

November 5, 2025 (Revision No. 2)

Mr. Frank Ciminelli
Arc Building Partners
100 South Elmwood Avenue, Suite 100
Buffalo, NY 14202

**RE: Traffic Impact Report for Proposed Sports Complex and Hotel
330 Maple Road, Town of Amherst, Erie County, New York
LaBella Project No.: 2254561**

Dear Mr. Ciminelli:

LaBella Associates (LaBella) has completed a Due Diligence Traffic Analysis for the proposed 716 Sports Fieldhouse development, to be located in the Town of Amherst at 330 Maple Road. This assessment is based on industry-standard engineering guidelines and the Concept Plan prepared by LaBella Associates, dated October 1, 2025, which is included under Attachment A. The revisions to this assessment are based on comments in a letter from Erie County Department of Public Works, dated October 20, 2025.

1. Project Description

The subject site is located along the north side of Maple Road and situated between the Audubon Town Park baseball fields and the Amherst Parks Department Building. Exhibit 1 is an aerial image that depicts the subject site, study intersections, and key landmarks.

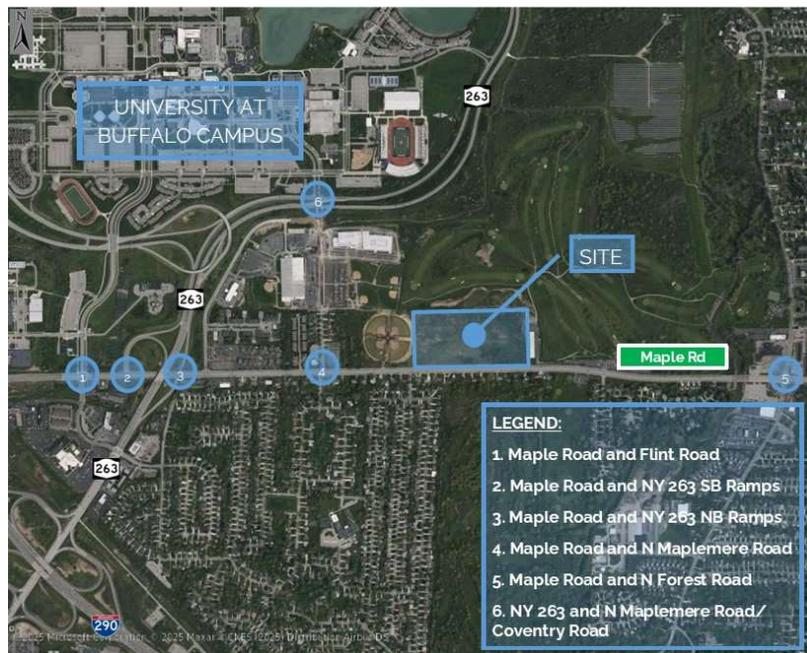


Exhibit 1 – Site Location & Study Intersections

The proposed project generally consists of an athletic community center comprised of two 137,500 square-foot sports domes. A two-story, 56,000-square-foot building will connect the two sports domes. The project will be supported by 520 parking spaces. Access to the site will be provided via a full-movement driveway on Maple Road. The analysis herein considers the proposed driveway operating under signal control.



2. Existing Conditions

Study Area Roadways

Maple Road is classified as a Principal Arterial – Other (no control of access) roadway and is under the jurisdiction of the Erie County Department of Public Works. The roadway runs primarily east-west through the Town of Amherst. In the vicinity of the subject site, Maple Road provides one 11-foot-wide travel lane and one 14-foot-wide travel in each direction, with a 15-foot-wide two-way left-turn lane, and sidewalks are located on both sides of the roadway. There is no shoulder near the subject site. The posted speed limit is 45-mph.

NYS Route 263 (a.k.a. Millersport Highway) is classified as a Principal Arterial – Other (no control of access) roadway and is under the jurisdiction of the New York State Department of Transportation (NYSDOT). The roadway primarily north-south through the Town of Amherst and is also known as Millersport Highway. In the vicinity of the subject site, Millersport Highway provides two 12-foot-wide travel lanes in both directions, with a landscaped split median that varies in width. There are no sidewalks along this roadway. The posted speed limit is 45-mph.

North Maplemere Road is classified as an Urban Local roadway and is under the jurisdiction of the Town of Amherst. The roadway runs north-south from Maple Road to Millersport Highway. In the vicinity of the subject site, North Maplemere Road provides a 32-foot-wide cross-section with travel lanes in both directions. It should be noted that the roadway narrows to a 20-foot-wide cross-section approximately 700-feet from the intersection of Maple Road and North Maplemere Road. Sidewalks are located on both sides of the roadway. The posted speed limit is 30-mph.

Study Intersections

Maple Road and Flint Road is a four-leg signalized intersection. The eastbound Maple Road approach provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane. The westbound Maple Road approach provides an exclusive left-turn only lane, a through lane, and a shared through/right-turn lane. The northbound and southbound Flint Road approaches provide an exclusive left-turn lane and a shared through/right-turn lane. Pedestrian accommodations at the intersection include curb ramps, marked crosswalks, and pedestrian signals with push buttons on all approaches. The study utilized signal timing data provided by the Erie County Department of Public Works, which is included in Attachment B. Exhibit 2 depicts an aerial image of the study intersection.



Exhibit 2 – Maple Road & Flint Road



Maple Road and NYS Route 263 (a.k.a. Millersport Highway) Southbound Ramps is a three-leg signalized intersection. The eastbound Maple Road approach consists of one exclusive left-turn lane and two through lanes. The westbound Maple Road approach provides two through lanes and an exclusive right-turn lane. The southbound NYS Route 263 ramps approach provides an exclusive left-turn lane and an exclusive right-turn lane. The southbound approach provides curb ramps, marked crosswalks, and pedestrian signals with a push buttons. The study utilized signal timing data provided by the New York State Department of Transportation (NYSDOT), which is included in Attachment B. Exhibit 3 depicts an aerial image of the study intersection.



Exhibit 3 – Maple Road & NYS Route 263 SB Ramps

Maple Road and NYS Route 263 (a.k.a. Millersport Highway) Northbound Ramps is a four-leg signalized intersection. The eastbound Maple Road approach provides an exclusive left-turn lane and two through lanes. The westbound Maple Road approach provides one through lane and one through/right-turn lane. The northbound NYS Route 263 exit ramp approach provides an exclusive left-turn lane and a shared through/right-turn lane. It should be noted that there is a one-way entrance ramp at this intersection. Pedestrian accommodation at the intersection includes curb ramps, marked crosswalks, and pedestrian signals with push buttons across the northbound and southbound approaches. The study utilized signal timing data provided by the NYSDOT, which is included in Attachment B. Exhibit 4 depicts an aerial image of the study intersection.



Exhibit 4 – Maple Road & NY Route 263 NB Ramps



Maple Road and N Maplemere Road is a four-leg signalized intersection. The eastbound and westbound Maple Road approaches provide an exclusive left-turn lane, a through lane, and a shared through/right-turn lane. The northbound N Maplemere Road approach provides a shared left-turn/through/right-turn lane. The southbound N Maplemere Road approach provides an exclusive left-turn lane and a shared through/right-turn lane. Pedestrian accommodations at the intersection include curb ramps, marked crosswalks, and pedestrian signals with push buttons on all approaches. The study utilized signal timing data provided by the Erie County Department of Public Works, which is included in Attachment B. Exhibit 5 depicts an aerial image of the study intersection.

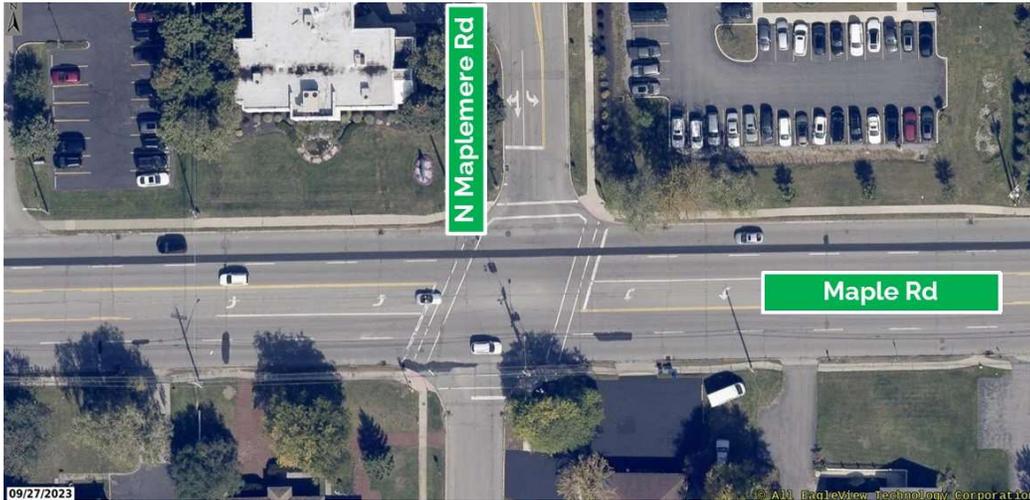


Exhibit 5 – Maple Road & N Maplemere Road

Maple Road and N Forest Road is a four-leg signalized intersection. The eastbound and westbound Maple Road approaches provide an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane. The northbound and southbound N Forest Road approaches provide an exclusive left-turn lane, a through lane, and an exclusive right-turn lane. Pedestrian accommodations at the intersection include curb ramps, marked crosswalks, and pedestrian signals with push buttons on all approaches. The study utilized signal timing data provided by the Erie County Department of Public Works, which is included in Attachment B. Exhibit 6 depicts an aerial image of the study intersection.

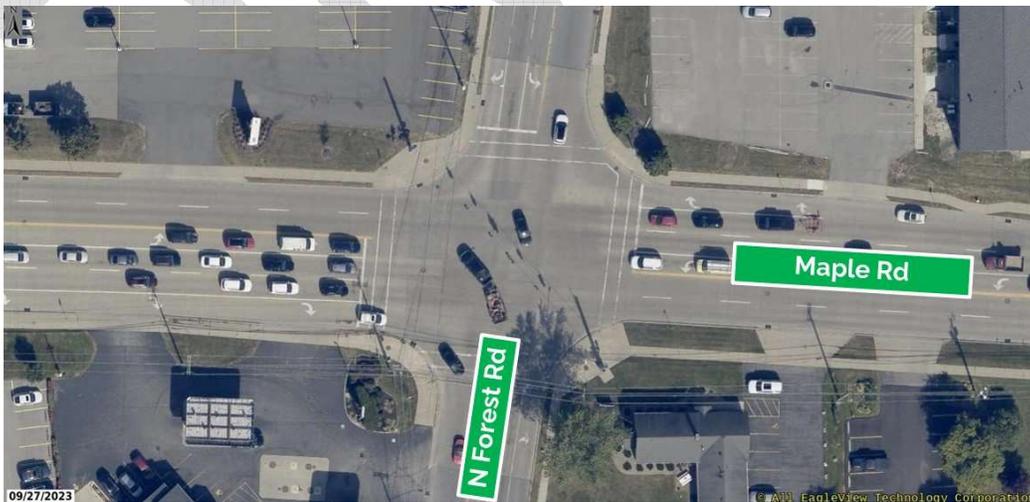


Exhibit 6 – Maple Road & N Forest Road



N Maplemere Road/Coventry Road and NYS Route 263 (a.k.a. Millersport Highway) is a four-leg signalized intersection. The eastbound and westbound Millersport Highway approaches provide an offset exclusive left-turn lane, a through lane, and a shared through/right-turn lane. The northbound N Maplemere Road approach provides a shared left-turn/through lane and an exclusive right-turn lane. The southbound Coventry Road approach provides a shared left-turn/through lane and an exclusive right-turn lane. It should be noted that Millersport Highway has a landscaped median. Pedestrian accommodations include curb ramps, a marked crosswalk, and pedestrian signals with push buttons across the westbound approach. The study utilized signal timing data provided by the NYSDOT, which is included in Attachment B. Exhibit 7 depicts an aerial image of the study intersection.



Exhibit 7 – NYS Route 263 & N Maplemere Road/Coventry Road

Collision Analysis

A collision analysis was performed for the study roadways and intersections based on data obtained from NYSDOT. The analysis included the review of 67 crashes over a three-year period between August 22, 2022, and August 22, 2025. Detailed collision summary tables are shown below in Tables 1-1 through 1-6.

Table 1-1: Maple Road and Flint Road Intersection Collision Summary

Collision Type	Number of Collisions				Number of Collisions Resulting in Injury				Number of Collisions Resulting in Fatalities			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
Rear End	0	2	1	2	0	1	0	1	0	0	0	0
Head On	0	0	0	0	0	0	0	0	0	0	0	0
Overtaking/Sideswipe	1	1	0	1	0	1	0	0	0	0	0	0
Left-Turn	1	0	0	2	1	0	0	1	0	0	0	0
Right-Turn	0	2	1	0	0	0	0	0	0	0	0	0
Right Angle	0	0	1	1	0	0	0	0	0	0	0	0
Fixed Object	0	1	0	0	0	0	0	0	0	0	0	0
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	1	0	0	0	1	0	0	0	0	0
Other	1	0	0	0	1	0	0	0	0	0	0	0
Total	3	6	4	6	2	2	1	2	0	0	0	0
Three-Year Total	19				7				0			

Table 1-1 shows that 19 collisions were reported at this intersection over the three-year period. Out of the 19 collisions, seven of the collisions resulted in an injury, and zero collisions resulted in a fatality. There were zero collisions involving a bicyclist and one collision involving a pedestrian resulting in an injury.



Table 1-2: Maple Road and CR 263 SB Ramps Intersection Collision Summary

Collision Type	Number of Collisions				Number of Collisions Resulting in Injury				Number of Collisions Resulting in Fatalities			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
Rear End	0	0	0	0	0	0	0	0	0	0	0	0
Head On	0	0	0	0	0	0	0	0	0	0	0	0
Overtaking/Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0
Left-Turn	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn	0	0	0	0	0	0	0	0	0	0	0	0
Right Angle	0	0	0	0	0	0	0	0	0	0	0	0
Fixed Object	0	0	0	0	0	0	0	0	0	0	0	0
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Three-Year Total	0				0				0			

Table 1-2 shows that zero collisions were reported at this intersection over the three-year period. Out of the zero collisions, zero of the collisions resulted in an injury, and zero collisions resulted in a fatality. There were zero collisions involving a bicyclist and zero collisions involving a pedestrian.

Table 1-3: Maple Road and NYS Route 263 NB Ramps Intersection Collision Summary

Collision Type	Number of Collisions				Number of Collisions Resulting in Injury				Number of Collisions Resulting in Fatalities			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
Rear End	1	1	0	1	0	0	0	1	0	0	0	0
Head On	0	0	0	0	0	0	0	0	0	0	0	0
Overtaking/Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0
Left-Turn	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn	0	0	1	0	0	0	0	0	0	0	0	0
Right Angle	0	0	0	0	0	0	0	0	0	0	0	0
Fixed Object	0	0	0	1	0	0	0	0	0	0	0	0
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	1	2	0	0	0	1	0	0	0	0
Three-Year Total	5				1				0			

Table 1-3 shows that five collisions were reported at this intersection over the three-year period. Out of the five collisions, one of the collisions resulted in an injury, and zero collisions resulted in a fatality. There were zero collisions involving a bicyclist and zero collisions involving a pedestrian.



Table 1-4: Maple Road and N Maplemere Road Intersection Collision Summary

Collision Type	Number of Collisions				Number of Collisions Resulting in Injury				Number of Collisions Resulting in Fatalities			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
Rear End	0	1	0	0	0	0	0	0	0	0	0	0
Head On	0	0	0	0	0	0	0	0	0	0	0	0
Overtaking/Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0
Left-Turn	0	2	0	1	0	2	0	0	0	0	0	0
Right-Turn	0	0	0	0	0	0	0	0	0	0	0	0
Right Angle	0	0	0	0	0	0	0	0	0	0	0	0
Fixed Object	0	0	0	1	0	0	0	0	0	0	0	0
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	1	0	0	0	0	0	0	0	0	0
Total	0	3	1	2	0	2	0	0	0	0	0	0
Three-Year Total	6				2				0			

Table 1-4 shows that six collisions were reported at this intersection over the three-year period. Out of the six collisions, two of the collisions resulted in an injury, and zero collisions resulted in a fatality. There were zero collisions involving a bicyclist and zero collisions involving a pedestrian.

Table 1-5: Maple Road and N Forest Road Intersection Collision Summary

Collision Type	Number of Collisions				Number of Collisions Resulting in Injury				Number of Collisions Resulting in Fatalities			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
Rear End	1	2	1	1	0	0	1	0	0	0	0	0
Head On	0	0	0	0	0	0	0	0	0	0	0	0
Overtaking/Sideswipe	0	1	1	1	0	0	0	0	0	0	0	0
Left-Turn	1	2	3	0	1	1	1	0	0	0	0	0
Right-Turn	0	0	0	1	0	0	0	0	0	0	0	0
Right Angle	0	2	4	0	0	0	1	0	0	0	0	0
Fixed Object	1	0	0	0	0	0	0	0	0	0	0	0
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	1	0	0	0	1	0	0	0	0	0	0
Other	1	1	1	0	0	0	0	0	0	0	0	0
Total	4	9	10	3	1	2	3	0	0	0	0	0
Three-Year Total	26				6				0			

Table 1-5 shows that 26 collisions were reported at this intersection over the three-year period. Out of the 26 collisions, six of the collisions resulted in an injury, and zero collisions resulted in a fatality. There were zero collisions involving a bicyclist and zero collisions involving a pedestrian.



Table 1-6: N Maplemere Road/Coventry Road and NYS Route Intersection Collision Summary

Collision Type	Number of Collisions				Number of Collisions Resulting in Injury				Number of Collisions Resulting in Fatalities			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
Rear End	1	2	1	0	0	0	0	0	0	0	0	0
Head On	0	0	0	0	0	0	0	0	0	0	0	0
Overtaking/Sideswipe	0	1	1	0	0	0	0	0	0	0	0	0
Left-Turn	0	0	1	1	0	0	1	0	0	0	0	0
Right-Turn	0	0	0	1	0	0	0	0	0	0	0	0
Right Angle	0	0	0	0	0	0	0	0	0	0	0	0
Fixed Object	0	0	1	0	0	0	0	0	0	0	0	0
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	1	0	0	0	1	0	0	0	0	0	0
Total	1	4	4	2	0	1	1	0	0	0	0	0
Three-Year Total	11				2				0			

Table 1-6 shows that 11 collisions were reported at this intersection over the three-year period. Out of the 11 collisions, two of the collisions resulted in an injury, and zero collisions resulted in a fatality. There were zero collisions involving a bicyclist and zero collisions involving a pedestrian.

Data Collection

LaBella collected turning movement counts (TMCs) at the study intersections on Thursday, September 11, 2025, and Saturday, September 13, 2025. The counts were conducted during the typical weekday PM and Saturday Midday peak periods – 4:00 p.m. to 7:00 p.m. and 11:00 a.m. to 2:00 p.m., respectively. The typical weekday AM peak period – 7:00 a.m. to 9:00 a.m. – was not evaluated as the weekday volumes are highest during the weekday PM peak period. Furthermore, it should be noted that the University of Buffalo football team had an away game during the Saturday count period. The selection of an away game Saturday was done intentionally to avoid capturing abnormal traffic patterns that result from home games. Based on these counts, the observed network peak hours were 4:30 p.m. to 5:30 p.m. during the weekday PM peak period and 12:15 p.m. to 1:15 p.m. during the Saturday Midday peak period. These 2025 Existing traffic volumes formed the basis of the traffic analysis herein and are shown in Figure 1. The raw TMC data is included under Attachment C.

LaBella also collected continuous traffic volume, speed, and vehicle classification data along Maple Road in proximity to the subject site's frontage from Friday September 5, 2025, through Saturday, September 13, 2025. The raw ATR data is included under Attachment D.

3. Traffic Assessment

Traffic Forecasting (i.e. No-Build Traffic Volumes)

To evaluate the impact of the proposed project, traffic projections were prepared for the design year of 2028. It should be noted that this design year was selected to provide a conservative analysis as it is expected that the project will be completed and occupied sooner than 2028. LaBella Associates reviewed the Pending Development Project page on the Town of Amherst website and determined that there are no projects that will have an effect on the study intersections.¹ In addition, historical traffic volume data from the NYSDOT Traffic Viewer was also reviewed. To provide a conservative analysis, a 1.50% annual growth rate was applied to the Existing 2025 traffic volumes and compounded over a three-year period. The 2028 No-Build traffic volumes are shown in Figure 2 for AM, Midday and PM peak hours. No-Build volumes represent the forecasted traffic volumes for 2028 *without* the proposed project.

¹ https://www.amherst.ny.us/content/development_projects_pending.php



Trip Generation

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 12th Edition, is the industry-standard resource used for estimating trip generation for proposed land uses based on data collected at similar uses. Upon review of the *Trip Generation Manual*, the following Land Use Codes (LUC) were utilized for the study herein:

- LUC 495 "Recreational Community Center" – ITE Description: *A recreational community center is a stand-alone public facility similar to and including YMCAs. These facilities often include classes and clubs for adults and children, a day care or nursery school, meeting rooms and other social facilities, swimming pools and whirlpools, saunas, tennis, racquetball, handball, pickleball, basketball and volleyball courts, outdoor athletic fields/courts, exercise classes, weightlifting and gymnastics equipment, locker rooms, and a restaurant or snack bar. Public access is typically allowed, and a membership fee may be charged.*

Table 2 summarizes the weekday PM and Saturday Midday peak hour site-generated trips for the two components of the project based on the applicable independent variable (IV).

Table 2 – Summary of Peak Hour Trip Generation

Project Component	Land Use	IV	Weekday PM Peak Hour			Saturday Midday Peak Hour		
			Entering	Exiting	Total	Entering	Exiting	Total
Recreational Community Center	495	331 KSF	441	228	669	204	173	377

As shown in Table 2, the proposed project will generate 669 total trips during the weekday PM peak hour and 377 total trips during the Saturday Midday peak hour. There is no "pass-by" component associated with the proposed uses. It should be noted that the analysis herein does not take a credit for internal capture (i.e., trip sharing between the two components) to provide a conservative analysis.

Trip Distribution

It was assumed that the majority of trips (60%) will come from the west via Maple Road. The 60% is distributed along key roadways that intersect Maple Road such as NYS Route 263 (a.k.a. Millersport Highway) and Flint Road. The remaining trips (40%) will come from the east via Maple Road. These trip distributions are shown in Figure 3. The resulting project-generated trips are shown in Figure 4 for weekday PM and Saturday Midday peak hours.

Capacity Analysis

The capacity analysis relates traffic volumes to the physical characteristics of an intersection. Intersection evaluations were made using Synchro Version 12 and the procedures contained in the *Highway Capacity Manual (HCM), 7th Edition*. Table 3 and Table 4 summarize the results of the level of service calculations for the Existing, No-Build and Build conditions during the weekday PM and Saturday Midday peak hours, respectively. The Level of Service reports are included under Attachment E.



Table 3 – LOS Summary: Weekday PM Peak Hour

Approach		Lane Group	2025 Existing	2028 No-Build	2028 Build	Δ No-Build vs. Build
Maple Rd / Flint Rd						
Maple Rd, EB	L		B/18.3	B/19.5	B/20.6	+1.1
	T		C/23.1	C/24.6	C/26.6	+2.0
	R		C/25.0	C/26.8	C/27.7	+0.9
Maple Rd, WB	L		B/16.8	B/18.0	B/19.8	+1.8
	TR		C/23.8	C/25.6	C/27.3	+1.7
Flint Rd, NB	L		C/32.3	C/33.8	C/34.6	+0.8
	TR		C/30.0	C/30.1	C/31.3	+1.2
Flint Rd, SB	LT		C/26.1	C/26.0	C/26.6	+0.6
	R		D/43.8	D/45.9	D/46.9	+1.0
		Overall	C/26.7	C/28.2	C/29.4	+1.2
Maple Rd / NYS Route 263 SB Ramps						
Maple Rd, EB	L		A/5.5	A/5.9	A/6.5	+0.6
	T		A/4.2	A/4.3	A/4.6	+0.3
Maple Rd, WB	T		A/4.4	A/4.6	A/4.7	+0.1
	R		A/3.9	A/4.1	A/4.7	+0.8
NYS Route 263 SB Ramp, SB	L		C/29.9	C/29.7	C/29.7	0.0
	R		D/39.5	D/39.2	D/39.2	0.0
		Overall	A/6.9	A/7.0	A/6.8	-0.2
Maple Rd / NYS Route 263 NB Ramps						
Maple Rd, EB	L		D/41.6	D/48.1	F/83.5	+35.4
	T		C/20.3	C/21.9	C/24.9	+3.0
Maple Rd, WB	TR		C/24.6	C/27.0	C/34.0	+7.0
	L		C/33.2	C/31.7	C/29.9	-1.8
NYS Route 263 NB Ramps, NB	TR		E/74.8	E/75.5	F/123.1	+47.6
	L					
		Overall	D/35.4	D/37.2	D/53.1	+15.9
Maple Rd / N Maplemere Rd						
Maple Rd, EB	L		A/5.2	A/5.4	A/6.9	+1.5
	TR		A/9.2	A/9.7	B/12.1	+2.4
Maple Rd, WB	L		A/5.8	A/6.1	A/7.4	+1.3
	TR		A/9.2	A/9.6	B/12.2	+2.6
N Maplemere Rd, NB	LTR		C/26.4	C/26.5	C/26.5	0.0
	L		C/25.9	C/26.0	C/26.6	+0.6
N Maplemere Rd, SB	TR		C/27.3	C/27.5	C/27.5	0.0
	L					
		Overall	B/10.6	B/11.0	B/13.2	+2.2
Maple Rd / N Forest Rd						
Maple Rd, EB	L		C/20.9	C/22.8	C/33.3	+10.5
	T		C/33.0	D/37.3	D/44.1	+6.8
	R		C/22.4	C/23.8	C/25.4	+1.6
Maple Rd, WB	L		C/27.9	C/34.0	D/41.8	+7.8
	T		C/27.6	C29.9	C/34.7	+4.8
	R		C/22.4	C/23.8	C/25.4	+1.6
N Forest Rd, NB	L		C/28.2	C/28.3	C/28.9	+0.6
	T		D/43.3	D/45.2	D/46.1	+0.9
	R		D/36.7	D/37.1	D/37.6	+0.5
N Forest Rd, SB	L		C/32.8	C/34.8	D/36.0	+1.2
	T		C/34.1	C/34.4	D/37.1	+2.7
	R		C/29.3	C/29.4	C/32.7	+3.3
		Overall	C/31.3	C/33.8	D/37.8	+4.0
N Maplemere Rd/Coventry Rd and NYS Route 263						
NYS Route 263, EB	L		F/99.8	F/99.2	F/99.2	0.0
	TR		C/26.9	C/27.8	C/29.7	+1.9
NYS Route 263, WB	L		F/107.6	F/106.9	F/102.1	-4.8
	TR		C/31.2	C/32.4	C/32.4	0.0
N Maplemere Rd, NB	LT		F/83.4	F/83.4	F/83.2	-0.2
	R		E/79.9	E/79.6	F/82.8	+3.2
Coventry Rd, SB	LT		E/72.4	E/73.4	E/73.4	0.0
	R		F/171.4	F/190.6	F/190.6	0.0
		Overall	E/60.4	E/63.7	E/65.0	+1.3

EB, WB, NB, SB = Eastbound, Westbound, Northbound, and Southbound intersection approaches

L, T, R = Left-turn, Through, and/or Right-turn movements

X / X.X = Level of service / Average delay in seconds per vehicle



Table 4 – LOS Summary: Saturday Midday Peak Hour

Approach	Lane Group	2025 Existing	2028 No-Build	2028 Build	Δ No-Build vs. Build
Maple Rd / Flint Rd					
Maple Rd, EB	L	B/11.8	B/12.2	B/12.4	+0.2
	T	B/15.4	B/16.1	B/16.6	+0.5
	R	B/15.0	B/15.5	B/15.7	+0.2
Maple Rd, WB	L	B/10.9	B/11.3	B/11.7	+0.4
	TR	B/14.5	B/15.1	B/15.4	+0.3
Flint Rd, NB	L	C/27.1	C/27.3	C/27.4	+0.1
	TR	C/27.1	C/27.2	C/27.6	+0.4
Flint Rd, SB	LT	C/30.9	C/31.0	C/31.2	+0.2
	R	C/34.9	D/35.3	D/35.5	+0.2
Overall		B/16.9	B/17.4	B/17.7	+0.3
Maple Rd / NYS Route 263 SB Ramps					
Maple Rd, EB	L	A/4.5	A/4.8	A/5.0	+0.2
	T	A/3.4	A/3.6	A/3.7	+0.1
Maple Rd, WB	T	A/3.6	A/3.8	A/3.9	+0.1
	R	A/3.2	A/3.4	A/3.6	+0.2
NYS Route 263 SB Ramp, SB	L	C/30.9	C/30.6	C/30.6	0.0
	R	D/41.9	D/41.4	D/41.4	0.0
Overall		A/6.1	A/6.3	A/6.2	-0.1
Maple Rd / NYS Route 263 NB Ramps					
Maple Rd, EB	L	B/16.2	B/18.3	C/25.7	+7.4
	T	A/8.8	A/9.4	B/12.1	+2.7
Maple Rd, WB	TR	B/10.4	B/11.2	B/14.7	+3.5
	L	D/42.5	D/41.4	D/37.1	-4.3
NYS Route 263 NB Ramps, NB	TR	E/61.8	E/62.8	E/65.6	+2.8
	Overall		C/20.3	C/21.1	C/24.7	+3.6
Maple Rd / N Maplemere Rd					
Maple Rd, EB	L	A/5.1	A/5.3	A/5.9	+0.6
	TR	A/6.6	A/6.8	A/7.3	+0.5
Maple Rd, WB	L	A/6.3	A/6.4	A/6.4	0.0
	TR	B/10.5	B/10.9	B/11.7	+0.8
N Maplemere Rd, NB	LTR	C/28.0	C/28.1	C/28.1	0.0
	L	C/30.0	C/30.5	C/31.0	+0.5
N Maplemere Rd, SB	TR	C/31.9	C/32.3	C/32.3	0.0
	Overall		B/11.5	B/11.8	B/12.2	+0.4
Maple Rd / N Forest Rd					
Maple Rd, EB	L	B/11.1	B/11.6	B/12.2	+0.6
	T	B/15.4	B/16.1	B/16.9	+0.8
	R	B/12.7	B/13.2	B/13.8	+0.6
Maple Rd, WB	L	B/11.1	B/11.7	B/12.3	+0.6
	T	B/14.9	B/15.6	B/16.8	+1.2
	R	B/12.4	B/12.9	B/13.6	+0.7
N Forest Rd, NB	L	C/29.2	C/29.3	C/28.8	-0.5
	T	D/36.9	D/37.2	D/36.3	-0.9
	R	D/36.4	D/36.6	D/35.8	-0.8
N Forest Rd, SB	L	C/28.6	C/28.7	C/28.4	-0.3
	T	D/35.9	D/36.2	D/37.4	+1.2
	R	C/31.8	C/31.9	C/33.5	+1.6
Overall		C/20.4	C/20.9	C/21.5	+0.6
N Maplemere Rd/Coventry Rd and NYS Route 263					
NYS Route 263, EB	L	F/114.0	F/113.0	F/113.0	0.0
	TR	B/11.4	B/11.8	B/12.7	+0.9
NYS Route 263, WB	L	F/104.0	F/103.6	F/102.1	-1.5
	TR	B/10.6	B/11.0	B/11.4	+0.4
N Maplemere Rd, NB	LT	F/84.2	F/84.0	F/82.7	-1.3
	R	F/86.6	F/86.6	F/86.8	+0.2
Coventry Rd, SB	LT	F/88.2	F/88.1	F/88.1	0.0
	R	F/101.7	F/101.4	F/101.4	0.0
Overall		C/29.8	C/30.0	C/31.2	+1.2

EB, WB, NB, SB = Eastbound, Westbound, Northbound, and Southbound intersection approaches

L, T, R = Left-turn, Through, and/or Right-turn movements

X / X.X = Level of service / Average delay in seconds per vehicle



Maple Road and Flint Road: The level of service analysis indicates that the intersection currently operates at an overall LOS C or better during the study peak hours and it will continue to do so in the No-Build and Build conditions. The maximum increase in overall delay between the No-Build and Build conditions is +1.2 second, which occurs during the weekday PM peak hour. The maximum increase in delay for an individual movement between the No-Build and Build conditions is +2.0 seconds during the weekday PM peak hour for the eastbound Maple Road through movement. Based on the analysis, the proposed project will not have a significant adverse impact on the operations of the intersection.

Maple Road and NYS Route 263 SB Ramps: The level of service analysis indicates that the intersection currently operates at an overall LOS A during all peak hours and it will continue to do so in the No-Build and Build conditions. In fact, there will be a marginal decrease in the overall delay between the No-Build and Build conditions. The maximum increase in delay for an individual movement between the No-Build and Build conditions is +0.8 seconds during the weekday PM peak hour for the westbound right-turn movement. Based on the analysis, the proposed project will not have a significant adverse impact on the operations of the intersection.

Maple Road and NYS Route 263 NB Ramps: The level of service analysis indicates that the intersection currently operates at an overall LOS D or better during the weekday PM and Saturday Midday peak hours and it will continue to do so in the No-Build and Build conditions. The maximum increase in overall delay between the No-Build and Build conditions is the +15.9, which occurs during the weekday PM peak hour. In the Build condition, there is a notable increase in delay in the northbound NYS Route 263 through/right-turn movement. LaBella investigated potential signal timing adjustments to mitigate the increase in delay in the Build condition during the weekday PM peak hour. Specifically, LaBella analyzed reallocated 5 seconds of green time from the mainline Maple Road movements to the northbound NYS Route 263 approach thus maintaining the existing cycle length. Table 5 summarizes the LOS results with these adjustments. The LOS reports are included under Attachment E.

Table 5 – LOS Summary: Weekday PM Peak Hour – Signal Timing Adjustments

Approach	Lane Group	2025 Existing	2028 No-Build	2028 Build w. Mitigation	Δ No-Build vs. Build w/ Mitigation
Maple Rd / NYS Route 263 NB Ramps					
Maple Rd, EB	L	D/41.6	D/48.1	F/142.8	+94.7
	T	C/20.3	C/21.9	C/31.5	+9.6
Maple Rd, WB	TR	C/24.6	C/27.0	D/45.7	+18.7
	L	C/33.2	C/31.7	C/24.4	-7.3
NYS Route 263 NB Ramps, NB	L	E/74.8	E/75.5	E/70.5	-5.0
	TR				
Overall		D/35.4	D/37.2	D/49.3	+12.1

EB, WB, NB, SB = Eastbound, Westbound, Northbound, and Southbound intersection approaches
 L, T, R = Left-turn, Through, and/or Right-turn movements
 X / X.X = Level of service / Average delay in seconds per vehicle

As shown in Table 5, the signal timing adjustments will result in the northbound NYS Route 263 approach operating with lower delays in the Build condition than the No-Build and Existing conditions. It should be noted that the reduction in time on the mainline does result in the eastbound Maple Road left-turn movement experiencing a degradation in LOS from a LOS D to a LOS F with an increase in delay of +94.7 seconds. However, the V/C ratio for the movement remain below 1.0 (0.89), which indicates that the approach will continue to have capacity in the Build condition with the signal timing adjustments. Based on the analysis, it is recommended that the signal timing adjustments be considered for implementation during the weekday PM peak hour. There are no impacts that require mitigation during the Saturday Midday peak hour.

Maple Road and N Maplemere Road: The level of service analysis indicates that the intersection currently operates at an overall LOS B during all peak hours and it will continue to do so in the No-Build and Build conditions. The maximum increase in overall delay between the No-Build and Build conditions is +2.2 second, which occurs during the weekday PM peak hour. The maximum increase in delay for an individual movement between the No-Build and Build conditions is +2.6 seconds during the weekday PM peak hour for the westbound Maple Road through movements. Based on the analysis, the proposed project will not have a significant adverse impact on the operations of the intersection.



Maple Road and N Forest Road: The level of service analysis indicates that the intersection currently operates at an overall LOS C during all peak hours and it will continue to do so in the No-Build conditions. The overall LOS will degrade from a LOS C to a LOS D in the Build condition during the weekday PM peak hour. The overall LOS will remain an LOS C in the Build condition during the Saturday Midday peak hour. The maximum increase in overall delay between the No-Build and Build conditions is +4.0 second, which occurs during the weekday PM peak hour. The maximum increase in delay for an individual movement between the No-Build and Build conditions is +10.5 seconds during the weekday PM peak hour for the eastbound Maple Road left-turn movement. Based on the analysis, the proposed project will not have a significant adverse impact on the operations of the intersection.

NYS Route 263 and N Maplemere Road/Coventry Road: The level of service analysis indicates that the intersection currently operates at an overall LOS E during the weekday PM peak hour and an overall LOS C during the Saturday Midday peak hour. These conditions are expected to remain unchanged under No-Build and Build conditions. The maximum increase in overall delay between the No-Build and Build conditions is +1.3 second, which occurs during the weekday PM peak hour. The maximum increase in delay for an individual movement between the No-Build and Build conditions is +3.2 seconds during the weekday PM peak hour for the northbound N Maplemere Road right-turn movement. Based on the analysis, the proposed project will not have a significant adverse impact on the operations of the intersection.

Maple Road and Site Driveway:

The proposed project is considering signaling the Maple Road/Site Driveway intersection. As requested in the comment letter from Erie County Department of Public Works, the intersection has been modeled as an unsignalized intersection with the Site Driveway approach operating under stop-control. Table 6 summarizes the LOS results for the Maple Road/Site Driveway intersection modeled as an unsignalized intersection.

Table 6 – LOS Summary: Maple Road/Site Driveway - Unsignalized

Approach	Lane Group	Weekday PM Peak Hour		Saturday Midday Peak Hour	
		Delay	95 th Percentile Queue	Delay	95 th Percentile Queue
Maple Rd / Site Driveway					
Maple Rd, EB	L	C/21.1	3.5 veh / 100-ft	B/12.0	0.8 veh / 25-ft
Site Driveway, SB	L	F/1108.6	21.4 veh / 525-ft	E/46.7	2.3 veh / 50-ft
	R	E/41.2	6.8 veh / 175-ft	B/14.7	0.9 veh / 25-ft

EB, WB, NB, SB = Eastbound, Westbound, Northbound, and Southbound intersection approaches

L, T, R = Left-turn, Through, and/or Right-turn movements

X / XX = Level of service / Average delay in seconds per vehicle

As shown in Table 6, the eastbound Maple Road left-turn movement will operate at an acceptable LOS C or better during the study peak hours. However, the southbound Site Driveway left-turn movement is expected to operate a LOS F with a delay of 1108.6 seconds and a LOS E with a delay of 46.7 seconds during the weekday PM and Saturday Midday peak hours, respectively. Due to the expected high delay and queue for the southbound Site Driveway left-turn expected during the weekday PM peak hour, signalization of the intersection is being considered.

LaBella conducted a Signal Warrant Analysis based on guidance in Chapter 4C of the *Manual on Uniform Traffic Control Devices* (MUTCD), 11th Edition. A technical memorandum containing the Signal Warrant Analysis and its findings that a signal is warranted is included under Attachment F. A capacity analysis was conducted for the Maple Road/Site Driveway based on the following assumptions:

- Exclusive left-turn and right-turn lanes for the Site Driveway approach
- Exclusive left-turn lane for the eastbound Maple Road approach
- Semi-Actuated Uncoordinated with detection on the Site Driveway and Maple Road left-turn movements
- 60-second cycle length with a 40-second Minimum Recall split for the mainline Maple Road phases and a 20-second No Recall split for the Site Driveway phase

Table 7 summarizes the LOS results for the Maple Road/Site Driveway intersection based on these assumptions. The LOS reports are included under Attachment E.



Table 7 – LOS Summary: Maple Road/Site Driveway - Signalized

Approach	Lane Group	Weekday PM Peak Hour	Saturday Midday Peak Hour
Maple Rd / Site Driveway			
Maple Rd, EB	L	F/136.7	B/11.4
	T	B/10.4	A/5.8
Maple Rd, WB Site Driveway, SB	TR	B/10.5	A/6.2
	L	C/21.2	B/14.2
	R	D/39.8	B/16.5
Overall		C/23.3	A/7.0

EB, WB, NB, SB = Eastbound, Westbound, Northbound, and Southbound intersection approaches
 L, T, R = Left-turn, Through, and/or Right-turn movements
 X / X.X = Level of service / Average delay in seconds per vehicle

As shown in Table 7, the level of service analysis indicates that the intersection will operate favorably under signal control.

4. Conclusion

Based on the results of the traffic impact study completed for the proposed project, the following conclusions are presented:

- The proposed project generally consists of an athletic community center comprised of two 125,000 square-foot sports domes that will house a full-size turf football/lacrosse/soccer field, a 200 meter long 6-lane banked track, and six basketball/volleyball/pickleball courts. A two-story, 50,000-square-foot building will connect the two sports domes, and it will be comprised of a 25,000-square-foot fitness center, a 20,000-square-foot core lobby (Locker Room/Restroom), and a 5,000-square-foot space for member amenities (Restaurant/Snack Bar). Lastly, a five-story 150-room hotel will be located on the site to support the proposed development. The project will be supported by +/- 500 parking spaces. Access to the site will be provided via a full-movement driveway on Maple Road. The analysis herein considers the proposed driveway operating under signal control.
- LaBella collected turning movement counts (TMCs) at the study intersections on Thursday, September 11, 2025, and Saturday, September 13, 2025. The counts were conducted during the typical PM and Saturday MD peak periods – 4:00 p.m. to 7:00 p.m. and 11:00 a.m. to 2:00 p.m., respectively. *It should be noted that the University of Buffalo football team had an away game during the Saturday count period. This was done intentionally to avoid capturing abnormal traffic patterns that result from home games.* Based on these counts, the observed network peak hours were 4:30 p.m. to 5:30 p.m. during the weekday PM peak period and 12:15 p.m. to 1:15 p.m. during the weekend Midday peak period.
- To evaluate the impact of the proposed project, traffic projections were prepared for the design year of 2028. It should be noted that this design year was selected to provide a conservative analysis as it is expected that the project will be completed and occupied sooner than 2028. LaBella Associates reviewed the Pending Development Project page on the Town of Amherst website and determined that there are no projects that will have an effect on the study intersections. In addition, historical traffic volume data from the NYSDOT Traffic Viewer was also reviewed. To provide a conservative analysis, a 1.50% annual growth rate was applied to the Existing 2025 traffic volumes and compounded over a three-year period.
- The level of service analysis indicates that the majority of the study intersection will operate at levels of service commensurate to the No-Build condition. Maple Road and NYS Route 263 SB Ramps – The northbound NYS Route 263 approach to the intersection will experience delay during the weekday PM peak hour Build condition. Mitigation could consist of signal timing adjustments. It is recommended that the Maple Road/Site Driveway intersection operate under signal control. Based on the MUTCD, a signal warrant analysis indicates that the Build condition traffic volumes warrant a traffic signal.

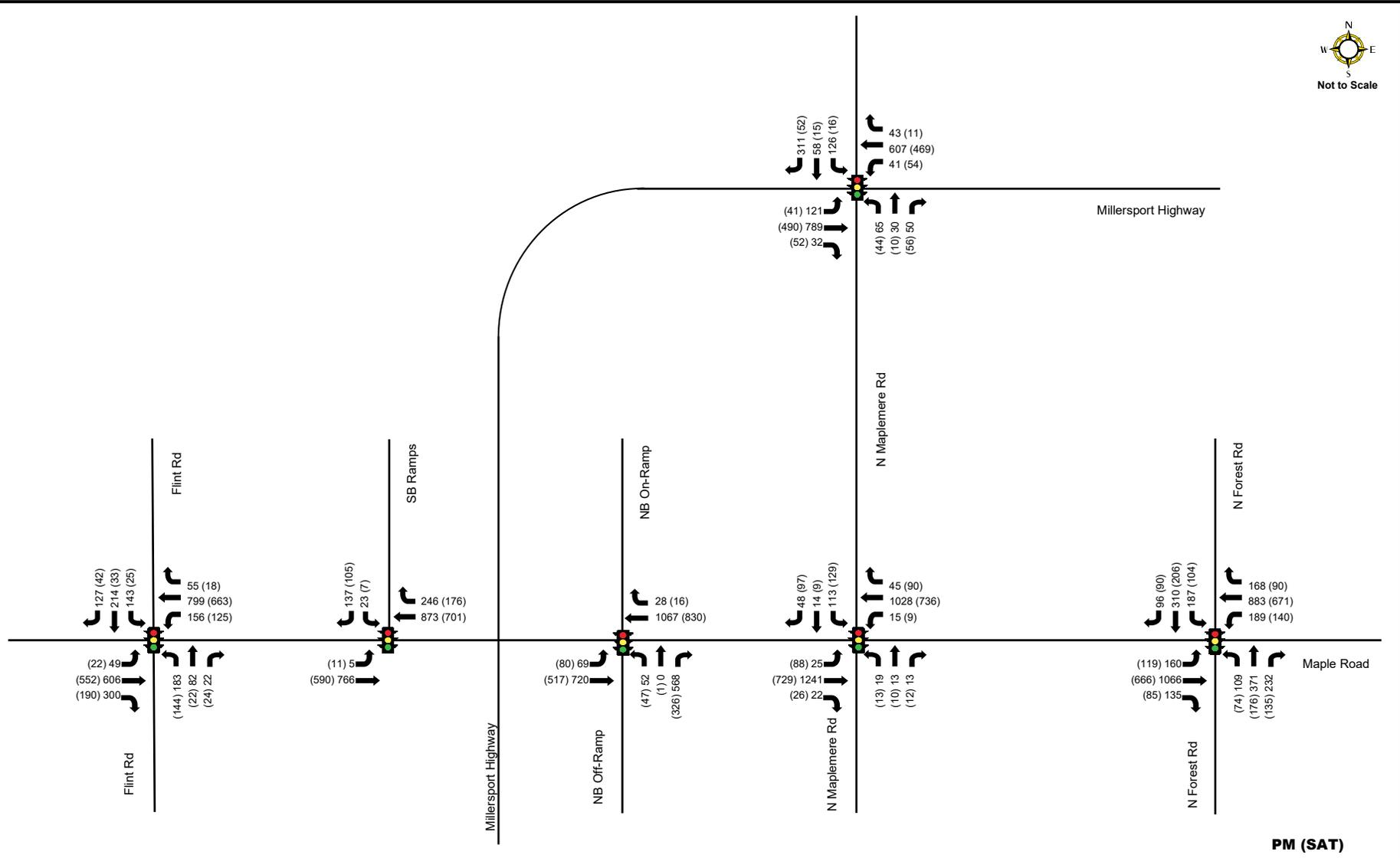


Please contact me at shipp@labellapc.com or at (914) 269-5604 if you have questions on this traffic analysis.

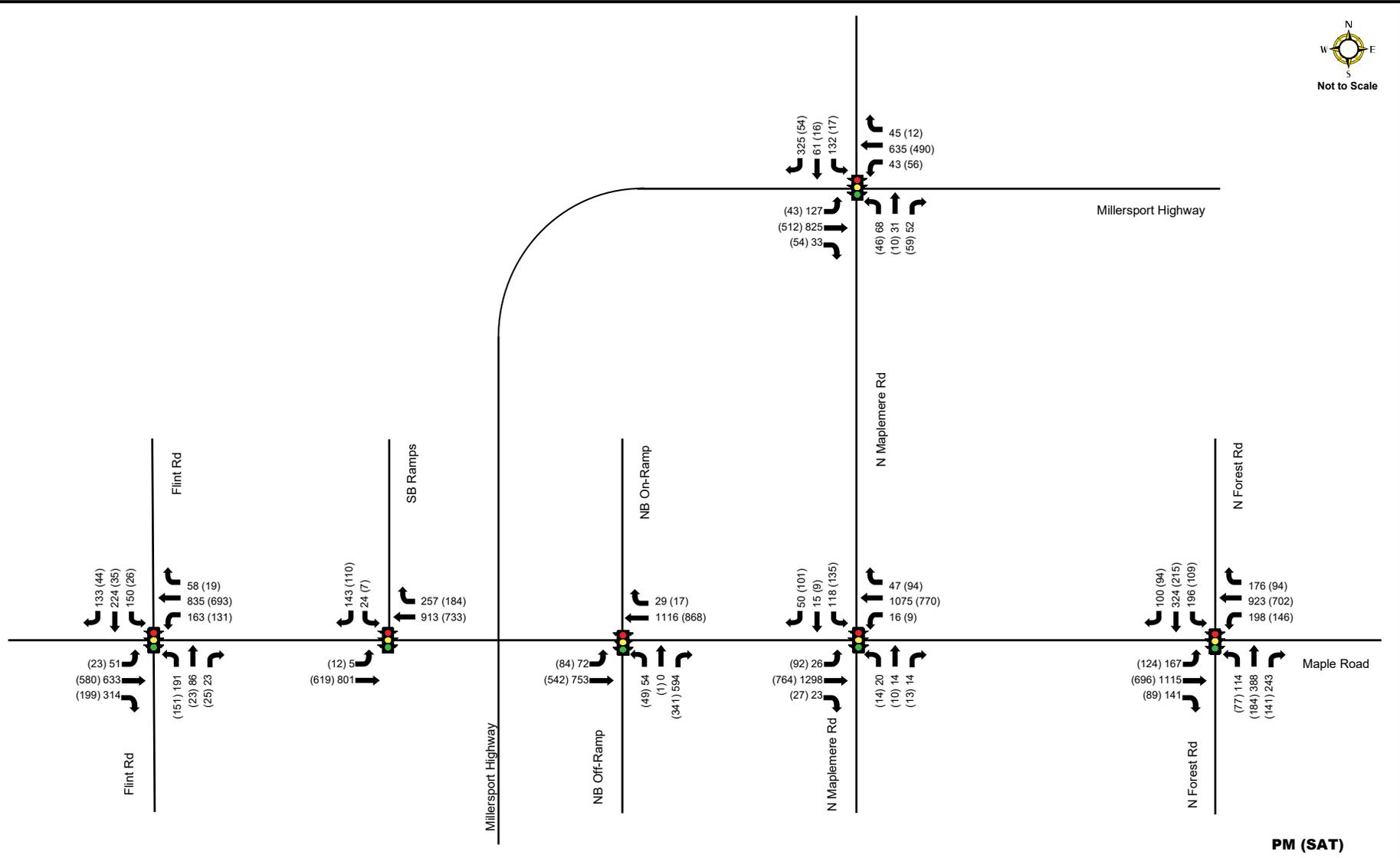
Sincerely,
LaBella Associates

Starke W. Hipp, PE
Traffic Engineer

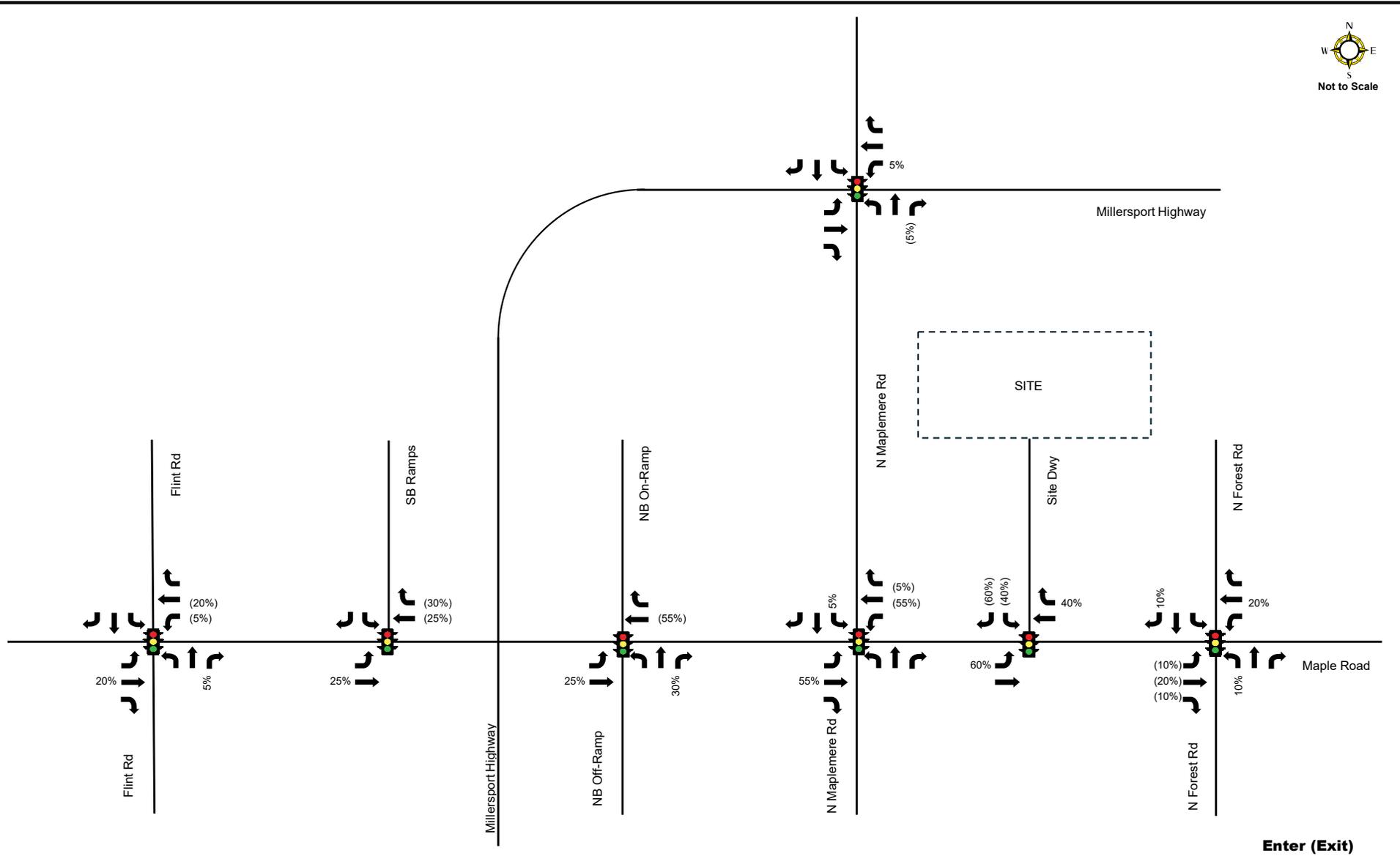
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 LaBella Powered by partnership.	2025 Existing Peak Hour Traffic Volumes		716 Sports Fieldhouse Traffic Impact Study Town of Amherst Erie County, New York
	FIGURE - 1	November 2025	

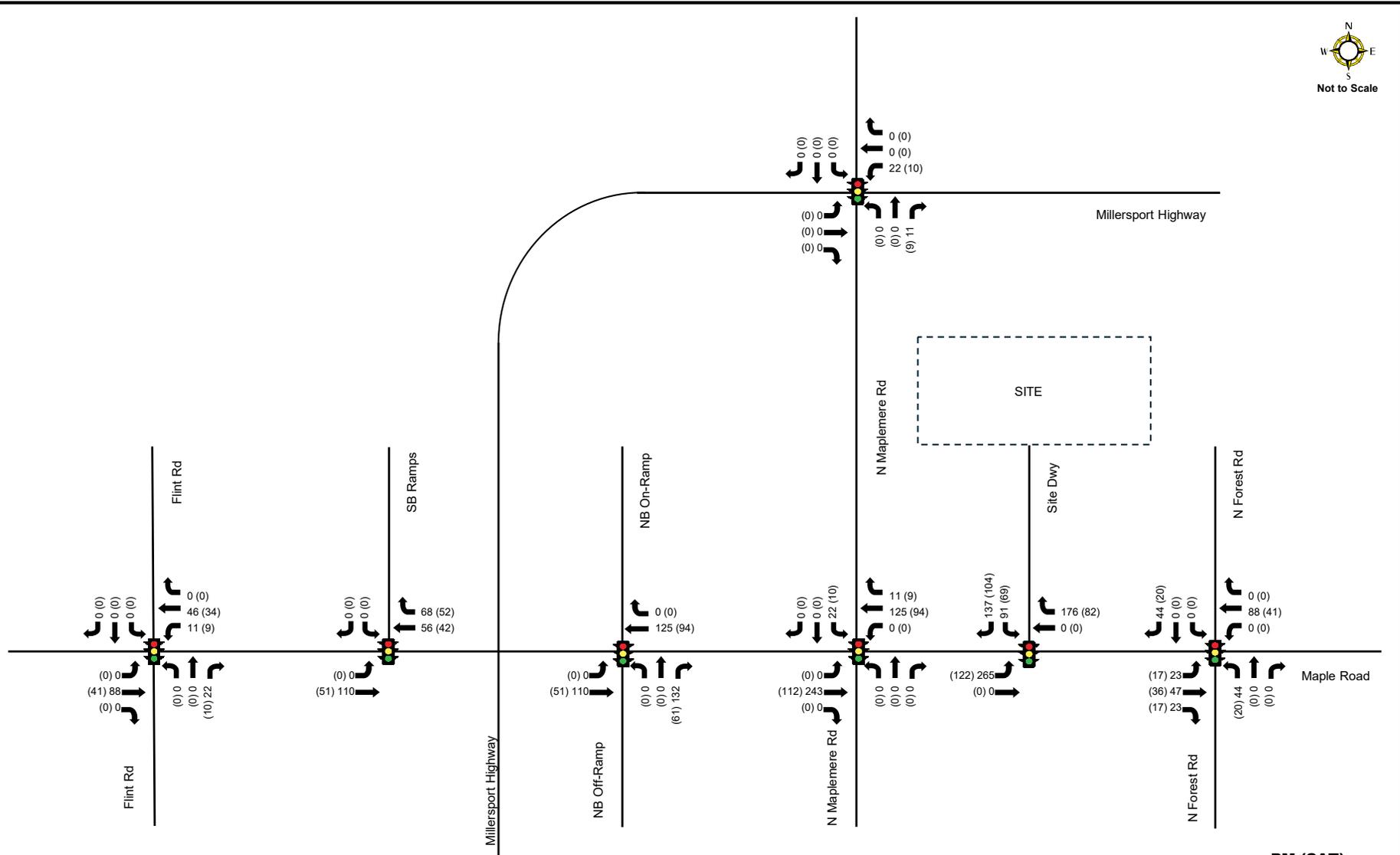


	2028 No-Build Peak Hour Traffic Volumes		716 Sports Fieldhouse Traffic Impact Study Town of Amherst Erie County, New York
	FIGURE - 2	November 2025	



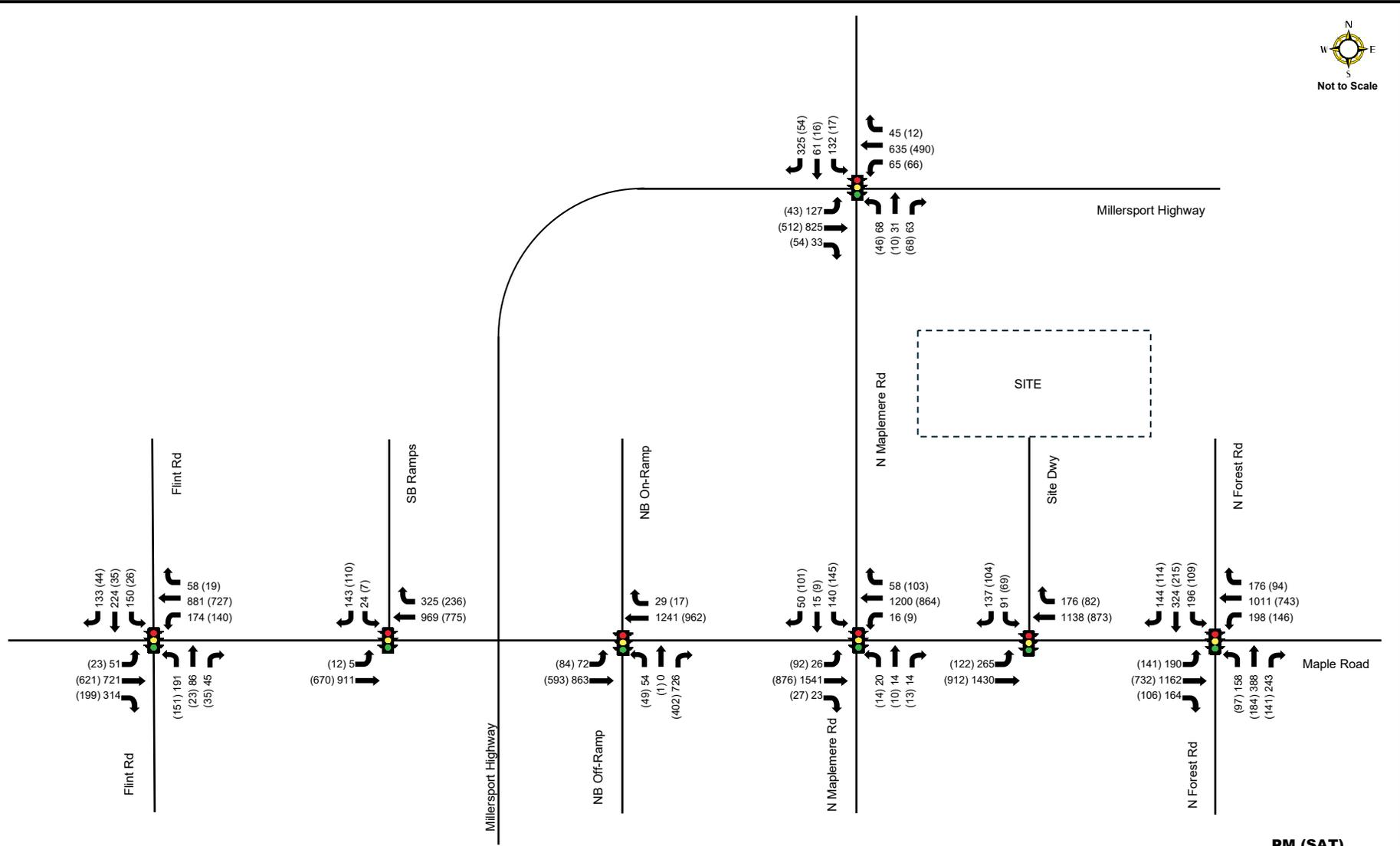
Enter (Exit)

	Trip Distributions		716 Sports Fieldhouse Traffic Impact Study Town of Amherst Erie County, New York
	FIGURE - 3	November 2025	



PM (SAT)

	Trip Assignment		716 Sports Fieldhouse Traffic Impact Study Town of Amherst Erie County, New York
	FIGURE - 4	November 2025	



	2028 Build Peak Hour Traffic Volumes		716 Sports Fieldhouse Traffic Impact Study Town of Amherst Erie County, New York
	FIGURE - 5	November 2025	



ATTACHMENT A

SITE PLAN

**PROPOSED SPORTS COMPLEX AND HOTEL
TOWN OF AMHERST
ERIE COUNTY, NY**



CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 0021272
LAND SURVEYING: 0021271
GEOLOGICAL: 0021659

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered" followed by their signature and date of such alteration, and a specific description of the alteration.

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ARC BUILDING PARTNERS
100 S ELMWOOD AVE
SUITE 100
BUFFALO, NY 14202



716 SPORTS COMPLEX
330 MAPLE ROAD
AMHERST NY, 14221

NO.	DATE	DESCRIPTION
Revisions		

PROJECT NUMBER: 2254561

DRAWN BY: SCB/JBB

REVIEWED BY: RJS

ISSUED FOR: PERMIT

DATE: OCTOBER 8, 2025

DRAWING NAME: **OVERALL SITE PLAN**

DRAWING NUMBER:

C200

PROJECT DATA

PARCEL INFORMATION	
APPLICANT	716 SPORTS COMPLEX, LLC
OWNER	TOWN OF AMHERST
PARCEL ADDRESS	330 MAPLE ROAD
TAX NUMBER	55.03-1-10
PARCEL AREA (TOTAL)	21.3 ACRES
TOTAL PROJECT AREA	21.3 ACRES
EXISTING IMPERVIOUS WITHIN PROJECT AREA	0.0 ACRES
PROPOSED IMPERVIOUS WITHIN PROJECT AREA	15.3 ACRES
TOTAL DISTURBANCE AREA	± 19.0 ACRES
PARKING COUNT	520 SPACES - REQUIRED NUMBER OF SPACES TO BE DETERMINED BY PARKING ANALYSIS

ZONING INFORMATION

	REQUIRED	PROPOSED
CLASSIFICATION	GB / RC 100-FT FRONTAGE CONSERVATION AREA	GB / RC 100-FT FRONTAGE CONSERVATION AREA
MIN. LOT AREA	NONE	N/A
MIN. LOT WIDTH	NONE	N/A
FRONT SETBACK	30 FT	± 100 FT
SIDE SETBACK	25 FT	± 91 FT
REAR SETBACK	25 FT	± 91 FT
MAX. HEIGHT	*	*
MAX. BUILDING COVERAGE	NONE	N/A
MAX. INTERIOR BUILDING SEPARATION	NONE	N/A

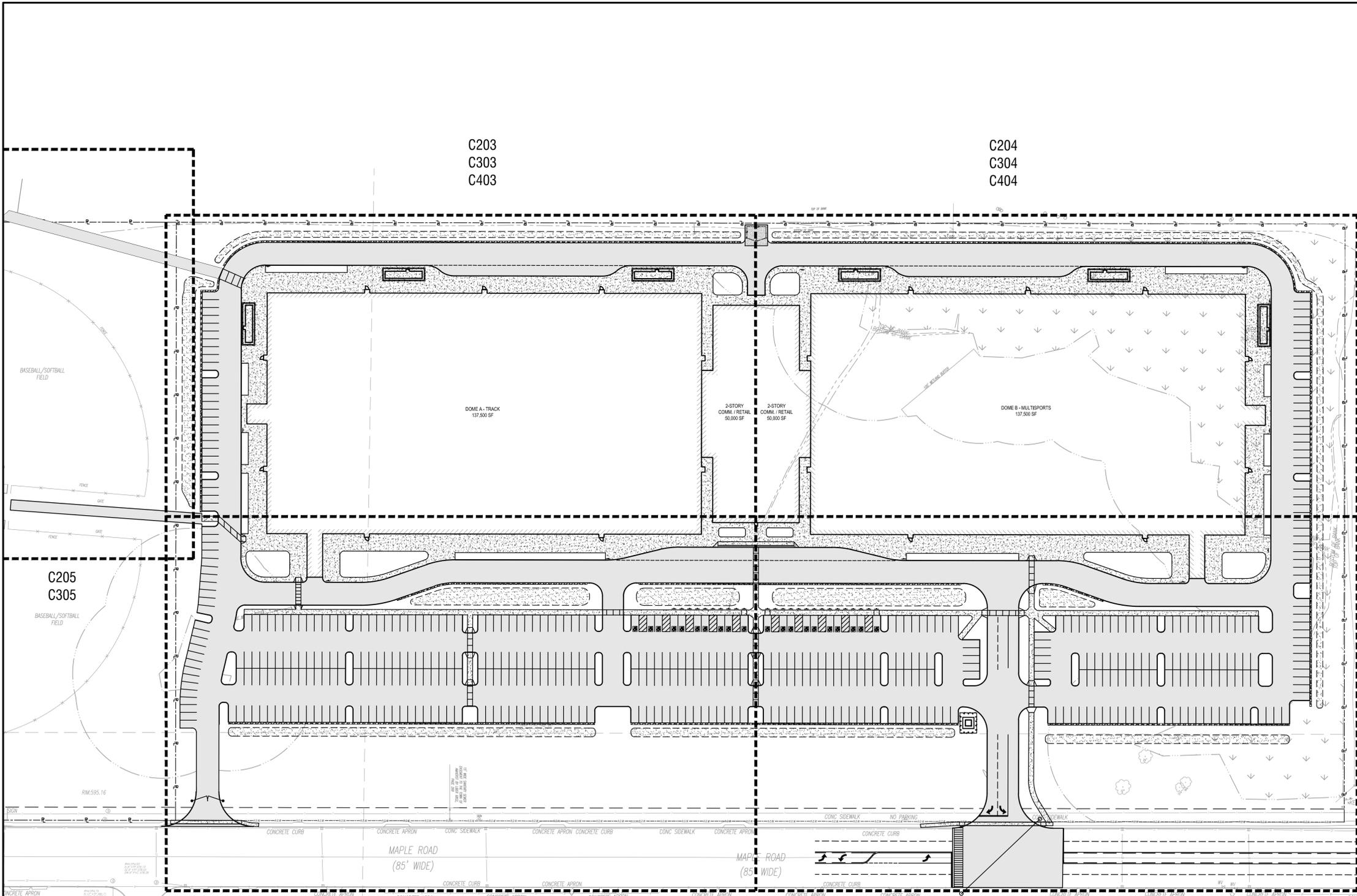
*PER NEW YORK STATE BUILDING CODE 2020 TABLE 504.3, "ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE":

MAX. ALLOWED HEIGHT: 2 STORIES, 55 FEET (TYPE IIB)
PROPOSED HEIGHT: 1 STORY, AVERAGE HEIGHT 50' (100' TO RIDGE)

PER NEW YORK STATE BUILDING CODE 2020 - SECTION 3102.5 "MAXIMUM HEIGHT":

MEMBRANE STRUCTURES SHALL NOT EXCEED ONE STORY NOR SHALL SUCH STRUCTURES EXCEED THE HEIGHT LIMITATIONS IN FEET SPECIFIED IN SECTION 504.3.

EXCEPTION: NONCOMBUSTIBLE MEMBRANE STRUCTURES SERVING AS ROOFS ONLY.



1 OVERALL SITE PLAN
SCALE: 1"=60'



Drawing Name: B:\GLOBAL\Projects\Arc Building Partners\2254561 - 716 Sports Facility\House Complex\06_Drawings\Civil\C200 SITE PLAN.dwg
Xref Attached: X:\ORDER\24306 DESIGN\UTILITY DESIGN\SITE\AERIAL\X845E\MAP
Date Plotted: Nov 03, 2025, 2:11pm



ATTACHMENT B1

NYSDOT SIGNAL TIMINGS

**PROPOSED SPORTS COMPLEX AND HOTEL
TOWN OF AMHERST
ERIE COUNTY, NY**

NYS DOT TRAFFIC SIGNAL #431
 MAPLE RD @ RAMP TO/FROM RTE 263

GRID NORTH



QUANTITY AND ITEM LIST			
SIGNAL 431			
ITEM NO.	DESCRIPTION	UNIT	QTY
206.03060005	CONDUIT EXCAV & BACKFILL (NOT IN ROADWAY)	FT	75
619.1612	MAINTAIN TRAFFIC SIGNAL EQUIP (REQ B)	INT MO	1
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	1
680.520506	CONDUIT, RIGID PLASTIC, CLASS 1, 2"	FT	75
680.6710	SIGNAL POLE - TOP MOUNT (10FT)	EA	2
680.730514	SIGNAL CABLE, 5 CONDUCTOR, 14 AWG	FT	325
680.78010005	ALTER PULLBOX FOR CONDUIT	EA	2
680.79000805	REMOVE TRAFFIC SIGNAL INSTALLATION	EA	1
680.813105	PEDESTRIAN SIGNAL MODULE 12IN, BI-MODAL HAND/MAN	EA	2
680.813106	PEDESTRIAN SIGNAL SECTION - POLYCARBONITE, TYPE 1 12IN	EA	4
680.81330010	AUDIBLE PEDESTRIAN SIGNAL	EA	2
680.8142	PEDESTRIAN SIGNAL POST TOP MOUNT ASSEMBLY	EA	2
680.81500010	PEDESTRIAN COUNT DOWN TIMER	EA	2

PROJECT MANAGER K. LORENZ
 CHECK R. LUNZ
 DRAFTING K. GORECKI
 CHECK R. LUNZ
 DESIGN K. GORECKI
 JOB MANAGER M.F. CHRISTNER



R10-31

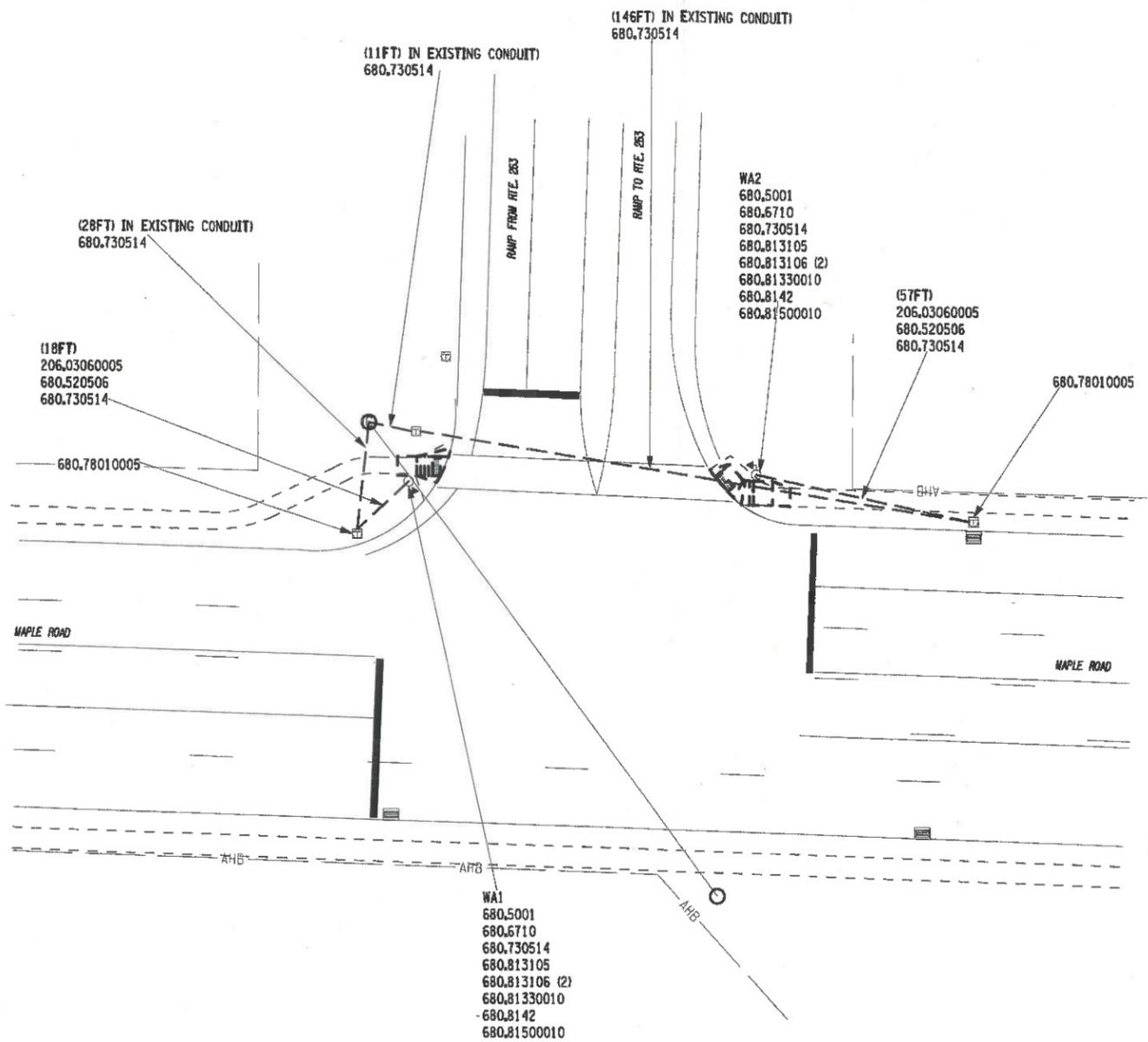
NEW PEDESTRIAN SIGNS SHALL BE SIGN NUMBER R10-31 FROM THE MUTCD.
 "RTE 263 RAMP" FOR WA1 & WA2
 ARROW MAY FACE LEFT OR RIGHT, IT IS CONTRACTORS RESPONSIBILITY FOR PROPER ARROW ORIENTATION.

1.) PULLBOX AND EXISTING CONDUIT LOCATIONS ON PLANS ARE SHOWN BASED ON RECORD PLANS. ACTUAL FIELD LOCATIONS MAY VARY.

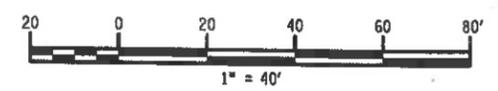
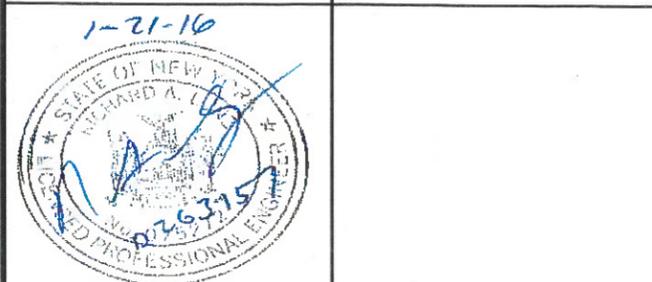
2.) ITEM 680.79000805, "REMOVE TRAFFIC SIGNAL INSTALLATION" SHALL INCLUDE THE REMOVAL AND STORAGE OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT. ALL EQUIPMENT, EXCEPT EXISTING PEDESTRIAN SIGNAL POLE AND CABLE, SHALL BE TURNED OVER TO THE REGION 5 NYS DOT TRAFFIC SIGNAL MAINTENANCE CREW. EXISTING PEDESTRIAN SIGNAL POLES WILL BECOME THE PROPERTY OF THE CONTRACTOR.

UNLESS OTHERWISE NOTED, "REMOVE TRAFFIC SIGNAL INSTALLATION", ITEM 680.79000805, SHALL INCLUDE:

- ALL EXISTING PEDESTRIAN SIGNAL CABLE
- ALL EXISTING PEDESTRIAN PUSH BUTTONS AND SIGNS
- ALL EXISTING PEDESTRIAN SIGNAL HEADS AND BRACKETS
- ALL EXISTING PEDESTRIAN SIGNAL POLES



AFFIX SEAL: ON:
 ALTERED BY: ON:

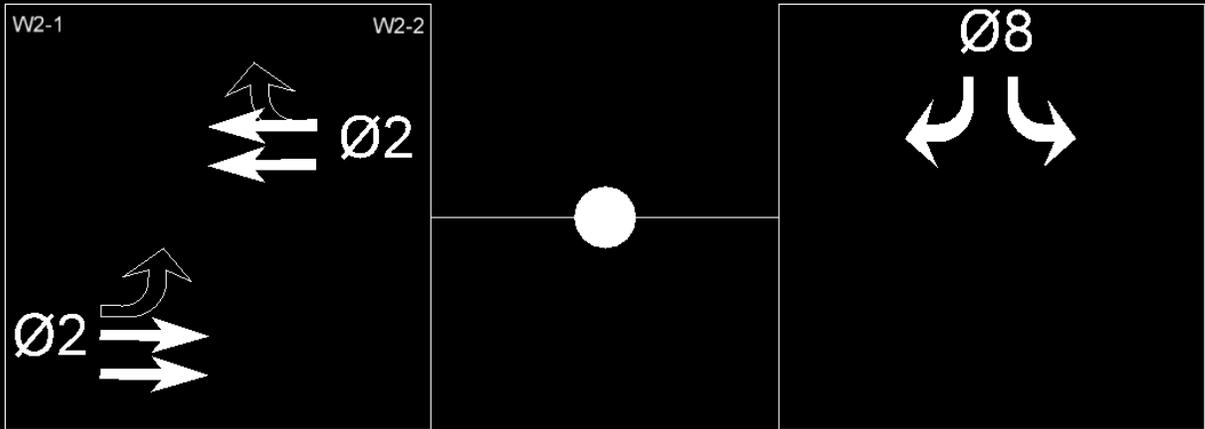


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	ADA COMPLIANCE ON VARIOUS ROUTES ERIE AND NIAGARA COUNTIES	PIN 5808.30	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D263157
	COUNTY: VARIOUS	REGION: 5			SIGNAL 431 - GENERAL PLAN SHEET	DRAWING NO. 431-1 SHEET NO. 35

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 580830_CPM_SIG431_1.dgn
 DATE/TIME = 12-JAN-2016 11:52
 USER = RLunz



Phasing Diagram displays controller operation for all phases with active detection

Phase Times [1.1.1]									Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]															53431								
1	2	3	4	5	6	7	8	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#					Cyc	Off	Split	Seq	
Min Green		10					6	1	140	20	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1	Ring/Startup [1.1.4]				
Gap, Ext		4					4	2	150	45	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1					Phs	Ring	Start	Enable
Max 1		40					30	3	160	121	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1	1	1	Red	OFF	
Max 2								4	130	33	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1	2	1	Red	ON	
Yel Clearance	3.5	4.3	3.5	3.5	3.5	3.5	3.5	4.3	5	140	59	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1	3	1	Red	OFF
Red Clearance	1.5	2	1.5	1.5	1.5	1.5	1.5	1.9	6	140	66	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1	4	1	Red	OFF
Walk		7							7	75	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1	5	2	Red	OFF
Ped Clearance		22							8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1	6	2	Red	OFF
Red Revert									9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1	7	2	Red	OFF
Add Initial									10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1	8	2	Red	ON
Max Initial									11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1	Coord Modes [2.1]			
Time B4 Reduct									12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1	Test OpMode	0		
Cars B4 Reduct									Split	1	2	3	4	5	6	7	8	Split	1	2	3	4	5	6	7	8	Correction	SHRT/LNG				
Time To Reduce									1	Coor	0	90	0	50	0	90	0	50	13	Coor	0	0	0	0	0	0	0	0	Maximum	MAX 1		
Reduce By									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	14	Coor	0	0	0	0	0	0	0	0	Force-Off	FIXED		
Min Gap									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	15	Coor	0	0	0	0	0	0	0	0	Closed Loop	ON		
DyMaxLim									3	Coor	0	100	0	60	0	100	0	60	16	Coor	0	0	0	0	0	0	0	0	Stop-in-Walk	ON		
Max Step									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	17	NON	NON	NON	NON	NON	NON	NON	NON	Auto Reset	ON			
Options [1.1.2]	1	2	3	4	5	6	7	8	4	Coor	0	80	0	50	0	80	0	50	18	Coor	0	0	0	0	0	0	0	0	Expand Split			
Enable		ON						ON	2	NON	Max	NON	NON	NON	NON	NON	NON	NON	19	NON	NON	NON	NON	NON	NON	NON	NON	Ped Recycle	NO_RECYCLE			
Min Recall		ON							5	Coor	0	80	0	60	0	80	0	60	20	Coor	0	0	0	0	0	0	0	0	Before	TIMED		
Max Recall									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	21	NON	NON	NON	NON	NON	NON	NON	NON	After	TIMED			
Ped Recall									6	Coor	0	80	0	60	0	80	0	60	18	Coor	0	0	0	0	0	0	0	0	Auto Flash [1.4.1]			
Soft Recall									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	20	NON	NON	NON	NON	NON	NON	NON	NON	Auto Flash	PH_OVLP			
Lock Calls									7	Coor	0	50	0	25	0	50	0	25	19	Coor	0	0	0	0	0	0	0	0	Flash Yel	45		
Auto Flash Entry									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	20	NON	NON	NON	NON	NON	NON	NON	NON	Flash Red	20			
Auto Flash Exit									8	Coor	0	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0	Unit Params [1.2.1]			
Dual Entry		ON		ON		ON		ON	Coor	0	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0	Phase Mode	STD8		
Enable Simul Gap	ON	ON	ON	ON	ON	ON	ON	ON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	23	Coor	0	0	0	0	0	0	0	0	IO Mode	User		
Gaurantee Passage									Coor	0	0	0	0	0	0	0	0	0	21	NON	NON	NON	NON	NON	NON	NON	NON	Loc Fish Start	Red			
Rest In Walk									Coor	0	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0	Start Flash(s)	0		
Conditon Service									NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	23	Coor	0	0	0	0	0	0	0	0	Start AllRed(s)	6		
Non-Actuated 1									NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	24	Coor	0	0	0	0	0	0	0	0	Yellow < 3"	OFF		
Non-Actuated 2									NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	24	Coor	0	0	0	0	0	0	0	0	Display Time	20		
Add Init Calc									12	Coor	0	0	0	0	0	0	0	0	24	Coor	0	0	0	0	0	0	0	0	Red Revert	3		
Options+ [1.1.3]	1	2	3	4	5	6	7	8	Page#																MCE Timeout	0						
Reservice									1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param															Feature Profile							
PedClr Thru Yel									1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param															Free Ring Seq	1						
Skip Red No Call									2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)															Auxswitch	STOPTM						
Red Rest									3	Detection; Sample Time and Unit Parameters related to detection															SDLC Retry	0						
Max II									4	Preemption and Alternate Phase Time and Phase Options															TS2 Det Faults	ON						
Call Phase									5	Annual Schedule															Auto Ped Clear	OFF						
Conflicting Phase									6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)															SDLC Retry	0						
Omit Yellow									7	Communications; Security; I/O Setup															Display Time	20						
Ped Delay									8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param															Red Revert	3						
Grn/Ped Delay									8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param															08/22/25	Page 1						

Overlap 1-16 Program Parm+ [1.5.2.1] [1.5.2.2]

Overlap	Conflict Lock	OFF	Overlap Lock Inhibit	OFF	Parent Ph Clearance	ON	Extra Included Ph	OFF
1	Included Ø				Type	NORMAL	Included Ø	
	Modifier Ø				Grn		9	Modifier Ø
	Conflict Ø				Yel	3.5		Conflict Ø
	Conflict Olap				Red	1.5	1	Conflict Olap
A	Conflict Ped				LG			Conflict Ped
	Included Ø				Type	NORMAL	Included Ø	
	Modifier Ø				Grn		10	Modifier Ø
	Conflict Ø				Yel	3.5		Conflict Ø
2	Conflict Olap				Red	1.5	J	Conflict Olap
	Conflict Ped				LG			Conflict Ped
	Included Ø				Type	NORMAL	Included Ø	
	Modifier Ø				Grn		11	Modifier Ø
3	Conflict Ø				Yel	3.5		Conflict Ø
	Conflict Olap				Red	1.5	K	Conflict Olap
	Conflict Ped				LG			Conflict Ped
	Included Ø				Type	NORMAL	Included Ø	
4	Modifier Ø				Grn		12	Modifier Ø
	Conflict Ø				Yel	3.5		Conflict Ø
	Conflict Olap				Red	1.5	L	Conflict Olap
	Conflict Ped				LG			Conflict Ped
D	Included Ø				Type	NORMAL	Included Ø	
	Modifier Ø				Grn		13	Modifier Ø
	Conflict Ø				Yel	3.5		Conflict Ø
	Conflict Olap				Red	1.5	M	Conflict Olap
E	Conflict Ped				LG			Conflict Ped
	Included Ø				Type	NORMAL	Included Ø	
	Modifier Ø				Grn		14	Modifier Ø
	Conflict Ø				Yel	3.5		Conflict Ø
6	Conflict Olap				Red	1.5	N	Conflict Olap
	Conflict Ped				LG			Conflict Ped
	Included Ø				Type	NORMAL	Included Ø	
	Modifier Ø				Grn		15	Modifier Ø
F	Conflict Ø				Yel	3.5		Conflict Ø
	Conflict Olap				Red	1.5	O	Conflict Olap
	Conflict Ped				LG			Conflict Ped
	Included Ø				Type	NORMAL	Included Ø	
7	Modifier Ø				Grn		16	Modifier Ø
	Conflict Ø				Yel	3.5		Conflict Ø
	Conflict Olap				Red	1.5	P	Conflict Olap
	Conflict Ped				LG			Conflict Ped
G	Included Ø				Type	NORMAL	Included Ø	
	Modifier Ø				Grn		16	Modifier Ø
	Conflict Ø				Yel	3.5		Conflict Ø
	Conflict Olap				Red	1.5		Conflict Olap
H	Conflict Ped				LG			Conflict Ped

Channel Settings [1.8.1]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Phase / Olap #		2						8		8						2								
Channel Type	VEH	PED	VEH																					
Channel Flash	Red	DRK																						
Alt Hz																								

Channel+ Settings [1.8.4]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash Red+																								
Flash Yellow+																								
Flash Green+																								
Flash Inh Red+																								
Olap Ovr																								

Coord Transition, CoordPhs [2.5]

Pat#	Short	Long	Dwell	No Shortway Ø	E-Yld	Offset	RetHld	Float	Min Veh Perm	Min Ped Perm
1	12	22				EndGRN	ON			ON
2	12	22				EndGRN	ON			ON
3	12	22				EndGRN	ON			ON
4	12	22				EndGRN	ON			ON
5	12	22				EndGRN	ON			ON
6	12	22				EndGRN	ON			ON
7	12	22				EndGRN	ON			ON
8	12	22				EndGRN				
9	12	22				EndGRN				
10	12	22				EndGRN				
11	12	22				EndGRN				
12	12	22				EndGRN				
13	12	22				EndGRN				
14	12	22				EndGRN				
15	12	22				EndGRN				
16	12	22				EndGRN				
17	12	22				EndGRN				
18	12	22				EndGRN				
19	12	22				EndGRN				
20	12	22				EndGRN				
21	12	22				EndGRN				
22	12	22				EndGRN				
23	12	22				EndGRN				
24	12	22				EndGRN				
25						BegGRN				
26						BegGRN				
27						BegGRN				
28						BegGRN				
29						BegGRN				
30						BegGRN				
31						BegGRN				
32						BegGRN				
33						BegGRN				
34						BegGRN				
35						BegGRN				
36						BegGRN				
37						BegGRN				
38						BegGRN				
39						BegGRN				
40						BegGRN				
41						BegGRN				
42						BegGRN				
43						BegGRN				
44						BegGRN				
45						BegGRN				
46						BegGRN				
47						BegGRN				
48						BegGRN				

Channel Params[1.8.3]

C1 IO Mode User Single BIU Map DEFAULT Invert Rail Input OFF

NYS DOT TRAFFIC SIGNAL #432
 MAPLE RD @ RAMP FROM RTE 263

GRID NORTH



QUANTITY AND ITEM LIST			
SIGNAL 432			
ITEM NO.	DESCRIPTION	UNIT	QTY
206.03050005	CONDUIT EXCAV & BACKFILL (IN ROADWAY)	FT	63
206.03060005	CONDUIT EXCAV & BACKFILL (NOT IN ROADWAY)	FT	190
619.1612	MAINTAIN TRAFFIC SIGNAL EQUIP (REQ. B)	INT MO	1
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	2
680.51000105	ALTER ELEVATION OF PULLBOX	EA	1
680.50500005	REMOVE POLE FOUNDATION	EA	2
680.510301	PULLBOX-CIRC., 24" DIA, REINF. CONC.	EA	1
680.520506	CONDUIT, RIGID PLASTIC, CLASS 1, 2"	FT	253
680.6710	SIGNAL POLE - TOP MOUNT (10FT)	EA	4
680.730514	SIGNAL CABLE, 5 CONDUCTOR, 14 AWG	FT	938
680.78010005	ALTER PULLBOX FOR CONDUIT	EA	5
680.79000905	REMOVE TRAFFIC SIGNAL INSTALLATION	EA	1
680.813105	PEDESTRIAN SIGNAL MODULE 12IN, BI-MODAL HAND/MAN	EA	4
680.813106	PEDESTRIAN SIGNAL SECTION - POLYCARBONITE, TYPE 1 12IN	EA	8
680.81330010	AUDIBLE PEDESTRIAN SIGNAL	EA	4
680.8142	PEDESTRIAN SIGNAL POST TOP MOUNT ASSEMBLY	EA	4
680.81500010	PEDESTRIAN COUNT DOWN TIMER	EA	4

PROJECT MANAGER K. LORENZ

CHECK R. LUNZ

DRAFTING K. GORECKI

CHECK R. LUNZ

DESIGN K. GORECKI

JOB MANAGER M.F. CHRISTNER

DESIGN SUPERVISOR K. LORENZ



R10-31

NEW PEDESTRIAN SIGNS SHALL BE SIGN NUMBER R10-31 FROM THE MUTCD.

"RTE 263 RAMP" FOR WA1, WA2, WA3 & WA4

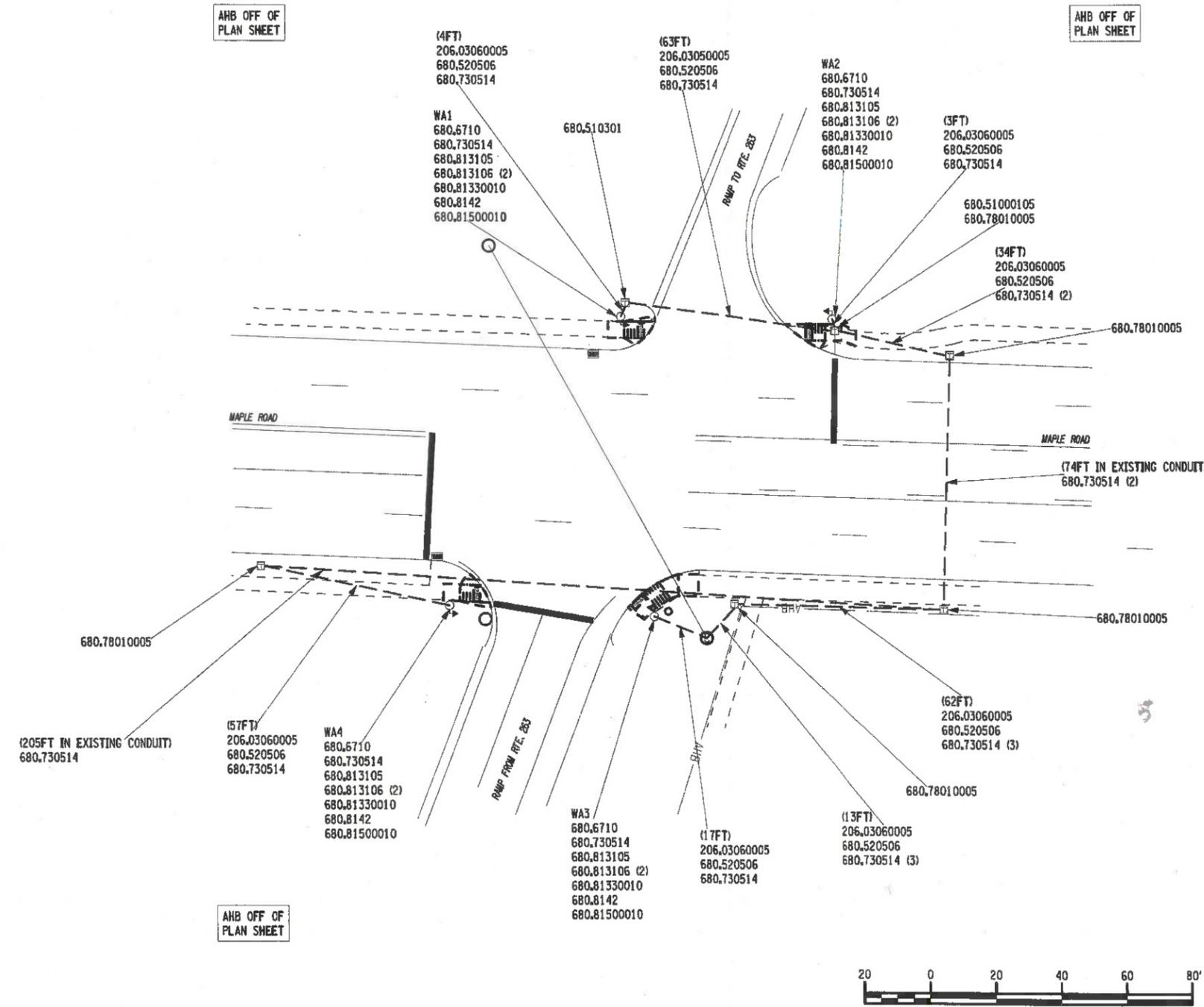
ARROW MAY FACE LEFT OR RIGHT, IT IS CONTRACTOR'S RESPONSIBILITY FOR PROPER ARROW ORIENTATION.

1.J PULLBOX AND EXISTING CONDUIT LOCATIONS ON PLANS ARE SHOWN BASED ON RECORD PLANS. ACTUAL FIELD LOCATIONS MAY VARY.

2.J ITEM 680.79000905, "REMOVE TRAFFIC SIGNAL INSTALLATION" SHALL INCLUDE THE REMOVAL AND STORAGE OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT. ALL EQUIPMENT, EXCEPT EXISTING PEDESTRIAN SIGNAL POLE AND CABLE, SHALL BE TURNED OVER TO THE REGION 5 NYS DOT TRAFFIC SIGNAL MAINTENANCE CREW. EXISTING PEDESTRIAN SIGNAL POLES WILL BECOME THE PROPERTY OF THE CONTRACTOR.

UNLESS OTHERWISE NOTED, "REMOVE TRAFFIC SIGNAL INSTALLATION", ITEM 680.79000905, SHALL INCLUDE:

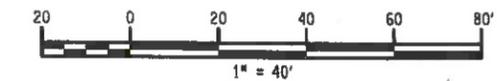
- ALL EXISTING PEDESTRIAN SIGNAL CABLE
- ALL EXISTING PEDESTRIAN PUSH BUTTONS AND SIGNS
- ALL EXISTING PEDESTRIAN SIGNAL HEADS AND BRACKETS
- ALL EXISTING PEDESTRIAN SIGNAL POLES



AHB OFF OF PLAN SHEET

AHB OFF OF PLAN SHEET

AHB OFF OF PLAN SHEET



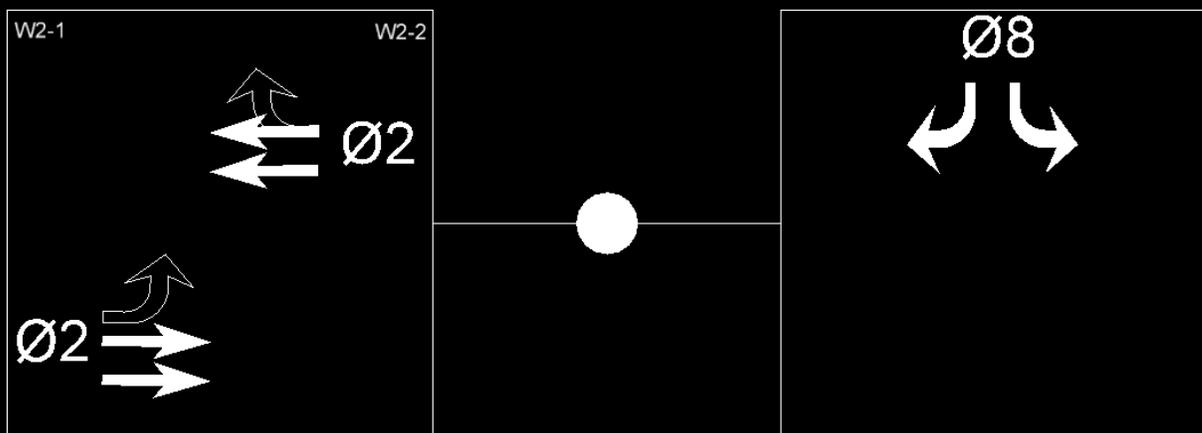
AFFIX SEAL: ON: <i>1-21-16</i>	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	ADA COMPLIANCE ON VARIOUS ROUTES	PIN 5808.30	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	ERIE AND NIAGARA COUNTIES					D263157
	COUNTY: VARIOUS					REGION: 5	SIGNAL 432 - GENERAL PLAN SHEET	DRAWING NO. 432-1
						SHEET NO. 36

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 580830_CPH_SIG432-1.dgn
 DATE/TIME = 12-JAN-2016 11:32
 USER = rLunz



Phasing Diagram displays controller operation for all phases with active detection

Phase Times [1.1.1]									Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]															53432								
1	2	3	4	5	6	7	8	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#					Cyc	Off	Split	Seq	
Min Green		20		6					1	140	12	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1	Ring/Startup [1.1.4]			
Gap, Ext		4		2					2	150	35	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1					Phs	Ring	Start	Enable
Max 1		40		30					3	160	80	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1	1	1	Red	OFF
Max 2									4	130	39	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1	2	1	Red	ON
Yel Clearance	3.5	4.3	3.5	4.3	3.5	3.5	3.5	3.5	5	140	43	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1	3	1	Red	OFF
Red Clearance	1.5	1.7	1.5	1.9	1.5	1.5	1.5	1.5	6	140	67	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1	4	1	Red	ON
Walk		7							7	0	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1	5	2	Red	OFF
Ped Clearance		16							8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1	6	2	Red	OFF
Red Revert									9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1	7	2	Red	OFF
Add Initial									10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1	8	2	Red	OFF
Max Initial									11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1	Coord Modes [2.1]			
Time B4 Reduct									12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1	Test OpMode	0		
Cars B4 Reduct									Split	1	2	3	4	5	6	7	8	Split	1	2	3	4	5	6	7	8	Correction	SHRT/LNG				
Time To Reduce									1	Coor	0	74	0	66	0	0	0	0	13	Coor	0	0	0	0	0	0	0	0	Maximum	MAX 1		
Reduce By									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	14	Coor	0	0	0	0	0	0	0	0	Force-Off	FIXED		
Min Gap									2	Coor	0	85	0	65	0	0	0	0	14	NON	NON	NON	NON	NON	NON	NON	NON	NON	Closed Loop	ON		
DyMaxLim									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	15	Coor	0	0	0	0	0	0	0	0	Stop-in-Walk	ON		
Max Step									3	Coor	0	90	0	70	0	0	0	0	15	NON	NON	NON	NON	NON	NON	NON	NON	NON	Auto Reset	ON		
Options [1.1.2]	1	2	3	4	5	6	7	8	2	NON	Max	NON	NON	NON	NON	NON	NON	NON	16	Coor	0	0	0	0	0	0	0	0	Expand Split			
Enable		ON		ON					4	Coor	0	65	0	65	0	0	0	0	16	NON	NON	NON	NON	NON	NON	NON	NON	NON	Ped Recycle	NO_RECYCLE		
Min Recall		ON							2	NON	Max	NON	NON	NON	NON	NON	NON	NON	17	Coor	0	0	0	0	0	0	0	0	Before	TIMED		
Max Recall									5	Coor	0	80	0	60	0	0	0	0	17	NON	NON	NON	NON	NON	NON	NON	NON	NON	After	TIMED		
Ped Recall									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	18	Coor	0	0	0	0	0	0	0	0	Auto Flash [1.4.1]			
Soft Recall									2	NON	Max	NON	NON	NON	NON	NON	NON	NON	18	NON	NON	NON	NON	NON	NON	NON	NON	NON	Auto Flash	PH_OVLP		
Lock Calls									7	Coor	0	0	0	0	0	0	0	0	19	Coor	0	0	0	0	0	0	0	0	Flash Yel	45		
Auto Flash Entry									7	NON	NON	NON	NON	NON	NON	NON	NON	NON	19	NON	NON	NON	NON	NON	NON	NON	NON	NON	Flash Red	20		
Auto Flash Exit									8	Coor	0	0	0	0	0	0	0	0	20	Coor	0	0	0	0	0	0	0	0	Unit Params [1.2.1]			
Dual Entry		ON		ON		ON		ON	8	NON	NON	NON	NON	NON	NON	NON	NON	NON	20	NON	NON	NON	NON	NON	NON	NON	NON	NON	Phase Mode	STD8		
Enable Simul Gap	ON	9	Coor	0	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0	0	IO Mode	User								
Gaurantee Passage									9	NON	NON	NON	NON	NON	NON	NON	NON	NON	21	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	Loc Fish Start	Red	
Rest In Walk									10	Coor	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0	0	Start Flash(s)	0	
Conditon Service									10	NON	NON	NON	NON	NON	NON	NON	NON	NON	22	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	Start AllRed(s)	6	
Non-Actuated 1									11	Coor	0	0	0	0	0	0	0	0	23	Coor	0	0	0	0	0	0	0	0	0	Yellow < 3"	OFF	
Non-Actuated 2									11	NON	NON	NON	NON	NON	NON	NON	NON	NON	23	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	Display Time	20	
Add Init Calc									11	NON	NON	NON	NON	NON	NON	NON	NON	NON	23	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	Red Revert	3	
Options+ [1.1.3]	1	2	3	4	5	6	7	8	12	Coor	0	0	0	0	0	0	0	0	24	Coor	0	0	0	0	0	0	0	0	0	0	MCE Timeout	0
Reservice									12	NON	NON	NON	NON	NON	NON	NON	NON	NON	24	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	Feature Profile	
PedClr Thru Yel									Page#																Free Ring Seq	1						
Skip Red No Call									1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param															Auxswitch	STOPTM						
Red Rest									1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param															SDLC Retry	0						
Max II									2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)															TS2 Det Faults	ON						
Call Phase									3	Detection; Sample Time and Unit Parameters related to detection															Auto Ped Clear	OFF						
Conflicting Phase									4	Preemption and Alternate Phase Time and Phase Options															SDLC Retry	0						
Omit Yellow									5	Annual Schedule															SDLC Retry	0						
Ped Delay									6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)															SDLC Retry	0						
Grn/Ped Delay									7	Communications; Secutiry; I/O Setup															SDLC Retry	0						
53432 263 @ Maple Rd (East)									8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param															08/22/25	Page 1						

Overlap 1-16 Program Parm+ [1.5.2.1] [1.5.2.2]

Overlap	Conflict Lock	OFF	Overlap Lock Inhibit	OFF	Parent Ph Clearance	ON	Extra Included Ph	OFF	Included Ø	Type	NORMAL	Included Ø	Type	NORMAL
1	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
A	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
2	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
B	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
3	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
C	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
4	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
D	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
5	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
E	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
6	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
F	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
7	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
G	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	
	Included Ø				Type	NORMAL			Included Ø	Grn		Included Ø	Grn	
8	Modifier Ø				Grn				Modifier Ø			Modifier Ø		
	Conflict Ø				Yel	3.5			Conflict Ø			Conflict Ø	Yel	3.5
	Conflict Olap				Red	1.5			Conflict Olap			Conflict Olap	Red	1.5
	Conflict Ped				LG				Conflict Ped			Conflict Ped	LG	

Channel Settings [1.8.1]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Phase / Olap #		2		4									2		2										
Channel Type	VEH	PED	VEH	PED	VEH																				
Channel Flash	Red	DRK																							
Alt Hz																									

Channel+ Settings [1.8.4]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Flash Red+																									
Flash Yellow+																									
Flash Green+																									
Flash Inh Red+																									
Olap Ovr																									

Coord Transition, CoordPhs [2.5]

Pat#	Short	Long	Dwell	No Shortway Ø	E-Yld	Offset	RetHld	Float	Min Veh Perm	Min Ped Perm
1	12	22				EndGRN	ON			ON
2	12	22				EndGRN	ON			ON
3	12	22				EndGRN	ON			ON
4	12	22				EndGRN	ON			ON
5	12	22				EndGRN	ON			ON
6	12	22				EndGRN	ON			ON
7	12	22				EndGRN				
8	12	22				EndGRN				
9	12	22				EndGRN				
10	12	22				EndGRN				
11	12	22				EndGRN				
12	12	22				EndGRN				
13	12	22				EndGRN				
14	12	22				EndGRN				
15	12	22				EndGRN				
16	12	22				EndGRN				
17	12	22				EndGRN				
18	12	22				EndGRN				
19	12	22				EndGRN				
20	12	22				EndGRN				
21	12	22				EndGRN				
22	12	22				EndGRN				
23	12	22				EndGRN				
24	12	22				EndGRN				
25						BegGRN				
26						BegGRN				
27						BegGRN				
28						BegGRN				
29						BegGRN				
30						BegGRN				
31						BegGRN				
32						BegGRN				
33						BegGRN				
34						BegGRN				
35						BegGRN				
36						BegGRN				
37						BegGRN				
38						BegGRN				
39						BegGRN				
40						BegGRN				
41						BegGRN				
42						BegGRN				
43						BegGRN				
44						BegGRN				
45						BegGRN				
46						BegGRN				
47						BegGRN				
48						BegGRN				

Channel Params[1.8.3]

C1 IO Mode User Single BIU Map DEFAULT Invert Rail Input OFF

DESIGNED BY PETER CALABRESE CHECKED BY RICHARD LUNZ ESTIMATED BY P.CALABRESE DRAFTED BY PETER CALABRESE CHECKED BY R. LUNZ
 DESIGN SUPERVISOR S. S. VAIDYA JOB MANAGER R. LUNZ USER = fdegeorge

ITEM	QUANTITY AND ITEM LIST DESCRIPTION	UNIT	Project
			Total QTY
05206.0306	CONDUIT EXCAV & BACKFILL (NOT IN ROADWAY)	M	82.00
619.1611	MAINTAIN TRAFFIC SIGNAL EQUIP (REQ A)	INT MO	12.00
680.5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CM	19.00
05680.5050	REMOVE POLE FOUNDATION	M	1.20
05680.5101	ALTER ELEVATION OF PULLBOX	EACH	1.00
680.510201	PULLBOX-CIRC., 450 mm DIA, REINF. CONC.	EACH	2.00
680.510301	PULLBOX-CIRC., 600 mm DIA, REINF. CONC.	EACH	3.00
680.520105	CONDUIT, STEEL, ZINC COATED, 1-1/2 NPS	M	4.00
680.520506	CONDUIT, RIGID PLASTIC, CLASS 1, 2 NPS	M	45.00
680.520508	CONDUIT, RIGID PLASTIC, CLASS 1, 3 NPS	M	139.00
680.53	CONDUIT JACKING OR BORING	M	52.00
05680.530803	CONDUIT, FLEX LIQ-TIGHT NON-METAL, 1 NPS	M	24.00
680.54	INDUCTANCE LOOP INSTALLATION	M	225.00
680.603010	SIGNAL POLE-SPAN WIRE	EACH	1.00
680.603011	SIGNAL POLE-SPAN WIRE	EACH	1.00
680.604010	SIGNAL POLE-SPAN WIRE	EACH	1.00
680.604011	SIGNAL POLE-SPAN WIRE	EACH	1.00
680.6730	SIGNAL POLE-POST TOP MOUNT	EACH	6.00
680.7001	SINGLE SPAN WIRE ASSEMBLY	EACH	6.00
680.71	SHIELDED LEAD-IN CABLE	M	428.00
680.72	INDUCTANCE LOOP WIRE	M	599.00
680.730514	SIGNAL CABLE, 5 CONDUCTORS 14 AWG	M	296.00
680.731914	SIGNAL CABLE, 19 CONDUCTORS 14 AWG	M	253.00
05680.770003	MODIFY TRAFFIC SIGNAL INSTALLATION, LOC 417	ELOC	1.00
05680.7801	ALTER PULLBOX FOR CONDUITS	EACH	3.00
05680.790005	REMOVE TRAFFIC SIGNAL INSTALLATION	ELOC	1.00
680.810101	SIGNAL MODULE-300 mm, RED BALL,LED	EACH	16.00
680.810103	SIGNAL MODULE-300 mm, YELLOW BALL, LED	EACH	12.00
680.810104	SIGNAL MODULE-300 mm, YELLOW ARROW,LED	EACH	4.00
680.810105	SIGNAL MODULE-300 mm, GREEN BALL,LED	EACH	12.00
680.810106	SIGNAL MODULE-300 mm, GREEN ARROW,LED	EACH	4.00
680.810601	SIGNAL SECTION, POLYCARBONITE,TYPE I, 300 mm	EACH	48.00
680.8111	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY	EACH	16.00
680.8120	TRAFFIC SIGNAL DISCONNECT HANGER	EACH	16.00
680.813105	PED MODULE - 300mm, BI-MODAL HAND/MAN, LED	EACH	6.00
680.813106	PED SIGNAL SEC. - POLYCARBONATE TYPE I, 300 mm	EACH	12.00
680.8142	PEDESTRIAN SIGNAL POST TOP MOUNT ASSEMBLY	EACH	6.00
03680.8150	PEDESTRIAN COUNT DOWN TIMER	EACH	6.00
680.8201	OVERHEAD SIGN ASSEMBLY, TYPE A	EACH	6.00
680.8225	PEDESTRIAN PUSHBUTTON AND SIGN - W/O POST	EACH	6.00

ITEM FACE	680. 810601	680. 810101	680. 810102	680. 810103	680. 810104	680. 810105	680. 810106	680. 8111	680. 8112	680. 8113	680. 8114	680. 8120
1	3	1		1		1		1				1
2	3	1		1		1		1				1
3	3	1		1		1		1				1
4	3	1		1		1		1				1
5	3	1		1		1		1				1
6	3	1		1		1		1				1
7	3	1		1		1		1				1
8	3	1		1		1		1				1
9	3	1		1		1		1				1
10	3	1		1		1		1				1
11	3	1		1		1		1				1
12	3	1		1		1		1				1
13	3	1			1		1	1				1
14	3	1			1		1	1				1
15	3	1			1		1	1				1
16	3	1			1		1	1				1
TOTAL	48	16		12	4	12	4	16				16

INSTALL TRAFFIC SIGNAL HEADS AT LOCATIONS SHOWN BELOW:
 HEADS TO BE ALIGNED IN CENTER OF LANE : 1, 2, 4, 5, 8, 9, 10, 11, 12
 HEADS TO BE ALIGNED WITH EDGE OF PAVEMENT: 13, 14, 15, 16
 HEADS TO BE ALIGNED WITH CENTERLINE OF MEDIAN : 3, 7
 HEAD 6 TO BE ALIGNED 3.3m TO THE RIGHT OF HEAD 5.

NOTE: ALL EXISTING TRAFFIC SIGNAL EQUIPMENT WILL REMAIN AS IS UNLESS OTHERWISE NOTED BELOW OR ON THE PLANS.

NOTE: THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT WILL BE REMOVED UNDER THE PROVISIONS OF ITEM 05680.790005, "REMOVE TRAFFIC SIGNAL INSTALLATION, LOCATION 417 ERIE":
 4- SPAN WIRE SIGNAL POLES
 ALL - TRAFFIC SIGNAL HEADS, SPAN WIRES, AND RELATED WIRING.

NOTE: SPAN WIRE POLES SHALL BECOME PROPERTY OF THE CONTRACTOR

CONTACT THE REGIONAL TRANSPORTATION SYSTEM OPERATIONS ENGINEER FOR OPERATIONAL SCHEDULE AND SIGNAL OPERATION SPECIFICATIONS.

NO.	680. 54	680. 72	680. 71	05206. 0306	05680. 530803
1A	21	55			3
1B	21	55	117	3	3
2A	20	54			2
2B	20	54	45	2	2
3A	20	54			2
3B	20	54	48		2
3C	22	56		2	2
3D	22	56	48		2
4A	20	54			2
4B	20	54	85	2	2
4C	19	53	85	2	2
TOTAL	225	599	428	11	24

NOTE: 1.83m X 6.1m LOOPS SHALL HAVE 3 TURNS OF WIRE.
 NOTE: 1.83m X 1.83m LOOPS SHALL HAVE 4 TURNS OF WIRE.
 NOTE: THE LEADING EDGE OF THE FIRST LOOP SHALL BE INSTALLED 1.5m IN FRONT OF THE STOP LINE.

NOTE: UNDER PROVISIONS OF 05680.770003 CONTRACTOR SHALL MODIFY CONTROLLER FOUNDATION BASE TO ACCEPT CONDUIT A.O.B.E.

 FACE 1, 2, 3, 4, 5, 6 7, 8, 9, 10, 11, 12	 FACE 13, 14, 15, 16
(R) RED BALL (Y) YELLOW BALL (G) GREEN BALL	 RED ARROW  YELLOW ARROW  GREEN ARROW

PREPARED BY: ON:	ALTERED BY: ON:
AS BUILT REVISIONS DESCRIPTION OF WORK:	
SIGNATURE	DATE
DOCUMENT NAME: SIG417.DGN	

SIGNAL IMPROVEMENTS/INSTALLATION PROJECT SFY 09/10 VARIOUS LOCATIONS IN REGION 5	PIN 5805.90 PS&E DATE 3/17/09	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER D261074
COUNTY: ERIE				RT 263 MILLERSPORT AT COVENTRY	DRAWING NO. SIG-12 SHEET NO. 16
				NYS DOT TRAFFIC SIGNAL *417 (ERIE)	

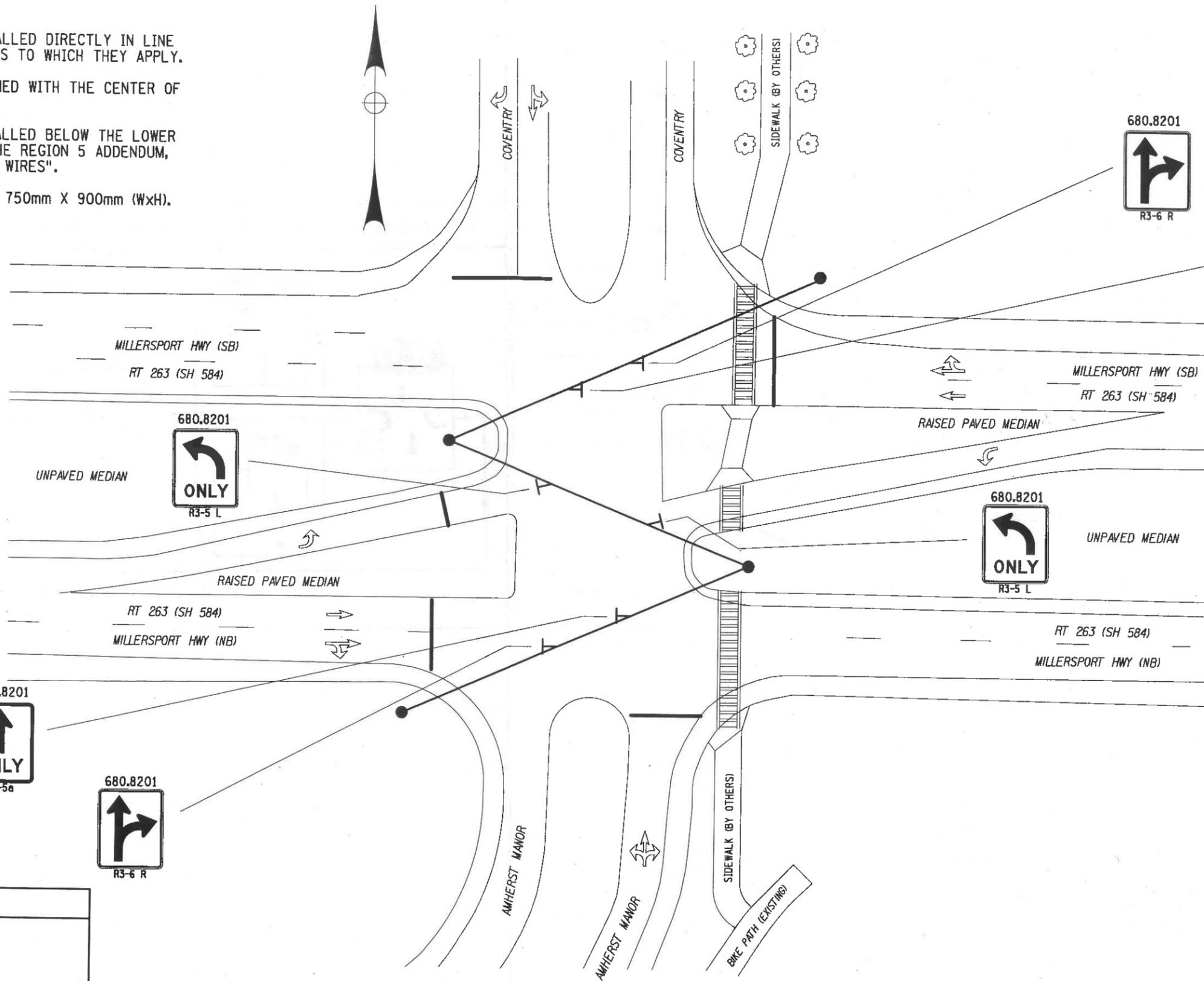
NOTE

ALL SIGNS SHALL BE INSTALLED DIRECTLY IN LINE WITH TRAFFIC IN THE LANES TO WHICH THEY APPLY.

ALL SIGNS SHALL BE ALIGNED WITH THE CENTER OF THEIR ASSOCIATED LANE.

ALL SIGNS SHALL BE INSTALLED BELOW THE LOWER SPAN WIRE AS SHOWN IN THE REGION 5 ADDENDUM, "SIGN MOUNT ON TWO SPAN WIRES".

ALL SIGNS SHALL MEASURE 750mm X 900mm (WxH).



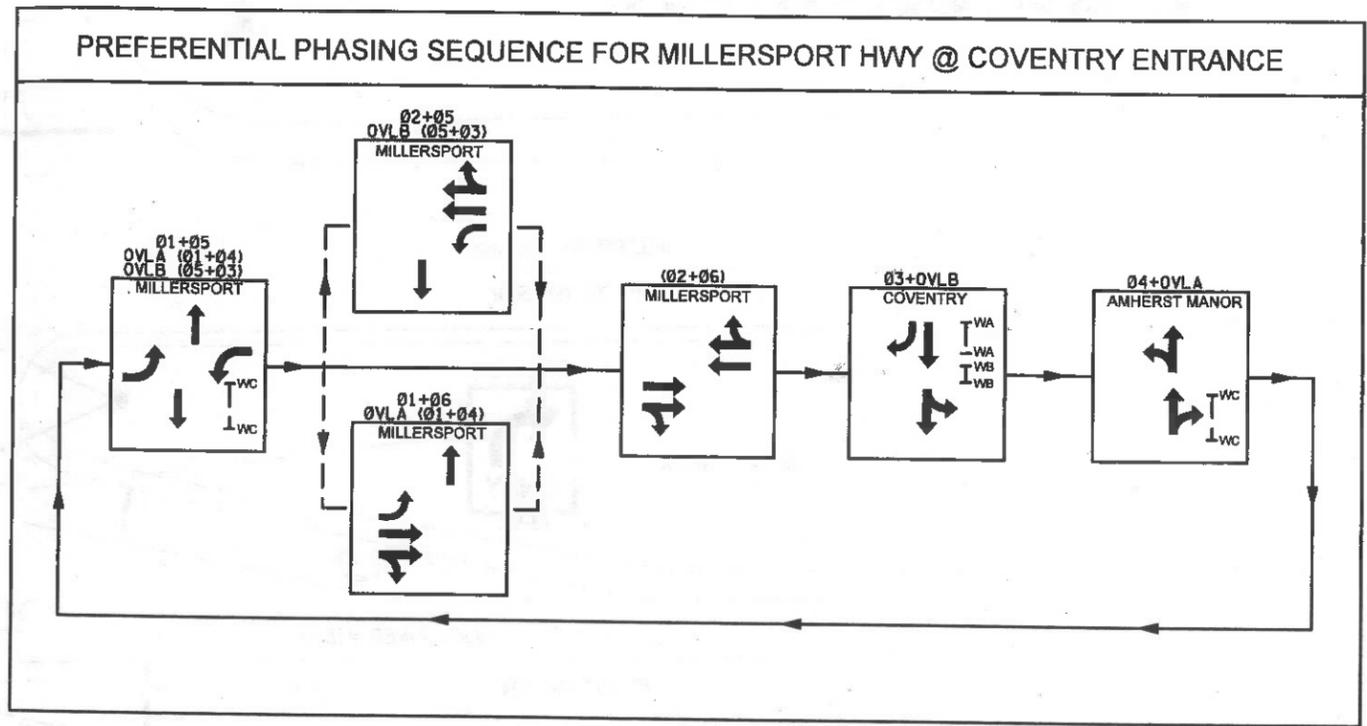
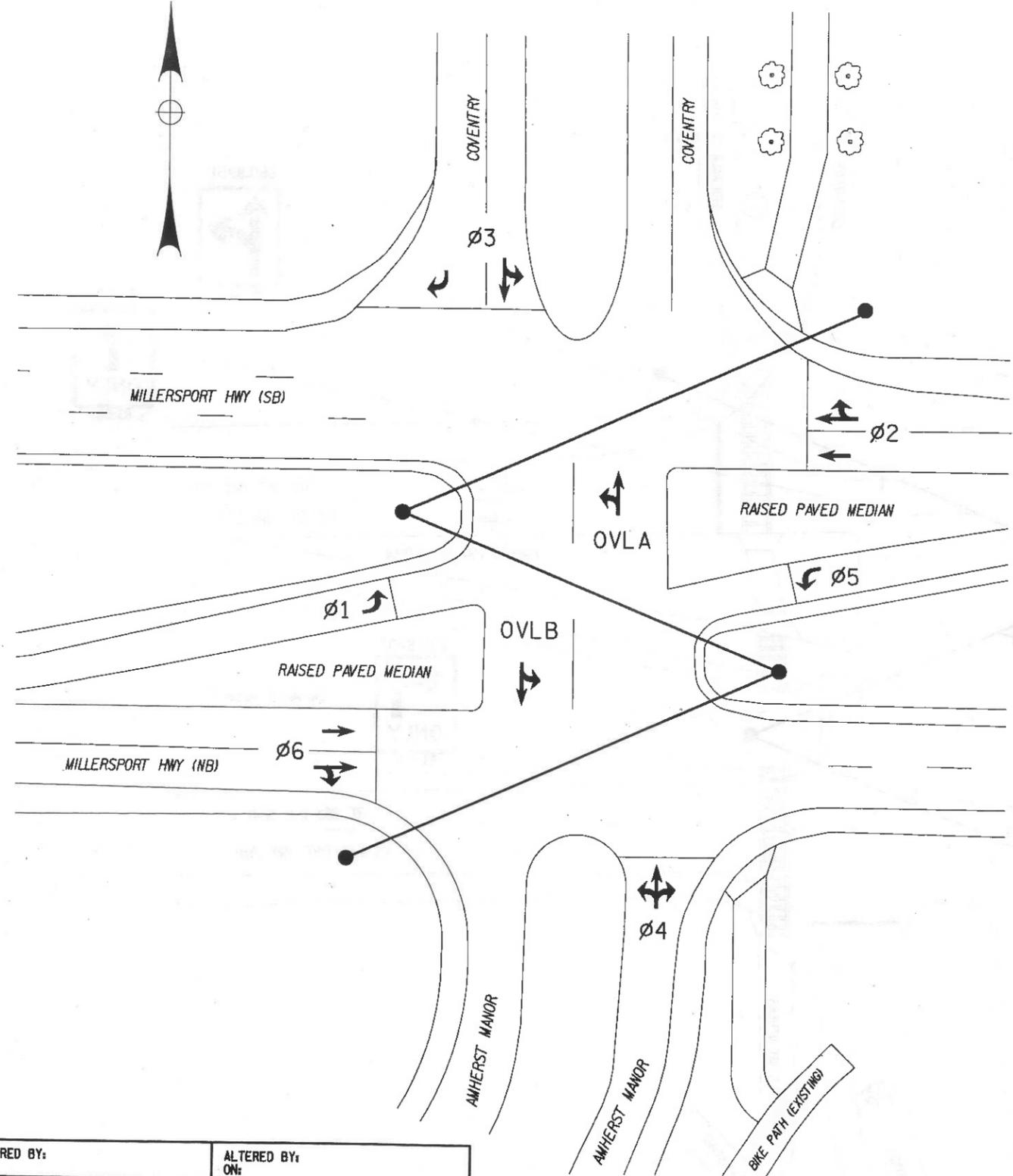
DESIGN SUPERVISOR: S. S. VAIDYA
 JOB MANAGER: R. LUNZ
 DESIGNED BY: PETER CALABRESE
 CHECKED BY: RICHARD LUNZ
 ESTIMATED BY: P. CALABRESE
 DRAFTED BY: PETER CALABRESE
 CHECKED BY: R. LUNZ

FILE NAME = SIG417.DGN
 DATE/TIME = 17-MAR-2009 11:02
 USER = fdegeorge

PREPARED BY: ON:	ALTERED BY: ON:

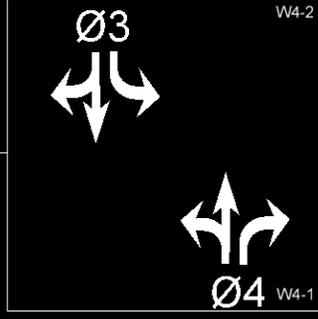
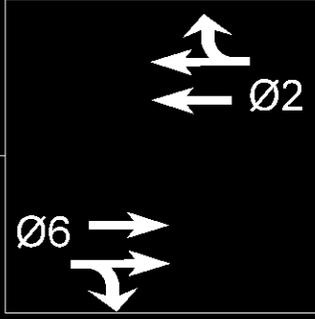
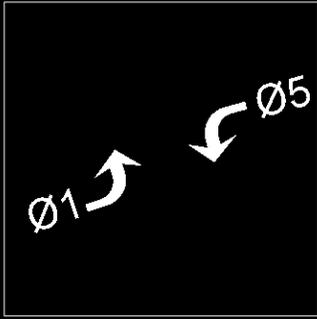
AS BUILT REVISIONS DESCRIPTION OF WORK:	SIGNAL IMPROVEMENTS/INSTALLATION PROJECT SFY 09/10	PIN 5805.90	BRIDGES	CULVERTS	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	VARIOUS LOCATIONS IN REGION 5	PS&E DATE 3/17/09				RT 263 MILLERSPORT AT COVENTRY	D261074
SIGNATURE _____	DATE _____	COUNTY: ERIE			NYS DOT TRAFFIC SIGNAL #417 (ERIE)	DRAWING NO. SIG-13 SHEET NO. 17
DOCUMENT NAME: SIG417.DGN						

DESIGN SUPERVISOR S. S. VAIDYA JOB MANAGER R. LUNZ DESIGNED BY PETER CALABRESE CHECKED BY PETER CALABRESE ESTIMATED BY RICHARD LUNZ DRAFTED BY PETER CALABRESE CHECKED BY PETER CALABRESE



PREPARED BY: ON:	ALTERED BY: ON:

AS BUILT REVISIONS DESCRIPTION OF WORK: _____ SIGNATURE	_____ DATE	SIGNAL IMPROVEMENTS/INSTALLATION PROJECT SFY 09/10 VARIOUS LOCATIONS IN REGION 5 _____ COUNTY: ERIE	PIN 5805.90 PS&E DATE 3/17/09	BRIDGES _____	CULVERTS _____	ALL DIMENSIONS IN m UNLESS OTHERWISE NOTED RT 263 MILLERSPORT AT COVENTRY NYSDOT TRAFFIC SIGNAL #417 (ERIE)	CONTRACT NUMBER D261074 DRAWING NO. SIG-14 SHEET NO. 18
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PHASING DIAGRAM DISPLAYS CONTROLLER OPERATION FOR ALL PHASES WITH ACTIVE DETECTION

Phase Times [1.1.1]								Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]															53417									
1	2	3	4	5	6	7	8	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq					Pat#	Cyc	Off	Split	Seq	
Min Green	6	35	6	6	6	35		1	0	0	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1	Ring/Startup [1.1.4]				
Gap, Ext	4	5	3	4	3	5		2	0	0	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1	Phs	Ring	Start	Enable	
Max 1	50	55	40	35	25	55		3	0	0	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1	1	1	Red	ON	
Max 2								4	0	0	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1	2	1	Green	ON	
Yel Clearance	4.3	4.3	3.2	3.2	4.3	4.3	3.5	3.5	5	0	0	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1	3	1	Red	ON
Red Clearance	2.5	2.5	4.3	4.3	2.5	2.5	1.5	1.5	6	0	0	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1	4	1	Red	ON
Walk				10					7	0	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1	5	2	Red	ON
Ped Clearance				33					8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1	6	2	Green	ON
Red Revert									9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1	7	2	Red	OFF
Add Initial									10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1	8	2	Red	OFF
Max Initial									11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1	Coord Modes [2.1]			
Time B4 Reduct									12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1	Test OpMode	0		
Cars B4 Reduct									Split	1	2	3	4	5	6	7	8	Split	1	2	3	4	5	6	7	8	Correction	SHRT/LNG				
Time To Reduce									1	Coor	0	0	0	0	0	0	0	13	Coor	0	0	0	0	0	0	0	0	Maximum	MAX 1			
Reduce By									2		NON	NON	NON	NON	NON	NON	NON	14		NON	NON	NON	NON	NON	NON	NON	NON	Force-Off	Float			
Min Gap									3	Coor	0	0	0	0	0	0	0	15	Coor	0	0	0	0	0	0	0	0	Closed Loop	ON			
DyMaxLim									4		NON	NON	NON	NON	NON	NON	NON	16		NON	NON	NON	NON	NON	NON	NON	NON	Stop-in-Walk	OFF			
Max Step									5	Coor	0	0	0	0	0	0	0	17	Coor	0	0	0	0	0	0	0	0	Auto Reset	ON			
Options [1.1.2]	1	2	3	4	5	6	7	8	6		NON	NON	NON	NON	NON	NON	NON	18		NON	NON	NON	NON	NON	NON	NON	NON	Expand Split				
Enable	ON	ON	ON	ON	ON	ON			7	Coor	0	0	0	0	0	0	0	19	Coor	0	0	0	0	0	0	0	0	Ped Recycle	NO_RECYCLE			
Min Recall		ON				ON			8		NON	NON	NON	NON	NON	NON	NON	20		NON	NON	NON	NON	NON	NON	NON	NON	Before	TIMED			
Max Recall									9	Coor	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0	After	TIMED			
Ped Recall									10		NON	NON	NON	NON	NON	NON	NON	22		NON	NON	NON	NON	NON	NON	NON	NON	Auto Flash [1.4.1]				
Soft Recall									11	Coor	0	0	0	0	0	0	0	23	Coor	0	0	0	0	0	0	0	0	Auto Flash	PH_OVLP			
Lock Calls									12		NON	NON	NON	NON	NON	NON	NON	24		NON	NON	NON	NON	NON	NON	NON	NON	Flash Yel	45			
Auto Flash Entry									13	Coor	0	0	0	0	0	0	0	25	Coor	0	0	0	0	0	0	0	0	Flash Red	20			
Auto Flash Exit									14		NON	NON	NON	NON	NON	NON	NON	26		NON	NON	NON	NON	NON	NON	NON	NON	Unit Params [1.2.1]				
Dual Entry		ON		ON		ON		ON	15	Coor	0	0	0	0	0	0	0	27	Coor	0	0	0	0	0	0	0	0	Phase Mode	STD8			
Enable Simul Gap	ON	16		NON	NON	NON	NON	NON	NON	NON	28		NON	NON	NON	NON	NON	NON	NON	NON	IO Mode	User										
Gaurantee Passage									17	Coor	0	0	0	0	0	0	0	29	Coor	0	0	0	0	0	0	0	0	Loc Fish Start	Red			
Rest In Walk									18		NON	NON	NON	NON	NON	NON	NON	30		NON	NON	NON	NON	NON	NON	NON	NON	Start Flash(s)	0			
Conditon Service									19	Coor	0	0	0	0	0	0	0	31	Coor	0	0	0	0	0	0	0	0	Start AllRed(s)	6			
Non-Actuated 1									20		NON	NON	NON	NON	NON	NON	NON	32		NON	NON	NON	NON	NON	NON	NON	NON	Yellow < 3"	OFF			
Non-Actuated 2									21	Coor	0	0	0	0	0	0	0	33	Coor	0	0	0	0	0	0	0	0	Display Time	20			
Add Init Calc									22		NON	NON	NON	NON	NON	NON	NON	34		NON	NON	NON	NON	NON	NON	NON	NON	Red Revert	3			
Options+ [1.1.3]	1	2	3	4	5	6	7	8	23	Coor	0	0	0	0	0	0	0	35	Coor	0	0	0	0	0	0	0	0	MCE Timeout	5			
Reservice									24		NON	NON	NON	NON	NON	NON	NON	36		NON	NON	NON	NON	NON	NON	NON	NON	Feature Profile				
PedClr Thru Yel									Page#																Free Ring Seq	1						
Skip Red No Call									1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param															Auxswitch	STOPTM						
Red Rest									1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param															SDLC Retry	0						
Max II									2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)															TS2 Det Faults	ON						
Call Phase									3	Detections; Sample Time and Unit Parameters related to detection															Auto Ped Clear	OFF						
Conflicting Phase									4	Preemption and Alternate Phase Time and Phase Options															SDLC Retry	0						
Omit Yellow									5	Annual Schedule															SDLC Retry	0						
Ped Delay									6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)															SDLC Retry	0						
Grn/Ped Delay									7	Communications; Security; I/O Setup															SDLC Retry	0						
53417 263 @ Coventry Rd.								8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param															08/22/25	Page 1							



ATTACHMENT B2
ERIE COUNTY SIGNAL TIMINGS

PROPOSED SPORTS COMPLEX AND HOTEL
TOWN OF AMHERST
ERIE COUNTY, NY



MAPLE ROAD AND FLINT ROAD – WEEKDAY PM

RG1 3G RG2 8G Thu Sep-18-2025 13:43:52D
EXT2.7 EXT3.0 1234567890ABCDEF TBC
MAX 6 MAX 16 O/N 0 0 PAT 1
VEH R CCE CYC 0
PED OFF 0
OVL MCT 0
FREE PATTRN POV LCT 0
SP FO H/O PRE

2.1	PHASE TIMINGS SET 1							DR
PHASE#	1	2	3	4	5	6	7	8
MIN GRN	4	4	4	4	4	4	4	4
PASS/10	30	30	30	30	30	30	30	30
MAX 1	5	22	12	22	10	23	10	22
MAX 2	0	0	0	0	0	0	0	0
MAX 3	0	0	0	0	0	0	0	0
MAX 4	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

RG1 3Y RG2 8G Thu Sep-18-2025 13:44:43D
YEL2.9 MIN 2 1234567890ABCDEF TBC
MAX WLK 5 O/N ON 0 PAT 1
VEH C C C E CYC 0
PED OFF 0
OVL MCT 0
FREE PATTRN POV LCT 0
SP FO H/O PRE

2.1	PHASE TIMINGS SET 1							UDR
PHASE#	1	2	3	4	5	6	7	8
YEL/10	30	43	40	36	30	43	30	36
RED/10	10	21	10	22	10	21	10	22
WALK	0	7	0	7	0	7	0	7
PED CLR	0	15	0	15	0	15	0	15
ADD IN/10	0	0	0	0	0	0	0	0
MAX INIT	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

MAPLE ROAD AND FLINT ROAD – WEEKEND MD

RG1 2G RG2 6G Thu Sep-18-2025 13:45:43D
EXT3.0 EXT3.0 1234567890ABCDEF TBC
MAX 0 MAX 9 O/N 0 0 PAT 1
VEH CE E C CYC 0
PED L OFF 0
OVL MCT 0
FREE PATTRN POV LCT 0
SP FO H/O PRE

2.1	PHASE TIMINGS SET 3							DR
PHASE#	1	2	3	4	5	6	7	8
MIN GRN	4	4	4	4	4	4	4	4
PASS/10	30	30	30	30	30	30	30	30
MAX 1	5	23	9	25	4	24	10	23
MAX 2	15	45	15	45	15	45	15	45
MAX 3	0	0	0	0	0	0	0	0
MAX 4	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

RG1 4G RG2 8G Thu Sep-18-2025 13:46:05D
EXT3.0 EXT3.0 1234567890ABCDEF TBC
MAX 12 PCL 12 O/N 0 0 PAT 1
VEH CCCE C E CYC 0
PED OFF 0
OVL MCT 0
FREE PATTRN POV LCT 0
SP FO H/O PRE

2.1	PHASE TIMINGS SET 3							UDR
PHASE#	1	2	3	4	5	6	7	8
YEL/10	30	43	40	36	30	43	30	36
RED/10	10	21	10	22	10	21	10	22
WALK	0	7	0	7	0	7	0	7
PED CLR	0	15	0	15	0	15	0	15
ADD IN/10	0	0	0	0	0	0	0	0
MAX INIT	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT



MAPLE ROAD AND N MAPLEMERE ROAD – WEEKDAY PM

```

RG1 2G RG2 6G Thu Sep-18-2025 13:38:31D
EXT3.0 EXT3.0 1234567890ABCDEF TBC
SPL 22 SPL 22 O/N 0 0 PAT 2
VEH E EC CYC120
PED OFF 0
OVL MCT 31
COORD ACTIVE POV LCT 31
SP FO H/O OH 00H00 PRE
  
```

2.1	PHASE TIMINGS SET 1							DR
PHASE#	1	2	3	4	5	6	7	8
MIN GRN	4	4	0	4	4	4	4	4
PASS/10	30	30	0	30	30	30	30	30
MAX 1	6	38	0	15	6	38	8	15
MAX 2	0	0	0	0	0	0	0	0
MAX 3	0	0	0	0	0	0	0	0
MAX 4	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

```

RG1 4G RG2 7G Thu Sep-18-2025 13:38:58D
MIN 8 MIN 4 1234567890ABCDEF TBC
SPL 37 SPL 7 O/N 0 0 PAT 2
VEH C RE CYC120
PED OFF 0
OVL MCT 58
COORD ACTIVE POV LCT 58
SP FO H/O 0 0 PRE
  
```

2.1	PHASE TIMINGS SET 1							UDR
PHASE#	1	2	3	4	5	6	7	8
YEL/10	40	40	0	40	40	40	40	40
RED/10	10	10	0	10	10	10	10	10
WALK	0	7	0	7	0	7	0	7
PED CLR	0	12	0	17	0	12	0	17
ADD IN/10	0	0	0	0	0	0	0	0
MAX INIT	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

MAPLE ROAD AND N MAPLEMERE ROAD – WEEKEND MD

```

RG1 2G RG2 6G Thu Sep-18-2025 13:39:47D
EXT0.0 EXT0.0 1234567890ABCDEF TBC
SPL 66 SPL 66 O/N 0 0 PAT 2
VEH R R CYC120
PED OFF 0
OVL MCT107
COORD ACTIVE POV LCT107
SP FO H/O OH 00H00 PRE
  
```

2.1	PHASE TIMINGS SET 3							DR
PHASE#	1	2	3	4	5	6	7	8
MIN GRN	6	10	4	8	6	10	4	8
PASS/10	30	30	30	30	30	30	30	30
MAX 1	6	19	25	25	6	19	25	25
MAX 2	15	45	15	45	15	45	15	45
MAX 3	0	0	0	0	0	0	0	0
MAX 4	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

```

RG1 2G RG2 6G Thu Sep-18-2025 13:40:11D
EXT3.0 EXT3.0 1234567890ABCDEF TBC
SPL 42 SPL 42 O/N 0 0 PAT 2
VEH E CE CYC120
PED OFF 0
OVL MCT 11
COORD ACTIVE POV LCT 11
SP FO H/O OH 00H00 PRE
  
```

2.1	PHASE TIMINGS SET 3							UDR
PHASE#	1	2	3	4	5	6	7	8
YEL/10	40	40	40	40	40	40	40	40
RED/10	10	10	10	10	10	10	10	10
WALK	0	7	0	7	0	7	0	7
PED CLR	0	12	0	17	0	12	0	17
ADD IN/10	0	0	0	0	0	0	0	0
MAX INIT	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT



MAPLE ROAD AND N FOREST ROAD – WEEKDAY PM

RG1 2Y RG2 6Y Thu Sep-18-2025 13:31:50D
 YEL1.3 YEL1.3 1234567890ABCDEF TBC
 MAX MAX O/N ON ON PAT 1
 VEH RCC RCC CYC 0
 PED OFF 0
 OVL MCT 0
 FREE PATTRN POV LCT 0
 SP FO H/O PRE

2.1	PHASE TIMINGS SET 1							DR
PHASE#	1	2	3	4	5	6	7	8
MIN GRN	4	4	4	4	4	4	4	4
PASS/10	30	30	30	30	30	30	30	30
MAX 1	11	29	10	23	11	29	10	23
MAX 2	0	0	0	0	0	0	0	0
MAX 3	0	0	0	0	0	0	0	0
MAX 4	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

RG1 2G RG2 6G Thu Sep-18-2025 13:33:10D
 EXT1.2 EXT1.8 1234567890ABCDEF TBC
 MAX 7 MAX 7 O/N 0 0 PAT 1
 VEH RCC RCC CYC 0
 PED OFF 0
 OVL MCT 0
 FREE PATTRN POV LCT 0
 SP FO H/O PRE

2.1	PHASE TIMINGS SET 1							UDR
PHASE#	1	2	3	4	5	6	7	8
YEL/10	30	40	30	40	30	40	30	40
RED/10	10	20	10	20	10	20	10	20
WALK	0	7	0	7	0	7	0	7
PED CLR	0	15	0	15	0	15	0	15
ADD IN/10	0	0	0	0	0	0	0	0
MAX INIT	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

MAPLE ROAD AND N FOREST ROAD – WEEKEND MD

RG1 2G RG2 6G Thu Sep-18-2025 13:34:20D
 EXT3.0 EXT3.0 1234567890ABCDEF TBC
 MAX 10 MAX 25 O/N 0 0 PAT 1
 VEH CE C E CYC 0
 PED OFF 0
 OVL MCT 0
 FREE PATTRN POV LCT 0
 SP FO H/O PRE

2.1	PHASE TIMINGS SET 3							DR
PHASE#	1	2	3	4	5	6	7	8
MIN GRN	4	4	4	4	4	4	4	4
PASS/10	30	30	30	30	30	30	30	30
MAX 1	5	23	4	24	5	23	4	24
MAX 2	15	45	15	45	15	45	15	45
MAX 3	0	0	0	0	0	0	0	0
MAX 4	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT

RG1 4G RG2 7G Thu Sep-18-2025 13:34:43D
 EXT3.0 EXT3.0 1234567890ABCDEF TBC
 MAX 17 MAX 4 O/N 0 0 PAT 1
 VEH R E R E CYC 0
 PED OFF 0
 OVL MCT 0
 FREE PATTRN POV LCT 0
 SP FO H/O PRE

2.1	PHASE TIMINGS SET 3							UDR
PHASE#	1	2	3	4	5	6	7	8
YEL/10	30	40	30	40	30	40	30	40
RED/10	10	20	10	20	10	20	10	20
WALK	0	7	0	7	0	7	0	7
PED CLR	0	15	0	15	0	15	0	15
ADD IN/10	0	0	0	0	0	0	0	0
MAX INIT	0	0	0	0	0	0	0	0

y=YES n=NO End=NEXT



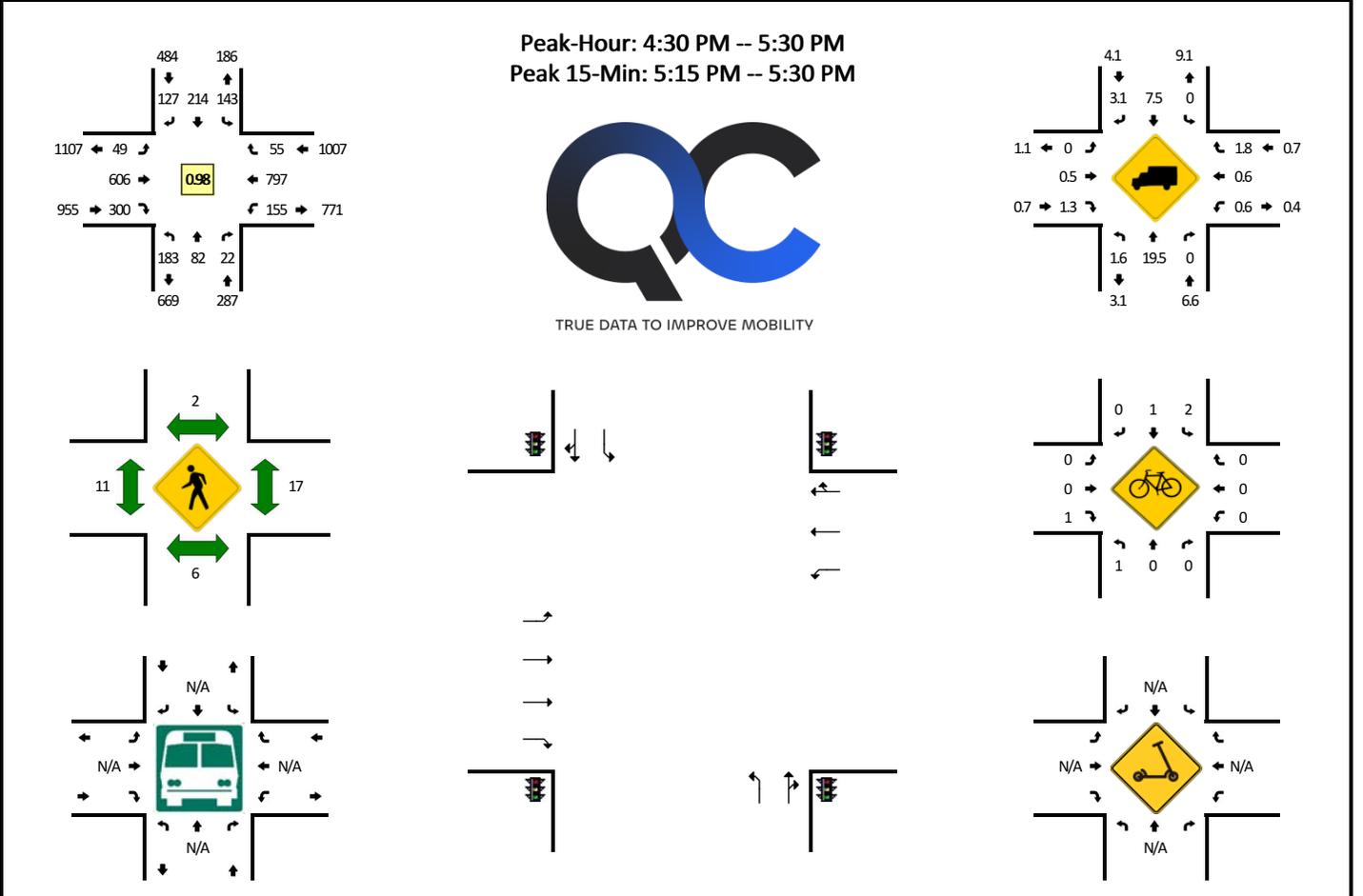
ATTACHMENT C

TURNING MOVEMENT COUNT DATA

**PROPOSED SPORTS COMPLEX AND HOTEL
TOWN OF AMHERST
ERIE COUNTY, NY**

LOCATION: Flint Rd -- Maple Rd
CITY/STATE: University at Buffalo, NY

QC JOB #: 17217101
DATE: Thu, Sep 11 2025

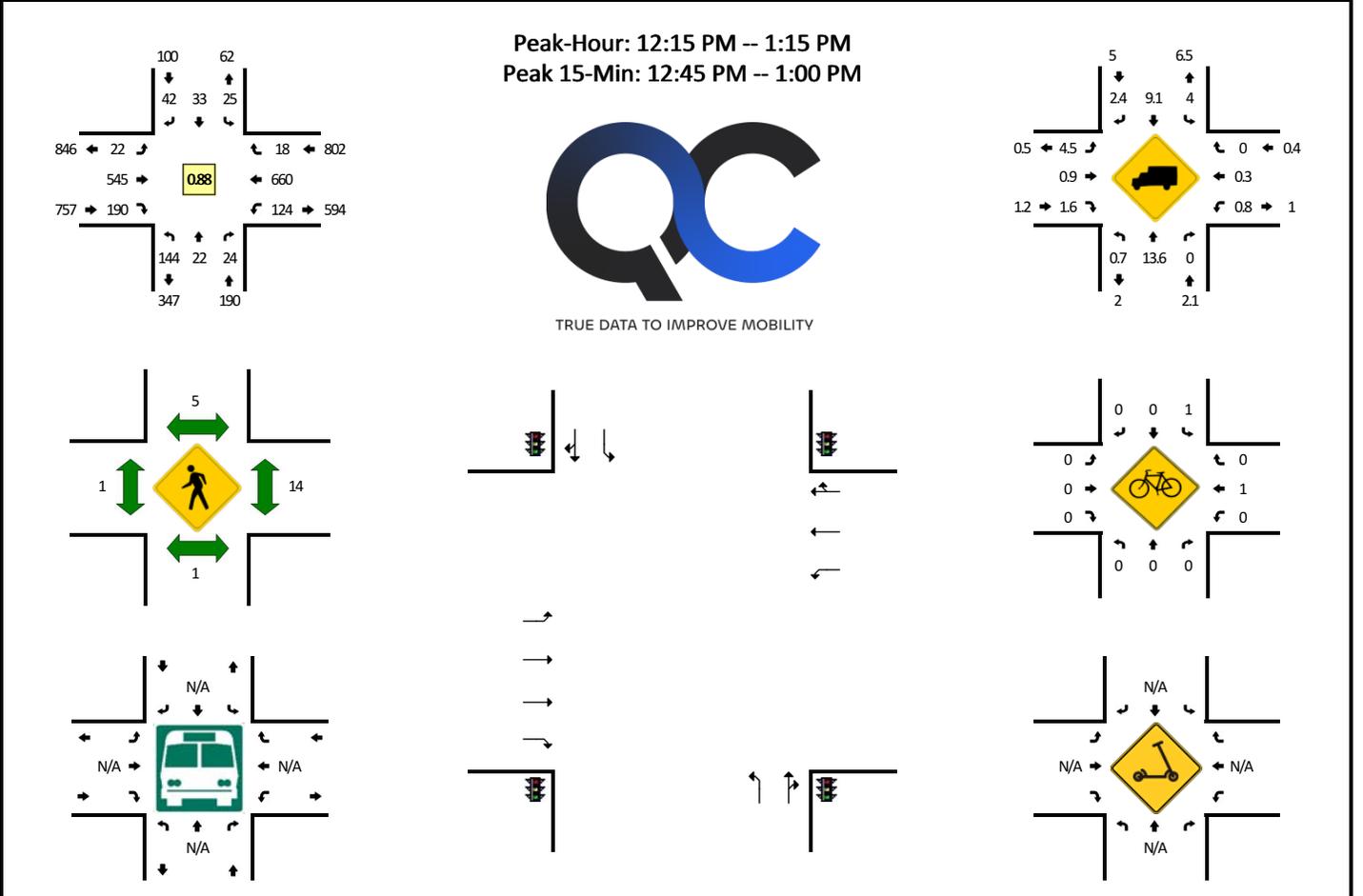


15-Min Count Period Beginning At	Flint Rd (Northbound)				Flint Rd (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	40	13	7	0	35	50	30	0	13	145	65	0	54	197	6	0	655	
4:15 PM	54	15	3	0	22	47	16	0	14	167	56	0	39	192	7	0	632	
4:30 PM	44	22	6	0	51	55	38	0	15	143	71	0	25	209	18	0	697	
4:45 PM	43	20	8	0	33	44	16	0	14	131	69	0	41	203	16	0	638	2622
5:00 PM	38	24	3	0	38	64	37	0	9	164	99	0	38	177	7	0	698	2665
5:15 PM	58	16	5	0	21	51	36	0	11	168	61	0	51	208	14	0	700	2733
5:30 PM	46	17	8	0	24	35	16	0	19	140	58	0	36	194	9	0	602	2638
5:45 PM	49	27	5	0	26	21	19	0	9	124	41	0	19	172	8	0	520	2520
6:00 PM	46	24	2	0	22	17	17	0	9	112	49	0	22	146	12	0	478	2300
6:15 PM	39	16	2	0	25	18	14	0	14	129	62	0	19	129	6	0	473	2073
6:30 PM	41	8	8	0	22	28	17	0	8	121	45	0	22	137	10	0	467	1938
6:45 PM	32	13	4	0	20	21	15	0	10	113	40	0	28	127	10	0	433	1851
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	232	64	20	0	84	204	144	0	44	672	244	0	204	832	56	0	2800	
Heavy Trucks	4	8	0		0	24	0		0	0	0		0	8	0		44	
Buses																		
Pedestrians		8				8				8				24			48	
Bicycles	4	0	0		4	0	0		0	0	0		0	0	0		8	
Scooters																		

Comments:

LOCATION: Flint Rd -- Maple Rd
CITY/STATE: University at Buffalo, NY

QC JOB #: 17217102
DATE: Sat, Sep 13 2025

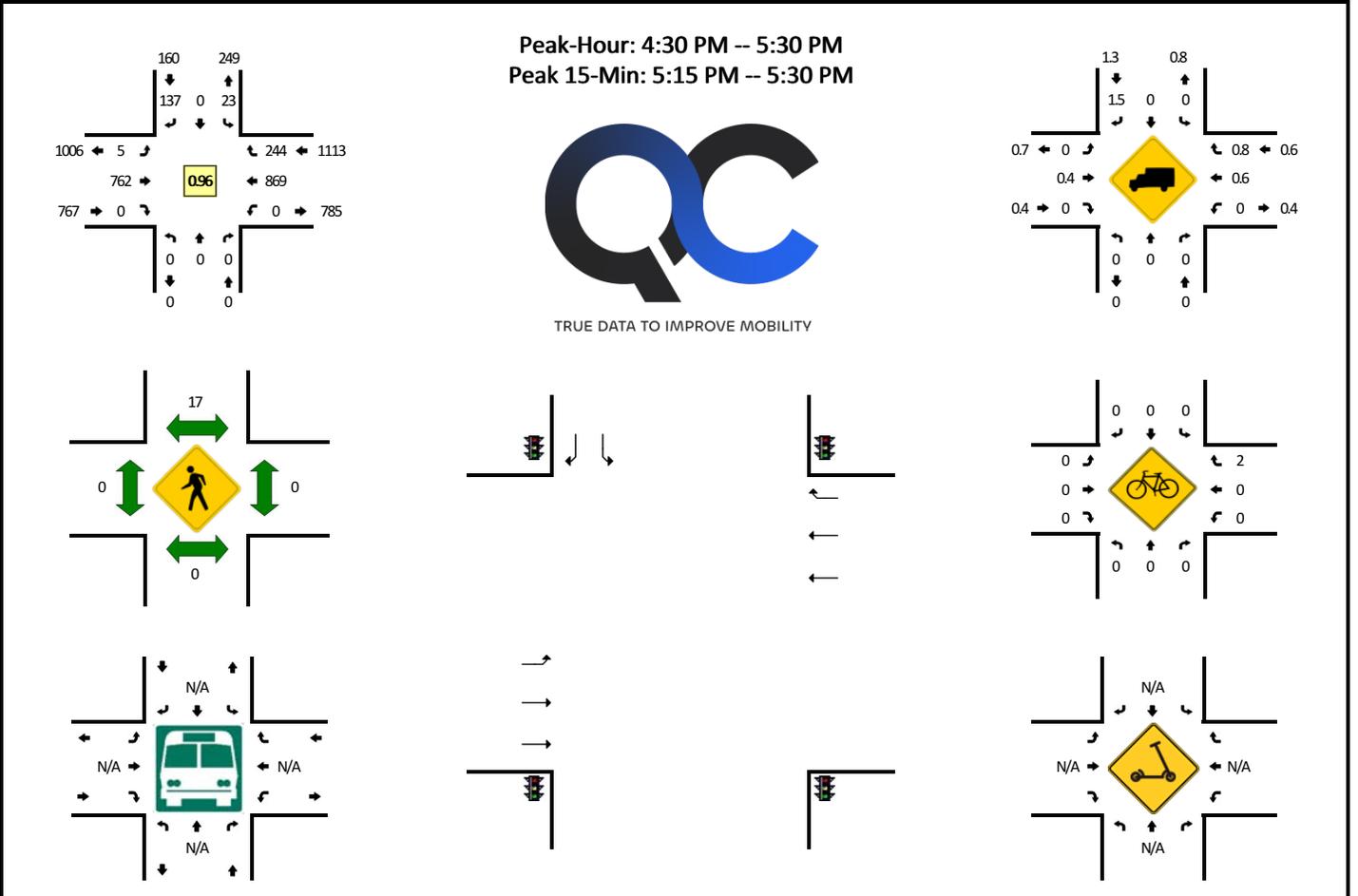


15-Min Count Period Beginning At	Flint Rd (Northbound)				Flint Rd (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	47	7	5	0	7	9	6	0	4	107	37	0	26	152	9	0	416	
11:15 AM	37	7	6	0	6	3	9	0	7	109	31	0	28	147	5	0	395	
11:30 AM	36	7	6	0	7	5	9	0	3	135	38	0	32	170	7	0	455	
11:45 AM	45	5	3	0	11	8	5	0	2	118	50	0	22	166	3	0	438	1704
12:00 PM	30	7	0	0	9	7	4	0	7	126	41	0	23	154	3	0	411	1699
12:15 PM	42	7	6	0	3	7	5	0	4	150	51	0	19	160	3	0	457	1761
12:30 PM	26	5	4	0	4	4	7	0	5	146	46	0	36	163	3	0	449	1755
12:45 PM	41	7	11	0	9	15	19	0	7	127	46	0	39	194	8	0	523	1840
1:00 PM	35	3	3	0	9	7	11	0	6	122	47	0	30	143	4	0	420	1849
1:15 PM	29	4	5	0	8	7	6	0	7	120	44	0	26	138	4	0	398	1790
1:30 PM	44	7	5	0	3	4	7	0	4	130	42	0	27	151	5	0	429	1770
1:45 PM	26	4	3	0	6	7	9	0	6	125	43	0	27	156	5	0	417	1664
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	164	28	44	0	36	60	76	0	28	508	184	0	156	776	32	0	2092	
Heavy Trucks	4	4	0		0	4	4		0	0	0		0	4	0		20	
Buses																		
Pedestrians	0	0	0			8			0	0			0	16	0		24	
Bicycles					4	0	0		0	0	0		0	0	0		4	
Scoters																		

Comments:

LOCATION: CR 263 SB Ramps -- Maple Rd
CITY/STATE: University at Buffalo, NY

QC JOB #: 17217103
DATE: Thu, Sep 11 2025

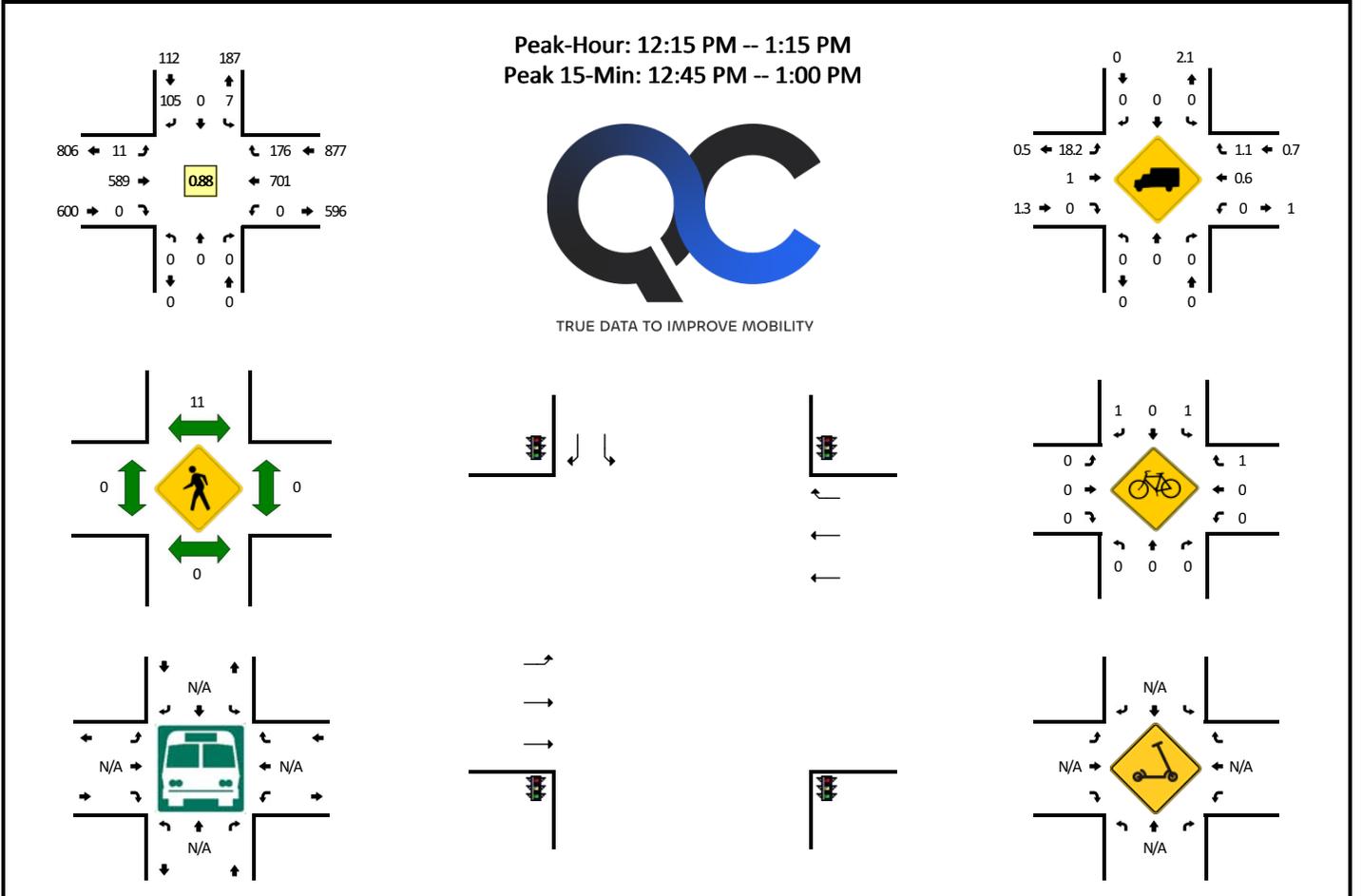


15-Min Count Period Beginning At	CR 263 SB Ramps (Northbound)				CR 263 SB Ramps (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	5	0	29	0	1	182	0	0	0	217	67	0	501	
4:15 PM	0	0	0	0	9	0	27	0	2	192	0	0	0	216	68	0	514	
4:30 PM	0	0	0	0	7	0	24	0	1	189	0	0	0	226	64	0	511	
4:45 PM	0	0	0	0	4	0	24	0	0	178	0	0	0	225	75	0	506	2032
5:00 PM	0	0	0	0	7	0	35	0	3	198	0	0	0	193	58	0	494	2025
5:15 PM	0	0	0	0	5	0	54	0	1	197	0	0	0	225	47	0	529	2040
5:30 PM	0	0	0	0	5	0	34	0	2	166	0	0	0	190	39	0	436	1965
5:45 PM	0	0	0	0	3	0	26	0	1	152	0	0	0	178	43	0	403	1862
6:00 PM	0	0	0	0	2	0	23	0	4	125	0	0	0	151	70	0	375	1743
6:15 PM	0	0	0	0	7	0	28	0	0	156	0	0	0	124	44	0	359	1573
6:30 PM	0	0	0	0	2	0	17	0	4	138	0	0	0	147	36	0	344	1481
6:45 PM	0	0	0	0	5	0	24	0	2	139	0	0	0	139	50	0	359	1437
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	20	0	216	0	4	788	0	0	0	900	188	0	2116	
Heavy Trucks	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	8	
Buses																		
Pedestrians		0				20				0				0			20	
Bicycles		0				0	0			0	0			0	8		8	
Scoters																		

Comments:

LOCATION: CR 263 SB Ramps -- Maple Rd
CITY/STATE: University at Buffalo, NY

QC JOB #: 17217104
DATE: Sat, Sep 13 2025

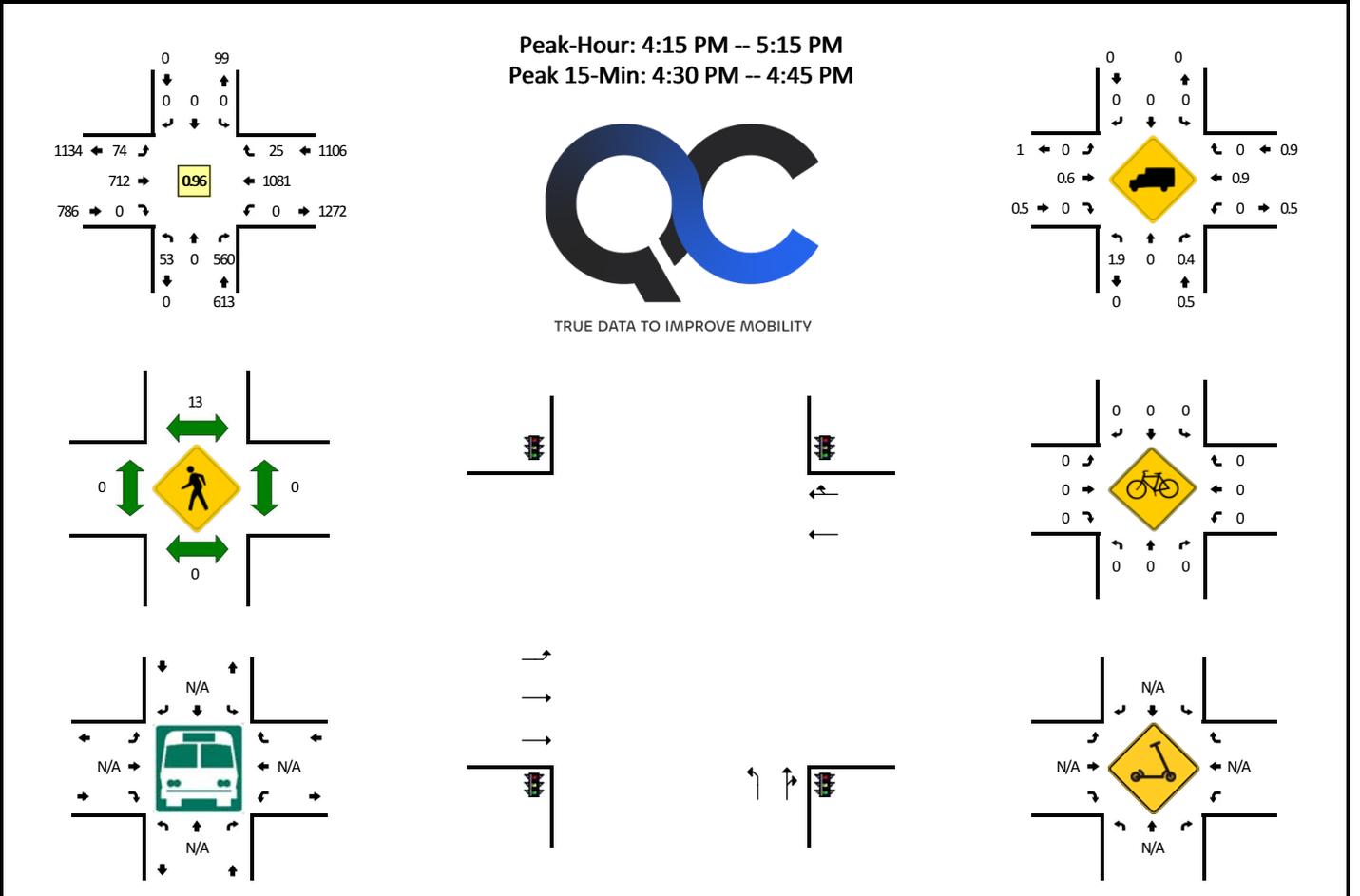


15-Min Count Period Beginning At	CR 263 SB Ramps (Northbound)				CR 263 SB Ramps (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	0	0	0	2	0	25	0	2	121	0	0	0	165	32	0	347	
11:15 AM	0	0	0	0	0	0	22	1	1	121	0	0	0	160	49	0	354	
11:30 AM	0	0	0	0	2	0	23	0	2	145	0	0	0	182	41	0	395	
11:45 AM	0	0	0	0	2	0	25	0	5	127	0	0	0	168	52	0	379	1475
12:00 PM	0	0	0	0	0	0	23	0	0	131	0	0	0	157	39	0	350	1478
12:15 PM	0	0	0	0	1	0	31	0	4	159	0	0	0	152	43	0	390	1514
12:30 PM	0	0	0	0	0	0	20	0	2	147	0	0	0	178	38	0	385	1504
12:45 PM	0	0	0	0	2	0	29	0	4	149	0	0	0	216	50	0	450	1575
1:00 PM	0	0	0	0	4	0	25	0	1	134	0	0	0	155	45	0	364	1589
1:15 PM	0	0	0	0	2	0	30	0	1	130	0	0	0	129	38	0	330	1529
1:30 PM	0	0	0	0	3	0	25	0	2	137	0	0	0	161	33	0	361	1505
1:45 PM	0	0	0	0	4	0	33	0	1	134	0	0	0	152	45	0	369	1424
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	8	0	116	0	16	596	0	0	0	864	200	0	1800	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	0	12	
Buses																		
Pedestrians	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	20	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

LOCATION: CR 263 NB Ramps -- Maple Rd
CITY/STATE: Erie, NY

QC JOB #: 17217105
DATE: Thu, Sep 11 2025

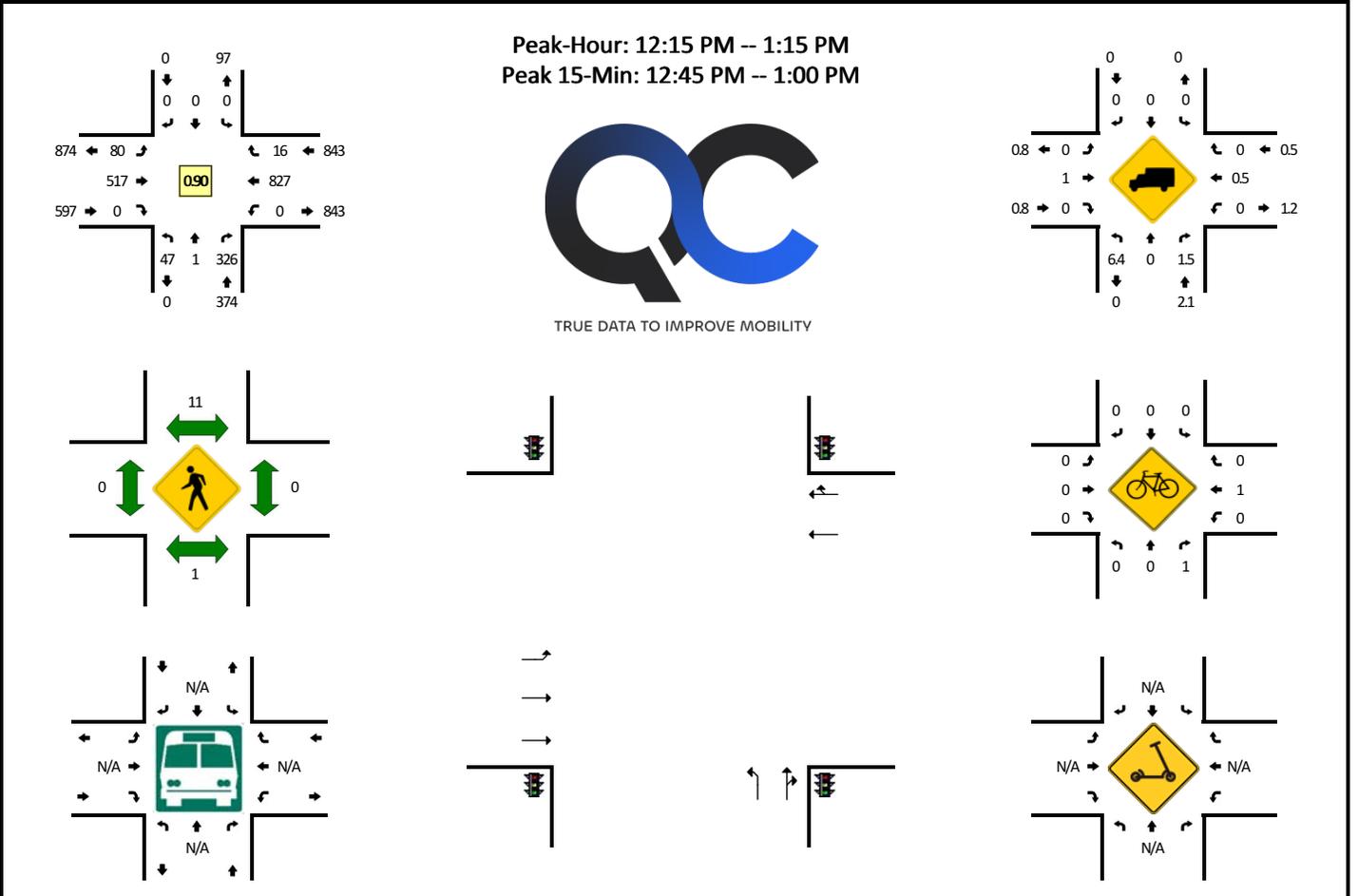


15-Min Count Period Beginning At	CR 263 NB Ramps (Northbound)				CR 263 NB Ramps (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	10	0	124	0	0	0	0	0	18	168	0	0	0	274	7	0	601	
4:15 PM	19	0	127	0	0	0	0	0	17	183	0	0	0	268	3	0	617	
4:30 PM	9	0	153	0	0	0	0	0	15	179	0	0	0	287	10	0	653	
4:45 PM	17	0	141	0	0	0	0	0	22	163	0	0	0	285	5	0	633	2504
5:00 PM	8	0	139	0	0	0	0	0	20	187	0	0	0	241	7	0	602	2505
5:15 PM	18	0	135	0	0	0	0	0	12	189	0	0	0	254	6	0	614	2502
5:30 PM	12	1	104	0	0	0	0	0	19	152	0	0	0	219	10	0	517	2366
5:45 PM	13	0	120	0	0	0	0	0	16	136	0	0	0	213	7	0	505	2238
6:00 PM	6	0	96	0	0	0	0	0	15	114	0	0	0	210	6	0	447	2083
6:15 PM	11	0	104	0	0	0	0	0	19	144	0	0	0	154	5	0	437	1906
6:30 PM	12	0	96	0	0	0	0	0	8	129	0	0	0	172	4	0	421	1810
6:45 PM	10	0	88	0	0	0	0	0	18	126	0	0	0	178	7	0	427	1732
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	36	0	612	0	0	0	0	0	60	716	0	0	0	1148	40	0	2612	
Heavy Trucks	0	0	4	0	0	0	0	0	0	8	0	0	0	12	0	0	24	
Buses																		
Pedestrians	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	16	
Bicycles																		
Scoters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

LOCATION: CR 263 NB Ramps -- Maple Rd
CITY/STATE: Erie, NY

QC JOB #: 17217106
DATE: Sat, Sep 13 2025

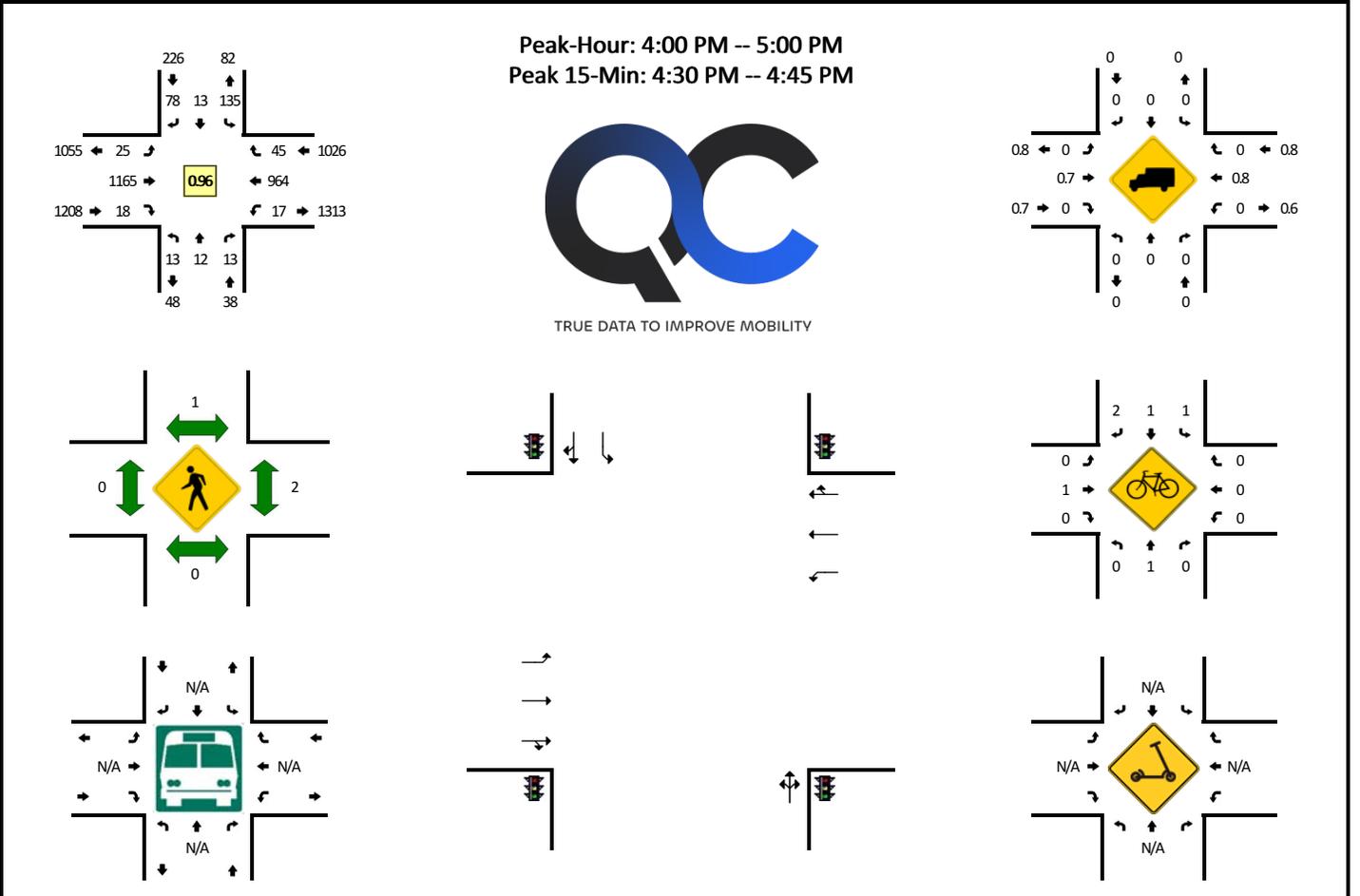


15-Min Count Period Beginning At	CR 263 NB Ramps (Northbound)				CR 263 NB Ramps (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	10	0	86	0	0	0	0	0	18	109	0	0	0	186	2	0	411	
11:15 AM	11	0	78	0	0	0	0	0	11	110	0	0	0	198	6	0	414	
11:30 AM	12	2	76	0	0	0	0	0	14	130	0	0	0	212	8	0	454	
11:45 AM	22	0	78	0	0	0	0	0	11	120	0	0	0	200	2	0	433	1712
12:00 PM	13	0	93	0	0	0	0	0	16	116	0	0	0	184	2	0	424	1725
12:15 PM	9	1	86	0	0	0	0	0	17	144	0	0	0	184	5	0	446	1757
12:30 PM	12	0	74	0	0	0	0	0	17	126	0	0	0	203	1	0	433	1736
12:45 PM	16	0	84	0	0	0	0	0	21	130	0	0	0	250	5	0	506	1809
1:00 PM	10	0	82	0	0	0	0	0	25	117	0	0	0	190	5	0	429	1814
1:15 PM	10	0	74	0	0	0	0	0	15	117	0	0	0	156	4	0	376	1744
1:30 PM	6	0	76	0	0	0	0	0	21	115	0	0	0	188	4	0	410	1721
1:45 PM	3	0	79	0	0	0	0	0	15	126	0	0	0	194	3	0	420	1635
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	64	0	336	0	0	0	0	0	84	520	0	0	0	1000	20	0	2024	
Heavy Trucks	0	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	16	
Buses																		
Pedestrians	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

LOCATION: N Maplemere Rd -- Maple Rd
CITY/STATE: Erie, NY

QC JOB #: 17217107
DATE: Thu, Sep 11 2025

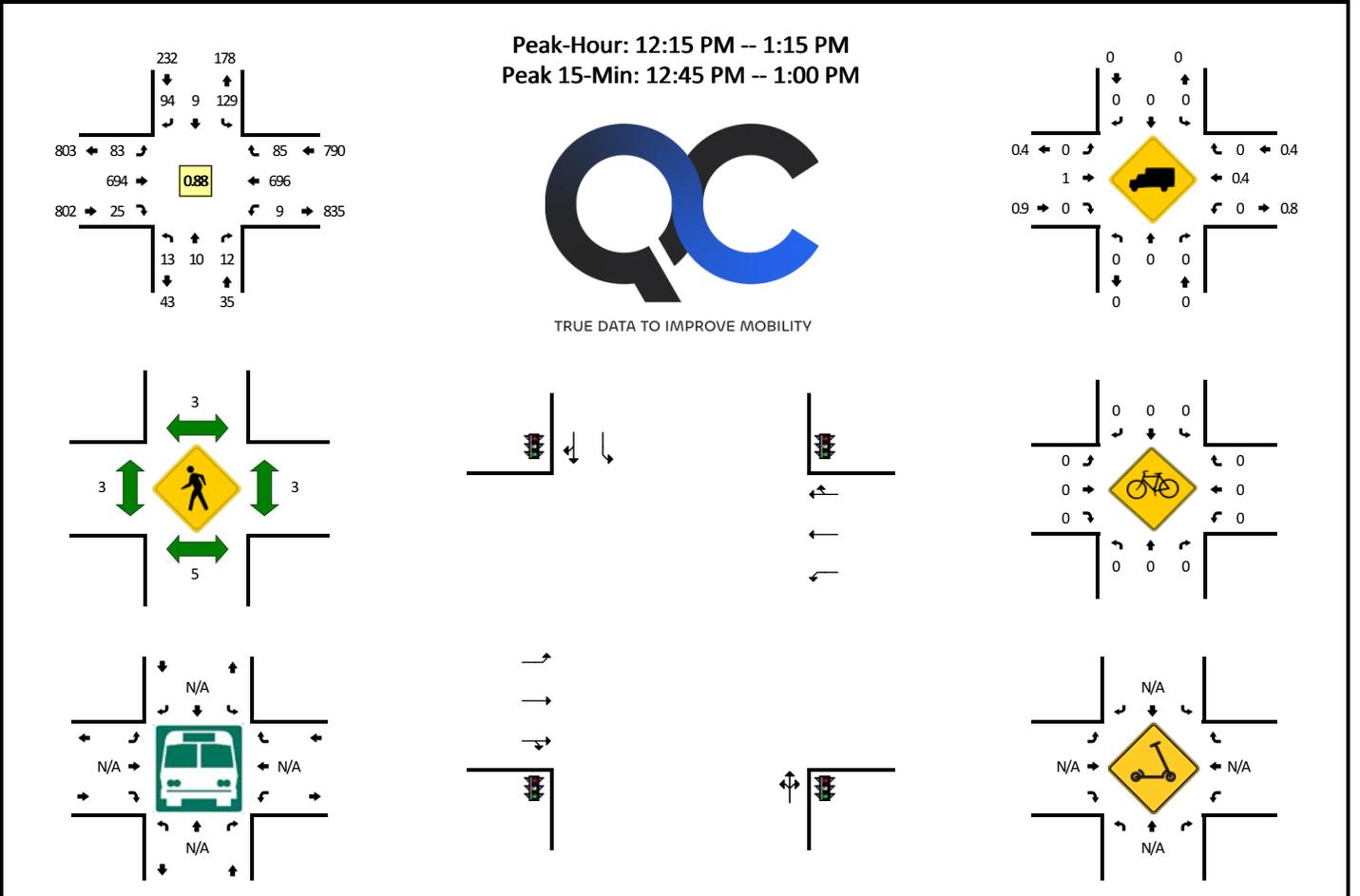


15-Min Count Period Beginning At	N Maplemere Rd (Northbound)				N Maplemere Rd (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	0	5	0	34	4	45	0	7	278	2	0	6	210	11	0	604	
4:15 PM	1	1	2	0	31	2	10	0	5	282	5	0	2	243	14	0	598	
4:30 PM	4	5	3	0	31	3	14	0	8	318	6	0	3	247	6	0	648	
4:45 PM	6	6	3	0	39	4	9	0	5	287	5	0	6	264	14	0	648	2498
5:00 PM	3	1	4	0	23	2	11	0	6	308	5	0	2	221	9	0	595	2489
5:15 PM	5	1	3	0	20	5	10	0	6	300	6	0	4	221	16	0	597	2488
5:30 PM	7	1	1	0	20	4	12	0	9	228	5	0	2	198	14	0	501	2341
5:45 PM	1	2	1	0	12	1	13	0	11	227	8	0	5	190	19	0	490	2183
6:00 PM	5	3	2	0	15	1	9	0	8	192	4	0	1	178	8	0	426	2014
6:15 PM	2	4	6	0	14	5	10	0	15	202	3	0	2	134	15	0	412	1829
6:30 PM	2	0	4	0	22	2	8	0	9	215	3	0	3	159	13	0	440	1768
6:45 PM	3	3	1	0	20	2	5	0	2	189	1	0	4	163	7	0	400	1678
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	20	12	0	124	12	56	0	32	1272	24	0	12	988	24	0	2592	
Heavy Trucks	0	0	0		0	0	0		0	16	0		0	12	0		28	
Buses																	0	
Pedestrians	0	0	0		0	0	0		0	0	0		0	0	0		0	
Bicycles	0	0	0		0	0	8		0	0	0		0	0	0		8	
Scoters																		

Comments:

LOCATION: N Maplemere Rd -- Maple Rd
CITY/STATE: Erie, NY

QC JOB #: 17217108
DATE: Sat, Sep 13 2025

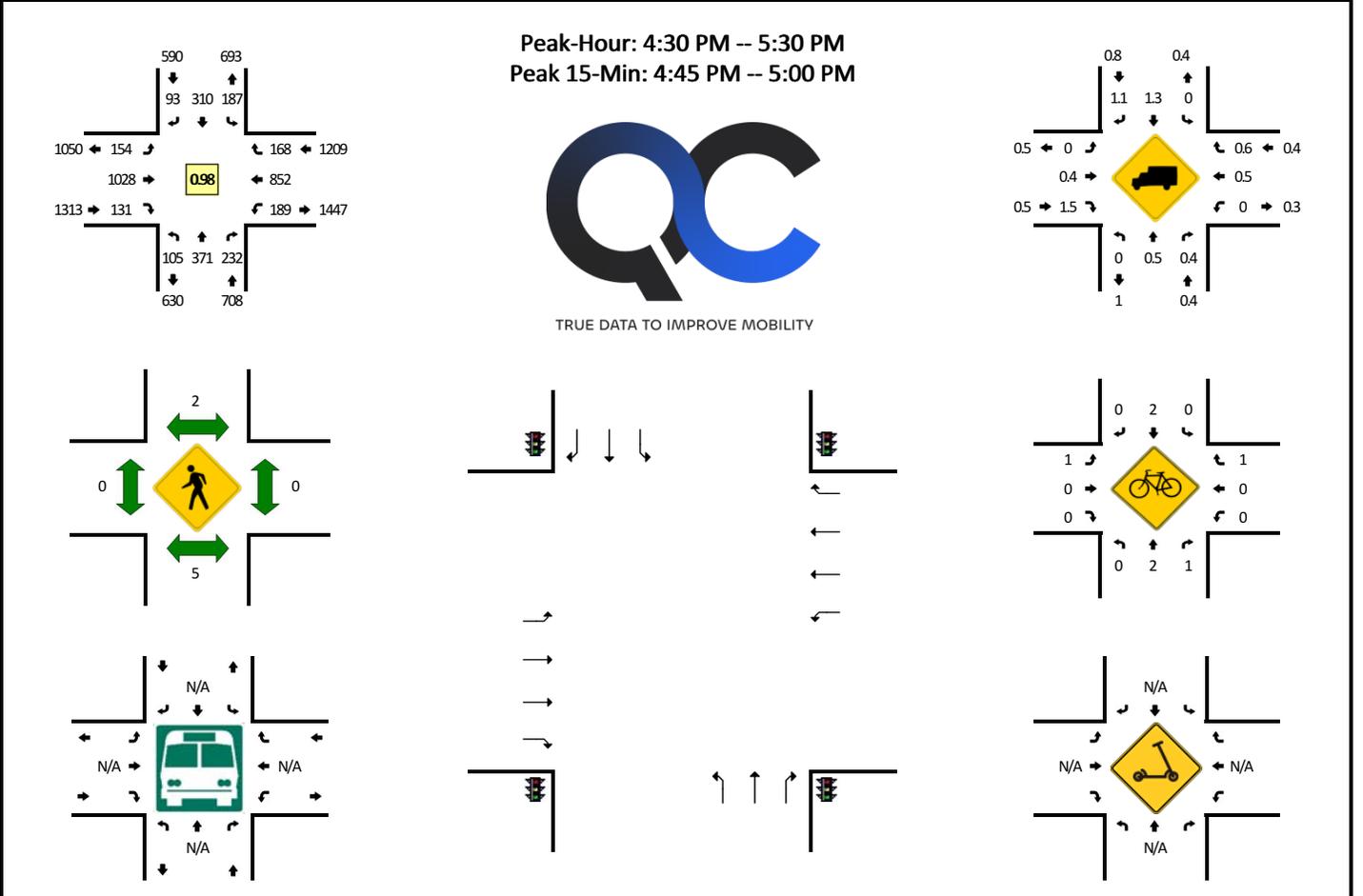


15-Min Count Period Beginning At	N Maplemere Rd (Northbound)				N Maplemere Rd (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	2	0	2	0	11	2	7	0	17	156	2	0	3	167	14	0	383	
11:15 AM	2	0	4	0	11	1	4	0	7	167	5	0	6	180	11	0	398	
11:30 AM	4	0	2	0	10	0	29	0	12	180	1	0	3	166	17	0	424	
11:45 AM	1	4	6	0	7	2	10	0	7	182	3	0	3	180	15	0	420	1625
12:00 PM	3	1	4	0	11	2	9	0	7	181	8	0	3	159	4	0	392	1634
12:15 PM	5	3	2	0	7	1	12	0	16	194	4	0	1	171	9	0	425	1661
12:30 PM	3	3	3	0	38	3	17	0	25	172	5	0	2	177	27	0	475	1712
12:45 PM	5	4	1	0	55	4	34	0	24	168	7	0	3	197	28	0	530	1822
1:00 PM	0	0	6	0	29	1	31	0	18	160	9	0	3	151	21	0	429	1859
1:15 PM	2	1	2	0	5	2	4	0	12	165	2	0	4	153	14	0	366	1800
1:30 PM	2	1	3	0	14	0	7	0	6	182	3	0	2	176	7	0	403	1728
1:45 PM	3	0	1	0	7	2	20	0	11	181	2	0	3	163	12	0	405	1603
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	20	16	4	0	220	16	136	0	96	672	28	0	12	788	112	0	2120	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	8	0	0	12	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

LOCATION: N Forest Rd -- Maple Rd
CITY/STATE: Erie, NY

QC JOB #: 17217109
DATE: Thu, Sep 11 2025

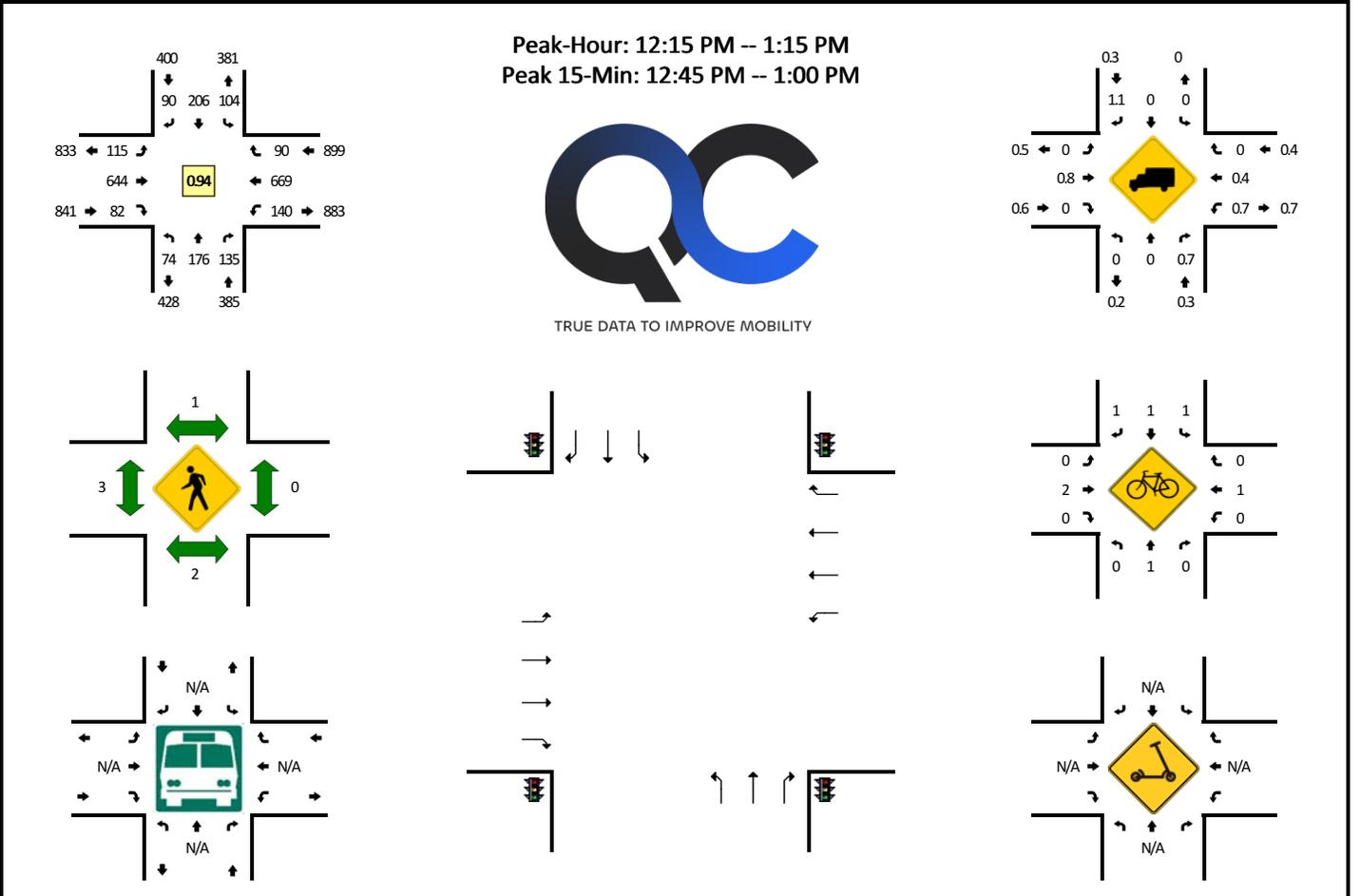


15-Min Count Period Beginning At	N Forest Rd (Northbound)				N Forest Rd (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	31	79	55	0	48	84	30	0	46	225	32	0	41	182	28	0	881	
4:15 PM	31	88	52	0	48	72	19	0	44	227	30	0	41	219	47	0	918	
4:30 PM	30	92	69	0	42	62	22	0	28	266	39	0	39	215	35	0	939	
4:45 PM	25	93	48	0	40	85	27	0	36	263	32	0	48	229	49	0	975	3713
5:00 PM	26	97	61	0	50	68	22	0	45	266	25	0	52	214	39	0	965	3797
5:15 PM	24	89	54	0	55	95	22	0	45	233	35	0	50	194	45	0	941	3820
5:30 PM	19	86	46	0	39	57	20	0	33	197	16	0	51	163	26	0	753	3634
5:45 PM	16	68	57	0	41	55	38	0	36	186	18	0	37	165	41	0	758	3417
6:00 PM	11	51	38	0	40	60	34	0	23	163	30	0	31	164	32	0	677	3129
6:15 PM	13	50	36	0	35	61	24	0	27	169	7	0	22	109	26	0	579	2767
6:30 PM	14	57	40	0	30	52	24	0	40	189	19	0	39	137	17	0	658	2672
6:45 PM	13	49	32	0	28	44	16	0	29	159	24	0	31	139	33	0	597	2511
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	100	372	192	0	160	340	108	0	144	1052	128	0	192	916	196	0	3900	
Heavy Trucks	0	4	0	0	0	4	0	0	0	0	0	0	0	4	0	0	12	
Buses																		
Pedestrians	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

LOCATION: N Forest Rd -- Maple Rd
CITY/STATE: Erie, NY

QC JOB #: 17217110
DATE: Sat, Sep 13 2025

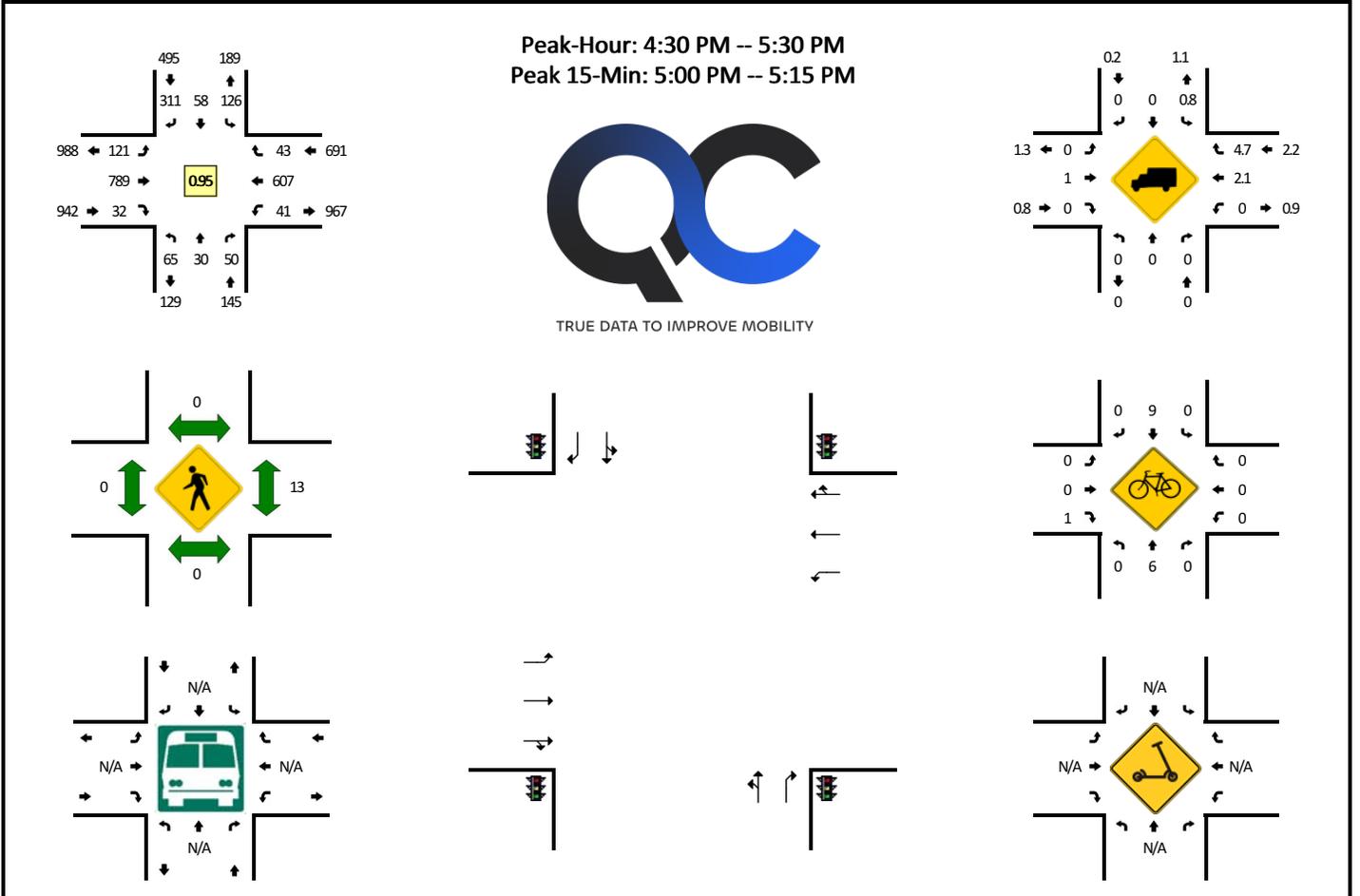


15-Min Count Period Beginning At	N Forest Rd (Northbound)				N Forest Rd (Southbound)				Maple Rd (Eastbound)				Maple Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	21	42	31	0	23	52	28	0	23	138	11	0	19	140	17	0	545	
11:15 AM	14	45	24	0	37	45	35	0	20	145	13	0	32	156	29	0	595	
11:30 AM	17	53	28	0	26	50	22	0	27	133	11	0	40	142	23	0	572	
11:45 AM	12	48	34	0	23	50	28	0	26	163	16	0	42	157	28	0	627	2339
12:00 PM	14	39	38	0	16	31	26	0	30	152	17	0	42	136	24	0	565	2359
12:15 PM	16	47	38	0	30	55	22	0	35	155	17	0	41	152	21	0	629	2393
12:30 PM	23	45	32	0	23	58	17	0	29	143	26	0	33	182	22	0	633	2454
12:45 PM	19	43	32	0	23	55	28	0	22	187	20	0	34	184	23	0	670	2497
1:00 PM	16	41	33	0	28	38	23	0	29	159	19	0	32	151	24	0	593	2525
1:15 PM	15	49	19	0	28	38	17	0	24	122	15	0	40	140	8	0	515	2411
1:30 PM	14	52	32	0	19	46	23	0	28	153	16	0	41	130	17	0	571	2349
1:45 PM	16	30	27	0	24	40	17	0	15	147	15	0	42	152	22	0	547	2226
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	76	172	128	0	92	220	112	0	88	748	80	0	136	736	92	0	2680	
Heavy Trucks	0	0	4		0	0	4		0	4	0		4	8	0		24	
Buses																		
Pedestrians	0	0	0		0	0	0		0	4	0		0	0	0		4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

LOCATION: Coventry Rd/N Maplemere Rd -- CR 263
CITY/STATE: University at Buffalo, NY

QC JOB #: 17217111
DATE: Thu, Sep 11 2025

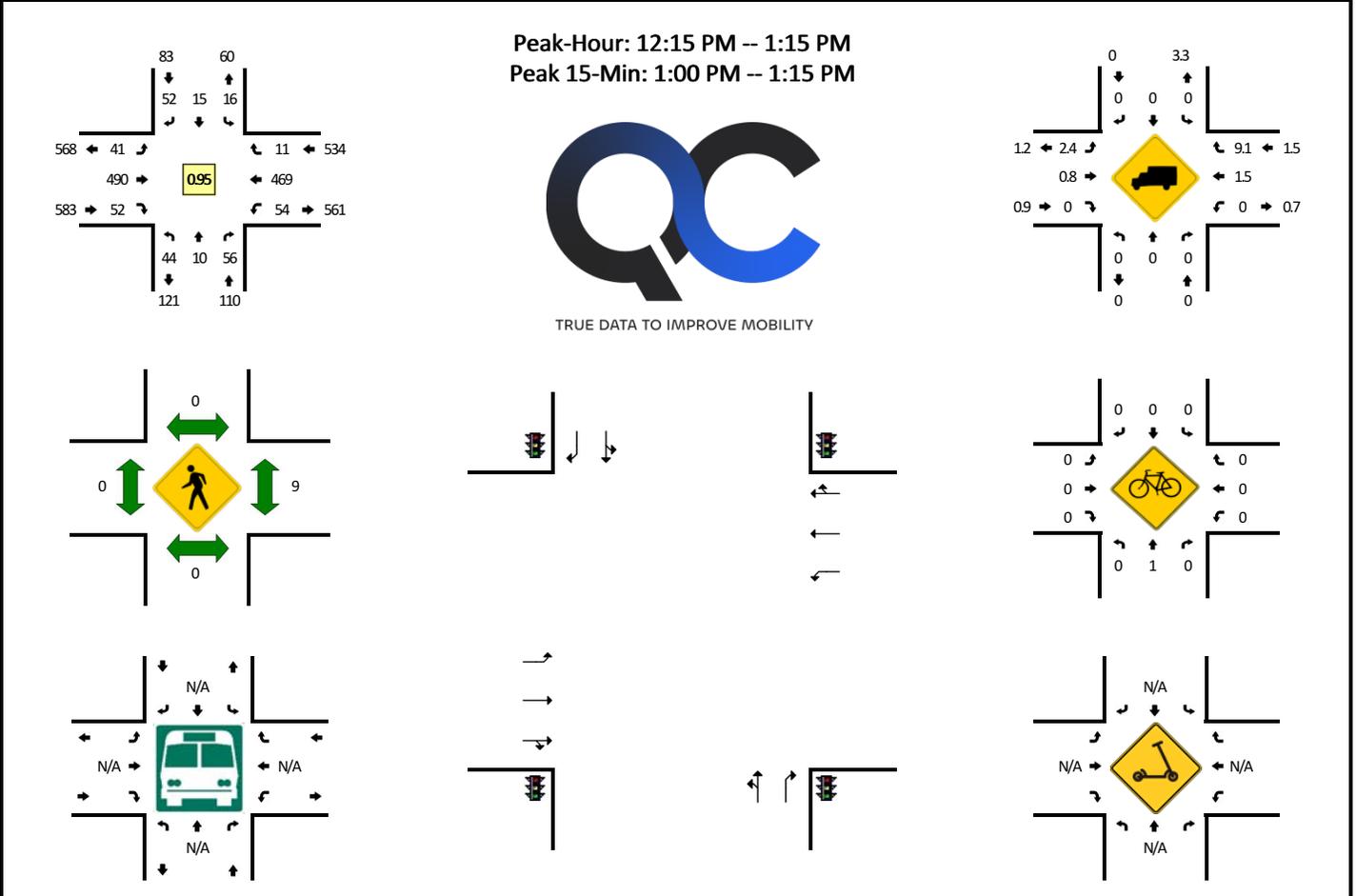


15-Min Count Period Beginning At	Coventry Rd/N Maplemere Rd (Northbound)				Coventry Rd/N Maplemere Rd (Southbound)				CR 263 (Eastbound)				CR 263 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	32	4	26	0	12	17	60	0	29	195	9	3	8	149	11	0	555	
4:15 PM	20	5	13	0	16	14	28	0	25	186	6	5	6	136	6	1	467	
4:30 PM	24	4	18	0	32	17	69	0	30	144	8	3	13	147	13	1	523	
4:45 PM	14	11	14	0	26	17	65	0	37	225	4	0	6	157	15	1	592	2137
5:00 PM	18	10	9	0	50	12	111	0	19	196	8	1	6	153	8	0	601	2183
5:15 PM	9	5	9	0	18	12	66	0	30	224	12	1	14	150	7	0	557	2273
5:30 PM	2	2	10	0	20	11	57	0	29	176	3	4	21	117	9	0	461	2211
5:45 PM	4	8	11	0	16	6	45	0	23	172	7	2	7	125	6	0	432	2051
6:00 PM	8	7	11	0	15	7	51	0	29	159	7	1	14	157	9	0	475	1925
6:15 PM	9	14	13	0	18	12	53	0	33	125	2	1	8	108	12	0	408	1776
6:30 PM	3	14	9	0	11	12	42	0	42	130	5	2	6	132	9	0	417	1732
6:45 PM	4	4	5	0	24	10	48	0	33	107	3	2	6	85	12	0	343	1643
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	72	40	36	0	200	48	444	0	76	784	32	4	24	612	32	0	2404	
Heavy Trucks	0	0	0		4	0	0		0	8	0		0	4	0		16	
Buses																		
Pedestrians	0	0	0		0	0	0		0	0	0		0	16	0		16	
Bicycles	0	0	0		0	12	0		0	0	4		0	0	0		16	
Scoters																		

Comments:

LOCATION: Coventry Rd/N Maplemere Rd -- CR 263
CITY/STATE: University at Buffalo, NY

QC JOB #: 17217112
DATE: Sat, Sep 13 2025



15-Min Count Period Beginning At	Coventry Rd/N Maplemere Rd (Northbound)				Coventry Rd/N Maplemere Rd (Southbound)				CR 263 (Eastbound)				CR 263 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	6	3	6	0	2	7	11	0	11	108	10	1	7	134	3	1	310	
11:15 AM	10	5	16	0	6	2	16	0	12	117	4	1	2	112	2	0	305	
11:30 AM	17	3	3	0	9	8	35	0	21	87	9	1	7	103	3	1	307	
11:45 AM	3	2	9	0	8	3	25	0	14	110	8	0	10	136	6	0	334	1256
12:00 PM	5	1	7	0	4	7	19	0	13	122	4	1	6	86	3	1	279	1225
12:15 PM	7	3	5	0	5	2	14	1	5	107	14	1	9	123	2	0	298	1218
12:30 PM	10	3	12	0	2	1	10	0	8	127	15	0	17	122	1	0	328	1239
12:45 PM	7	3	16	0	6	10	11	0	14	131	13	0	21	103	5	0	340	1245
1:00 PM	20	1	23	0	2	2	17	0	11	125	10	2	7	121	3	0	344	1310
1:15 PM	4	1	3	0	4	1	14	0	9	113	11	3	8	101	5	0	277	1289
1:30 PM	10	3	5	0	3	1	5	0	13	122	8	1	8	117	3	0	299	1260
1:45 PM	9	5	8	0	8	2	17	0	13	102	8	3	12	98	6	0	291	1211
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	80	4	92	0	8	8	68	0	44	500	40	8	28	484	12	0	1376	
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	0	0		8	
Buses																		
Pedestrians		0				0				0				12			12	
Bicycles	0	4	0		0	0	0		0	0	0		0	0	0		4	
Scoters																		

Comments:



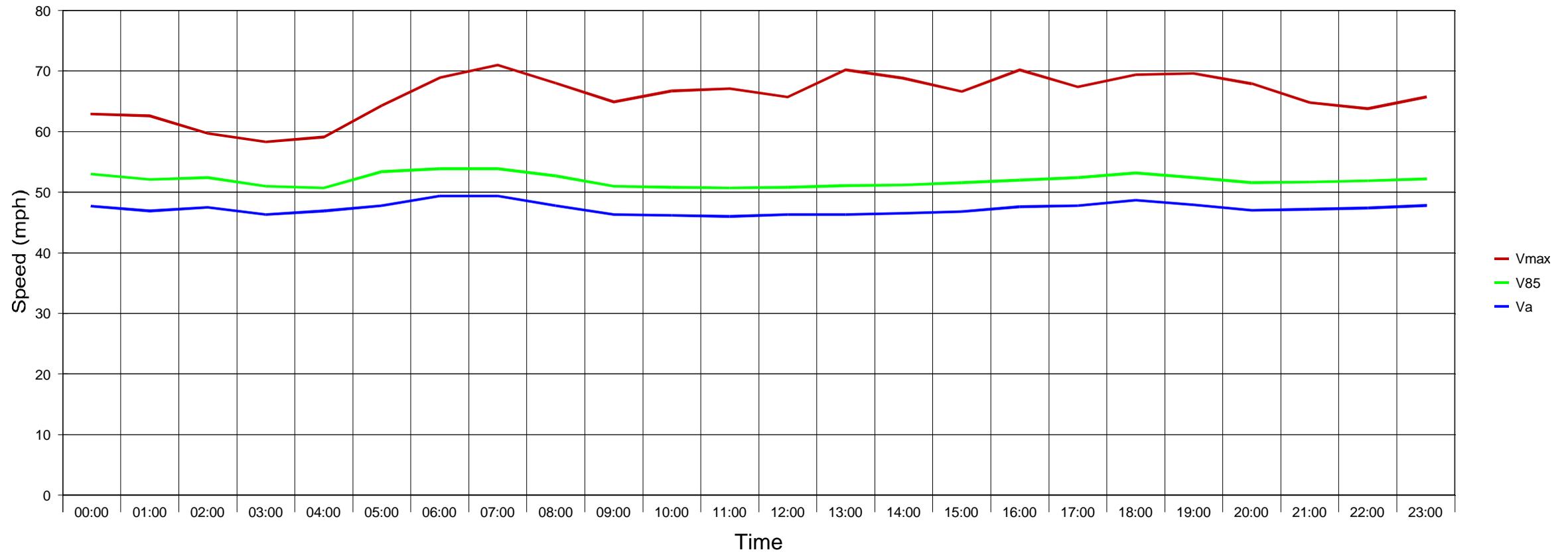
ATTACHMENT D

AUTOMATIC TRAFFIC RECORDER (ATR) DATA

**PROPOSED SPORTS COMPLEX AND HOTEL
TOWN OF AMHERST
ERIE COUNTY, NY**

Quality Counts L.L.C.
 621 Carlisle Dr, Herndon VA 20170
 954-944-2363

Maple Road, EB, 950 ft east of Donna Lea Blvd.; Lat.: 42°59'28.81"N; Long.,78°46'24.73"W, "+" = EB



Statistics

Period: Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

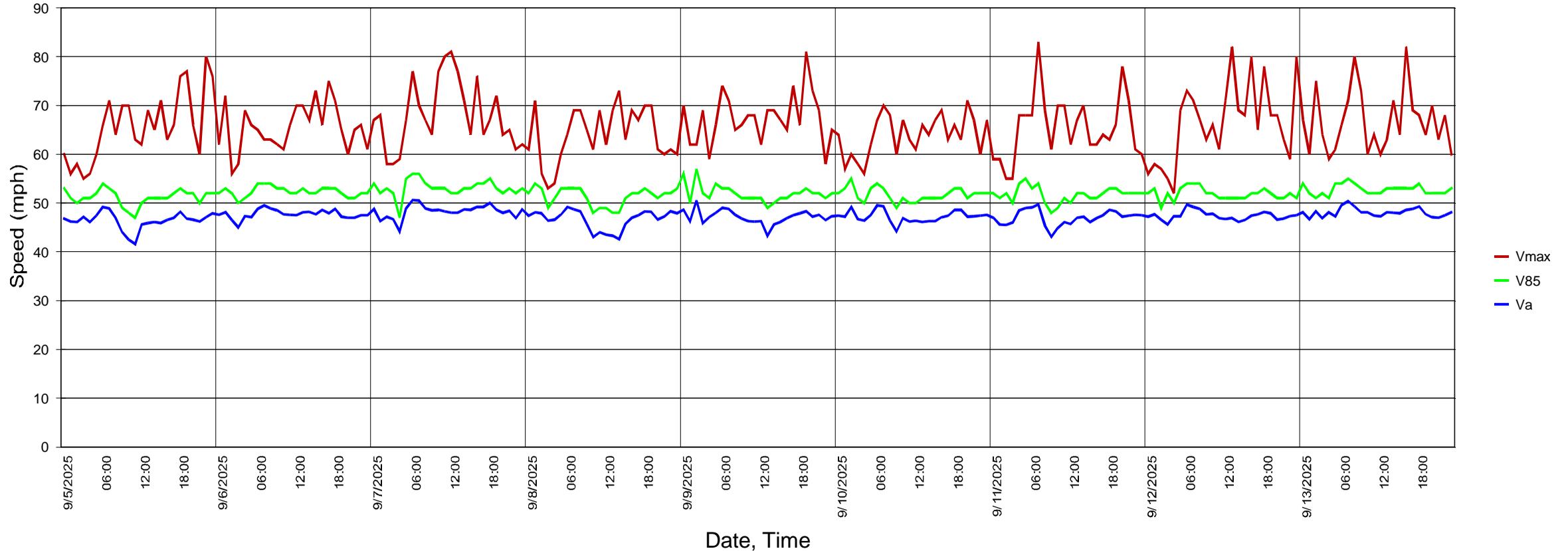
		Count	%	V15	Va	V85	Vmax	
Speed violations:	64 %	Motorcycle/sm	2422	2.5	41	46	52	75
Average time interval:	4.3 sec.	Car	93229	94.6	42	47	52	83
Traffic in column:	95 %	Truck	2513	2.5	41	45	50	64
ADT:	10953	Tractor-Trailer	403	0.4	39	43	48	56
Truck Share:	3 %	Total	98567	100	42	47	52	83



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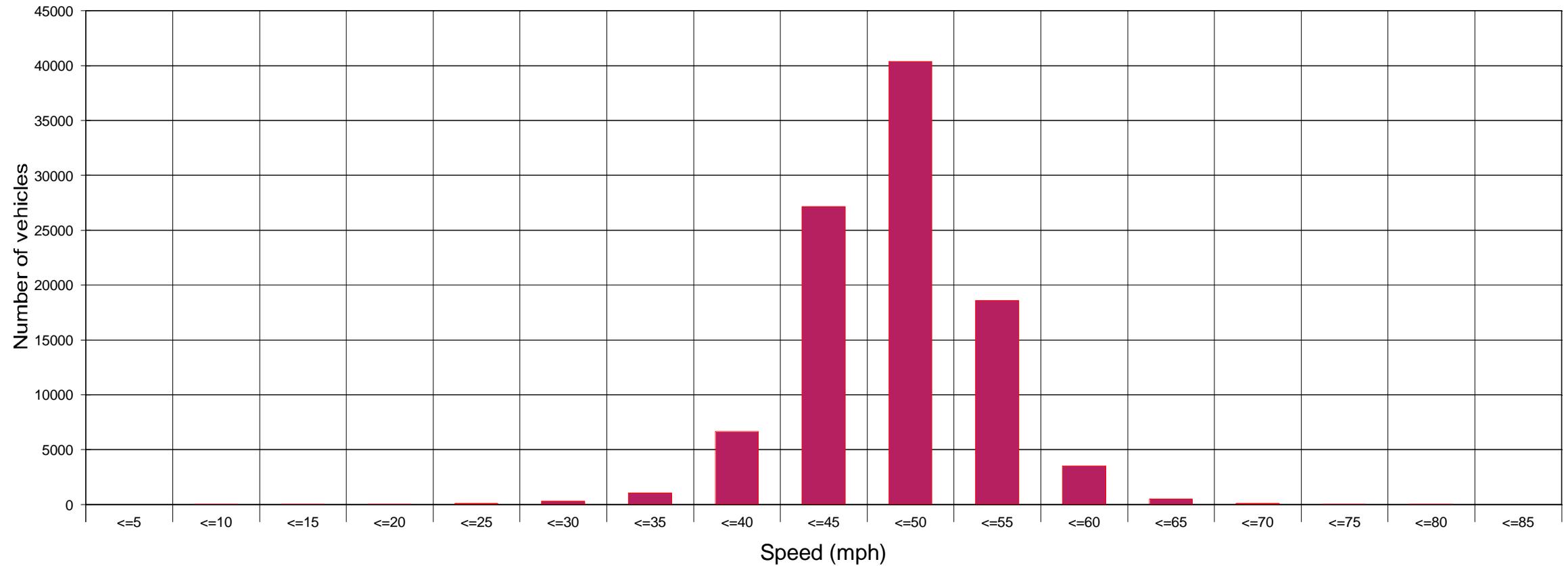
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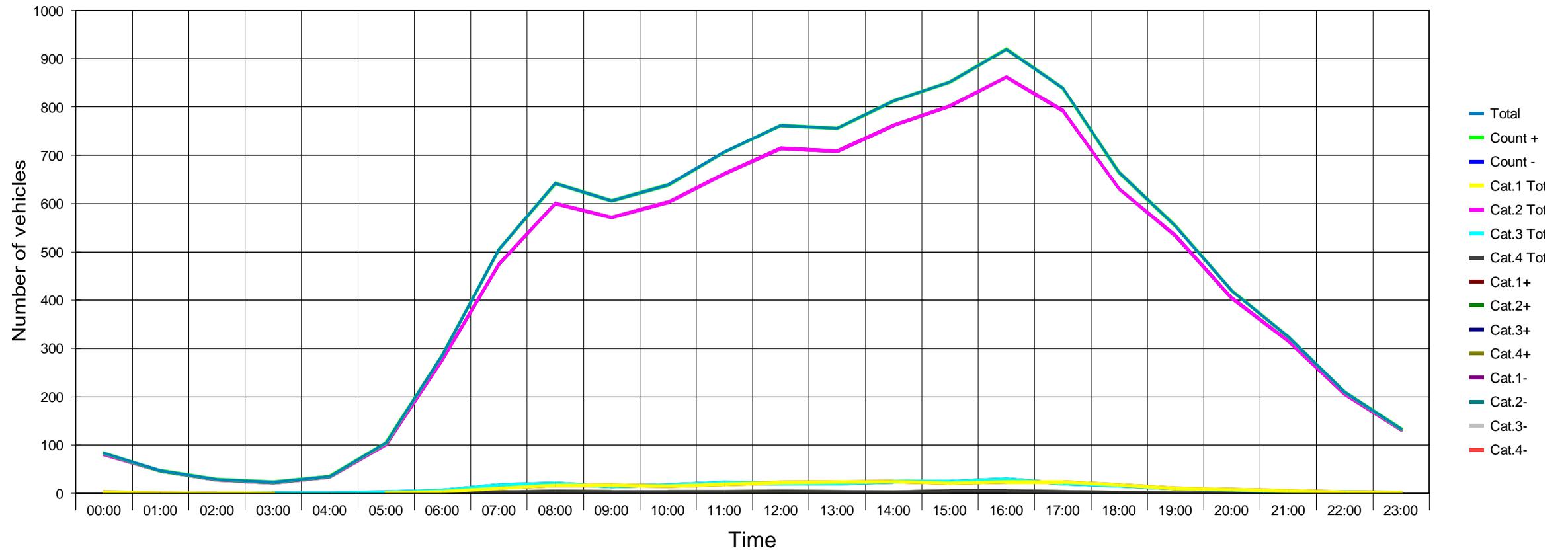
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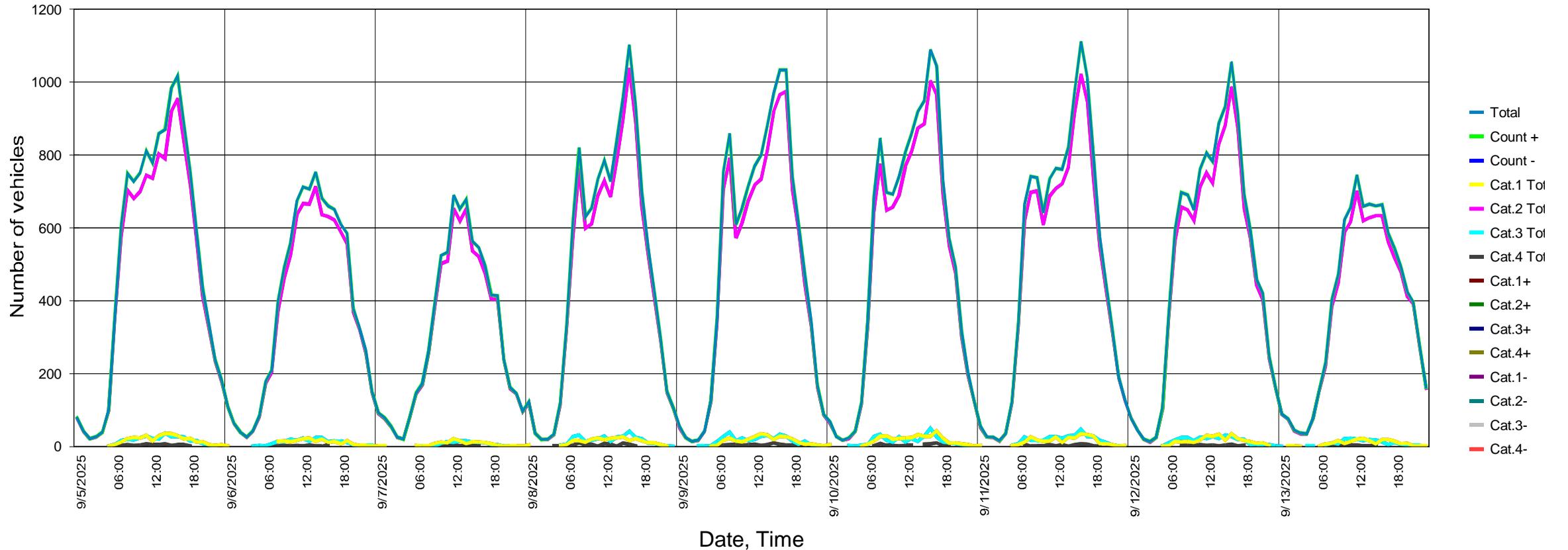
		Count	%	V15	Va	V85	Vmax	
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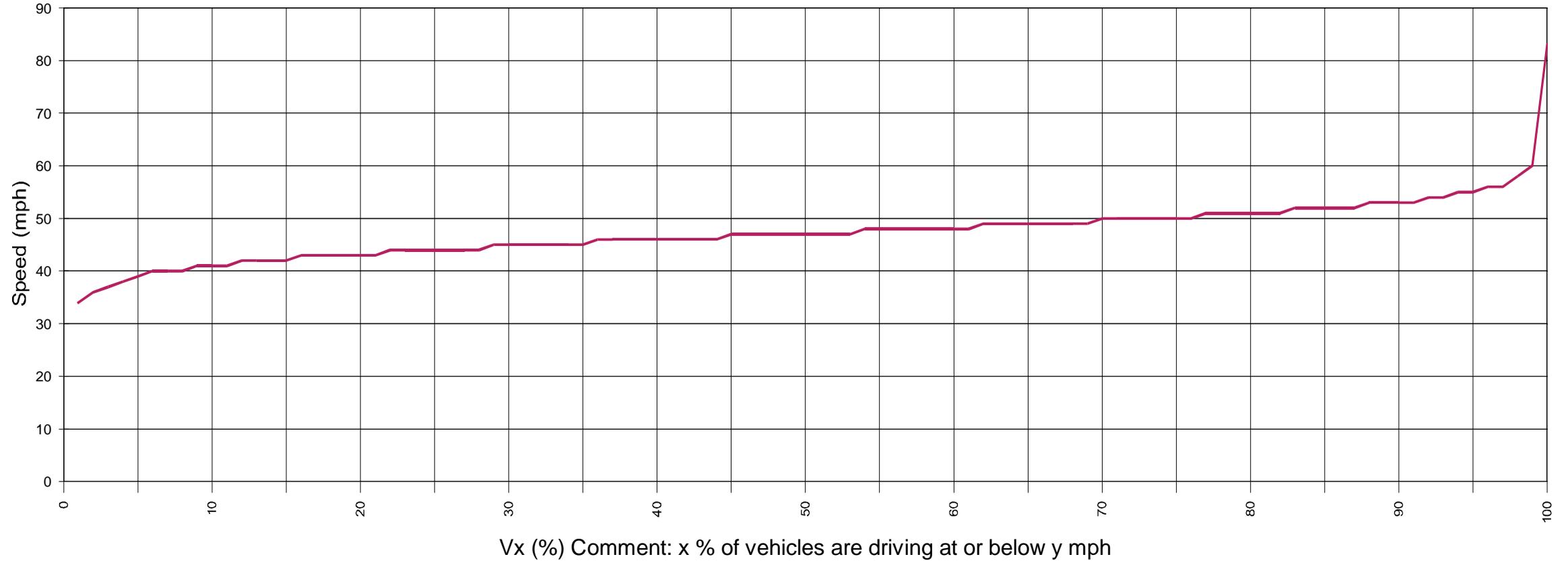
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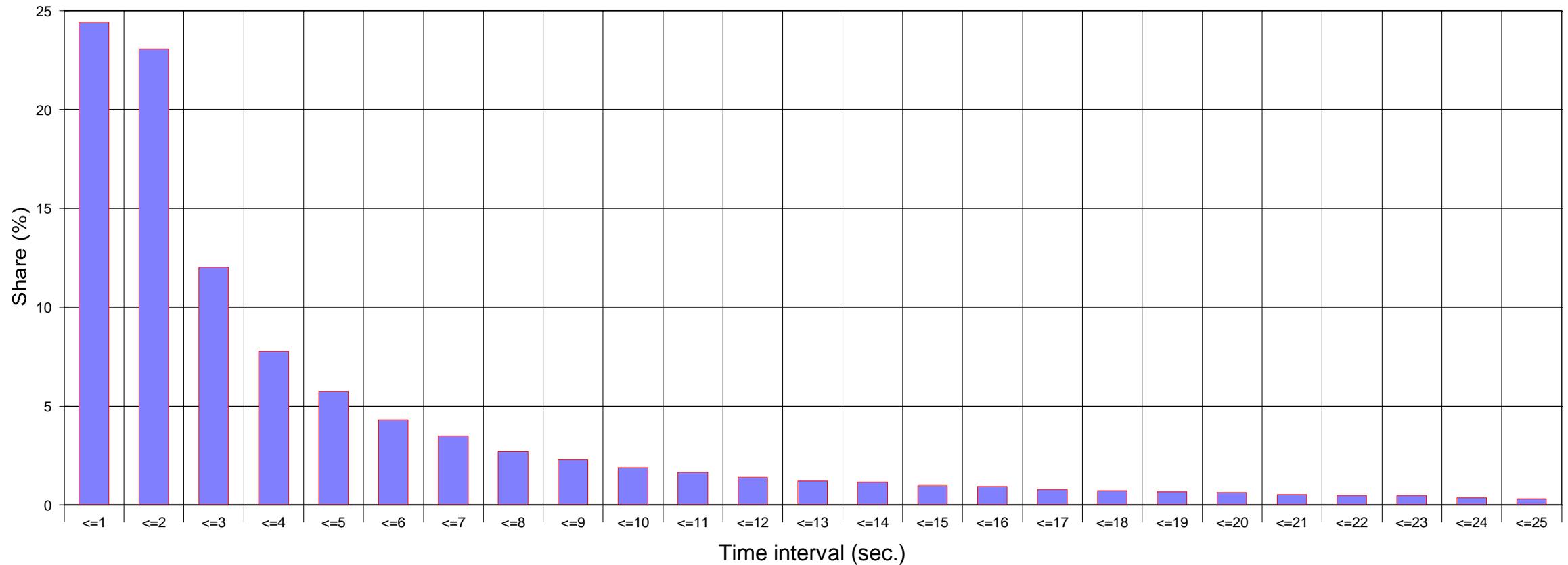
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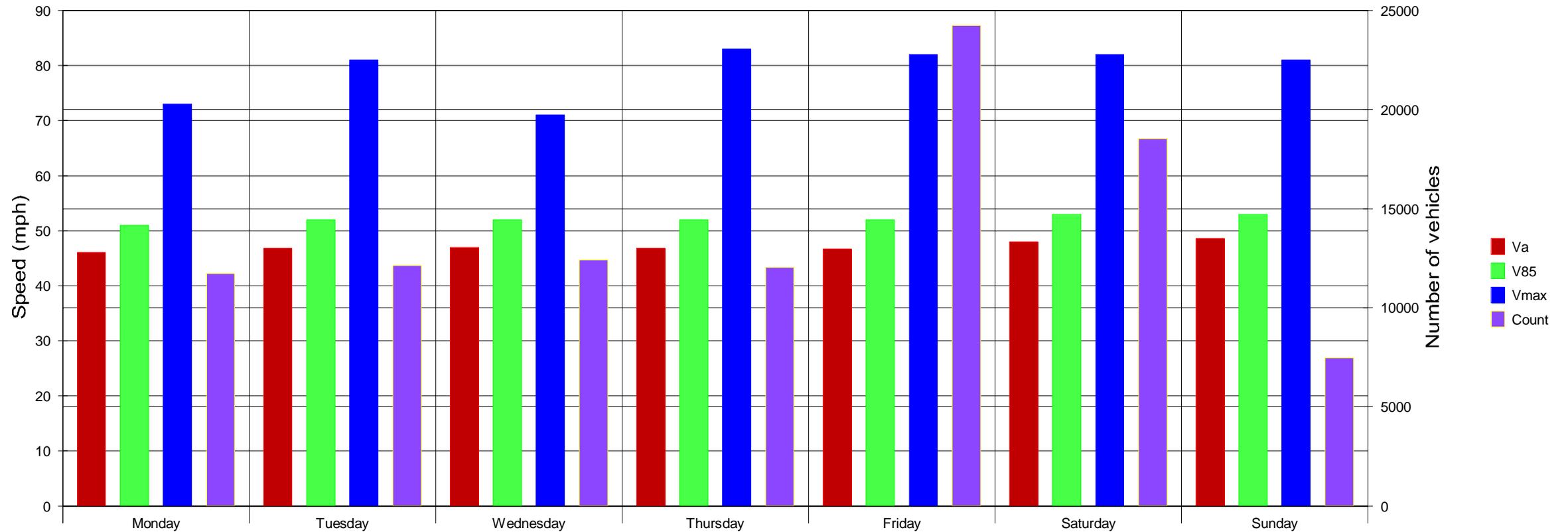
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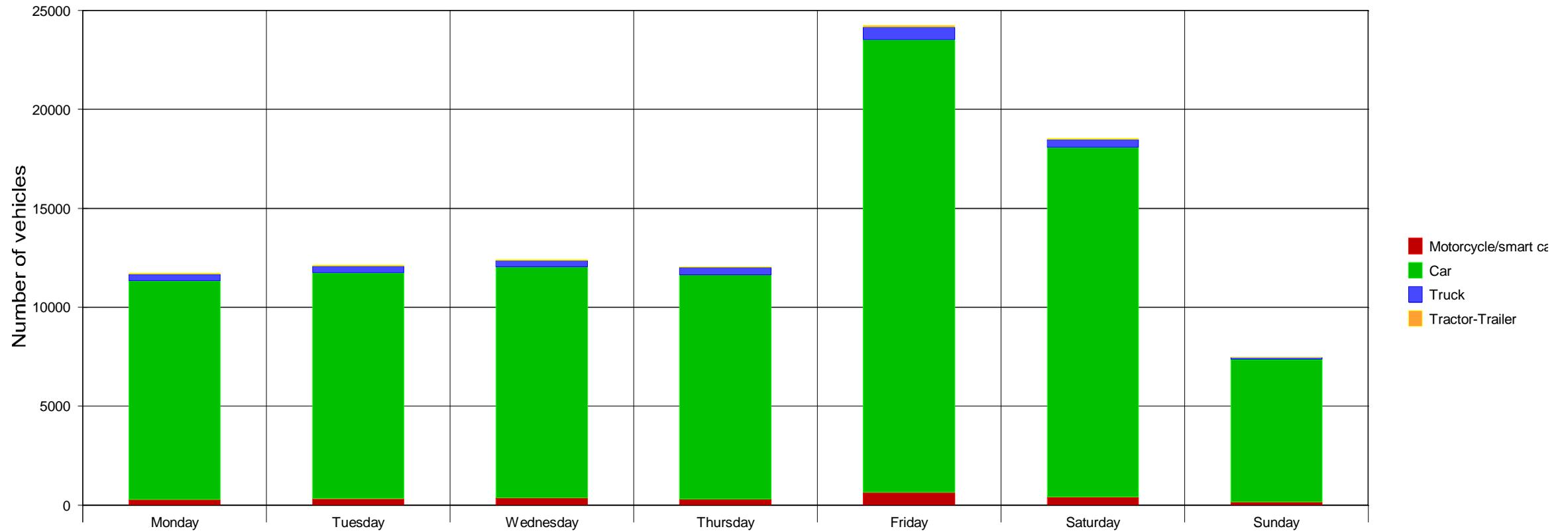
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Truck Share:	3 %	Total	98567	100	42	47	52	83



Detailed evaluation Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

	Car					Truck					Tractor-Trailer					Truck + Tractor-Trailer					Total:					
	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	
Direction +	Day:	56667	93.8	47	52	83	1797	3	45	50	64	308	0.5	43	48	56	2105	3.5	45	50	64	60437	61.3	47	51	83
	Evening:	7912	96.2	47	52	81	146	1.8	46	51	58	12	0.1	46	49	54	158	1.9	46	51	58	8228	8.3	47	52	81
	Night:	3686	97.2	48	52	80	43	1.1	46	50	60	9	0.2	42	47	48	52	1.4	46	49	60	3791	3.8	47	52	80
	16 Hours:	64630	94	47	52	83	1943	2.8	45	50	64	320	0.5	43	48	56	2263	3.3	45	50	64	68719	69.7	47	52	83
	Weekday traffic:	68354	94.2	47	52	83	1986	2.7	45	50	64	329	0.5	43	48	56	2315	3.2	45	50	64	72548	73.6	47	52	83
	Weekend traffic:	24875	95.6	48	53	82	527	2	47	51	60	74	0.3	45	48	55	601	2.3	47	51	60	26019	26.4	48	53	82
	Total traffic:	93229	94.6	47	52	83	2513	2.5	45	50	64	403	0.4	43	48	56	2916	3	45	50	64	98567	100	47	52	83
Direction -	Day:	0	0				0	0				0	0				0	0				0	0			
	Evening:	0	0				0	0				0	0				0	0				0	0			
	Night:	0	0				0	0				0	0				0	0				0	0			
	16 Hours:	0	0				0	0				0	0				0	0				0	0			
	Weekday traffic:	0	0				0	0				0	0				0	0				0	0			
	Weekend traffic:	0	0				0	0				0	0				0	0				0	0			
	Total traffic:	0	0				0	0				0	0				0	0				0	0			
Total	Day:	56667	93.8	47	52	83	1797	3	45	50	64	308	0.5	43	48	56	2105	3.5	45	50	64	60437	61.3	47	51	83
	Evening:	7912	96.2	47	52	81	146	1.8	46	51	58	12	0.1	46	49	54	158	1.9	46	51	58	8228	8.3	47	52	81
	Night:	3686	97.2	48	52	80	43	1.1	46	50	60	9	0.2	42	47	48	52	1.4	46	49	60	3791	3.8	47	52	80
	16 Hours:	64630	94	47	52	83	1943	2.8	45	50	64	320	0.5	43	48	56	2263	3.3	45	50	64	68719	69.7	47	52	83
	Weekday traffic:	68354	94.2	47	52	83	1986	2.7	45	50	64	329	0.5	43	48	56	2315	3.2	45	50	64	72548	73.6	47	52	83
	Weekend traffic:	24875	95.6	48	53	82	527	2	47	51	60	74	0.3	45	48	55	601	2.3	47	51	60	26019	26.4	48	53	82
	Total traffic:	93229	94.6	47	52	83	2513	2.5	45	50	64	403	0.4	43	48	56	2916	3	45	50	64	98567	100	47	52	83



Detailed evaluation Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

Evaluation:	From - To	Days	Dir.	Average Traffic										
				Day:		Evening:		Night:		16 Hours:		ADT		
From - To				06:00 - 18:59		19:00 - 21:59		22:00 - 05:59		06:00 - 21:59		00:00 - 23:59		
Days				9		9		8.998		9		8.999		
				AT [veh./h]	AT [veh./13h]	AT [veh./h]	AT [veh./3h]	AT [veh./h]	AT [veh./8h]	AT [veh./h]	AT [veh./16h]	AT [veh./h]	ADT [veh./24h]	
Weekday traffic:	Mon - Fri	6	+	776	10073	460	1371	79	632	717	11453	504	12091	
			-	0	0	0	0	0	0	0	0	0	0	0
			T	776	10073	460	1371	79	632	717	11453	504	12091	
Weekend traffic:	Sat - Sun	2.999	+	524	6798	380	1135	91	726	497	7943	361	8675	
			-	0	0	0	0	0	0	0	0	0	0	
			T	524	6798	380	1135	91	726	497	7943	361	8675	
Total traffic:		8.999	+	692	8981	433	1292	83	663	643	10283	456	10953	
			-	0	0	0	0	0	0	0	0	0	0	
			T	692	8981	433	1292	83	663	643	10283	456	10953	



Detailed evaluation Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

Evaluation:	From - To	Days	Dir.	Peak hours				K - Factors		
				From mean values		Absolute		K6	K16	K200
From - To				Time	[veh./h]	Date, time	[veh./h]	06:00 - 08:59	06:00 - 21:59	Peak hour
								15:00 - 17:59		
Weekday traffic:	Mon - Fri	6	+	16:15	1082	9/11/2025, 16:30	1136	0.394	0.947	0.089
			-	00:00	0	0	0	0	0	0
			T	16:15	1082	9/11/2025, 16:30	1136	0.394	0.947	0.089
Weekend traffic:	Sat - Sun	2.999	+	12:15	748	9/6/2025, 12:15	761	0.292	0.915	0.086
			-	00:00	0	0	0	0	0	0
			T	12:15	748	9/6/2025, 12:15	761	0.292	0.915	0.086
Total traffic:		8.999	+	16:15	927	9/11/2025, 16:30	1136	0.367	0.939	0.085
			-	00:00	0	0	0	0	0	0
			T	16:15	927	9/11/2025, 16:30	1136	0.367	0.939	0.085

Legend to K-factors:

K(I) -factor: vehicles in period1+2 / ADT

K(J) -factor: vehicles in 16 hrs. period /ADT

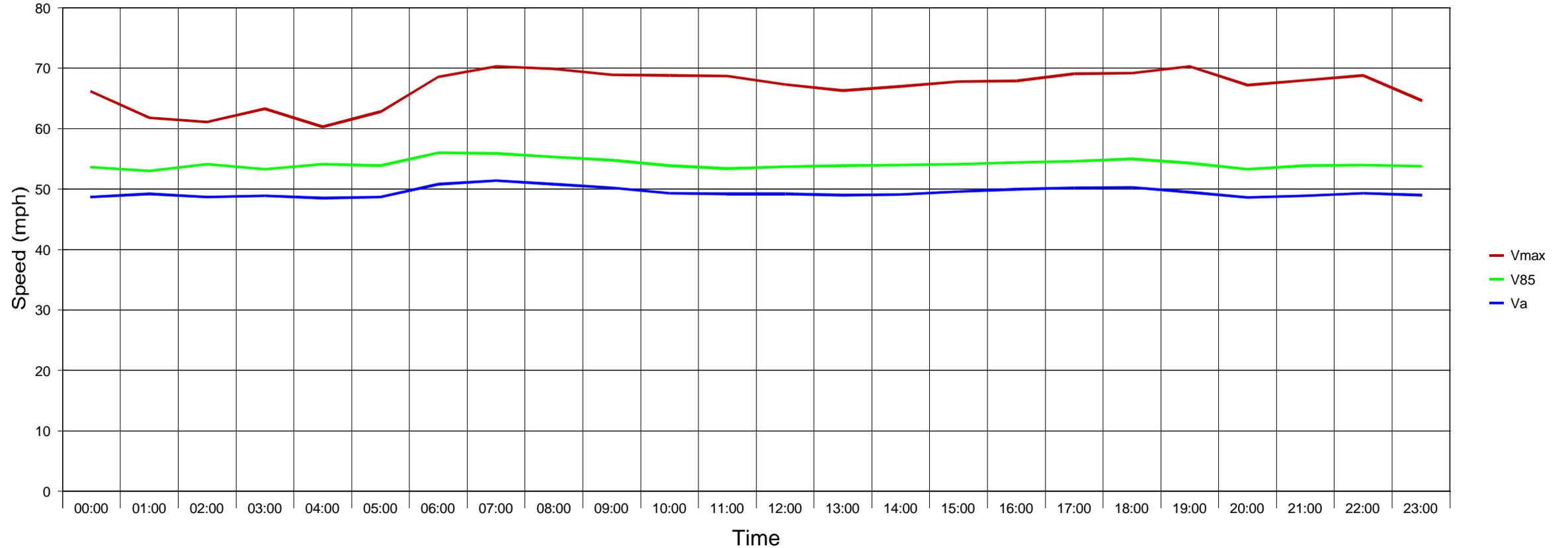
K(200)-factor: vehicles in peak hour /ADT



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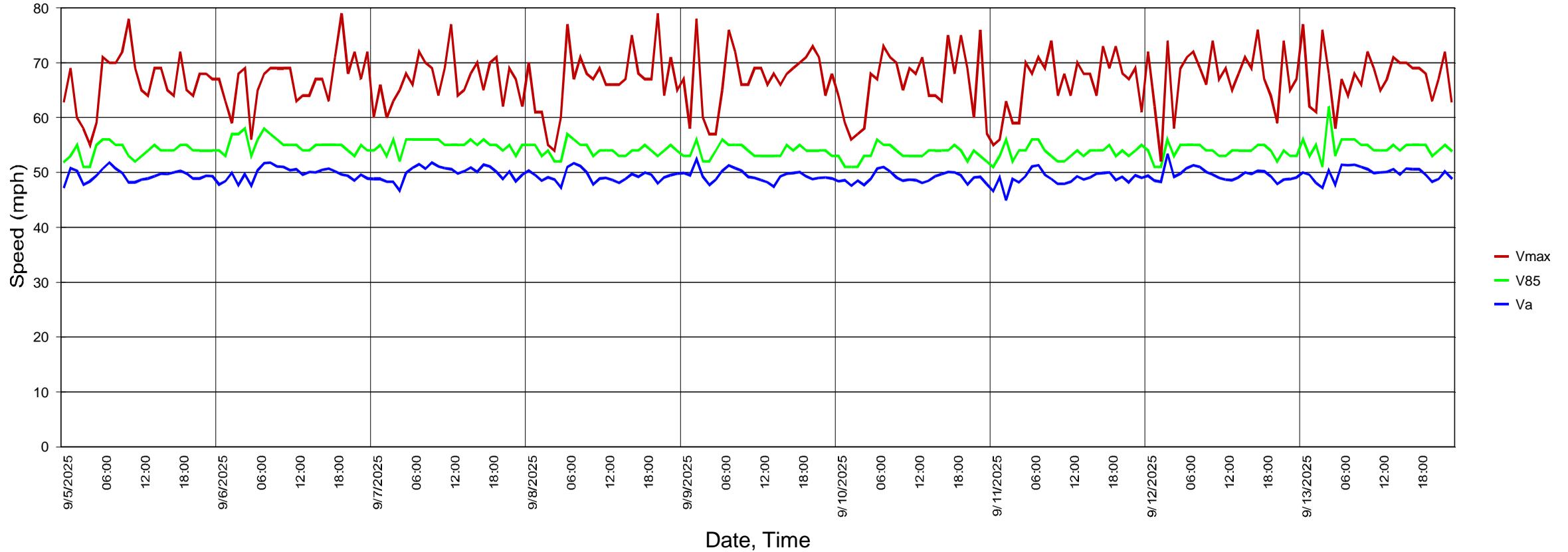
		Count	%	V15	Va	V85	Vmax	
Speed violations:	82 %	Motorcycle	2207	2.5	43	49	55	77
Average time interval:	4.2 sec.	Car	82828	94.5	45	50	54	79
Traffic in column:	93 %	Truck	1774	2	46	50	53	70
ADT:	9737	Tractor-Trailer	813	0.9	45	49	53	62
Truck Share:	3 %	Total	87622	100	45	50	54	79



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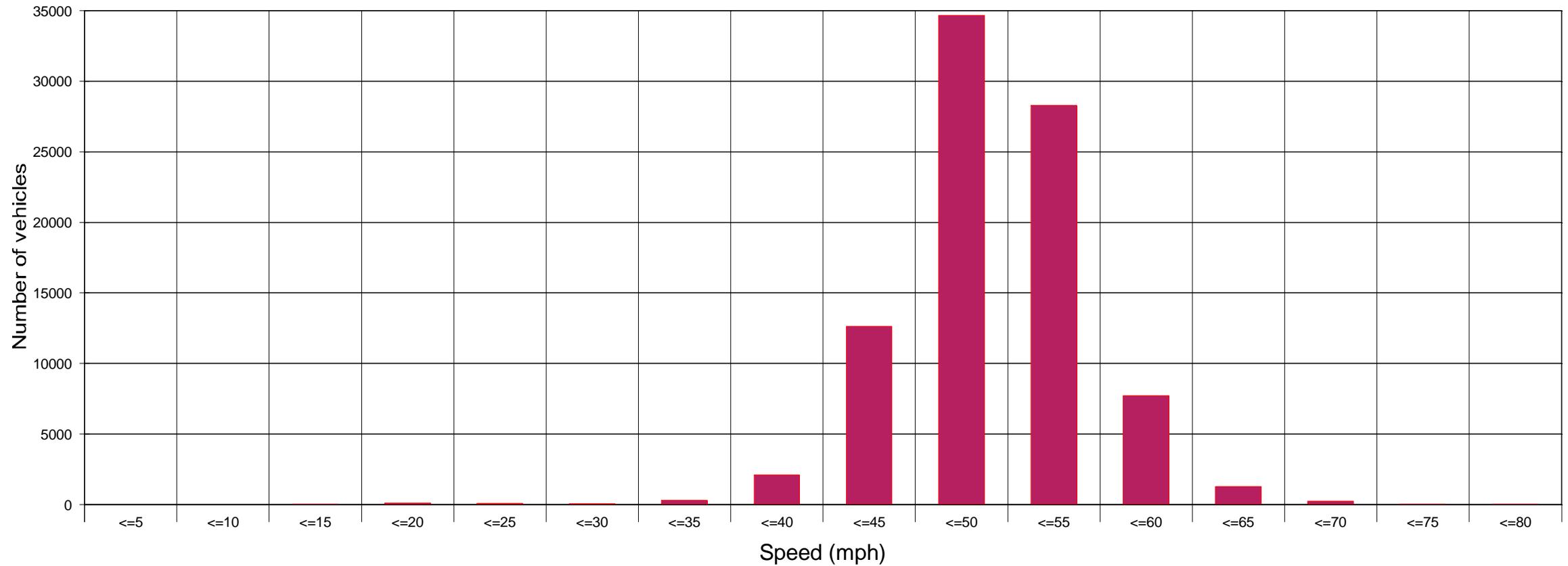
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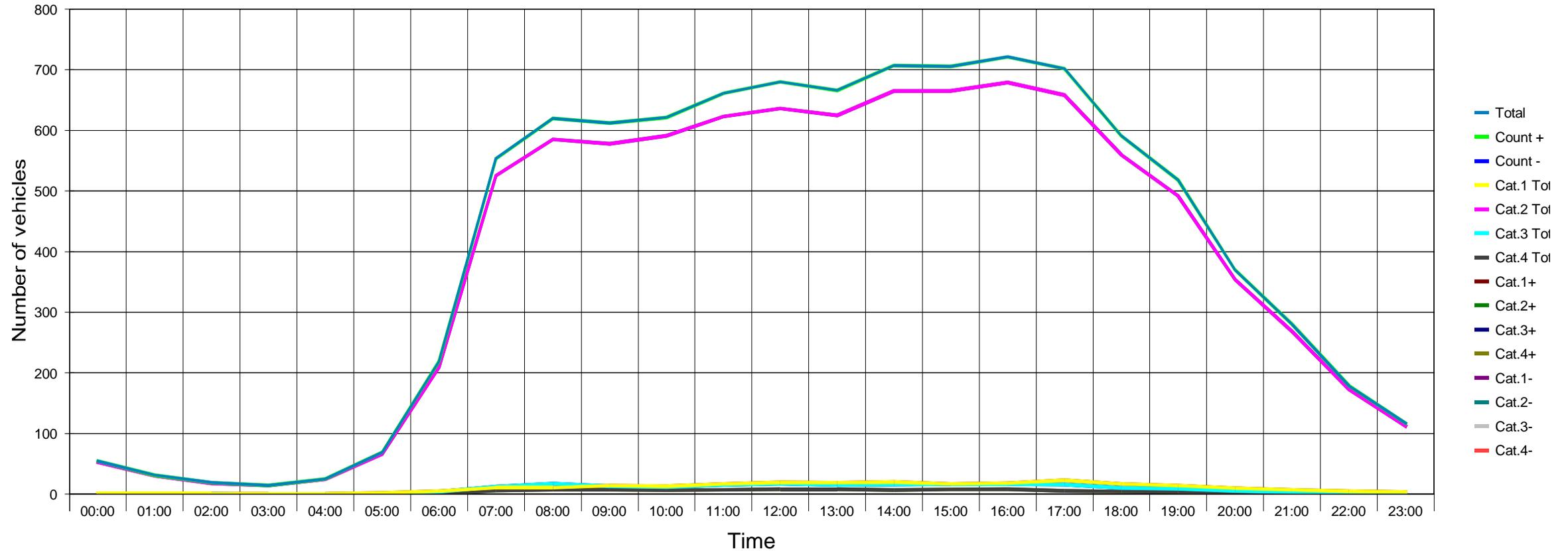
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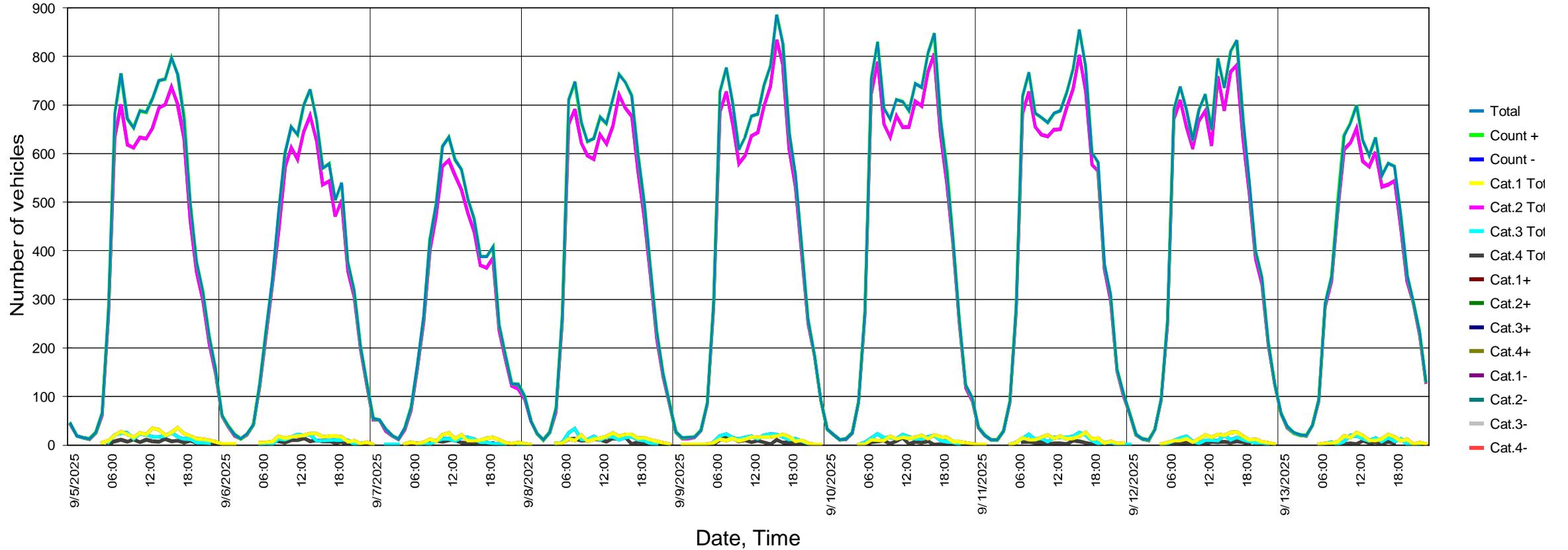
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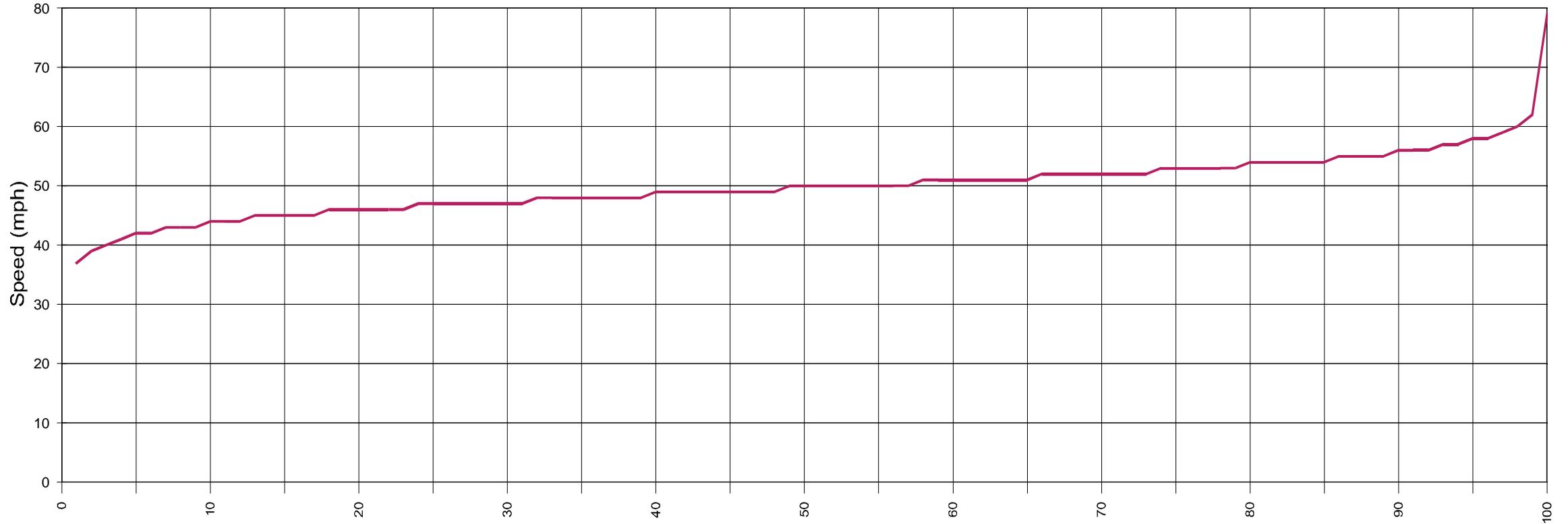
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Vx (%) Comment: x % of vehicles are driving at or below y mph

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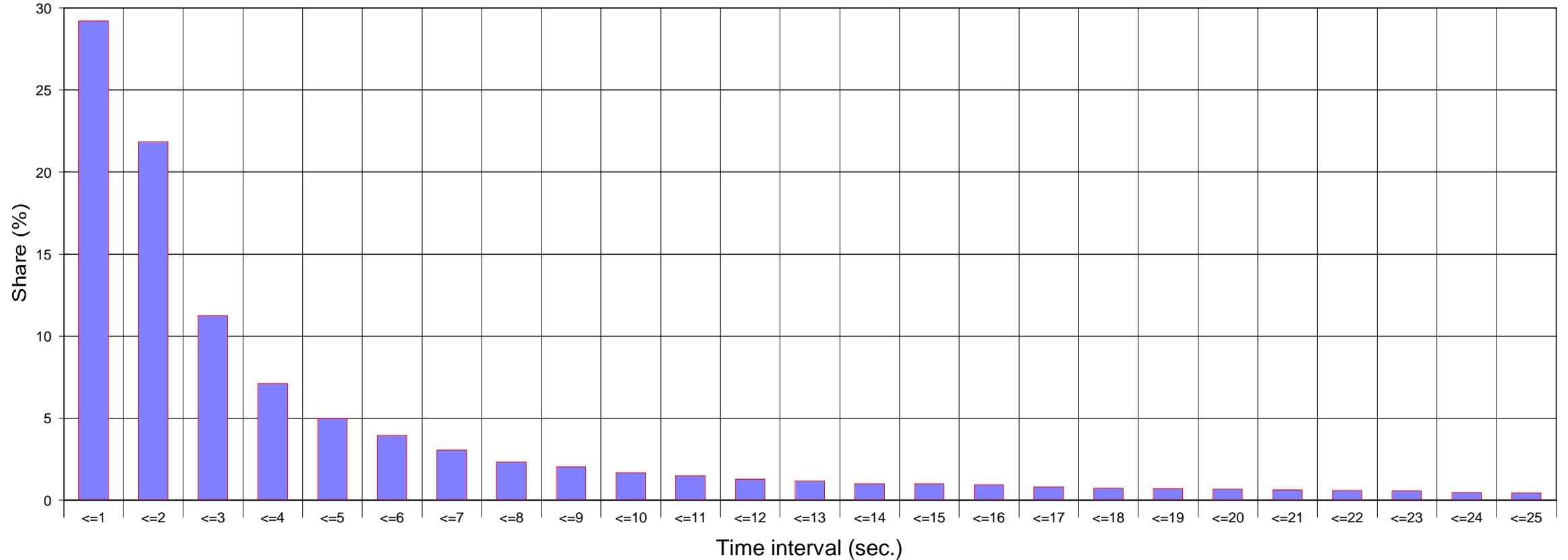
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Statistics

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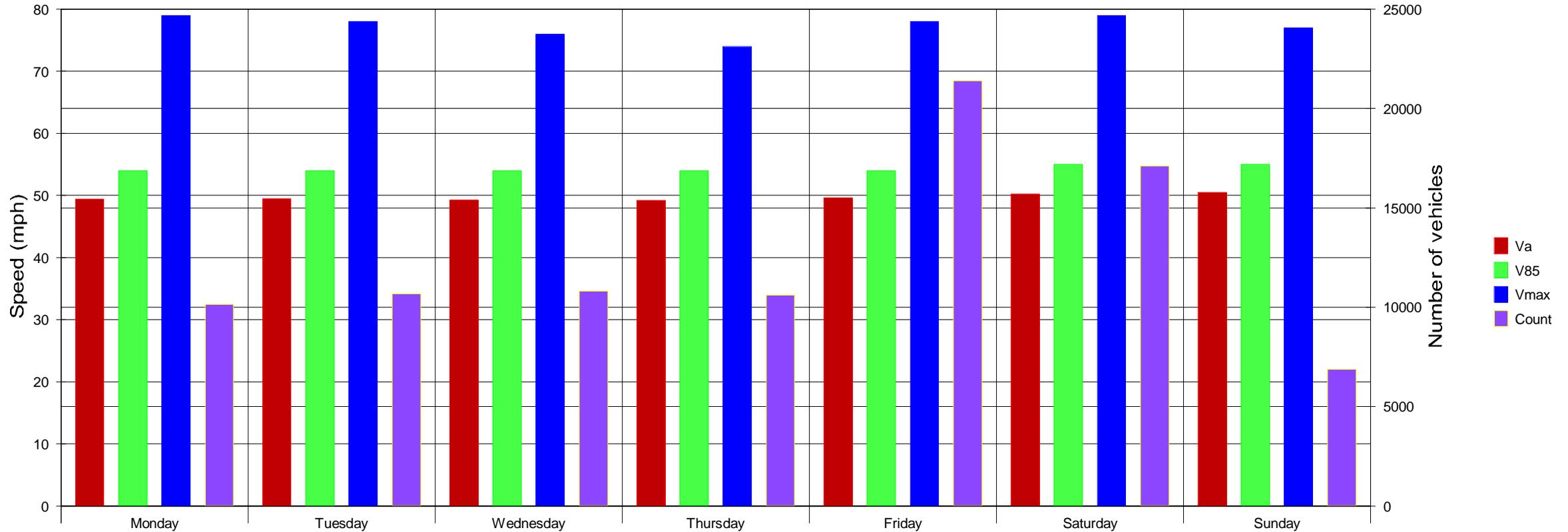
		Count	%	V15	Va	V85	Vmax	
Speed violations:	82 %	Motorcycle	2207	2.5	43	49	55	77
Average time interval:	4.2 sec.	Car	82828	94.5	45	50	54	79
Traffic in column:	93 %	Truck	1774	2	46	50	53	70
ADT:	9737	Tractor-Trailer	813	0.9	45	49	53	62
Truck Share:	3 %	Total	87622	100	45	50	54	79



Quality Counts L.L.C.
 621 Carlisle Dr, Herndon VA 20170
 954-944-2363



Maple Road, WB, 760 ft. west of Sandhurst Ln; Lat = 42°59'29.66"N; Long = 78°46'15.60"W ; "+" = WB



Statistics

Period: Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

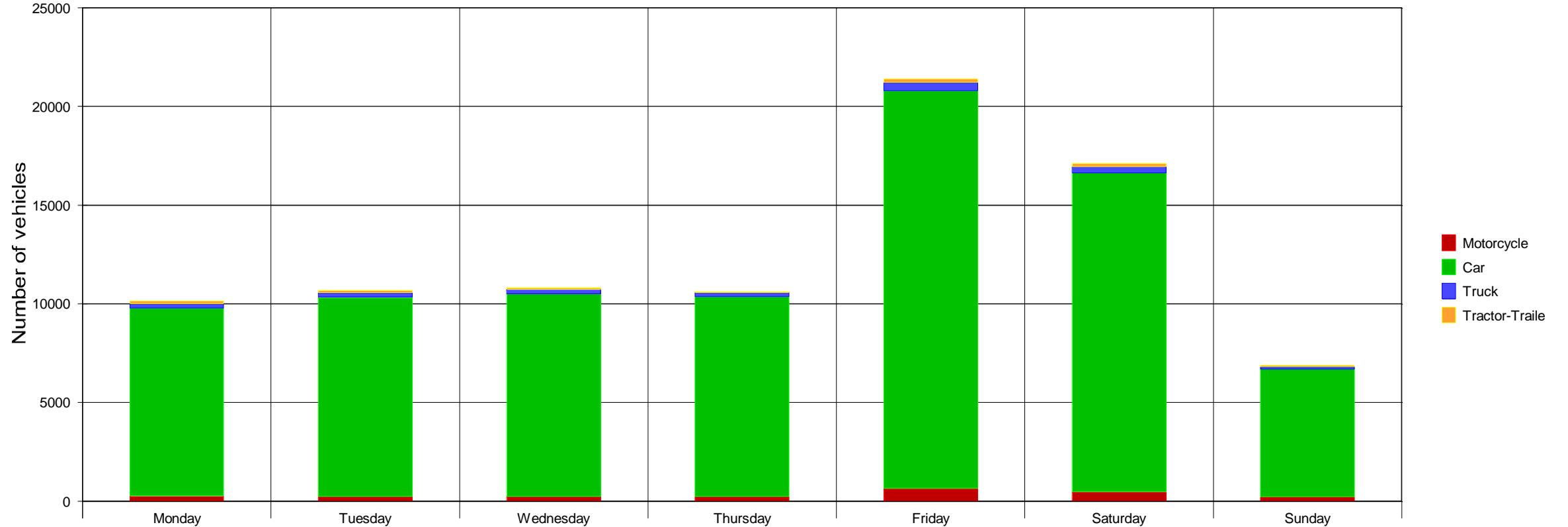
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Detailed evaluation Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

	Car					Truck					Tractor-Trailer					Truck + Tractor-Trailer					Total:					
	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	Count	Share [%]	Va mph	V85 mph	Vmax mph	
Direction +	Day:	50255	94.3	50	54	78	1204	2.3	49	53	70	539	1	49	53	62	1743	3.3	49	53	70	53282	60.8	50	54	78
	Evening:	6964	95.4	49	54	79	105	1.4	49	53	62	45	0.6	49	52	58	150	2.1	49	53	62	7300	8.3	49	54	79
	Night:	2889	96.3	49	54	78	23	0.8	47	49	54	11	0.4	49	52	54	34	1.1	47	50	54	3000	3.4	49	54	78
	16 Hours:	57263	94.5	50	54	79	1309	2.2	49	53	70	584	1	49	53	62	1893	3.1	49	53	70	60626	69.2	49	54	79
	Weekday traffic:	60179	94.5	49	54	79	1332	2.1	49	53	70	595	0.9	49	53	62	1927	3	49	53	70	63653	72.6	49	54	79
	Weekend traffic:	22649	94.5	50	55	79	442	1.8	50	54	62	218	0.9	50	53	60	660	2.8	50	54	62	23969	27.4	50	55	79
	Total traffic:	82828	94.5	50	54	79	1774	2	50	53	70	813	0.9	49	53	62	2587	3	49	53	70	87622	100	50	54	79
Direction -	Day:	0	0				0	0				0	0				0	0				0	0			
	Evening:	0	0				0	0				0	0				0	0				0	0			
	Night:	0	0				0	0				0	0				0	0				0	0			
	16 Hours:	0	0				0	0				0	0				0	0				0	0			
	Weekday traffic:	0	0				0	0				0	0				0	0				0	0			
	Weekend traffic:	0	0				0	0				0	0				0	0				0	0			
	Total traffic:	0	0				0	0				0	0				0	0				0	0			
Total	Day:	50255	94.3	50	54	78	1204	2.3	49	53	70	539	1	49	53	62	1743	3.3	49	53	70	53282	60.8	50	54	78
	Evening:	6964	95.4	49	54	79	105	1.4	49	53	62	45	0.6	49	52	58	150	2.1	49	53	62	7300	8.3	49	54	79
	Night:	2889	96.3	49	54	78	23	0.8	47	49	54	11	0.4	49	52	54	34	1.1	47	50	54	3000	3.4	49	54	78
	16 Hours:	57263	94.5	50	54	79	1309	2.2	49	53	70	584	1	49	53	62	1893	3.1	49	53	70	60626	69.2	49	54	79
	Weekday traffic:	60179	94.5	49	54	79	1332	2.1	49	53	70	595	0.9	49	53	62	1927	3	49	53	70	63653	72.6	49	54	79
	Weekend traffic:	22649	94.5	50	55	79	442	1.8	50	54	62	218	0.9	50	53	60	660	2.8	50	54	62	23969	27.4	50	55	79
	Total traffic:	82828	94.5	50	54	79	1774	2	50	53	70	813	0.9	49	53	62	2587	3	49	53	70	87622	100	50	54	79



Detailed evaluation Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

Evaluation:	From - To	Days	Dir.	Average Traffic										
				Day:		Evening:		Night:		16 Hours:		ADT		
From - To				06:00 - 18:59		19:00 - 21:59		22:00 - 05:59		06:00 - 21:59		00:00 - 23:59		
Days				9		9		8.998		9		8.999		
				AT [veh./h]	AT [veh./13h]	AT [veh./h]	AT [veh./3h]	AT [veh./h]	AT [veh./8h]	AT [veh./h]	AT [veh./16h]	AT [veh./h]	ADT [veh./24h]	
Weekday traffic:	Mon - Fri	6	+	684	8880	408	1217	63	500	632	10104	442	10609	
			-	0	0	0	0	0	0	0	0	0	0	0
			T	684	8880	408	1217	63	500	632	10104	442	10609	
Weekend traffic:	Sat - Sun	2.999	+	493	6396	355	1059	66	523	467	7461	333	7992	
			-	0	0	0	0	0	0	0	0	0	0	0
			T	493	6396	355	1059	66	523	467	7461	333	7992	
Total traffic:		8.999	+	620	8052	390	1164	64	508	577	9223	406	9737	
			-	0	0	0	0	0	0	0	0	0	0	0
			T	620	8052	390	1164	64	508	577	9223	406	9737	



Detailed evaluation Friday, September 5, 2025, 00:00 o'clock to Saturday, September 13, 2025, 23:59 o'clock

Evaluation:	From - To	Days	Dir.	Peak hours				K - Factors		
				From mean values		Absolute		K6	K16	K200
From - To				Time	[veh./h]	Date, time	[veh./h]	06:00 - 08:59	06:00 - 21:59	Peak hour
Weekday traffic:	Mon - Fri	6	+	16:30	817	9/9/2025, 16:15	902	0.388	0.952	0.077
			-	00:00	0	0	0	0	0	0
			T	16:30	817	9/9/2025, 16:15	902	0.388	0.952	0.077
Weekend traffic:	Sat - Sun	2.999	+	12:30	667	9/6/2025, 13:30	735	0.286	0.934	0.083
			-	00:00	0	0	0	0	0	0
			T	12:30	667	9/6/2025, 13:30	735	0.286	0.934	0.083
Total traffic:		8.999	+	14:30	725	9/9/2025, 16:15	902	0.36	0.947	0.074
			-	00:00	0	0	0	0	0	0
			T	14:30	725	9/9/2025, 16:15	902	0.36	0.947	0.074

Legend to K-factors:

K(I) -factor: vehicles in period1+2 / ADT

K(J) -factor: vehicles in 16 hrs. period /ADT

K(200)-factor: vehicles in peak hour /ADT





ATTACHMENT E

SYNCHRO LEVEL OF SERVICE REPORTS

PROPOSED SPORTS COMPLEX AND HOTEL

TOWN OF AMHERST

ERIE COUNTY, NY

HCM 7th Signalized Intersection Summary
1: Flint Road & Maple Road

2254561; 716 Sports Fieldhouse

Existing_PM

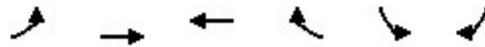


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	606	300	156	799	55	183	82	22	143	214	127
Future Volume (veh/h)	49	606	300	156	799	55	183	82	22	143	214	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1961	1885	1885	1870	1945	1604	1900	1900	1868	1856
Adj Flow Rate, veh/h	50	618	306	159	815	56	187	84	22	146	218	130
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	1	1	1	2	2	20	0	0	7	3
Cap, veh/h	291	1411	645	362	1468	101	286	308	81	472	247	147
Arrive On Green	0.03	0.39	0.39	0.07	0.43	0.43	0.10	0.25	0.25	0.08	0.23	0.23
Sat Flow, veh/h	1810	3610	1649	1795	3399	234	1853	1219	319	1810	1086	648
Grp Volume(v), veh/h	50	618	306	159	429	442	187	0	106	146	0	348
Grp Sat Flow(s),veh/h/ln	1810	1805	1649	1795	1791	1842	1853	0	1538	1810	0	1734
Q Serve(g_s), s	1.6	12.4	13.7	5.0	17.7	17.7	7.5	0.0	5.5	6.0	0.0	19.2
Cycle Q Clear(g_c), s	1.6	12.4	13.7	5.0	17.7	17.7	7.5	0.0	5.5	6.0	0.0	19.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.21	1.00		0.37
Lane Grp Cap(c), veh/h	291	1411	645	362	774	796	286	0	389	472	0	394
V/C Ratio(X)	0.17	0.44	0.47	0.44	0.56	0.56	0.65	0.00	0.27	0.31	0.00	0.88
Avail Cap(c_a), veh/h	438	1411	645	435	774	796	296	0	611	528	0	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	22.1	22.5	15.9	21.0	21.0	27.4	0.0	29.6	25.8	0.0	36.9
Incr Delay (d2), s/veh	0.3	1.0	2.5	0.8	2.9	2.8	4.9	0.0	0.4	0.4	0.0	6.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.1	5.6	1.9	7.4	7.6	3.6	0.0	2.0	2.6	0.0	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.3	23.1	25.0	16.8	23.8	23.7	32.3	0.0	30.0	26.1	0.0	43.8
LnGrp LOS	B	C	C	B	C	C	C		C	C		D
Approach Vol, veh/h		974			1030			293				494
Approach Delay, s/veh		23.4			22.7			31.4				38.6
Approach LOS		C			C			C				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	45.0	14.5	28.2	7.0	49.0	12.0	30.7				
Change Period (Y+Rc), s	4.0	6.4	5.0	5.8	4.0	6.4	4.0	5.8				
Max Green Setting (Gmax), s	11.0	38.6	10.0	39.2	11.0	38.6	11.0	39.2				
Max Q Clear Time (g_c+I1), s	7.0	0.0	9.5	21.2	3.6	0.0	8.0	7.5				
Green Ext Time (p_c), s	0.2	0.0	0.0	1.3	0.0	0.0	0.1	0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			26.7									
HCM 7th LOS			C									

HCM 7th Signalized Intersection Summary
 2: Maple Road & CR 263 SB Ramps

2254561; 716 Sports Fieldhouse

Existing_PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	766	873	246	23	137
Future Volume (veh/h)	5	766	873	246	23	137
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1976	1900	1885	1961	1976	1961
Adj Flow Rate, veh/h	5	798	909	256	24	143
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	0	1
Cap, veh/h	411	2586	2566	1176	220	194
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	508	3705	3676	1642	1882	1662
Grp Volume(v), veh/h	5	798	909	256	24	143
Grp Sat Flow(s),veh/h/ln	508	1805	1791	1642	1882	1662
Q Serve(g_s), s	0.3	6.0	7.2	3.9	0.9	6.2
Cycle Q Clear(g_c), s	7.5	6.0	7.2	3.9	0.9	6.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	411	2586	2566	1176	220	194
V/C Ratio(X)	0.01	0.31	0.35	0.22	0.11	0.74
Avail Cap(c_a), veh/h	411	2586	2566	1176	472	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.85	0.85	1.00	1.00
Uniform Delay (d), s/veh	5.5	3.9	4.0	3.6	29.6	32.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.4	0.3	7.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.3	1.5	0.8	0.4	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.5	4.2	4.4	3.9	29.9	39.5
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		803	1165		167	
Approach Delay, s/veh		4.2	4.3		38.1	
Approach LOS		A	A		D	
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		60.0			60.0	15.0
Change Period (Y+Rc), s		6.3			6.3	6.2
Max Green Setting (Gmax), s		43.7			43.7	18.8
Max Q Clear Time (g_c+I1), s		0.0			0.0	8.2
Green Ext Time (p_c), s		0.0			0.0	0.8
Intersection Summary						
HCM 7th Control Delay, s/veh			6.9			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary
 3: CR 263 NB Off Ramp/CR 263 NB On Ramp & Maple Road

2254561; 716 Sports Fieldhouse

Existing_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑		↘	↘				
Traffic Volume (veh/h)	69	720	0	0	1067	28	52	0	568	0	0	0
Future Volume (veh/h)	69	720	0	0	1067	28	52	0	568	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1976	1900	0	0	1885	1796	1870	1976	1900			
Adj Flow Rate, veh/h	72	750	0	0	1111	29	54	0	592			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	0	0	0	1	7	2	0	0			
Cap, veh/h	231	2014	0	0	1988	52	652	0	613			
Arrive On Green	0.56	0.56	0.00	0.00	0.56	0.56	0.37	0.00	0.37			
Sat Flow, veh/h	521	3705	0	0	3659	93	1781	0	1675			
Grp Volume(v), veh/h	72	750	0	0	558	582	54	0	592			
Grp Sat Flow(s),veh/h/ln	521	1805	0	0	1791	1867	1781	0	1675			
Q Serve(g_s), s	16.5	18.6	0.0	0.0	32.0	32.0	3.2	0.0	55.5			
Cycle Q Clear(g_c), s	48.5	18.6	0.0	0.0	32.0	32.0	3.2	0.0	55.5			
Prop In Lane	1.00		0.00	0.00		0.05	1.00		1.00			
Lane Grp Cap(c), veh/h	231	2014	0	0	999	1041	652	0	613			
V/C Ratio(X)	0.31	0.37	0.00	0.00	0.56	0.56	0.08	0.00	0.97			
Avail Cap(c_a), veh/h	231	2014	0	0	999	1041	710	0	668			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	0.83	0.83	1.00	0.00	1.00			
Uniform Delay (d), s/veh	38.3	19.7	0.0	0.0	22.7	22.7	33.2	0.0	49.7			
Incr Delay (d2), s/veh	3.3	0.5	0.0	0.0	1.9	1.8	0.0	0.0	25.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.3	7.8	0.0	0.0	13.6	14.1	1.4	0.0	27.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.6	20.3	0.0	0.0	24.6	24.5	33.2	0.0	74.8			
LnGrp LOS	D	C			C	C	C		E			
Approach Vol, veh/h		822			1140			646				
Approach Delay, s/veh		22.1			24.6			71.3				
Approach LOS		C			C			E				
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		95.2		64.8		95.2						
Change Period (Y+Rc), s		6.0		* 6.2		6.0						
Max Green Setting (Gmax), s		84.0		* 64		84.0						
Max Q Clear Time (g_c+I1), s		50.5		57.5		0.0						
Green Ext Time (p_c), s		0.1		1.1		0.0						

Intersection Summary

HCM 7th Control Delay, s/veh	35.4
HCM 7th LOS	D

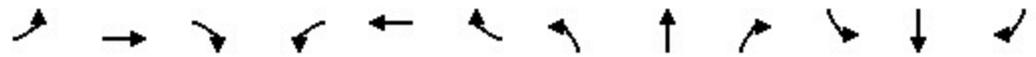
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
4: N Maplemere Rd & Maple Road

2254561; 716 Sports Fieldhouse

Existing_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1241	22	15	1028	45	19	13	13	113	14	48
Future Volume (veh/h)	25	1241	22	15	1028	45	19	13	13	113	14	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1900	1976	1885	1900	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	26	1293	23	16	1071	47	20	14	14	118	15	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	1	0	0	0	0	0	0	0
Cap, veh/h	424	2275	40	337	2111	93	135	91	61	349	48	158
Arrive On Green	0.05	0.63	0.63	0.02	0.60	0.60	0.12	0.12	0.12	0.00	0.12	0.12
Sat Flow, veh/h	1882	3629	65	1882	3495	153	469	733	495	1810	384	1281
Grp Volume(v), veh/h	26	643	673	16	549	569	48	0	0	118	0	65
Grp Sat Flow(s),veh/h/ln	1882	1805	1888	1882	1791	1858	1697	0	0	1810	0	1666
Q Serve(g_s), s	0.3	13.7	13.7	0.2	11.6	11.6	0.0	0.0	0.0	0.1	0.0	2.4
Cycle Q Clear(g_c), s	0.3	13.7	13.7	0.2	11.6	11.6	1.5	0.0	0.0	0.1	0.0	2.4
Prop In Lane	1.00		0.03	1.00		0.08	0.42		0.29	1.00		0.77
Lane Grp Cap(c), veh/h	424	1131	1184	337	1082	1122	287	0	0	349	0	206
V/C Ratio(X)	0.06	0.57	0.57	0.05	0.51	0.51	0.17	0.00	0.00	0.34	0.00	0.32
Avail Cap(c_a), veh/h	621	1131	1184	578	1082	1122	1064	0	0	619	0	1383
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.2	7.2	7.2	5.8	7.5	7.5	26.1	0.0	0.0	25.3	0.0	26.5
Incr Delay (d2), s/veh	0.1	2.1	2.0	0.1	1.7	1.6	0.3	0.0	0.0	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.0	4.1	0.1	3.5	3.6	0.7	0.0	0.0	1.6	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.2	9.2	9.2	5.9	9.2	9.1	26.4	0.0	0.0	25.9	0.0	27.3
LnGrp LOS	A	A	A	A	A	A	C			C		C
Approach Vol, veh/h	1342			1134			48			183		
Approach Delay, s/veh	9.1			9.1			26.4			26.4		
Approach LOS	A			A			C			C		
Timer - Assigned Phs	1	2	4		5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	46.5	13.2		8.0	45.0	0.0	13.2				
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	10.0	40.0	55.0		10.0	40.0	10.0	40.0				
Max Q Clear Time (g_c+I1), s	2.2	15.7	4.4		2.3	13.6	0.0	3.5				
Green Ext Time (p_c), s	0.0	5.5	0.2		0.0	4.5	0.0	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				10.6								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary
5: N Forest Road & Maple Road

2254561; 716 Sports Fieldhouse

Existing_PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1066	135	189	883	168	109	371	232	187	310	96
Future Volume (veh/h)	160	1066	135	189	883	168	109	371	232	187	310	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1885	1900	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	163	1088	138	193	901	171	111	379	237	191	316	98
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	2	0	0	1	0	1	0	0	1	1
Cap, veh/h	305	1367	596	275	1404	617	305	441	377	280	504	427
Arrive On Green	0.07	0.38	0.38	0.08	0.39	0.39	0.06	0.23	0.23	0.10	0.27	0.27
Sat Flow, veh/h	1810	3610	1575	1810	3610	1587	1810	1885	1610	1810	1885	1598
Grp Volume(v), veh/h	163	1088	138	193	901	171	111	379	237	191	316	98
Grp Sat Flow(s),veh/h/ln	1810	1805	1575	1810	1805	1587	1810	1885	1610	1810	1885	1598
Q Serve(g_s), s	5.5	27.3	6.1	6.5	20.7	7.5	4.7	19.6	13.4	7.9	15.0	4.9
Cycle Q Clear(g_c), s	5.5	27.3	6.1	6.5	20.7	7.5	4.7	19.6	13.4	7.9	15.0	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1367	596	275	1404	617	305	441	377	280	504	427
V/C Ratio(X)	0.53	0.80	0.23	0.70	0.64	0.28	0.36	0.86	0.63	0.68	0.63	0.23
Avail Cap(c_a), veh/h	366	1367	596	318	1404	617	385	716	611	300	716	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	28.1	21.5	22.2	25.3	21.3	27.5	37.3	35.0	27.1	32.8	29.1
Incr Delay (d2), s/veh	1.5	4.9	0.9	5.7	2.3	1.1	0.7	6.0	1.7	5.7	1.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	11.8	2.3	2.9	8.7	2.9	2.0	9.5	5.3	3.7	6.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.9	33.0	22.4	27.9	27.6	22.4	28.2	43.3	36.7	32.8	34.1	29.3
LnGrp LOS	C	C	C	C	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1389			1265			727			605	
Approach Delay, s/veh		30.5			26.9			38.9			32.9	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.6	45.0	10.5	33.6	11.6	46.0	13.9	30.2				
Change Period (Y+Rc), s	4.0	6.5	4.0	* 6.4	4.0	6.5	4.0	* 6.4				
Max Green Setting (Gmax), s	11.0	38.5	11.0	* 39	11.0	38.5	11.0	* 39				
Max Q Clear Time (g_c+I1), s	8.5	0.0	6.7	17.0	7.5	0.0	9.9	21.6				
Green Ext Time (p_c), s	0.1	0.0	0.1	1.4	0.1	0.0	0.1	2.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			31.3									
HCM 7th LOS			C									
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 7th Signalized Intersection Summary
 6: N Maplemere Road/Coventry Road & CR 263

2254561; 716 Sports Fieldhouse

Existing_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	789	32	41	607	43	65	30	50	126	58	311
Future Volume (veh/h)	121	789	32	41	607	43	65	30	50	126	58	311
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1976	1870	1826	1900	1900	1900	1885	1976	1976
Adj Flow Rate, veh/h	127	831	34	43	639	45	68	32	53	133	61	327
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	0	0	2	5	0	0	0	1	0	0
Cap, veh/h	151	1899	78	57	1645	116	122	58	152	230	106	288
Arrive On Green	0.08	0.54	0.54	0.03	0.49	0.49	0.10	0.10	0.10	0.18	0.18	0.18
Sat Flow, veh/h	1810	3507	143	1882	3368	237	1250	588	1546	1310	601	1637
Grp Volume(v), veh/h	127	424	441	43	337	347	100	0	53	194	0	327
Grp Sat Flow(s),veh/h/ln	1810	1791	1859	1882	1777	1828	1838	0	1546	1911	0	1637
Q Serve(g_s), s	12.8	26.3	26.3	4.2	22.1	22.2	9.6	0.0	5.9	17.2	0.0	32.5
Cycle Q Clear(g_c), s	12.8	26.3	26.3	4.2	22.1	22.2	9.6	0.0	5.9	17.2	0.0	32.5
Prop In Lane	1.00		0.08	1.00		0.13	0.68		1.00	0.69		1.00
Lane Grp Cap(c), veh/h	151	970	1007	57	868	893	180	0	152	336	0	288
V/C Ratio(X)	0.84	0.44	0.44	0.76	0.39	0.39	0.56	0.00	0.35	0.58	0.00	1.14
Avail Cap(c_a), veh/h	423	970	1007	185	868	893	323	0	272	336	0	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	83.6	25.5	25.5	89.1	29.9	29.9	79.6	0.0	77.9	70.0	0.0	76.3
Incr Delay (d2), s/veh	16.2	1.4	1.4	18.6	1.3	1.3	3.8	0.0	2.0	2.5	0.0	95.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	11.5	11.9	2.3	9.8	10.1	4.8	0.0	2.5	8.7	0.0	21.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	99.8	26.9	26.9	107.6	31.2	31.1	83.4	0.0	79.9	72.4	0.0	171.4
LnGrp LOS	F	C	C	F	C	C	F		E	E		F
Approach Vol, veh/h		992			727			153			521	
Approach Delay, s/veh		36.2			35.7			82.2			134.6	
Approach LOS		D			D			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.2	97.2		25.6	12.4	107.0		40.0				
Change Period (Y+Rc), s	6.8	6.8		7.5	6.8	6.8		7.5				
Max Green Setting (Gmax), s	43.2	48.2		32.5	18.2	73.2		32.5				
Max Q Clear Time (g_c+I1), s	14.8	0.0		11.6	6.2	0.0		34.5				
Green Ext Time (p_c), s	0.6	0.0		0.7	0.1	0.0		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh				60.4								
HCM 7th LOS				E								

Notes
 User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
 1: Flint Road & Maple Road

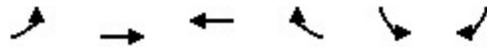
2254561; 716 Sports Fieldhouse
 Existing_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	552	190	125	663	18	144	22	24	25	33	42
Future Volume (veh/h)	22	552	190	125	663	18	144	22	24	25	33	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.98		0.98	0.97		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1945	1885	1900	1900	1961	1693	1900	1841	1837	1870
Adj Flow Rate, veh/h	25	627	216	142	753	20	164	25	27	28	38	48
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	1	2	1	0	0	1	14	0	4	9	2
Cap, veh/h	375	1651	756	427	1806	48	371	156	168	291	92	116
Arrive On Green	0.02	0.46	0.46	0.06	0.50	0.50	0.10	0.21	0.21	0.02	0.13	0.13
Sat Flow, veh/h	1739	3582	1640	1795	3592	95	1867	736	795	1753	723	913
Grp Volume(v), veh/h	25	627	216	142	378	395	164	0	52	28	0	86
Grp Sat Flow(s),veh/h/ln	1739	1791	1640	1795	1805	1882	1867	0	1531	1753	0	1636
Q Serve(g_s), s	0.6	9.6	6.8	3.3	11.0	11.0	6.1	0.0	2.3	1.2	0.0	4.1
Cycle Q Clear(g_c), s	0.6	9.6	6.8	3.3	11.0	11.0	6.1	0.0	2.3	1.2	0.0	4.1
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.52	1.00		0.56
Lane Grp Cap(c), veh/h	375	1651	756	427	908	947	371	0	324	291	0	209
V/C Ratio(X)	0.07	0.38	0.29	0.33	0.42	0.42	0.44	0.00	0.16	0.10	0.00	0.41
Avail Cap(c_a), veh/h	567	1651	756	550	908	947	416	0	717	481	0	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.7	14.7	14.0	10.5	13.1	13.1	26.3	0.0	26.9	30.7	0.0	33.6
Incr Delay (d2), s/veh	0.1	0.7	1.0	0.5	1.4	1.4	0.8	0.0	0.2	0.1	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.6	0.2	1.1	4.2	4.3	2.7	0.0	0.9	0.5	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.8	15.4	15.0	10.9	14.5	14.4	27.1	0.0	27.1	30.9	0.0	34.9
LnGrp LOS	B	B	B	B	B	B	C		C	C		C
Approach Vol, veh/h		868			915			216				114
Approach Delay, s/veh		15.2			13.9			27.1				33.9
Approach LOS		B			B			C				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	45.0	13.0	16.5	5.8	48.5	5.9	23.5				
Change Period (Y+Rc), s	4.0	6.4	5.0	5.8	4.0	6.4	4.0	5.8				
Max Green Setting (Gmax), s	11.0	38.6	10.0	39.2	11.0	38.6	11.0	39.2				
Max Q Clear Time (g_c+I1), s	5.3	0.0	8.1	6.1	2.6	0.0	3.2	4.3				
Green Ext Time (p_c), s	0.2	0.0	0.1	0.3	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			16.9									
HCM 7th LOS			B									

HCM 7th Signalized Intersection Summary
 2: Maple Road & CR 263 SB Ramps

2254561; 716 Sports Fieldhouse
 Existing_SAT



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	590	701	176	7	105
Future Volume (veh/h)	11	590	701	176	7	105
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1699	1885	1885	1961	1976	1976
Adj Flow Rate, veh/h	12	670	797	200	8	119
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	18	1	1	1	0	0
Cap, veh/h	435	2639	2639	1215	182	162
Arrive On Green	0.74	0.74	0.74	0.74	0.10	0.10
Sat Flow, veh/h	512	3676	3676	1649	1882	1675
Grp Volume(v), veh/h	12	670	797	200	8	119
Grp Sat Flow(s),veh/h/ln	512	1791	1791	1649	1882	1675
Q Serve(g_s), s	0.6	4.5	5.6	2.7	0.3	5.2
Cycle Q Clear(g_c), s	6.3	4.5	5.6	2.7	0.3	5.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	435	2639	2639	1215	182	162
V/C Ratio(X)	0.03	0.25	0.30	0.16	0.04	0.74
Avail Cap(c_a), veh/h	435	2639	2639	1215	472	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.96	0.96	1.00	1.00
Uniform Delay (d), s/veh	4.4	3.2	3.3	3.0	30.7	33.0
Incr Delay (d2), s/veh	0.1	0.2	0.3	0.3	0.1	8.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	1.1	0.5	0.1	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.5	3.4	3.6	3.2	30.9	41.9
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		682	997		127	
Approach Delay, s/veh		3.4	3.5		41.2	
Approach LOS		A	A		D	
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		61.6			61.6	13.4
Change Period (Y+Rc), s		6.3			6.3	6.2
Max Green Setting (Gmax), s		43.7			43.7	18.8
Max Q Clear Time (g_c+I1), s		0.0			0.0	7.2
Green Ext Time (p_c), s		0.0			0.0	0.6
Intersection Summary						
HCM 7th Control Delay, s/veh			6.1			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary
 3: CR 263 NB Off Ramp/CR 263 NB On Ramp & Maple Road

2254561; 716 Sports Fieldhouse

Existing_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑		↘	↘				
Traffic Volume (veh/h)	80	517	0	0	830	16	47	1	326	0	0	0
Future Volume (veh/h)	80	517	0	0	830	16	47	1	326	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1976	1885	0	0	1900	1900	1811	1976	1870			
Adj Flow Rate, veh/h	89	574	0	0	922	18	52	1	362			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	0	1	0	0	0	0	6	0	2			
Cap, veh/h	410	2434	0	0	2461	48	402	1	390			
Arrive On Green	0.68	0.68	0.00	0.00	0.68	0.68	0.23	0.23	0.23			
Sat Flow, veh/h	629	3676	0	0	3716	71	1725	5	1671			
Grp Volume(v), veh/h	89	574	0	0	460	480	52	0	363			
Grp Sat Flow(s),veh/h/ln	629	1791	0	0	1805	1887	1725	0	1675			
Q Serve(g_s), s	9.9	8.6	0.0	0.0	15.3	15.3	3.3	0.0	29.7			
Cycle Q Clear(g_c), s	25.2	8.6	0.0	0.0	15.3	15.3	3.3	0.0	29.7			
Prop In Lane	1.00		0.00	0.00		0.04	1.00		1.00			
Lane Grp Cap(c), veh/h	410	2434	0	0	1227	1282	402	0	391			
V/C Ratio(X)	0.22	0.24	0.00	0.00	0.37	0.37	0.13	0.00	0.93			
Avail Cap(c_a), veh/h	410	2434	0	0	1227	1282	663	0	644			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	0.86	0.86	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.1	8.6	0.0	0.0	9.6	9.6	42.4	0.0	52.5			
Incr Delay (d2), s/veh	1.2	0.2	0.0	0.0	0.8	0.7	0.1	0.0	9.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	3.1	0.0	0.0	5.7	6.0	1.5	0.0	13.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.2	8.8	0.0	0.0	10.4	10.4	42.5	0.0	61.8			
LnGrp LOS	B	A			B	B	D		E			
Approach Vol, veh/h		663			940			415				
Approach Delay, s/veh		9.8			10.4			59.4				
Approach LOS		A			B			E				
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		101.1		38.9		101.1						
Change Period (Y+Rc), s		6.0		* 6.2		6.0						
Max Green Setting (Gmax), s		74.0		* 54		74.0						
Max Q Clear Time (g_c+I1), s		27.2		31.7		0.0						
Green Ext Time (p_c), s		0.1		1.0		0.0						
Intersection Summary												
HCM 7th Control Delay, s/veh				20.3								
HCM 7th LOS				C								
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

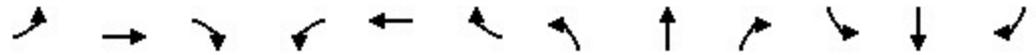
HCM 7th Signalized Intersection Summary
4: N Maplemere Rd & Maple Road

2254561; 716 Sports Fieldhouse
Existing_SAT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Traffic Volume (veh/h)	88	729	26	9	736	90	13	10	12	129	9	97
Future Volume (veh/h)	88	729	26	9	736	90	13	10	12	129	9	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1885	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	100	828	30	10	836	102	15	11	14	147	10	110
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	1	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	545	2281	83	496	1829	223	103	74	58	299	17	187
Arrive On Green	0.10	0.65	0.65	0.02	0.56	0.56	0.13	0.13	0.13	0.00	0.13	0.13
Sat Flow, veh/h	1882	3525	128	1882	3237	395	265	589	460	1810	135	1485
Grp Volume(v), veh/h	100	421	437	10	466	472	40	0	0	147	0	120
Grp Sat Flow(s),veh/h/ln	1882	1791	1862	1882	1805	1827	1314	0	0	1810	0	1620
Q Serve(g_s), s	1.2	7.7	7.7	0.2	10.7	10.7	0.1	0.0	0.0	0.1	0.0	5.0
Cycle Q Clear(g_c), s	1.2	7.7	7.7	0.2	10.7	10.7	5.0	0.0	0.0	0.1	0.0	5.0
Prop In Lane	1.00		0.07	1.00		0.22	0.37		0.35	1.00		0.92
Lane Grp Cap(c), veh/h	545	1159	1205	496	1020	1032	235	0	0	299	0	204
V/C Ratio(X)	0.18	0.36	0.36	0.02	0.46	0.46	0.17	0.00	0.00	0.49	0.00	0.59
Avail Cap(c_a), veh/h	628	1159	1205	733	1020	1032	932	0	0	552	0	1259
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.9	5.8	5.8	6.3	9.0	9.0	27.7	0.0	0.0	28.8	0.0	29.2
Incr Delay (d2), s/veh	0.2	0.9	0.8	0.0	1.5	1.5	0.3	0.0	0.0	1.3	0.0	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.1	2.2	0.0	3.6	3.6	0.6	0.0	0.0	2.4	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.1	6.6	6.6	6.3	10.5	10.5	28.0	0.0	0.0	30.0	0.0	31.9
LnGrp LOS	A	A	A	A	B	B	C			C		C
Approach Vol, veh/h		958			948			40			267	
Approach Delay, s/veh		6.5			10.5			28.0			30.9	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.1	50.8		13.9	11.9	45.0	0.0	13.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	10.0	40.0		55.0	10.0	40.0	10.0	40.0				
Max Q Clear Time (g_c+I1), s	2.2	9.7		7.0	3.2	12.7	0.0	7.0				
Green Ext Time (p_c), s	0.0	3.2		0.5	0.1	3.6	0.0	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				11.5								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary
 5: N Forest Road & Maple Road

2254561; 716 Sports Fieldhouse
 Existing_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	666	85	140	671	90	74	176	135	104	206	90
Future Volume (veh/h)	119	666	85	140	671	90	74	176	135	104	206	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1885	1900	1900	1900	1900	1885	1900	1900	1885
Adj Flow Rate, veh/h	127	709	90	149	714	96	79	187	144	111	219	96
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	0	1	0	0	0	0	1	0	0	1
Cap, veh/h	430	1674	751	437	1715	763	237	269	225	267	305	255
Arrive On Green	0.06	0.47	0.47	0.07	0.48	0.48	0.05	0.14	0.14	0.07	0.16	0.16
Sat Flow, veh/h	1810	3582	1607	1795	3610	1607	1810	1900	1587	1810	1900	1589
Grp Volume(v), veh/h	127	709	90	149	714	96	79	187	144	111	219	96
Grp Sat Flow(s),veh/h/ln	1810	1791	1607	1795	1805	1607	1810	1900	1587	1810	1900	1589
Q Serve(g_s), s	2.9	10.8	2.6	3.5	10.7	2.7	3.0	7.7	7.1	4.2	9.0	4.4
Cycle Q Clear(g_c), s	2.9	10.8	2.6	3.5	10.7	2.7	3.0	7.7	7.1	4.2	9.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	430	1674	751	437	1715	763	237	269	225	267	305	255
V/C Ratio(X)	0.30	0.42	0.12	0.34	0.42	0.13	0.33	0.69	0.64	0.42	0.72	0.38
Avail Cap(c_a), veh/h	565	1674	751	557	1715	763	384	890	744	380	890	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	14.6	12.4	10.7	14.1	12.1	28.4	33.7	33.4	27.6	32.8	30.9
Incr Delay (d2), s/veh	0.4	0.8	0.3	0.5	0.7	0.3	0.8	3.2	3.0	1.0	3.1	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.0	0.9	1.2	3.9	1.0	1.3	3.7	2.8	1.8	4.3	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.1	15.4	12.7	11.1	14.9	12.4	29.2	36.9	36.4	28.6	35.9	31.8
LnGrp LOS	B	B	B	B	B	B	C	D	D	C	D	C
Approach Vol, veh/h		926			959			410			426	
Approach Delay, s/veh		14.5			14.1			35.2			33.1	
Approach LOS		B			B			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	45.0	8.3	19.6	8.8	45.6	9.9	18.1				
Change Period (Y+Rc), s	4.0	6.5	4.0	* 6.4	4.0	6.5	4.0	* 6.4				
Max Green Setting (Gmax), s	11.0	38.5	11.0	* 39	11.0	38.5	11.0	* 39				
Max Q Clear Time (g_c+I1), s	5.5	0.0	5.0	11.0	4.9	0.0	6.2	9.7				
Green Ext Time (p_c), s	0.2	0.0	0.1	1.1	0.2	0.0	0.1	1.2				

Intersection Summary												
HCM 7th Control Delay, s/veh											20.4	
HCM 7th LOS											C	

Notes
 * HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
 6: N Maplemere Road/Coventry Road & CR 263

2254561; 716 Sports Fieldhouse
 Existing_SAT



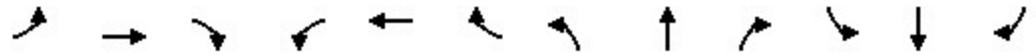
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	490	52	54	469	11	44	10	56	16	15	52
Future Volume (veh/h)	41	490	52	54	469	11	44	10	56	16	15	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1900	1976	1885	1767	1900	1900	1900	1900	1976	1976
Adj Flow Rate, veh/h	43	516	55	57	494	12	46	11	59	17	16	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	1	0	0	1	9	0	0	0	0	0	0
Cap, veh/h	57	2234	237	73	2470	60	113	27	119	46	43	73
Arrive On Green	0.03	0.68	0.68	0.04	0.69	0.69	0.08	0.08	0.08	0.05	0.05	0.05
Sat Flow, veh/h	1781	3267	347	1882	3574	87	1474	352	1553	992	934	1577
Grp Volume(v), veh/h	43	282	289	57	247	259	57	0	59	33	0	55
Grp Sat Flow(s),veh/h/ln	1781	1791	1823	1882	1791	1870	1826	0	1553	1926	0	1577
Q Serve(g_s), s	4.4	10.9	11.0	5.6	9.2	9.2	5.5	0.0	6.7	3.1	0.0	6.4
Cycle Q Clear(g_c), s	4.4	10.9	11.0	5.6	9.2	9.2	5.5	0.0	6.7	3.1	0.0	6.4
Prop In Lane	1.00		0.19	1.00		0.05	0.81		1.00	0.52		1.00
Lane Grp Cap(c), veh/h	57	1225	1246	73	1238	1292	139	0	119	89	0	73
V/C Ratio(X)	0.76	0.23	0.23	0.78	0.20	0.20	0.41	0.00	0.50	0.37	0.00	0.75
Avail Cap(c_a), veh/h	416	1225	1246	185	1238	1292	321	0	273	338	0	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	88.9	11.0	11.0	88.1	10.2	10.2	81.5	0.0	82.0	85.6	0.0	87.2
Incr Delay (d2), s/veh	25.1	0.4	0.4	15.9	0.4	0.3	2.7	0.0	4.5	2.5	0.0	14.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	4.4	4.5	3.0	3.7	3.8	2.7	0.0	2.9	1.6	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.0	11.4	11.4	104.0	10.6	10.6	84.2	0.0	86.6	88.2	0.0	101.7
LnGrp LOS	F	B	B	F	B	B	F		F	F		F
Approach Vol, veh/h		614			563			116				88
Approach Delay, s/veh		18.6			20.1			85.4				96.6
Approach LOS		B			C			F				F
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	134.6		21.6	14.0	133.3		16.1				
Change Period (Y+Rc), s	6.8	6.8		7.5	6.8	6.8		7.5				
Max Green Setting (Gmax), s	43.2	48.2		32.5	18.2	73.2		32.5				
Max Q Clear Time (g_c+I1), s	6.4	0.0		8.7	7.6	0.0		8.4				
Green Ext Time (p_c), s	0.2	0.0		0.5	0.1	0.0		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh		29.8
HCM 7th LOS		C

Notes
 User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
 1: Flint Road & Maple Road

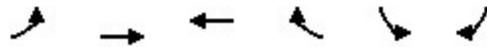
2254561; 716 Sports Fieldhouse
 No-Build_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	633	314	163	835	58	191	86	23	150	224	133
Future Volume (veh/h)	51	633	314	163	835	58	191	86	23	150	224	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1961	1885	1885	1870	1945	1604	1900	1900	1868	1856
Adj Flow Rate, veh/h	52	646	320	166	852	59	195	88	23	153	229	136
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	1	1	1	2	2	20	0	0	7	3
Cap, veh/h	271	1379	630	349	1446	100	287	319	83	482	257	153
Arrive On Green	0.03	0.38	0.38	0.07	0.43	0.43	0.10	0.26	0.26	0.08	0.24	0.24
Sat Flow, veh/h	1810	3610	1648	1795	3397	235	1853	1220	319	1810	1088	646
Grp Volume(v), veh/h	52	646	320	166	449	462	195	0	111	153	0	365
Grp Sat Flow(s),veh/h/ln	1810	1805	1648	1795	1791	1842	1853	0	1539	1810	0	1735
Q Serve(g_s), s	1.8	13.6	15.0	5.4	19.4	19.4	7.9	0.0	5.8	6.4	0.0	20.6
Cycle Q Clear(g_c), s	1.8	13.6	15.0	5.4	19.4	19.4	7.9	0.0	5.8	6.4	0.0	20.6
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.21	1.00		0.37
Lane Grp Cap(c), veh/h	271	1379	630	349	762	784	287	0	402	482	0	410
V/C Ratio(X)	0.19	0.47	0.51	0.48	0.59	0.59	0.68	0.00	0.28	0.32	0.00	0.89
Avail Cap(c_a), veh/h	414	1379	630	412	762	784	289	0	597	529	0	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	23.5	23.9	17.0	22.2	22.2	27.6	0.0	29.7	25.7	0.0	37.3
Incr Delay (d2), s/veh	0.3	1.1	2.9	1.0	3.3	3.2	6.2	0.0	0.4	0.4	0.0	8.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.6	6.2	2.1	8.2	8.4	3.9	0.0	2.2	2.8	0.0	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.5	24.6	26.8	18.0	25.6	25.5	33.8	0.0	30.1	26.0	0.0	45.9
LnGrp LOS	B	C	C	B	C	C	C		C	C		D
Approach Vol, veh/h		1018			1077			306			518	
Approach Delay, s/veh		25.1			24.4			32.5			40.0	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	45.0	14.9	29.7	7.1	49.4	12.4	32.2				
Change Period (Y+Rc), s	4.0	6.4	5.0	5.8	4.0	6.4	4.0	5.8				
Max Green Setting (Gmax), s	11.0	38.6	10.0	39.2	11.0	38.6	11.0	39.2				
Max Q Clear Time (g_c+I1), s	7.4	0.0	9.9	22.6	3.8	0.0	8.4	7.8				
Green Ext Time (p_c), s	0.2	0.0	0.0	1.3	0.0	0.0	0.1	0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			28.2									
HCM 7th LOS			C									

HCM 7th Signalized Intersection Summary
 2: Maple Road & CR 263 SB Ramps

2254561; 716 Sports Fieldhouse
 No-Build_PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	801	913	257	24	143
Future Volume (veh/h)	5	801	913	257	24	143
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1976	1900	1885	1961	1976	1961
Adj Flow Rate, veh/h	5	834	951	268	25	149
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	0	1
Cap, veh/h	390	2571	2551	1169	228	201
Arrive On Green	0.71	0.71	0.71	0.71	0.12	0.12
Sat Flow, veh/h	483	3705	3676	1642	1882	1662
Grp Volume(v), veh/h	5	834	951	268	25	149
Grp Sat Flow(s),veh/h/ln	483	1805	1791	1642	1882	1662
Q Serve(g_s), s	0.3	6.5	7.8	4.2	0.9	6.5
Cycle Q Clear(g_c), s	8.1	6.5	7.8	4.2	0.9	6.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	390	2571	2551	1169	228	201
V/C Ratio(X)	0.01	0.32	0.37	0.23	0.11	0.74
Avail Cap(c_a), veh/h	390	2571	2551	1169	472	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.82	0.82	1.00	1.00
Uniform Delay (d), s/veh	5.8	4.0	4.2	3.7	29.4	31.8
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.4	0.3	7.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.4	1.7	0.9	0.4	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.9	4.3	4.6	4.1	29.7	39.2
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		839	1219		174	
Approach Delay, s/veh		4.3	4.5		37.8	
Approach LOS		A	A		D	
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		59.7			59.7	15.3
Change Period (Y+Rc), s		6.3			6.3	6.2
Max Green Setting (Gmax), s		43.7			43.7	18.8
Max Q Clear Time (g_c+I1), s		0.0			0.0	8.5
Green Ext Time (p_c), s		0.0			0.0	0.8
Intersection Summary						
HCM 7th Control Delay, s/veh			7.0			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary
 3: CR 263 NB Off Ramp/CR 263 NB On Ramp & Maple Road

2254561; 716 Sports Fieldhouse

No-Build_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑			↑↑		↖	↗				
Traffic Volume (veh/h)	72	753	0	0	1116	29	54	0	594	0	0	0
Future Volume (veh/h)	72	753	0	0	1116	29	54	0	594	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1976	1900	0	0	1885	1796	1870	1976	1900			
Adj Flow Rate, veh/h	75	784	0	0	1162	30	56	0	619			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	0	0	0	1	7	2	0	0			
Cap, veh/h	205	1961	0	0	1937	50	678	0	637			
Arrive On Green	0.54	0.54	0.00	0.00	0.54	0.54	0.38	0.00	0.38			
Sat Flow, veh/h	496	3705	0	0	3660	92	1781	0	1675			
Grp Volume(v), veh/h	75	784	0	0	583	609	56	0	619			
Grp Sat Flow(s),veh/h/ln	496	1805	0	0	1791	1867	1781	0	1675			
Q Serve(g_s), s	19.3	20.3	0.0	0.0	35.3	35.3	3.2	0.0	58.1			
Cycle Q Clear(g_c), s	54.7	20.3	0.0	0.0	35.3	35.3	3.2	0.0	58.1			
Prop In Lane	1.00		0.00	0.00		0.05	1.00		1.00			
Lane Grp Cap(c), veh/h	205	1961	0	0	973	1014	678	0	637			
V/C Ratio(X)	0.37	0.40	0.00	0.00	0.60	0.60	0.08	0.00	0.97			
Avail Cap(c_a), veh/h	205	1961	0	0	973	1014	710	0	668			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	0.80	0.80	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.3	21.3	0.0	0.0	24.8	24.8	31.7	0.0	48.7			
Incr Delay (d2), s/veh	4.8	0.6	0.0	0.0	2.2	2.1	0.0	0.0	26.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	8.6	0.0	0.0	15.1	15.7	1.4	0.0	28.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.1	21.9	0.0	0.0	27.0	26.9	31.7	0.0	75.5			
LnGrp LOS	D	C			C	C	C		E			
Approach Vol, veh/h		859			1192			675				
Approach Delay, s/veh		24.2			26.9			71.9				
Approach LOS		C			C			E				
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		92.9		67.1		92.9						
Change Period (Y+Rc), s		6.0		* 6.2		6.0						
Max Green Setting (Gmax), s		84.0		* 64		84.0						
Max Q Clear Time (g_c+I1), s		56.7		60.1		0.0						
Green Ext Time (p_c), s		0.1		0.8		0.0						

Intersection Summary

HCM 7th Control Delay, s/veh	37.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
4: N Maplemere Rd & Maple Road

2254561; 716 Sports Fieldhouse
No-Build_PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Traffic Volume (veh/h)	26	1298	23	16	1075	47	20	14	14	118	15	50
Future Volume (veh/h)	26	1298	23	16	1075	47	20	14	14	118	15	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1900	1900	1976	1885	1900	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	27	1352	24	17	1120	49	21	15	15	123	16	52
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	1	0	0	0	0	0	0	0
Cap, veh/h	408	2271	40	322	2108	92	134	91	62	349	49	158
Arrive On Green	0.05	0.63	0.63	0.02	0.60	0.60	0.12	0.12	0.12	0.00	0.12	0.12
Sat Flow, veh/h	1882	3629	64	1882	3496	153	461	738	499	1810	392	1275
Grp Volume(v), veh/h	27	672	704	17	574	595	51	0	0	123	0	68
Grp Sat Flow(s),veh/h/ln	1882	1805	1888	1882	1791	1858	1698	0	0	1810	0	1667
Q Serve(g_s), s	0.3	14.7	14.7	0.2	12.4	12.4	0.0	0.0	0.0	0.1	0.0	2.5
Cycle Q Clear(g_c), s	0.3	14.7	14.7	0.2	12.4	12.4	1.6	0.0	0.0	0.1	0.0	2.5
Prop In Lane	1.00		0.03	1.00		0.08	0.41		0.29	1.00		0.76
Lane Grp Cap(c), veh/h	408	1130	1182	322	1080	1120	287	0	0	349	0	206
V/C Ratio(X)	0.07	0.59	0.60	0.05	0.53	0.53	0.18	0.00	0.00	0.35	0.00	0.33
Avail Cap(c_a), veh/h	603	1130	1182	560	1080	1120	1062	0	0	619	0	1382
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.3	7.4	7.4	6.0	7.7	7.7	26.2	0.0	0.0	25.4	0.0	26.6
Incr Delay (d2), s/veh	0.1	2.3	2.2	0.1	1.9	1.8	0.3	0.0	0.0	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.3	4.5	0.1	3.7	3.9	0.7	0.0	0.0	1.7	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.4	9.7	9.6	6.1	9.6	9.5	26.5	0.0	0.0	26.0	0.0	27.5
LnGrp LOS	A	A	A	A	A	A	C			C		C
Approach Vol, veh/h	1403			1186			51			191		
Approach Delay, s/veh	9.6			9.5			26.5			26.6		
Approach LOS	A			A			C			C		
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	46.5		13.2	8.1	45.0	0.0	13.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	10.0	40.0		55.0	10.0	40.0	10.0	40.0				
Max Q Clear Time (g_c+I1), s	2.2	16.7		4.5	2.3	14.4	0.0	3.6				
Green Ext Time (p_c), s	0.0	5.9		0.2	0.0	4.7	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				11.0								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary
 5: N Forest Road & Maple Road

2254561; 716 Sports Fieldhouse
 No-Build_PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	1115	141	198	923	176	114	388	243	196	324	100
Future Volume (veh/h)	167	1115	141	198	923	176	114	388	243	196	324	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1885	1900	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	170	1138	144	202	942	180	116	396	248	200	331	102
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	2	0	0	1	0	1	0	0	1	1
Cap, veh/h	291	1334	582	263	1374	604	306	457	390	281	521	441
Arrive On Green	0.08	0.37	0.37	0.09	0.38	0.38	0.07	0.24	0.24	0.10	0.28	0.28
Sat Flow, veh/h	1810	3610	1574	1810	3610	1587	1810	1885	1610	1810	1885	1598
Grp Volume(v), veh/h	170	1138	144	202	942	180	116	396	248	200	331	102
Grp Sat Flow(s),veh/h/ln	1810	1805	1574	1810	1805	1587	1810	1885	1610	1810	1885	1598
Q Serve(g_s), s	6.0	30.2	6.6	7.1	22.8	8.3	4.9	21.0	14.4	8.3	16.1	5.1
Cycle Q Clear(g_c), s	6.0	30.2	6.6	7.1	22.8	8.3	4.9	21.0	14.4	8.3	16.1	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	1334	582	263	1374	604	306	457	390	281	521	441
V/C Ratio(X)	0.58	0.85	0.25	0.77	0.69	0.30	0.38	0.87	0.64	0.71	0.64	0.23
Avail Cap(c_a), veh/h	343	1334	582	295	1374	604	379	699	597	293	699	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	30.2	22.8	23.6	27.0	22.5	27.5	37.9	35.3	27.4	33.1	29.1
Incr Delay (d2), s/veh	1.8	7.1	1.0	10.3	2.8	1.3	0.8	7.3	1.7	7.5	1.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	13.5	2.6	3.5	9.7	3.2	2.2	10.4	5.7	4.1	7.3	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.8	37.3	23.8	34.0	29.9	23.8	28.3	45.2	37.1	34.8	34.4	29.4
LnGrp LOS	C	D	C	C	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1452			1324			760			633	
Approach Delay, s/veh		34.3			29.7			40.0			33.7	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	45.0	10.8	35.2	12.1	46.1	14.3	31.6				
Change Period (Y+Rc), s	4.0	6.5	4.0	* 6.4	4.0	6.5	4.0	* 6.4				
Max Green Setting (Gmax), s	11.0	38.5	11.0	* 39	11.0	38.5	11.0	* 39				
Max Q Clear Time (g_c+I1), s	9.1	0.0	6.9	18.1	8.0	0.0	10.3	23.0				
Green Ext Time (p_c), s	0.1	0.0	0.1	1.5	0.1	0.0	0.0	2.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			33.8									
HCM 7th LOS			C									
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 7th Signalized Intersection Summary
 6: N Maplemere Road/Coventry Road & CR 263

2254561; 716 Sports Fieldhouse
 No-Build_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	825	33	43	635	45	68	31	52	132	61	325
Future Volume (veh/h)	127	825	33	43	635	45	68	31	52	132	61	325
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1976	1870	1826	1900	1900	1900	1885	1976	1976
Adj Flow Rate, veh/h	134	868	35	45	668	47	72	33	55	139	64	342
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	0	0	2	5	0	0	0	1	0	0
Cap, veh/h	158	1889	76	59	1625	114	126	58	155	230	106	288
Arrive On Green	0.09	0.54	0.54	0.03	0.48	0.48	0.10	0.10	0.10	0.18	0.18	0.18
Sat Flow, veh/h	1810	3509	141	1882	3368	237	1260	577	1547	1308	602	1637
Grp Volume(v), veh/h	134	443	460	45	352	363	105	0	55	203	0	342
Grp Sat Flow(s),veh/h/ln	1810	1791	1860	1882	1777	1828	1837	0	1547	1911	0	1637
Q Serve(g_s), s	13.5	28.1	28.1	4.4	23.7	23.7	10.1	0.0	6.1	18.1	0.0	32.5
Cycle Q Clear(g_c), s	13.5	28.1	28.1	4.4	23.7	23.7	10.1	0.0	6.1	18.1	0.0	32.5
Prop In Lane	1.00		0.08	1.00		0.13	0.69		1.00	0.68		1.00
Lane Grp Cap(c), veh/h	158	964	1001	59	857	882	184	0	155	336	0	288
V/C Ratio(X)	0.85	0.46	0.46	0.76	0.41	0.41	0.57	0.00	0.36	0.60	0.00	1.19
Avail Cap(c_a), veh/h	423	964	1001	185	857	882	323	0	272	336	0	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	83.2	26.2	26.2	88.9	30.9	30.9	79.5	0.0	77.7	70.3	0.0	76.3
Incr Delay (d2), s/veh	16.0	1.6	1.5	18.0	1.5	1.4	3.9	0.0	2.0	3.1	0.0	114.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	12.3	12.8	2.4	10.5	10.8	5.0	0.0	2.6	9.2	0.0	22.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	99.2	27.8	27.7	106.9	32.4	32.3	83.4	0.0	79.6	73.4	0.0	190.6
LnGrp LOS	F	C	C	F	C	C	F		E	E		F
Approach Vol, veh/h		1037			760			160				545
Approach Delay, s/veh		37.0			36.8			82.1				146.9
Approach LOS		D			D			F				F
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.9	96.1		26.0	12.6	106.4		40.0				
Change Period (Y+Rc), s	6.8	6.8		7.5	6.8	6.8		7.5				
Max Green Setting (Gmax), s	43.2	48.2		32.5	18.2	73.2		32.5				
Max Q Clear Time (g_c+I1), s	15.5	0.0		12.1	6.4	0.0		34.5				
Green Ext Time (p_c), s	0.6	0.0		0.7	0.1	0.0		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh				63.7								
HCM 7th LOS				E								

Notes
 User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
 1: Flint Road & Maple Road

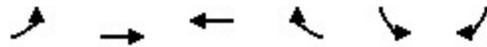
2254561; 716 Sports Fieldhouse
 No-Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	580	199	131	693	19	151	23	25	26	35	44
Future Volume (veh/h)	23	580	199	131	693	19	151	23	25	26	35	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.98		0.98	0.97		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1945	1885	1900	1900	1961	1693	1900	1841	1837	1870
Adj Flow Rate, veh/h	26	659	226	149	788	22	172	26	28	30	40	50
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	1	2	1	0	0	1	14	0	4	9	2
Cap, veh/h	359	1634	748	413	1793	50	375	159	171	293	94	117
Arrive On Green	0.02	0.46	0.46	0.07	0.50	0.50	0.10	0.22	0.22	0.02	0.13	0.13
Sat Flow, veh/h	1739	3582	1639	1795	3587	100	1867	737	794	1753	728	910
Grp Volume(v), veh/h	26	659	226	149	397	413	172	0	54	30	0	90
Grp Sat Flow(s),veh/h/ln	1739	1791	1639	1795	1805	1882	1867	0	1531	1753	0	1637
Q Serve(g_s), s	0.7	10.4	7.4	3.5	11.9	11.9	6.4	0.0	2.4	1.2	0.0	4.3
Cycle Q Clear(g_c), s	0.7	10.4	7.4	3.5	11.9	11.9	6.4	0.0	2.4	1.2	0.0	4.3
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.52	1.00		0.56
Lane Grp Cap(c), veh/h	359	1634	748	413	902	941	375	0	330	293	0	211
V/C Ratio(X)	0.07	0.40	0.30	0.36	0.44	0.44	0.46	0.00	0.16	0.10	0.00	0.43
Avail Cap(c_a), veh/h	547	1634	748	530	902	941	411	0	710	479	0	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.1	15.3	14.5	10.8	13.6	13.6	26.4	0.0	27.0	30.9	0.0	34.0
Incr Delay (d2), s/veh	0.1	0.7	1.0	0.5	1.6	1.5	0.9	0.0	0.2	0.2	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.9	2.8	1.2	4.6	4.7	2.9	0.0	0.9	0.5	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.2	16.1	15.5	11.3	15.1	15.0	27.3	0.0	27.2	31.0	0.0	35.3
LnGrp LOS	B	B	B	B	B	B	C		C	C		D
Approach Vol, veh/h		911			959			226				120
Approach Delay, s/veh		15.8			14.5			27.2				34.2
Approach LOS		B			B			C				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	45.0	13.4	16.7	5.8	48.7	6.0	24.0				
Change Period (Y+Rc), s	4.0	6.4	5.0	5.8	4.0	6.4	4.0	5.8				
Max Green Setting (Gmax), s	11.0	38.6	10.0	39.2	11.0	38.6	11.0	39.2				
Max Q Clear Time (g_c+I1), s	5.5	0.0	8.4	6.3	2.7	0.0	3.2	4.4				
Green Ext Time (p_c), s	0.2	0.0	0.1	0.3	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				17.4								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary
 2: Maple Road & CR 263 SB Ramps

2254561; 716 Sports Fieldhouse
 No-Build_SAT



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	619	733	184	7	110
Future Volume (veh/h)	12	619	733	184	7	110
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1699	1885	1885	1961	1976	1976
Adj Flow Rate, veh/h	14	703	833	209	8	125
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	18	1	1	1	0	0
Cap, veh/h	416	2623	2623	1208	190	169
Arrive On Green	0.73	0.73	0.73	0.73	0.10	0.10
Sat Flow, veh/h	491	3676	3676	1649	1882	1675
Grp Volume(v), veh/h	14	703	833	209	8	125
Grp Sat Flow(s),veh/h/ln	491	1791	1791	1649	1882	1675
Q Serve(g_s), s	0.8	4.9	6.1	2.9	0.3	5.4
Cycle Q Clear(g_c), s	6.8	4.9	6.1	2.9	0.3	5.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	416	2623	2623	1208	190	169
V/C Ratio(X)	0.03	0.27	0.32	0.17	0.04	0.74
Avail Cap(c_a), veh/h	416	2623	2623	1208	472	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	4.7	3.3	3.5	3.1	30.4	32.8
Incr Delay (d2), s/veh	0.1	0.2	0.3	0.3	0.1	8.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	1.2	0.6	0.1	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.8	3.6	3.8	3.4	30.6	41.4
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		717	1042		133	
Approach Delay, s/veh		3.6	3.7		40.8	
Approach LOS		A	A		D	
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		61.2			61.2	13.8
Change Period (Y+Rc), s		6.3			6.3	6.2
Max Green Setting (Gmax), s		43.7			43.7	18.8
Max Q Clear Time (g_c+I1), s		0.0			0.0	7.4
Green Ext Time (p_c), s		0.0			0.0	0.6
Intersection Summary						
HCM 7th Control Delay, s/veh			6.3			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary
 3: CR 263 NB Off Ramp/CR 263 NB On Ramp & Maple Road

2254561; 716 Sports Fieldhouse

No-Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗			↖↖		↖	↗				
Traffic Volume (veh/h)	84	542	0	0	868	17	49	1	341	0	0	0
Future Volume (veh/h)	84	542	0	0	868	17	49	1	341	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1976	1885	0	0	1900	1900	1811	1976	1870			
Adj Flow Rate, veh/h	93	602	0	0	964	19	54	1	379			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	0	1	0	0	0	0	6	0	2			
Cap, veh/h	384	2398	0	0	2424	48	420	1	407			
Arrive On Green	0.67	0.67	0.00	0.00	0.67	0.67	0.24	0.24	0.24			
Sat Flow, veh/h	605	3676	0	0	3715	71	1725	4	1671			
Grp Volume(v), veh/h	93	602	0	0	481	502	54	0	380			
Grp Sat Flow(s),veh/h/ln	605	1791	0	0	1805	1886	1725	0	1675			
Q Serve(g_s), s	11.5	9.3	0.0	0.0	16.8	16.8	3.4	0.0	31.1			
Cycle Q Clear(g_c), s	28.3	9.3	0.0	0.0	16.8	16.8	3.4	0.0	31.1			
Prop In Lane	1.00		0.00	0.00		0.04	1.00		1.00			
Lane Grp Cap(c), veh/h	384	2398	0	0	1208	1263	420	0	408			
V/C Ratio(X)	0.24	0.25	0.00	0.00	0.40	0.40	0.13	0.00	0.93			
Avail Cap(c_a), veh/h	384	2398	0	0	1208	1263	663	0	644			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	0.84	0.84	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.8	9.2	0.0	0.0	10.4	10.4	41.4	0.0	51.8			
Incr Delay (d2), s/veh	1.5	0.2	0.0	0.0	0.8	0.8	0.1	0.0	11.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	3.4	0.0	0.0	6.4	6.6	1.5	0.0	14.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.3	9.4	0.0	0.0	11.2	11.2	41.4	0.0	62.8			
LnGrp LOS	B	A			B	B	D		E			
Approach Vol, veh/h		695			983			434				
Approach Delay, s/veh		10.6			11.2			60.1				
Approach LOS		B			B			E				
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		99.7		40.3		99.7						
Change Period (Y+Rc), s		6.0		* 6.2		6.0						
Max Green Setting (Gmax), s		74.0		* 54		74.0						
Max Q Clear Time (g_c+I1), s		30.3		33.1		0.0						
Green Ext Time (p_c), s		0.1		1.0		0.0						

Intersection Summary

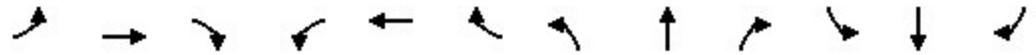
HCM 7th Control Delay, s/veh	21.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
4: N Maplemere Rd & Maple Road

2254561; 716 Sports Fieldhouse
No-Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	764	27	9	770	94	14	10	13	135	9	101
Future Volume (veh/h)	92	764	27	9	770	94	14	10	13	135	9	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1976	1885	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	105	868	31	10	875	107	16	11	15	153	10	115
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	1	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	531	2284	82	478	1825	223	102	70	56	296	16	187
Arrive On Green	0.10	0.65	0.65	0.02	0.56	0.56	0.13	0.13	0.13	0.00	0.13	0.13
Sat Flow, veh/h	1882	3527	126	1882	3236	396	252	556	449	1810	130	1490
Grp Volume(v), veh/h	105	441	458	10	488	494	42	0	0	153	0	125
Grp Sat Flow(s),veh/h/ln	1882	1791	1862	1882	1805	1827	1256	0	0	1810	0	1619
Q Serve(g_s), s	1.3	8.2	8.2	0.2	11.5	11.5	0.1	0.0	0.0	0.1	0.0	5.2
Cycle Q Clear(g_c), s	1.3	8.2	8.2	0.2	11.5	11.5	5.2	0.0	0.0	0.1	0.0	5.2
Prop In Lane	1.00		0.07	1.00		0.22	0.38		0.36	1.00		0.92
Lane Grp Cap(c), veh/h	531	1160	1206	478	1018	1030	228	0	0	296	0	204
V/C Ratio(X)	0.20	0.38	0.38	0.02	0.48	0.48	0.18	0.00	0.00	0.52	0.00	0.61
Avail Cap(c_a), veh/h	611	1160	1206	715	1018	1030	920	0	0	548	0	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	5.8	5.8	6.3	9.2	9.2	27.8	0.0	0.0	29.1	0.0	29.4
Incr Delay (d2), s/veh	0.2	0.9	0.9	0.0	1.6	1.6	0.4	0.0	0.0	1.4	0.0	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.3	2.3	0.0	3.8	3.9	0.6	0.0	0.0	2.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.3	6.8	6.8	6.4	10.9	10.8	28.1	0.0	0.0	30.5	0.0	32.3
LnGrp LOS	A	A	A	A	B	B	C			C		C
Approach Vol, veh/h	1004			992			42			278		
Approach Delay, s/veh	6.6			10.8			28.1			31.3		
Approach LOS	A			B			C			C		
Timer - Assigned Phs	1	2	4		5	6	7	8				
Phs Duration (G+Y+Rc), s	6.1	50.9	13.9		12.0	45.0	0.0	13.9				
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	10.0	40.0	55.0		10.0	40.0	10.0	40.0				
Max Q Clear Time (g_c+I1), s	2.2	10.2	7.2		3.3	13.5	0.0	7.2				
Green Ext Time (p_c), s	0.0	3.4	0.5		0.1	3.8	0.0	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				11.8								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary
 5: N Forest Road & Maple Road

2254561; 716 Sports Fieldhouse
 No-Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	696	89	146	702	94	77	184	141	109	215	94
Future Volume (veh/h)	124	696	89	146	702	94	77	184	141	109	215	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1885	1900	1900	1900	1900	1885	1900	1900	1885
Adj Flow Rate, veh/h	132	740	95	155	747	100	82	196	150	116	229	100
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	0	1	0	0	0	0	1	0	0	1
Cap, veh/h	415	1653	741	423	1695	754	238	277	232	269	315	264
Arrive On Green	0.06	0.46	0.46	0.07	0.47	0.47	0.05	0.15	0.15	0.07	0.17	0.17
Sat Flow, veh/h	1810	3582	1607	1795	3610	1607	1810	1900	1588	1810	1900	1589
Grp Volume(v), veh/h	132	740	95	155	747	100	82	196	150	116	229	100
Grp Sat Flow(s),veh/h/ln	1810	1791	1607	1795	1805	1607	1810	1900	1588	1810	1900	1589
Q Serve(g_s), s	3.1	11.7	2.8	3.7	11.5	2.9	3.2	8.2	7.4	4.5	9.5	4.7
Cycle Q Clear(g_c), s	3.1	11.7	2.8	3.7	11.5	2.9	3.2	8.2	7.4	4.5	9.5	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	1653	741	423	1695	754	238	277	232	269	315	264
V/C Ratio(X)	0.32	0.45	0.13	0.37	0.44	0.13	0.34	0.71	0.65	0.43	0.73	0.38
Avail Cap(c_a), veh/h	544	1653	741	536	1695	754	380	879	735	375	879	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.2	15.3	12.9	11.2	14.8	12.5	28.4	33.9	33.6	27.6	33.0	31.0
Incr Delay (d2), s/veh	0.4	0.9	0.4	0.5	0.8	0.4	0.9	3.3	3.0	1.1	3.2	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.4	1.0	1.3	4.3	1.1	1.4	3.9	3.0	1.9	4.5	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.6	16.1	13.2	11.7	15.6	12.9	29.3	37.2	36.6	28.7	36.2	31.9
LnGrp LOS	B	B	B	B	B	B	C	D	D	C	D	C
Approach Vol, veh/h		967			1002			428			445	
Approach Delay, s/veh		15.2			14.7			35.5			33.3	
Approach LOS		B			B			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	45.0	8.5	20.2	9.1	45.7	10.1	18.6				
Change Period (Y+Rc), s	4.0	6.5	4.0	* 6.4	4.0	6.5	4.0	* 6.4				
Max Green Setting (Gmax), s	11.0	38.5	11.0	* 39	11.0	38.5	11.0	* 39				
Max Q Clear Time (g_c+I1), s	5.7	0.0	5.2	11.5	5.1	0.0	6.5	10.2				
Green Ext Time (p_c), s	0.2	0.0	0.1	1.2	0.2	0.0	0.1	1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh				20.9								
HCM 7th LOS				C								

Notes
 * HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
 6: N Maplemere Road/Coventry Road & CR 263

2254561; 716 Sports Fieldhouse

No-Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	512	54	56	490	12	46	10	59	17	16	54
Future Volume (veh/h)	43	512	54	56	490	12	46	10	59	17	16	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1900	1976	1885	1767	1900	1900	1900	1900	1976	1976
Adj Flow Rate, veh/h	45	539	57	59	516	13	48	11	62	18	17	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	1	0	0	1	9	0	0	0	0	0	0
Cap, veh/h	59	2222	234	76	2451	62	116	27	121	47	45	75
Arrive On Green	0.03	0.68	0.68	0.04	0.69	0.69	0.08	0.08	0.08	0.05	0.05	0.05
Sat Flow, veh/h	1781	3269	345	1882	3570	90	1485	340	1554	991	936	1580
Grp Volume(v), veh/h	45	295	301	59	259	270	59	0	62	35	0	57
Grp Sat Flow(s),veh/h/ln	1781	1791	1823	1882	1791	1869	1826	0	1554	1926	0	1580
Q Serve(g_s), s	4.6	11.7	11.7	5.7	9.8	9.8	5.7	0.0	7.1	3.3	0.0	6.6
Cycle Q Clear(g_c), s	4.6	11.7	11.7	5.7	9.8	9.8	5.7	0.0	7.1	3.3	0.0	6.6
Prop In Lane	1.00		0.19	1.00		0.05	0.81		1.00	0.51		1.00
Lane Grp Cap(c), veh/h	59	1217	1239	76	1230	1283	142	0	121	92	0	75
V/C Ratio(X)	0.76	0.24	0.24	0.78	0.21	0.21	0.41	0.00	0.51	0.38	0.00	0.76
Avail Cap(c_a), veh/h	416	1217	1239	185	1230	1283	321	0	273	338	0	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	88.7	11.4	11.4	88.0	10.6	10.6	81.3	0.0	81.9	85.5	0.0	87.0
Incr Delay (d2), s/veh	24.3	0.5	0.5	15.6	0.4	0.4	2.7	0.0	4.7	2.6	0.0	14.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	4.7	4.8	3.1	3.9	4.1	2.8	0.0	3.0	1.7	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	113.0	11.8	11.8	103.6	11.0	11.0	84.0	0.0	86.6	88.1	0.0	101.4
LnGrp LOS	F	B	B	F	B	B	F		F	F		F
Approach Vol, veh/h	641		588				121		92			
Approach Delay, s/veh	18.9		20.3				85.3		96.3			
Approach LOS	B		C				F		F			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	12.9	133.8	21.9		14.2	132.5	16.3					
Change Period (Y+Rc), s	6.8	6.8	7.5		6.8	6.8	7.5					
Max Green Setting (Gmax), s	43.2	48.2	32.5		18.2	73.2	32.5					
Max Q Clear Time (g_c+I1), s	6.6	0.0	9.1		7.7	0.0	8.6					
Green Ext Time (p_c), s	0.2	0.0	0.5		0.1	0.0	0.3					

Intersection Summary												
HCM 7th Control Delay, s/veh			30.0									
HCM 7th LOS			C									

Notes
 User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
 1: Flint Road & Maple Road

2254561; 716 Sports Fieldhouse

Build_PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	725	314	188	935	58	191	86	46	150	224	133
Future Volume (veh/h)	51	725	314	188	935	58	191	86	46	150	224	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1961	1885	1885	1870	1945	1604	1900	1900	1868	1856
Adj Flow Rate, veh/h	52	740	320	192	954	59	195	88	47	153	229	136
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	1	1	1	2	2	20	0	0	7	3
Cap, veh/h	243	1360	621	335	1471	91	285	254	136	455	257	152
Arrive On Green	0.03	0.38	0.38	0.08	0.43	0.43	0.10	0.26	0.26	0.08	0.24	0.24
Sat Flow, veh/h	1810	3610	1648	1795	3425	212	1853	976	521	1810	1088	646
Grp Volume(v), veh/h	52	740	320	192	499	514	195	0	135	153	0	365
Grp Sat Flow(s),veh/h/ln	1810	1805	1648	1795	1791	1846	1853	0	1497	1810	0	1735
Q Serve(g_s), s	1.8	16.5	15.4	6.4	22.6	22.6	8.0	0.0	7.5	6.5	0.0	20.9
Cycle Q Clear(g_c), s	1.8	16.5	15.4	6.4	22.6	22.6	8.0	0.0	7.5	6.5	0.0	20.9
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.35	1.00		0.37
Lane Grp Cap(c), veh/h	243	1360	621	335	769	793	285	0	390	455	0	409
V/C Ratio(X)	0.21	0.54	0.52	0.57	0.65	0.65	0.68	0.00	0.35	0.34	0.00	0.89
Avail Cap(c_a), veh/h	383	1360	621	379	769	793	285	0	573	500	0	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	25.0	24.7	18.1	23.1	23.1	28.0	0.0	30.8	26.1	0.0	37.9
Incr Delay (d2), s/veh	0.4	1.6	3.0	1.6	4.2	4.1	6.6	0.0	0.5	0.4	0.0	9.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.9	6.4	2.6	9.7	9.9	4.0	0.0	2.7	2.8	0.0	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.6	26.6	27.7	19.8	27.3	27.2	34.6	0.0	31.3	26.6	0.0	46.9
LnGrp LOS	C	C	C	B	C	C	C		C	C		D
Approach Vol, veh/h		1112			1205			330				518
Approach Delay, s/veh		26.6			26.1			33.3				40.9
Approach LOS		C			C			C				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	45.0	15.0	30.0	7.1	50.4	12.4	32.5				
Change Period (Y+Rc), s	4.0	6.4	5.0	5.8	4.0	6.4	4.0	5.8				
Max Green Setting (Gmax), s	11.0	38.6	10.0	39.2	11.0	38.6	11.0	39.2				
Max Q Clear Time (g_c+I1), s	8.4	0.0	10.0	22.9	3.8	0.0	8.5	9.5				
Green Ext Time (p_c), s	0.1	0.0	0.0	1.3	0.0	0.0	0.1	0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh			29.4									
HCM 7th LOS			C									

HCM 7th Signalized Intersection Summary
 2: Maple Road & CR 263 SB Ramps

2254561; 716 Sports Fieldhouse
 Build_PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	916	1037	406	24	143
Future Volume (veh/h)	5	916	1037	406	24	143
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1976	1900	1885	1961	1976	1961
Adj Flow Rate, veh/h	5	954	1080	423	25	149
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	0	1
Cap, veh/h	313	2571	2551	1169	228	201
Arrive On Green	0.71	0.71	0.71	0.71	0.12	0.12
Sat Flow, veh/h	368	3705	3676	1642	1882	1662
Grp Volume(v), veh/h	5	954	1080	423	25	149
Grp Sat Flow(s),veh/h/ln	368	1805	1791	1642	1882	1662
Q Serve(g_s), s	0.4	7.8	9.3	7.5	0.9	6.5
Cycle Q Clear(g_c), s	9.7	7.8	9.3	7.5	0.9	6.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	313	2571	2551	1169	228	201
V/C Ratio(X)	0.02	0.37	0.42	0.36	0.11	0.74
Avail Cap(c_a), veh/h	313	2571	2551	1169	472	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.55	0.55	1.00	1.00
Uniform Delay (d), s/veh	6.5	4.2	4.4	4.2	29.4	31.8
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.5	0.3	7.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	2.0	1.5	0.4	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.5	4.6	4.7	4.7	29.7	39.2
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		959	1503		174	
Approach Delay, s/veh		4.6	4.7		37.8	
Approach LOS		A	A		D	
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		59.7			59.7	15.3
Change Period (Y+Rc), s		6.3			6.3	6.2
Max Green Setting (Gmax), s		43.7			43.7	18.8
Max Q Clear Time (g_c+I1), s		0.0			0.0	8.5
Green Ext Time (p_c), s		0.0			0.0	0.8
Intersection Summary						
HCM 7th Control Delay, s/veh			6.8			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary
 3: CR 263 NB Off Ramp/CR 263 NB On Ramp & Maple Road

2254561; 716 Sports Fieldhouse

Build_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	868	0	0	1390	29	54	0	732	0	0	0
Future Volume (veh/h)	72	868	0	0	1390	29	54	0	732	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1976	1900	0	0	1885	1796	1870	1976	1900			
Adj Flow Rate, veh/h	75	904	0	0	1448	30	56	0	752			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	0	0	0	1	7	2	0	0			
Cap, veh/h	122	1895	0	0	1883	39	710	0	668			
Arrive On Green	0.52	0.52	0.00	0.00	0.52	0.52	0.40	0.00	0.40			
Sat Flow, veh/h	378	3705	0	0	3682	74	1781	0	1675			
Grp Volume(v), veh/h	75	904	0	0	722	756	56	0	752			
Grp Sat Flow(s),veh/h/ln	378	1805	0	0	1791	1871	1781	0	1675			
Q Serve(g_s), s	31.6	25.4	0.0	0.0	51.4	51.5	3.1	0.0	63.8			
Cycle Q Clear(g_c), s	83.1	25.4	0.0	0.0	51.4	51.5	3.1	0.0	63.8			
Prop In Lane	1.00		0.00	0.00		0.04	1.00		1.00			
Lane Grp Cap(c), veh/h	122	1895	0	0	940	982	710	0	668			
V/C Ratio(X)	0.62	0.48	0.00	0.00	0.77	0.77	0.08	0.00	1.13			
Avail Cap(c_a), veh/h	122	1895	0	0	940	982	710	0	668			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	0.62	0.62	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.4	24.1	0.0	0.0	30.2	30.3	29.9	0.0	48.1			
Incr Delay (d2), s/veh	20.0	0.8	0.0	0.0	3.8	3.7	0.0	0.0	75.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.7	10.8	0.0	0.0	22.2	23.3	1.4	0.0	40.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	83.5	24.9	0.0	0.0	34.0	34.0	29.9	0.0	123.1			
LnGrp LOS	F	C			C	C	C		F			
Approach Vol, veh/h		979			1478			808				
Approach Delay, s/veh		29.4			34.0			116.6				
Approach LOS		C			C			F				
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		90.0		70.0		90.0						
Change Period (Y+Rc), s		6.0		* 6.2		6.0						
Max Green Setting (Gmax), s		84.0		* 64		84.0						
Max Q Clear Time (g_c+I1), s		85.1		65.8		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary

HCM 7th Control Delay, s/veh	53.1
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
4: N Maplemere Rd & Maple Road

2254561; 716 Sports Fieldhouse
Build_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1550	23	16	1349	72	20	14	14	141	15	50
Future Volume (veh/h)	26	1550	23	16	1349	72	20	14	14	141	15	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1976	1900	1900	1976	1885	1900	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	27	1615	24	17	1405	75	21	15	15	147	16	52
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	1	0	0	0	0	0	0	0
Cap, veh/h	322	2278	34	260	2084	111	134	91	62	349	49	158
Arrive On Green	0.05	0.63	0.63	0.02	0.60	0.60	0.12	0.12	0.12	0.00	0.12	0.12
Sat Flow, veh/h	1882	3641	54	1882	3459	184	461	737	499	1810	392	1275
Grp Volume(v), veh/h	27	800	839	17	726	754	51	0	0	147	0	68
Grp Sat Flow(s),veh/h/ln	1882	1805	1890	1882	1791	1852	1698	0	0	1810	0	1667
Q Serve(g_s), s	0.3	19.8	19.9	0.2	18.0	18.1	0.0	0.0	0.0	0.1	0.0	2.5
Cycle Q Clear(g_c), s	0.3	19.8	19.9	0.2	18.0	18.1	1.6	0.0	0.0	0.1	0.0	2.5
Prop In Lane	1.00		0.03	1.00		0.10	0.41		0.29	1.00		0.76
Lane Grp Cap(c), veh/h	322	1129	1182	260	1079	1116	287	0	0	349	0	207
V/C Ratio(X)	0.08	0.71	0.71	0.07	0.67	0.68	0.18	0.00	0.00	0.42	0.00	0.33
Avail Cap(c_a), veh/h	516	1129	1182	498	1079	1116	1062	0	0	619	0	1381
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.8	8.4	8.4	7.3	8.8	8.8	26.2	0.0	0.0	25.8	0.0	26.5
Incr Delay (d2), s/veh	0.1	3.8	3.6	0.1	3.3	3.3	0.3	0.0	0.0	0.8	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	6.2	0.1	5.6	5.8	0.7	0.0	0.0	2.1	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.9	12.1	12.0	7.4	12.2	12.1	26.5	0.0	0.0	26.6	0.0	27.5
LnGrp LOS	A	B	B	A	B	B	C			C		C
Approach Vol, veh/h		1666			1497			51			215	
Approach Delay, s/veh		12.0			12.1			26.5			26.9	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	46.5		13.2	8.1	45.0	0.0	13.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	40.0	40.0		55.0	10.0	40.0	10.0	40.0				
Max Q Clear Time (g_c+1/2), s	12.2	21.9		4.5	2.3	20.1	0.0	3.6				
Green Ext Time (p_c), s	0.0	7.0		0.2	0.0	6.3	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh											13.2	
HCM 7th LOS											B	

HCM 7th Signalized Intersection Summary
5: N Forest Road & Maple Road

2254561; 716 Sports Fieldhouse
Build_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	1216	191	198	1015	176	160	388	243	196	324	146
Future Volume (veh/h)	217	1216	191	198	1015	176	160	388	243	196	324	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1885	1900	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	221	1241	195	202	1036	180	163	396	248	200	331	149
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	2	0	0	1	0	1	0	0	1	1
Cap, veh/h	291	1340	584	244	1317	579	315	456	389	282	484	410
Arrive On Green	0.09	0.37	0.37	0.09	0.36	0.36	0.09	0.24	0.24	0.10	0.26	0.26
Sat Flow, veh/h	1810	3610	1574	1810	3610	1587	1810	1885	1610	1810	1885	1598
Grp Volume(v), veh/h	221	1241	195	202	1036	180	163	396	248	200	331	149
Grp Sat Flow(s),veh/h/ln	1810	1805	1574	1810	1805	1587	1810	1885	1610	1810	1885	1598
Q Serve(g_s), s	7.9	34.8	9.4	7.3	27.0	8.6	7.0	21.3	14.6	8.6	16.7	8.1
Cycle Q Clear(g_c), s	7.9	34.8	9.4	7.3	27.0	8.6	7.0	21.3	14.6	8.6	16.7	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	1340	584	244	1317	579	315	456	389	282	484	410
V/C Ratio(X)	0.76	0.93	0.33	0.83	0.79	0.31	0.52	0.87	0.64	0.71	0.68	0.36
Avail Cap(c_a), veh/h	308	1340	584	273	1317	579	348	690	589	289	690	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	31.8	23.8	24.6	29.9	24.0	27.5	38.4	35.9	28.4	35.4	32.1
Incr Delay (d2), s/veh	10.0	12.3	1.5	17.2	4.8	1.4	1.3	7.7	1.7	7.6	1.7	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	16.3	3.7	4.0	11.8	3.4	3.1	10.6	5.8	4.2	7.7	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.3	44.1	25.4	41.8	34.7	25.4	28.9	46.1	37.6	36.0	37.1	32.7
LnGrp LOS	C	D	C	D	C	C	C	D	D	D	D	C
Approach Vol, veh/h		1657			1418			807			680	
Approach Delay, s/veh		40.5			34.5			40.0			35.8	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.3	45.7	13.0	33.5	14.0	45.0	14.6	31.9				
Change Period (Y+Rc), s	4.0	6.5	4.0	* 6.4	4.0	6.5	4.0	* 6.4				
Max Green Setting (Gmax), s	1.0	38.5	11.0	* 39	11.0	38.5	11.0	* 39				
Max Q Clear Time (g_c+19), s	19.3	0.0	9.0	18.7	9.9	0.0	10.6	23.3				
Green Ext Time (p_c), s	0.1	0.0	0.1	1.7	0.1	0.0	0.0	2.2				

Intersection Summary

HCM 7th Control Delay, s/veh	37.8
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
 6: N Maplemere Road/Coventry Road & CR 263

2254561; 716 Sports Fieldhouse
 Build_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	825	33	66	635	45	68	31	77	132	61	325
Future Volume (veh/h)	127	825	33	66	635	45	68	31	77	132	61	325
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1885	1900	1976	1870	1826	1900	1900	1900	1885	1976	1976
Adj Flow Rate, veh/h	134	868	35	69	668	47	72	33	81	139	64	342
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	0	0	2	5	0	0	0	1	0	0
Cap, veh/h	158	1835	74	87	1623	114	127	58	156	230	106	288
Arrive On Green	0.09	0.52	0.52	0.05	0.48	0.48	0.10	0.10	0.10	0.18	0.18	0.18
Sat Flow, veh/h	1810	3509	141	1882	3368	237	1260	577	1548	1308	602	1637
Grp Volume(v), veh/h	134	443	460	69	352	363	105	0	81	203	0	342
Grp Sat Flow(s),veh/h/ln	1810	1791	1860	1882	1777	1828	1837	0	1548	1911	0	1637
Q Serve(g_s), s	13.5	29.0	29.0	6.7	23.7	23.7	10.1	0.0	9.2	18.1	0.0	32.5
Cycle Q Clear(g_c), s	13.5	29.0	29.0	6.7	23.7	23.7	10.1	0.0	9.2	18.1	0.0	32.5
Prop In Lane	1.00		0.08	1.00		0.13	0.69		1.00	0.68		1.00
Lane Grp Cap(c), veh/h	158	937	973	87	856	881	185	0	156	336	0	288
V/C Ratio(X)	0.85	0.47	0.47	0.79	0.41	0.41	0.57	0.00	0.52	0.60	0.00	1.19
Avail Cap(c_a), veh/h	423	937	973	185	856	881	323	0	272	336	0	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	83.2	28.0	28.0	87.3	31.0	31.0	79.4	0.0	79.0	70.3	0.0	76.3
Incr Delay (d2), s/veh	16.0	1.7	1.6	14.8	1.5	1.4	3.9	0.0	3.8	3.1	0.0	114.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	12.8	13.3	3.6	10.5	10.8	5.0	0.0	3.9	9.2	0.0	22.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	99.2	29.7	29.6	102.1	32.4	32.4	83.2	0.0	82.8	73.4	0.0	190.6
LnGrp LOS	F	C	C	F	C	C	F		F	E		F
Approach Vol, veh/h		1037			784			186				545
Approach Delay, s/veh		38.6			38.5			83.0				146.9
Approach LOS		D			D			F				F
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.9	96.0		26.1	15.4	103.5		40.0				
Change Period (Y+Rc), s	6.8	6.8		7.5	6.8	6.8		7.5				
Max Green Setting (Gmax), s	43.2	48.2		32.5	18.2	73.2		32.5				
Max Q Clear Time (g_c+1/5), s	11.5	0.0		12.1	8.7	0.0		34.5				
Green Ext Time (p_c), s	0.6	0.0		0.9	0.1	0.0		0.0				

Intersection Summary

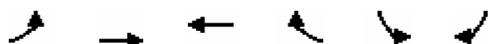
HCM 7th Control Delay, s/veh	65.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
7: Maple Road

2254561; 716 Sports Fieldhouse
Build_PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	275	1430	1138	184	199	299
Future Volume (veh/h)	275	1430	1138	184	199	299
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	286	1490	1185	192	207	311
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	0	0	0
Cap, veh/h	244	2072	1773	286	404	360
Arrive On Green	0.57	0.57	0.57	0.57	0.22	0.22
Sat Flow, veh/h	400	3705	3183	498	1810	1610
Grp Volume(v), veh/h	286	1490	685	692	207	311
Grp Sat Flow(s),veh/h/ln	400	1805	1791	1796	1810	1610
Q Serve(g_s), s	18.2	17.7	15.6	15.8	5.9	11.0
Cycle Q Clear(g_c), s	34.0	17.7	15.6	15.8	5.9	11.0
Prop In Lane	1.00			0.28	1.00	1.00
Lane Grp Cap(c), veh/h	244	2072	1028	1031	404	360
V/C Ratio(X)	1.17	0.72	0.67	0.67	0.51	0.86
Avail Cap(c_a), veh/h	244	2072	1028	1031	428	381
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	9.2	8.7	8.7	20.2	22.1
Incr Delay (d2), s/veh	111.6	1.2	1.6	1.7	1.0	17.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	5.6	4.3	4.4	2.4	5.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	136.7	10.4	10.3	10.5	21.2	39.8
LnGrp LOS	F	B	B	B	C	D
Approach Vol, veh/h		1776	1377		518	
Approach Delay, s/veh		30.7	10.4		32.4	
Approach LOS		C	B		C	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				40.0	19.2	40.0
Change Period (Y+Rc), s				6.0	6.0	6.0
Max Green Setting (Gmax), s				34.0	14.0	34.0
Max Q Clear Time (g_c+I1), s				36.0	13.0	0.0
Green Ext Time (p_c), s				0.0	0.2	0.0
Intersection Summary						
HCM 7th Control Delay, s/veh			23.3			
HCM 7th LOS			C			

HCM 7th Signalized Intersection Summary
1: Flint Road & Maple Road

2254561; 716 Sports Fieldhouse

Build_SAT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	621	199	140	727	19	151	23	35	26	35	44
Future Volume (veh/h)	23	621	199	140	727	19	151	23	35	26	35	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.98		0.98	0.97		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1945	1885	1900	1900	1961	1693	1900	1841	1837	1870
Adj Flow Rate, veh/h	26	706	226	159	826	22	172	26	40	30	40	50
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	1	2	1	0	0	1	14	0	4	9	2
Cap, veh/h	346	1628	745	401	1800	48	374	128	197	291	94	117
Arrive On Green	0.02	0.45	0.45	0.07	0.50	0.50	0.10	0.22	0.22	0.02	0.13	0.13
Sat Flow, veh/h	1739	3582	1639	1795	3592	96	1867	594	913	1753	728	910
Grp Volume(v), veh/h	26	706	226	159	415	433	172	0	66	30	0	90
Grp Sat Flow(s),veh/h/ln	1739	1791	1639	1795	1805	1882	1867	0	1507	1753	0	1637
Q Serve(g_s), s	0.7	11.4	7.4	3.7	12.7	12.7	6.5	0.0	3.1	1.3	0.0	4.3
Cycle Q Clear(g_c), s	0.7	11.4	7.4	3.7	12.7	12.7	6.5	0.0	3.1	1.3	0.0	4.3
Prop In Lane	1.00		1.00	1.00		0.05	1.00		0.61	1.00		0.56
Lane Grp Cap(c), veh/h	346	1628	745	401	905	943	374	0	325	291	0	211
V/C Ratio(X)	0.08	0.43	0.30	0.40	0.46	0.46	0.46	0.00	0.20	0.10	0.00	0.43
Avail Cap(c_a), veh/h	533	1628	745	511	905	943	410	0	695	476	0	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.3	15.7	14.7	11.0	13.7	13.7	26.5	0.0	27.3	31.0	0.0	34.1
Incr Delay (d2), s/veh	0.1	0.8	1.0	0.6	1.7	1.6	0.9	0.0	0.3	0.2	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.3	2.8	1.3	4.8	5.0	2.9	0.0	1.1	0.5	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.4	16.6	15.7	11.7	15.4	15.3	27.4	0.0	27.6	31.2	0.0	35.5
LnGrp LOS	B	B	B	B	B	B	C		C	C		D
Approach Vol, veh/h		958			1007			238				120
Approach Delay, s/veh		16.3			14.8			27.4				34.4
Approach LOS		B			B			C				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.8	45.0	13.4	16.8	5.8	49.0	6.0	24.1				
Change Period (Y+Rc), s	4.0	6.4	5.0	5.8	4.0	6.4	4.0	5.8				
Max Green Setting (Gmax), s	11.0	38.6	10.0	39.2	11.0	38.6	11.0	39.2				
Max Q Clear Time (g_c+I1), s	5.7	0.0	8.5	6.3	2.7	0.0	3.3	5.1				
Green Ext Time (p_c), s	0.2	0.0	0.1	0.3	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			17.7									
HCM 7th LOS			B									

HCM 7th Signalized Intersection Summary
 2: Maple Road & CR 263 SB Ramps

2254561; 716 Sports Fieldhouse
 Build_SAT



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	670	775	236	7	110
Future Volume (veh/h)	12	670	775	236	7	110
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1699	1885	1885	1961	1976	1976
Adj Flow Rate, veh/h	14	761	881	268	8	125
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	18	1	1	1	0	0
Cap, veh/h	382	2623	2623	1208	190	169
Arrive On Green	0.73	0.73	0.73	0.73	0.10	0.10
Sat Flow, veh/h	444	3676	3676	1649	1882	1675
Grp Volume(v), veh/h	14	761	881	268	8	125
Grp Sat Flow(s),veh/h/ln	444	1791	1791	1649	1882	1675
Q Serve(g_s), s	0.9	5.4	6.5	3.9	0.3	5.4
Cycle Q Clear(g_c), s	7.4	5.4	6.5	3.9	0.3	5.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	382	2623	2623	1208	190	169
V/C Ratio(X)	0.04	0.29	0.34	0.22	0.04	0.74
Avail Cap(c_a), veh/h	382	2623	2623	1208	472	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.91	0.91	1.00	1.00
Uniform Delay (d), s/veh	4.9	3.4	3.6	3.2	30.4	32.8
Incr Delay (d2), s/veh	0.2	0.3	0.3	0.4	0.1	8.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln0.1		1.1	1.3	0.8	0.1	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.0	3.7	3.9	3.6	30.6	41.4
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		775	1149		133	
Approach Delay, s/veh		3.7	3.8		40.8	
Approach LOS		A	A		D	
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		61.2			61.2	13.8
Change Period (Y+Rc), s		6.3			6.3	6.2
Max Green Setting (Gmax), s		43.7			43.7	18.8
Max Q Clear Time (g_c+I1), s		0.0			0.0	7.4
Green Ext Time (p_c), s		0.0			0.0	0.6
Intersection Summary						
HCM 7th Control Delay, s/veh			6.2			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary
 3: CR 263 NB Off Ramp/CR 263 NB On Ramp & Maple Road

2254561; 716 Sports Fieldhouse
 Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	593	0	0	962	17	49	1	402	0	0	0
Future Volume (veh/h)	84	593	0	0	962	17	49	1	402	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1976	1885	0	0	1900	1900	1811	1976	1870			
Adj Flow Rate, veh/h	93	659	0	0	1069	19	54	1	447			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	0	1	0	0	0	0	6	0	2			
Cap, veh/h	311	2253	0	0	2282	41	490	1	474			
Arrive On Green	0.63	0.63	0.00	0.00	0.63	0.63	0.28	0.28	0.28			
Sat Flow, veh/h	548	3676	0	0	3723	64	1725	4	1671			
Grp Volume(v), veh/h	93	659	0	0	532	556	54	0	448			
Grp Sat Flow(s),veh/h/ln	548	1791	0	0	1805	1888	1725	0	1675			
Q Serve(g_s), s	15.1	11.7	0.0	0.0	21.7	21.7	3.2	0.0	36.6			
Cycle Q Clear(g_c), s	36.8	11.7	0.0	0.0	21.7	21.7	3.2	0.0	36.6			
Prop In Lane	1.00		0.00	0.00		0.03	1.00		1.00			
Lane Grp Cap(c), veh/h	311	2253	0	0	1135	1187	490	0	475			
V/C Ratio(X)	0.30	0.29	0.00	0.00	0.47	0.47	0.11	0.00	0.94			
Avail Cap(c_a), veh/h	311	2253	0	0	1135	1187	663	0	644			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	0.78	0.78	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.3	11.8	0.0	0.0	13.7	13.7	37.1	0.0	49.0			
Incr Delay (d2), s/veh	2.4	0.3	0.0	0.0	1.1	1.0	0.0	0.0	16.6			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.1	4.5	0.0	0.0	8.5	8.9	1.4	0.0	17.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.7	12.1	0.0	0.0	14.7	14.7	37.1	0.0	65.6			
LnGrp LOS	C	B			B	B	D		E			
Approach Vol, veh/h	752		1088				502					
Approach Delay, s/veh	13.8		14.7				62.6					
Approach LOS	B		B				E					
Timer - Assigned Phs	2		4				6					
Phs Duration (G+Y+Rc), s	94.1		45.9				94.1					
Change Period (Y+Rc), s	6.0		* 6.2				6.0					
Max Green Setting (Gmax), s	74.0		* 54				74.0					
Max Q Clear Time (g_c+I1), s	38.8		38.6				0.0					
Green Ext Time (p_c), s	0.1		1.1				0.0					

Intersection Summary

HCM 7th Control Delay, s/veh	24.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
4: N Maplemere Rd & Maple Road

2254561; 716 Sports Fieldhouse

Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	876	27	9	864	103	14	10	13	145	9	101
Future Volume (veh/h)	92	876	27	9	864	103	14	10	13	145	9	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1976	1885	1900	1976	1900	1900	1900	1976	1900	1900	1900	1900
Adj Flow Rate, veh/h	105	995	31	10	982	117	16	11	15	165	10	115
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	1	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	490	2296	72	426	1831	218	102	70	56	296	16	187
Arrive On Green	0.10	0.65	0.65	0.02	0.56	0.56	0.13	0.13	0.13	0.00	0.13	0.13
Sat Flow, veh/h	1882	3545	110	1882	3247	387	252	556	449	1810	130	1490
Grp Volume(v), veh/h	105	503	523	10	546	553	42	0	0	165	0	125
Grp Sat Flow(s),veh/h/ln	1882	1791	1865	1882	1805	1828	1256	0	0	1810	0	1619
Q Serve(g_s), s	1.3	9.8	9.8	0.2	13.4	13.4	0.1	0.0	0.0	0.1	0.0	5.2
Cycle Q Clear(g_c), s	1.3	9.8	9.8	0.2	13.4	13.4	5.2	0.0	0.0	0.1	0.0	5.2
Prop In Lane	1.00		0.06	1.00		0.21	0.38		0.36	1.00		0.92
Lane Grp Cap(c), veh/h	490	1160	1207	426	1018	1031	228	0	0	296	0	204
V/C Ratio(X)	0.21	0.43	0.43	0.02	0.54	0.54	0.18	0.00	0.00	0.56	0.00	0.61
Avail Cap(c_a), veh/h	570	1160	1207	663	1018	1031	920	0	0	548	0	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	6.1	6.1	6.4	9.7	9.7	27.8	0.0	0.0	29.4	0.0	29.4
Incr Delay (d2), s/veh	0.2	1.2	1.1	0.0	2.0	2.0	0.4	0.0	0.0	1.6	0.0	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.7	2.8	0.0	4.5	4.6	0.6	0.0	0.0	2.7	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.9	7.3	7.3	6.4	11.7	11.7	28.1	0.0	0.0	31.0	0.0	32.3
LnGrp LOS	A	A	A	A	B	B	C			C		C
Approach Vol, veh/h		1131			1109			42			290	
Approach Delay, s/veh		7.2			11.6			28.1			31.6	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.1	50.9		13.9	12.0	45.0	0.0	13.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	40.0	40.0		55.0	10.0	40.0	10.0	40.0				
Max Q Clear Time (g_c+1/2), s	11.8	11.8		7.2	3.3	15.4	0.0	7.2				
Green Ext Time (p_c), s	0.0	4.0		0.5	0.1	4.4	0.0	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh											12.2	
HCM 7th LOS											B	

HCM 7th Signalized Intersection Summary
 5: N Forest Road & Maple Road

2254561; 716 Sports Fieldhouse

Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	732	106	146	743	94	97	184	141	109	215	114
Future Volume (veh/h)	141	732	106	146	743	94	97	184	141	109	215	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1885	1900	1900	1900	1900	1885	1900	1900	1885
Adj Flow Rate, veh/h	150	779	113	155	790	100	103	196	150	116	229	121
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	0	1	0	0	0	0	1	0	0	1
Cap, veh/h	401	1636	734	401	1656	737	252	292	244	276	306	256
Arrive On Green	0.07	0.46	0.46	0.07	0.46	0.46	0.07	0.15	0.15	0.07	0.16	0.16
Sat Flow, veh/h	1810	3582	1607	1795	3610	1607	1810	1900	1588	1810	1900	1589
Grp Volume(v), veh/h	150	779	113	155	790	100	103	196	150	116	229	121
Grp Sat Flow(s),veh/h/ln	1810	1791	1607	1795	1805	1607	1810	1900	1588	1810	1900	1589
Q Serve(g_s), s	3.6	12.7	3.5	3.8	12.8	3.0	4.0	8.2	7.4	4.5	9.7	5.8
Cycle Q Clear(g_c), s	3.6	12.7	3.5	3.8	12.8	3.0	4.0	8.2	7.4	4.5	9.7	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	1636	734	401	1656	737	252	292	244	276	306	256
V/C Ratio(X)	0.37	0.48	0.15	0.39	0.48	0.14	0.41	0.67	0.61	0.42	0.75	0.47
Avail Cap(c_a), veh/h	516	1636	734	512	1656	737	370	870	727	381	870	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	15.9	13.4	11.7	15.8	13.2	27.8	33.7	33.3	27.4	33.7	32.1
Incr Delay (d2), s/veh	0.6	1.0	0.4	0.6	1.0	0.4	1.1	2.7	2.5	1.0	3.7	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	4.8	1.3	1.3	4.8	1.1	1.7	3.9	2.9	1.9	4.6	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.2	16.9	13.8	12.3	16.8	13.6	28.8	36.3	35.8	28.4	37.4	33.5
LnGrp LOS	B	B	B	B	B	B	C	D	D	C	D	C
Approach Vol, veh/h		1042			1045			449			466	
Approach Delay, s/veh		15.9			15.8			34.5			34.2	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.8	45.0	9.5	20.0	9.6	45.2	10.1	19.4				
Change Period (Y+Rc), s	4.0	6.5	4.0	* 6.4	4.0	6.5	4.0	* 6.4				
Max Green Setting (Gmax), s	1.0	38.5	11.0	* 39	11.0	38.5	11.0	* 39				
Max Q Clear Time (g_c+15), s	15.0	0.0	6.0	11.7	5.6	0.0	6.5	10.2				
Green Ext Time (p_c), s	0.2	0.0	0.1	1.2	0.2	0.0	0.1	1.3				

Intersection Summary		
HCM 7th Control Delay, s/veh		21.5
HCM 7th LOS		C

Notes
 * HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
6: N Maplemere Road/Coventry Road & CR 263

2254561; 716 Sports Fieldhouse
Build_SAT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	512	54	66	490	12	46	10	68	17	16	54
Future Volume (veh/h)	43	512	54	66	490	12	46	10	68	17	16	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1885	1900	1976	1885	1767	1900	1900	1900	1900	1976	1976
Adj Flow Rate, veh/h	45	539	57	69	516	13	48	11	72	18	17	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	1	0	0	1	9	0	0	0	0	0	0
Cap, veh/h	59	2186	231	87	2433	61	123	28	129	47	45	75
Arrive On Green	0.03	0.67	0.67	0.05	0.68	0.68	0.08	0.08	0.08	0.05	0.05	0.05
Sat Flow, veh/h	1781	3269	345	1882	3570	90	1485	340	1558	991	936	1580
Grp Volume(v), veh/h	45	295	301	69	259	270	59	0	72	35	0	57
Grp Sat Flow(s),veh/h/ln	1781	1791	1823	1882	1791	1869	1826	0	1558	1926	0	1580
Q Serve(g_s), s	4.6	12.1	12.1	6.7	9.9	10.0	5.7	0.0	8.2	3.3	0.0	6.6
Cycle Q Clear(g_c), s	4.6	12.1	12.1	6.7	9.9	10.0	5.7	0.0	8.2	3.3	0.0	6.6
Prop In Lane	1.00		0.19	1.00		0.05	0.81		1.00	0.51		1.00
Lane Grp Cap(c), veh/h	59	1197	1219	87	1221	1274	152	0	129	92	0	75
V/C Ratio(X)	0.76	0.25	0.25	0.79	0.21	0.21	0.39	0.00	0.56	0.38	0.00	0.76
Avail Cap(c_a), veh/h	416	1197	1219	185	1221	1274	321	0	274	338	0	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	88.7	12.2	12.2	87.3	11.0	11.0	80.4	0.0	81.6	85.5	0.0	87.0
Incr Delay (d2), s/veh	24.3	0.5	0.5	14.8	0.4	0.4	2.3	0.0	5.2	2.6	0.0	14.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	4.9	5.0	3.6	4.0	4.2	2.8	0.0	3.5	1.7	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	113.0	12.6	12.7	102.1	11.4	11.3	82.7	0.0	86.8	88.1	0.0	101.4
LnGrp LOS	F	B	B	F	B	B	F		F	F		F
Approach Vol, veh/h		641			598			131				92
Approach Delay, s/veh		19.7			21.8			85.0				96.3
Approach LOS		B			C			F				F
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.9	132.9		22.9	15.4	130.5		16.3				
Change Period (Y+Rc), s	6.8	6.8		7.5	6.8	6.8		7.5				
Max Green Setting (Gmax), s	43.2	48.2		32.5	18.2	73.2		32.5				
Max Q Clear Time (g_c+1), s	10.6	0.0		10.2	8.7	0.0		8.6				
Green Ext Time (p_c), s	0.2	0.0		0.6	0.1	0.0		0.3				

Intersection Summary

HCM 7th Control Delay, s/veh	31.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary
7: Maple Road

2254561; 716 Sports Fieldhouse
Build_SAT



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	912	873	82	69	104
Future Volume (veh/h)	122	912	873	82	69	104
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	139	1036	992	93	78	118
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	379	1861	1719	161	227	202
Arrive On Green	0.52	0.52	0.52	0.52	0.13	0.13
Sat Flow, veh/h	528	3705	3431	313	1810	1610
Grp Volume(v), veh/h	139	1036	537	548	78	118
Grp Sat Flow(s),veh/h/ln	528	1805	1805	1844	1810	1610
Q Serve(g_s), s	8.2	6.5	6.8	6.9	1.3	2.3
Cycle Q Clear(g_c), s	15.1	6.5	6.8	6.9	1.3	2.3
Prop In Lane	1.00			0.17	1.00	1.00
Lane Grp Cap(c), veh/h	379	1861	930	950	227	202
V/C Ratio(X)	0.37	0.56	0.58	0.58	0.34	0.58
Avail Cap(c_a), veh/h	645	3674	1837	1876	758	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	5.5	5.6	5.6	13.4	13.8
Incr Delay (d2), s/veh	0.6	0.3	0.6	0.6	0.9	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.2	0.8	0.9	0.5	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.4	5.8	6.2	6.1	14.2	16.5
LnGrp LOS	B	A	A	A	B	B
Approach Vol, veh/h		1175	1085		196	
Approach Delay, s/veh		6.4	6.1		15.6	
Approach LOS		A	A		B	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				23.2	10.2	23.2
Change Period (Y+Rc), s				6.0	6.0	6.0
Max Green Setting (Gmax), s				34.0	14.0	34.0
Max Q Clear Time (g_c+I1), s				17.1	4.3	0.0
Green Ext Time (p_c), s				0.1	0.4	0.0
Intersection Summary						
HCM 7th Control Delay, s/veh			7.0			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary
 3: CR 263 NB Off Ramp/CR 263 NB On Ramp & Maple Road

2254561; 716 Sports Fieldhouse
 Build - Mitigation_PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗			↖↖		↖	↗				
Traffic Volume (veh/h)	72	868	0	0	1390	29	54	0	732	0	0	0
Future Volume (veh/h)	72	868	0	0	1390	29	54	0	732	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1976	1900	0	0	1885	1796	1870	1976	1900			
Adj Flow Rate, veh/h	75	904	0	0	1448	30	56	0	752			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	0	0	0	1	7	2	0	0			
Cap, veh/h	85	1685	0	0	1674	35	814	0	765			
Arrive On Green	0.47	0.47	0.00	0.00	0.47	0.47	0.46	0.00	0.46			
Sat Flow, veh/h	378	3705	0	0	3681	74	1781	0	1675			
Grp Volume(v), veh/h	75	904	0	0	722	756	56	0	752			
Grp Sat Flow(s),veh/h/ln	378	1805	0	0	1791	1870	1781	0	1675			
Q Serve(g_s), s	16.8	28.5	0.0	0.0	57.7	57.9	2.8	0.0	70.8			
Cycle Q Clear(g_c), s	74.7	28.5	0.0	0.0	57.7	57.9	2.8	0.0	70.8			
Prop In Lane	1.00		0.00	0.00		0.04	1.00		1.00			
Lane Grp Cap(c), veh/h	85	1685	0	0	836	873	814	0	765			
V/C Ratio(X)	0.89	0.54	0.00	0.00	0.86	0.87	0.07	0.00	0.98			
Avail Cap(c_a), veh/h	85	1685	0	0	836	873	822	0	772			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	0.62	0.62	1.00	0.00	1.00			
Uniform Delay (d), s/veh	75.6	30.4	0.0	0.0	38.1	38.2	24.3	0.0	42.8			
Incr Delay (d2), s/veh	67.2	1.2	0.0	0.0	7.6	7.4	0.0	0.0	27.7			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.6	12.4	0.0	0.0	26.1	27.4	1.2	0.0	34.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	142.8	31.5	0.0	0.0	45.7	45.5	24.4	0.0	70.5			
LnGrp LOS	F	C			D	D	C		E			
Approach Vol, veh/h		979			1478			808				
Approach Delay, s/veh		40.0			45.6			67.3				
Approach LOS		D			D			E				
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		80.7		79.3		80.7						
Change Period (Y+Rc), s		6.0		* 6.2		6.0						
Max Green Setting (Gmax), s		74.0		* 74		74.0						
Max Q Clear Time (g_c+I1), s		76.7		72.8		0.0						
Green Ext Time (p_c), s		0.0		0.3		0.0						

Intersection Summary		
HCM 7th Control Delay, s/veh		49.3
HCM 7th LOS		D

Notes
 * HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	67.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↗
Traffic Vol, veh/h	275	1430	1138	184	199	299
Future Vol, veh/h	275	1430	1138	184	199	299
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	286	1490	1185	192	207	311

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1377	0	-	0	2599 689
Stage 1	-	-	-	-	1281 -
Stage 2	-	-	-	-	1318 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	504	-	-	-	~ 21 393
Stage 1	-	-	-	-	228 -
Stage 2	-	-	-	-	218 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	504	-	-	-	~ 9 393
Mov Cap-2 Maneuver	-	-	-	-	~ 66 -
Stage 1	-	-	-	-	~ 99 -
Stage 2	-	-	-	-	218 -

Approach	EB	WB	SB
HCM Control Delay, s/v	3.4	0	\$ 467.74
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	504	-	-	-	66	393
HCM Lane V/C Ratio	0.568	-	-	-	3.164	0.792
HCM Control Delay (s/veh)	21.1	-	-	-	\$ 1108.6	41.2
HCM Lane LOS	C	-	-	-	F	E
HCM 95th %tile Q(veh)	3.5	-	-	-	21.4	6.8

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↗
Traffic Vol, veh/h	122	912	873	82	69	104
Future Vol, veh/h	122	912	873	82	69	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	139	1036	992	93	78	118

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1085	0	-	0	1834 543
Stage 1	-	-	-	-	1039 -
Stage 2	-	-	-	-	795 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	650	-	-	-	~ 69 489
Stage 1	-	-	-	-	307 -
Stage 2	-	-	-	-	410 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	650	-	-	-	~ 54 489
Mov Cap-2 Maneuver	-	-	-	-	161 -
Stage 1	-	-	-	-	241 -
Stage 2	-	-	-	-	410 -

Approach	EB	WB	SB
HCM Control Delay, s/v	1.42	0	27.47
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	650	-	-	-	161	489
HCM Lane V/C Ratio	0.213	-	-	-	0.486	0.241
HCM Control Delay (s/veh)	12	-	-	-	46.7	14.7
HCM Lane LOS	B	-	-	-	E	B
HCM 95th %tile Q(veh)	0.8	-	-	-	2.3	0.9

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



ATTACHMENT F
SIGNAL WARRANT ANALYSIS

PROPOSED SPORTS COMPLEX AND HOTEL
TOWN OF AMHERST
ERIE COUNTY, NY

MUTCD Signal Warrant Analysis – Maple Road & Site Driveway

LaBella conducted a Signal Warrant Analysis to determine if signalization is warranted at the Site Driveway intersection. Chapter 4C of the *MUTCD* provides guidance for investigating the need for a traffic control signal in the form of nine warrant analyses.

Warrants 1-3: Eight-Hour Vehicular Volume, Four-Hour Vehicular Volume, & Peak Hour

- Warrant 1 – Eight-Hour Vehicular Volume – This warrant is satisfied if for any eight hours of an average day the traffic volumes for Condition A or Condition B specified in Table 4C-1 in the *MUTCD* are met for the main arterial and the higher volume side road approach to the intersection.
- Warrant 2 – Four-Hour Vehicular Volume – This warrant is met when for any four hours of any average day, points plotted on the graph presented on Figure 4C-1 of the *MUTCD* fall above the appropriate curve.
- Warrant 3 – Peak Hour – This warrant is met when for any one hour of an average day, points plotted on the graph presented on Figure 4C-3 of the *MUTCD* fall above the appropriate curve.

The volumes for the main arterial (a.k.a. Maple Road) and side road (a.k.a. Site Driveway) are based on the forecasted traffic volumes and the site-generated trips per the applicable ITE Land Use Codes (LUC 495 "Athletic Community Center").¹ Tables 1 summarizes the analyses for Signal Warrants 1, 2, and 3. A "Yes" under the "Signal Warrants Met?" column indicates that the criteria are satisfied for that hour. The detailed evaluation for Warrants 2 and 3 is included under Attachment F-2.

Table 1 – Signal Warrant Analysis – Maple Road/Site Driveway

Time Begin (1-hour Period)	Build Volumes		Signal Warrants Met?			
	Maple Road	Site Driveway	#1 – Eight Hour Volume		#2 – Four Hour Volume	#3 – Peak Hour Volume
			Condition A	Condition B		
12:00 AM	143	7	No	No	No	No
1:00 AM	82	3	No	No	No	No
2:00 AM	50	0	No	No	No	No
3:00 AM	39	0	No	No	No	No
4:00 AM	126	3	No	No	No	No
5:00 AM	357	49	No	No	No	No
6:00 AM	697	202	Yes	No	No	No
7:00 AM	1379	167	No	Yes	Yes	No
8:00 AM	1743	227	Yes	Yes	Yes	Yes
9:00 AM	1603	300	Yes	Yes	Yes	Yes
10:00 AM	1612	248	Yes	Yes	Yes	Yes
11:00 AM	1619	307	Yes	Yes	Yes	Yes
12:00 PM	1742	331	Yes	Yes	Yes	Yes
1:00 PM	1592	136	No	Yes	Yes	No
2:00 PM	1739	143	No	Yes	Yes	No
3:00 PM	1881	303	Yes	Yes	Yes	Yes
4:00 PM	2122	286	Yes	Yes	Yes	Yes
5:00 PM	2329	460	Yes	Yes	Yes	Yes
6:00 PM	1712	408	Yes	Yes	Yes	Yes
7:00 PM	1484	582	Yes	Yes	Yes	Yes
8:00 PM	975	363	Yes	Yes	Yes	No
9:00 PM	712	206	Yes	No	No	No
10:00 PM	407	31	No	No	No	No
11:00 PM	262	7	No	No	No	No
Required volumes	Two Lane Major Street		600	900	See Figure 4C-1	See Figure 4C-3
	Two Lane Minor Street		200	100		
Overall Warrant Met?			Yes	Yes	Yes	Yes

As shown in Table 1, a signal is warranted based on Warrants 1, 2, and 3.

¹ Tables displaying the volumes are included under Attachment F-1.



Warrant 4, Pedestrian Volume Four Hour Volume & Peak Hour Volume

This warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street. These warrants require a minimum of 53 pedestrian crossings per hour for four hours or 66 pedestrian crossings per hour for one hour. This project is not expected to generate this volume of pedestrian crossings per hour; thus, this warrant is not applicable.

Warrant 5, School Crossing

This warrant is intended for application where the fact that schoolchildren (elementary through high school students) cross the major street is the principal reason to consider installing a traffic control signal. This project will not be associated with a school crossing where schoolchildren would be crossing the major street; thus, this warrant is not applicable.

Warrant 6, Coordinated Signal System

This warrant is intended for application where proper platooning of vehicle must be maintained to facilitate progressive movement along a coordinated signal system. While this warrant is not applicable for this project, it is possible that the proposed signal be considered for inclusion in the coordinated network along Maple Road.

Warrant 7, Crash Experience

This warrant is intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal. There is no history of crashes as the intersection does not exist currently; thus, this warrant is not applicable.

Warrant 8, Roadway Network

Similar to Warrant 6, this warrant is intended to justify the encouragement of concentrating and organizing traffic flow on a roadway network. These purposes are not the intent of the proposed signal; thus, this warrant is not applicable.

Warrant 9, Intersection Near a Grade Crossing

This warrant is intended for use at a location where none of the conditions described in the other eight traffic signal warrants are met, but the proximity of a grade crossing on an approach controlled by a Stop or Yield sign at a highway-highway intersection is the principal reason to consider installing a traffic control signal. The proposed intersection is not proximity to a grade crossing; thus, this warrant is not applicable.



ATTACHMENT F-1

SIGNAL WARRANT ANALYSIS – Build Volumes

PROPOSED SPORTS COMPLEX AND HOTEL

TOWN OF AMHERST

ERIE COUNTY, NY

		Land Use		IV	Enter	Exit	Total									
		LUC 495		331	4770	4769	9539									
		Existing 2025		No Build 2028		LUC 495 - Weekday			LUC 495 - Weekday			Site Generated Volumes			Build 2025	
Hour	Maple Rd	Site Drwy	Maple Rd	Site Drwy	% of 24-Hour Vehicle Trips			24-Hour Vehicle Volume						Maple Rd	Site Drwy	
Beginning	Street	Street 1	Street	Street 1	Total	Entering	Exiting	Total	Entering	Exiting	Enter	Exit	Total	Street	Street 1	
12:00 AM	137	0	143	0	0.1%	0.0%	0.1%	7	0	7	0	7	7	143	7	
1:00 AM	78	0	82	0	0.0%	0.0%	0.1%	3	0	3	0	3	3	82	3	
2:00 AM	48	0	50	0	0.0%	0.0%	0.0%	0	0	0	0	0	0	50	0	
3:00 AM	37	0	39	0	0.0%	0.0%	0.0%	0	0	0	0	0	0	39	0	
4:00 AM	60	0	63	0	0.7%	1.3%	0.1%	66	63	3	63	3	66	126	3	
5:00 AM	174	0	182	0	2.3%	3.7%	1.0%	223	175	49	175	49	223	357	49	
6:00 AM	506	0	529	0	3.9%	3.5%	4.2%	370	168	202	168	202	370	697	202	
7:00 AM	1058	0	1106	0	4.6%	5.7%	3.5%	440	273	167	273	167	440	1379	167	
8:00 AM	1262	0	1320	0	6.8%	8.9%	4.8%	649	423	227	423	227	649	1743	227	
9:00 AM	1218	0	1274	0	6.6%	6.9%	6.3%	628	329	300	329	300	628	1603	300	
10:00 AM	1260	0	1318	0	5.7%	6.2%	5.2%	541	294	248	294	248	541	1612	248	
11:00 AM	1368	0	1430	0	5.2%	4.0%	6.4%	496	189	307	189	307	496	1619	307	
12:00 PM	1442	0	1508	0	5.9%	4.9%	6.9%	566	234	331	234	331	566	1742	331	
1:00 PM	1422	0	1487	0	2.5%	2.2%	2.9%	241	105	136	105	136	241	1592	136	
2:00 PM	1520	0	1589	0	3.1%	3.2%	3.0%	293	150	143	150	143	293	1739	143	
3:00 PM	1558	0	1629	0	5.8%	5.3%	6.4%	555	252	303	252	303	555	1881	303	
4:00 PM	1641	0	1716	0	7.2%	8.5%	6.0%	691	406	286	406	286	691	2122	286	
5:00 PM	1542	0	1612	0	12.3%	15.0%	9.6%	1177	717	460	717	460	1177	2329	460	
6:00 PM	1256	0	1313	0	8.5%	8.4%	8.6%	807	399	408	399	408	807	1712	408	
7:00 PM	1071	0	1120	0	9.9%	7.6%	12.2%	946	364	582	364	582	946	1484	582	
8:00 PM	789	0	825	0	5.4%	3.2%	7.6%	513	150	363	150	363	513	975	363	
9:00 PM	604	0	632	0	3.0%	1.7%	4.3%	286	80	206	80	206	286	712	206	
10:00 PM	389	0	407	0	0.3%	0.0%	0.7%	31	0	31	0	31	31	407	31	
11:00 PM	251	0	262	0	0.1%	0.0%	0.1%	7	0	7	0	7	7	262	7	





ATTACHMENT F

SIGNAL WARRANT ANALYSIS – Warrant 2 & 3 Figures

**PROPOSED SPORTS COMPLEX AND HOTEL
TOWN OF AMHERST
ERIE COUNTY, NY**

Figure 4C-1
Four-Hour Vehicular Volume Warrant
Source: Federal MUTCD

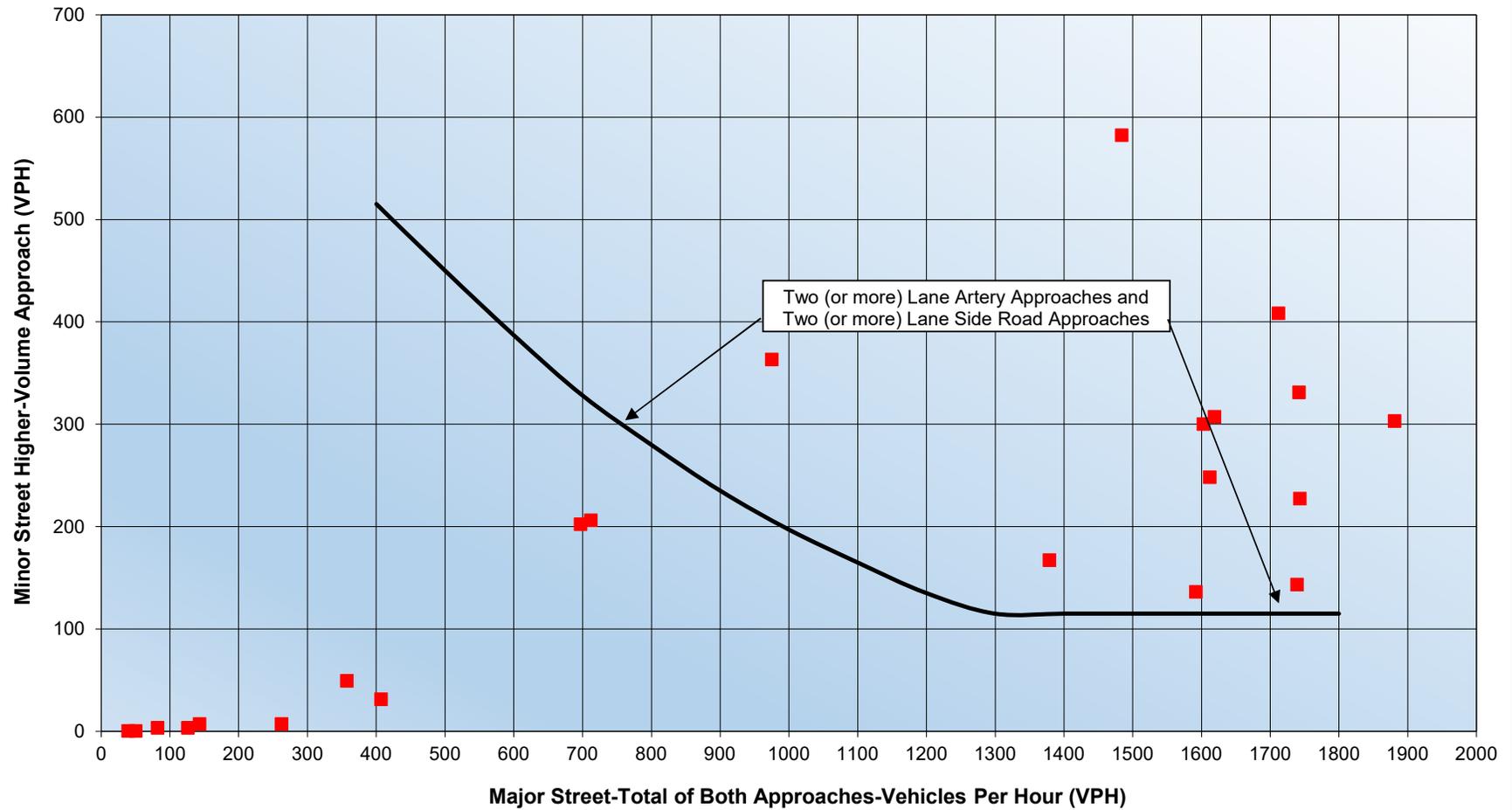


Figure 4C-3
Peak Hour Volume Warrant
Source: Federal MUTCD

