



Environmental, Planning, and Engineering Consultants

34 South Broadway
Suite 300
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

Technical Memorandum

To: Village of Croton-on-Hudson Board of Trustees
From: AKRF, Inc.
Date: May 6, 2021
Re: 41-51 Maple Street Residential Development – Traffic Impact Study

This Traffic Impact Study (TIS) provides a detailed traffic analysis that was completed to assess the potential traffic and transportation impacts of the proposed residential development to be located at 41-51 Maple Street in the Village of Croton-on-Hudson (“the Proposed Project”).

This TIS describes traffic operations for existing conditions within the Study Area and for conditions in the future without the Proposed Project (the “No Build” analysis), and in the future with the Proposed Project (the “Build” analysis).

Regan Development Corporation (the “Applicant”), contract vendee of the property located at 41-51 Maple Street (the “Project Site”), is seeking, among other actions, special use permit approval from the Village of Croton-on-Hudson (the “Village”) Board of Trustees pursuant to §230-20.3.B(4) of the Village Zoning Code, to develop the currently vacant Project Site with a 33-unit multifamily residential development, the majority of which would be affordable housing (the “Proposed Project”). The Village Board of Trustees is serving as the Lead Agency for the Proposed Project’s environmental review pursuant to the State Environmental Quality Review Act (SEQRA).

As outlined in the Preliminary Site Plan prepared by Prime Companies (dated March 16, 2021), the Applicant is proposing to construct an approximately 41,100 square-foot (sf) multifamily residential development consisting of 33 rental apartments within two 2-story buildings, 61 at-grade parking spaces, landscaping, and private/public open spaces.

A. PRINCIPAL CONCLUSIONS

TRAFFIC

TRAFFIC ANALYSIS

Traffic conditions were evaluated for the following four intersections during the weekday AM and PM peak hours:

1. Maple Street (NYS Route 129) and Municipal Place/Shopping Center Driveway
2. Maple Street/Hudson River Road and South Riverside Avenue (NYS Route 9A)
3. South Riverside Avenue and Municipal Place

4. Maple Street and Project Site Driveway (Build condition only)

Field inventories of the intersection roadway geometries were conducted and signal timing plans were obtained from New York State Department of Transportation (NYSDOT) to provide the appropriate inputs to the operational analyses. Field inventories of the study area intersections, descriptions of the study area roadways, and the NYSDOT signal timing plans are provided in **Attachment A**.

Potential impacts of the Proposed Project were analyzed using methodologies based on the Highway Capacity Manual, 6th Edition (HCM 6) methodology (Synchro 10 software) to calculate existing and future traffic operating conditions (Level of Service (“LOS”) and total delay) at each of the Study Area intersections. LOS is based on a grading scale of “A” through “F” with “A” representing optimum traffic conditions and “F” representing poor traffic conditions (LOS D or better is typically considered acceptable operating conditions). Further descriptions of the capacity analysis methodology are provided in **Attachment A**.

For the purpose of this analysis, traffic impacts are identified as: (1) any change in LOS D or better to LOS E or F; (2) any change from LOS E to LOS F; or (3) any increase of 10 percent or greater in delay for LOS F between No Build and Build conditions. The significant impact criteria are applied to the approach/lane group LOS for signalized intersections and approach/movement group LOS for unsignalized intersections.

Based on the criteria outlined above, no traffic impacts were identified for the Proposed Project. All intersection lane groups/movements would operate at LOS D or better under Existing, No Build, and Build conditions (see **Tables 1 and 2** which summarize traffic operating condition analysis results). As noted above, LOS D or better is typically considered acceptable operating conditions. The Synchro output reports for the Existing, No Build, and Build conditions are provided in **Attachment B**.

TRAFFIC VOLUME DEVELOPMENT

2021 Existing Conditions

Manual turning movement counts (TMC) at the three existing Study Area intersections were collected during the weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods in March, 2021. To account for pre-pandemic existing baseline traffic conditions, AKRF developed and applied an adjustment factor to the March 2021 TMC data as it was collected during the ongoing pandemic. Details of the development of these adjustment factors and the summarized TMC data are outlined in **Attachment A**. The 2021 Existing conditions traffic volumes are based on the adjusted TMC data.

2023 No Build Conditions

An annual background growth rate of 0.5 percent was applied to the 2021 Existing Conditions volumes. Additional trips were then added to the roadway network from another planned multifamily residential development in the vicinity of the study area (25 South Riverside Avenue) to develop the 2023 No Build traffic volumes. Trip generation and assignment information for the 25 South Riverside Avenue project are provided in **Attachment A**.

2023 Build Conditions

Traffic volumes anticipated to be generated by the proposed project were estimated utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. **Table 3** presents a summary of the project generated trips.

Table 1

2021 Existing and 2023 No Build Conditions Level of Service Analysis

Intersection	Weekday AM							Weekday PM								
	2021 Existing				2023 No Build			2021 Existing				2023 No Build				
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS
Signalized Intersections																
Maple Street and Municipal Place/Shopping Center Driveway																
EB (Municipal Pl.)	LTR	0.71	33.6	C	LTR	0.72	33.9	C	LTR	0.74	35.4	D	LTR	0.74	35.7	D
WB (Shopping Ctr. Drv.)	LTR	0.16	18.4	B	LTR	0.15	18.3	B	LTR	0.28	20.9	C	LTR	0.28	20.9	C
NB (Maple St.)	LTR	0.22	9.9	A	LTR	0.23	10.1	B	LTR	0.40	12.3	B	LTR	0.40	12.3	B
SB (Maple St.)	LTR	0.60	14.0	B	LTR	0.60	14.3	B	LTR	0.44	8.8	A	LTR	0.45	8.9	A
Intersection		18.9	B	Intersection		19.2	B	Intersection		18.1	B	Intersection		18.2	B	
Maple Street/Hudson River Road and S. Riverside Avenue (NYS Route 9A)																
WB (Hudson River Rd.)	LR	0.22	4.1	A	LR	0.22	4.1	A	LR	0.09	1.0	A	LR	0.09	1.0	A
SWB (Maple St.)	LR	0.63	23.9	C	LR	0.64	24.1	C	LR	0.29	15.0	B	LR	0.29	15.0	B
NB (Rt. 9A)	T	0.29	23.6	C	T	0.29	23.6	C	T	0.54	25.6	C	T	0.55	25.8	C
SB (Rt. 9A)	R	0.13	1.6	A	R	0.13	1.6	A	R	0.24	1.0	A	R	0.24	1.1	A
	LT	0.58	29.2	C	LT	0.60	29.6	C	LT	0.57	26.6	C	LT	0.58	26.9	C
Intersection		21.6	C	Intersection		21.8	C	Intersection		17.0	B	Intersection		17.2	B	
S. Riverside Avenue (NYS Route 9A) and Municipal Place																
EB (Municipal Pl.)	LT	0.59	21.5	C	LT	0.60	21.9	C	LT	0.80	33.5	C	LT	0.81	34.3	C
WB (Municipal Pl.)	R	0.30	4.6	A	R	0.30	4.6	A	R	0.24	3.8	A	R	0.24	3.8	A
	LTR	0.62	22.1	C	LTR	0.62	22.3	C	LTR	0.64	23.5	C	LTR	0.65	23.5	C
NB (Rt. 9A)	LTR	0.27	10.6	B	LTR	0.27	10.7	B	LTR	0.55	18.9	B	LTR	0.56	19.6	B
SB (Rt. 9A)	LTR	0.44	12.0	B	LTR	0.46	12.2	B	LTR	0.41	16.0	B	LTR	0.41	16.4	B
Intersection		15.5	B	Intersection		15.6	B	Intersection		21.5	C	Intersection		21.9	C	

Table 2
2023 No Build and Build Conditions Analysis

Intersection	Weekday AM								Weekday PM															
	2023 No Build				2023 Build				2023 No Build				2023 Build											
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS								
Signalized Intersections																								
Maple Street and Municipal Place/Shopping Center Driveway																								
EB (Municipal Pl.)	LTR	0.72	33.9	C	LTR	0.74	35.3	D	LTR	0.74	35.7	D	LTR	0.77	37.9	D								
WB (Shopping Ctr. Drv.)	LTR	0.15	18.3	B	LTR	0.16	18.4	B	LTR	0.28	20.9	C	LTR	0.28	21.1	C								
NB (Maple St.)	LTR	0.23	10.1	B	LTR	0.23	9.8	A	LTR	0.40	12.3	B	LTR	0.40	12.1	B								
SB (Maple St.)	LTR	0.60	14.3	B	LTR	0.61	14.2	A	LTR	0.45	8.9	A	LTR	0.45	8.8	A								
	Intersection		19.2	B	Intersection		19.5	B	Intersection		18.2	B	Intersection		18.7	B								
Maple Street/Hudson River Road and S. Riverside Avenue (NYS Route 9A)																								
WB (Hudson River Rd.)	LR	0.22	4.1	A	LR	0.22	4.1	C	LR	0.09	1.0	A	LR	0.09	1.0	A								
SWB (Maple St.)	LR	0.64	24.1	C	LR	0.64	24.2	B	LR	0.29	15.0	B	LR	0.29	15.0	B								
NB (Rt. 9A)	T	0.29	23.6	C	T	0.29	23.6	D	T	0.55	25.8	C	T	0.55	25.8	C								
	R	0.13	1.6	A	R	0.13	1.6	A	R	0.24	1.1	A	R	0.25	1.1	A								
SB (Rt. 9A)	LT	0.60	29.6	C	LT	0.60	29.6	A	LT	0.58	26.9	C	LT	0.58	26.9	C								
	Intersection		21.8	C	Intersection		21.8	C	Intersection		17.2	B	Intersection		17.1	B								
S. Riverside Avenue (NYS Route 9A) and Municipal Place																								
EB (Municipal Pl.)	LT	0.60	21.9	C	LT	0.60	21.8	C	LT	0.81	34.3	C	LT	0.92	49.7	D								
	R	0.30	4.6	A	R	0.30	4.4	A	R	0.24	3.8	A	R	0.25	4.1	A								
WB (Municipal Pl.)	LTR	0.62	22.3	C	LTR	0.63	22.2	C	LTR	0.65	23.5	C	LTR	0.71	25.8	C								
NB (Rt. 9A)	LTR	0.27	10.7	B	LTR	0.28	11.1	B	LTR	0.56	19.6	B	LTR	0.54	16.7	B								
	LT	0.46	12.2	B	LT	0.46	12.6	B	LT	0.41	16.4	B	LT	0.41	14.2	B								
SB (Rt. 9A)	Intersection		15.6	B	Intersection		15.8	B	Intersection		21.9	C	Intersection		25.1	C								
Unsignalized Intersections																								
Maple Street and Project Site Driveway																								
EB	Does Not Exist in No Build				LR	0.04	14.1	B	Does Not Exist in No Build				LR	0.02	12.9	B								
NB					L	0.01	8.6	A					L	0.01	8.2	A								

Table 3
Build Development Trip Generation

ITE Land Use		# of Units	Weekday AM Peak Hour			Weekday PM Peak Hour		
#	Description		In	Out	Total	In	Out	Total
220	Multifamily Housing (Low-Rise)	33	6	14	20	13	10	23
Source:								
Based on Institute of Transportation Engineers (ITE) <i>Trip Generation Manual, 10th Edition.</i>								

Trip distribution patterns to and from the Project Site were developed based on existing traffic patterns in the study area and then utilized to assign the project generated trips to the study area intersections. These project generated trips were then overlaid onto the No Build volumes to develop the Build traffic volumes.

Figures 1 through 9 depict the traffic volumes and assignments outlined above.

ACCIDENT HISTORY/SAFETY

The most recent three-year's traffic accident data for the study area intersections and roadways was obtained from NYSDOT. A total of 12 accidents were identified occurring in the study area during the January 1, 2018 through December 31, 2020 three-year period. No fatalities were identified as part of the accident data. A review of this data did not reveal any High Accident Locations (HAL – defined as where five or more accidents are reported at an intersection or along a corridor in a 12-month period). All intersections and roadway corridors within the study area experienced less than five accidents per year based on the NYSDOT data. Based on the relatively low number of accidents, no significant trends could be identified. Accident factors included following too closely ("tailgating"), disregard of traffic control devices, driver inattention, failure to yield right of way, passing or lane usage improperly,

None of the accidents were identified as involving pedestrians, however, one accident involved a collision with a bicyclist at the intersection of S. Riverside Avenue and Municipal Place in 2017.

The NYSDOT accident/crash data records are presented in **Attachment B**.

PARKING

Off-street parking facilities are present for the surrounding land uses in the study area. On-street parking is prohibited along the study area roadways.

The Proposed Project is currently proposing 61 surface parking spaces on-site, including 4 handicapped spaces. The proposed parking supply exceeds the 55 spaces required for the Proposed Project under the provisions of the site's C-2/Municipal Place Gateway Overlay zoning. It is anticipated that these 61 spaces would adequately meet the parking demand for the Proposed Project.

PEDESTRIAN AND BICYCLE CONDITIONS

As part of the Proposed Project, a new sidewalk will be constructed along the west side Maple Street from the southern edge of the site driveway to the northwest corner of the intersection of Maple Street and Municipal Place. This sidewalk will provide pedestrian access and connections to the existing bus stop on the west side of Maple Street, the existing midblock crosswalk on Maple Street (north of the Maple Street/Municipal Place intersection), and the nearby shopping center, bus stop, and sidewalk on the east side of Maple Street.

Both the Pierre Van Cortlandt Middle School and Croton-Harmon High School are within an approximately ½-mile walking distance from the Proposed Project. It is anticipated that students from both schools residing at the Proposed Project may opt to walk to school due to the close proximity of the schools. The new sidewalk described above would provide adequate pedestrian connections to accommodate students

walking to the schools to and from the Proposed Project. **Figure 10** provides a depiction of the routes that would be provided.

A designated signed bike lane is currently in-place on the west side of S. Riverside Avenue. No new bike facilities are planned along the study area roadways as part of the Proposed Project. However, the Applicant is considering providing bike racks and electric bike/electric vehicle charging stations on-site as part of the Proposed Project

PUBLIC TRANSPORTATION

Westchester County operates two Bee-Line bus routes within the study area; Route 10 (“Cortlandt Town Center-Croton”) and Route 14 (“Peekskill-Ossining-White Plains”). Bus stops are provided on both sides of Maple Street in the vicinity of the Proposed Project.

As part of the Proposed Project, upgrades are planned for the bus stop on the west side of Maple Street.

SCHOOL TRANSPORTATION

It is anticipated that as part of the Proposed Project, a school bus stop will be added at the project site driveway to pick up and discharge students. In order to alert drivers along Maple Street of these school bus stops, it is recommended that “School Bus Stop Ahead” warning signs be considered for installation along Maple Street approaching the project site driveway. **Attachment A** includes a depiction of the potential Manual of Uniform Traffic Control Devices (MUTCD) warning sign for installation which could be coordinated with NYSDOT (sign S3-1).

SITE ACCESS AND CIRCULATION

Access to the site will be provided via a full access driveway on the west side of Maple Street providing one ingress lane and one egress lane. The newly created intersection will be an unsignalized intersection with stop-sign control on the site driveway approach.

Due to the existing layout of the nearby shopping center, tractor trailer trucks making deliveries to the nearby shopping center at times will occasionally drive out of the shopping center driveway (located north of the proposed site driveway) onto Maple Street in order to facilitate reverse maneuvers to the shopping center loading docks, occasionally blocking Maple Street. In order to alert drivers along Maple Street of the potential for these occasional blockages by trucks, it is recommended that “Truck Crossing” warning signs be considered for installation along Maple Street. **Attachment A** includes depictions of potential Manual of Uniform Traffic Control Devices (MUTCD) warning signs for installation which could be coordinated with NYSDOT (signs W8-6 and W11-10).

B. OVERALL CONCLUSIONS

No traffic impacts were identified for the Proposed Project and all intersections are projected to operate at acceptable LOS under Existing, No Build, and Build conditions. No mitigation measures are anticipated to be necessary at any of the study area intersection as a result of the Proposed Project.

No High Accident Locations were identified in the study area.

Parking in exceedance of zoning requirements will be provided on-site and is anticipated to meet the projected demand.

The proposed sidewalk along the west side of Maple Street will provide connections to other existing pedestrian elements in the area and the adjacent shopping center, in addition to providing a pedestrian connection to the nearby Middle and High Schools for students that may opt to walk to school.

In order to alert drivers of the potential school bus stops that would occur at the project site driveway, “School Bus Stop Ahead” warning signs are recommended for placement along Maple Street approaching the driveway.

In order to address the occasional blockages of Maple Street by tractor trailer maneuvers to access the shopping center loading docks, “Truck Crossing” warning signs are recommended for placement along Maple Street.

TRAFFIC IMPACT STUDY FIGURES

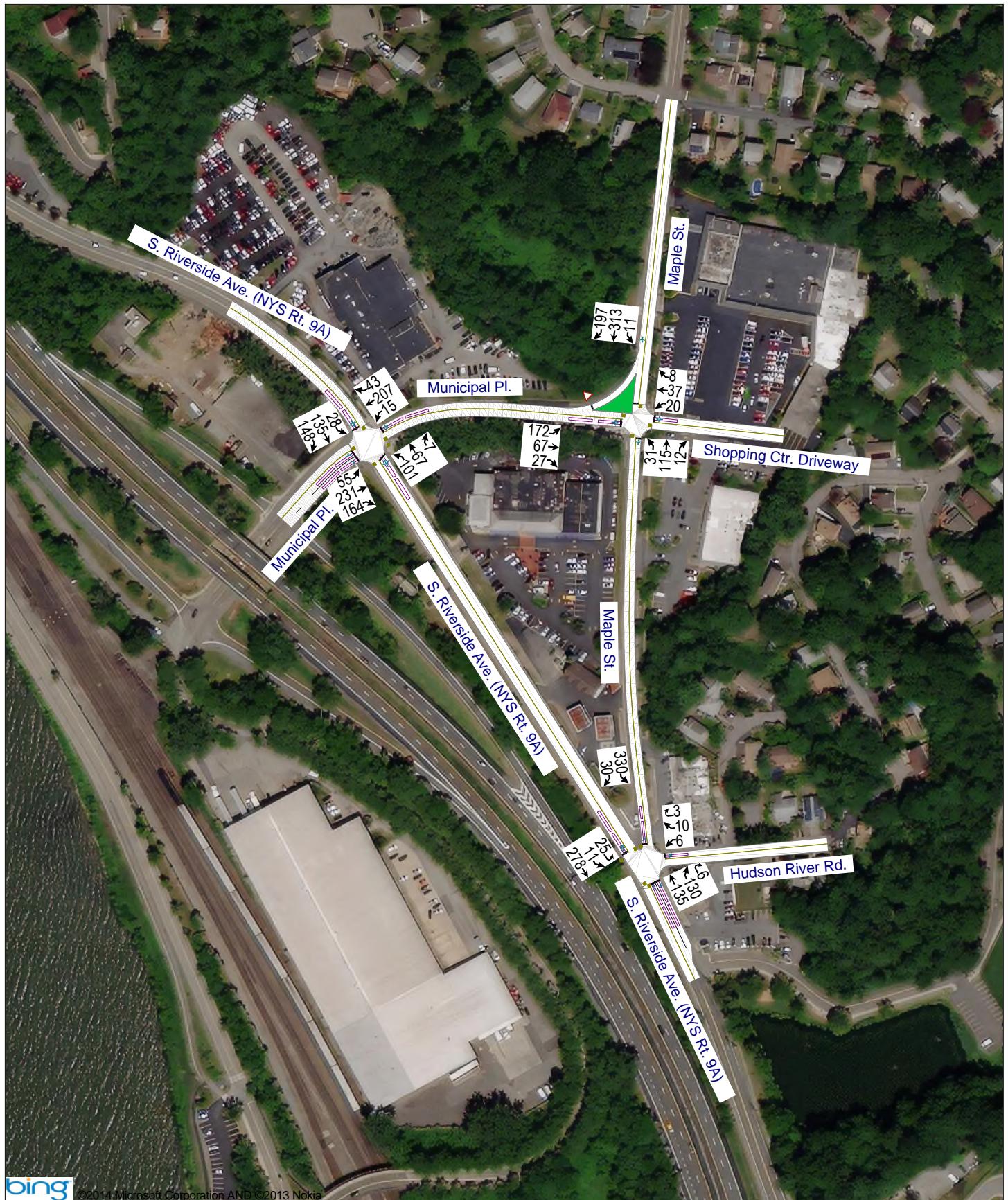


Figure 1
Existing 2021 AM Peak Hour Volumes



Figure 2
Existing 2021 PM Peak Hour Volumes



Figure 3
2023 No Build AM Peak Hour Volumes



Figure 4
2023 No Build PM Peak Hour Volumes



Figure 5
Trip Distribution Percentages

41-51 Maple Street

Project Generated Volumes



Figure 6
Project Generated AM Peak Hour Volumes

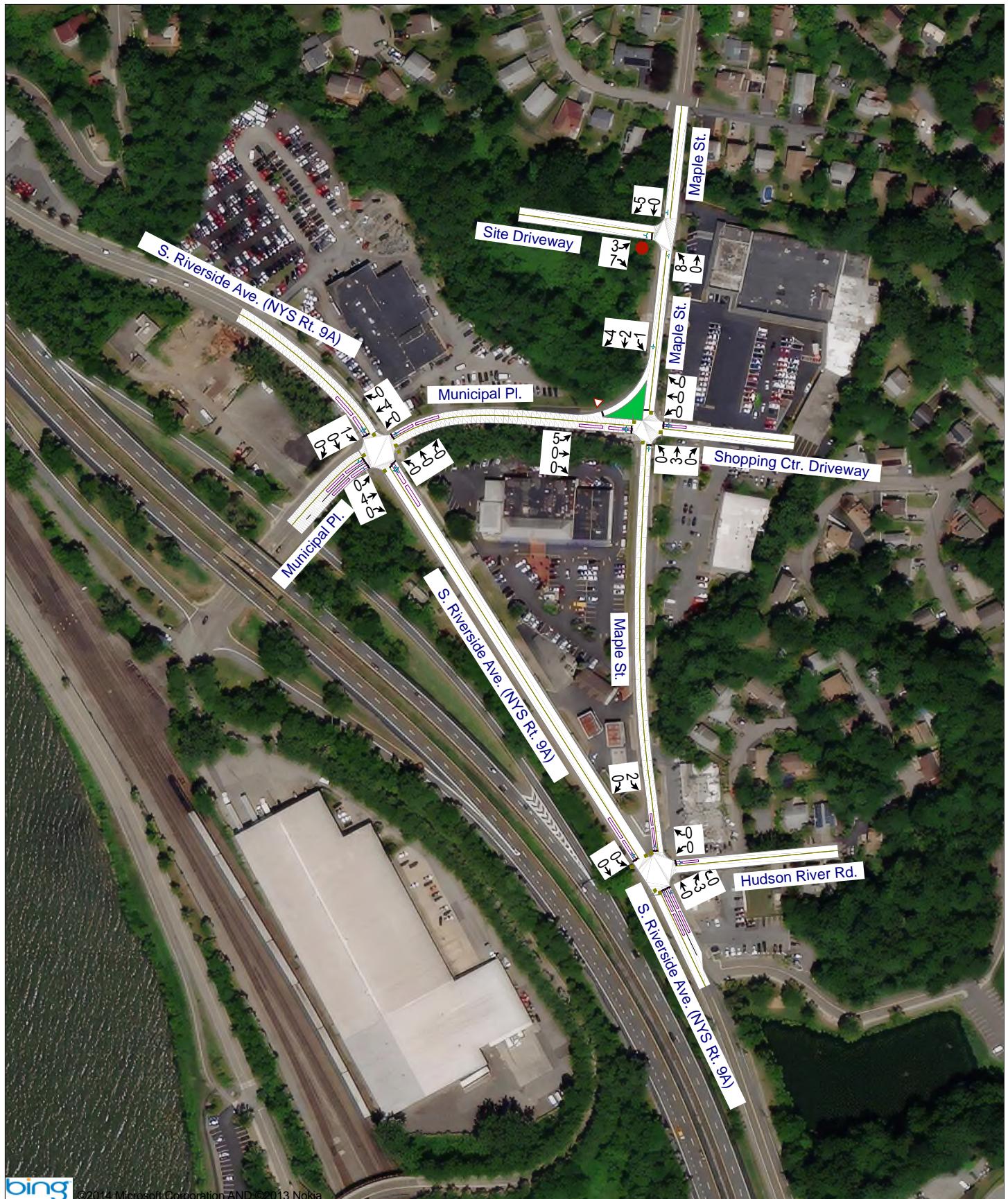


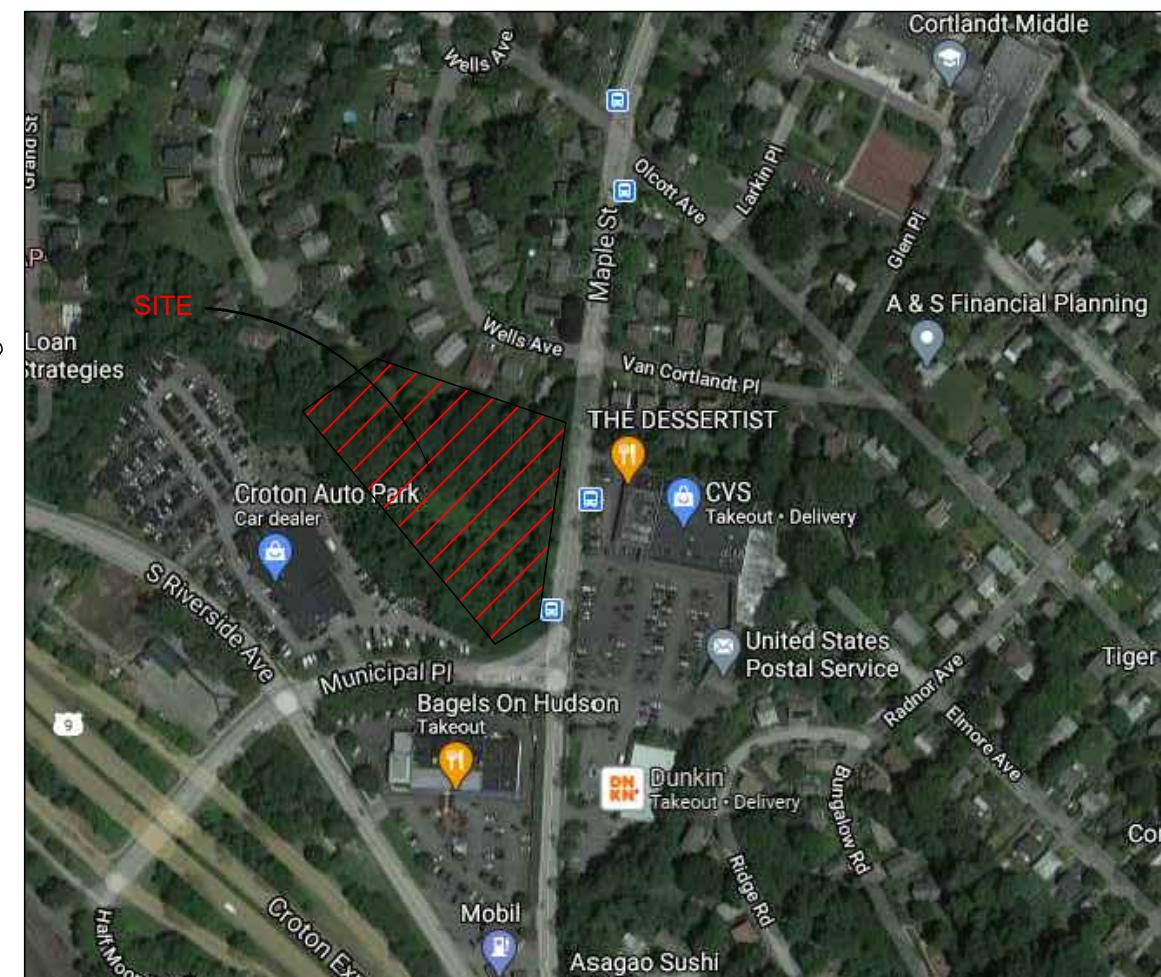
Figure 7
Project Generated PM Peak Hour Volumes



Figure 8
2023 Build AM Peak Hour Volumes



Figure 9
2023 Build PM Peak Hour Volumes



SITE LOCATION MAP
NOT TO SCALE

SITE INFORMATION

ZONING: C-2 WITH MUNICIPAL PLACE GATEWAY OVERLAY DISTRICT

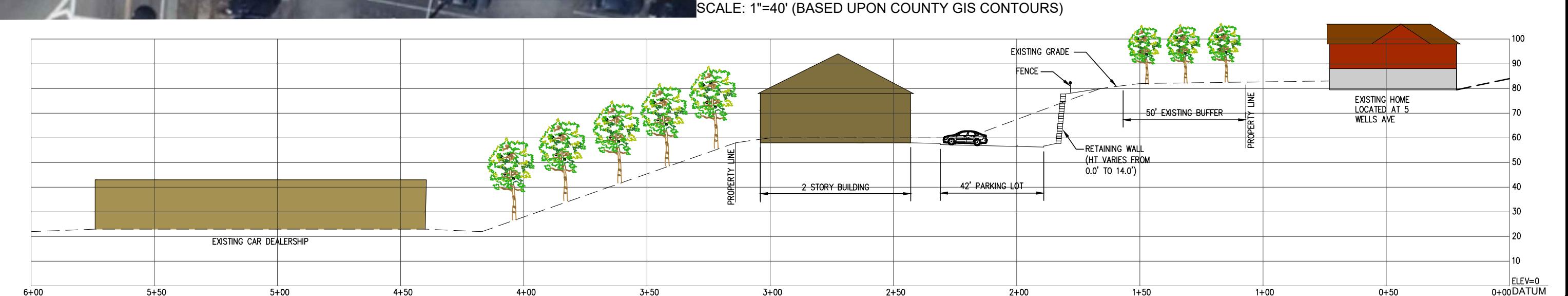
ALLOWED	PROPOSED	VARIANCE REQUIRED
MAXIMUM HEIGHT:	+/-28 FEET	NO
MINIMUM AREA:	N/A	NO
MINIMUM LOT WIDTH:	50 FEET	NO
DENSITY:	33 UNITS	NO
FLOOR AREA RATIO:	0.50	NO

SETBACK REQUIREMENTS	REQUIRED	PROPOSED	VARIANCE REQUIRED
FRONT BLDG. SETBACK:	20 FEET	+/-21 FEET	NO
SIDE BLDG. SETBACK:	10 FEET	+/-11 FEET	NO
REAR BLDG. SETBACK:	10 FEET	+/-52 FEET	NO

PARKING
REQUIRED-55 PARKINGS STALL
PROPOSED- 61 PARKING STALLS OR 1.85 PARKING RATIO

SECTION A-A

SCALE: 1"=40' (BASED UPON COUNTY GIS CONTOURS)



SUBMITTAL / REVISIONS

No.	DATE	DESCRIPTION	BY	REVIEWED BY:	DATE	PROJ. MANAGER:	CHIEF DESIGNER:	DESIGNED BY:	DRAWN BY:	CHECKED BY:

THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE
UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, (I.E.)
ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR
LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A
VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR
REGULATIONS AND IS A CLASS "A" MISDEMEANOR.



621 COLUMBIA STREET EXT.
COHOES NY 12047
PH 518-765-9000

REGAN DEVELOPMENT

CONCEPT PLAN
41-51 MAPLE STREET

VILLAGE OF CROTON-ON-HUDSON

NEW YORK

SCALE: 1"=30'
CONTRACT NO.:
PROJ. No.: 2021-004E
DATE: 2/25/2021

C-1

ATTACHMENT A

- Intersection Physical Inventories
- Study Area Intersection Roadway Descriptions and Jurisdiction Map
- NYSDOT Traffic Signal Timing Plans
- Capacity Analysis Methodology
- Summary of Development of Pre-Pandemic 2021 Existing Traffic Volumes
- Turning Movement Count (TMC) Data (AKRF and StreetLight Data)
- No Build Project Trip Assignment and Distribution Data (25 South Riverside Avenue Project)
- ITE Trip Generation Reference Data
- Depictions of Recommended MUTCD Signage

Intersection Physical Inventories

Maple @ Municipal

Bus Stop



Maple Street

SPEED
LIMIT
30

9.6'



13.8'

15.0'

Municipal Place

13.3'

Shopping Center
Driveway

12.4'

8.9'

Google Earth

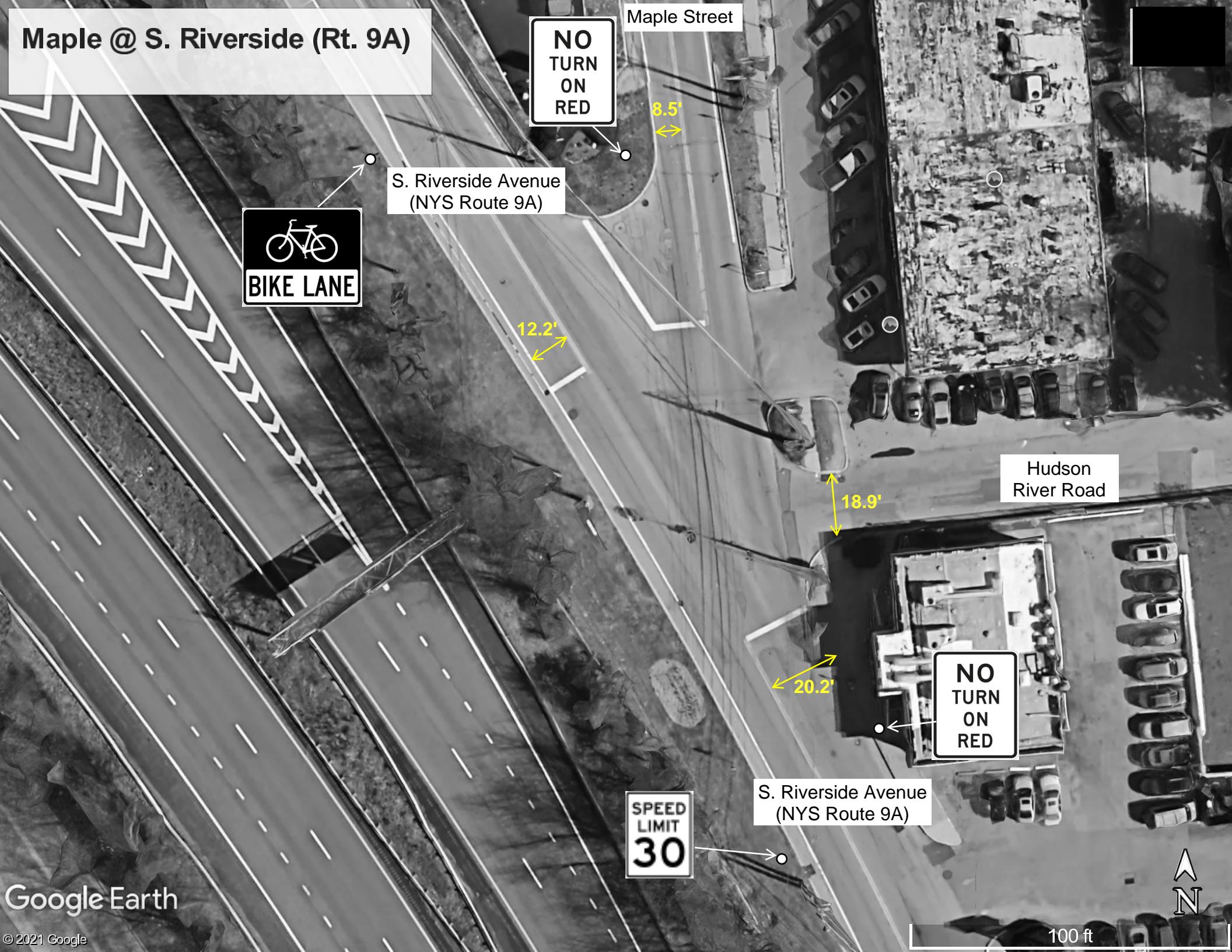
© 2021 Google

Maple Street



100 ft

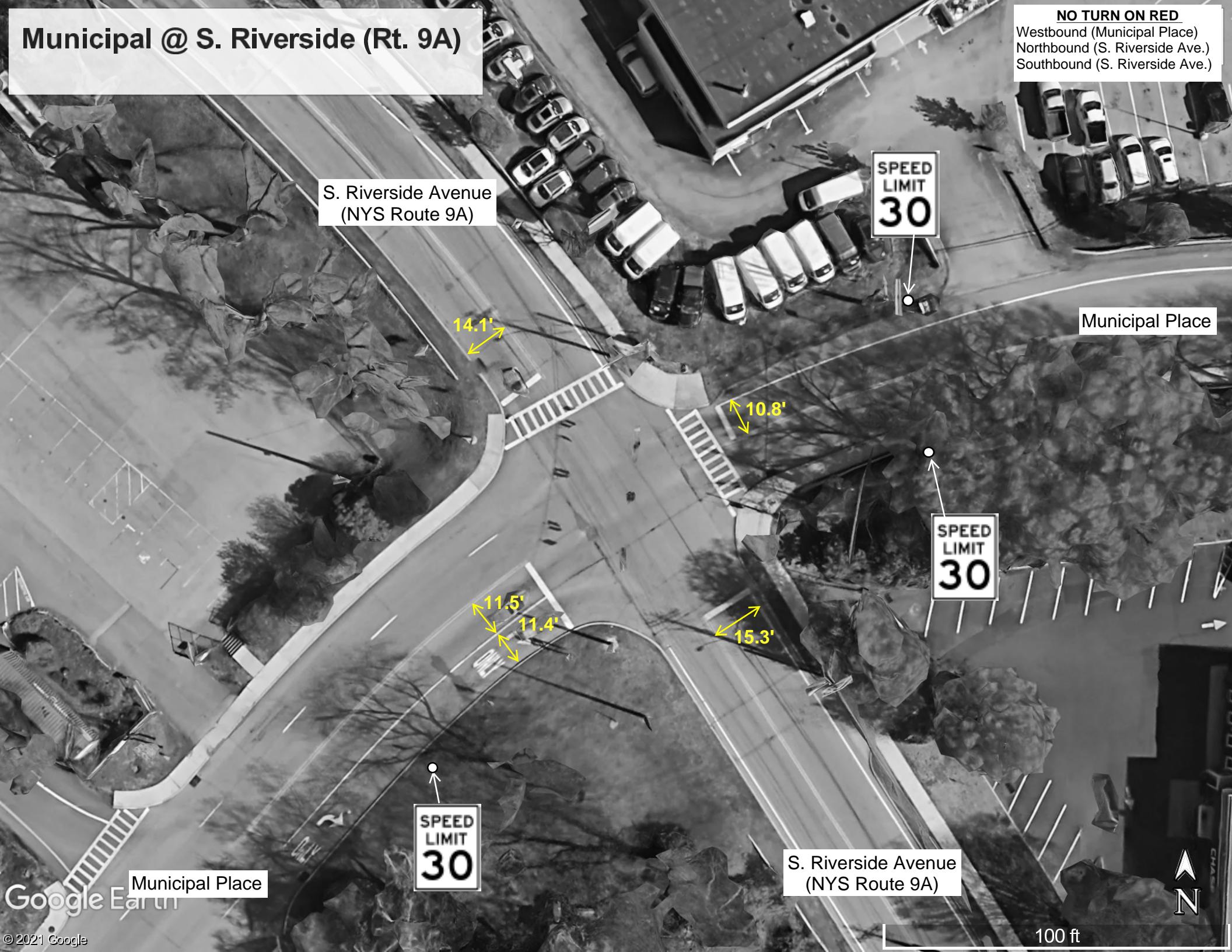
Maple @ S. Riverside (Rt. 9A)



Municipal @ S. Riverside (Rt. 9A)

NO TURN ON RED

Westbound (Municipal Place)
Northbound (S. Riverside Ave.)
Southbound (S. Riverside Ave.)



Study Area Intersection Roadway Descriptions
and Jurisdiction Map

ROADWAY AND INTERSECTION CHARACTERISTICS

The following is a brief description of the major roadways and intersections within the study area. **Figure A-1** shows the maintenance jurisdictions of each of the roadways as sourced from NYSDOT.

Maple Street (NYS Route 129)

Maple Street (NYS Route 129) is classified by NYSDOT as a minor arterial roadway that generally traverses in a north-south direction. Maple Street is under the jurisdiction of NYSDOT and generally provides one moving lane in each direction within the study area. Maple Street has a posted speed limit of 30 mph in the study area. Based on field observations, the pavement along Maple Street in the study area is in good condition.

South Riverside Avenue (NYS Route 9A)

South Riverside Avenue (NYS Route 9A) is classified by NYSDOT as a minor arterial roadway that generally traverses in a north-south direction. South Riverside Avenue is under the jurisdiction of NYSDOT and generally provides one moving lane in each direction within the study area. South Riverside Avenue has a posted speed limit of 30 mph in the study area. Based on field observations, the pavement along South Riverside Avenue in the study area is in good condition.

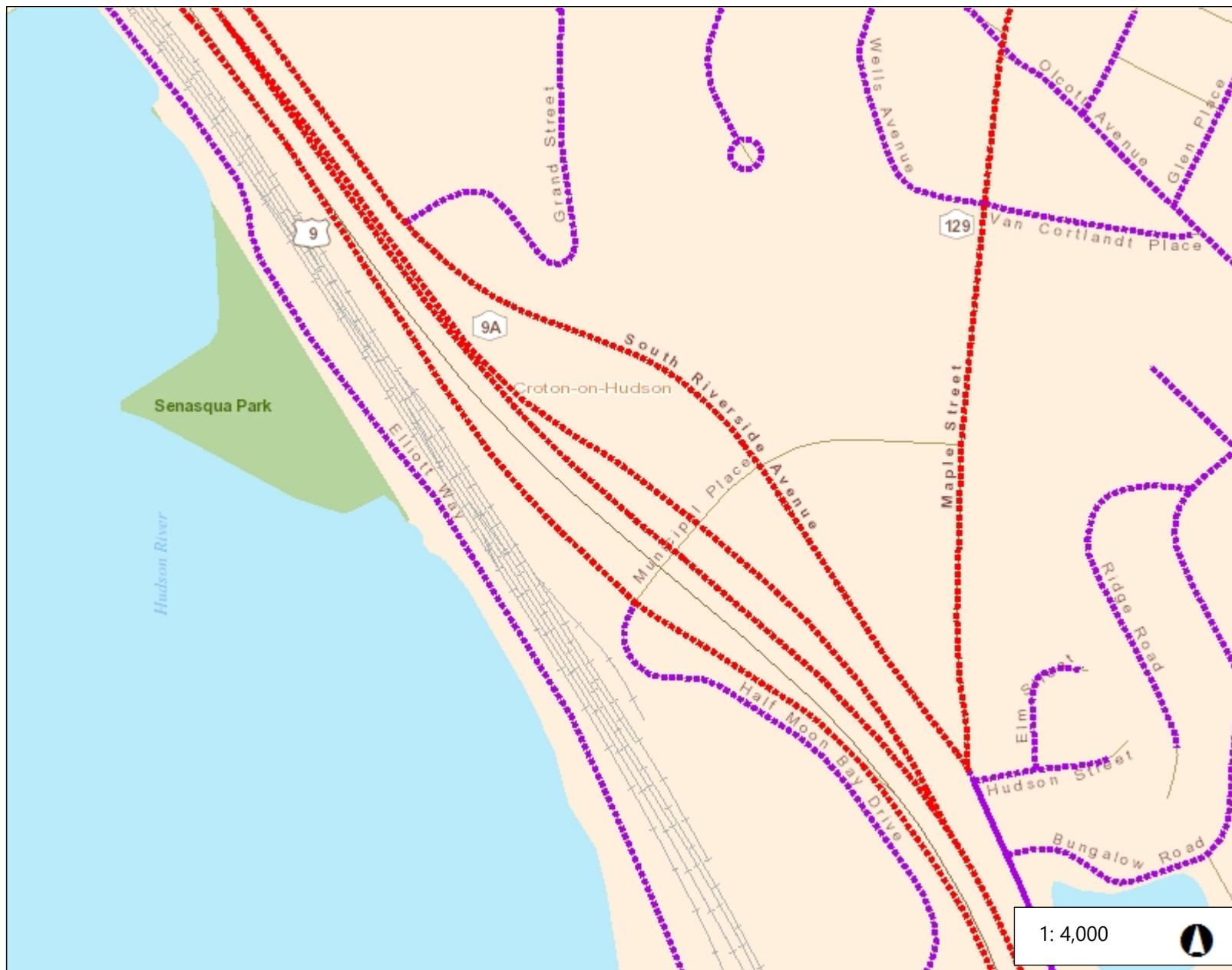
Municipal Place

Municipal Place is local roadway that generally traverses in an east-west direction within the study area. Municipal Place generally provides one moving lane in each direction within the study area. At its eastbound approach with South Riverside Avenue, Municipal Place provides one shared left-turn/through lane and one exclusive right-turn lane. Municipal Place has a posted speed limit of 30 mph in the study area. Based on field observations, the pavement along Municipal Place in the study area is in good condition.



New York State Department of Transportation

Roadway Maintenance Jurisdictions



0.1 0 0.06 0.1 Miles

NAD_1983_UTM_Zone_18N
© Latitude Geographics Group Ltd.

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Legend

- Maintenance Jurisdiction
- 01 NYSDOT
 - 02 County
 - 03 Town
 - 04 City or village
 - 31 NYS Thruway
 - Interstate
 - 900 Route
 - US Highway
 - State Highway
 - County Touring
 - County Highway
- StateShoreline_Lines
- Cities_Towns_Shore
- Towns_Shoreline
- NYS_Background

Notes

Please enter the notes

NYSDOT Traffic Signal Timing Plans

File

**STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING & SAFETY DIVISION
TRAFFIC CONTROL SPECIFICATIONS**

STUDY :
CONTRACT :
PIN :
FILE :

W-391
SIGNAL NO(S)

WESTCHESTER
COUNTY

PAGE 1 OF 20 PAGES

INTERSECTION Route 129 @ Municipal Place & Van Wyck Plaza

CITY VILLAGE TOWN OF CROTON ON HUDSON

Department Order filed _____ as Section 2055.11 Subdivision (I)

Prior specifications hereby superseded None October 18, 1983

Purpose : UPGRADE TO MODEL 179 MICROPROCESSOR

These specifications will be effective upon the Installation Modification of the necessary traffic control device(s) required by and conforming to the State Manual of Uniform Traffic Control Devices

I. This Signal shall

A. Operate in accordance with the Table of Operations and / or Change intervals as shown on page(s) 2 as a:

- Pretimed Signal
- Semi-traffic actuated signal
- Full-traffic actuated signal
- Pedestrian actuated signal
- Other

- B.
- Display vehicular indications
 - Display pedestrian indications
 - Be equipped with vehicle detectors
 - Be equipped with Pedestrian pushbuttons

as shown in the schematic scaled drawing on page 3

C. Be equipped with Pre-emption Interconnection and / or Coordination

Which are described as follows :

Shop 03

cc: (2) Main Office

9/1/95

Signature

RTE

Title

(1) Region 8 Traffic Engineer

Installation Date

(2) D. SYWYK

Modification Date September 1, 1995

()

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
 TRAFFIC AND SAFETY DIVISION
TRAFFIC CONTROL SIGNAL SPECIFICATIONS (CONTINUED)

STUDY:
 CONTRACT:
 PIN:
 FILE:

W-391
 SIGNAL NO(S)

Westchester
 COUNTY

Sept. 1 1995
 DATE

PAGE 2 OF 20 PAGES

Table of Operations

Faces

<u>Phase</u>	<u>1,2,3,4</u>	<u>5,6,7,8</u>	<u>Ped "A"</u>
Ø1	Green	Red	Don't Walk
1st Clearance	Yellow	Red	Don't Walk
2nd Clearance	Red	Red	Don't Walk
Ø3	Red	Green	Don't Walk *
1st Clearance	Red	Yellow	Don't Walk
2nd Clearance	Red	Red	Don't Walk
Flashing Operation	Flashing Yellow	Flashing Red	Dark

Note: * This indication shall be Walk followed by Flashing Don't Walk and steady Don't Walk if a Pedastrian Push Button is activated

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
 TRAFFIC AND SAFETY DIVISION
TRAFFIC CONTROL SIGNAL SPECIFICATIONS (CONTINUED)

STUDY:
 CONTRACT:
 PIN:
 FILE:

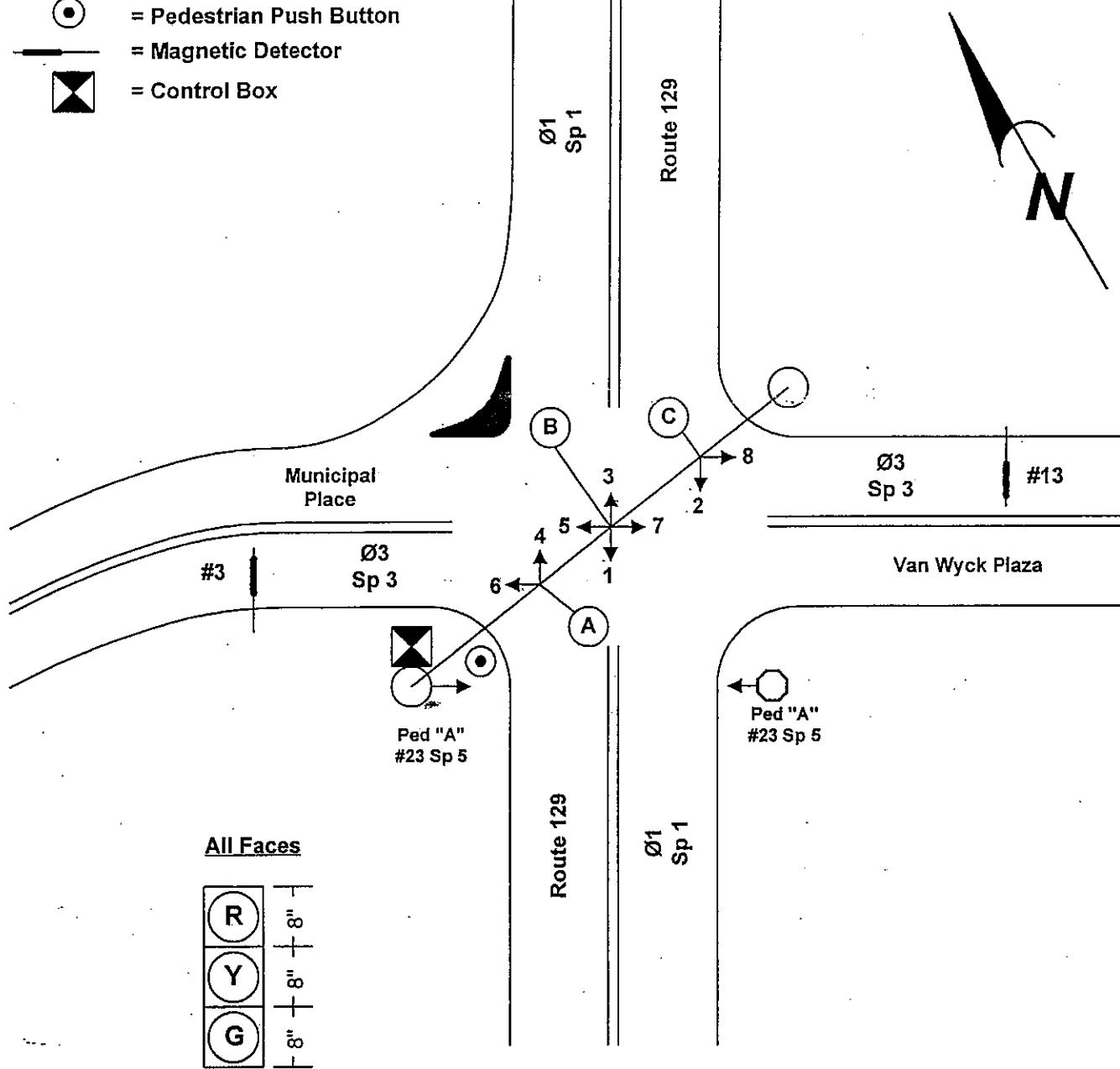
W-391
 SIGNAL NO(S)

Westchester
 COUNTY

Sept. 1 1995
 DATE

PAGE 3 OF 20 PAGES

-  = Pedestrian Indication
-  = Pedestrian Push Button
-  = Magnetic Detector
-  = Control Box



W 301
RTE 129 @ MUNICIPAL PLACE & VAN WYCK PL (ID 7391) (Standard 816) Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc 08/10/00am Page 1

Annual Schedule [40 Month of Year]																																																				
	Day of Week																																																			
	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
1																																										1										
2																																										1										
3																																									1											
4																																									1											
5																																									1											
6																																									1											
7																																									1											
8																																									1											
9																																									1											
10																																									1											
11																																									1											
12																																									1											
13																																									1											
14																																									1											
15																																									1											
16																																									1											
17																																									1											
18																																									1											
19																																									1											
20																																									1											
21																																									1											
22																																									1											
23																																									1											
24																																									1											

#	Event / Alarm	Ev/Air	Call Phases [1.1.5]	Redirect Phases [1.1.5]	Inhibit Phases [1.1.5]			
1	Power Up Alarm.	1 1	Ø Phases Called By Ø	Fron To Fron To Fron To Fron To	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16			
2	Stop Timing	1 1	1		1			
3	TS1 Cabinet Door		2		2			
4	Coordination Failure	1 1	3		3			
5	External Alarm # 1	1 1	4		4			
6	External Alarm # 2	1 1	5		5			
7	External Alarm # 3		6		6			
8	External Alarm # 4		7		7			
9	Closed Loop Disabled	1	8		8			
10	External Alarm # 5		9		9			
11	External Alarm # 6		10		10			
12	Manual Control Enabled	1 1	11		11			
13	Coord Free Input		12		12			
14	Local Flash Input	1 1	13		13			
15	MMU Flash		14		14			
16	CMU Flash		15		15			
17	Cycle Fault	1	16		16			
18	Cycle Failure	1	Alt Call & Redirect # 1 [1.1.6.3]		Alt Inhibit Phases # 1 [1.1.6.3]			
19	Coordination Fault	1	Col Ø Phases Called By Ø	Fron To Fron To Fron To Fron To	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16			
20	Controller Fault	1 1	1		1			
21	Detector SDLC Failure		2		2			
22	MMU SDLC Failure		3		3			
23	Critical SDLC Failure		4		4			
24	Reserved		5		5			
25	EEPROM CRC Fault	1 1	6		6			
26	Detector Diagnostic F		7		7			
27	BIU Detector Failure	1 1	8		8			
28	Queue detector alarm	1	Alt Call & Redirect # 2 [1.1.6.3]		Alt Inhibit Phases # 2 [1.1.6.3]			
29	Ped Detector Fault	1	Col Ø Phases Called By Ø	From To From To From To From To	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16			
30	Coord Diagnostic Fault		1		1			
41	TempAlert Probe Ch. A		2		2			
42	TempAlert Probe Ch. B		3		3			
47	Coord Active	1	4		4			
48	Preempt Active		5		5			
49	Preempt 1 Input	1	6		6			
50	Preempt 2 Input	1	7		7			
51	Preempt 3 Input	1	8		8			
52	Preempt 4 Input	1	Coord, CIC Plans [2.3]		Unit Parameters [1.2.1]			
53	Preempt 5 Input	1	CIC Co Ø Grow	1 2 3 4 5 6 7 8	Allow Skip Yellow	OFF	Max Cycle Time	0
54	Preempt 6 Input	1	1	OFF	TOD Dim Enable	OFF	Cycle Fault Action	ALARM
55	Preempt 7 Input	1	2	OFF	Tone Disable	OFF		
56	Preempt 8 Input	1	3	OFF	Diamond Mode	4Ph		
57	Preempt 9 Input	1	4	OFF	Backup Time (s)	900		
58	Preempt 10 Input	1	Auto Flash Phase/Olap Settings [1.4.2]		Disable Init Ped	OFF		
61	In Transition	1	Yel Ø		Cycle Fault Action	ALARM		
81	FIO Status Alarm		Yel (olaps)		Enable Run Time	ON	RTE 129 @ MUNICIPAL PLACE & VAN WYCK I	

	Phase	Time
Aux Out 1	0	0
Aux Out 2	0	0

3/10/2010
Page 8

**MODEL 179 SIGNAL OPERATION
PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION**

TAPS _____
STUDY # _____
FILE # _____
PAGE 18 OF 20

SIGNAL # W-391COUNTY #WestchesterDATE 09/01/95

SWITCH PACK	FUNCTION	INDICATIONS	FACE	TERMINAL WIRING BOARD		FACE	TERMINAL WIRING BOARD	
				TERMINAL	WIRE COLOR CODE		TERMINAL	WIRE COLOR CODE
1	Ø1	Red	1,2 3,4	SP 1 R	14/19c-1-R		SP 1 R	
		Yellow		SP 1 Y	14/19c-1-O		SP 1 Y	
		Green		SP 1 G	14/19c-1-G		SP 1 G	
		Ground Wire		Grnd Bus	14/19c-1-W		Grnd Bus	
2				SP 2 R			SP 2 R	
				SP 2 Y			SP 2 Y	
				SP 2 G			SP 2 G	
		Ground Wire		Grnd Bus			Grnd Bus	
3	Ø3	Red	5,6 7,8	SP 3 R	14/19c-1-R/B		SP 3 R	
		Yellow		SP 3 Y	14/19c-1-O/B		SP 3 Y	
		Green		SP 3 G	14/19c-1-G/B		SP 3 G	
		Ground Wire		Grnd Bus	14/19c-1-W/B		Grnd Bus	
4				SP 4 R			SP 4 R	
				SP 4 Y			SP 4 Y	
				SP 4 G			SP 4 G	
		Ground Wire		Grnd Bus			Grnd Bus	
5	Ped "A" Ø3	Don't Walk	23	SP 5 R	14/5c-1P-R		SP 5 R	
		-----		SP 5 Y	-----		SP 5 Y	
		Walk		SP 5 G	14/5c-1P-G		SP 5 G	
		Ground Wire		Grnd Bus	14/5c-1P-W		Grnd Bus	
6				SP 6 R			SP 6 R	
				SP 6 Y			SP 6 Y	
				SP 6 G			SP 6 G	
		Ground Wire		Grnd Bus			Grnd Bus	
7				SP 7 R			SP 7 R	
				SP 7 Y			SP 7 Y	
				SP 7 G			SP 7 G	
		Ground Wire		Grnd Bus			Grnd Bus	
8				SP 8 R			SP 8 R	
				SP 8 Y			SP 8 Y	
				SP 8 G			SP 8 G	
		Ground Wire		Grnd Bus			Grnd Bus	
9				SP 9 R			SP 9 R	
				SP 9 Y			SP 9 Y	
				SP 9 G			SP 9 G	
		Ground Wire		Grnd Bus			Grnd Bus	
10				SP 10 R			SP 10 R	
				SP 10 Y			SP 10 Y	
				SP 10 G			SP 10 G	
		Ground Wire		Grnd Bus			Grnd Bus	
11				SP 11 R			SP 11 R	
				SP 11 Y			SP 11 Y	
				SP 11 G			SP 11 G	
		Ground Wire		Grnd Bus			Grnd Bus	
12				SP 12 R			SP 12 R	
				SP 12 Y			SP 12 Y	
				SP 12 G			SP 12 G	
		Ground Wire		Grnd Bus			Grnd Bus	
13				SP 13 R			SP 13 R	
				SP 13 Y			SP 13 Y	
				SP 13 G			SP 13 G	
		Ground Wire		Grnd Bus			Grnd Bus	
14				SP 14 R			SP 14 R	
				SP 14 Y			SP 14 Y	
				SP 14 G			SP 14 G	
		Ground Wire		Grnd Bus			Grnd Bus	

**STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING & SAFETY DIVISION
TRAFFIC CONTROL SPECIFICATIONS**

Study :
Contract : D254979
PIN: 8804.27.321
File : 55.11-9A

W-116

WESTCHESTER
COUNTY

PAGE 1 OF 20 PAGES

INTERSECTION ROUTE 9A AT ROUTE 129 AND HUDSON STREET

CITY VILLAGE TOWN OF CROTON ON HUDSON

Department Order filed 1/5/81 as Section 2055.11 Subdivision (f)

Prior specifications hereby superseded None May 22, 1985

Purpose : MODIFICATION TO TRAFFIC SIGNAL UNDER CONTRACT D254979

These specifications will be effective upon the Installation Modification of the necessary traffic control device(s) required by and conforming to the State Manual of Uniform Traffic Control Devices

I. This Signal shall

A. Operate in accordance with the Table of Operations and / of Change intervals as shown on page(s) 2 as a :

- Pretimed Signal
- Semi-traffic actuated signal
- Full-traffic actuated signal
- Pedestrian actuated signal
- Other

B. Display vehicular indications

Display pedestrian indications

Be equipped with vehicle detectors

Be equipped with Pedestrian pushbuttons

as shown in the schematic scaled drawing on page 3

Be equipped with pre-emption which are described as follows interconnection and / or coordination

*FILE SHOP CABINET

FINAL COPY

OCT 16 1995

Date

WD Fctn Patrill
Signature

RTE
Title
KRF

cc: () Main Office

(1) Region 8 Traffic Engineer

(2) D. SYWK

(1) RES 8-8

Installation Date

Modification Date

OCT 16 1995

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
 TRAFFIC AND SAFETY DIVISION
TRAFFIC CONTROL SIGNAL SPECIFICATIONS (CONTINUED)

Study:
 Contract:
 P.I.N.:
 File: 55.11.9A

116

Westchester

OCT 16 1995

PAGE 2 OF 2 PAGES

SIGNAL NO(S).

COUNTY

DATE

TABLE OF OPERATIONS
 FACES

<u>PHASES</u>	<u>1,2,3,</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7,8</u>
Ø	Green	Green	Red	Red	Red
1st clearance to Ø2	Yellow	Yellow/→	Red	Red	Red
2nd clearance to Ø2	Red	Red/→	Red	Red	Red
1st clearance to Ø3	Yellow	Yellow	Red	Red	Red
2nd clearance to Ø3	Red	Red	Red	Red	Red
Ø2	Red	Red/→	↑	↑ →	Red
1st clearance to Ø3	Red	Red/○→	Yellow	yellow	Red
2nd clearance to Ø3	Red	Red	Red	Red	Red
1st clearance to Ø1	Red	Red/→	Yellow	Yellow	Red
2nd clearance to Ø1	Red	Red/→	Red	Red	Red
Ø3	Red	Red	Red	Red	Green
1st clearance to Ø	Red	Red	Red	Red	Yellow
2nd clearance to Ø	Red	Red	Red	Red	Red

→ = Rt. Green Arrow

↑ = Vertical Green Arrow

○→ = Rt. Yellow Arrow

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
TRAFFIC AND SAFETY DIVISION
TRAFFIC CONTROL SIGNAL SPECIFICATIONS (CONTINUED)

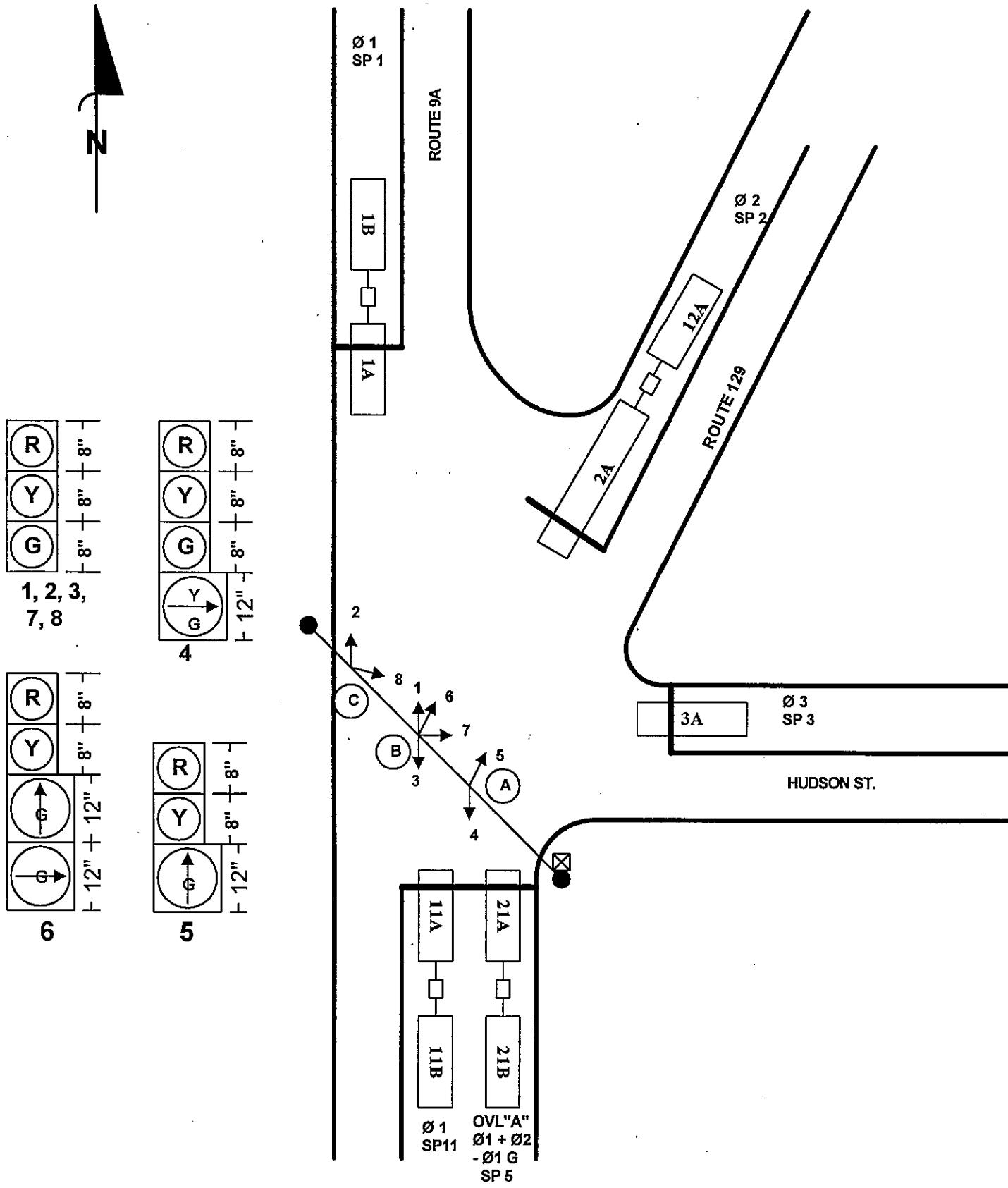
STUDY:
CONTRACT: D254979
PIN: 8804.27.321
FILE 55.11-9A

W-116
SIGNAL NO(S)

WESTCHESTER
COUNTY

OCT 16 1995

PAGE 3 OF 20 PAGES



MODEL 179 MISCELLANEOUS TIMER DISPLAYS
SIGNAL OPERATION SPECIFICATIONTAPS _____ V 1.0
STUDY # _____
FILE # _____
PAGE 5 OF 20SIGNAL # W116COUNTY # WESTDATE OCT 16 1995

(NOTE: USE THE D (LOCATION #) COMMAND TO ACCESS THESE DYNAMIC TIMERS.)

DETECTOR DELAY/EXTENSION TIMERS

TIMER DESCRIPTION	LOCATION	TIMER DESCRIPTION	LOCATION
DELAY TIMERS 1-32	2040-205F	EXTENSION TIMERS 1-32	2060-207F

(To obtain the location for a specific detector delay or extension timer, subtract 100 from the location number where the delay or extension time is set in Locations 2140-217F).

PRE-EMPTION TIMERS

PHASE SELECTION TIMERS

TIME BEFORE PRE-EMPT TIMER EXTENSION TIMER GUARANTEED GREEN TIMER CALL SELECT GREEN TIMER	2080 2081 2082 2083	GUARANTEED GREEN TIMER	208A
--	------------------------------	------------------------	------

EXCLUSIVE PEDESTRIAN

OFFSET HOLD

EXCL. PED WALK TIMER EXCL. PED CLEARANCE TIMER	208B 208C	@ SAFETY TIMER @ EXTENSION TIMER	208D 208E
---	--------------	-------------------------------------	--------------

CABINET FLASH TIME LOG (VIEW COMPOSITE DISPLAY THROUGH SPECIAL COMMAND "CF")

YEAR LAST ACTIVATED MONTH LAST ACTIVATED DAY LAST ACTIVATED	2090 2091 2092	HOUR LAST ACTIVATED MINUTE LAST ACTIVATED	2093 2094
---	----------------------	--	--------------

POWERDOWN COUNTERS (TAPS VERSION 0.2 AND UP)

NUMBER OF SHORT POWERDOWNS NUMBER OF LONG POWERDOWNS NUMBER OF SYS REPAIRS	2097 2098 2099	(THESE ARE # OF POWERDOWNS OR # OF TIMES THE SYSTEM REPAIRED ITSELF) SINCE 00:00 MIDNIGHT SUNDAY MORNING)
--	----------------------	--

COORDINATION/TIMECLOCK
STATUS WORDS:INDICATOR LIGHT # 9/AUX #1 = T.C. FUNCTION IN EFFECT
INDICATOR LIGHT #10/AUX #2 = COORDINATION IN EFFECT

WEEK PROGRAM IN EFFECT DAY PROGRAM IN EFFECT	20C0 20C1	PATTERN IN EFFECT *T.C. FUNCTION IN EFFECT	20C2 20C3
---	--------------	---	--------------

* When this location is displayed the three-digit code for the timeclock function(s) in effect will be displayed and indicator lights will be lit to indicate function as follows:

Function	Code	LED IND #		Function	Code	LED IND #	
Omit A	001	9	AUX 1	Aux. Output (SP9Y)	032	14	AUX 6
Omit B	002	10	2	Input by T.C.	064	15	7
R.I.R.	004	11	3	Spare	128	16	8
Max 2	008	12	4	Flash	255	9-16	1-8
Max 3	016	13	5				

@ NOT IMPLEMENTED

CCS = 87B Signal # = 116
 DATE: 11/01/02 TIME: 02:45:56

Rte = 9A Rte Seq # = 280

+++++
 +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

TE 261 (11/95)

PHASE TIMING DATA/TIMER INTERVALS

INTERVAL	PHASE/ INT. #								
		F1	F2	F3	F4	F5	F6	F7	F8
MEMORY/RECALL	00	004	000	000	000	000	000	000	000
WALK	01	—	—	—	—	—	—	—	—
PEDESTRIAN CLEARANCE	02	—	—	—	—	—	—	—	—
INITIAL	03	—	010	002	—	—	—	—	—
VARIABLE INITIAL	04	—	—	—	—	—	—	—	—
VARIABLE INIT. LIMIT	05	050	050	050	050	050	050	050	050
TIME BEFOR REDUCTION	06	—	—	—	—	—	—	—	—
TIME TO REDUCE	07	—	—	—	—	—	—	—	—
MAXIMUM GAP	08	00.1	06.0	00.1	00.1	00.1	00.1	00.1	00.1
MINIMUM GAP	09	—	—	—	—	—	—	—	—
GAP CLOCK	10	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY
MAXIMUM GREEN 1	11	030	040	020	—	—	—	—	—
MAXIMUM GREEN 2	12	—	—	—	—	—	—	—	—
MAXIMUM GREEN 3	13	—	—	—	—	—	—	—	—
RECALL GREEN	14	030	030	015	—	—	—	—	—
YELLOW CLEARANCE	15	04.0	04.0	04.0	—	—	—	—	—
RED CLEARANCE	16	01.0	02.0	01.0	—	—	—	—	—
THIRD CLEARANCE	17	—	—	—	—	—	—	—	—
FOURTH CLEARANCE	18	—	—	—	—	—	—	—	—
		F1	F2	F3	F4	F5	F6	F7	F8

Changed to 2.0sec on 11-29-11 at the request of Jain Alexander



CCS = 87B Signal # = 116
DATE: 11/01/02 TIME: 02:46:16

Rte = 9A Rte Seq # = 280

+++++
+

TE 262-0 (11/95) MISCELLANEOUS PROGRAMMABLE DATA

TIMING/RANGE	FUNCTION	LOC.	TIME
IN SECONDS	STARTUP CLEARANCE TIMER A	2100	002
IN SECONDS	STARTUP CLEARANCE TIMER B	2101	_____
IN MINUTES	DETECTOR ANALYSIS TIME	2102	034
000 = GREEN GATING	UNCONDITIONAL DELAY/EXTENSION	2103	_____
001 = UNCONDITIONAL			
IN SECONDS / 004-012	ALL RED STARTUP TIMER	2104	000
ENABLE = 000	ACLINE FATAL ERROR SWITCH	2110	_____
DISABLE = 170			
ENABLE = 102	DIAGNOSTIC MESSAGE CIRCULAR	2111	_____
DISABLE = 000	BUFFER (USED WITH GUARD)		
001 - 255	MAXIMUM RANDOM INPUT INTERVAL	2115	_____
001 - 040	MAX NO OF PERMITTED DETECTORS	2116	_____
ENABLE = 099	RANDOM INPUTS SWITCH WORD	2117	_____
DISABLE = 000			

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
DATE: 11/01/02 TIME: 02:46:43
+++++
.

TE 262-1 (11/95) MISCELLANEOUS PROGRAMMABLE DATA

DELAY TIMES - (DELAY TIME IN TENTHS OF SECONDS)

DETECTOR # 1	2140	—.—	DETECTOR #15	214E	—.—
DETECTOR # 2	2141	—.—	DETECTOR #16	214F	—.—
DETECTOR # 3	2142	10.0	DETECTOR #17	2150	—.—
DETECTOR # 4	2143	—.—	DETECTOR #18	2151	—.—
DETECTOR # 5	2144	—.—	DETECTOR #19	2152	—.—
DETECTOR # 6	2145	—.—	DETECTOR #20	2153	03.0
DETECTOR # 7	2146	—.—	DETECTOR #21	2154	—.—
DETECTOR # 8	2147	—.—	DETECTOR #22	2155	—.—
DETECTOR # 9	2148	—.—	DETECTOR #23	2156	—.—
DETECTOR #10	2149	—.—	DETECTOR #24	2157	—.—
DETECTOR #11	214A	—.—	DETECTOR #25	2158	—.—
DETECTOR #12	214B	—.—	DETECTOR #26	2159	—.—
DETECTOR #13	214C	—.—	DETECTOR #27	215A	—.—
DETECTOR #14	214D	—.—	DETECTOR #28	215B	—.—

CCS = 87B Signal # = 116

Rte = 9A

Rte Seq # = 280

DATE: 11/01/02 TIME: 02:46:55

TE 262-1A (11/95) MISCELLANEOUS PROGRAMMABLE DATA

EXTENSION TIMES - (EXTENSION TIME IN TENTHS OF SECONDS)

DETECTOR # 1	2160	---	DETECTOR #15	216E	---
DETECTOR # 2	2161	---	DETECTOR #16	216F	---
DETECTOR # 3	2162	---	DETECTOR #17	2170	---
DETECTOR # 4	2163	---	DETECTOR #18	2171	---
DETECTOR # 5	2164	---	DETECTOR #19	2172	---
DETECTOR # 6	2165	---	DETECTOR #20	2173	---
DETECTOR # 7	2166	---	DETECTOR #21	2174	---
DETECTOR # 8	2167	---	DETECTOR #22	2175	---
DETECTOR # 9	2168	---	DETECTOR #23	2176	---
DETECTOR #10	2169	---	DETECTOR #24	2177	---
DETECTOR #11	216A	---	DETECTOR #25	2178	---
DETECTOR #12	216B	---	DETECTOR #26	2179	---
DETECTOR #13	216C	---	DETECTOR #27	217A	---
DETECTOR #14	216D	---	DETECTOR #28	217B	---

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
 DATE: 11/01/02 TIME: 02:47:05
 ++++++
 .

TE 262-2 (11/95) MISCELLANEOUS PROGRAMMABLE DATA (CONT.)

PRE-EMPTION - IN SECONDS	PREMPT A		PREMPT B		PREMPT C	
	LOC.	TIME	LOC.	TIME	LOC.	TIME
TIME BEFORE PRE-EMPTION	2180	_____	2183	_____	2186	_____
EXTENSION TIME	2181	_____	2184	_____	2187	_____
GUARANTEED GREEN TIME BEFORE CALL SELECT GREEN BEFORE	2182	002	2185	002	2188	002
					2189	_____

TIMING/RANGE	FUNCTION	MISCELLANEOUS	
		LOC.	TIME
IN SECONDS	PHASE SELECTION - GUARANTEED GREEN TIME	218A	002
IN SECONDS	EXCLUSIVE PED. WALK INTERVAL	218B	_____
IN SECONDS	EXCLUSIVE PED. CLEARANCE INTERVAL	218C	_____
IN SECONDS	@ OFFSET HOLD - SAFETY OVERRIDE	218D	_____
IN SECONDS	@ OFFSET HOLD - EXTENSION	218E	050
IN SECONDS	PREMPT C PED CLR MAX SAFETY TIMER	218F	_____

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
DATE: 11/01/02 TIME: 02:47:12
+++++
TE 262-3 (11/95) MISCELLANEOUS PROGRAMMABLE DATA

TAPS EDIT PROTECT CODE		21DE	
NO PROTECT	= 000		
TRAFFIC COUNTS	= 001		
PATTERN PHASING	= 002		
PATTERN TIMING	= 004		
TIMECLOCK TABLES	= 008		
SIGNAL PROGRAMMABLE FEATURES	= 016		
SIGNAL TIMING FEATURES AND FAILURE ALARMS	= 032		
EDIT ACCESS CODE - MUST BE CODED IN ORDER TO EDIT ALL OTHER PROG. FEATURES LOCATIONS		21DF	xxx
* * * MAY NOT BE IMPLEMENTED BY DESKTOP * * *			

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
 DATE: 11/01/02 TIME: 02:47:20
 ++++++
 .
 .

TE 262-3A (11/95) MASTER TIMECLOCK PROGRAMMABLE DATA

001-012	BEGIN DAYLIGHT SAVINGS TIME MONTH	21EC	004
001-012	END DAYLIGHT SAVINGS TIME MONTH	21ED	010
001=FIRST	BEGIN DAYLIGHT SAVINGS TIME WEEK OF MONTH	21EE	001
002=SECOND			
003=THIRD	END DAYLIGHT SAVINGS TIME WEEK OF MONTH	21EF	005
004=FOURTH			
005=LAST OR FIFTH			
001 - 012		*MONTH OF YEAR	21F0
001 - 031		*DAY OF MONTH	21F1
000 - 099		*YEAR	21F2
000 - 023		*HOUR OF DAY	21F3
000 - 059		*MINUTE OF HOUR	21F4
000 - 059		*SECOND OF MINUTE	21F5
001 - 007		DAY OF WEEK	21F6
001 - 053 (READ ONLY)		WEEK OF YEAR	21F7
001 = To portable card	TRANSFER MASTER CLOCK	21F8	xxx
002 = From portable card			
* * * 21F0-21F8 NOT IMPLEMENTED. USE CLOCK DOWNLOAD FUNCTION. * * *			

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
 DATE: 11/01/02 TIME: 02:47:26
 ++++++
 TE 262-F (11/95) FAILURE ALARM DATA

ALARM LOCATIONS			ALARM LOCATIONS			ALARM CODES
ALARM 00	F00	_____	ALARM 16	F16	_____	099=RTCA ERROR
ALARM 01	F01	_____	ALARM 17	F17	_____	098=EXCL. PED
ALARM 02	F02	_____	ALARM 18	F18	_____	SWITCH ERROR
ALARM 03	F03	_____	ALARM 19	F19	_____	097=COMM. ERROR
ALARM 04	F04	_____	ALARM 20	F20	_____	083=TIMECLOCK
ALARM 05	F05	_____	ALARM 21	F21	_____	ERROR
ALARM 06	F06	_____	ALARM 22	F22	_____	082=AC LINE
ALARM 07	F07	_____	ALARM 23	F23	_____	ERROR
ALARM 08	F08	_____	ALARM 24	F24	_____	079=COORDINATION
ALARM 09	F09	_____	ALARM 25	F25	_____	CONSISTANCY
ALARM 10	F10	_____	ALARM 26	F26	_____	ERROR
ALARM 11	F11	_____	ALARM 27	F27	_____	0xx=HIGH OCC.
ALARM 12	F12	_____	ALARM 28	F28	_____	1xx=LOW OCC.
ALARM 13	F13	_____	ALARM 29	F29	_____	2xx=DETECTOR
ALARM 14	F14	_____	ALARM 30	F30	_____	OVERRIDE
ALARM 15	F15	_____	ALARM 31	F31	_____	

CCS = 87B Signal # = 116
DATE: 11/01/02 TIME: 02:49:22

Rte = 9A Rte Seq # = 280

+++++
+++++
+++++
+++++

TE 262-4 (11/95)

PROGRAMMABLE FEATURES

FUNCTION	PHASE WORD								LOC.	CODE
	8	4	2	1	8	4	2	1		
VEHICLE PHASES PERMITTED	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2200	C8
PEDESTRIAN PHASES PERMITTED	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2201	—
	SP	SP	SP	SP	SP	SP	SP	SP		
STARTUP A OUTPUT	3G	3Y	3R	2G	2Y	2R	1G	1R	2202	26
STARTUP A OUTPUT	6G	6Y	6R	5G	5Y	5R	4G	4R	2203	—
STARTUP A OUTPUT	9G	9Y	9R	8G	8Y	8R	7G	7R	2204	—
STARTUP A OUTPUT	12G	12Y	12R	11G	11Y	11R	10G	10R	2205	10
STARTUP A OUTPUT	-	-	-	-	7Y	1Y	10Y	4Y	2206	—
STARTUP A OUTPUT	14G	14Y	14R	13G	13Y	13R	-	-	2207	—
STARTUP B OUTPUT	3G	3Y	3R	2G	2Y	2R	1G	1R	2208	—
STARTUP B OUTPUT	6G	6Y	6R	5G	5Y	5R	4G	4R	2209	—
STARTUP B OUTPUT	9G	9Y	9R	8G	8Y	8R	7G	7R	220A	—
STARTUP B OUTPUT	12G	12Y	12R	11G	11Y	11R	10G	10R	220B	—
STARTUP B OUTPUT	-	-	-	-	7Y	1Y	10Y	4Y	220C	—
STARTUP B OUTPUT	14G	14Y	14R	13G	13Y	13R	-	-	220D	—
STARTUP PHASES	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	220E	80

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
DATE: 11/01/02 TIME: 02:49:29
+-----+

TE 262-4A (11/95) PROGRAMMABLE FEATURES MISCELLANEOUS CONTROL WORDS

MISCELLANEOUS FUNCTIONS	(@ = NOT IMPLEMENTED BY TAPS)	LOC.	CODE
@ MANUAL CONTROL MODIFIER	ADVANCE = 01 HOLD = 02 EXCLUSIVE PED = 04	2210	—
@ REST POINT	BEFORE GAP = 00 AFTER GAP = 01	2211	—
DUAL RING MODIFIER	QUAD LEFT TURN OPERATION = 00 SPECIAL 6 PHASE SEQUENTIAL = 01	2212	—
CLEAR TABLE SELECTOR WORD	SIGNAL OPERATION FEATURES = 01 DAY PROGRAM = 02 YEAR PROGRAMMING TABLES = 04 PATTERN TIMING = 08 PATTERN PHASING = 10 TRAFFIC COUNT = 20 DIAGNOSTIC ERROR DATA = 40	2213	xx

* * * CLEAR TABLES FUNCTION NOT IMPLEMENTED BY DESKTOP. * * *

CCS = 87B Signal # = 116
DATE: 11/01/02 TIME: 02:50:01

Rte = 9A Rte Seq # = 280

+++++
+

TE 262-5 (11/95) DETECTOR INPUT WORDS

INPUT NUMBER	LOC.	FUNC CODE	INPUT NUMBER	LOC.	FUNC CODE	INPUT FUNC CODES
INPUT # 1	2214	18	INPUT #16	2223		PED BUTTON = X2
INPUT # 2	2215	28	INPUT #17	2224		CALLING DET = X4
INPUT # 3	2216	38	INPUT #18	2225		NORMAL DET = X8
INPUT # 4	2217		INPUT #19	2226		EX PED = 02
INPUT # 5	2218		INPUT #20	2227		PREEMPT C = 21
INPUT # 6	2219		INPUT #21	2228	18	PREEMPT B = 41
INPUT # 7	221A		INPUT #22	2229		PREEMPT A = 81
INPUT # 8	221B		INPUT #23	222A		φ SLCT OMT A = B1
INPUT # 9	221C		INPUT #24	222B		φ SLCT OMT B = B2
INPUT #10	221D		INPUT #25	222C		φ SLCT OMT C = B4
INPUT #11	221E	18	INPUT #26	222D		φ SLCT OMT D = B8
INPUT #12	221F	28	INPUT #27	222E		CYCLE 1 = C8
INPUT #13	2220		INPUT #28	222F		CYCLE 2 = C9
INPUT #14	2221					CYCLE 3 = CA
INPUT #15	2222					SYNC = CB
						OFFSET 1 = CC
						OFFSET 2 = CD
						OFFSET 3 = CE
						FREE = CF

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
 DATE: 11/01/02 TIME: 02:50:09
 ++++++
 ,
 ,

TE 262-6 (11/95) INPUT CONTROL WORDS (CONT.)

FUNCTION	INPUT CONTROL WORDS (CONT.)										LOC.	CODE
INPUT JUMPING/SWITCHING NOTE: ANY INPUT FUNCTION CODE CAN BE USED AS A SECONDARY FUNCTION CODE.	SECONDARY FUNCTION - INPUT #1 SECONDARY FUNCTION - INPUT #2 SECONDARY FUNCTION - INPUT #3 SECONDARY FUNCTION - INPUT #4 SECONDARY FUNCTION - INPUT #5 SECONDARY FUNCTION - INPUT #6 SECONDARY FUNCTION - INPUT #7 SECONDARY FUNCTION - INPUT #8										223C 223D 223E 223F 2240 2241 2242 2243	— — — — — — — —
INPUT #1 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		2244		
INPUT #2 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		2245		
INPUT #3 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		2246		
INPUT #4 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		2247		
INPUT #5 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		2248		
INPUT #6 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		2249		
INPUT #7 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		224A		
INPUT #8 - SECOND PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		224B		
DETECTOR ANALYSIS												
LOW OCCUPANCY OVERRIDE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		224C		
HIGH OCCUPANCY OVERRIDE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		224D		
MISCELLANEOUS (@ = NOT IMPLEMENTED)												
@ OFFSET HOLD-PHASES	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8		224E		

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
 DATE: 11/01/02 TIME: 02:50:33
 ++++++
 TE 262-7 (10/96) OUTPUT CONTROL WORDS

COMBINE FUNCTION (X) AND SPECIFIER (Y) TO FORM CODE WORD (XY)

FUNCTION (X)	SPECIFIER (Y)	SWITCH PACK	LOC.	CODE
0 = PHASE	1-8 = PHASE			
1 = PED ***	1 (9) = PEDA 4 (C) = PEDD 2 (A) = PEDB 5 (D) = PEDE 3 (B) = PEDC 6 (E) = PEDF	SP1 SP2 SP3 SP4	2270 2271 2272 2273	01 02 03 —
2 = OVERLAP	1 = OVLA 4 = OVLD 2 = OVLB 5 = OVLE 3 = OVLC 6 = OVLF	SP5 SP6 SP7 SP8	2274 2275 2276 2277	21 — — —
4 = DOUBLE CLR	1 = DCA 2 = DCB 3 = DCC 4 = DCD 5 = DCE 6 = DCF	SP9* SP10	2278 2279	— —
6 = DC/OVL	1 = DC/OVLA 2 = DC/OVLB	SP11**	227A	01
C = MASTER OUTPUTS (R/Y/G)	0 = UNUSED/OFF2/OFF3 C = CYC1/CYC2/CYC3 F = FREE/SYNC/OFF1	SP12 SP13 SP14	227B 227C 227D	— — —

NOTES: * SP9 (YELLOW) Outputs Aux Output by Timeclock
 ** SP11 (YELLOW) Outputs Blue Light
 *** Choose value in () for solid yellow output during DON'T WALK

CCS = 87B Signal # = 116
 DATE: 11/01/02 TIME: 02:50:52

Rte = 9A Rte Seq # = 280

+++++
 ,

TE 262-7A (11/95)

OVERLAPS

FUNCTION	PHASE WORD								LOC.	CODE
	8	4	2	1	8	4	2	1		
OVERLAP A GREEN PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	227E	40
OVERLAP B GREEN PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	227F	—
OVERLAP C GREEN PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2280	—
OVERLAP D GREEN PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2281	—
OVERLAP E GREEN PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2282	—
OVERLAP F GREEN PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2283	—
OVERLAP A CLEARANCE PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2284	C0
OVERLAP B CLEARANCE PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2285	—
OVERLAP C CLEARANCE PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2286	—
OVERLAP D CLEARANCE PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2287	—
OVERLAP E CLEARANCE PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2288	—
OVERLAP F CLEARANCE PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2289	—
DC/OVL A DBL. CLEAR PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	228A	—
DC/OVL B DBL. CLEAR PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	228B	—
DC/OVL A OVL GREEN PHASES	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	228C	—
DC/OVL B OVL GREEN PHASES	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	228D	—
DC/OVL A CLEARANCE PHASES	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	228E	—
DC/OVL B CLEARANCE PHASES	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	228F	—

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
 DATE: 11/01/02 TIME: 02:51:00
 ++++++
 TE 262-8 (11/95)

OUTPUT CONTROL WORDS

FUNCTION	PHASE WORD									LOC.	CODE	
	8	4	2	1	8	4	2	1				
PEDESTRIAN												
PEDESTRIAN A PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2290			
PEDESTRIAN B PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2291			
PEDESTRIAN C PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2292			
PEDESTRIAN D PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2293			
PEDESTRIAN E PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2294			
PEDESTRIAN F PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2295			
FLASHING WALK PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2296			
PEDESTRIAN PHASE REST N WALK	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2297			
EXTENDED PED CLEARANCE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2298			
DOUBLE CLEARANCE												
DOUBLE CLEARANCE A PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	2299			
DOUBLE CLEARANCE B PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	229A			
DOUBLE CLEARANCE C PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	229B			
DOUBLE CLEARANCE D PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	229C			
DOUBLE CLEARANCE E PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	229D			
DOUBLE CLEARANCE F PHASE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	229E			

CCS = 87B Signal # = 116
DATE: 11/01/02 TIME: 02:51:06

Rte = 9A Rte Seq # = 280

+++++
+++++
+++++
+++++

TE 262-8A (11/95)

OUTPUT CONTROL WORDS (CONT.)

3 COLOR FLASH MODIFIER	NO = 00				YES = 01				229F	____
	SP	SP	SP	SP	SP	SP	SP	SP		
3 COLOR FLASH MODIFIER OUTPUT	3G	3Y	3R	2G	2Y	2R	1G	1R	22A0	____
3 COLOR FLASH MODIFIER OUTPUT	6G	6Y	6R	5G	5Y	5R	4G	4R	22A1	____
3 COLOR FLASH MODIFIER OUTPUT	9G	9Y	9R	8G	8Y	8R	7G	7R	22A2	____
3 COLOR FLASH MODIFIER OUTPUT	12G	12Y	12R	11G	11Y	11R	10G	10R	22A3	____
3 COLOR FLASH MODIFIER OUTPUT	-	-	-	-	7Y	1Y	10Y	4Y	22A4	____
3 COLOR FLASH MODIFIER OUTPUT	14G	14Y	14R	13G	13Y	13R	-	-	22A5	____
LIGHT REDUCTION										
LIGHT REDUCTION OUTPUT	3G	3Y	3R	2G	2Y	2R	1G	1R	22A6	____
LIGHT REDUCTION OUTPUT	6G	6Y	6R	5G	5Y	5R	4G	4R	22A7	____
LIGHT REDUCTION OUTPUT	9G	9Y	9R	8G	8Y	8R	7G	7R	22A8	____
LIGHT REDUCTION OUTPUT	12G	12Y	12R	11G	11Y	11R	10G	10R	22A9	____
LIGHT REDUCTION OUTPUT	-	-	-	-	7Y	1Y	10Y	4Y	22AA	____
LIGHT REDUCTION OUTPUT	14G	14Y	14R	13G	13Y	13R	-	-	22AB	____

CCS = 87B Signal # = 116
DATE: 11/01/02 TIME: 02:51:12

Rte = 9A Rte Seq # = 280

+++++
TE 262-9 (11/95) PHASE SELECTION

FUNCTION	PHASE WORD								LOC.	CODE
	8	4	2	1	8	4	2	1		
PHASE SELECTION - OMIT A	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22AC	—
PHASE SELECTION - OMIT B	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22AD	—
PHASE SELECTION - OMIT C	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22AE	—
PHASE SELECTION - OMIT D	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22AF	—
PHASE SELECTION - MODIFIER	OMIT IN ORDER OF CALL OMIT PRIORITY A-B-C-D							= 00 = 80	22B0	—

CCS = 87B Signal # = 116
 DATE: 11/01/02 TIME: 02:51:20

Rte = 9A Rte Seq # = 280

+++++
 +-----+

TE 262-9A (11/95)

PREEMPTION WORDS

PREEMPT MODIFIER	PREEMPT C FLASH = 02 PREEMPT C FLASH = TC FLASH = 82 PREEMPT PRIORITY C-A-B = 20	22B1	—
BLUE LIGHT MODIFIER & SELECTOR - COMBINE BLUE LIGHT OUTPUT (X) AND PREEMPTION SPECIFIER (Y) TO FORM CODE WORD (XY)		22B2	—
BLUE LIGHT OUTPUT (X) FLASH = 0 STEADY = 8	PREEMPTION SPECIFIER (Y) NO BLUE LIGHT = 0 PREEMPT A = 1 PREEMPT B = 2 PREEMPT C = 4		

PHASE WORD										
FUNCTION	8	4	2	1	8	4	2	1	LOC.	CODE

PREEMPT A PHASE DELETE φ	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22B3	—
PREEMPT B PHASE DELETE φ	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22B4	—
PREEMPT C PHASE DELETE φ	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22B5	—
PREEMPT C CALL SELECT φ	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22B6	—
	SP	SP		SP	SP	SP	SP	SP		
PREEMPT C FLASH OUTPUT	-	3Y	3R	-	2Y	2R	-	1R	22B7	—
PREEMPT C FLASH OUTPUT	-	6Y	6R	-	5Y	5R	-	4R	22B8	—
PREEMPT C FLASH OUTPUT	-	9Y	9R	-	8Y	8R	-	7R	22B9	—
PREEMPT C FLASH OUTPUT	-	12Y	12R	-	11Y	11R	-	10R	22BA	—
PREEMPT C FLASH OUTPUT	-	-	-	-	7Y	1Y	10Y	4Y	22BB	—
PREEMPT C FLASH OUTPUT	-	14Y	14R	-	13Y	13R	-	-	22BC	—
PREEMPT C PED CLR SW	= 00 USE EXISTING PED CLR = 01 USE PREEMPT C MAX PED CLR SAFETY TIMER (SEE 218F)								22BD	—
PREEMPT C PED CLR TIMER - PHASES TO OVERRIDE	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22BE	—

CCS = 87B Signal # = 116 Rte = 9A Rte Seq # = 280
 DATE: 11/01/02 TIME: 02:51:27
 ++++++
 e

TE 262-10 (11/95)

TIMECLOCK FUNCTIONS

FUNCTION	8	4	2	1	8	4	2	1	LOC.	CODE
		SP	SP		SP	SP	SP	SP		
FLASH OUTPUT	-	3Y	3R	-	2Y	2R	-	1R	22CE	—
FLASH OUTPUT	-	6Y	6R	-	5Y	5R	-	4R	22CF	—
FLASH OUTPUT	-	9Y	9R	-	8Y	8R	-	7R	22D0	—
FLASH OUTPUT	-	12Y	12R	-	11Y	11R	-	10R	22D1	—
FLASH OUTPUT	-	-	-	-	7Y	1Y	10Y	4Y	22D2	—
FLASH OUTPUT	-	14Y	14R	-	13Y	13R	-	-	22D3	—
OMIT A PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22D4	—
OMIT B PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22D5	—
REST IN RED	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22D6	—
MAX GRN II PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22D7	—
MAX GRN III PHASE WORD	φ 1	φ 2	φ 5	φ 6	φ 3	φ 4	φ 7	φ 8	22D8	—
INPUT 1-16 BY TIMECLOCK	1	3	5	7	9	11	13	15		
	2	4	6	8	10	12	14	16	22D9	—
INPUT 17-28 BY TIMECLOCK	17	19	21	23	25	27				
	18	20	22	24	26	28			22DA	—

**MODEL 179 SIGNAL OPERATION
PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION**

TAPS _____
STUDY # _____
FILE # _____
PAGE 18 OF 20

SIGNAL # W116COUNTY # WESTDATE OCT 16 1995

SWITCH PACK	FUNCTION	INDICATIONS	FACE	TERMINAL WIRING BOARD		FACE	TERMINAL WIRING BOARD	
				TERMINAL	WIRE COLOR CODE		TERMINAL	WIRE COLOR CODE
1	$\emptyset 1$	Red	1	SP 1 R	14 / 20C - B - R	2	SP 1 R	14 / 10C - C - R
		Yellow		SP 1 Y	- O		SP 1 Y	- O
		Green		SP 1 G	- G		SP 1 G	- G
		Ground Wire		Grnd Bus	- W		Grnd Bus	- W
2	$\emptyset 2$	Red	5	SP 2 R	14 / 20C - B - R / BI	6	SP 2 R	14 / 10C - C - R / B
		Yellow		SP 2 Y	- O / BL		SP 2 Y	- O / B
		Green		SP 2 G	- B / BL		SP 2 G	- G / B
		Ground Wire		Grnd Bus	- BI / W		Grnd Bus	- W / B
3	$\emptyset 3$	Red	7	SP 3 R	14 / 10C - A - R / B	8	SP 3 R	14 / 10C - B - R / B
		Yellow		SP 3 Y	- O / B		SP 3 Y	- O / B
		Green		SP 3 G	- G / B		SP 3 G	- G / B
		Ground Wire		Grnd Bus	- W / B		Grnd Bus	- W / B
4				SP 4 R			SP 4 R	
				SP 4 Y			SP 4 Y	
				SP 4 G			SP 4 G	
		Ground Wire		Grnd Bus			Grnd Bus	
5	$OVL "A"$ $\emptyset 1 + \emptyset 2$ - $\emptyset 1 G$	-----	4	SP 5 R	-----		SP 5 R	
		(		SP 5 Y	14 / 10C - A - BI		SP 5 Y	
		-----		SP 5 G	- B		SP 5 G	
		Ground Wire		Grnd Bus	- W / B		Grnd Bus	
6				SP 6 R			SP 6 R	
				SP 6 Y			SP 6 Y	
				SP 6 G			SP 6 G	
		Ground Wire		Grnd Bus			Grnd Bus	
7				SP 7 R			SP 7 R	
				SP 7 Y			SP 7 Y	
				SP 7 G			SP 7 G	
		Ground Wire		Grnd Bus			Grnd Bus	
8				SP 8 R			SP 8 R	
				SP 8 Y			SP 8 Y	
				SP 8 G			SP 8 G	
		Ground Wire		Grnd Bus			Grnd Bus	
9				SP 9 R			SP 9 R	
				SP 9 Y			SP 9 Y	
				SP 9 G			SP 9 G	
		Ground Wire		Grnd Bus			Grnd Bus	
10				SP 10 R			SP 10 R	
				SP 10 Y			SP 10 Y	
				SP 10 G			SP 10 G	
		Ground Wire		Grnd Bus			Grnd Bus	
11	$\emptyset 1$	Red	3	SP 11 R	14 / 15C - B - R / W	4	SP 11 R	14 / 10C - A - R
		Yellow		SP 11 Y	- BL / W		SP 11 Y	- O
		Green		SP 11 G	- G / W		SP 11 G	- G
		Ground Wire		Grnd Bus	- B / W		Grnd Bus	- W
12				SP 12 R			SP 12 R	
				SP 12 Y			SP 12 Y	
				SP 12 G			SP 12 G	
		Ground Wire		Grnd Bus			Grnd Bus	
13				SP 13 R			SP 13 R	
				SP 13 Y			SP 13 Y	
				SP 13 G			SP 13 G	
		Ground Wire		Grnd Bus			Grnd Bus	
14				SP 14 R			SP 14 R	
				SP 14 Y			SP 14 Y	
				SP 14 G			SP 14 G	
		Ground Wire		Grnd Bus			Grnd Bus	

TE 262-12 (7/91)

**MODEL 179 SIGNAL OPERATION
PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION**

TAPS _____
STUDY # _____
FILE # _____
PAGE 19 OF 20

SIGNAL # W116

COUNTY # WEST

DATE OCT 16 1995

CONFLICT / CURRENT MONITOR PROGRAMMING

D254979

NOTES:

TE 262-12 (7/91)

**MODEL 179 SIGNAL OPERATION
PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION**

TAPS _____
 STUDY # _____
 FILE # _____
 PAGE 20 OF 20

SIGNAL # W116COUNTY # WESTDATE OCT 16 1995**TABLE OF INPUT WIRING**

TERM. NUMBER	FUNCTION	DET. NO.	DET. YPE	DET. AN OVER	REMARKS
1A, 1B	Ø 1	1A, 1B	NORMAL		PRESENCE LOOP
2A, 2B	Ø 2	2A	NORMAL		PRESENCE LOOP
3A, 3B	Ø 3	3A, 3B	NORMAL		PRESENCE LOOP
4A, 4B					
5A, 5B					
6A, 6B					
7A, 7B					
8A, 8B					
9A, 9B					
10A, 10B					
11A, 11B	Ø 1	11A, 11B	NORMAL		PRESENCE LOOP
12A, 12B	Ø 2	12A	NORMAL		PRESENCE LOOP
13A, 13B					
14A, 14B					
15A, 15B					
16A, 16B					
17A, 17B					
18A, 18B					
19A, 19B					
20A, 20B					
21A, 21B	Ø 1	21A, 21B	NORMAL		PRESENCE LOOP
22A, 22B					
23A, 23B					
24A, 24B					
25A, 25B					
26A, 26B					
27A, 27B					
28A, 28B					

TAPS — MODEL 179 OPERATING INSTRUCTIONS SHEET #1
KEYBOARD INPUT COMMANDS — SUMMARY

<p>D <LOCATION #>:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>daaaa</td><td>xx</td></tr> <tr><td>daaaa</td><td>ttt</td></tr> <tr><td>daaaaA</td><td>ttt</td></tr> </table> <p>d = DISPLAY LOCATION # COMMAND aaaa = LOCATION # ENTERED A = DAY PROGRAM EVENT PART (A-D) (xx = HEX. DATA VALUE (00-FF) ttt = DECIMAL DATA VALUE (000-255)</p>	daaaa	xx	daaaa	ttt	daaaaA	ttt	<p>DAA <TIMING INT. #>:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>d A ii</td></tr> <tr><td>F a: ttt</td></tr> </table> <p>dAA = DISPLAY RING A INTERVAL COMMAND ii = INTERVAL NUMBER ENTERED (00-31) F = FAZE a = RING A PHASE # (1-4) - DYNAMIC ttt = INTERVAL TIMING - DYNAMIC</p>	d A ii	F a: ttt
daaaa	xx								
daaaa	ttt								
daaaaA	ttt								
d A ii									
F a: ttt									
<p>DBB <TIMING INT. #>:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>dbb jj</td></tr> <tr><td>F b: sss</td></tr> </table> <p>dbb = DISPLAY RING B INTERVAL COMMAND jj = INTERVAL NUMBER ENTERED (00-31) F = FAZE b = RING B PHASE # (5-8) - DYNAMIC sss = INTERVAL TIMING - DYNAMIC</p>	dbb jj	F b: sss	<p>DCC <DETECTOR #>:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>d CC ii</td></tr> <tr><td>xxx</td></tr> </table> <p>dCC = DISPLAY DETECTOR COUNT COMMAND ii = DETECTOR NUMBER ENTERED (01-40) xxx = NUMBER OF ACTUATIONS SINCE TERMINATION OF PHASE GREEN</p>	d CC ii	xxx				
dbb jj									
F b: sss									
d CC ii									
xxx									
<p>CC7:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>:C 7:</td></tr> <tr><td>mm:d d:y y</td></tr> </table> <p>C7 = CHIP DATE month/day/year COMMAND mm = MONTH (01-12) dd = DAY (01-31) yy = YEAR (00-99)</p>	:C 7:	mm:d d:y y	<p>CC8:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>:C 8:</td></tr> <tr><td>mm:d d:y y</td></tr> </table> <p>C8 = MASTER CLOCK month/day/year COMMAND mm = MONTH (01-12) dd = DAY (01-31) yy = YEAR (00-99)</p>	:C 8:	mm:d d:y y				
:C 7:									
mm:d d:y y									
:C 8:									
mm:d d:y y									
<p>CC9:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>:C 9:</td></tr> <tr><td>h h:m m:s s</td></tr> </table> <p>C9 = MASTER CLOCK hour/min/sec COMMAND hh = HOUR (00-23) mm = MINUTE (00-59) ss = SECOND (00-59)</p>	:C 9:	h h:m m:s s	<p>CCA:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>F a:C A:z z</td></tr> <tr><td>ii: ttt</td></tr> </table> <p>CA = RING A DYNAMIC DISPLAY COMMAND F = FAZE a = RING A ACTIVE PHASE # (1-4) ii = RING A ACTIVE PHASE TIMING INTERVAL # ttt = DYNAMIC INTERVAL TIMING zz = PHASE TERMINATION MODE - FLASHING FLASHING DURING CLEARANCE</p>	F a:C A:z z	ii: ttt				
:C 9:									
h h:m m:s s									
F a:C A:z z									
ii: ttt									
<p>CCB:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>z z:C B:F b</td></tr> <tr><td>jj: sss</td></tr> </table> <p>CB = RING B DYNAMIC DISPLAY COMMAND F = FAZE b = RING B ACTIVE PHASE # (5-8) jj = RING B ACTIVE PHASE TIMING INTERVAL # sss = DYNAMIC INTERVAL TIMING zz = PHASE TERMINATION MODE - FLASHING</p>	z z:C B:F b	jj: sss	<p>CCC:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>F a:C C:F b</td></tr> <tr><td>ii: jj</td></tr> </table> <p>CC = DUAL RING DYNAMIC DISPLAY COMMAND F = FAZE a = RING A ACTIVE PHASE # (1-4) b = RING B ACTIVE PHASE # (5-8) ii = RING A ACTIVE PHASE TIMING INTERVAL # jj = RING B ACTIVE PHASE TIMING INTERVAL # (ii and jj replaced by zz during clearance)</p>	F a:C C:F b	ii: jj				
z z:C B:F b									
jj: sss									
F a:C C:F b									
ii: jj									
<p>CCD:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>i i:C D:j j</td></tr> <tr><td>ttt sss</td></tr> </table> <p>CD = DUAL RING DYNAMIC DISPLAY COMMAND ii = RING A ACTIVE PHASE TIMING INTERVAL # jj = RING B ACTIVE PHASE TIMING INTERVAL # ttt = RING A DYNAMIC INTERVAL TIMING sss = RING B DYNAMIC INTERVAL TIMING</p>	i i:C D:j j	ttt sss	<p>CCE:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>m m:C E:n n</td></tr> <tr><td>g g.g h h.h</td></tr> </table> <p>CE = MAX GRN/GAP DUAL RING DISPLAY COMMAND mm = RING A MAX GRN TIMER - DYNAMIC nn = RING B MAX GRN TIMER - DYNAMIC gg.g = RING A GAP TIMER - DYNAMIC hh.h = RING B GAP TIMER - DYNAMIC</p>	m m:C E:n n	g g.g h h.h				
i i:C D:j j									
ttt sss									
m m:C E:n n									
g g.g h h.h									

TARS — MODEL 179 OPERATING INSTRUCTIONS SHEET #2
KEYBOARD INPUT COMMANDS — SUMMARY

CCF:

y:y:C F:m m
d d:h h:t t

CF = CABINET FLASH DISPLAY COMMAND
 yy = YEAR (00-99)
 mm = MONTH (01-12)
 dd = DAY (01-31)
 hh = HOUR (00-23)
 tt = MINUTE (00-59)

C00:

x x:0 0;z z
AAA

00 = PATTERN NUMBER DISPLAY COMMAND
 xx = PATTERN # IN EFFECT
 zz = MODE
 AAA = CYCLE LENGTH IN EFFECT

C01:

O F:0 1:S Y
b b b a a a

01 = CYCLE/OFFSET DISPLAY COMMAND
 OF = OFFSET
 SY = SYSTEM
 bbb = LOCAL CYCLE TIMER
 aaa = SYSTEM CYCLE TIMER

C02:

CY:0 2;z z
b b b a a a

02 = VEHICLE PERMISSIVE DISPLAY COMMAND
 CY = CYCLE
 zz = PERMISSIVE IN EFFECT
 bbb = LOCAL CYCLE TIMER
 aaa = PERMISSIVE TIMER
 call lights = phases not omitted

C03:

CY:0 3:z z
b b b a a a

03 = PEDESTRIAN PERMISSIVE
 DISPLAY COMMAND
 CY = CYCLE
 zz = PEDESTRIAN PERMISSIVE IN EFFECT
 bbb = LOCAL CYCLE TIMER
 aaa = PERMISSIVE TIMER
 call lights = ped phase not omitted

C04:

CY:0 4:z z
b b b a a a

04 = FORCE OFF DISPLAY COMMAND
 CY = CYCLE
 zz = FORCE OFF COMING UP
 bbb = LOCAL CYCLE TIMER
 aaa = TIME TO FORCE OFF
 call lights = phases forced off

DISPLAY COMMANDS

F<ALARM LOC #>:

F a a n n
· x x x

F = FAILURE ALARM DISPLAY COMMAND
 aa = ALARM LOC NUMBER ENTERED (00-31)
 r = RESETS OR OCCURANCES
 nn = NUMBER OF RESETS (00-12)
 xxx = FAILURE ALARM CODE

FAILURE ALARM CODES

001-032 HIGH OCCUPANCY DETECTOR 01-32
 101-132 LOW OCCUPANCY DETECTOR 01-32
 201-232 DETECTOR ANALYSIS OVERRIDE
 DETECTOR 01-32
 099 MASTER CLOCK RTCA ERROR-RESET CLOCK
 098 EXCLUSIVE PEDESTRIAN PUSH BUTTON ERROR
 097 COMMUNICATIONS ERROR
 089 MODEL 602 MODEM SETUP ERROR
 088 MODEL 602 MODEM SETUP ERROR
 084 RTCA ERROR
 083 MASTER CLOCK DATA ERROR-RESET CLOCK
 082 MAIN A.C. SERVICE ERROR-CHECK SERVICE
 079 PATTERN CONSISTENCY CHECK ERROR (COORD)
 078 LATE RETURN TO ARTERY (COORD)

FATAL ERROR MESSAGES: EEPROM, RA, PRO, GUARD, BORDER, COURT, AC LINE, NEORRF

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING & SAFETY DIVISION
TRAFFIC CONTROL SPECIFICATIONS

Study :
Contract : D254979
PIN: 8802.27.321
File : 55.11-9A

W-227

SIGNAL NO(S)

WESTCHESTER
COUNTY

PAGE 1 OF 20 PAGES

INTERSECTION ROUTE 9A AT MUNICIPAL PLACE & ROUTE 129

CITY VILLAGE TOWN OF CROTON ON HUDSON

Department Order filed 3/10/69 as Section 2055.11 Subdivision (k)

Prior specifications hereby superseded None January 22, 1991

Purpose : REINSTALLATION OF TRAFFIC SIGNAL UNDER CONTRACT D254979

These specifications will be effective upon the Installation Modification of the necessary traffic control device(s) required by and conforming to the State Manual of Uniform Traffic Control Devices

I. This Signal shall

A. Operate in accordance with the Table of Operations and / or Change intervals as shown on page(s) 2 as a :

- Pretimed Signal
 Semi-traffic actuated signal
 Full-traffic actuated signal
 Pedestrian actuated signal
 Other

B. Display vehicular indications

Display pedestrian indications

Be equipped with vehicle detectors

Be equipped with Pedestrian pushbuttons

as shown in the schematic scaled drawing on page 3

Be equipped with pre-emption which are described as follows interconnection and / or coordination

FILE SHOP CABINET

FINAL COPY

OCT 16 1995 WD F City Patrick / RTE
Date Signature Title
Installation Date 3-29-10
Modification Date OCT 16 1995

cc: () Main Office
(1) Region 8 Traffic Engineer
(2) D.SYWYK
(1) RES 8-8

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
 TRAFFIC AND SAFETY DIVISION
TRAFFIC CONTROL SIGNAL SPECIFICATIONS (CONTINUED)

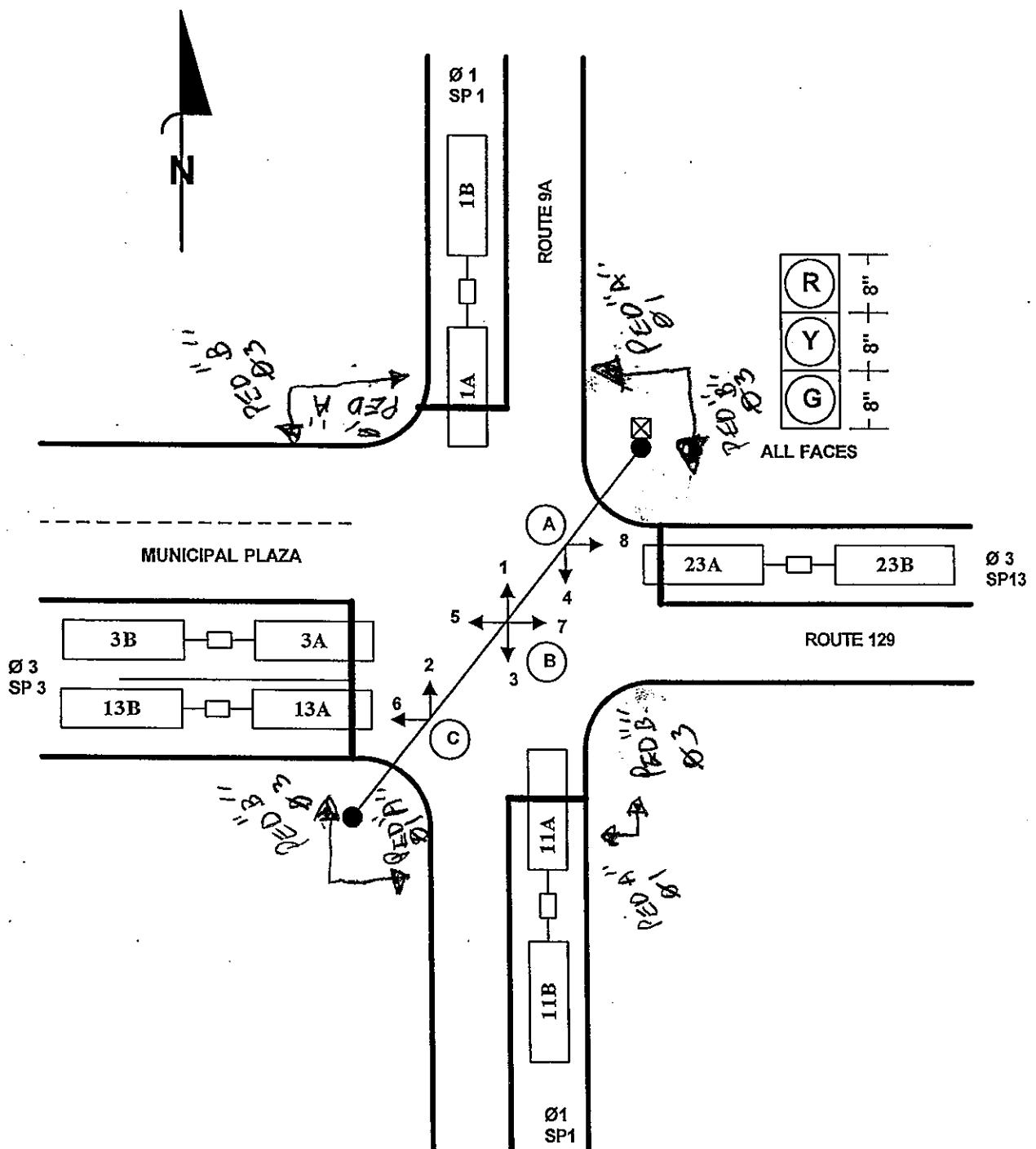
STUDY:
 CONTRACT: D254979
 PIN: 8804.27.321
 FILE: 55.11-9A

W-227
 SIGNAL NO(S)

WESTCHESTER
 COUNTY

OCT 16 1995
 DATE

PAGE 3 OF 20 PAGES



**MODEL 179 SIGNAL OPERATION
PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION**

TAPS _____
STUDY # _____
FILE # _____
PAGE 18 OF 20

SIGNAL # W227COUNTY # WESTDATE OCT 16 1995

SWITCH PACK	FUNCTION	INDICATIONS	FACE	TERMINAL WIRING BOARD		FACE	TERMINAL WIRING BOARD	
				TERMINAL	WIRE COLOR CODE		TERMINAL	WIRE COLOR CODE
1	$\emptyset 1$	Red	1	SP 1 R	14 / 15C - B - R	2	SP 1 R	14 / 10C - C - R
		Yellow		SP 1 Y	- O		SP 1 Y	- O
		Green		SP 1 G	- G		SP 1 G	- G
		Ground Wire		Grnd Bus	- W		Grnd Bus	- W
2				SP 2 R			SP 2 R	
				SP 2 Y			SP 2 Y	
				SP 2 G			SP 2 G	
		Ground Wire		Grnd Bus			Grnd Bus	
3	$\emptyset 3$	Red	5	SP 3 R	14 / 19C - B - R / B	6	SP 3 R	14 / 10C - C - R / B
		Yellow		SP 3 Y	- O / B		SP 3 Y	- O / B
		Green		SP 3 G	- G / B		SP 3 G	- G / B
		Ground Wire		Grnd Bus	- W / B		Grnd Bus	- W / B
4				SP 4 R			SP 4 R	
				SP 4 Y			SP 4 Y	
				SP 4 G			SP 4 G	
		Ground Wire		Grnd Bus			Grnd Bus	
5				SP 5 R			SP 5 R	
				SP 5 Y			SP 5 Y	
				SP 5 G			SP 5 G	
		Ground Wire		Grnd Bus			Grnd Bus	
6				SP 6 R			SP 6 R	
				SP 6 Y			SP 6 Y	
				SP 6 G			SP 6 G	
		Ground Wire		Grnd Bus			Grnd Bus	
7				SP 7 R			SP 7 R	
				SP 7 Y			SP 7 Y	
				SP 7 G			SP 7 G	
		Ground Wire		Grnd Bus			Grnd Bus	
8				SP 8 R			SP 8 R	
				SP 8 Y			SP 8 Y	
				SP 8 G			SP 8 G	
		Ground Wire		Grnd Bus			Grnd Bus	
9				SP 9 R			SP 9 R	
				SP 9 Y			SP 9 Y	
				SP 9 G			SP 9 G	
		Ground Wire		Grnd Bus			Grnd Bus	
10	$\emptyset 1$	Red	3	SP 10 R	14 / 15C - B - R / W	4	SP 10 R	14 / 10C - A - R
		Yellow		SP 10 Y	- BL / W		SP 10 Y	- O
		Green		SP 10 G	- G / W		SP 10 G	- G
		Ground Wire		Grnd Bus	- B / W		Grnd Bus	- W
11	$\emptyset 1$ <i>PED "A"</i> $\emptyset 1$			SP 11 R			SP 11 R	
				SP 11 Y			SP 11 Y	
				SP 11 G			SP 11 G	
		Ground Wire		Grnd Bus			Grnd Bus	
12	$\emptyset 3$ <i>PED "B"</i> $\emptyset 3$			SP 12 R			SP 12 R	
				SP 12 Y			SP 12 Y	
				SP 12 G			SP 12 G	
		Ground Wire		Grnd Bus			Grnd Bus	
13	$\emptyset 3$	Red	7	SP 13 R	14 / 15C - B - BI / B	8	SP 13 R	14 / 10C - A - R / B
		Yellow		SP 13 Y	- BI		SP 13 Y	- O / B
		Green		SP 13 G	- B		SP 13 G	- G / B
		Ground Wire		Grnd Bus	- W / B		Grnd Bus	- W / B
14				SP 14 R			SP 14 R	
				SP 14 Y			SP 14 Y	
				SP 14 G			SP 14 G	
		Ground Wire		Grnd Bus			Grnd Bus	

**MODEL 179 SIGNAL OPERATION
PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION**

TAPS _____
STUDY # _____
FILE # _____
PAGE 19 OF 20

SIGNAL # W-227

COUNTY # WEST

DATE OCT 16 1995

CONFLICT / CURRENT MONITOR PROGRAMMING

D254979

NOTES:

W-227

RTE 9A @ MUNICIPAL PLACE (ID 7227) (Standard File)

3-29-10
8 Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc ~~08297&fam~~ Page 1

#	Event / Alarm	EV ALM	Call Phases[1.1.5]	Redirect Phases[1.1.5]	Inhibit Phases[1.1.5]		
1	Power Up Alarm.	1	Ø	Phases Called By Ø	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16		
2	Stop Timing	1	1	1	1		
3	TS1 Cabinet Door		2	2	2		
4	Coordination Failure	1	1	3	3		
5	External Alarm # 1	1	1	4	4		
6	External Alarm # 2	1	1	5	5		
7	External Alarm # 3		6	6	6		
8	External Alarm # 4		7	7	7		
9	Closed Loop Disabled	1	8	8	8		
10	External Alarm # 5		9	9	9		
11	External Alarm # 6		10	10	10		
12	Manual Control Enable	1	11	11	11		
13	Coord Free Input		12	12	12		
14	Local Flash Input	1	13	13	13		
15	MMU Flash		14	14	14		
16	CMU Flash		15	15	15		
17	Cycle Fault	1	16	16	16		
18	Cycle Failure	1	Alt Call & Redirect #1 [1.1.6.3]				
19	Coordination Fault	1	Col Ø Phases Called By Ø	Front To Fron To Fron To Fron To	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16		
20	Controller Fault	1	1	1	1		
21	Detector SDLC Failure		2	2	2		
22	MMU SDLC Failure		3	3	3		
23	Critical SDLC Failure		4	4	4		
24	Reserved		5	5	5		
25	EEPROM CRC Fault	1	1	6	6		
26	Detector Diagnostic F		7	7	7		
27	BIU Detector Failure	1	1	8	8		
28	Queue detector alarm	1	Alt Call & Redirect #2 [1.1.6.3]				
29	Ped Detector Fault	1	Col Ø Phases Called By Ø	Front To Fron To Fron To Fron To	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16		
30	Coord Diagnostic Fault		1	1	1		
41	TempAlert Probe Ch. A		2	2	2		
42	TempAlert Probe Ch. B		3	3	3		
47	Coord Active	1	4	4	4		
48	Preempt Active		5	5	5		
49	Preempt 1 Input		6	6	6		
50	Preempt 2 Input	1	7	7	7		
51	Preempt 3 Input	1	8	8	8		
52	Preempt 4 Input	1	Coord, CIC Plans [2.3]				
53	Preempt 5 Input	1	CIC CoØ Grow 1	2 3 4 5 6 7 8	Allow Skip Yellow OFF	Max Cycle Time 0	
54	Preempt 6 Input	1	1 OFF		TOD Dim Enable OFF	Cycle Fault Action ALARM	
55	Preempt 7 Input	1	2 OFF		Tone Disable OFF		
56	Preempt 8 Input	1	3 OFF		Diamond Mode 4Ph		
57	Preempt 9 Input	1	4 OFF		Backup Time (s) 900		
58	Preempt 10 Input	1	Auto Flash Phase/Olap Settings [1.4.2]				
61	In Transition	1	Yet Ø		Disable Init Ped OFF		
81	FIO Status Alarm		Yet (laps)		Cycle Fault Action ALARM		
					Enable Run Time ON	RTE 9A @ MUNICIPAL PLACE (ID 7227) (Standard File)	3/29/2010 Page 8

Capacity Analysis Methodology

CAPACITY ANALYSIS METHODOLOGY

SIGNALIZED INTERSECTIONS

AKRF analyzed the operation of Study Area signalized intersections by applying the Percentile Delay Methodology included in the Synchro 10 traffic signal software. The Percentile Delay Methodology differs from the *Highway Capacity Manual (HCM)* Methodology by calculating vehicle delays for five different percentile scenarios (10th, 30th, 50th, 70th and 90th) and taking the volume weighted average of the scenarios as compared to HCM, which calculates delay for a single average scenario. The Percentile Delay Methodology includes an additional queue delay component to account for the effects of queues and blocking on short links and turning bays. The methodology evaluates signalized intersections for average delay per vehicle and level of service (LOS).

LOS is characterized for the entire intersection, each intersection approach, and/or each lane group. LOS is the only measure of effectiveness provided for the entire intersection operation. Total delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

LOS A describes operation with a delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operation with delay between 10 and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operation with delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D describes operation with delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E describes operation with delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F describes operation with delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

A lane group can incur a delay less than 80 seconds per vehicle when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression

is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 seconds per vehicle represents failure from a delay perspective).

HCM's standard delay criteria for the range of service levels at signalized intersections are shown in **Table A.1-1**.

Table A.1-1
LOS Criteria for Signalized Intersections

Total Delay Per Vehicle	Level-of-Service (LOS) ⁽¹⁾	
	v/c ratio ≤ 1.0	v/c ratio > 1.0
≤ 10.0 seconds	A	F
>10.0 and ≤ 20.0 seconds	B	F
>20.0 and ≤ 35.0 seconds	C	F
>35.0 and ≤ 55.0 seconds	D	F
>55.0 and ≤ 80.0 seconds	E	F
>80.0 seconds	F	F

Note: (1) For approach-based and intersection-wide assessments, LOS is defined solely by delay.
Source: Transportation Research Board. *Highway Capacity Manual, 6th Edition*.

UNSIGNALIZED INTERSECTIONS

LOS for a two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections is determined by the computed or measured control delay using the *Highway Capacity Manual 6th Edition (HCM 6)* Methodology. For vehicles, LOS is determined for each minor-street movement (or shared movement), major-street left turns at TWSC intersections, and for all movements at AWSC intersections. LOS is not defined for the intersection as a whole for TWSC intersections.

HCM's standard LOS criteria for TWSC and AWSC unsignalized intersections are summarized in **Table A.1-2**.

Note that the LOS criteria for unsignalized intersections are somewhat different from the criteria used in signalized intersections. At TWSC intersections, drivers on the stop-controlled approaches need to find a break in the traffic to cross a lane or make a turn. When drivers on the stop-controlled approach are waiting in a traffic queue, this results in additional delay. AWSC intersections require drivers on all approaches to stop before proceeding into the intersection.

Table A.1-2
LOS Criteria for Unsignalized Intersections

Control Delay Per Vehicle	Level-of-Service (LOS) ⁽¹⁾	
	v/c ratio ≤ 1.0	v/c ratio > 1.0
≤ 10.0 seconds	A	F
>10.0 and ≤ 15.0 seconds	B	F
>15.0 and ≤ 25.0 seconds	C	F
>25.0 and ≤ 35.0 seconds	D	F
>35.0 and ≤ 50.0 seconds	E	F
>50.0 seconds	F	F

Note: (1) For TWSC intersections, the LOS criteria apply to each lane on a given approach and to each approach on the minor street (for TWSC intersections). LOS is not calculated for major-street approaches or for the intersection as a whole.
Source: Transportation Research Board. *Highway Capacity Manual, 6th Edition*.

Summary of Development of Pre-Pandemic 2021
Existing Traffic Volumes

SUMMARY OF DEVELOPMENT OF PRE-PANDEMIC 2021 EXISTING TRAFFIC VOLUMES

To account for pre-pandemic existing baseline traffic conditions, AKRF developed and applied an adjustment factor to apply the March 2021 Turning Movement Count (“TMC”) data as it was collected during the ongoing pandemic.

AKRF utilized data from the Streetlight Insight platform¹ to obtain historical TMC data at the study area intersections

Average weekday TMC data from Streetlight from the 4-month period of March through June, 2019 was obtained from the Streetlight platform. This period was selected as it is the most recent pre-pandemic 4-month period which (1) schools were in session (2) were not summer months and (3) did not cover the fall/winter periods which contain several holidays and inclement weather.

The 2019 Streetlight TMC data was then grown by 0.5 percent per year to 2021 levels. These grown volumes were then compared against AKRF’s 2021 field collected TMCs.

The more conservative values between the grown Streetlight TMCs and the AKRF TMCs for each intersection movement were then selected for use in the traffic study area network and the network volumes were then balanced to establish the 2021 pre-pandemic Existing Conditions traffic volumes.

¹ The StreetLight Data InSight platform is an on-demand web platform for transportation, which utilizes a system of location-based services/mobile phone and navigation device data to develop time-based location data points. StreetLight Data has seen an increase in use among transportation consultants and agencies for traffic data in response to the pandemic.

SUMMARY OF 2021 EXISTING CONDITIONS TRAFFIC VOLUME DEVELOPMENT

Volume Development Steps:

1. 2019 StreetLight TMC data was tabulated for the 7-8 AM, 8-9 AM, 4-5 PM, and 5-6 PM peak hours
2. The maximum StreetLight TMC values based on the comparisons between the 2 peak hours for the AM peak and PM peak periods were then tabulated.
3. The maximum StreetLight TMC values for the AM peak and PM peak periods were then grown by 1 percent to estimate 2021 values
4. Based on a comparison of the 2021 AKRF and 2021 grown StreetLight developed in step (3), the maximum values of the two data sets were utilized for the 2021 Existing Raw Values
5. The volumes in step (4) were then balanced between the study area intersections as shown in the Existing Conditions Traffic Volume figures.

Growth Factor:
0.5% per year (2019 to 2021)
1.01

Traffic Intersections			Lane Group		2021 AKRF TMC - RAW		2019 StreetLight TMC - Hour 1		2019 StreetLight TMC - Hour 2		Max. Peak Hr. StreetLight TMC - 2019 Raw		Max SL Value - 2021 Grown		2021 Pandemic Adjusted	
					AM	PM	7-8 AM	4-5 PM	8-9 AM	5-6 PM	AM	PM	AM	PM	AM	PM
1 Maple St @ Municipal Pl/Shopping Ctr.	EB	L	118	178	166	189	59	145	166	189	168	191	168	191	168	191
		T	27	55	65	75	17	55	65	75	66	76	66	76	66	76
		R	2	3	26	19	12	17	26	19	26	19	26	19	26	19
	WB	L	13	19	19	23	11	30	19	30	19	30	19	30	19	30
		T	33	73	21	28	18	48	21	48	21	48	33	73	33	73
		R	6	10	8	5	0	5	8	5	8	5	8	10	8	10
	NB	L	18	31	27	24	13	29	27	29	27	29	27	31	27	31
		T	101	167	114	175	80	219	114	219	115	221	115	221	115	221
		R	10	21	7	38	12	38	12	38	12	38	12	38	12	38
	SB	L	5	9	11	11	4	11	11	11	11	11	11	11	11	11
		T	99	126	297	111	147	128	297	128	300	129	300	129	300	129
		R	166	203	164	183	172	187	172	187	174	189	174	203	174	203
2 Maple @ S. Riverside (9A)	WB	L	6	4	4	0	0	0	4	0	4	0	6	4	6	4
		R (to 9A)	5	5	10	0	0	0	10	0	10	0	10	5	10	5
		R (to Maple)	3	1	0	0	0	0	0	0	0	0	0	3	1	
	SWB	L (to HRR)	4	7	0	0	13	0	13	0	13	0	13	7	13	7
		L (to 9A)	86	121	327	136	156	143	327	143	330	144	330	144	330	144
		R	5	3	30	21	10	40	30	40	30	40	30	40	30	40
	NB	T	107	184	111	279	119	262	119	279	120	282	120	282	120	282
		R (to Maple)	96	178	129	272	115	261	129	272	130	275	130	275	130	275
		R (to HRR)	5	4	0	6	6	14	6	14	6	14	6	14	6	14
	SB	L (to Maple)	2	4	25	7	21	32	25	32	25	32	25	32	25	32
		L (to HRR)	11	7	0	8	10	0	10	8	10	8	11	8	11	8
		T	130	208	251	152	147	195	251	195	254	197	254	208	254	208
3 Municipal @ S. Riverside (9A)	EB	L	54	134	54	114	50	132	54	132	55	133	55	134	55	134
		T	131	190	229	231	78	175	229	231	231	233	231	233	231	233
		R	90	113	162	124	109	150	162	150	164	152	164	152	164	152
	WB	L	15	34	7	11	12	12	12	12	12	12	12	15	34	
		T	207	216	165	200	178	206	178	206	180	208	207	216	208	
		R	34	112	43	42	35	54	43	54	43	55	43	55	43	55
	NB	L	89	128	100	146	79	142	100	146	101	147	101	147	101	147
		T	62	121	52	162	66	154	66	162	67	164	67	164	67	164
		R	7	17	5	11	3	16	5	16	5	16	7	17	7	17
	SB	L	20	49	28	45	11	33	28	45	28	45	28	45	28	45
		T	75	123	134	87	86	88	134	88	135	89	135	123	89	123
		R	66	114	147	106	143	86	147	106	148	107	148	114	148	114

*(Max. Values of AKRF vs
Grown SL TMCs)

Turning Movement Count (TMC) Data (AKRF
and StreetLight Data)

GENERAL INFORMATION

PROJECT NAME:	41 Maple Street
PROJECT NO:	210059-B6
DATE:	May 3, 2021
ANALYST:	AA

INTERSECTION INFORMATION

SURVEY DATE:	March 23, 2021		
INTERSECTION:	STREET (E-W): Municipal Place/Shopping Center Driveway STREET (N-S): Maple Street (NYS Route 129)		
SURVEY PERIOD:	AM PEAK PERIOD	7:00 AM	TO 9:00 AM
	PM PEAK PERIOD	4:00 PM	TO 6:00 PM

TRAFFIC VOLUMES

Time Period		Eastbound				Westbound				Northbound				Southbound			
Begin	End	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total
AM PEAK PERIOD																	
7:00 AM	- 7:15 AM	31	1	0	32	1	11	1	13	4	20	1	25	3	27	37	67
7:15 AM	- 7:30 AM	33	5	0	38	1	6	2	9	9	20	1	30	3	28	38	69
7:30 AM	- 7:45 AM	24	6	0	30	1	7	2	10	5	21	6	32	2	27	37	66
7:45 AM	- 8:00 AM	27	6	0	33	2	7	3	12	6	27	1	34	1	31	41	73
8:00 AM	- 8:15 AM	30	5	1	36	3	6	1	10	4	21	1	26	1	27	40	68
8:15 AM	- 8:30 AM	30	12	0	42	5	9	1	15	4	26	7	37	3	21	45	69
8:30 AM	- 8:45 AM	31	4	1	36	3	11	1	15	4	27	1	32	0	20	40	60
8:45 AM	- 9:00 AM	24	15	0	39	7	11	2	20	5	19	6	30	2	24	34	60
Generalized AM Peak Hour Only																	
7:45 AM	- 8:00 AM	27	6	0	33	2	7	3	12	6	27	1	34	1	31	41	73
8:00 AM	- 8:15 AM	30	5	1	36	3	6	1	10	4	21	1	26	1	27	40	68
8:15 AM	- 8:30 AM	30	12	0	42	5	9	1	15	4	26	7	37	3	21	45	69
8:30 AM	- 8:45 AM	31	4	1	36	3	11	1	15	4	27	1	32	0	20	40	60
Peak Hour Total		118	27	2	147	13	33	6	52	18	101	10	129	5	99	166	270
Peak 15 Minute Vol		31	12	1	42	5	11	3	15	6	27	7	37	3	31	45	73
Calculated PHF		0.95	0.56	0.50	0.88	0.65	0.75	0.50	0.87	0.75	0.94	0.36	0.87	0.42	0.80	0.92	0.92
PM PEAK PERIOD																	
4:00 PM	- 4:15 PM	40	10	1	51	6	14	4	24	6	20	6	32	2	27	50	79
4:15 PM	- 4:30 PM	48	23	1	72	10	15	4	29	6	29	13	48	2	23	54	79
4:30 PM	- 4:45 PM	41	10	1	52	7	16	3	26	7	31	5	43	1	25	54	80
4:45 PM	- 5:00 PM	40	11	0	51	5	17	2	24	7	31	4	42	2	31	49	82
5:00 PM	- 5:15 PM	43	17	1	61	5	18	1	24	6	37	7	50	3	31	47	81
5:15 PM	- 5:30 PM	46	16	0	62	7	18	3	28	9	42	9	60	2	32	58	92
5:30 PM	- 5:45 PM	41	11	1	53	4	19	2	25	8	40	4	52	1	33	47	81
5:45 PM	- 6:00 PM	48	11	1	60	3	18	4	25	8	48	1	57	3	30	51	84
Generalized PM Peak Hour Only																	
5:00 PM	- 5:15 PM	43	17	1	61	5	18	1	24	6	37	7	50	3	31	47	81
5:15 PM	- 5:30 PM	46	16	0	62	7	18	3	28	9	42	9	60	2	32	58	92
5:30 PM	- 5:45 PM	41	11	1	53	4	19	2	25	8	40	4	52	1	33	47	81
5:45 PM	- 6:00 PM	48	11	1	60	3	18	4	25	8	48	1	57	3	30	51	84
Peak Hour Total		178	55	3	236	19	73	10	102	31	167	21	219	9	126	203	338
Peak 15 Minute Vol		48	17	1	62	7	19	4	28	9	48	9	60	3	33	58	92
Calculated PHF		0.93	0.81	0.75	0.95	0.68	0.96	0.63	0.91	0.86	0.87	0.58	0.91	0.75	0.95	0.88	0.92

GENERAL INFORMATION

PROJECT NAME:	41 Maple Street
PROJECT NO:	210059-B6
DATE:	May 3, 2021
ANALYST:	AA

INTERSECTION INFORMATION

SURVEY DATE:	March 23, 2021		
INTERSECTION:	STREET (E-W): Maple St. (NYS Route 129)/Hudson River Road STREET (N-S): S. Riverdale Ave. (NYS Route 9A)		
SURVEY PERIOD:	AM PEAK PERIOD	7:00 AM	TO 9:00 AM
	PM PEAK PERIOD	4:00 PM	TO 6:00 PM

TRAFFIC VOLUMES

Time Period Begin End	Westbound (Hudson River Rd.)				Southwestbound (Maple St.)				Northbound				Southbound			
	Left	R (to 9A)	R (to Mpl)	Total	L (to HRR)	L (to 9A)	Right	Total	Thru	R (to Mpl)	R (to HRR)	Total	L (to Mpl)	L (to HRR)	Thru	Total
AM PEAK PERIOD																
7:00 AM - 7:15 AM	2	1	1	4	0	27	1	28	16	41	0	57	1	3	27	31
7:15 AM - 7:30 AM	3	2	1	6	1	31	1	33	11	24	1	36	0	2	31	33
7:30 AM - 7:45 AM	1	1	1	3	1	30	1	32	10	21	1	32	1	3	27	31
7:45 AM - 8:00 AM	4	1	1	6	3	31	1	35	17	24	1	42	1	3	31	35
8:00 AM - 8:15 AM	1	1	1	3	1	27	2	30	20	27	1	48	1	2	27	30
8:15 AM - 8:30 AM	2	1	0	3	1	20	0	21	22	20	1	43	1	2	30	33
8:30 AM - 8:45 AM	0	1	0	1	1	19	1	21	29	21	1	51	0	2	38	40
8:45 AM - 9:00 AM	3	2	2	7	1	20	2	23	36	28	2	66	0	5	35	40
Generalized AM Peak Hour Only																
8:00 AM - 8:15 AM	1	1	1	3	1	27	2	30	20	27	1	48	1	2	27	30
8:15 AM - 8:30 AM	2	1	0	3	1	20	0	21	22	20	1	43	1	2	30	33
8:30 AM - 8:45 AM	0	1	0	1	1	19	1	21	29	21	1	51	0	2	38	40
8:45 AM - 9:00 AM	3	2	2	7	1	20	2	23	36	28	2	66	0	5	35	40
Peak Hour Total	6	5	3	14	4	86	5	95	107	96	5	208	2	11	130	143
Peak 15 Minute Vol	3	2	2	7	1	27	2	30	36	28	2	66	1	5	38	40
Calculated PHF	0.50	0.63	0.38	0.50	1.00	0.80	0.63	0.79	0.74	0.86	0.63	0.79	0.50	0.55	0.86	0.89
PM PEAK PERIOD																
4:00 PM - 4:15 PM	1	1	1	3	3	31	1	35	41	27	1	69	1	1	41	43
4:15 PM - 4:30 PM	1	1	2	4	2	30	1	33	33	50	1	84	0	1	41	42
4:30 PM - 4:45 PM	1	1	1	3	1	30	2	33	32	40	1	73	0	2	43	45
4:45 PM - 5:00 PM	1	1	1	3	3	31	1	35	48	44	1	93	2	1	45	48
5:00 PM - 5:15 PM	2	1	1	4	1	27	0	28	41	40	1	82	2	1	47	50
5:15 PM - 5:30 PM	1	2	0	3	2	31	1	34	47	43	2	92	1	3	53	57
5:30 PM - 5:45 PM	1	1	0	2	3	34	1	38	43	40	1	84	1	1	50	52
5:45 PM - 6:00 PM	0	1	0	1	1	29	1	31	53	55	0	108	0	2	58	60
Generalized PM Peak Hour Only																
5:00 PM - 5:15 PM	2	1	1	4	1	27	0	28	41	40	1	82	2	1	47	50
5:15 PM - 5:30 PM	1	2	0	3	2	31	1	34	47	43	2	92	1	3	53	57
5:30 PM - 5:45 PM	1	1	0	2	3	34	1	38	43	40	1	84	1	1	50	52
5:45 PM - 6:00 PM	0	1	0	1	1	29	1	31	53	55	0	108	0	2	58	60
Peak Hour Total	4	5	1	10	7	121	3	131	184	178	4	366	4	7	208	219
Peak 15 Minute Vol	2	2	1	4	3	34	1	38	53	55	2	108	2	3	58	60
Calculated PHF	0.50	0.63	0.25	0.63	0.58	0.89	0.75	0.86	0.87	0.81	0.50	0.85	0.50	0.58	0.90	0.91

GENERAL INFORMATION

PROJECT NAME:	41 Maple Street
PROJECT NO:	210059-B6
DATE:	May 3, 2021
ANALYST:	AA

INTERSECTION INFORMATION

SURVEY DATE:	March 23, 2021		
INTERSECTION:	STREET (E-W): Municipal Place STREET (N-S): S. Riverdale Avenue (NYS Route 9A)		
SURVEY PERIOD:	AM PEAK PERIOD	7:00 AM	TO 9:00 AM
	PM PEAK PERIOD	4:00 PM	TO 6:00 PM

TRAFFIC VOLUMES

Time Period Begin	End	Eastbound				Westbound				Northbound				Southbound			
		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total
AM PEAK PERIOD																	
7:00 AM	- 7:15 AM	8	39	17	64	1	45	4	50	11	6	1	18	2	14	13	29
7:15 AM	- 7:30 AM	8	30	18	56	1	47	5	53	11	6	1	18	3	15	14	32
7:30 AM	- 7:45 AM	11	31	19	61	3	47	4	54	27	7	3	37	4	17	15	36
7:45 AM	- 8:00 AM	11	32	21	64	4	50	7	61	21	11	4	36	5	21	16	42
8:00 AM	- 8:15 AM	16	36	23	75	3	69	9	81	24	14	3	41	6	23	18	47
8:15 AM	- 8:30 AM	11	35	21	67	3	50	6	59	23	14	3	40	6	17	17	40
8:30 AM	- 8:45 AM	11	31	22	64	5	40	5	50	21	15	1	37	6	18	16	40
8:45 AM	- 9:00 AM	16	29	24	69	4	48	14	66	21	19	0	40	2	17	15	34
Generalized AM Peak Hour Only																	
8:00 AM	- 8:15 AM	16	36	23	75	3	69	9	81	24	14	3	41	6	23	18	47
8:15 AM	- 8:30 AM	11	35	21	67	3	50	6	59	23	14	3	40	6	17	17	40
8:30 AM	- 8:45 AM	11	31	22	64	5	40	5	50	21	15	1	37	6	18	16	40
8:45 AM	- 9:00 AM	16	29	24	69	4	48	14	66	21	19	0	40	2	17	15	34
Peak Hour Total		54	131	90	275	15	207	34	256	89	62	7	158	20	75	66	161
Peak 15 Minute Vol		16	36	24	75	5	69	14	81	24	19	3	41	6	23	18	47
Calculated PHF		0.84	0.91	0.94	0.92	0.75	0.75	0.61	0.79	0.93	0.82	0.58	0.96	0.83	0.82	0.92	0.86
PM PEAK PERIOD																	
4:00 PM	- 4:15 PM	23	58	26	107	5	51	25	81	31	28	3	62	11	28	19	58
4:15 PM	- 4:30 PM	24	51	27	102	6	51	27	84	31	27	3	61	8	27	18	53
4:30 PM	- 4:45 PM	23	46	28	97	7	55	31	93	37	31	4	72	11	28	20	59
4:45 PM	- 5:00 PM	31	47	27	105	7	53	27	87	35	27	5	67	10	29	27	66
5:00 PM	- 5:15 PM	36	47	29	112	8	62	26	96	32	37	4	73	13	33	30	76
5:15 PM	- 5:30 PM	37	47	27	111	8	54	28	90	30	31	4	65	12	31	31	74
5:30 PM	- 5:45 PM	30	49	30	109	11	47	31	89	31	26	4	61	14	30	26	70
5:45 PM	- 6:00 PM	30	53	31	114	10	46	31	87	27	27	6	60	11	31	20	62
Generalized PM Peak Hour Only																	
4:45 PM	- 5:00 PM	31	47	27	105	7	53	27	87	35	27	5	67	10	29	27	66
5:00 PM	- 5:15 PM	36	47	29	112	8	62	26	96	32	37	4	73	13	33	30	76
5:15 PM	- 5:30 PM	37	47	27	111	8	54	28	90	30	31	4	65	12	31	31	74
5:30 PM	- 5:45 PM	30	49	30	109	11	47	31	89	31	26	4	61	14	30	26	70
Peak Hour Total		134	190	113	437	34	216	112	362	128	121	17	266	49	123	114	286
Peak 15 Minute Vol		37	49	30	112	11	62	31	96	35	37	5	73	14	33	31	76
Calculated PHF		0.91	0.97	0.94	0.98	0.77	0.87	0.90	0.94	0.91	0.82	0.85	0.91	0.88	0.93	0.92	0.94

Day Type

1: Weekday (Tu-Th)

STREETLIGHT 2019**TURNING MOVEMENT COUNTS**

<u>Day Part</u>	Municipal Pl - West Leg - IN			hopping Ctr Driveway - East Leg - II			Maple St - South Leg - IN			Maple St - North Leg - IN			<u>Total</u>
	<u>EB Left</u>	<u>EB Thru</u>	<u>EB Right</u>	<u>WB Left</u>	<u>WB Thru</u>	<u>WB Right</u>	<u>NB Left</u>	<u>NB Thru</u>	<u>NB Right</u>	<u>SB Left</u>	<u>SB Thru</u>	<u>SB Right</u>	
00: All Day (12am-12am)	1,725	744	256	323	506	74	324	2,163	360	133	1,972	2,397	10,977
01: 12am (12am-1am)	6	2	-	-	-	-	-	12	-	-	5	4	29
02: 1am (1am-2am)	2	-	-	-	-	-	2	5	-	-	2	4	15
03: 2am (2am-3am)	3	-	-	-	-	-	-	3	-	-	1	1	8
04: 3am (3am-4am)	4	1	-	-	-	-	3	15	1	-	2	7	33
05: 4am (4am-5am)	3	15	-	-	-	-	-	4	2	-	14	21	59
06: 5am (5am-6am)	9	19	8	-	3	-	2	6	-	16	42	39	144
07: 6am (6am-7am)	18	8	2	4	15	-	9	19	-	1	204	147	427
08: 7am (7am-8am)	166	65	26	19	21	8	27	114	7	11	297	164	925
09: 8am (8am-9am)	59	17	12	11	18	-	13	80	12	4	147	172	545
10: 9am (9am-10am)	53	58	7	14	25	3	13	53	13	15	93	128	475
11: 10am (10am-11am)	66	37	15	18	27	7	12	64	14	7	95	108	470
12: 11am (11am-12noon)	63	47	9	26	23	3	15	89	25	5	86	123	514
13: 12pm (12noon-1pm)	89	79	15	37	40	10	20	99	24	11	117	132	673
14: 1pm (1pm-2pm)	100	57	25	13	42	6	17	129	25	5	93	111	623
15: 2pm (2pm-3pm)	145	57	19	42	44	5	28	147	28	11	104	146	776
16: 3pm (3pm-4pm)	160	48	16	34	53	5	26	121	35	11	126	210	845
17: 4pm (4pm-5pm)	189	75	19	23	28	5	24	175	38	11	111	183	881
18: 5pm (5pm-6pm)	145	55	17	30	48	5	29	219	38	11	128	187	912
19: 6pm (6pm-7pm)	148	45	25	12	46	7	31	287	39	7	109	199	955
20: 7pm (7pm-8pm)	133	28	19	15	35	8	30	218	25	6	76	148	741
21: 8pm (8pm-9pm)	72	20	12	8	19	1	14	125	17	1	64	70	423
22: 9pm (9pm-10pm)	67	9	6	2	11	2	8	99	7	3	30	50	294
23: 10pm (10pm-11pm)	22	3	-	-	10	-	4	47	-	-	18	12	116
24: 11pm (11pm-12am)	14	-	2	-	2	-	2	35	1	-	14	17	87

Day Type

1: Weekday (Tu-Th)

STREETLIGHT 2019**TURNING MOVEMENT COUNTS**

<u>Day Part</u>	Maple St. - Northeast Leg - IN			Hudson River Rd - East Leg - IN			S. Riverside Ave. - South Leg - IN			S. Riverside Ave. - North Leg - IN			<u>Total</u>
	<u>EB Left</u>	<u>EB Thru</u>	<u>EB Right</u>	<u>WB Left</u>	<u>WB Thru</u>	<u>WB Right</u>	<u>NB Left</u>	<u>NB Thru</u>	<u>NB Right</u>	<u>SB Left</u>	<u>SB Thru</u>	<u>SB Right</u>	
00: All Day (12am-12am)	313	110	2,247	15	46	60	2,746	2,638	58	135	2,182	294	10,844
01: 12am (12am-1am)	-	-	3	-	-	-	15	17	-	-	3	-	38
02: 1am (1am-2am)	-	-	3	-	-	9	7	7	-	-	1	-	27
03: 2am (2am-3am)	-	-	2	-	-	-	4	3	-	-	2	-	11
04: 3am (3am-4am)	-	-	2	-	-	-	18	3	-	-	8	-	31
05: 4am (4am-5am)	-	-	-	-	-	-	-	-	-	-	-	-	-
06: 5am (5am-6am)	-	-	47	-	-	-	4	19	4	-	38	6	118
07: 6am (6am-7am)	15	-	214	-	-	-	36	57	-	-	157	8	487
08: 7am (7am-8am)	30	-	327	4	-	10	129	111	-	-	251	25	887
09: 8am (8am-9am)	10	13	156	-	-	-	115	119	6	10	147	21	597
10: 9am (9am-10am)	6	19	116	-	-	9	80	102	7	34	79	9	461
11: 10am (10am-11am)	10	17	100	9	-	-	90	100	3	7	91	15	442
12: 11am (11am-12noon)	11	-	116	-	-	4	129	117	4	10	103	21	515
13: 12pm (12noon-1pm)	27	15	130	-	-	-	133	163	3	-	131	13	615
14: 1pm (1pm-2pm)	22	5	123	-	-	-	166	151	-	5	98	18	588
15: 2pm (2pm-3pm)	12	-	129	-	-	-	200	182	-	-	156	13	692
16: 3pm (3pm-4pm)	24	-	151	5	-	-	171	184	10	-	121	33	699
17: 4pm (4pm-5pm)	21	-	136	-	-	-	272	279	6	8	152	7	881
18: 5pm (5pm-6pm)	40	-	143	-	-	-	261	262	14	-	195	32	947
19: 6pm (6pm-7pm)	15	-	129	3	16	7	342	233	4	20	161	24	954
20: 7pm (7pm-8pm)	12	-	102	3	11	10	259	215	4	11	109	19	755
21: 8pm (8pm-9pm)	7	-	71	-	-	-	146	161	7	8	77	5	482
22: 9pm (9pm-10pm)	7	-	29	-	4	-	95	97	9	-	41	7	289
23: 10pm (10pm-11pm)	1	8	12	-	-	-	50	55	-	5	28	1	160
24: 11pm (11pm-12am)	-	-	19	-	-	-	40	31	-	5	14	-	109

Day Type

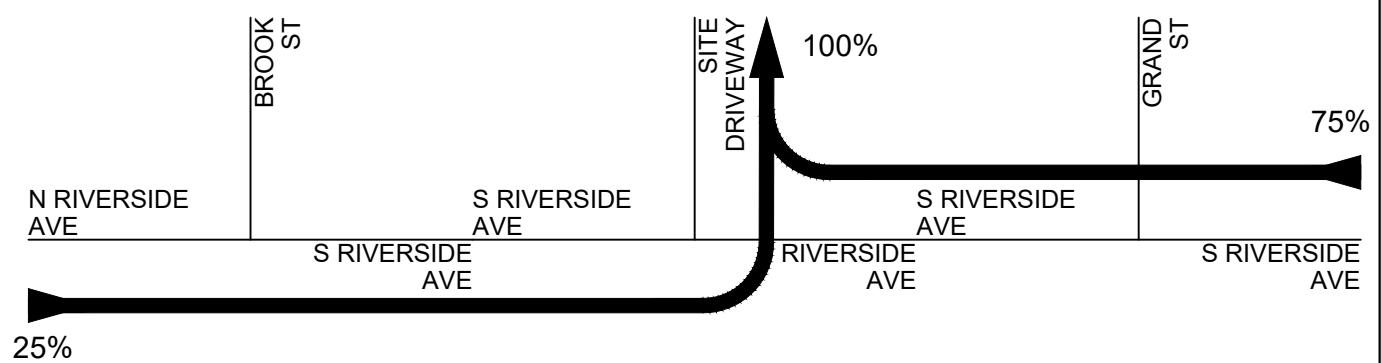
1: Weekday (Tu-Th)

STREETLIGHT 2019**TURNING MOVEMENT COUNTS**

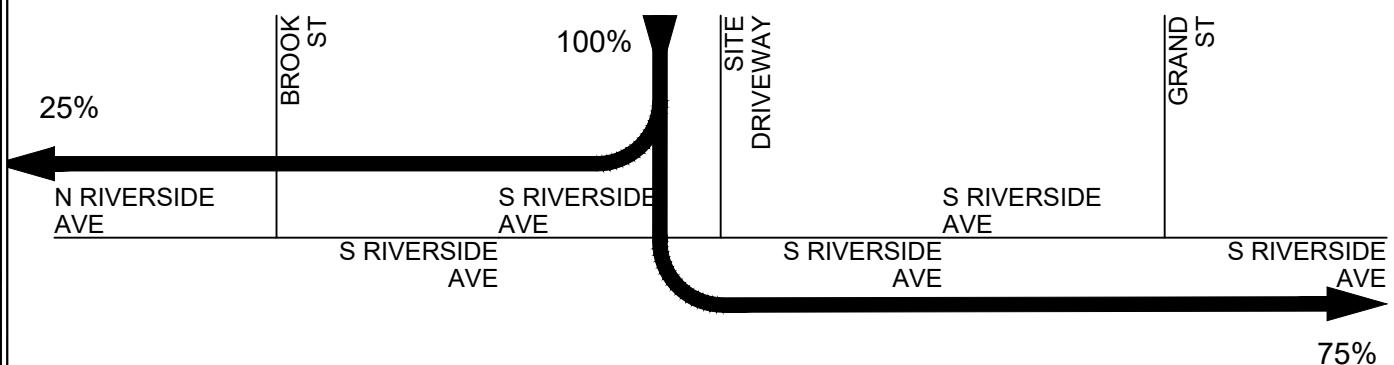
<u>Day Part</u>	Municipal Pl - West Leg - IN			Municipal Pl - East Leg - IN			S. Riverside Ave. - South Leg - IN			S. Riverside Ave. - North Leg - IN			<u>Total</u>
	<u>EB Left</u>	<u>EB Thru</u>	<u>EB Right</u>	<u>WB Left</u>	<u>WB Thru</u>	<u>WB Right</u>	<u>NB Left</u>	<u>NB Thru</u>	<u>NB Right</u>	<u>SB Left</u>	<u>SB Thru</u>	<u>SB Right</u>	
00: All Day (12am-12am)	1,231	2,377	1,658	151	2,555	606	1,531	1,568	123	335	1,270	1,335	14,740
01: 12am (12am-1am)	7	7	6	-	4	1	8	11	1	-	1	3	49
02: 1am (1am-2am)	3	2	-	-	2	2	7	6	-	-	1	-	23
03: 2am (2am-3am)	3	3	3	-	2	-	1	1	-	-	2	3	18
04: 3am (3am-4am)	2	5	3	1	5	-	2	1	-	-	4	2	25
05: 4am (4am-5am)	4	16	6	2	23	1	11	-	-	-	5	6	74
06: 5am (5am-6am)	6	30	16	7	34	6	13	8	-	3	24	23	170
07: 6am (6am-7am)	20	23	80	8	166	10	38	32	2	7	102	150	638
08: 7am (7am-8am)	54	229	162	7	165	43	100	52	5	28	134	147	1,126
09: 8am (8am-9am)	50	78	109	12	178	35	79	66	3	11	86	143	850
10: 9am (9am-10am)	58	103	116	6	148	23	63	71	8	15	61	69	741
11: 10am (10am-11am)	55	106	88	8	130	22	66	59	4	14	55	57	664
12: 11am (11am-12noon)	51	100	76	6	121	32	70	69	5	21	80	54	685
13: 12pm (12noon-1pm)	55	159	93	8	145	45	76	102	9	23	87	62	864
14: 1pm (1pm-2pm)	68	154	77	8	125	36	87	85	8	26	65	62	801
15: 2pm (2pm-3pm)	89	207	104	7	162	48	96	99	9	23	75	81	1,000
16: 3pm (3pm-4pm)	99	201	99	10	209	73	121	113	6	19	81	75	1,106
17: 4pm (4pm-5pm)	114	231	124	11	200	42	146	162	11	45	87	106	1,279
18: 5pm (5pm-6pm)	132	175	150	12	206	54	142	154	16	33	88	86	1,248
19: 6pm (6pm-7pm)	110	182	119	14	207	45	121	140	13	30	90	73	1,144
20: 7pm (7pm-8pm)	109	174	81	10	156	42	111	140	8	16	76	65	988
21: 8pm (8pm-9pm)	65	91	73	7	75	27	69	98	5	14	29	33	586
22: 9pm (9pm-10pm)	38	69	42	2	50	14	47	51	9	4	12	25	363
23: 10pm (10pm-11pm)	24	21	18	3	17	4	25	31	2	4	12	16	177
24: 11pm (11pm-12am)	20	15	12	1	17	3	16	20	1	-	7	6	118

No Build Project Trip Assignment and
Distribution Data (25 South Riverside Avenue
Project)

 NOT TO SCALE



 NOT TO SCALE



Provident
design engineering

7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

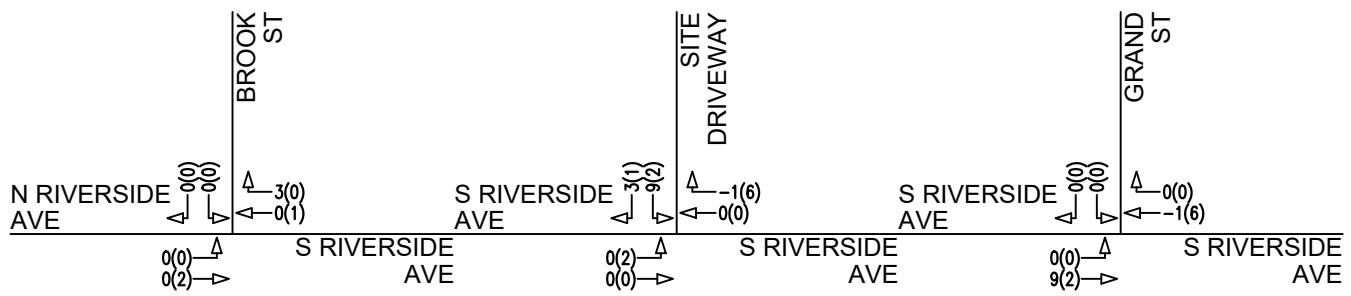
© PROVIDENT DESIGN ENGINEERING, PLLC

Departure Distribution
25 South Riverside Avenue
Village of Croton-On-Hudson, Westchester County, NY

Project No. 20-049
Scale: N.T.S.
October 2020

Figure No. 05

 NOT TO SCALE



LEGEND

00 - VPH-PEAK AM HOUR (9:00-10:00)
(00) - VPH-PEAK PM HOUR (5:00-6:00)



Provident
design engineering

7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

© PROVIDENT DESIGN ENGINEERING, PLLC

Site Generated Traffic Volumes
25 South Riverside Avenue
Village of Croton-On-Hudson, Westchester County, NY

Project No. 20-049
Scale: N.T.S.
October 2020

Figure No. 06

**No Build Project Trip Assignments to 41-51 Maple Street Study Area Intersections
25 S. Riverside Avenue Project**

Traffic Intersections		Lane Group		No Build Project Trips (25 S. Riverside Avenue)	
				AM	PM
1 Maple St @ Municipal Pl/Shopping Ctr.		EB	L T R L T R L T R L T R	1	
		WB			2
		NB			
		SB			
2 Maple @ S. Riverside (9A)		WB	L R (to 9A) R (to Maple) L (to HRR) L (to 9A) R T		
		SWB			
		NB	R (to Maple) R (to HRR) L (to Maple) L (to HRR) T	-1	2
		SB			
3 Municipal @ S. Riverside (9A)		EB	L T R L T R L T R L T R	4	1
		WB			
		NB			
		SB			

ITE Trip Generation Reference Data

Multifamily Housing (Low-Rise) (220)

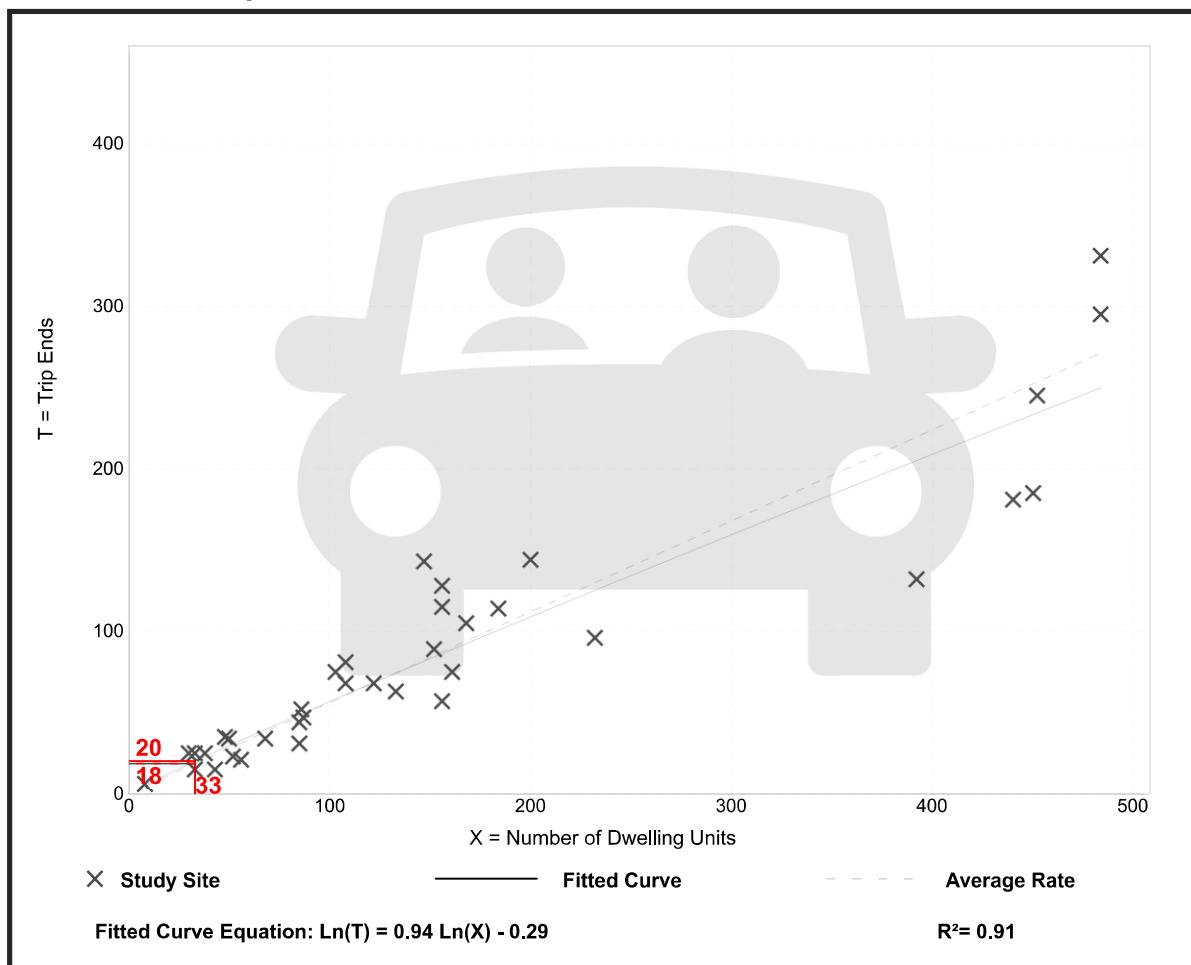
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 36
Avg. Num. of Dwelling Units: 161
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.34 - 0.97	0.15

Data Plot and Equation



Multifamily Housing (Low-Rise) (220)

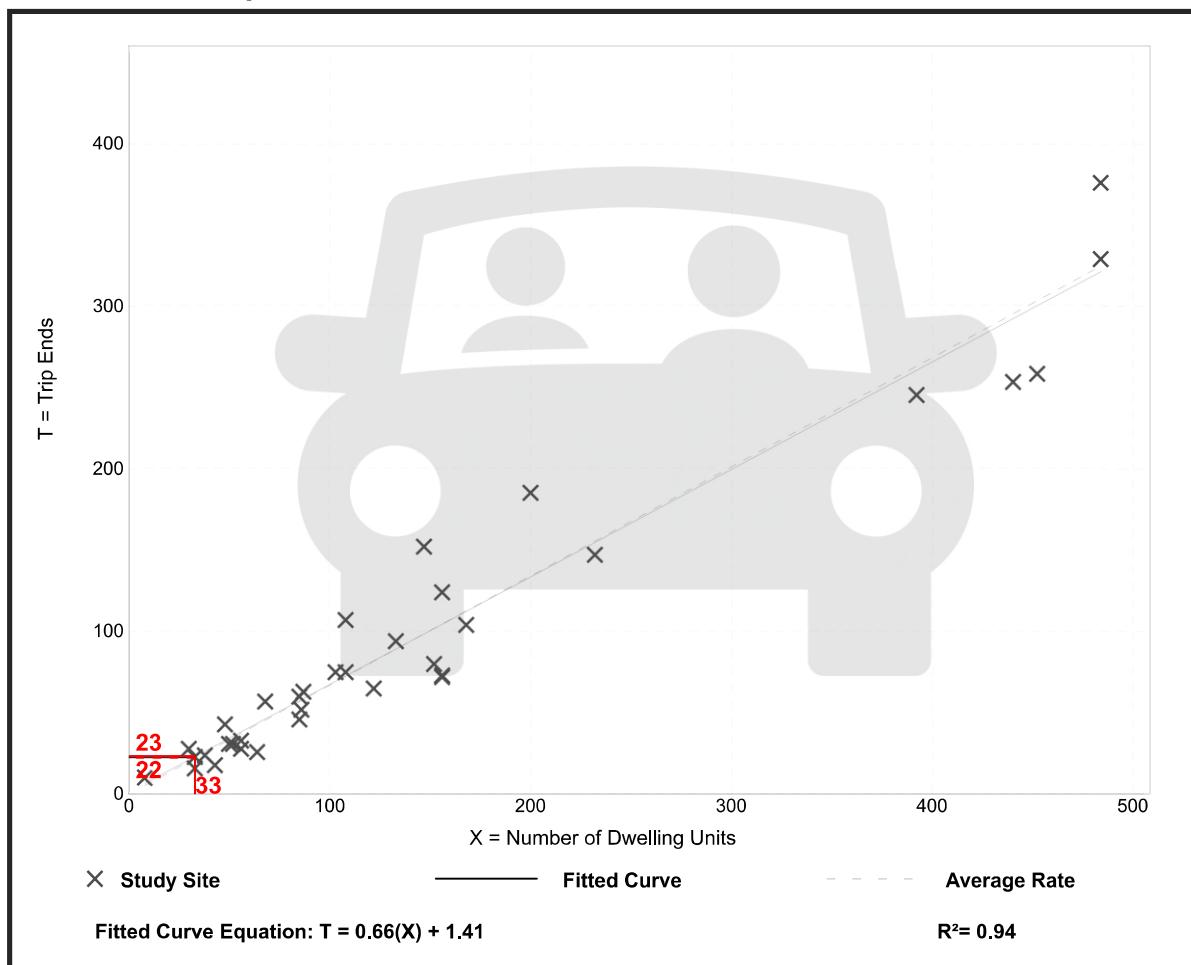
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
 Number of Studies: 35
 Avg. Num. of Dwelling Units: 146
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.67	0.41 - 1.25	0.14

Data Plot and Equation



Depictions of Recommended MUTCD Signage

Figure 7B-1. School Area Signs

School Advance Crossing Assembly



S1-1

AHEAD W16-9P

OR

200 FT W16-2aP

OR

200 FEET W16-2P

OR

W16-5P (optional)

OR

W16-6P (optional)

School Crossing Assembly



S1-1

W16-7P

School Zone Sign



S1-1

ALL YEAR

SCHOOL

OR

W16-5P (optional)

OR

W16-6P (optional)

School Speed Limit Assembly



S4-3P

R2-1

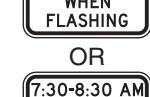
S4-1P

OR



S4-2P

OR



S4-4P

OR



S4-1P

OR

MON-FRI

S4-6P



S3-1



S3-2



S4-5

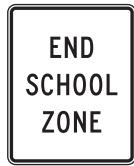


S4-5a

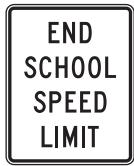


S5-1

R2-6P (optional)



S5-2



S5-3



R2-10



R2-11

05 The Overhead Pedestrian Crossing (R1-9 or R1-9a) sign (see Section 2B.12 and Figure 2B-2) may be modified to replace the standard pedestrian symbol with the standard schoolchildren symbol and may be used at unsignalized school crossings. The STATE LAW legend on the R1-9 series signs may be omitted.

06 A 12-inch reduced size in-street School (S1-1) sign (see Figure 7B-6) may be used at an unsignalized school crossing instead of the In-Street Pedestrian Crossing (R1-6 or R1-6a) or the In-Street Schoolchildren Crossing (R1-6b or R1-6c) sign. A 12 x 6-inch reduced size diagonal downward pointing arrow (W16-7P) plaque may be mounted below the reduced size in-street School (S1-1) sign.

Standard:

07 If an In-Street Pedestrian Crossing sign, an In-Street Schoolchildren Crossing sign, or a reduced size in-street School (S1-1) sign is placed in the roadway, the sign support shall comply with the mounting height and special mounting support requirements for In-Street Pedestrian Crossing (R1-6 or R1-6a) signs (see Section 2B.12).

08 The In-Street Pedestrian Crossing sign, the In-Street Schoolchildren Crossing sign, the Overhead Pedestrian Crossing sign, and the reduced size in-street School (S1-1) sign shall not be used at signalized locations.

Section 7B.13 School Bus Stop Ahead Sign (S3-1)

Guidance:

01 The School Bus Stop Ahead (S3-1) sign (see Figure 7B-1) should be installed in advance of locations where a school bus, when stopped to pick up or discharge passengers, is not visible to road users for an adequate distance and where there is no opportunity to relocate the school bus stop to provide adequate sight distance.

Section 7B.14 SCHOOL BUS TURN AHEAD Sign (S3-2)

Option:

01 The SCHOOL BUS TURN AHEAD (S3-2) sign (see Figure 7B-1) may be installed in advance of locations where a school bus turns around on a roadway at a location not visible to approaching road users for a distance as determined by the "0" column under Condition B of Table 2C-4, and where there is no opportunity to relocate the school bus turn around to provide the distance provided in Table 2C-4.

Section 7B.15 School Speed Limit Assembly (S4-1P, S4-2P, S4-3P, S4-4P, S4-6P, S5-1) and END SCHOOL SPEED LIMIT Sign (S5-3)

Standard:

01 A School Speed Limit assembly (see Figure 7B-1) or a School Speed Limit (S5-1) sign (see Figure 7B-1) shall be used to indicate the speed limit where a reduced school speed limit zone has been established based upon an engineering study or where a reduced school speed limit is specified for such areas by statute. The School Speed Limit assembly or School Speed Limit sign shall be placed at or as near as practical to the point where the reduced school speed limit zone begins (see Figures 7B-3 and 7B-5).

02 If a reduced school speed limit zone has been established, a School (S1-1) sign shall be installed in advance (see Table 2C-4 for advance placement guidelines) of the first School Speed Limit sign assembly or S5-1 sign that is encountered in each direction as traffic approaches the reduced school speed limit zone (see Figures 7B-3 and 7B-5).

03 Where increased fines are imposed for traffic violations within a reduced school speed limit zone, a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or \$XX FINE (R2-6bP) plaque (see Figure 2B-3) shall be installed as a supplement to the reduced school speed limit sign to notify road users.

04 Except as provided in Paragraph 5, the downstream end of an authorized and posted reduced school speed limit zone shall be identified with an END SCHOOL SPEED LIMIT (S5-3) sign (see Figures 7B-1 and 7B-5).

Option:

05 If a reduced school speed limit zone ends at the same point as a higher fines zone, an END SCHOOL ZONE (S5-2) sign may be used instead of a combination of an END HIGHER FINES ZONE (R2-11) sign and an END SCHOOL SPEED LIMIT (S5-3) sign.

06 A standard Speed Limit sign showing the speed limit for the section of highway that is downstream from the authorized and posted reduced school speed limit zone may be mounted on the same post above the END SCHOOL SPEED LIMIT (S5-3) sign or the END SCHOOL ZONE (S5-2) sign.

Guidance:

07 The beginning point of a reduced school speed limit zone should be at least 200 feet in advance of the school grounds, a school crossing, or other school related activities; however, this 200-foot distance should be increased if the reduced school speed limit is 30 mph or higher.

02 The Circular Intersection (W2-6) symbol sign (see Figure 2C-9) may be installed in advance of a circular intersection (see Figures 2B-21 through 2B-23).

Guidance:

03 *If an approach to a roundabout has a statutory or posted speed limit of 40 mph or higher, the Circular Intersection (W2-6) symbol sign should be installed in advance of the circular intersection.*

Option:

04 An educational plaque (see Figure 2C-9) with a legend such as ROUNDABOUT (W16-17P) or TRAFFIC CIRCLE (W16-12P) may be mounted below a Circular Intersection symbol sign.

05 The relative importance of the intersecting roadways may be shown by different widths of lines in the symbol.

06 An advance street name plaque (see Section 2C.58) may be installed above or below an Intersection Warning sign.

Guidance:

07 *The Intersection Warning sign should illustrate and depict the general configuration of the intersecting roadway, such as cross road, side road, T-intersection, or Y-intersection.*

08 *Intersection Warning signs, other than the Circular Intersection (W2-6) symbol sign and the T-intersection (W2-4) symbol sign should not be used on approaches controlled by STOP signs, YIELD signs, or signals.*

09 *If an Intersection Warning sign is used where the side roads are not opposite of each other, the Offset Side Roads (W2-7) symbol sign (see Figure 2C-9) should be used instead of the Cross Road symbol sign.*

10 *If an Intersection Warning sign is used where two closely-spaced side roads are on the same side of the highway, the Double Side Roads (W2-8) symbol sign (see Figure 2C-9) should be used instead of the Side Road symbol sign.*

11 *No more than two side road symbols should be displayed on the same side of the highway on a W2-7 or W2-8 symbol sign, and no more than three side road symbols should be displayed on a W2-7 or W2-8 symbol sign.*

Support:

12 Figure 2A-4 shows the typical placement of an Intersection Warning sign.

Section 2C.47 Two-Direction Large Arrow Sign (W1-7)

Standard:

01 The Two-Direction Large Arrow (W1-7) sign (see Figure 2C-9) shall be a horizontal rectangle.

02 If used, it shall be installed on the far side of a T-intersection in line with, and at approximately a right angle to, traffic approaching from the stem of the T-intersection.

03 The Two-Direction Large Arrow sign shall not be used where there is no change in the direction of travel such as at the beginnings and ends of medians or at center piers.

04 The Two-Direction Large Arrow sign directing traffic to the left and right shall not be used in the central island of a roundabout.

Guidance:

05 *The Two-Direction Large Arrow sign should be visible for a sufficient distance to provide the road user with adequate time to react to the intersection configuration.*

Section 2C.48 Traffic Signal Signs (W25-1, W25-2)

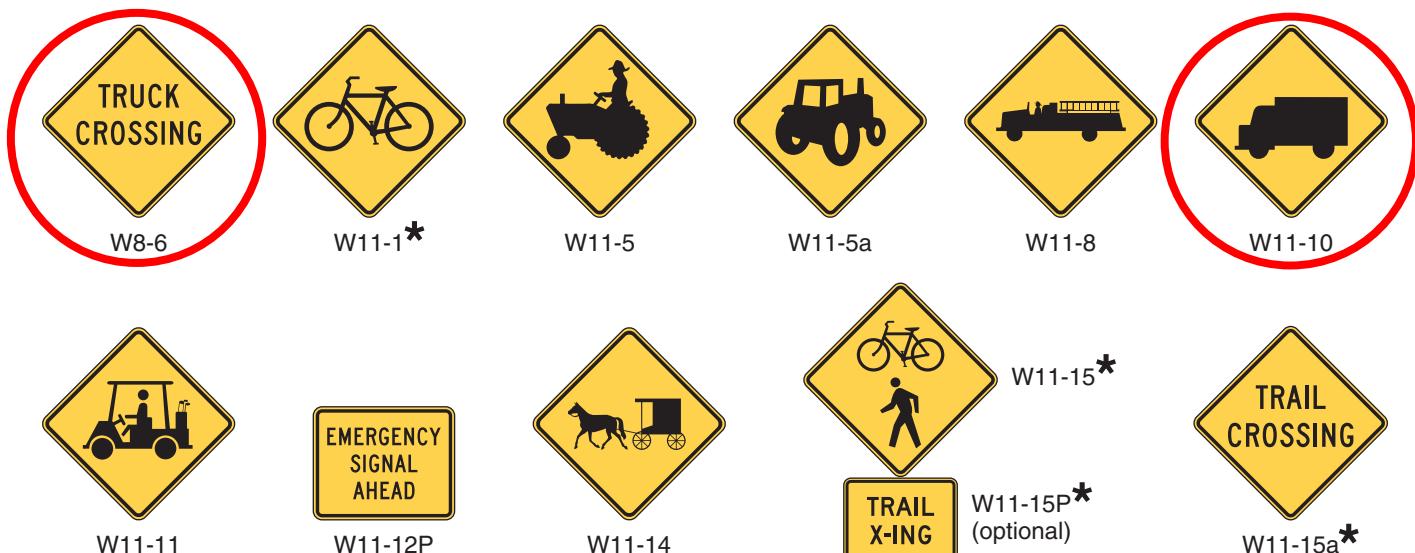
Standard:

01 At locations where either a W25-1 or a W25-2 sign is required based on the provisions in Section 4D.05, the W25-1 or W25-2 sign (see Figure 2C-9) shall be installed near the left-most signal head. The W25-1 and W25-2 signs shall be vertical rectangles.

Section 2C.49 Vehicular Traffic Warning Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14, W11-15, and W11-15a)

Option:

01 Vehicular Traffic Warning (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14, W11-15, and W11-15a) signs (see Figure 2C-10) may be used to alert road users to locations where unexpected entries into the roadway by trucks, bicyclists, farm vehicles, emergency vehicles, golf carts, horse-drawn vehicles, or other vehicles might occur. The TRUCK CROSSING (W8-6) word message sign may be used as an alternate to the Truck Crossing (W11-10) symbol sign.

Figure 2C-10. Vehicular Traffic Warning Signs and Plaques

* A fluorescent yellow-green background color may be used for this sign or plaque.

Support:

02 These locations might be relatively confined or might occur randomly over a segment of roadway.

Guidance:

03 *Vehicular Traffic Warning signs should be used only at locations where the road user's sight distance is restricted, or the condition, activity, or entering traffic would be unexpected.*

04 *If the condition or activity is seasonal or temporary, the Vehicular Traffic Warning sign should be removed or covered when the condition or activity does not exist.*

Option:

05 The combined Bicycle/Pedestrian (W11-15) sign may be used where both bicyclists and pedestrians might be crossing the roadway, such as at an intersection with a shared-use path. A TRAIL X-ING (W11-15P) supplemental plaque (see Figure 2C-10) may be mounted below the W11-15 sign. The TRAIL CROSSING (W11-15a) sign may be used to warn of shared-use path crossings where pedestrians, bicyclists, and other user groups might be crossing the roadway.

06 The W11-1, W11-15, and W11-15a signs and their related supplemental plaques may have a fluorescent yellow-green background with a black legend and border.

07 Supplemental plaques (see Section 2C.53) with legends such as AHEAD, XX FEET, NEXT XX MILES, or SHARE THE ROAD may be mounted below Vehicular Traffic Warning signs to provide advance notice to road users of unexpected entries.

Guidance:

08 *If used in advance of a pedestrian and bicycle crossing, a W11-15 or W11-15a sign should be supplemented with an AHEAD or XX FEET plaque to inform road users that they are approaching a point where crossing activity might occur.*

Standard:

09 **If a post-mounted W11-1, W11-11, W11-15, or W11-15a sign is placed at the location of the crossing point where golf carts, pedestrians, bicyclists, or other shared-use path users might be crossing the roadway, a diagonal downward pointing arrow (W16-7P) plaque (see Figure 2C-12) shall be mounted below the sign. If the W11-1, W11-11, W11-15, or W11-15a sign is mounted overhead, the W16-7P supplemental plaque shall not be used.**

Option:

10 The crossing location identified by a W11-1, W11-11, W11-15, or W11-15a sign may be defined with crosswalk markings (see Section 3B.18).

ATTACHMENT B

- Synchro Output Reports
- NYSDOT Accident/Crash Data

Synchro Output Reports

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	67	27	20	37	8	31	115	12	11	313	197
Future Volume (vph)	172	67	27	20	37	8	31	115	12	11	313	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	12	12	12	9	9	9	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.986				0.984			0.990		0.949	
Flt Protected			0.969			0.985			0.990		0.999	
Satd. Flow (prot)	0	1805	0	0	1805	0	0	1621	0	0	1626	0
Flt Permitted		0.760				0.877			0.859		0.994	
Satd. Flow (perm)	0	1416	0	0	1593	0	0	1406	0	0	1617	0
Right Turn on Red			Yes				Yes			Yes		Yes
Satd. Flow (RTOR)		7				9			8		55	
Link Speed (mph)		30				30			30		30	
Link Distance (ft)		468				249			744		546	
Travel Time (s)		10.6				5.7			16.9		12.4	
Confl. Peds. (#/hr)		25	25						25	25		
Confl. Bikes (#/hr)		10							10			
Peak Hour Factor	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	1	1	1
Adj. Flow (vph)	195	76	31	23	43	9	36	132	14	12	340	214
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	302	0	0	75	0	0	182	0	0	566	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.00	1.00	1.00	1.14	1.14	1.14	1.09	1.10	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	90		20	40		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		50										
Detector 2 Size(ft)		40										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA										
Protected Phases			4			4			2			2
Permitted Phases	4				4			2			2	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		7.0	7.0		7.0	7.0	
Total Split (s)	35.0	35.0		35.0	35.0		50.0	50.0		50.0	50.0	
Total Split (%)	41.2%	41.2%		41.2%	41.2%		58.8%	58.8%		58.8%	58.8%	
Maximum Green (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		0.2	0.2		0.2	0.2	
Minimum Gap (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	20.0	20.0		20.0	20.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	10.0	10.0		10.0	10.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	5	5		5	5							
Act Effct Green (s)	23.5			23.5			45.2			45.2		
Actuated g/C Ratio	0.30			0.30			0.57			0.57		
v/c Ratio	0.71			0.16			0.22			0.60		
Control Delay	33.6			18.4			9.9			14.0		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	33.6			18.4			9.9			14.0		
LOS	C			B			A			B		
Approach Delay	33.6			18.4			9.9			14.0		
Approach LOS	C			B			A			B		

Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 78.7

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 18.9

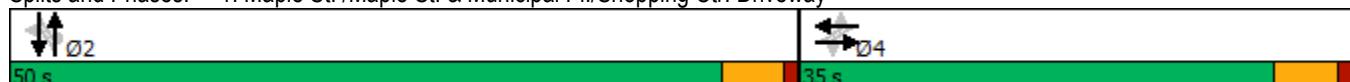
Intersection LOS: B

Intersection Capacity Utilization 59.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Maple St. /Maple St. & Municipal Pl./Shopping Ctr. Driveway



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Lane Configurations												
Traffic Volume (vph)	6	10	3	330	30	25	11	278	135	130	6	
Future Volume (vph)	6	10	3	330	30	25	11	278	135	130	6	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	10	10	9	9	12	12	12	10	10	10	
Storage Length (ft)	0	0		0	0		0			125		
Storage Lanes	1	0		1	0		0			1		
Taper Length (ft)	25			25			25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor									1.00		0.97	
Frt	0.908			0.989						0.850		
Flt Protected	0.984			0.956					0.994			
Satd. Flow (prot)	1553	0	0	1570	0	0	0	1834	1722	1463	0	
Flt Permitted	0.984			0.956					0.949			
Satd. Flow (perm)	1553	0	0	1570	0	0	0	1748	1722	1424	0	
Right Turn on Red			Yes		No						No	
Satd. Flow (RTOR)	82											
Link Speed (mph)	30			30				30	30			
Link Distance (ft)	307			744				845	222			
Travel Time (s)	7.0			16.9				19.2	5.0			
Confl. Peds. (#/hr)								10		10		
Peak Hour Factor	0.50	0.50	0.50	0.79	0.79	0.89	0.89	0.89	0.79	0.79	0.79	
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	
Adj. Flow (vph)	12	20	6	418	38	28	12	312	171	165	8	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	0	0	456	0	0	0	352	171	173	0	
Enter Blocked Intersection	No											
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right	
Median Width(ft)	10			9				0	0			
Link Offset(ft)	0			0				20	-15			
Crosswalk Width(ft)	16			16				16	16			
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.14	1.14	1.00	1.00	1.00	1.09	1.09	1.09	
Turning Speed (mph)	15	9	9	15	9	15	15			9	9	
Number of Detectors	1			2		1	1	2	2	2	2	
Detector Template						Left	Left					
Leading Detector (ft)	40			65		20	20	85	85	85		
Trailing Detector (ft)	0			0		0	0	0	0	0		
Detector 1 Position(ft)	0			0		0	0	0	0	0		
Detector 1 Size(ft)	40			40		20	20	40	40	40		
Detector 1 Type	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(ft)				45				45	45	45		
Detector 2 Size(ft)				20				40	40	40		
Detector 2 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 2 Channel												



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Detector 2 Extend (s)				0.0				0.0	0.0	0.0		
Turn Type	Prot			Prot		Perm	Perm	NA	NA	custom		
Protected Phases	8			2				1	1	6		5
Permitted Phases						1	1		1	1		
Detector Phase	8			2		1	1	1	1	1	6	
Switch Phase												
Minimum Initial (s)	2.0			10.0		5.0	5.0	5.0	5.0	10.0		5.0
Minimum Split (s)	7.0			16.0		10.0	10.0	10.0	10.0	16.0		10.0
Total Split (s)	25.0			46.0		35.0	35.0	35.0	35.0	51.0		30.0
Total Split (%)	23.6%			43.4%		33.0%	33.0%	33.0%	33.0%	48.1%		28%
Maximum Green (s)	20.0			40.0		30.0	30.0	30.0	30.0	45.0		25.0
Yellow Time (s)	4.0			4.0		4.0	4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0			2.0		1.0	1.0	1.0	1.0	2.0		1.0
Lost Time Adjust (s)	0.0			0.0				0.0	0.0	0.0		
Total Lost Time (s)	5.0			6.0				5.0	5.0	6.0		
Lead/Lag				Lag		Lead	Lead	Lead	Lead	Lag		Lead
Lead-Lag Optimize?				Yes		Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0			3.0		3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None			Max		Max	Max	Max	Max	None		None
Act Effect Green (s)	5.5			40.1				30.1	30.1	77.8		
Actuated g/C Ratio	0.06			0.46				0.34	0.34	0.89		
v/c Ratio	0.22			0.63				0.58	0.29	0.13		
Control Delay	4.1			23.9				29.2	23.6	1.6		
Queue Delay	0.0			0.0				0.0	0.0	0.0		
Total Delay	4.1			23.9				29.2	23.6	1.6		
LOS	A			C				C	C	A		
Approach Delay	4.1			23.9				29.2	12.5			
Approach LOS	A			C				C	B			

Intersection Summary

Area Type: Other

Cycle Length: 106

Actuated Cycle Length: 87.3

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 21.6

Intersection LOS: C

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: S. Riverside Ave. (NYS Rt. 9A) & Hudson River Rd. & Maple St.



41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2021 Existing Conditions
Weekday AM Peak Hour

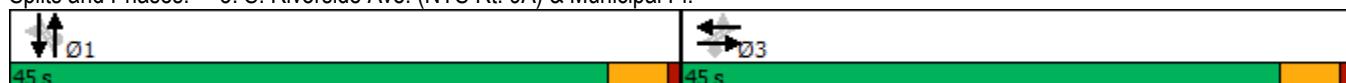
	←	→	↖	↙	↔	↙	↑	↗	↘	↓	↗	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	231	164	15	207	43	101	67	7	28	135	148
Future Volume (vph)	55	231	164	15	207	43	101	67	7	28	135	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11	15	15	15	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.97		0.99			1.00			0.98		
Frt		0.850		0.978			0.995			0.936		
Flt Protected		0.990		0.997			0.972			0.995		
Satd. Flow (prot)	0	1826	1516	0	1716	0	0	1956	0	0	1808	0
Flt Permitted		0.884		0.970			0.705			0.965		
Satd. Flow (perm)	0	1622	1473	0	1670	0	0	1419	0	0	1747	0
Right Turn on Red		Yes			No			No			No	
Satd. Flow (RTOR)		178										
Link Speed (mph)	30			30			30			30		
Link Distance (ft)	195			468			845			330		
Travel Time (s)	4.4			10.6			19.2			7.5		
Confl. Peds. (#/hr)	25				25			25	25			
Confl. Bikes (#/hr)		10			10			10			10	
Peak Hour Factor	0.92	0.92	0.92	0.79	0.79	0.79	0.96	0.96	0.96	0.86	0.86	0.86
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	60	251	178	19	262	54	105	70	7	33	157	172
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	311	178	0	335	0	0	182	0	0	362	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0			0			0			0		
Link Offset(ft)	0			0			0			0		
Crosswalk Width(ft)	16			16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04	0.88	0.88	0.88	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		1	2		1	2	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	85	85	20	85		20	85		20	85	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	40	40	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	45	45		45			45			45		
Detector 2 Size(ft)	40	40		40			40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0			0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	

41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2021 Existing Conditions
Weekday AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		3			3			1			1	
Permitted Phases	3			3	3			1			1	
Detector Phase	3	3	3	3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		25.0	25.0		25.0	25.0	
Total Split (s)	45.0	45.0	45.0	45.0	45.0		45.0	45.0		45.0	45.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		5.0	5.0		5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		8.0	8.0		8.0	8.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	5	5	5	5	5		5	5		5	5	
Act Effct Green (s)	17.3	17.3	17.3		17.3			25.1			25.1	
Actuated g/C Ratio	0.33	0.33		0.33			0.47			0.47		
v/c Ratio	0.59	0.30		0.62			0.27			0.44		
Control Delay	21.5	4.6		22.1			10.6			12.0		
Queue Delay	0.0	0.0		0.0			0.0			0.0		
Total Delay	21.5	4.6		22.1			10.6			12.0		
LOS	C	A		C			B			B		
Approach Delay	15.4			22.1			10.6			12.0		
Approach LOS	B			C			B			B		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	53.2											
Natural Cycle:	55											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.62											
Intersection Signal Delay:	15.5						Intersection LOS: B					
Intersection Capacity Utilization	75.6%						ICU Level of Service D					
Analysis Period (min)	15											

Splits and Phases: 3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.



41-51 Maple Street
1: Maple St. & Municipal Pl./Shopping Ctr. Driveway

2021 Existing Conditions

Weekday PM Peak Hour

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	79	20	31	86	10	37	231	40	11	133	239
Future Volume (vph)	200	79	20	31	86	10	37	231	40	11	133	239
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	12	12	12	9	9	9	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.99			1.00	
Frt		0.991			0.989			0.982			0.916	
Flt Protected		0.968			0.988			0.994			0.999	
Satd. Flow (prot)	0	1818	0	0	1820	0	0	1610	0	0	1569	0
Flt Permitted		0.725			0.886			0.921			0.989	
Satd. Flow (perm)	0	1362	0	0	1621	0	0	1492	0	0	1553	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			6			13			149	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		468			249			744			546	
Travel Time (s)		10.6			5.7			16.9			12.4	
Confl. Peds. (#/hr)		25	25					25	25			
Confl. Bikes (#/hr)		10							10			
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	1	1	1
Adj. Flow (vph)	211	83	21	34	95	11	41	254	44	12	145	260
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	0	0	140	0	0	339	0	0	417	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.00	1.00	1.00	1.14	1.14	1.14	1.09	1.10	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	90		20	40		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		50										
Detector 2 Size(ft)		40										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										

41-51 Maple Street
1: Maple St. & Municipal Pl./Shopping Ctr. Driveway

2021 Existing Conditions
Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA										
Protected Phases			4			4			2			2
Permitted Phases	4				4			2			2	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		7.0	7.0		7.0	7.0	
Total Split (s)	35.0	35.0		35.0	35.0		50.0	50.0		50.0	50.0	
Total Split (%)	41.2%	41.2%		41.2%	41.2%		58.8%	58.8%		58.8%	58.8%	
Maximum Green (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		0.2	0.2		0.2	0.2	
Minimum Gap (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	20.0	20.0		20.0	20.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	10.0	10.0		10.0	10.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	5	5		5	5							
Act Effct Green (s)	25.0			25.0			45.2			45.2		
Actuated g/C Ratio	0.31			0.31			0.56			0.56		
v/c Ratio	0.74			0.28			0.40			0.44		
Control Delay	35.4			20.9			12.3			8.8		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	35.4			20.9			12.3			8.8		
LOS	D			C			B			A		
Approach Delay	35.4			20.9			12.3			8.8		
Approach LOS	D			C			B			A		

Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 80.2

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 18.1

Intersection LOS: B

Intersection Capacity Utilization 64.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Maple St. & Municipal Pl./Shopping Ctr. Driveway





Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Lane Configurations												
Traffic Volume (vph)	4	5	1	144	40	32	8	269	283	275	14	
Future Volume (vph)	4	5	1	144	40	32	8	269	283	275	14	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	10	10	9	9	12	12	12	10	10	10	
Storage Length (ft)	0	0		0	0		0			125		
Storage Lanes	1	0		1	0		0			1		
Taper Length (ft)	25			25			25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor									1.00		0.97	
Frt	0.916			0.970						0.850		
Flt Protected	0.982			0.962					0.994			
Satd. Flow (prot)	1564	0	0	1549	0	0	0	1834	1722	1463	0	
Flt Permitted	0.982			0.962					0.898			
Satd. Flow (perm)	1564	0	0	1549	0	0	0	1655	1722	1424	0	
Right Turn on Red			Yes		No						No	
Satd. Flow (RTOR)	82											
Link Speed (mph)	30			30				30	30			
Link Distance (ft)	307			744				845	222			
Travel Time (s)	7.0			16.9				19.2	5.0			
Confl. Peds. (#/hr)							10			10		
Peak Hour Factor	0.63	0.63	0.63	0.86	0.86	0.91	0.91	0.91	0.85	0.85	0.85	
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	
Adj. Flow (vph)	6	8	2	167	47	35	9	296	333	324	16	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	0	0	214	0	0	0	340	333	340	0	
Enter Blocked Intersection	No											
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right	
Median Width(ft)	10			9				0	0			
Link Offset(ft)	0			0				20	-15			
Crosswalk Width(ft)	16			16				16	16			
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.14	1.14	1.00	1.00	1.00	1.09	1.09	1.09	
Turning Speed (mph)	15	9	9	15	9	15	15			9	9	
Number of Detectors	1			2		1	1	2	2	2	2	
Detector Template						Left	Left					
Leading Detector (ft)	40			65		20	20	85	85	85		
Trailing Detector (ft)	0			0		0	0	0	0	0	0	
Detector 1 Position(ft)	0			0		0	0	0	0	0	0	
Detector 1 Size(ft)	40			40		20	20	40	40	40	40	
Detector 1 Type	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				45				45	45	45		
Detector 2 Size(ft)				20				40	40	40		
Detector 2 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Detector 2 Extend (s)				0.0				0.0	0.0	0.0		
Turn Type	Prot			Prot		Perm	Perm	NA	NA	custom		
Protected Phases	8			2				1	1	6		5
Permitted Phases						1	1		1	1		
Detector Phase	8			2		1	1	1	1	1	6	
Switch Phase												
Minimum Initial (s)	2.0			10.0		5.0	5.0	5.0	5.0	10.0		5.0
Minimum Split (s)	7.0			16.0		10.0	10.0	10.0	10.0	16.0		10.0
Total Split (s)	25.0			46.0		35.0	35.0	35.0	35.0	51.0		30.0
Total Split (%)	23.6%			43.4%		33.0%	33.0%	33.0%	33.0%	48.1%		28%
Maximum Green (s)	20.0			40.0		30.0	30.0	30.0	30.0	45.0		25.0
Yellow Time (s)	4.0			4.0		4.0	4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0			2.0		1.0	1.0	1.0	1.0	2.0		1.0
Lost Time Adjust (s)	0.0			0.0				0.0	0.0	0.0		
Total Lost Time (s)	5.0			6.0				5.0	5.0	6.0		
Lead/Lag				Lag		Lead	Lead	Lead	Lead	Lag		Lead
Lead-Lag Optimize?				Yes		Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0			3.0		3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None			Max		Max	Max	Max	Max	None		None
Act Effect Green (s)	5.5			40.1				30.1	30.1	80.1		
Actuated g/C Ratio	0.07			0.48				0.36	0.36	0.96		
v/c Ratio	0.09			0.29				0.57	0.54	0.24		
Control Delay	1.0			15.0				26.6	25.6	1.0		
Queue Delay	0.0			0.0				0.0	0.0	0.0		
Total Delay	1.0			15.0				26.6	25.6	1.0		
LOS	A			B				C	C	A		
Approach Delay	1.0			15.0				26.6	13.2			
Approach LOS	A			B				C	B			

Intersection Summary

Area Type: Other

Cycle Length: 106

Actuated Cycle Length: 83.1

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 17.0

Intersection LOS: B

Intersection Capacity Utilization 62.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: S. Riverside Ave. (NYS Rt. 9A) & Hudson River Rd. & Maple St.



41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2021 Existing Conditions

Weekday PM Peak Hour



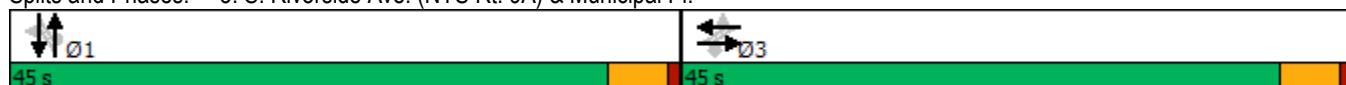
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	233	152	34	216	112	147	164	17	49	123	114
Future Volume (vph)	134	233	152	34	216	112	147	164	17	49	123	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11	15	15	15	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.97		0.98			1.00			0.98	
Fr _t				0.850		0.958			0.993		0.946	
Flt Protected					0.982		0.995			0.978		0.992
Satd. Flow (prot)	0	1811	1516	0	1658	0	0	1962	0	0	1826	0
Flt Permitted		0.673				0.940			0.722		0.893	
Satd. Flow (perm)	0	1231	1473	0	1566	0	0	1448	0	0	1636	0
Right Turn on Red				Yes			No			No		No
Satd. Flow (RTOR)				155								
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		195			468			845			330	
Travel Time (s)		4.4			10.6			19.2			7.5	
Confl. Peds. (#/hr)	25				25			25	25			
Confl. Bikes (#/hr)			10			10			10		10	
Peak Hour Factor	0.98	0.98	0.98	0.94	0.94	0.94	0.91	0.91	0.91	0.94	0.94	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	137	238	155	36	230	119	162	180	19	52	131	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	375	155	0	385	0	0	361	0	0	304	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04	0.88	0.88	0.88	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		1	2		1	2	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	85	85	20	85		20	85		20	85	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	40	40	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	45	45		45			45			45		
Detector 2 Size(ft)	40	40		40			40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0			0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	

41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2021 Existing Conditions
Weekday PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		3			3			1			1	
Permitted Phases	3			3	3			1			1	
Detector Phase	3	3	3	3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		25.0	25.0		25.0	25.0	
Total Split (s)	45.0	45.0	45.0	45.0	45.0		45.0	45.0		45.0	45.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		5.0	5.0		5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		8.0	8.0		8.0	8.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	5	5	5	5	5		5	5		5	5	
Act Effct Green (s)	26.0	26.0		26.0			31.2			31.2		
Actuated g/C Ratio	0.38	0.38		0.38			0.46			0.46		
v/c Ratio	0.80	0.24		0.64			0.55			0.41		
Control Delay	33.5	3.8		23.5			18.9			16.0		
Queue Delay	0.0	0.0		0.0			0.0			0.0		
Total Delay	33.5	3.8		23.5			18.9			16.0		
LOS	C	A		C			B			B		
Approach Delay	24.8			23.5			18.9			16.0		
Approach LOS	C			C			B			B		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	68.2											
Natural Cycle:	55											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.80											
Intersection Signal Delay:	21.5						Intersection LOS: C					
Intersection Capacity Utilization	91.2%						ICU Level of Service F					
Analysis Period (min)	15											

Splits and Phases: 3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.



	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	68	27	20	37	8	31	116	12	11	316	199
Future Volume (vph)	175	68	27	20	37	8	31	116	12	11	316	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	12	12	12	9	9	9	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99				0.99			1.00			1.00	
Frt	0.986				0.984			0.990			0.949	
Flt Protected	0.969				0.985			0.990			0.999	
Satd. Flow (prot)	0	1805	0	0	1805	0	0	1621	0	0	1626	0
Flt Permitted	0.759				0.876			0.858			0.994	
Satd. Flow (perm)	0	1414	0	0	1591	0	0	1405	0	0	1617	0
Right Turn on Red			Yes				Yes			Yes		Yes
Satd. Flow (RTOR)	7				9			7			55	
Link Speed (mph)	30				30			30			30	
Link Distance (ft)	468				249			744			546	
Travel Time (s)	10.6				5.7			16.9			12.4	
Confl. Peds. (#/hr)		25	25					25	25			
Confl. Bikes (#/hr)		10							10			
Peak Hour Factor	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	1	1	1
Adj. Flow (vph)	199	77	31	23	43	9	36	133	14	12	343	216
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	307	0	0	75	0	0	183	0	0	571	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.00	1.00	1.00	1.14	1.14	1.14	1.09	1.10	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	90		20	40		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	50											
Detector 2 Size(ft)	40											
Detector 2 Type	Cl+Ex											
Detector 2 Channel												
Detector 2 Extend (s)	0.0											



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA										
Protected Phases			4			4			2			2
Permitted Phases	4				4			2			2	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		7.0	7.0		7.0	7.0	
Total Split (s)	35.0	35.0		35.0	35.0		50.0	50.0		50.0	50.0	
Total Split (%)	41.2%	41.2%		41.2%	41.2%		58.8%	58.8%		58.8%	58.8%	
Maximum Green (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		0.2	0.2		0.2	0.2	
Minimum Gap (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	20.0	20.0		20.0	20.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	10.0	10.0		10.0	10.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	5	5		5	5							
Act Effct Green (s)		23.7			23.7			45.2			45.2	
Actuated g/C Ratio		0.30			0.30			0.57			0.57	
v/c Ratio		0.72			0.15			0.23			0.60	
Control Delay		33.9			18.3			10.1			14.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		33.9			18.3			10.1			14.3	
LOS		C			B			B			B	
Approach Delay		33.9			18.3			10.1			14.3	
Approach LOS		C			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 79

Natural Cycle: 55

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 19.2

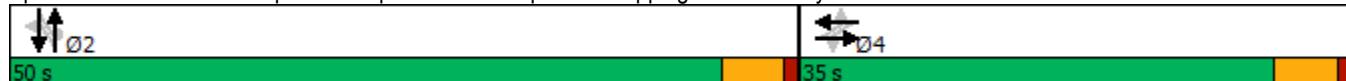
Intersection LOS: B

Intersection Capacity Utilization 60.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Maple St. /Maple St. & Municipal Pl./Shopping Ctr. Driveway



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Lane Configurations												
Traffic Volume (vph)	6	10	3	333	30	25	11	285	136	131	6	
Future Volume (vph)	6	10	3	333	30	25	11	285	136	131	6	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	10	10	9	9	12	12	12	10	10	10	
Storage Length (ft)	0	0	0	0	0	0	0	0	125	125	125	
Storage Lanes	1	0	0	1	0	0	0	0	1	1	1	
Taper Length (ft)	25			25			25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor									1.00	0.97		
Frt	0.908			0.989						0.850		
Flt Protected	0.984			0.956					0.994			
Satd. Flow (prot)	1553	0	0	1570	0	0	0	1834	1722	1463	0	
Flt Permitted	0.984			0.956					0.950			
Satd. Flow (perm)	1553	0	0	1570	0	0	0	1750	1722	1424	0	
Right Turn on Red			Yes		No						No	
Satd. Flow (RTOR)	82											
Link Speed (mph)	30			30				30	30			
Link Distance (ft)	307			744				845	222			
Travel Time (s)	7.0			16.9				19.2	5.0			
Confl. Peds. (#/hr)							10			10		
Peak Hour Factor	0.50	0.50	0.50	0.79	0.79	0.89	0.89	0.89	0.79	0.79	0.79	
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	
Adj. Flow (vph)	12	20	6	422	38	28	12	320	172	166	8	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	0	0	460	0	0	0	360	172	174	0	
Enter Blocked Intersection	No											
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right	
Median Width(ft)	10			9				0	0			
Link Offset(ft)	0			0				20	-15			
Crosswalk Width(ft)	16			16				16	16			
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.14	1.14	1.00	1.00	1.00	1.09	1.09	1.09	
Turning Speed (mph)	15	9	9	15	9	15	15		9	9	9	
Number of Detectors	1			2		1	1	2	2	2	2	
Detector Template						Left	Left					
Leading Detector (ft)	40			65		20	20	85	85	85	85	
Trailing Detector (ft)	0			0		0	0	0	0	0	0	
Detector 1 Position(ft)	0			0		0	0	0	0	0	0	
Detector 1 Size(ft)	40			40		20	20	40	40	40	40	
Detector 1 Type	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				45				45	45	45		
Detector 2 Size(ft)				20				40	40	40		
Detector 2 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 2 Channel												



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Detector 2 Extend (s)				0.0				0.0	0.0	0.0		
Turn Type	Prot			Prot		Perm	Perm	NA	NA	custom		
Protected Phases	8			2				1	1	6		5
Permitted Phases						1	1		1	1		
Detector Phase	8			2		1	1	1	1	6		
Switch Phase												
Minimum Initial (s)	2.0			10.0		5.0	5.0	5.0	5.0	10.0		5.0
Minimum Split (s)	7.0			16.0		10.0	10.0	10.0	10.0	16.0		10.0
Total Split (s)	25.0			46.0		35.0	35.0	35.0	35.0	51.0		30.0
Total Split (%)	23.6%			43.4%		33.0%	33.0%	33.0%	33.0%	48.1%		28%
Maximum Green (s)	20.0			40.0		30.0	30.0	30.0	30.0	45.0		25.0
Yellow Time (s)	4.0			4.0		4.0	4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0			2.0		1.0	1.0	1.0	1.0	2.0		1.0
Lost Time Adjust (s)	0.0			0.0				0.0	0.0	0.0		
Total Lost Time (s)	5.0			6.0				5.0	5.0	6.0		
Lead/Lag				Lag		Lead	Lead	Lead	Lead	Lag		Lead
Lead-Lag Optimize?				Yes		Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0			3.0		3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None			Max		Max	Max	Max	Max	None		None
Act Effect Green (s)	5.5			40.1				30.1	30.1	77.8		
Actuated g/C Ratio	0.06			0.46				0.34	0.34	0.89		
v/c Ratio	0.22			0.64				0.60	0.29	0.13		
Control Delay	4.1			24.1				29.6	23.6	1.6		
Queue Delay	0.0			0.0				0.0	0.0	0.0		
Total Delay	4.1			24.1				29.6	23.6	1.6		
LOS	A			C				C	C	A		
Approach Delay	4.1			24.1				29.6	12.6			
Approach LOS	A			C				C	B			

Intersection Summary

Area Type: Other

Cycle Length: 106

Actuated Cycle Length: 87.3

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 21.8

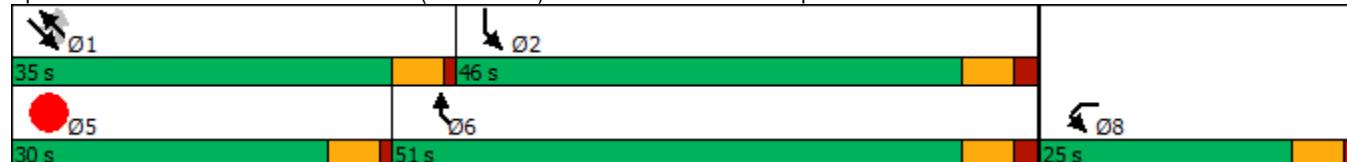
Intersection LOS: C

Intersection Capacity Utilization 65.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: S. Riverside Ave. (NYS Rt. 9A) & Hudson River Rd. & Maple St.



41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2023 No Build Conditions
Weekday AM Peak Hour

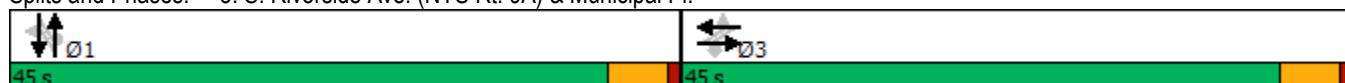
	←	→	↖	↙	↔	↙	↖	↑	↗	↘	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑		↑	↑		↑	↑
Traffic Volume (vph)	56	234	166	15	209	43	102	67	7	29	140	153
Future Volume (vph)	56	234	166	15	209	43	102	67	7	29	140	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11	15	15	15	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.97		0.99			1.00				0.98	
Frt		0.850		0.978			0.995				0.936	
Flt Protected		0.990		0.997			0.972				0.995	
Satd. Flow (prot)	0	1826	1516	0	1716	0	0	1956	0	0	1808	0
Flt Permitted		0.881		0.971			0.702				0.964	
Satd. Flow (perm)	0	1617	1473	0	1672	0	0	1413	0	0	1745	0
Right Turn on Red		Yes			No			No			No	
Satd. Flow (RTOR)		180										
Link Speed (mph)	30			30			30			30		
Link Distance (ft)	195			468			845			330		
Travel Time (s)	4.4			10.6			19.2			7.5		
Confl. Peds. (#/hr)	25				25			25		25		
Confl. Bikes (#/hr)		10			10			10			10	
Peak Hour Factor	0.92	0.92	0.92	0.79	0.79	0.79	0.96	0.96	0.96	0.86	0.86	0.86
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	61	254	180	19	265	54	106	70	7	34	163	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	180	0	338	0	0	183	0	0	375	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0			0			0			0		
Link Offset(ft)	0			0			0			0		
Crosswalk Width(ft)	16			16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04	0.88	0.88	0.88	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		1	2		1	2	
Detector Template	Left		Left			Left			Left		Left	
Leading Detector (ft)	20	85	85	20	85		20	85		20	85	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	40	40	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	45	45		45			45			45		
Detector 2 Size(ft)	40	40		40			40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0			0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	

41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2023 No Build Conditions
Weekday AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		3			3			1			1	
Permitted Phases	3			3	3			1			1	
Detector Phase	3	3	3	3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		25.0	25.0		25.0	25.0	
Total Split (s)	45.0	45.0	45.0	45.0	45.0		45.0	45.0		45.0	45.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		5.0	5.0		5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		8.0	8.0		8.0	8.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	5	5	5	5	5		5	5		5	5	
Act Effct Green (s)	17.4	17.4		17.4			25.3			25.3		
Actuated g/C Ratio	0.32	0.32		0.32			0.47			0.47		
v/c Ratio	0.60	0.30		0.62			0.27			0.46		
Control Delay	21.9	4.6		22.3			10.7			12.2		
Queue Delay	0.0	0.0		0.0			0.0			0.0		
Total Delay	21.9	4.6		22.3			10.7			12.2		
LOS	C	A		C			B			B		
Approach Delay	15.6			22.3			10.7			12.2		
Approach LOS	B			C			B			B		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	53.6											
Natural Cycle:	55											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.62											
Intersection Signal Delay:	15.6						Intersection LOS: B					
Intersection Capacity Utilization	76.9%						ICU Level of Service D					
Analysis Period (min)	15											

Splits and Phases: 3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.



	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	80	20	31	87	10	37	234	40	11	134	243
Future Volume (vph)	202	80	20	31	87	10	37	234	40	11	134	243
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	12	12	12	9	9	9	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.99			1.00	
Frt		0.991			0.989			0.983			0.916	
Flt Protected		0.968			0.988			0.994			0.999	
Satd. Flow (prot)	0	1818	0	0	1820	0	0	1612	0	0	1569	0
Flt Permitted		0.724			0.886			0.921			0.989	
Satd. Flow (perm)	0	1360	0	0	1621	0	0	1493	0	0	1553	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			6			13			150	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		468			249			744			546	
Travel Time (s)		10.6			5.7			16.9			12.4	
Confl. Peds. (#/hr)		25	25					25	25			
Confl. Bikes (#/hr)		10							10			
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	1	1	1
Adj. Flow (vph)	213	84	21	34	96	11	41	257	44	12	146	264
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	318	0	0	141	0	0	342	0	0	422	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.00	1.00	1.00	1.14	1.14	1.14	1.09	1.10	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	90		20	40		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		50										
Detector 2 Size(ft)		40										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA										
Protected Phases			4			4			2			2
Permitted Phases	4				4			2			2	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		7.0	7.0		7.0	7.0	
Total Split (s)	35.0	35.0		35.0	35.0		50.0	50.0		50.0	50.0	
Total Split (%)	41.2%	41.2%		41.2%	41.2%		58.8%	58.8%		58.8%	58.8%	
Maximum Green (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		0.2	0.2		0.2	0.2	
Minimum Gap (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	20.0	20.0		20.0	20.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	10.0	10.0		10.0	10.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	5	5		5	5							
Act Effct Green (s)		25.1			25.1			45.2			45.2	
Actuated g/C Ratio		0.31			0.31			0.56			0.56	
v/c Ratio		0.74			0.28			0.40			0.45	
Control Delay		35.7			20.9			12.3			8.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		35.7			20.9			12.3			8.9	
LOS		D			C			B			A	
Approach Delay		35.7			20.9			12.3			8.9	
Approach LOS		D			C			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 80.3

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 18.2

Intersection LOS: B

Intersection Capacity Utilization 64.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Maple St. & Municipal Pl./Shopping Ctr. Driveway



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Lane Configurations												
Traffic Volume (vph)	4	5	1	145	40	32	8	273	288	278	14	
Future Volume (vph)	4	5	1	145	40	32	8	273	288	278	14	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	10	10	9	9	12	12	12	10	10	10	
Storage Length (ft)	0	0		0	0		0			125		
Storage Lanes	1	0		1	0		0			1		
Taper Length (ft)	25			25			25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor									1.00		0.97	
Frt	0.916			0.971							0.850	
Flt Protected	0.982			0.962					0.994			
Satd. Flow (prot)	1564	0	0	1551	0	0	0	1834	1722	1463	0	
Flt Permitted	0.982			0.962					0.889			
Satd. Flow (perm)	1564	0	0	1551	0	0	0	1638	1722	1424	0	
Right Turn on Red			Yes		No						No	
Satd. Flow (RTOR)	82											
Link Speed (mph)	30			30				30	30			
Link Distance (ft)	307			744				845	222			
Travel Time (s)	7.0			16.9				19.2	5.0			
Confl. Peds. (#/hr)								10			10	
Peak Hour Factor	0.63	0.63	0.63	0.86	0.86	0.91	0.91	0.91	0.85	0.85	0.85	
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	
Adj. Flow (vph)	6	8	2	169	47	35	9	300	339	327	16	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	0	0	216	0	0	0	344	339	343	0	
Enter Blocked Intersection	No											
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right	
Median Width(ft)	10			9				0	0			
Link Offset(ft)	0			0				20	-15			
Crosswalk Width(ft)	16			16				16	16			
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.14	1.14	1.00	1.00	1.00	1.09	1.09	1.09	
Turning Speed (mph)	15	9	9	15	9	15	15			9	9	
Number of Detectors	1			2		1	1	2	2	2	2	
Detector Template						Left	Left					
Leading Detector (ft)	40			65		20	20	85	85	85		
Trailing Detector (ft)	0			0		0	0	0	0	0		
Detector 1 Position(ft)	0			0		0	0	0	0	0		
Detector 1 Size(ft)	40			40		20	20	40	40	40		
Detector 1 Type	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(ft)				45				45	45	45		
Detector 2 Size(ft)				20				40	40	40		
Detector 2 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 2 Channel												



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Detector 2 Extend (s)				0.0				0.0	0.0	0.0		
Turn Type	Prot			Prot		Perm	Perm	NA	NA	custom		
Protected Phases	8			2				1	1	6		5
Permitted Phases						1	1		1	1		
Detector Phase	8			2		1	1	1	1	1	6	
Switch Phase												
Minimum Initial (s)	2.0			10.0		5.0	5.0	5.0	5.0	10.0		5.0
Minimum Split (s)	7.0			16.0		10.0	10.0	10.0	10.0	16.0		10.0
Total Split (s)	25.0			46.0		35.0	35.0	35.0	35.0	51.0		30.0
Total Split (%)	23.6%			43.4%		33.0%	33.0%	33.0%	33.0%	48.1%		28%
Maximum Green (s)	20.0			40.0		30.0	30.0	30.0	30.0	45.0		25.0
Yellow Time (s)	4.0			4.0		4.0	4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0			2.0		1.0	1.0	1.0	1.0	2.0		1.0
Lost Time Adjust (s)	0.0			0.0				0.0	0.0	0.0		
Total Lost Time (s)	5.0			6.0				5.0	5.0	6.0		
Lead/Lag				Lag		Lead	Lead	Lead	Lead	Lag		Lead
Lead-Lag Optimize?				Yes		Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0			3.0		3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None			Max		Max	Max	Max	Max	None		None
Act Effect Green (s)	5.5			40.1				30.1	30.1	80.1		
Actuated g/C Ratio	0.07			0.48				0.36	0.36	0.96		
v/c Ratio	0.09			0.29				0.58	0.55	0.24		
Control Delay	1.0			15.0				26.9	25.8	1.1		
Queue Delay	0.0			0.0				0.0	0.0	0.0		
Total Delay	1.0			15.0				26.9	25.8	1.1		
LOS	A			B				C	C	A		
Approach Delay	1.0			15.0				26.9	13.4			
Approach LOS	A			B				C	B			

Intersection Summary

Area Type: Other

Cycle Length: 106

Actuated Cycle Length: 83.1

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 17.2 Intersection LOS: B

Intersection Capacity Utilization 63.0% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: S. Riverside Ave. (NYS Rt. 9A) & Hudson River Rd. & Maple St.



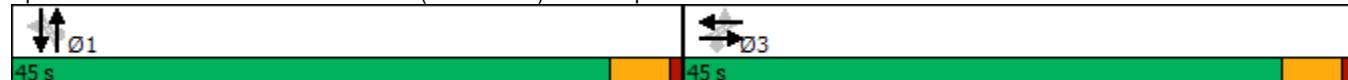
41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2023 No Build Conditions
Weekday PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	236	154	34	218	115	148	168	17	49	125	116
Future Volume (vph)	137	236	154	34	218	115	148	168	17	49	125	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11	15	15	15	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.97		0.97			1.00			0.98	
Frt			0.850		0.958			0.993			0.946	
Flt Protected			0.982		0.995			0.978			0.992	
Satd. Flow (prot)	0	1811	1516	0	1657	0	0	1962	0	0	1826	0
Flt Permitted		0.667			0.940			0.718			0.893	
Satd. Flow (perm)	0	1220	1473	0	1565	0	0	1440	0	0	1636	0
Right Turn on Red			Yes			No			No			No
Satd. Flow (RTOR)		157										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		195			468			845			330	
Travel Time (s)		4.4			10.6			19.2			7.5	
Confl. Peds. (#/hr)	25				25			25	25			
Confl. Bikes (#/hr)		10			10			10			10	
Peak Hour Factor	0.98	0.98	0.98	0.94	0.94	0.94	0.91	0.91	0.91	0.94	0.94	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	140	241	157	36	232	122	163	185	19	52	133	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	381	157	0	390	0	0	367	0	0	308	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04	0.88	0.88	0.88	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		1	2		1	2	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	85	85	20	85		20	85		20	85	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	40	40	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	45	45		45			45			45		
Detector 2 Size(ft)	40	40		40			40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0			0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		3			3			1			1	
Permitted Phases	3			3	3			1			1	
Detector Phase	3	3	3	3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		25.0	25.0		25.0	25.0	
Total Split (s)	45.0	45.0	45.0	45.0	45.0		45.0	45.0		45.0	45.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		5.0	5.0		5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		8.0	8.0		8.0	8.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	5	5	5	5	5		5	5		5	5	
Act Effct Green (s)	26.8	26.8		26.8			31.5			31.5		
Actuated g/C Ratio	0.39	0.39		0.39			0.46			0.46		
v/c Ratio	0.81	0.24		0.65			0.56			0.41		
Control Delay	34.3	3.8		23.5			19.6			16.4		
Queue Delay	0.0	0.0		0.0			0.0			0.0		
Total Delay	34.3	3.8		23.5			19.6			16.4		
LOS	C	A		C			B			B		
Approach Delay	25.4			23.5			19.6			16.4		
Approach LOS	C			C			B			B		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	69.2											
Natural Cycle:	55											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.81											
Intersection Signal Delay:	21.9					Intersection LOS: C						
Intersection Capacity Utilization	92.3%					ICU Level of Service F						
Analysis Period (min)	15											

Splits and Phases: 3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.



41-51 Maple Street

1: Maple St. /Maple St. & Municipal Pl./Shopping Ctr. Driveway

2023 Build Conditions

Weekday AM Peak Hour

	→	→	↙	↖	←	↖	↗	↑	↗	↙	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	178	68	27	20	37	8	31	117	12	11	319	205
Future Volume (vph)	178	68	27	20	37	8	31	117	12	11	319	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	12	12	12	9	9	9	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			1.00			1.00	
Fr _t		0.986			0.984			0.990			0.948	
Flt Protected		0.968			0.985			0.990			0.999	
Satd. Flow (prot)	0	1803	0	0	1805	0	0	1621	0	0	1624	0
Flt Permitted		0.758			0.876			0.857			0.994	
Satd. Flow (perm)	0	1412	0	0	1592	0	0	1403	0	0	1615	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			9			7			56	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		468			249			744			331	
Travel Time (s)		10.6			5.7			16.9			7.5	
Confl. Peds. (#/hr)		25	25						25	25		
Confl. Bikes (#/hr)		10								10		
Peak Hour Factor	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	1	1	1
Adj. Flow (vph)	202	77	31	23	43	9	36	134	14	12	347	223
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	310	0	0	75	0	0	184	0	0	582	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.00	1.00	1.00	1.14	1.14	1.14	1.09	1.10	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	90		20	40		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		50										
Detector 2 Size(ft)		40										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA										
Protected Phases			4			4			2			2
Permitted Phases	4				4			2			2	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		7.0	7.0		7.0	7.0	
Total Split (s)	35.0	35.0		35.0	35.0		50.0	50.0		50.0	50.0	
Total Split (%)	41.2%	41.2%		41.2%	41.2%		58.8%	58.8%		58.8%	58.8%	
Maximum Green (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		0.2	0.2		0.2	0.2	
Minimum Gap (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	20.0	20.0		20.0	20.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	10.0	10.0		10.0	10.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	5	5		5	5							
Act Effct Green (s)		23.9			23.9			45.2			45.2	
Actuated g/C Ratio		0.30			0.30			0.57			0.57	
v/c Ratio		0.72			0.15			0.23			0.62	
Control Delay		34.1			18.3			10.1			14.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		34.1			18.3			10.1			14.7	
LOS		C			B			B			B	
Approach Delay		34.1			18.3			10.1			14.7	
Approach LOS		C			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 79.2

Natural Cycle: 55

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 19.4

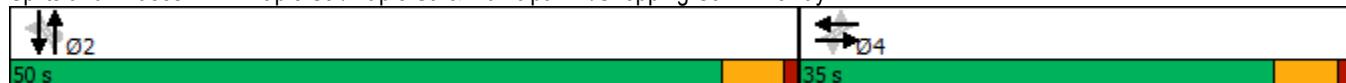
Intersection LOS: B

Intersection Capacity Utilization 61.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Maple St. /Maple St. & Municipal Pl./Shopping Ctr. Driveway





Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Lane Configurations												
Traffic Volume (vph)	6	10	3	336	30	25	11	285	136	132	6	
Future Volume (vph)	6	10	3	336	30	25	11	285	136	132	6	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	10	10	9	9	12	12	12	10	10	10	
Storage Length (ft)	0	0		0	0		0			125		
Storage Lanes	1	0		1	0		0			1		
Taper Length (ft)	25			25			25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor								1.00		0.97		
Frt	0.908			0.989						0.850		
Flt Protected	0.984			0.956				0.994				
Satd. Flow (prot)	1553	0	0	1570	0	0	0	1834	1722	1463	0	
Flt Permitted	0.984			0.956				0.950				
Satd. Flow (perm)	1553	0	0	1570	0	0	0	1750	1722	1424	0	
Right Turn on Red				Yes			No				No	
Satd. Flow (RTOR)	82											
Link Speed (mph)	30			30				30	30			
Link Distance (ft)	307			744				845	222			
Travel Time (s)	7.0			16.9				19.2	5.0			
Confl. Peds. (#/hr)								10		10		
Peak Hour Factor	0.50	0.50	0.50	0.79	0.79	0.89	0.89	0.89	0.79	0.79	0.79	
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	
Adj. Flow (vph)	12	20	6	425	38	28	12	320	172	167	8	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	0	0	463	0	0	0	360	172	175	0	
Enter Blocked Intersection	No											
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right	
Median Width(ft)	10			9				0	0			
Link Offset(ft)	0			0				20	-15			
Crosswalk Width(ft)	16			16				16	16			
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.14	1.14	1.00	1.00	1.00	1.09	1.09	1.09	
Turning Speed (mph)	15	9	9	15	9	15	15			9	9	
Number of Detectors	1			2		1	1	2	2	2	2	
Detector Template						Left	Left					
Leading Detector (ft)	40			65		20	20	85	85	85		
Trailing Detector (ft)	0			0		0	0	0	0	0		
Detector 1 Position(ft)	0			0		0	0	0	0	0		
Detector 1 Size(ft)	40			40		20	20	40	40	40		
Detector 1 Type	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(ft)				45				45	45	45		
Detector 2 Size(ft)				20				40	40	40		
Detector 2 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 2 Channel												



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Detector 2 Extend (s)				0.0				0.0	0.0	0.0		
Turn Type	Prot			Prot			Perm	NA	NA	custom		
Protected Phases	8			2				1	1	6		5
Permitted Phases								1		1		1
Detector Phase	8			2				1	1	1		6
Switch Phase												
Minimum Initial (s)	2.0			10.0			5.0	5.0	5.0	10.0		5.0
Minimum Split (s)	7.0			16.0			10.0	10.0	10.0	16.0		10.0
Total Split (s)	25.0			46.0			35.0	35.0	35.0	51.0		30.0
Total Split (%)	23.6%			43.4%			33.0%	33.0%	33.0%	48.1%		28%
Maximum Green (s)	20.0			40.0			30.0	30.0	30.0	45.0		25.0
Yellow Time (s)	4.0			4.0			4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0			2.0			1.0	1.0	1.0	2.0		1.0
Lost Time Adjust (s)	0.0			0.0				0.0	0.0	0.0		
Total Lost Time (s)	5.0			6.0				5.0	5.0	6.0		
Lead/Lag				Lag			Lead	Lead	Lead	Lag		Lead
Lead-Lag Optimize?				Yes			Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0			3.0			3.0	3.0	3.0	3.0		3.0
Recall Mode	None			Max			Max	Max	Max	None		None
Act Effect Green (s)	5.5			40.1				30.1	30.1	77.8		
Actuated g/C Ratio	0.06			0.46				0.34	0.34	0.89		
v/c Ratio	0.22			0.64				0.60	0.29	0.13		
Control Delay	4.1			24.2				29.6	23.6	1.6		
Queue Delay	0.0			0.0				0.0	0.0	0.0		
Total Delay	4.1			24.2				29.6	23.6	1.6		
LOS	A			C				C	C	A		
Approach Delay	4.1			24.2				29.6	12.5			
Approach LOS	A			C				C	B			

Intersection Summary

Area Type: Other

Cycle Length: 106

Actuated Cycle Length: 87.3

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 21.8

Intersection LOS: C

Intersection Capacity Utilization 65.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: S. Riverside Ave. (NYS Rt. 9A) & Hudson River Rd. & Maple St.



41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2023 Build Conditions
Weekday AM Peak Hour

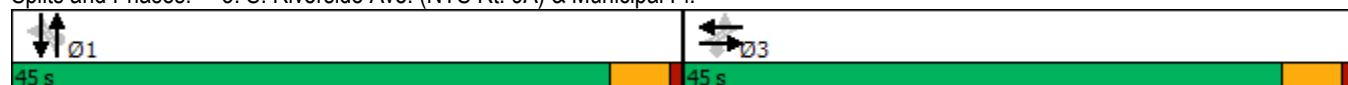
	→	→	←	←	→	←	↑	↑	↓	↓	↗	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	237	166	15	214	44	102	67	7	29	140	153
Future Volume (vph)	56	237	166	15	214	44	102	67	7	29	140	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11	15	15	15	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.97		0.99			1.00			0.98		
Frt		0.850		0.978			0.995			0.936		
Flt Protected		0.991		0.997			0.972			0.995		
Satd. Flow (prot)	0	1828	1516	0	1716	0	0	1956	0	0	1808	0
Flt Permitted		0.880		0.971			0.703			0.964		
Satd. Flow (perm)	0	1615	1473	0	1671	0	0	1415	0	0	1745	0
Right Turn on Red		Yes		No			No			No		No
Satd. Flow (RTOR)		180										
Link Speed (mph)	30		30		30			30		30		
Link Distance (ft)	195		468		845					330		
Travel Time (s)	4.4		10.6		19.2					7.5		
Confl. Peds. (#/hr)	25			25			25		25			
Confl. Bikes (#/hr)		10		10			10		10		10	
Peak Hour Factor	0.92	0.92	0.92	0.79	0.79	0.79	0.96	0.96	0.96	0.86	0.86	0.86
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	61	258	180	19	271	56	106	70	7	34	163	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	319	180	0	346	0	0	183	0	0	375	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0		0		0		0		0		0	
Link Offset(ft)	0		0		0		0		0		0	
Crosswalk Width(ft)	16		16		16		16		16		16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04	0.88	0.88	0.88	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		1	2		1	2	
Detector Template	Left		Left			Left		Left		Left		
Leading Detector (ft)	20	85	85	20	85		20	85		20	85	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	40	40	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	45	45	45		45		45		45		45	
Detector 2 Size(ft)	40	40	40		40		40		40		40	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0			0.0		0.0		0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	

41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2023 Build Conditions
Weekday AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		3			3			1			1	
Permitted Phases	3			3	3			1			1	
Detector Phase	3	3	3	3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		25.0	25.0		25.0	25.0	
Total Split (s)	45.0	45.0	45.0	45.0	45.0		45.0	45.0		45.0	45.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		5.0	5.0		5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		8.0	8.0		8.0	8.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	5	5	5	5	5		5	5		5	5	
Act Effct Green (s)	17.9	17.9	17.9		17.9			25.5			25.5	
Actuated g/C Ratio	0.33	0.33		0.33			0.47			0.47		
v/c Ratio	0.60	0.30		0.63			0.28			0.46		
Control Delay	21.6	4.4		22.2			11.1			12.6		
Queue Delay	0.0	0.0		0.0			0.0			0.0		
Total Delay	21.6	4.4		22.2			11.1			12.6		
LOS	C	A		C			B			B		
Approach Delay	15.4			22.2			11.1			12.6		
Approach LOS	B			C			B			B		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	54.3											
Natural Cycle:	55											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.63											
Intersection Signal Delay:	15.8						Intersection LOS: B					
Intersection Capacity Utilization	77.2%						ICU Level of Service D					
Analysis Period (min)	15											

Splits and Phases: 3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.



Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		A	B		
Traffic Vol, veh/h	5	9	4	299	526	2
Future Vol, veh/h	5	9	4	299	526	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	87	87	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	5	10	5	344	572	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	927	573	574	0	-	0
Stage 1	573	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	298	519	999	-	-	-
Stage 1	564	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	296	519	999	-	-	-
Mov Cap-2 Maneuver	296	-	-	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.1	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	999	-	409	-	-	
HCM Lane V/C Ratio	0.005	-	0.037	-	-	
HCM Control Delay (s)	8.6	0	14.1	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

41-51 Maple Street
1: Maple St. & Municipal Pl./Shopping Ctr. Driveway

2023 Build Conditions
Weekday PM Peak Hour

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	207	80	20	31	87	10	37	237	40	12	136	247
Future Volume (vph)	207	80	20	31	87	10	37	237	40	12	136	247
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	12	12	12	9	9	9	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.99			1.00	
Frt		0.991			0.989			0.983			0.916	
Flt Protected		0.967			0.988			0.994			0.998	
Satd. Flow (prot)	0	1816	0	0	1820	0	0	1612	0	0	1568	0
Flt Permitted		0.722			0.886			0.920			0.988	
Satd. Flow (perm)	0	1356	0	0	1621	0	0	1492	0	0	1551	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			6			13			150	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		468			249			744			321	
Travel Time (s)		10.6			5.7			16.9			7.3	
Confl. Peds. (#/hr)		25	25						25	25		
Confl. Bikes (#/hr)		10							10			
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	1	1	1
Adj. Flow (vph)	218	84	21	34	96	11	41	260	44	13	148	268
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	323	0	0	141	0	0	345	0	0	429	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.00	1.00	1.00	1.14	1.14	1.14	1.09	1.10	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	1		1	0		1	0	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	90		20	40		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		50										
Detector 2 Size(ft)		40										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA										
Protected Phases			4			4			2			2
Permitted Phases	4				4			2			2	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		7.0	7.0		7.0	7.0	
Total Split (s)	35.0	35.0		35.0	35.0		50.0	50.0		50.0	50.0	
Total Split (%)	41.2%	41.2%		41.2%	41.2%		58.8%	58.8%		58.8%	58.8%	
Maximum Green (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	6.0	6.0		6.0	6.0		0.2	0.2		0.2	0.2	
Minimum Gap (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	20.0	20.0		20.0	20.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	10.0	10.0		10.0	10.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	5	5		5	5							
Act Effct Green (s)		25.1			25.1			45.2			45.2	
Actuated g/C Ratio		0.31			0.31			0.56			0.56	
v/c Ratio		0.76			0.28			0.41			0.46	
Control Delay		36.6			20.9			12.4			9.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		36.6			20.9			12.4			9.0	
LOS		D			C			B			A	
Approach Delay		36.6			20.9			12.4			9.0	
Approach LOS		D			C			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 80.3

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 18.5

Intersection LOS: B

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Maple St. & Municipal Pl./Shopping Ctr. Driveway



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Lane Configurations												
Traffic Volume (vph)	4	5	1	147	40	32	8	273	288	281	14	
Future Volume (vph)	4	5	1	147	40	32	8	273	288	281	14	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	10	10	9	9	12	12	12	10	10	10	
Storage Length (ft)	0	0		0	0		0			125		
Storage Lanes	1	0		1	0		0			1		
Taper Length (ft)	25			25			25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor								1.00		0.97		
Frt	0.916			0.971						0.850		
Flt Protected	0.982			0.962				0.994				
Satd. Flow (prot)	1564	0	0	1551	0	0	0	1834	1722	1463	0	
Flt Permitted	0.982			0.962				0.889				
Satd. Flow (perm)	1564	0	0	1551	0	0	0	1638	1722	1424	0	
Right Turn on Red			Yes		No						No	
Satd. Flow (RTOR)	82											
Link Speed (mph)	30			30				30	30			
Link Distance (ft)	307			744				845	222			
Travel Time (s)	7.0			16.9				19.2	5.0			
Confl. Peds. (#/hr)							10			10		
Peak Hour Factor	0.63	0.63	0.63	0.86	0.86	0.91	0.91	0.91	0.85	0.85	0.85	
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	
Adj. Flow (vph)	6	8	2	171	47	35	9	300	339	331	16	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	0	0	218	0	0	0	344	339	347	0	
Enter Blocked Intersection	No											
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right	
Median Width(ft)	10			9				0	0			
Link Offset(ft)	0			0				20	-15			
Crosswalk Width(ft)	16			16				16	16			
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.14	1.14	1.00	1.00	1.00	1.09	1.09	1.09	
Turning Speed (mph)	15	9	9	15	9	15	15			9	9	
Number of Detectors	1			2		1	1	2	2	2	2	
Detector Template						Left	Left					
Leading Detector (ft)	40			65		20	20	85	85	85		
Trailing Detector (ft)	0			0		0	0	0	0	0		
Detector 1 Position(ft)	0			0		0	0	0	0	0		
Detector 1 Size(ft)	40			40		20	20	40	40	40		
Detector 1 Type	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0			0.0		0.0	0.0	0.0	0.0	0.0		
Detector 2 Position(ft)				45				45	45	45		
Detector 2 Size(ft)				20				40	40	40		
Detector 2 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 2 Channel												



Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2	Ø5
Detector 2 Extend (s)				0.0				0.0	0.0	0.0		
Turn Type	Prot			Prot		Perm	Perm	NA	NA	custom		
Protected Phases	8			2				1	1	6		5
Permitted Phases						1	1		1	1		
Detector Phase	8			2		1	1	1	1	6		
Switch Phase												
Minimum Initial (s)	2.0			10.0		5.0	5.0	5.0	5.0	10.0		5.0
Minimum Split (s)	7.0			16.0		10.0	10.0	10.0	10.0	16.0		10.0
Total Split (s)	25.0			46.0		35.0	35.0	35.0	35.0	51.0		30.0
Total Split (%)	23.6%			43.4%		33.0%	33.0%	33.0%	33.0%	48.1%		28%
Maximum Green (s)	20.0			40.0		30.0	30.0	30.0	30.0	45.0		25.0
Yellow Time (s)	4.0			4.0		4.0	4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0			2.0		1.0	1.0	1.0	1.0	2.0		1.0
Lost Time Adjust (s)	0.0			0.0				0.0	0.0	0.0		
Total Lost Time (s)	5.0			6.0				5.0	5.0	6.0		
Lead/Lag				Lag		Lead	Lead	Lead	Lead	Lag		Lead
Lead-Lag Optimize?				Yes		Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0			3.0		3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None			Max		Max	Max	Max	Max	None		None
Act Effect Green (s)	5.5			40.1				30.1	30.1	80.1		
Actuated g/C Ratio	0.07			0.48				0.36	0.36	0.96		
v/c Ratio	0.09			0.29				0.58	0.55	0.25		
Control Delay	1.0			15.0				26.9	25.8	1.1		
Queue Delay	0.0			0.0				0.0	0.0	0.0		
Total Delay	1.0			15.0				26.9	25.8	1.1		
LOS	A			B				C	C	A		
Approach Delay	1.0			15.0				26.9	13.3			
Approach LOS	A			B				C	B			

Intersection Summary

Area Type: Other

Cycle Length: 106

Actuated Cycle Length: 83.1

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 17.1

Intersection LOS: B

Intersection Capacity Utilization 63.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: S. Riverside Ave. (NYS Rt. 9A) & Hudson River Rd. & Maple St.



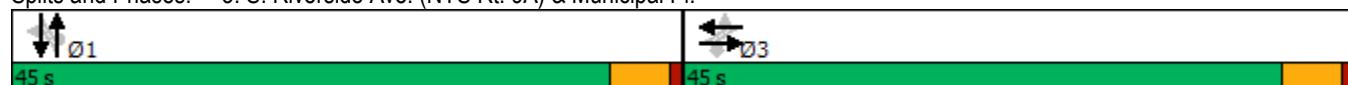
41-51 Maple Street
3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.

2023 Build Conditions
Weekday PM Peak Hour

	→	→	←	←	↑	↑	↓	↓				
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	240	154	34	222	115	148	168	17	50	125	116
Future Volume (vph)	137	240	154	34	222	115	148	168	17	50	125	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11	15	15	15	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.97		0.98			1.00			0.98		
Frt		0.850		0.958			0.993			0.946		
Flt Protected		0.982		0.995			0.978			0.991		
Satd. Flow (prot)	0	1811	1516	0	1657	0	0	1962	0	0	1824	0
Flt Permitted		0.667		0.941			0.716			0.891		
Satd. Flow (perm)	0	1220	1473	0	1567	0	0	1436	0	0	1633	0
Right Turn on Red		Yes		No			No			No		No
Satd. Flow (RTOR)		157										
Link Speed (mph)	30		30		30			30		30		
Link Distance (ft)	195		468		845			845		330		
Travel Time (s)	4.4		10.6		19.2			19.2		7.5		
Confl. Peds. (#/hr)	25			25			25		25			
Confl. Bikes (#/hr)		10		10			10		10		10	
Peak Hour Factor	0.98	0.98	0.98	0.94	0.94	0.94	0.91	0.91	0.91	0.94	0.94	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	140	245	157	36	236	122	163	185	19	53	133	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	385	157	0	394	0	0	367	0	0	309	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0		0		0		0		0		0	
Link Offset(ft)	0		0		0		0		0		0	
Crosswalk Width(ft)	16		16		16		16		16		16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04	0.88	0.88	0.88	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		1	2		1	2	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	85	85	20	85		20	85		20	85	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	40	40	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	45	45		45		45		45		45		
Detector 2 Size(ft)	40	40		40		40		40		40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0			0.0		0.0		0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		3			3			1			1	
Permitted Phases	3			3	3			1			1	
Detector Phase	3	3	3	3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0		25.0	25.0		25.0	25.0	
Total Split (s)	45.0	45.0	45.0	45.0	45.0		45.0	45.0		45.0	45.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		5.0	5.0		5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		8.0	8.0		8.0	8.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	5	5	5	5	5		5	5		5	5	
Act Effct Green (s)	26.9	26.9		26.9			31.5			31.5		
Actuated g/C Ratio	0.39	0.39		0.39			0.45			0.45		
v/c Ratio	0.81	0.24		0.65			0.56			0.42		
Control Delay	34.7	3.8		23.6			19.8			16.6		
Queue Delay	0.0	0.0		0.0			0.0			0.0		
Total Delay	34.7	3.8		23.6			19.8			16.6		
LOS	C	A		C			B			B		
Approach Delay	25.8			23.6			19.8			16.6		
Approach LOS	C			C			B			B		
Intersection Summary												
Area Type:	Other											
Cycle Length:	90											
Actuated Cycle Length:	69.4											
Natural Cycle:	55											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.81											
Intersection Signal Delay:	22.1						Intersection LOS: C					
Intersection Capacity Utilization	92.8%						ICU Level of Service F					
Analysis Period (min)	15											

Splits and Phases: 3: S. Riverside Ave. (NYS Rt. 9A) & Municipal Pl.



Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		A	B		
Traffic Vol, veh/h	3	7	8	446	388	5
Future Vol, veh/h	3	7	8	446	388	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	91	91	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	3	8	9	490	422	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	933	425	427	0	-	0
Stage 1	425	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	295	629	1132	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	292	629	1132	-	-	-
Mov Cap-2 Maneuver	292	-	-	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.9	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1132	-	467	-	-	
HCM Lane V/C Ratio	0.008	-	0.023	-	-	
HCM Control Delay (s)	8.2	0	12.9	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

NYSDOT Accident/Crash Data

NYSDOT QRA ACCIDENT SEVERITY SUMMARY

Print Date

3/29/2021

Print Time

12:22:56 PM

Accident Summary Report					

<u>Query Number/Name</u>	<u>Query Type</u>	<u>Query Sub Type</u>	<u>Accident Date Range</u>		
62309	18177	AttributeQuery	None	1/1/2017 12:00:00AM To	12/31/2020 12:00:00AM
<u>Case Year</u>	<u>Injury</u>	<u>Fatality</u>	<u>Property Damage</u>	<u>Non-Reportables</u>	<u>Totals</u>
<u>2017</u>	3	0	3	0	6
<u>Case Year</u>	<u>Injury</u>	<u>Fatality</u>	<u>Property Damage</u>	<u>Non-Reportables</u>	<u>Totals</u>
<u>2018</u>	2	0	5	0	7
<u>Case Year</u>	<u>Injury</u>	<u>Fatality</u>	<u>Property Damage</u>	<u>Non-Reportables</u>	<u>Totals</u>
<u>2019</u>	1	0	1	0	2
<u>Case Year</u>	<u>Injury</u>	<u>Fatality</u>	<u>Property Damage</u>	<u>Non-Reportables</u>	<u>Totals</u>
<u>2020</u>	0	0	3	0	3
<u>Grand Total:</u>	6	0	12	0	

Accident Location Information System(ALIS)

Date:
3/29/2021
12:20:46 PM

Accident Verbal Description

18177_VDR

Date in this report covers the period -1/1/2017-12/31/2020

Complete Accident data from NYSDMV is only available thru 1/31/2021 12:00:00 AM

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 129 87011001 Street: [Route] 129
AT INTERSECTION WITH Municipal Pl

7/5/2017 Wed 09:00 AM Persons Killed: 0 Persons Injured: 2 Extent of Injuries: CC Case: 2017-36793260
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: PD WESTCHESTER COUNTY DPS Num of Veh: 3
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE
Manner of Collision: OTHER Weather: CLEAR
Road Surface Condition: DRY Road Char.: CURVE AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 8000 State of Registration: NY
Num of Occupants: 3 Driver's Age: 36 Sex: M Citation Issued: N
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: SLOWED OR STOPPING
Apparent Factors: OBSTRUCTION/DEBRIS, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 4463 State of Registration: NY
Num of Occupants: 1 Driver's Age: 39 Sex: F Citation Issued: N
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE

Veh :3 CAR/VAN/PICKUP Registered Weight: 16000 State of Registration: NY
Num of Occupants: 1 Driver's Age: 49 Sex: M Citation Issued: N
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: [Route] 9A
AT INTERSECTION WITH MUNICIPAL PL

7/2/2017 Sun 21:53 PM Persons Killed: 0 Persons Injured: 2 Extent of Injuries: CC Case: 2017-36995329
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
Manner of Collision: RIGHT ANGLE Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3035 State of Registration: NY
Num of Occupants: 1 Driver's Age: 54 Sex: M Citation Issued: N
Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: TRAFFIC CONTROL DEVICES DISREGARDED, DRIVER INATTENTION

Veh :1 CAR/VAN/PICKUP Registered Weight: 3585 State of Registration: NY
Num of Occupants: 2 Driver's Age: 70 Sex: M Citation Issued: N
Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: S RIVERSIDE AVE
AT INTERSECTION WITH MUNICIPAL PL

9/25/2017 Mon 16:13 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2017-37003528
Accident Class: INJURY Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 1
Type Of Accident: COLLISION WITH BICYCLIST Traffic Control: TRAFFIC SIGNAL

Manner of Collision: OTHER Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: PED/BICYCLIST NOT AT INTERSECTION Action of Ped/Bicycle: CROSSING AGAINST SIGNAL

Veh :2 BICYCLE Registered Weight: State of Registration: -3
 Num of Occupants: 1 Driver's Age: 24 Sex: F Citation Issued: N
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: DRIVER INATTENTION, FAILURE TO YIELD RIGHT OF WAY

Veh :1 CAR/VAN/PICKUP Registered Weight: 2877 State of Registration: NY
 Num of Occupants: 3 Driver's Age: 20 Sex: F Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: S RIVERSIDE AVE
 AT INTERSECTION WITH MUNICIPAL PL

11/21/2017 Tue 07:25 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2017-37013993**
 Accident Class: PROPERTY DAMAGE Police Agency: Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3009 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 58 Sex: M Citation Issued: N
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING LEFT TURN
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :2 CAR/VAN/PICKUP Registered Weight: 4765 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 51 Sex: M Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT ENTERED, NOT ENTERED

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: MUNICIPAL PL
 AT INTERSECTION WITH S RIVERSIDE AVE

11/18/2017 Sat 14:54 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2017-37232377**
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: OVERTAKING Weather: RAIN
 Road Surface Condition: WET Road Char.: STRAIGHT AND LEVEL Light Condition: DUSK
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 2899 State of Registration: NY
 Num of Occupants: 2 Driver's Age: 35 Sex: M Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING RIGHT TURN
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :2 CAR/VAN/PICKUP Registered Weight: 3413 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 45 Sex: M Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT ENTERED, PASSING OR LANE USAGE IMPROPERLY

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 129 87011000 Street: MAPLE ST
 15 Meters North of S RIVERSIDE AVE

12/21/2017 Thu 13:37 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2017-37253549**
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2

Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE
 Manner of Collision: RIGHT ANGLE Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 2777 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 20 Sex: F Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :2 CAR/VAN/PICKUP Registered Weight: 3471 State of Registration: NY
 Num of Occupants: 2 Driver's Age: 21 Sex: M Citation Issued: N
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING RIGHT TURN
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT ENTERED

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 129 87011001 Street: MAPLE ST
 AT INTERSECTION WITH MUNICIPAL PL

2/15/2018 Thu 12:27 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2018-37285352**
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: REAR END Weather: CLOUDY
 Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 OTHER Registered Weight: State of Registration: NJ
 Num of Occupants: 1 Driver's Age: 31 Sex: M Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING RIGHT TURN
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :1 CAR/VAN/PICKUP Registered Weight: 2351 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 32 Sex: M Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: DRIVER INATTENTION, FOLLOWING TOO CLOSELY

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: S RIVERSIDE AVE
 91 Meters South of MUNICIPAL PL

2/9/2018 Fri 16:29 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2018-37285354**
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN
 Manner of Collision: RIGHT TURN (WITH OTHER CAR) Weather: CLOUDY
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 4598 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 50 Sex: M Citation Issued: N
 Direction of Travel: NORTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING RIGHT TURN
 Apparent Factors: NOT ENTERED, DRIVER INATTENTION

Veh :2 CAR/VAN/PICKUP Registered Weight: 4438 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 36 Sex: F Citation Issued: N
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: STOPPED IN TRAFFIC
 Apparent Factors: NOT ENTERED, NOT ENTERED

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: MUNICIPAL PL
 AT INTERSECTION WITH S RIVERSIDE AVE

3/17/2018 Sat 21:30 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2018-37289071**

Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: RIGHT ANGLE Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 2641 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 46 Sex: F Citation Issued: N
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 2856 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 21 Sex: F Citation Issued: N
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING LEFT TURN
 Apparent Factors: NOT APPLICABLE, FAILURE TO YIELD RIGHT OF WAY

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032191 Street: [Route] 9A
 12 Meters North of Hudson St

4/28/2018 Sat 20:20 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2018-37361971
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH GUIDE RAIL Traffic Control: NONE
 Manner of Collision: UNKNOWN Weather: RAIN
 Road Surface Condition: WET Road Char.: STRAIGHT/ GRADE Light Condition: DARK-ROAD UNLIGHTED
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 4137 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 24 Sex: M Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3374 State of Registration: NY
 Num of Occupants: 2 Driver's Age: 27 Sex: F Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: PAVEMENT SLIPPERY, NOT APPLICABLE

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 129 87011001 Street: MAPLE ST
 AT INTERSECTION WITH MUNICIPAL PL

4/12/2018 Thu 13:21 PM Persons Killed: 0 Persons Injured: 3 Extent of Injuries: ABC Case: 2018-37363149
 Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 3
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: OTHER Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :3 CAR/VAN/PICKUP Registered Weight: 3770 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 54 Sex: F Citation Issued: N
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: State of Registration: NY
 Num of Occupants: 1 Driver's Age: 94 Sex: F Citation Issued: Y
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: PASSING OR LANE USAGE IMPROPERLY, TRAFFIC CONTROL DEVICES DISREGARDED

Veh :2 CAR/VAN/PICKUP Registered Weight: 5683 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 76 Sex: M Citation Issued: N

Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: S RIVERSIDE AVE
 AT INTERSECTION WITH MUNICIPAL PL

8/25/2018 Sat 14:10 PM Persons Killed: 0 Persons Injured: 2 Extent of Injuries: CC **Case: 2018-37481726**
 Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: RIGHT ANGLE Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3515 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 35 Sex: F Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :2 CAR/VAN/PICKUP Registered Weight: 2895 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 68 Sex: F Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT ENTERED, DRIVER INATTENTION

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: S RIVERSIDE AVE
 15 Meters South of MUNICIPAL PL

11/2/2018 Fri 16:32 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2018-37770452**
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE
 Manner of Collision: OVERTAKING Weather: RAIN
 Road Surface Condition: WET Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 10500 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 41 Sex: M Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING RIGHT TURN
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3000 State of Registration: NY
 Num of Occupants: 2 Driver's Age: 54 Sex: M Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: PASSING OR LANE USAGE IMPROPERLY, NOT APPLICABLE

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 129 87011001 Street: MAPLE ST
 AT INTERSECTION WITH MUNICIPAL PL

4/6/2019 Sat 10:52 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-37957760**
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: REAR END Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 4901 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 46 Sex: M Citation Issued: N
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: STARTING IN TRAFFIC
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :2 CAR/VAN/PICKUP Registered Weight: 2523 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 38 Sex: F Citation Issued: N

Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER

Pre-Accd Action: STARTING IN TRAFFIC

Apparent Factors: NOT ENTERED, FOLLOWING TOO CLOSELY

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 129 87011001 Street: MAPLE ST
AT INTERSECTION WITH MUNICIPAL PL

1/17/2020 Fri 17:25 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2020-38323072**
Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
Manner of Collision: RIGHT ANGLE Weather: CLOUDY
Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DARK-ROAD UNLIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 2931 State of Registration: NY
Num of Occupants: 2 Driver's Age: 82 Sex: M Citation Issued: N
Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 2895 State of Registration: NY
Num of Occupants: 1 Driver's Age: 22 Sex: M Citation Issued: N
Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: DRIVER INATTENTION, UNKNOWN

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: S RIVERSIDE AVE
30 Meters South of MUNICIPAL PL

12/5/2019 Thu 08:03 AM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C **Case: 2019-38428255**
Accident Class: INJURY Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE
Manner of Collision: REAR END Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3504 State of Registration: NY
Num of Occupants: 1 Driver's Age: 44 Sex: F Citation Issued: N
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: DRIVER INATTENTION, NOT ENTERED

Veh :2 CAR/VAN/PICKUP Registered Weight: 3261 State of Registration: NY
Num of Occupants: 1 Driver's Age: 38 Sex: F Citation Issued: N
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT ENTERED, NOT ENTERED

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: MUNICIPAL PL
AT INTERSECTION WITH S RIVERSIDE AVE

6/27/2020 Sat 21:20 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2020-38619120**
Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
Manner of Collision: OVERTAKING Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3455 State of Registration: NY
Num of Occupants: 1 Driver's Age: 31 Sex: F Citation Issued: N
Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :1 CAR/VAN/PICKUP Registered Weight: 4142 State of Registration: NY

Num of Occupants: 3 Driver's Age: 17 Sex: F Citation Issued: N
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT ENTERED, UNKNOWN

County: Westchester Muni: Croton-on-Hudson(V) Ref. Marker: 9A87032192 Street: MUNICIPAL PL
 AT INTERSECTION WITH S RIVERSIDE AVE

9/3/2020 Thu 13:58 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2020-38708537**
 Accident Class: PROPERTY DAMAGE Police Agency: CROTON ON HUDSON VILLAGE PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
 Manner of Collision: OVERTAKING Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 2747 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 61 Sex: M Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3360 State of Registration: NY
 Num of Occupants: 3 Driver's Age: 49 Sex: F Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: CHANGING LANES
 Apparent Factors: UNSAFE LANE CHANGE, UNKNOWN

