

Timmons Property

Sussex County, Delaware

May 20, 2024

Traffic Impact Study

Prepared for:

Shields Properties, LLC

130 Admiral Cochrane Drive

Annapolis, MD 21401

c/o Mr. Dale Shields



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EXECUTIVE SUMMARY

Shields Properties, LLC seeks to develop a convenience market with gas (Tax Parcels 233-10.00-48.00, 49.00, 50.01, 50.02) and expand the existing American Legion Building (Tax Parcels 233-10.00-53.01 & 233-10.00-54.00) in Sussex County Delaware. Previously, a fast-food restaurant was proposed for this development as well. However, it is no longer included in the project. The land is currently zoned as AR-1 (Agricultural Residential) and C-1 (General Commercial), and the developer does not propose to rezone the land. One full movement access is proposed on Nine Foot Road and one Right-in/Right-out on US 113. Construction is anticipated to be completed in 2025.

The Traffic Impact Study evaluated conditions at the following intersections for capacity and level of service for the weekday morning and evening peak hour and the summer Saturday peak hour.

- Site Access A and US Routes 113
- Site Access B/Nine Foot Road (Sussex Road 26)
- US Route 113 and Nine Foot Road/Clayton Street (Sussex Road 26)

Seasonal adjustment factors and growth factors were provided by DelDOT and applied to the vehicle turning movement counts.

Four committed developments were identified to be included in the analysis of background peak hour traffic conditions; however, three of these committed developments were removed for reasons specified below.

- Clayton Crossing – This development was completely built out in 2019.
- Royal Farms #316 Dagsboro – This development was relocated prior to the 2023 counts.
- Generals Green: Phase I – The Town of Dagsboro reports that this project is not moving forward. Correspondence is contained in Appendix F.
- Highlands of Peppers Creek – This committed development is included in the study.

One additional committed development was added to the study. The Nine Foot Road Warehousing project has received final approval.

The study intersection and site accesses were evaluated utilizing the intersection capacity analysis methodology identified in the Highway Capacity Manual, which is incorporated into the Highway Capacity Software. Three cases were evaluated:

1. Existing (2023)
2. 2025 without development
3. 2025 with development

The site accesses are projected to operate at acceptable Levels of Service for all cases. A bypass lane is warranted for the site access on Nine Foot Road.

The study intersection of US 113 and Nine Foot Road/Clayton Road consists of varying lane uses on the approaches and in the median. Assuming the lane use in the median with separate through and left turn lanes, acceptable Levels of Service are projected.

SITE INFORMATION

Developer: Shields Property, LLC
130 Admiral Cochrane Drive
Annapolis, MD 21401
c/o Mr. Dale Shields

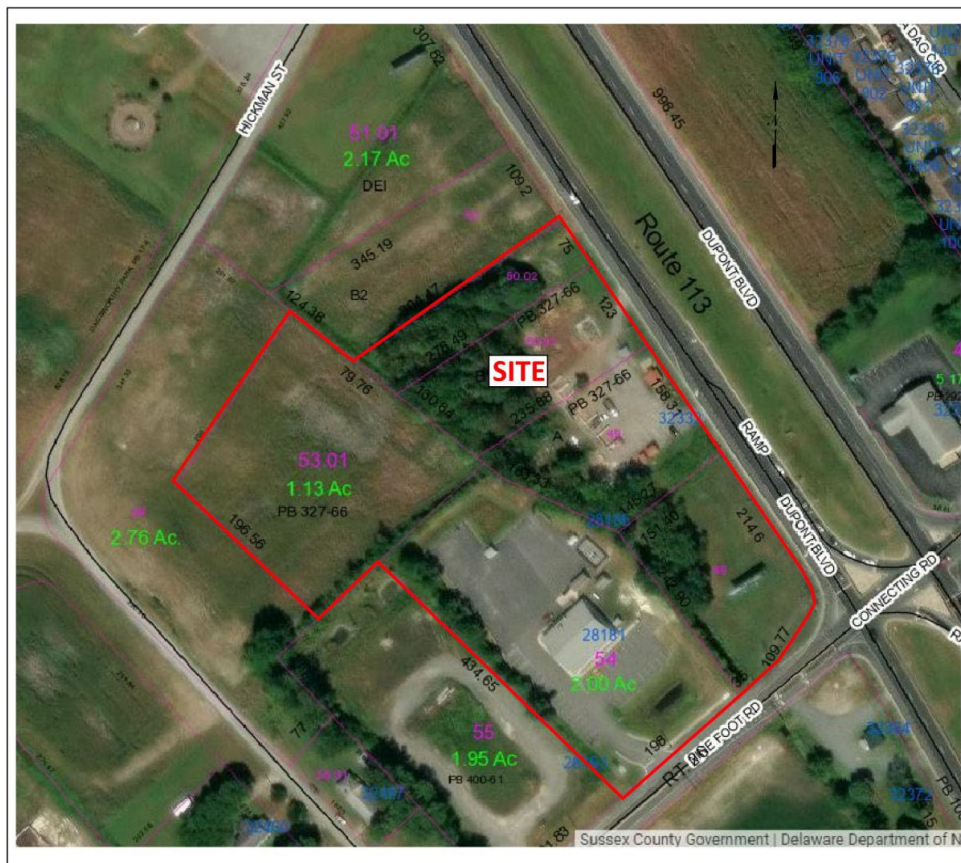
Lot Location: Tax Parcels 233-10.00-48.00, 49.00, 50.01, 50.02
Tax Parcels 233-10.00-53.01 and 233-10.00-54.00 for the American Legion

Routes of Access: One full movement access on Nine Foot Road and one Right-in/Right-out on US 113.

Size and Type of Zoning: 5.17 acres +/-

Current Zoning: AR-1 (Agricultural Residential), C-1 (General Commercial)

Proposed Zoning: No changes in current zoning are proposed.



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PROJECT DESCRIPTION

Shields Properties, LLC seeks to develop a convenience market with gas (Tax Parcels 233-10.00-48.00, 49.00, 50.01, 50.02) and expand the existing American Legion Building (Tax Parcels 233-10.00-53.01 & 233-10.00-54.00) in Sussex County Delaware. Previously, a fast-food restaurant was proposed for this development as well. However, it is no longer included in the project. The land is currently zoned as AR-1 (Agricultural Residential) and C-1 (General Commercial), and the developer does not propose to rezone the land. One full movement access is proposed on Nine Foot Road and one Right-in/Right-out on US 113. Construction is anticipated to be completed in 2025.

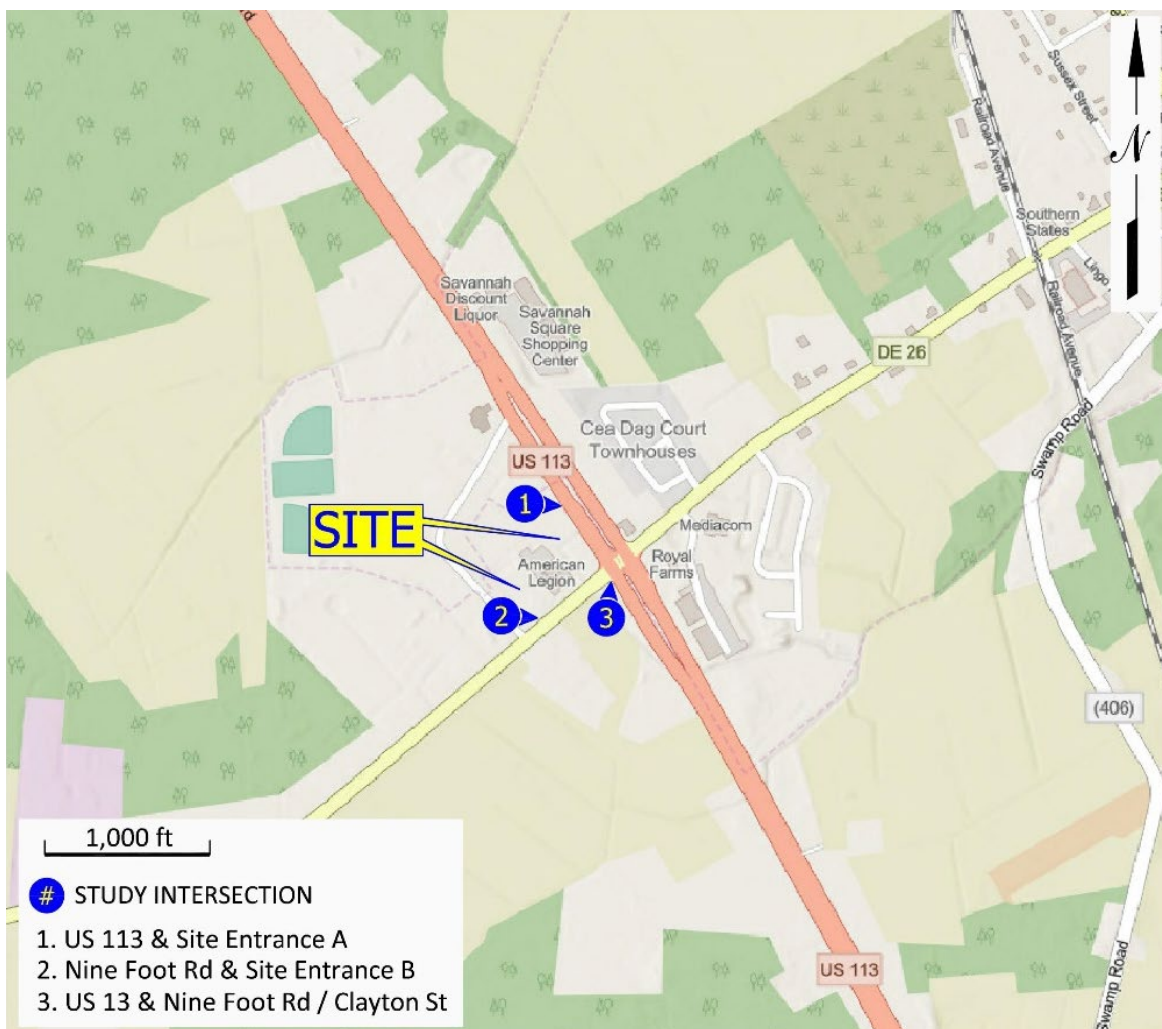
STUDY AREA

As noted in the Minutes of the Scoping Meeting, dated July 20, 2020, the Traffic Impact Study will evaluate conditions at the following intersections for capacity and level of service using the Highway Capacity Software (HCS). A copy of the Minutes of the Scoping Meeting is contained in Appendix F.

- Site Access A and US Routes 113
- Site Access B/Nine Foot Road (Sussex Road 26)
- US Route 113 and Nine Foot Road/Clayton Street (Sussex Road 26)

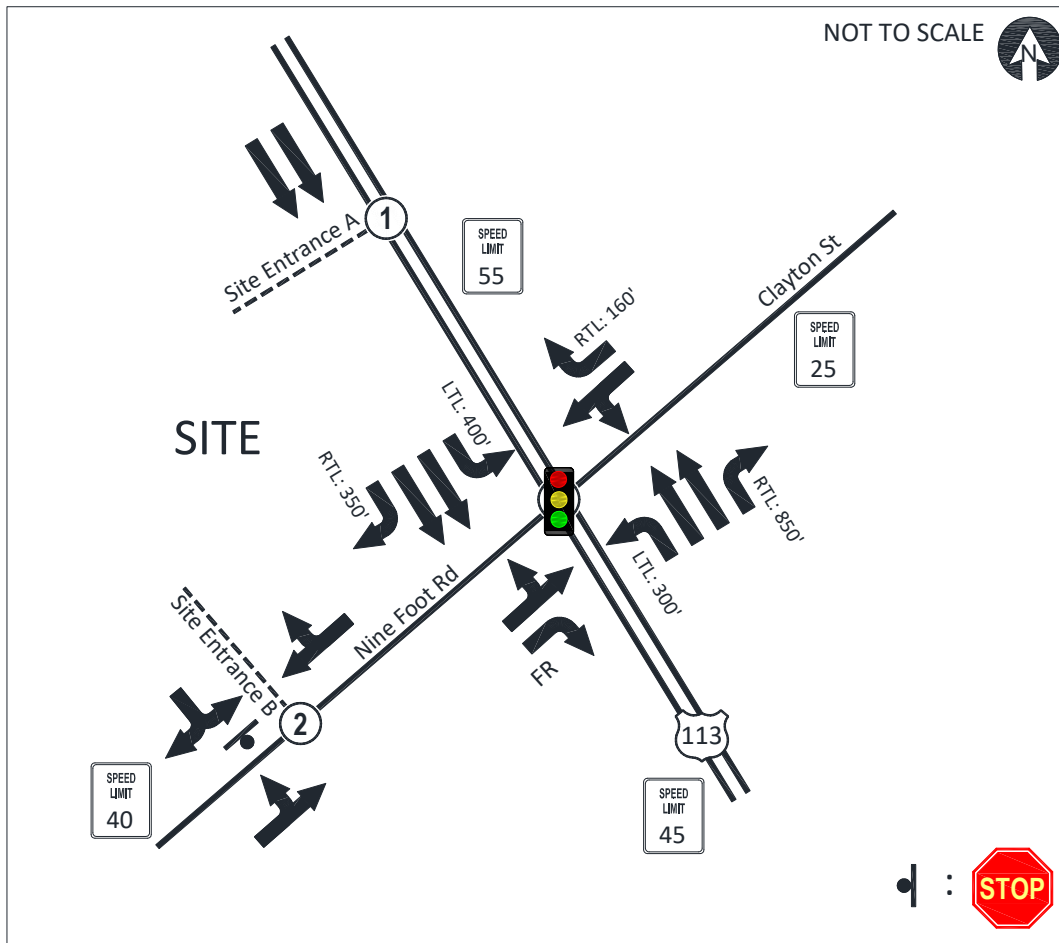
The study intersections are located on the map shown as Figure 1.

Figure 1. Site Location Map



The existing and lane use and traffic control at the study intersections are illustrated on Figure 2.

Figure 2. Existing Lane Use and Traffic Control



A description of the study intersections follows.

US 113 and Nine Foot Road/Clayton Road

	Road	Route Number	Traffic Control	Functional Classification	Post Speed (MPH)	2022 ADT	Traffic Group
East Leg	Clayton Rd	Sussex Road 26	Signal	Major Collector	25	6,133	8
West Leg	Nine Foot Road	Sussex Road 26	Signal	Mjor Collector	40	2,447	8
North Leg	Dupont Blvd	US 113	Signal	Arterials	55	19,980	2
South Leg	Dupont Blvd	US 113	Signal	Arterials	45	27,065	5



Nine Foot Road and Site Access

Road	Route Number	Traffic Control	Functional Classification	Post Speed (MPH)	2022 ADT	Traffic Group
Nine Foot Road	Sussex Road 26	Free	Major Collector	40	2,447	8
American Legion Access	---	Stop Sign	Local	---	---	---



EXISTING TRAFFIC CONDITIONS, CASE 1

The Minutes of the Scoping Meeting dated July 20, 2020, specified that traffic counts should be conducted at the study intersections from 7–9 AM and 4–6 PM on a Tuesday, Wednesday, or Thursday and on a summer Saturday from 10 AM to 2 PM. Turning movement count summaries are provided in Appendix A.

Figure 3 provides the 2023 existing peak hour traffic volumes for the weekday morning and evening peak hours. Figure 3A provides the peak hour turning movements for heavy vehicles, and Figure 3B provides the peak hour Right Turn on Red volumes. No pedestrians were observed during the counts.

Figure 3. Existing Peak Hour Traffic Volumes

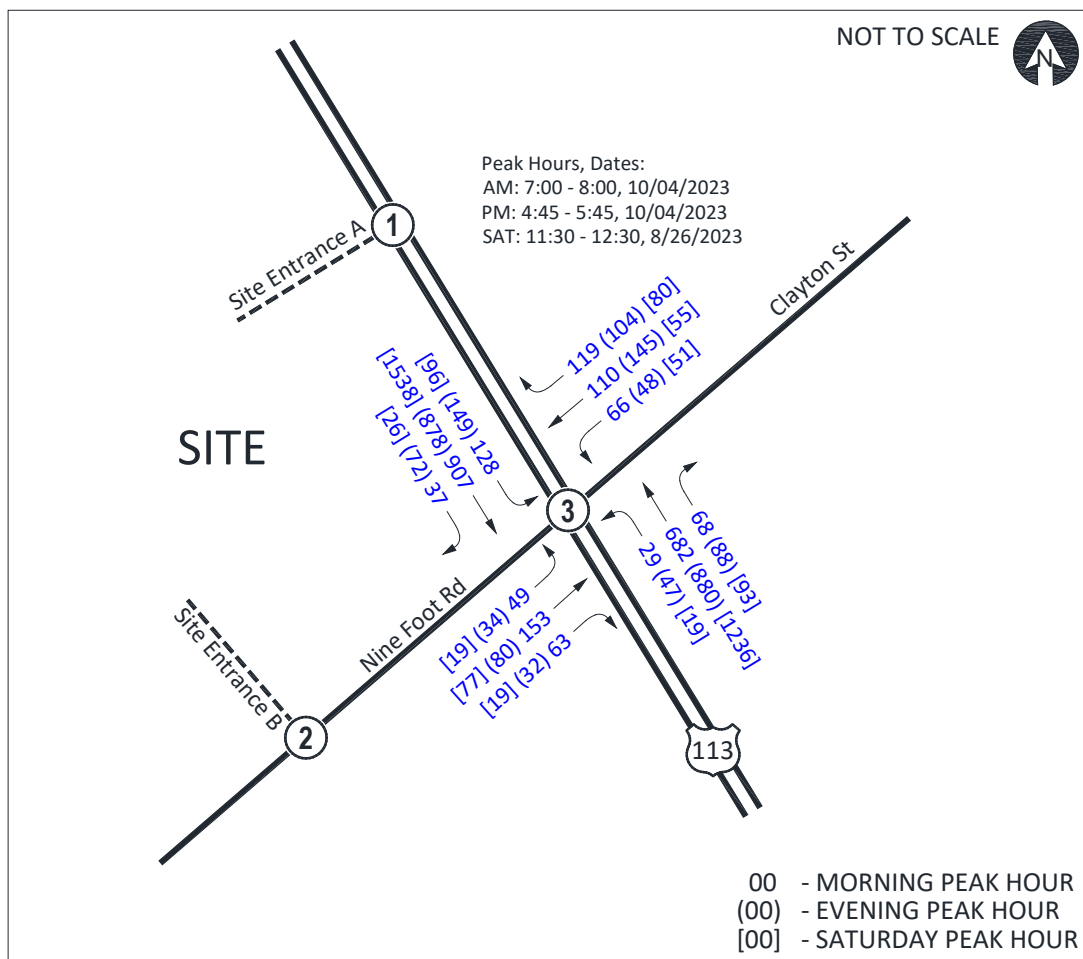


Figure 3A. Existing Peak Hour Traffic Volumes (Heavy Vehicles)

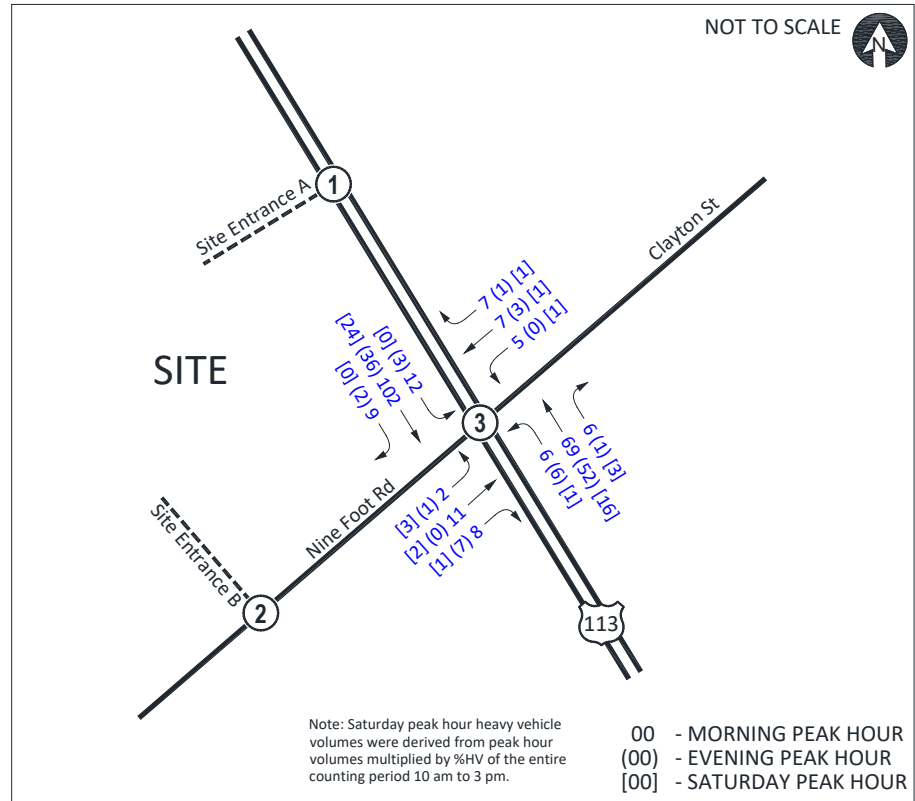
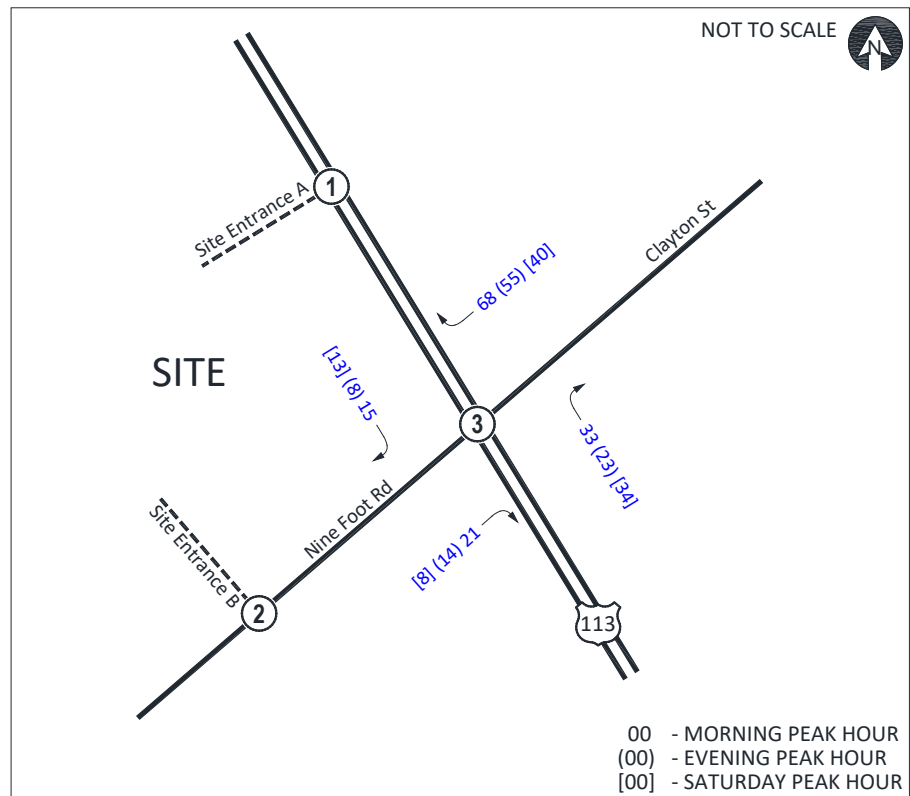


Figure 3B. Existing Peak Hour Traffic Volumes (Right Turn on Red)

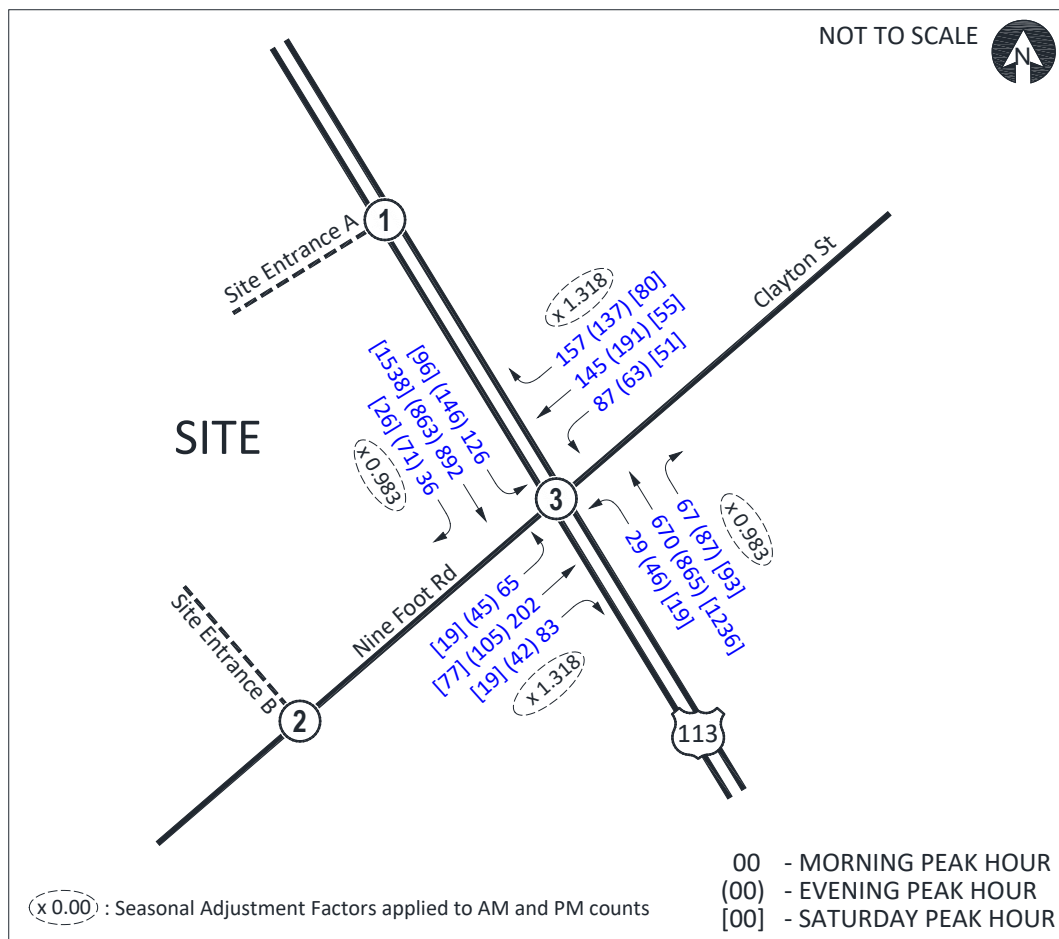


Seasonal Adjustment Factors were provided in email correspondence, as shown in Table 1, and applied to the peak hour turning movement counts as shown in Figure 4.

Table 1. Seasonal Adjustment Factors

Roads	October
US Route 113 – TPG 2	0.983
Nine Foot Road (Sussex Road 26) – TPG 8	1.318
Clayton Street (Sussex Road 26) – TPG 8	1.318
All Other Roads	1.00

Figure 4. Seasonally Adjusted Existing Peak Hour Traffic Volumes



CRASH DATA

Crash data for a three-year period from February 26, 2021, through February 26, 2024, were obtained from DelDOT for the study area. The crash statistics are summarized below. The Crash Summary Reports are contained in Appendix B.

US Route 113 / Nine Foot Road / Clayton Street (Sussex Road 26): Thirty-five crashes occurred at or within a 0.1-mile radius of the intersection during the three-year study period. Fourteen (40%) crashes were front to rear, one (2.86%) was front to front, 10 (28.57%) were angle crashes, three (8.57%) were sideswipe, same direction crashes, and five (14.29%) were not collisions between two vehicles.

Seven (20%) of the crashes involved personal injury and none involved fatality. Two (5.71%) of the crashes were alcohol related.

Twenty-seven (77.14%) of the crashes occurred on weekdays and eight (22.86%) on weekends. The crashes occurred throughout the day with 24 crashes (68.57%) during daylight, two (5.71%) at dusk, seven (20%) during dark-lighted conditions, and two (5.71) during dark-not lighted conditions.

Twenty-eight (80%) crashes occurred during clear weather conditions, eight (22.86%) during cloudy conditions, two (5.71%) during rainy conditions, and one (2.86%) during severe crosswinds conditions. Thirty-two (91.43%) of the crashes occurred under dry surface conditions and three (8.57%) under wet surface conditions.

The primary contributing causes were: failed to yield right of way (1); disregard traffic signal (3); improper passing (1); improper lane change (2); following too close (5); driving under the influence (1); driver inattention, distraction, or fatigue (13); driving in a careless or reckless manner (2); improper backing (2); other improper driving (1); animal in roadway – deer (1); other environmental circumstances - weather, glare (1); other (1); and unknown (1).

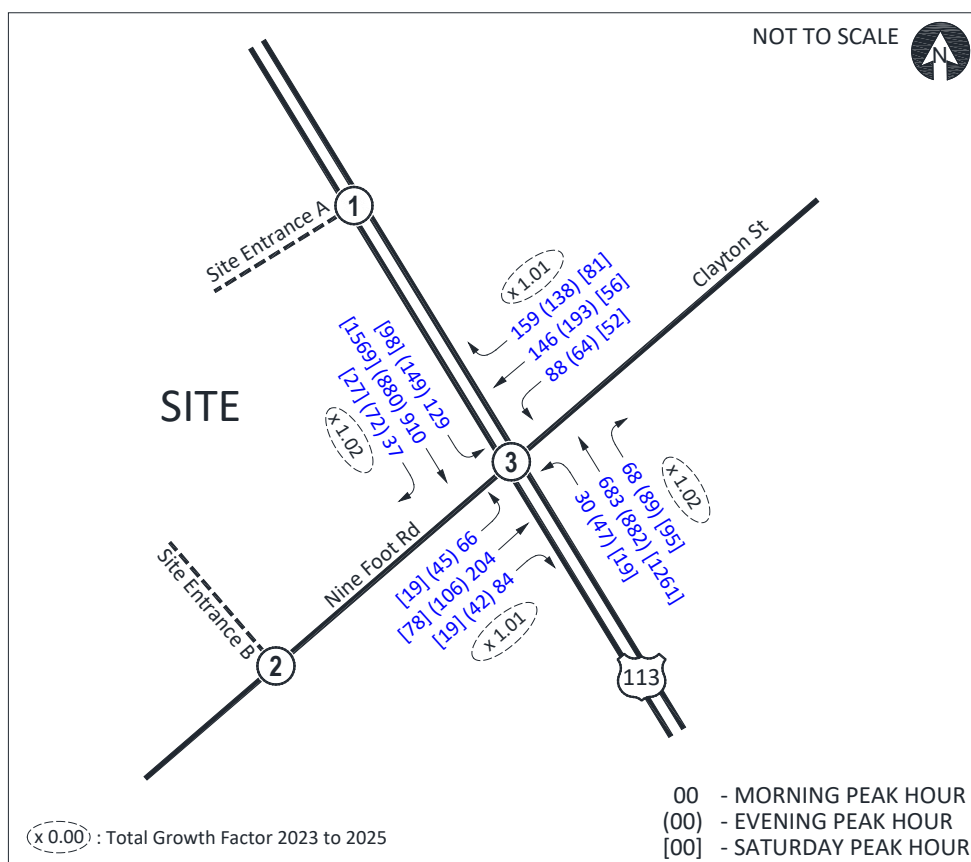
BACKGROUND TRAFFIC CONDITIONS, CASE 2

The Traffic Count Review letter, dated February 9, 2024, provided growth factors to be applied to the study intersections. These growth factors, shown in Table 2, were applied to the seasonally adjusted peak hour traffic volumes to obtain the base peak hour traffic volumes shown on Figure 5 for the weekday morning and evening peak hours. Correspondence is contained in Appendix F.

Table 2. Growth Factors

Roads	Annual Growth Factor	Total Growth Factor 2023 to 2025
US Route 113	1.01	1.02
Clayton Street/Nine Foot Road (Sussex Road 26)	1.005	1.01
All Other Roads	1.000	1.000

Figure 5. 2025 Base Peak Hour Traffic Volumes

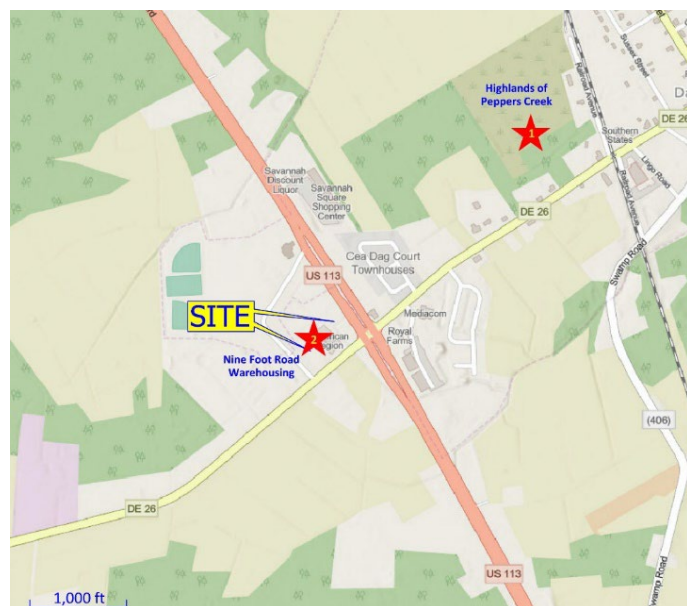


Four committed developments were identified in the Minutes of the Scoping Meeting to be included in the analysis of background peak hour traffic conditions.

- Clayton Crossing – This development was completely built out in 2019.
- Royal Farms #316 Dagsboro – This development was relocated prior to the 2023 counts.
- Generals Green: Phase I – The Town of Dagsboro reports that this project is not moving forward. Correspondence is contained in Appendix F.
- Highlands of Peppers Creek – This committed development is included in the study.

One additional committed development was added to the study. The Nine Foot Road Warehousing project has received final approval. Figure 6 provides the location for these two committed developments.

Figure 6. Location Map for Committed Developments



Utilizing information from the Institute of Transportation Engineer's (ITE) Trip Generation Manual (11th Edition), trip generation rates and totals were developed for these committed developments as shown in Tables 3 and 4.

Table 3. Trip Generation Formula for Committed Developments, *Revised to correct typo*

Land Use (Source)	Formula/Rate	Directional Distribution					
		AM Peak Hour		PM Peak Hour		SAT Peak Hour	
		In	Out	In	Out	In	Out
Single Family	$\text{Ln(AM Peak Hour Trips)} = 0.91 \times \text{Ln(Units)} + 0.12$						
Detached Houses	$\text{Ln(PM Peak Hour Trips)} = 0.94 \times \text{Ln(Units)} + 0.27$	25%	75%	63%	37%	54%	46%
(units, ITE - 210)	Sat. Midday Peak Hour Trips = $0.86 \times \text{Units} + 9.72$						
Warehousing	AM Peak Hour Trips = $0.17 \times \text{ksf}$						
(ksf, ITE-150)	PM Peak Hour Trips = $0.18 \times \text{ksf}$	77%	23%	28%	72%	64%	36%
	Sat. Midday Peak Hour Trips = $0.05 \times \text{ksf}$						

Note: ITE Trip Generation Manual 11th Edition, 2017.

Table 4. Trip Generation and Totals for Committed Developments

Land Use	Size	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
1. The Highlands of Pepper's Creek										
Single Family Detached Houses	51 units	10	30	40	33	20	53	29	25	54
2. Nine Foot Road Warehousing										
Warehousing	9,800 sq.ft.	2	0	2	1	1	2	0	0	0

The committed development peak hour traffic volumes were distributed to the study intersections in accordance with approved Traffic Generation Diagrams. Figures 7, 8, 9A, and 9B provide the trip distributions and assignments for the two committed developments.

Figure 7. Trip Distribution Percentage for Highlands of Peppers Creek

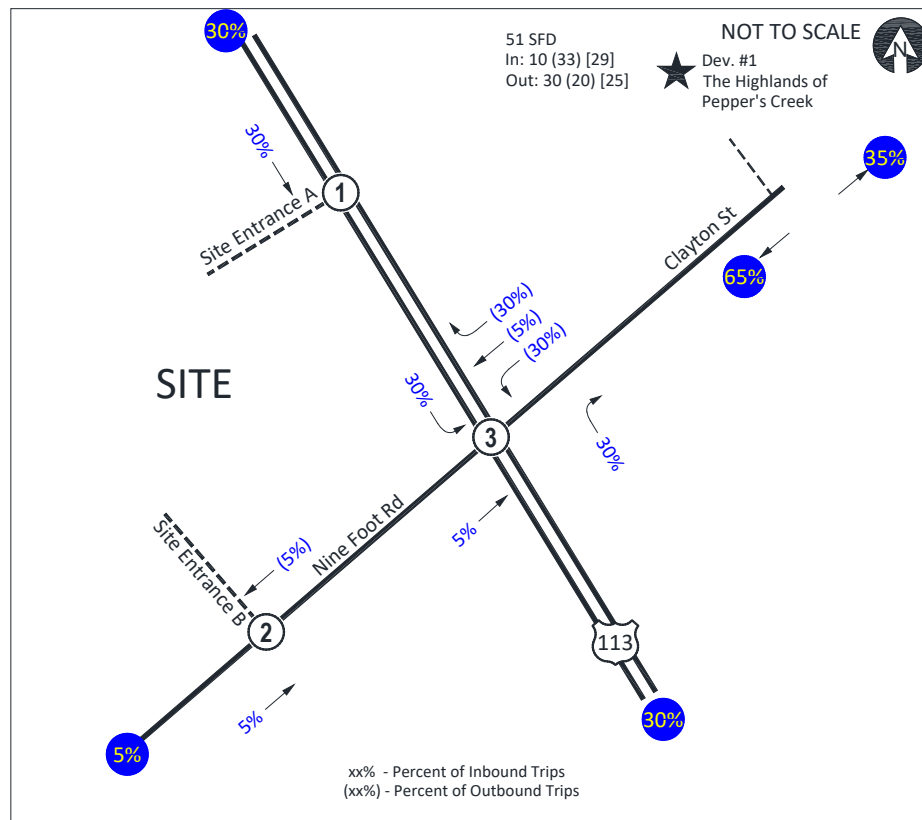


Figure 8. Trip Assignment for Highlands of Peppers Creek

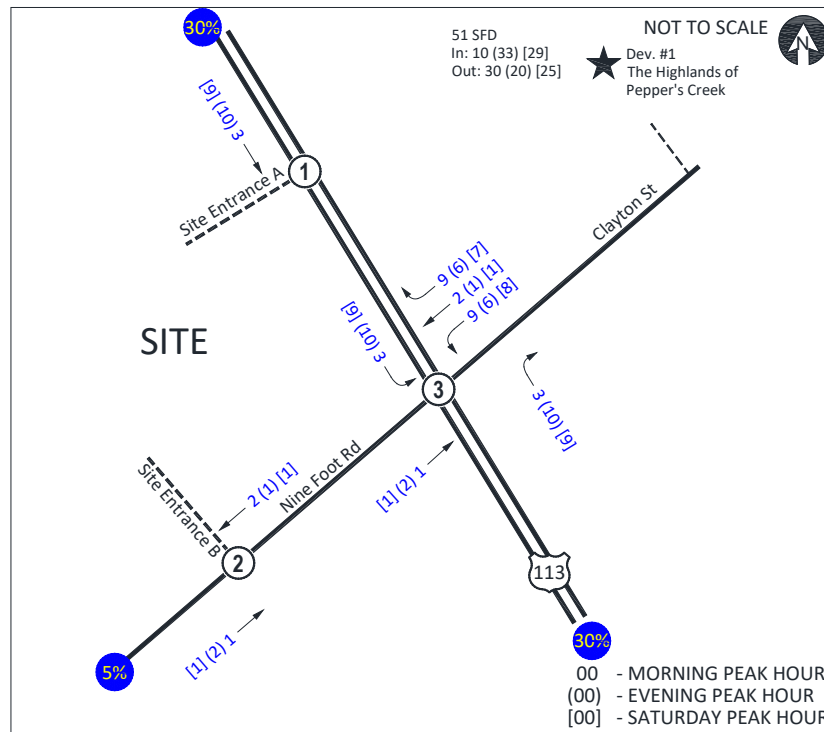


Figure 9A. Trip Distribution for Nine Foot Road Warehousing, *Revised*

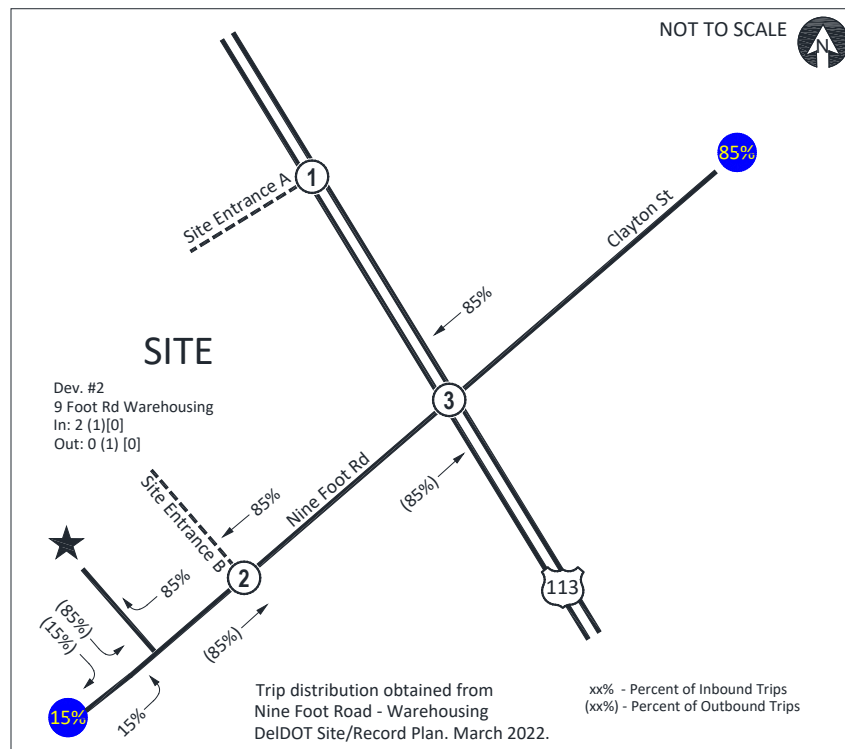
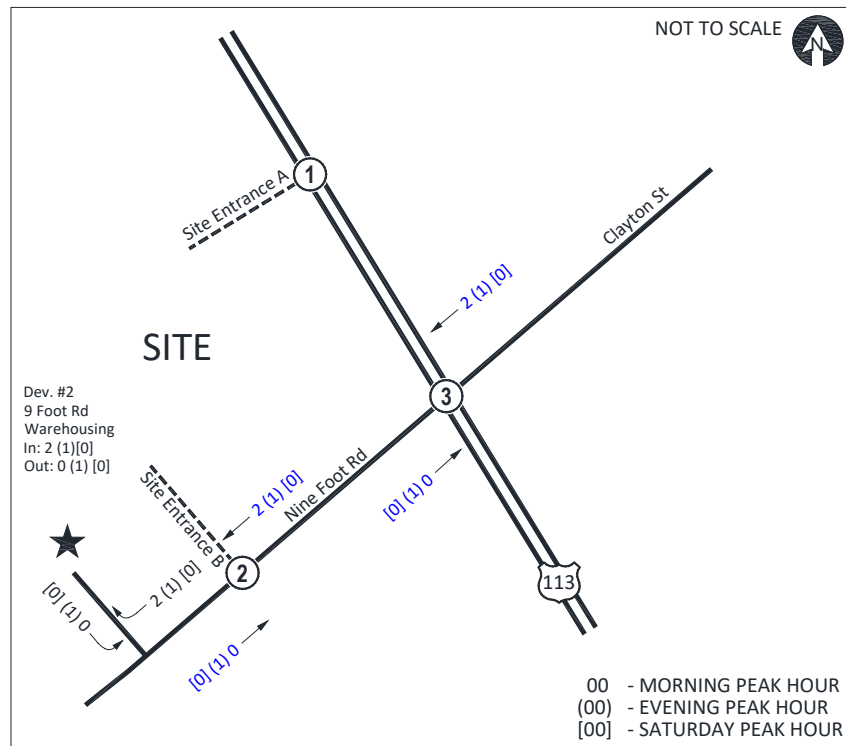
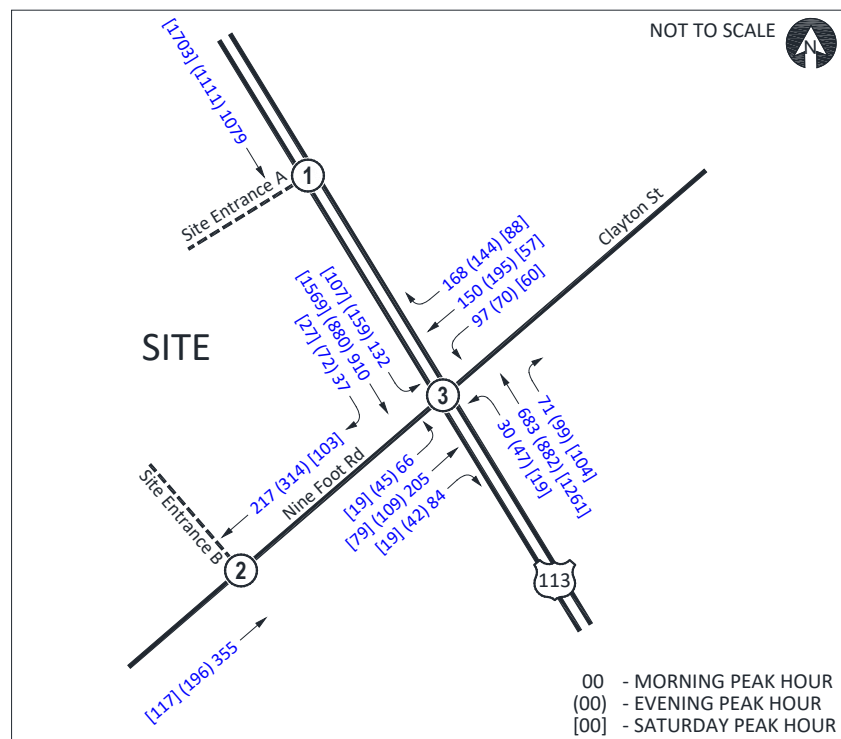


Figure 9B. Trip Assignment for Nine Foot Road Warehousing, Revised



The peak hour trips for the committed developments were added to the base peak hour traffic volumes to obtain the background peak hour traffic volumes provided on Figure 10.

Figure 10. 2025 Background Peak Hour Traffic Volumes, Revised



Shields Properties, LLC seeks to develop a convenience market with gas (Tax Parcels 233-10.00-48.00, 49.00, 50.01, 50.02) and expand the existing American Legion Building (Tax Parcels 233-10.00-53.01 & 233-10.00-54.00) in Sussex County Delaware. Previously, a fast-food restaurant was proposed for this development as well. However, it is no longer included in the project. The land is currently zoned as AR-1 (Agricultural Residential) and C-1 (General Commercial), and the developer does not propose to rezone the land. One full movement access is proposed on Nine Foot Road and one Right-in/Right-out on US 113. Construction is anticipated to be completed in 2025. A conceptual site plan is provided on Figure 11.

[illegible]

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Table 4. Trip Generation Formula for Subject Site, *Corrected*

Land Use (Source)	Formula/Rate	Directional Distribution					
		AM Peak Hour		PM Peak Hour		SAT Peak Hour	
		In	Out	In	Out	In	Out
Fine Dining Restaurant (ksf, ITE-931)	AM Peak Hour Trips = 0.73 x ksf						
	PM Peak Hour Trips = 7.80 x ksf	---		67%	33%	59%	41%
	Sat. Midday Peak Hour Trips = 10.68 x ksf						
Convenience Store/Gas Station (9-15 VFP, ITE-945)	AM Peak Hour Trips = 56.52 x ksf						
	PM Peak Hour Trips = 54.52 x ksf	50%	50%	50%	50%	50%	50%
	Sat. Midday Peak Hour Trips = 64.13 x ksf						

Table 5. Trip Generation and Totals for Subject Site, *Revised*

Land Use	Size	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Fine Dining Restaurant	7,200 sq.ft.	2	3	5	38	18	56	45	32	77
Pass-by Trips (PM and Sat.-44%)		<u>0</u>	<u>0</u>	<u>0</u>	<u>-17</u>	<u>-8</u>	<u>-25</u>	<u>-20</u>	<u>-14</u>	<u>-34</u>
New Restaurant Trips		2	3	5	21	10	31	25	18	43
Convenience Market w/Gas	2,720 sq.ft.	77	77	154	74	74	148	87	87	174
Pass-by Trips (AM-76%, PM and Sat. -75%)		<u>-59</u>	<u>-59</u>	<u>-118</u>	<u>-56</u>	<u>-56</u>	<u>-112</u>	<u>-65</u>	<u>-65</u>	<u>-130</u>
New Conv. Store/Gas Station Trips		18	18	36	18	18	36	22	22	44
Total Trips		79	80	159	112	92	204	132	119	251
Total Pass-by Trips		59	59	118	73	64	137	85	79	164
Total New Trips		20	21	41	39	28	67	47	40	87

These trips were distributed and assigned to the study intersections in accordance with the information from the Minutes of the Scoping Meeting as shown on Figures 12, 13, and 14. These peak hour traffic volumes were added to the background peak hour traffic volumes to obtain the total peak hour traffic volumes as shown on Figure 15.

Figure 12. Trip Distribution for Subject Site

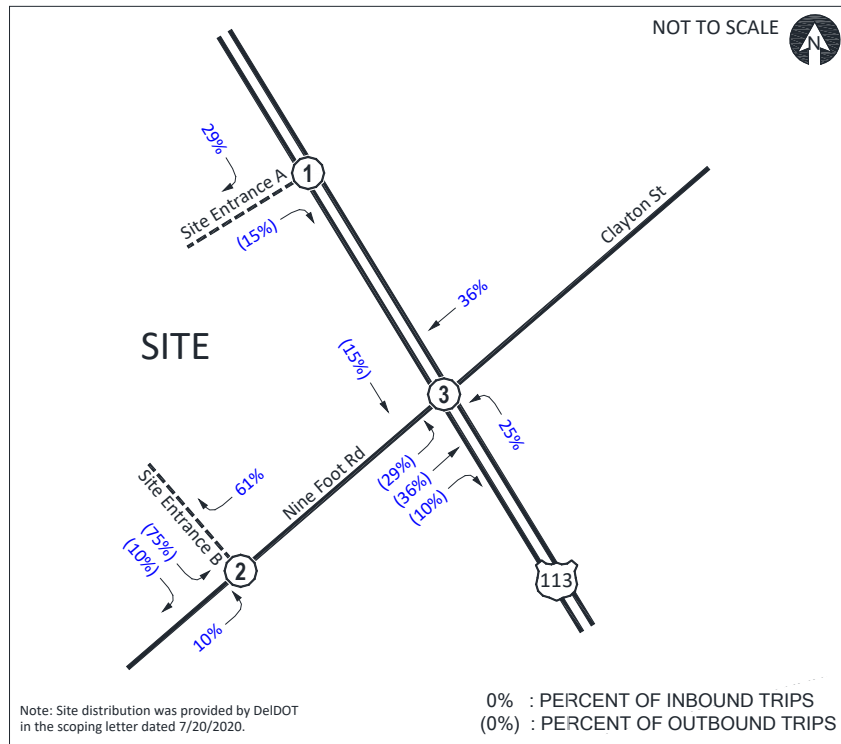


Figure 13. Trip Assignment for Subject Site, Revised

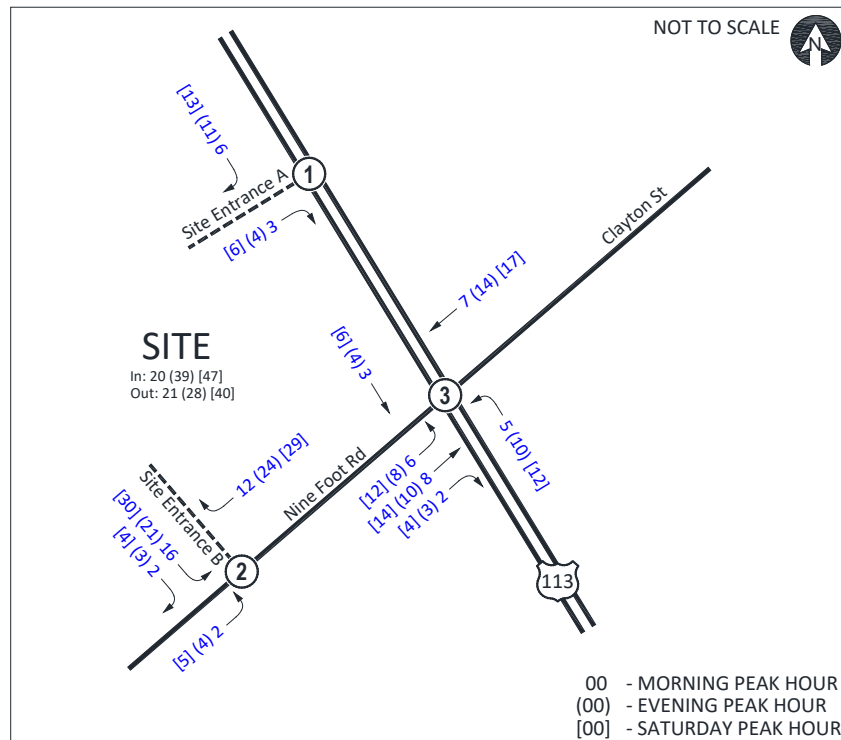


Figure 14. Pass-by Trip Assignment for Subject Site, Revised

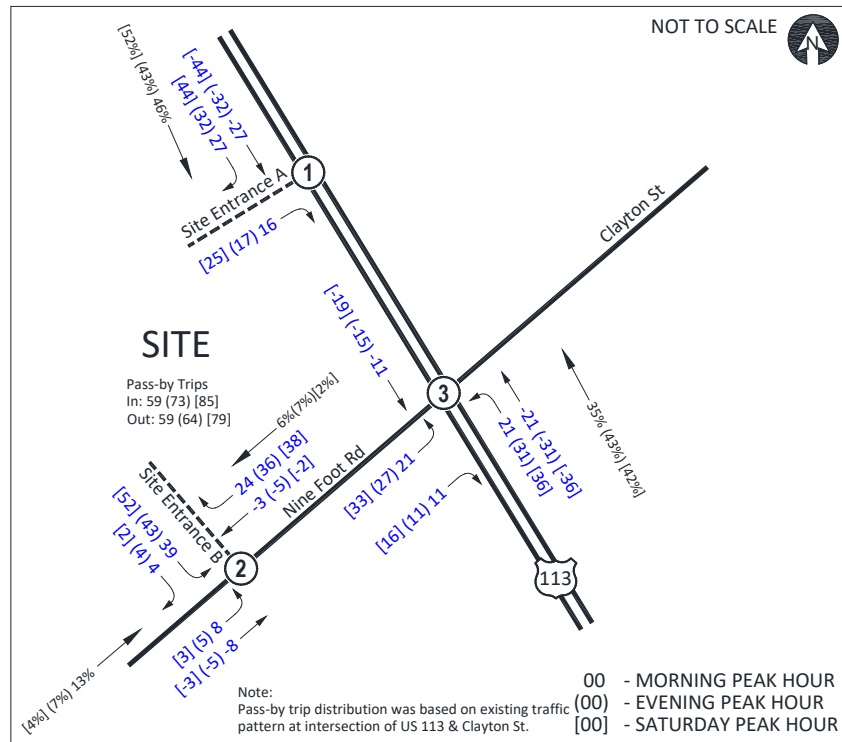
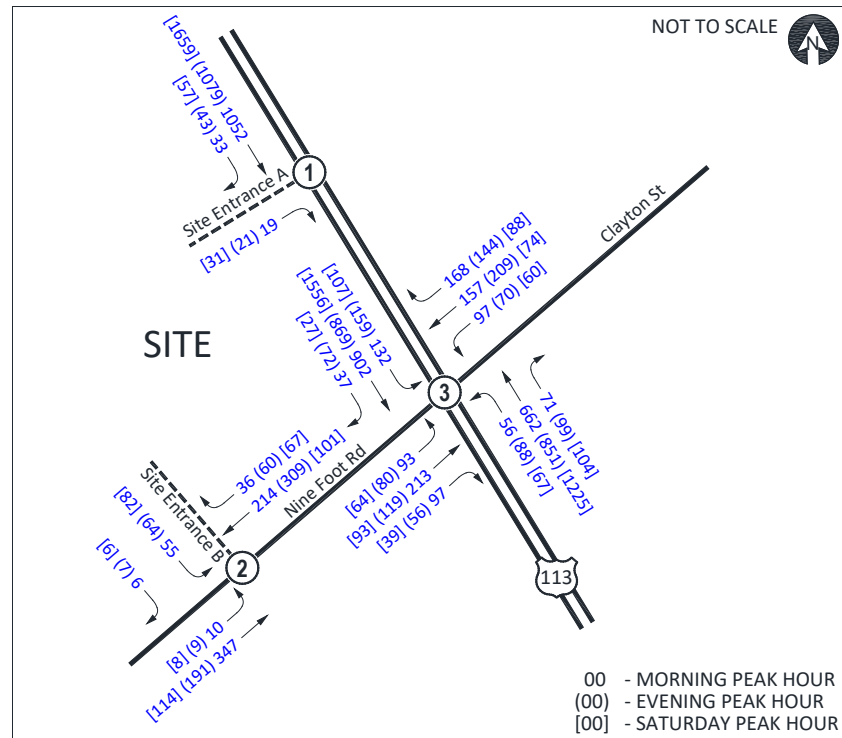


Figure 15. 2025 Total Peak Hour Traffic Volumes, Revised



INTERSECTION CAPACITY ANALYSIS

The study intersection and site accesses were evaluated utilizing the intersection capacity analysis methodology identified in the Highway Capacity manual, which is incorporated into the Highway Capacity Software, Version 2024. The results are summarized in Table 6. The capacity analysis worksheets are contained in Appendix C, and the signal timing information is provided in Appendix D.

Table 6. Results of HCM Analysis

Intersection		2023 Existing Traffic Case 1			2025 Background Traffic Case 2			2025 Total Traffic Case 3		
Type of Control	Movement	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
		LOS / Delay (sec)			LOS / Delay (sec)			LOS / Delay (sec)		
1. US 113 (N/S) & Site Entrance A (E/W)										
Two-Way Stop	EB R							B / 13.2	B / 13.4	C / 19.7
2.Nine Foot Rd (E/W) & Site Entrance B (N/S)										
Two-Way Stop	EB L							A / 7.9	A / 8.2	A / 7.7
	SB LR							B / 14.6	B / 14.0	B / 11.0
3. US 113 (N/S) & Nine Foot Rd/Clayton St (E/W)										
Assuming shared left-turn/thru lanes on both minor streets										
Traffic Signal	Overall	E / 67.4	D / 44.3	C / 22.6	E / 65.2	D / 47.4	C / 24.1	E / 78.5	E / 56.9	D / 40.7
Traffic Signal	Overall	- Signal Timing Adjustment (Increased green time for minor streets)						E / 66.5	D / 50.7	
Assuming separate left-turn and through lanes on both minor streets										
Traffic Signal	Overall	D / 42.2	C / 34.1	B / 17.6	D / 41.1	D / 35.3	B / 18.5	D / 44.4	D / 39.6	C / 25.2

Note: All results are based on HCS Version 2024.

US 113 and Nine Foot Road/Clayton Street: The lane use at this intersection provides a challenge to analyze as the lane uses on the minor approaches are a shared left turn/through lane and a right turn lane. However, in the median, the lane use consists of a separate left turn lane and a separate through lane.



Therefore, the intersection was analyzed using two types of lane uses:

1. Assuming a shared left/through lane on both minor streets.
2. Assuming a separate left turn and separate through lane on both minor streets.

Under the first assumed lane use, this split-phased signalized intersection is operating with deficiencies for the existing (Case 1) morning peak hour and is operating at acceptable Levels of Service for the evening peak hour and summer midday peak hour. The same levels of service are projected for background peak hour traffic conditions (Case 2). For total peak hour traffic conditions (Case 3), the morning peak hour and evening peak hour traffic conditions are projected to operate with deficiencies. However, modifying the signal timing results in improvements to delay for both the morning and evening peak hours.

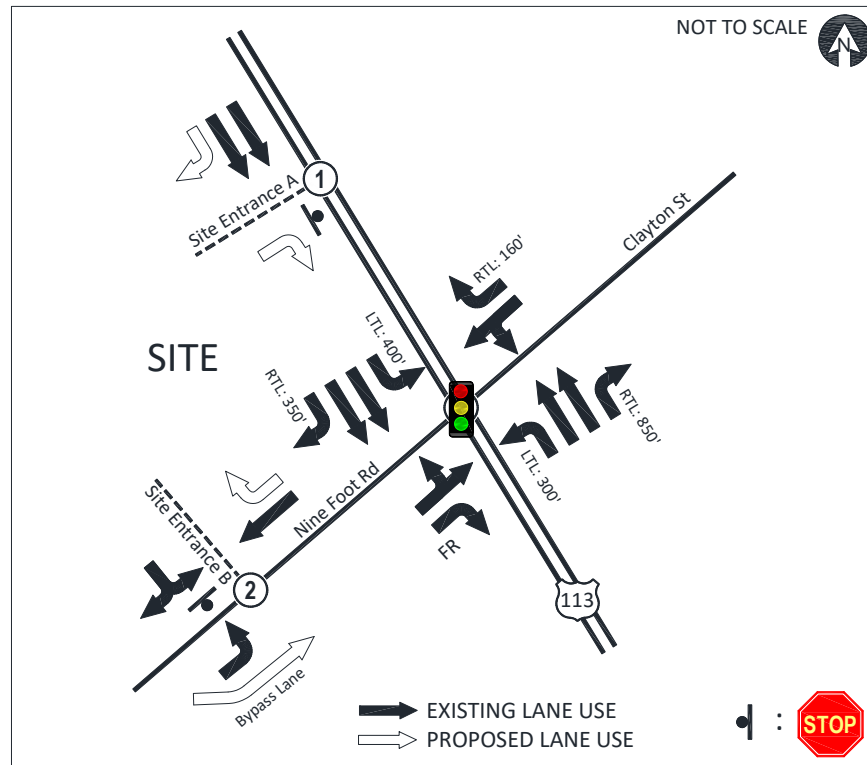
Under the second assumed lane use, this split-phased signalized intersection is operating at acceptable Levels of Service for the existing peak hour traffic conditions (Case 1) and is projected to operate at acceptable Levels of Service for background peak hour traffic conditions (Case 2) and for total peak hour traffic conditions (Case 3).

The site accesses are projected to operate at acceptable Levels of Service.

AUXILIARY LANE ANALYSIS AT SITE ACCESS

Utilizing DeIDOT's Auxiliary Lane Worksheet, the turn lane requirements were determined for the site access on Nine Foot Road. An eastbound bypass lane is required at this site access. The future lane use is provided on Figure 16. The auxiliary lane worksheets are contained in Appendix E.

Figure 16. Future Lane Use and Traffic Control



TRANSIT, PEDESTRIAN, AND BICYCLE FACILITIES

A representative from DelDOT's Local Systems section was contacted regarding requested bicycle and pedestrian facilities. A representative from Delaware Transit Corporation (DTC) was contacted regarding requested transit related facilities. Pedestrian access into the site from the SUP is requested.

Copies of the email correspondence are contained in Appendix F.

APPENDIX A

Intersection Turning Movement Counts



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: October 04, 2023
Weather: Sunny/Warm
Entered by: SN

Wednesday

Star Rating: 4



TIME	TRAFFIC FROM NORTH on: US 113					TRAFFIC FROM SOUTH on: US 113					TRAFFIC FROM EAST on: Clayton Street					TRAFFIC FROM WEST on: Nine Foot Road					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	6	200	20	2	228	15	142	6	1	164	20	31	19	0	70	8	43	9	0	60	522
7:15 - 7:30	10	199	21	0	230	16	160	8	0	184	37	32	21	0	90	13	37	11	0	61	565
7:30 - 7:45	11	243	35	0	289	15	185	10	0	210	20	20	11	0	51	22	39	21	0	82	632
7:45 - 8:00	10	265	39	11	325	22	195	4	0	221	42	27	15	0	84	20	34	8	0	62	692
8:00 - 8:15	2	163	32	0	197	15	167	3	0	185	14	16	9	0	39	16	35	18	0	69	490
8:15 - 8:30	3	178	25	1	207	17	144	3	0	164	19	26	9	0	54	7	37	7	0	51	476
8:30 - 8:45	7	146	41	2	196	19	179	0	0	198	15	25	14	0	54	13	30	9	0	52	500
8:45 - 9:00	8	155	24	0	187	20	129	3	0	152	17	22	11	0	50	18	23	10	0	51	440
2 Hr Totals	57	1549	237	16	1859	139	1301	37	1	1478	184	199	109	0	492	117	278	93	0	488	4317
1 Hr Totals																					
7:00 - 8:00	37	907	115	13	1072	68	682	28	1	779	119	110	66	0	295	63	153	49	0	265	2411
7:15 - 8:15	33	870	127	11	1041	68	707	25	0	800	113	95	56	0	264	71	145	58	0	274	2379
7:30 - 8:30	26	849	131	12	1018	69	691	20	0	780	95	89	44	0	228	65	145	54	0	264	2290
7:45 - 8:45	22	752	137	14	925	73	685	10	0	768	90	94	47	0	231	56	136	42	0	234	2158
8:00 - 9:00	20	642	122	3	787	71	619	9	0	699	65	89	43	0	197	54	125	44	0	223	1906
PEAK HOUR																					
7:00 - 8:00	37	907	115	13	1072	68	682	28	1	779	119	110	66	0	295	63	153	49	0	265	2411
PM																					
4:00 - 4:15	22	229	22	0	273	18	222	14	1	255	36	36	18	0	90	6	17	8	0	31	649
4:15 - 4:30	17	255	41	0	313	13	203	7	0	223	35	32	4	0	71	6	23	7	0	36	643
4:30 - 4:45	18	248	28	0	294	24	183	16	0	223	30	36	7	0	73	12	18	6	0	36	626
4:45 - 5:00	15	231	31	1	278	18	215	11	0	244	26	27	9	0	62	7	18	4	0	29	613
5:00 - 5:15	29	240	43	0	312	23	202	11	0	236	28	43	17	0	88	6	19	12	0	37	673
5:15 - 5:30	14	204	36	0	254	23	240	17	0	280	21	35	11	0	67	6	18	9	0	33	634
5:30 - 5:45	14	203	37	1	255	24	223	8	0	255	29	40	11	0	80	13	25	9	0	47	637
5:45 - 6:00	8	176	23	1	208	22	156	5	0	183	21	18	8	0	47	1	23	10	0	34	472
2 Hr Totals	137	1786	261	3	2187	165	1644	89	1	1899	226	267	85	0	578	57	161	65	0	283	4947
1 Hr Totals																					
4:00 - 5:00	72	963	122	1	1158	73	823	48	1	945	127	131	38	0	296	31	76	25	0	132	2531
4:15 - 5:15	79	974	143	1	1197	78	803	45	0	926	119	138	37	0	294	31	78	29	0	138	2555
4:30 - 5:30	76	923	138	1	1138	88	840	55	0	983	105	141	44	0	290	31	73	31	0	135	2546
4:45 - 5:45	72	878	147	2	1099	88	880	47	0	1015	104	145	48	0	297	32	80	34	0	146	2557
5:00 - 6:00	65	823	139	2	1029	92	821	41	0	954	99	136	47	0	282	26	85	40	0	151	2416
PEAK HOUR																					
4:45 - 5:45	72	878	147	2	1099	88	880	47	0	1015	104	145	48	0	297	32	80	34	0	146	2557

HEAVY TRUCKS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: October 04, 2023
Weather: Sunny/Warm
Entered by: SN

Wednesday

Star Rating: 4



TIME	TRAFFIC FROM NORTH on: US 113					TRAFFIC FROM SOUTH on: US 113					TRAFFIC FROM EAST on: Clayton Street					TRAFFIC FROM WEST on: Nine Foot Road					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	1	17	1	1	20	0	12	2	0	14	0	4	3	0	7	1	1	1	0	3	44
7:15 - 7:30	3	21	3	0	27	1	15	1	0	17	3	3	2	0	8	1	5	1	0	7	59
7:30 - 7:45	3	30	5	0	38	2	24	2	0	28	2	0	0	0	2	3	2	0	0	5	73
7:45 - 8:00	2	34	2	0	38	3	18	1	0	22	2	0	0	0	2	3	3	0	0	6	68
8:00 - 8:15	0	14	5	0	19	1	21	1	0	23	1	0	0	0	1	6	0	6	0	12	55
8:15 - 8:30	0	20	1	0	21	1	10	1	0	12	0	0	1	0	1	2	3	4	0	9	43
8:30 - 8:45	3	14	2	1	20	1	17	0	0	18	0	1	0	0	1	3	1	3	0	7	46
8:45 - 9:00	0	23	2	0	25	1	12	1	0	14	1	1	0	0	2	3	1	2	0	6	47
2 Hr Totals	12	173	21	2	208	10	129	9	0	148	9	9	6	0	24	22	16	17	0	55	435
1 Hr Totals																					
7:00 - 8:00	9	102	11	1	123	6	69	6	0	81	7	7	5	0	19	8	11	2	0	21	244
7:15 - 8:15	8	99	15	0	122	7	78	5	0	90	8	3	2	0	13	13	10	7	0	30	255
7:30 - 8:30	5	98	13	0	116	7	73	5	0	85	5	0	1	0	6	14	8	10	0	32	239
7:45 - 8:45	5	82	10	1	98	6	66	3	0	75	3	1	1	0	5	14	7	13	0	34	212
8:00 - 9:00	3	71	10	1	85	4	60	3	0	67	2	2	1	0	5	14	5	15	0	34	191
PEAK HOUR																					
7:00 - 8:00	9	102	11	1	123	6	69	6	0	81	7	7	5	0	19	8	11	2	0	21	244
PM																					
4:00 - 4:15	1	19	0	0	20	0	13	3	0	16	1	1	2	0	4	1	3	1	0	5	45
4:15 - 4:30	4	15	1	0	20	0	12	2	0	14	0	2	0	0	2	4	4	0	0	8	44
4:30 - 4:45	1	14	0	0	15	0	19	2	0	21	0	6	0	0	6	2	2	0	0	4	46
4:45 - 5:00	1	11	1	0	13	1	17	3	0	21	1	1	0	0	2	3	0	0	0	3	39
5:00 - 5:15	1	14	1	0	16	0	12	1	0	13	0	0	0	0	0	1	0	0	0	1	30
5:15 - 5:30	0	7	0	0	7	0	10	2	0	12	0	2	0	0	2	1	0	0	0	1	22
5:30 - 5:45	0	4	1	0	5	0	13	0	0	13	0	0	0	0	0	2	0	1	0	3	21
5:45 - 6:00	1	8	0	0	9	0	11	1	0	12	0	0	0	0	0	0	2	0	0	2	23
2 Hr Totals	9	92	4	0	105	1	107	14	0	122	2	12	2	0	16	14	11	2	0	27	270
1 Hr Totals																					
4:00 - 5:00	7	59	2	0	68	1	61	10	0	72	2	10	2	0	14	10	9	1	0	20	174
4:15 - 5:15	7	54	3	0	64	1	60	8	0	69	1	9	0	0	10	10	6	0	0	16	159
4:30 - 5:30	3	46	2	0	51	1	58	8	0	67	1	9	0	0	10	7	2	0	0	9	137
4:45 - 5:45	2	36	3	0	41	1	52	6	0	59	1	3	0	0	4	7	0	1	0	8	112
5:00 - 6:00	2	33	2	0	37	0	46	4	0	50	0	2	0	0	2	4	2	1	0	7	96
PEAK HOUR																					
4:45 - 5:45	2	36	3	0	41	1	52	6	0	59	1	3	0	0	4	7	0	1	0	8	112

RTOR TURNING MOVEMENT COUNT - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: October 04, 2023
Weather: Sunny/Warm
Entered by: SN

Wednesday

Star Rating: 4



TIME	TRAFFIC FROM NORTH on: US 113					TRAFFIC FROM SOUTH on: US 113					TRAFFIC FROM EAST on: Clayton Street					TRAFFIC FROM WEST on: Nine Foot Road					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	1				1	8				8	12				12	4				4	25
7:15 - 7:30	5				5	8				8	20				20	3				3	36
7:30 - 7:45	7				7	7				7	15				15	9				9	38
7:45 - 8:00	2				2	10				10	21				21	5				5	38
8:00 - 8:15	0				0	2				2	7				7	9				9	18
8:15 - 8:30	0				0	5				5	10				10	3				3	18
8:30 - 8:45	3				3	6				6	9				9	2				2	20
8:45 - 9:00	1				1	4				4	9				9	4				4	18
2 Hr Totals	19	0	0	0	19	50	0	0	0	50	103	0	0	0	103	39	0	0	0	39	211
1 Hr Totals																					
7:00 - 8:00	15	0	0	0	15	33	0	0	0	33	68	0	0	0	68	21	0	0	0	21	137
7:15 - 8:15	14	0	0	0	14	27	0	0	0	27	63	0	0	0	63	26	0	0	0	26	130
7:30 - 8:30	9	0	0	0	9	24	0	0	0	24	53	0	0	0	53	26	0	0	0	26	112
7:45 - 8:45	5	0	0	0	5	23	0	0	0	23	47	0	0	0	47	19	0	0	0	19	94
8:00 - 9:00	4	0	0	0	4	17	0	0	0	17	35	0	0	0	35	18	0	0	0	18	74
PEAK HOUR																					
7:00 - 8:00	15	0	0	0	15	33	0	0	0	33	68	0	0	0	68	21	0	0	0	21	137
PM																					
4:00 - 4:15	5				5	9				9	17				17	2				2	33
4:15 - 4:30	3				3	4				4	20				20	2				2	29
4:30 - 4:45	2				2	6				6	15				15	2				2	25
4:45 - 5:00	3				3	4				4	12				12	2				2	21
5:00 - 5:15	3				3	5				5	15				15	3				3	26
5:15 - 5:30	2				2	9				9	11				11	2				2	24
5:30 - 5:45	0				0	5				5	17				17	7				7	29
5:45 - 6:00	2				2	5				5	15				15	0				0	22
2 Hr Totals	20	0	0	0	20	47	0	0	0	47	122	0	0	0	122	20	0	0	0	20	209
1 Hr Totals																					
4:00 - 5:00	13	0	0	0	13	23	0	0	0	23	64	0	0	0	64	8	0	0	0	8	108
4:15 - 5:15	11	0	0	0	11	19	0	0	0	19	62	0	0	0	62	9	0	0	0	9	101
4:30 - 5:30	10	0	0	0	10	24	0	0	0	24	53	0	0	0	53	9	0	0	0	9	96
4:45 - 5:45	8	0	0	0	8	23	0	0	0	23	55	0	0	0	55	14	0	0	0	14	100
5:00 - 6:00	7	0	0	0	7	24	0	0	0	24	58	0	0	0	58	12	0	0	0	12	101
PEAK HOUR																					
4:45 - 5:45	8	0	0	0	8	23	0	0	0	23	55	0	0	0	55	14	0	0	0	14	100

PEDESTRIAN OBSERVATIONS - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: October 04, 2023
Weather: Sunny/Warm
Entered by: SN

Wednesday
Star Rating: 4



TIME	NORTH LEG US 113	SOUTH LEG US 113	EAST LEG Clayton Street	WEST LEG Nine Foot Road
AM				
7:00 - 7:15	0	0	0	0
7:15 - 7:30	0	0	0	0
7:30 - 7:45	0	0	0	0
7:45 - 8:00	0	0	0	0
8:00 - 8:15	0	0	0	0
8:15 - 8:30	0	0	0	0
8:30 - 8:45	0	0	0	0
8:45 - 9:00	0	0	0	0
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0	0	0
4:15 - 4:30	0	0	0	0
4:30 - 4:45	0	0	0	0
4:45 - 5:00	0	0	0	0
5:00 - 5:15	0	0	0	0
5:15 - 5:30	0	0	0	0
5:30 - 5:45	0	0	0	0
5:45 - 6:00	0	0	0	0
TOTALS	0	0	0	0

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: August 26, 2023
Weather: Sunny/Warm
Entered by: SN

Saturday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: US 113					TRAFFIC FROM SOUTH on: US 113					TRAFFIC FROM EAST on: Clayton Street					TRAFFIC FROM WEST on: Nine Foot Road					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
10:00 - 10:15	4	306	27	0	337	20	288	6	0	314	26	26	12	0	64	9	13	3	0	25	740
10:15 - 10:30	12	357	24	0	393	26	284	7	0	317	15	22	9	0	46	3	20	4	0	27	783
10:30 - 10:45	10	325	17	0	352	33	296	18	0	347	29	33	12	0	74	3	12	3	0	18	791
10:45 - 11:00	10	333	23	1	367	31	261	15	0	307	33	24	13	0	70	3	25	7	0	35	779
11:00 - 11:15	7	362	19	0	388	20	261	4	0	285	22	9	11	0	42	5	11	41	0	57	772
11:15 - 11:30	10	314	30	0	354	27	234	11	0	272	21	10	11	0	42	8	10	4	0	22	690
11:30 - 11:45	6	382	16	2	406	30	303	5	0	338	27	8	17	0	52	2	12	7	0	21	817
11:45 - 12:00	7	372	24	1	404	25	244	6	0	275	14	15	9	0	38	5	26	5	0	36	753
12:00 - 12:15	7	439	31	1	478	16	343	3	0	362	18	21	9	0	48	10	18	4	0	32	920
12:15 - 12:30	6	345	21	0	372	22	346	5	0	373	21	11	16	0	48	2	21	3	0	26	819
12:30 - 12:45	9	315	30	2	356	24	304	7	0	335	18	11	10	0	39	7	9	3	0	19	749
12:45 - 1:00	8	311	16	0	335	13	308	5	0	326	18	14	12	0	44	8	14	3	0	25	730
1:00 - 1:15	12	344	22	0	378	14	326	2	0	342	14	18	14	0	46	2	10	2	0	14	780
1:15 - 1:30	6	346	19	0	371	15	277	6	0	298	16	14	10	0	40	5	13	8	0	26	735
1:30 - 1:45	10	316	27	0	353	20	251	7	0	278	21	22	5	0	48	7	13	4	0	24	703
1:45 - 2:00	4	335	17	0	356	28	257	2	0	287	19	15	8	0	42	4	10	5	0	19	704
4 Hr Totals	128	5502	363	7	6000	364	4583	109	0	5056	332	273	178	0	783	83	237	106	0	426	12265
1 Hr Totals																					
10:00 - 11:00	36	1321	91	1	1449	110	1129	46	0	1285	103	105	46	0	254	18	70	17	0	105	3093
10:15 - 11:15	39	1377	83	1	1500	110	1102	44	0	1256	99	88	45	0	232	14	68	55	0	137	3125
10:30 - 11:30	37	1334	89	1	1461	111	1052	48	0	1211	105	76	47	0	228	19	58	55	0	132	3032
10:45 - 11:45	33	1391	88	3	1515	108	1059	35	0	1202	103	51	52	0	206	18	58	59	0	135	3058
11:00 - 12:00	30	1430	89	3	1552	102	1042	26	0	1170	84	42	48	0	174	20	59	57	0	136	3032
11:15 - 12:15	30	1507	101	4	1642	98	1124	25	0	1247	80	54	46	0	180	25	66	20	0	111	3180
11:30 - 12:30	26	1538	92	4	1660	93	1236	19	0	1348	80	55	51	0	186	19	77	19	0	115	3309
11:45 - 12:45	29	1471	106	4	1610	87	1237	21	0	1345	71	58	44	0	173	24	74	15	0	113	3241
12:00 - 1:00	30	1410	98	3	1541	75	1301	20	0	1396	75	57	47	0	179	27	62	13	0	102	3218
12:15 - 1:15	35	1315	89	2	1441	73	1284	19	0	1376	71	54	52	0	177	19	54	11	0	84	3078
12:30 - 1:30	35	1316	87	2	1440	66	1215	20	0	1301	66	57	46	0	169	22	46	16	0	84	2994
12:45 - 1:45	36	1317	84	0	1437	62	1162	20	0	1244	69	68	41	0	178	22	50	17	0	89	2948
1:00 - 2:00	32	1341	85	0	1458	77	1111	17	0	1205	70	69	37	0	176	18	46	19	0	83	2922
PEAK HOUR																					
11:30 - 12:30	26	1538	92	4	1660	93	1236	19	0	1348	80	55	51	0	186	19	77	19	0	115	3309

HEAVY TRUCKS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: August 26, 2023
Weather: Sunny/Warm
Entered by: SN

Saturday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: US 113					TRAFFIC FROM SOUTH on: US 113					TRAFFIC FROM EAST on: Clayton Street					TRAFFIC FROM WEST on: Nine Foot Road					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
10:00 - 10:15	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	1	0	0	0	1	7
10:15 - 10:30	0	6	0	0	6	0	4	0	0	4	1	0	0	0	1	0	0	0	0	0	11
10:30 - 10:45	0	5	0	0	5	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	6
10:45 - 11:00	0	3	1	0	4	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5
11:00 - 11:15	0	6	0	0	6	1	3	0	0	4	1	0	0	0	1	0	0	0	0	0	11
11:15 - 11:30	0	5	1	0	6	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0	9
11:30 - 11:45	0	9	0	0	9	0	4	0	0	4	0	0	1	0	1	0	0	2	0	2	16
11:45 - 12:00	0	4	0	0	4	2	2	0	0	4	0	1	0	0	1	1	0	0	0	1	10
12:00 - 12:15	0	7	0	0	7	0	7	1	0	8	0	0	0	0	0	0	1	0	0	1	16
12:15 - 12:30	0	4	0	0	4	1	3	0	0	4	1	0	0	0	1	0	1	1	0	2	11
12:30 - 12:45	0	3	0	1	4	1	4	1	0	6	0	2	1	0	3	1	0	0	0	1	14
12:45 - 1:00	0	4	1	0	5	0	6	0	0	6	1	0	0	0	1	1	1	0	0	2	14
1:00 - 1:15	0	6	0	0	6	0	6	1	0	7	0	1	0	0	1	0	0	0	0	0	14
1:15 - 1:30	0	9	2	0	11	0	6	0	0	6	0	1	0	0	1	1	0	0	0	1	19
1:30 - 1:45	0	4	1	0	5	0	7	0	0	7	0	1	0	0	1	0	0	0	0	0	13
1:45 - 2:00	0	4	1	0	5	1	9	0	0	10	0	1	0	0	1	0	0	0	0	0	16
4 Hr Totals	0	81	7	1	89	7	68	4	0	79	4	7	2	0	13	5	3	3	0	11	192
1 Hr Totals																					
10:00 - 11:00	0	16	1	0	17	0	10	0	0	10	1	0	0	0	1	1	0	0	0	1	29
10:15 - 11:15	0	20	1	0	21	1	9	0	0	10	2	0	0	0	2	0	0	0	0	0	33
10:30 - 11:30	0	19	2	0	21	2	6	1	0	9	1	0	0	0	1	0	0	0	0	0	31
10:45 - 11:45	0	23	2	0	25	2	9	1	0	12	1	0	1	0	2	0	0	2	0	2	41
11:00 - 12:00	0	24	1	0	25	4	10	1	0	15	1	1	1	0	3	1	0	2	0	3	46
11:15 - 12:15	0	25	1	0	26	3	14	2	0	19	0	1	1	0	2	1	1	2	0	4	51
11:30 - 12:30	0	24	0	0	24	3	16	1	0	20	1	1	1	0	3	1	2	3	0	6	53
11:45 - 12:45	0	18	0	1	19	4	16	2	0	22	1	3	1	0	5	2	2	1	0	5	51
12:00 - 1:00	0	18	1	1	20	2	20	2	0	24	2	2	1	0	5	2	3	1	0	6	55
12:15 - 1:15	0	17	1	1	19	2	19	2	0	23	2	3	1	0	6	2	2	1	0	5	53
12:30 - 1:30	0	22	3	1	26	1	22	2	0	25	1	4	1	0	6	3	1	0	0	4	61
12:45 - 1:45	0	23	4	0	27	0	25	1	0	26	1	3	0	0	4	2	1	0	0	3	60
1:00 - 2:00	0	23	4	0	27	1	28	1	0	30	0	4	0	0	4	1	0	0	0	1	62
PEAK HOUR																					
11:30 - 12:30	0	24	0	0	24	3	16	1	0	20	1	1	1	0	3	1	2	3	0	6	53

RTOR TURNING MOVEMENT COUNT - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: August 26, 2023
Weather: Sunny/Warm
Entered by: SN

Saturday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: US 113					TRAFFIC FROM SOUTH on: US 113					TRAFFIC FROM EAST on: Clayton Street					TRAFFIC FROM WEST on: Nine Foot Road					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
10:00 - 10:15	0				0	6				6	8				8	6				6	20
10:15 - 10:30	3				3	9				9	6				6	2				2	20
10:30 - 10:45	3				3	11				11	12				12	2				2	28
10:45 - 11:00	7				7	14				14	11				11	2				2	34
11:00 - 11:15	3				3	5				5	18				18	4				4	30
11:15 - 11:30	2				2	6				6	15				15	4				4	27
11:30 - 11:45	3				3	5				5	16				16	2				2	26
11:45 - 12:00	5				5	12				12	8				8	4				4	29
12:00 - 12:15	2				2	6				6	5				5	1				1	14
12:15 - 12:30	3				3	11				11	11				11	1				1	26
12:30 - 12:45	5				5	12				12	10				10	6				6	33
12:45 - 1:00	1				1	8				8	9				9	2				2	20
1:00 - 1:15	2				2	6				6	9				9	0				0	17
1:15 - 1:30	1				1	3				3	12				12	1				1	17
1:30 - 1:45	3				3	10				10	10				10	0				0	23
1:45 - 2:00	0				0	7				7	10				10	3				3	20
4 Hr Totals	43	0	0	0	43	131	0	0	0	131	170	0	0	0	170	40	0	0	0	40	384
1 Hr Totals																					
10:00 - 11:00	13	0	0	0	13	40	0	0	0	40	37	0	0	0	37	12	0	0	0	12	102
10:15 - 11:15	16	0	0	0	16	39	0	0	0	39	47	0	0	0	47	10	0	0	0	10	112
10:30 - 11:30	15	0	0	0	15	36	0	0	0	36	56	0	0	0	56	12	0	0	0	12	119
10:45 - 11:45	15	0	0	0	15	30	0	0	0	30	60	0	0	0	60	12	0	0	0	12	117
11:00 - 12:00	13	0	0	0	13	28	0	0	0	28	57	0	0	0	57	14	0	0	0	14	112
11:15 - 12:15	12	0	0	0	12	29	0	0	0	29	44	0	0	0	44	11	0	0	0	11	96
11:30 - 12:30	13	0	0	0	13	34	0	0	0	34	40	0	0	0	40	8	0	0	0	8	95
11:45 - 12:45	15	0	0	0	15	41	0	0	0	41	34	0	0	0	34	12	0	0	0	12	102
12:00 - 1:00	11	0	0	0	11	37	0	0	0	37	35	0	0	0	35	10	0	0	0	10	93
12:15 - 1:15	11	0	0	0	11	37	0	0	0	37	39	0	0	0	39	9	0	0	0	9	96
12:30 - 1:30	9	0	0	0	9	29	0	0	0	29	40	0	0	0	40	9	0	0	0	9	87
12:45 - 1:45	7	0	0	0	7	27	0	0	0	27	40	0	0	0	40	3	0	0	0	3	77
1:00 - 2:00	6	0	0	0	6	26	0	0	0	26	41	0	0	0	41	4	0	0	0	4	77
PEAK HOUR																					
11:30 - 12:30	13	0	0	0	13	34	0	0	0	34	40	0	0	0	40	8	0	0	0	8	95

PEDESTRIAN OBSERVATIONS - SUMMARY

Intersection of: US 113
and: Nine Foot Road
Location: Sussex County, Delaware

Counted by: VCU
Date: August 26, 2023
Weather: Sunny/Warm
Entered by: SN

Saturday
Star Rating: 4



TIME	NORTH LEG US 113	SOUTH LEG US 113	EAST LEG Clayton Street	WEST LEG Nine Foot Road
AM				
10:00 - 10:15	0	0	0	0
10:15 - 10:30	0	0	0	0
10:30 - 10:45	0	0	0	0
10:45 - 11:00	0	0	0	0
11:00 - 11:15	0	0	0	0
11:15 - 11:30	0	0	0	0
11:30 - 11:45	0	0	0	0
11:45 - 12:00	0	0	0	0
12:00 - 12:15	0	0	0	0
12:15 - 12:30	0	0	0	0
12:30 - 12:45	0	0	0	0
12:45 - 1:00	0	0	0	0
1:00 - 1:15	0	0	0	0
1:15 - 1:30	0	0	0	0
1:30 - 1:45	0	0	0	0
1:45 - 2:00	0	0	0	0
TOTALS	0	0	0	0

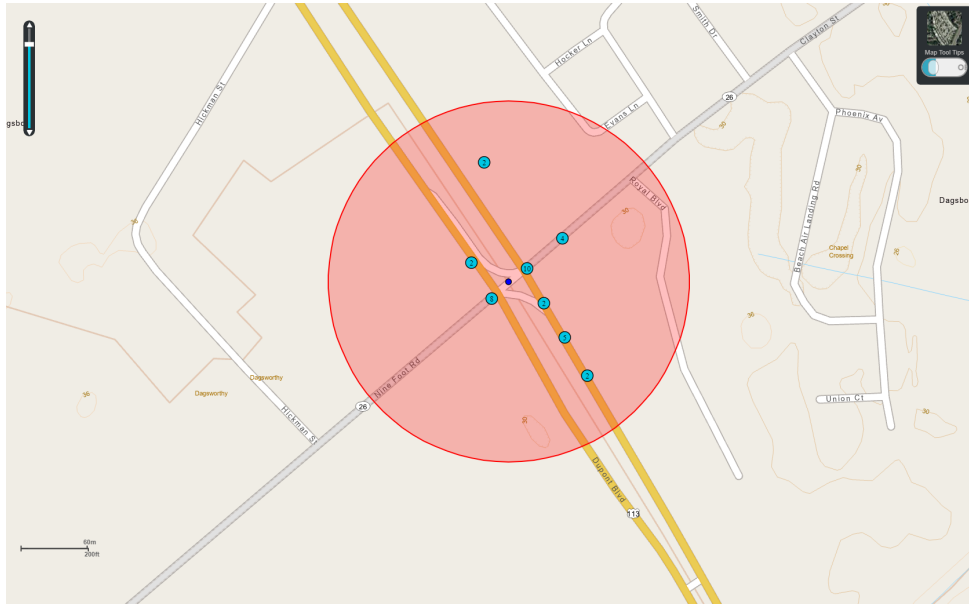
APPENDIX B

Crash Data



Delaware Crash Analysis Reporting System

Crash Study Time Period:	02/26/2021 - 02/26/2024
Query Type:	AdvancedQueryTool
Description:	Timmons Property TIS
Study Requested By:	Ming-Yu Chien (TTG)
Study Generated By:	TDTSCJM
Number of Crashes:	35
Includes Non-Reportable Crashes:	N
Study Code:	



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State of Delaware Crash Study

Summary		Classification			Manner of Impact		
	# of Crashes		# of Crashes	% of Total Crashes		# of Crashes	% of Total Crashes
Total Crashes	35				Front to rear	14	40.00%
Fatal Crashes	0	Non-Reportable	0	0.00%	Front to front	1	2.86%
Total Alcohol-Related Crashes	2	Reportable	28	80.00%	Angle	10	28.57%
Total Non Alcohol-Related Crashes	33	Personal Injury	7	20.00%	Sideswipe, same direction	3	8.57%
Total Fatalities	0	Fatality	0	0.00%	Sideswipe, opposite direction	0	0.00%
Total Pedestrian Fatalities	0	Total	35		Rear to side	0	0.00%
Total Pedestrian Injuries	0				Rear to rear	0	0.00%
Total Pedestrian Crashes	0				Other	1	2.86%
Total Motorcycle Crashes	1				Unknown	1	2.86%
Total Pedalcyclist Crashes	0				Not a collision between two vehicles	5	14.29%
					Total	35	

Alcohol Related Crashes By Classification					
	Non-reportable	Reportable	Personal Injury	Fatality	Total
Alcohol Related	0	2	0	0	2
Non-Alcohol Related	0	26	7	0	33
Total	0	28	7	0	35

Manner of Impact By Classification					
	Non-Reportable	Reportable	Personal Injury	Fatality	Total
Front to rear	0	13	1	0	14
Front to front	0	1	0	0	1
Angle	0	5	5	0	10
Sideswipe, same direction	0	3	0	0	3
Sideswipe, opposite direction	0	0	0	0	0
Rear to side	0	0	0	0	0
Rear to rear	0	0	0	0	0
Other	0	0	1	0	1
Unknown	0	1	0	0	1
Not a collision between two vehicles	0	5	0	0	5
Total	0	28	7	0	35

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Day Of Week		
	# of Crashes	% of Total Crashes
Sunday	5	14.29%
Monday	4	11.43%
Tuesday	4	11.43%
Wednesday	5	14.29%
Thursday	6	17.14%
Friday	8	22.86%
Saturday	3	8.57%
Total	35	

Time Of Day (AM)		
	# of Crashes	% of Total Crashes
00:00 - 00:59	1	2.86%
01:00 - 01:59	0	0.00%
02:00 - 02:59	1	2.86%
03:00 - 03:59	0	0.00%
04:00 - 04:59	1	2.86%
05:00 - 05:59	1	2.86%
06:00 - 06:59	1	2.86%
07:00 - 07:59	1	2.86%
08:00 - 08:59	0	0.00%
09:00 - 09:59	2	5.71%
10:00 - 10:59	3	8.57%
11:00 - 11:59	2	5.71%
Total	13	

Time Of Day (PM)		
	# of Crashes	% of Total Crashes
12:00 - 12:59	2	5.71%
13:00 - 13:59	1	2.86%
14:00 - 14:59	2	5.71%
15:00 - 15:59	3	8.57%
16:00 - 16:59	2	5.71%
17:00 - 17:59	2	5.71%
18:00 - 18:59	2	5.71%
19:00 - 19:59	2	5.71%
20:00 - 20:59	3	8.57%
21:00 - 21:59	0	0.00%
22:00 - 22:59	1	2.86%
23:00 - 23:59	2	5.71%
Total	22	
Unknown Time	0	

Surface Conditions		
	# of Crashes	% of Total Crashes
Dry	32	91.43%
Wet	3	8.57%
Snow	0	0.00%
Ice/Frost	0	0.00%
Sand	0	0.00%
Water (standing, moving)	0	0.00%
Slush	0	0.00%
Oil	0	0.00%
Mud, Dirt, Gravel	0	0.00%
Other	0	0.00%
Unknown	0	0.00%
Total	35	

Lighting Conditions		
	# of Crashes	% of Total Crashes
Daylight	24	68.57%
Dawn	0	0.00%
Dusk	2	5.71%
Dark-Lighted	7	20.00%
Dark-Not Lighted	2	5.71%
Dark-Unknown Lighting	0	0.00%
Other	0	0.00%
Unknown	0	0.00%
Total	35	

Weather Conditions		
	# of Crashes	% of Total Crashes
Clear	28	80.00%
Cloudy	8	22.86%
Fog, Smog, Smoke	0	0.00%
Rain	2	5.71%
Sleet, Hail (freezing rain or drizzle)	0	0.00%
Snow	0	0.00%
Blowing Snow	0	0.00%
Severe Crosswinds	1	2.86%
Blowing Sand, Soil, Dirt	0	0.00%
Other	0	0.00%
Unknown	0	0.00%
Total	39	

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First Harmful Event		
	# of Crashes	% of Total Crashes
Overturn/Rollover, Non-Collision	0	0.00%
Fire/Explosion, Non-Collision	0	0.00%
Immersion, Non-Collision	0	0.00%
Jackknife, Non-Collision	0	0.00%
Cargo/Equipment Loss or Shift, Non-Collision	0	0.00%
Fell/Jumped From Motor Vehicle, Non-Collision	0	0.00%
Thrown or Falling Object, Non-Collision	0	0.00%
Other Non-Collision, Non-Collision	0	0.00%
Pedestrian, Collision With Person, Motor Vehicle, or Non-Fixed Object	0	0.00%
Pedalcycle, Collision With Person, Motor Vehicle, or Non-Fixed Object	0	0.00%
Railway Vehicle (train, engine), Collision With Person, Motor Vehicle, or Non-Fixed Object	0	0.00%
Animal, Collision With Person, Motor Vehicle, or Non-Fixed Object	1	2.86%
Motor Vehicle in Transport, Collision With Person, Motor Vehicle, or Non-Fixed Object	26	74.29%
Legally Parked Motor Vehicle, Collision With Person, Motor Vehicle, or Non-Fixed Object	1	2.86%
Struck by Anything Set in Motion by Vehicle, Collision With Person, Motor Vehicle, or Non-Fixed Object	0	0.00%
Work Zone / Maintenance Equipment, Collision With Person, Motor Vehicle, or Non-Fixed Object	0	0.00%
Other Non-Fixed Object, Collision With Person, Motor Vehicle, or Non-Fixed Object	0	0.00%
Impact Attenuator/Crash Cushion, Collision With Fixed Object	0	0.00%
Bridge Overhead Structure, Collision With Fixed Object	0	0.00%
Bridge Pier or Support, Collision With Fixed Object	0	0.00%
Bridge Rail, Collision With Fixed Object	0	0.00%
Cable Barrier, Collision With Fixed Object	0	0.00%
Culvert, Collision With Fixed Object	0	0.00%
Curb, Collision With Fixed Object	0	0.00%
Ditch, Collision With Fixed Object	0	0.00%
Embankment, Collision With Fixed Object	0	0.00%

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Guardrail Face, Collision With Fixed Object	0	0.00%
Guardrail End, Collision With Fixed Object	0	0.00%
Concrete Traffic Barrier, Collision With Fixed Object	1	2.86%
Other Traffic Barrier, Collision With Fixed Object	0	0.00%
Tree (standing), Collision With Fixed Object	0	0.00%
Utility Pole, Collision With Fixed Object	1	2.86%
Light Support, Collision With Fixed Object	1	2.86%
Traffic Sign Support, Collision With Fixed Object	0	0.00%
Overhead Sign Support, Collision With Fixed Object	0	0.00%
Traffic Signal Support, Collision With Fixed Object	0	0.00%
Fence, Collision With Fixed Object	0	0.00%
Mailbox, Collision With Fixed Object	0	0.00%
Other Post, Pole or Support, Collision With Fixed Object	1	2.86%
Other Fixed Object (wall, building, tunnel, etc.), Collision With Fixed Object	0	0.00%
Illegally Parked Motor Vehicle, Collision With Person, Motor Vehicle, or Non-Fixed Object	0	0.00%
Stopped Motor Vehicle, Collision With Person, Motor Vehicle, or Non-Fixed Object	3	8.57%
Unknown, Collision With Fixed Object	0	0.00%
Total	34	

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Primary Contributing Circumstance		
	# of Crashes	% of Total Crashes
Speeding	0	0.00%
Failed to yield right of way	1	2.86%
Passed Stop Sign	0	0.00%
Disregard Traffic Signal	3	8.57%
Wrong side or wrong way	0	0.00%
Improper passing	1	2.86%
Improper lane change	2	5.71%
Following too close	5	14.29%
Made improper turn	0	0.00%
Driving under the influence	1	2.86%
Driver inattention, distraction, or fatigue	13	37.14%
Driving in a careless or reckless manner	2	5.71%
Driving in an aggressive manner	0	0.00%
Improper backing	2	5.71%
Other improper driving	1	2.86%
Mechanical defects	0	0.00%
Animal in Roadway - Deer	1	2.86%
Animal in Roadway - Other Animal	0	0.00%
Other environmental circumstances - weather, glare	1	2.86%
Roadway circumstances - debris, holes, work zone,	0	0.00%
Other	1	2.86%
Unknown	1	2.86%
Total	35	

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Driver Action		
	# of Drivers	% of Total Crashes
No Contributing Action	28	44.44%
Failed to yield right of way	4	6.35%
Ran Red Light	3	4.76%
Ran Stop Sign	0	0.00%
Disregard other traffic sign	0	0.00%
Disregard other road markings	2	3.17%
Exceeded authorized speed limit	0	0.00%
Driving too fast for conditions	0	0.00%
Made an improper turn	0	0.00%
Improper backing	2	3.17%
Wrong side or wrong way	0	0.00%
Followed too closely	5	7.94%
Failure to keep in proper lane	3	4.76%
Ran off roadway	0	0.00%
Operating vehicle in erratic, reckless, careless, negligent or aggressive manner	12	19.05%
Swerving or avoiding due to wind, slippery surface, vehicle, object, non-motorist in roadway, etc.	0	0.00%
Over-correcting/over-steering	0	0.00%
Improper Passing	1	1.59%
Other Contributing Action	1	1.59%
Unknown	2	3.17%
Total	63	

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Date	Time	CTY	RD	MP	C-MP	Class	MOI	FHE	PC	LC	WC	SC	Fat	Inj	AL
2021															
03/08/2021	06:58	S	00113	6.58	6.58	Property Damage Only	Front to rear	Motor Vehicle in Transport	Following too close	Daylight	Clear	Dry	0	0	N
03/24/2021	18:57	S	00113	28.83	64.18	Personal Injury Crash	Other	Motor Vehicle in Transport	Other improper driving	Dusk	Rain	Wet	0	1	N
04/02/2021	11:49	S	00113	28.83	64.18	Property Damage Only	Angle	Motor Vehicle in Transport	Other environmental circumstances - weather, glare	Daylight	Severe Crosswinds - Cloudy	Dry	0	0	N
05/26/2021	19:16	S	00113	6.53	6.53	Property Damage Only	Angle	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Clear	Dry	0	0	N
07/11/2021	22:14	S	00113	6.58	6.58	Property Damage Only	Front to rear	Motor Vehicle in Transport	Following too close	Dark-Lighted	Clear	Dry	0	0	Y
08/06/2021	23:15	S				Personal Injury Crash	Angle	Motor Vehicle in Transport	Disregard Traffic Signal	Dark-Lighted	Clear	Dry	0	1	N
09/24/2021	10:23	S	00026	11.26	11.26	Property Damage Only	Angle	Motor Vehicle in Transport	Failed to yield right of way	Daylight	Clear	Dry	0	0	N
05/22/2021	11:49	S	00113	6.54	6.54	Personal Injury Crash	Front to rear	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Cloudy	Dry	0	3	N
09/17/2021	16:22	S	00113	6.53	6.53	Property Damage Only	Front to rear	Motor Vehicle in Transport	Following too close	Daylight	Cloudy	Dry	0	0	N

2022

02/02/2022	04:21	S	00113	6.56	6.56	Property Damage Only	Not a collision between two vehicles	Animal	Animal in Roadway - Deer	Dark-Not Lighted	Clear	Dry	0	0	N
05/30/2022	07:23	S				Personal Injury Crash	Angle	Motor Vehicle in Transport	Disregard Traffic Signal	Daylight	Clear	Dry	0	3	N
06/18/2022	00:34	S	00026	11.26	11.26	Property Damage Only	Sideswipe, same direction	Motor Vehicle in Transport	Improper lane change	Dark-Lighted	Clear	Dry	0	0	N
07/19/2022	19:26	S				Property Damage Only	Front to rear	Motor Vehicle in Transport	Unknown	Daylight	Clear	Dry	0	0	N
04/22/2022	15:12	S	00026	11.26	11.26	Property Damage Only	Angle	Motor Vehicle in Transport	Improper passing	Daylight	Clear	Dry	0	0	N

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Date	Time	CTY	RD	MP	C-MP	Class	MOI	FHE	PC	LC	WC	SC	Fat	Inj	AL
2022															
05/30/2022	14:08	S	00113	6.54	6.54	Property Damage Only	Front to rear	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Cloudy - Clear	Dry	0	0	N
06/16/2022	20:17	S	00113	6.54	6.54	Property Damage Only	Front to rear	Stopped Motor Vehicle	Driver inattention, distraction, or fatigue	Dusk	Cloudy	Dry	0	0	N
06/24/2022	18:36	S	00026	11.3	11.30	Property Damage Only	Sideswipe, same direction	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Clear	Dry	0	0	N
07/17/2022	10:34	S	00113	6.58	6.58	Personal Injury Crash	Angle	Motor Vehicle in Transport	Disregard Traffic Signal	Daylight	Clear - Cloudy	Dry	0	1	N
08/05/2022	17:05	S				Property Damage Only	Unknown	Legally Parked Motor Vehicle	Driver inattention, distraction, or fatigue	Daylight	Cloudy - Rain	Wet	0	0	N
08/20/2022	16:13	S	00113	6.58	6.58	Property Damage Only	Not a collision between two vehicles	Other Post, Pole or Support	Driving under the influence	Daylight	Clear	Dry	0	0	Y

2023

01/12/2023	09:46	S	00113	28.74	64.07	Property Damage Only	Sideswipe, same direction	Motor Vehicle in Transport	Improper lane change	Daylight	Clear	Dry	0	0	N
05/23/2023	02:21	S				Property Damage Only	Not a collision between two vehicles	Concrete Traffic Barrier	Driver inattention, distraction, or fatigue	Dark-Lighted	Clear	Dry	0	0	N
07/02/2023	09:55	S	00113	28.75	64.08	Property Damage Only	Front to rear	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Clear - Clear	Dry	0	0	N
08/10/2023	23:05	S	00026	11.23	11.23	Property Damage Only	Front to rear	Motor Vehicle in Transport	Driving in a careless or reckless manner	Dark-Not Lighted	Clear	Dry	0	0	N
09/24/2023	05:59	S	00026	11.21	11.21	Property Damage Only	Front to rear	Motor Vehicle in Transport	Improper backing	Dark-Lighted	Clear	Wet	0	0	N
02/08/2023	20:54	S				Property Damage Only	Not a collision between two vehicles	Utility Pole	Other	Dark-Lighted	Clear	Dry	0	0	N

Disclaimer for CARS: Crash data and associated police reports are intended for DelDOT use only and shall not be transmitted, copied, distributed or provided to any entity other than DelDOT unless written approval is received from the DelDOT Legal Section. Police reports are the property of the Delaware State Police.

Date	Time	CTY	RD	MP	C-MP	Class	MOI	FHE	PC	LC	WC	SC	Fat	Inj	AL
2023															
02/09/2023	15:55	S	00026	11.29	11.29	Property Damage Only	Front to front	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Clear	Dry	0	0	N
03/16/2023	13:47	S	00026	11.28	11.28	Property Damage Only	Front to rear	Stopped Motor Vehicle	Following too close	Daylight	Clear	Dry	0	0	N
04/14/2023	14:44	S	00026	11.26	11.26	Personal Injury Crash	Angle	Motor Vehicle in Transport	Driving in a careless or reckless manner	Daylight	Clear	Dry	0	1	N
05/22/2023	12:18	S	00026	11.26	11.26	Property Damage Only	Angle	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Clear	Dry	0	0	N
05/30/2023	20:50	S	00026	11.29	11.29	Property Damage Only	Front to rear	Stopped Motor Vehicle	Improper backing	Dark-Lighted	Clear	Dry	0	0	N
06/11/2023	10:39	S	00113	6.56	6.56	Property Damage Only	Front to rear	Motor Vehicle in Transport	Following too close	Daylight	Clear	Dry	0	0	N
07/20/2023	15:40	S	00026	11.28	11.28	Personal Injury Crash	Angle	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Clear	Dry	0	1	N
07/25/2023	12:14	S	00113	6.51	6.51	Property Damage Only	Front to rear	Motor Vehicle in Transport	Driver inattention, distraction, or fatigue	Daylight	Cloudy	Dry	0	0	N
2024															
01/24/2024	17:00	S				Property Damage Only	Not a collision between two vehicles	Light Support	Driver inattention, distraction, or fatigue	Daylight	Clear	Dry	0	0	N

Report generated by TDTSCJM at 2024-02-26 17:33:15.221

Disclaimer for CARS: Crash data and associated police reports are intended for DeIDOT use only and shall not be transmitted, copied, distributed or provided to any entity other than DeIDOT unless written approval is received from the DeIDOT Legal Section. Police reports are the property of the Delaware State Police.

Report Legend

CTY – County

RD – Maintenance Road

MP – Milepoint

C-MP – Continuous Milepoint

Fat – Fatality

Inj – Injury

AL - Alcohol Involved

LC – Lighting Condition

WC – Weather Condition

SC – Surface Condition

FHE – First Harmful Event

PC – Primary Contributing Circumstance

Class – Report Classification

MOI – Manner of Impact

APPENDIX C

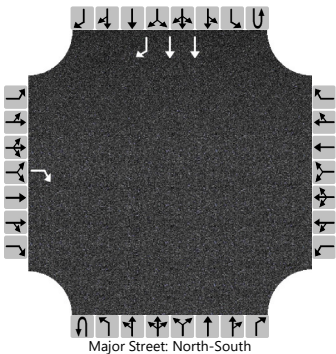
Capacity Analysis Worksheets



HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	US 113 at Site Entrance A
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	Sussex County, Del
Date Performed	5/8/2024	East/West Street	Site Entrance A
Analysis Year	2025	North/South Street	US 113 B
Time Analyzed	Total AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Timmons Property		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	0	0	0	0	2	1
Configuration				R											T	R
Volume (veh/h)				19											1052	33
Percent Heavy Vehicles (%)				3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No												No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.96												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.33												

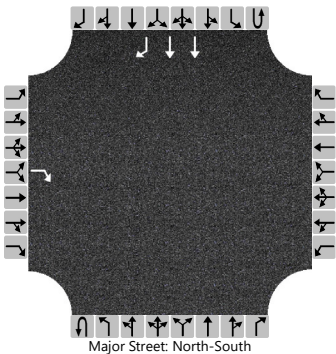
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				21												
Capacity, c (veh/h)				461												
v/c Ratio				0.04												
95% Queue Length, Q ₉₅ (veh)				0.1												
95% Queue Length, Q ₉₅ (ft)				2.6												
Control Delay (s/veh)				13.2												
Level of Service (LOS)				B												
Approach Delay (s/veh)	13.2															
Approach LOS	B															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	US 113 at Site Entrance A
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	Sussex County, Del
Date Performed	5/8/2024	East/West Street	Site Entrance A
Analysis Year	2025	North/South Street	US 113 B
Time Analyzed	Total PM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Timmons Property		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	0	0	0	0	2	1
Configuration				R											T	R
Volume (veh/h)				21											1079	43
Percent Heavy Vehicles (%)				3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No												No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.96												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.33												

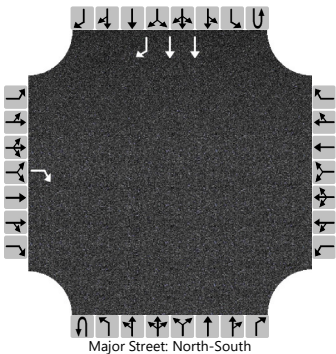
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				23												
Capacity, c (veh/h)				451												
v/c Ratio				0.05												
95% Queue Length, Q ₉₅ (veh)				0.2												
95% Queue Length, Q ₉₅ (ft)				5.1												
Control Delay (s/veh)				13.4												
Level of Service (LOS)				B												
Approach Delay (s/veh)	13.4															
Approach LOS	B															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	US 113 at Site Entrance A
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	Sussex County, Del
Date Performed	5/8/2024	East/West Street	Site Entrance A
Analysis Year	2025	North/South Street	US 113 B
Time Analyzed	Total SATM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Timmons Property		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	0	0	0	0	2	1
Configuration				R											T	R
Volume (veh/h)				31											1659	57
Percent Heavy Vehicles (%)				3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No												No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.96												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.33												

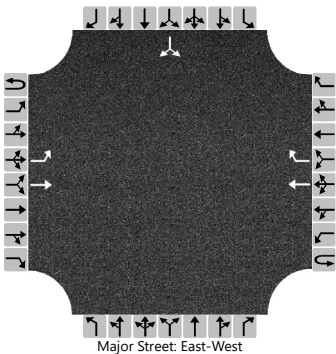
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				34												
Capacity, c (veh/h)				279												
v/c Ratio				0.12												
95% Queue Length, Q ₉₅ (veh)				0.4												
95% Queue Length, Q ₉₅ (ft)				10.2												
Control Delay (s/veh)				19.7												
Level of Service (LOS)				C												
Approach Delay (s/veh)	19.7															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	9 Foot Rd at Site Entrance B
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	Sussex County, Del
Date Performed	5/8/2024	East/West Street	Nine Foot Rd
Analysis Year	2025	North/South Street	Site Entrance B
Time Analyzed	Total AM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Timmons		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		0	1	0
Configuration		L	T				T	R							LR	
Volume (veh/h)		10	347				214	36						55		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

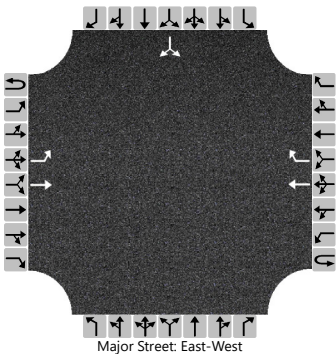
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11													69	
Capacity, c (veh/h)		1272													443	
v/c Ratio		0.01													0.16	
95% Queue Length, Q ₉₅ (veh)		0.0													0.6	
95% Queue Length, Q ₉₅ (ft)		0.0													15.4	
Control Delay (s/veh)		7.9													14.6	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)	0.2												14.6			
Approach LOS	A												B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	9 Foot Rd at Site Entrance B
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	Sussex County, Del
Date Performed	5/8/2024	East/West Street	Nine Foot Rd
Analysis Year	2025	North/South Street	Site Entrance B
Time Analyzed	Total PM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Timmons		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		0	1	0
Configuration		L	T				T	R							LR	
Volume (veh/h)		9	191				309	60						64		7
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

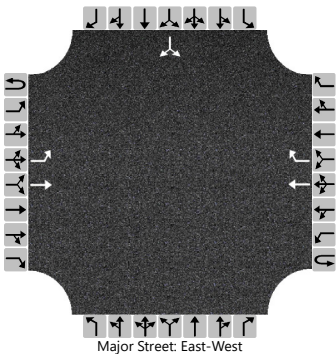
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10													81	
Capacity, c (veh/h)		1134													481	
v/c Ratio		0.01													0.17	
95% Queue Length, Q ₉₅ (veh)		0.0													0.6	
95% Queue Length, Q ₉₅ (ft)		0.0													15.4	
Control Delay (s/veh)		8.2													14.0	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)	0.4												14.0			
Approach LOS	A												B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	9 Foot Rd at Site Entrance B
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	Sussex County, Del
Date Performed	5/8/2024	East/West Street	Nine Foot Rd
Analysis Year	2025	North/South Street	Site Entrance B
Time Analyzed	Total Sat	Peak Hour Factor	0.80
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Timmons		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		0	1	0
Configuration		L	T				T	R							LR	
Volume (veh/h)		8	114				101	67						82		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10													110	
Capacity, c (veh/h)		1355													706	
v/c Ratio		0.01													0.16	
95% Queue Length, Q ₉₅ (veh)		0.0													0.5	
95% Queue Length, Q ₉₅ (ft)		0.0													12.8	
Control Delay (s/veh)		7.7													11.0	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)	0.5												11.0			
Approach LOS	A												B			

HCS Signalized Intersection Input Data

General Information						Intersection Information						
Agency	The Traffic Group, Inc.			Duration, h	0.250							
Analyst	MYC	Analysis Date	2/26/2024		Area Type	Other						
Jurisdiction	Sussex County, DE	Time Period	Existing AM Peak		PHF	0.87						
Urban Street	US 113	Analysis Year	2023		Analysis Period	1> 7:00						
Intersection	US 113 & Nine Foot Rd/...		File Name	1EA.xus								
Project Description	Timmons Property											

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	65	202		87	145	157	29	670	67	126	892	36

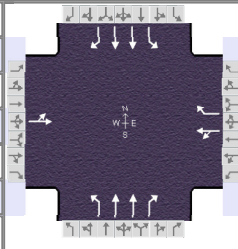
Signal Information																								
Cycle, s	150.0	Reference Phase	2	Green	4.2	3.7	58.1	22.0	22.0	0.0	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	Red	2.0	2.0	2.0	3.0	3.0	0.0
Offset, s	0	Reference Point	End																					
Uncoordinated	No	Simult. Gap E/W	On																					
Force Mode	Fixed	Simult. Gap N/S	On																					

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	65	202		87	145	157	29	670	67	126	892	36
Initial Queue (Q_b), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		6			7	6	21	10	9	9	11	24
Ped / Bike / RTOR, /h	0	0		0	0	90	0	0	33	0	0	14
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	The Traffic Group, Inc.			Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other	
Jurisdiction	Sussex County, DE	Time Period	Existing AM Peak	PHF	0.87	
Urban Street	US 113	Analysis Year	2023	Analysis Period	1> 7:00	
Intersection	US 113 & Nine Foot Rd/...	File Name	1EA.xus			
Project Description	Timmons Property					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	65	202		87	145	157	29	670	67	126	892	36

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	4.2	3.7	58.1	22.0	22.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		30.0		30.0	12.2	66.1	23.9	77.8
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		24.0		24.0	5.6		15.7	
Green Extension Time (g_e), s		0.0		0.0	0.0	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	0.75		1.00	
Max Out Probability		1.00		1.00	0.21		1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		307			267	77	33	770	39	145	1025	25
Adjusted Saturation Flow Rate (s), veh/h/ln		1648			1624	1414	1394	1536	1379	1550	1523	1205
Queue Service Time (g_s), s		22.0			22.0	7.4	3.6	27.3	2.1	13.7	34.8	1.2
Cycle Queue Clearance Time (g_c), s		22.0			22.0	7.4	3.6	27.3	2.1	13.7	34.8	1.2
Green Ratio (g/C)		0.15			0.15	0.15	0.03	0.39	0.39	0.11	0.47	0.47
Capacity (c), veh/h		242			238	207	39	1190	534	164	1417	561
Volume-to-Capacity Ratio (X)		1.270			1.120	0.371	0.854	0.647	0.073	0.881	0.723	0.045
Back of Queue (Q), ft/ln (95 th percentile)		766			608	131	93	388	35	285	426	19
Back of Queue (Q), veh/ln (95 th percentile)		29.2			23.0	5.0	3.2	14.4	1.3	10.6	15.7	0.6
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.82	0.31	0.00	0.04	0.71	0.00	0.05
Uniform Delay (d_1), s/veh		64.0			64.0	57.8	71.9	28.8	22.7	63.5	21.8	15.5
Incremental Delay (d_2), s/veh		149.8			94.2	1.6	47.9	2.7	0.3	30.2	3.2	0.2
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		213.8			158.2	59.3	119.8	31.6	23.0	93.7	25.1	15.6
Level of Service (LOS)		F			F	E	F	C	C	F	C	B
Approach Delay, s/veh / LOS	213.8	F		136.1	F		34.7	C		33.2	C	
Intersection Delay, s/veh / LOS	67.4						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.52	C	2.50	C	2.06	B	1.73	B
Bicycle LOS Score / LOS	0.94	A	1.05	A	1.18	A	1.47	A

HCS Signalized Intersection Input Data

General Information						Intersection Information						
Agency	The Traffic Group, Inc.			Duration, h	0.250							
Analyst	MYC	Analysis Date	2/26/2024		Area Type	Other						
Jurisdiction	Sussex County, DE	Time Period	Existing PM Peak		PHF	0.95						
Urban Street	US 113	Analysis Year	2023		Analysis Period	1> 7:00						
Intersection	US 113 & Nine Foot Rd/...		File Name	1EP.xus								
Project Description	Timmons Property											

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	105		63	191	137	46	865	87	146	863	71

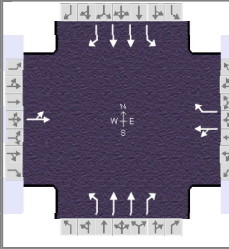
Signal Information													
Cycle, s	150.0	Reference Phase	2	Green	6.0	2.2	63.9	22.0	15.9	0.0			
Offset, s	0	Reference Point	End	Yellow	6.0	6.0	6.0	5.0	5.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	3.0	3.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On										

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	105		63	191	137	46	865	87	146	863	71
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		1			2	1	13	6	1	2	4	3
Ped / Bike / RTOR, /h	0	0		0	0	72	0	0	23	0	0	8
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Existing PM Peak	PHF	0.95		
Urban Street	US 113	Analysis Year	2023	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	1EP.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	105		63	191	137	46	865	87	146	863	71

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	6.0	2.2	63.9	22.0	15.9	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		23.9		30.0	14.0	71.9	24.2	82.1
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.2	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		15.6		24.0	6.8		15.7	
Green Extension Time (g_e), s		0.3		0.0	0.1	0.0	0.5	0.0
Phase Call Probability		1.00		1.00	0.87		1.00	
Max Out Probability		0.44		1.00	0.00		0.04	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		158			267	68	48	911	67	154	908	66
Adjusted Saturation Flow Rate (s), veh/h/ln		1711			1702	1471	1498	1588	1471	1641	1614	1448
Queue Service Time (g_s), s		13.6			22.0	6.2	4.8	30.1	3.2	13.7	23.1	2.5
Cycle Queue Clearance Time (g_c), s		13.6			22.0	6.2	4.8	30.1	3.2	13.7	23.1	2.5
Green Ratio (g/C)		0.11			0.15	0.15	0.04	0.43	0.43	0.11	0.49	0.49
Capacity (c), veh/h		182			250	216	60	1352	627	177	1594	715
Volume-to-Capacity Ratio (X)		0.868			1.071	0.317	0.812	0.673	0.108	0.869	0.570	0.093
Back of Queue (Q), ft/ln (95 th percentile)		288			559	110	114	407	51	264	286	39
Back of Queue (Q), veh/ln (95 th percentile)		11.4			22.0	4.4	4.1	15.5	2.0	10.4	11.1	1.5
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.69	0.38	0.00	0.06	0.66	0.00	0.11
Uniform Delay (d_1), s/veh		66.0			64.0	57.3	70.5	25.1	19.3	63.2	16.9	13.4
Incremental Delay (d_2), s/veh		22.9			77.2	1.2	29.6	2.7	0.3	18.6	1.5	0.3
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		88.9			141.2	58.5	100.1	27.8	19.6	81.7	18.4	13.7
Level of Service (LOS)		F			F	E	F	C	B	F	B	B
Approach Delay, s/veh / LOS	88.9	F		124.3	F		30.7	C		26.7	C	
Intersection Delay, s/veh / LOS	44.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.49	B	2.03	B	1.72	B
Bicycle LOS Score / LOS	0.72	A	1.04	A	1.33	A	1.42	A

HCS Signalized Intersection Input Data

General Information						Intersection Information						
Agency	The Traffic Group, Inc.					Duration, h	0.250					
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other					
Jurisdiction	Sussex County, DE	Time Period	Existing SAT PK			PHF	0.90					
Urban Street	US 113	Analysis Year	2023			Analysis Period	1> 7:00					
Intersection	US 113 & Nine Foot Rd/...		File Name	1ES.xus								
Project Description	Timmons Property											

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	77		51	55	80	19	1236	93	96	1538	26

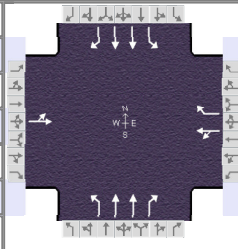
Signal Information													
Cycle, s	165.0	Reference Phase	2	Green	3.1	1.6	93.7	13.9	12.7	0.0			
Offset, s	0	Reference Point	End	Yellow	6.0	6.0	6.0	5.0	5.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	3.0	3.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On										

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	77		51	55	80	19	1236	93	96	1538	26
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		5			2	1	5	1	3	0	2	0
Ped / Bike / RTOR, /h	0	0		0	0	40	0	0	34	0	0	13
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	77.0	28.0	85.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	The Traffic Group, Inc.			Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other	
Jurisdiction	Sussex County, DE	Time Period	Existing SAT PK	PHF	0.90	
Urban Street	US 113	Analysis Year	2023	Analysis Period	1> 7:00	
Intersection	US 113 & Nine Foot Rd/...	File Name	1ES.xus			
Project Description	Timmons Property					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	77		51	55	80	19	1236	93	96	1538	26

Signal Information										
Cycle, s	165.0	Reference Phase	2							
Offset, s	0	Reference Point	End							
Uncoordinated	No	Simult. Gap E/W	On							
Force Mode	Fixed	Simult. Gap N/S	On							

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		20.7		21.9	11.1	101.7	20.7	111.3
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		12.4		13.4	4.2		12.4	
Green Extension Time (g_e), s		0.4		0.5	0.0	0.0	0.5	0.0
Phase Call Probability		0.99		1.00	0.62		0.99	
Max Out Probability		0.00		0.16	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		107			118	44	21	1373	66	107	1709	14
Adjusted Saturation Flow Rate (s), veh/h/ln		1665			1682	1471	1602	1653	1448	1667	1640	1483
Queue Service Time (g_s), s		10.4			11.4	4.7	2.2	37.3	1.9	10.4	46.5	0.3
Cycle Queue Clearance Time (g_c), s		10.4			11.4	4.7	2.2	37.3	1.9	10.4	46.5	0.3
Green Ratio (g/C)		0.08			0.08	0.08	0.02	0.57	0.57	0.08	0.63	0.63
Capacity (c), veh/h		128			141	124	30	1878	823	128	2054	929
Volume-to-Capacity Ratio (X)		0.831			0.834	0.360	0.701	0.731	0.080	0.830	0.832	0.016
Back of Queue (Q), ft/ln (95 th percentile)		227			243	86	55	398	30	211	308	4
Back of Queue (Q), veh/ln (95 th percentile)		8.7			9.6	3.4	2.1	15.8	1.2	8.5	12.1	0.2
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.53	0.18	0.00	0.04	0.53	0.00	0.01
Uniform Delay (d_1), s/veh		75.1			74.4	71.4	80.0	13.2	8.9	73.0	8.9	5.1
Incremental Delay (d_2), s/veh		17.3			17.7	2.5	34.4	2.6	0.2	17.2	4.1	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		92.4			92.2	73.9	114.4	15.7	9.1	90.2	13.0	5.1
Level of Service (LOS)		F			F	E	F	B	A	F	B	A
Approach Delay, s/veh / LOS	92.4	F		87.1	F		16.9	B		17.5	B	
Intersection Delay, s/veh / LOS	22.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.53	C	2.51	C	1.96	B	1.68	B
Bicycle LOS Score / LOS	0.65	A	0.76	A	1.69	B	2.00	B

HCS Signalized Intersection Input Data

General Information						Intersection Information						
Agency	The Traffic Group, Inc.					Duration, h	0.250					
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other					
Jurisdiction	Sussex County, DE	Time Period	Background AM			PHF	0.92					
Urban Street	US 113	Analysis Year	2025			Analysis Period	1> 7:00					
Intersection	US 113 & Nine Foot Rd/...		File Name	1BA.xus								
Project Description	Timmons Property											

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	66	205		97	150	168	30	683	71	132	910	37

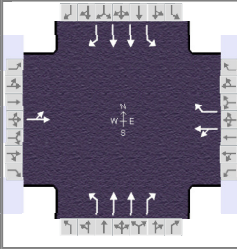
Signal Information													
Cycle, s	150.0	Reference Phase	2	Green	4.1	3.7	58.2	22.0	22.0	0.0			
Offset, s	0	Reference Point	End	Yellow	6.0	6.0	6.0	5.0	5.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	3.0	3.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On										

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	66	205		97	150	168	30	683	71	132	910	37
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		6			7	6	21	10	9	9	11	24
Ped / Bike / RTOR, /h	0	0		0	0	96	0	0	34	0	0	15
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Background AM	PHF	0.92		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	1BA.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	66	205		97	150	168	30	683	71	132	910	37

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	4.1	3.7	58.2	22.0	22.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		30.0		30.0	12.1	66.2	23.8	77.9
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		24.0		24.0	5.5		15.6	
Green Extension Time (g_e), s		0.0		0.0	0.0	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	0.74		1.00	
Max Out Probability		1.00		1.00	0.19		1.00	

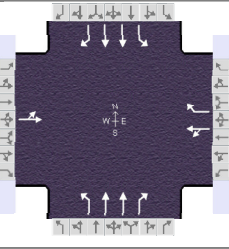
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		295			268	78	33	742	40	143	989	24
Adjusted Saturation Flow Rate (s), veh/h/ln		1648			1623	1414	1394	1536	1379	1550	1523	1205
Queue Service Time (g_s), s		22.0			22.0	7.5	3.5	25.8	2.2	13.6	32.5	1.2
Cycle Queue Clearance Time (g_c), s		22.0			22.0	7.5	3.5	25.8	2.2	13.6	32.5	1.2
Green Ratio (g/C)		0.15			0.15	0.15	0.03	0.39	0.39	0.11	0.47	0.47
Capacity (c), veh/h		242			238	207	38	1192	535	163	1419	562
Volume-to-Capacity Ratio (X)		1.219			1.128	0.377	0.855	0.623	0.075	0.879	0.697	0.043
Back of Queue (Q), ft/ln (95 th percentile)		708			616	133	92	369	36	282	402	18
Back of Queue (Q), veh/ln (95 th percentile)		27.0			23.3	5.1	3.1	13.7	1.4	10.5	14.8	0.6
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.83	0.30	0.00	0.04	0.71	0.00	0.05
Uniform Delay (d_1), s/veh		64.0			64.0	57.8	72.0	28.4	22.7	63.5	21.3	15.4
Incremental Delay (d_2), s/veh		129.8			97.2	1.6	49.0	2.5	0.3	29.9	2.9	0.1
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		193.8			161.2	59.4	121.0	30.8	23.0	93.5	24.2	15.5
Level of Service (LOS)		F			F	E	F	C	C	F	C	B
Approach Delay, s/veh / LOS	193.8	F		138.2	F		34.1	C		32.6	C	
Intersection Delay, s/veh / LOS	65.2						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.52	C	2.50	C	2.07	B	1.73	B
Bicycle LOS Score / LOS	0.92	A	1.06	A	1.16	A	1.44	A

HCS Signalized Intersection Input Data

General Information						Intersection Information															
Agency	The Traffic Group, Inc.					Duration, h	0.250														
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other														
Jurisdiction	Sussex County, DE	Time Period	Background PM			PHF	0.95														
Urban Street	US 113	Analysis Year	2025			Analysis Period	1> 7:00														
Intersection	US 113 & Nine Foot Rd/...		File Name	1BP.xus																	
Project Description	Timmons Property																				
Demand Information						EB			WB			NB			SB						
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h						45	109		70	195	144	47	882	99	159	880	72				
Signal Information																					
Cycle, s	150.0	Reference Phase	2																		
Offset, s	0	Reference Point	End																		
Uncoordinated	No	Simult. Gap E/W	On	Green	6.1	3.3	62.3	22.0	16.3	0.0											
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0											
				Red	2.0	2.0	2.0	3.0	3.0	0.0											
Traffic Information						EB			WB			NB			SB						
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h						45	109		70	195	144	47	882	99	159	880	72				
Initial Queue (Q_0), veh/h						0	0		0	0	0	0	0	0	0	0	0				
Base Saturation Flow Rate (s_0), veh/h						1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750				
Parking (N_m), man/h							None			None			None			None					
Heavy Vehicles (P_{HV}), %							1			2	1	13	6	1	2	4	3				
Ped / Bike / RTOR, /h						0	0		0	0	76	0	0	26	0	0	8				
Buses (N_b), buses/h						0	0	0	0	0	0	0	0	0	0	0	0				
Arrival Type (AT)						3	3		3	3	3	4	4	4	4	4	4				
Upstream Filtering (I)						1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lane Width (W), ft							10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0				
Turn Bay Length, ft							0			0	160	300	0	850	400	0	350				
Grade (P_g), %							0			0			0			0					
Speed Limit, mi/h						40	40		25	25	25	45	45	45	55	55	55				
Phase Information						EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Maximum Green (G_{max}) or Phase Split, s								30.0				30.0		20.0		62.0		28.0		70.0	
Yellow Change Interval (Y), s								5.0				5.0		6.0		6.0		6.0		6.0	
Red Clearance Interval (R_c), s								3.0				3.0		2.0		2.0		2.0		2.0	
Minimum Green (G_{min}), s								5				5		5		20		5		20	
Start-Up Lost Time (l_t), s						2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0	
Extension of Effective Green (e), s						2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0	
Passage (PT), s								4.0				4.0		4.0		3.0		4.0		3.0	
Recall Mode								Off				Off		Off		Min		Off		Min	
Dual Entry								Yes				Yes		No		Yes		No		Yes	
Walk ($Walk$), s								0.0				0.0				0.0				0.0	
Pedestrian Clearance Time (PC), s								0.0				0.0				0.0				0.0	
Multimodal Information						EB			WB			NB			SB						
85th % Speed / Rest in Walk / Corner Radius						0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0				
Walkway / Crosswalk Width / Length, ft						9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0				
Street Width / Island / Curb, ft						0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No				
Width Outside / Bike Lane / Shoulder, ft						12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0				
Pedestrian Signal / Occupied Parking						No		0.50	No		0.50	No		0.50	No		0.50				

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Background PM	PHF	0.95		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	1BP.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	109		70	195	144	47	882	99	159	880	72

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	6.1	3.3	62.3	22.0	16.3	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		24.3		30.0	14.1	70.3	25.4	81.6
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		16.0		24.0	6.9		17.0	
Green Extension Time (g_e), s		0.3		0.0	0.1	0.0	0.5	0.0
Phase Call Probability		1.00		1.00	0.87		1.00	
Max Out Probability		0.55		1.00	0.00		0.10	

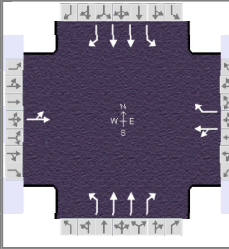
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		162			279	72	49	928	77	167	926	67
Adjusted Saturation Flow Rate (s), veh/h/ln		1711			1700	1471	1498	1588	1471	1641	1614	1448
Queue Service Time (g_s), s		14.0			22.0	6.5	4.9	32.1	3.8	15.0	24.1	2.6
Cycle Queue Clearance Time (g_c), s		14.0			22.0	6.5	4.9	32.1	3.8	15.0	24.1	2.6
Green Ratio (g/C)		0.11			0.15	0.15	0.04	0.42	0.42	0.12	0.49	0.49
Capacity (c), veh/h		186			249	216	61	1319	611	190	1584	711
Volume-to-Capacity Ratio (X)		0.871			1.119	0.332	0.812	0.704	0.126	0.879	0.585	0.095
Back of Queue (Q), ft/ln (95 th percentile)		295			604	116	116	435	61	287	298	40
Back of Queue (Q), veh/ln (95 th percentile)		11.7			23.8	4.6	4.2	16.6	2.4	11.3	11.5	1.6
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.72	0.39	0.00	0.07	0.72	0.00	0.11
Uniform Delay (d_1), s/veh		65.8			64.0	57.4	70.4	26.7	20.4	62.4	17.4	13.7
Incremental Delay (d_2), s/veh		23.7			92.6	1.3	29.1	3.2	0.4	21.6	1.6	0.3
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		89.5			156.6	58.7	99.5	29.9	20.8	84.0	19.0	13.9
Level of Service (LOS)		F			F	E	F	C	C	F	B	B
Approach Delay, s/veh / LOS	89.5	F		136.6	F		32.5	C		28.1	C	
Intersection Delay, s/veh / LOS	47.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.49	B	2.04	B	1.72	B
Bicycle LOS Score / LOS	0.72	A	1.07	A	1.36	A	1.45	A

HCS Signalized Intersection Input Data

General Information						Intersection Information													
Agency	The Traffic Group, Inc.					Duration, h	0.250												
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other												
Jurisdiction	Sussex County, DE	Time Period	Background SAT			PHF	0.92												
Urban Street	US 113	Analysis Year	2025			Analysis Period	1 > 7:00												
Intersection	US 113 & Nine Foot Rd/...		File Name	3BS.xus															
Project Description	Timmons Property																		
Demand Information						EB			WB			NB			SB				
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R		
Demand (v), veh/h						19	79		60	57	88	19	1261	104	107	1569	27		
Signal Information																			
Cycle, s	165.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On	Green	3.1	2.7	91.8	14.8	12.7	0.0									
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0									
				Red	2.0	2.0	2.0	3.0	3.0	0.0									
Traffic Information						EB			WB			NB			SB				
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R		
Demand (v), veh/h						19	79		60	57	88	19	1261	104	107	1569	27		
Initial Queue (Q_0), veh/h						0	0		0	0	0	0	0	0	0	0	0		
Base Saturation Flow Rate (s_0), veh/h						1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750		
Parking (N_m), man/h						None			None			None			None				
Heavy Vehicles (P_{HV}), %						5			2			1			5				
Ped / Bike / RTOR, /h						0			0			44			0				
Buses (N_b), buses/h						0			0			0			0				
Arrival Type (AT)						3			3			3			4				
Upstream Filtering (I)						1.00			1.00			1.00			1.00				
Lane Width (W), ft						10.0			12.0			10.0			11.0				
Turn Bay Length, ft						0			0			160			300				
Grade (P_g), %						0			0			0			0				
Speed Limit, mi/h						40			40			25			45				
Phase Information						EBL		EBT		WBL		WBT		NBL		NBT		SBL	
Maximum Green (G_{max}) or Phase Split, s								30.0				30.0		20.0		77.0		28.0	
Yellow Change Interval (Y), s								5.0				5.0		6.0		6.0		6.0	
Red Clearance Interval (R_c), s								3.0				3.0		2.0		2.0		2.0	
Minimum Green (G_{min}), s								5				5		5		20		5	
Start-Up Lost Time (l_t), s						2.0		2.0		2.0		2.0		2.0		2.0		2.0	
Extension of Effective Green (e), s						2.0		2.0		2.0		2.0		2.0		2.0		2.0	
Passage (PT), s								4.0				4.0		4.0		3.0		4.0	
Recall Mode								Off				Off		Off		Min		Off	
Dual Entry								Yes				Yes		No		Yes		No	
Walk ($Walk$), s								0.0				0.0				0.0			
Pedestrian Clearance Time (PC), s								0.0				0.0				0.0			
Multimodal Information						EB			WB			NB			SB				
85th % Speed / Rest in Walk / Corner Radius						0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0		
Walkway / Crosswalk Width / Length, ft						9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0		
Street Width / Island / Curb, ft						0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No		
Width Outside / Bike Lane / Shoulder, ft						12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0		
Pedestrian Signal / Occupied Parking						No		0.50	No		0.50	No		0.50	No		0.50		

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Background SAT	PHF	0.92		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3BS.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	79		60	57	88	19	1261	104	107	1569	27

Signal Information											
Cycle, s	165.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	3.1	2.7	91.8	14.8	12.7	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		20.7		22.8	11.1	99.8	21.7	110.5
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		12.4		14.3	4.1		13.3	
Green Extension Time (g_e), s		0.4		0.5	0.0	0.0	0.5	0.0
Phase Call Probability		0.99		1.00	0.61		1.00	
Max Out Probability		0.00		0.28	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		107			127	48	21	1371	72	116	1705	14
Adjusted Saturation Flow Rate (s), veh/h/ln		1666			1680	1471	1602	1653	1448	1667	1640	1483
Queue Service Time (g_s), s		10.4			12.3	5.0	2.1	39.5	2.3	11.3	48.1	0.3
Cycle Queue Clearance Time (g_c), s		10.4			12.3	5.0	2.1	39.5	2.3	11.3	48.1	0.3
Green Ratio (g/C)		0.08			0.09	0.09	0.02	0.56	0.56	0.08	0.62	0.62
Capacity (c), veh/h		128			151	132	30	1839	806	139	2037	921
Volume-to-Capacity Ratio (X)		0.832			0.844	0.363	0.695	0.745	0.089	0.840	0.837	0.015
Back of Queue (Q), ft/ln (95 th percentile)		227			262	92	53	432	35	225	331	4
Back of Queue (Q), veh/ln (95 th percentile)		8.7			10.3	3.6	2.1	17.1	1.4	9.0	13.0	0.2
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.57	0.18	0.00	0.04	0.56	0.00	0.01
Uniform Delay (d_1), s/veh		75.1			74.0	70.7	80.0	14.5	9.7	72.3	9.5	5.4
Incremental Delay (d_2), s/veh		17.4			20.2	2.4	34.1	2.8	0.2	17.0	4.3	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		92.5			94.2	73.0	114.1	17.3	10.0	89.2	13.8	5.4
Level of Service (LOS)		F			F	E	F	B	A	F	B	A
Approach Delay, s/veh / LOS	92.5	F		88.4	F		18.3	B		18.5	B	
Intersection Delay, s/veh / LOS	24.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.53	C	2.51	C	1.97	B	1.68	B
Bicycle LOS Score / LOS	0.65	A	0.78	A	1.69	B	2.00	B

HCS Signalized Intersection Input Data

General Information						Intersection Information								
Agency	The Traffic Group, Inc.					Duration, h	0.250							
Analyst	MYC		Analysis Date	2/26/2024		Area Type	Other							
Jurisdiction	Sussex County, DE		Time Period	Total AM Peak		PHF	0.92							
Urban Street	US 113		Analysis Year	2025		Analysis Period	1> 7:00							
Intersection	US 113 & Nine Foot Rd/...		File Name	3TA.xus										
Project Description	Timmons Property													

Demand Information				EB			WB			NB			SB		
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				93	213		97	157	168	56	662	71	132	902	37

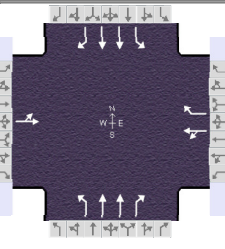
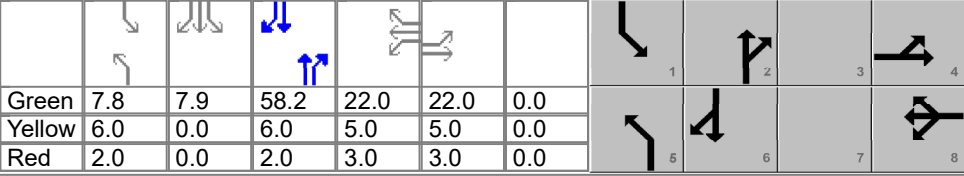
Signal Information															
Cycle, s	150.0	Reference Phase	2	Green	7.8	7.9	58.2	22.0	22.0	0.0					
Offset, s	0	Reference Point	End	Yellow	6.0	0.0	6.0	5.0	5.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	0.0	2.0	3.0	3.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On												

Traffic Information				EB			WB			NB			SB		
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				93	213		97	157	168	56	662	71	132	902	37
Initial Queue (Q_0), veh/h				0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h				1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h					None			None			None			None	
Heavy Vehicles (P_{HV}), %					6			7	6	21	10	9	9	11	24
Ped / Bike / RTOR, /h				0	0		0	0	96	0	0	34	0	0	15
Buses (N_b), buses/h				0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)				3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)				1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft					10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft					0			0	160	300	0	850	400	0	350
Grade (P_g), %					0			0			0			0	
Speed Limit, mi/h				40	40		25	25	25	45	45	45	55	55	55

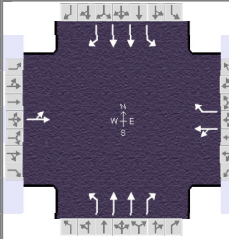
Phase Information		EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s			30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s			5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s			3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s			5		5	5	20	5	20
Start-Up Lost Time (l_t), s		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s			4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode			Off		Off	Off	Min	Off	Min
Dual Entry			Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s			0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s			0.0		0.0		0.0		0.0

Multimodal Information				EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius				0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft				9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft				0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft				12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking				No		0.50	No		0.50	No		0.50	No		0.50

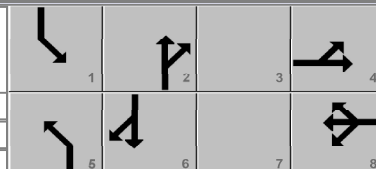
HCS Signalized Intersection Results Summary

General Information						Intersection Information													
Agency		The Traffic Group, Inc.				Duration, h		0.250											
Analyst		MYC		Analysis Date		2/26/2024		Area Type		Other									
Jurisdiction		Sussex County, DE		Time Period		Total AM Peak		PHF		0.92									
Urban Street		US 113		Analysis Year		2025		Analysis Period		1> 7:00									
Intersection		US 113 & Nine Foot Rd/...		File Name		3TA.xus													
Project Description		Timmons Property																	
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h				93	213		97	157	168	56	662	71	132	902	37				
Signal Information																			
Cycle, s	150.0	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	No	Simult. Gap E/W	On																
Force Mode	Fixed	Simult. Gap N/S	On																
				Green	7.8	7.9	58.2	22.0	22.0	0.0									
				Yellow	6.0	0.0	6.0	5.0	5.0	0.0									
				Red	2.0	0.0	2.0	3.0	3.0	0.0									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase						4				8		5		2		1		6	
Case Number						12.0				11.0		2.0		3.0		2.0		3.0	
Phase Duration, s						30.0				30.0		15.8		66.2		23.8		74.2	
Change Period, (Y+R c), s						8.0				8.0		8.0		8.0		8.0		8.0	
Max Allow Headway (MAH), s						5.0				5.3		5.0		0.0		4.9		0.0	
Queue Clearance Time (g s), s						24.0				24.0		8.5				15.6			
Green Extension Time (g e), s						0.0				0.0		0.0		0.0		0.2		0.0	
Phase Call Probability						1.00				1.00		0.92				1.00			
Max Out Probability						1.00				1.00		1.00				1.00			
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				7	4		3	8	18	5	2	12	1	6	16				
Adjusted Flow Rate (v), veh/h					333			276	78	61	720	40	143	980	24				
Adjusted Saturation Flow Rate (s), veh/h/ln					1643			1623	1414	1394	1536	1379	1550	1523	1205				
Queue Service Time (g s), s					22.0			22.0	7.5	6.5	24.7	2.2	13.6	34.8	1.3				
Cycle Queue Clearance Time (g c), s					22.0			22.0	7.5	6.5	24.7	2.2	13.6	34.8	1.3				
Green Ratio (g/C)					0.15			0.15	0.15	0.05	0.39	0.39	0.11	0.44	0.44				
Capacity (c), veh/h					241			238	207	73	1192	535	163	1343	532				
Volume-to-Capacity Ratio (X)					1.380			1.160	0.377	0.835	0.604	0.075	0.879	0.730	0.045				
Back of Queue (Q), ft/ln (95 th percentile)					893			648	133	152	355	36	282	441	20				
Back of Queue (Q), veh/ln (95 th percentile)					34.1			24.6	5.1	5.2	13.2	1.4	10.5	16.2	0.7				
Queue Storage Ratio (RQ) (95 th percentile)					0.00			0.00	0.83	0.51	0.00	0.04	0.71	0.00	0.06				
Uniform Delay (d 1), s/veh					64.0			64.0	57.8	69.1	28.1	22.7	63.5	24.4	17.5				
Incremental Delay (d 2), s/veh					194.9			108.2	1.6	32.3	2.3	0.3	29.9	3.5	0.2				
Initial Queue Delay (d 3), s/veh					0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Control Delay (d), s/veh					258.9			172.2	59.4	101.5	30.4	23.0	93.5	28.0	17.7				
Level of Service (LOS)					F			F	E	F	C	C	F	C	B				
Approach Delay, s/veh / LOS				258.9	F		147.3	F		35.3	D		35.9	D					
Intersection Delay, s/veh / LOS				78.5						E									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS				2.52	C		2.50	C		2.07	B		1.74	B					
Bicycle LOS Score / LOS				0.99	A		1.07	A		1.16	A		1.43	A					

HCS Signalized Intersection Input Data

General Information						Intersection Information								
Agency	The Traffic Group, Inc.					Duration, h	0.250							
Analyst	MYC		Analysis Date	2/26/2024		Area Type	Other							
Jurisdiction	Sussex County, DE		Time Period	Total PM Peak		PHF	0.95							
Urban Street	US 113		Analysis Year	2025		Analysis Period	1> 7:00							
Intersection	US 113 & Nine Foot Rd/...		File Name	3TP.xus										
Project Description	Timmons Property													

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	80	119		70	209	144	88	851	99	159	869	72

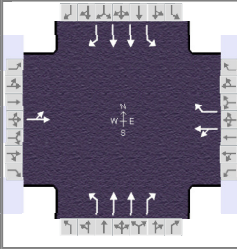
Signal Information													
Cycle, s	150.0	Reference Phase	2	Green	11.0	6.3	58.4	22.0	20.4	0.0			
Offset, s	0	Reference Point	End	Yellow	6.0	0.0	6.0	5.0	5.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	0.0	2.0	3.0	3.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On										

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	80	119		70	209	144	88	851	99	159	869	72
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		1			2	1	13	6	1	2	4	3
Ped / Bike / RTOR, /h	0	0		0	0	76	0	0	26	0	0	8
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Total PM Peak	PHF	0.95		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3TP.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	80	119		70	209	144	88	851	99	159	869	72

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	11.0	6.3	58.4	22.0	20.4	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0	
				Red	2.0	0.0	2.0	3.0	3.0	0.0	

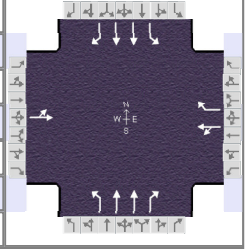
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		28.4		30.0	19.0	66.4	25.3	72.7
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.2	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		20.2		24.0	11.1		17.0	
Green Extension Time (g_e), s		0.2		0.0	0.1	0.0	0.3	0.0
Phase Call Probability		1.00		1.00	0.98		1.00	
Max Out Probability		1.00		1.00	1.00		1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		209			294	72	93	896	77	167	915	67
Adjusted Saturation Flow Rate (s), veh/h/ln		1702			1701	1471	1498	1588	1471	1641	1614	1448
Queue Service Time (g_s), s		18.2			22.0	6.5	9.1	32.6	4.1	15.0	29.0	3.2
Cycle Queue Clearance Time (g_c), s		18.2			22.0	6.5	9.1	32.6	4.1	15.0	29.0	3.2
Green Ratio (g/C)		0.14			0.15	0.15	0.07	0.39	0.39	0.12	0.43	0.43
Capacity (c), veh/h		231			250	216	109	1236	573	189	1392	625
Volume-to-Capacity Ratio (X)		0.907			1.177	0.332	0.847	0.725	0.134	0.887	0.657	0.108
Back of Queue (Q), ft/ln (95 th percentile)		380			665	116	216	451	66	299	378	50
Back of Queue (Q), veh/ln (95 th percentile)		15.1			26.2	4.6	7.8	17.2	2.6	11.8	14.6	2.0
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.72	0.72	0.00	0.08	0.75	0.00	0.14
Uniform Delay (d_1), s/veh		63.9			64.0	57.4	66.9	29.9	23.0	62.5	24.3	18.8
Incremental Delay (d_2), s/veh		32.9			113.3	1.3	33.9	3.7	0.5	28.5	2.4	0.3
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		96.8			177.3	58.7	100.8	33.6	23.5	91.0	26.7	19.2
Level of Service (LOS)		F			F	E	F	C	C	F	C	B
Approach Delay, s/veh / LOS	96.8	F		154.1	F		38.7	D		35.7	D	
Intersection Delay, s/veh / LOS	56.9						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.49	B	2.04	B	1.73	B
Bicycle LOS Score / LOS	0.80	A	1.09	A	1.37	A	1.44	A

HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	The Traffic Group, Inc.			Duration, h	0.250
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other
Jurisdiction	Sussex County, DE	Time Period	Total SAT	PHF	0.92
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00
Intersection	US 113 & Nine Foot Rd/...	File Name	3TS.xus		
Project Description	Timmons Property				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	93		60	74	88	67	1225	104	107	1556	27

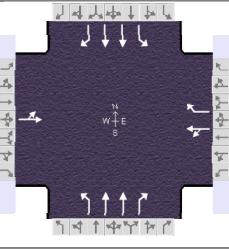
Signal Information											
Cycle, s	165.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	9.2	4.4	83.6	16.5	19.3	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0	
				Red	2.0	0.0	2.0	3.0	3.0	0.0	

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	93		60	74	88	67	1225	104	107	1556	27
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		5			2	1	5	1	3	0	2	0
Ped / Bike / RTOR, /h	0	0		0	0	44	0	0	38	0	0	14
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	77.0	28.0	85.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Total SAT	PHF	0.92		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3TS.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	93		60	74	88	67	1225	104	107	1556	27

Signal Information											
Cycle, s	165.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	9.2	4.4	83.6	16.5	19.3	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0	
				Red	2.0	0.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		27.3		24.5	17.2	91.6	21.6	96.0
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		18.8		16.1	9.4		13.3	
Green Extension Time (g_e), s		0.5		0.5	0.2	0.0	0.4	0.0
Phase Call Probability		1.00		1.00	0.96		1.00	
Max Out Probability		0.12		0.71	0.01		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		171			146	48	73	1332	72	116	1691	14
Adjusted Saturation Flow Rate (s), veh/h/ln		1648			1685	1471	1602	1653	1448	1667	1640	1483
Queue Service Time (g_s), s		16.8			14.1	5.0	7.4	46.6	2.8	11.3	78.7	0.5
Cycle Queue Clearance Time (g_c), s		16.8			14.1	5.0	7.4	46.6	2.8	11.3	78.7	0.5
Green Ratio (g/C)		0.12			0.10	0.10	0.06	0.51	0.51	0.08	0.53	0.53
Capacity (c), veh/h		193			169	147	89	1674	734	138	1749	791
Volume-to-Capacity Ratio (X)		0.885			0.864	0.325	0.814	0.795	0.098	0.845	0.967	0.018
Back of Queue (Q), ft/ln (95 th percentile)		340			298	90	164	554	45	226	846	7
Back of Queue (Q), veh/ln (95 th percentile)		13.1			11.7	3.6	6.3	22.0	1.8	9.0	33.3	0.3
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.56	0.55	0.00	0.05	0.56	0.00	0.02
Uniform Delay (d_1), s/veh		71.8			73.1	69.1	75.5	20.8	13.7	72.4	22.5	11.2
Incremental Delay (d_2), s/veh		23.6			24.7	1.8	21.5	4.0	0.3	17.6	15.0	0.0
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		95.3			97.9	70.9	97.0	24.8	13.9	89.9	37.5	11.2
Level of Service (LOS)		F			F	E	F	C	B	F	D	B
Approach Delay, s/veh / LOS	95.3	F		91.2	F		27.8	C		40.7	D	
Intersection Delay, s/veh / LOS	40.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.53	C	2.51	C	1.98	B	1.70	B
Bicycle LOS Score / LOS	0.75	A	0.81	A	1.71	B	1.99	B

HCS Signalized Intersection Input Data

General Information						Intersection Information								
Agency	The Traffic Group, Inc.					Duration, h	0.250							
Analyst	MYC		Analysis Date	2/26/2024		Area Type	Other							
Jurisdiction	Sussex County, DE		Time Period	Total AM Peak		PHF	0.92							
Urban Street	US 113		Analysis Year	2025		Analysis Period	1> 7:00							
Intersection	US 113 & Nine Foot Rd/...		File Name	3TA-Timing Adj.xus										
Project Description	Timmons Property													

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	93	213		97	157	168	56	662	71	132	902	37

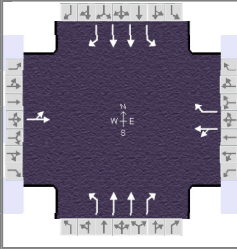
Signal Information													
Cycle, s	150.0	Reference Phase	2	Green	7.8	7.9	48.2	22.0	32.0	0.0			
Offset, s	0	Reference Point	End	Yellow	6.0	0.0	6.0	5.0	5.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	0.0	2.0	3.0	3.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On										

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	93	213		97	157	168	56	662	71	132	902	37
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		6			7	6	21	10	9	9	11	24
Ped / Bike / RTOR, /h	0	0		0	0	96	0	0	34	0	0	15
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		40.0		30.0	20.0	52.0	28.0	60.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Total AM Peak	PHF	0.92		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3TA-Timing Adj.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	93	213		97	157	168	56	662	71	132	902	37

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	7.8	7.9	48.2	22.0	32.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0	
				Red	2.0	0.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		40.0		30.0	15.8	56.2	23.8	64.2
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		32.0		24.0	8.5		15.6	
Green Extension Time (g_e), s		0.0		0.0	0.0	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	0.92		1.00	
Max Out Probability		1.00		1.00	1.00		1.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		333			276	78	61	720	40	143	980	24
Adjusted Saturation Flow Rate (s), veh/h/ln		1643			1623	1414	1394	1536	1379	1550	1523	1205
Queue Service Time (g_s), s		30.0			22.0	7.5	6.5	29.2	2.6	13.6	42.3	1.5
Cycle Queue Clearance Time (g_c), s		30.0			22.0	7.5	6.5	29.2	2.6	13.6	42.3	1.5
Green Ratio (g/C)		0.21			0.15	0.15	0.05	0.32	0.32	0.11	0.37	0.37
Capacity (c), veh/h		350			238	207	73	988	443	163	1141	452
Volume-to-Capacity Ratio (X)		0.950			1.160	0.377	0.835	0.728	0.091	0.879	0.859	0.053
Back of Queue (Q), ft/ln (95 th percentile)		582			648	133	152	430	44	282	570	24
Back of Queue (Q), veh/ln (95 th percentile)		22.2			24.6	5.1	5.2	15.9	1.6	10.5	21.0	0.8
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.83	0.51	0.00	0.05	0.71	0.00	0.07
Uniform Delay (d_1), s/veh		58.2			64.0	57.8	69.1	37.4	29.8	63.5	34.1	23.9
Incremental Delay (d_2), s/veh		35.3			108.2	1.6	32.2	4.7	0.4	29.8	8.5	0.2
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		93.5			172.2	59.4	101.3	42.1	30.2	93.4	42.6	24.1
Level of Service (LOS)		F			F	E	F	D	C	F	D	C
Approach Delay, s/veh / LOS	93.5	F		147.3	F		45.9	D		48.5	D	
Intersection Delay, s/veh / LOS	66.5						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.50	C	2.08	B	1.75	B
Bicycle LOS Score / LOS	0.99	A	1.07	A	1.16	A	1.43	A

HCS Signalized Intersection Input Data

General Information						Intersection Information						
Agency	The Traffic Group, Inc.					Duration, h	0.250					
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other					
Jurisdiction	Sussex County, DE	Time Period	Total PM Peak			PHF	0.95					
Urban Street	US 113	Analysis Year	2025			Analysis Period	1> 7:00					
Intersection	US 113 & Nine Foot Rd/...		File Name	3TP-Timing Adj.xus								
Project Description	Timmons Property											

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	80	119		70	209	144	88	851	99	159	869	72

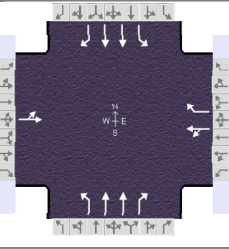
Signal Information												
Cycle, s	150.0	Reference Phase	2	Green	11.2	6.4	51.1	28.3	21.0	0.0		
Offset, s	0	Reference Point	End	Yellow	6.0	0.0	6.0	5.0	5.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	0.0	2.0	3.0	3.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On									

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	80	119		70	209	144	88	851	99	159	869	72
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		1			2	1	13	6	1	2	4	3
Ped / Bike / RTOR, /h	0	0		0	0	76	0	0	26	0	0	8
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft		10.0			12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft		0			0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		40.0		40.0	20.0	42.0	28.0	50.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Total PM Peak	PHF	0.95		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3TP-Timing Adj.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	80	119		70	209	144	88	851	99	159	869	72

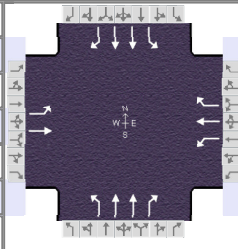
Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	11.2	6.4	51.1	28.3	21.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0	
				Red	2.0	0.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		12.0		11.0	2.0	3.0	2.0	3.0
Phase Duration, s		29.0		36.3	19.2	59.1	25.6	65.6
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.2	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		20.1		27.4	11.1		16.9	
Green Extension Time (g_e), s		0.9		0.9	0.3	0.0	0.7	0.0
Phase Call Probability		1.00		1.00	0.98		1.00	
Max Out Probability		0.00		1.00	0.00		0.00	

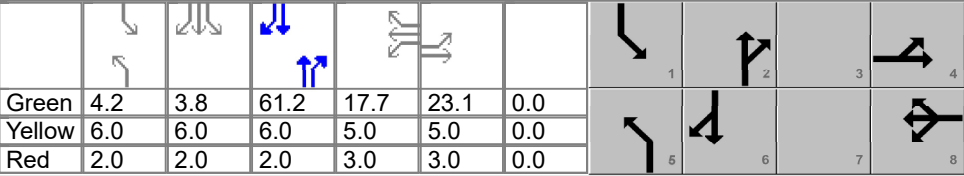
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		209			294	72	93	896	77	167	915	67
Adjusted Saturation Flow Rate (s), veh/h/ln		1702			1701	1471	1498	1588	1471	1641	1614	1448
Queue Service Time (g_s), s		18.1			25.4	6.2	9.1	37.0	4.6	14.9	33.4	3.6
Cycle Queue Clearance Time (g_c), s		18.1			25.4	6.2	9.1	37.0	4.6	14.9	33.4	3.6
Green Ratio (g/C)		0.14			0.19	0.19	0.07	0.34	0.34	0.12	0.38	0.38
Capacity (c), veh/h		238			321	277	112	1083	502	193	1239	556
Volume-to-Capacity Ratio (X)		0.879			0.916	0.258	0.830	0.827	0.153	0.869	0.738	0.121
Back of Queue (Q), ft/ln (95 th percentile)		342			494	109	197	527	76	275	447	58
Back of Queue (Q), veh/ln (95 th percentile)		13.6			19.4	4.3	7.1	20.1	3.0	10.8	17.3	2.3
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.68	0.66	0.00	0.09	0.69	0.00	0.17
Uniform Delay (d_1), s/veh		63.3			59.7	51.9	66.6	37.1	28.2	62.1	30.7	23.5
Incremental Delay (d_2), s/veh		14.4			26.5	0.7	19.4	7.3	0.6	15.2	4.0	0.4
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		77.7			86.2	52.6	86.0	44.3	28.9	77.3	34.7	23.9
Level of Service (LOS)		E			F	D	F	D	C	E	C	C
Approach Delay, s/veh / LOS	77.7	E		79.6	E		46.9	D		40.2	D	
Intersection Delay, s/veh / LOS	50.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.49	B	2.05	B	1.73	B
Bicycle LOS Score / LOS	0.80	A	1.09	A	1.37	A	1.44	A

HCS Signalized Intersection Input Data

General Information				Intersection Information		
Agency	The Traffic Group, Inc.			Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other	
Jurisdiction	Sussex County, DE	Time Period	Existing AM Peak	PHF	0.87	
Urban Street	US 113	Analysis Year	2023	Analysis Period	1> 7:00	
Intersection	US 113 & Nine Foot Rd/...	File Name	3EA.xus			
Project Description	Timmons Property					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	65	202		87	145	157	29	670	67	126	892	36

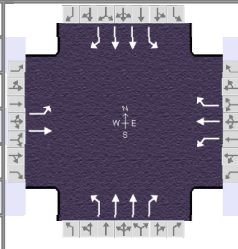
Signal Information											
Cycle, s	150.0	Reference Phase	2		Green	4.2	3.8	61.2	17.7	23.1	0.0
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	65	202		87	145	157	29	670	67	126	892	36
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	6		0	7	6	21	10	9	9	11	24
Ped / Bike / RTOR, /h	0	0		0	0	90	0	0	33	0	0	14
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft	0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	The Traffic Group, Inc.			Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other	
Jurisdiction	Sussex County, DE	Time Period	Existing AM Peak	PHF	0.87	
Urban Street	US 113	Analysis Year	2023	Analysis Period	1> 7:00	
Intersection	US 113 & Nine Foot Rd/...	File Name	3EA.xus			
Project Description	Timmons Property					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	65	202		87	145	157	29	670	67	126	892	36

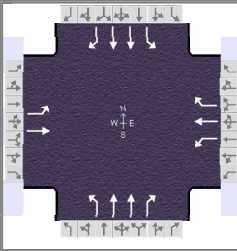
Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	4.2	3.8	61.2	17.7	23.1	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		31.1		25.7	12.2	69.2	24.0	81.0
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		22.5		16.8	5.6		15.7	
Green Extension Time (g_e), s		0.5		0.9	0.0	0.0	0.3	0.0
Phase Call Probability		1.00		1.00	0.75		1.00	
Max Out Probability		1.00		1.00	0.01		0.19	

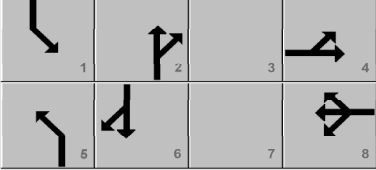
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	75	232		100	167	77	33	770	39	145	1025	25
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1668		1667	1654	1414	1394	1536	1379	1550	1523	1205
Queue Service Time (g_s), s	6.0	20.5		8.4	14.8	7.6	3.6	25.7	2.0	13.7	32.1	1.1
Cycle Queue Clearance Time (g_c), s	6.0	20.5		8.4	14.8	7.6	3.6	25.7	2.0	13.7	32.1	1.1
Green Ratio (g/C)	0.15	0.15		0.12	0.12	0.12	0.03	0.41	0.41	0.11	0.49	0.49
Capacity (c), veh/h	256	257		196	195	167	39	1254	563	166	1483	587
Volume-to-Capacity Ratio (X)	0.291	0.905		0.509	0.854	0.462	0.851	0.614	0.069	0.875	0.691	0.043
Back of Queue (Q), ft/ln (95 th percentile)	115	419		170	318	137	93	363	33	274	385	18
Back of Queue (Q), veh/ln (95 th percentile)	4.6	16.0		6.8	12.1	5.2	3.2	13.4	1.2	10.2	14.1	0.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.86	0.31	0.00	0.04	0.69	0.00	0.05
Uniform Delay (d_1), s/veh	56.2	62.4		62.1	64.9	61.7	71.9	26.1	20.7	63.3	19.1	13.7
Incremental Delay (d_2), s/veh	0.9	28.6		2.9	22.8	2.8	47.5	2.3	0.2	24.0	2.7	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.1	91.0		65.0	87.7	64.5	119.3	28.4	20.9	87.3	21.8	13.8
Level of Service (LOS)	E	F		E	F	E	F	C	C	F	C	B
Approach Delay, s/veh / LOS	82.7	F		75.9	E		31.6	C		29.6	C	
Intersection Delay, s/veh / LOS	42.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.52	C	2.50	C	2.25	B	1.96	B
Bicycle LOS Score / LOS	0.94	A	1.05	A	1.18	A	1.47	A

HCS Signalized Intersection Input Data

General Information						Intersection Information						
Agency	The Traffic Group, Inc.					Duration, h	0.250					
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other					
Jurisdiction	Sussex County, DE	Time Period	Existing PM Peak			PHF	0.95					
Urban Street	US 113	Analysis Year	2023			Analysis Period	1 > 7:00					
Intersection	US 113 & Nine Foot Rd/...		File Name	3EP.xus								
Project Description	Timmons Property											

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	105		63	191	137	46	865	87	146	863	71

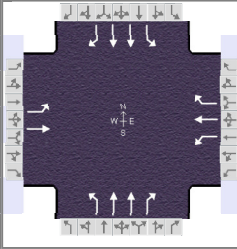
Signal Information											
Cycle, s	150.0	Reference Phase	2	Green	6.0	2.3	70.1	19.7	11.9	0.0	
Offset, s	0	Reference Point	End	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	3.0	3.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On								

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	105		63	191	137	46	865	87	146	863	71
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	1		0	2	1	13	6	1	2	4	3
Ped / Bike / RTOR, /h	0	0		0	0	72	0	0	23	0	0	8
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft	0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Existing PM Peak	PHF	0.95		
Urban Street	US 113	Analysis Year	2023	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3EP.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	105		63	191	137	46	865	87	146	863	71

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	6.0	2.3	70.1	19.7	11.9	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		19.9		27.7	14.0	78.1	24.3	88.4
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		11.4		19.2	6.8		15.7	
Green Extension Time (g_e), s		0.5		0.5	0.1	0.0	0.6	0.0
Phase Call Probability		1.00		1.00	0.87		1.00	
Max Out Probability		0.01		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	47	111		66	201	68	48	911	67	154	908	66
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1736		1667	1723	1471	1498	1588	1471	1641	1614	1448
Queue Service Time (g_s), s	4.0	9.4		5.4	17.2	6.4	4.8	26.3	2.8	13.7	19.3	2.1
Cycle Queue Clearance Time (g_c), s	4.0	9.4		5.4	17.2	6.4	4.8	26.3	2.8	13.7	19.3	2.1
Green Ratio (g/C)	0.08	0.08		0.13	0.13	0.13	0.04	0.47	0.47	0.11	0.54	0.54
Capacity (c), veh/h	132	138		219	226	193	60	1484	687	178	1729	776
Volume-to-Capacity Ratio (X)	0.358	0.801		0.303	0.888	0.354	0.807	0.614	0.098	0.862	0.525	0.085
Back of Queue (Q), ft/ln (95 th percentile)	81	207		107	368	113	113	347	44	259	240	32
Back of Queue (Q), veh/ln (95 th percentile)	3.2	8.2		4.3	14.5	4.5	4.1	13.2	1.8	10.2	9.3	1.2
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.71	0.38	0.00	0.05	0.65	0.00	0.09
Uniform Delay (d_1), s/veh	65.4	67.9		58.9	64.1	59.3	70.4	20.0	15.6	63.0	12.7	10.2
Incremental Delay (d_2), s/veh	2.3	14.0		1.1	28.8	1.6	29.0	1.9	0.3	15.5	1.1	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	67.7	81.9		60.0	92.8	60.9	99.4	21.9	15.9	78.5	13.9	10.5
Level of Service (LOS)	E	F		E	F	E	F	C	B	E	B	B
Approach Delay, s/veh / LOS	77.6	E		79.8	E		25.2	C		22.5	C	
Intersection Delay, s/veh / LOS	34.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.49	B	2.21	B	1.93	B
Bicycle LOS Score / LOS	0.72	A	1.04	A	1.33	A	1.42	A

HCS Signalized Intersection Input Data

General Information						Intersection Information						
Agency	The Traffic Group, Inc.					Duration, h	0.250					
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other					
Jurisdiction	Sussex County, DE	Time Period	Existing SAT PK			PHF	0.90					
Urban Street	US 113	Analysis Year	2023			Analysis Period	1> 7:00					
Intersection	US 113 & Nine Foot Rd/...		File Name	3ES.xus								
Project Description	Timmons Property											

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	77		51	55	80	19	1236	93	96	1538	26

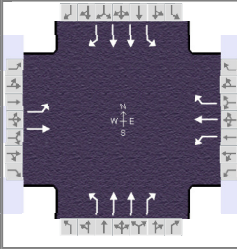
Signal Information													
Cycle, s	165.0	Reference Phase	2	Green	3.1	1.7	101.2	8.4	10.7	0.0			
Offset, s	0	Reference Point	End	Yellow	6.0	6.0	6.0	5.0	5.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	3.0	3.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On										

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	77		51	55	80	19	1236	93	96	1538	26
Initial Queue (Q_b), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	5		0	2	1	5	1	3	0	2	0
Ped / Bike / RTOR, /h	0	0		0	0	40	0	0	34	0	0	13
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft	0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	77.0	28.0	85.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Existing SAT PK	PHF	0.90		
Urban Street	US 113	Analysis Year	2023	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3ES.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	77		51	55	80	19	1236	93	96	1538	26

Signal Information											
Cycle, s	165.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	3.1	1.7	101.2	8.4	10.7	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

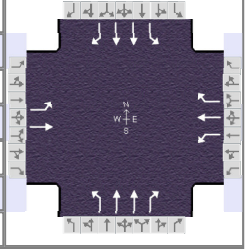
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		18.7		16.4	11.1	109.2	20.8	118.8
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		10.3		7.8	4.2		12.4	
Green Extension Time (g_e), s		0.5		0.7	0.1	0.0	0.5	0.0
Phase Call Probability		0.99		1.00	0.62		0.99	
Max Out Probability		0.00		0.01	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	21	86		57	61	44	21	1373	66	107	1709	14
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1682		1667	1723	1471	1602	1653	1448	1667	1640	1483
Queue Service Time (g_s), s	2.0	8.3		5.5	5.8	4.9	2.2	28.0	1.5	10.4	29.4	0.2
Cycle Queue Clearance Time (g_c), s	2.0	8.3		5.5	5.8	4.9	2.2	28.0	1.5	10.4	29.4	0.2
Green Ratio (g/C)	0.06	0.06		0.05	0.05	0.05	0.02	0.61	0.61	0.08	0.67	0.67
Capacity (c), veh/h	108	109		85	88	75	30	2027	888	129	2203	996
Volume-to-Capacity Ratio (X)	0.196	0.788		0.667	0.696	0.592	0.701	0.677	0.074	0.828	0.776	0.015
Back of Queue (Q), ft/ln (95 th percentile)	40	190		121	133	94	55	260	22	211	200	3
Back of Queue (Q), veh/ln (95 th percentile)	1.6	7.3		4.8	5.2	3.7	2.1	10.3	0.9	8.4	7.9	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.59	0.18	0.00	0.03	0.53	0.00	0.01
Uniform Delay (d_1), s/veh	73.1	76.1		76.9	77.0	76.6	80.0	8.4	6.0	72.9	4.4	2.8
Incremental Delay (d_2), s/veh	1.3	16.2		12.1	13.1	10.2	34.4	1.8	0.2	17.0	2.7	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.4	92.3		89.0	90.2	86.8	114.4	10.2	6.1	89.9	7.1	2.9
Level of Service (LOS)	E	F		F	F	F	F	B	A	F	A	A
Approach Delay, s/veh / LOS	88.7	F		88.8	F		11.5	B		11.9	B	
Intersection Delay, s/veh / LOS	17.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.53	C	2.51	C	2.15	B	1.90	B
Bicycle LOS Score / LOS	0.65	A	0.76	A	1.69	B	2.00	B

HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	The Traffic Group, Inc.			Duration, h	0.250
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other
Jurisdiction	Sussex County, DE	Time Period	Background AM	PHF	0.92
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00
Intersection	US 113 & Nine Foot Rd/...	File Name	3BA.xus		
Project Description	Timmons Property				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	66	205		97	150	168	30	683	71	132	910	37

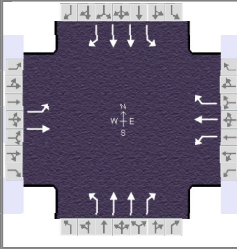
Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	4.1	3.8	62.3	17.4	22.3	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	66	205		97	150	168	30	683	71	132	910	37
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	6		0	7	6	21	10	9	9	11	24
Ped / Bike / RTOR, /h	0	0		0	0	96	0	0	34	0	0	15
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft	0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	62.0	28.0	70.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Background AM	PHF	0.92		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3BA.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	66	205		97	150	168	30	683	71	132	910	37

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	4.1	3.8	62.3	17.4	22.3	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		30.3		25.4	12.1	70.3	23.9	82.2
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		21.7		16.5	5.5		15.6	
Green Extension Time (g_e), s		0.6		0.9	0.0	0.0	0.4	0.0
Phase Call Probability		1.00		1.00	0.74		1.00	
Max Out Probability		1.00		0.92	0.00		0.09	

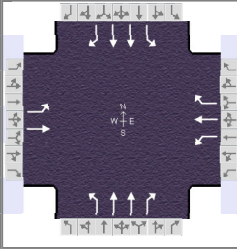
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	72	223		105	163	78	33	742	40	143	989	24
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1668		1667	1654	1414	1394	1536	1379	1550	1523	1205
Queue Service Time (g_s), s	5.7	19.7		9.0	14.5	7.8	3.5	23.8	2.0	13.6	29.3	1.0
Cycle Queue Clearance Time (g_c), s	5.7	19.7		9.0	14.5	7.8	3.5	23.8	2.0	13.6	29.3	1.0
Green Ratio (g/C)	0.15	0.15		0.12	0.12	0.12	0.03	0.42	0.42	0.11	0.49	0.49
Capacity (c), veh/h	248	248		193	192	164	38	1277	573	165	1506	596
Volume-to-Capacity Ratio (X)	0.289	0.898		0.545	0.849	0.477	0.853	0.581	0.070	0.872	0.657	0.040
Back of Queue (Q), ft/ln (95 th percentile)	111	401		181	311	140	91	338	33	269	351	16
Back of Queue (Q), veh/ln (95 th percentile)	4.4	15.3		7.2	11.8	5.3	3.1	12.5	1.2	10.1	12.9	0.5
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.88	0.30	0.00	0.04	0.67	0.00	0.05
Uniform Delay (d_1), s/veh	56.8	62.7		62.6	65.0	62.0	72.0	24.9	20.0	63.4	17.9	13.1
Incremental Delay (d_2), s/veh	0.9	26.6		3.4	21.8	3.0	48.5	1.9	0.2	22.0	2.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.7	89.3		65.9	86.8	65.1	120.4	26.8	20.2	85.4	20.2	13.2
Level of Service (LOS)	E	F		E	F	E	F	C	C	F	C	B
Approach Delay, s/veh / LOS	81.6	F		75.6	E		30.2	C		28.1	C	
Intersection Delay, s/veh / LOS	41.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.52	C	2.50	C	2.25	B	1.96	B
Bicycle LOS Score / LOS	0.92	A	1.06	A	1.16	A	1.44	A

HCS Signalized Intersection Input Data

General Information						Intersection Information											
Agency	The Traffic Group, Inc.					Duration, h	0.250										
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other										
Jurisdiction	Sussex County, DE	Time Period	Background PM			PHF	0.95										
Urban Street	US 113	Analysis Year	2025			Analysis Period	1> 7:00										
Intersection	US 113 & Nine Foot Rd/...		File Name	3BP.xus													
Project Description	Timmons Property																
Demand Information						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h						45	109		70	195	144	47	882	99	159	880	72
Signal Information																	
Cycle, s	150.0	Reference Phase	2														
Offset, s	0	Reference Point	End														
Uncoordinated	No	Simult. Gap E/W	On	Green	6.1	3.4	68.1	20.0	12.3	0.0							
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0							
				Red	2.0	2.0	2.0	3.0	3.0	0.0							
Traffic Information						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h						45	109		70	195	144	47	882	99	159	880	72
Initial Queue (Q_0), veh/h						0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h						1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h						None			None			None			None		
Heavy Vehicles (P_{HV}), %						0	1		0	2	1	13	6	1	2	4	3
Ped / Bike / RTOR, /h						0	0		0	0	76	0	0	26	0	0	8
Buses (N_b), buses/h						0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)						3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)						1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft						12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft						0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %							0			0			0			0	
Speed Limit, mi/h						40	40		25	25	25	45	45	45	55	55	55
Phase Information						EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT				
Maximum Green (G_{max}) or Phase Split, s							30.0		30.0	20.0	62.0	28.0	70.0				
Yellow Change Interval (Y), s							5.0		5.0	6.0	6.0	6.0	6.0				
Red Clearance Interval (R_c), s							3.0		3.0	2.0	2.0	2.0	2.0				
Minimum Green (G_{min}), s							5		5	5	20	5	20				
Start-Up Lost Time (l_t), s						2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Extension of Effective Green (e), s						2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Passage (PT), s							4.0		4.0	4.0	3.0	4.0	3.0				
Recall Mode							Off		Off	Off	Min	Off	Min				
Dual Entry							Yes		Yes	No	Yes	No	Yes				
Walk ($Walk$), s							0.0		0.0		0.0		0.0				
Pedestrian Clearance Time (PC), s							0.0		0.0		0.0		0.0				
Multimodal Information						EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius						0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft						9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft						0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft						12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking						No	0.50	No	0.50	No	0.50	No	0.50				

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Background PM	PHF	0.95		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3BP.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	45	109		70	195	144	47	882	99	159	880	72

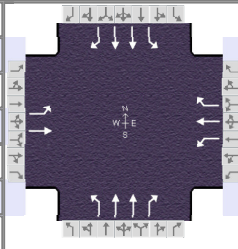
Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	6.1	3.4	68.1	20.0	12.3	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		20.3		28.0	14.1	76.1	25.6	87.5
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		11.7		19.6	6.9		16.9	
Green Extension Time (g_e), s		0.5		0.5	0.1	0.0	0.6	0.0
Phase Call Probability		1.00		1.00	0.87		1.00	
Max Out Probability		0.01		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	47	115		74	205	72	49	928	77	167	926	67
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1736		1667	1723	1471	1498	1588	1471	1641	1614	1448
Queue Service Time (g_s), s	4.0	9.7		6.0	17.6	6.6	4.9	28.3	3.3	14.9	20.4	2.2
Cycle Queue Clearance Time (g_c), s	4.0	9.7		6.0	17.6	6.6	4.9	28.3	3.3	14.9	20.4	2.2
Green Ratio (g/C)	0.08	0.08		0.13	0.13	0.13	0.04	0.45	0.45	0.12	0.53	0.53
Capacity (c), veh/h	136	142		223	230	197	61	1442	668	192	1712	768
Volume-to-Capacity Ratio (X)	0.347	0.807		0.331	0.892	0.364	0.807	0.644	0.115	0.871	0.541	0.088
Back of Queue (Q), ft/ln (95 th percentile)	80	213		119	376	118	115	376	53	276	250	33
Back of Queue (Q), veh/ln (95 th percentile)	3.2	8.5		4.8	14.8	4.7	4.2	14.3	2.1	10.9	9.7	1.3
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.74	0.38	0.00	0.06	0.69	0.00	0.09
Uniform Delay (d_1), s/veh	65.1	67.7		58.9	63.9	59.2	70.3	21.7	16.8	62.2	13.3	10.6
Incremental Delay (d_2), s/veh	2.1	14.1		1.2	29.6	1.6	28.5	2.2	0.3	15.4	1.2	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	67.2	81.8		60.1	93.5	60.8	98.9	24.0	17.2	77.6	14.5	10.9
Level of Service (LOS)	E	F		E	F	E	F	C	B	E	B	B
Approach Delay, s/veh / LOS	77.5	E		79.8	E		27.0	C		23.4	C	
Intersection Delay, s/veh / LOS	35.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.49	B	2.22	B	1.94	B
Bicycle LOS Score / LOS	0.72	A	1.07	A	1.36	A	1.45	A

HCS Signalized Intersection Input Data

General Information				Intersection Information		
Agency	The Traffic Group, Inc.			Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other	
Jurisdiction	Sussex County, DE	Time Period	Background SAT	PHF	0.92	
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00	
Intersection	US 113 & Nine Foot Rd/...	File Name	3BS.xus			
Project Description	Timmons Property					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	79		60	57	88	19	1261	104	107	1569	27

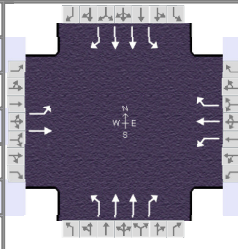
Signal Information											
Cycle, s	165.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	3.1	2.7	99.5	9.1	10.7	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	79		60	57	88	19	1261	104	107	1569	27
Initial Queue (Q_0), veh/h	0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h	1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	5		0	2	1	5	1	3	0	2	0
Ped / Bike / RTOR, /h	0	0		0	0	44	0	0	38	0	0	14
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft	0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %		0			0			0			0	
Speed Limit, mi/h	40	40		25	25	25	45	45	45	55	55	55

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	77.0	28.0	85.0
Yellow Change Interval (Y), s		5.0		5.0	6.0	6.0	6.0	6.0
Red Clearance Interval (R_c), s		3.0		3.0	2.0	2.0	2.0	2.0
Minimum Green (G_{min}), s		5		5	5	20	5	20
Start-Up Lost Time (l_t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s		4.0		4.0	4.0	3.0	4.0	3.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk ($Walk$), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	The Traffic Group, Inc.			Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other	
Jurisdiction	Sussex County, DE	Time Period	Background SAT	PHF	0.92	
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00	
Intersection	US 113 & Nine Foot Rd/...	File Name	3BS.xus			
Project Description	Timmons Property					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	19	79		60	57	88	19	1261	104	107	1569	27

Signal Information											
Cycle, s	165.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	3.1	2.7	99.5	9.1	10.7	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		18.7		17.1	11.1	107.5	21.8	118.2
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		10.3		8.4	4.1		13.3	
Green Extension Time (g_e), s		0.5		0.7	0.1	0.0	0.5	0.0
Phase Call Probability		0.99		1.00	0.61		1.00	
Max Out Probability		0.00		0.01	0.00		0.00	

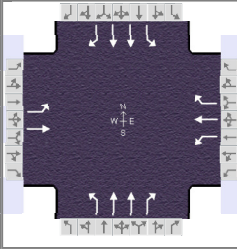
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	21	86		65	62	48	21	1371	72	116	1705	14
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1682		1667	1723	1471	1602	1653	1448	1667	1640	1483
Queue Service Time (g_s), s	1.9	8.3		6.4	5.8	5.2	2.1	30.0	1.7	11.3	30.6	0.2
Cycle Queue Clearance Time (g_c), s	1.9	8.3		6.4	5.8	5.2	2.1	30.0	1.7	11.3	30.6	0.2
Green Ratio (g/C)	0.06	0.06		0.05	0.05	0.05	0.02	0.60	0.60	0.08	0.67	0.67
Capacity (c), veh/h	108	109		92	95	81	30	1994	873	139	2191	991
Volume-to-Capacity Ratio (X)	0.191	0.789		0.713	0.655	0.592	0.695	0.688	0.082	0.837	0.778	0.014
Back of Queue (Q), ft/ln (95 th percentile)	39	190		140	132	101	53	288	26	225	208	3
Back of Queue (Q), veh/ln (95 th percentile)	1.6	7.3		5.6	5.2	4.0	2.1	11.4	1.0	9.0	8.2	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.63	0.18	0.00	0.03	0.56	0.00	0.01
Uniform Delay (d_1), s/veh	73.1	76.0		76.7	76.4	76.2	80.0	9.4	6.6	72.2	4.7	3.0
Incremental Delay (d_2), s/veh	1.2	16.3		13.6	10.4	9.5	34.1	2.0	0.2	16.6	2.8	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.3	92.3		90.3	86.9	85.6	114.1	11.3	6.8	88.9	7.5	3.0
Level of Service (LOS)	E	F		F	F	F	F	B	A	F	A	A
Approach Delay, s/veh / LOS	88.8	F		87.8	F		12.5	B		12.6	B	
Intersection Delay, s/veh / LOS	18.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.54	C	2.51	C	2.15	B	1.90	B
Bicycle LOS Score / LOS	0.65	A	0.78	A	1.69	B	2.00	B

HCS Signalized Intersection Input Data

General Information						Intersection Information											
Agency	The Traffic Group, Inc.					Duration, h	0.250										
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other										
Jurisdiction	Sussex County, DE	Time Period	Total AM Peak			PHF	0.92										
Urban Street	US 113	Analysis Year	2025			Analysis Period	1> 7:00										
Intersection	US 113 & Nine Foot Rd/...		File Name	3TA.xus													
Project Description	Timmons Property																
Demand Information						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h						93	213		97	157	168	56	662	71	132	902	37
Signal Information																	
Cycle, s	150.0	Reference Phase	2														
Offset, s	0	Reference Point	End														
Uncoordinated	No	Simult. Gap E/W	On	Green	7.9	0.0	61.1	18.0	23.0	0.0							
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0							
				Red	2.0	2.0	2.0	3.0	3.0	0.0							
Traffic Information						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h						93	213		97	157	168	56	662	71	132	902	37
Initial Queue (Q_0), veh/h						0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h						1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h						None			None			None			None		
Heavy Vehicles (P_{HV}), %						0	6		0	7	6	21	10	9	9	11	24
Ped / Bike / RTOR, /h						0	0		0	0	96	0	0	34	0	0	15
Buses (N_b), buses/h						0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)						3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)						1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft						12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft						0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %							0			0			0			0	
Speed Limit, mi/h						40	40		25	25	25	45	45	45	55	55	55
Phase Information						EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT				
Maximum Green (G_{max}) or Phase Split, s							30.0		30.0	20.0	62.0	28.0	70.0				
Yellow Change Interval (Y), s							5.0		5.0	6.0	6.0	6.0	6.0				
Red Clearance Interval (R_c), s							3.0		3.0	2.0	2.0	2.0	2.0				
Minimum Green (G_{min}), s							5		5	5	20	5	20				
Start-Up Lost Time (l_t), s						2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Extension of Effective Green (e), s						2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Passage (PT), s							4.0		4.0	4.0	3.0	4.0	3.0				
Recall Mode							Off		Off	Off	Min	Off	Min				
Dual Entry							Yes		Yes	No	Yes	No	Yes				
Walk ($Walk$), s							0.0		0.0		0.0		0.0				
Pedestrian Clearance Time (PC), s							0.0		0.0		0.0		0.0				
Multimodal Information						EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius						0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft						9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft						0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft						12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking						No	0.50	No	0.50	No	0.50	No	0.50				

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Total AM Peak	PHF	0.92		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3TA.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	93	213		97	157	168	56	662	71	132	902	37

Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	7.9	0.0	61.1	18.0	23.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	6.0	6.0	5.0	5.0	0.0	
				Red	2.0	2.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		31.0		26.0	15.9	69.1	23.9	77.1
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		22.5		17.2	8.5		15.6	
Green Extension Time (g_e), s		0.6		0.8	0.1	0.0	0.3	0.0
Phase Call Probability		1.00		1.00	0.92		1.00	
Max Out Probability		1.00		1.00	0.27		0.21	

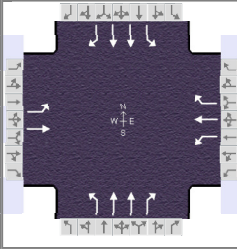
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	101	232		105	171	78	61	720	40	143	980	24
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1668		1667	1654	1414	1394	1536	1379	1550	1523	1205
Queue Service Time (g_s), s	8.2	20.5		8.9	15.2	7.7	6.5	23.4	2.1	13.6	32.6	1.2
Cycle Queue Clearance Time (g_c), s	8.2	20.5		8.9	15.2	7.7	6.5	23.4	2.1	13.6	32.6	1.2
Green Ratio (g/C)	0.15	0.15		0.12	0.12	0.12	0.05	0.41	0.41	0.11	0.46	0.46
Capacity (c), veh/h	256	256		200	199	170	73	1250	561	164	1403	555
Volume-to-Capacity Ratio (X)	0.395	0.904		0.526	0.858	0.461	0.832	0.575	0.072	0.874	0.699	0.043
Back of Queue (Q), ft/ln (95 th percentile)	159	418		180	326	139	147	335	34	273	406	18
Back of Queue (Q), veh/ln (95 th percentile)	6.4	16.0		7.2	12.3	5.3	5.0	12.4	1.3	10.2	14.9	0.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.87	0.49	0.00	0.04	0.68	0.00	0.05
Uniform Delay (d_1), s/veh	57.2	62.4		62.0	64.7	61.5	69.1	25.7	20.8	63.4	21.9	15.8
Incremental Delay (d_2), s/veh	1.4	28.8		3.0	23.6	2.8	27.5	1.9	0.2	24.2	2.9	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	58.6	91.2		65.0	88.3	64.2	96.6	27.6	21.1	87.6	24.8	16.0
Level of Service (LOS)	E	F		E	F	E	F	C	C	F	C	B
Approach Delay, s/veh / LOS	81.3	F		76.1	E		32.4	C		32.5	C	
Intersection Delay, s/veh / LOS	44.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.52	C	2.50	C	2.26	B	1.96	B
Bicycle LOS Score / LOS	0.99	A	1.07	A	1.16	A	1.43	A

HCS Signalized Intersection Input Data

General Information						Intersection Information											
Agency	The Traffic Group, Inc.					Duration, h	0.250										
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other										
Jurisdiction	Sussex County, DE	Time Period	Total PM Peak			PHF	0.95										
Urban Street	US 113	Analysis Year	2025			Analysis Period	1> 7:00										
Intersection	US 113 & Nine Foot Rd/...		File Name	3TP.xus													
Project Description	Timmons Property																
Demand Information						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h						80	119		70	209	144	88	851	99	159	869	72
Signal Information																	
Cycle, s	150.0	Reference Phase	2			Green	11.1	6.4	66.1	21.1	13.3	0.0					
Offset, s	0	Reference Point	End			Yellow	6.0	0.0	6.0	5.0	5.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On			Red	2.0	0.0	2.0	3.0	3.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On														
Traffic Information						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h						80	119		70	209	144	88	851	99	159	869	72
Initial Queue (Q_0), veh/h						0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h						1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h						None			None			None			None		
Heavy Vehicles (P_{HV}), %						0	1		0	2	1	13	6	1	2	4	3
Ped / Bike / RTOR, /h						0	0		0	0	76	0	0	26	0	0	8
Buses (N_b), buses/h						0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)						3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)						1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft						12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft						0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %							0			0			0			0	
Speed Limit, mi/h						40	40		25	25	25	45	45	45	55	55	55
Phase Information						EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT				
Maximum Green (G_{max}) or Phase Split, s							30.0		30.0	20.0	62.0	28.0	70.0				
Yellow Change Interval (Y), s							5.0		5.0	6.0	6.0	6.0	6.0				
Red Clearance Interval (R_c), s							3.0		3.0	2.0	2.0	2.0	2.0				
Minimum Green (G_{min}), s							5		5	5	20	5	20				
Start-Up Lost Time (l_t), s						2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Extension of Effective Green (e), s						2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Passage (PT), s							4.0		4.0	4.0	3.0	4.0	3.0				
Recall Mode							Off		Off	Off	Min	Off	Min				
Dual Entry							Yes		Yes	No	Yes	No	Yes				
Walk ($Walk$), s							0.0		0.0		0.0		0.0				
Pedestrian Clearance Time (PC), s							0.0		0.0		0.0		0.0				
Multimodal Information						EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius						0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft						9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft						0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft						12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking						No	0.50	No	0.50	No	0.50	No	0.50				

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Total PM Peak	PHF	0.95		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3TP.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	80	119		70	209	144	88	851	99	159	869	72

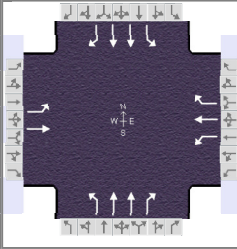
Signal Information											
Cycle, s	150.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	11.1	6.4	66.1	21.1	13.3	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0	
				Red	2.0	0.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		21.3		29.1	19.1	74.1	25.5	80.5
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.2	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		12.6		20.9	11.1		17.0	
Green Extension Time (g_e), s		0.7		0.2	0.2	0.0	0.6	0.0
Phase Call Probability		1.00		1.00	0.98		1.00	
Max Out Probability		0.06		1.00	0.02		0.01	

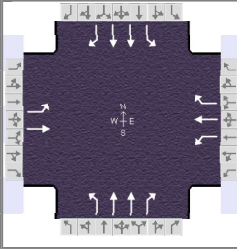
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	84	125		74	220	72	93	896	77	167	915	67
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1736		1667	1723	1471	1498	1588	1471	1641	1614	1448
Queue Service Time (g_s), s	7.3	10.6		6.0	18.9	6.6	9.1	28.0	3.5	15.0	24.3	2.6
Cycle Queue Clearance Time (g_c), s	7.3	10.6		6.0	18.9	6.6	9.1	28.0	3.5	15.0	24.3	2.6
Green Ratio (g/C)	0.09	0.09		0.14	0.14	0.14	0.07	0.44	0.44	0.12	0.48	0.48
Capacity (c), veh/h	148	154		235	242	207	111	1399	648	192	1560	700
Volume-to-Capacity Ratio (X)	0.569	0.813		0.314	0.907	0.346	0.835	0.640	0.119	0.874	0.587	0.096
Back of Queue (Q), ft/ln (95 th percentile)	147	227		118	405	117	197	377	56	278	303	41
Back of Queue (Q), veh/ln (95 th percentile)	5.9	9.0		4.7	15.9	4.6	7.1	14.4	2.2	10.9	11.8	1.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.73	0.66	0.00	0.07	0.69	0.00	0.12
Uniform Delay (d_1), s/veh	65.6	67.1		57.9	63.5	58.2	66.7	23.1	18.0	62.2	18.1	14.3
Incremental Delay (d_2), s/veh	4.8	13.5		1.1	33.2	1.4	20.0	2.3	0.4	16.7	1.6	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	70.4	80.6		59.0	96.7	59.6	86.7	25.4	18.4	78.9	19.7	14.5
Level of Service (LOS)	E	F		E	F	E	F	C	B	E	B	B
Approach Delay, s/veh / LOS	76.5	E		81.8	F		30.2	C		28.1	C	
Intersection Delay, s/veh / LOS	39.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.51	C	2.49	B	2.22	B	1.94	B
Bicycle LOS Score / LOS	0.80	A	1.09	A	1.37	A	1.44	A

HCS Signalized Intersection Input Data

General Information						Intersection Information									
Agency	The Traffic Group, Inc.					Duration, h	0.250								
Analyst	MYC	Analysis Date	2/26/2024			Area Type	Other								
Jurisdiction	Sussex County, DE	Time Period	Total SAT			PHF	0.92								
Urban Street	US 113	Analysis Year	2025			Analysis Period	1> 7:00								
Intersection	US 113 & Nine Foot Rd/...		File Name	3TS.xus											
Project Description	Timmons Property														
Demand Information				EB			WB			NB			SB		
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				64	93		60	74	88	67	1225	104	107	1556	27
Signal Information															
Cycle, s	165.0	Reference Phase	2												
Offset, s	0	Reference Point	End												
Uncoordinated	No	Simult. Gap E/W	On	Green	9.3	4.4	96.4	10.3	12.5	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0					
				Red	2.0	0.0	2.0	3.0	3.0	0.0					
Traffic Information				EB			WB			NB			SB		
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				64	93		60	74	88	67	1225	104	107	1556	27
Initial Queue (Q_0), veh/h				0	0		0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_0), veh/h				1750	1750		1750	1750	1750	1750	1750	1750	1750	1750	1750
Parking (N_m), man/h					None			None			None			None	
Heavy Vehicles (P_{HV}), %				0	5		0	2	1	5	1	3	0	2	0
Ped / Bike / RTOR, /h				0	0		0	0	44	0	0	38	0	0	14
Buses (N_b), buses/h				0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)				3	3		3	3	3	4	4	4	4	4	4
Upstream Filtering (I)				1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft				12.0	10.0		12.0	12.0	10.0	11.0	12.0	10.0	12.0	12.0	10.0
Turn Bay Length, ft				0	0		0	0	160	300	0	850	400	0	350
Grade (P_g), %					0			0			0			0	
Speed Limit, mi/h				40	40		25	25	25	45	45	45	55	55	55
Phase Information				EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT				
Maximum Green (G_{max}) or Phase Split, s					30.0		30.0	20.0	77.0	28.0	85.0				
Yellow Change Interval (Y), s					5.0		5.0	6.0	6.0	6.0	6.0				
Red Clearance Interval (R_c), s					3.0		3.0	2.0	2.0	2.0	2.0				
Minimum Green (G_{min}), s					5		5	5	20	5	20				
Start-Up Lost Time (l_t), s				2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Extension of Effective Green (e), s				2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Passage (PT), s					4.0		4.0	4.0	3.0	4.0	3.0				
Recall Mode					Off		Off	Off	Min	Off	Min				
Dual Entry					Yes		Yes	No	Yes	No	Yes				
Walk ($Walk$), s					0.0		0.0		0.0		0.0				
Pedestrian Clearance Time (PC), s					0.0		0.0		0.0		0.0				
Multimodal Information				EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius				0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft				9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft				0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft				12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking				No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency	The Traffic Group, Inc.				Duration, h	0.250	
Analyst	MYC	Analysis Date	2/26/2024	Area Type	Other		
Jurisdiction	Sussex County, DE	Time Period	Total SAT	PHF	0.92		
Urban Street	US 113	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 113 & Nine Foot Rd/...	File Name	3TS.xus				
Project Description	Timmons Property						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	93		60	74	88	67	1225	104	107	1556	27

Signal Information											
Cycle, s	165.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	9.3	4.4	96.4	10.3	12.5	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	6.0	0.0	6.0	5.0	5.0	0.0	
				Red	2.0	0.0	2.0	3.0	3.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		10.0		9.0	2.0	3.0	2.0	3.0
Phase Duration, s		20.5		18.3	17.3	104.4	21.7	108.8
Change Period, ($Y+R_c$), s		8.0		8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s		5.0		5.3	5.0	0.0	4.9	0.0
Queue Clearance Time (g_s), s		11.8		9.6	9.4		13.3	
Green Extension Time (g_e), s		0.8		0.8	0.3	0.0	0.5	0.0
Phase Call Probability		1.00		1.00	0.96		1.00	
Max Out Probability		0.00		0.03	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4		3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	70	101		65	80	48	73	1332	72	116	1691	14
Adjusted Saturation Flow Rate (s), veh/h/ln	1667	1682		1667	1723	1471	1602	1653	1448	1667	1640	1483
Queue Service Time (g_s), s	6.6	9.8		6.3	7.6	5.2	7.4	31.7	1.9	11.3	50.5	0.3
Cycle Queue Clearance Time (g_c), s	6.6	9.8		6.3	7.6	5.2	7.4	31.7	1.9	11.3	50.5	0.3
Green Ratio (g/C)	0.08	0.08		0.06	0.06	0.06	0.06	0.58	0.58	0.08	0.61	0.61
Capacity (c), veh/h	127	128		104	108	92	90	1931	846	139	2004	906
Volume-to-Capacity Ratio (X)	0.550	0.792		0.625	0.745	0.519	0.805	0.689	0.085	0.838	0.844	0.016
Back of Queue (Q), ft/ln (95 th percentile)	136	215		134	174	7	163	328	30	225	379	5
Back of Queue (Q), veh/ln (95 th percentile)	5.4	8.3		5.4	6.8	0.3	6.3	13.0	1.2	9.0	14.9	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.05	0.54	0.00	0.04	0.56	0.00	0.01
Uniform Delay (d_1), s/veh	73.5	75.0		75.4	76.0	74.9	75.4	11.1	7.8	72.2	10.6	6.0
Incremental Delay (d_2), s/veh	5.2	14.3		8.4	13.5	6.3	20.5	2.0	0.2	16.8	4.6	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	78.7	89.3		83.9	89.5	81.2	95.9	13.1	8.0	89.0	15.2	6.0
Level of Service (LOS)	E	F		F	F	F	F	B	A	F	B	A
Approach Delay, s/veh / LOS	85.0	F		85.5	F		17.0	B		19.8	B	
Intersection Delay, s/veh / LOS	25.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.53	C	2.51	C	2.16	B	1.91	B
Bicycle LOS Score / LOS	0.75	A	0.81	A	1.71	B	1.99	B

APPENDIX D

Signal Timing



Phase Data - Bank 1

DO NOT USE - UNDER CONSTRUCTION

☐ OK TO USE

INITIAL, DATE & TIME

VEHICLE DATA

VEHICLE TIMES

PHASE DIRECTION LOCATION	1 SB LT	2 NB US 113	3 WB DE 26	4 EB DE 26	5 NB LT	6 SB US 113	7	8
MIN GRN	5	20	5	5	5	20	0	0
PASS/10	40	50	40	40	40	50	0	0
MAX 1	25	60	15	20	10	60	0	0
MAX 2	25	60	15	20	10	60	0	0
YEL/10	60	60	50	50	60	60	0	0
RED/10	20	20	30	30	20	20	0	0

RECALLS +

VEH RCL	0	2	0	0	0	2	0	0
VEH DLY	0	0	0	0	0	0	0	0

BIKE & AWS TIMES +

BGRN/10	0	0	0	0	0	0	0	0
BPAS/10	0	0	0	0	0	0	0	0
GDLY/10	0	0	0	0	0	0	0	0
YDLY/10	0	0	0	0	0	0	0	0

DENSITY TIMES +

AINI/10	0	0	0	0	0	0	0	0
MAX INI	0	0	0	0	0	0	0	0
TIM BEF	0	0	0	0	0	0	0	0
CAR BEF	0	0	0	0	0	0	0	0
TIME TO	0	0	0	0	0	0	0	0
MGAP/10	0	0	0	0	0	0	0	0

PEDESTRIAN DATA

PED TIMES +

WALK 1	0	7	0	0	0	0	0	0
PED CLR 1	0	7	0	0	0	0	0	0

PED RECALL +

PED RCL	0	0	0	0	0	0	0	0
PED DLY	0	0	0	0	0	0	0	0

PED OFFSET +

WOFF/10	0	0	0	0	0	0	0	0
MODE *	0	0	0	0	0	0	0	0

MISC PED OPTIONS +

*FL WK	0	0	0	0	0	0	0	0
**EXT PCL	0	0	0	0	0	0	0	0
*ACT RIW	0	0	0	0	0	0	0	0

INIT & NA RESP +

INITIAL	1	4	1	1	1	4	0	0
NA RESP	0	1	0	0	0	0	0	0

N. LOCK & MISC +

NL MEM	1	0	0	0	1	0	0	0
2 ENTRY	0	1	0	0	0	1	0	0

SPEC. SEQUENCE +

OMIT	0	0	0	0	0	0	0	0
-YEL	0	0	0	0	0	0	0	0
OCAL	0	0	0	0	0	0	0	0

Signal Permit Number:

S209

Phase Bank 1	Copy to another Phase Bank								Copy to all Phase Banks							
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min. Green	5	20	10	10	5	20	0	0	0	0	0	0	0	0	0	0
Passage	4	5	4	4	4	5	0	0	0	0	0	0	0	0	0	0
Maximum 1	25	60	20	20	20	60	0	0	0	0	0	0	0	0	0	0
Maximum 2	25	60	15	20	10	60	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow Change	6	6	5	5	6	6	4	4	3	3	3	3	3	3	3	3
Red Clearance	2	2	3	3	2	2	1	1	0	0	0	0	0	0	0	0
Green Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike Passage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PATTERN BROADCAST 2/23/2024 – 2/27/2024

DATE	DAY	TIME	Pattern	MSG
02/27/2024	Tue	14:10		Alarm Preemption (110) - Off at US 113 @ RD 334-S162 (S162)
02/27/2024	Tue	14:09		Alarm Preemption (110) - On at US 113 @ RD 334-S162 (S162)
02/27/2024	Tue	14:03		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)
02/27/2024	Tue	14:02		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/27/2024	Tue	14:01		Alarm Preemption (110) - Off at US 113 @ DE 20-S183 (S183)
02/27/2024	Tue	14:00		Alarm Preemption (110) - On at US 113 @ DE 20-S183 (S183)
02/27/2024	Tue	12:29		Alarm Preemption (110) - Off at US 113 @ SR 26-S209 (S209)
02/27/2024	Tue	12:28		Alarm Preemption (110) - On at US 113 @ SR 26-S209 (S209)
02/27/2024	Tue	11:16	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/27/2024	Tue	11:16	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/27/2024	Tue	11:09	311 - 150	[TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008
02/27/2024	Tue	11:09	311 - 150	Broadcast 311 - 150 IB SB to Zone S008
02/27/2024	Tue	10:40	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/27/2024	Tue	10:40	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/27/2024	Tue	10:13	311 - 150	[TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008
02/27/2024	Tue	10:13	311 - 150	Broadcast 311 - 150 IB SB to Zone S008
02/27/2024	Tue	10:06		Alarm Preemption (110) - Off at US 113 @ SR 26-S209 (S209)
02/27/2024	Tue	10:05		Alarm Preemption (110) - On at US 113 @ SR 26-S209 (S209)
02/27/2024	Tue	08:26		Alarm Preemption (110) - Off at US 113 @ DE 20-S183 (S183)
02/27/2024	Tue	08:24		Alarm Preemption (110) - On at US 113 @ DE 20-S183 (S183)
02/27/2024	Tue	08:17		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)
02/27/2024	Tue	08:16		Alarm Preemption (110) - Off at US 113 @ RD 334-S162 (S162)
02/27/2024	Tue	08:16		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/27/2024	Tue	08:14		Alarm Preemption (110) - On at US 113 @ RD 334-S162 (S162)
02/27/2024	Tue	08:10		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/27/2024	Tue	08:09		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/27/2024	Tue	07:53	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/27/2024	Tue	07:53	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/27/2024	Tue	06:32	311 - 150	[TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008
02/27/2024	Tue	06:32	311 - 150	Broadcast 311 - 150 IB SB to Zone S008
02/27/2024	Tue	06:20	211 - 120	[TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008
02/27/2024	Tue	06:20	211 - 120	Broadcast 211 - 120 IB SB to Zone S008
02/27/2024	Tue	06:05	221 - 120	[TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008
02/27/2024	Tue	06:05	221 - 120	Broadcast 221 - 120 BAL to Zone S008
02/27/2024	Tue	05:57		Alarm Preemption (110) - Off at US 113 @ DE 20-S183 (S183)
02/27/2024	Tue	05:55		Alarm Preemption (110) - On at US 113 @ DE 20-S183 (S183)
02/27/2024	Tue	05:55		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)
02/27/2024	Tue	05:54		Alarm Preemption (110) - Off at US 113 @ TOWN CENTER BLV-S314 (S314)
02/27/2024	Tue	05:54		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/27/2024	Tue	05:53		Alarm Preemption (110) - Off at US 113 @ RD 334-S162 (S162)
02/27/2024	Tue	05:53		Alarm Preemption (110) - On at US 113 @ TOWN CENTER BLV-S314 (S314)
02/27/2024	Tue	05:51		Alarm Preemption (110) - On at US 113 @ RD 334-S162 (S162)
02/26/2024	Mon	23:12		Alarm Preemption (110) - Off at US 113 @ DE 20-S183 (S183)
02/26/2024	Mon	23:11		Alarm Preemption (110) - On at US 113 @ DE 20-S183 (S183)
02/26/2024	Mon	22:51		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)
02/26/2024	Mon	22:50		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/26/2024	Mon	22:28		Alarm Preemption (110) - Off at US 113 @ DE 20-S183 (S183)
02/26/2024	Mon	22:26		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)
02/26/2024	Mon	22:26		Alarm Preemption (110) - On at US 113 @ DE 20-S183 (S183)
02/26/2024	Mon	22:25		Alarm Preemption (110) - Off at US 113 @ RD 334-S162 (S162)

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/26/2024	Mon	22:25		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/26/2024	Mon	22:23		Alarm Preemption (110) - On at US 113 @ RD 334-S162 (S162)
02/26/2024	Mon	21:46	121 - 90	[TrafficResponsive] TR Recommends pattern 121 - 90 BAL for group S008
02/26/2024	Mon	21:46	121 - 90	Broadcast 121 - 90 BAL to Zone S008
02/26/2024	Mon	20:37	211 - 120	[TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008
02/26/2024	Mon	20:37	211 - 120	Broadcast 211 - 120 IB SB to Zone S008
02/26/2024	Mon	20:14	221 - 120	[TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008
02/26/2024	Mon	20:14	221 - 120	Broadcast 221 - 120 BAL to Zone S008
02/26/2024	Mon	20:08	231 - 120	[TrafficResponsive] TR Recommends pattern 231 - 120 OB NB for group S008
02/26/2024	Mon	20:08	231 - 120	Broadcast 231 - 120 OB NB to Zone S008
02/26/2024	Mon	20:02	221 - 120	[TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008
02/26/2024	Mon	20:02	221 - 120	Broadcast 221 - 120 BAL to Zone S008
02/26/2024	Mon	19:50	211 - 120	Broadcast 211 - 120 IB SB to Zone S008
02/26/2024	Mon	19:49	211 - 120	[TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008
02/26/2024	Mon	19:44	311 - 150	[TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008
02/26/2024	Mon	19:44	311 - 150	Broadcast 311 - 150 IB SB to Zone S008
02/26/2024	Mon	18:53	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/26/2024	Mon	18:53	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/26/2024	Mon	18:40	331 - 150	[TrafficResponsive] TR Recommends pattern 331 - 150 OB NB for group S008
02/26/2024	Mon	18:40	331 - 150	Broadcast 331 - 150 OB NB to Zone S008
02/26/2024	Mon	17:55	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/26/2024	Mon	17:55	321 - 150	Broadcast 321 - 150 BAL to Zone S008

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/26/2024	Mon	17:46	331 - 150	[TrafficResponsive] TR Recommends pattern 331 - 150 OB NB for group S008
02/26/2024	Mon	17:46	331 - 150	Broadcast 331 - 150 OB NB to Zone S008
02/26/2024	Mon	17:31	431 - 165	[TrafficResponsive] TR Recommends pattern 431 - 165 OB NB for group S008
02/26/2024	Mon	17:31	431 - 165	Broadcast 431 - 165 OB NB to Zone S008
02/26/2024	Mon	17:22	331 - 150	[TrafficResponsive] TR Recommends pattern 331 - 150 OB NB for group S008
02/26/2024	Mon	17:22	331 - 150	Broadcast 331 - 150 OB NB to Zone S008
02/26/2024	Mon	17:08		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)
02/26/2024	Mon	17:06		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/26/2024	Mon	16:23	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/26/2024	Mon	16:23	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/26/2024	Mon	16:12		Alarm Preemption (110) - Off at US 113 @ SR 26-S209 (S209)
02/26/2024	Mon	16:11		Alarm Preemption (110) - On at US 113 @ SR 26-S209 (S209)
02/26/2024	Mon	16:05	331 - 150	[TrafficResponsive] TR Recommends pattern 331 - 150 OB NB for group S008
02/26/2024	Mon	16:05	331 - 150	Broadcast 331 - 150 OB NB to Zone S008
02/26/2024	Mon	08:37	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/26/2024	Mon	08:37	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/26/2024	Mon	08:24	311 - 150	[TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008
02/26/2024	Mon	08:24	311 - 150	Broadcast 311 - 150 IB SB to Zone S008
02/26/2024	Mon	08:08	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/26/2024	Mon	08:08	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/26/2024	Mon	07:45		Alarm Preemption (110) - Off at US 113 @ DE 20-S183 (S183)
02/26/2024	Mon	07:44		Alarm Preemption (110) - On at US 113 @ DE 20-S183 (S183)
02/26/2024	Mon	06:34	311 - 150	Broadcast 311 - 150 IB SB to Zone S008

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/26/2024 Mon 06:31 311 - 150 [TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008

02/26/2024 Mon 06:28 211 - 120 [TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008

02/26/2024 Mon 06:28 211 - 120 Broadcast 211 - 120 IB SB to Zone S008

02/26/2024 Mon 06:08 221 - 120 [TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008

02/26/2024 Mon 06:08 221 - 120 Broadcast 221 - 120 BAL to Zone S008

02/26/2024 Mon 02:50 Alarm Preemption (110) - Off at US 113 @ RD 334-S162 (S162)

02/26/2024 Mon 02:49 Alarm Preemption (110) - On at US 113 @ RD 334-S162 (S162)

02/26/2024 Mon 02:49 Alarm Preemption (110) - Off at US 113 @ SR 26-S209 (S209)

02/26/2024 Mon 02:47 Alarm Preemption (110) - On at US 113 @ SR 26-S209 (S209)

02/26/2024 Mon 00:33 Alarm Preemption (110) - Off at US 113 @ DE 20-S183 (S183)

02/26/2024 Mon 00:31 Alarm Preemption (110) - On at US 113 @ DE 20-S183 (S183)

02/25/2024 Sun 21:49 121 - 90 [TrafficResponsive] TR Recommends pattern 121 - 90 BAL for group S008

02/25/2024 Sun 21:49 121 - 90 Broadcast 121 - 90 BAL to Zone S008

02/25/2024 Sun 21:32 231 - 120 [TrafficResponsive] TR Recommends pattern 231 - 120 OB NB for group S008

02/25/2024 Sun 21:32 231 - 120 Broadcast 231 - 120 OB NB to Zone S008

02/25/2024 Sun 21:19 221 - 120 [TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008

02/25/2024 Sun 21:19 221 - 120 Broadcast 221 - 120 BAL to Zone S008

02/25/2024 Sun 21:12 211 - 120 [TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008

02/25/2024 Sun 21:12 211 - 120 Broadcast 211 - 120 IB SB to Zone S008

02/25/2024 Sun 20:59 221 - 120 [TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008

02/25/2024 Sun 20:59 221 - 120 Broadcast 221 - 120 BAL to Zone S008

02/25/2024 Sun 20:34 211 - 120 [TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008

02/25/2024 Sun 20:34 211 - 120 Broadcast 211 - 120 IB SB to Zone S008

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/25/2024 Sun 20:20 221 - 120 [TrafficResponsive] TR Recommends pattern 221 - 120
BAL for group S008

02/25/2024 Sun 20:20 221 - 120 Broadcast 221 - 120 BAL to Zone S008

02/25/2024 Sun 19:47 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/25/2024 Sun 19:47 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/25/2024 Sun 19:09 331 - 150 [TrafficResponsive] TR Recommends pattern 331 - 150
OB NB for group S008

02/25/2024 Sun 19:09 331 - 150 Broadcast 331 - 150 OB NB to Zone S008

02/25/2024 Sun 18:32 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/25/2024 Sun 18:32 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/25/2024 Sun 18:13 331 - 150 [TrafficResponsive] TR Recommends pattern 331 - 150
OB NB for group S008

02/25/2024 Sun 18:13 331 - 150 Broadcast 331 - 150 OB NB to Zone S008

02/25/2024 Sun 17:36 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/25/2024 Sun 17:36 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/25/2024 Sun 15:19 331 - 150 [TrafficResponsive] TR Recommends pattern 331 - 150
OB NB for group S008

02/25/2024 Sun 15:19 331 - 150 Broadcast 331 - 150 OB NB to Zone S008

02/25/2024 Sun 15:12 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/25/2024 Sun 15:12 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/25/2024 Sun 13:32 331 - 150 [TrafficResponsive] TR Recommends pattern 331 - 150
OB NB for group S008

02/25/2024 Sun 13:32 331 - 150 Broadcast 331 - 150 OB NB to Zone S008

02/25/2024 Sun 13:23 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/25/2024 Sun 13:23 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/25/2024 Sun 12:58 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 12:57 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/25/2024 Sun 12:43 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 12:41 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 12:18 331 - 150 [TrafficResponsive] TR Recommends pattern 331 - 150
OB NB for group S008

02/25/2024 Sun 12:18 331 - 150 Broadcast 331 - 150 OB NB to Zone S008

02/25/2024 Sun 11:58 431 - 165 [TrafficResponsive] TR Recommends pattern 431 - 165
OB NB for group S008

02/25/2024 Sun 11:58 431 - 165 Broadcast 431 - 165 OB NB to Zone S008

02/25/2024 Sun 10:15 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 10:14 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 09:22 331 - 150 [TrafficResponsive] TR Recommends pattern 331 - 150
OB NB for group S008

02/25/2024 Sun 09:22 331 - 150 Broadcast 331 - 150 OB NB to Zone S008

02/25/2024 Sun 08:13 231 - 120 [TrafficResponsive] TR Recommends pattern 231 - 120
OB NB for group S008

02/25/2024 Sun 08:13 231 - 120 Broadcast 231 - 120 OB NB to Zone S008

02/25/2024 Sun 07:11 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 07:09 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 06:54 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 06:53 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 01:33 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 01:31 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/25/2024 Sun 01:00 Alarm Preemption (110) - Off at US 113 @ SR 26-S209 (S209)

02/25/2024 Sun 00:59 Alarm Preemption (110) - On at US 113 @ SR 26-S209 (S209)

02/24/2024 Sat 22:49 121 - 90 Broadcast 121 - 90 BAL to Zone S008

02/24/2024 Sat 22:45 121 - 90 [TrafficResponsive] TR Recommends pattern 121 - 90
BAL for group S008

02/24/2024 Sat 22:43 231 - 120 [TrafficResponsive] TR Recommends pattern 231 - 120
OB NB for group S008

02/24/2024 Sat 22:43 231 - 120 Broadcast 231 - 120 OB NB to Zone S008

02/24/2024 Sat 22:01 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/24/2024	Sat	22:00		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/24/2024	Sat	21:15	221 - 120	[TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008
02/24/2024	Sat	21:15	221 - 120	Broadcast 221 - 120 BAL to Zone S008
02/24/2024	Sat	20:40	211 - 120	[TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008
02/24/2024	Sat	20:40	211 - 120	Broadcast 211 - 120 IB SB to Zone S008
02/24/2024	Sat	20:34		Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)
02/24/2024	Sat	20:32		Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)
02/24/2024	Sat	20:20	221 - 120	[TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008
02/24/2024	Sat	20:20	221 - 120	Broadcast 221 - 120 BAL to Zone S008
02/24/2024	Sat	20:12	211 - 120	[TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008
02/24/2024	Sat	20:12	211 - 120	Broadcast 211 - 120 IB SB to Zone S008
02/24/2024	Sat	19:50	221 - 120	[TrafficResponsive] TR Recommends pattern 221 - 120 BAL for group S008
02/24/2024	Sat	19:50	221 - 120	Broadcast 221 - 120 BAL to Zone S008
02/24/2024	Sat	19:38	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/24/2024	Sat	19:38	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/24/2024	Sat	19:04	311 - 150	[TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008
02/24/2024	Sat	19:04	311 - 150	Broadcast 311 - 150 IB SB to Zone S008
02/24/2024	Sat	18:01	321 - 150	[TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008
02/24/2024	Sat	18:01	321 - 150	Broadcast 321 - 150 BAL to Zone S008
02/24/2024	Sat	17:43	311 - 150	[TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008
02/24/2024	Sat	17:43	311 - 150	Broadcast 311 - 150 IB SB to Zone S008
02/24/2024	Sat	15:52		Alarm Preemption (110) - Off at US 113 @ RD 334-S162 (S162)
02/24/2024	Sat	15:51		Alarm Preemption (110) - On at US 113 @ RD 334-S162 (S162)

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/24/2024 Sat 12:20 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/24/2024 Sat 12:20 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/24/2024 Sat 11:50 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 11:49 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 11:27 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 11:26 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 11:18 311 - 150 [TrafficResponsive] TR Recommends pattern 311 - 150 IB
SB for group S008

02/24/2024 Sat 11:18 311 - 150 Broadcast 311 - 150 IB SB to Zone S008

02/24/2024 Sat 09:16 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/24/2024 Sat 09:16 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/24/2024 Sat 09:08 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 09:07 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 08:54 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 08:53 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 08:05 221 - 120 [TrafficResponsive] TR Recommends pattern 221 - 120
BAL for group S008

02/24/2024 Sat 08:05 221 - 120 Broadcast 221 - 120 BAL to Zone S008

02/24/2024 Sat 07:24 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 07:20 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/24/2024 Sat 07:02 211 - 120 [TrafficResponsive] TR Recommends pattern 211 - 120 IB
SB for group S008

02/24/2024 Sat 07:02 211 - 120 Broadcast 211 - 120 IB SB to Zone S008

02/23/2024 Fri 23:27 121 - 90 [TrafficResponsive] TR Recommends pattern 121 - 90
BAL for group S008

02/23/2024 Fri 23:27 121 - 90 Broadcast 121 - 90 BAL to Zone S008

02/23/2024 Fri 22:55 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 22:54 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/23/2024 Fri 21:22 211 - 120 [TrafficResponsive] TR Recommends pattern 211 - 120 IB SB for group S008

02/23/2024 Fri 21:22 211 - 120 Broadcast 211 - 120 IB SB to Zone S008

02/23/2024 Fri 17:48 311 - 150 [TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008

02/23/2024 Fri 17:48 311 - 150 Broadcast 311 - 150 IB SB to Zone S008

02/23/2024 Fri 17:11 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008

02/23/2024 Fri 17:11 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/23/2024 Fri 16:29 311 - 150 [TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008

02/23/2024 Fri 16:29 311 - 150 Broadcast 311 - 150 IB SB to Zone S008

02/23/2024 Fri 14:34 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 14:33 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 14:10 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 14:09 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 13:16 Alarm Preemption (110) - Off at US 113 @ SR 26-S209 (S209)

02/23/2024 Fri 13:15 Alarm Preemption (110) - On at US 113 @ SR 26-S209 (S209)

02/23/2024 Fri 10:29 Alarm Preemption (110) - Off at US 113 @ TOWN CENTER BLV-S314 (S314)

02/23/2024 Fri 10:27 Alarm Preemption (110) - On at US 113 @ TOWN CENTER BLV-S314 (S314)

02/23/2024 Fri 10:27 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 10:26 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 10:18 Alarm Preemption (110) - Off at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 10:16 Alarm Preemption (110) - On at US 113 @ SR 24-S112 (S112)

02/23/2024 Fri 08:48 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150 BAL for group S008

02/23/2024 Fri 08:48 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/23/2024 Fri 08:41 311 - 150 [TrafficResponsive] TR Recommends pattern 311 - 150 IB SB for group S008

02/23/2024 Fri 08:41 311 - 150 Broadcast 311 - 150 IB SB to Zone S008

PATTERN BROADCAST 2/23/2024 – 2/27/2024

02/23/2024 Fri 08:10 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/23/2024 Fri 08:10 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/23/2024 Fri 07:29 311 - 150 [TrafficResponsive] TR Recommends pattern 311 - 150 IB
SB for group S008

02/23/2024 Fri 07:29 311 - 150 Broadcast 311 - 150 IB SB to Zone S008

02/23/2024 Fri 07:09 321 - 150 [TrafficResponsive] TR Recommends pattern 321 - 150
BAL for group S008

02/23/2024 Fri 07:09 321 - 150 Broadcast 321 - 150 BAL to Zone S008

02/23/2024 Fri 06:35 311 - 150 [TrafficResponsive] TR Recommends pattern 311 - 150 IB
SB for group S008

02/23/2024 Fri 06:35 311 - 150 Broadcast 311 - 150 IB SB to Zone S008

02/23/2024 Fri 06:16 211 - 120 Broadcast 211 - 120 IB SB to Zone S008

02/23/2024 Fri 06:12 211 - 120 [TrafficResponsive] TR Recommends pattern 211 - 120 IB
SB for group S008

02/23/2024 Fri 06:10 221 - 120 [TrafficResponsive] TR Recommends pattern 221 - 120
BAL for group S008

02/23/2024 Fri 06:10 221 - 120 Broadcast 221 - 120 BAL to Zone S008

Dial 1/Split 1

Cycle Length 90

Phase	1	2	3	4	5	6	7	8
Time	18	32	20	20	18	32	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Dial 1/Split 2

Cycle Length 90

Phase	1	2	3	4	5	6	7	8
Time	18	32	20	20	18	32	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	45	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 1/Split 3

Cycle Length 90

Phase	1	2	3	4	5	6	7	8
Time	18	32	20	20	18	32	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	23	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 1/Split 4

Cycle Length 75

Phase	1	2	3	4	5	6	7	8
Time	15	30	15	15	15	30	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	61	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 2/Split 1

Cycle Length 120

Phase	1	2	3	4	5	6	7	8
Time	23	52	20	25	23	52	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	13	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 2/Split 2

Cycle Length 120

Phase	1	2	3	4	5	6	7	8
Time	23	52	20	25	23	52	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	78	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 2/Split 3

Cycle Length 120

Phase	1	2	3	4	5	6	7	8
Time	23	52	20	25	23	52	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	44	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 3/Split 1

Cycle Length 150

Phase	1	2	3	4	5	6	7	8
Time	28	62	30	30	20	70	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	93	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 3/Split 2

Cycle Length 150

Phase	1	2	3	4	5	6	7	8
Time	28	62	30	30	20	70	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	141	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 3/Split 3

Cycle Length 150

Phase	1	2	3	4	5	6	7	8
Time	28	62	30	30	20	70	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	106	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 4/Split 1

Cycle Length 165

Phase	1	2	3	4	5	6	7	8
Time	35	70	35	25	20	85	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	110	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 4/Split 2

Cycle Length 165

Phase	1	2	3	4	5	6	7	8
Time	28	77	30	30	20	85	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Offset	1	2	3
Time	164	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

Dial 4/Split 3

Cycle Length 165

Phase	1	2	3	4	5	6	7	8
Time	28	77	30	30	20	85	0	0
Mode	0 - AP	1 - CP	0 - AP	0 - AP	0 - AP	1 - CP	0 - AP	0 - AP
Min Veh Time	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=19 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=29 Bnk2=29 Bnk3=29 Bnk4=29		
Min Ped Time	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=14 Bnk2=14 Bnk3=14 Bnk4=14	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0	Bnk1=0 Bnk2=0 Bnk3=0 Bnk4=0		
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

Phase	9	10	11	12	13	14	15	16
Time	0	0	0	0	0	0	0	0
Mode	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP	0 - AP
Min Veh Time								
Min Ped Time								
Phase Reduction	0	0	0	0	0	0	0	0
Phase Extension	0	0	0	0	0	0	0	0

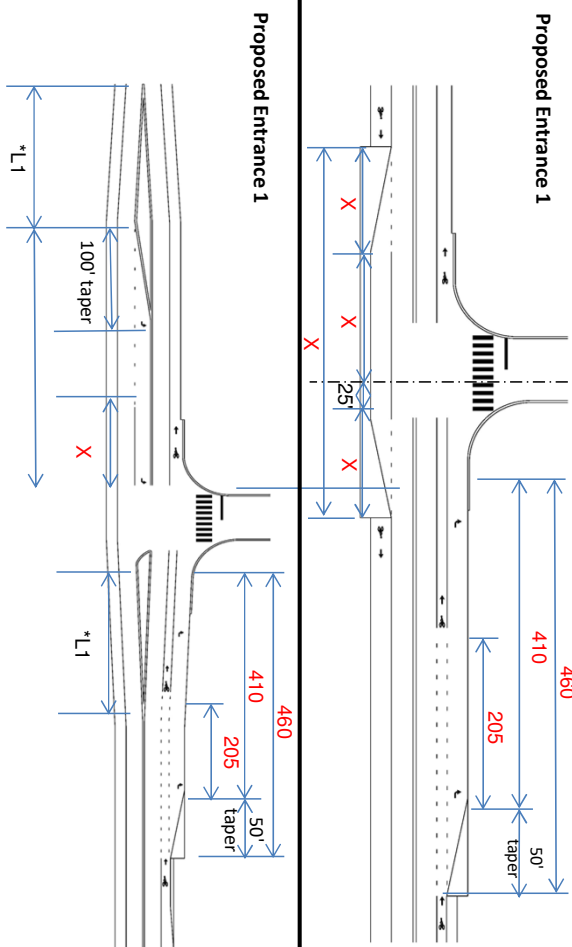
Offset	1	2	3
Time	132	0	0
Mode	0 - Normal	0 - Normal	0 - Normal
Alt Sequence	0	0	0
Correction	0 - Normal	0 - Normal	0 - Normal
Special Function	0	0	0
Maximum Mode	0 - None	0 - None	0 - None
Ring 2 Lag Time	0	0	0
Ring 3 Lag Time	0	0	0
Ring 4 Lag Time	0	0	0

APPENDIX E

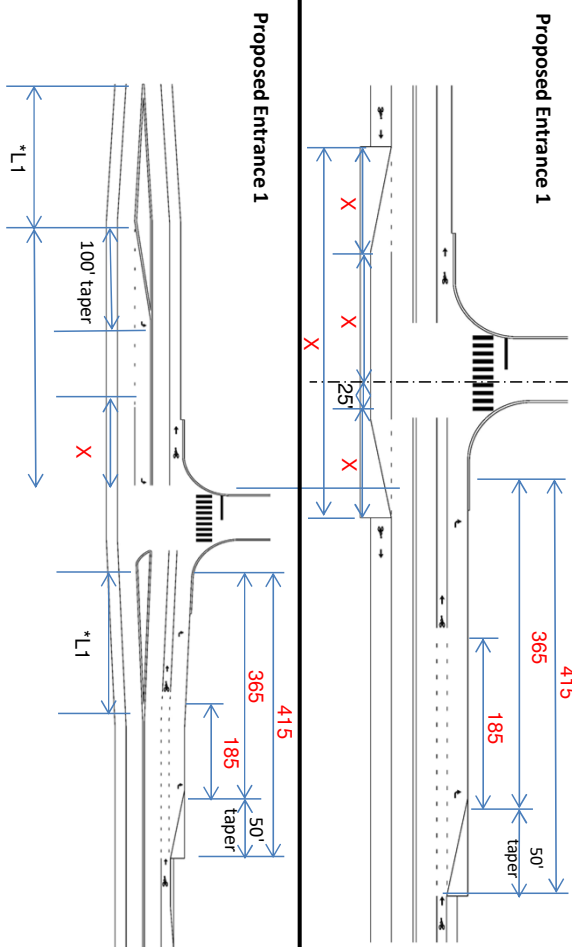
Auxiliary Lane Worksheets



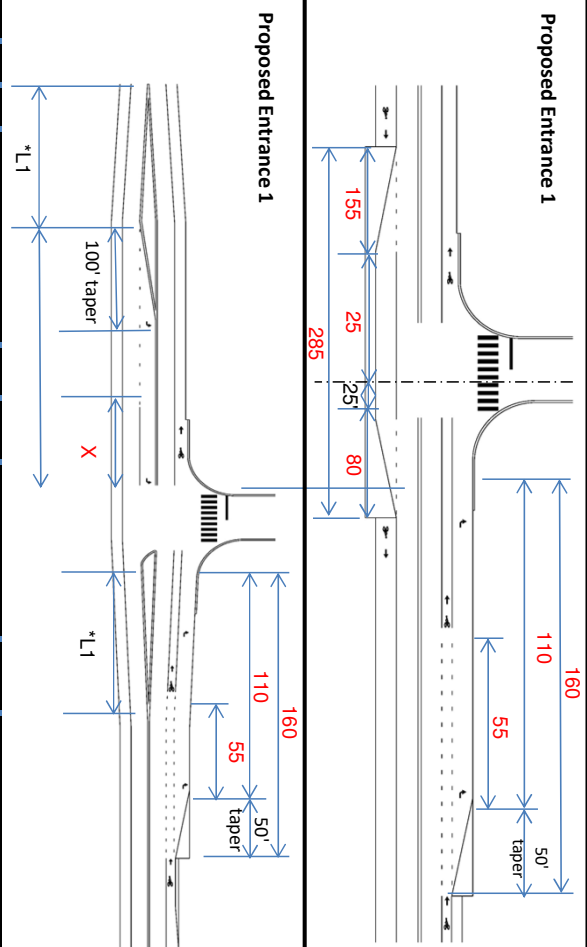
Site Entrance A

April 28, 2023												V2020.3					
 DelDOT Auxiliary Lane Worksheet Roadway Information and Entrance												<table border="1"> <tr> <td>Manually Update Cell</td> <td>XX</td> </tr> <tr> <td>Auto-Calculated Cells</td> <td>XX</td> </tr> </table>		Manually Update Cell	XX	Auto-Calculated Cells	XX
Manually Update Cell	XX																
Auto-Calculated Cells	XX																
Name of Project			Timmons Property			Date of Submittal			5/9/2024								
Maintenance Road No. (i.e. K234A)			S113			Road Name			US 113								
Signalized / Unsignalized			Unsignalized			Posted Speed Limit			55								
Roadway ADT (From DelDOT Traffic Manual)			20029			Traffic Pattern Group			2								
Left Approach Site ADT	690	Committed Development ADT	0	Total Left Approach ADT	690	Right Approach Site ADT	493	Committed Development ADT	0	Total Right Approach ADT	493						
Total Number of Through Lanes (Does Not Include Turn Lanes)				4 lanes		Number of intersection legs				3							
Roadway Functional Classification				Other Principal Arterial		Calculation for (specify leg)				Proposed Entrance 1							
Left-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT				23923		Right-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT				23726							
K Factor				10.9		D Factor				56.3							
Left Turn Information						Right Turn Information											
Left Turn VPH			0			Right Turn ADT			Over 400								
Left Turn Approach Grade			0.0%			Right Turn Approach Grade			0.0%								
Heavy Vehicle %			5			Effective Radius of Entrance			R≤50'								
10 Yr Opposing Vol. (Manual Input - Veh/hr)						0											
10 Yr Opposing Volume (Calculated)			1426 Veh/hr			Right Turn Length			460 ft								
10 Yr Opposing Volume (Calculated Vol.)			1426 Veh/hr														
The Engineer shall contact DelDOT Development Coordination section.																	
NOTE: This worksheet is for Right Turn Auxiliary Lanes, and Unsignalized Left Turn Auxiliary Lanes. If a signal analysis is required, please refer to signalized intersection analysis spreadsheet (Tab 6). *L1 - See Typical Entrance Diagram located at: http://www.deldot.gov/information/business/subdivisions/Typical_Entrance_Diagrams.pdf																	

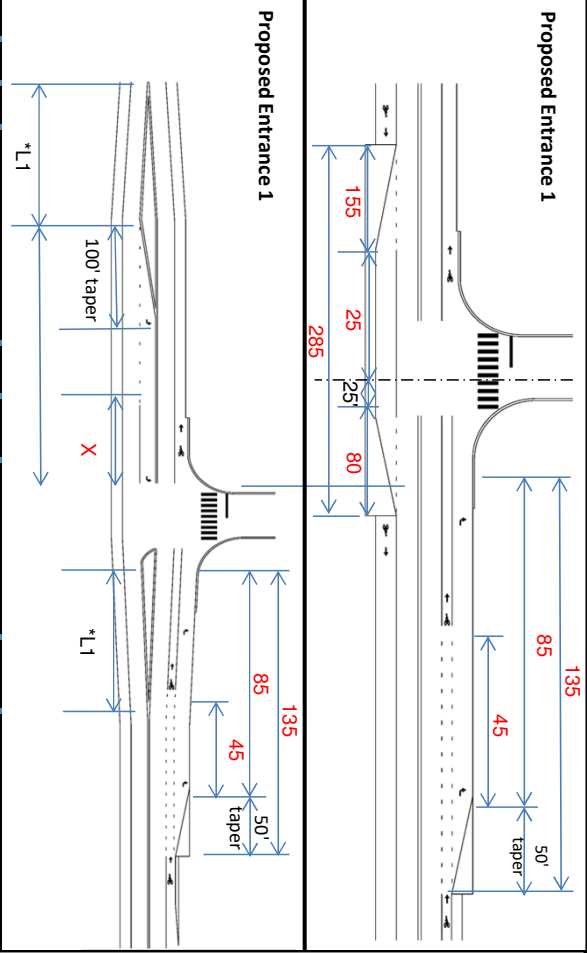
Site Entrance A

April 28, 2023												V2020.3					
 DelDOT Auxiliary Lane Worksheet Roadway Information and Entrance												<table border="1"> <tr> <td>Manually Update Cell</td> <td>XX</td> </tr> <tr> <td>Auto-Calculated Cells</td> <td>XX</td> </tr> </table>		Manually Update Cell	XX	Auto-Calculated Cells	XX
Manually Update Cell	XX																
Auto-Calculated Cells	XX																
Name of Project			Timmons Property			Date of Submittal			5/9/2024								
Maintenance Road No. (i.e. K234A)			S113			Road Name			US 113								
Signalized / Unsignalized			Unsignalized			Posted Speed Limit			55								
Roadway ADT (From DelDOT Traffic Manual)			20029			Traffic Pattern Group			2								
Left Approach	690	Committed Development ADT	0	Total Left Approach ADT	690	Right Approach	493	Committed Development ADT	0	Total Right Approach ADT	493						
Total Number of Through Lanes (Does Not Include Turn Lanes)				4 lanes		Number of intersection legs				3							
Roadway Functional Classification				Other Principal Arterial		Calculation for (specify leg)				Proposed Entrance 1							
Left-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT				23923		Right-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT				23726							
K Factor				10.9		D Factor				56.3							
Left Turn Information						Right Turn Information											
Left Turn VPH			0			Right Turn ADT			Over 400								
Left Turn Approach Grade			0.0%			Right Turn Approach Grade			0.0%								
Heavy Vehicle %			5			Effective Radius of Entrance			R>50'								
10 Yr Opposing Vol. (Manual Input - Veh/hr)						0											
10 Yr Opposing Volume (Calculated)			1426 Veh/hr			Right Turn Length			415 ft								
10 Yr Opposing Volume (Calculated Vol.)			1426 Veh/hr														
The Engineer shall contact DelDOT Development Coordination section.																	
NOTE: This worksheet is for Right Turn Auxiliary Lanes, and Unsignalized Left Turn Auxiliary Lanes. If a signal analysis is required, please refer to signalized intersection analysis spreadsheet (Tab 6). *L1 - See Typical Entrance Diagram located at: http://www.deldot.gov/information/business/subdivisions/Typical_Entrance_Diagrams.pdf																	

Site Entrance B

April 28, 2023												V2020.3					
 DelDOT Auxiliary Lane Worksheet Roadway Information and Entrance												<table border="1"> <tr> <td>Manually Update Cell</td> <td>XX</td> </tr> <tr> <td>Auto-Calculated Cells</td> <td>XX</td> </tr> </table>		Manually Update Cell	XX	Auto-Calculated Cells	XX
Manually Update Cell	XX																
Auto-Calculated Cells	XX																
Name of Project			Timmons Property			Date of Submittal			5/9/2024								
Maintenance Road No. (i.e. K234A)			S26			Road Name			Nine Foot Rd								
Signalized / Unsignalized			Unsignalized			Posted Speed Limit			40								
Roadway ADT (From DelDOT Traffic Manual)			2035			Traffic Pattern Group			8								
Left Approach Site ADT	218	Committed Development ADT	0	Total Left Approach ADT	218	Right Approach Site ADT	1183	Committed Development ADT	0	Total Right Approach ADT	1183						
Total Number of Through Lanes (Does Not Include Turn Lanes)			2 lanes			Number of intersection legs			3								
Roadway Functional Classification			Major Collector			Calculation for (specify leg)			Proposed Entrance 1								
Left-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT			2578			Right-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT			3543								
K Factor			10.3			D Factor			53.8								
Left Turn Information						Right Turn Information											
Left Turn VPH			10			Right Turn ADT			301 - 400								
Left Turn Approach Grade			0.0%			Right Turn Approach Grade			0.0%								
Heavy Vehicle %			5			Effective Radius of Entrance			R≤50'								
10 Yr Opposing Vol. (Manual Input - Veh/hr)			0														
10 Yr Opposing Volume (Calculated)			131 Veh/hr			Right Turn Length			160 ft								
10 Yr Opposing Volume (Calculated Vol.)			131 Veh/hr														
Bypass Lane Approach Taper			155 ft														
Bypass Lane Departure Taper			80 ft														
Bypass Lane Storage			50 ft														
NOTE:																	
This worksheet is for Right Turn Auxiliary Lanes, and Unsignalized Left Turn Auxiliary Lanes. If a signal analysis is required, please refer to signalized intersection analysis spreadsheet (Tab 6).																	
*L1 - See Typical Entrance Diagram located at: http://www.deldot.gov/information/business/subdivisions/Typical_Entrance_Diagrams.pdf																	

Site Entrance B

April 28, 2023												V2020.3					
 DelDOT Auxiliary Lane Worksheet Roadway Information and Entrance												<table border="1"> <tr> <td>Manually Update Cell</td> <td>XX</td> </tr> <tr> <td>Auto-Calculated Cells</td> <td>XX</td> </tr> </table>		Manually Update Cell	XX	Auto-Calculated Cells	XX
Manually Update Cell	XX																
Auto-Calculated Cells	XX																
Name of Project			Timmons Property			Date of Submittal			5/9/2024								
Maintenance Road No. (i.e. K234A)			S26			Road Name			Nine Foot Rd								
Signalized / Unsignalized			Unsignalized			Posted Speed Limit			40								
Roadway ADT (From DelDOT Traffic Manual)			2035			Traffic Pattern Group			8								
Left Approach Site ADT	218	Committed Development ADT	0	Total Left Approach ADT	218	Right Approach Site ADT	1183	Committed Development ADT	0	Total Right Approach ADT	1183						
Total Number of Through Lanes (Does Not Include Turn Lanes)			2 lanes			Number of intersection legs			3								
Roadway Functional Classification			Major Collector			Calculation for (specify leg)			Proposed Entrance 1								
Left-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT			2578			Right-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT			3543								
K Factor			10.3			D Factor			53.8								
Left Turn Information						Right Turn Information											
Left Turn VPH			10			Right Turn ADT			301 - 400								
Left Turn Approach Grade			0.0%			Right Turn Approach Grade			0.0%								
Heavy Vehicle %			5			Effective Radius of Entrance			R>50'								
10 Yr Opposing Vol. (Manual Input - Veh/hr)			0														
10 Yr Opposing Volume (Calculated)			131 Veh/hr			Right Turn Length			135 ft								
10 Yr Opposing Volume (Calculated Vol.)			131 Veh/hr														
Bypass Lane Approach Taper			155 ft														
Bypass Lane Departure Taper			80 ft														
Bypass Lane Storage			50 ft														
NOTE:																	
This worksheet is for Right Turn Auxiliary Lanes, and Unsignalized Left Turn Auxiliary Lanes. If a signal analysis is required, please refer to signalized intersection analysis spreadsheet (Tab 6).																	
*L1 - See Typical Entrance Diagram located at: http://www.deldot.gov/information/business/subdivisions/Typical_Entrance_Diagrams.pdf																	

APPENDIX F

Correspondence





STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

NICOLE MAJESKI
SECRETARY

April 25, 2024

Betty H. Tustin, P.E., PTOE
The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21811

Dear Ms. Tustin,

We have reviewed the Preliminary TIS that we received on April 18, 2024, for the **Timmons Property** development Tax Parcels: (233-10.00-48.00, 49.00, 50.01, 50.02, and 50.01). Upon our review, the PTIS is acceptable and proceed to the Final TIS.

You may contact Mr. Philip Lindsey at philip.lindsey@delaware.gov if you have any questions concerning this correspondence.

Sincerely,

Sireen Muhtaseb, PE
TIS Group Manager
Development Coordination

SAM:plm

cc: Todd Sammons, Assistant Director, Development Coordination
Annamaria Furmato, TIS Group Engineer, Development Coordination
Philip Lindsey, TIS Group Engineer, Development Coordination



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

NICOLE MAJESKI
SECRETARY

April 16, 2024

Betty H. Tustin, PE, PTOE
The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21811

Dear Ms. Tustin,

We have reviewed the Preliminary TIS that we received on March 25, 2024, for the **Timmons Property** development Tax Parcels: 233-10.00-48.00, 49.00, 50.01, 50.02, and 50.01). Upon our review we found the items below that need to be addressed.

1. Update Figure 9A and all affected figures per the April 9 email discussion pertaining to the entrance locate for the Nine Foot Road Warehouse committed development.
2. On Figure 14, the pass by distribution does not account for trips diverted from US Route 113 northbound. Redistribute the trips to account for those diverted movements and show any diverted movements at intersection 3. Also account for some trips diverted from US Route 113 southbound to exit the site using Clayton Street to turn right onto US Route 113.

Please address these items and then resubmit the Preliminary TIS. You may contact Mr. Philip Lindsey at philip.lindsey@delaware.gov if you have any questions concerning this correspondence.

Sincerely,

Sireen Muhtaseb, PE
TIS Group Manager
Development Coordination

SAM:plm

cc: Todd Sammons, Assistant Director, Development Coordination
Annamaria Fumato, TIS Group Engineer, Development Coordination
Philip Lindsey, TIS Group Engineer, Development Coordination



Betty Tustin

From: Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>
Sent: Tuesday, April 9, 2024 7:36 AM
To: Betty Tustin
Cc: Furmato, Annamaria (DelDOT); Muhtaseb, Sireen (DelDOT)
Subject: RE: Timmons Property PTIS - Additional Questions for Betty

Betty,

Let me complete the full analysis with the verified information, then a PTIS review letter will be issued.

Thank you for your responses.

Philip Lindsey

TIS Group Engineer
(302)760-2167
philip.lindsey@delaware.gov

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Monday, April 8, 2024 4:44 PM
To: Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>
Cc: Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Subject: RE: Timmons Property PTIS - Additional Questions for Betty

Philip,

Yes, that is correct.

May we proceed with the TIS?

From: Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>
Sent: Monday, April 8, 2024 4:07 PM
To: Betty Tustin <btustin@trafficgroup.com>
Cc: Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Subject: RE: Timmons Property PTIS - Additional Questions for Betty

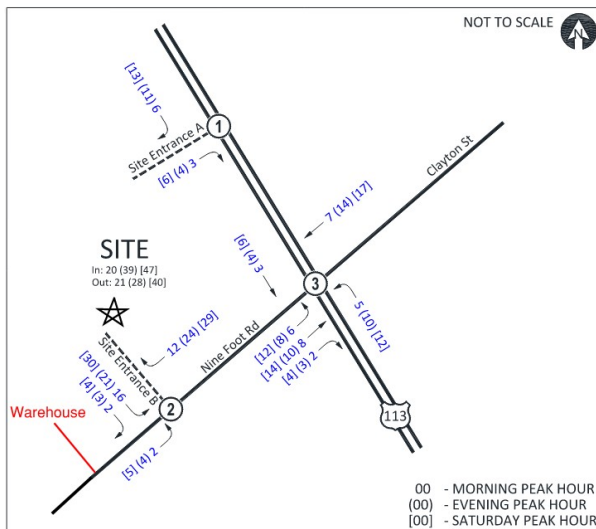
Betty,

Thank you for your quick response. The information you supplied answers my questions.

Additional Clarification

I assume the Site Trip Assignment calculations on Figure 13 (page 16) will not change.

Figure 13. Trip Assignment for Subject Site, Revised



Please make sure that the changes to Page 12 and Page 16 are integrated into future documentation for this project.

Thank you again.

Philip Lindsey

TIS Group Engineer

(302)760-2167

philip.lindsey@delaware.gov

From: Betty Tustin <btustin@trafficgroup.com>

Sent: Monday, April 8, 2024 2:33 PM

To: Lindsey, Philip (DeIDOT) <philip.lindsey@delaware.gov>

Cc: Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>

Subject: RE: Timmons Property PTIS - Additional Questions for Betty

Please see comments in red below.

From: Lindsey, Philip (DeIDOT) <philip.lindsey@delaware.gov>

Sent: Thursday, April 4, 2024 3:41 PM

To: Betty Tustin <btustin@trafficgroup.com>

Cc: Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>

Subject: FW: Timmons Property PTIS - Additional Questions for Betty

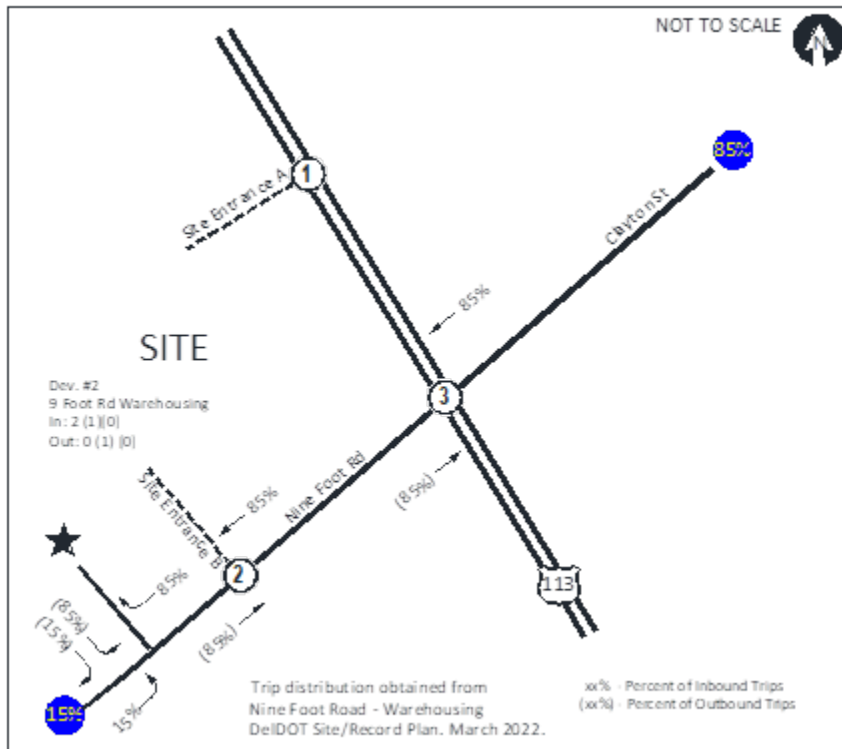
Good Afternoon, Betty,

While reviewing the submitted 3/25/2024 Timmons Property Preliminary TIS (PDF File). We are finding mixed information on the location of Site Entrance 2 on Nine Foot Road. Refer to ariel photos on page 4 and page 8. Also refer to figure 9A and 9B on pages 15 and 16.

Updated aerial attached. Hope that is more clear.

- We are having trouble distinguishing the site entrance through either the American legend entrance on parcel 233-10.00-54.00 or if the entrance is through the Warehouse Entrance on parcel 233-10.00-55.00.

The warehouse will have its own separate entrance like this.



- Confirm that the American Legend Facility is being replaced by the Fine Dining Restaurant with the extension, as described on page 5. **The American Legion holds occasional meetings and dinners. I believe Fine-Dining Land use was previously proposed and approved.**
- If the entrance is through the Warehouse parcel (233-10.00-55.00) and the American Legend Facility is being redeveloped, will the American Legend entrance on parcel 233-10.00-54.00 be closed? **No.**
- Can you confirm that figure 11 on page 17 is the most up-to date concept plan and if not, please send us the most recent plan. **It is the most recent plan.**

Let me know if you need any additional clarification of the questions above.

Thanks

Philip J Lindsey
TIS Group Engineer
Division of Planning
Department of Transportation
(302)760-2167
philip.lindsey@delaware.gov



Betty Tustin

From: Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>
Sent: Thursday, March 21, 2024 4:22 PM
To: Betty Tustin; Lindsey, Philip (DeIDOT); Robert Palmer; daleshields@icloud.com
Cc: JArellano@jmt.com; Muhtaseb, Sireen (DeIDOT); Laura Hudson
Subject: RE: Preliminary TIS Report #1 has been submitted for Timmons Property

Betty,

After reviewing your comments, we have the below responses:

Item 2: The rates are acceptable to use. Disregard Item 2.

Item 3: We are requesting a trip distribution percentage diagram alongside the other committed development diagram. This will help our future reviews and for ease of future reference.

Items 6 and 7: DeIDOT is amiable to accept PM pass by percentages used for Saturday trips for the site uses. Please update any affected diagrams or tables.

As Items 6 and 7 would still need to be reviewed, please resubmit the Preliminary TIS. Please include this email in the correspondence section of the submitted report.

Thanks,
Annamaria Furmato, EIT
TIS Group Project Engineer
Delaware Department of Transportation
(302) 760-2710

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Wednesday, March 20, 2024 3:09 PM
To: Lindsey, Philip (DeIDOT) <philip.lindsey@delaware.gov>; Robert Palmer <RPalmer@beaconengineeringllc.com>; daleshields@icloud.com
Cc: JArellano@jmt.com; Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>; Laura Hudson <LHudson@beaconengineeringllc.com>
Subject: RE: Preliminary TIS Report #1 has been submitted for Timmons Property

Please see the comments on the attached review letter. Some of the comments are typos, a couple of others were taken directly from the approved record plan for the warehouses which is in Appendix F. In the past, when ITE does not provide Saturday pass-by rates, DeIDOT has permitted the use of pm pass-by rates.

We respectfully request that we move forward with the TIS.

Thank you

Betty
Betty H. Tustin, P.E., PTOE
Senior Project Manager – Delmarva Region



104 Kenwood Court
Berlin, MD 21811
M: 410-603-6251
btustin@trafficgroup.com
www.trafficgroup.com

Certifications

SBA Certified Service-Disabled Veteran-Owned Small Business (SDVOSB)
NY Certified Service-Disabled Veteran-Owned Business (SDVOB)
MBE Certified: Charles County, Howard County, and Prince George's County, MD
MFD Certified: Montgomery County, MD
MDOT SBE Certified
Virginia SWaM

From: Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>
Sent: Tuesday, March 19, 2024 6:44 PM
To: Betty Tustin <btustin@trafficgroup.com>; Robert Palmer <RPalmer@beaconengineeringllc.com>; daleshields@icloud.com
Cc: JArellano@jmt.com; Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>; Laura Hudson <LHudson@beaconengineeringllc.com>
Subject: RE: Preliminary TIS Report #1 has been submitted for Timmons Property

Betty,

The Timmons Property PTIS should be submitted tomorrow by noon.

Philip Lindsey
TIS Group Engineer
(302)760-2167
philip.lindsey@delaware.gov

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Tuesday, March 19, 2024 6:33 PM
To: Robert Palmer <RPalmer@beaconengineeringllc.com>; daleshields@icloud.com
Cc: JArellano@jmt.com; Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>; Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>; Laura Hudson <LHudson@beaconengineeringllc.com>
Subject: RE: Preliminary TIS Report #1 has been submitted for Timmons Property

I haven't heard anything but I will keep an eye out for the review from DelDOT.

From: Robert Palmer <RPalmer@beaconengineeringllc.com>
Sent: Tuesday, March 19, 2024 5:28 PM
To: Betty Tustin <btustin@trafficgroup.com>; daleshields@icloud.com
Cc: JArellano@jmt.com; annamaria.furmato@delaware.gov; sireen.muhtaseb@delaware.gov; philip.lindsey@delaware.gov; Laura Hudson <LHudson@beaconengineeringllc.com>
Subject: RE: Preliminary TIS Report #1 has been submitted for Timmons Property

Hi Betty et. al. and Happy Tuesday!

I am checking in to see if there are any questions or concerns with regard to the PTIS. The PDCA receipt indicates a draft TIS letter should be expected by today. I checked the PDCA entry just now, and the color code for this submission is still blue (submitted).

Regards,
Bob

Robert J. Palmer, P.E.
President | Senior Engineer
Beacon Engineering, LLC
23318 Cedar Lane
Georgetown, Delaware 19947

Phone: 302.864.8825
Fax: 302.608.0212
Email: RPalmer@beaconengineeringllc.com



From: Betty Tustin <btustin@trafficgroup.com>
Sent: Tuesday, February 27, 2024 8:57 AM
To: DelDot PDCA <PDCANotifications@Deldot.gov>; daleshields@icloud.com; Robert Palmer <RPalmer@beaconengineeringllc.com>
Cc: JArellano@jmt.com; annamaria.furmato@delaware.gov; sireen.muhtaseb@delaware.gov; philip.lindsey@delaware.gov
Subject: RE: Preliminary TIS Report #1 has been submitted for Timmons Property

Bob
Here is a copy for your files.

From: DelDot PDCA <PDCANotifications@Deldot.gov>
Sent: Tuesday, February 27, 2024 8:57 AM
To: daleshields@icloud.com; rpalmer@beaconengineeringllc.com; Betty Tustin <btustin@trafficgroup.com>
Cc: JArellano@jmt.com; annamaria.furmato@delaware.gov; sireen.muhtaseb@delaware.gov; philip.lindsey@delaware.gov
Subject: Preliminary TIS Report #1 has been submitted for Timmons Property

Dear Mr. Robert Palmer,

The Preliminary TIS Report for Timmons Property has been submitted to DelDOT for review. A completed review can be expected by 3/19/2024.

DelDOT will notify you with any other concerns regarding your project prior to the above date. Please contact Ms. Joanne Arellano at JArellano@jmt.com or (302) 533-3969 if you have any questions.

Submission Information:

Original Submission Date
2/27/2024
Project Name

Timmons Property
Engineering Organization
Beacon Engineering, LLC
Engineering Contact
Mr. Robert Palmer
Developer Organization
Shields Properties, LLC
Developer Contact
Dale Shields
Project Type
Major
Review Type
Preliminary TIS Report
Submission #
1
Project Url / Name
[Timmons Property](#)

Thank you,
Development Coordination: Traffic Analysis Section



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

NICOLE MAJESKI
SECRETARY

March 20, 2024

Betty H. Tustin, P.E., PTOE
The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21811

Dear Ms. Tustin,

We have reviewed the Preliminary TIS that we received on February 27, 2024, for the **Timmons Property** development Tax Parcels: 233-10.00-48.00, 49.00, 50.01, 50.02, and 50.01). Upon our review we found there are several items that need to be addressed. Please make the changes and then resubmit the Preliminary TIS.

1. Use the 11th edition ITE Code LUC 210 for single family detached houses instead of LUC 710 on Table 3 of page 13.
2. Use Fitted Curve information for Nine Foot Road Warehouse (LUC 150) on Table 4 of page 14. Also, Figure 8 for the Committed Development Nine Foot Road trip assignment will need to be adjusted if Fitted Curve numbers are used. Update all affected tables and figures.
3. Provide Trip Distribution percentages for Nine Foot Road Warehouse committed development.
4. Confirm 11th edition / LUC 931 (Fine Dining Restaurant) for AM Peak Hour in/out on the Directional Distribution Table 4 of page 18.
5. Confirm 11th edition ITE / LUC 931 (Fine Dining Restaurant) for Saturday Peak Hour in/out on the Directional Distribution Table 4 of page 18.
6. Confirm if the "PM" Pass-By percentage (Pass-By Trips 44% PM) should be used for the Saturday in/out Trip Generation on Table 5 of page 18. Update affected Tables and figures accordingly.



Mr. Braden Garrison, P.E.

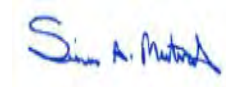
March 20, 2024

Page 2 of 2

7. Confirm if the “PM” Pass-By percentage (Pass-By Trips 75% PM) should be used for the Saturday in/out Trip Generation on Table 5 of page 18. Update affected Tables and figures accordingly.

You may contact Mr. Philip Lindsey at philip.lindsey@delaware.gov if you have any questions concerning this correspondence.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sireen A. Muhtaseb".

Sireen Muhtaseb, PE
TIS Group Manager
Development Coordination

SAM:plm

Enclosure

cc: Todd Sammons, Assistant Director, Development Coordination
Annamaria Furmato, TIS Group Engineer, Development Coordination
Philip Lindsey, TIS Group Engineer, Development Coordination
Tanner Chiamprasert, TIS Group Engineer, Development Coordination



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

NICOLE MAJESKI
SECRETARY

February 9, 2024

Betty H. Tustin, P.E., PTOE
The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21811

Dear Ms. Tustin,

We have reviewed the traffic counts and seasonally adjusted volumes that we received on January 26, 2024, for the **Timmons Property** development Tax Parcels: 233-10.00-48.00, 49.00, 50.01, 50.02, and 50.01). Upon our review, the counts are found to be acceptable with the changes. Please make the following changes and then proceed to the Preliminary TIS:

1. The Scoping Memo was issued during a time when we were not accepting ATR counts. From previous correspondence, in place of issuing an updated memo, it was discussed DELDOT would accept the original scoping memo while updating to current practices. As part of that update, the Scoping Memo would usually include language requiring ATR data, however, as it was not provided during the traffic counts. Based on a historical 2019 count at the intersection, DELDOT has verified the provided traffic counts and no additional ATR data will be required. See attached enclosure.
2. Provide correspondence from the Local Land Use agency explaining the reasoning for omitting the General Green and Highlands of Peppers Creek committed development information or include the committed development in the Timmons Property Preliminary TIS.
3. Use the enclosed Royal Farms #316 TGD to base your committed development distribution information on.
4. Use the enclosed Clayton Crossing TGD to base your committed development distribution information on.



5. Provide a Pass by Trips Diagram for the Royal Farms #316 committed development. The Pass By information will be reviewed by DELDOT.
6. Apply the following Growth Factors for the Background growth:

Roads	Annual Growth Factor	Total Growth Factor 2023 to 2025
US Route 113	1.01	1.02
Clayton Street/Nine Foot Road (Sussex Road 26)	1.005	1.01
All Other Roads	1.000	1.000

Please address these concerns and resubmit the traffic counts. You may contact Mr. Philip Lindsey at philip.lindsey@delaware.gov if you have any questions concerning this correspondence.

Sincerely,



Sireen Muhtaseb, PE
TIS Group Manager
Development Coordination

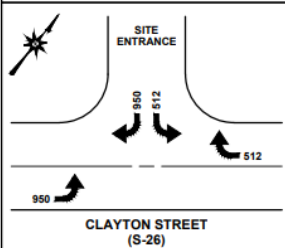
SAM:plm

Enclosure

cc: Todd Sammons, Assistant Director, Development Coordination
Aaron Bell, Engineering Technician, Regional Systems Planning
Annamaria Fumato, TIS Group Project Engineer, Development Coordination
Philip Lindsey, TIS Group Project Engineer, Development Coordination

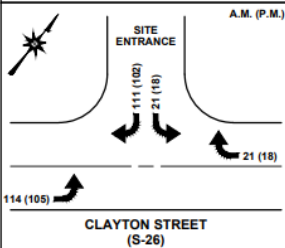
TRAFFIC GENERATION DIAGRAM

"VEHICLE TRIPS PER DAY"



TRAFFIC GENERATION DIAGRAM

"VEHICLES IN A.M. / P.M. PEAK HOUR"



ROAD TRAFFIC DATA :

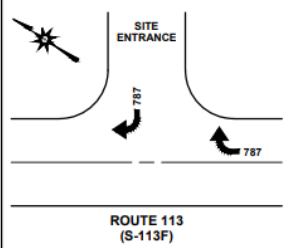
S-26 (CLAYTON STREET) - SPEED LIMIT = 25 MPH
AADT = 6,020 Trips (from 2018 DelDOT Traffic Summary)
10 YEAR PROJECTED AADT: (1.02*10) x 6,020 = 7,338 TRIPS
10 YEAR PROJECTED AADT + SITE ADT: 11,836 TRIPS
DIRECTIONAL SPLIT: 65% / 35%
PEAK HOUR : 11.70% = 526 TRIPS (DHW)
10.17% TRUCKS: 160
PEAK HOUR TRUCKS: 10.17% = 3 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL (10TH EDITION)
ITE: 960 SUPER CONVENIENCE MARKET/GAS
TOTAL SITE ADT = (5.37 x 837.58 = 4,523 TRIPS)
A.M. PEAK HR. TRIPS = 406 (50% IN / 50% OUT)
P.M. PEAK HR. TRIPS = 373 (50% IN / 50% OUT)
ENTRANCE ADT = (65% x 4,498 = 2,924 TRIPS)
DIRECTIONAL DISTRIBUTION:
65% TO & FROM WEST (1900 TRIPS) (225 a.m. pk.) (207 p.m. pk.)
35% TO & FROM EAST (1024 TRIPS) (42 a.m. pk.) (36 p.m. pk.)

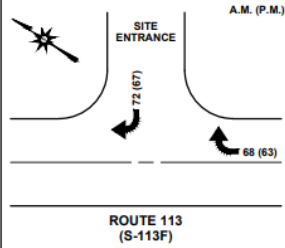
TRAFFIC GENERATION DIAGRAM

"VEHICLE TRIPS PER DAY"



TRAFFIC GENERATION DIAGRAM

"VEHICLES IN A.M. / P.M. PEAK HOUR"



ROAD TRAFFIC DATA :

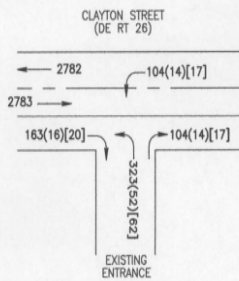
S-113F (ROUTE 113) - SPEED LIMIT = 45 MPH
AADT = 22,545 Trips (from 2018 DelDOT Traffic Summary)
10 YEAR PROJECTED AADT: (1.01*10) x 22,545 = 24,903 TRIPS
10 YEAR PROJECTED AADT + SITE ADT: 29,401 TRIPS
DIRECTIONAL SPLIT: 65% / 35%
PEAK HOUR : 11.26% = 3,396 TRIPS (DHW)
8.99% TRUCKS: 291
PEAK HOUR TRUCKS: 8.99% = 33 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL (10TH EDITION)
ITE: 960 SUPER CONVENIENCE MARKET/GAS
TOTAL SITE ADT = (5.37 x 837.58 = 4,497.8 TRIPS)
A.M. PEAK HR. TRIPS = 406 (50% IN / 50% OUT)
P.M. PEAK HR. TRIPS = 373 (50% IN / 50% OUT)
ENTRANCE ADT = (35% x 4,498 = 1,574 TRIPS)
DIRECTIONAL DISTRIBUTION:
35% TO & FROM SOUTH (787 TRIPS) (68 a.m. pk.) (63 p.m. pk.)

TRIP GENERATION - CLAYTON STREET (DE ROUTE 26)

(FULL MOVEMENT)



ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION - DE 26 (CLAYTON STREET) - MAJ. COLL.
POSTED SPEED LIMIT - 25 MPH
AADT = 5628 TRIPS (FROM 2014 DelDOT TRAFFIC SUMMARY)
10-YR PROJECTED AADT = 1,20 x 5628 = 6,754 TRIPS
10-YR PROJECTED AADT + SITE ADT = 7,446 TRIPS
TRAFFIC PATTERN GROUP - B (FROM 2014 DelDOT TRAFFIC SUMMARY)
PEAK HOUR = 14% x 5628 = 788 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 9th EDITION
56,000 S.F. GENERAL OFFICE SPACE (710)
ONE ENTRANCE - FULL MOVEMENT (81% OF SITE ADT)
DESIGN VEHICLE: SU-30
56,000 S.F. GENERAL OFFICE SPACE
WEEKDAY = 856 TRIPS

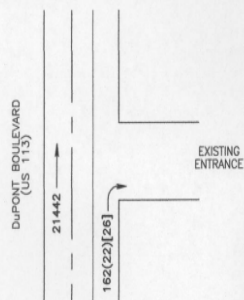
TOTAL ADT FOR ENTRANCE (WEEKDAY) = 692 TRIPS
DIRECTIONAL DISTRIBUTION:
70% TO AND FROM THE WEST: 484 TRIPS
(68 A.M. PEAK) (82 P.M. PEAK)
30% TO AND FROM THE EAST: 208 TRIPS
(28 A.M. PEAK) (34 P.M. PEAK)
5.36% TRUCKS & BUSES x 692 = 38

TRAFFIC GENERATION DIAGRAM

TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

TRIP GENERATION - DuPONT BOULEVARD (US 113)

(FULL MOVEMENT)



ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION - US 113 (DuPont Blvd) - PRIN. ART.
POSTED SPEED LIMIT - 55 MPH
AADT = 21,442 TRIPS (FROM 2014 DelDOT TRAFFIC SUMMARY)
10-YR PROJECTED AADT = 1,20 x 21,442 TRIPS = 25,731 TRIPS
10-YR PROJECTED AADT + SITE ADT = 25,893 TRIPS
TRAFFIC PATTERN GROUP - 5 (FROM 2014 DelDOT TRAFFIC SUMMARY)
PEAK HOUR = 10% x 21,442 = 2,144 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 9th EDITION
56,000 S.F. GENERAL OFFICE SPACE (710)
ONE ENTRANCE - RIGHT TURN INGRESS ONLY (19% OF SITE ADT)
DESIGN VEHICLE: SU-30
56,000 S.F. GENERAL OFFICE SPACE
WEEKDAY = 856 TRIPS

TOTAL ADT FOR ENTRANCE (WEEKDAY) = 162 TRIPS
DIRECTIONAL DISTRIBUTION:
100% TO AND FROM THE SOUTH: 162 TRIPS
(22 A.M. PEAK) (26 P.M. PEAK)
5.36% TRUCKS & BUSES x 162 = 9

TRAFFIC GENERATION DIAGRAM

TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

WRA

1013 Centre Road, Suite 302
Wilmington, DE 19805

Location: Dagsboro, DE
Intersection: US 113 @ SR 26
Date: Wednesday, September 18, 2019
Counter: SH

File Name : US 113 @ SR 26
Site Code : 09182019
Start Date : 9/18/2019
Page No : 1

Groups Printed- Cars - Trucks - Buses																					
	SR 26 Eastbound				App. Var.	SR 26 Westbound				App. Var.	US 113 Northbound				App. Var.	US 113 Southbound				App. Var.	Incl. Total
	Start Time	Right	Thru	Left		Peds	Right	Thru	Left		Peds	Right	Thru	Left		Peds	Right	Thru	Left		
07:00 AM	10	25	7	0	42	38	27	11	0	76	9	154	7	0	170	3	181	27	0	211	499
07:15 AM	9	33	7	0	49	36	17	6	0	59	14	194	11	0	219	7	215	40	0	262	589
07:30 AM	9	39	10	0	58	44	16	14	0	74	8	210	12	0	230	10	254	33	0	297	659
07:45 AM	12	31	8	0	51	44	8	14	0	66	9	193	0	0	202	7	224	41	0	272	591
Total	40	128	32	0	200	162	68	45	0	275	40	751	30	0	821	27	874	141	0	1042	2338
*** BREAK ***																					
04:00 PM	5	26	10	0	41	46	30	11	0	87	10	174	12	0	196	14	262	33	0	309	633
04:15 PM	5	16	9	0	30	33	24	11	0	68	14	217	13	0	244	14	222	35	0	271	613
04:30 PM	4	26	7	0	37	32	23	12	0	67	14	180	13	0	207	10	255	40	0	305	616
04:45 PM	8	22	3	0	33	27	21	11	0	59	17	196	10	0	223	17	223	42	0	282	597
Total	22	90	29	0	141	138	98	45	0	281	55	767	48	0	870	55	962	150	0	1167	2459
Grand Total	62	218	61	0	341	300	166	90	0	556	95	1518	78	0	1691	82	1836	291	0	2209	4797
Approch %	18.2	63.9	17.9	0	54	54	29.9	16.2	0	5.6	5.6	89.8	4.6	0	3.7	83.1	13.2	0	0	0	0
Total %	1.3	4.5	1.3	0	7.1	6.3	3.5	1.9	0	11.6	2	31.6	1.6	0	35.3	1.7	38.3	6.1	0	4.6	0
Cars	58	214	52	0	324	297	166	85	0	548	91	1441	68	0	1600	80	1755	286	0	2121	4593
% Cars	93.5	98.2	85.2	0	95	99	100	94.4	0	98.6	95.8	94.9	87.2	0	94.6	97.6	95.6	98.3	0	96	95.7
Trucks	4	4	7	0	15	2	0	5	0	7	1	69	10	0	80	1	69	4	0	74	176
% Trucks	6.5	1.8	11.5	0	4.4	0.7	0	5.6	0	1.3	1.1	4.5	12.8	0	4.7	1.2	3.8	1.4	0	3.3	3.7
Buses	0	0	2	0	2	1	0	0	0	1	3	8	0	0	11	1	12	1	0	14	28
% Buses	0	0	3.3	0	0.6	0.3	0	0	0	0.2	3.2	0.5	0	0	0.7	1.2	0.7	0.3	0	0.6	0.6

Richard Huang

From: Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>
Sent: Tuesday, February 13, 2024 2:21 PM
To: Betty Tustin; Furmato, Annamaria (DelDOT); Muhtaseb, Sireen (DelDOT)
Cc: Richard Huang
Subject: RE: Question about the distribution for Timmons Property's background developments

Yes, Thank you Betty and I concur with Annamaria.

Philip Lindsey

TIS Group Engineer
(302)760-2167
philip.lindsey@delaware.gov

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Tuesday, February 13, 2024 1:32 PM
To: Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>; Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>; Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Cc: Richard Huang <rhuang@trafficgroup.com>
Subject: RE: Question about the distribution for Timmons Property's background developments

Thank you!

From: Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>
Sent: Tuesday, February 13, 2024 1:30 PM
To: Betty Tustin <btustin@trafficgroup.com>; Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>; Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Cc: Richard Huang <rhuang@trafficgroup.com>
Subject: RE: Question about the distribution for Timmons Property's background developments

Betty,

Apologies for the confusion, you are free to move forward and submit the Preliminary TIS report.

Annamaria Furmato, EIT
TIS Group Project Engineer
Delaware Department of Transportation
(302) 760-2710

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Tuesday, February 13, 2024 1:00 PM
To: Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>; Lindsey, Philip (DelDOT) <philip.lindsey@delaware.gov>; Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Cc: Richard Huang <rhuang@trafficgroup.com>
Subject: RE: Question about the distribution for Timmons Property's background developments

Annamaria

We will include the correspondence. May we move on to the PTIS or do you require another Count Submittal?
Betty

From: Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>
Sent: Tuesday, February 13, 2024 12:56 PM
To: Betty Tustin <btustin@trafficgroup.com>; Lindsey, Philip (DeIDOT) <philip.lindsey@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>
Cc: Richard Huang <rhuang@trafficgroup.com>
Subject: RE: Question about the distribution for Timmons Property's background developments

Thanks Betty,

If you can include the correspondence in the PTIS letter that would help our review.

-Annamaria

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Tuesday, February 13, 2024 12:48 PM
To: Lindsey, Philip (DeIDOT) <philip.lindsey@delaware.gov>; Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>
Cc: Richard Huang <rhuang@trafficgroup.com>
Subject: RE: Question about the distribution for Timmons Property's background developments

Last update – the Layfield project is not moving forward per the Town of Dagsboro and DBF.

From: Betty Tustin
Sent: Tuesday, February 13, 2024 11:48 AM
To: Philip.lindsey@delaware.gov; Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>
Cc: Richard Huang <rhuang@trafficgroup.com>
Subject: RE: Question about the distribution for Timmons Property's background developments

Well I have another correcFon. While the proposed Generals Green has become dormant, a new development is now proposed for those same parcels – Layfield. I am seeking informa on on the status of that proposed project.

Stay tuned!

From: Betty Tustin
Sent: Tuesday, February 13, 2024 11:10 AM
To: Philip.lindsey@delaware.gov; Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>
Cc: Richard Huang <rhuang@trafficgroup.com>
Subject: RE: Question about the distribution for Timmons Property's background developments

Good morning!

AGer reviewing the traffic count submittal and speaking with the Town of Dagsboro, I would like to provide clarifica on on the committed developments idenFfied in the Minutes of the Scoping MeeFng.

- 1) Clayton Crossing (f.k.a. Cummings & Clark G.P) (56,000 square-foot general office)
- 2) Royal Farms #316 Dagsboro (5,371 square-foot convenience store with gas pumps) *
- 3) Generals Green – Phase I – *confirm type and size with the Town.*
- 4) Highlands of Peppers Creek – *confirm type and size with the Town.*

- 1 – Clayton Crossing has been built out
- 2 – Royal Farms has been relocated and was fully operational at the time of the counts
- 3 – Generals Green has sunset and we will receive documentation from the Town
- 4 – Highlands of Peppers Creek is under construction and we will include that in the revised Traffic Count Submittal.

I apologize for the confusion as I see we did not remove Appendix C from the earlier submission.

Betty

From: Richard Huang <rhuang@trafficgroup.com>

Sent: Monday, February 12, 2024 1:17 PM

To: Philip.lindsey@delaware.gov

Cc: Betty Tustin <btustin@trafficgroup.com>

Subject: Question about the distribution for Timmons Property's background developments

Mr. Philip,

We receive the letter regarding Timmons Property Count Submission dated Feb 9, 2024. The letter requests us to use enclosed Clayton Crossing TGD to base committed development distribution information.

However, the enclosed Clayton Crossing TGD is a little bit confuse to me. (see attached document)

1. The ADT trips , AM Peak trips and PM Peak trips in/out are all different. Should we use whatever the percentage we calculated from the enclosed TGD and use it in our study for AM/PM in/out trips or use one of them to all time periods?
2. Our study includes Saturday Peak period, which distribution shall we follow?

I will propose to use the following method to do the trip generation and trip assignment for the committed developments.

1. The Clayton Crossing is general office, the trip number shown on TGD have nothing closed to the trip number generated by ITE (no matter which version of ITE), we will use ITE 11th Edition Land use 710 to generate the office trips.
2. The distribution – TGD mention 81% ADT use Clayton Street Access, and 30% of them from/to Clayton St East, 70% from/to west, 19% of ADT use US 113 access. Based on this information, the trips from US 113 south will be 38% inbound, 24% to/from Clayton St East, 28% to/from US 113 North, 10% to/from Nine Foot Rd. (see attached figure)
3. Royal Farms Store #361 has been built and opened before 2022. Our traffic count conduct in 2023, the Royal Farms store traffic already include in our counts. We will make a note and show no impact to our study area.

If you agree with the method I propose, please give us a “green light” to proceed or modify the distribution to be followed.

Thank you.

Fu-Hsiung Huang, P.E., PTOE

Senior Traffic Engineer



Baltimore, Maryland

P: 410-931-6600

M: 443-760-8370

rh Huang@trafficgroup.com

www.trafficgroup.com

Certifications

SBA Certified Service-Disabled Veteran-Owned Small Business (SDVOSB)

NY Certified Service-Disabled Veteran-Owned Business (SDVOB)

MBE Certified: Charles County, Howard County, and Prince George's County, MD

MFD Certified: Montgomery County, MD

MDOT SBE Certified

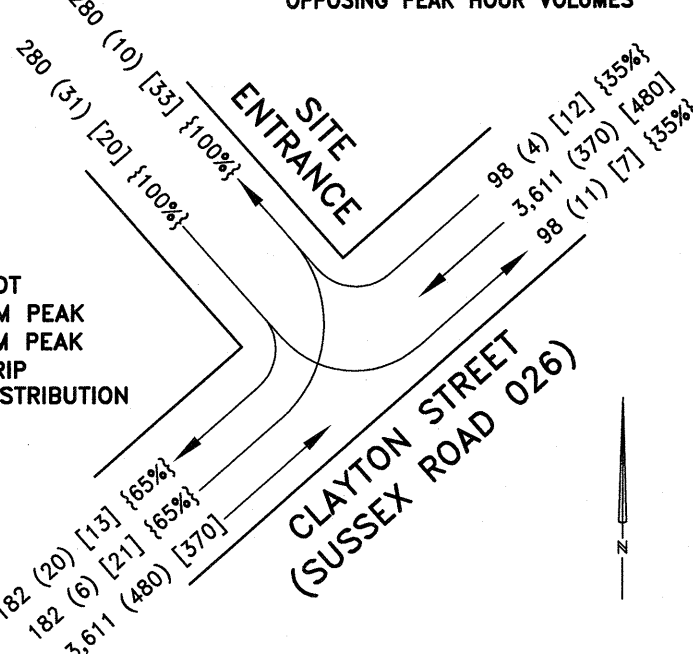
Virginia SWaM

P:\Horse\0700A036 Highlands\DESIGN\0700A036-RECORD PLAN.dwg Apr 17, 2023 - 2:28pm (REK)

ROAD DATA
CLAYTON STREET (SUSSEX ROAD 026)
FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR
AADT (2019 TRAFFIC SUMMARY) = 6,226
10 YR PROJECTED AADT = 1.16 X 6,226 = 7,222
10 YR PROJECTED AADT + SITE ADT NE OF SITE (196) = 7,418
10 YR PROJECTED AADT + SITE ADT SW OF SITE (364) = 7,586
PEAK HOUR = 11.77% X 7,222 = 850
DIRECTIONAL SPLIT = 56.51% / 43.49% = 480/370
10.55% TRUCK % X 850 = 90
SPEED - POSTED - 25 MPH
TRAFFIC PATTERN GROUP - 8

SITE ACCESS DESIGN VOLUMES
NEW ROAD: 2029 AADT (HIGHEST LEG PER HIGHWAY
SAFETY MANUAL PAGE 10-6) = 7,586
RIGHT-TURN ADT = 98
LEFT-TURN PEAK HOUR VOLUME = 21
OPPOSING PEAK HOUR VOLUMES = 492

LEGEND
ADT
AM PEAK
PM PEAK
TRIP DISTRIBUTION

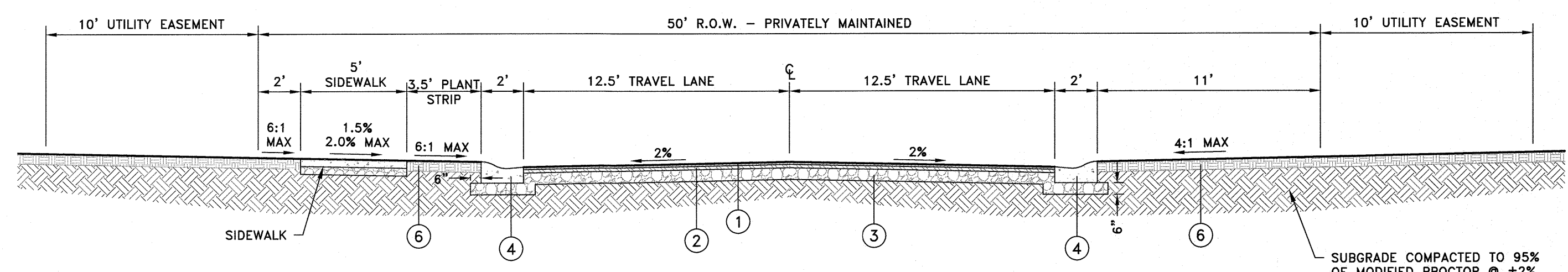


TRAFFIC DIAGRAM
NO SCALE

SITE TRIPS GENERATED

TYPE OF DEV.	ITE CODE	# UNITS	AM	PM	WKDY
SINGLE FAMILY HOMES	210	51	41	53	560

NOTES:
-TRIP GENERATION BASED ON ITE TRIP GENERATION MANUAL, 10TH EDITION.
-DESIGN VEHICLE: SU-30/WB-40.
-ONE (1) FULL SITE ENTRANCE PROPOSED.



TYPICAL ROAD SECTION
26' PAVEMENT SECTION
NOT TO SCALE

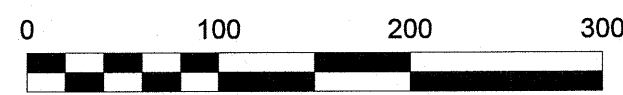
- LEGEND
- 1 BITUMINOUS CONCRETE, SUPERPAVE, TYPE 'C', PG 64-22, 160 GYRATIONS (CARBONATE STONE)
 - 2 BITUMINOUS CONCRETE, SUPERPAVE, TYPE 'C', PG 64-22, 160 GYRATIONS
 - 3 GRADED AGGREGATE BASE COURSE, TYPE 'B', SHALL BE OVER APPROVED SUBGRADE
 - 4 INTEGRAL P.C.C. CURB & GUTTER, TYPE 2
 - 5 P.C.C. CURB, TYPE 2
 - 6 TOPSOIL (6" DEPTH), PERMANENT GRASS SEEDING, DRY GROUND

LINE TABLE

LINE	BEARING	DISTANCE
L11	S 73°16'54" W	28.89'
L12	N 31°05'12" E	19.84'
L13	N 54°12'39" E	1.73'
L14	N 33°39'13" E	15.00'
L15	S 36°45'20" W	25.00'
L16	S 06°01'59" W	30.24'
L17	S 28°28'08" W	12.49'
L18	N 70°24'22" E	1.16'
L19	S 69°06'19" E	15.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	35.00'	54.36'	49.06'	N 11°28'08" E	88°59'22"
C1A	35.00'	44.84'	41.83'	N 19°15'52" E	73°23'54"
C1B	35.00'	9.52'	9.49'	N 25°13'48" W	15°55'28"
C2	475.00'	85.09'	84.98'	N 38°09'29" W	10°15'51"
C2A	475.00'	26.83'	26.83'	N 34°38'39" W	3°14'11"
C2B	475.00'	58.26'	58.22'	N 39°46'34" W	7°01'35"
C3	225.00'	40.65'	40.60'	N 38°06'49" W	10°21'09"
C3A	225.00'	15.07'	15.07'	N 41°22'16" W	3°50'16"
C3B	225.00'	25.58'	25.57'	N 36°11'41" W	6°30'53"
C4	175.00'	214.47'	201.30'	N 02°10'20" E	70°13'10"
C4A	175.00'	31.66'	31.61'	N 27°45'19" W	10°21'51"
C4B	175.00'	64.61'	64.24'	N 11°58'47" W	21°09'13"
C4C	175.00'	118.21'	115.97'	N 17°55'52" E	36°42'06"
C5	125.00'	71.48'	70.51'	N 20°53'58" E	32°45'54"
C6	175.00'	151.78'	147.06'	N 29°21'46" E	49°41'31"
C6A	175.00'	90.08'	89.09'	N 19°15'49" E	29°29'36"
C6B	175.00'	61.69'	61.37'	N 44°06'34" E	20°11'55"
C7	310.00'	87.64'	87.34'	N 62°18'27" E	16°11'50"
C7A	310.00'	15.18'	15.18'	N 55°36'43" E	2°48'22"
C7B	310.00'	55.99'	55.91'	N 62°11'19" E	10°20'51"
C7C	310.00'	16.47'	16.47'	N 68°53'03" E	3°02'37"
C8	20.00'	30.74'	27.80'	N 26°22'51" E	88°03'01"
C9	125.00'	151.73'	142.59'	N 52°25'07" W	69°32'55"
C9A	125.00'	74.44'	73.33'	N 34°42'00" W	3°40'64"
C9B	125.00'	62.72'	62.06'	N 66°07'44" W	28°44'48"
C9C	125.00'	14.60'	14.59'	N 83°50'51" W	6°41'26"
C10	225.00'	41.08'	41.02'	N 81°57'46" W	10°27'37"
C11	20.00'	26.54'	24.64'	S 65°15'05" W	76°01'55"
C12	52.50'	234.60'	82.72'	N 24°44'55" W	256°01'55"
C12A	52.50'	43.43'	42.20'	S 50°55'56" W	47°23'37"
C12B	52.50'	46.89'	45.34'	N 79°47'09" W	51°10'13"
C12C	52.50'	54.55'	52.13'	N 24°26'03" W	59°31'58"
C12D	52.50'	70.18'	65.07'	N 43°37'48" E	76°35'43"
C12E	52.50'	19.55'	18.44'	S 87°24'08" E	21°20'23"
C13	20.00'	31.42'	28.28'	N 58°16'03" E	90°00'00"
C14	275.00'	216.93'	211.35'	N 35°51'56" E	45°11'47"
C14A	275.00'	56.09'	55.99'	N 19°06'37" E	11°41'07"
C14B	275.00'	59.58'	59.47'	N 31°09'56" E	12°24'51"
C14C	275.00'	59.00'	58.89'	N 43°30'48" E	12°17'33"
C14D	275.00'	42.26'	42.22'	N 54°03'42" E	8°48'15"
C15	52.50'	234.60'	82.72'	S 06°28'47" W	256°01'55"
C15A	52.50'	4.07'	4.07'	N 60°41'13" E	4°26'46"
C15B	52.50'	52.91'	50.70'	S 88°13'06" E	57°44'37"
C15C	52.50'	177.62'	104.23'	S 37°34'29" W	193°50'32"
C16	20.00'	26.54'	24.64'	S 83°31'13" E	76°01'55"
C17	225.00'	177.49'	172.92'	S 35°51'56" W	45°11'47"
C17A	225.00'	79.46'	79.05'	S 48°20'48" W	20°14'03"
C17B	225.00'	98.03'	97.25'	S 25°44'55" W	2°45'44"
C18	20.00'	32.06'	28.74'	S 32°39'29" E	91°51'05"
C19	175.00'	26.29'	26.27'	S 82°53'18" E	8°36'33"
C20	175.00'	212.42'	199.62'	S 52°25'07" E	69°32'55"
C20A	175.00'	78.38'	77.73'	S 74°21'43" E	25°39'42"
C20B	175.00'	52.94'	52.74'	S 52°51'55" E	17°19'55"
C20C	175.00'	48.87'	48.71'	S 36°11'57" E	16°00'01"
C20D	175.00'	32.24'	32.19'	S 22°55'17" E	10°33'17"
C21	20.00'	32.10'	28.76'	S 63°37'09" E	91°56'59"
C22	2.50'	3.83'	3.47'	N 26°29'14" E	87°50'15"
C23	52.50'	247.40'	74.25'	S 64°35'38" E	270°00'00"
C23A	52.50'	202.03'	93.51'	S 89°20'59" E	220°29'19"
C23B	52.50'	45.37'	43.97'	S 45°39'01" W	49°30'41"
C24	260.00'	73.50'	73.26'	S 62°18'27" W	16°11'50"
C24A	260.00'	59.82'	59.69'	S 63°48'53" W	13°10'58"
C24B	260.00'	13.68'	13.68'	S 55°42'58" W	3°00'52"
C25	125.00'	108.41'	105.05'	S 29°21'46" W	49°41'51"
C25A	125.00'	1.00'	1.00'	S 53°58'47" W	0°27'30"
C25B	125.00'	63.30'	62.62'	S 39°14'37" W	29°00'49"
C25C	125.00'	44.11'	43.88'	S 14°37'36" W	20°13'12"
C26	175.00'	100.08'	98.72'	S 20°53'58" W	32°45'54"
C27	125.00'	153.19'	143.79'	S 02°10'20" W	70°13'10"
C27A	125.00'	129.57'	123.85'	S 07°35'10" W	59°23'29"
C27B	125.00'	23.62'	23.59'	S 27°31'25" E	10°49'40"
C28	175.00'	31.62'	31.58'	S 38°06'49" E	10°21'09"
C29	525.00'	94.05'	93.92'	S 38°08'29" E	10°15'51"
C29A	525.00'	2.11'	2.11'	S 43°10'29" E	0°15'51"
C29B	525.00'	62.46'	62.43'	S 39°39'02" E	6°49'02"
C29C	525.00'	29.47'	29.47'	S 34°38'02" E	3°12'58"
C30	35.00'	55.60'	49.93'	S 78°31'52" E	91°00'38"



RECORD PLAN - OVERVIEW

DAVIS, BOWEN & FRIEDEL, INC.

ARCHITECTS ENGINEERS SURVEYORS

SALISBURY, MARYLAND (410) 543-9993
FREDERICK, MARYLAND (410) 770-1474
EASTON, MARYLAND (410) 770-1474

REGISTERED PROFESSIONAL ENGINEER
NO. 12724
APR 9 2023

THE HIGHLANDS OF PEPPER'S CREEK

DAGSBORO HUNDRED

DAGSBORO, DELAWARE

REVISED:
2022-08-25: DELDOT INITIAL SUBMISSION
2022-11-10: TOWN OF DAGSBORO COMMENTS
2023-01-15: DELDOT COMMENTS
2023-04-17: CONSERVATION EASEMENT

Date: AUGUST, 2022
Scale: 1" = 100'
Dwn.By: DBF
Proj.No.: 0700A036
Dwg.No.: V-102

GENERAL RECORD / SITE PLAN NOTES

- REVISION DATE: 03/21/2019
- ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
 - NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT-OF-WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
 - SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
 - UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
 - PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17 §131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
 - THE SIDEWALK AND SHARED USE PATH SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
 - THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
 - THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.
 - A PERPETUAL CROSS ACCESS INGRESS/EGRESS EASEMENT IS HEREBY ESTABLISHED AS SHOWN ON THIS PLAT.

NINE FOOT ROAD - WAREHOUSING

DELDOT SITE / RECORD PLAN
VINES PEPPER CREEK WATERSHED,
DAGSBORO HUNDRED,
SUSSEX COUNTY, DELAWARE
TAX MAP # 233-10.00-55.00
MARCH 2022 SHI01-03A

DeIDOT
NO OBJECTION TO
RECORDATION
September 29, 2022
DATE

SITE DATA

OWNER:
144 DIXON ROAD, LLC
DALE SHIELDS
3408 VICEROY CT
EDGEWATER, MARYLAND 21037
PHONE: 443-623-5464
DALESHIELDS@ME.COM

DEVELOPER:
SHIELDS PROPERTIES, LLC
DALE SHIELDS
130 ADMIRAL COCHRANE DR.
ANNAPOLIS, MARYLAND 21401
PHONE: 443-623-5464
DALESHIELDS@ME.COM

CONSULTANT:
BEACON ENGINEERING, LLC
ROBERT J. PALMER, P.E.
23318 CEDAR LANE
GEORGETOWN, DELAWARE 19947
PHONE: 302-864-8825
RPALMER@BEACONENGINEERINGLLC.COM

PROPERTY AND ZONING DATA:
TAX MAP ID: 233-10.00-55.00
TOTAL SITE AREA: 1.95 AC.
TOTAL PROPOSED SITE AREA: 1.95 AC.
TOTAL LOD AREA: 0.966 AC.
PAVING AND PARKING: 0.649 AC.
OPEN SPACE AND LANDSCAPING: 0.891 AC.
LATITUDE AND LONGITUDE: LAT : 38.54191117 LON: - 75.25978830
SITE ADDRESS: 28163 NINE FOOT RD
DAGSBORO, DELAWARE 19939
DAGSBORO/FRANKFORD SSD
SEWER: PRIVATE
WATER: PRIVATE
THIS SITE CONTAINS NO WETLANDS WITHIN THE LOD.
THIS SITE IS LOCATED WITHIN A "FAIR" GROUNDWATER RECHARGE AREA.
THIS SITE IS NOT WITHIN A WELLHEAD PROTECTION AREA.
THIS PROJECT WILL BE CONSTRUCTED IN 1 PHASE.
THIS SITE IS NOT WITHIN THE 100YR FLOOD PLAIN PER FEMA MAP NUMBERED 10005C0458K DATED MARCH 16, 2015.

AREA AND BULK REQUIREMENTS:		C-1	CR-1
FRONT YARD:	60'	60'	
SIDE YARD:	5'	5' (20' FROM RESIDENTIAL)	
REAR YARD:	5'	5'	
HEIGHT MAX:	42'	42'	

SITE ACCESS:
VERTICAL DATUM : PRIVATE
HORIZONTAL DATUM: NAD83 (DELAWARE STATE PLANE)
DEED REFERENCE: DB: 5296 PAGE: 73, PB: 148 PAGE 36
PROXIMITY TO TRANSPORTATION
IMPROVEMENT DISTRICT: 10 MILES FROM HENLOPEN TID
STATE STRATEGIES
INVESTMENT LEVEL: 2
POSTED SPEED LIMIT: 40 MPH NINE FOOT ROAD.
NEAREST TOWN: TOWN OF DAGSBORO
SURVEYOR: BEACON ENGINEERING, LLC
DATE OF SURVEY: SEPTEMBER 21, 2020

LAND USE:
EXISTING TOTAL NUMBER OF LOTS: 1
PROPOSED TOTAL NUMBER OF LOTS: 1
CURRENT USE: VACANT
PROPOSED USE: WAREHOUSING
ZONING: C-1 and CR-1

PARKING REQUIREMENTS:	UNIT REQUIREMENT	PARKING REQUIRED	PARKING PROVIDED
USE			
WHOLESALE OR	1 FOR EVERY 2 EMPLOYEES	10	13
MANUFACTURING	ON THE MAJOR SHIFT		

LOADING SPACES REQUIRED 1 1

CONFORMED COPY
Document # 2023000019051 BK: 400 PG: 61
On 6/1/2023 at 9:20:22 AM
RECORDER OF DEEDS Alexandra Reed Baker
Sussex County
Consideration: \$0.00

APPROVED
Reidot Record
Plan Only
SUSSEX COUNTY
PLANNING & ZONING COMMISSION
6/1/23

OWNER'S CERTIFICATION

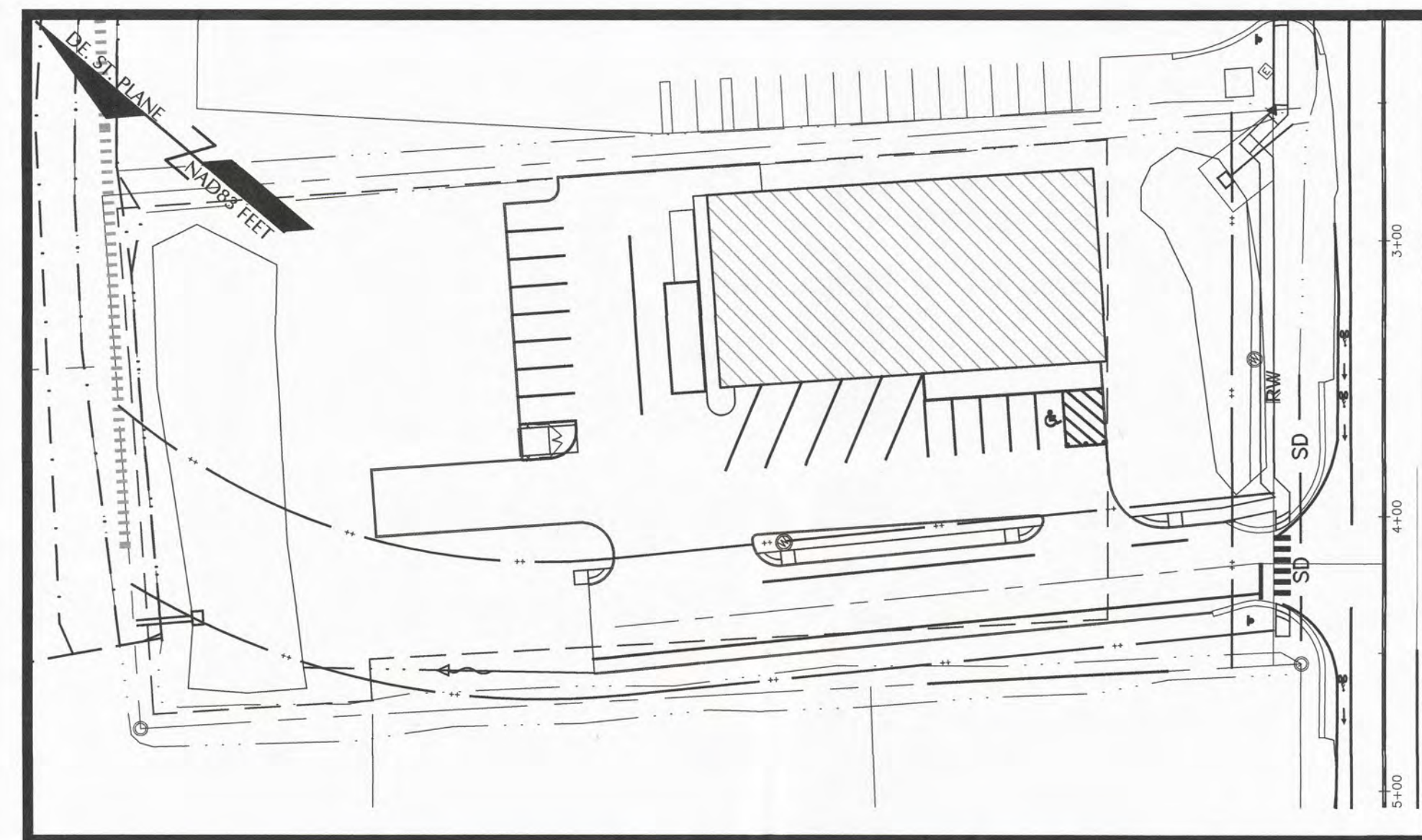
IT IS HEREBY CERTIFIED THAT I AM THE OWNER /DEVELOPER OF THE PROPERTY DESCRIBED AS PARCEL #233-10.00-55.00 AND SHOWN ON THIS PLAN. THE PLAN WAS MADE AT MY DIRECTION, AND I ACKNOWLEDGE THE SAME TO BE MY ACT. IT IS MY DESIRE TO HAVE THE PLAN RECORDED AS SHOWN AND IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

OWNER: 144 DIXON ROAD, LLC.
DALE SHIELDS
3408 VICEROY CT
EDGEWATER, MD 21037
09/23/2022
DATE

ENGINEER'S CERTIFICATION

I, ROBERT J. PALMER, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF DELAWARE AND THAT THIS PLAN WAS EITHER PREPARED BY ME OR UNDER MY DIRECTION, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS PLAN COMPLIES WITH THE APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES. MY LICENSE NUMBER IS 11563, AND EXPIRES ON JUNE 30, 2024.

ENGINEER: ROBERT J. PALMER, P.E.
BEACON ENGINEERING, LLC
23318 CEDAR LANE
GEORGETOWN, DELAWARE 19947
09/23/2022
DATE



SITE PLAN

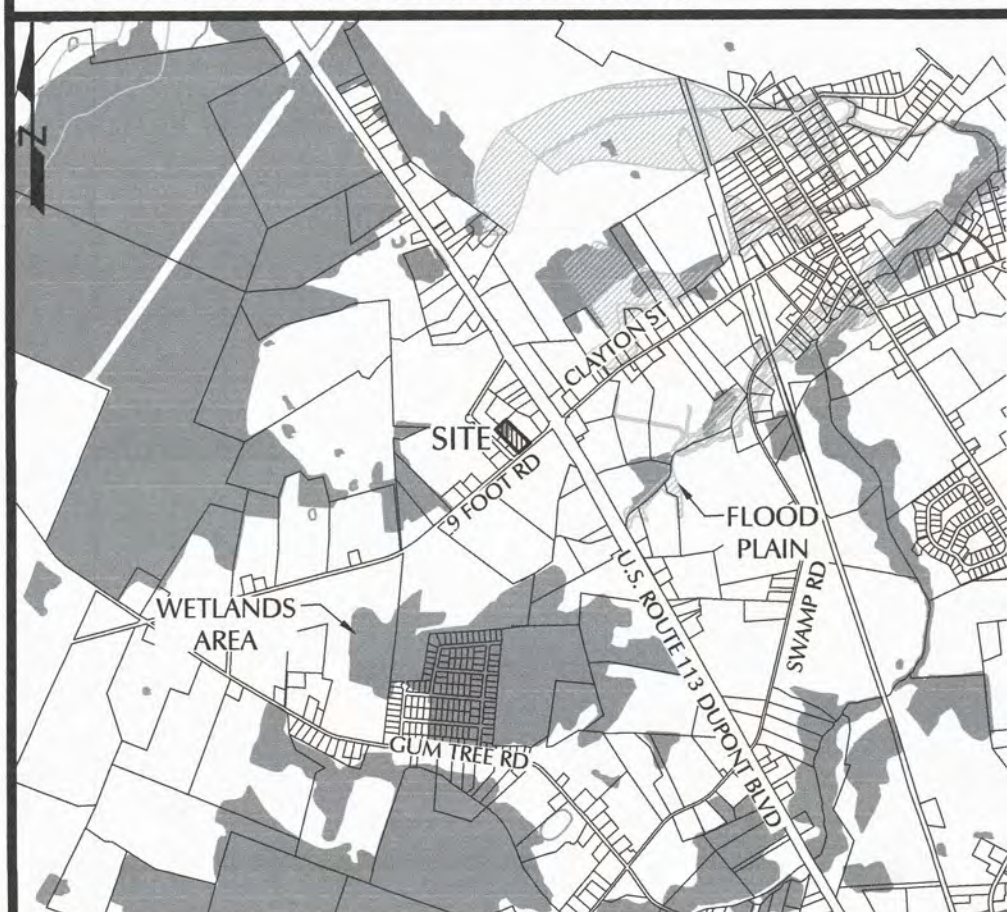
0 50 100 150
FEET

DRAWING INDEX:

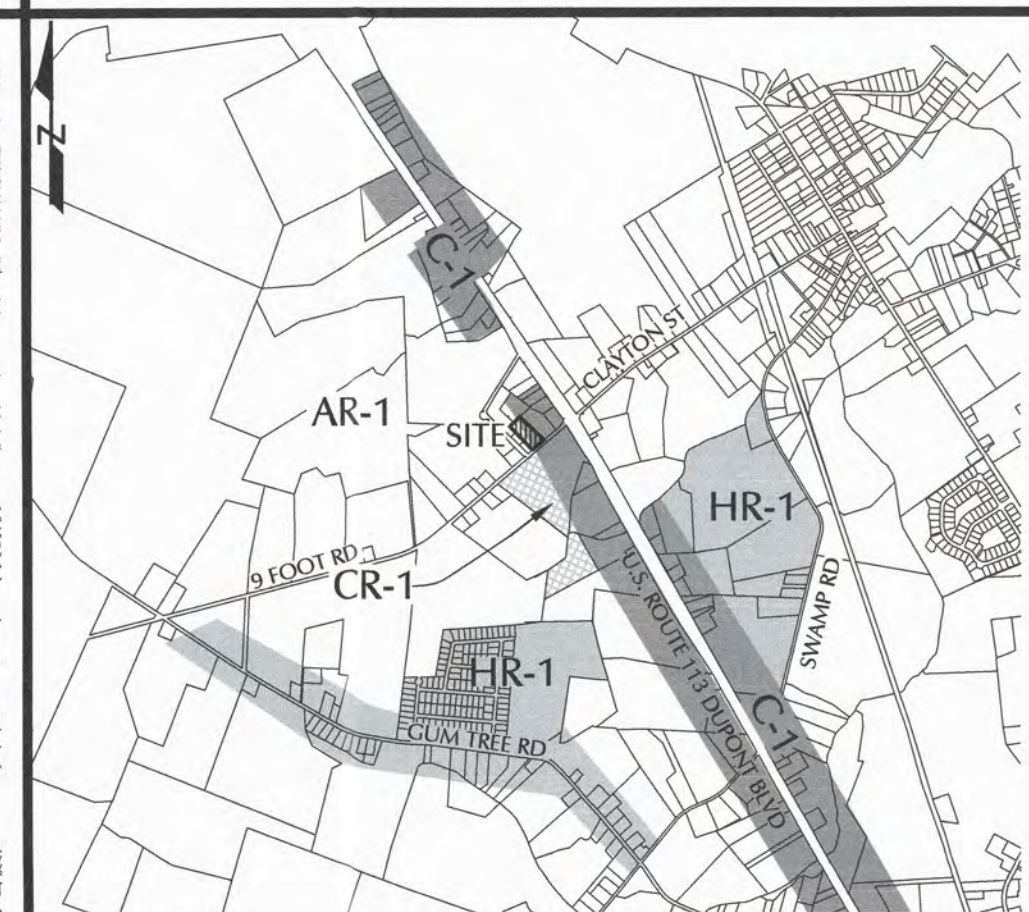
DWG NO.	SHEET NO.	TITLE
T1.1	1	TITLE SHEET
RP1.1	2	RECORD PLAN



WATER RESOURCE PROTECTION 1" = 1/2 MI



WETLANDS / FLOODPLAIN MAP 1" = 1/2 MI



LOCATION / ZONING 1" = 1/2 MI

ROAD TRAFFIC DATA		SR. 26, NINE FOOT ROAD	
FUNCTIONAL CLASSIFICATION:		MAJOR COLLECTOR	
POSTED SPEED LIMIT:		40 MPH	
AADT (2021 TRAFFIC VOLUME SUMMARY):		2,416 TRIPS	
10 YEAR PROJECTED AADT (1.16 X AADT):		2,803 TRIPS	
SITE AADT:		54 TRIPS	
10 YEAR PROJECTED + SITE AADT:		2,857 TRIPS	
TRAFFIC PATTERN GROUP:		8	
PEAK HOUR: 11:77% X (10 YEAR PROJECTED AADT + SITE AADT):		337 TRIPS	
SITE TRAFFIC DATA		SR. 26, NINE FOOT ROAD	
SOURCE: ITE TRIP GENERATION MANUAL 11TH EDITION		DESIGN VEHICLE: WB-40	
TRUCK PERCENTAGE: 5 (4 TRIPS)		FULL MOVEMENT	
CODE:		150 - WAREHOUSING (PER 1000 SF GFA)	
		9,800 SF	ADT 54 (AM PK) (PM PK) 2 2
DIRECTIONAL DISTRIBUTION		(AM PK) (PM PK)	
85% FROM THE EAST / 15% FROM THE WEST		ENTER EXIT ENTER EXIT	
150 - WAREHOUSING (PER 1000 SF GFA)		9,800 SF	1 1 1 1
		(AM PK) (PM PK)	
150 - WAREHOUSING (PER 1000 SF GFA)		77% ENTERING 23% EXITING 28% ENTERING 72% EXITING	



Date:	6/17/2022
By:	BAS
Revision:	DELDOT COMMENTS
	DELDOT COMMENTS
	1
	2

NINE FOOT ROAD - WAREHOUSING
144 DIXON ROAD, LLC.
VINES PEPPER CREEK WATERSHED, DAGSBORO HUNDRED,
SUSSEX COUNTY, DELAWARE
TAX MAP # 233-10.00-55
SCR. 26 - NINE FOOT ROAD.
TITLE SHEET

Date: APRIL 22 2022
Scale: AS SHOWN
Dwn.By: BAS
Proj.No.: SHI01-03

Dwg. No.: DELDOT SHEET 1

T1.1

Betty Tustin

From: Town of Dagsboro <dagsborotownclerk@mediacombb.net>
Sent: Tuesday, February 13, 2024 12:44 PM
To: Betty Tustin
Subject: Re: General's Green

It was decided last month I believe that they are not pursuing it any further.

Stacy West
Town Clerk
Town of Dagsboro
dagsborotownclerk@mediacombb.net
302-732-3777
<http://dagsboro.delaware.gov>

From: "Betty Tustin" <btustin@trafficgroup.com>
To: "dagsborotownclerk" <dagsborotownclerk@mediacombb.net>
Sent: Tuesday, February 13, 2024 11:48:49 AM
Subject: RE: General's Green

Stacy
Thank you so much for this information. I wasn't aware of the Layfield Property development. Are you aware of it's place in the approval process?

Thanks again

Betty

Betty H. Tustin, P.E., PTOE
Senior Project Manager – Delmarva Region



104 Kenwood Court
Berlin, MD 21811
M: 410-603-6251
btustin@trafficgroup.com
www.trafficgroup.com

Certifications

SBA Certified Service-Disabled Veteran-Owned Small Business (SDVOSB)
NY Certified Service-Disabled Veteran-Owned Business (SDVOB)
MBE Certified: Charles County, Howard County, and Prince George's County, MD
MFD Certified: Montgomery County, MD
MDOT SBE Certified

From: Town of Dagsboro <dagsborotownclerk@mediacombb.net>
Sent: Tuesday, February 13, 2024 11:26 AM
To: Betty Tustin <btustin@trafficgroup.com>
Subject: General's Green

Good Morning Betty

Per our phone conversation the General's Green project that I have included TMP's 2-33-10.00-35.00, 11.00-260.00, 11.00-274.00, and part of 11.00-276.00. and it look like there was a traffic impact study for General's Green phase 1 back in 2005.

This project did sunset as General's Green, however I believe a traffic study was done more recently under possibly the Layfield Property/Riverview Associates, I am not sure if that is what you are looking for or not.

Thanks

Stacy West
Town Clerk
Town of Dagsboro
dagsborotownclerk@mediacombb.net
302-732-3777
<http://dagsboro.delaware.gov>

Richard Huang

From: Ming-Yu Chien
Sent: Wednesday, November 22, 2023 8:16 AM
To: Richard Huang
Cc: Betty Tustin
Subject: FW: Timmons
Attachments: FW: Timmons Property; 2020-07-20_Timmons Property - TIS-Scope Memo.pdf

Good morning Betty,

Richard will help working on this one:

F:\2020\2020-0714_Timmons Property\ENG\REV1

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Tuesday, November 21, 2023 11:56 AM
To: Ming-Yu Chien <mchien@trafficgroup.com>
Subject: FW: Timmons

Back to this one after Phillips.

From: Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Sent: Tuesday, November 21, 2023 11:53 AM
To: Betty Tustin <btustin@trafficgroup.com>; Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>
Cc: Chiamprasert, Tanner (DelDOT) <tanner.chiamprasert@delaware.gov>
Subject: FW: Timmons

Be=y,

Upda?ng the scoping memo is more work for Annamaria but in doing so you get all the new updated informa?on since the scope memo is from 2020 and many things have changed since then.

I do agree the new counts are more reflec?ve of the current traffic pa= erns, and given it's only three intersec?ons and the minimal change in traffic numbers, you can submit the revised new collected counts for our review and include this email with the submission, so the reviewer is aware of all the changes.

As for the 2022 seasonal factors for October for TPG 2 is 0.983 and for TPG 8 is 1.318. Hope this helps!

Sireen A. Muhtaseb, PE
TIS Group Manager
Division of Planning
Delaware Department of Transportation
☎: 302.760.2529
✉: sireen.muhtaseb@delaware.gov



From: Betty Tustin <btustin@trafficgroup.com>

Sent: Monday, November 20, 2023 5:11 PM

To: Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>

Subject: RE: Timmons

Annamaria

Please see the attached email from Sireen approving the use of the existing Scope of Work for this project.

As you can see from the Scope of Work, the previous count submittal was based on earlier counts and assumptions due to the COVID 19 pandemic. Also, assumptions were made to divert traffic from the previous location of the Royal Farms to the new location. We thought it prudent to collect new counts now that the traffic volumes are no longer affected by the COVID 19 pandemic and the Royal Farms convenience store has been relocated and in operation at the new location for quite a while.

It seemed to us that the results of the study will be more reliable based on actual counts than counts fabricated based on old counts and assumptions. We could, however, move forward based on Sireen's email and use the previously approved traffic counts. I haven't compared those counts to the new counts so I can't make a statement as to how successful we were in making our adjustments to the older counts. Quite frankly, we thought that DeIDOT would be pleased that our client went to the extra expense to collect current data.

Of course we will use the ITE 11th edition, and of course we will use the HCM 7th edition. We will not need a TSJS as the study intersection is already signalized. Nor will we be making a request to adjust the speed limit on a US primary arterial (US 113).

Therefore, it would seem to us a waste of our time and yours to go through the Scope process again. If amenable, please provide the 2022 SAF as requested and we will prepare and submit a revised Traffic Count for your review.

Kind Regards

Betty

From: Furmato, Annamaria (DeIDOT) <Annamaria.Furmato@delaware.gov>

Sent: Monday, November 20, 2023 4:54 PM

To: Betty Tustin <btustin@trafficgroup.com>; Muhtaseb, Sireen (DeIDOT) <Sireen.Muhtaseb@delaware.gov>

Subject: Re: Timmons

Betty,

Due to new traffic counts and recent inclusions to scoping memos, the Scope of Work needs to be updated. Please submit a scoping meeting request. Please also include any project information that has changed since the scope was issued. We will be bringing the scope up to current practices including 2022 seasonal adjustment factors, 2022 TPG, ITE 11th edition, HCM 7th edition, TSJS and speed limit adjustment information, and inclusion of any new projects in the area. We will also remove the Covid 19 condition language. A new scoping meeting will not be required to issue a revised memo. After that memo is issued, please resubmit the new traffic counts.

Annamaria Furmato, EIT

TIS Group Project Engineer
Delaware Department of Transportation
(302) 760-2710

From: Betty Tustin <btustin@trafficgroup.com>
Sent: Monday, November 20, 2023 9:30 AM
To: Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>; Furmato, Annamaria (DelDOT) <Annamaria.Furmato@delaware.gov>
Subject: Timmons

Good morning,
The Timmons TIS has been delayed so we have conducted new traffic counts in accordance with the Scope. We need SAF for the month of October. This is for the intersection of US 113 and Nine Foot Road.
Betty



Betty H. Tustin, P.E., PTOE
Senior Project Manager – Delmarva Region

The Traffic Group, Inc.

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Berlin, MD 21811

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STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

JENNIFER COHAN
SECRETARY

MEMORANDUM

TO: File

FROM: Claudy Joinville, Project Engineer *C.J.*

DATE: July 20, 2020

SUBJECT: **Timmons Property**
Traffic Impact Study (TIS) - Scoping Meeting (7/15/2020)
Scope of Work

ATTENDANCE: Robert Palmer, Beacon Engineering, LLC
Dale Shields, Shields Properties, LLC
Al Shields, Shield Properties, LLC
Lauren DeVore, Sussex County Planning and Zoning
Todd Sammons, DelDOT Planning
Susanne Laws, DelDOT Planning
Tom Felice, DelDOT Planning
Kevin Hickman, DelDOT Planning
T. William Brockenbrough, Jr., DelDOT Planning
Claudy Joinville, DelDOT Planning

Background and Discussion

Shields Properties, LLC seeks to develop a 3,150 square-foot fast-food restaurant with drive-through window, a 2,750 square-foot convenience market with gas pumps, and 19,000 square-foot warehouse on an approximately 6.65-acre assemblage of parcels (Tax Parcels: 233-10.00-48.00, 49.00, 50.01, 50.02, 53.01 and 55.00).

The land is located at the northwest corner of the intersection of US Route 113 and Nine Foot Road (Sussex Road 26), west of Dagsboro. The land is currently split-zoned as AR-1 (Agricultural Residential), C-1 (General Commercial) and CR-1 (Commercial Residential), and the developer does not plan to rezone the land.



Two access points are proposed: a rights-in / rights-out on US Route 113 and a full access on Nine Foot Road. Construction is anticipated to be complete in 2022.

Cases to be Evaluated

The study shall evaluate the weekday morning, weekday evening, and summer Saturday midday peak hours for the following situations:

- 1) Existing (2020);
- 2) 2022 without development; and
- 3) 2022 with development.

Facilities to be Evaluated

The TIS should evaluate conditions at the following intersections for capacity and level of service using the Highway Capacity Software (HCS). It should also evaluate the extent to which they meet the relevant DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices.

1. Site Entrance A / US Route 113 (rights-in / rights-out)*
2. Site Entrance B / Nine Foot Road (Sussex Road 26)
3. US Route 113 / Nine Foot Road / Clayton Street (Sussex Road 26)

** DelDOT is amenable to allowing a rights-out movement at the proposed entrance on US Route 113 if the developer is willing to extend the existing US Route 113 southbound left-turn lane north of the entrance and install a concrete median along the left-turn lane to prevent traffic exiting the site from entering that lane..*

Traffic Counts

The Consultant should conduct traffic counts for the intersections listed above from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., on a Tuesday, Wednesday or Thursday, and from 10:00 a.m. to 2:00 p.m. on a Saturday to determine when the peaks occur. The weekday traffic counts should be performed during a time when schools are open and operating at a normal capacity. The Saturday counts should be conducted at a time when local area schools, as well as schools in the nearby metropolitan areas of Philadelphia, Baltimore, and Washington, D.C., are closed in June, July, or August.

Due to the traffic impact of the COVID-19 pandemic on the road network, DelDOT is amenable to the Consultant's reusing counts recently collected for the intersections in the study area. DelDOT will supply traffic counts for the intersection of US Route 113 and Nine Foot Road / Clayton Street. Since existing counts will be reused for this development, an Automatic Traffic Recorder (ATR) is no longer required to be placed on US Route 113 and Nine Foot Road near the site entrance.

Section 2.2.8.5, item 19, under Existing Traffic and Transportation Conditions in the Development Coordination Manual, addresses how oversaturated intersections are to be counted.

The traffic counts should be submitted to DelDOT both electronically as Portable Document Format (PDF)/Excel files and as draft report figures showing peak hour volumes (labeled with date and peak hour interval) posted on diagrams of the road network.

The Consultant should include counts of pedestrians, a separate count of right-turn on red (in addition to right-turn movement counts), and a separate count of heavy vehicles.

The Consultant should be alert for events affecting the traffic counts, such as accidents or nearby construction and shall make note of any such events when submitting the counts. As necessary, DelDOT reserves the right to reject the counts or require adjustments to them.

Trip Generation

The Consultant shall use the 10th edition of the ITE Trip Generation Manual in generating trips for this development.

Trip Distribution to be used for the site were developed using DelDOT's Travel Demand Model and are attached.

Future Growth

The Consultant shall apply growth factors to the traffic counts. DelDOT will develop those factors after we receive the Consultant's traffic counts.

The Consultant should also determine what portions of the following developments were complete at the time of any traffic counts to be used in the study and shall add in projected traffic from any unbuilt portions. The following information on the amount and types of development associated with these projects is tentative and should be verified Sussex County and Town of Dagsboro.

- 1) **Clayton Crossing (f.k.a. Cummings & Clark G.P)** (56,000 square-foot general office)
- 2) **Royal Farms #316 Dagsboro** (5,371 square-foot convenience store with gas pumps) *
- 3) **Generals Green – Phase I** – *confirm type and size with the Town.*
- 4) **Highlands of Peppers Creek** – *confirm type and size with the Town.*

** The proposed Royal Farms #316 is proposed to replace the existing Royal Farms store located at the southeast corner of the intersection of US Route 113 and Clayton Street / Nine Foot Road. Specifically, the existing store will be demolished and relocated at the northeast corner of the above-mentioned intersection. Because the existing store is still in operation and the proposed store is proposed to be slightly larger, this will result in a net increase in site trips. The Consultant should only account for the net increase in trips at the intersection. In addition, the*

Consultant should account for the change in site trip pattern at the intersection due to relocating the existing store to the northeast corner of the intersection.

Highway Capacity Software

The Consultant shall use the most recent version of the Highway Capacity Software (HCS) that implements the 6th Edition of the Highway Capacity Manual (HCM). Presently, that is HCS7.

Seasonal Adjustment Factors for the roads in the study area are as follows:

Roads	July	August	September
US Route 113 – TPG 2	0.98	0.96	0.97
Nine Foot Road (Sussex Road 26) – TPG 8	0.76	0.77	0.92
Clayton Street (Sussex Road 26) – TPG 8	0.76	0.77	0.92
All Other Roads	1.00	1.00	1.00

DelDOT Projects

DelDOT currently has two active projects in the study area.

1. DelDOT's **Corridor Capacity Preservation Program (CCPP)** seeks to maintain the through capacity of certain arterial highways through the management of access along them. US Route 113 is one of the highways included in the CCPP. For more information on the CCPP the Consultant shall contact Tom Felice, Project Manager within DelDOT's Development Coordination Section. Mr. Felice may be reached at (302) 760-2338.

2. The **US 113 North / South Study** which aims to make various improvements throughout the US Route 113 corridor from the Maryland state line in Selbyville to Delaware Route 1, north of Milford. The proposed development would directly impact the Millsboro-South Area of the project. The overall purpose of the US 113 North/South Study is to identify an alignment for a continuous limited access roadway from the Maryland / Delaware state line north to Delaware Route 1 north of the City of Milford. More details, including concept plans for this project, are available at the following link: <https://deldot.gov/information/projects/us113/pages/overview.shtml>. For more information on how this project affects the proposed development, the Consultant shall contact Mr. Mark Whiteside, Project Manager in the Project Development – South section. Mr. Whiteside may be reached at (302) 760-2127.

Transit, Bicycle, and Pedestrian Facilities

The study should describe the existing and proposed transit service in the project area and should also describe the existing and needed transit, bicycle, and pedestrian facilities on or near the project site. In determining these items, the Consultant shall contact Mr. Jared Kauffman, a Service Development Planner at the Delaware Transit Corporation (DTC), and Mr. Anthony Aglio, of DelDOT's Statewide and Regional Planning Section. Mr. Kauffman may be reached at (302) 576-6062. Mr. Aglio may be reached at (302) 760-2509.

General Notes

- 1) All submissions relating to this study should be made electronically via the Planning and Development Coordination Application (PDCA), preferably in Portable Document Format (PDF).
- 2) The Consultant should e-mail DelDOT's Transportation Management Center (TMC) at tmc1@delaware.gov to obtain advance approval for the use of any signal timings.
- 3) The Consultant should refer to the attached memorandum from Scott Neidert of DelDOT's Traffic Section for guidance regarding requests for crash data within the study area. The Consultant shall report on this data and make recommendations for improvements if safety problems exist in the study area. Mr. Neidert may be reached at (302) 659-4075.
- 4) Before deploying temporary unmanned devices, e.g. cameras or radar detectors, in the State-maintained right-of-way, the individual or company proposing to do so shall execute and file a Right-of-Way Use Agreement. Before each specific deployment of devices, the individual or company shall email a completed Temporary Data Collection Device Notification Form to TMC1@delaware.gov. Deployment of Automatic Traffic Recorders, a.k.a. tube counters, and devices on portable trailers does not require a Right-of-Way Use Agreement but does require submission of the Temporary Data Collection Device Notification Form. Copies of the standard agreement and the form are available from Ms. Lara Brown at (302) 659-4062 or Lara.Brown@delaware.gov.
- 5) DelDOT, Town of Dagsboro, and Sussex County reserve the right to change this scope of work if the study is not performed within a reasonable time.
- 6) The developer may choose to have DelDOT's Consultant perform the TIS rather than use their own Consultant. If this option is of interest, the developer should contact Mr. Troy Brestel at (302) 760-2167 to request a cost estimate.

Memorandum to File
July 20, 2020
Page 6 of 6

- 7) By copy of this memorandum I ask those copied to contact me at (302) 760-2124 regarding any significant errors or omissions.

CJ:cjm

Enclosures

cc: Jamie Whitehouse, Director, Sussex County Planning and Zoning
Cynthia Brought, Town Administrator, Town of Dagsboro
Marc Coté, Director, DelDOT Planning
Michael Simmons, Assistant Director for Project Development South, DOTS
Peter Haag, Chief Traffic Engineer, Traffic, DOTS
Chris Sylvester, Traffic Studies Engineer, DOTS
Alastair Probert, South District Engineer, DOTS
Gemez Norwood, South District Public Works Supervisor, DOTS
James Satterfield, Regional Group Engineer, Project Development South, DOTS
Mark Whiteside, Project Manager, Project Development South, DOTS
William Kirsch, South District Permit Supervisor, DOTS
Derek Sapp, Sussex County Subdivision Manager, Development Coordination
Mark Galipo, Traffic Engineer, DelDOT Traffic, DOTS
Troy Brestel, Project Manager, Development Coordination
David Dooley, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Statewide & Regional Planning
Scott Neidert, Design Resource Engineer, Traffic Section
Lara Brown, Administrative Specialist, DelDOT Traffic DOTS
Jared Kauffman, Service Development Planner, Delaware Transit Corporation
Kari Glanden, Statistical Information Supervisor, DelDOT Traffic, DOTS
James Argo, South District Project Reviewer, Maintenance & Operations
Andrew Parker, McCormick & Taylor, Inc.
Mir Wahed, Johnson, Mirmiran, & Thompson, Inc.



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

JENNIFER COHAN
SECRETARY

TO: Requestors of Crash Data via DelDOT's Development Coordination Process

FROM: Scott Neidert, Design Resource Engineer, Traffic Section

DATE: September 5, 2019

SUBJECT: Revisions to Crash Data Requests and Releases

As of July 23, 2019, Governor Carney has signed SB 147 into law containing amendments to the release of crash data, namely permitting DelDOT to release certain de-identified data based on the nature of the requestor. Specifically, newly enacted 21 Del. C. §313(c)(1) provides that:

"The Department of Transportation may provide the information under this subsection if the person requesting the information provides proof of identity and a sworn representation that the data will be strictly used for any of the following purposes:

- a. To comply with federal, State, or local law or regulations.*
- b. By a municipality or municipal planning organization in carrying out official functions."*

To conform with the "proof of identity and... sworn representation..." clause, requestors will be required to complete an online crash data request as well as provide a notarized release form to be submitted with each crash request prior to being processed. A link to the release form is provided within the online crash request.

Effective immediately, all requests for crash data, when required, must be made at:
<https://tmc.deldot.gov/tmcx/app/crashdata/public/info.html>

Requests for crash data will not be processed until all required fields are completed, and the release form has been completed and received.

SN

cc: Nicole Majeski, Deputy Secretary
Shanté Hastings, Chief Engineer
Drew Boyce, Director, Planning
Annie Cordo, Deputy Attorney General
Mark Luszczyk, Deputy Director, Division of Transportation Solutions
Kari Glanden Thompson, Statistical Information Supervisor, Traffic Section



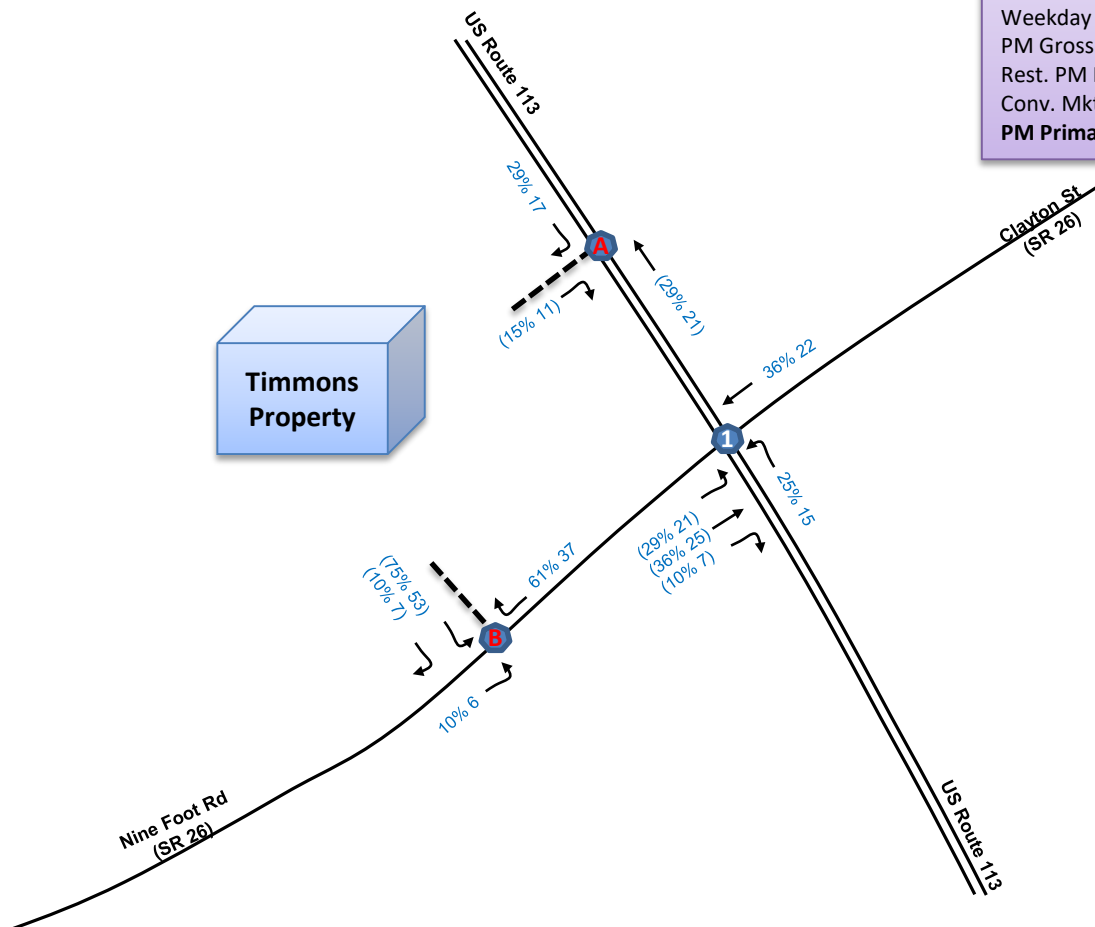
PM Peak Distribution & Assignment Rights-in / Rights-out on US 113 July 20, 2020

Timmons Property

Trip Generation

3,150 SF Fast-Food Rest. w/ Drive-Thru (ITE 10th Ed. LUC 934)
2,750 SF Convenience Mark. w/ Gas (ITE 10th Ed. LUC 853)
19,000 SF Warehousing (ITE 10th Ed. LUC 150)

	Total	IN	OUT
Weekday ADT Total	3,276	1,638	1,638
PM Gross Total	269	130	139
Rest. PM Pass-by (50%)	-52	-27	-25
Conv. Mkt. PM Pass-by (50%)	-86	-43	-43
PM Primary	131	60	71



Timmons Property

Nine Foot Rd
(SR 26)

Clayton St
(SR 26)

US Route 113

Note: Figure Not Drawn to Scale

Richard Huang

From: Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Sent: Thursday, June 22, 2023 3:15 PM
To: Betty Tustin
Cc: Furmato, Annamaria (DelDOT); Lindsey, Philip (DelDOT); Arellano, Joanne (JArellano@jmt.com)
Subject: FW: Timmons Property
Attachments: TRIPS.pdf; 2020-07-20_Timmons Property - TIS-Scope Memo.pdf; Ltr_TIS Traffic Count Submittal_Brockenbrough.pdf; 2020-11-30_Timmons-Property_Traffic-Count-letter.pdf

Hi Betty,

With the minimal change in the traffic numbers between the two editions of the ITE and since the counts have already been approved, you can move on to the Preliminary TIS.

Please update the trip generation to the 11th and confirm the committed developments status and any changes. Also, no need to revise the scope memo but do include this email with your next submission. Thanks!

Sireen A. Muhtaseb, PE

TIS Group Manager
Division of Planning
Delaware Department of Transportation
☎: 302.760.2529
✉: sireen.muhtaseb@delaware.gov



From: Betty Tustin <btustin@trafficgroup.com>
Sent: Monday, June 19, 2023 4:26 PM
To: Muhtaseb, Sireen (DelDOT) <Sireen.Muhtaseb@delaware.gov>
Subject: Timmons Property

Sireen,

In 2020, we held a Scoping Meeting for the proposed development of the Timmons Property located on US 113 in Dagsboro, DE. A copy of the Scoping Memorandum is attached for your convenience.

We submitted traffic counts on November 3, 2020 which were accepted on November 30, 2020. Copies of this correspondence is also attached for your convenience.

No further work was conducted on the Traffic Impact Study. However, the project is now moving forward again.

The planned use is similar to that previously proposed; however, the trip generation tables for the previous proposal (ITE 10th ed was used) and the present proposal (ITE 11th ed was used) is attached. In summary, with the changes in trip

genera on rates, we will have a slight decrease in the evening peak hour traffic volumes which are used to Scope the TIS.

May we move forward using the existing Scope or will a revised Scope be provided? Also, may we utilizing the counts from the previously approved count submiŰal or will new counts be required.

Please advise.

<i>Trip Generation for Timmons Property</i>	<i>AM Peak Hour</i>			<i>PM Peak Hour</i>			<i>Saturday Peak Hour</i>		
	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
Previously Proposed (ITE-10th Ed.)									
Total New Trips	76	59	135	58	69	127	157	153	310
Currently Proposed (ITE-11th Ed.)									
Total New Trips	67	65	132	57	55	112	177	173	350
Current - Previous	-9	6	-3	-1	-14	-15	20	20	40



Betty H. Tustin, P.E., PTOE
Senior Project Manager – Delmarva Region

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Previously Proposed for Timmons Property

Trip Generation Rates - ITE 10th Edition										
Land Use (Source)	Formula/Rate	Directional Distribution								
		AM Peak Hour		PM Peak Hour		SAT Peak Hour				
		In	Out	In	Out	In	Out			
Fast Food Rest. w/Drive-Thru (ITE-934)	AM Peak Hour Trips = 40.19 x ksf									
	PM Peak Hour Trips = 32.67 x ksf	51%	49%	52%	48%	51%	49%			
	Sat. Midday Peak Hour Trips = 54.86 x ksf									
Convenience Market w/Gas (ITE-853)	AM Peak Hour Trips = 40.59 x ksf									
	PM Peak Hour Trips = 49.29 x ksf	50%	50%	50%	50%	50%	50%			
	Sat. Midday Peak Hour Trips = Assumed same as PM Peak Trips									
Warehousing (ITE-150)	AM Peak Hour Trips = 0.12 x ksf + 25.32									
	PM Peak Hour Trips = 0.12 x ksf + 27.82	77%	23%	27%	73%	64%	36%			
	Sat. Midday Peak Hour Trips = 0.05 x ksf									
Trip Generation for Timmons Property										
Land Use	Size	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Fast Food Rest. w/Drive-Thru	3,150 sq.ft.	65	62	127	54	49	103	88	85	173
	Pass-by Trips (AM-49%, PM-50%)	-32	-30	-62	-27	-25	-52	0	0	0
	New Trips	33	32	65	27	24	51	88	85	173
Convenience Market w/Gas	2,750 sq.ft.	56	56	112	68	68	136	68	68	136
	Pass-by Trips (AM-63%, PM-66%)	-35	-35	-70	-45	-45	-90	0	0	0
	New Trips	21	21	42	23	23	46	68	68	136
Warehousing	19,000 sq.ft.	22	6	28	8	22	30	1	0	1
	Total Trips	143	124	267	130	139	269	157	153	310
	Total Pass-by Trips	67	65	132	72	70	142	0	0	0
	Total New Trips	76	59	135	58	69	127	157	153	310



Currently Proposed for Timmons Property

Trip Generation Rates - ITE 11th Edition										
Land Use (Source)	Formula/Rate	Directional Distribution								
		AM Peak Hour		PM Peak Hour		SAT Peak Hour				
		In	Out	In	Out	In	Out			
Fast Food Rest. w/Drive-Thru (ITE-934)	AM Peak Hour Trips = 44.64 x ksf									
	PM Peak Hour Trips = 33.03 x ksf	51%	49%	52%	48%	51%	49%			
	Sat. Midday Peak Hour Trips = 55.25 x ksf									
Convenience Store/Gas Station (9-15 VFP, ITE-945)	AM Peak Hour Trips = 56.52 x ksf									
	PM Peak Hour Trips = 54.52 x ksf	50%	50%	50%	50%	50%	50%			
	Sat. Midday Peak Hour Trips = 64.13 x ksf									
Trip Generation for Timmons Property										
Land Use	Size	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Fast Food Rest. w/Drive-Thru	3,150 sq.ft.	72	69	141	54	50	104	89	85	174
	Pass-by Trips (AM-50%, PM-55%)	<u>-36</u>	<u>-35</u>	<u>-71</u>	<u>-30</u>	<u>-28</u>	<u>-58</u>	<u>0</u>	<u>0</u>	<u>0</u>
	New Trips	36	34	70	24	22	46	89	85	174
Convenience Market w/Gas	2,750 sq.ft.	77	78	155	75	75	150	88	88	176
	Pass-by Trips (AM-60%, PM-56%)	<u>-46</u>	<u>-47</u>	<u>-93</u>	<u>-42</u>	<u>-42</u>	<u>-84</u>	<u>0</u>	<u>0</u>	<u>0</u>
	New Trips	31	31	62	33	33	66	88	88	176
	Total Trips	149	147	296	129	125	254	177	173	350
	Total Pass-by Trips	82	82	164	72	70	142	0	0	0
	Total New Trips	67	65	132	57	55	112	177	173	350





STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

November 30, 2020

Ms. Betty Tustin
The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21811

Dear Ms. Tustin:

We have reviewed the traffic counts that we received on November 4, 2020 for the **Timmons Property** (Protocol Tax Parcel: 233-10.00-48.00) traffic impact study (TIS). Upon our review, we find that the traffic counts are acceptable as submitted.

Considering background growth factors, please apply the following growth factors to the seasonally adjusted traffic volumes in developing future traffic:

<u>Road</u>	<u>Growth Factor</u>	<u>Total Growth from 2020 to 2022</u>
US Route 113	1.01	1.02
Clayton Street / Nine Foot Road (Sussex Road 26)	1.005	1.01
All Other Roads	1.00	1.00

You may contact Mr. Troy Brestel at (302) 760-2167 if you have any questions concerning this correspondence.

Sincerely,

T. William Brockenbrough, Jr.
County Coordinator

TWB:tbm

cc: Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

November 30, 2020

Ms. Betty Tustin
The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21811

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<u>Road</u>	<u>Growth Factor</u>	<u>Total Growth from 2020 to 2022</u>
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All Other Roads	1.00	1.00

You may contact Mr. Troy Brestel at (302) 760-2167 if you have any questions concerning this correspondence.

Sincerely,

T. William Brockenbrough, Jr.
County Coordinator

TWB:tbm

cc: Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination