

July 31, 2024

John Razzano, Chairperson  
Wawayanda Planning Board  
80 Ridgebury Hill Road  
Slate Hill, NY 10973

RDM, Dewpoint South – Dolsontown Road (RDM #3)  
SBL: 4-1-50.32, 6-1-107 & p/o 6-1-90.24  
Town of Wawayanda, Orange County, NY  
Colliers Engineering & Design Project No. 20006912E

Dear Chairperson Razzano and Members of the Planning Board,

Below please find our responses to comment letters received from Creighton Manning dated June 24, 2024, MHE Engineering dated June 26, 2024, and Orange County Planning dated July 2, 2024. The comments have been repeated here for clarity:

Creighton Manning:

**Comment 1:** We agree with the methodology and scope of the supplemental traffic report. The additional trip generation associated with the increased building size for Dewpoint South (about 45 trips in each peak hour) would not be significant under most conditions; however, it's noted that the westbound left turn movement of Dolsontown Road at Route 17M would operate at LOS F in the GEIS Build with improvement condition during the PM peak hour. This movement's delay and queue length would continue to worsen with the increase in the Dewpoint South building size. Based on the GEIS traffic study, the 50th/95th percentile queue of the left turn movement is 250/450 feet, which is 10 to 18 cars in queue. With the effects of the Elma Dolsontown project, it's questionable whether any additional capacity can be managed at the intersection based on the present assumptions.

**Response 1:** **As review of the attached analysis indicate, the anticipated GEIS 2032 PM Peak Hour Build 85% left turn queue on Dolsontown Road westbound approach to NYS Route 17 is calculated at 423 feet (approximately 18 vehicles) Under the 2032 Build with the updated Dewpoint South, the 85% queue is anticipated to be 449 feet during the PM Peak Hour; essentially one (1) additional vehicle in length.**

**Comment 2:** Please show the 2032 No-Build condition in the LOS tables instead of the 2022 Existing condition as it offers a more meaningful comparison to the 2032 Build(s) condition.

**Response 2:** Attached is a revised Table 2 that now identifies the GEIS 2032 No-Build condition and analysis results as well as the GEIS 2032 Build and for 2032 Build with updated Dewpoint South analysis and results for each of the AM and PM Peak Hours. As identified, the westbound Dolsontown Road approach delay will increase by 0.7 seconds during the 2032 Build AM Peak Hour and by 5.4 seconds during the PM Peak Hour with the updated Dewpoint South project.

We would expect any additional traffic generated by the Elma Dolsontown Project would be examined to determine the extent of impacts associated with it and any mitigation suggested.

**Comment 3:** Please confirm that the compactor loading dock located centrally along the southern side of the proposed building can be accessed as intended given the narrow ~40-foot-wide pinch-point in the drive aisle.

**Comment 3:** We confirm that the compactor loading docks having a ±30-foot-long compactor equipment can be accessed with a garbage truck, as intended.

MHE Engineering:

**Comment 1:** The applicants have revised the Site Plan to increase the front yard setback from 50 feet to 60 feet. This resulted in a building footprint being reduced from 243,600 to 234,900. Building was lowered by two feet elevation.

**Response 1:** Comment noted and remains accurate. Based on comments received from the Planning Board, RDM has revised the project and related documents to further enhance the aesthetic appearance of the building and/or minimize certain visual concerns expressed by the Board with a variety of mitigation measures. A list of those mitigation measures is set forth in the cover letter accompanying this submission and is not repeated here.

**Comment 2:** The applicants have provided a project comparison chart identifying the project when it was evaluated under the Generic Environmental Impact Statement and the current project.

**Response 2:** Comment noted. An updated project comparison chart has been included in the cover letter accompanying this submission.

**Comment 3:** The completion of the Town's Caskey Lane abandonment must occur prior to any approvals.

**Response 3:** Comment noted. We request that finalizing the abandonment of Caskey Lane be made a condition of the Planning Board's approval which must be completed prior to the final site plans being signed by the Planning Board

**Chairman, similar to other recently approved projects along the corridor (RDM #6, Simon Warehouse).**

Comment 4: A revised SWPPP has been prepared for the project, which is under review.

**Response 4:** **Comment noted. We await any final SWPPP comments.**

Comment 5: Consideration for sidewalks from the large passenger vehicle parking lot should be provided.

**Response 5:** **The plans have been revised to include a sidewalk from the large southern passenger vehicle parking lot as suggested.**

Comment 6: Water system meter vault plans should be submitted to the Town's contract operator.

**Response 6:** **The Town's water operator, Aquablue, has reviewed and approved the proposed water system design plans including the water valve chamber. Please see the email dated 6/4/24 from Dakota Guerriera from Aquablue which has been provided to the Planning Board included with the prior June 2024 submission package.**

Comment 7: NYSDEC changes to Wetland Regulations may impact the project. NYSDEC may exercise jurisdiction over the Federal Wetlands beginning January 1<sup>st</sup>.

**Response 7:** **Comment noted. We understand that DEC's proposed new regulations include a grace period for the wetland jurisdiction shift of 2-3 years following the adoption of the new law on January 1, 2025 for projects that have received Planning Board approval. We will continue to follow the development of the regulations,**

Comment 8: A net cut excess material of 16,550 cubic yards is depicted on the Grading Plans.

**Response 8:** **In addition to the impact on this number due to the site plan revisions incorporated herein, we discovered an error in the previous calculations. Upon further review, the project is expected to generate approximately 34,875 cubic yards of cut (excess material), not 16,550. The applicant anticipates utilizing the majority (~25,500 cubic yards) of the excess material from this project on the adjacent development (RDM #6, Simon Warehouse) under common ownership, and a smaller portion (~4,000 cubic yards) of the excess material on the development on the other side of Dolsontown Road (Dewpoint North). By so utilizing this material on adjacent project sites, only approximately 5,000 cubic yards is anticipated to be transferred out of the immediate project area, largely keeping transportation of the excess material off of the public roadways and further reducing the impacts of both projects. Notwithstanding this correction, the impact on locally roadways will actually**

be less than previously anticipated. Given the Simon and Dewpoint North projects are anticipated to collectively require approximately 29,500 cubic yards of fill and the prior excess generated by the Dewpoint South Project was only anticipated to be approximately 16,550 cubic yards, a net import of approximately 13,000 cubic yards would have been necessary. Under the revised scenario, there is instead a net export of approximately 5,000 cubic yards.

**Comment 9:** Project must be included in the Developers Agreement for off-site roadway improvements , watermain extensions, sanitary sewer extension.

**Response 9:** **As previously discussed with the Planning Board, the applicant will enter into a developer's agreement with the Town that covers the items noted above. Signing a developer's agreement will be a condition of the Board's approval.**

**Comment 10:** The project is subject to the Town's Development Fee, Code Section.

**Response 10:** **Comment noted. Payment of required fees will be a condition of the Board's approval.**

**Comment 11:** Cross grading easements will be required for adjoining lots, as grading for each project crosses lot lines.

**Response 11:** **Comment noted. Providing cross grading easements to be reviewed and approved by the Town will be condition of the Board's approval.**

**Comment 12:** A Stormwater Facilities Maintenance Agreement will be required.

**Response 12:** **Comment noted. The applicant will prepare a SWM agreement upon acceptance of the SWPPP as required. Approval and execution of the agreement will be a condition of the Planning Board's approval which must be completed prior to the final site plans being signed by the Planning Board Chairman.**

**Comment 13:** Five Acre Waiver must be received from the Town Board prior to signing of the plans.

**Response 13:** **Comment noted. The applicant will request the waiver from the Town Board after the SWPPP has been approved by the Town. Obtaining the 5-acre waiver will be a condition of the Planning Board's approval which must be satisfied prior to the final site plans being signed by the Planning Board Chairman.**

**Comment 14:** The water hydrant requires Orange County Health Department approval.

**Response 14:** **The applicant is in the process of coordinating with the OCDOH for the approval of the water main extension with hydrants. A submission to OCDOH was made on 7/12 and the applicant is currently awaiting a response. OCDOH**

**approval for the watermain extension will be a condition of the Planning Board's approval.**

Comment 15: The Board should consider submitting the plans to County Planning for a 239 Review.

**Response 15:** **County GML 239 referral was made by the Planning Board on 6/27/24 and comments received July 29, 2024 which are responded to herein.**

Orange County Planning:

Coordination

Comment 1: The applicant should coordinate with the Orange County Health Department regarding any required reviews for the proposed water connection and sewer connection.

**Response 1:** **The applicant is in the process of coordinating with the OCDOH for the approval of the water main extension with hydrants. A submission to OCDOH was made on 7/12 and the applicant is currently awaiting a response. OCDOH approval for the watermain extension will be a condition of the Planning Board's approval. The OCDOH does not have jurisdiction over the sewer connection, which has been reviewed by the Town and the Town's system operator.**

Comment 2: The applicant should coordinate with the local police department and ambulance corps serving this site to ensure that any of their safety concerns are addressed.

**Response 2:** **The Town currently does not have a local police force or local EMS service. The site plans were submitted to the local fire department. They issued a memo dated 5/15/24 indicating there are no fire safety concerns for this project. The site accessibility and safety on Dolsontown Road has been reviewed by the fire department, the Planning Board, the Town Engineer, the Town's Traffic Engineer, and the Town's Highway Superintendent. All their comments have been addressed. In addition, the project will comply with the NYS Building and Fire Codes to ensure all building safety issues are addressed.**

Traffic Impacts

Comment 3: We appreciate that the applicant has provided an updated traffic study for the Dolsontown Road Corridor and has proposed several mitigation measures for the anticipated traffic needs. However, the applicant should clearly address our remaining concerns about the potential traffic impacts in this area. For example, *it appears that the growth rate of 0.5% is applied, which may not accurately reflect the growth rate of this area and the growth rate may need to be adjusted accordingly.* Also,

it appears that additional mitigation measures will be needed for the left turn, westbound approach from Doslontown Road onto Route 17M. *The applicant should coordinate with the New York State Department of Transportation (NYSDOT) about the anticipated impacts on this intersection.* Based on the information supplied, the "GEIS 2023 Build" condition for the weekday PM peak hour will have a 92.3 second delay (LOS of F). However, the "Updated GEIS 2023 Build" condition of the PM peak hour will decrease to 104.2 second delay (LOS f). The overall westbound approach to this intersection will decrease from 56.0 seconds (LOS E) to 61.4 seconds (LOS E). *Additionally, the applicant should also expand the traffic study to include the intersections of Route 17M and the I-84 ramps.*

**Response 3:** **The background growth factor 0.5% per year was based on NYSDOT Historical Traffic Data Reports for the NYS Route 17M Corridor 520' feet south of James P. Kelly Way (Station 830069) and 310' northeast of the I-84 Westbound Off Ramp (Station 830018). NYSDOT traffic projections from 2017 to 2019, show a slight reduction in background growth. Notwithstanding, a 0.5% per year (for a total 5%) general background growth was utilized. It should be noted that traffic for 10 "other" proposed developments was included in the Year 2032 traffic projections in developing the Year 2032 No-Build Conditions. The inclusion of these other proposed developments resulted in a total background growth of 18% - 22% at the study area intersections.**

Detailed roadway improvement plans for the Dolsontown Road Corridor have been submitted to the Town for review and approval that include the 2-way left turn lane geometrics on Dolsontown Road. Furthermore, design documents for the improvements along the NYS Route 17M Corridor including improvements to James P. Kelly Way, US Route 6 and I-84 Westbound Exit Ramp intersections with NYS Route 17M have been submitted to the New York State Department of Transportation (NYSDOT) that includes recommendations made by NYSDOT to support future traffic volume levels. The improvements identified have been incorporated into the design documents to mitigate impacts associated with the proposed future development while some increase in delay is anticipated, the intersection Levels of Service are better than what would be expected under the No-Build condition for the same design year; overall intersection Level of Service "E" with delay equal to 68.9 seconds vs. overall intersection Level of Service "D" with delay equal to 51.0 seconds.

**Comment 4:** The current site plan shows that the proposed access points for this project are staggered form the proposed driveway from the proposed Dewpoint North project. *Thus, the Town should ensure that the proposed driveways for this project and the nearby proposed projects and any active existing driveways are aligned to minimize the potential for traffic conflicts and/or potential vehicular and truck accidents.*

- Response 4:** **The locations of the various access drives were established upon the need to supply adequate intersection sight distances and stopping sight distances for each access based upon the 85% speed. The use of a 2-way left turn lane along Dolsontown Road allows for the simultaneous left turn entering movements to sites situated on opposite sides of Dolsontown Road.**  
**Furthermore, "T" type intersections have reduced conflict points, 22 versus a typical 4-way intersection where 32 conflict points exist.**

*Agricultural Impact*

- Comment 5: We are aware that a portion of this site is within Orange County Agricultural District 1. Thus, the construction of a warehouse on existing agricultural land located within a County Agricultural District may impact the parcel's status within the Agricultural District in the future. Additionally, the applicant should be aware that this property may not be able to receive an agricultural assessment upon construction of the proposed warehouse, if it is receiving such assessment at this time.

- Response 5:** **Comment noted. No responded needed.**

*Site Plan*

- Comment 6: The applicant should utilize low-impact development design alternatives, such as rain gardens, banked parking spaces and permeable paving in the passenger car parking lot, to reduce the stormwater runoff and related flooding. Such measure would help to reduce the impervious surfaces at this site and resulting stormwater runoff.

- Response 6:** **Quantitative and qualitative stormwater impacts have been appropriately mitigated in conformance with the current NYSDEC stormwater design standards for new development. The SWPPP is being reviewed by the Town as the MS4 authority and revisions to address final technical engineering comments, if any, can be a condition of the approval.**

- Comment 7: The stormwater protection measures should be strictly enforced throughout the construction phase and the limits of disturbance should be clearly marked on the site and the plan.

- Response 7:** **Routine stormwater inspections will be conducted during construction to ensure compliance with the approved SWPPP and all applicable erosion & sediment control measures as required by the NYSDEC General Stormwater Permit GP-0-20-001. Wetland boundaries and the limits of disturbance will be marked on the site prior to construction as required by the Town. Wetland boundaries are also depicted on the site plans.**

**Comment 8:** The applicant should indicate where any proposed signs identifying this site will be located on this site.

**Response 8:** **Proposed directional signage has been included on the site plans. The tenant signage requirements for the facility are not known at this time and are subject to the selection of an end-user for the facility and subject to compliance with the Town of Wawayanda's sign regulations. Tenant signage will need to be reviewed and approved by the Town through a separate sign permit application.**

**Comment 9:** The applicant should use neutral colors on the proposed warehouse, as this will help ensure that the proposed building will blend in with its surrounding environment.

**Response 9:** **Comment noted. The Planning Board was favorable to the building color scheme proposed in the architecture for RDM's Route 6 warehouse project and the applicant intends to use a similar architecture and color design for this project. Visual renderings have been provided to the Board for review and include the propose neutral color scheme of the building.**

**Comment 10:** Due to the change in scale of the proposed project, the applicant should provide an updated visual analysis. This visual analysis should consider the viewpoint from I-84, as well as any other visually sensitive locations in this area.

**Response 10:** **An updated visual analysis was included with the June 2024 submission and has been revised as part of this submission package based on additional feedback from the Board. This analysis shows the critical visual impact points along Dolsontown Road as identified by the Planning Board. The revised documents provide various mitigation measures based on feedback from the Board and adequately address this critical viewpoint. We do not think it is necessary or practical to update the viewpoint from I-84 understanding that the project is located within an industrial park corridor and the property exists beyond large overhead utility transmission main lines visible from I-84. Moreover, any visual impacts to travelers along I-84 are expected to be minimal based on the high traffic speeds associated with the interstate.**

**Comment 11:** The Town should be aware that the segment of Dolsontown Road and James P. Kelley Way between County Route 78 and Genung Street is NOT federal-aid eligible, meaning any pavement or construction is the responsibility of the municipality. *Due to the anticipated long-term impacts on this stretch of roadway (i.e. the deterioration of pavement from heavy truck usage overtime), the Town may want to consider the creation of a Transportation Improvement District to help with the roadway maintenance.*

**Response 11:** **The Applicants will undertake the roadway improvements required as mitigation for the project, which obligations are contingent upon receipt of all**

necessary approvals from NYSDOT and any municipality under whose jurisdiction a particular improvement falls. These improvements will not only mitigate the potential impacts of the project to the maximum extent practicable but will also mitigate conditions anticipated to exist even in the absence of the Proposed Action under the No Build scenario. The Applicants agree to be responsible for the funding and construction of all improvements identified as required mitigation in the SEQRA Finding Statement as the same may be supplemented by any additional SEQRA Negative Declaration that may be issued. The Applicants also agree to furnish security consistent with Chapter 156, Article II of the Town of Wawayanda Code, including by way of a cash bond or irrevocable letter of credit in favor of the Town, in such form as may be approved by the Town Attorney, to guarantee completion of these improvements prior to the issuance of the first Certificate of Occupancy. Finally, the Applicants will be coordinating with NYSDOT on all traffic signal coordination. Based on the foregoing, a Transportation Improvement District is not required. Rather, the Applicant's obligations will be reflected in a Developer's Agreement that will be entered with the Town as a condition of the Project's approval.

**Comment 12:** The applicant should investigate the feasibility of providing jitney service to the proposed warehouse to reduce the amount of car trips that are needed to access the warehouse for employees who live in Middletown or Wallkill. An alternative to utilizing a jitney is to work with Transit Orange to alter its Middletown Fixed Transit Route to include stops along Dolsontown Road.

**Response 12:** **The improvements identified in the Traffic Impact Study—the funding and construction of which the applicants agree to be fully responsible for—will mitigate all potential significant adverse traffic impacts to the maximum extent practicable. Accordingly, no additional measures to reduce the number of trips to and from the warehouses are required pursuant to SEQRA. While not a SEQRA requirement, the Applicants are willing to coordinate with Transit Orange to facilitate adjustments to nearby transit routes.**

#### Site Plan

**Comment 13:** We appreciate the applicant's intent to follow the recommendations of the International Dark Sky Association (IDA) for its outdoor lighting.

**Response 13:** **Comment noted. No response needed.**

**Comment 14:** We appreciate that the applicants of the proposed warehouse has designed its building to allow for the installation of solar panels in the future. We strongly encourage the installation of solar panels to help provide power for this warehouse and reduce the need for power from the grid. As previously said, the County of



Orange has adopted the C-PACE Program that could utilize to finance 100% of the cost of installing roof top solar panels. (See attached information sheet.)

**Response 14: Comment noted. No response needed.**

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

A handwritten signature in black ink that reads "Cory D. Robinson".

Cory Robinson, P.E.  
Project Manager

R:\Projects\2020\20006912E\Correspondence\OUT240731\_CDR Comment Response South.docx

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak AM Hour**

	Location	GEIS 2032 No-Build			GEIS 2032 Build			2032 Build w/ Updated Dewpoint South			Change in Delay GEIS to Update
		v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
1	NYS Route 17M & Dolsontown Road/James P. Kelly Way										
		James P. Kelly Way	EB	L	0.19	C	34.2	0.20	C	33.7	-
				T	0.85	E	56.2	0.97	F	80.8	-
				R	0.78	B	11.7	0.77	B	11.4	-
			EB Overall		-	C	26.2	-	D	36.3	-
		Dolsontown Road	WB	L	0.82	E	59.2	1.12	F	141.0	-
				TR	0.53	D	36.5	0.58	D	37.8	-
			WB Overall		-	D	47.9	-	F	89.9	-
		NYS Route 17M	NB	L	1.01	F	72.6	1.02	F	77.6	-
				T, TR	0.72	C	28.8	0.86	D	39.0	-
			NB Overall		-	D	44.2	-	D	50.8	-
		NYS Route 17M	SB	L	0.63	D	42.6	1.20	F	169.9	-
				T, TR	0.96	E	75.8	0.98	F	80.7	-
			SB Overall		-	E	70.5	-	F	102.8	-
			Overall		-	D	46.0	-	E	63.1	-
	With Additional WB Through Lane & Additional NB Left Turn Lane Additional NB Right Turn Lane										
	James P. Kelly Way	EB	L	-	-	-	0.13	C	30.6	0.13	
			T	-	-	-	0.86	D	52.4	0.87	
			R	-	-	-	0.89	C	20.8	0.88	
		EB Overall		-	-	-	-	C	32.3	-	
	Dolsontown Road	WB	L	-	-	-	0.75	D	38.8	0.76	
			T, TR	-	-	-	0.14	C	29.1	0.14	
		WB Overall		-	-	-	-	C	33.7	-	
	NYS Route 17M	NB	L, L	-	-	-	0.32	D	49.3	0.33	
			T, T	-	-	-	0.84	D	38.2	0.84	
			R	-	-	-	0.65	C	28.8	0.70	
		NB Overall		-	-	-	-	D	39.7	-	
	NYS Route 17M	SB	L	-	-	-	0.79	D	50.1	0.78	
			T, TR	-	-	-	0.89	D	52.8	0.89	
		SB Overall		-	-	-	-	D	52.0	-	
		Overall		-	-	-	-	D	40.2	-	

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak AM Hour**

		GEIS 2032 No-Build			GEIS 2032 Build			2032 Build w/ Updated Dewpoint South			Change in Delay GEIS to Update
		v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
2	Dolsontown Road & Dewpoint South Driveway	Unsignalized									
	Dolsontown Road	EB	TR	-	-	-	0.00	A	0.0	0.00	0.0
	Dolsontown Road	WB	L	-	-	-	0.01	A	10.0	0.00	3.2
	Dewpoint South Driveway	NB	LR	-	-	-	0.02	C	17.3	0.01	2.8
3	Dolsontown Road & Dewpoint North Driveway	Unsignalized									
	Dolsontown Road	EB	L	-	-	-	0.01	A	8.0	0.01	0.0
	Dolsontown Road	WB	TR	-	-	-	0.00	A	0.0	0.00	0.0
	Dewpoint North Driveway	SB	LR	-	-	-	0.00	B	10.0	0.00	0.0
4	Dolsontown Road & Dewpoint South/RDM Simon Driveway	Unsignalized									
	Dolsontown Road	EB	TR	-	-	-	-	-	-	0.00	0.0
	Dolsontown Road	WB	L	-	-	-	-	-	-	0.04	-
	RDM Simon Driveway	NB	LR	-	-	-	-	-	-	0.07	10.0
											-
5	Dolsontown Road & 1081 Driveway	Unsignalized									
	Dolsontown Road	EB	L	-	-	-	0.06	A	8.1	0.06	0.0
	Dolsontown Road	WB	TR	-	-	-	0.00	A	0.0	0.00	0.0
	1081 Driveway	SB	LR	-	-	-	0.02	B	10.8	0.02	-0.1

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak PM Hour**

		GEIS 2032 No-Build			GEIS 2032 Build			2032 Build w/ Updated Dewpoint South			Change in Delay GEIS to Update
		v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
1	NYS Route 17M & Dolsontown Road/James P. Kelly Way	Signalized									
	James P. Kelly Way	EB	L	0.35	C	34.6	0.35	C	34.6	-	-
			T	0.58	D	38.9	0.61	D	39.8	-	-
			R	0.52	A	8.9	0.52	A	8.9	-	-
		EB Overall		-	C	21.7	-	C	22.3	-	-
	Dolsontown Road	WB	L	0.78	D	42.8	1.27	F	180.0	-	-
			TR	1.05	F	93.8	1.38	F	222.6	-	-
		WB Overall		-	E	76.1	-	F	205.9	-	-
	NYS Route 17M	NB	L	1.14	F	125.8	1.14	F	125.8	-	-
			T, TR	0.93	D	53.0	0.97	E	59.8	-	-
		NB Overall		-	E	73.4	-	E	77.5	-	-
	NYS Route 17M	SB	L	0.80	D	50.3	0.90	E	67.9	-	-
			T, TR	1.04	F	88.3	1.04	F	88.3	-	-
		SB Overall		-	F	82.1	-	F	84.6	-	-
		Overall		-	E	68.9	-	F	101.1	-	-
	With Additional WB Through Lane & Additional NB Left Turn Lane Additional NB Right Turn Lane										
	James P. Kelly Way	EB	L	-	-	-	0.18	C	34.9	0.18	C
			T	-	-	-	0.82	D	49.5	0.82	D
			R	-	-	-	0.73	B	14.8	0.73	B
		EB Overall		-	-	-	-	C	29.4	-	C
	Dolsontown Road	WB	L	-	-	-	1.06	F	91.6	1.09	F
			T, TR	-	-	-	0.65	C	33.5	0.67	C
		WB Overall		-	-	-	-	E	56.0	-	E
	NYS Route 17M	NB	L, L	-	-	-	1.03	F	93.1	1.03	F
			T, T	-	-	-	0.86	D	39.3	0.86	D
			R	-	-	-	0.36	B	16.5	0.37	B
		NB Overall		-	-	-	-	D	50.7	-	D
	NYS Route 17M	SB	L	-	-	-	0.81	D	47.4	0.83	D
			T, TR	-	-	-	0.93	D	53.5	0.93	D
		SB Overall		-	-	-	-	D	52.2	-	D
		Overall		-	-	-	-	D	49.4	-	D

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak PM Hour**

		GEIS 2032 No-Build			GEIS 2032 Build			2032 Build w/ Updated Dewpoint South			Change in Delay GEIS to Update
		v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
2	Dolsontown Road & Dewpoint South Driveway	Unsignalized									
	Dolsontown Road	EB	TR	-	-	-	0.00	A	0.0	0.00	0.0
	Dolsontown Road	WB	L	-	-	-	0.00	A	9.2	0.00	0.0
	Dewpoint South Driveway	NB	LR	-	-	-	0.17	C	22.3	0.10	25.2
3	Dolsontown Road & Dewpoint North Driveway	Unsignalized									
	Dolsontown Road	EB	L	-	-	-	0.01	B	11.1	0.01	11.4
	Dolsontown Road	WB	TR	-	-	-	0.00	A	0.0	0.00	0.0
	Dewpoint North Driveway	SB	LR	-	-	-	0.04	C	19.7	0.05	20.8
4	Dolsontown Road & Dewpoint South/RDM Simon Driveway	Unsignalized									
	Dolsontown Road	EB	TR	-	-	-	-	-	-	0.00	0.0
	Dolsontown Road	WB	L	-	-	-	-	-	-	0.01	8.9
	RDM Simon Driveway	NB	LR	-	-	-	-	-	-	0.56	32.6
5	Dolsontown Road & 1081 Driveway	Unsignalized									
	Dolsontown Road	EB	L	-	-	-	0.01	A	9.8	0.01	9.5
	Dolsontown Road	WB	TR	-	-	-	0.00	A	0.0	0.00	0.0
	1081 Driveway	SB	LR	-	-	-	0.20	C	18.8	0.18	17.3

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

## 2032 No-Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak AM Hour

06/26/2024

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	45	256	553	161	52	109	544	788	214	120	637	28
Future Volume (vph)	45	256	553	161	52	109	544	788	214	120	637	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0	0	150		90	440		0	125		0	
Storage Lanes	1	1	1		0	1		0	1		0	
Taper Length (ft)	25		86			86			60			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.850		0.899				0.968			0.994	
Flt Protected	0.950		0.950				0.950			0.950		
Satd. Flow (prot)	1719	1793	1495	1616	1620	0	1663	3316	0	1761	3391	0
Flt Permitted	0.644		0.231			0.294			0.282			
Satd. Flow (perm)	1166	1793	1495	393	1620	0	515	3316	0	523	3391	0
Right Turn on Red		Yes			Yes				Yes			Yes
Satd. Flow (RTOR)		157		93			42			4		
Link Speed (mph)	30		45		45					45		
Link Distance (ft)	628		741			950				1031		
Travel Time (s)	14.3		11.2			14.4				15.6		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	4%	6%	8%	6%	0%	8%	4%	8%	3%	6%	14%
Adj. Flow (vph)	50	284	614	179	58	121	604	876	238	133	708	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	284	614	179	179	0	604	1114	0	133	739	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	11		11			12				12		
Link Offset(ft)	0		0			0				0		
Crosswalk Width(ft)	16		16			16				16		
Two way Left Turn Lane										Yes		
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83		83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 No-Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak AM Hour

06/26/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases	8		8	4			2			6		
Detector Phase	3	8	5	7	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0		3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0		9.0	16.0	
Total Split (s)	9.0	25.0	38.0	13.0	29.0		38.0	52.0		14.0	28.0	
Total Split (%)	8.7%	24.0%	36.5%	12.5%	27.9%		36.5%	50.0%		13.5%	26.9%	
Maximum Green (s)	3.0	19.0	32.0	7.0	23.0		32.0	46.0		8.0	22.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	2.0	2.0	3.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max		None	None	
v/c Ratio	0.19	0.90	0.76	0.91	0.39		1.02	0.73		0.65	1.01	
Control Delay (s/veh)	29.5	73.4	15.4	79.3	19.9		78.6	26.3		51.3	78.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	29.5	73.4	15.4	79.3	19.9		78.6	26.3		51.3	78.9	
Queue Length 50th (ft)	24	185	140	92	47		~386	305		76	~276	
Queue Length 95th (ft)	52	#331	232	#186	111		#604	388		#145	#397	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				150			440				125	
Base Capacity (vph)	255	330	807	195	448		587	1510		207	726	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.20	0.86	0.76	0.92	0.40		1.03	0.74		0.64	1.02	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 103.2

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road



Synchro 12 Report

Page 2

## 2032 No-Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak AM Hour

06/26/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↖	↑ ↗	↑ ↙	↑ ↘	↑ ↗	↑ ↙	↑ ↘	↑ ↖
Traffic Volume (veh/h)	45	256	553	161	52	109	544	788	214	120	637	28
Future Volume (veh/h)	45	256	553	161	52	109	544	788	214	120	637	28
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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	
Adj Sat Flow, veh/h/ln	1973	1958	1928	1781	1811	1900	1776	1835	1776	1894	1849	1729
Adj Flow Rate, veh/h	50	284	614	179	58	121	604	876	238	133	708	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	4	6	8	6	0	8	4	8	3	6	14
Cap, veh/h	267	334	789	217	110	229	598	1216	330	211	736	32
Arrive On Green	0.03	0.17	0.17	0.07	0.21	0.21	0.31	0.45	0.45	0.08	0.21	0.21
Sat Flow, veh/h	1879	1958	1634	1697	523	1091	1691	2710	736	1804	3429	150
Grp Volume(v), veh/h	50	284	614	179	0	179	604	563	551	133	363	376
Grp Sat Flow(s), veh/h/ln	1879	1958	1634	1697	0	1615	1691	1743	1702	1804	1757	1822
Q Serve(g_s), s	2.2	14.4	7.8	7.0	0.0	10.1	32.0	27.0	27.0	6.7	20.9	21.0
Cycle Q Clear(g_c), s	2.2	14.4	7.8	7.0	0.0	10.1	32.0	27.0	27.0	6.7	20.9	21.0
Prop In Lane	1.00		1.00	1.00		0.68	1.00		0.43	1.00		0.08
Lane Grp Cap(c), veh/h	267	334	789	217	0	339	598	782	764	211	377	391
V/C Ratio(X)	0.19	0.85	0.78	0.82	0.00	0.53	1.01	0.72	0.72	0.63	0.96	0.96
Avail Cap(c_a), veh/h	267	363	813	217	0	362	598	782	764	211	377	391
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	41.2	7.4	37.4	0.0	36.0	33.4	23.0	23.0	38.1	39.8	39.8
Incr Delay (d2), s/veh	0.3	14.9	4.2	21.9	0.0	0.5	39.2	5.7	5.8	4.5	36.0	35.4
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	1.0	8.3	5.7	2.5	0.0	3.9	20.2	11.3	11.1	3.1	12.4	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.2	56.2	11.7	59.2	0.0	36.5	72.6	28.7	28.8	42.6	75.8	75.3
LnGrp LOS	C	E	B	E		D	F	C	C	D	E	E
Approach Vol, veh/h		948			358			1718			872	
Approach Delay, s/veh		26.2			47.9			44.2			70.5	
Approach LOS		C			D			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	14.0	52.0	9.0	27.5	38.0	28.0	13.0	23.5				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	8.0	46.0	3.0	23.0	32.0	22.0	7.0	19.0				
Max Q Clear Time (g_c+l1), s	8.7	29.0	4.2	12.1	34.0	23.0	9.0	16.4				
Green Ext Time (p_c), s	0.0	3.5	0.0	0.4	0.0	0.0	0.0	1.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			46.0									
HCM 6th LOS				D								

## 2032 No-Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak PM Hour

06/26/2024

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	40	225	343	265	325	170	473	970	225	191	936	72
Future Volume (vph)	40	225	343	265	325	170	473	970	225	191	936	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0	0	150		90	440		0	125		0	
Storage Lanes	1	1	1		0	1		0	1		0	
Taper Length (ft)	25		86			86			60			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.850			0.949			0.972			0.989	
Flt Protected	0.950		0.950			0.950			0.950			
Satd. Flow (prot)	1771	1846	1569	1728	1743	0	1761	3423	0	1814	3555	0
Flt Permitted	0.198		0.326			0.220			0.220			
Satd. Flow (perm)	369	1846	1569	593	1743	0	408	3423	0	420	3555	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		220		25			31			7		
Link Speed (mph)		30		45			45			45		
Link Distance (ft)		628		741			950			1031		
Travel Time (s)		14.3		11.2			14.4			15.6		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	1%	1%	0%	0%	2%	2%	2%	0%	1%	0%
Adj. Flow (vph)	41	232	354	273	335	175	488	1000	232	197	965	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	232	354	273	510	0	488	1232	0	197	1039	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83		83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 No-Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak PM Hour

06/26/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases	8		8	4			2			6		
Detector Phase	3	8	5	7	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0		3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0		9.0	16.0	
Total Split (s)	9.0	27.0	27.0	16.0	34.0		27.0	45.0		16.0	34.0	
Total Split (%)	8.7%	26.0%	26.0%	15.4%	32.7%		26.0%	43.3%		15.4%	32.7%	
Maximum Green (s)	3.0	21.0	21.0	10.0	28.0		21.0	39.0		10.0	28.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	3.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max		None	None	
v/c Ratio	0.35	0.71	0.48	0.87	1.00		1.10	0.91		0.78	1.04	
Control Delay (s/veh)	32.4	52.1	6.7	57.2	76.3		111.3	40.4		53.4	77.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	32.4	52.1	6.7	57.2	76.3		111.3	40.4		53.4	77.7	
Queue Length 50th (ft)	18	142	35	137	~357		~333	404		107	~407	
Queue Length 95th (ft)	42	224	76	#273	#564		#537	#552		#193	#538	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				150			440			125		
Base Capacity (vph)	117	385	737	311	510		441	1352		255	994	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.35	0.60	0.48	0.88	1.00		1.11	0.91		0.77	1.05	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 100.8

Natural Cycle: 140

Control Type: Actuated-Uncoordinated

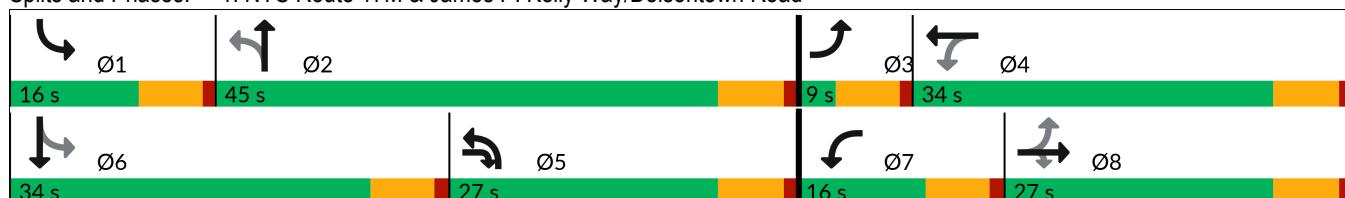
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road



Synchro 12 Report

Page 2

## 2032 No-Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak PM Hour

06/26/2024

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↖	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↘	↑ ↙
Traffic Volume (veh/h)	40	225	343	265	325	170	473	970	225	191	936	72
Future Volume (veh/h)	40	225	343	265	325	170	473	970	225	191	936	72
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	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	2018	2003	2003	1885	1900	1900	1864	1864	1864	1939	1924	1939
Adj Flow Rate, veh/h	41	232	354	273	335	175	488	1000	232	197	965	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	1	1	0	0	2	2	2	0	1	0
Cap, veh/h	118	398	682	351	318	166	429	1075	249	248	930	71
Arrive On Green	0.03	0.20	0.20	0.10	0.27	0.27	0.20	0.38	0.38	0.10	0.27	0.27
Sat Flow, veh/h	1922	2003	1697	1795	1175	614	1776	2856	661	1847	3441	264
Grp Volume(v), veh/h	41	232	354	273	0	510	488	619	613	197	513	526
Grp Sat Flow(s), veh/h/ln	1922	2003	1697	1795	0	1789	1776	1771	1746	1847	1828	1877
Q Serve(g_s), s	1.8	10.9	4.2	10.0	0.0	28.0	21.0	34.7	35.0	9.5	28.0	28.0
Cycle Q Clear(g_c), s	1.8	10.9	4.2	10.0	0.0	28.0	21.0	34.7	35.0	9.5	28.0	28.0
Prop In Lane	1.00			1.00			0.34	1.00		0.38	1.00	
Lane Grp Cap(c), veh/h	118	398	682	351	0	484	429	667	657	248	494	507
V/C Ratio(X)	0.35	0.58	0.52	0.78	0.00	1.05	1.14	0.93	0.93	0.80	1.04	1.04
Avail Cap(c_a), veh/h	125	406	688	351	0	484	429	667	657	248	494	507
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	37.6	8.6	32.4	0.0	37.8	39.6	31.0	31.0	35.2	37.8	37.8
Incr Delay (d2), s/veh	0.7	1.3	0.3	10.5	0.0	56.0	86.2	21.2	22.0	15.1	50.5	50.1
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	0.8	5.4	3.0	2.5	0.0	19.1	20.6	17.6	17.6	5.1	18.7	19.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.6	38.9	8.9	42.8	0.0	93.8	125.8	52.1	53.0	50.3	88.3	87.9
LnGrp LOS	C	D	A	D		F	F	D	D	D	F	F
Approach Vol, veh/h						783						1236
Approach Delay, s/veh						76.1						82.1
Approach LOS			C			E			E			F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	16.0	45.0	8.6	34.0	27.0	34.0	16.0	26.6				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	10.0	39.0	3.0	28.0	21.0	28.0	10.0	21.0				
Max Q Clear Time (g_c+l1), s	11.5	37.0	3.8	30.0	23.0	30.0	12.0	12.9				
Green Ext Time (p_c), s	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				68.9								
HCM 6th LOS				E								

## 2032 Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak AM Hour

06/26/2024

	↗	→	↘	↖	←	↙	↑	↗	↘	↓	↖	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	45	311	553	187	59	124	544	788	367	222	637	28
Future Volume (vph)	45	311	553	187	59	124	544	788	367	222	637	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0	0	150		90	440		0	125		0	
Storage Lanes	1	1	1		0	1		0	1		0	
Taper Length (ft)	25		86			86			60			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.850		0.899			0.952			0.994		
Flt Protected	0.950		0.950			0.950			0.950			
Satd. Flow (prot)	1719	1793	1495	1544	1578	0	1663	3229	0	1728	3391	0
Flt Permitted	0.630		0.161			0.293			0.286			
Satd. Flow (perm)	1140	1793	1495	262	1578	0	513	3229	0	520	3391	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		157		93			94			4		
Link Speed (mph)		30		30			45			45		
Link Distance (ft)		628		741			950			1031		
Travel Time (s)		14.3		16.8			14.4			15.6		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	4%	6%	13%	8%	3%	8%	4%	10%	5%	6%	14%
Adj. Flow (vph)	50	346	614	208	66	138	604	876	408	247	708	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	346	614	208	204	0	604	1284	0	247	739	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11		11			12			12		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83		83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak AM Hour

06/26/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases	8		8	4			2			6		
Detector Phase	3	8	5	7	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0		3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0		9.0	16.0	
Total Split (s)	9.0	25.0	38.0	13.0	29.0		38.0	52.0		14.0	28.0	
Total Split (%)	8.7%	24.0%	36.5%	12.5%	27.9%		36.5%	50.0%		13.5%	26.9%	
Maximum Green (s)	3.0	19.0	32.0	7.0	23.0		32.0	46.0		8.0	22.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	3.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max		None	None	
v/c Ratio	0.19	1.05	0.75	1.28	0.45		1.04	0.86		1.22	1.02	
Control Delay (s/veh)	29.4	107.9	15.2	195.8	22.5		82.4	31.9		171.2	81.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	29.4	107.9	15.2	195.8	22.5		82.4	31.9		171.2	81.3	
Queue Length 50th (ft)	24	~253	140	~135	62		~387	372		~153	~276	
Queue Length 95th (ft)	52	#430	232	#285	135		#605	475		#307	#397	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				150			440				125	
Base Capacity (vph)	257	327	813	162	447		580	1480		202	720	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.19	1.06	0.76	1.28	0.46		1.04	0.87		1.22	1.03	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 104

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

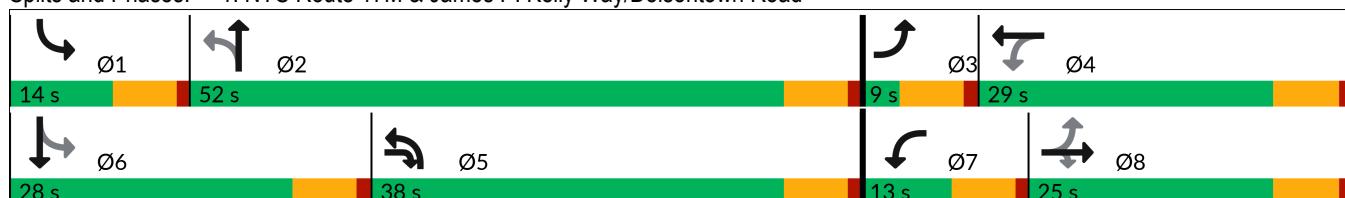
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road



Synchro 12 Report

Page 2

## 2032 Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak AM Hour

06/26/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↗	↑ ↘	↑ ↗	↑ ↘	↑ ↗	↑ ↘	↑ ↗	↑ ↘	↑ ↗	↑ ↘
Traffic Volume (veh/h)	45	311	553	187	59	124	544	788	367	222	637	28
Future Volume (veh/h)	45	311	553	187	59	124	544	788	367	222	637	28
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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	
Adj Sat Flow, veh/h/ln	1973	1958	1928	1707	1781	1856	1776	1835	1746	1864	1849	1729
Adj Flow Rate, veh/h	50	346	614	208	66	138	604	876	408	247	708	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	4	6	13	8	3	8	4	10	5	6	14
Cap, veh/h	256	358	801	186	114	238	590	1024	473	206	725	32
Arrive On Green	0.03	0.18	0.18	0.07	0.22	0.22	0.31	0.44	0.44	0.08	0.21	0.21
Sat Flow, veh/h	1879	1958	1634	1626	514	1074	1691	2316	1070	1776	3429	150
Grp Volume(v), veh/h	50	346	614	208	0	204	604	658	626	247	363	376
Grp Sat Flow(s), veh/h/ln	1879	1958	1634	1626	0	1588	1691	1743	1642	1776	1757	1822
Q Serve(g_s), s	2.2	18.2	7.8	7.0	0.0	11.9	32.0	35.1	35.8	8.0	21.3	21.3
Cycle Q Clear(g_c), s	2.2	18.2	7.8	7.0	0.0	11.9	32.0	35.1	35.8	8.0	21.3	21.3
Prop In Lane	1.00		1.00	1.00		0.68	1.00		0.65	1.00		0.08
Lane Grp Cap(c), veh/h	256	358	801	186	0	351	590	771	726	206	372	385
V/C Ratio(X)	0.20	0.97	0.77	1.12	0.00	0.58	1.02	0.85	0.86	1.20	0.98	0.98
Avail Cap(c_a), veh/h	256	358	801	186	0	351	590	771	726	206	372	385
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	42.2	7.3	38.7	0.0	36.2	34.1	26.0	26.1	42.7	40.7	40.7
Incr Delay (d2), s/veh	0.1	38.6	4.0	102.3	0.0	1.6	43.4	11.5	12.8	127.2	39.9	39.3
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	1.0	12.5	5.7	6.9	0.0	4.7	19.9	15.7	15.3	8.5	12.9	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.7	80.8	11.4	141.0	0.0	37.8	77.6	37.5	39.0	169.9	80.7	80.1
LnGrp LOS	C	F	B	F		D	F	D	D	F	F	F
Approach Vol, veh/h		1010				412			1888			986
Approach Delay, s/veh		36.3				89.9			50.8			102.8
Approach LOS		D				F			D			F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	14.0	52.0	9.0	29.0	38.0	28.0	13.0	25.0				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	8.0	46.0	3.0	23.0	32.0	22.0	7.0	19.0				
Max Q Clear Time (g_c+l1), s	10.0	37.8	4.2	13.9	34.0	23.3	9.0	20.2				
Green Ext Time (p_c), s	0.0	3.1	0.0	0.4	0.0	0.0	0.0	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			63.1									
HCM 6th LOS			E									

## 2032 Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak PM Hour

06/26/2024

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	40	236	343	406	376	260	473	970	263	213	936	72
Future Volume (vph)	40	236	343	406	376	260	473	970	263	213	936	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0	0	150		90	440		0	125		0	
Storage Lanes	1	1	1		0	1		0	1		0	
Taper Length (ft)	25		86			86			60			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.850			0.939			0.968			0.989	
Flt Protected	0.950		0.950			0.950			0.950			
Satd. Flow (prot)	1771	1828	1569	1631	1694	0	1761	3374	0	1778	3555	0
Flt Permitted	0.197		0.308			0.222			0.222			
Satd. Flow (perm)	367	1828	1569	529	1694	0	411	3374	0	416	3555	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		220		33			38			7		
Link Speed (mph)		30		30			45			45		
Link Distance (ft)		628		741			950			1031		
Travel Time (s)		14.3		16.8			14.4			15.6		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	7%	1%	3%	2%	2%	7%	2%	1%	0%
Adj. Flow (vph)	41	243	354	419	388	268	488	1000	271	220	965	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	243	354	419	656	0	488	1271	0	220	1039	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2		2	2	
Detector Template												
Leading Detector (ft)	83	83	83	83	83		83	83		83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 Build Traffic Volumes

## 1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak PM Hour

06/26/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases	8		8	4			2			6		
Detector Phase	3	8	5	7	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0		3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0		9.0	16.0	
Total Split (s)	9.0	27.0	27.0	16.0	34.0		27.0	45.0		16.0	34.0	
Total Split (%)	8.7%	26.0%	26.0%	15.4%	32.7%		26.0%	43.3%		15.4%	32.7%	
Maximum Green (s)	3.0	21.0	21.0	10.0	28.0		21.0	39.0		10.0	28.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	3.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max		None	None	
v/c Ratio	0.35	0.75	0.47	1.46	1.30		1.10	0.95		0.88	1.04	
Control Delay (s/veh)	32.3	54.6	6.7	253.1	180.8		112.5	46.8		66.9	78.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	32.3	54.6	6.7	253.1	180.8		112.5	46.8		66.9	78.2	
Queue Length 50th (ft)	18	150	35	~349	~565		~332	425		122	~407	
Queue Length 95th (ft)	42	236	76	#567	#789		#536	#585		#235	#538	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				150			440			125		
Base Capacity (vph)	117	381	739	286	504		440	1328		250	992	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.35	0.64	0.48	1.47	1.30		1.11	0.96		0.88	1.05	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 101

Natural Cycle: 140

Control Type: Actuated-Uncoordinated

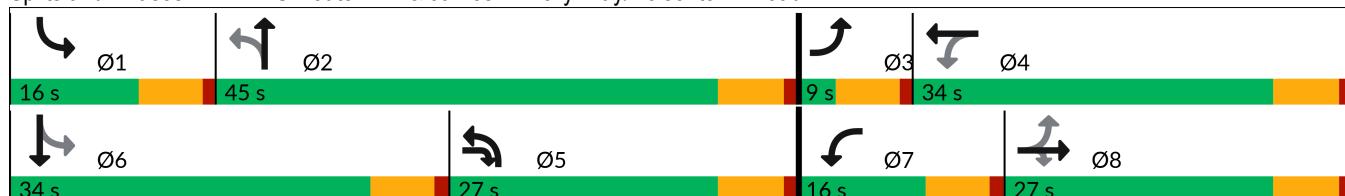
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road



Synchro 12 Report

Page 2

## 2032 Build Traffic Volumes

1: NYS Route 17M &amp; James P. Kelly Way/Dolsontown Road

Weekday Peak PM Hour

06/26/2024

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↖	↑ ↖	↑ ↙	↑ ↙	↑ ↙	↑ ↖	↑ ↖	↑ ↖
Traffic Volume (veh/h)	40	236	343	406	376	260	473	970	263	213	936	72
Future Volume (veh/h)	40	236	343	406	376	260	473	970	263	213	936	72
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	2018	1988	2003	1796	1885	1856	1864	1864	1790	1909	1924	1939
Adj Flow Rate, veh/h	41	243	354	419	388	268	488	1000	271	220	965	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	1	7	1	3	2	2	7	2	1	0
Cap, veh/h	118	395	682	330	281	194	429	1038	280	245	930	71
Arrive On Green	0.03	0.20	0.20	0.10	0.27	0.27	0.20	0.38	0.38	0.10	0.27	0.27
Sat Flow, veh/h	1922	1988	1697	1711	1039	717	1776	2758	744	1818	3441	264
Grp Volume(v), veh/h	41	243	354	419	0	656	488	641	630	220	513	526
Grp Sat Flow(s), veh/h/ln	1922	1988	1697	1711	0	1756	1776	1771	1731	1818	1828	1877
Q Serve(g_s), s	1.8	11.6	4.2	10.0	0.0	28.0	21.0	36.6	37.0	10.0	28.0	28.0
Cycle Q Clear(g_c), s	1.8	11.6	4.2	10.0	0.0	28.0	21.0	36.6	37.0	10.0	28.0	28.0
Prop In Lane	1.00			1.00			0.41	1.00		0.43	1.00	0.14
Lane Grp Cap(c), veh/h	118	395	682	330	0	475	429	667	651	245	494	507
V/C Ratio(X)	0.35	0.61	0.52	1.27	0.00	1.38	1.14	0.96	0.97	0.90	1.04	1.04
Avail Cap(c_a), veh/h	125	403	688	330	0	475	429	667	651	245	494	507
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	37.9	8.6	36.7	0.0	37.8	39.6	31.6	31.7	36.6	37.8	37.8
Incr Delay (d2), s/veh	0.7	1.9	0.3	143.3	0.0	184.8	86.2	26.5	28.1	31.2	50.5	50.1
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	0.8	5.8	3.0	16.9	0.0	36.1	20.6	19.3	19.3	6.8	18.7	19.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.6	39.8	8.9	180.0	0.0	222.6	125.8	58.0	59.8	67.9	88.3	87.9
LnGrp LOS	C	D	A	F		F	F	E	E	E	F	F
Approach Vol, veh/h						1075			1759			1259
Approach Delay, s/veh						205.9			77.5			84.6
Approach LOS		C				F		E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	16.0	45.0	8.6	34.0	27.0	34.0	16.0	26.6				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	10.0	39.0	3.0	28.0	21.0	28.0	10.0	21.0				
Max Q Clear Time (g_c+l1), s	12.0	39.0	3.8	30.0	23.0	30.0	12.0	13.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				101.1								
HCM 6th LOS				F								

## 2032 Build Traffic Volumes w/Secondary Improvements

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak AM Hour

06/26/2024

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑↑
Traffic Volume (vph)	45	311	553	187	59	124	544	788	367	222	637	28
Future Volume (vph)	45	311	553	187	59	124	544	788	367	222	637	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0		0	530		190	440		0	125		0
Storage Lanes	1		1	1		1	2		1	1		0
Taper Length (ft)	25			86			86			60		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.899				0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1793	1495	1544	2999	0	3226	3454	1461	1728	3391	0
Flt Permitted	0.624			0.191			0.950			0.342		
Satd. Flow (perm)	1129	1793	1495	310	2999	0	3226	3454	1461	622	3391	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			157		138				156			4
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		628			741			950			1031	
Travel Time (s)		14.3			16.8			14.4			15.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	4%	6%	13%	8%	3%	8%	4%	10%	5%	6%	14%
Adj. Flow (vph)	50	346	614	208	66	138	604	876	408	247	708	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	346	614	208	204	0	604	876	408	247	739	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane				Yes							Yes	
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2	1	2	2	
Detector Template									Right			
Leading Detector (ft)	83	83	83	83	83		83	83	20	83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 Build Traffic Volumes w/Secondary Improvements

## 1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak AM Hour

06/26/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases	8		8	4					2	6		
Detector Phase	3	8	5	7	4		5	2	7	1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0	4.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0	10.0	9.0	16.0	
Total Split (s)	17.0	29.0	24.0	17.0	29.0		24.0	38.0	17.0	20.0	34.0	
Total Split (%)	16.3%	27.9%	23.1%	16.3%	27.9%		23.1%	36.5%	16.3%	19.2%	32.7%	
Maximum Green (s)	11.0	23.0	18.0	11.0	23.0		18.0	32.0	11.0	14.0	28.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lead	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	3.0	2.0		2.0	2.0	3.0	2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max	None	None	None	
v/c Ratio	0.14	0.91	0.86	0.84	0.21		0.94	0.81	0.52	0.82	0.87	
Control Delay (s/veh)	21.9	68.5	28.2	55.5	11.6		66.9	39.8	14.0	56.9	49.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	21.9	68.5	28.2	55.5	11.6		66.9	39.8	14.0	56.9	49.5	
Queue Length 50th (ft)	21	223	166	97	17		~214	283	110	142	244	
Queue Length 95th (ft)	46	#382	#410	#216	47		#342	362	199	#220	313	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				530			440				125	
Base Capacity (vph)	424	403	706	245	935		639	1080	781	305	930	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.12	0.86	0.87	0.85	0.22		0.95	0.81	0.52	0.81	0.79	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 102.4

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

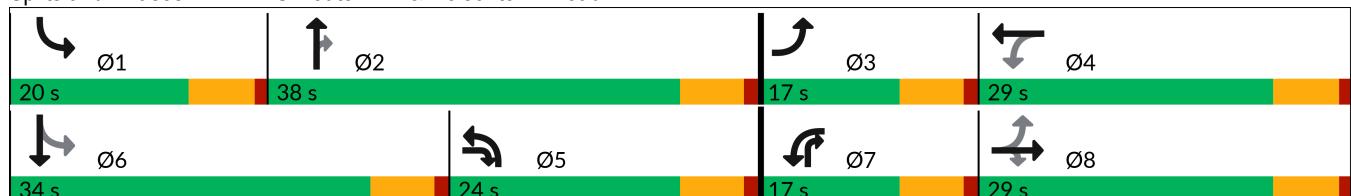
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 17M &amp; Dolsontown Road



Synchro 12 Report

Page 2

## 2032 Build Traffic Volumes w/Secondary Improvements

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak AM Hour

06/26/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑		↑↑	↑↑	↑	↑	↑↑	
Traffic Volume (veh/h)	45	311	553	187	59	124	544	788	367	222	637	28
Future Volume (veh/h)	45	311	553	187	59	124	544	788	367	222	637	28
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1973	1958	1928	1707	1781	1856	1776	1835	1746	1864	1849	1729
Adj Flow Rate, veh/h	50	346	614	208	66	138	604	876	408	247	708	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	4	6	13	8	3	8	4	10	5	6	14
Cap, veh/h	384	402	694	279	477	426	720	1095	624	315	795	35
Arrive On Green	0.03	0.21	0.21	0.11	0.28	0.28	0.22	0.31	0.31	0.14	0.23	0.23
Sat Flow, veh/h	1879	1958	1634	1626	1692	1510	3281	3486	1480	1776	3429	150
Grp Volume(v), veh/h	50	346	614	208	66	138	604	876	408	247	363	376
Grp Sat Flow(s), veh/h/ln	1879	1958	1634	1626	1692	1510	1640	1743	1480	1776	1757	1822
Q Serve(g_s), s	2.1	17.4	10.2	10.0	3.0	7.4	17.9	23.5	22.4	13.3	20.4	20.4
Cycle Q Clear(g_c), s	2.1	17.4	10.2	10.0	3.0	7.4	17.9	23.5	22.4	13.3	20.4	20.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	384	402	694	279	477	426	720	1095	624	315	407	423
V/C Ratio(X)	0.13	0.86	0.89	0.75	0.14	0.32	0.84	0.80	0.65	0.79	0.89	0.89
Avail Cap(c_a), veh/h	528	442	727	279	477	426	720	1095	624	315	483	501
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	39.1	9.2	28.3	27.3	28.9	38.0	32.0	23.5	38.7	37.9	37.9
Incr Delay (d2), s/veh	0.1	13.7	11.6	10.5	0.0	0.2	11.3	6.2	5.3	11.3	14.9	14.6
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	1.0	9.8	7.5	4.6	1.2	2.7	8.0	10.2	8.5	6.5	10.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.6	52.8	20.8	38.8	27.4	29.1	49.3	38.2	28.8	50.1	52.8	52.4
LnGrp LOS	C	D	C	D	C	C	D	D	C	D	D	D
Approach Vol, veh/h		1010			412			1888			986	
Approach Delay, s/veh		32.3			33.7			39.7			52.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	20.0	38.0	9.2	34.7	28.4	29.6	17.0	26.9				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	14.0	32.0	11.0	23.0	18.0	28.0	11.0	23.0				
Max Q Clear Time (g_c+l1), s	15.3	25.5	4.1	9.4	19.9	22.4	12.0	19.4				
Green Ext Time (p_c), s	0.0	2.5	0.0	0.5	0.0	1.3	0.0	1.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			40.2									
HCM 6th LOS				D								

## 2032 Build Traffic Volumes w/Secondary Improvements

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak PM Hour

06/26/2024

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑	↑↑	↑↑	↑↑	↑	↑	↑↑	↑↑
Traffic Volume (vph)	40	236	343	406	376	260	473	970	263	213	936	72
Future Volume (vph)	40	236	343	406	376	260	473	970	263	213	936	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0		0	530		190	440		0	125		0
Storage Lanes	1		1	1		1	2		1	1		0
Taper Length (ft)	25			86			86			60		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.939				0.850		0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1771	1828	1569	1631	3218	0	3416	3522	1502	1778	3555	0
Flt Permitted	0.402			0.286			0.950			0.197		
Satd. Flow (perm)	749	1828	1569	491	3218	0	3416	3522	1502	369	3555	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			157			159			176			8
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		628			741			950			1031	
Travel Time (s)		14.3			16.8			14.4			15.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	7%	1%	3%	2%	2%	7%	2%	1%	0%
Adj. Flow (vph)	41	243	354	419	388	268	488	1000	271	220	965	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	243	354	419	656	0	488	1000	271	220	1039	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane				Yes							Yes	
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2	1	2	2	
Detector Template									Right			
Leading Detector (ft)	83	83	83	83	83		83	83	20	83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 Build Traffic Volumes w/Secondary Improvements

## 1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak PM Hour

06/26/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases	8		8	4					2	6		
Detector Phase	3	8	5	7	4		5	2	7	1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0	4.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0	10.0	9.0	16.0	
Total Split (s)	17.0	25.0	18.0	23.0	31.0		18.0	39.0	23.0	17.0	38.0	
Total Split (%)	16.3%	24.0%	17.3%	22.1%	29.8%		17.3%	37.5%	22.1%	16.3%	36.5%	
Maximum Green (s)	11.0	19.0	12.0	17.0	25.0		12.0	33.0	17.0	11.0	32.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lead	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	3.0	2.0		2.0	2.0	3.0	2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max	None	None	None	
v/c Ratio	0.17	0.81	0.62	1.09	0.58		1.14	0.87	0.29	0.83	0.94	
Control Delay (s/veh)	22.3	62.8	14.6	102.1	25.1		130.6	42.5	5.4	55.9	51.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	22.3	62.8	14.6	102.1	25.1		130.6	42.5	5.4	55.9	51.7	
Queue Length 50th (ft)	16	154	59	~231	151		~206	328	29	114	348	
Queue Length 95th (ft)	38	#261	115	#423	218		#311	#450	73	#219	#486	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				530			440			125		
Base Capacity (vph)	314	342	563	382	1124		427	1146	908	266	1127	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.13	0.71	0.63	1.10	0.58		1.14	0.87	0.30	0.83	0.92	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 101.5

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

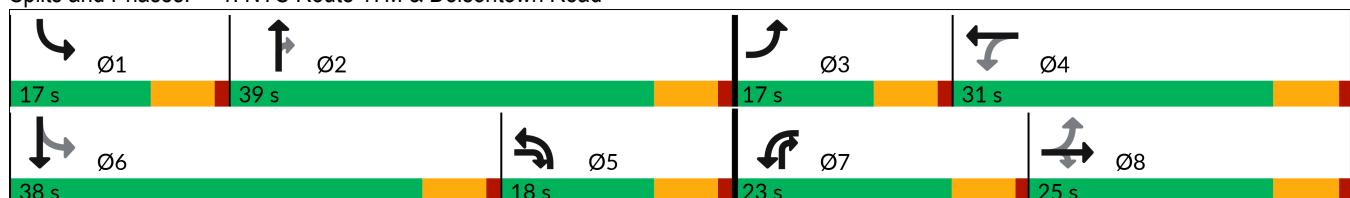
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## Splits and Phases: 1: NYS Route 17M &amp; Dolsontown Road



Synchro 12 Report

Page 2

## 2032 Build Traffic Volumes w/Secondary Improvements

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak PM Hour

06/26/2024

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑		↑↑	↑↑	↑	↑	↑↑	
Traffic Volume (veh/h)	40	236	343	406	376	260	473	970	263	213	936	72
Future Volume (veh/h)	40	236	343	406	376	260	473	970	263	213	936	72
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	
Adj Sat Flow, veh/h/ln	2018	1988	2003	1796	1885	1856	1864	1864	1790	1909	1924	1939
Adj Flow Rate, veh/h	41	243	354	419	388	268	488	1000	271	220	965	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	1	7	1	3	2	2	7	2	1	0
Cap, veh/h	227	298	487	397	598	408	473	1169	759	272	1042	80
Arrive On Green	0.03	0.15	0.15	0.17	0.29	0.29	0.14	0.33	0.33	0.11	0.30	0.30
Sat Flow, veh/h	1922	1988	1697	1711	2037	1389	3445	3542	1517	1818	3441	264
Grp Volume(v), veh/h	41	243	354	419	341	315	488	1000	271	220	513	526
Grp Sat Flow(s), veh/h/ln	1922	1988	1697	1711	1791	1635	1722	1771	1517	1818	1828	1877
Q Serve(g_s), s	1.8	11.8	6.1	17.0	16.6	16.9	13.7	26.3	10.9	10.1	27.2	27.2
Cycle Q Clear(g_c), s	1.8	11.8	6.1	17.0	16.6	16.9	13.7	26.3	10.9	10.1	27.2	27.2
Prop In Lane	1.00		1.00	1.00		0.85	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	227	298	487	397	526	480	473	1169	759	272	554	568
V/C Ratio(X)	0.18	0.82	0.73	1.06	0.65	0.66	1.03	0.86	0.36	0.81	0.93	0.93
Avail Cap(c_a), veh/h	388	378	556	397	526	480	473	1169	759	272	585	601
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	41.2	11.7	31.2	30.8	30.9	43.1	31.3	15.2	32.1	33.8	33.8
Incr Delay (d2), s/veh	0.1	8.4	3.2	60.4	2.2	2.6	49.9	8.1	1.3	15.4	19.7	19.3
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	0.8	6.4	3.6	14.7	7.4	6.9	8.9	11.8	3.9	5.4	14.3	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.9	49.5	14.8	91.6	33.0	33.5	93.1	39.3	16.5	47.4	53.5	53.1
LnGrp LOS	C	D	B	F	C	C	F	D	B	D	D	D
Approach Vol, veh/h		638			1075			1759			1259	
Approach Delay, s/veh		29.4			56.0			50.7			52.2	
Approach LOS		C			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	17.0	39.0	8.6	35.4	19.7	36.3	23.0	21.0				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	11.0	33.0	11.0	25.0	12.0	32.0	17.0	19.0				
Max Q Clear Time (g_c+l1), s	12.1	28.3	3.8	18.9	15.7	29.2	19.0	13.8				
Green Ext Time (p_c), s	0.0	2.0	0.0	1.4	0.0	1.1	0.0	1.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			49.4									
HCM 6th LOS				D								

## 2032 Build Traffic Volumes (Dewpoint South 234.9K SF) w/ Imp.

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak AM Hour

06/26/2024

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↖	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑↑
Traffic Volume (vph)	45	317	553	190	60	126	544	788	383	234	637	28
Future Volume (vph)	45	317	553	190	60	126	544	788	383	234	637	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0		0	530		190	440		0	125		0
Storage Lanes	1		1	1		1	2		1	1		0
Taper Length (ft)	25			86			86			60		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.95	1.00	1.00	0.95	0.95
Fr <sub>t</sub>			0.850		0.899				0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1793	1495	1544	2999	0	3226	3454	1461	1728	3391	0
Flt Permitted	0.622			0.185			0.950			0.367		
Satd. Flow (perm)	1126	1793	1495	301	2999	0	3226	3454	1461	667	3391	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			157		140				154			4
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		628			741			950			1031	
Travel Time (s)		14.3			11.2			14.4			15.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	4%	6%	13%	8%	3%	8%	4%	10%	5%	6%	14%
Adj. Flow (vph)	50	352	614	211	67	140	604	876	426	260	708	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	352	614	211	207	0	604	876	426	260	739	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane				Yes							Yes	
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2	1	2	2	
Detector Template									Right			
Leading Detector (ft)	83	83	83	83	83		83	83	20	83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 Build Traffic Volumes (Dewpoint South 234.9K SF) w/ Imp.

## 1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak AM Hour

06/26/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases	8		8	4					2	6		
Detector Phase	3	8	5	7	4		5	2	7	1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0	4.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0	10.0	9.0	16.0	
Total Split (s)	17.0	29.0	24.0	17.0	29.0		24.0	37.0	17.0	21.0	34.0	
Total Split (%)	16.3%	27.9%	23.1%	16.3%	27.9%		23.1%	35.6%	16.3%	20.2%	32.7%	
Maximum Green (s)	11.0	23.0	18.0	11.0	23.0		18.0	31.0	11.0	15.0	28.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lead	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	3.0	2.0		2.0	2.0	3.0	2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max	None	None	None	
v/c Ratio	0.14	0.91	0.86	0.86	0.22		0.95	0.83	0.55	0.82	0.87	
Control Delay (s/veh)	21.9	70.0	28.2	58.6	11.6		68.2	42.2	15.4	56.7	49.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	21.9	70.0	28.2	58.6	11.6		68.2	42.2	15.4	56.7	49.6	
Queue Length 50th (ft)	21	228	166	99	17		~214	287	125	151	244	
Queue Length 95th (ft)	46	#393	#410	#225	47		#342	#376	221	#229	313	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				530			440				125	
Base Capacity (vph)	425	403	706	243	940		635	1046	767	320	930	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.12	0.87	0.87	0.87	0.22		0.95	0.84	0.56	0.81	0.79	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 102.4

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 17M &amp; Dolsontown Road



Synchro 12 Report

Page 2

## 2032 Build Traffic Volumes (Dewpoint South 234.9K SF) w/ Imp.

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak AM Hour

06/26/2024

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑		↑↑	↑↑	↑	↑	↑↑	
Traffic Volume (veh/h)	45	317	553	190	60	126	544	788	383	234	637	28
Future Volume (veh/h)	45	317	553	190	60	126	544	788	383	234	637	28
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	
Adj Sat Flow, veh/h/ln	1973	1958	1928	1707	1781	1856	1776	1835	1746	1864	1849	1729
Adj Flow Rate, veh/h	50	352	614	211	67	140	604	876	426	260	708	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	4	6	13	8	3	8	4	10	5	6	14
Cap, veh/h	385	405	695	277	480	428	717	1058	608	331	795	35
Arrive On Green	0.03	0.21	0.21	0.11	0.28	0.28	0.22	0.30	0.30	0.15	0.23	0.23
Sat Flow, veh/h	1879	1958	1634	1626	1692	1510	3281	3486	1480	1776	3429	150
Grp Volume(v), veh/h	50	352	614	211	67	140	604	876	426	260	363	376
Grp Sat Flow(s), veh/h/ln	1879	1958	1634	1626	1692	1510	1640	1743	1480	1776	1757	1822
Q Serve(g_s), s	2.1	17.8	10.2	10.1	3.0	7.5	18.0	23.9	24.3	14.1	20.4	20.4
Cycle Q Clear(g_c), s	2.1	17.8	10.2	10.1	3.0	7.5	18.0	23.9	24.3	14.1	20.4	20.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	385	405	695	277	480	428	717	1058	608	331	407	422
V/C Ratio(X)	0.13	0.87	0.88	0.76	0.14	0.33	0.84	0.83	0.70	0.78	0.89	0.89
Avail Cap(c_a), veh/h	529	441	725	277	480	428	717	1058	608	331	482	500
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	39.2	9.2	28.4	27.3	28.9	38.2	33.1	24.9	39.1	38.0	38.0
Incr Delay (d2), s/veh	0.1	14.8	11.5	11.8	0.0	0.2	11.5	7.5	6.6	10.8	15.0	14.7
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	1.0	10.1	7.5	4.6	1.2	2.6	8.0	10.6	9.4	6.9	10.0	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.5	53.9	20.7	40.2	27.3	29.0	49.8	40.6	31.5	49.9	53.0	52.7
LnGrp LOS	C	D	C	D	C	C	D	D	C	D	D	D
Approach Vol, veh/h	1016				418			1906			999	
Approach Delay, s/veh	32.7				34.4			41.4			52.1	
Approach LOS	C				C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	21.0	37.0	9.2	35.0	28.3	29.7	17.0	27.1				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	15.0	31.0	11.0	23.0	18.0	28.0	11.0	23.0				
Max Q Clear Time (g_c+l1), s	16.1	26.3	4.1	9.5	20.0	22.4	12.1	19.8				
Green Ext Time (p_c), s	0.0	2.0	0.0	0.5	0.0	1.2	0.0	1.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			41.2									
HCM 6th LOS			D									

## 2032 Build Traffic Volumes (Dewpoint South 234.9K SF) w/ Imp.

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak PM Hour

06/26/2024

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↖	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑	↑↑	↑↑	↑↑	↑	↑	↑↑	
Traffic Volume (vph)	40	238	343	421	381	270	473	970	267	216	936	72
Future Volume (vph)	40	238	343	421	381	270	473	970	267	216	936	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	12	12	12	12	12	12
Grade (%)	-3%				0%			1%			-1%	
Storage Length (ft)	0	0	530		190	440		0	125		0	
Storage Lanes	1	1	1	1	1	2		1	1		0	
Taper Length (ft)	25			86		86			60			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.95	1.00	1.00	0.95	0.95
Frt		0.850			0.938				0.850		0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1771	1828	1569	1631	3215	0	3416	3522	1488	1761	3555	0
Flt Permitted	0.397			0.283			0.950			0.198		
Satd. Flow (perm)	740	1828	1569	486	3215	0	3416	3522	1488	367	3555	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		157			162				173		8	
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		628			741			950			1031	
Travel Time (s)		14.3			11.2			14.4			15.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	7%	1%	3%	2%	2%	8%	3%	1%	0%
Adj. Flow (vph)	41	245	354	434	393	278	488	1000	275	223	965	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	245	354	434	671	0	488	1000	275	223	1039	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		11			11			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane				Yes							Yes	
Headway Factor	1.02	1.02	1.02	1.04	1.04	1.04	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2	2	2	2		2	2	1	2	2	
Detector Template									Right			
Leading Detector (ft)	83	83	83	83	83		83	83	20	83	83	
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5	0	-5	-5	
Detector 1 Size(ft)	40	40	40	40	40		40	40	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43	43	43	43		43	43		43	43	
Detector 2 Size(ft)	40	40	40	40	40		40	40		40	40	
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	

Synchro 12 Report

Page 1

## 2032 Build Traffic Volumes (Dewpoint South 234.9K SF) w/ Imp.

## 1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak PM Hour

06/26/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	pm+pt	NA	
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases	8		8	4					2	6		
Detector Phase	3	8	5	7	4		5	2	7	1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0	4.0	4.0		10.0	10.0	4.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	16.0	10.0	10.0		16.0	16.0	10.0	9.0	16.0	
Total Split (s)	17.0	25.0	18.0	23.0	31.0		18.0	39.0	23.0	17.0	38.0	
Total Split (%)	16.3%	24.0%	17.3%	22.1%	29.8%		17.3%	37.5%	22.1%	16.3%	36.5%	
Maximum Green (s)	11.0	19.0	12.0	17.0	25.0		12.0	33.0	17.0	11.0	32.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lead	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	3.0	2.0		2.0	2.0	3.0	2.0	2.0	
Recall Mode	None	None	Max	None	None		Max	Max	None	None	None	
v/c Ratio	0.18	0.81	0.62	1.13	0.59		1.14	0.87	0.30	0.84	0.94	
Control Delay (s/veh)	22.3	63.1	14.6	116.8	25.4		129.6	42.7	5.7	58.2	51.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	22.3	63.1	14.6	116.8	25.4		129.6	42.7	5.7	58.2	51.9	
Queue Length 50th (ft)	16	155	59	~253	155		~207	329	32	116	349	
Queue Length 95th (ft)	38	#263	115	#449	224		#311	#450	77	#225	#486	
Internal Link Dist (ft)		548			661			870			951	
Turn Bay Length (ft)				530			440				125	
Base Capacity (vph)	312	341	565	381	1126		428	1143	897	263	1125	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.13	0.72	0.63	1.14	0.60		1.14	0.87	0.31	0.85	0.92	

## Intersection Summary

Area Type: Other

Cycle Length: 104

Actuated Cycle Length: 101.7

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

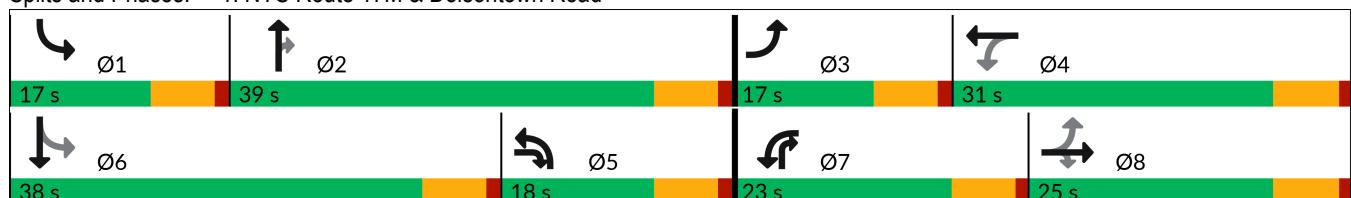
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## Splits and Phases: 1: NYS Route 17M &amp; Dolsontown Road



Synchro 12 Report

Page 2

## 2032 Build Traffic Volumes (Dewpoint South 234.9K SF) w/ Imp.

1: NYS Route 17M &amp; Dolsontown Road

Weekday Peak PM Hour

06/26/2024

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑↑		↑↑	↑↑	↑	↑	↑↑	
Traffic Volume (veh/h)	40	238	343	421	381	270	473	970	267	216	936	72
Future Volume (veh/h)	40	238	343	421	381	270	473	970	267	216	936	72
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	
Adj Sat Flow, veh/h/ln	2018	1988	2003	1796	1885	1856	1864	1864	1776	1894	1924	1939
Adj Flow Rate, veh/h	41	245	354	434	393	278	488	1000	275	223	965	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	1	7	1	3	2	2	8	3	1	0
Cap, veh/h	222	299	488	397	593	415	472	1168	752	270	1042	80
Arrive On Green	0.03	0.15	0.15	0.17	0.29	0.29	0.14	0.33	0.33	0.11	0.30	0.30
Sat Flow, veh/h	1922	1988	1697	1711	2014	1408	3445	3542	1505	1804	3441	264
Grp Volume(v), veh/h	41	245	354	434	349	322	488	1000	275	223	513	526
Grp Sat Flow(s), veh/h/ln	1922	1988	1697	1711	1791	1632	1722	1771	1505	1804	1828	1877
Q Serve(g_s), s	1.8	11.9	6.1	17.0	17.1	17.4	13.7	26.4	11.2	10.4	27.2	27.2
Cycle Q Clear(g_c), s	1.8	11.9	6.1	17.0	17.1	17.4	13.7	26.4	11.2	10.4	27.2	27.2
Prop In Lane	1.00		1.00	1.00		0.86	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	222	299	488	397	527	480	472	1168	752	270	554	568
V/C Ratio(X)	0.18	0.82	0.73	1.09	0.66	0.67	1.03	0.86	0.37	0.83	0.93	0.93
Avail Cap(c_a), veh/h	383	377	555	397	527	480	472	1168	752	270	585	600
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	41.2	11.7	31.2	30.9	31.0	43.2	31.3	15.3	32.2	33.8	33.8
Incr Delay (d2), s/veh	0.1	8.7	3.2	73.1	2.5	2.9	50.7	8.1	1.4	17.4	19.8	19.4
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	0.8	6.5	3.6	15.7	7.3	6.8	8.9	11.8	4.0	5.6	14.3	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.9	49.9	14.8	104.2	33.4	34.0	93.9	39.5	16.7	49.6	53.6	53.2
LnGrp LOS	C	D	B	F	C	C	F	D	B	D	D	D
Approach Vol, veh/h		640			1105			1763			1262	
Approach Delay, s/veh		29.5			61.4			51.0			52.7	
Approach LOS		C			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	17.0	39.0	8.6	35.5	19.7	36.3	23.0	21.1				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	11.0	33.0	11.0	25.0	12.0	32.0	17.0	19.0				
Max Q Clear Time (g_c+l1), s	12.4	28.4	3.8	19.4	15.7	29.2	19.0	13.9				
Green Ext Time (p_c), s	0.0	2.0	0.0	1.2	0.0	1.1	0.0	1.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			51.0									
HCM 6th LOS			D									