



TRAFFIC IMPACT STUDY

NEW CENTURY FILM

Neversink Drive at NYS Route 209
Town of Deerpark
Orange County, New York

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The purpose of this Traffic Impact Study is to identify potential adverse traffic issues that may result due to the development of various improvements and expansions of an existing film studio on property located on Neversink Drive and Route 209 in the Town of Deerpark, New York. The proposed project would include hotel rooms, a multi-purpose building and new restaurants and film studio. The entire site will maintain its existing access from driveways on Neversink Drive. The access to Route 209, which is under the jurisdiction of the New York State Department of Transportation (DOT), will be for emergency use only. Neversink Drive is a designated County Road – CR-80. The project build-out is estimated to be about three years, i.e., completed and occupied in 2025.

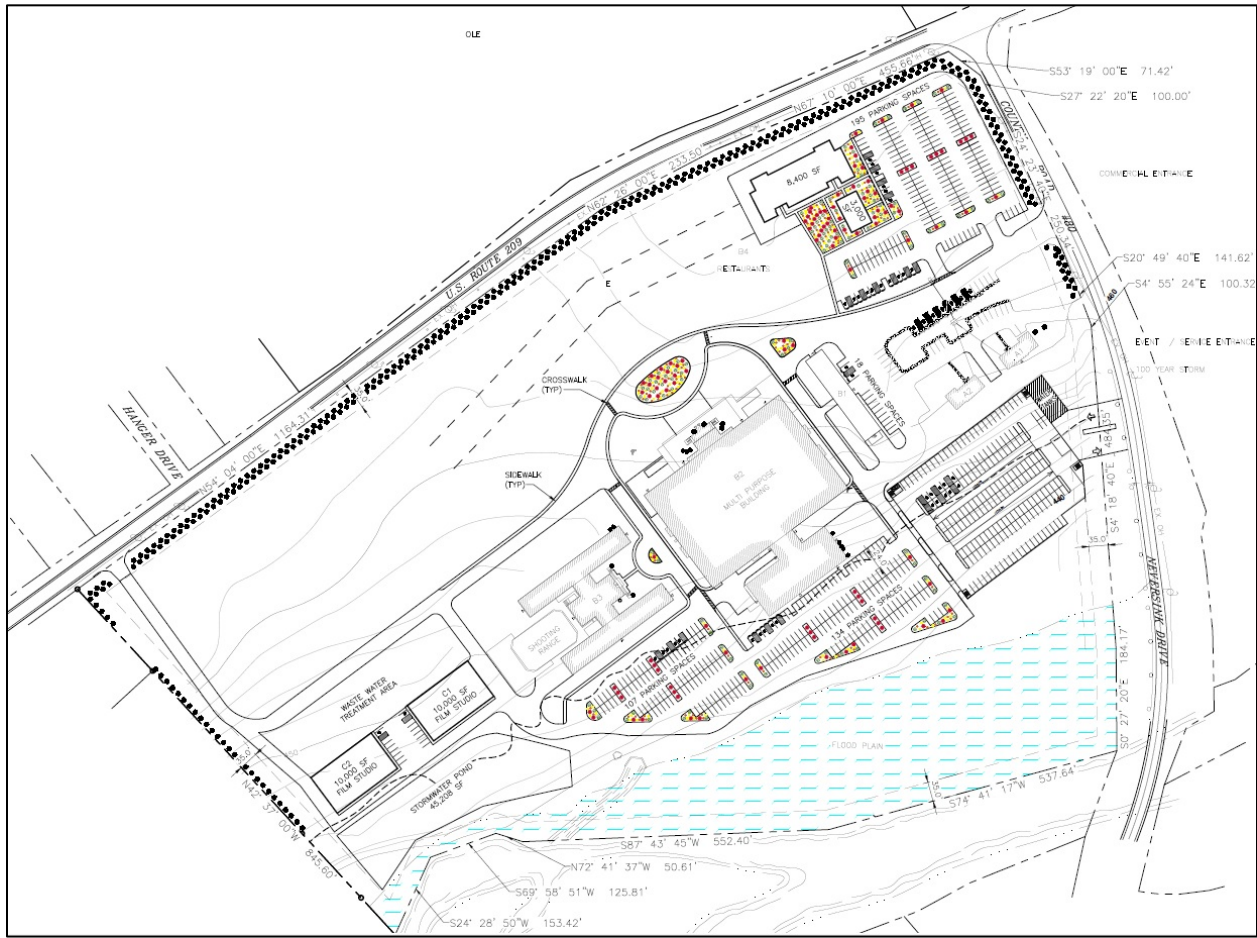
The site and its environs are shown in the following map and plan – a Google Earth aerial map showing the approximate boundaries of the site and a plan from the application plan set prepared by Fellenzer Engineering LLP:

SITE LOCATION MAP



Source: Google Earth

SITE PLAN



Source: Fellenzer Engineering LLP

Existing Conditions

The following is a description of existing travel conditions near the site of the New Century Film site:

Roadways

Route 209 is a two-lane generally northeast/southwest major arterial running through the Town, lying just northwest of the project site. Route 209 directly serves both residential and commercial uses. Some residential uses have direct access to Route 209 and in the vicinity of the site there are several intersecting side roads – including Peenpack Trail to the north of the site and Hanger Drive to the south in Deerpark.

There is no on-street parking on Route 209 and the pavement is in good condition. There are two different posted speed limits – 45 mph at the project site starting northeast of the Huguenot property and continuing northeastward, and 40 mph to the southwest through Deerpark and past Hanger Drive. At the intersections of Route 209 with Neversink and Hanger Drives, traffic on the side roads is controlled by a Stop sign while Route 209 traffic is

free flowing. Travel lanes are 12 feet in width and there are 5-foot wide shoulders on both sides.

Neversink Drive is a two-lane County Road (CR-80) that intersects Route 209 at the project site. Its alignment at Route 209 is generally east/west, however, farther south, Neversink Drive curves to a more north/south alignment. It serves primarily residential land uses. The pavement is in good condition and the posted speed limit is 45 mph.

At one time, the speed limit on Neversink Drive was 55 mph and was the subject of a 2015 resolution from the Town Council to the Orange County DPW to review speeds and safety conditions that residents and the Town felt were excessive. That study led to the reduction of the limit to the now posted 45 mph and a number of curve warning signs accompanied by lower advisory speed limits.

Parking is not prohibited on Neversink Drive; however, street parking is rare as virtually all abutting properties have driveways and off-street parking spaces. The roadway width is 22 to 24 feet near the approach to Route 209.

Peenpack Trail is a two-lane local road that intersects Route 209 to the north of the project site. Its alignment at Route 209 is generally east/west. It serves primarily residential land uses. The pavement is in good condition and the posted speed limit is 45 mph.

Parking is not prohibited on Peenpack Trail; however, street parking is rare as virtually all abutting properties have driveways and off-street parking spaces. The roadway width is 22 to 24 feet near the approach to Route 209.

Hangar Drive is a two-lane local road that intersects Route 209 to the south of the project site. Its alignment at Route 209 is generally east/west. It provides partial access to a large residential trailer park property known as the Huguenot. The pavement is in good condition and the posted speed limit is 30 mph at Route 209 and lowers to 25 mph within the Huguenot.

Parking is not prohibited on Hangar Drive; however, street parking is rare as virtually all abutting properties have driveways and off-street parking spaces. The roadway width is ±28 feet near the approach to Route 209.

Traffic Volumes

As proposed, the development will include hotel, restaurant and film studio uses. To evaluate the potential “worst-case” impacts of this type of development, manual turning movement counts were conducted at four key intersections on typical weekday (i.e., non-holiday/recess, school in session) mornings and evenings. The times were 7:00 to 9:00 AM and 4:00 to 6:00 PM on Thursday, October 27, 2022. The counted intersections were as follows:

1. Route 209 and Peenpack Trail
2. Route 209 and Neversink Drive

- 3. Route 209 and Hanger Drive
- 4. Neversink Drive and New Century Film Driveway

At all study intersections the minor side-streets are controlled by Stop signs. The AM and PM peak hour volumes (i.e., the highest 60-minute periods) were reduced from the collected 2-hour volumes, which are contained in **Appendix A**. The peak hour volumes are shown graphically in Figures 1 and 2 in **Appendix B** for the AM and PM peak hours, respectively.

Level of Service Analysis – Existing Conditions

The *2016 Highway Capacity Manual – 6th Edition* (HCM), published by the Transportation Research Board, defines Level of Service (LOS) for signalized and unsignalized intersections as a function of the average vehicle control delay. LOS may be calculated per movement or per approach for any intersection configuration, but LOS for the intersection as a whole is only defined for signalized and all-way stop configurations. In this analysis, the study locations are both two-way Stop controlled intersections with “T” shaped configurations.

Delay is defined in the *HCM 2016* as "the additional travel time experienced by a driver, passenger, bicyclist, or pedestrian beyond that which is required to travel at the desired speed."

For unsignalized intersections (i.e., Stop sign controlled), the major road has free through movements while movements from the minor road are controlled by a stop sign. The movements that are subject to control delays are rated on a scale of “A” to “F,” with LOS “A” exhibiting very short delays – 10 seconds or less on average – and LOS “F” exhibiting much longer delays – 50 seconds or more per vehicle on average. The relationship of LOS to delay times is shown in the following table:

**TABLE 1: LEVEL OF SERVICE VS. DELAY TIMES
STOP/YIELD SIGN CONTROLLED INTERSECTIONS**

LOS (Unsignalized Intersections)	Average Control Delay (sec/vehicle)
A	≤10 sec
B	>10–15 sec
C	>15–25 sec
D	>25–35 sec
E	>35–50 sec
F	>50 sec

In the two-way Stop controlled Level of Service analyses, the through movements on the major road and right turns from the major road are assumed to have no delay. LOS for those movements is not an integral part of the analysis, because LOS is determined by control delay, and for these "free" movements, the control delay is zero.

Movements that are subject to small to moderate control delays include left turns from the major road, through movements on the minor road and right turns from the minor road. Movements that are most affected by control delay include left turns from the minor road.

Generally accepted software (Synchro) was used to compute control delays and Levels of Service. Synchro uses the methodologies published in the Highway Capacity Manual and requires input from the user specific to the intersections being studied. Among other items, that input information includes the following:

1. Traffic Volumes – from the manual counts noted above.
2. Speeds – from field observations of posted limits and advisories as noted above.
3. Lane Configuration and Width – from field measurements.
4. Traffic Control – from field observations that included Stop/Yield control or timings and phasing if signal controlled.
5. Peak Hour Factor – from the manual counts noted above.
6. Vehicle Mix/Classification – from NYSDOT counts, which indicate 7% heavy trucks/buses on Route 209, 5% heavy vehicles on Neversink Drive and the default 2% heavy vehicles on the local streets.
7. Buses – from field observations indicating no route buses with stops any study street.
8. Pedestrians/Bicycles – from field observations indicating few if any pedestrians and bicycles.

The Levels of Service and corresponding control delays for the study locations are summarized in the following Table for the AM and PM peak hours. The detailed LOS summary reports are contained in **Appendix C**.

TABLE 2: LEVEL OF SERVICE SUMMARY – EXISTING CONDITIONS

INTERSECTION	MVMT.	EXISTING			
		AM		PM	
		DELAY (SEC)	LOS	DELAY (SEC)	LOS
Route 209 at Peenpack Trail (stop sign control)	NB Left	7.3	A	7.3	A
	SB Left	7.3	A	7.3	A
	EB	11.5	B	12.3	B
	WB	10.7	B	11.0	B
Route 209 at Neversink Dr (stop sign control)	NWB	10.3	B	12.2	B
	SWB Left	7.8	A	7.9	A
Route 209 at Hanger Dr (stop sign control)	SEB	10.2	B	11.1	B
	NEB Left	7.5	A	7.8	A
Neversink Dr at Site Dr (stop sign control)	NB Left	7.4	A	7.4	A
	EB	9.0	A	9.4	A

Upon review of the summary table for existing LOS at the key intersection, it is noted that control delays are low – all below 12.5 seconds with all Levels of Service A and B. These results are indicative of very good operating levels with little or no delay at the intersections.

Future Traffic Conditions

Background Traffic

As noted above, the project is scheduled to be completed and occupied by the year 2025 – about three years from the date of data collection. We would expect that general background traffic growth would occur to account for some minor increases in traffic volumes. This study included a background growth factor, increasing all existing traffic volumes by 4.0 percent. There were no other planned or on-going new developments in the area of the New Century site.

The resulting traffic volumes – projected future traffic without the proposed project – are shown in Figures 3 and 4 in **Appendix B** for the AM and PM peak hours, respectively. This study refers to this future condition as the “No Build” scenario.

The Proposed Project

The site is proposed to have the following uses that are expected to generate peak hour traffic:

1. Hotel – 118 rooms
2. Restaurants – 500 seats
3. Studio Space (for fabrication and set construction) – 50 employees
4. Studio Space (for film sets) – 50 employees
5. Multi-Purpose Building – for internal meetings and screenings on weekdays, with larger screenings, theatre shows, live events/festivals and conferences primarily on weekends.

The industry standard trip generation reference (*The Trip Generation Manual – 11th Edition*) from the Institute of Transportation Engineers (ITE) was referenced to estimate traffic for the proposed project. The ITE Land Uses (LU) that best fit the proposed uses are as follows:

1. Hotel – LU310: Hotel – 118 rooms
2. Restaurants – LU931: Fine Dining Restaurant – 500 seats
3. Studio Space (for fabrication and set construction) – LU140: Manufacturing – 50 employees
4. Studio Space (for film sets) – LU150: Warehousing – 50 employees
5. Multi-Purpose Building (weekday use: small screenings and meetings) – LU 445 Movie Theater – one screen

Note: ITE does not have the specific land uses for the proposed “studio” spaces (Items 3 & 4 above). However, ITE does have other uses that can be considered applicable for set construction and other fabrication work associated with filming – ITE’s Manufacturing land use. Also, indoor film sets are basically warehousing space that is used for filming. ITE’s Manufacturing and Warehousing data were considered applicable for the New Century Film use.

The results of the ITE data and the application of that information as used in this study, with the trip volumes used in the subsequent analyses at the key study intersections, are summarized as follows:

TABLE 3: TRIP GENERATION

ITE 11th Edition LU310: Hotel		Trip Generation 118 rooms			
		Rate (trips/ksf)		Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.25	0.20	29	23
PM	Peak Hour of the Adj. Street	0.25	0.25	30	29

ITE 11th Edition LU931: Fine Dining Restaurant		Trip Generation 500 seats			
		Rate (trips/ksf)		Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.01	0.01	5	5
PM	Peak Hour of the Adj. Street	0.19	0.09	94	46

ITE 11th Edition LU140: Manufacturing		Trip Generation 50 employees			
		Rate (trips/ksf)		Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.60	0.22	30	11
PM	Peak Hour of the Adj. Street	0.32	0.56	16	28

ITE 11th Edition LU150: Warehousing		Trip Generation 50 employees			
		Rate (trips/ksf)		Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.44	0.18	22	9
PM	Peak Hour of the Adj. Street	0.24	0.42	12	21

ITE 11th Edition LU 445: Movie Theater		Trip Generation 1 screen			
		Rate (trips/ksf)		Volume	
Period	Time Frame	Enter	Exit	Enter	Exit
AM	Peak Hour of the Adj. Street	0.00	0.00	0	0
PM (Friday)	Peak Hour of the Adj. Street	14.00	11.00	14	11

		Total Volume			
Period	Time Frame			Enter	Exit
AM	Peak Hour of the Adj. Street			86	48
PM (Friday)	Peak Hour of the Adj. Street			166	135

Note that the traffic totals shown above do not account for “internal” trips made between uses within the site. For example, guests at the hotel can visit a restaurant during their stay or be involved in filming on a temporary basis. Also, hotel guests, diners and company employees may visit the screening room (movie theater) without leaving the site, thus not accounting for additional external trips. Such internal trips could be as high as 25% to 30%. To be conservative, this study uses a 20% reduction factor to account for internal trips. The resulting net new external trips are estimated as follows:

TABLE 4: NET NEW EXTERNAL TRIP GENERATION

Period	Time Frame	Internal Trip Reduction	Volume	
			Enter	Exit
AM	Peak Hour of the Adj. Street	20%	69	38
PM (Friday)	Peak Hour of the Adj. Street		133	108

Traffic from the proposed development was distributed to the surrounding street network generally in accordance with the existing travel patterns exhibited in the recent manual counts. The resulting trip volume distributions are shown in Figures 5 and 6 of **Appendix B** for the AM and PM peak times, respectively.

The traffic generated by the site was then added to the above-described No Build traffic scenario resulting in the Build scenario – the future traffic volumes with both other background growth traffic and traffic from the proposed development. The resulting Build traffic is shown in Figures 7 and 8 in **Appendix B** for the AM and PM peak hours, respectively.

Level of Service (LOS) analyses were run for the No Build and Build traffic scenarios, using the same methodology as used for the existing condition analysis. The results are summarized in the following table:

TABLE 5: LEVEL OF SERVICE SUMMARY – NO BUILD TO BUILD COMPARISON

INTERSECTION	MVMT.	NO BUILD				BUILD			
		AM		PM		AM		PM	
		DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS
Route 209 at Peenpack Trail (stop sign control)	NB Left	7.3	A	7.3	A	7.3	A	7.3	A
	SB Left	7.3	A	7.3	A	7.3	A	7.3	A
	EB	11.7	B	12.5	B	11.9	B	13.5	B
	WB	10.8	B	11.2	B	11.0	B	11.6	B
Route 209 at Neversink Dr (stop sign control)	NWB	10.4	B	12.5	B	11.3	B	17.0	C
	SWB Left	7.8	A	7.9	A	8.0	A	8.2	A
Route 209 at Hanger Dr (stop sign control)	SEB	10.3	B	11.2	B	10.5	B	12.0	B
	NEB Left	7.5	A	7.8	A	7.6	A	7.9	A
Neversink Dr at Site Dr (stop sign control)	NB Left	7.4	A	7.4	A	7.5	A	7.7	A
	EB	9.0	A	9.4	A	9.7	A	11.5	B

The Build scenario shows a minor change in Level of Service during the PM peak hour on the site driveway at Neversink Drive. Also, during the PM peak hour, there is one other change in Level of Service: a “B” to “C” on the Neversink Drive approach to Route 209 with a minor delay increase of 4½ seconds. This increase is not considered significant.

Except as noted at the site entrance and on Neversink Drive during the PM peak hour, delay times increase by no more than one second from no-build to build conditions. Therefore, with such minimal changes in delay time, the impacts at the study intersections would not be noticeable in terms of LOS. This is an indication that traffic related impacts for the proposed development generally will be minimal.

Multi-Purpose Building (B-2)

As noted above, Building B-2 is proposed to accommodate multiple uses such as internal meeting space and film screenings on weekdays, and screenings, theatre shows, live events/festivals and conferences intended for larger attendance and held primarily on weekends. Those larger events would be accommodated in ±3,500 seats and would be scheduled in advance and held on Saturdays and Sundays.

While the seating appears to represent B-2 as a significant traffic generator, there are many factors that result in much lower trip generation. For example, the proposal for use as a movie/live theater would still provide a single screen/stage. Statistics for movie theater occupancy has rates averaging between 15% and 20%. Applying that rate to the 3,500 seats gives an audience of ±700. That audience would generate just under 300 trips – assuming each vehicle carries between 2 and 3 riders. Moreover, several showings/shows per weekend would spread out the audiences, which ultimately would reach a finite limit. Festivals and conferences, which tend to unfold over the course of many hours throughout the weekend, would further reduce the generated trips during a single hour.

For the reasons stated above, the traffic impact of the proposed Multi-Purpose Building would be limited to weekends and is not expected to negatively impact peak weekend traffic conditions.

Accident Assessment

The NYSDOT provided accident data for the section of Route 209 from Peenpack Trail to Hangar Drive for the last three years – starting June 1, 2019 and ending May 31, 2022. The DOT Summary is shown in Table 6.

There were totals of 2, 8, 9 and 1 accidents in the four years provided by DOT at the intersection and non-intersection locations in the above-described sections of roadways. During that study period, there were three injury accidents and 16 property-damage-only accidents. One accident resulted in a fatality. There were no accidents that were non-reportable.

Table 6: Accident Severity Summary

NYS DOT QRA ACCIDENT SEVERITY SUMMARY					
Query Number/Name	Accident Date Range	6/1/2019	To	5/31/2022	
FMO-22-20592	Attribute Query				
Case Year	Injury	Fatality	Property Damage	Non-Reportable	Total
2019	0	1	1	0	2
2020	0	0	8	0	8
2021	3	0	6	0	9
2022	0	0	1	0	1
Totals:	3	1	16	0	
Grand Total:					20

Source: NYSDOT

Detailed summaries of all accidents are included in **Appendix D**. Those summaries include information about each accident, such as location, date and time, severity, type, weather and roadway conditions, and apparent contributing factors. Regarding the accident that resulted in a fatality, the contributing factor was given as “Failure to Yield Right of Way, Turning Improper.” These factors are considered driver error.

Data for specific locations were extracted from the detailed summaries and are shown in the following Table:

Table 7: Accident Summary by Location

ACCIDENT SUMMARY BY LOCATION					
ON STREET	AT OR NEAR CROSS-STREET	NUMBER OF ACCIDENTS			
		6/30/19 to 12/31/19	2020	2021	1/1/22 to 5/31/22
ROUTE 209	PEENPACK TRAIL	0	1	1	0
	CORA ROSE LANE	0	0	1	0
	TUFANO LANE	0	1	0	0
	NEVERSINK DRIVE	2	4	4	1
	PRIVATE DRIVEWAY	0	1	1	0
	HANGAR DRIVE	0	0	2	0
NEVERSINK DRIVE	Route 209	0	1	0	0

There are two methods of measuring the relative safety history of each study intersection:

- 1) Frequency = Number of Accidents/Year
- 2) Rate = Number of Accidents per annual Vehicular Volume

Frequency is simply read from the Summary Table for each location and year. For example, in 2021 there were four (4) accidents at the Route 209/Neversink Drive intersection, described in the detailed summaries as follows:

Table 8: 2021 Accident Details – Route 209 at Neversink Drive

Case Number	Crash Severity	Case Year	Collision Type	Crash Date	Crash Time	Crash Type	Apparent Contributing Factor
38827009	INJURY	2021	REAR END	4/17/2021	11:45 AM	COLLISION WITH MOTOR VEHICLE	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38835503	PDO	2021	OTHER	4/29/2021	9:38 PM	COLLISION WITH DEER	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38998030	INJURY	2021	OTHER	8/8/2021	12:26 PM	RAN OFF ROAD ONLY	V1:(UNSAFE SPEED,DRIVER INEXPERIENCE)
39163190	PDO	2021	REAR END	12/22/2021	12:45 PM	COLLISION WITH MOTOR VEHICLE	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(CELL PHONE (HAND HELD),FOLLOWING TOO CLOSELY)

One accident – a “ran off the road” crash – resulted in injury and was attributed to “unsafe speed and driver inexperience.” Another accident – a deer strike – resulted in property damage only. The remaining two crashes were rear end type and were attributable to following too closely (tailgating) and distracted driving (cell phone).

In this assessment, contributing factors were primarily driver error related or unknown, as no physical roadway or operational issues were reported. This is an indication of good safety conditions.

Frequencies of five to six or more accidents per year – and a consistent frequency in that range for several consecutive years - are typically indicative of a possible unsafe condition that would bear further study. As shown in Table 7, above, none of the studied intersections meet those thresholds.

Accident rates for State highways are determined by calculating the number of accidents that occurred in the study period per million entering vehicles (MEV) in the section of roadway during that period. The number of accidents is the total number shown for the one-year period for all intersection and non-intersection locations listed in the Table above. The MEV is computed from the recent DOT counts as summarized in Appendix A. The 3-year accident total, the MEV for that period, the resulting rates and the comparable Statewide average rate are summarized in the following Table:

Table 9: Accident Rate Comparison

ROUTE 209 ACCIDENT RECORD COMPARED TO STATEWIDE AVERAGE					
FULL CALANDER YEAR	ROADWAY	NUMBER OF ACCIDENTS IN THE STATE RIGHT-OF-WAY	MILLION ENTERING VEHICLES (MEV)*	CALCULATED RATE (ACCIDENTS/MEV)	STATEWIDE AVERAGE RATE** (ACCIDENTS/MEV)
2020	ROUTE 209	7	2.04	3.43	3.73
2021		9	2.04	4.41	

SED ON NYS DOT ESTIMATED AADT VOLUME OF 5,600 ENTERING VEHICLES/DAY X 365 DAYS
see APPENDIX E for the applicable State DOT rate statistics

Since there were totals of seven and nine accidents in the two full calendar years on Route 209, the calculated rates are 3.43 (2020) and 4.41 (2021). These rates are consistent with the statewide average of 3.73.

Moreover, note the following:

1. Accident frequencies are low – generally four (4) or fewer accidents per year at all intersections in the study area.
2. Yearly accident rates are consistent with the statewide average.
3. There are no indications that there are unsafe conditions within the study area.

It is concluded that the proposed New Century Film development will not adversely impact the accident history in the study area. The added volume from the site will be distributed in several different directions thereby spreading out the potential increases. No safety issues are expected due to site generated traffic.

Traffic Impacts During Construction

Impacts due to construction traffic will be temporary in nature, lasting for the duration of the on-going building program at the site. Traffic would consist of occasional heavy trucks delivering building materials to the project site and daily traffic from vehicles belonging to construction workers. Typically, large pieces of construction equipment such as bulldozers and excavators are brought to the site (if needed) at the beginning of the project and kept on-site until no longer needed. Construction may also require the temporary, short-term closure of traffic lanes and flagging to direct traffic during the closure. This will be coordinated with the local Police Department if required. Construction workers' vehicles would be parked on-site.

Conclusions

This Traffic Impact Study and, in particular, the Level of Service and accident analyses summarized above indicate that, while there will be increases in traffic volumes on the adjacent streets and minor increases in control delay times at key intersections, traffic flows and Levels of Service generally would not be negatively impacted. It is concluded that the proposed project will not adversely impact traffic conditions on the adjacent streets and at intersections in the study area.

APPENDIX A
DOT TRAFFIC VOLUME DATA
2022 INTERSECTION TURNING MOVEMENT COUNTS

NYS DOT TRAFFIC VOLUMES				
<i>Route 209</i>				
FUNCTIONAL_CLASS	14			
FACTOR_GROUP	40			
MONTH	10			
DAY_OF_FIRST_DATA	1			
YEAR	2018			
SPECIFIC_RECORDER_PLACEMENT				
400' E OF TRI STATES CAMP RD				
SEASONAL_FACTOR	1.034			
AXLE_FACTOR	1			
Time Period		Average Hourly Volume		
From	To	Eastbound	Westbound	Total
12:00AM	1:00 AM	18	11	29
1:00 AM	2:00 AM	14	10	24
2:00 AM	3:00 AM	6	8	14
3:00 AM	4:00 AM	6	11	17
4:00 AM	5:00 AM	18	16	34
5:00 AM	6:00 AM	42	73	115
6:00 AM	7:00 AM	115	128	243
7:00 AM	8:00 AM	149	212	361
8:00 AM	9:00 AM	141	181	322
9:00 AM	10:00 AM	132	192	324
10:00 AM	11:00 AM	145	163	308
11:00 AM	12:00 PM	155	171	326
12:00 PM	1:00 PM	171	174	345
1:00 PM	2:00 PM	164	190	354
2:00 PM	3:00 PM	250	190	440
3:00 PM	4:00 PM	242	254	496
4:00 PM	5:00 PM	262	245	507
5:00 PM	6:00 PM	276	206	482
6:00 PM	7:00 PM	180	163	343
7:00 PM	8:00 PM	136	132	268
8:00 PM	9:00 PM	114	72	186
9:00 PM	10:00 PM	68	46	114
10:00 PM	11:00 PM	50	41	91
11:00 PM	12:00 AM	25	34	59
	AADT	2784	2827	5611

Station	FC Order	County	End Mile Point	Section Length	Road Name	Beginning Description	End Description	2019 Estimate				Previous Counts				
								AAADT	% Trucks	YEAR	AAADT	YEAR	AAADT	YEAR		
83_0516	16 01	1689	0039		START 207/300 OLAP	END 207/300 OLAP	27166	4.4	2019	27166	2016	24921	2013	23699	2010	23998
83_0517	16 01	1907	0218		END 207/300 OLAP	RT 17K END RT 207	9080	4.1	2016	9119	2013	8797	2010	8598	2007	9125
Region 08																
County 071 Orange																
83_0032	16 01	0087	0087		RT 17M	RTS 6 & 17	15848	3.9	2016	15915	2010	16887	2007	20697	2004	18134
83_0081	16 01	0381	0294		RTS 6 & 17	CR 27 CLOVE RD	17231	3.3	2018	17255	2011	16022	2008	17198	2005	16999
83_0522	16 01	0741	0360		CR 27 CLOVE RD	RT 94 WASHINGTONVILLE	7479	3	2018	7490	2012	7798	2008	9050	2005	9342
83_0523	14 01	0953	0212		RT 94 WASHINGTONVILLE	CR 8/SARAH WELLS TR	5800	4.9	2018	5821	2015	6456	2012	6278	2009	6952
83_0524	14 01	1105	0152	NY 208	CR 8/SARAH WELLS TR	START NY 207/NY 208 OLAP	2888	5	2016	2920	2012	3125	2009	3354	2006	3679
83_0514	14 01	1118	0013		START NY 207/NY 208 OLAP	END 207/208 OLAP	6245	5.6	2018	6268	2015	6377	2009	6242	2006	7405
83_0525	14 01	1319	0201		END 207/208 OLAP	CR 4/MAYBROOK RD	3182	5.6	2018	3193	2014	2154	2011	3205	2008	3552
83_0057	14 01	1568	0249	HOMESTEAD AVE N	CR 4/MAYBROOK RD	RT 84I OVER	6742	6.2	2017	6791	2011	7095	2008	7474	2005	8532
83_0526	16 01	1681	0113		RT 84I OVER	RT 17K	17100	7.2	2019	17100	2016	16817	2013	17049	2010	14556
83_0289	16 01	1945	0264		RT 17K	END NY 52/NY 208 OLAP/MAIN S	11268	4.7	2018	11284	2014	10519	2011	9825	2008	10030
83_0299	16 01	1951	0006		END NY 52/NY 208 OLAP/MAIN S	START NY 52/NY 208 OLAP/MAIN	13513	4.4	2018	13532	2014	20448	2011	18609	2008	14700
83_0290	16 01	2044	0093	ULSTER AVE NY 2	START NY 52/NY 208 OLAP/MAIN	LAKE OSIRIS RD	6008	6.1	2016	6034	2013	5351	2010	5422	2007	5606
83_0828	16 01	2209	0165		LAKE OSIRIS RD	Orange/Ulster Co Line	4265	7.2	2017	4277	2011	4804	2008	4345	2002	5021
County 111 Ulster																
86_0529	16 02	0169	0169		Orange/Ulster Co Line	RT 300	8000	12.2	2019	8000	2009	8574	2006	7806	2003	9032
86_0531	6 02	0696	0527		RT 300	RTS 44 & 55	5685	6.8	2017	5650	2011	5681	2008	5925	2005	6380
86_0532	16 02	1269	0573		RTS 44 & 55	RTS 299 & 32 SB END RT 208	6275	5.3	2018	6284	2015	5995	2012	6175	2009	5512
County 071 Orange																
83_0012	14 01	0061	0061		PIKE ST	PENN STATE LINE START 6/209	9375	3.5	2018	9409	2015	10536	2009	10567	2004	12094
83_0013	14 01	0086	0025	EAST MAIN ST	BEGIN 6/209 OLAP PIKE ST	END 6/209 OLAP FOWLER ST	10544	4.8	2018	10582	2014	10429	2011	8189	2008	11878
83_0533	14 01	0185	0059	KINGSTON AVE	END 6/209 OLAP FOWLER ST	PORT JERVIS CL / DEERPARK TL	7959	6.9	2018	7988	2014	7053	2008	9498	2002	7753
83_0534	14 01	0440	0255		PORT JERVIS CL / DEERPARK TL	CR 80 NEVERSINK DR	5591	7.6	2018	5611	2015	5941	2011	5861	2007	6784
83_0728	14 01	0888	0468		CR 80 NEVERSINK DR	RT 211 CUDDERBACKVILLE	5181	8.8	2018	5200	2014	4924	2011	4503	2008	4955
83_0535	4 01	1204	0316		RT 211 CUDDERBACKVILLE	Orange/Sullivan Co Line	2785	8.7	2018	2791	2014	2803	2011	2767	2007	3012
County 105 Sullivan																
96_0283	4 02	0546	0546		Orange/Sullivan Co Line	ACC RT 17	3848	7.8	2017	3854	2011	2785	2007	3005	2004	3497

Project	New Century Film			
Intersection	Route 209 at Peenpack Trail			

PM PEAK HOUR FILL IN BLUE FIELDS ONLY

Day/Date Thursday 10/27/2022

		1	2	3	4	5	6	7	8	9	10	11	12		
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R		
	Field #	4	5	6	10	11	12	7	8	9	1	2	3		
4:00 PM	4:15 PM	11	47	1	0	37	2	0	0	0	4	0	11		
4:15 PM	4:30 PM	11	55	0	1	41	3	0	0	1	5	0	10		
4:30 PM	4:45 PM	15	50	0	0	40	4	0	0	1	6	0	14		
4:45 PM	5:00 PM	10	49	0	0	40	2	1	0	0	6	0	11		
5:00 PM	5:15 PM	10	47	0	0	37	3	0	0	0	7	0	11		
5:15 PM	5:30 PM	15	47	0	0	39	6	0	0	0	6	1	3		
5:30 PM	5:45 PM	9	50	0	0	45	2	0	0	0	6	0	5		
5:45 PM	6:00 PM	9	47	0	0	40	2	0	0	0	8	0	7		
6:00 PM	6:15 PM														
6:15 PM	6:30 PM														
6:30 PM	6:45 PM														
6:45 PM	7:00 PM														

4:00 PM	4:15 PM	11	47	1	0	37	2	0	0	0	4	0	11	113		4:15 PM
4:15 PM	4:30 PM	11	55	0	1	41	3	0	0	1	5	0	10	127		4:30 PM
4:30 PM	4:45 PM	15	50	0	0	40	4	0	0	1	6	0	14	130		4:45 PM
4:45 PM	5:00 PM	10	49	0	0	40	2	1	0	0	6	0	11	119	489	5:00 PM
5:00 PM	5:15 PM	10	47	0	0	37	3	0	0	0	7	0	11	115	491	5:15 PM
5:15 PM	5:30 PM	15	47	0	0	39	6	0	0	0	6	1	3	117	481	5:30 PM
5:30 PM	5:45 PM	9	50	0	0	45	2	0	0	0	6	0	5	117	468	5:45 PM
5:45 PM	6:00 PM	9	47	0	0	40	2	0	0	0	8	0	7	113	462	6:00 PM
6:00 PM	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	347	6:15 PM
6:15 PM	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	230	6:30 PM
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	113	6:45 PM
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:00 PM
		46	201	0	1	158	12	1	0	2	24	0	46	130	491	

4:15 PM 5:15 PM
PHF 0.94

PEAK HOUR SUMMARY		EB	L	
		EB	T	201
		EB	R	0
		WB	L	1
		WB	T	158
		WB	R	12
		NB	L	1
		NB	T	0
		NB	R	2
		SB	L	24
		SB	T	0
		SB	R	46

Project		New Century Film														
Intersection		Route 209 at Neversink Drive														
AM PEAK HOUR																
Day/Date	Thursday	10/27/2022														
		1	2	3	4	5	6	7	8	9	10	11	12			
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R			
Field #		3	4	1	2			5		6						
7:00 AM	7:15 AM		47	8	12	33		3		10						
7:15 AM	7:30 AM		55	10	10	26		3		13						
7:30 AM	7:45 AM		48	5	11	31		3		11						
7:45 AM	8:00 AM		41	6	13	37		4		12						
8:00 AM	8:15 AM		42	7	10	28		5		13						
8:15 AM	8:30 AM		38	5	13	27		5		18						
8:30 AM	8:45 AM		40	5	11	31		6		14						
8:45 AM	9:00 AM		10	8	11	28		7		11						
9:00 AM	9:15 AM															
9:15 AM	9:30 AM															
9:30 AM	9:45 AM															
9:45 AM	10:00 AM															
7:00 AM	7:15 AM	0	47	8	12	33	0	3	0	10	0	0	0	113	7:15 AM	
7:15 AM	7:30 AM	0	55	10	10	26	0	3	0	13	0	0	0	117	7:30 AM	
7:30 AM	7:45 AM	0	48	5	11	31	0	3	0	11	0	0	0	109	7:45 AM	
7:45 AM	8:00 AM	0	41	6	13	37	0	4	0	12	0	0	0	113	452 8:00 AM	
8:00 AM	8:15 AM	0	42	7	10	28	0	5	0	13	0	0	0	105	444 8:15 AM	
8:15 AM	8:30 AM	0	38	5	13	27	0	5	0	18	0	0	0	106	433 8:30 AM	
8:30 AM	8:45 AM	0	40	5	11	31	0	6	0	14	0	0	0	107	431 8:45 AM	
8:45 AM	9:00 AM	0	10	8	11	28	0	7	0	11	0	0	0	75	393 9:00 AM	
9:00 AM	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	288 9:15 AM	
9:15 AM	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	182 9:30 AM	
9:30 AM	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	75 9:45 AM	
9:45 AM	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0 10:00 AM	
		0	191	29	46	127	0	13	0	46	0	0	0	117	452	
												7:00 AM	8:00 AM			
												PHF		0.97		
												PEAK HOUR SUMMARY				
												EB	T	191		
												EB	R	29		
												WB	L	46		
												WB	T	127		
												NB	L	13		
												NB	R	46		

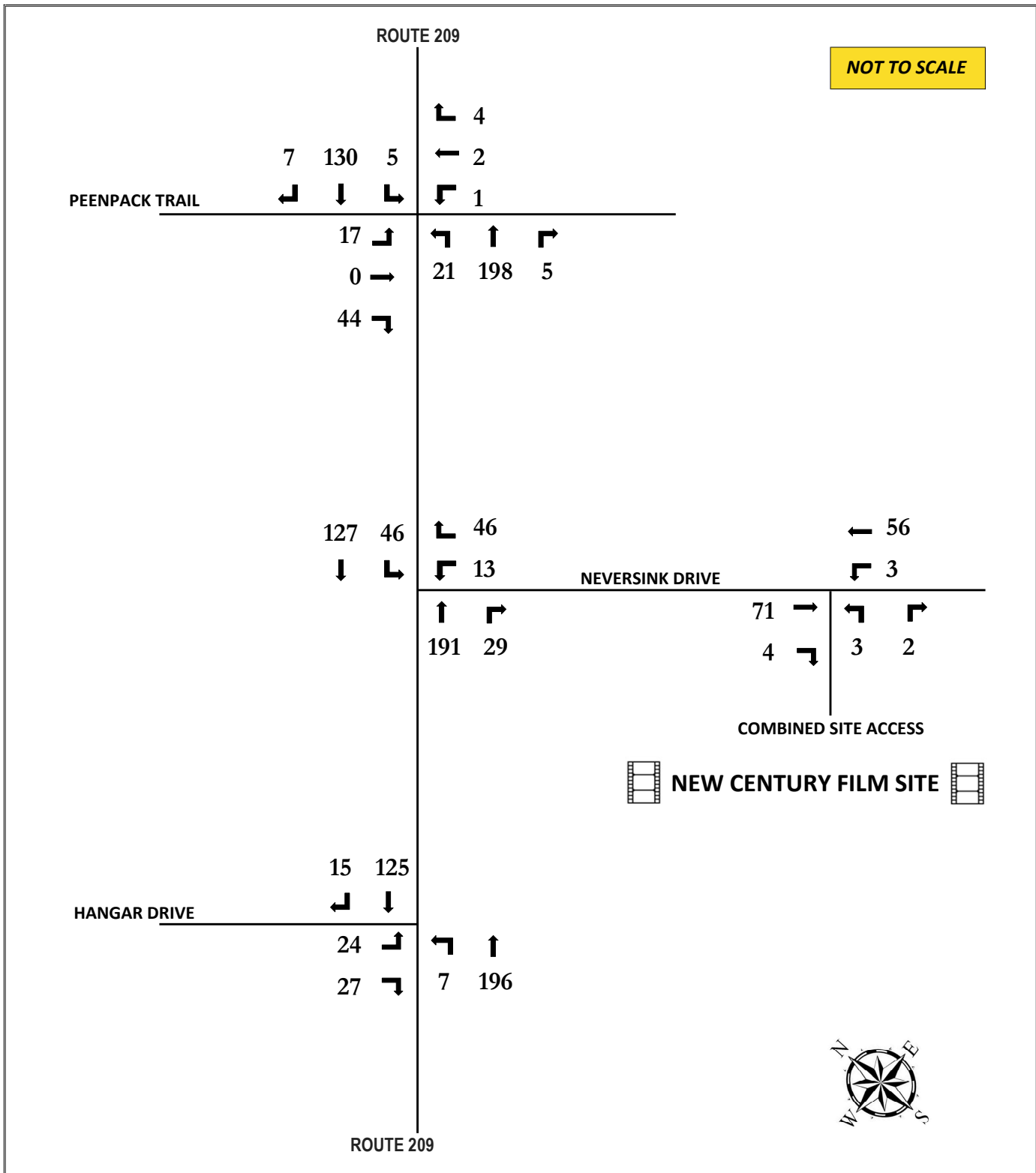
Project		New Century Film														
Intersection		Route 209 at Neversink Drive														
PM PEAK HOUR																
Day/Date	Thursday	10/27/2022														
		1	2	3	4	5	6	7	8	9	10	11	12			
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R			
	Field #	3	4	1	2			5		6						
4:00 PM	4:15 PM		47	7	10	48		10		11						
4:15 PM	4:30 PM		60	6	15	45		15		15						
4:30 PM	4:45 PM		50	8	15	41		14		17						
4:45 PM	5:00 PM		38	15	12	38		8		22						
5:00 PM	5:15 PM		41	11	13	39		8		10						
5:15 PM	5:30 PM		41	12	11	46		7		10						
5:30 PM	5:45 PM		43	11	18	59		9		11						
5:45 PM	6:00 PM		47	8	17	43		9		12						
6:00 PM	6:15 PM															
6:15 PM	6:30 PM															
6:30 PM	6:45 PM															
6:45 PM	7:00 PM															
4:00 PM	4:15 PM	0	47	7	10	48	0	10	0	11	0	0	0	133	4:15 PM	
4:15 PM	4:30 PM	0	60	6	15	45	0	15	0	15	0	0	0	156	4:30 PM	
4:30 PM	4:45 PM	0	50	8	15	41	0	14	0	17	0	0	0	145	4:45 PM	
4:45 PM	5:00 PM	0	38	15	12	38	0	8	0	22	0	0	0	133	567 5:00 PM	
5:00 PM	5:15 PM	0	41	11	13	39	0	8	0	10	0	0	0	122	556 5:15 PM	
5:15 PM	5:30 PM	0	41	12	11	46	0	7	0	10	0	0	0	127	527 5:30 PM	
5:30 PM	5:45 PM	0	43	11	18	59	0	9	0	11	0	0	0	151	533 5:45 PM	
5:45 PM	6:00 PM	0	47	8	17	43	0	9	0	12	0	0	0	136	536 6:00 PM	
6:00 PM	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	414 6:15 PM	
6:15 PM	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	287 6:30 PM	
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	136 6:45 PM	
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0 7:00 PM	
		0	195	36	52	172	0	47	0	65	0	0	0	156	567	
														4:00 PM	5:00 PM	
														PHF	0.91	
														PEAK HOUR SUMMARY		
														EB	T	195
														EB	R	36
														WB	L	52
														WB	T	172
														NB	L	47
														NB	R	65

	Project		New Century Film														
	Intersection		Route 209 at Hangar Drive														
PM PEAK HOUR																	
Day/Date	Thursday	10/27/2022															
		1	2	3	4	5	6	7	8	9	10	11	12				
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R				
	Field #	4					1				2		3				
4:00 PM	4:15 PM	2					3				4		1				
4:15 PM	4:30 PM	2					3				3		4				
4:30 PM	4:45 PM	3					3				3		3				
4:45 PM	5:00 PM	4					4				1		2				
5:00 PM	5:15 PM	5					5				4		1				
5:15 PM	5:30 PM	6					6				1		1				
5:30 PM	5:45 PM	4					5				2		2				
5:45 PM	6:00 PM	4					5				2		3				
6:00 PM	6:15 PM																
6:15 PM	6:30 PM																
6:30 PM	6:45 PM																
6:45 PM	7:00 PM																
4:00 PM	4:15 PM	2	0	0	0	0	3	0	0	0	4	0	1	10	4:15 PM		
4:15 PM	4:30 PM	2	0	0	0	0	3	0	0	0	3	0	4	12	4:30 PM		
4:30 PM	4:45 PM	3	0	0	0	0	3	0	0	0	3	0	3	12	4:45 PM		
4:45 PM	5:00 PM	4	0	0	0	0	4	0	0	0	1	0	2	11	45	5:00 PM	
5:00 PM	5:15 PM	5	0	0	0	0	5	0	0	0	4	0	1	15	50	5:15 PM	
5:15 PM	5:30 PM	6	0	0	0	0	6	0	0	0	1	0	1	14	52	5:30 PM	
5:30 PM	5:45 PM	4	0	0	0	0	5	0	0	0	2	0	2	13	53	5:45 PM	
5:45 PM	6:00 PM	4	0	0	0	0	5	0	0	0	2	0	3	14	56	6:00 PM	
6:00 PM	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	41	6:15 PM	
6:15 PM	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	27	6:30 PM	
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	14	6:45 PM	
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:00 PM	
		19	0	0	0	0	21	0	0	0	9	0	7	15	56		
														5:00 PM	6:00 PM		
														PHF	0.93		
														PEAK HOUR SUMMARY	EB	L	19
															EB	T	222
															WB	T	198
															WB	R	21
															SB	L	9
															SB	R	7

APPENDIX B

TRAFFIC VOLUME DIAGRAMS

FIGURE	TITLE	
1	AM Peak Hour	2022 Existing Volumes
2	PM Peak Hour	2022 Existing Volumes
3	AM Peak Hour	2025 No Build Volumes
4	PM Peak Hour	2025 No Build Volumes
5	AM Peak Hour	Site Generated Traffic Volumes
6	PM Peak Hour	Site Generated Traffic Volumes
7	AM Peak Hour	2025 Build Volumes
8	PM Peak Hour	2025 Build Volumes



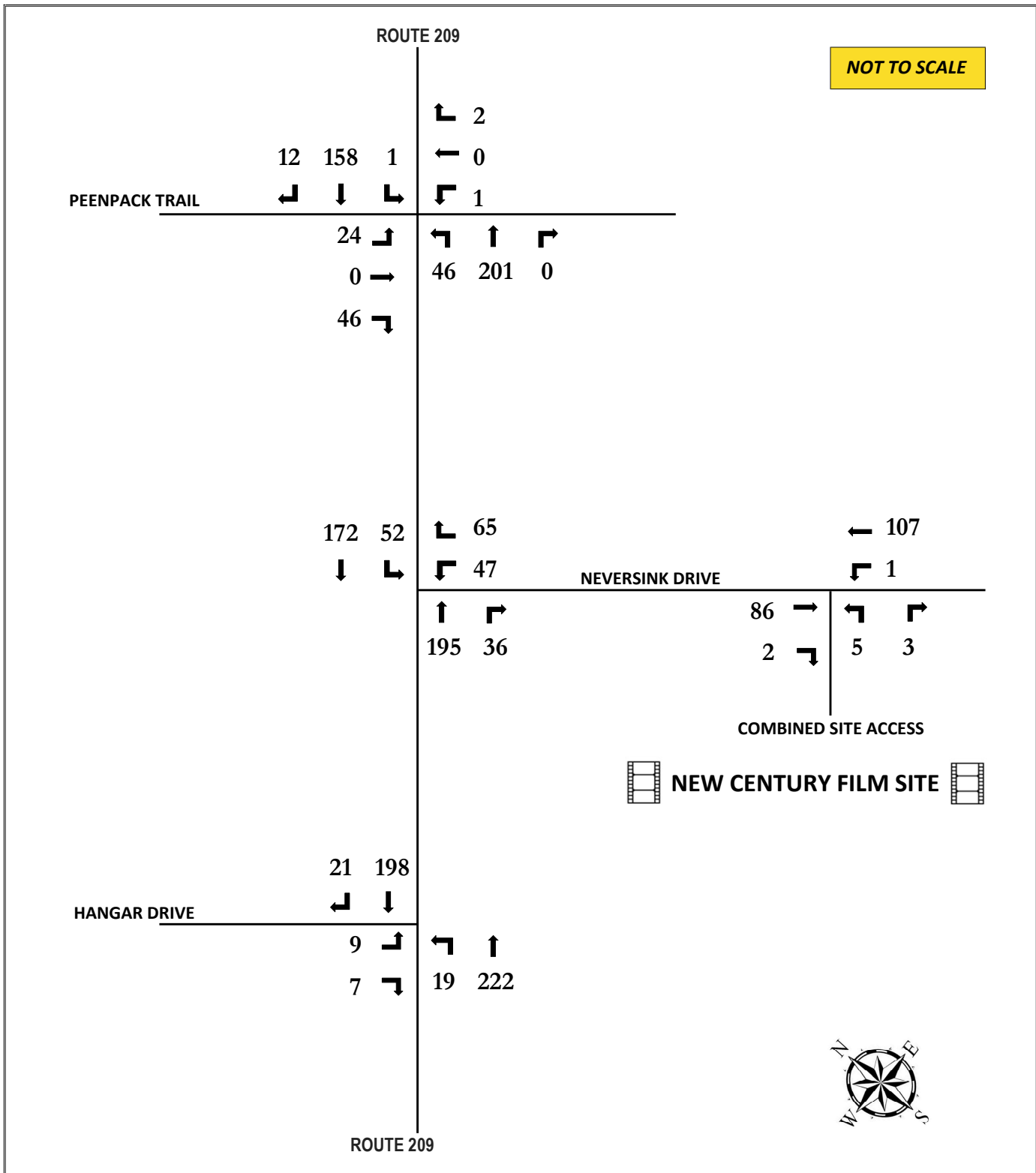
NEW CENTURY FILM

DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 1

SCENARIO	AM PEAK HOUR 2022 EXISTING
TRAFFIC VOLUME CONDITIONS	



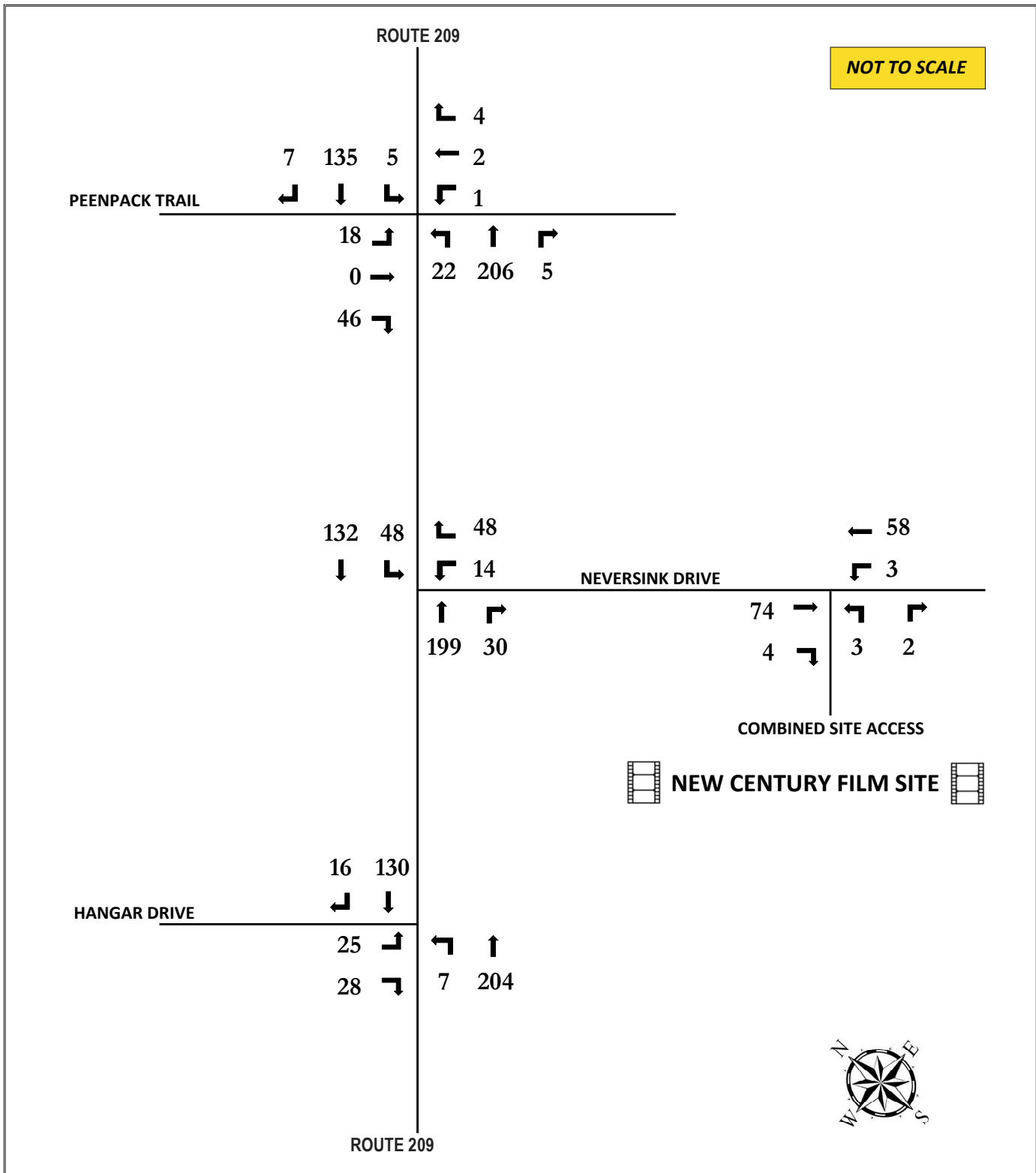
NEW CENTURY FILM

DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 2

SCENARIO	PM PEAK HOUR 2022 EXISTING
TRAFFIC VOLUME CONDITIONS	



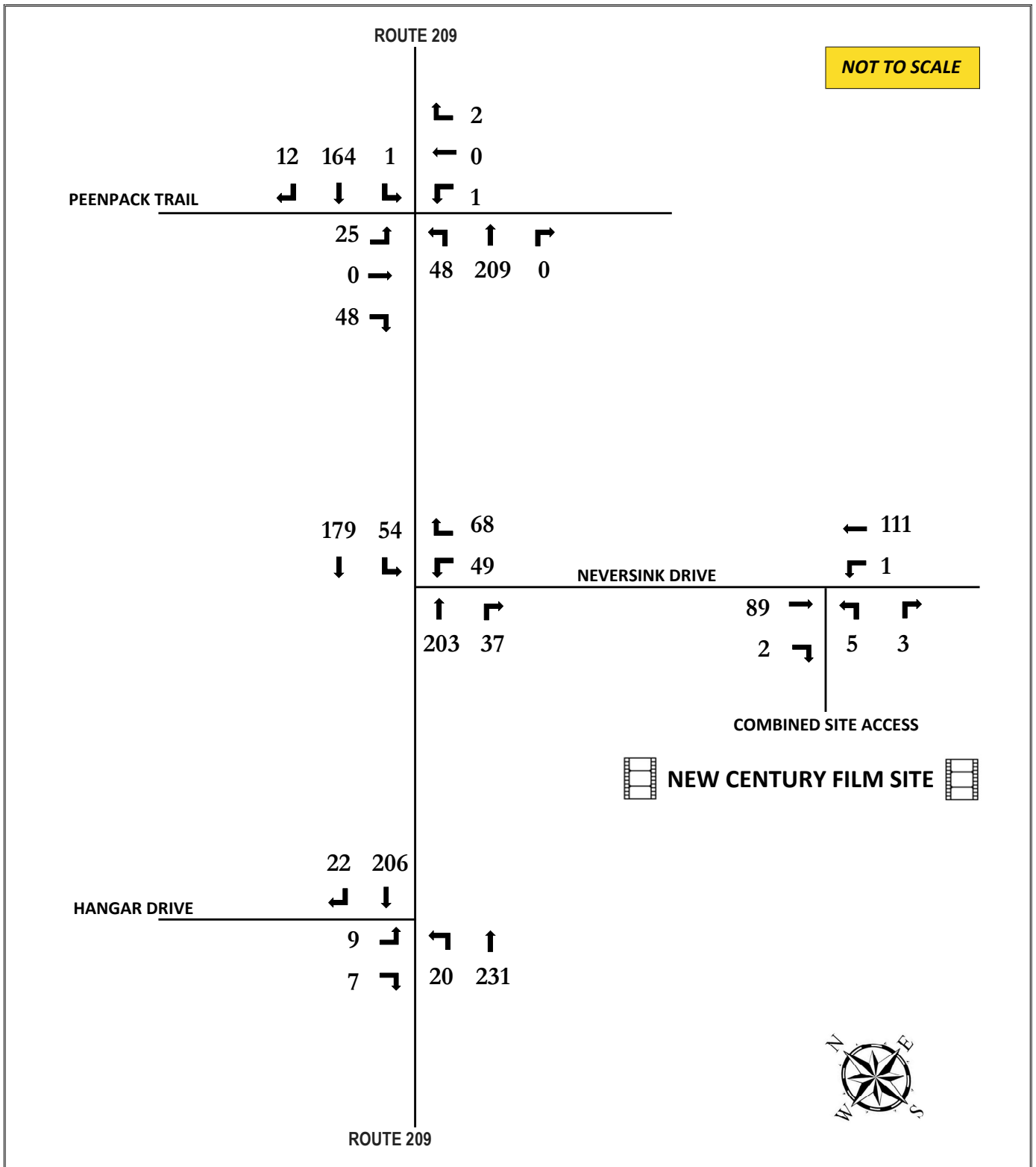
NEW CENTURY FILM

DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 3

SCENARIO:	AM PEAK HOUR 2025 NO BUILD
TRAFFIC VOLUME CONDITIONS	



NEW CENTURY FILM

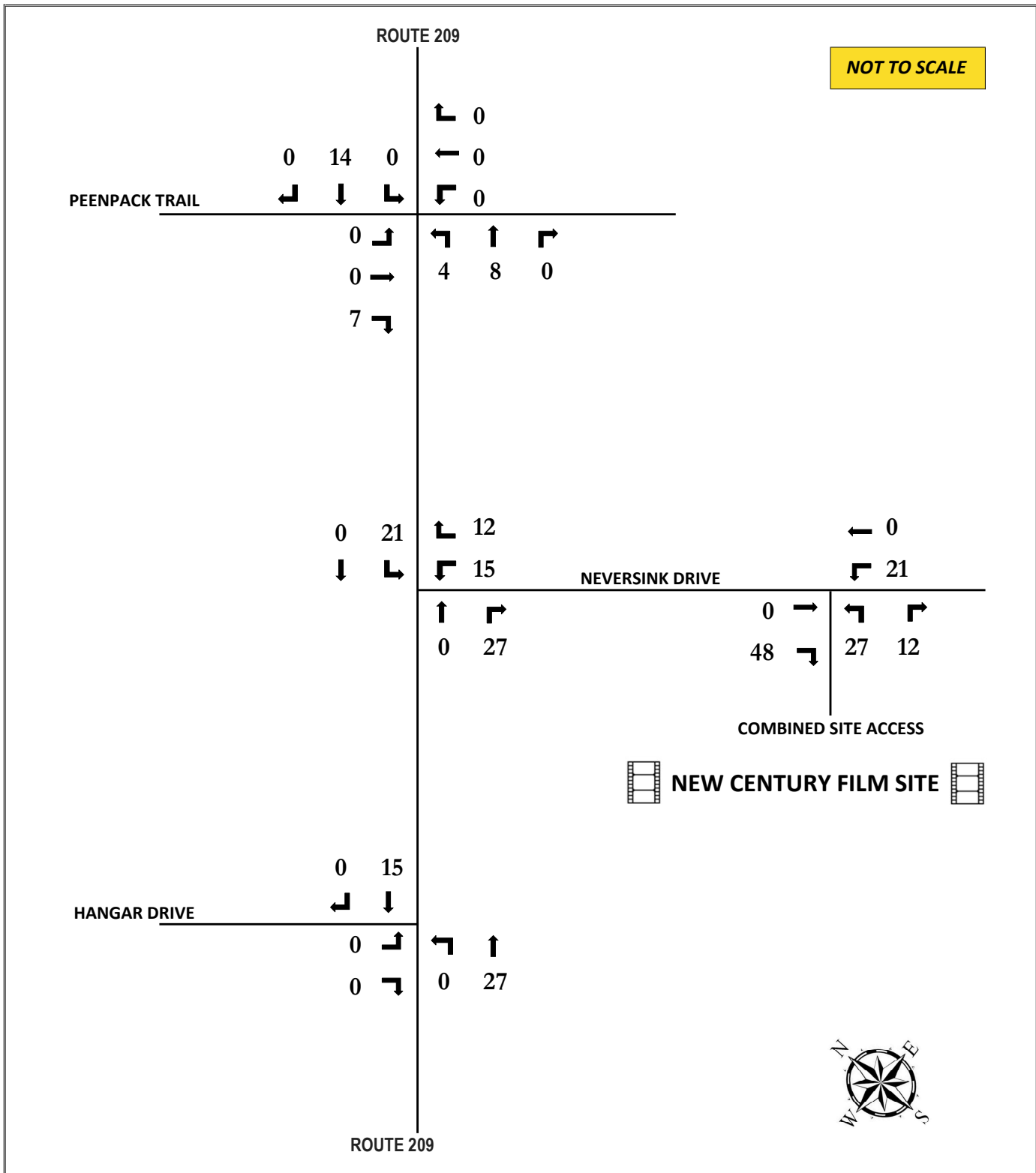
DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 4

SCENARIO: PM PEAK HOUR 2025 NO BUILD

TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM

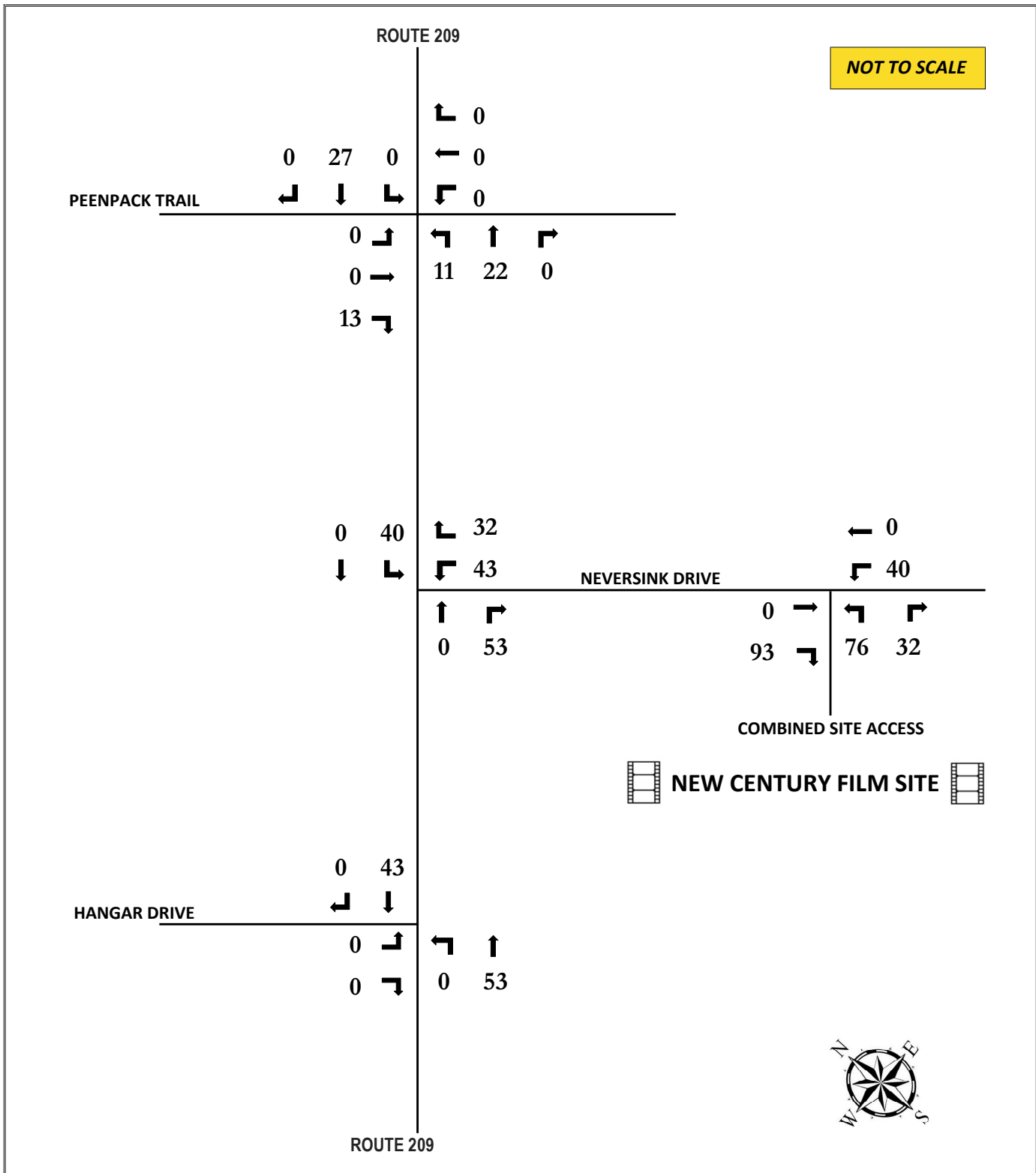
DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 5

SCENARIO: AM PEAK HOUR SITE GENERATED

TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM

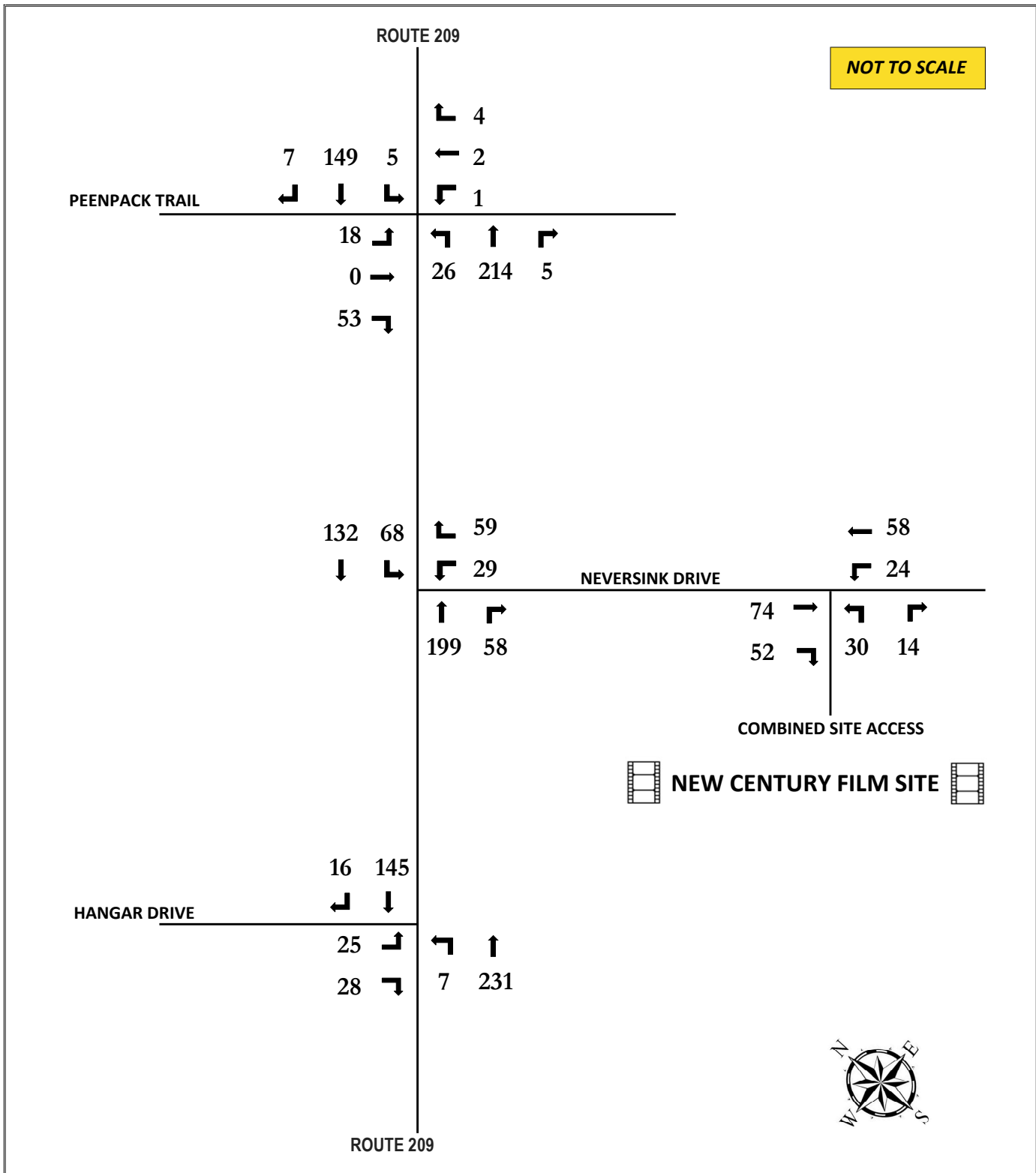
DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 6

SCENARIO: PM PEAK HOUR SITE GENERATED

TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM

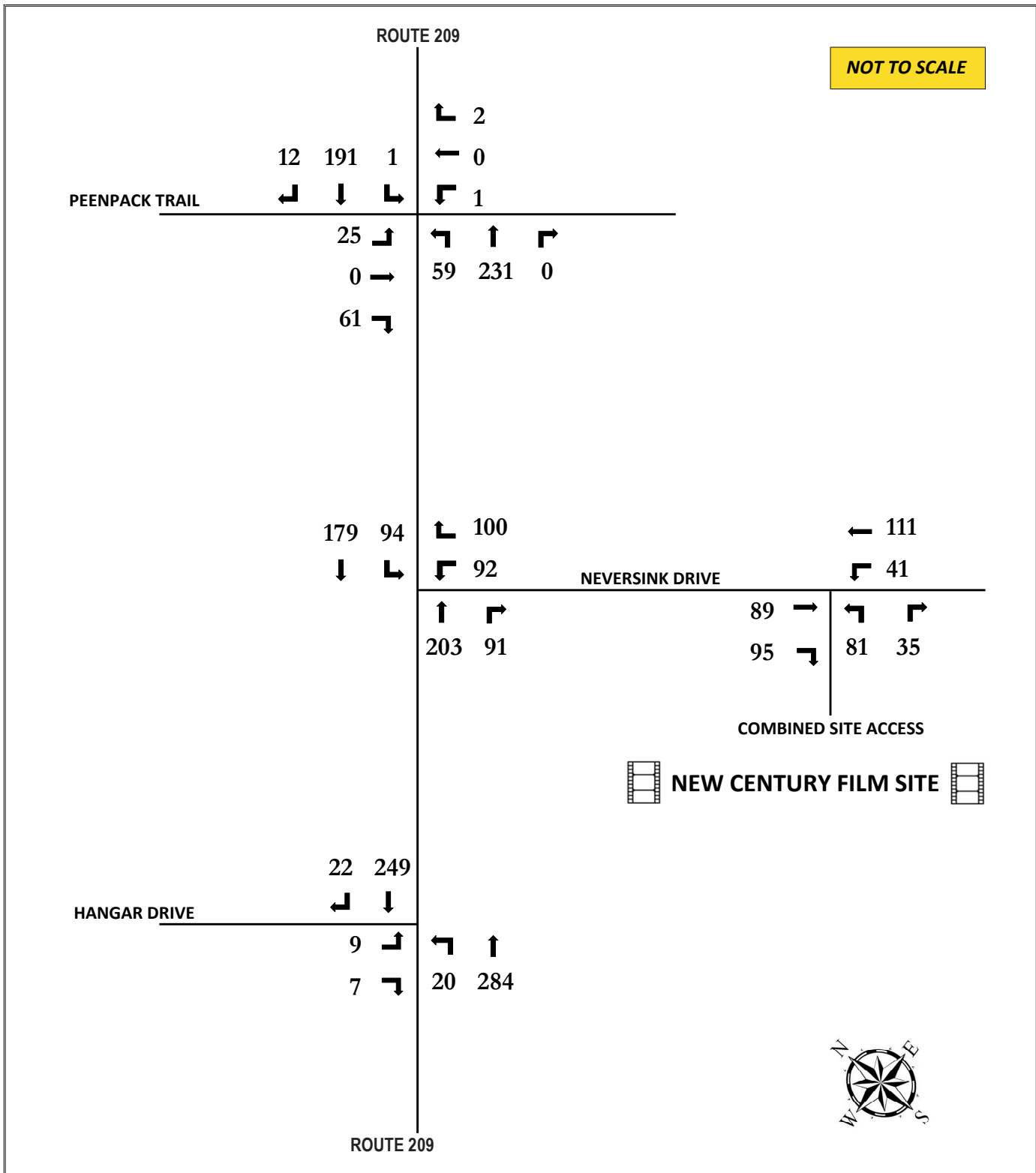
DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 7

SCENARIO: AM PEAK HOUR 2025 BUILD

TRAFFIC VOLUME CONDITIONS



NEW CENTURY FILM

DEERPARK, NEW YORK

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 8

SCENARIO: PM PEAK HOUR 2025 BUILD

TRAFFIC VOLUME CONDITIONS

APPENDIX C

DETAILED LEVEL OF SERVICE SUMMARIES

Intersection												
Int Delay, s/veh	9.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	198	5	5	130	7	1	2	4	17	0	44
Future Vol, veh/h	21	198	5	5	130	7	1	2	4	17	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	10	2	2	10	2	2	2	2	2	2	2
Mvmt Flow	22	211	5	5	138	7	1	2	4	18	0	47

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	139	68	24	174	89	4	47	0	0	6	0	0
Stage 1	60	60	-	6	6	-	-	-	-	-	-	-
Stage 2	79	8	-	168	83	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	831	807	1052	789	786	1080	1560	-	-	1615	-	-
Stage 1	951	829	-	1016	875	-	-	-	-	-	-	-
Stage 2	930	873	-	834	811	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	706	797	1052	619	776	1080	1560	-	-	1615	-	-
Mov Cap-2 Maneuver	706	797	-	619	776	-	-	-	-	-	-	-
Stage 1	950	819	-	1015	874	-	-	-	-	-	-	-
Stage 2	777	872	-	609	801	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.5		10.7		1		2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1560	-	-	792	780	1615	-	-
HCM Lane V/C Ratio	0.001	-	-	0.301	0.194	0.011	-	-
HCM Control Delay (s)	7.3	0	-	11.5	10.7	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.3	0.7	0	-	-

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	191	29	46	127	13	46
Future Vol, veh/h	191	29	46	127	13	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	197	30	47	131	13	47

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	227	0	437 212
Stage 1	-	-	-	-	212 -
Stage 2	-	-	-	-	225 -
Critical Hdwy	-	-	4.15	-	6.45 6.25
Critical Hdwy Stg 1	-	-	-	-	5.45 -
Critical Hdwy Stg 2	-	-	-	-	5.45 -
Follow-up Hdwy	-	-	2.245	-	3.545 3.345
Pot Cap-1 Maneuver	-	-	1324	-	571 821
Stage 1	-	-	-	-	816 -
Stage 2	-	-	-	-	805 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1324	-	549 821
Mov Cap-2 Maneuver	-	-	-	-	549 -
Stage 1	-	-	-	-	816 -
Stage 2	-	-	-	-	774 -

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	740	-	-	1324	-
HCM Lane V/C Ratio	0.082	-	-	0.036	-
HCM Control Delay (s)	10.3	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	24	27	7	196	125	15
Future Vol, veh/h	24	27	7	196	125	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	26	29	8	213	136	16

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	373	144	152	0	0
Stage 1	144	-	-	-	-
Stage 2	229	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	628	903	1429	-	-
Stage 1	883	-	-	-	-
Stage 2	809	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	624	903	1429	-	-
Mov Cap-2 Maneuver	624	-	-	-	-
Stage 1	878	-	-	-	-
Stage 2	809	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.2	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1429	-	746	-	-
HCM Lane V/C Ratio	0.005	-	0.074	-	-
HCM Control Delay (s)	7.5	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	3	2	3	56	71	4
Future Vol, veh/h	3	2	3	56	71	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	3	2	3	58	73	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	139	75	77	0	0
Stage 1	75	-	-	-	-
Stage 2	64	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	854	986	1522	-	-
Stage 1	948	-	-	-	-
Stage 2	959	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	852	986	1522	-	-
Mov Cap-2 Maneuver	852	-	-	-	-
Stage 1	946	-	-	-	-
Stage 2	959	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1522	-	901	-	-
HCM Lane V/C Ratio	0.002	-	0.006	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	46	201	0	1	158	12	1	0	2	24	0	46
Future Vol, veh/h	46	201	0	1	158	12	1	0	2	24	0	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	7	2	2	7	2	2	2	2	2	2	2
Mvmt Flow	49	214	0	1	168	13	1	0	2	26	0	49

Major/Minor	Minor2		Minor1			Major1		Major2				
Conflicting Flow All	171	81	25	187	104	1	49	0	0	2	0	0
Stage 1	77	77	-	3	3	-	-	-	-	-	-	-
Stage 2	94	4	-	184	101	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.57	6.22	7.12	6.57	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.063	3.318	3.518	4.063	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	792	800	1051	774	777	1084	1558	-	-	1620	-	-
Stage 1	932	821	-	1020	883	-	-	-	-	-	-	-
Stage 2	913	883	-	818	802	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	642	786	1051	604	763	1084	1558	-	-	1620	-	-
Mov Cap-2 Maneuver	642	786	-	604	763	-	-	-	-	-	-	-
Stage 1	931	807	-	1019	882	-	-	-	-	-	-	-
Stage 2	730	882	-	591	788	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.3		11		2.4		2.5	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1558	-	-	754	778	1620	-	-
HCM Lane V/C Ratio	0.001	-	-	0.348	0.234	0.016	-	-
HCM Control Delay (s)	7.3	0	-	12.3	11	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.6	0.9	0	-	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	195	36	52	172	47	65
Future Vol, veh/h	195	36	52	172	47	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	214	40	57	189	52	71

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	254	0	537
Stage 1	-	-	-	-	234
Stage 2	-	-	-	-	303
Critical Hdwy	-	-	4.15	-	6.45
Critical Hdwy Stg 1	-	-	-	-	5.45
Critical Hdwy Stg 2	-	-	-	-	5.45
Follow-up Hdwy	-	-	2.245	-	3.545
Pot Cap-1 Maneuver	-	-	1294	-	500
Stage 1	-	-	-	-	798
Stage 2	-	-	-	-	742
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1294	-	476
Mov Cap-2 Maneuver	-	-	-	-	476
Stage 1	-	-	-	-	798
Stage 2	-	-	-	-	706

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	622	-	-	1294	-
HCM Lane V/C Ratio	0.198	-	-	0.044	-
HCM Control Delay (s)	12.2	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-

Intersection						
Int Delay, s/veh	0.7					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	9	7	19	222	198	21
Future Vol, veh/h	9	7	19	222	198	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	10	8	21	241	215	23

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	510	227	238	0	-	0
Stage 1	227	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	523	812	1329	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	514	812	1329	-	-	-
Mov Cap-2 Maneuver	514	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	11.1	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1329	-	612	-	-
HCM Lane V/C Ratio	0.016	-	0.028	-	-
HCM Control Delay (s)	7.8	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	107	86	2
Future Vol, veh/h	5	3	1	107	86	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	5	3	1	118	95	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	216	96	97	0	0
Stage 1	96	-	-	-	-
Stage 2	120	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	772	960	1496	-	-
Stage 1	928	-	-	-	-
Stage 2	905	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	771	960	1496	-	-
Mov Cap-2 Maneuver	771	-	-	-	-
Stage 1	927	-	-	-	-
Stage 2	905	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1496	-	832	-	-
HCM Lane V/C Ratio	0.001	-	0.011	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	9.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	206	5	5	135	7	1	2	4	18	0	46
Future Vol, veh/h	22	206	5	5	135	7	1	2	4	18	0	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	10	2	2	10	2	2	2	2	2	2	2
Mvmt Flow	23	219	5	5	144	7	1	2	4	19	0	49

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	145	71	25	181	93	4	49	0	0	6	0	0
Stage 1	63	63	-	6	6	-	-	-	-	-	-	-
Stage 2	82	8	-	175	87	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	824	804	1051	781	782	1080	1558	-	-	1615	-	-
Stage 1	948	827	-	1016	875	-	-	-	-	-	-	-
Stage 2	926	873	-	827	807	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	695	794	1051	605	772	1080	1558	-	-	1615	-	-
Mov Cap-2 Maneuver	695	794	-	605	772	-	-	-	-	-	-	-
Stage 1	947	817	-	1015	874	-	-	-	-	-	-	-
Stage 2	768	872	-	595	797	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.7		10.8		1		2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1558	-	-	788	775	1615	-	-
HCM Lane V/C Ratio	0.001	-	-	0.315	0.202	0.012	-	-
HCM Control Delay (s)	7.3	0	-	11.7	10.8	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.4	0.8	0	-	-

Intersection						
Int Delay, s/veh	2.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	199	30	48	132	14	48
Future Vol, veh/h	199	30	48	132	14	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	205	31	49	136	14	49

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	236	0	455 221
Stage 1	-	-	-	-	221 -
Stage 2	-	-	-	-	234 -
Critical Hdwy	-	-	4.15	-	6.45 6.25
Critical Hdwy Stg 1	-	-	-	-	5.45 -
Critical Hdwy Stg 2	-	-	-	-	5.45 -
Follow-up Hdwy	-	-	2.245	-	3.545 3.345
Pot Cap-1 Maneuver	-	-	1314	-	558 811
Stage 1	-	-	-	-	809 -
Stage 2	-	-	-	-	798 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1314	-	536 811
Mov Cap-2 Maneuver	-	-	-	-	536 -
Stage 1	-	-	-	-	809 -
Stage 2	-	-	-	-	766 -

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	727	-	-	1314	-
HCM Lane V/C Ratio	0.088	-	-	0.038	-
HCM Control Delay (s)	10.4	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	25	28	7	204	130	16
Future Vol, veh/h	25	28	7	204	130	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	27	30	8	222	141	17

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	388	150	158	0	-	0
Stage 1	150	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	616	896	1422	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	802	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	612	896	1422	-	-	-
Mov Cap-2 Maneuver	612	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.3	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1422	- 735	-	-
HCM Lane V/C Ratio	0.005	- 0.078	-	-
HCM Control Delay (s)	7.5	0 10.3	-	-
HCM Lane LOS	A	A B	-	-
HCM 95th %tile Q(veh)	0	- 0.3	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	3	2	3	58	74	4
Future Vol, veh/h	3	2	3	58	74	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	3	2	3	60	76	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	144	78	80	0	0
Stage 1	78	-	-	-	-
Stage 2	66	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	849	983	1518	-	-
Stage 1	945	-	-	-	-
Stage 2	957	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	847	983	1518	-	-
Mov Cap-2 Maneuver	847	-	-	-	-
Stage 1	943	-	-	-	-
Stage 2	957	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1518	-	897	-	-
HCM Lane V/C Ratio	0.002	-	0.006	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	10.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	48	209	0	1	164	12	1	0	2	25	0	48
Future Vol, veh/h	48	209	0	1	164	12	1	0	2	25	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	7	2	2	7	2	2	2	2	2	2	2
Mvmt Flow	51	222	0	1	174	13	1	0	2	27	0	51

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	177	84	26	194	108	1	51	0	0	2	0	0
Stage 1	80	80	-	3	3	-	-	-	-	-	-	-
Stage 2	97	4	-	191	105	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.57	6.22	7.12	6.57	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.063	3.318	3.518	4.063	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	785	797	1050	765	773	1084	1555	-	-	1620	-	-
Stage 1	929	819	-	1020	883	-	-	-	-	-	-	-
Stage 2	910	883	-	811	799	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	630	783	1050	589	759	1084	1555	-	-	1620	-	-
Mov Cap-2 Maneuver	630	783	-	589	759	-	-	-	-	-	-	-
Stage 1	928	805	-	1019	882	-	-	-	-	-	-	-
Stage 2	721	882	-	577	785	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	12.5		11.2			2.4			2.5		
HCM LOS	B		B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1555	-	-	749	773	1620	-	-
HCM Lane V/C Ratio	0.001	-	-	0.365	0.244	0.016	-	-
HCM Control Delay (s)	7.3	0	-	12.5	11.2	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.7	1	0.1	-	-

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	37	54	179	49	68
Future Vol, veh/h	203	37	54	179	49	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	223	41	59	197	54	75

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	264	0	559 244
Stage 1	-	-	-	-	244 -
Stage 2	-	-	-	-	315 -
Critical Hdwy	-	-	4.15	-	6.45 6.25
Critical Hdwy Stg 1	-	-	-	-	5.45 -
Critical Hdwy Stg 2	-	-	-	-	5.45 -
Follow-up Hdwy	-	-	2.245	-	3.545 3.345
Pot Cap-1 Maneuver	-	-	1283	-	485 787
Stage 1	-	-	-	-	790 -
Stage 2	-	-	-	-	733 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1283	-	460 787
Mov Cap-2 Maneuver	-	-	-	-	460 -
Stage 1	-	-	-	-	790 -
Stage 2	-	-	-	-	695 -

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	606	-	-	1283	-
HCM Lane V/C Ratio	0.212	-	-	0.046	-
HCM Control Delay (s)	12.5	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Intersection						
Int Delay, s/veh	0.7					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	9	7	20	231	206	22
Future Vol, veh/h	9	7	20	231	206	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	10	8	22	251	224	24

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	531	236	248	0	0
Stage 1	236	-	-	-	-
Stage 2	295	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	509	803	1318	-	-
Stage 1	803	-	-	-	-
Stage 2	755	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	499	803	1318	-	-
Mov Cap-2 Maneuver	499	-	-	-	-
Stage 1	788	-	-	-	-
Stage 2	755	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	11.2	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1318	-	598	-	-
HCM Lane V/C Ratio	0.016	-	0.029	-	-
HCM Control Delay (s)	7.8	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	111	89	2
Future Vol, veh/h	5	3	1	111	89	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	5	3	1	122	98	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	223	99	100	0	0
Stage 1	99	-	-	-	-
Stage 2	124	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	765	957	1493	-	-
Stage 1	925	-	-	-	-
Stage 2	902	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	764	957	1493	-	-
Mov Cap-2 Maneuver	764	-	-	-	-
Stage 1	924	-	-	-	-
Stage 2	902	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1493	-	827	-	-
HCM Lane V/C Ratio	0.001	-	0.011	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	10											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	214	5	5	149	7	1	2	4	18	0	53
Future Vol, veh/h	26	214	5	5	149	7	1	2	4	18	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	10	2	2	10	2	2	2	2	2	2	2
Mvmt Flow	28	228	5	5	159	7	1	2	4	19	0	56

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	155	74	28	189	100	4	56	0	0	6	0	0
Stage 1	66	66	-	6	6	-	-	-	-	-	-	-
Stage 2	89	8	-	183	94	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	812	801	1047	771	775	1080	1549	-	-	1615	-	-
Stage 1	945	824	-	1016	875	-	-	-	-	-	-	-
Stage 2	918	873	-	819	802	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	672	791	1047	591	765	1080	1549	-	-	1615	-	-
Mov Cap-2 Maneuver	672	791	-	591	765	-	-	-	-	-	-	-
Stage 1	944	814	-	1015	874	-	-	-	-	-	-	-
Stage 2	746	872	-	580	792	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	11.9		11			1			1.8		
HCM LOS	B		B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1549	-	-	780	768	1615	-	-
HCM Lane V/C Ratio	0.001	-	-	0.334	0.223	0.012	-	-
HCM Control Delay (s)	7.3	0	-	11.9	11	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.5	0.9	0	-	-

Intersection						
Int Delay, s/veh	2.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	199	58	68	132	29	59
Future Vol, veh/h	199	58	68	132	29	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	205	60	70	136	30	61

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	265	0	511 235
Stage 1	-	-	-	-	235 -
Stage 2	-	-	-	-	276 -
Critical Hdwy	-	-	4.15	-	6.45 6.25
Critical Hdwy Stg 1	-	-	-	-	5.45 -
Critical Hdwy Stg 2	-	-	-	-	5.45 -
Follow-up Hdwy	-	-	2.245	-	3.545 3.345
Pot Cap-1 Maneuver	-	-	1282	-	517 797
Stage 1	-	-	-	-	797 -
Stage 2	-	-	-	-	764 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1282	-	486 797
Mov Cap-2 Maneuver	-	-	-	-	486 -
Stage 1	-	-	-	-	797 -
Stage 2	-	-	-	-	719 -

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	658	-	-	1282	-
HCM Lane V/C Ratio	0.138	-	-	0.055	-
HCM Control Delay (s)	11.3	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-

Intersection						
Int Delay, s/veh	1.3					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	25	28	7	231	145	16
Future Vol, veh/h	25	28	7	231	145	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	27	30	8	251	158	17

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	434	167	175	0	0
Stage 1	167	-	-	-	-
Stage 2	267	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	579	877	1401	-	-
Stage 1	863	-	-	-	-
Stage 2	778	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	575	877	1401	-	-
Mov Cap-2 Maneuver	575	-	-	-	-
Stage 1	857	-	-	-	-
Stage 2	778	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1401	-	703	-	-
HCM Lane V/C Ratio	0.005	-	0.082	-	-
HCM Control Delay (s)	7.6	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	30	14	24	58	74	52
Future Vol, veh/h	30	14	24	58	74	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	31	14	25	60	76	54

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	213	103	130	0	0
Stage 1	103	-	-	-	-
Stage 2	110	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	775	952	1455	-	-
Stage 1	921	-	-	-	-
Stage 2	915	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	761	952	1455	-	-
Mov Cap-2 Maneuver	761	-	-	-	-
Stage 1	904	-	-	-	-
Stage 2	915	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1455	-	813	-	-
HCM Lane V/C Ratio	0.017	-	0.056	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection												
Int Delay, s/veh	11.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	59	231	0	1	191	12	1	0	2	25	0	61
Future Vol, veh/h	59	231	0	1	191	12	1	0	2	25	0	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	7	2	2	7	2	2	2	2	2	2	2
Mvmt Flow	63	246	0	1	203	13	1	0	2	27	0	65

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	198	91	33	213	122	1	65	0	0	2	0	0
Stage 1	87	87	-	3	3	-	-	-	-	-	-	-
Stage 2	111	4	-	210	119	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.57	6.22	7.12	6.57	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.57	-	6.12	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.063	3.318	3.518	4.063	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	761	790	1041	744	759	1084	1537	-	-	1620	-	-
Stage 1	921	813	-	1020	883	-	-	-	-	-	-	-
Stage 2	894	883	-	792	788	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	586	776	1041	554	745	1084	1537	-	-	1620	-	-
Mov Cap-2 Maneuver	586	776	-	554	745	-	-	-	-	-	-	-
Stage 1	920	799	-	1019	882	-	-	-	-	-	-	-
Stage 2	679	882	-	539	775	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	13.5		11.6			2.4			2.1		
HCM LOS	B		B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	728	758	1620	-	-
HCM Lane V/C Ratio	0.001	-	-	0.424	0.286	0.016	-	-
HCM Control Delay (s)	7.3	0	-	13.5	11.6	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.1	1.2	0.1	-	-

Intersection						
Int Delay, s/veh	5.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	91	94	179	92	100
Future Vol, veh/h	203	91	94	179	92	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	5	5	7	5	5
Mvmt Flow	223	100	103	197	101	110

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	323	0	676	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1220	-	414	759
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	668	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1220	-	375	759
Mov Cap-2 Maneuver	-	-	-	-	375	-
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	17
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	509	-	-	1220	-
HCM Lane V/C Ratio	0.415	-	-	0.085	-
HCM Control Delay (s)	17	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0.3	-

Intersection						
Int Delay, s/veh	0.6					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	9	7	20	284	249	22
Future Vol, veh/h	9	7	20	284	249	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	7	7	2
Mvmt Flow	10	8	22	309	271	24

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	636	283	295	0	0
Stage 1	283	-	-	-	-
Stage 2	353	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	442	756	1266	-	-
Stage 1	765	-	-	-	-
Stage 2	711	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	433	756	1266	-	-
Mov Cap-2 Maneuver	433	-	-	-	-
Stage 1	749	-	-	-	-
Stage 2	711	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1266	-	533	-	-
HCM Lane V/C Ratio	0.017	-	0.033	-	-
HCM Control Delay (s)	7.9	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	81	35	41	111	89	95
Future Vol, veh/h	81	35	41	111	89	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	89	38	45	122	98	104

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	362	150	202	0	0
Stage 1	150	-	-	-	-
Stage 2	212	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	637	896	1370	-	-
Stage 1	878	-	-	-	-
Stage 2	823	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	615	896	1370	-	-
Mov Cap-2 Maneuver	615	-	-	-	-
Stage 1	847	-	-	-	-
Stage 2	823	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	2.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1370	-	679	-	-
HCM Lane V/C Ratio	0.033	-	0.188	-	-
HCM Control Delay (s)	7.7	0	11.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

APPENDIX D
ACCIDENT DATA

Case Number	Crash Severity	Case Year	Collision Type	Crash Date	Crash Time	Crash Type	Light Conditions	Road Characteristics	Road Surface Conditions	Weather Conditions	Closest Cross Street	On Street	Apparent Contributing Factor
38352159	FATAL	2019	HEAD ON	7/27/2019	11:19 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(FAILURE TO YIELD RIGHT OF WAY,TURNING IMPROPER) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38160055	PDO	2019	OTHER	11/1/2019	11:40 AM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38346834	PDO	2020	HEAD ON	2/24/2020	7:45 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	PEENPACK TRL	ROUTE 209	V1:(TRAFFIC CONTROL DEVICES DISREGARDED,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38379442	PDO	2020	OTHER	3/18/2020	7:00 AM	COLLISION WITH SIGN POST	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(UNKNOW,NOT APPLICABLE)
38401499	PDO	2020	OTHER	4/28/2020	12:45 AM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38406337	PDO	2020	OTHER	4/29/2020	7:45 PM	COLLISION WITH GUIDE RAIL	DUCK	CURVE AND LEVEL	DRY	CLOUDY			V1:(TIRE FAILURE/INADEQUATE,NOT APPLICABLE)
38406255	PDO	2020	OTHER	5/2/2020	11:10 PM	COLLISION WITH DEER	DARK-ROAD LIGHTED	CURVE AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38560939	PDO	2020	OTHER	9/19/2020	7:35 PM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	DRIVEWAY	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38741943	PDO	2020	OTHER	12/10/2020	8:05 AM	COLLISION WITH CURBING	DAYLIGHT	CURVE AND LEVEL	SNOW/ICE	CLEAR	ROUTE 209	NEVERSINK DR	V1:(PAVEMENT SLIPPERY,NOT APPLICABLE)
38689739	PDO	2020	OTHER	12/29/2020	11:00 PM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38736105	PDO	2021	OTHER	1/9/2021	9:21 AM	COLLISION WITH OTHER FIXED OBJECT	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	HANGER DR	ROUTE 209	V1:(GLARE,NOT APPLICABLE)
38827009	INJURY	2021	REAR END	4/17/2021	11:45 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
38835503	PDO	2021	OTHER	4/29/2021	9:38 PM	COLLISION WITH DEER	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLOUDY	NEVERSINK DR	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
38865188	INJURY	2021	OTHER	5/20/2021	1:20 PM	COLLISION WITH SIGN POST	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	HANGER DR	ROUTE 209	V1:(REACTION TO OTHER UNINVOLVED VEHICLE,NOT APPLICABLE)
38998030	INJURY	2021	OTHER	8/8/2021	12:26 PM	RAN OFF ROAD ONLY	DAYLIGHT	CURVE AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(UNSAFE SPEED,DRIVER INEXPERIENCE)
38985901	PDO	2021	LEFT TURN	8/14/2021	7:25 AM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	WET	RAIN	PEENPACK TRL	ROUTE 209	V1:(FAILURE TO YIELD RIGHT OF WAY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
39040077	PDO	2021	OTHER	9/9/2021	3:41 AM	COLL. W/EARTH ELEM./ROCK CUT/DITCH	DARK-ROAD UNLIGHTED	CURVE AND LEVEL	WET	RAIN	DRIVEWAY	ROUTE 209	V1:(UNSAFE SPEED,FELL ASLEEP)
39106779	PDO	2021	OTHER	11/14/2021	9:05 AM	COLLISION WITH DEER	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	CORA ROSE LN	ROUTE 209	V1:(ANIMAL'S ACTION,NOT APPLICABLE)
39163190	PDO	2021	REAR END	12/22/2021	12:45 PM	COLLISION WITH MOTOR VEHICLE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(CELL PHONE (HAND HELD),FOLLOWING TOO CLOSELY)
39357018	PDO	2022	OTHER	5/22/2022	6:00 AM	COLL. W/LIGHT SUPPORT/UTILITY POLE	DAWN	STRAIGHT AND LEVEL	DRY	CLEAR	NEVERSINK DR	ROUTE 209	V1:(ALCOHOL INVOLVEMENT,PASSING OR LANE USAGE IMPROPERLY)

APPENDIX E

DOT STATEWIDE AVERAGE ACCIDENT RATE

MAINLINE & JUNCTURE ACCIDENTS

URBAN FUNCTION CLASS		ALL TYPES ACC/MVM					
UNDIVIDED		ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM	
2 LANES	2.36	0.44	0.34	0.68	0.44	0.44	
3 LANES	3.34	0.6	0.28	5.31	0.95	0.38	
4 LANES	3.57	0.69	0.19	6.41	1.22	0.31	
ALL LANES	2.64	0.49	0.32	4.27	0.79	0.43	
DIVIDED							
2 LANES	3.45	0.64	0.2	5.56	1.02	0.32	
4 LANES	2.99	0.56	0.18	4.63	0.87	0.25	
6 LANES	4.14	0.77	0.15	5.53	1.01	0.18	
7 LANES	3.51	0.6	0.06	3.82	0.69	0.07	
ALL LANES	3.36	0.63	0.17	5.02	0.94	0.26	

PARTIAL CONTROL OF ACCESS

RURAL FUNCTION CLASS		MAINLINE ACCIDENTS ONLY					
UNDIVIDED		ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM	ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM
2 LANES	1.94	0.43	0.42	0.41	2.41	0.54	0.49
ALL LANES	1.92	0.43	0.41	2.41	0.54	0.49	
DIVIDED							
4 LANES	1.79	0.35	0.75	1.88	0.37	0.78	
ALL LANES	1.8	0.36	0.75	1.89	0.38	0.77	

URBAN FUNCTION CLASS

UNDIVIDED		ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM	ALL TYPES ACC/MVM	WET ROAD ACC/MVM	FIXED OBJECT ACC/MVM
2 LANES	2.07	0.56	0.49	2.76	0.68	0.6	
ALL LANES	2.48	0.62	0.44	3.42	0.82	0.51	
DIVIDED							
4 LANES	1.69	0.33	0.26	2.16	0.42	0.29	
6 LANES	1.85	0.33	0.21	2.22	0.39	0.24	
ALL LANES	1.88	0.35	0.25	2.36	0.44	0.28	