201
6:45 - 7:00	1	90	0	0	91	0	86	1	6	93	0	0	0	0	0	0	0	1	0	1	185
3 Hr Totals	17	1363	0	1	1381	0	1493	24	56	1573	0	0	0	0	0	6	0	30	0	36	2990
1 Hr Totals																					
4:00 - 5:00	4	472	0	0	476	0	541	13	16	570	0	0	0	0	0	2	0	12	0	14	1060
4:15 - 5:15	8	480	0	0	488	0	550	11	17	578	0	0	0	0	0	2	0	11	0	13	1079
4:30 - 5:30	8	469	0	1	478	0	550	9	20	579	0	0	0	0	0	4	0	9	0	13	1070
4:45 - 5:45	8	495	0	1	504	0	539	8	17	564	0	0	0	0	0	4	0	10	0	14	1082
5:00 - 6:00	8	515	0	1	524	0	531	5	17	553	0	0	0	0	0	2	0	7	0	9	1086
5:15 - 6:15	6	485	0	1	492	0	521	6	20	547	0	0	0	0	0	3	0	7	0	10	1049
5:30 - 6:30	7	455	0	0	462	0	514	5	20	539	0	0	0	0	0	2	0	9	0	11	1012
5:45 - 6:45	4	413	0	0	417	0	468	7	20	495	0	0	0	0	0	2	0	11	0	13	925
6:00 - 7:00	5	376	0	0	381	0	421	6	23	450	0	0	0	0	0	2	0	11	0	13	844
PEAK HOUR																					
5:00 - 6:00	8	515	0	1	524	0	531	5	17	553	0	0	0	0	0	2	0	7	0	9	1086

Brightseat Road & Evarts Street



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: MD 202 | Date: April 11, 2023 | Tuesday

and: Brightseat Road | Weather: Sunny/Warm

Location: Prince George's County, Maryland | Entered by: SN | Star Rating: 4

TIME	TRAFFIC FROM NORTH on: Brightseat Road					TRAFFIC FROM SOUTH on: Brightseat Road					TRAFFIC FROM EAST on: MD 202					TRAFFIC FROM WEST on: MD 202					TOT N + S
	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	E + W
AM																					
6:30 - 6:45	19	15	38	0	72	37	13	28	0	78	39	292	39	0	370	46	191	7	0	244	764
6:45 - 7:00	24	16	46	0	86	36	17	56	0	109	36	325	59	0	420	50	193	9	0	252	867
7:00 - 7:15	15	18	41	0	74	31	31	70	0	132	40	371	66	3	480	29	183	7	0	219	905
7:15 - 7:30	16	21	41	0	78	60	28	60	0	148	37	427	72	2	538	37	230	12	0	279	1043
7:30 - 7:45	20	46	55	0	121	53	61	58	0	172	58	453	71	1	583	58	222	8	0	288	1164
7:45 - 8:00	20	33	58	0	111	62	57	55	0	174	100	456	88	0	644	70	281	17	0	368	1297
8:00 - 8:15	25	36	50	0	111	53	56	75	0	184	91	354	81	2	528	72	257	12	1	342	1165
8:15 - 8:30	11	39	62	0	112	62	37	66	0	165	85	327	106	3	521	65	211	6	1	283	1081
8:30 - 8:45	18	37	48	0	103	61	63	71	0	195	150	388	78	3	619	63	273	14	2	352	1269
8:45 - 9:00	20	49	68	0	137	85	39	66	0	190	91	323	91	2	507	48	265	10	1	324	1158
9:00 - 9:15	22	39	65	0	126	72	29	53	0	154	56	275	86	3	420	48	236	6	1	291	991
9:15 - 9:30	27	37	64	0	128	58	45	52	0	155	39	212	79	2	332	54	232	9	0	295	910
3 Hr Totals	237	386	636	0	1259	670	476	710	0	1856	822	4203	916	21	5962	640	2774	117	6	3537	12614
1 Hr Totals																					
6:30 - 7:30	74	70	166	0	310	164	89	214	0	467	152	1415	236	5	1808	162	797	35	0	994	3579
6:45 - 7:45	75	101	183	0	359	180	137	244	0	561	171	1576	268	6	2021	174	828	36	0	1038	3979
7:00 - 8:00	71	118	195	0	384	206	177	243	0	626	235	1707	297	6	2245	194	916	44	0	1154	4409
7:15 - 8:15	81	136	204	0	421	228	202	248	0	678	286	1690	312	5	2293	237	990	49	1	1277	4669
7:30 - 8:30	76	154	225	0	455	230	211	254	0	695	334	1590	346	6	2276	265	971	43	2	1281	4707
7:45 - 8:45	74	145	218	0	437	238	213	267	0	718	426	1525	353	8	2312	270	1022	49	4	1345	4812
8:00 - 9:00	74	161	228	0	463	261	195	278	0	734	417	1392	356	10	2175	248	1006	42	5	1301	4673
8:15 - 9:15	71	164	243	0	478	280	168	256	0	704	382	1313	361	11	2067	224	985	36	5	1250	4499
8:30 - 9:30	87	162	245	0	494	276	176	242	0	694	336	1198	334	10	1878	213	1006	39	4	1262	4328
PEAK HOUR																					
7:45 - 8:45	74	145	218	0	437	238	213	267	0	718	426	1525	353	8	2312	270	1022	49	4	1345	4812
PM																					
4:00 - 4:15	25	49	73	0	147	78	49	81	0	208	84	259	96	4	443	72	314	14	0	400	1198
4:15 - 4:30	19	52	58	0	129	81	47	68	0	196	84	242	98	4	428	83	312	24	0	419	1172
4:30 - 4:45	17	45	60	0	122	75	62	64	0	201	89	281	79	0	449	77	311	20	0	408	1180
4:45 - 5:00	19	48	55	0	122	74	47	87	0	208	97	306	101	1	505	58	281	24	0	363	1198
5:00 - 5:15	23	46	85	0	154	83	43	65	0	191	80	313	85	0	478	100	327	20	1	448	1271
5:15 - 5:30	23	67	73	0	163	83	39	83	0	205	97	315	115	5	532	123	350	13	0	486	1386
5:30 - 5:45	25	55	59	0	139	90	64	94	0	248	97	305	105	4	511	101	350	14	0	465	1363
5:45 - 6:00	20	43	70	0	133	86	47	74	0	207	89	275	100	6	470	84	390	18	1	493	1303
6:00 - 6:15	25	33	57	0	115	96	44	107	0	247	74	256	122	3	455	82	290	16	0	388	1205
6:15 - 6:30	9	17	59	0	85	80	45	85	0	210	77	225	99	2	403	76	303	18	0	397	1095
6:30 - 6:45	13	43	60	0	116	78	36	60	0	174	72	283	83	0	438	93	327	27	0	447	1175
6:45 - 7:00	13	31	58	0	102	78	28	55	0	161	63	186	128	2	379	71	264	19	0	354	996
3 Hr Totals	231	529	767	0	1527	982	551	923	0	2456	1003	3246	1211	31	5491	1020	3819	227	2	5068	14542
1 Hr Totals																					
4:00 - 5:00	80	194	246	0	520	308	205	300	0	813	354	1088	374	9	1825	290	1218	82	0	1590	4748
4:15 - 5:15	78	191	258	0	527	313	199	284	0	796	350	1142	363	5	1860	318	1231	88	1	1638	4821
4:30 - 5:30	82	206	273	0	561	315	191	299	0	805	363	1215	380	6	1964	358	1269	77	1	1705	5035
4:45 - 5:45	90	216	272	0	578	330	193	329	0	852	371	1239	406	10	2026	382	1308	71	1	1762	5218
5:00 - 6:00	91	211	287	0	589	342	193	316	0	851	363	1208	405	15	1991	408	1417	65	2	1892	5323
5:15 - 6:15	93	198	259	0	550	355	194	358	0	907	357	1151	442	18	1968	390	1380	61	1	1832	5257
5:30 - 6:30	79	148	245	0	472	352	200	360	0	912	337	1061	426	15	1839	343	1333	66	1	1743	4966
5:45 - 6:45	67	136	246	0	449	340	172	326	0	838	312	1039	404	11	1766	335	1310	79	1	1725	4778
6:00 - 7:00	60	124	234	0	418	332	153	307	0	792	286	950	432	7	1675	322	1184	80	0	1586	4471
PEAK HOUR																					
5:00 - 6:00	91	211	287	0	589	342	193	316	0	851	363	1208	405	15	1991	408	1417	65	2	1892	5323

MD 202 & Brightseat Road

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: MD 202 | Date: April 11, 2023 | Tuesday

and: I-495 SB Ramps | Weather: Sunny/Warm

Location: Prince George's County, Maryland | Entered by: SN | Star Rating: 4

TIME	TRAFFIC FROM NORTH on: I-495 SB Off Ramp					TRAFFIC FROM SOUTH on: I-495 SB Ramps					TRAFFIC FROM EAST on: MD 202					TRAFFIC FROM WEST on: MD 202					TOT N + S
	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	E + W
AM																					
6:30 - 6:45	44	0	0	0	44	85	0	0	0	85	0	338	53	0	391	133	123	0	0	256	776
6:45 - 7:00	61	0	0	0	61	107	0	0	0	107	0	361	52	0	413	131	139	0	0	270	851
7:00 - 7:15	68	0	0	0	68	101	0	0	0	101	0	420	56	0	476	131	143	0	0	274	919
7:15 - 7:30	67	0	0	0	67	105	0	0	0	105	0	467	92	0	559	164	175	0	0	339	1070
7:30 - 7:45	64	0	0	0	64	151	0	0	0	151	0	552	93	0	645	148	205	0	0	353	1213
7:45 - 8:00	73	0	0	0	73	179	0	0	0	179	0	576	100	2	678	143	246	0	0	389	1319
8:00 - 8:15	64	0	0	0	64	203	0	0	0	203	0	489	85	3	577	151	230	0	0	381	1225
8:15 - 8:30	68	0	0	0	68	185	0	0	0	185	0	463	92	1	556	150	202	0	0	352	1161
8:30 - 8:45	63	0	0	0	63	169	0	0	0	169	0	582	82	2	666	155	237	0	0	392	1290
8:45 - 9:00	72	0	0	0	72	195	0	0	0	195	0	448	84	2	534	154	265	0	0	419	1220
9:00 - 9:15	56	0	0	0	56	194	0	0	0	194	0	324	70	2	396	162	231	0	0	393	1039
9:15 - 9:30	67	0	0	0	67	152	0	0	0	152	0	280	71	1	352	132	222	0	0	354	925
3 Hr Totals	767	0	0	0	767	1826	0	0	0	1826	0	5300	930	13	6243	1754	2418	0	0	4172	13008
1 Hr Totals																					
6:30 - 7:30	240	0	0	0	240	398	0	0	0	398	0	1586	253	0	1839	559	580	0	0	1139	3616
6:45 - 7:45	260	0	0	0	260	464	0	0	0	464	0	1800	293	0	2093	574	662	0	0	1236	4053
7:00 - 8:00	272	0	0	0	272	536	0	0	0	536	0	2015	341	2	2358	586	769	0	0	1355	4521
7:15 - 8:15	268	0	0	0	268	638	0	0	0	638	0	2084	370	5	2459	606	856	0	0	1462	4827
7:30 - 8:30	269	0	0	0	269	718	0	0	0	718	0	2080	370	6	2456	592	883	0	0	1475	4918
7:45 - 8:45	268	0	0	0	268	736	0	0	0	736	0	2110	359	8	2477	599	915	0	0	1514	4995
8:00 - 9:00	267	0	0	0	267	752	0	0	0	752	0	1982	343	8	2333	610	934	0	0	1544	4896
8:15 - 9:15	259	0	0	0	259	743	0	0	0	743	0	1817	328	7	2152	621	935	0	0	1556	4710
8:30 - 9:30	258	0	0	0	258	710	0	0	0	710	0	1634	307	7	1948	603	955	0	0	1558	4474
PEAK HOUR																					
7:45 - 8:45	268	0	0	0	268	736	0	0	0	736	0	2110	359	8	2477	599	915	0	0	1514	4995
PM																					
4:00 - 4:15	70	0	0	0	70	235	0	0	0	235	0	368	70	3	441	146	330	0	0	476	1222
4:15 - 4:30	69	0	0	0	69	236	0	0	0	236	0	363	97	8	468	132	336	0	0	468	1241
4:30 - 4:45	66	0	0	0	66	224	0	0	0	224	0	397	64	6	467	146	301	0	0	447	1204
4:45 - 5:00	59	0	0	0	59	242	0	0	0	242	0	440	71	2	513	122	308	0	0	430	1244
5:00 - 5:15	67	0	0	0	67	231	0	0	0	231	0	413	83	6	502	144	349	0	0	493	1293
5:15 - 5:30	86	0	0	0	86	242	0	0	0	242	0	450	69	4	523	148	375	0	0	523	1374
5:30 - 5:45	81	0	0	0	81	230	0	0	0	230	0	451	66	5	522	157	356	0	0	513	1346
5:45 - 6:00	85	0	0	0	85	236	0	0	0	236	0	374	91	2	467	171	377	0	0	548	1336
6:00 - 6:15	80	0	0	0	80	200	0	0	0	200	0	357	93	4	454	145	323	0	0	468	1202
6:15 - 6:30	75	0	0	0	75	182	0	0	0	182	0	350	99	2	451	151	308	0	0	459	1167
6:30 - 6:45	75	0	0	0	75	193	0	0	0	193	0	357	103	0	460	156	293	0	0	449	1177
6:45 - 7:00	85	0	0	0	85	174	0	0	0	174	0	297	92	0	389	139	259	0	0	398	1046
3 Hr Totals	898	0	0	0	898	2625	0	0	0	2625	0	4617	998	42	5657	1757	3915	0	0	5672	14852
1 Hr Totals																					
4:00 - 5:00	264	0	0	0	264	937	0	0	0	937	0	1568	302	19	1889	546	1275	0	0	1821	4911
4:15 - 5:15	261	0	0	0	261	933	0	0	0	933	0	1613	315	22	1950	544	1294	0	0	1838	4982
4:30 - 5:30	278	0	0	0	278	939	0	0	0	939	0	1700	287	18	2005	560	1333	0	0	1893	5115
4:45 - 5:45	293	0	0	0	293	945	0	0	0	945	0	1754	289	17	2060	571	1388	0	0	1959	5257
5:00 - 6:00	319	0	0	0	319	939	0	0	0	939	0	1688	309	17	2014	620	1457	0	0	2077	5349
5:15 - 6:15	332	0	0	0	332	908	0	0	0	908	0	1632	319	15	1966	621	1431	0	0	2052	5258
5:30 - 6:30	321	0	0	0	321	848	0	0	0	848	0	1532	349	13	1894	624	1364	0	0	1988	5051
5:45 - 6:45	315	0	0	0	315	811	0	0	0	811	0	1438	386	8	1832	623	1301	0	0	1924	4882
6:00 - 7:00	315	0	0	0	315	749	0	0	0	749	0	1361	387	6	1754	591	1183	0	0	1774	4592
PEAK HOUR																					
5:00 - 6:00	319	0	0	0	319	939	0	0	0	939	0	1688	309	17	2014	620	1457	0	0	2077	5349

MD 202 & I-495 SB Ramps

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Intersection of: MD 202 | Date: April 11, 2023 | Tuesday

and: I-495 NB Ramps | Weather: Sunny/Warm

Location: Prince George's County, Maryland | Entered by: SN | Star Rating: 4

TIME	TRAFFIC FROM NORTH on: I-495 NB On Ramp					TRAFFIC FROM SOUTH on: I-495 NB Ramps					TRAFFIC FROM EAST on: MD 202					TRAFFIC FROM WEST on: MD 202					TOT N + S
	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	E + W
AM																					
6:30 - 6:45	0	0	0	0	0	15	0	133	0	148	138	249	0	0	387	46	154	1	0	201	736
6:45 - 7:00	0	0	0	0	0	14	0	143	0	157	160	270	0	0	430	37	206	1	1	245	832
7:00 - 7:15	0	0	0	0	0	21	0	137	0	158	191	341	0	0	532	45	204	3	0	252	942
7:15 - 7:30	0	0	0	0	0	26	0	163	0	189	237	391	0	0	628	36	229	1	1	267	1084
7:30 - 7:45	0	0	0	0	0	30	0	229	0	259	236	399	0	0	635	34	313	1	1	349	1243
7:45 - 8:00	0	0	0	0	0	38	0	255	0	293	240	423	0	0	663	33	385	4	0	422	1378
8:00 - 8:15	0	0	0	0	0	47	0	188	0	235	254	371	0	0	625	28	422	5	1	456	1316
8:15 - 8:30	0	0	0	0	0	37	0	186	0	223	206	370	0	0	576	25	366	3	3	397	1196
8:30 - 8:45	0	0	0	0	0	34	0	269	0	303	213	397	0	0	610	22	376	1	2	401	1314
8:45 - 9:00	0	0	0	0	0	36	0	174	0	210	288	361	0	0	649	31	412	3	3	449	1308
9:00 - 9:15	0	0	0	0	0	26	0	108	0	134	231	305	0	0	536	27	401	4	4	436	1106
9:15 - 9:30	0	0	0	0	0	30	0	50	0	80	198	300	0	0	498	31	346	8	1	386	964
3 Hr Totals	0	0	0	0	0	354	0	2035	0	2389	2592	4177	0	0	6769	395	3814	35	17	4261	13419
1 Hr Totals																					
6:30 - 7:30	0	0	0	0	0	76	0	576	0	652	726	1251	0	0	1977	164	793	6	2	965	3594
6:45 - 7:45	0	0	0	0	0	91	0	672	0	763	824	1401	0	0	2225	152	952	6	3	1113	4101
7:00 - 8:00	0	0	0	0	0	115	0	784	0	899	904	1554	0	0	2458	148	1131	9	2	1290	4647
7:15 - 8:15	0	0	0	0	0	141	0	835	0	976	967	1584	0	0	2551	131	1349	11	3	1494	5021
7:30 - 8:30	0	0	0	0	0	152	0	858	0	1010	936	1563	0	0	2499	120	1486	13	5	1624	5133
7:45 - 8:45	0	0	0	0	0	156	0	898	0	1054	913	1561	0	0	2474	108	1549	13	6	1676	5204
8:00 - 9:00	0	0	0	0	0	154	0	817	0	971	961	1499	0	0	2460	106	1576	12	9	1703	5134
8:15 - 9:15	0	0	0	0	0	133	0	737	0	870	938	1433	0	0	2371	105	1555	11	12	1683	4924
8:30 - 9:30	0	0	0	0	0	126	0	601	0	727	930	1363	0	0	2293	111	1535	16	10	1672	4692
PEAK HOUR																					
7:45 - 8:45	0	0	0	0	0	156	0	898	0	1054	913	1561	0	0	2474	108	1549	13	6	1676	5204
PM																					
4:00 - 4:15	0	0	0	0	0	32	0	135	0	167	221	310	0	0	531	28	552	1	1	582	1280
4:15 - 4:30	0	0	0	0	0	26	0	136	0	162	214	320	0	0	534	37	523	1	1	562	1258
4:30 - 4:45	0	0	0	0	0	23	0	139	0	162	252	325	0	0	577	25	530	6	1	562	1301
4:45 - 5:00	0	0	0	0	0	31	0	150	0	181	241	357	0	0	598	25	526	4	1	556	1335
5:00 - 5:15	0	0	0	0	0	35	0	155	0	190	272	353	0	0	625	23	539	4	1	567	1382
5:15 - 5:30	0	0	0	0	0	38	0	150	0	188	238	370	0	0	608	21	590	4	0	615	1411
5:30 - 5:45	0	0	0	0	0	36	0	167	0	203	217	341	0	1	559	22	575	9	1	607	1369
5:45 - 6:00	0	0	0	0	0	35	0	153	0	188	204	327	0	0	531	31	566	9	1	607	1326
6:00 - 6:15	0	0	0	0	0	32	0	128	0	160	185	331	0	0	516	26	532	3	0	561	1237
6:15 - 6:30	0	0	0	0	0	26	0	130	0	156	215	326	0	0	541	22	477	2	1	502	1199
6:30 - 6:45	0	0	0	0	0	24	0	108	0	132	185	359	0	0	544	31	459	3	2	495	1171
6:45 - 7:00	0	0	0	0	0	23	0	105	0	128	159	285	0	0	444	32	402	3	2	439	1011
3 Hr Totals	0	0	0	0	0	361	0	1656	0	2017	2603	4004	0	1	6608	323	6271	49	12	6655	15280
1 Hr Totals																					
4:00 - 5:00	0	0	0	0	0	112	0	560	0	672	928	1312	0	0	2240	115	2131	12	4	2262	5174
4:15 - 5:15	0	0	0	0	0	115	0	580	0	695	979	1355	0	0	2334	110	2118	15	4	2247	5276
4:30 - 5:30	0	0	0	0	0	127	0	594	0	721	1003	1405	0	0	2408	94	2185	18	3	2300	5429
4:45 - 5:45	0	0	0	0	0	140	0	622	0	762	968	1421	0	1	2390	91	2230	21	3	2345	5497
5:00 - 6:00	0	0	0	0	0	144	0	625	0	769	931	1391	0	1	2323	97	2270	26	3	2396	5488
5:15 - 6:15	0	0	0	0	0	141	0	598	0	739	844	1369	0	1	2214	100	2263	25	2	2390	5343
5:30 - 6:30	0	0	0	0	0	129	0	578	0	707	821	1325	0	1	2147	101	2150	23	3	2277	5131
5:45 - 6:45	0	0	0	0	0	117	0	519	0	636	789	1343	0	0	2132	110	2034	17	4	2165	4933
6:00 - 7:00	0	0	0	0	0	105	0	471	0	576	744	1301	0	0	2045	111	1870	11	5	1997	4618
PEAK HOUR																					
4:45 - 5:45	0	0	0	0	0	140	0	622	0	762	968	1421	0	1	2390	91	2230	21	3	2345	5497

MD 202 & I-495 NB Ramps

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

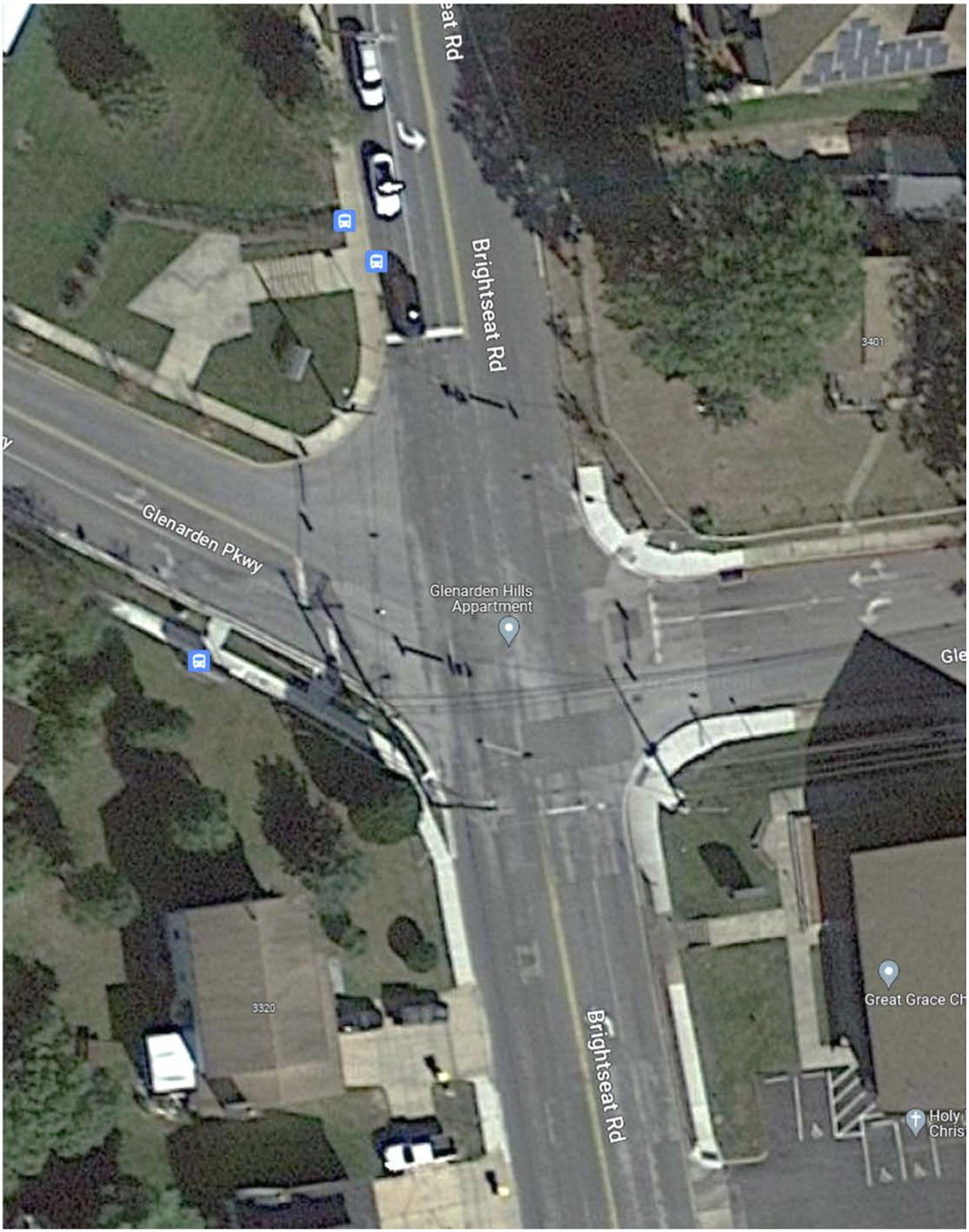
Intersection of: Brightseat Road | **Date: April 11, 2023** | **Tuesday**

and: Glenarden Parkway | **Weather: Sunny/Warm**

Location: Prince George's County, Maryland | **Entered by: SN** | **Star Rating: 4**

TIME	TRAFFIC FROM NORTH on: Brightseat Road					TRAFFIC FROM SOUTH on: Brightseat Road					TRAFFIC FROM EAST on: Glenarden Parkway					TRAFFIC FROM WEST on: Glenarden Parkway					TOT N + S
	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	E + W
AM																					
6:30 - 6:45	2	40	1	0	43	2	42	4	0	48	6	7	4	0	17	8	0	1	0	9	117
6:45 - 7:00	4	33	2	0	39	4	39	12	0	55	5	11	4	0	20	14	6	1	0	21	135
7:00 - 7:15	2	35	2	0	39	5	66	11	0	82	8	25	9	0	42	9	2	2	0	13	176
7:15 - 7:30	3	39	1	0	43	4	70	12	0	86	5	20	8	0	33	11	6	4	0	21	183
7:30 - 7:45	4	57	1	0	62	9	106	20	0	135	8	24	13	0	45	18	13	2	0	33	275
7:45 - 8:00	5	65	2	0	72	4	133	20	0	157	9	19	9	0	37	14	18	4	0	36	302
8:00 - 8:15	5	59	8	0	72	5	127	17	0	149	13	11	11	0	35	11	9	3	0	23	279
8:15 - 8:30	3	57	4	0	64	3	99	16	0	118	10	12	9	0	31	15	6	1	0	22	235
8:30 - 8:45	8	65	5	0	78	9	180	16	0	205	8	22	7	1	38	17	8	1	0	26	347
8:45 - 9:00	16	94	10	0	120	4	108	22	0	134	6	16	8	0	30	31	17	3	0	51	335
9:00 - 9:15	6	80	6	0	92	6	66	12	0	84	9	15	10	0	34	18	22	2	0	42	252
9:15 - 9:30	3	75	4	0	82	2	70	16	0	88	6	12	5	0	23	24	15	4	0	43	236
3 Hr Totals	61	699	46	0	806	57	1106	178	0	1341	93	194	97	1	385	190	122	28	0	340	2872
1 Hr Totals																					
6:30 - 7:30	11	147	6	0	164	15	217	39	0	271	24	63	25	0	112	42	14	8	0	64	611
6:45 - 7:45	13	164	6	0	183	22	281	55	0	358	26	80	34	0	140	52	27	9	0	88	769
7:00 - 8:00	14	196	6	0	216	22	375	63	0	460	30	88	39	0	157	52	39	12	0	103	936
7:15 - 8:15	17	220	12	0	249	22	436	69	0	527	35	74	41	0	150	54	46	13	0	113	1039
7:30 - 8:30	17	238	15	0	270	21	465	73	0	559	40	66	42	0	148	58	46	10	0	114	1091
7:45 - 8:45	21	246	19	0	286	21	539	69	0	629	40	64	36	1	141	57	41	9	0	107	1163
8:00 - 9:00	32	275	27	0	334	21	514	71	0	606	37	61	35	1	134	74	40	8	0	122	1196
8:15 - 9:15	33	296	25	0	354	22	453	66	0	541	33	65	34	1	133	81	53	7	0	141	1169
8:30 - 9:30	33	314	25	0	372	21	424	66	0	511	29	65	30	1	125	90	62	10	0	162	1170
PEAK HOUR																					
8:00 - 9:00	32	275	27	0	334	21	514	71	0	606	37	61	35	1	134	74	40	8	0	122	1196
PM																					
4:00 - 4:15	2	75	12	0	89	14	90	17	0	121	6	17	13	0	36	30	33	1	0	64	310
4:15 - 4:30	5	110	12	0	127	13	92	27	0	132	6	10	5	0	21	21	22	7	0	50	330
4:30 - 4:45	3	85	9	0	97	8	108	27	0	143	4	15	8	0	27	30	24	1	0	55	322
4:45 - 5:00	7	90	7	0	104	10	111	34	0	155	7	15	6	0	28	19	31	0	0	50	337
5:00 - 5:15	6	83	15	0	104	13	104	19	0	136	9	21	7	0	37	27	35	7	0	69	346
5:15 - 5:30	6	105	7	0	118	16	82	30	0	128	13	17	9	0	39	23	30	3	0	56	341
5:30 - 5:45	4	90	17	0	111	10	101	26	0	137	2	12	9	0	23	33	30	2	0	65	336
5:45 - 6:00	6	99	14	0	119	17	90	25	0	132	8	21	5	0	34	31	32	1	0	64	349
6:00 - 6:15	7	62	12	0	81	21	71	19	0	111	5	13	11	0	29	23	30	6	0	59	280
6:15 - 6:30	7	79	10	0	96	13	73	23	0	109	8	10	9	0	27	22	38	7	0	67	299
6:30 - 6:45	6	66	8	0	80	20	65	24	0	109	6	15	7	0	28	18	26	6	0	50	267
6:45 - 7:00	5	59	4	0	68	17	46	24	0	87	8	19	13	0	40	30	17	8	0	55	250
3 Hr Totals	64	1003	127	0	1194	172	1033	295	0	1500	82	185	102	0	369	307	348	49	0	704	3767
1 Hr Totals																					
4:00 - 5:00	17	360	40	0	417	45	401	105	0	551	23	57	32	0	112	100	110	9	0	219	1299
4:15 - 5:15	21	368	43	0	432	44	415	107	0	566	26	61	26	0	113	97	112	15	0	224	1335
4:30 - 5:30	22	363	38	0	423	47	405	110	0	562	33	68	30	0	131	99	120	11	0	230	1346
4:45 - 5:45	23	368	46	0	437	49	398	109	0	556	31	65	31	0	127	102	126	12	0	240	1360
5:00 - 6:00	22	377	53	0	452	56	377	100	0	533	32	71	30	0	133	114	127	13	0	254	1372
5:15 - 6:15	23	356	50	0	429	64	344	100	0	508	28	63	34	0	125	110	122	12	0	244	1306
5:30 - 6:30	24	330	53	0	407	61	335	93	0	489	23	56	34	0	113	109	130	16	0	255	1264
5:45 - 6:45	26	306	44	0	376	71	299	91	0	461	27	59	32	0	118	94	126	20	0	240	1195
6:00 - 7:00	25	266	34	0	325	71	255	90	0	416	27	57	40	0	124	93	111	27	0	231	1096
PEAK HOUR																					
5:00 - 6:00	22	377	53	0	452	56	377	100	0	533	32	71	30	0	133	114	127	13	0	254	1372

Brightseat Road & Glenarden Parkway



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

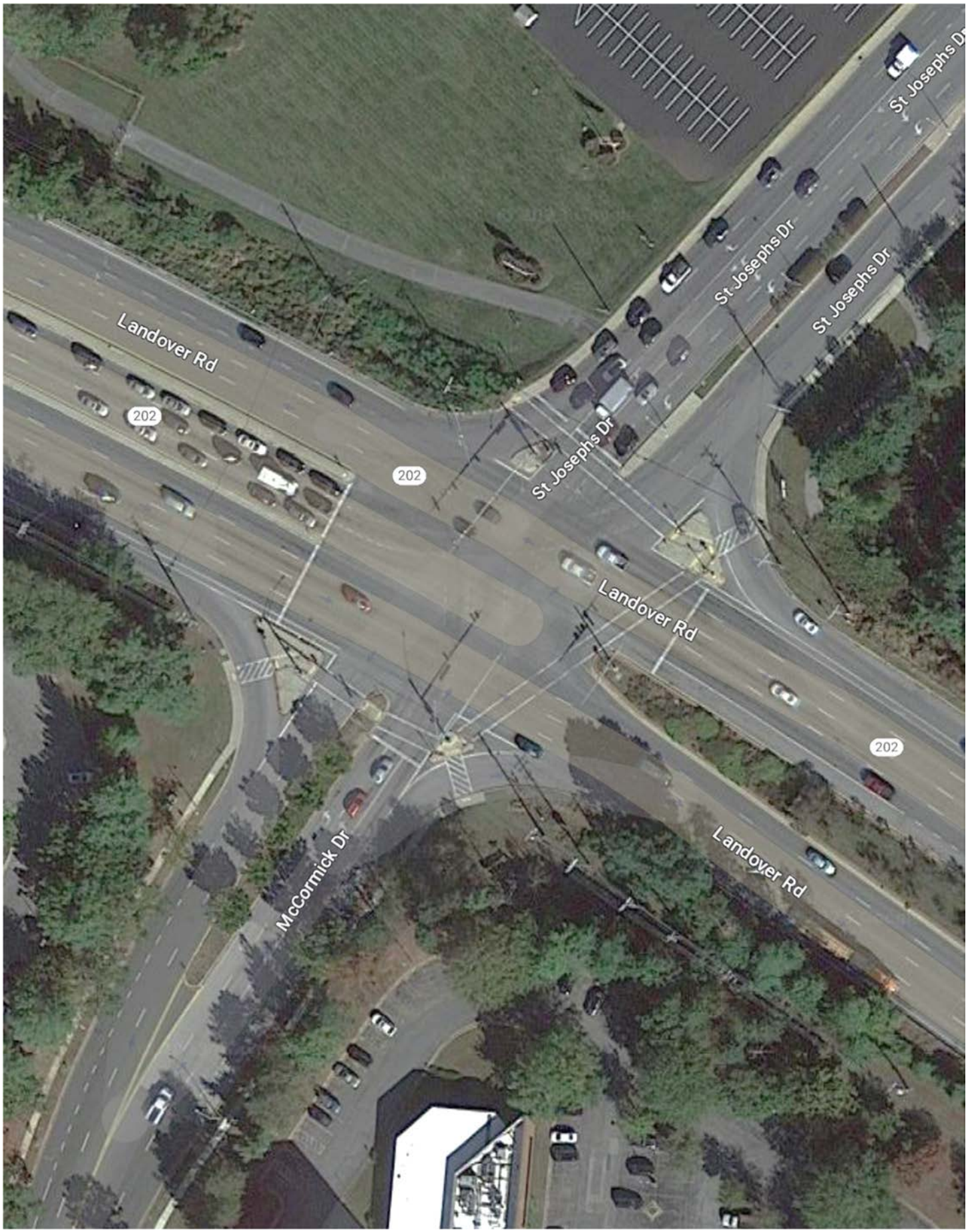
Intersection of: MD 202 **Date:** May 18, 2023 **Thursday**

and: St. Joseph's Drive - McCormick Drive **Weather:** Sunny/Warm

Location: Prince George's County, Maryland **Entered by:** SN **Star Rating:** 4

TIME	TRAFFIC FROM NORTH on: St. Joseph's Drive					TRAFFIC FROM SOUTH on: McCormick Drive					TRAFFIC FROM EAST on: MD 202					TRAFFIC FROM WEST on: MD 202					TOT N + S
	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	RT	TH	LT	UT	TOT	E + W
AM																					
6:30 - 6:45	70	2	6	0	78	8	6	15	0	29	23	331	4	3	361	18	123	48	0	189	657
6:45 - 7:00	101	4	13	0	118	4	4	20	0	28	32	304	4	1	341	42	142	69	0	253	740
7:00 - 7:15	111	1	21	0	133	2	7	20	0	29	38	378	3	3	422	32	145	61	0	238	822
7:15 - 7:30	116	5	29	0	150	4	15	10	1	30	41	407	6	3	457	44	163	69	0	276	913
7:30 - 7:45	149	18	31	0	198	9	10	23	0	42	54	474	7	6	541	54	251	94	0	399	1180
7:45 - 8:00	169	10	35	0	214	4	14	30	0	48	72	489	10	2	573	84	286	81	0	451	1286
8:00 - 8:15	132	15	34	0	181	9	12	25	0	46	62	473	10	4	549	54	279	109	2	444	1220
8:15 - 8:30	112	14	37	0	163	4	15	18	0	37	59	414	17	1	491	83	296	117	0	496	1187
8:30 - 8:45	116	27	40	0	183	8	14	26	0	48	61	387	16	4	468	58	280	96	0	434	1133
8:45 - 9:00	112	18	39	0	169	2	19	22	0	43	64	387	11	2	464	75	257	102	0	434	1110
9:00 - 9:15	109	10	37	0	156	15	14	20	0	49	70	308	9	6	393	76	256	148	0	480	1078
9:15 - 9:30	132	12	47	3	194	6	28	22	0	56	65	321	8	1	395	75	248	103	0	426	1071
3 Hr Totals	1429	136	369	3	1937	75	158	251	1	485	641	4673	105	36	5455	695	2726	1097	2	4520	12397
1 Hr Totals																					
6:30 - 7:30	398	12	69	0	479	18	32	65	1	116	134	1420	17	10	1581	136	573	247	0	956	3132
6:45 - 7:45	477	28	94	0	599	19	36	73	1	129	165	1563	20	13	1761	172	701	293	0	1166	3655
7:00 - 8:00	545	34	116	0	695	19	46	83	1	149	205	1748	26	14	1993	214	845	305	0	1364	4201
7:15 - 8:15	566	48	129	0	743	26	51	88	1	166	229	1843	33	15	2120	236	979	353	2	1570	4599
7:30 - 8:30	562	57	137	0	756	26	51	96	0	173	247	1850	44	13	2154	275	1112	401	2	1790	4873
7:45 - 8:45	529	66	146	0	741	25	55	99	0	179	254	1763	53	11	2081	279	1141	403	2	1825	4826
8:00 - 9:00	472	74	150	0	696	23	60	91	0	174	246	1661	54	11	1972	270	1112	424	2	1808	4650
8:15 - 9:15	449	69	153	0	671	29	62	86	0	177	254	1496	53	13	1816	292	1089	463	0	1844	4508
8:30 - 9:30	469	67	163	3	702	31	75	90	0	196	260	1403	44	13	1720	284	1041	449	0	1774	4392
PEAK HOUR																					
7:30 - 8:30	562	57	137	0	756	26	51	96	0	173	247	1850	44	13	2154	275	1112	401	2	1790	4873
PM																					
4:00 - 4:15	173	22	87	0	282	15	17	39	1	72	103	344	3	8	458	22	408	179	0	609	1421
4:15 - 4:30	172	15	99	2	288	12	22	46	0	80	119	344	4	10	477	33	408	144	1	586	1431
4:30 - 4:45	201	12	75	2	290	20	23	53	0	96	114	348	6	8	476	35	424	163	0	622	1484
4:45 - 5:00	164	19	106	0	289	16	29	46	0	91	116	358	9	7	490	31	445	197	0	673	1543
5:00 - 5:15	169	15	100	2	286	15	22	44	0	81	141	323	5	7	476	47	454	175	1	677	1520
5:15 - 5:30	185	25	88	1	299	12	36	41	0	89	140	361	2	8	511	33	467	170	0	670	1569
5:30 - 5:45	166	36	104	0	306	4	27	31	0	62	124	362	4	6	496	31	408	206	0	645	1509
5:45 - 6:00	187	19	122	0	328	6	21	24	0	51	111	273	6	10	400	50	453	181	0	684	1463
6:00 - 6:15	192	24	85	0	301	13	17	20	0	50	122	306	2	3	433	23	379	197	0	599	1383
6:15 - 6:30	174	18	92	2	286	5	18	17	0	40	98	264	6	10	378	35	347	190	0	572	1276
6:30 - 6:45	215	14	110	1	340	6	16	20	0	42	89	263	5	4	361	24	332	186	0	542	1285
6:45 - 7:00	149	13	101	1	264	5	24	20	0	49	109	287	5	7	408	24	303	241	0	568	1289
3 Hr Totals	2147	232	1169	11	3559	129	272	401	1	803	1386	3833	57	88	5364	388	4828	2229	2	7447	17173
1 Hr Totals																					
4:00 - 5:00	710	68	367	4	1149	63	91	184	1	339	452	1394	22	33	1901	121	1685	683	1	2490	5879
4:15 - 5:15	706	61	380	6	1153	63	96	189	0	348	490	1373	24	32	1919	146	1731	679	2	2558	5978
4:30 - 5:30	719	71	369	5	1164	63	110	184	0	357	511	1390	22	30	1953	146	1790	705	1	2642	6116
4:45 - 5:45	684	95	398	3	1180	47	114	162	0	323	521	1404	20	28	1973	142	1774	748	1	2665	6141
5:00 - 6:00	707	95	414	3	1219	37	106	140	0	283	516	1319	17	31	1883	161	1782	732	1	2676	6061
5:15 - 6:15	730	104	399	1	1234	35	101	116	0	252	497	1302	14	27	1840	137	1707	754	0	2598	5924
5:30 - 6:30	719	97	403	2	1221	28	83	92	0	203	455	1205	18	29	1707	139	1587	774	0	2500	5631
5:45 - 6:45	768	75	409	3	1255	30	72	81	0	183	420	1106	19	27	1572	132	1511	754	0	2397	5407
6:00 - 7:00	730	69	388	4	1191	29	75	77	0	181	418	1120	18	24	1580	106	1361	814	0	2281	5233
PEAK HOUR																					
4:45 - 5:45	684	95	398	3	1180	47	114	162	0	323	521	1404	20	28	1973	142	1774	748	1	2665	6141

MD 202 & St. Josephs Dr/Mccormick Dr



APPENDIX B

Capacity Analysis Worksheets

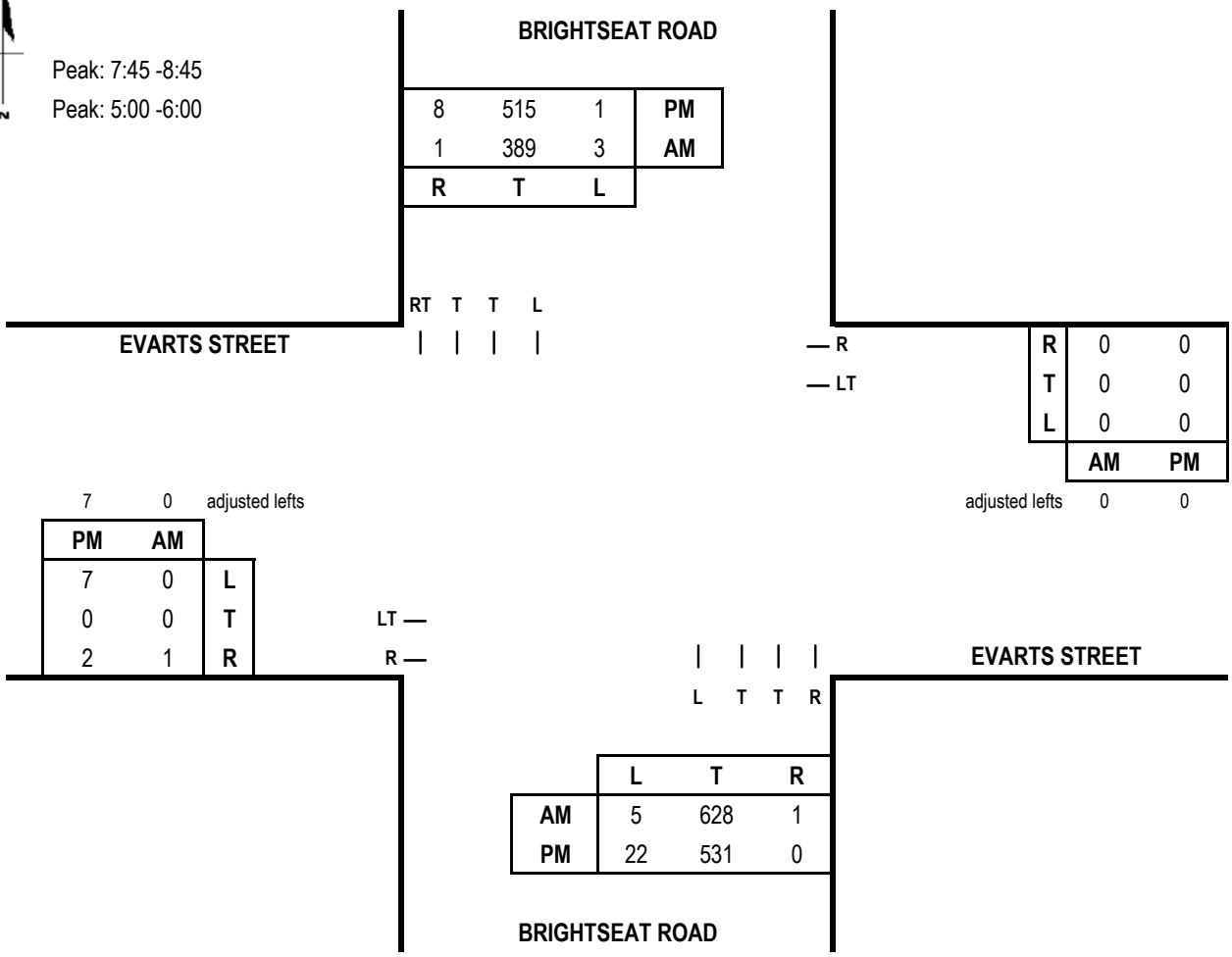
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: Evarts Street
N/S Road: Brightseat Road
Conditions: Existing Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	628	0.55	345	3	1.00	3	348
SB	390	0.37	144	5	1.00	5	
EB	0	1.00	0	0	1.00	0	0
WB	0	1.00	0	0	1.00	0	

CLV TOTAL= **348**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	531	0.55	292	1	1.00	1	293
SB	523	0.37	194	22	1.00	22	
EB	7	1.00	7	0	1.00	0	7
WB	0	1.00	0	7	1.00	7	

CLV TOTAL= **300**
Level of Service (LOS)= **A**

Scenario ID - EXIST1
AM V/C =0.22
PM V/C =0.19

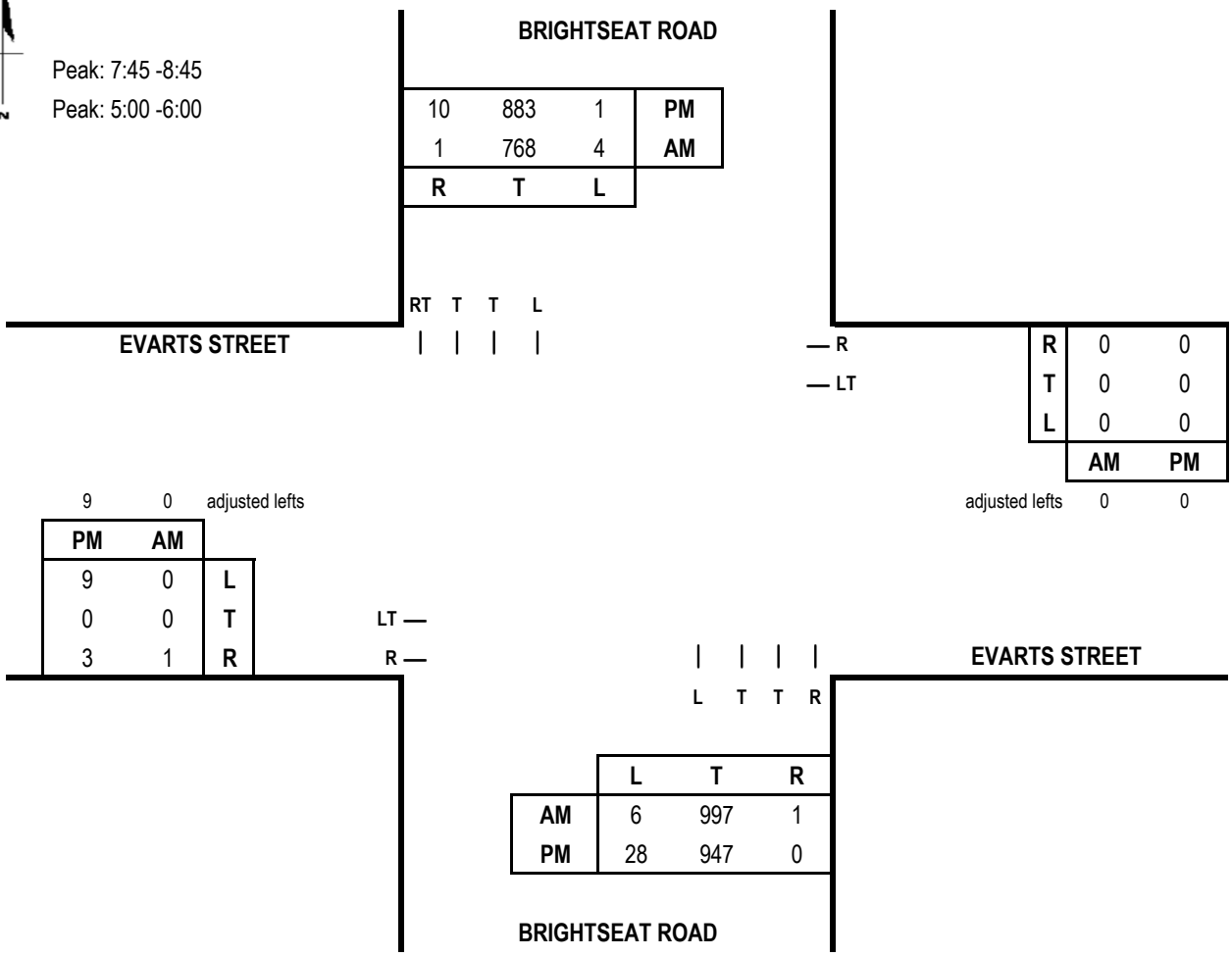
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: Evarts Street
N/S Road: Brightseat Road
Conditions: 2029 Background Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	997	0.55	548	4	1.00	4	552
SB	769	0.37	285	6	1.00	6	
EB	0	1.00	0	0	1.00	0	0
WB	0	1.00	0	0	1.00	0	

CLV TOTAL= **552**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	947	0.55	521	1	1.00	1	522
SB	893	0.37	330	28	1.00	28	
EB	9	1.00	9	0	1.00	0	9
WB	0	1.00	0	9	1.00	9	

CLV TOTAL= **531**
Level of Service (LOS)= **A**

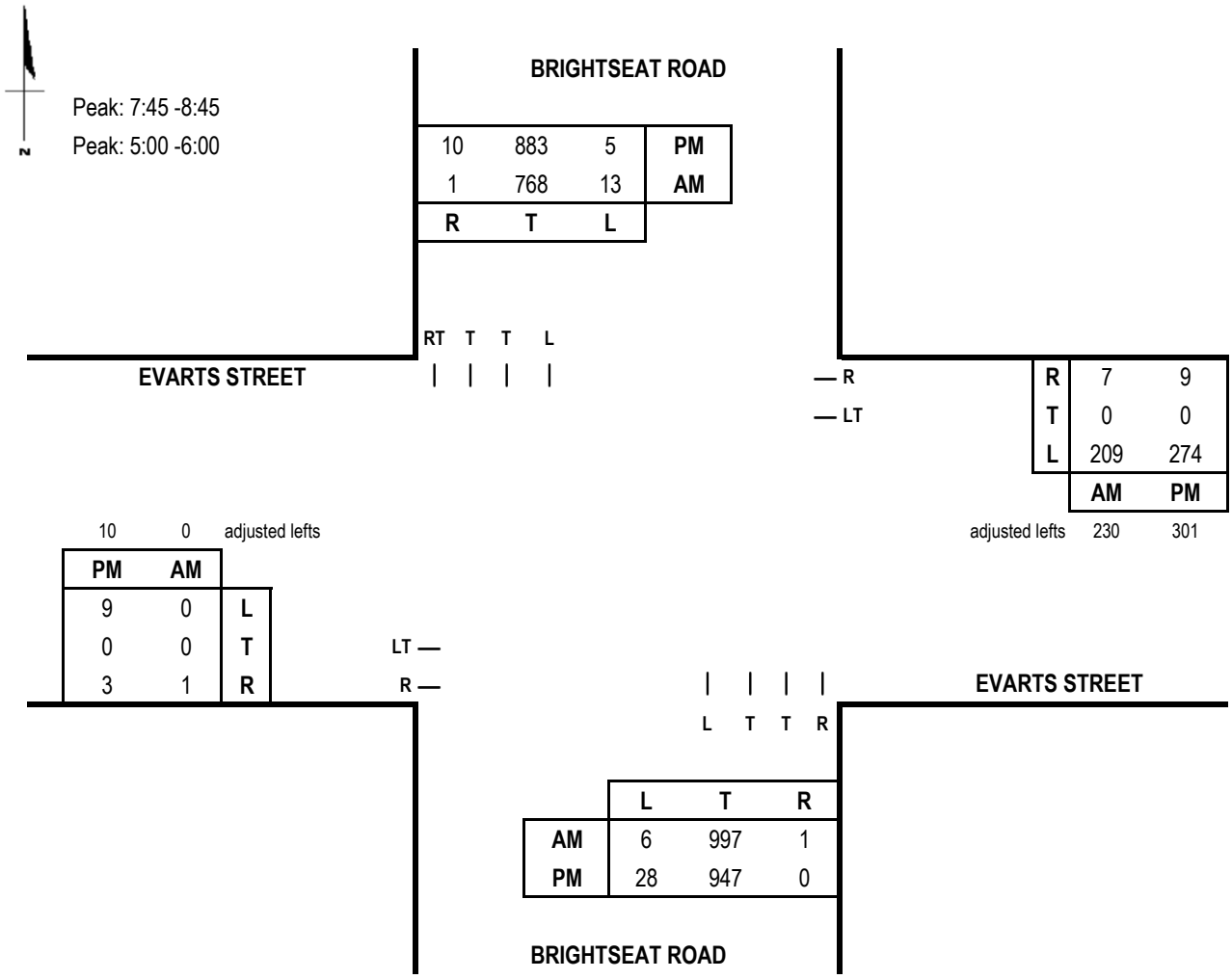
Scenario ID - BACK1
AM V/C =0.35
PM V/C =0.33

CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: Evarts Street
N/S Road: Brightseat Road
Conditions: 2029 Total Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	997	0.55	548	13	1.00	13	561
SB	769	0.37	285	6	1.00	6	
EB	0	1.00	0	209	1.00	209	230
WB	230	1.00	230	0	1.00	0	

CLV TOTAL= **791**
Level of Service (LOS)= **A**

Scenario ID - TOT1
AM V/C =0.49

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	947	0.55	521	5	1.00	5	526
SB	893	0.37	330	28	1.00	28	
EB	10	1.00	10	274	1.00	274	310
WB	301	1.00	301	9	1.00	9	

CLV TOTAL= **836**
Level of Service (LOS)= **A**

PM V/C =0.52

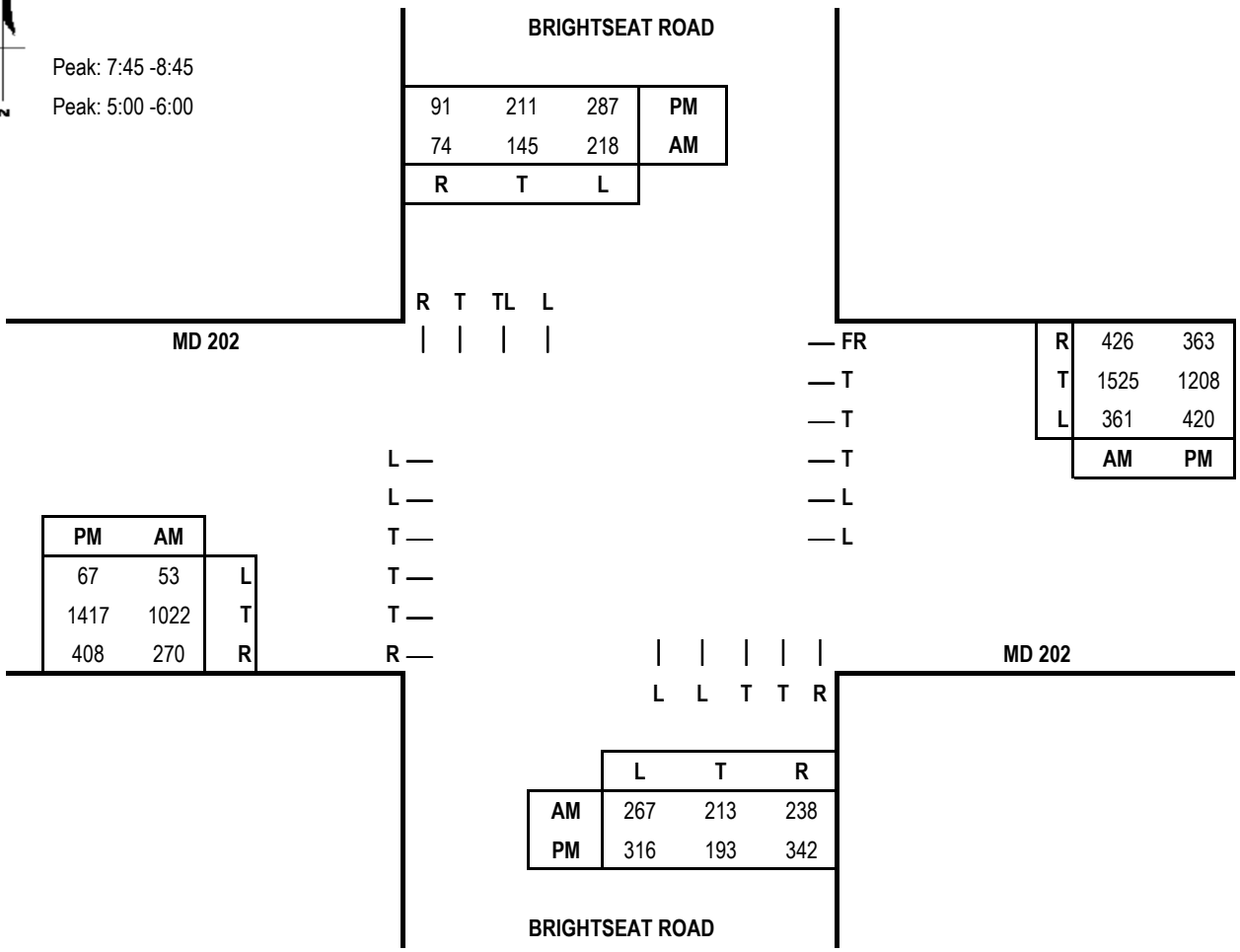
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202
N/S Road: Brightseat Road
Conditions: Existing Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	267	0.60	160				160
SB	363	0.40	145				145
EB	1022	0.37	378	361	0.60	217	596
WB	1525	0.37	564	53	0.60	32	

CLV TOTAL= **901**
Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	316	0.60	190				190
SB	498	0.40	199				199
EB	1417	0.37	524	420	0.60	252	776
WB	1208	0.37	447	67	0.60	40	

CLV TOTAL= **1,165**
Level of Service (LOS)= **C**

Scenario ID - EXIST2
AM V/C =0.56
PM V/C =0.73

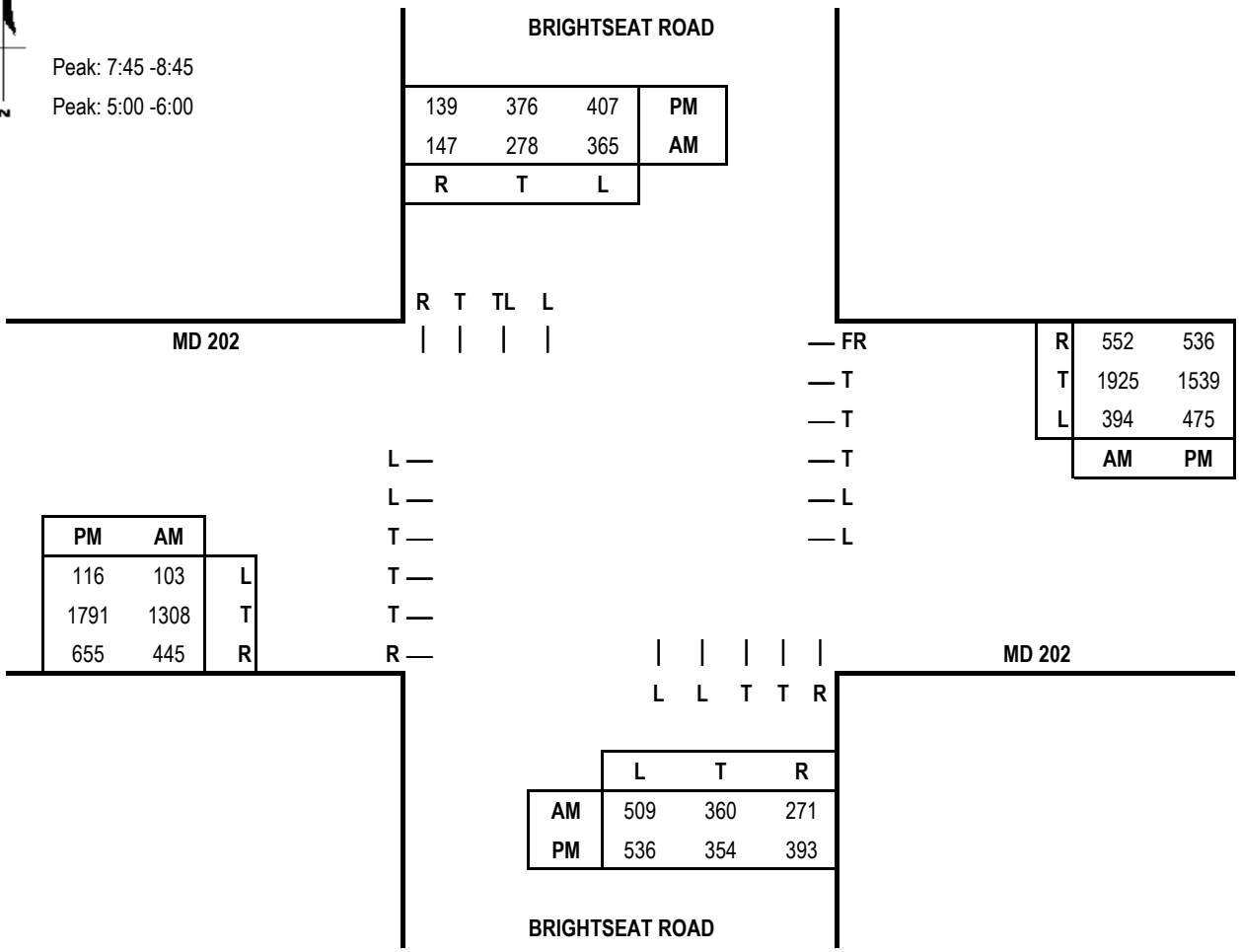
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202
N/S Road: Brightseat Road
Conditions: 2029 Background Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	509	0.60	305				305
SB	643	0.40	257				257
EB	1308	0.37	484	394	0.60	236	774
WB	1925	0.37	712	103	0.60	62	

CLV TOTAL= **1,336**
Level of Service (LOS)= **D**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	536	0.60	322				322
SB	783	0.40	313				313
EB	1791	0.37	663	475	0.60	285	948
WB	1539	0.37	569	116	0.60	70	

CLV TOTAL= **1,583**
Level of Service (LOS)= **E**

Scenario ID - BACK2
AM V/C =0.84
PM V/C =0.99

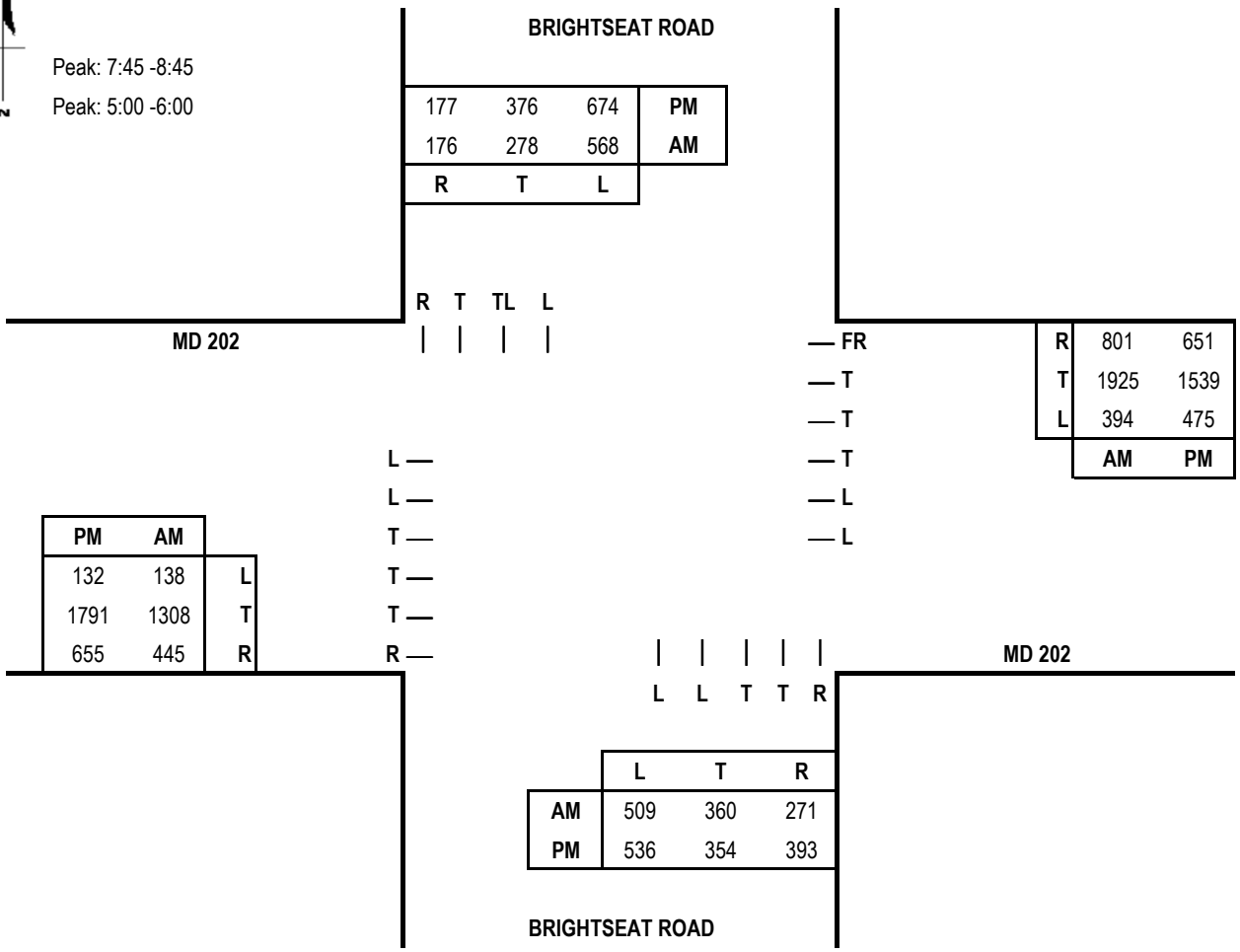
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202
N/S Road: Brightseat Road
Conditions: 2029 Total Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	509	0.60	305				305
SB	568	0.60	341				341
EB	1308	0.37	484	394	0.60	236	795
WB	1925	0.37	712	138	0.60	83	
						CLV TOTAL=	1,441
						Level of Service (LOS)=	D

Scenario ID - TOT2
AM V/C =0.9

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	536	0.60	322				322
SB	1050	0.40	420				420
EB	1791	0.37	663	475	0.60	285	948
WB	1539	0.37	569	132	0.60	79	
						CLV TOTAL=	1,690
						Level of Service (LOS)=	F

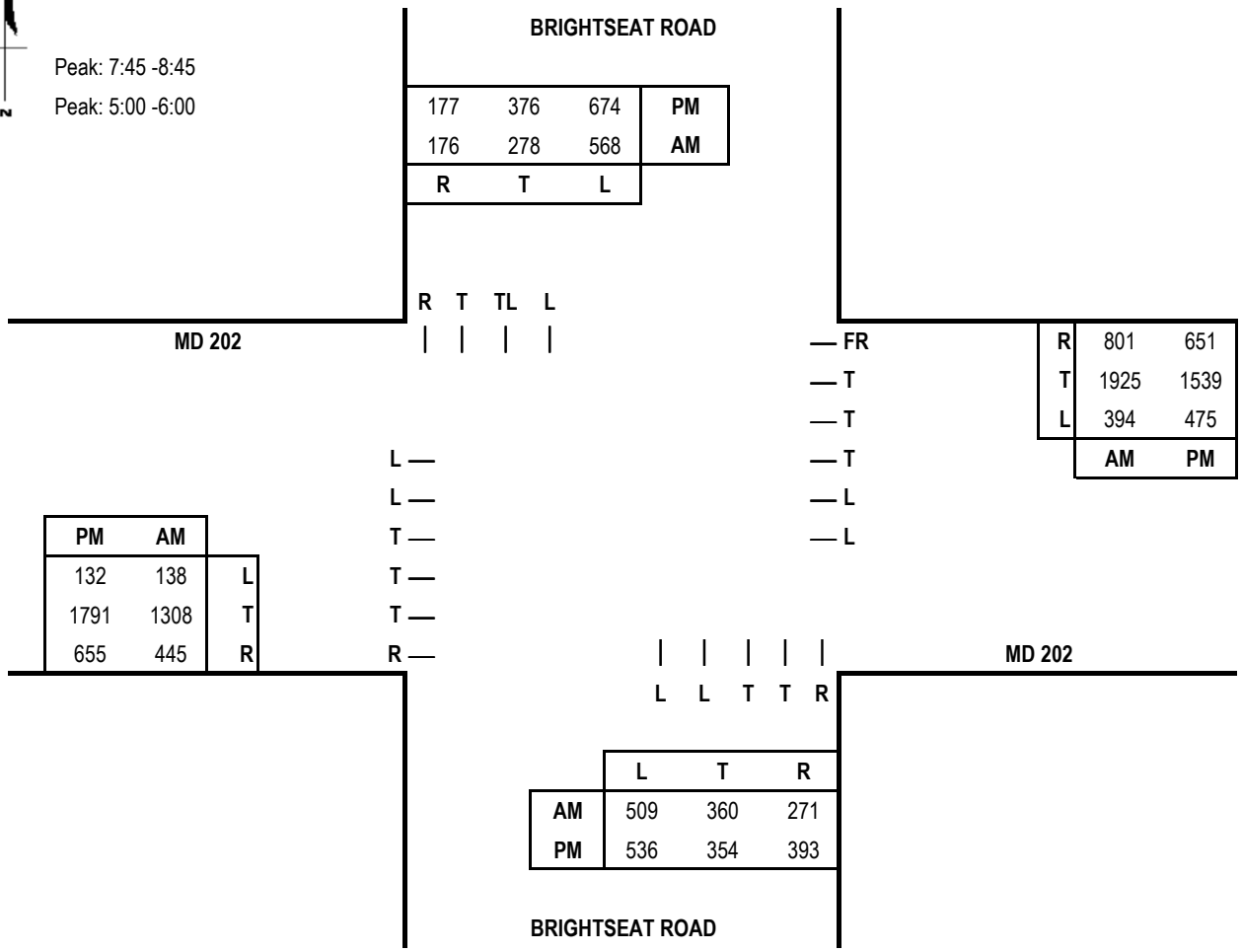
PM V/C =1.06

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

E/W Road: MD 202
N/S Road: Brightseat Road
Conditions: 2029 Total Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	509	0.60	305				305
SB	568	0.60	341				341
EB	1308	0.40	523	394	0.60	236	853
WB	1925	0.40	770	138	0.60	83	

CLV TOTAL= **1,499**
Level of Service (LOS)= **E**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	536	0.60	322				322
SB	1050	0.40	420				420
EB	1791	0.40	716	475	0.60	285	1001
WB	1539	0.40	616	132	0.60	79	

CLV TOTAL= **1,743**
Level of Service (LOS)= **F**

Scenario ID - TOT2
AM V/C =0.94
PM V/C =1.09

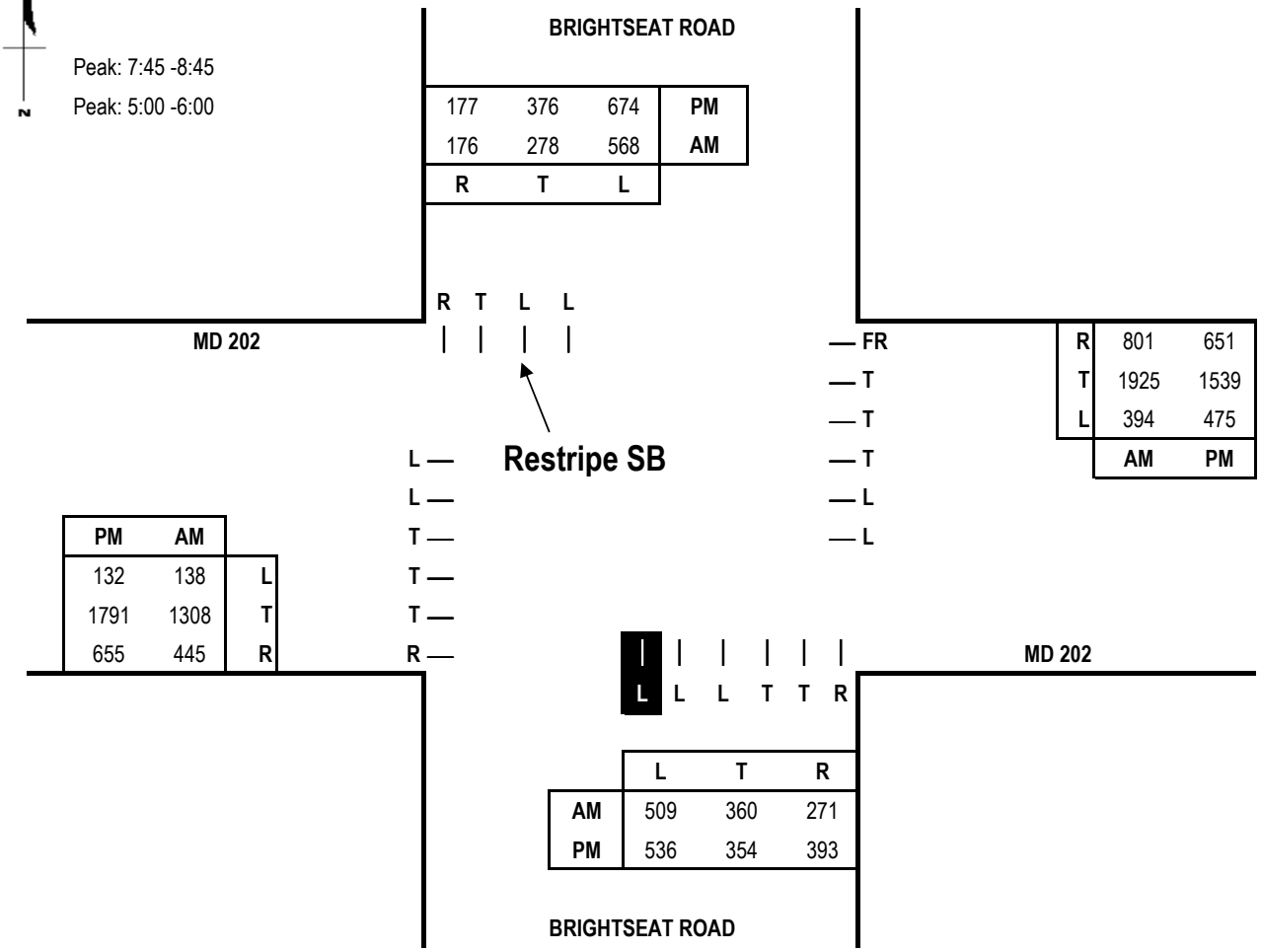
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202
N/S Road: Brightseat Road
Conditions: Total Traffic w/ improvement

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	509	0.45	229				229
SB	568	0.60	341				341
EB	1308	0.37	484	394	0.60	236	795
WB	1925	0.37	712	138	0.60	83	

CLV TOTAL= **1,365**
Level of Service (LOS)= **D**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	536	0.45	241				241
SB	674	0.60	404				404
EB	1791	0.37	663	475	0.60	285	948
WB	1539	0.37	569	132	0.60	79	

CLV TOTAL= **1,593**
Level of Service (LOS)= **E**

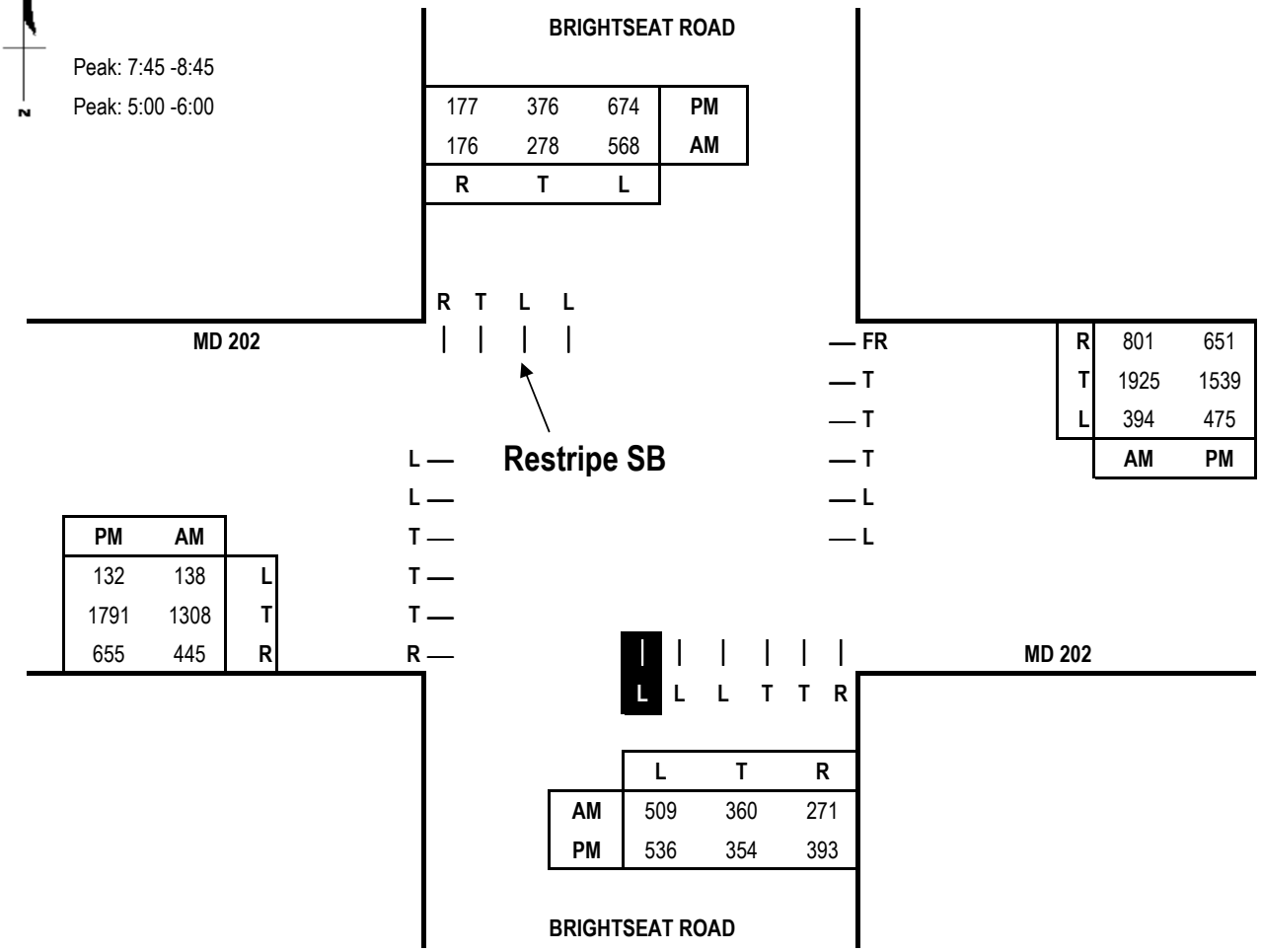
Scenario ID - TOT2
AM V/C =0.85
PM V/C =1

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

E/W Road: MD 202
N/S Road: Brightseat Road
Conditions: Total Traffic w/ improvement

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	509	0.45	229				229
SB	568	0.60	341				341
EB	1308	0.40	523	394	0.60	236	853
WB	1925	0.40	770	138	0.60	83	

CLV TOTAL= **1,423**
Level of Service (LOS)= **D**
AM V/C =0.89

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	536	0.45	241				241
SB	674	0.60	404				404
EB	1791	0.40	716	475	0.60	285	1001
WB	1539	0.40	616	132	0.60	79	

CLV TOTAL= **1,646**
Level of Service (LOS)= **F**
PM V/C =1.03

Scenario ID - TOT2

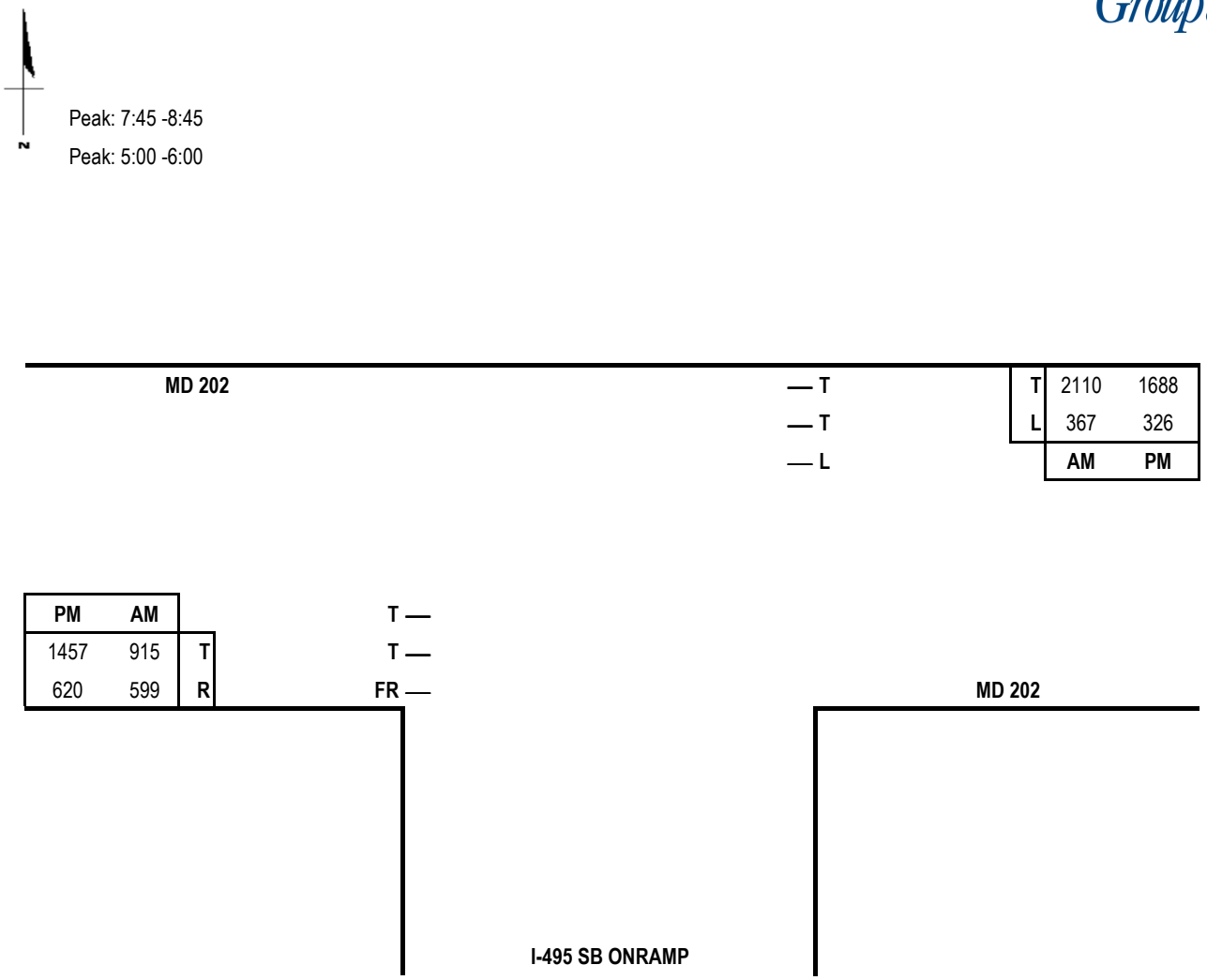
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202
N/S Road: I-495 SB Onramp
Conditions: Existing Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	0	0.00	0				0
EB	915	0.55	503	367	1.00	367	1161
WB	2110	0.55	1161				

CLV TOTAL= **1,161**
Level of Service (LOS)= **C**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	0	0.00	0				0
EB	1457	0.55	801	326	1.00	326	1127
WB	1688	0.55	928				

CLV TOTAL= **1,127**
Level of Service (LOS)= **B**

Scenario ID - EXIST3
AM V/C =0.73
PM V/C =0.7

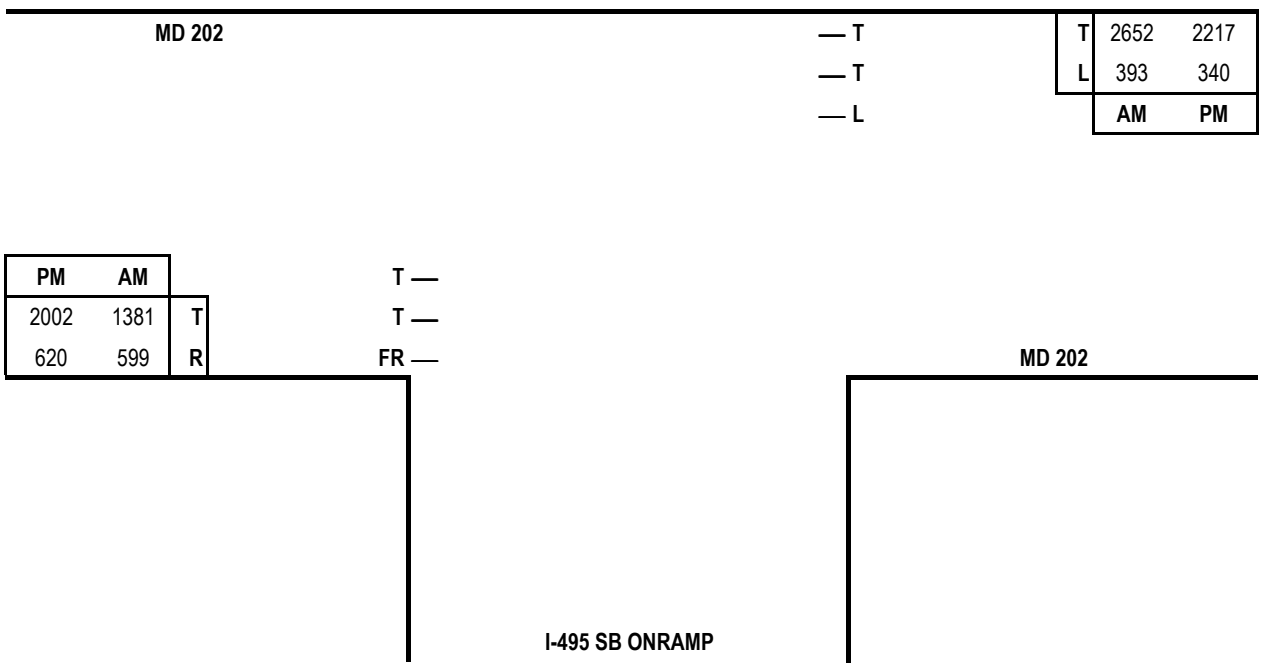
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202
N/S Road: I-495 SB Onramp
Conditions: 2029 Background Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	0	0.00	0				0
EB	1381	0.55	760	393	1.00	393	1459
WB	2652	0.55	1459				

CLV TOTAL= **1,459**
Level of Service (LOS)= **E**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	0	0.00	0				0
EB	2002	0.55	1101	340	1.00	340	1441
WB	2217	0.55	1219				

CLV TOTAL= **1,441**
Level of Service (LOS)= **D**

Scenario ID - BACK3
AM V/C =0.91
PM V/C =0.9

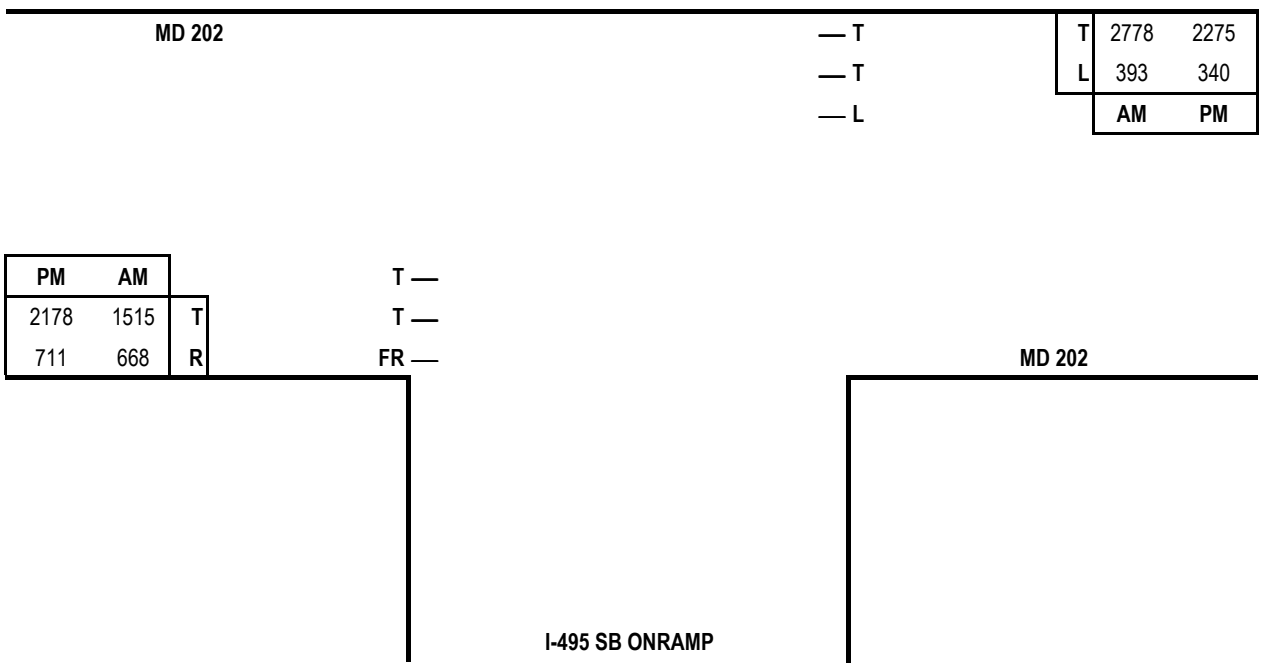
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202
N/S Road: I-495 SB Onramp
Conditions: 2029 Total Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	0	0.00	0				0
EB	1515	0.55	833	393	1.00	393	1528
WB	2778	0.55	1528				

CLV TOTAL= **1,528**
Level of Service (LOS)= **E**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	0	0.00	0				0
EB	2178	0.55	1198	340	1.00	340	1538
WB	2275	0.55	1251				

CLV TOTAL= **1,538**
Level of Service (LOS)= **E**

Scenario ID - TOT3
AM V/C =0.96
PM V/C =0.96

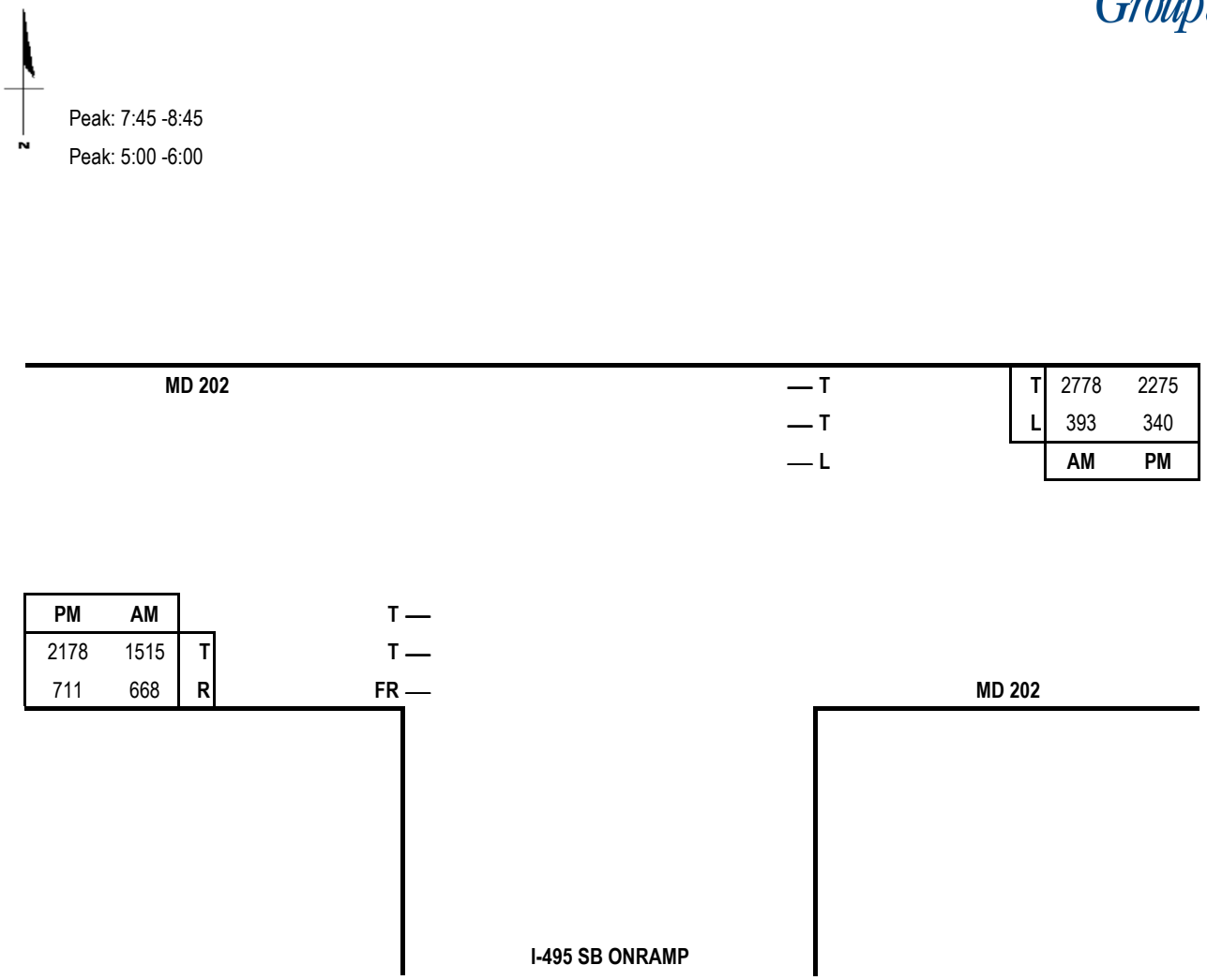
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for MSHA

E/W Road: MD 202
N/S Road: I-495 SB Onramp
Conditions: 2029 Total Traffic

Date of Count: 4/11/2023
Day of Count: Tuesday
Analyst: Shulin Li

Peak: 7:45 -8:45
Peak: 5:00 -6:00



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	0	0.00	0				0
EB	1515	0.55	833	393	1.00	393	1528
WB	2778	0.55	1528				

CLV TOTAL= **1,528**
Level of Service (LOS)= **E**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	0	0.00	0				0
EB	2178	0.55	1198	340	1.00	340	1538
WB	2275	0.55	1251				

CLV TOTAL= **1,538**
Level of Service (LOS)= **E**

Scenario ID - TOT3
AM V/C =0.96
PM V/C =0.96

CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

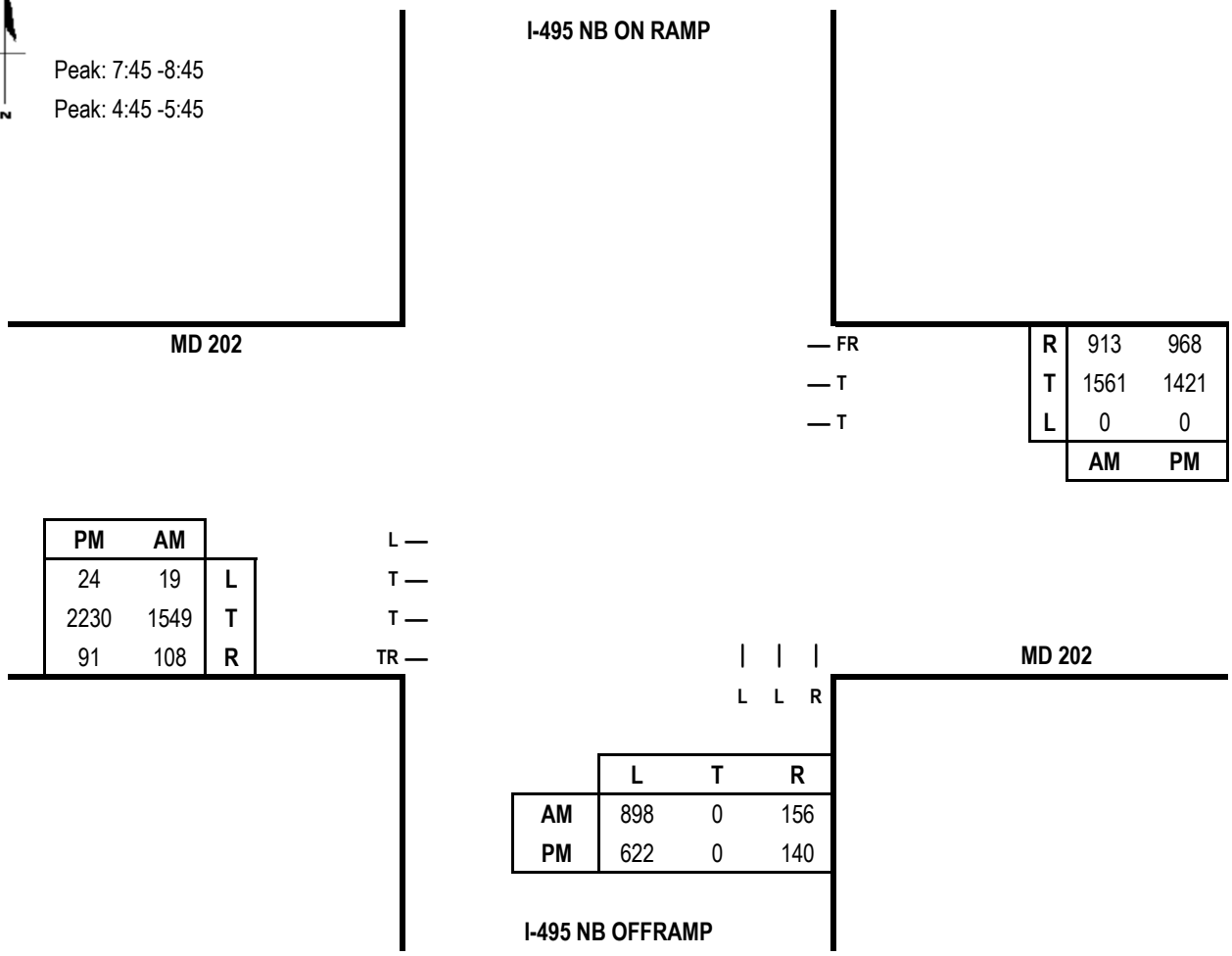
E/W Road: MD 202 **Date of Count:** 4/11/2023

N/S Road: I-495 NB On Ramp/I-495 Nb Offramp **Day of Count:** Tuesday

Conditions: Existing Traffic **Analyst:** Shulin Li

Peak: 7:45 -8:45

Peak: 4:45 -5:45



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	156	1.00	156	0	0.00	0	539
SB	0	0.00	0	898	0.60	539	
EB	1657	0.37	613	0	0.00	0	878
WB	1561	0.55	859	19	1.00	19	

CLV TOTAL= **1,417**

Level of Service (LOS)= **D**

AM V/C =0.89

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	140	1.00	140	0	0.00	0	373
SB	0	0.00	0	622	0.60	373	
EB	2321	0.37	859	0	0.00	0	859
WB	1421	0.55	782	24	1.00	24	

CLV TOTAL= **1,232**

Level of Service (LOS)= **C**

PM V/C =0.77

Scenario ID - EXIST4

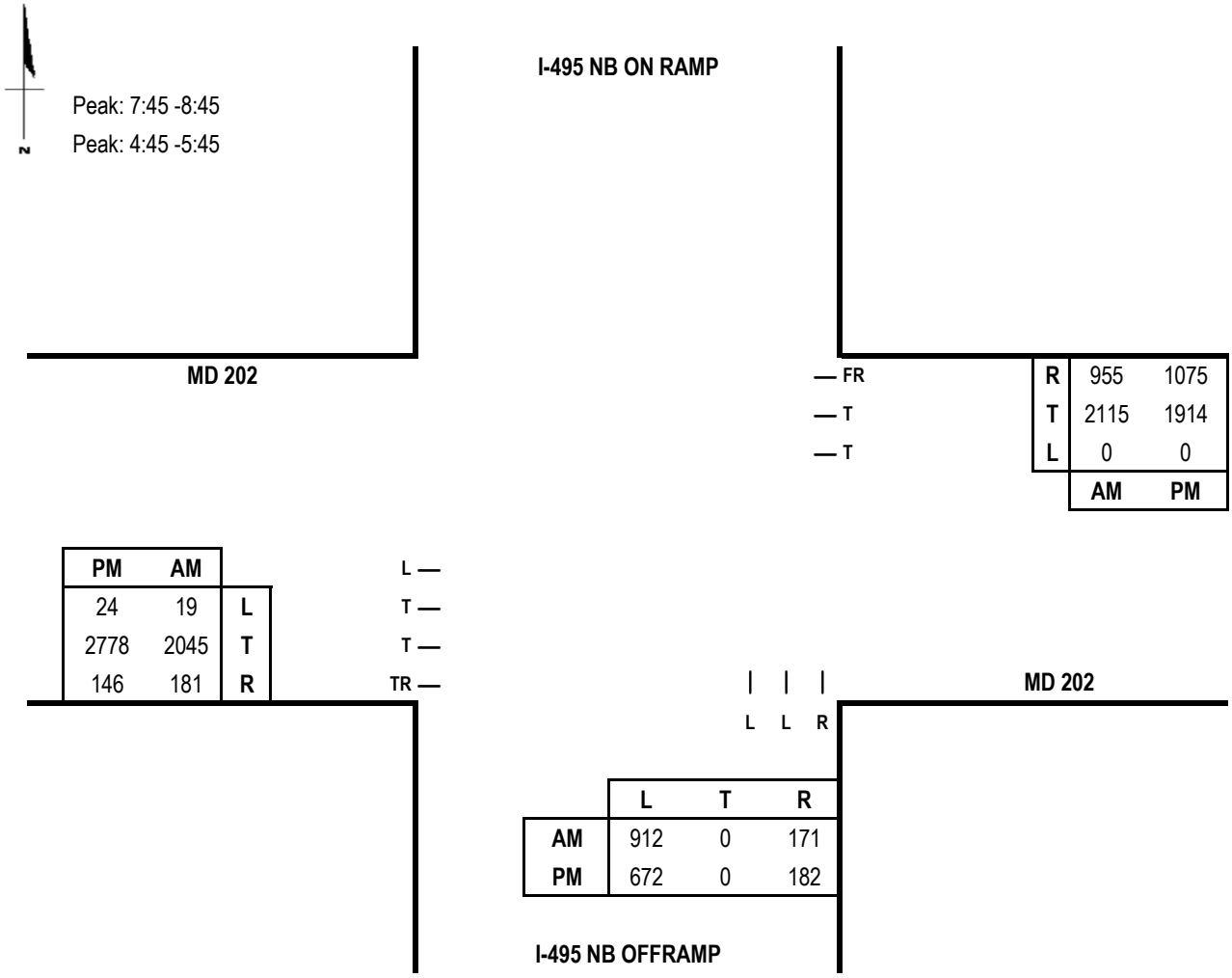
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202 **Date of Count:** 4/11/2023

N/S Road: I-495 NB On Ramp/I-495 Nb Offramp **Day of Count:** Tuesday

Conditions: 2029 Background Traffic **Analyst:** Shulin Li



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	171	1.00	171	0	0.00	0	547
SB	0	0.00	0	912	0.60	547	
EB	2226	0.37	824	0	0.00	0	1182
WB	2115	0.55	1163	19	1.00	19	

CLV TOTAL= **1,729**

Level of Service (LOS)= **F**

Scenario ID - BACK4

AM V/C =1.08

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	182	1.00	182	0	0.00	0	403
SB	0	0.00	0	672	0.60	403	
EB	2924	0.37	1082	0	0.00	0	1082
WB	1914	0.55	1053	24	1.00	24	

CLV TOTAL= **1,485**

Level of Service (LOS)= **E**

PM V/C =0.93

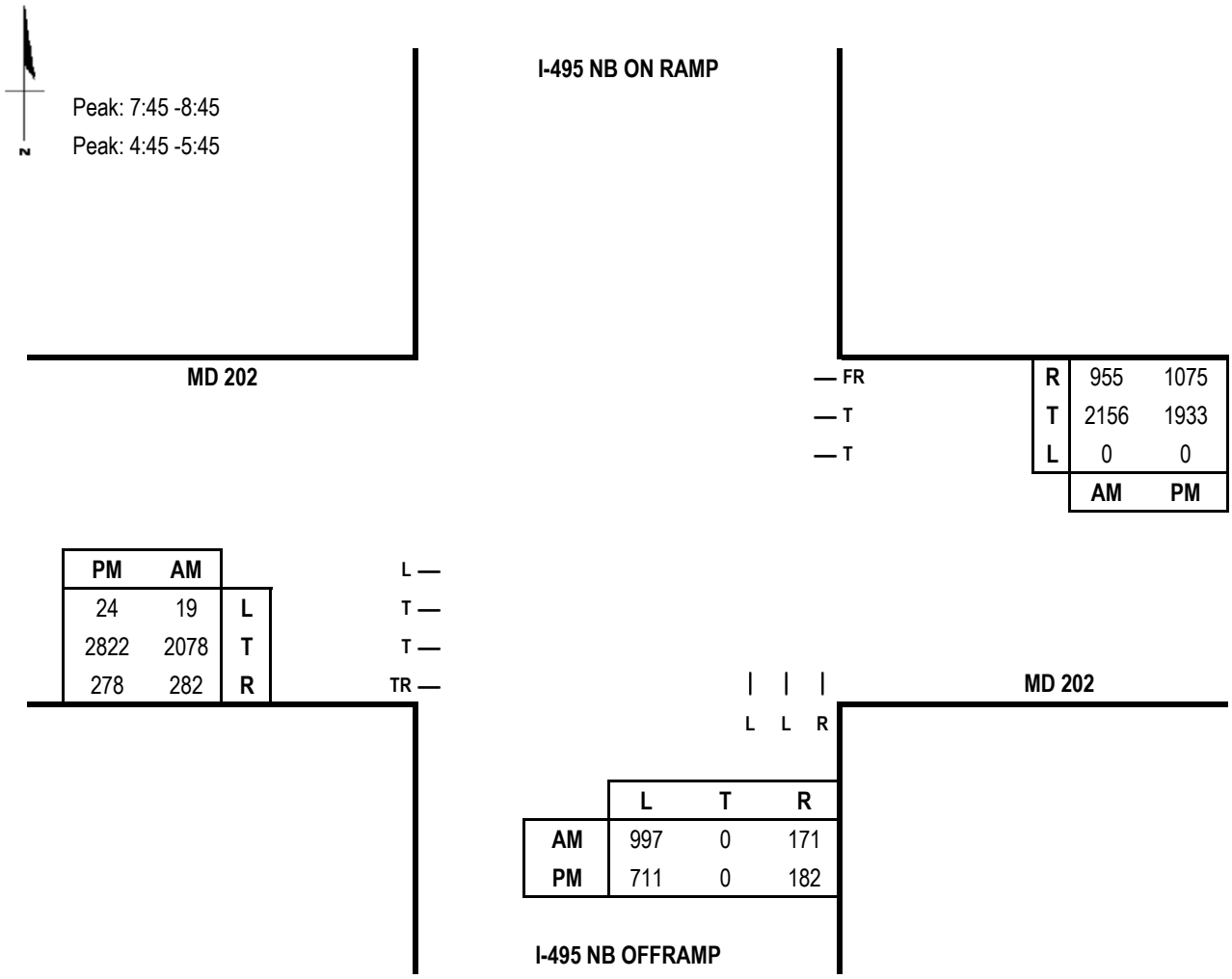
CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: MD 202 **Date of Count:** 4/11/2023

N/S Road: I-495 NB On Ramp/I-495 Nb Offramp **Day of Count:** Tuesday

Conditions: 2029 Total Traffic **Analyst:** Shulin Li



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	171	1.00	171	0	0.00	0	598
SB	0	0.00	0	997	0.60	598	
EB	2360	0.37	873	0	0.00	0	1205
WB	2156	0.55	1186	19	1.00	19	

CLV TOTAL= **1,803**

Level of Service (LOS)= **F**

Scenario ID - TOT4

AM V/C =1.13

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	182	1.00	182	0	0.00	0	427
SB	0	0.00	0	711	0.60	427	
EB	3100	0.37	1147	0	0.00	0	1147
WB	1933	0.55	1063	24	1.00	24	

CLV TOTAL= **1,574**

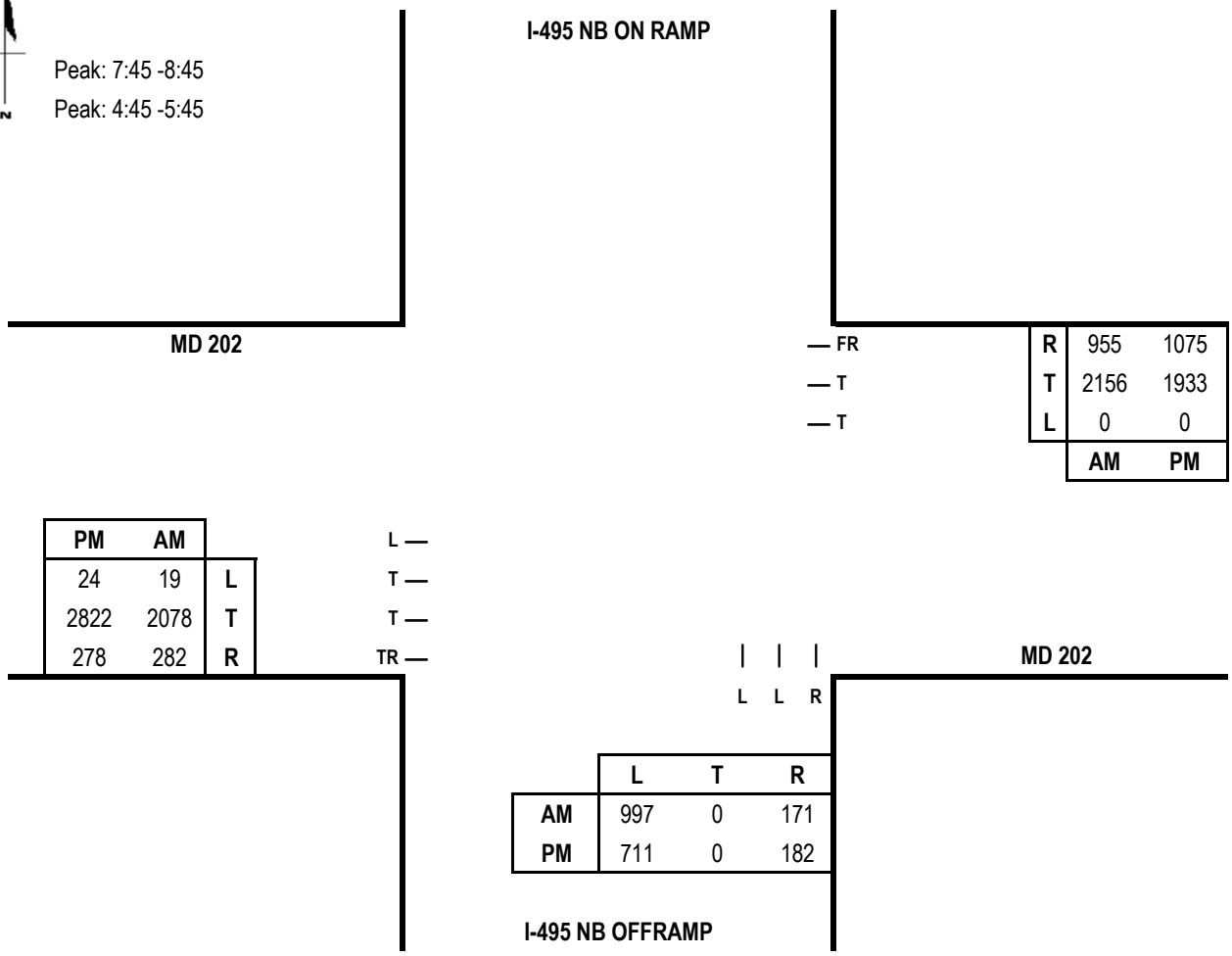
Level of Service (LOS)= **E**

PM V/C =0.98

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

E/W Road: MD 202 **Date of Count:** 4/11/2023
N/S Road: I-495 NB On Ramp/I-495 Nb Offramp **Day of Count:** Tuesday
Conditions: 2029 Total Traffic **Analyst:** Shulin Li

Peak: 7:45 -8:45
Peak: 4:45 -5:45



	AM	PM
R	955	1075
T	2156	1933
L	0	0

PM	AM	
24	19	L
2822	2078	T
278	282	R

	L	T	R
AM	997	0	171
PM	711	0	182

Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	171	1.00	171	0	0.00	0	598
SB	0	0.00	0	997	0.60	598	
EB	2360	0.40	944	0	0.00	0	1205
WB	2156	0.55	1186	19	1.00	19	

CLV TOTAL= **1,803**
Level of Service (LOS)= **F**
AM V/C =1.13

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	182	1.00	182	0	0.00	0	427
SB	0	0.00	0	711	0.60	427	
EB	3100	0.40	1240	0	0.00	0	1240
WB	1933	0.55	1063	24	1.00	24	

CLV TOTAL= **1,667**
Level of Service (LOS)= **F**
PM V/C =1.04

Scenario ID - TOT4

CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

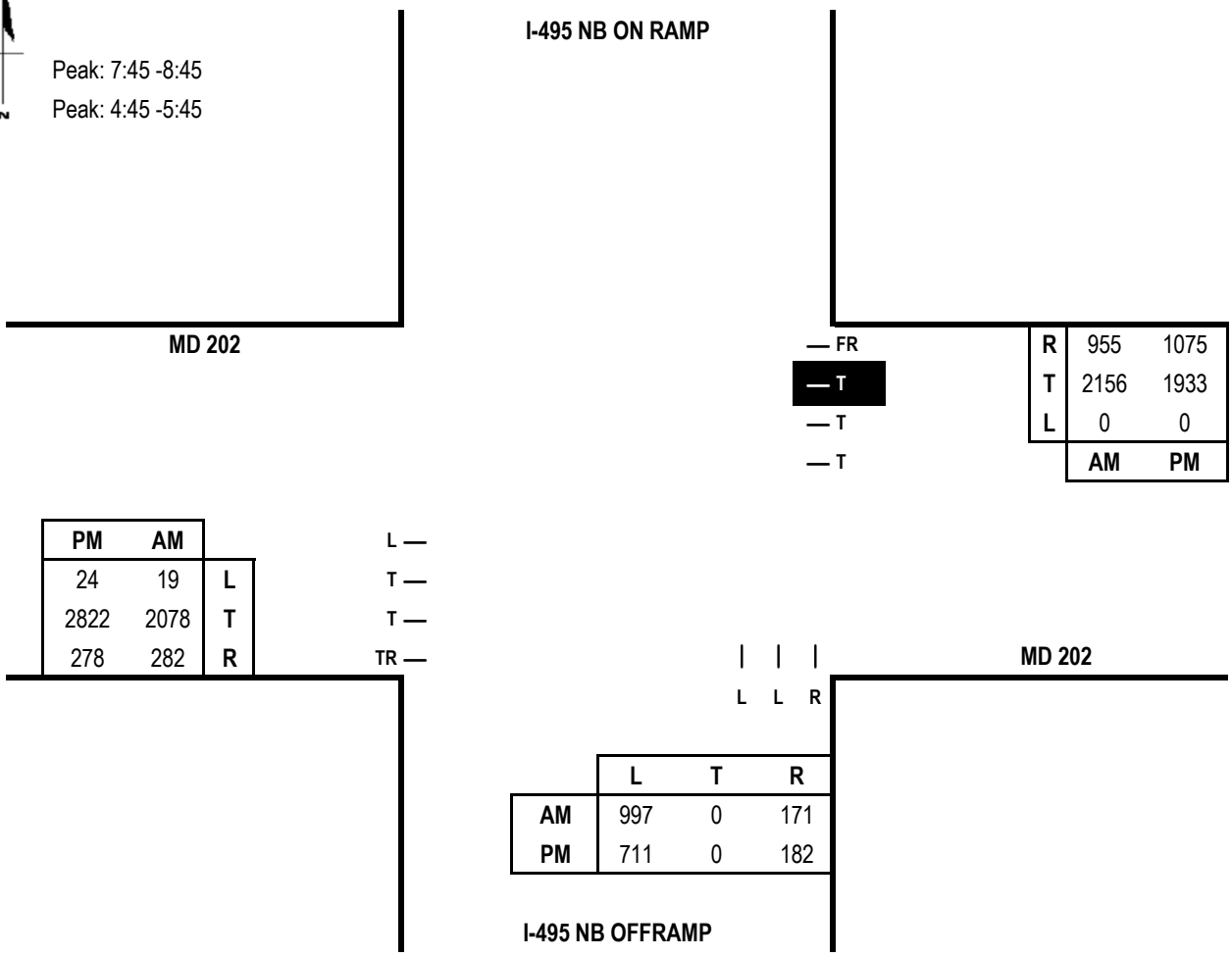
E/W Road: MD 202 **Date of Count:** 4/11/2023

N/S Road: I-495 NB On Ramp/I-495 Nb Offramp **Day of Count:** Tuesday

Conditions: 2029 Total Traffic w/ improvement **Analyst:** Shulin Li

Peak: 7:45 -8:45

Peak: 4:45 -5:45



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	171	1.00	171	0	0.00	0	598
SB	0	0.00	0	997	0.60	598	
EB	2360	0.37	873	0	0.00	0	873
WB	2156	0.37	798	19	1.00	19	

CLV TOTAL= **1,471**

Level of Service (LOS)= **E**

AM V/C =0.92

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	182	1.00	182	0	0.00	0	427
SB	0	0.00	0	711	0.60	427	
EB	3100	0.37	1147	0	0.00	0	1147
WB	1933	0.37	715	24	1.00	24	

CLV TOTAL= **1,574**

Level of Service (LOS)= **E**

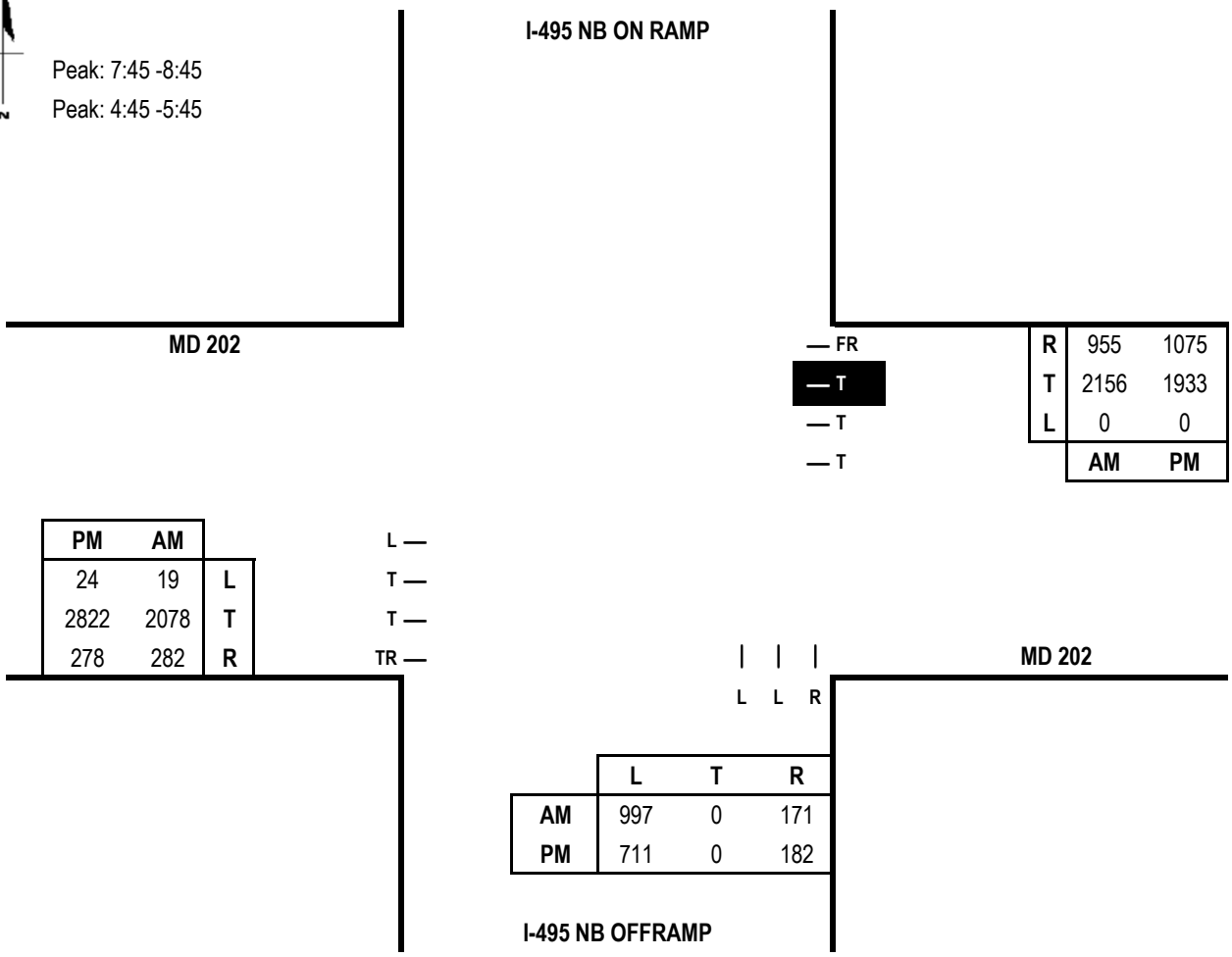
PM V/C =0.98

Scenario ID - TOT4

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

E/W Road: MD 202 **Date of Count:** 4/11/2023
N/S Road: I-495 NB On Ramp/I-495 Nb Offramp **Day of Count:** Tuesday
Conditions: 2029 Total Traffic w/ improvement **Analyst:** Shulin Li

Peak: 7:45 -8:45
Peak: 4:45 -5:45



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	171	1.00	171	0	0.00	0	598
SB	0	0.00	0	997	0.60	598	
EB	2360	0.40	944	0	0.00	0	944
WB	2156	0.40	862	19	1.00	19	

CLV TOTAL= **1,542**
Level of Service (LOS)= **E**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	182	1.00	182	0	0.00	0	427
SB	0	0.00	0	711	0.60	427	
EB	3100	0.40	1240	0	0.00	0	1240
WB	1933	0.40	773	24	1.00	24	

CLV TOTAL= **1,667**
Level of Service (LOS)= **F**

Scenario ID - TOT4
AM V/C =0.96
PM V/C =1.04

CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

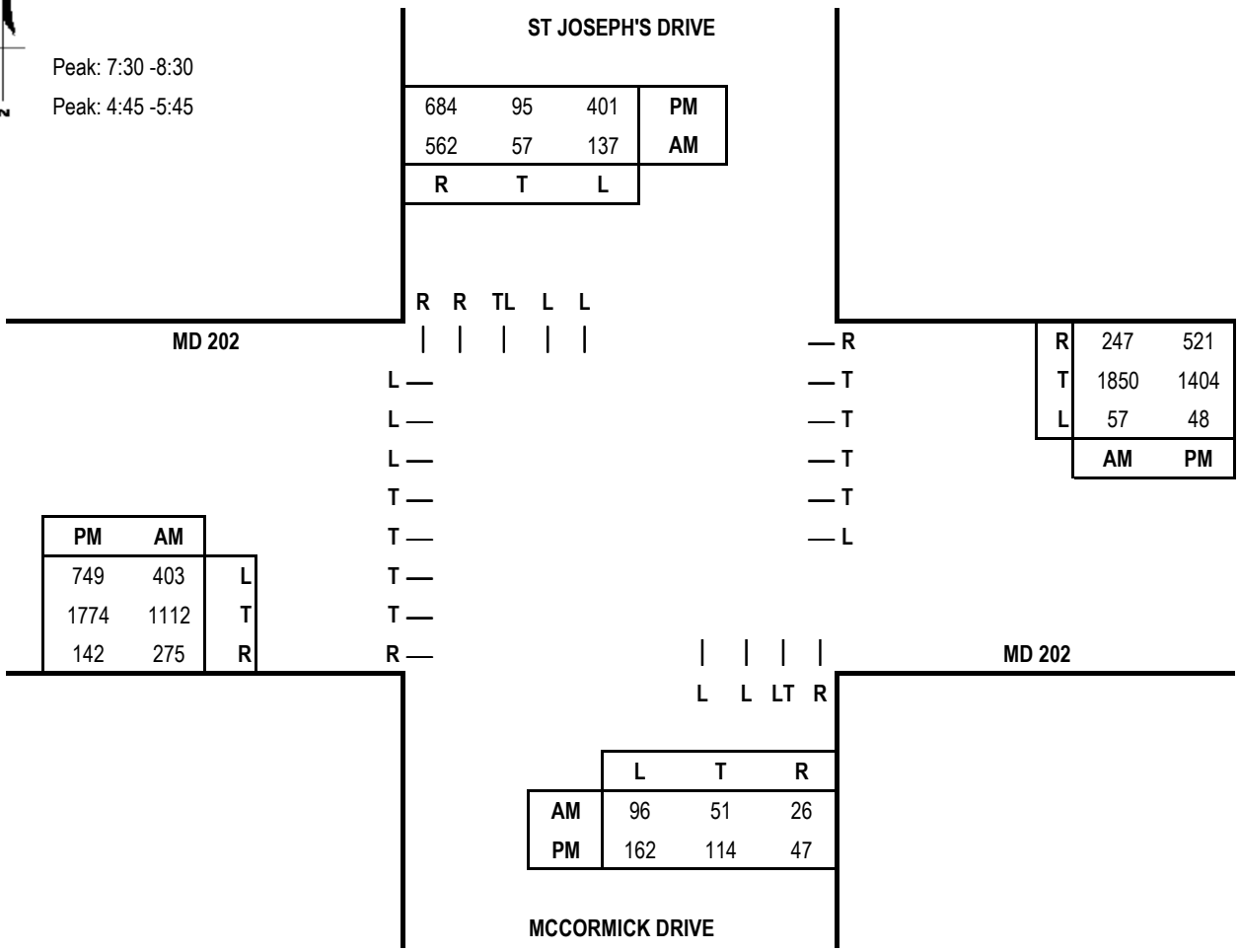
E/W Road: MD 202 **Date of Count:** 5/18/2023

N/S Road: St Joseph'S Drive/Mccormick Drive **Day of Count:** Thursday

Conditions: Existing Traffic **Analyst:** Shulin Li

Peak: 7:30 -8:30

Peak: 4:45 -5:45



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	147	0.45	66				66
SB	194	0.45	87				87
EB	1112	0.29	322	57	1.00	57	779
WB	1850	0.29	537	403	0.60	242	

CLV TOTAL= **932**

Level of Service (LOS)= **A**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	276	0.45	124				124
SB	496	0.45	223				223
EB	1774	0.29	514	48	1.00	48	856
WB	1404	0.29	407	749	0.60	449	

CLV TOTAL= **1,203**

Level of Service (LOS)= **C**

Scenario ID - EXIST5

AM V/C =0.58

PM V/C =0.75

CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

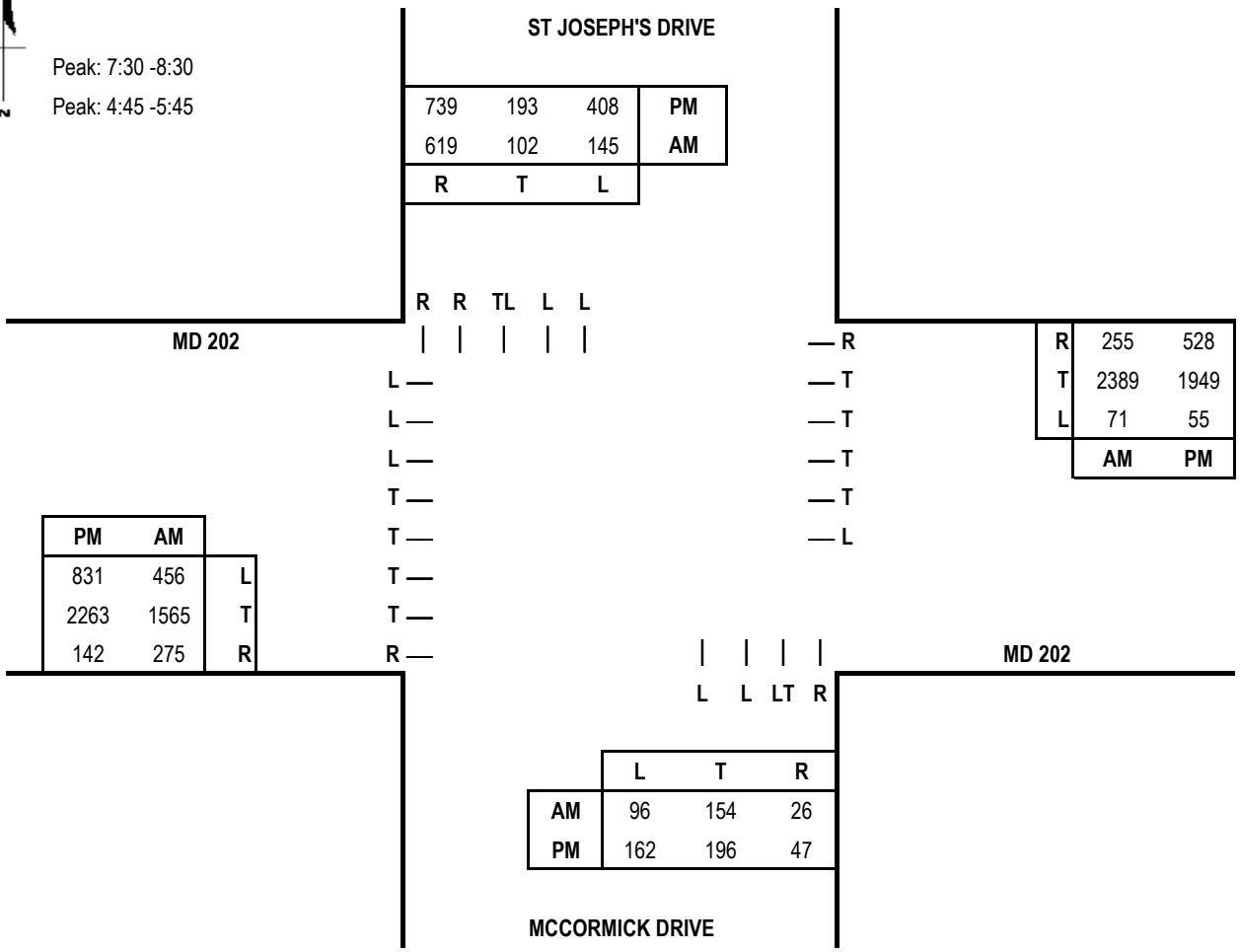
E/W Road: MD 202 **Date of Count:** 5/18/2023

N/S Road: St Joseph'S Drive/Mccormick Drive **Day of Count:** Thursday

Conditions: 2029 Background Traffic **Analyst:** Shulin Li

Peak: 7:30 -8:30

Peak: 4:45 -5:45



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	154	1.00	154				154
SB	247	0.45	111				111
EB	1565	0.29	454	71	1.00	71	967
WB	2389	0.29	693	456	0.60	274	

CLV TOTAL= **1,232**

Level of Service (LOS)= **C**

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	196	1.00	196				196
SB	601	0.45	270				270
EB	2263	0.29	656	55	1.00	55	1064
WB	1949	0.29	565	831	0.60	499	

CLV TOTAL= **1,530**

Level of Service (LOS)= **E**

Scenario ID - BACK5

AM V/C =0.77

PM V/C =0.96

CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

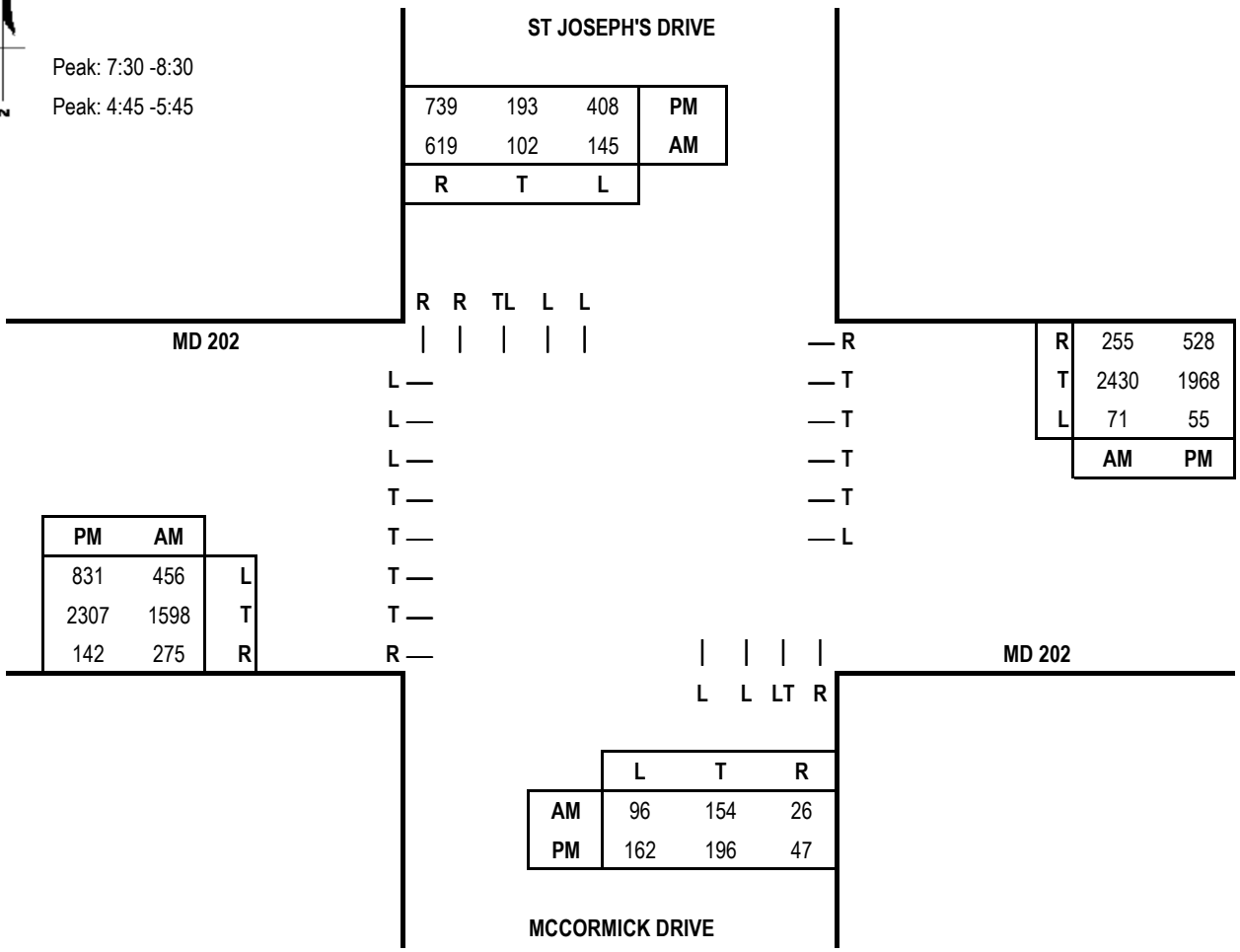
E/W Road: MD 202 **Date of Count:** 5/18/2023

N/S Road: St Joseph'S Drive/Mccormick Drive **Day of Count:** Thursday

Conditions: 2029 Total Traffic **Analyst:** Shulin Li

Peak: 7:30 -8:30

Peak: 4:45 -5:45



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	154	1.00	154				154
SB	247	0.45	111				111
EB	1598	0.29	463	71	1.00	71	979
WB	2430	0.29	705	456	0.60	274	

CLV TOTAL= **1,244**

Level of Service (LOS)= **C**

AM V/C =0.78

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	196	1.00	196				196
SB	601	0.45	270				270
EB	2307	0.29	669	55	1.00	55	1070
WB	1968	0.29	571	831	0.60	499	

CLV TOTAL= **1,536**

Level of Service (LOS)= **E**

Scenario ID - TOT5

PM V/C =0.96

CRITICAL LANE VOLUME (CLV) METHODOLOGY
for MSHA

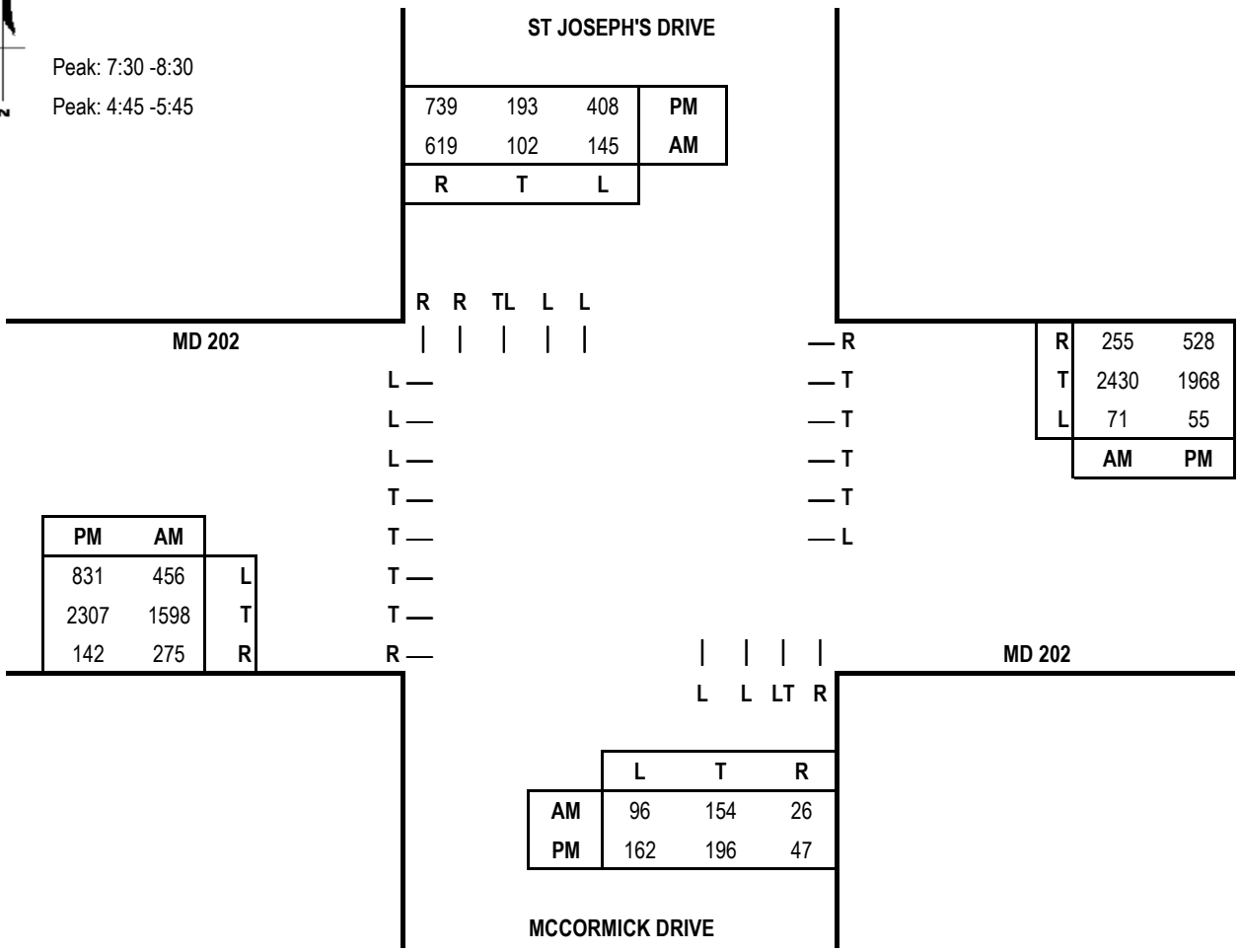
E/W Road: MD 202 **Date of Count:** 5/18/2023

N/S Road: St Joseph'S Drive/Mccormick Drive **Day of Count:** Thursday

Conditions: 2029 Total Traffic **Analyst:** Shulin Li

Peak: 7:30 -8:30

Peak: 4:45 -5:45



Capacity Analysis - North/South Split

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
NB	154	1.00	154				154
SB	247	0.45	111				111
EB	1598	0.30	479	71	1.00	71	1003
WB	2430	0.30	729	456	0.60	274	

CLV TOTAL= **1,268**

Level of Service (LOS)= **C**

AM V/C =0.79

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
NB	196	1.00	196				196
SB	601	0.45	270				270
EB	2307	0.30	692	55	1.00	55	1089
WB	1968	0.30	590	831	0.60	499	

CLV TOTAL= **1,555**

Level of Service (LOS)= **E**

PM V/C =0.97

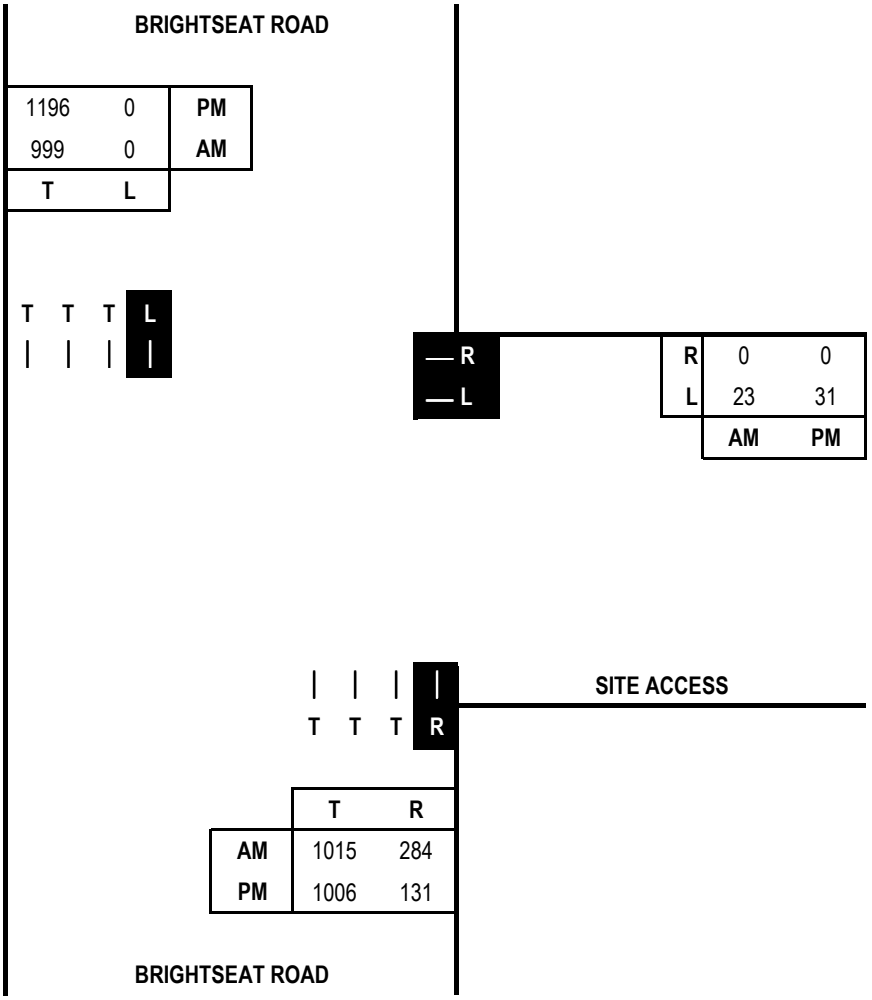
Scenario ID - TOT5

CRITICAL LANE VOLUME (CLV) METHODOLOGY

for Prince Georges County

E/W Road: Site Access
N/S Road: Brightseat Road
Conditions: 2029 Total Traffic

Date of Count:
Day of Count:
Analyst: Shulin Li



Capacity Analysis

Morning Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	AM CLV
WB	23	1.00	23				23
NB	1015	0.37	376	0	1.00	0	376
SB	999	0.37	370				
						CLV TOTAL=	399
						Level of Service (LOS)=	A

Evening Peak Hour

Dir	Thru Volumes VOL	x LUF	= Total	+ Opposing Lefts VOL	x LUF	= Total	PM CLV
WB	31	1.00	31				31
NB	1006	0.37	372	0	1.00	0	443
SB	1196	0.37	443				
						CLV TOTAL=	474
						Level of Service (LOS)=	A

Scenario ID - TOT6

AM V/C =0.25

PM V/C =0.3

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	10	1015	284	10	999
Future Vol, veh/h	23	10	1015	284	10	999
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	11	1103	309	11	1086

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1559	552	0	0	1412	0
Stage 1	1103	-	-	-	-	-
Stage 2	456	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	161	409	-	-	246	-
Stage 1	209	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	154	409	-	-	246	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	209	-	-	-	-	-
Stage 2	528	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.2	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	154	409	246	-
HCM Lane V/C Ratio	-	-	0.162	0.027	0.044	-
HCM Control Delay (s)	-	-	32.9	14	20.3	-
HCM Lane LOS	-	-	D	B	C	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	0.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	10	1006	131	10	1196
Future Vol, veh/h	31	10	1006	131	10	1196
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	11	1093	142	11	1300

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1635	547	0	0	1235	0
Stage 1	1093	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	146	412	-	-	301	-
Stage 1	212	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	141	412	-	-	301	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	212	-	-	-	-	-
Stage 2	481	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.4	0	0.1
HCM LOS	D		

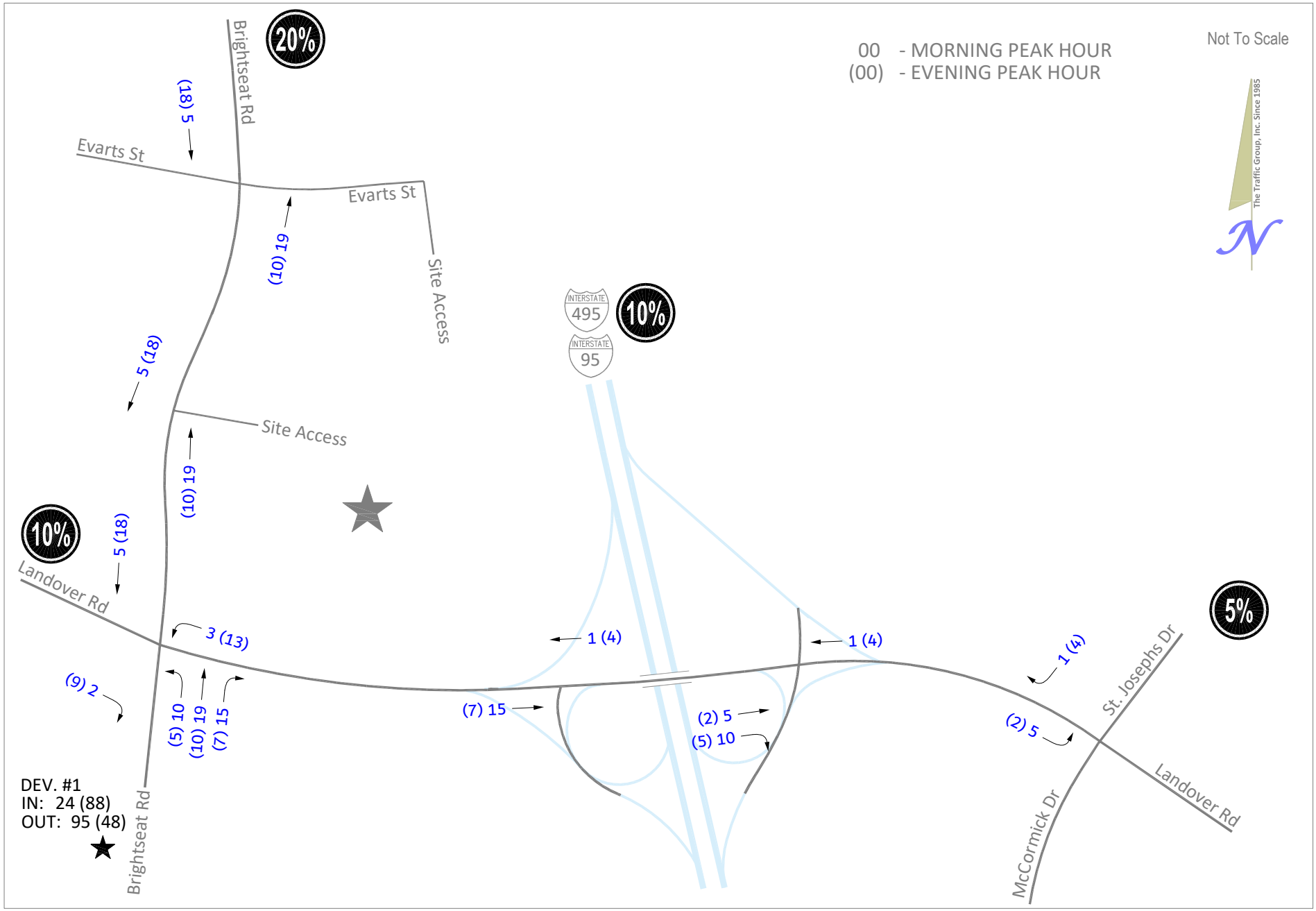
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	141	412	301	-
HCM Lane V/C Ratio	-	-	0.239	0.026	0.036	-
HCM Control Delay (s)	-	-	38.4	14	17.4	-
HCM Lane LOS	-	-	E	B	C	-
HCM 95th %tile Q(veh)	-	-	0.9	0.1	0.1	-

APPENDIX C

Trip Assignment for

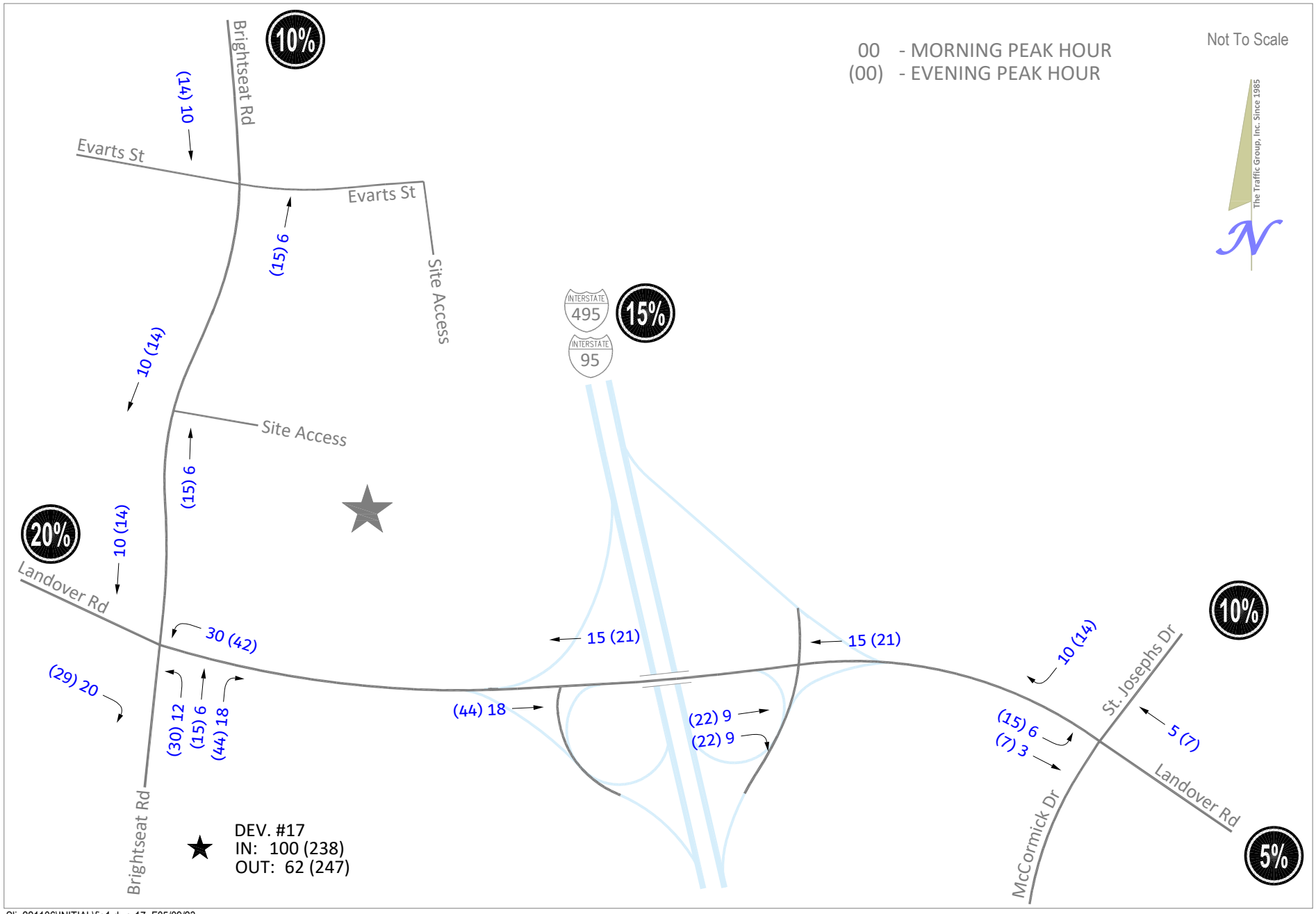
Approved Developments

Figure C-1. Trip Assignment for Development #1



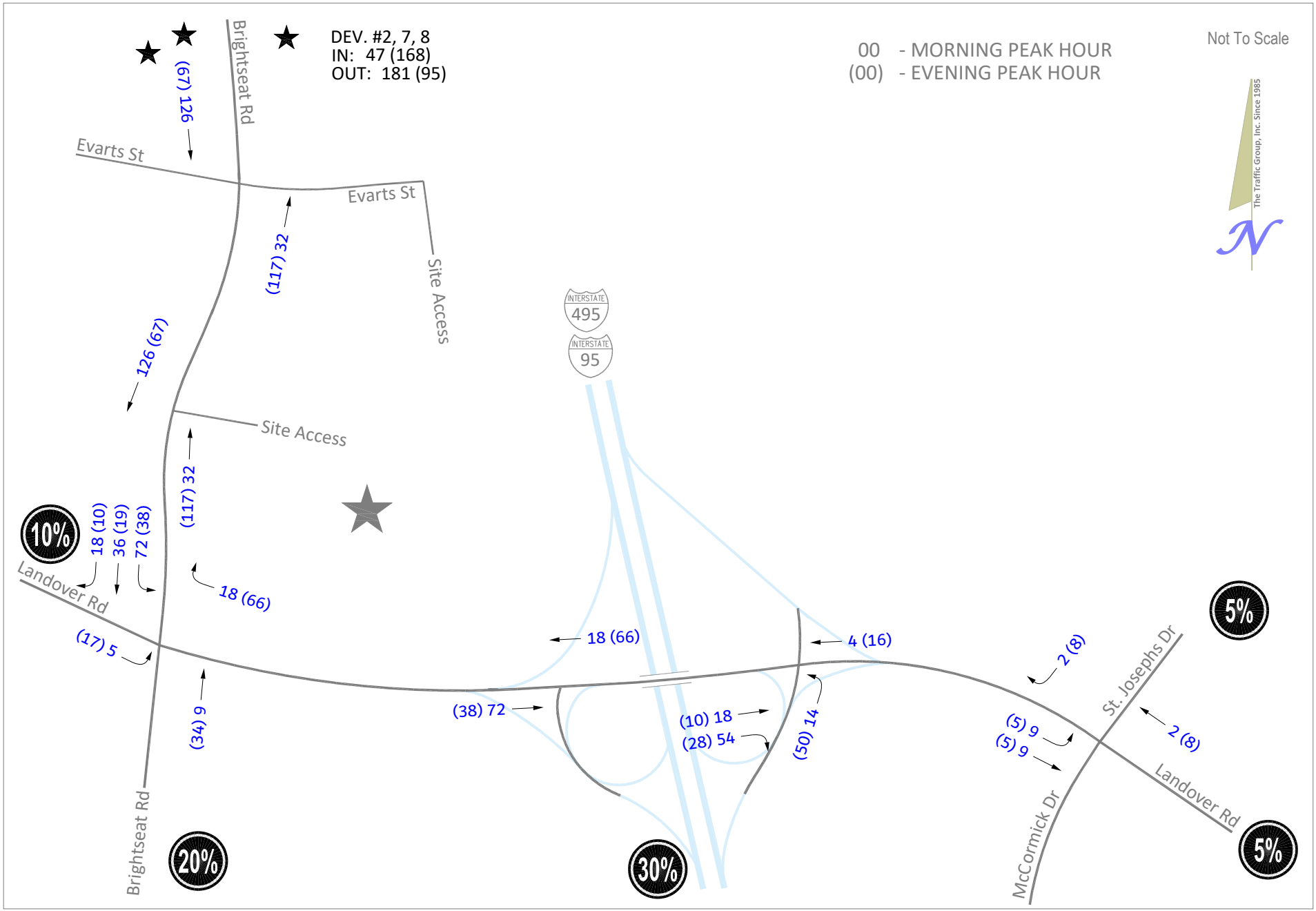
Sli, 221106\INITIAL\fig1.dwg-1, F05/09/23

Figure C-2. Trip Assignment for Development #17



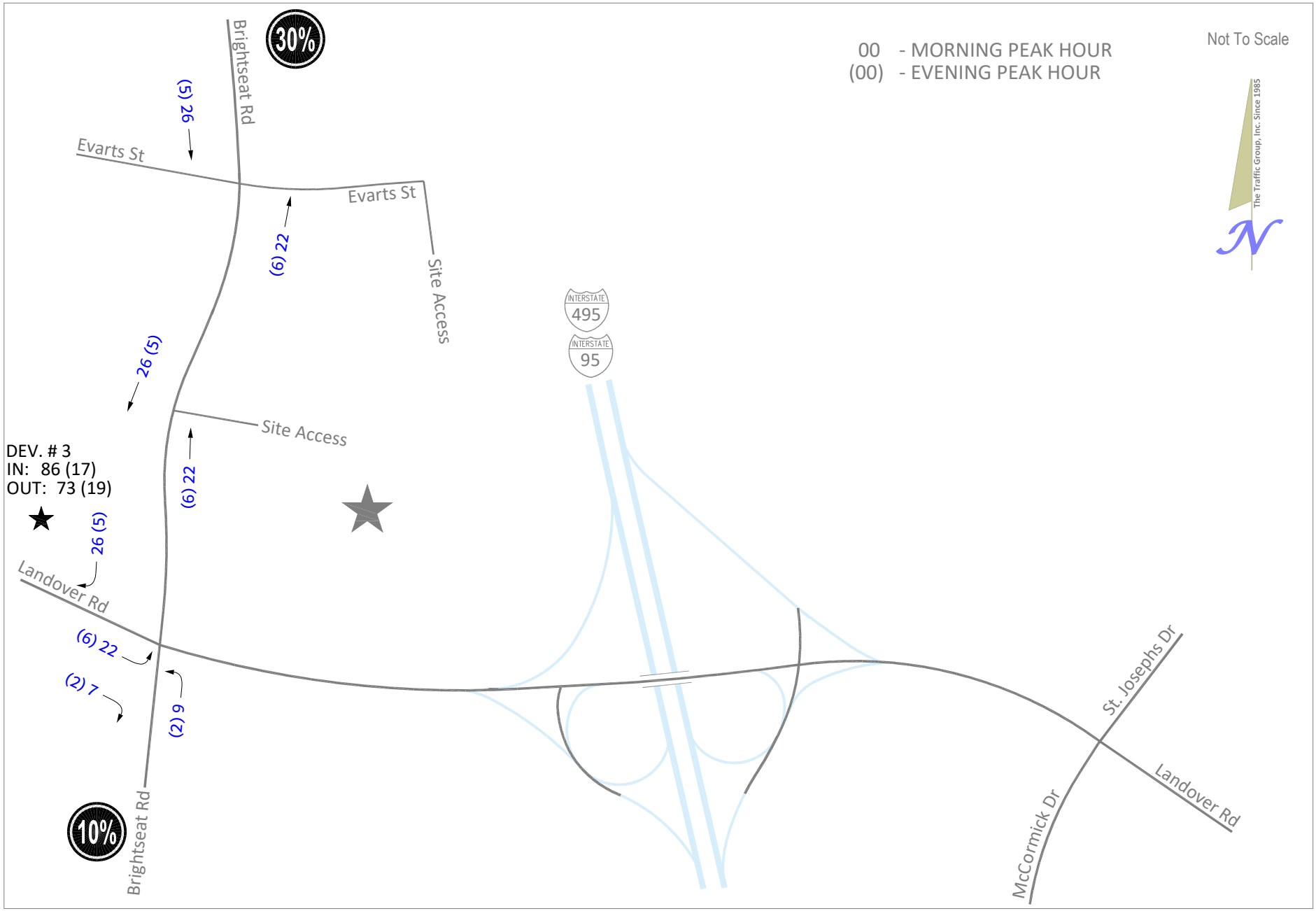
Sli, 221106\INITIAL\fig1.dwg-17, F05/09/23

Figure C-3. Trip Assignment for Developments #2,7,8



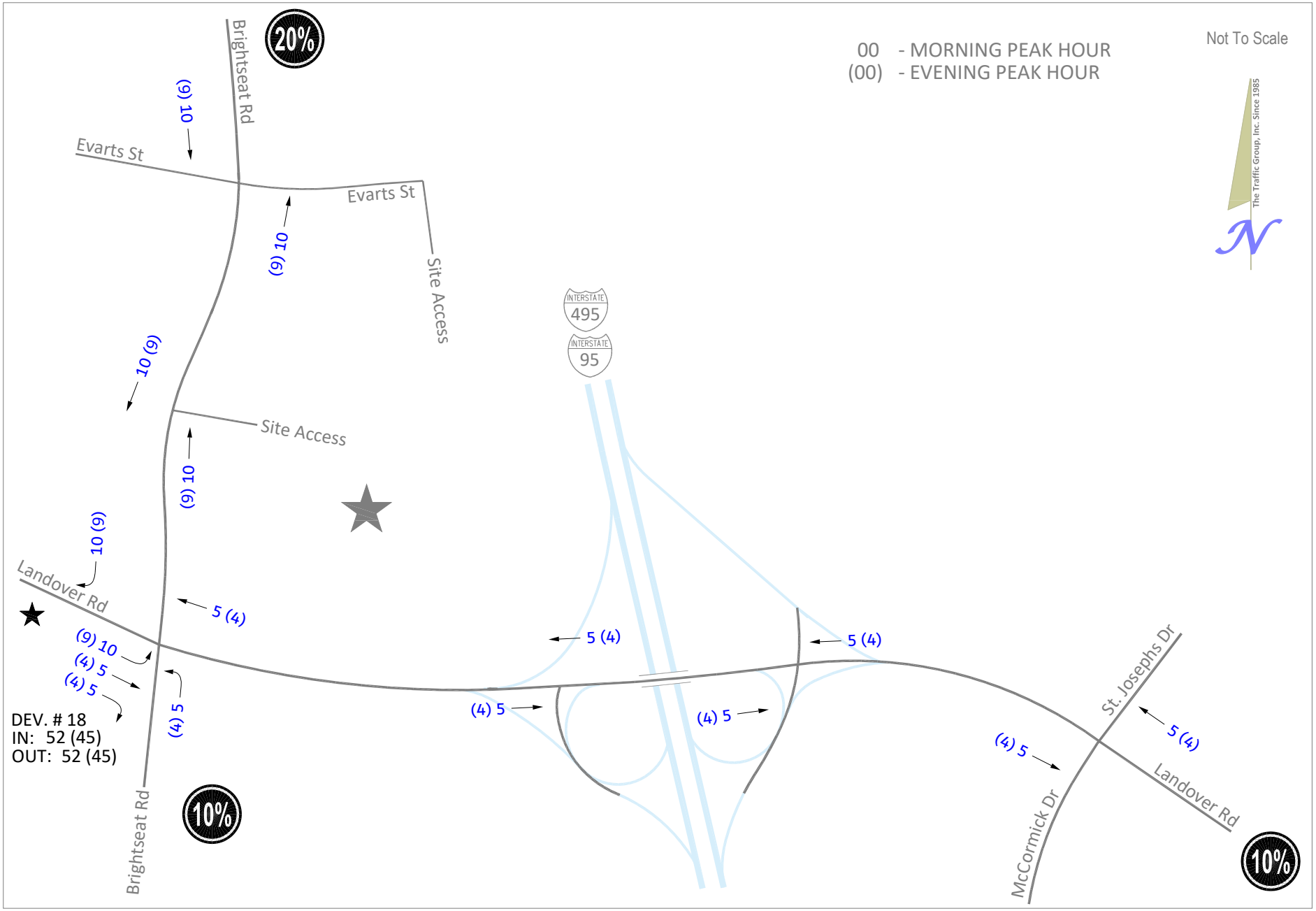
Sli, 221106\INITIAL\fig1.dwg-2.7.8, F05/09/23

Figure C-4. Trip Assignment for Development #3



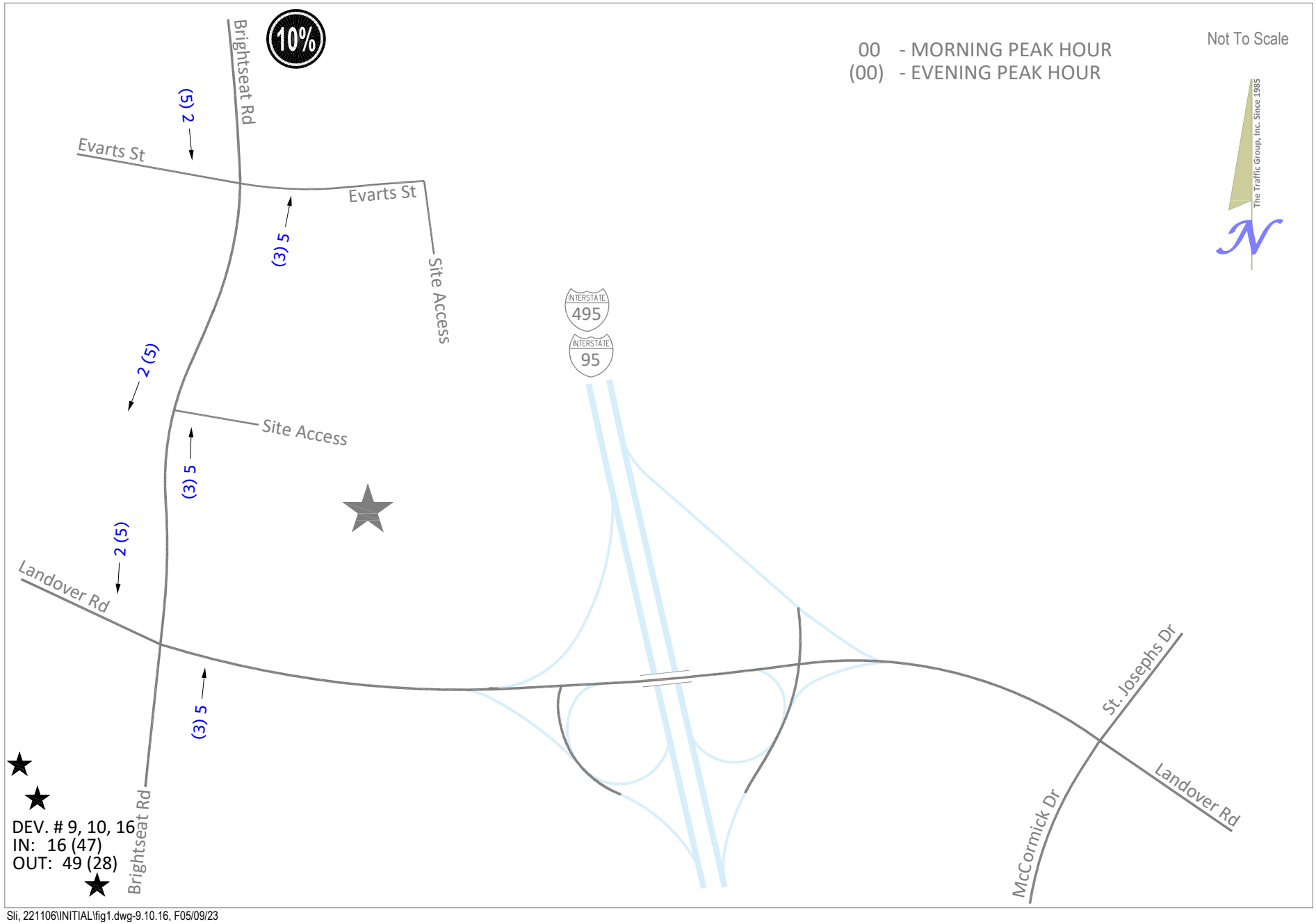
SLI, 221106\INITIAL\fig1.dwg-3, F5/9/2023

Figure C-5. Trip Assignment for Development #18



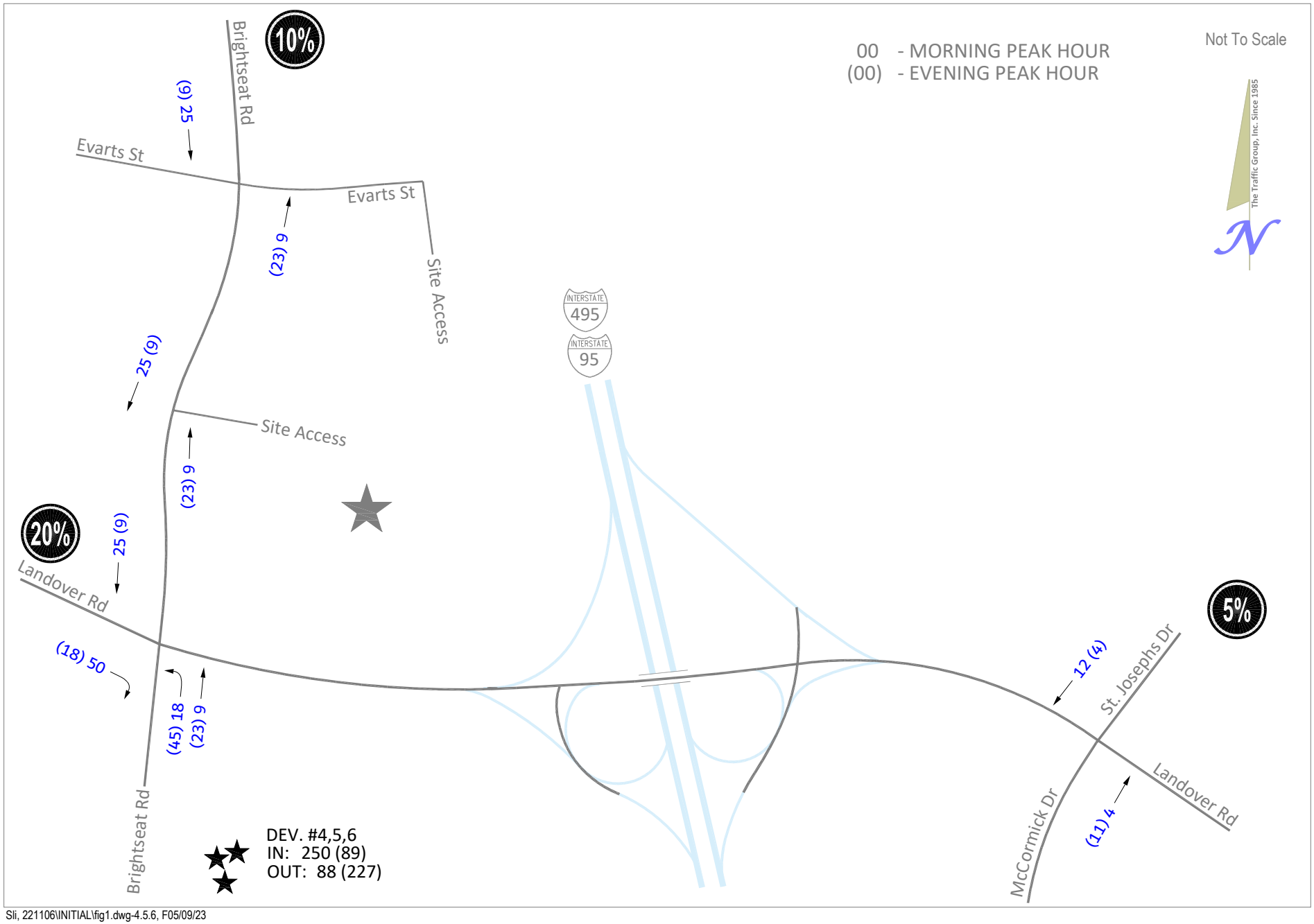
SLI, 221106\INITIAL\fig1.dwg-18, F5/9/2023

Figure C-6. Trip Assignment for Developments # 9, 10, 16



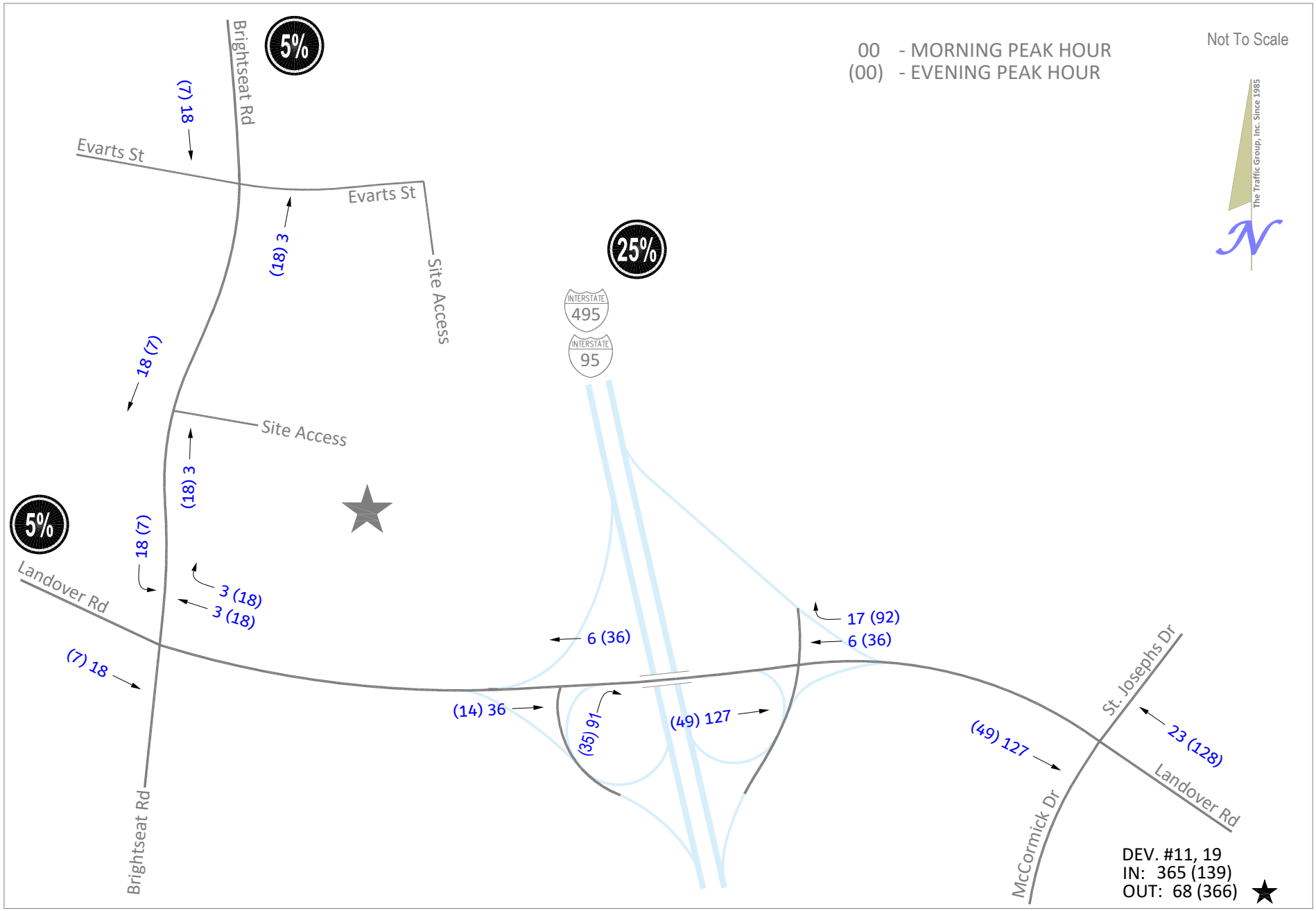
Sli, 221106\INITIAL\fig1.dwg-9.10.16, F05/09/23

Figure C-7. Trip Assignment for Developments #4, 5, 6



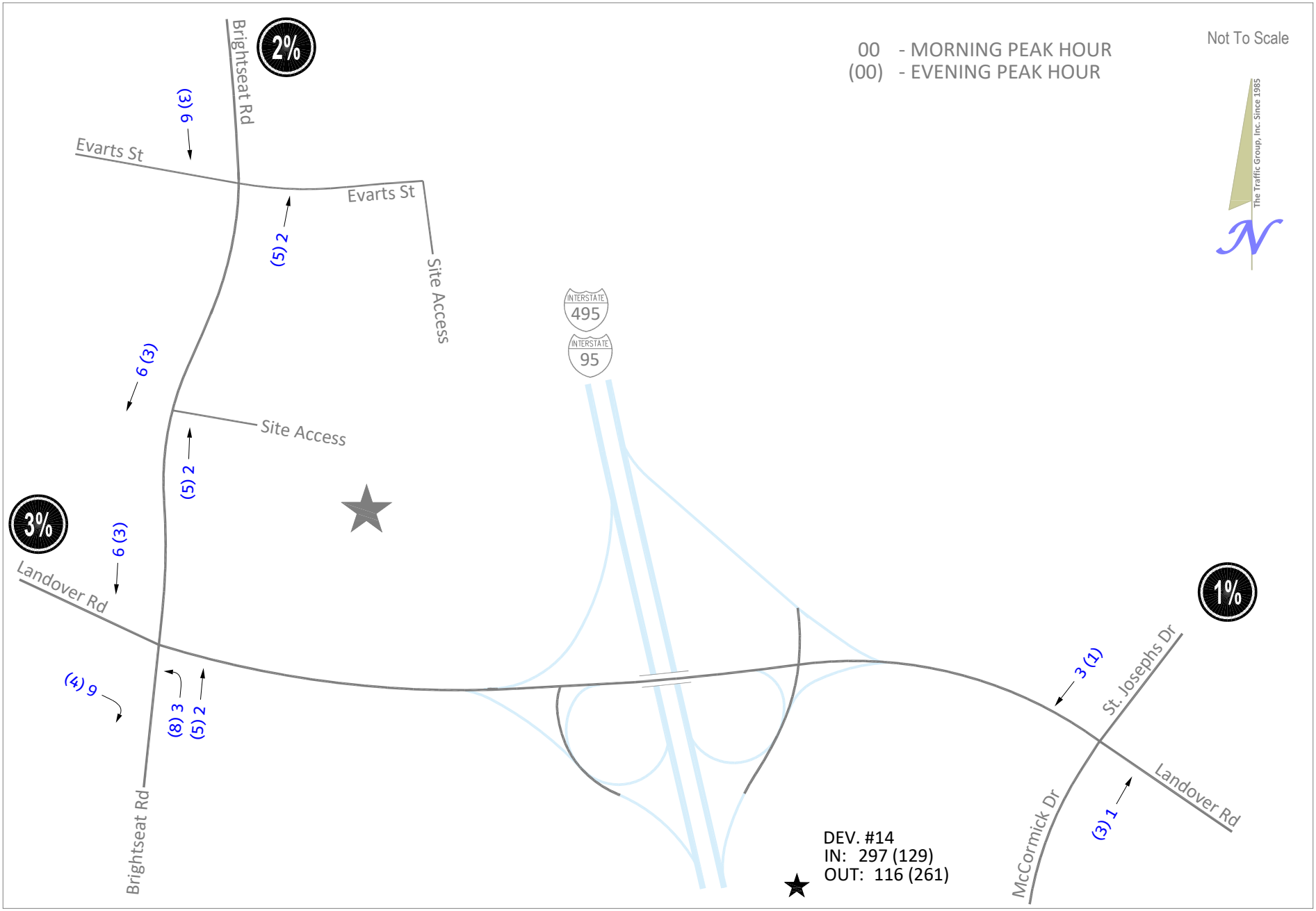
Sli, 221106\INITIAL\fig1.dwg-4.5.6, F05/09/23

Figure C-8. Trip Assignment for Developments #11, 19



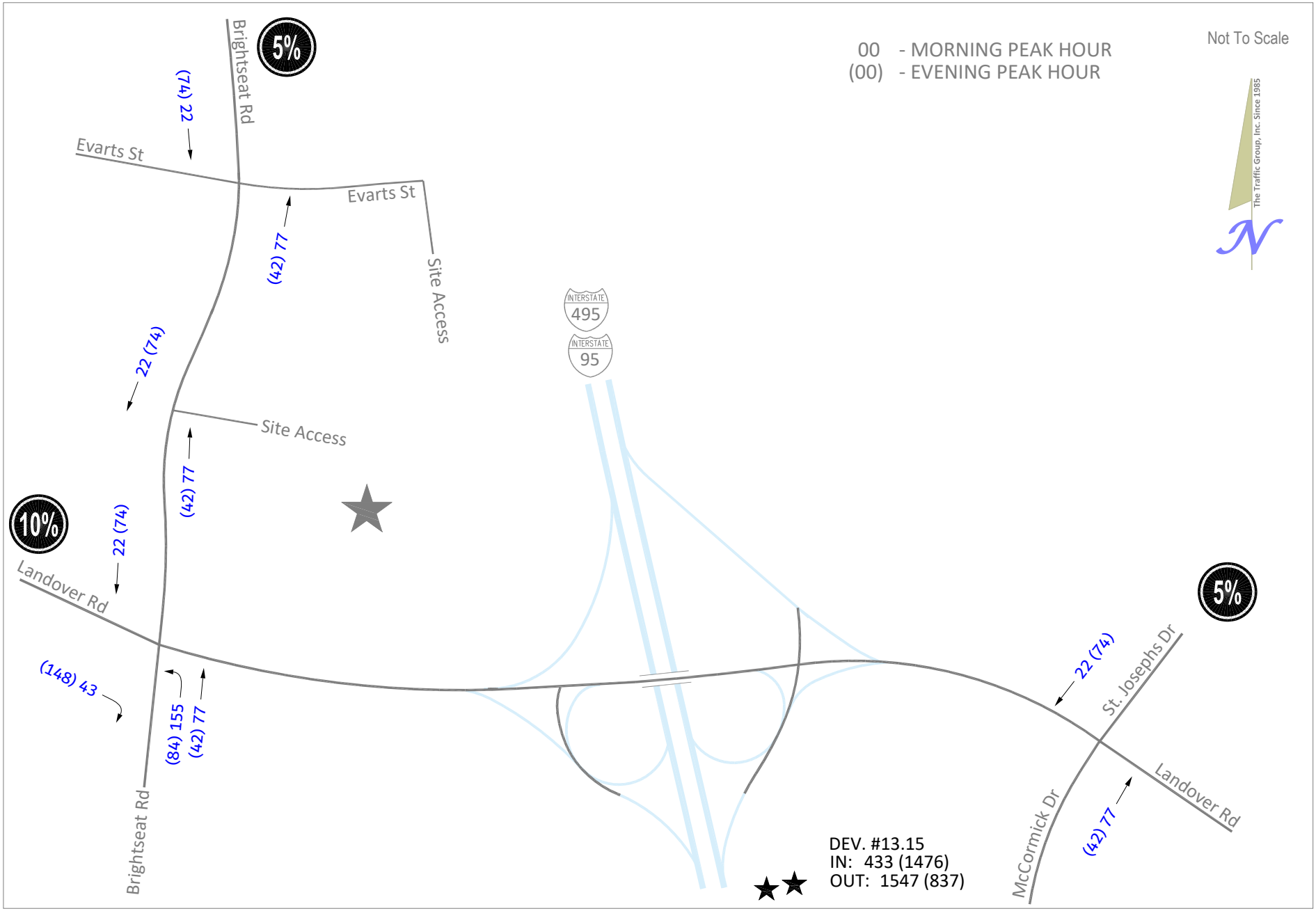
Sli, 221106\INITIAL\fig1.dwg-11.19, F05/09/23

Figure C-9. Trip Assignment for Development #14



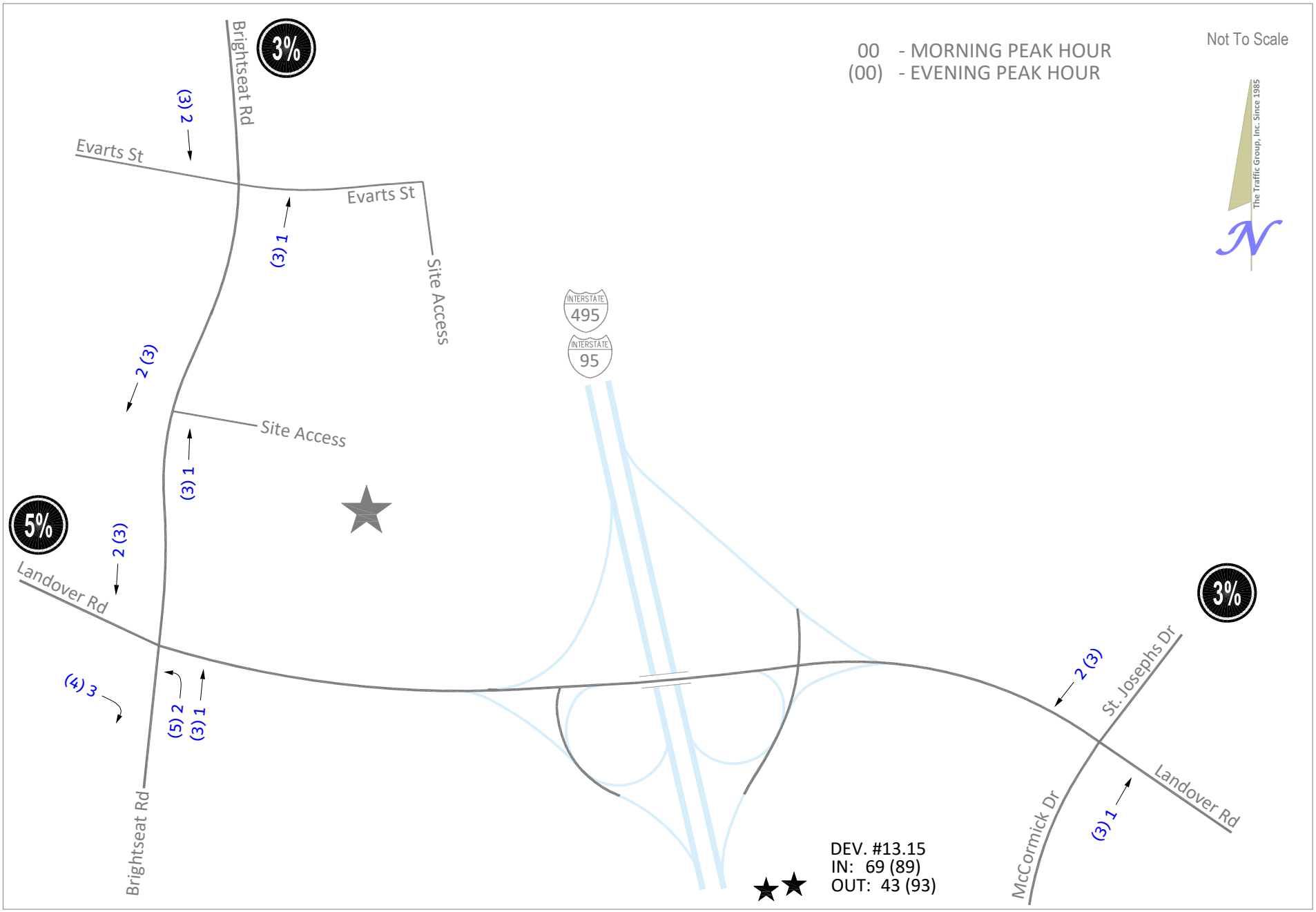
Sli, 221106\INITIAL\fig1.dwg-14, F05/09/23

Figure C-10. Trip Assignment for Developments #13, 15 (residential, hotel)



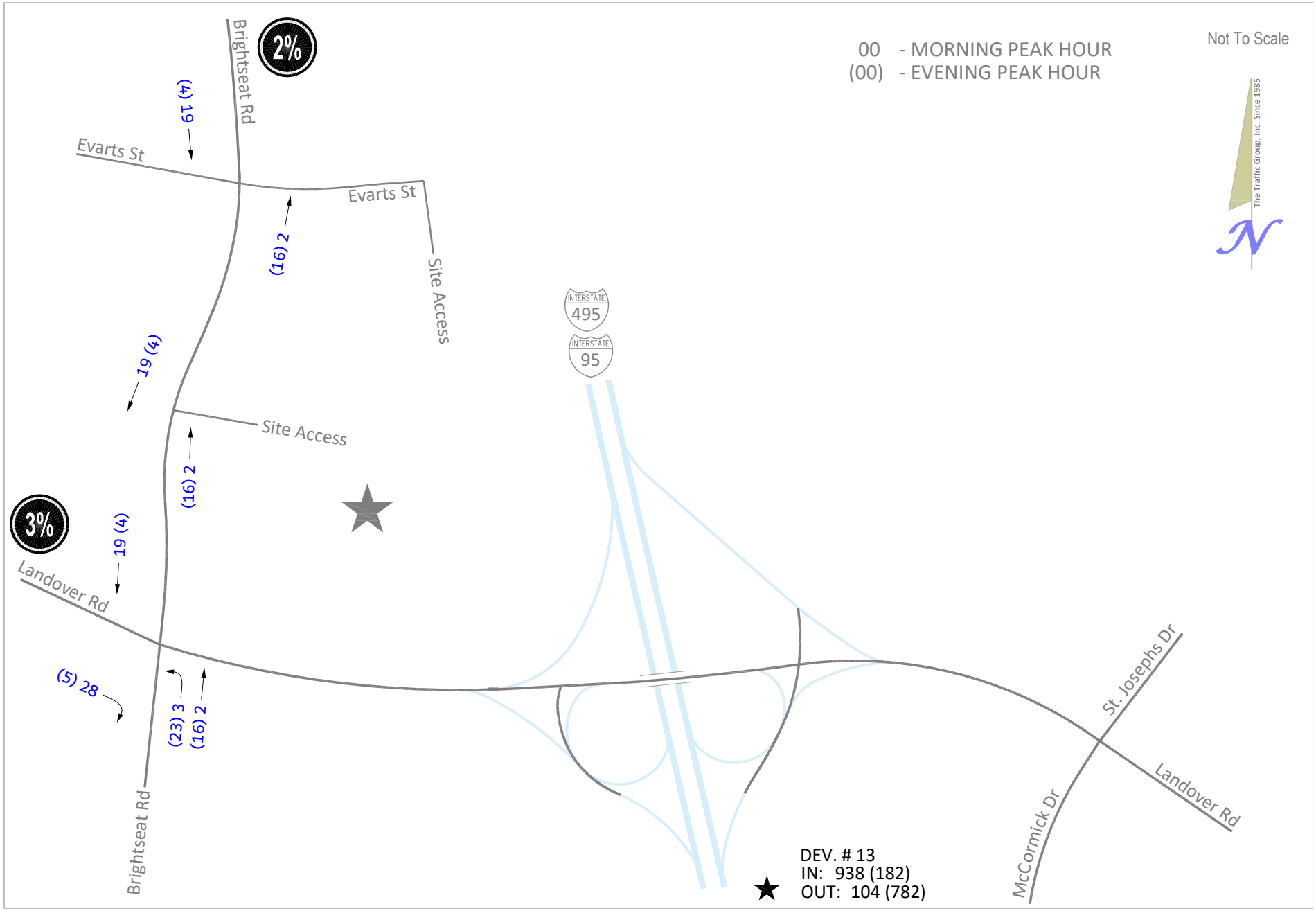
Sli, 221106\INITIAL\fig1.dwg-13.15 RES.HOT, F05/09/23

Figure C-11. Trip Assignment for Developments #13, 15 (retail)



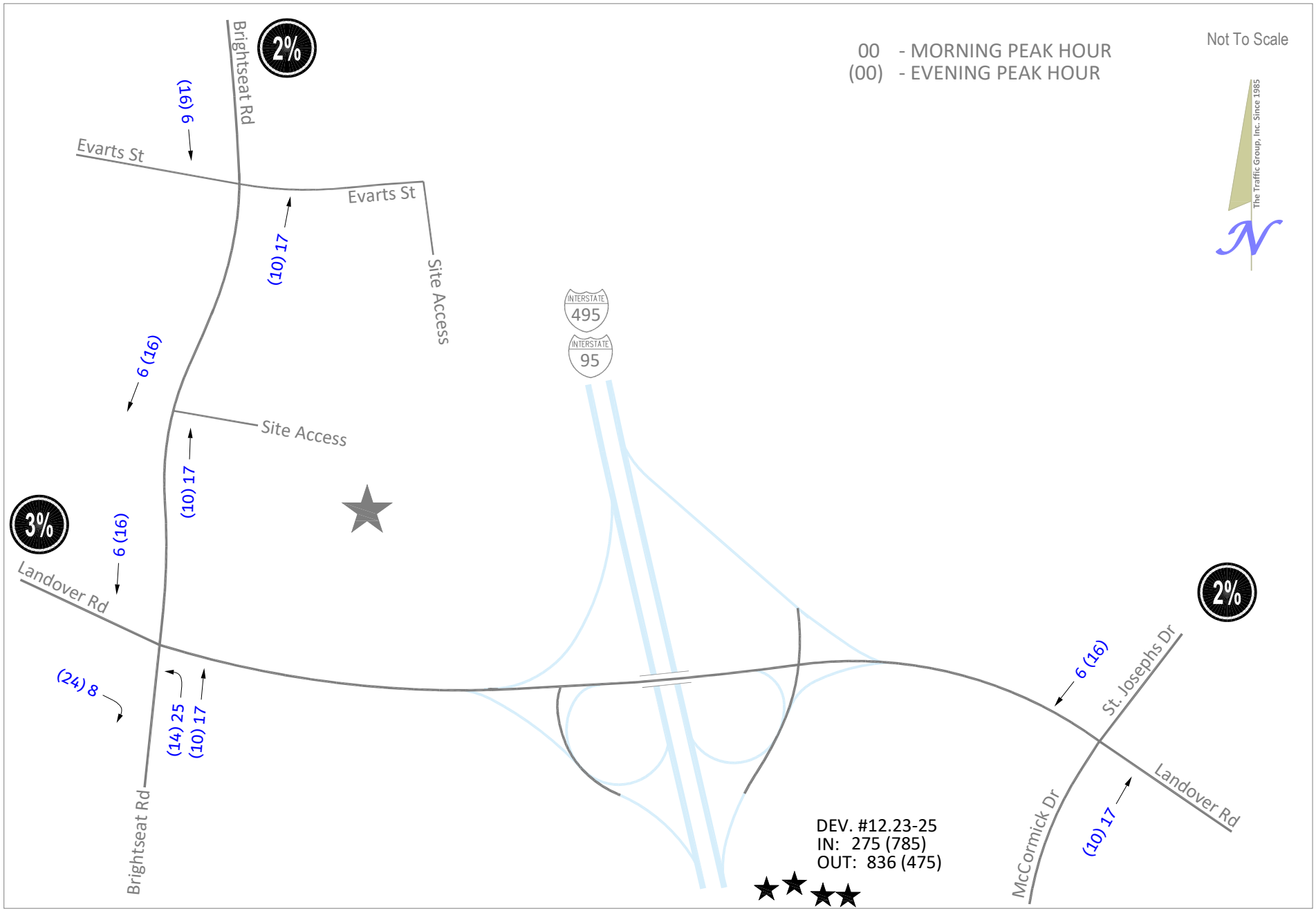
Sli, 221106\INITIAL\fig1.dwg-13.15 RET, F05/09/23

Figure C-12. Trip Assignment for Developments #13 (office)



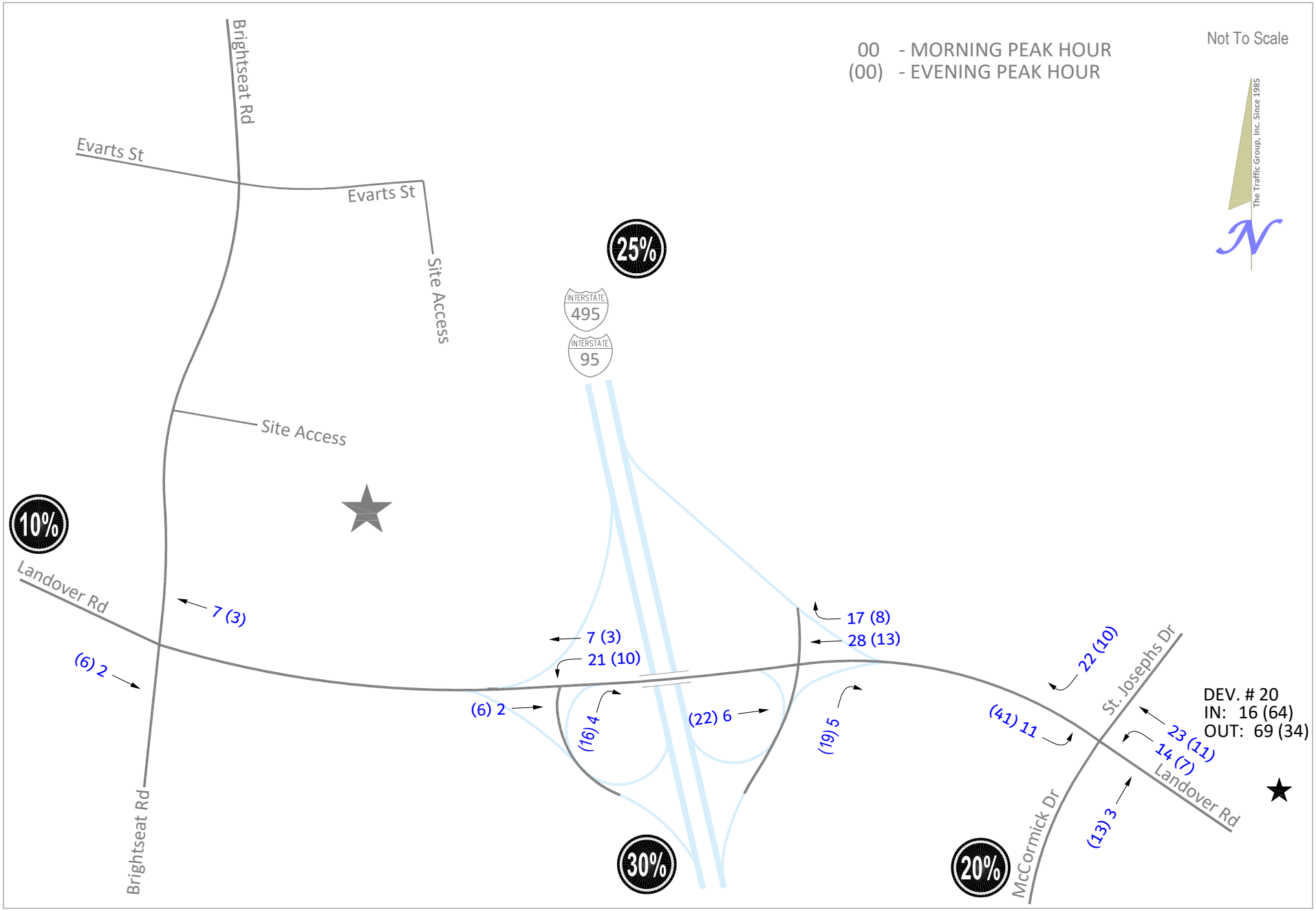
Sli, 221106\INITIAL\fig1.dwg-13 OFFICE, F05/09/23

Figure C-13. Trip Assignment for Development #12, 23-25



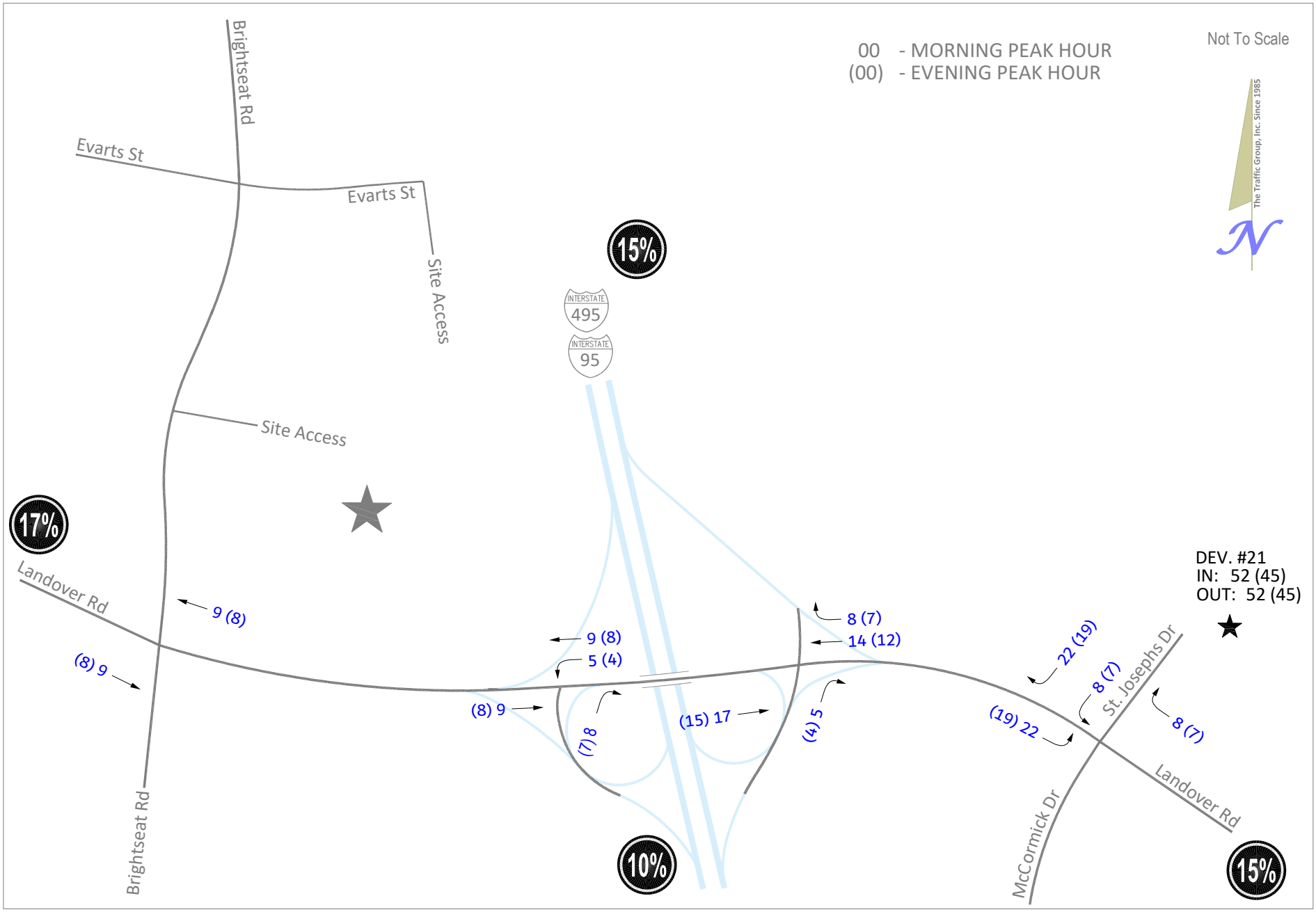
Sli, 221106\INITIAL\fig1.dwg-12.23-25, F05/09/23

Figure C-14. Trip Assignment for Development #20



SLI, 221106\INITIAL\fig1.dwg-20, F5/9/2023

Figure C-15. Trip Assignment for Development #21



SLI, 221106\INITIAL\fig1.dwg-21, F5/9/2023

APPENDIX D

Traffic Queuing Analysis

MD SHA Queuing Analysis for Brightseat Road & Evarts Street

Maryland State Highway Administration Queuing Analysis Formula

Queue Length (ft) =

If Avg No. of Vehicle (Specific Movement) per Cycle <= 20: Maximum No. of Vehicles per Cycle (Specific Movement) x 25 Feet per Vehicle

If Avg No. of Vehicle (Specific Movement) per Cycle > 20: $\frac{\text{Turning Volume (vph) x Lane Use Factor x Cycle Length (Seconds)}}{\text{3600 (Seconds per hour)}}$ x 25 Feet per Vehicle x 1.4 Surge Factor

		Available Storage (feet)	Queue Length (feet)	Veh / Hour	Lane Use Factor	Cycle Length (seconds)	Avg No. of Veh per Cycle	Is Avg No. of Veh per Cycle <= 20?	Max. No. of Veh Per Cycle
Existing Traffic									
Brightseat Road & Evarts Street									
AM Peak Hour	SB (Brightseat) Left Turn:	***110***	0	3	1	60	0.1	Yes	0
AM Peak Hour	NB (Brightseat) Left Turn:	***200***	0	5	1	60	0.1	Yes	0
PM Peak Hour	SB (Brightseat) Left Turn:	***110***	0	1	1	60	0.0	Yes	0
PM Peak Hour	NB (Brightseat) Left Turn:	***200***	25	22	1	60	0.4	Yes	1
2029 Background Traffic									
Brightseat Road & Evarts Street									
AM Peak Hour	SB (Brightseat) Left Turn:	***110***	0	4	1	60	0.1	Yes	0
AM Peak Hour	NB (Brightseat) Left Turn:	***200***	25	6	1	60	0.1	Yes	1
PM Peak Hour	SB (Brightseat) Left Turn:	***110***	0	1	1	60	0.0	Yes	0
PM Peak Hour	NB (Brightseat) Left Turn:	***200***	50	28	1	60	0.5	Yes	2
2029 Total Traffic									
Brightseat Road & Evarts Street									
AM Peak Hour	SB (Brightseat) Left Turn:	***110***	25	12	1	60	0.2	Yes	1
AM Peak Hour	NB (Brightseat) Left Turn:	***200***	25	6	1	60	0.1	Yes	1
PM Peak Hour	SB (Brightseat) Left Turn:	***110***	0	5	1	60	0.1	Yes	0
PM Peak Hour	NB (Brightseat) Left Turn:	***200***	50	28	1	60	0.5	Yes	2

MD SHA Queuing Analysis for MD 202 & Brightseat Road

Maryland State Highway Administration Queuing Analysis Formula

Queue Length (ft) =

If Avg No. of Vehicle (Specific Movement) per Cycle <= 20:

Maximum No. of Vehicles per Cycle (Specific Movement) x 25 Feet per Vehicle

If Avg No. of Vehicle (Specific Movement) per Cycle > 20:

$$\frac{\text{Turning Volume (vph) x Lane Use Factor x Cycle Length (Seconds)}}{\text{3600 (Seconds per hour)}} \times \text{25 Feet per Vehicle x 1.4 Surge Factor}$$

		Available Storage (feet)	Queue Length (feet)	Veh / Hour	Lane Use Factor	Cycle Length (seconds)	Avg No. of Veh per Cycle	Is Avg No. of Veh per Cycle <= 20?	Max. No. of Veh Per Cycle
Existing Traffic									
MD 202 & Brightseat Road									
AM Peak Hour	EB (MD 202) Left Turn:	***350***	75	53	0.6	150	1.3	Yes	3
	WB (MD 202) Left Turn:	***800***	350	361	0.6	150	9.0	Yes	14
PM Peak Hour	EB (MD 202) Left Turn:	***350***	100	67	0.6	150	1.7	Yes	4
	WB (MD 202) Left Turn:	***800***	400	420	0.6	150	10.5	Yes	16
2029 Background Traffic									
MD 202 & Brightseat Road									
AM Peak Hour	EB (MD 202) Left Turn:	***350***	125	103	0.6	150	2.6	Yes	5
	WB (MD 202) Left Turn:	***800***	375	394	0.6	150	9.9	Yes	15
PM Peak Hour	EB (MD 202) Left Turn:	***350***	150	116	0.6	150	2.9	Yes	6
	WB (MD 202) Left Turn:	***800***	450	475	0.6	150	11.9	Yes	18
2029 Total Traffic									
MD 202 & Brightseat Road									
AM Peak Hour	EB (MD 202) Left Turn:	***350***	175	136	0.6	150	3.4	Yes	7
	WB (MD 202) Left Turn:	***800***	375	394	0.6	150	9.9	Yes	15
PM Peak Hour	EB (MD 202) Left Turn:	***350***	150	131	0.6	150	3.3	Yes	6
	WB (MD 202) Left Turn:	***800***	450	475	0.6	150	11.9	Yes	18

MD SHA Queuing Analysis for MD 202 & I-495 SB Onramp

Maryland State Highway Administration Queuing Analysis Formula

Queue Length (ft) =

If Avg No. of Vehicle (Specific Movement) per Cycle <= 20: Maximum No. of Vehicles per Cycle (Specific Movement) x 25 Feet per Vehicle

If Avg No. of Vehicle (Specific Movement) per Cycle > 20: $\frac{\text{Turning Volume (vph) x Lane Use Factor x Cycle Length (Seconds)}}{\text{3600 (Seconds per hour)}}$ x 25 Feet per Vehicle x 1.4 Surge Factor

		Available Storage (feet)	Queue Length (feet)	Veh / Hour	Lane Use Factor	Cycle Length (seconds)	Avg No. of Veh per Cycle	Is Avg No. of Veh per Cycle <= 20?	Max. No. of Veh Per Cycle
Existing Traffic									
MD 202 & I-495 SB Onramp									
AM Peak Hour	WB (MD 202) Left Turn:	***710***	550	367	1	150	15.3	Yes	22
PM Peak Hour	SB (MD 108) Left Turn:	***710***	500	326	1	150	13.6	Yes	20
2029 Background Traffic									
MD 202 & I-495 SB Onramp									
AM Peak Hour	SB (MD 108) Left Turn:	***710***	575	393	1	150	16.4	Yes	23
PM Peak Hour	SB (MD 108) Left Turn:	***710***	525	340	1	150	14.2	Yes	21
2029 Total Traffic									
MD 202 & I-495 SB Onramp									
AM Peak Hour	SB (MD 108) Left Turn:	***710***	575	393	1	150	16.4	Yes	23
PM Peak Hour	SB (MD 108) Left Turn:	***710***	525	340	1	150	14.2	Yes	21

MD SHA Queuing Analysis for MD 202 & I-495 NB Ramps

Maryland State Highway Administration Queuing Analysis Formula

Queue Length (ft) =

If Avg No. of Vehicle (Specific Movement) per Cycle <= 20: Maximum No. of Vehicles per Cycle (Specific Movement) x 25 Feet per Vehicle

If Avg No. of Vehicle (Specific Movement) per Cycle > 20: $\frac{\text{Turning Volume (vph) x Lane Use Factor x Cycle Length (Seconds)}}{\text{3600 (Seconds per hour)}}$ x 25 Feet per Vehicle x 1.4 Surge Factor

		Available Storage (feet)	Queue Length (feet)	Veh / Hour	Lane Use Factor	Cycle Length (seconds)	Avg No. of Veh per Cycle	Is Avg No. of Veh per Cycle <= 20?	Max. No. of Veh Per Cycle
Existing Traffic									
MD 202 & I-495 NB Ramps									
AM Peak Hour	EB (MD 202) Left Turn:	***300***	50	19	1	150	0.8	Yes	2
PM Peak Hour	EB (MD 202) Left Turn:	***300***	75	24	1	150	1.0	Yes	3
2029 Background Traffic									
MD 202 & I-495 NB Ramps									
AM Peak Hour	EB (MD 202) Left Turn:	***300***	50	19	1	150	0.8	Yes	2
PM Peak Hour	EB (MD 202) Left Turn:	***300***	75	24	1	150	1.0	Yes	3
2029 Total Traffic									
MD 202 & I-495 NB Ramps									
AM Peak Hour	EB (MD 202) Left Turn:	***300***	50	19	1	150	0.8	Yes	2
PM Peak Hour	EB (MD 202) Left Turn:	***300***	75	24	1	150	1.0	Yes	3

MD SHA Queuing Analysis for MD 202 & St. Josephs Dr

Maryland State Highway Administration Queuing Analysis Formula

Queue Length (ft) =

If Avg No. of Vehicle (Specific Movement) per Cycle <= 20: Maximum No. of Vehicles per Cycle (Specific Movement) x 25 Feet per Vehicle

If Avg No. of Vehicle (Specific Movement) per Cycle > 20: $\frac{\text{Turning Volume (vph) x Lane Use Factor x Cycle Length (Seconds)}}{\text{3600 (Seconds per hour)}}$ x 25 Feet per Vehicle x 1.4 Surge Factor

		Available Storage (feet)	Queue Length (feet)	Veh / Hour	Lane Use Factor	Cycle Length (seconds)	Avg No. of Veh per Cycle	Is Avg No. of Veh per Cycle <= 20?	Max. No. of Veh Per Cycle
Existing Traffic									
MD 202 & St. Josephs Dr									
AM Peak Hour	EB (MD 202) Left Turn:	***840***	300	488	0.45	120	7.3	Yes	12
	WB (MD 202) Left Turn:	***230***	100	42	1	120	1.4	Yes	4
PM Peak Hour	EB (MD 202) Left Turn:	***840***	400	716	0.45	120	10.7	Yes	16
	WB (MD 202) Left Turn:	***230***	50	18	1	120	0.6	Yes	2
2029 Background Traffic									
MD 202 & St. Josephs Dr									
AM Peak Hour	EB (MD 202) Left Turn:	***840***	325	541	0.45	120	8.1	Yes	13
	WB (MD 202) Left Turn:	***230***	100	56	1	120	1.9	Yes	4
PM Peak Hour	EB (MD 202) Left Turn:	***840***	450	798	0.45	120	12.0	Yes	18
	WB (MD 202) Left Turn:	***230***	50	25	1	120	0.8	Yes	2
2029 Total Traffic									
MD 202 & St. Josephs Dr									
AM Peak Hour	EB (MD 202) Left Turn:	***840***	325	541	0.45	120	8.1	Yes	13
	WB (MD 202) Left Turn:	***230***	100	56	1	120	1.9	Yes	4
PM Peak Hour	EB (MD 202) Left Turn:	***840***	450	798	0.45	120	12.0	Yes	18
	WB (MD 202) Left Turn:	***230***	50	25	1	120	0.8	Yes	2