

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

APPENDIX 6

FEIS TRAFFIC STUDY

**Lighthouse Landing
Sleepy Hollow, New York**

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

I. EXECUTIVE SUMMARY

In conjunction with the Final Environmental Impact Statement (FEIS) for the Lighthouse Landing project and the comments received regarding the Draft Environmental Impact Statement (DEIS), this supplemental revised Traffic and Transportation analysis has been performed by TRC Raymond Keyes Associates (“TRC”). This Study provides the basis for evaluating the traffic/transportation impacts of the proposed Lighthouse Landing development, including the traffic flow conditions in the study area with the FEIS Alternative Plan.

The DEIS and its accompanying traffic analysis, as well as this Study, demonstrate that with the measures proposed, the traffic impacts of the Project would be adequately mitigated. This Study also confirms that many of the proposed traffic improvements and reductions in parking spaces identified as mitigation measures are generally warranted by current or No Build traffic conditions rather than the impacts of Project-generated traffic conditions.

Notwithstanding this conclusion, the overall density of the Project has been reduced in response to comments, resulting in less traffic to be generated by the Project. The Final Environmental Impact Statement (FEIS) Alternative Plan results in a 20% reduction in the number of residential units from 1562 to 1250, a 30.3 % reduction in the office space from 50,200 square feet (sf) to 35,000 sf, and a 26.7% reduction in the retail/commercial space from 180,000 sf to 132,000 sf (including the Cinema, which is being reduced from 24,000 sf to 18,000 sf, as well as the commercial space in the hotel). The hotel program is also scaled back in the FEIS Alternative Plan by eliminating the conference center, reducing the number of rooms from 147 to 140, and cutting the restaurant space in half. The FEIS Alternative Plan reduces the Project’s resident population by 17% from 2,999 to 2,499 people.

The traffic projected to be generated by the residential and commercial components of the FEIS Alternative Plan (exclusive of the traffic projected to be generated as a result of the commuter train parking lot, the soccer fields now proposed to be constructed by the Village on the East Parcel, and the fire/ambulance station now proposed to be constructed by the Village on the South Parcel) was compared to the traffic projected to be generated by these elements under the DEIS Plan. Traffic generated by the reduced density residential and commercial components of the FEIS Alternative Plan would be approximately 17.2, 18.0, and 14.8 percent less than the DEIS Plan during the weekday AM, weekday PM, and Saturday Peak Hours, respectively.¹

The analyses demonstrate that with the reduction in Project density, but without the increase in the size of the commuter parking lot requested by the Village, the FEIS Alternative Plan will have the same or improved levels of service as the DEIS Plan. However, when the impact of the additional traffic associated with the increase in commuter lot size from 400 to 550 spaces is considered, as well as the other East Parcel uses to a lesser extent, the reductions in total traffic projected to be generated by the FEIS Alternative Plan are effectively offset. The trip generation during the weekday AM and PM Peak Hours would actually increase slightly, to approximately 0.4 and 1.4 percent, respectively, while the Saturday Peak Hour would be reduced by 5.8 percent, as compared to the DEIS Plan. The 550 parking

¹ The Traffic Study for the DEIS did not include traffic that would be generated by the soccer fields on the East Parcel and the fire/ambulance station on the South Parcel, as those uses were not firmly established by the Village at that time. If the traffic associated with those uses were included in the traffic generated by the DEIS Plan, the reductions in traffic associated with the changes in the FEIS Alternative Plan would be slightly less.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

space commuter lot accounts for 35% of the trip generation in the Peak AM Hour, 32% of the trip generation in the Peak PM Hour, and 6% of the trip generation in the Peak Saturday Hour.

This supplement includes updated trip generation/distribution for the Project, modifications to the background traffic, revised capacity analysis, additional study locations, synchro analysis, one-way analysis, traffic signal warrant analysis and a sensitivity analysis of a smaller train ridership credit and a 10% reduction in the trips by Project residents to on-site retailers. Like the DEIS, it includes analyses with and without a new train station constructed on site. A shuttle system will be provided under either scenario. If the proposed new train station is not constructed, the shuttle system will be provided between the Project and the Tarrytown and/or Philipse Manor train stations. Access to the Project has been slightly modified, as illustrated on the Site Plans. The DEIS volumes were based upon the Institute of Transportation Engineers publication, Trip Generation, Sixth Edition, which was the latest available at that time. This Study and the FEIS volumes are based upon the Seventh Edition, in response to comments. However, there is no difference between the Sixth and Seventh Editions that would materially affect the traffic analysis in the FEIS.

The DEIS includes analysis of 25 locations, exclusive of Site driveways. Thirteen of these locations are in the Village of Tarrytown. All of these locations are also studied in the FEIS. Improvements are recommended at 10 of the 25 intersections. Of the thirteen intersections studied in Tarrytown, improvements have been suggested at seven of the intersections, the majority of which have been suggested due to existing or No-Build conditions. Many of these improvements are in accordance with a Traffic and Parking Study commissioned by Tarrytown in 1998. To date, many of the improvements recommended in that Study, such as the installation of a traffic signal at the intersection of Route 9 and West Franklin Avenue, have not been undertaken by Tarrytown although these improvements would help improve traffic operating conditions. In addition, twelve other intersections are studied as part of this FEIS, including nine that are in the Village of Tarrytown. Most of these locations are analyzed as part of the Highway Capacity Software (HCS) analysis, while others were analyzed as part of the Synchro analysis.

1. EXISTING CONDITIONS

A. Study Area

The study area for the traffic analysis in the Draft Environmental Impact Statement (DEIS) includes 25 existing intersections (see Figure No. 6-1 - Study Location Map in Attachment 1). Twelve of these intersections are within the Village of Sleepy Hollow and 13 of them are in the Village of Tarrytown. In addition, the intersections of the proposed new roadways connecting the Site to Beekman Avenue were also analyzed. The following is a list of the existing study locations (which are in Sleepy Hollow unless it is indicated otherwise):

1. US Route 9/Pierson Avenue/Gordon Avenue
2. US Route 9/Pocantico Street/Old Broadway/Philipsburg Manor Driveway
3. Pocantico Street/Continental Street
4. US Route 9/Lawrence Avenue
5. US Route 9/Bedford Road/New Broadway
6. US Route 9/Beekman Avenue/Hudson Terrace

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

7. Beekman Avenue/Lawrence Avenue
8. Beekman Avenue/Washington Street
9. Beekman Avenue/Pocantico Street
10. Beekman Avenue/Cortland Street
11. Beekman Avenue/Clinton Street
12. Beekman Avenue/Hudson Street
13. US Route 9/Willey Street (Tarrytown)
14. US Route 9/Central Avenue (Tarrytown)
15. Neperan Road/County House Road (Tarrytown)
16. US Route 9/Main Street/Neperan Road (Tarrytown)
17. Main Street/Washington Street (Tarrytown)
18. H-Bridge/Main Street/Cortland Street/Depot Plaza (Tarrytown)
19. West Franklin Street/Riverview Avenue (Tarrytown)
20. US Route 9/Franklin Street (Tarrytown)
21. US Route 9/Benedict Avenue (Tarrytown)
22. Benedict Avenue/Highland Avenue/Prospect Avenue (Tarrytown)
23. US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)
24. US Route 9/NY Route 119 (Tarrytown)
25. US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)

As part of the FEIS, an additional twelve (12) intersections have been counted and analyzed, nine (9) of which are in Tarrytown. These additional intersections include:

1. US Route 9 & NY Route 117 Westbound
2. US Route 9 & NY Route 117 Eastbound
3. US Route 9 & Park Avenue (Tarrytown)
4. US Route 9 & Independence Street (Tarrytown)
5. US Route 9 & Church Street (Tarrytown)
6. West Franklin Street & Washington Street (Tarrytown)
7. West Franklin Street & Miller Avenue (Tarrytown)
8. US Route 9 & Prospect Avenue (Tarrytown)
9. Eastern H-Bridge Intersection (Tarrytown)
10. Western H-Bridge Intersection (Tarrytown)
11. H-Bridge & Cortland Street/Willey Street (Tarrytown)
12. US Route 9 & Depeyster Street/High School Driveway

Some of these intersections were analyzed as part of the Highway Capacity Software (HCS) analysis, see Section 12, while others were included in the Synchro analysis, see Section 13.

B. Existing Traffic Volumes

The representative weekday AM, PM and Saturday Traffic Volumes at the DEIS study locations were based upon manual traffic counts, as well as Automatic Traffic Recorder (“ATR”) counts, performed by representatives of TRC. The representative weekday AM, PM, and Saturday Traffic Volumes at the new study locations were based upon manual traffic counts performed on various days, but mainly in May, 2005 in the weekday AM, PM and Saturday Peak periods. The traffic counts were also compared with other available count data from other traffic studies performed for other projects in the area. Pedestrians were also counted at key locations. As part of the DEIS, it was determined that the Peak AM Highway Hour generally occurs from 7:45 AM to 8:45 AM, the Peak PM Hour generally occurs from 5:15 PM to

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

6:15 PM, while the Peak Saturday Hour generally occurs from 11:45 AM to 12:45 PM. The new traffic volumes were balanced amongst the 2005 traffic volumes along the roadway network where appropriate, but since the traffic counts were performed during different years and some of the adjacent developments included in the DEIS such as the New York Life building have been constructed, they were not balanced with the DEIS traffic volumes. The Existing AM, PM and Saturday Peak Hour Traffic Volumes are shown on Figure No. 6-2.

During the Peak Hours, Beekman Avenue carries between 200-300 vehicles per hour in each direction. Route 9, during the Peak Hours, carries between 600-1000 vehicles per hour in each direction.

C. Historical Traffic Patterns and Flows

As described in Section II of the DEIS, the project Site was occupied for more than 80 years as a General Motors assembly facility. At peak production times during the 1940's, this facility had almost 12,000 employees. Trucks, and trains, were utilized to bring supplies to the facility and to transport new vehicles from the assembly plant. In 1987, there were 4,500 employees. Prior to the facility's closure in 1996, the number of employees began to reduce. Vehicle trips generated by these employees utilized the same roadways that exist today.

Based upon traffic volume information obtained from the Traffic Consultants for the Village of Sleepy Hollow and the Village of Tarrytown, the two-way AADT for Broadway at Wildey Street was 18,100 in 1990 and 18,400 in 2003, while for Broadway at Prospect Avenue, the two-way AADT was 24,000 in 1990 and 24,500 in 2003. Thus, traffic over more than the last decade has been relatively flat, with an annual average cumulative increase of approximately 0.159% per year.

D. Capacity Analysis and Existing Levels of Service

Capacity analyses were conducted utilizing the Highway Capacity Software (HCS) at the key locations for the Peak Hours to identify existing problem areas within the study area. The following is a brief description of the procedure utilized in preparation of this analysis.

Capacity analysis is a method by which traffic volumes are compared to the calculated roadway and intersection capacities to evaluate existing and future traffic conditions. The methodology used is described in the 2000 Highway Capacity Manual published by the Transportation Research Board. In general, the term "Level of Service" is used to provide a "qualitative" evaluation based on certain "quantitative" calculations related to empirical values. Level of Service "A" represents the best traffic operating condition and Level of Service "F" represents the worst traffic operating condition with the varying levels in between.

Levels of Service for signalized and unsignalized intersections are defined in terms of average delay. Delay is used as a measure of driver discomfort, frustration, efficiency, etc. For signalized intersections, delay is based upon a number of variables, including traffic volumes, geometry, cycle length and green time, among others. For unsignalized intersections, delay is based upon the availability of gaps in the mainline traffic stream and the acceptance of the gaps by motorists waiting on the sidestreet to enter the traffic flow. Levels of Service for ramp junctions are defined in terms of density (passenger cars per mile per lane).

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

The following table summarizes the various Level of Service designations for signalized and unsignalized intersections:

	SIGNALIZED	UNSIGNALIZED
LEVEL OF SERVICE	Average Control Delay per Vehicle (Seconds)	Average Control Delay per Vehicle (Seconds)
A	10.0 or less	10.0 or less
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	80.1 or greater	50.1 or greater

In downtown areas similar to the study area, Level of Service E is generally the limit of acceptable delay due to the traffic volumes and closely spaced intersections, and the neighborhood character of the area works to keep vehicle speeds slow, especially when pedestrians are present. During Peak Hour conditions in downtown areas, some individual movements or intersections will tend to operate at Level of Service F, but then operate at better Levels of Service during the remainder of the day. The peak periods (which are described above) are the commuting periods in the morning and afternoon/early evening during the weekday and the Saturday midday shopping period. The Level of Service in a downtown area is also impacted by on-street parking, which acts as a traffic calming measure and keeps traffic slow. The removal of on-street parking would improve Level of Service, but the retention of the parking is sometimes desirable to maintain low traffic speeds in these areas.

Volume-to-Capacity (V/C) ratios are also provided. A V/C ratio is defined in the 2000 Highway Capacity Manual as “the ratio of flow rate to capacity for a transportation facility” (in this case, an intersection). A “flow rate” is “the equivalent hourly rate at which vehicles, bicycles, or persons pass a point on a lane, roadway, or other trafficway; computed as the number of vehicles, bicycles or persons passing the point, divided by the time interval (usually less than one hour) in which they pass; expressed as vehicles, bicycles, or persons per hour.”

Capacity analyses were performed for the key study locations as described in the DEIS with the Existing Traffic Volumes utilizing Highway Capacity Software developed by the Federal Highway Administration (“FHWA”). Adjustment factors such as Heavy Vehicle Percentages, Pedestrians, Bus Stops, and Parking Maneuvers were included in the analysis where appropriate.

The capacity analysis worksheets for the key locations are contained in Attachment 3 . Table 6-1 summarizes the Overall Intersection Existing Levels of Service determined from the capacity analyses as part of the DEIS. Detailed Levels of Service for each individual lane group for each intersection are shown on Table 6A-1 contained in Attachment 2. These Levels of Service are the same as in the DEIS.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

TABLE NO. 6-1 LEVEL OF SERVICE SUMMARY FOR EXISTING CONDITIONS										
Intersection		AM			PM			SAT.		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	13.7	0.39	B	11.9	0.52	B	13.0	0.40
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	C	33.8	N/A	D	41.6	N/A	B	19.1	N/A
3.	Pocantico St./Continental St.	b	10.0	0.01	b	11.6	0.02	b	10.6	0.02
4.	US Route 9/Lawrence Ave.	d	29.7	0.25	e	35.6	0.36	d	26.9	0.22
5.	US Route 9/Bedford Rd./New Broadway	C	33.8	0.62	D	47.6	0.73	C	31.2	0.55
6.	US Route 9/Beekman Ave./Hudson Terrace	E	73.4	0.72	E	71.8	0.71	D	47.6	0.58
7.	Beekman Ave./Lawrence Ave.	b	12.2	0.19	b	12.5	0.17	b	13.2	0.18
8.	Beekman Ave./Washington St.	B	17.2	0.48	C	20.2	0.61	B	17.8	0.52
9.	Beekman Ave./Pocantico St.	b	11.3	N/A	c	15.2	N/A	b	10.9	N/A
10.	Beekman Ave./Cortland St.	b	12.3	.33	c	16	.23	b	12.8	0.34
11.	Beekman Ave./Clinton St.	a	9.3	0.07	a	9.7	0.07	b	11.6	N/A
12.	Beekman Ave./Hudson St.	a	7.4	0.03	a	7.5	0.04	a	7.4	0.02
13.	US Route 9/Wildey St. (Tarrytown)	A	8.6	0.58	B	14.1	0.59	B	10.1	0.52
14.	US Route 9/Central Ave. (Tarrytown)	c	20.1	0.26	d	31.7	0.45	e	38.7	0.47
15.	Neperan Rd./County House Rd. (Tarrytown)	c	23.1	N/A	c	23.2	N/A	a	9.1	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	C	24.8	0.71	D	46.9	0.98	D	44.3	0.93
17.	Main St./Washington St. (Tarrytown)	B	12.6	0.39	B	13.1	0.44	B	14.7	0.51
18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	A	9.9	0.30	C	21.2	0.37	B	11.3	0.18

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

19.	West Franklin St./Riverview Ave. (Tarrytown)	b	13.5	0.26	b	14.4	0.20	b	11.5	0.13
20A.	US Route 9/West Franklin St. (Tarrytown)	e	40.1	0.79	f	54.3	0.89	e	37.5	0.74
20B.	US Route 9/East Franklin St. (Tarrytown)	c	16.2	0.08	d	27.5	0.18	c	20.6	0.08
21.	US Route 9/Benedict Ave. (Tarrytown)	B	15.6	0.58	C	23.7	0.78	B	17.8	0.64
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	B	16.3	0.52	C	25.0	0.74	A	8.4	0.39
23.	US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)	b	14.3	N/A	b	16.6	N/A	b	13.4	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	B	18.7	0.71	C	20.4	0.63	B	19.3	0.58
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	D	40.8	N/A	C	28.7	N/A	C	20.6	N/A

- Note: (1) Signalized intersections represented by upper case letters.
(2) Unsignalized intersections represented by lower case letters.
(3) Delay is in seconds per vehicle.
(4) Overall Level of Service/Delay/Volume to Capacity Ratios at Two-Way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
(5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
(6) Overall Volume to Capacity Ratio is not provided for All-Way STOP Control intersections.
(7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.

As can be seen in the above table, the majority of the intersections currently operate at an overall Level of Service “E” or better. However, some intersections such as US Route 9 at West Franklin Street currently experience lengthy delays during some of the Peak Hours.

Timing runs were performed along Route 9 between Beekman Avenue and I-287 during the weekday AM and PM and Saturday Peak Hours as well as during off peak times. The PM Peak Hour had the longest times to complete the runs in both directions, at 9 minutes 28 seconds in the southbound direction and 7 minutes 47 seconds in the northbound direction. During the other time periods, the times were generally significantly less.

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

2. FUTURE CONDITIONS WITHOUT THE PROJECT

The Future Conditions without the Project or No-Build Conditions, analyzes future traffic operating conditions without the proposed development. Future conditions were projected for the Year 2012. Consistent with the methodology contained in the DEIS, except with revised numbers, the existing traffic volumes were increased with traffic to be generated by several potential area developments, as well as with a background growth rate.

A. Other Area Developments/2012 No-Build Traffic Volumes

In order to develop the No-Build Traffic Volumes for the 2012 Design Year, a growth rate in conjunction with traffic from known developments in the area was added to the Existing Traffic Volumes. All Existing Traffic Volumes in the DEIS were grown by an annually-compounded growth rate of 2% to the 2012 Design Year resulting in an increase of 19.5%. As part of the FEIS, the Existing Traffic Volumes were grown by an annually-compounded growth rate of 0.25% per year, based upon a review of traffic volumes information provided by the New York State Department of Transportation and compiled by the Traffic Consultants for the Village of Sleepy Hollow and the Village of Tarrytown. The resulting volumes are 2012 Grown Traffic Volumes, and are illustrated on Figure No. 6.3. In addition to the “background” growth rate, traffic attributable to the following known area developments was included in the No-Build Traffic Volumes:

1. Ichabod’s Landing
2. Kendal on Hudson
3. Hess Gas Station
4. Ferry Landings
5. New York Life Building
6. Spring Hill Suites
7. 155 White Plains Road
8. Tarrytown Schools Expansion

Other minor residential subdivisions such as Jardim Estates, 224 South Broadway, and Tarryview were accounted for in the “background” growth rate.

The adjacent development traffic for the above developments were the same as for the DEIS, except for the Ferry Landings Project. Based upon the latest available traffic volume information, the Ferry Landings traffic generation has now been calculated to include 40,000 square feet (sf) of commercial space and 228 condominium units, in addition to the 60,000 sf of existing office space.

The 2012 Grown Traffic Volumes were combined with the Adjacent Development Traffic Volumes illustrated on Figures No. 6-4 and 6-5 to yield the 2012 No-Build Traffic Volumes shown on Figure No. 6-6.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

C. Capacity of the Street System in the Study Area for the Weekday AM, PM and Saturday Peak Hours

Capacity analyses were conducted for the Future Conditions Without the Project, utilizing the 2012 No-Build Traffic Volumes. Tables No. 6-2 through 6-4 summarize the Overall Intersection Levels of Service determined from the capacity analyses for the No-Build condition.

Detailed Levels of Service for each individual lane group for each individual intersection are shown on Table 6A-2 contained in Attachment 2. Signalized intersections are represented by upper case letters, while unsignalized intersections are represented by lower case letters.

TABLE NO. 6-2 PEAK AM HOUR LEVEL OF SERVICE SUMMARY FOR NO-BUILD CONDITIONS							
Intersection		EXISTING			NO-BUILD		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	13.7	0.39	B	14.2	0.48
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	C	33.8	N/A	D	36.7	N/A
3.	Pocantico St./Continental St.	b	10.0	0.01	b	10.2	0.01
4.	US Route 9/Lawrence Ave.	d	29.7	0.25	e	46.1	0.37
5.	US Route 9/Bedford Rd./New Broadway	C	33.8	0.62	D	39.1	0.72
6.	US Route 9/Beekman Ave./Hudson Terrace	E	73.4	0.72	E	61.5	0.71
7.	Beekman Ave./Lawrence Ave.	b	12.2	0.19	b	12.4	0.19
8.	Beekman Ave./Washington St.	B	17.2	0.48	B	17.4	0.49
9.	Beekman Ave./Pocantico St.	b	11.3	N/A	b	12.3	N/A
10.	Beekman Ave./Cortland St.	b	12.3	.33	b	13.3	.36
11.	Beekman Ave./Clinton St.	a	9.3	0.07	a	9.7	0.08
12.	Beekman Ave./Hudson St.	a	7.4	0.03	a	7.6	0.04
13	US Route 9/Wildey St. (Tarrytown)	A	8.6	0.58	B	10.1	0.64
14.	US Route 9/Central Ave. (Tarrytown)	c	20.1	0.26	c	23.3	0.31

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

15.	Neperan Rd./County House Rd. (Tarrytown)	c	23.1	N/A	d	26.9	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	C	24.8	0.71	C	29.8	0.82
17.	Main St./Washington St. (Tarrytown)	B	12.6	0.39	B	12.8	0.43
18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	A	9.9	0.30	B	13.2	0.41
19.	West Franklin St./Riverview Ave. (Tarrytown)	b	13.5	0.26	c	15.4	0.30
20A.	US Route 9/West Franklin St. (Tarrytown)	e	40.1	0.79	f	95.9	1.05
20B.	US Route 9/East Franklin St. (Tarrytown)	c	16.2	0.08	c	18.8	0.10
21.	US Route 9/Benedict Ave. (Tarrytown)	B	15.6	0.58	C	20.8	0.66
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	B	16.3	0.52	C	20.1	0.55
23.	US Route 9/I-87-I-287 Westbound On-Ramp (Tarrytown)	b	14.3	N/A	B	15.4	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	B	18.7	0.71	C	21.5	0.77
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	D	40.8	N/A	E	57.7	N/A

- Note:
- (1) Signalized intersections represented by upper case letters.
 - (2) Unsignalized intersections represented by lower case letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
 - (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

TABLE NO. 6-3 PEAK PM HOUR LEVEL OF SERVICE SUMMARY FOR NO-BUILD CONDITIONS							
Intersection		EXISTING			NO-BUILD		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	11.9	0.52	B	12.9	0.60
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	D	41.6	N/A	D	44.2	N/A
3.	Pocantico St./Continental St.	b	11.6	0.02	b	11.8	0.02
4.	US Route 9/Lawrence Ave.	e	35.6	0.36	f	55.4	0.50
5.	US Route 9/Bedford Rd./New Broadway	D	47.6	0.73	D	54.6	0.80
6.	US Route 9/Beekman Ave./Hudson Terrace	E	71.8	0.71	F	93.5	0.80
7.	Beekman Ave./Lawrence Ave.	b	12.5	0.17	b	13.0	0.18
8.	Beekman Ave./Washington St.	C	20.2	0.61	C	21.2	0.64
9.	Beekman Ave./Pocantico St.	c	15.2	N/A	c	18.9	N/A
10.	Beekman Ave./Cortland St.	c	16	.23	c	18.3	0.27
11.	Beekman Ave./Clinton St.	a	9.7	0.07	b	10.1	0.08
12.	Beekman Ave./Hudson St.	a	7.5	0.04	a	7.6	0.04
13.	US Route 9/Wildey St. (Tarrytown)	B	14.1	0.59	B	17.0	0.65
14.	US Route 9/Central Ave. (Tarrytown)	d	31.7	0.45	e	42.6	0.55
15.	Neperan Rd./County House Rd. (Tarrytown)	c	23.2	N/A	D	28.1	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	D	46.9	0.98	E	66.8	1.11
17.	Main St./Washington St. (Tarrytown)	B	13.1	0.44	B	13.5	0.47
18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	C	21.2	0.37	D	44.2	0.49
19.	West Franklin St./Riverview Ave.	b	14.4	0.20	c	16.6	0.24

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

	(Tarrytown)						
20A.	US Route 9/West Franklin St. (Tarrytown)	f	54.3	0.89	f	142.9	1.18
20B.	US Route 9/East Franklin St. (Tarrytown)	d	27.5	0.18	E	37.0	0.24
21.	US Route 9/Benedict Ave. (Tarrytown)	C	23.7	0.78	D	50.7	1.68
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	C	25.0	0.74	C	26.4	0.76
23.	US Route 9/I-87-I-287 Westbound On-Ramp (Tarrytown)	b	16.6	N/A	B	18.0	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	C	20.4	0.63	C	24.3	0.72
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	C	28.7	N/A	C	31.1	0.00

- Note: (1) Signalized intersections represented by upper case letters.
(2) Unsignalized intersections represented by lower case letters.
(3) Delay is in seconds per vehicle.
(4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
(5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
(6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
(7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

TABLE NO. 6-4 PEAK SATURDAY HOUR LEVEL OF SERVICE SUMMARY FOR NO-BUILD CONDITIONS							
Intersection		EXISTING			NO-BUILD		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	13.0	0.40	B	13.3	0.45
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	B	19.1	N/A	C	20.9	N/A
3.	Pocantico St./Continental St.	b	10.6	0.02	b	10.8	0.02
4.	US Route 9/Lawrence Ave.	d	26.9	0.22	d	34.5	0.28
5.	US Route 9/Bedford Rd./New Broadway	C	31.2	0.55	C	32.8	0.61
6.	US Route 9/Beekman Ave./Hudson Terrace	D	47.6	0.58	E	62.5	0.66
7.	Beekman Ave./Lawrence Ave.	b	13.2	0.18	b	13.7	0.19
8.	Beekman Ave./Washington St.	B	17.8	0.52	B	18.6	0.55
9.	Beekman Ave./Pocantico St.	b	10.9	N/A	b	12.3	N/A
10.	Beekman Ave./Cortland St.	b	12.8	0.34	b	13.6	0.37
11.	Beekman Ave./Clinton St.	b	11.6	N/A	b	12.5	N/A
12.	Beekman Ave./Hudson St.	a	7.4	0.02	a	7.5	0.02
13.	US Route 9/Wildey St. (Tarrytown)	B	10.1	0.52	B	11.0	0.58
14.	US Route 9/Central Ave. (Tarrytown)	e	38.7	0.47	e	48.7	0.54
15.	Neperan Rd./County House Rd. (Tarrytown)	a	9.1	N/A	a	9.4	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	D	44.3	0.93	E	69.8	1.06
17.	Main St./Washington St. (Tarrytown)	B	14.7	0.51	B	15.2	0.55
18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	B	11.3	0.18	B	13.3	0.28
19.	West Franklin St./Riverview Ave.	b	11.5	0.13	b	12.7	0.15

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

	(Tarrytown)						
20A.	US Route 9/West Franklin St. (Tarrytown)	e	37.5	0.74	f	81.6	0.99
20B.	US Route 9/East Franklin St. (Tarrytown)	c	20.6	0.08	C	25.0	0.10
21.	US Route 9/Benedict Ave. (Tarrytown)	B	17.8	0.64	C	27.2	0.73
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	A	8.4	0.39	A	8.5	0.41
23.	US Route 9/I-87-I-287 Westbound On-Ramp (Tarrytown)	b	13.4	N/A	b	14.4	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	B	19.3	0.58	C	20.7	0.65
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	C	20.6	N/A	C	21.0	N/A

- Note:
- (1) Signalized intersections represented by upper case letters.
 - (2) Unsignalized intersections represented by lower case letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
 - (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

As can be seen in the above tables, the additional traffic due to the known area developments, coupled with the growth rate, would – without accounting for mitigation -- significantly impact a considerable number of the study locations. Some of these developments have not completed the approval process and therefore the traffic improvements required to mitigate their impacts have not yet been determined. Therefore, the No-Build and Build Analyses (as described below) conducted for this Study are conservative, since the traffic volumes attributable to these proposed developments were included, but without any corresponding traffic improvements that might be warranted to mitigate traffic impacts.

3. POTENTIAL IMPACTS

A. ANTICIPATED VEHICULAR VOLUMES

Site Access

The main access driveway to the proposed West Parcel of the Site will be via Beekman Avenue (see FEIS Alternative Plan). An additional access driveway will be provided from River Street. The access to the proposed cinema on the South Parcel will be provided from River Street. A Fire/Ambulance Station will also be located on the South Parcel. The access to East Parcel will be by a full-movement driveway via the existing viaduct located along Beekman Avenue east of the railroad tracks. A secondary access to the East Parcel would be via an extension of Continental Street.

Trip Assignment

Consistent with the DEIS, the Arrival/Departure distribution patterns for traffic to be generated by the proposed development were developed based upon a review of the adjacent roadway network, “Journey to Work” US Census Data, a Retail Gravity Model and the existing traffic flow patterns. As the Project density, including the residential size has been reduced, the Retail Gravity Model has changed accordingly from the DEIS. The Cinema distribution, which also was based upon the gravity model, also changed. In addition, as the size of the commuter lot has changed from 400 parking spaces in the DEIS to 550 parking spaces, as requested by the Village, this distribution has also changed. The other distributions in the DEIS remain the same. The water-dependent uses, Interpretive Center, and the Fire/Ambulance Station utilized the West Parcel distribution (the Fire/Ambulance Station, which will be located on the South Parcel, was combined with these other uses for trip generation/distribution determination to be conservative).

The Arrival and Departure Distributions for the residential, retail, office, cinema and the other West Parcel components of the project are illustrated on Figures No. 6-7 through 6-20.

The limited vehicles destined to and from the relocated Department of Public Works (“DPW”) facility on the East Parcel will travel on the roadways currently used, and will enter/exit the Site via Beekman Avenue or Continental Street. The arrival/departure distributions for the East Parcel uses, aside from the commuter lot, are illustrated on Figures No. 6-21 and 6-22.

In order to understand the development of the Arrival and Departure Distributions for the proposed train station, it is important to understand that a new train station itself does not necessarily result in all new vehicle trips, but rather that vehicles formerly destined to existing train stations, which have parking supply limitations, would be re-routed to the new station to the extent that it has more parking availability. Furthermore, for this Project, although additional passengers will be generated, this does not equate to additional vehicular trips since these passengers would be expected to either walk to the station or take the shuttle to be provided. However, as the size of the commuter lot has been increased from 400 parking spaces to 550 parking spaces at the request of the Village, there will be new trips generated by the additional parking spaces. Based upon information from Metro-North, it was projected that these additional trips due to the increase in the size of the commuter lot would possibly come from Rockland County.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

Based upon a survey of nearby existing train stations, it was determined that an overwhelming majority of the re-routed passengers and corresponding vehicular trips to the commuter parking lot proposed to accompany the new train station would be from the Metro-North Tarrytown station as well as the Philipse Manor station and the Scarborough station, due to the existing parking conditions and their close proximity. Accordingly, it was determined that the potential re-routed traffic from the Tarrytown, Philipse Manor and Scarborough stations would generally originate from the Village of Sleepy Hollow (as illustrated on Figures No. 6-23 through 6-26). Tarrytown residents would be expected to continue to use that station. Commuters from outlying communities, such as Briarcliff, Ossining, Irvington, Hawthorne, and Pleasantville, would be expected to generally continue to use the Metro-North train stations located in those communities. Based upon the foregoing, the Origin and Destination Distributions were developed for the Sleepy Hollow residents that would travel to the station. New trip patterns from Rockland County are illustrated on Figure No. 6-27. Additional parking provided at the commuter lot would attract commuters from surrounding communities, offsetting the benefits of Project residents foregoing their cars in favor of the train, and increasing the impact to the local roads.

Project-generated Traffic Volumes

The ability of any roadway network to accommodate anticipated traffic volumes is measured by comparing Peak Hour Traffic Volumes to roadway capacities. Thus, it is essential to determine the Hourly Traffic Volumes to be generated by the proposed Project and add them to the No-Build Traffic Volumes for the Peak Hours. Under the DEIS, the Lighthouse Landing project for purposes of the Traffic Study was projected to consist of elements to be developed by the Applicant and the DPW facility proposed by the Village:

- (1) 1,562 residential units (922 apartment units, 440 condominium/townhouse units and 200 senior residential units);
- (2) 50,200 square foot (sf) office building;
- (3) 145,617 sf of retail (this includes an approximate 26,000 sf grocery);
- (4) 147-room hotel/inn (includes 10,500 sf of accompanying commercial space);
- (5) 24,000 sf theater;
- (6) Metro-North train station and associated 400-space commuter parking lot.
- (7) Village DPW facility.

The project density has since been reduced. The FEIS Alternative Plan for the Lighthouse Landing project for purposes of the revised Traffic Study is now projected to consist of a combination of elements to be developed by the Applicant and those proposed by the Village (the DPW Facility, the on-site Fire/Ambulance station, the soccer fields and the Interpretative Center):

- (1) 1,250 residential units (608 apartment units including 216 loft units, 394 condominium units including 42 senior market-rate units and 21 units to be offered with pricing incentives to local public employees and volunteers, and 248 townhouses);
- (2) 35,000 square feet (sf) office building;
- (3) 109,000 sf of retail (includes a 25,000 sf grocery and 18,000 sf of restaurant space along Beekman Place);

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

- (4) 140-room hotel (includes 5,000 sf of accompanying commercial space);
- (5) 18,000 sf Cinema;
- (6) On-site Fire/Ambulance station;
- (7) Interpretive Center, Small Craft Launch Pier, Fishing Pier, Dock & Dine Dock;
- (8) Village DPW Facility;
- (9) Soccer fields;
- (10) Metro-North train station and associated 550-space commuter parking lot.

The FEIS Alternative Plan results in a 20% reduction in the number of residential units from 1562 to 1250, a 30.3 % reduction in the office space from 50,200 square feet (sf) to 35,000 sf, and a 26.7% reduction in the retail/commercial space from 180,000 sf to 132,000 sf (including the Cinema, which is being reduced from 24,000 sf to 18,000 sf, as well as the commercial space in the hotel). The hotel program is also scaled back in the FEIS Alternative Plan by eliminating the conference center, reducing the number of rooms from 147 to 140, and cutting the restaurant space in half. The FEIS Alternative Plan reduces the Project's resident population by 17% from 2,999 to 2,499 people.

The FEIS Alternative Plan, for comparison purposes, not including the commuter train parking lot, soccer fields, and the fire/ambulance station (to be consistent with the DEIS), would reduce Project-generated traffic approximately 17.2, 18.0, and 14.8 percent during the Weekday AM, Weekday PM, and Saturday Peak Hours, respectively, in comparison to the DEIS Plan, as illustrated on Table No. 6A-4 in Attachment 2.

The project will have mass transit access, most particularly the pedestrian and shuttle access to a new train station (or, if the new station is not constructed, the shuttle to the existing Tarrytown and/or Philipse Manor train stations) and the mixture of complementary land uses. The project is a walkable community and reduces the dependence on private automobiles for mobility. The design of this project promotes the use of the trains, as well as encourages walking, thus limiting vehicular trips.

A train station is proposed to be constructed on-site. If the train station is not constructed, a shuttle system will be provided between the project and the Tarrytown and/or Philipse Manor Train Stations. The proposed train station, or the provision of the shuttle system to either or both of the adjacent train stations, each provides a significant benefit in the reductions of trips from the project site along the adjacent roadway network. Although a 400 space parking lot was proposed for the train station in the DEIS, the Village has requested that this lot be increased to 550 parking spaces.

In general, Project-generated Traffic Volumes for the FEIS were estimated based upon information contained in the Institute of Transportation Engineers' ("ITE") report entitled, "Trip Generation", Seventh Edition, while the DEIS utilized the Sixth Edition. The estimated trip generation obtained for the Peak AM, Peak PM and Peak Saturday Hours are outlined in Table No. 6A-3 contained in Attachment 2.

All of these uses would be located on the Site to the west of the Metro-North Hudson Line railroad tracks and north of Beekman Avenue, except for the Cinema and Fire/Ambulance station which will be located

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

in the parcel south of Beekman Avenue bounded by Hudson Street and River Street, and the Village DPW, the soccer fields and the train station commuter parking lot, which will be located on the east side of the railroad tracks.

The majority of the retail uses will be located on the first floor of the residential buildings. Due to the unique nature of the retail use, Land Use 814, "Specialty Retail Center", was utilized to estimate the trip generation for this component of the project, consistent with the DEIS. No pass-by or diverted link credits were applied to be conservative.

Traffic counts were performed at the existing DPW facility during the weekday AM and PM periods, as well as the Saturday midday period. The DPW facility is open from 7:00 AM to 2:00 PM during the week and 6:30 AM to 3:00 PM on a Saturday (only a few workers and not open to the public). Thus, their main operations and employee shifts do not conflict with the roadway Peak Hours (7:45 AM to 8:45 AM and 5:15 PM to 6:15 PM on weekdays and 11:45 AM to 12:45 PM on Saturdays). The DPW facility currently has approximately 20 employees. With the project, there could be an increase of up to six additional employees and possibly two additional DPW vehicles. During the Peak Hours, there is essentially no traffic entering/exiting the existing DPW facility and thus, the relocation of the facility will have essentially no impact on the surrounding roadways during the Peak Hours.

The Peak PM Hour of Adjacent Street Traffic rates for Land Use 444 (Movie Theater with Matinee) were conservatively utilized for the Peak PM and Peak Saturday Hours for the proposed three-screen fine arts cinema. The cinema would not operate during the Peak AM Hour; therefore, no trips were estimated for this time period. All other Land Uses utilized standard ITE rates.

Due to the number of residential units as well as the amount of retail to be located on-Site, a significant number of these retail and residential trips would occur on-Site and would not impact the external roadway network. Based upon the retail gravity model previously discussed, 40% of the Peak Hour retail trips would originate from the on-Site residential units. This is a reduction from the DEIS as a result of the reduction in the residential portion of the Project. As described earlier, many of these trips would tend to be more frequent trips for smaller items. Conservatively assuming that 50% of these residential trips would be pedestrian trips, the total residential trips were adjusted accordingly. Additionally, consistent with the DEIS, a conservative 40% train ridership credit was assumed for the Peak AM and Peak PM Hour residential trips. No train ridership credit was taken during the Peak Saturday Hour.

As described in the DEIS, the train ridership credit was based upon a review of the New Rochelle Downtown Study, which indicates that the train ridership from the Avalon-on-the-Sound residential development is 55%. Therefore, the 40% train ridership credit utilized for this project is conservative. Additionally, this train ridership credit was verified via a survey at the existing Scrimshaw Building located in close proximity to the Yonkers Train Station. This survey indicated that 44% of the residents were non-vehicular trips, as described in the DEIS. In addition, there will be an on-site shuttle system that will bring residents and workers from within the Site to the train station that doesn't exist at the other locations reviewed.

As described in Section III.H (Mass Transit) of the DEIS, bus service is also available through the Bee-Line Bus system operated by Westchester County and can potentially be extended into the Site. However, to be conservative, no credit was taken in the trip generation for this potential bus service.

If the new train station is constructed, access would be provided via the existing viaduct along Beekman Avenue as well as a secondary access from Continental Street. In order to determine the amount of

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

vehicular trips that would divert from the Metro-North Tarrytown station, as well as the Philipse Manor and Scarborough Stations (as discussed in the Trip Assignment Section), it was conservatively assumed that 303 trips would enter during the Peak AM Hour and exit during the Peak PM Hour and 46 trips would exit during the Peak AM Hour and enter during the Peak PM Hour. Additional trips would occur in the hour(s) preceding and following the Peak Hours. As a result of the change in parking spaces from 400 in the DEIS to 550 parking spaces, new trips will come from Rockland County. Approximately 70 of the 303 trips would come from other areas including Rockland County during the Peak Hour. During the Peak Saturday Hour, it was assumed that there would be 30 entering trips and 30 exiting trips, 6 of each from Rockland County.

After accounting for the expanded commuter lot, and the other East Parcel uses to a lesser extent, the trip generation during the weekday AM and PM Peak Hours would actually increase slightly to approximately 0.4 and 1.4 percent, respectively, while the Saturday Peak Hour would be reduced by 5.8 percent, as compared to the DEIS Plan, as illustrated on Table No. 6A-5 in Attachment 2. The 550 parking space commuter lot accounts for 35 percent of the total trip generation in the Peak AM Hour, 32 percent of the total trip generation in the Peak PM Hour, and 6 percent of the total trip generation in the Peak Saturday Hour.

2012 Build Traffic Volumes

The Project-Generated Traffic Volumes for each component of the project were distributed to the roadway network in accordance with their associated Arrival/Departure Distributions described above and are presented in Figures No. 6-28 through 6-37. The Project-generated Traffic Volumes for each component were combined to yield the Overall Project-generated Traffic Volumes illustrated in Figure No.6-38.

The Overall Project-Generated Traffic Volumes were then combined with the 2012 No-Build Traffic Volumes to form the 2012 Build Traffic Volumes shown in Figure No. 6-39.

Traffic Impacts From the FEIS Alternative Plan

Capacity analyses were conducted at the key locations using the 2012 Build Traffic Volumes and conditions. Tables 6-5 through 6-7 illustrate the future conditions with the project (the “Build Condition”) (with and without potential mitigation) compared with the 2012 No-Build Conditions for the Overall Intersection Levels of Service for each studied intersection. Detailed Levels of Service for each individual lane group are contained in Attachment 2. Signalized intersections are represented by upper case letters, while unsignalized intersections are represented by lower case letters. If the potential mitigation is the signalization of an unsignalized intersection, the intersection Level of Service would be capitalized under the Build with Improvements condition.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

TABLE NO. 6-5 PEAK AM HOUR LEVEL OF SERVICE SUMMARY FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)										
Intersection		No-Build			Build			Build w/Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	14.2	0.48	B	14.9	0.54	N/A	N/A	N/A
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	D	36.7	N/A	E	64.8	0.00	C	31.7	0.00
3.	Pocantico St./Continental St.	b	10.2	0.01	b	11.0	0.01	N/A	N/A	N/A
4.	US Route 9/Lawrence Ave.	e	46.1	.37	f	52.4	0.47	N/A	N/A	N/A
5.	US Route 9/Bedford Rd./New Broadway	D	39.1	0.72	D	41.1	0.78	N/A	N/A	N/A
6.	US Route 9/Beekman Ave./Hudson Terrace	E	61.5	.70	F	89.2	0.80	D	39.1	0.68
7.	Beekman Ave./Lawrence Ave.	b	12.4	0.19	b	13.5	0.17	N/A	N/A	N/A
8.	Beekman Ave./Washington St.	B	17.4	0.49	B	18.1	0.58	N/A	N/A	N/A
9.	Beekman Ave./Pocantico St.	b	12.3	N/A	c	22.1	N/A	b	12.6	N/A
10.	Beekman Ave./Cortland St.	b	13.3	.36	c	18.6	N/A	N/A	N/A	N/A
11.	Beekman Ave./Clinton St.	a	9.7	0.08	c	16.4	0.28	N/A	N/A	N/A
12.	Beekman Ave./Hudson St.	a	7.6	0.04	a	8.2	0.02	N/A	N/A	N/A
13.	US Route 9/Willey St. (Tarrytown)	B	10.1	0.64	B	10.0	0.64	N/A	N/A	N/A
14.	US Route 9/Central Ave. (Tarrytown)	c	23.3	0.31	c	23.3	0.31	N/A	N/A	N/A
15.	Neperan Rd./County House Rd. (Tarrytown)	d	26.9	N/A	d	30.0	N/A	N/A	N/A	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	C	29.8	0.82	D	35.0	0.90	C	25.8	0.74
17.	Main St./Washington St. (Tarrytown)	B	12.8	0.43	B	13.1	0.48	N/A	N/A	N/A

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	B	13.2	0.41	D	47.9	0.46	B	13.7	0.56
19.	West Franklin St./Riverview Ave. (Tarrytown)	c	15.4	0.30	c	26.5	0.49	N/A	N/A	N/A
20A.	US Route 9/West Franklin St. (Tarrytown)	f	95.9	1.05	f	301.8	1.58	C	28.6	N/A
20B.	US Route 9/East Franklin St. (Tarrytown)	c	18.8	0.10	c	23.6	0.14	A	5.8	0.84
21.	US Route 9/Benedict Ave. (Tarrytown)	C	20.8	0.66	D	44.8	0.84	B	16.7	0.77
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	C	20.1	0.55	B	19.9	0.55	B	11.9	0.54
23.	US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)	B	15.4	N/A	b	17.1	N/A	N/A	N/A	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	C	21.5	0.77	C	27.5	0.77	C	20.0	0.77
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	E	57.7	N/A	E	72.0	N/A	E	67.1	0.00
26.	River St./Ichabod's Landing Driveway	N/A	N/A	N/A	a	8.2	N/A	N/A	N/A	N/A
27.	Beekman Ave./Beekman Ave. Ext./River Street	N/A	N/A	N/A	b	12.6	0.37	N/A	N/A	N/A
28.	River St./Proposed Cinema Driveway	a	9.9	0.08	N/A	N/A	N/A	N/A	N/A	N/A
29.	Beekman Ave. Ext./Internal Site Road	N/A	N/A	N/A	a	9.4	N/A	N/A	N/A	N/A
30.	River St. Ext./Internal Site Road	N/A	N/A	N/A	a	7.8	N/A	N/A	N/A	N/A
31.	Beekman Ave./Viaduct Driveway	N/A	N/A	N/A	b	13.5	0.05	N/A	N/A	N/A

- Note: (1) Signalized intersections represented by upper case letters.
(2) Unsignalized intersections represented by lower case letters.
(3) Delay is in seconds per vehicle.
(4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
(5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

- (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
- (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

TABLE NO. 6-6 PEAK PM HOUR LEVEL OF SERVICE SUMMARY FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)										
Intersection		No-Build			Build			Build w/Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	12.9	0.60	B	13.8	0.65	N/A	N/A	N/A
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	D	44.2	N/A	F	94.7	N/A	D	40.2	0.00
3.	Pocantico St./Continental St.	b	11.8	0.02	b	13.6	0.03	N/A	N/A	N/A
4.	US Route 9/Lawrence Ave.	f	55.4	0.50	f	58.7	0.53	N/A	N/A	N/A
5.	US Route 9/Bedford Rd./New Broadway	D	54.6	0.80	E	70.6	0.86	N/A	N/A	N/A
6.	US Route 9/Beekman Ave./Hudson Terrace	F	93.5	0.80	F	103.7	0.85	D	39.4	0.63
7.	Beekman Ave./Lawrence Ave.	b	13.0	0.18	b	14.3	0.21	N/A	N/A	N/A
8.	Beekman Ave./Washington St.	C	21.2	0.64	C	26.5	0.73	N/A	N/A	N/A
9.	Beekman Ave./Pocantico St.	c	18.9	N/A	e	47.4	N/A	c	20.5	N/A
10.	Beekman Ave./Cortland St.	C	18.3	N/A	e	37.5	0.50	N/A	N/A	N/A
11.	Beekman Ave./Clinton St.	b	10.1	0.08	d	27.1	0.46	N/A	N/A	N/A
12.	Beekman Ave./Hudson St.	a	7.6	0.04	a	8.6	0.12	N/A	N/A	N/A
13.	US Route 9/Wildey St. (Tarrytown)	B	17.0	0.65	B	17.4	0.65	N/A	N/A	N/A
14.	US Route 9/Central Ave. (Tarrytown)	e	42.6	0.55	e	42.6	0.55	N/A	N/A	N/A
15.	Neperan Rd./County House Rd. (Tarrytown)	d	28.1	N/A	d	30.6	N/A	N/A	N/A	N/A

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	E	66.8	1.11	F	98.9	1.25	D	42.2	0.91
17.	Main St./Washington St. (Tarrytown)	B	13.5	0.47	B	14.0	0.52	N/A	N/A	N/A
18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	D	44.2	0.49	F	203.5	0.80	C	30.1	0.80
19.	West Franklin St./Riverview Ave. (Tarrytown)	c	16.6	0.24	d	29.1	0.42	N/A	N/A	N/A
20A.	US Route 9/West Franklin St. (Tarrytown)	f	142.9	1.18	f	417.2	1.84	D	36.8	N/A
20B.	US Route 9/East Franklin St. (Tarrytown)	e	37.0	0.24	f	61.6	0.37	B	15.4	0.97
21.	US Route 9/Benedict Ave. (Tarrytown)	D	50.7	1.68	E	76.1	1.75	B	19.0	0.75
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	C	26.4	0.76	C	26.3	0.77	B	15.6	0.77
23.	US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)	B	18.0	N/A	b	19.9	N/A	N/A	N/A	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	C	24.3	0.72	D	43.6	0.87	C	23.3	0.75
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	C	31.1	0.00	D	35.8	0.00	C	29.0	0.00
26.	River St./Ichabod's Landing Driveway	N/A	N/A	N/A	a	9.0	N/A	N/A	N/A	N/A
27.	Beekman Ave./Beekman Ave. Ext./River Street	N/A	N/A	N/A	b	13.7	0.37	N/A	N/A	N/A
28.	River St./Proposed Cinema Driveway	a	9.9	0.05	b	11.0	0.04	N/A	N/A	N/A
29.	Beekman Ave. Ext./Internal Site Road	N/A	N/A	N/A	b	10.7	N/A	N/A	N/A	N/A
30.	River St. Ext./Internal Site Road	N/A	N/A	N/A	a	8.7	N/A	N/A	N/A	N/A
31.	Beekman Ave./Viaduct Driveway	N/A	N/A	N/A	c	17.7	0.40	N/A	N/A	N/A

- Note: (1) Signalized intersections represented by upper case letters.
(2) Unsignalized intersections represented by lower case letters.
(3) Delay is in seconds per vehicle.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

- (4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
- (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
- (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
- (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

TABLE NO. 6-7 PEAK SATURDAY HOUR LEVEL OF SERVICE SUMMARY FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)										
Intersection		No-Build			Build			Build w/Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	13.3	0.45	B	14.0	0.55	N/A	N/A	N/A
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	C	20.9	N/A	D	48.6	N/A	C	20.7	N/A
3.	Pocantico St./Continental St.	b	10.8	0.02	b	12.5	0.02	N/A	N/A	N/A
4.	US Route 9/Lawrence Ave.	d	34.5	0.28	e	42.5	0.40	N/A	N/A	N/A
5.	US Route 9/Bedford Rd./New Broadway	C	32.8	0.61	D	37.5	0.71	N/A	N/A	N/A
6.	US Route 9/Beekman Ave./Hudson Terrace	E	62.5	0.66	E	73.9	0.75	D	35.9	0.63
7.	Beekman Ave./Lawrence Ave.	b	13.7	0.19	c	15.6	0.25	N/A	N/A	N/A
8.	Beekman Ave./Washington St.	B	18.6	0.55	C	23.0	0.65	N/A	N/A	N/A
9.	Beekman Ave./Pocantico St.	b	12.3	N/A	f	59.9	N/A	c	18.0	N/A
10.	Beekman Ave./Cortland St.	b	13.6	0.37	c	19.2	N/A	N/A	N/A	N/A
11.	Beekman Ave./Clinton St.	b	12.5	N/A	d	29.5	0.51	N/A	N/A	N/A
12.	Beekman Ave./Hudson St.	a	7.5	0.02	a	8.6	0.05	N/A	N/A	N/A
13.	US Route 9/Wildey St. (Tarrytown)	B	11.0	0.58	B	11.3	0.60	N/A	N/A	N/A
14.	US Route 9/Central Ave. (Tarrytown)	e	48.7	0.54	e	48.7	0.54	N/A	N/A	N/A

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

15.	Neperan Rd./County House Rd. (Tarrytown)	a	9.4	N/A	a	9.7	N/A	N/A	N/A	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	E	69.8	1.06	F	117.7	1.28	D	38.7	1.04
17.	Main St./Washington St. (Tarrytown)	B	15.2	0.55	B	16.2	0.62	N/A	N/A	N/A
18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	B	13.3	0.28	F	104.8	0.63	B	15.9	0.63
19.	West Franklin St./Riverview Ave. (Tarrytown)	b	12.7	0.15	c	21.1	0.32	N/A	N/A	N/A
20A.	US Route 9/West Franklin St. (Tarrytown)	f	81.6	0.99	f	327.9	1.63	C	28.5	N/A
20B.	US Route 9/East Franklin St. (Tarrytown)	c	25.0	0.10	e	37.3	0.18	A	8.1	0.86
21.	US Route 9/Benedict Ave. (Tarrytown)	C	27.2	0.73	E	61.9	1.11	B	18.9	0.78
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	A	8.5	0.41	A	8.5	0.42	N/A	N/A	N/A
23.	US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)	b	14.4	N/A	b	16.2	N/A	N/A	N/A	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	C	20.7	0.65	C	33.3	0.82	C	22.2	0.72
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	C	21.0	N/A	C	21.9	0.00	N/A	N/A	N/A
26.	River St./Ichabod's Landing Driveway	N/A	N/A	N/A	a	9.5	N/A	N/A	N/A	N/A
27.	Beekman Ave./Beekman Ave. Ext./River Street	N/A	N/A	N/A	c	17.0	0.54	N/A	N/A	N/A
28.	River St./Proposed Cinema Driveway	a	9.8	0.05	b	11.3	0.04	N/A	N/A	N/A
29.	Beekman Ave. Ext./Internal Site Road	N/A	N/A	N/A	b	13.3	N/A	N/A	N/A	N/A
30.	River St. Ext./Internal Site Road	N/A	N/A	N/A	a	8.7	N/A	N/A	N/A	N/A
31.	Beekman Ave./Viaduct Driveway	N/A	N/A	N/A	b	14.2	0.08	N/A	N/A	N/A

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

- Note:
- (1) Signalized intersections represented by upper case letters.
 - (2) Unsignalized intersections represented by lower case letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
 - (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

As illustrated in the above Tables, some intersections will experience impacts as a result of the proposed project (i.e., in the Build Condition). As explained earlier, these predicted impacts are very conservative as they assume no measures would be implemented to mitigate the traffic impacts of the other projects that are accounted for in the No-Build Condition – an unlikely scenario. Based upon this conservative approach, mitigation measures have been identified for certain of the locations impacted by the Lighthouse Landing Project and the other area projects, and are described in detail in Section 4. The mitigation measures, if implemented, will significantly improve the overall operation at many of the intersections. Some locations will continue to operate at similar conditions than would occur without the project (i.e., in the No-Build Condition).

Parking Utilization Study

Commuter Parking

As described in the DEIS, there are approximately 125 permit parking spaces at the Philipse Manor train station, regulated by the Village of Sleepy Hollow and the Philipse Manor Improvement Association. There are approximately 900 parking spaces (permit and metered), regulated by the Village of Tarrytown, at the Tarrytown train station.

If the new train station at the Site is constructed, a 550-space commuter parking lot would be constructed on the East Parcel, as requested by the Village. The DEIS had analyzed a 400-space lot. An on-Site shuttle system would be provided for residents who choose not to walk to the station. Therefore, project residents would not be expected to utilize the new parking lot.

If a station is not constructed, as described in Section 5, shuttles will be provided to the Tarrytown and/or the Philipse Manor stations, and therefore, the project would not significantly increase demand for commuter parking at these existing train stations.

Downtown Parking

A detailed downtown parking utilization study was previously contained in the DEIS. As described in the DEIS, although some of the existing parking spaces are somewhat distant from the desired destination, the existing parking utilization study indicates that there is available on-street, as well as off-street parking spaces in the study area throughout the day.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

Some of the traffic improvements suggested as potential mitigation (as described in Section 4) would, if implemented, result in the loss of some existing on-street parking along Beekman Avenue and US Route 9. These improvements are generally suggested both without and with the Project to improve the traffic capacity at the intersections. The Tarrytown CBD Traffic and Parking Study performed by Adler Consulting indicated that similar improvements could be installed with minimal reductions in parking spaces. The parking spaces described in the DEIS accounted for full length tapers, which most likely can be reduced.

There is a remote possibility that the loss of parking could be limited to the peak periods, as done in other parts of the County, although this would need to be coordinated with the NYSDOT and the affected Village and would require additional signage and striping as well as modifications to proposed tapers.

The problem with on-street parking along primary thoroughfares is that it limits traffic flow by reducing roadway capacity and creates delays as vehicles enter/exit parking spaces. The proposed improvements will improve traffic flow along the corridor by increasing available roadway capacity at the identified locations, thus reducing vehicular delays. Although these improvements will eliminate some on-street parking, the improvements to the traffic operating conditions offset the minimal loss of parking. Additionally, the loss of some on-street parking will encourage more people to utilize the available off-street parking in the municipal lots, which is safer and more efficient.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

4. POTENTIAL MITIGATION MEASURES

A. Traffic Mitigation Measures

The project has been designed to limit its traffic impact on the adjacent roadway network. The mix of uses such as the residential and commercial components, including the grocery, will limit the number of external trips that will occur. The project has been designed to be pedestrian friendly and to encourage walking between the uses.

One important traffic mitigating factor is the proximity of the proposed project to available mass transit, especially to the Hudson Line of the Metro-North Railroad, which will take residents/employees of the proposed project directly to/from Manhattan and other points along the rail line. Subject to Metro-North approval and the availability of sufficient public funding, a train station is proposed to be constructed on the project Site. Residents/employees of the proposed project will be able to walk or take a shuttle to/from the train station. A disadvantage of a new train station is that it will draw additional non-project traffic to the roads surrounding the Site, which would not occur if the train station is not built. The provision of commuter parking along with the station increases the extent to which additional non-project traffic would travel local roadways to reach the station/parking lot: the larger the capacity of the parking lot, the greater the volume of additional non-project traffic that would be drawn. Section 5 describes the condition if the train station is not constructed. If a new train station is not constructed, there will be shuttles provided to/from the project site to the Philipse Manor train station and/or the Tarrytown train station, which would effectively eliminate external roadway vehicular trips between the project and the existing train stations by project residents.

Additionally, Westchester County Bee-Line Bus Service may be provided to the project Site.

The Beekman Avenue Bridge will be upgraded to current highway design loading either through public funding or by the Applicant if such funding is not available.

The Applicant is amenable to consider a transportation interface between the proposed shuttle service and a potential future inter-municipal trolley/jitney loop route to travel between the Project and the downtown portions of the Villages. The Applicant is also amenable to considering a fair share for traffic calming measures in the Miller Park area.

The Applicant is also amenable to discussing with the Village a fair share of an emergency signal pre-emptive system. In addition, the New York State Department of Transportation could consider an emergency signal pre-emptive system in its long-range regional improvement plan.

As described earlier, in downtown areas similar to the study area, Level of Service E is generally the limit of acceptable delay due to the traffic volumes and the closely spaced intersections. However, during Peak Hour conditions in these type areas, some individual movements or intersections will tend to operate at Level of Service F, but then operate at better Levels of Service during the remainder of the day.

Based upon the capacity analyses conducted for each study location, the following improvements are suggested to improve future operating conditions on the area roadway network, consistent with the DEIS. Potential for physical improvements are limited due to existing rights-of-way and building locations. Many of these potential improvements are recommended based upon not only the Lighthouse Landing project impacts, but also based upon existing conditions and/or anticipated traffic impacts as a result of either background growth or other proposed (such as Ferry Landings) or approved developments. At

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

some locations, poor Levels of Service are projected to occur even without the project, if no improvements are constructed. Consistent with the DEIS, the Applicant would contribute its fair share to the costs of the improvements that are suggested to mitigate conditions projected to occur even in the absence of the project.

The following intersections, discussed in detail below, were determined in the DEIS to service significant amounts of background or adjacent development traffic (including Ferry Landings) and would be impacted even in the absence of the project (listed by their DEIS reference number):

1. US Route 9 at Pocantico Street/Old Broadway
2. US Route 9 at Lawrence Avenue
3. US Route 9 at New Broadway/Bedford Road/Beekman Avenue/Hudson Terrace
6. Neperan Road at County House Road
7. US Route 9 at Main Street/Neperan Road
8. Main Street at Cortlandt Street/Depot Plaza/H-Bridge
9. West Franklin Street at Riverview Avenue
10. US Route 9 at Franklin Street
11. US Route 9 at Benedict Avenue
12. US Route 9 at NY Route 119
13. US Route 9 at I-287/I-87 Eastbound Ramps/Hotel Driveway

The following is a summary of the potential mitigation for the individual intersections in the study area:

1. US Route 9 at Pocantico Street/Old Broadway

In order to accommodate the future traffic volumes at this location, slight signal timing modifications are recommended for the Peak AM, Peak PM and Peak Saturday Hours. With these signal timing modifications, the location will operate at acceptable Levels of Service.

2. US Route 9 at Lawrence Avenue

The Lawrence Avenue approach will operate at appropriate Levels of Service, after accounting for the reduced background traffic as well as the reduced density of the retail and commercial portions of the Project. Therefore, no improvements are now recommended at this location.

3. US Route 9 at New Broadway/Bedford Road/Beekman Avenue/Hudson Terrace

These two directly-coordinated signalized intersections will operate at poor Levels of Service with or without the proposed Project due to existing conditions as well as background growth and adjacent developments. Additionally, due to the offset nature and direct coordination of these signals, a large number of signal phases are needed, thus resulting in significant red time for each movement. One improvement that could be implemented is to provide a northbound left-turn lane at the intersection of US Route 9 and Beekman Avenue/Hudson Terrace. This left-turn lane could be provided through re-striping and the elimination of some on-street parking spaces (possibly 7 to 10 metered spaces if full length tapers are utilized; however these could possibly be reduced) along northbound US Route 9. This improvement was shown conceptually on Figure No. III.I-34 in the DEIS. The possible elimination of on-street parking was previously discussed in the DEIS.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

Another potential form of mitigation for this location that could be considered in the future would be to make New Broadway and Hudson Terrace one-way roadways (away from the intersection), thus eliminating this signal phase and reducing the red time for the other more critical movements at this location. The existing movements from New Broadway and Hudson Terrace can be re-routed to Bedford Road and performed on that approach. This is analyzed in Section 10 below. This improvement is not recommended at this time due to the diversions that would need to occur.

4. Beekman Avenue at Washington Street

A slight signal timing/phasing modification was previously recommended in the DEIS. However, the intersection will operate at appropriate Levels of Service, after accounting for the reduced background traffic as well as the reduced density of the retail and commercial portions of the Project. Therefore, no improvements are recommended at this location.

5. Beekman Avenue at Pocantico Street

The installation of a traffic signal and an eastbound left-turn lane along Beekman Avenue could be provided through re-striping and the elimination of some on-street parking spaces along eastbound Beekman Avenue. was previously recommended in the DEIS. These improvements were shown conceptually on Figure No. III.I-35 in the DEIS. However, the intersection will operate at appropriate Levels of Service, after accounting for the reduced background traffic as well as the reduced density of the retail and commercial portions of the Project, with only the left turn modification. The traffic signal is no longer recommended. The potential elimination of on-street parking (possibly 10 to 16 metered spaces if full length tapers are utilized; however these could possibly be reduced) was previously discussed in the “Parking Utilization Study” section of the DEIS. With the proposed improvements, this location will operate at an acceptable Overall Level of Service “c” during all three Peak Hours.

6. Neperan Road at County House Road

A traffic signal was previously recommended for this location in the DEIS. The intersection will operate at appropriate Levels of Service, after accounting for the reduced background traffic as well as the reduced density of the retail and commercial portions of the Project. Therefore, no improvements are now recommended at this location.

7. US Route 9 at Main Street/Neperan Road

In order to accommodate the future traffic volumes at this location, the installation of northbound and southbound left-turn lanes along the US Route 9 approaches is suggested, as per the DEIS. Additionally, signal timing/phasing modifications will be needed in order to provide a northbound left-turn lag phase. The left-turn lanes could be provided via re-striping and the elimination of some on-street parking spaces along Route 9 (possibly 8 to 15 metered spaces if full length tapers are utilized; however, these can possibly be reduced as the Tarrytown CBD Traffic and Parking Study shows minimal parking spaces to be eliminated for a similar improvement). These improvements were shown conceptually on Figure No. III.I-36 in the DEIS and are recommended without and with the Project. With the identified improvements, this location will operate at better overall Levels of Service than the 2012 No-Build conditions during all three Peak Hours. The potential elimination of on-street parking was previously discussed in the “Parking Utilization Study” section in the DEIS.

8. Main Street at Cortland Street/Depot Plaza/H-Bridge

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

Consistent with the DEIS, in order to accommodate the future traffic volumes at this location, slight signal timing modifications are required with or without the project. With the proposed signal timing modifications, this location will continue to operate at an overall good Level of Service.

9. West Franklin Street at Riverview Avenue

The northbound Riverview Avenue approach at this location will operate at appropriate Levels of Service, after accounting for the reduced background traffic as well as the reduced density of the retail and commercial portions of the Project. Therefore, no improvements are now recommended at this location.

10. US Route 9 at Franklin Street

This location currently operates at poor Levels of Service due to the utilization of West Franklin Street as the main thoroughfare for traffic traveling to and from the Tarrytown train station originating from US Route 9 to the south. Currently, a police officer is stationed at this intersection to direct traffic during critical time periods. Based upon a Signal Warrant Analysis, this location currently meets signal warrants. The identified improvements for this location include the installation of a traffic signal, and the restriction of left turns from East Franklin Street (during all times), as well as providing a northbound left-turn lane through re-striping and the elimination of some on-street parking spaces along Route 9 (possibly approximately 16 to 20 unmarked, part-time parking spaces), depending upon the length of tapers; however, these can likely be significantly reduced as the Tarrytown CBD Traffic and Parking Study shows minimal parking spaces to be eliminated for a similar improvement) along northbound US Route 9. These improvements were shown conceptually on Figure No. III.I-37 in the DEIS. Similar improvements were recommended in the Ferry Landings DEIS and in the 1998 Tarrytown CBD Traffic and Parking Study. With these suggested improvements, this location will operate significantly better and safer than the 2012 No-Build Conditions during all three Peak Hours. The potential elimination of on-street parking was previously discussed in the “Parking Utilization Study” section in the DEIS.

11. US Route 9 at Benedict Avenue

Consistent with the DEIS, the re-striping of the northbound US Route 9 right-turn lane to a shared through/right-turn lane would accommodate the existing and future traffic volumes at this location. Additionally, slight signal timing modifications should be implemented. These improvements were shown conceptually on Figure No. III.I-37 in the DEIS. With the proposed improvements, this location will operate at a good overall Level of Service during all three Peak Hours. Additionally, the location will operate at better overall Levels of Service than the 2012 No-Build Conditions during all three Peak Hours. The re-striping may require the elimination of some minimal on-street parking (possibly one to three spaces although no parking spaces are delineated at this location), which was previously discussed in the “Parking Utilization Study” section in the DEIS.

12. US Route 9 at NY Route 119

In order to accommodate the future traffic volumes at this location, the right-most left-turn lane on the westbound NY Route 119 approach should be re-striping to a shared left-turn/right-turn lane. In addition to these geometric improvements, slight signal timing modifications should be implemented. These improvements were shown conceptually on Figure No. III.I-38 in the DEIS. With these proposed improvements, this location will operate at an acceptable overall Level of Service “C” during all three Peak Hours.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

13. US Route 9 at I-287/I-87 Eastbound Ramps/Hotel Driveway

In order to accommodate the future traffic volumes at this location, slight signal timing modifications should be implemented during both the Peak AM and Peak PM Hours. With these improvements, the intersection will continue to operate at essentially the same overall Levels of Service as the No-Build Conditions.

All of the Site driveways (see FEIS Alternative Plan) will be able to operate under STOP sign control and will operate at good Levels of Service.

These suggested improvements will improve traffic flow in the corridor and would help keep traffic out of the adjacent neighborhoods. Some of the improvements are similar to improvements recommended in other previous traffic studies. It should be noted that the identified improvements are only conceptual. Detailed design plans and survey will be prepared for these improvements during the site development plan approval process. The improvements would require a collaborative effort with the NYSDOT, the affected Village(s) and sometimes other developers. The NYSDOT, Rockland County, Westchester County and the affected Villages should also consider regional improvements to improve traffic flow. Some of these are being considered in conjunction with the analysis of the Tappan Zee Bridge, including the potential for mass transit access from Rockland County. The on-going improvements on I-87/I-287 will also improve traffic flow in the area. Other regional improvements, including the Route 9A Bypass and the Route 9A direct connection to the Taconic State Parkway southbound will also improve traffic operating conditions in the area. However, to be conservative, this study does not reduce any traffic volumes to account for these regional improvements which will improve local traffic conditions. The formation of a transportation improvement district to coordinate inter-municipal improvements has been suggested. The creation of such a district would be a government initiative.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

5. ALTERNATIVE DESIGN WITHOUT TRAIN STATION

A. Project without Train Station On-Site

Since discussions are still ongoing, an alternative analysis has been performed in the event that the Metro-North Railroad Station/commuter parking lot is not constructed at the project Site. If a new train station/commuter parking lot is not constructed, the additional non-project traffic from Rockland County and the trips diverted from the existing Tarrytown, Philipse Manor, and Scarborough train stations will remain at their current locations. The Philipse Manor train station is 0.6 miles north of the center of the proposed project, while the Tarrytown train station is 0.7 miles south of the center of the proposed project, which are walkable distances. However, as described below, a shuttle service would be provided to/from the project Site and the Tarrytown and/or Philipse Manor train stations.

B. 2012 Build Conditions without Train Station

Under the Build Condition without the new train station, the trips to the train station commuter lot previously described were removed from the Build Traffic Volumes. If a train station is not provided at the Site, a shuttle service to the Philipse Manor train station and/or the Tarrytown train station will be provided, effectively eliminating any external roadway vehicular trips to/from the project and the existing train stations. However, to be conservative, and in response to comments, the transit credit was reduced from 40% of the residential peak hour trips as utilized in the DEIS to 35%, with the other 5% driving to and from the Tarrytown train station. FEIS Section II.L has a further discussion of shuttle bus operations without the train station. There may also be some people dropped off/picked up at the Tarrytown train station via residents of the project who are passing by the station en route to another location. This is accounted for in the residential trip assignment. Under this scenario, the DPW facility and the park uses will still have access from both Beekman Avenue and Continental Street. The 2012 Build Traffic Volumes without Train Station are shown on Figure No. 6-42.

Capacity analyses were performed at the key locations for the three Peak Hours for the 2012 Build Condition without Train Station. Tables 6-8 through 6-10 illustrate the results of the Build Condition without the Train Station (with and without the suggested mitigation improvements) compared with the 2012 No-Build Conditions for the Levels of Service for each overall intersection. Detailed Levels of Service for each individual lane group for each intersection are shown on Table No. 6A-7 contained in Attachment 2.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

TABLE NO. 6-8 PEAK AM HOUR LEVEL OF SERVICE SUMMARY FUTURE CONDITIONS WITH THE PROJECT (BUILD – NO STATION ALTERNATIVE)										
Intersection		No-Build			Build			Build w/Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	14.2	0.48	B	14.7	0.55	N/A	N/A	N/A
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	D	36.7	N/A	D	65.4	N/A	C	31.8	N/A
3.	Pocantico St./Continental St.	b	10.2	0.01	b	10.9	0.01	N/A	N/A	N/A
4.	US Route 9/Lawrence Ave.	e	46.1	.37	f	61.5	0.52	N/A	N/A	N/A
5.	US Route 9/Bedford Rd./New Broadway	D	39.1	0.72	D	43.1	0.79	N/A	N/A	N/A
6.	US Route 9/Beekman Ave./Hudson Terrace	E	61.5	.70	E	72.4	0.75	D	47.3	0.69
7.	Beekman Ave./Lawrence Ave.	b	12.4	0.19	b	13.4	0.23	N/A	N/A	N/A
8.	Beekman Ave./Washington St.	B	17.4	0.49	B	18.7	0.55	N/A	N/A	N/A
9.	Beekman Ave./Pocantico St.	b	12.3	N/A	d	25.1	N/A	b	12.9	N/A
10.	Beekman Ave./Cortland St.	b	13.3	.36	c	16.9	N/A	N/A	N/A	N/A
11.	Beekman Ave./Clinton St.	a	9.7	0.08	N/A	N/A	N/A	N/A	N/A	N/A
12.	Beekman Ave./Hudson St.	a	7.6	0.04	a	8.3	0.05	N/A	N/A	N/A
13.	US Route 9/Willey St. (Tarrytown)	B	10.1	0.64	B	10.2	0.65	N/A	N/A	N/A
14.	US Route 9/Central Ave. (Tarrytown)	c	23.3	0.31	c	23.3	0.31	N/A	N/A	N/A
15.	Neperan Rd./County House Rd. (Tarrytown)	d	26.9	N/A	d	30.02	N/A	N/A	N/A	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	C	29.8	0.82	D	35	0.90	C	25.7	0.74
17.	Main St./Washington St. (Tarrytown)	B	12.8	0.43	B	13	0.48	N/A	N/A	N/A

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	B	13.2	0.41	F	95.3	0.65	B	15.5	0.65
19.	West Franklin St./Riverview Ave. (Tarrytown)	c	15.4	0.30	c	24.0	0.46	N/A	N/A	N/A
20A.	US Route 9/West Franklin St. (Tarrytown)	f	95.9	1.05	N/A	N/A	N/A	C	29.0	N/A
20B.	US Route 9/East Franklin St. (Tarrytown)	c	18.8	0.10	N/A	N/A	N/A	A	5.3	0.84
21.	US Route 9/Benedict Ave. (Tarrytown)	C	20.8	0.66	D	37.5	0.84	B	16.1	0.77
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	C	20.1	0.55	B	19.9	0.55	B	11.9	0.54
23.	US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)	B	15.4	N/A	b	17.1	N/A	N/A	N/A	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	C	21.5	0.77	C	27.5	0.77	C	20.0	0.77
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	E	57.7	N/A	E	58.9	N/A	D	54.6	N/A
26.	River St./Ichabod's Landing Driveway	N/A	N/A	N/A	a	9.0	N/A	N/A	N/A	N/A
27.	Beekman Ave./Beekman Ave. Ext./River Street	a	9.9	0.08	b	12.6	0.37	N/A	N/A	N/A
28.	River St./Proposed Cinema Driveway	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29.	Beekman Ave. Ext./Internal Site Road	N/A	N/A	N/A	a	10	N/A	N/A	N/A	N/A
30.	River St. Ext./Internal Site Road	N/A	N/A	N/A	a	8.39	N/A	N/A	N/A	N/A
31.	Beekman Ave./Viaduct Driveway	N/A	N/A	N/A	b	11.4	N/A	N/A	N/A	N/A

- Note: (1) Signalized intersections represented by upper case letters.
(2) Unsignalized intersections represented by lower case letters.
(3) Delay is in seconds per vehicle.
(4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
(5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

- (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
- (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

TABLE NO. 6-9 PEAK PM HOUR LEVEL OF SERVICE SUMMARY FUTURE CONDITIONS WITH THE PROJECT (BUILD – NO STATION ALTERNATIVE)										
Intersection		No-Build			Build			Build w/Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	12.9	0.60	B	13.9	0.65	N/A	N/A	N/A
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	D	44.2	0.00	E	70.4	N/A	C	29.6	N/A
3.	Pocantico St./Continental St.	b	11.8	0.02	b	13.3	0.03	N/A	N/A	N/A
4.	US Route 9/Lawrence Ave.	f	55.4	0.50	f	69.4	0.61	N/A	N/A	N/A
5.	US Route 9/Bedford Rd./New Broadway	D	54.6	0.80	E	70.4	0.87	N/A	N/A	N/A
6.	US Route 9/Beekman Ave./Hudson Terrace	F	93.5	0.80	F	102.2	0.85	D	46.5	0.64
7.	Beekman Ave./Lawrence Ave.	b	13.0	0.18	b	14.4	0.22	N/A	N/A	N/A
8.	Beekman Ave./Washington St.	C	21.2	0.64	C	25.3	0.74	N/A	N/A	N/A
9.	Beekman Ave./Pocantico St.	c	18.9	N/A	f	60.66	N/A	c	20.3	N/A
10.	Beekman Ave./Cortland St.	c	17.3	N/A	d	25.8	N/A	N/A	N/A	N/A
11.	Beekman Ave./Clinton St.	b	10.1	0.08	c	22.6	0.4	N/A	N/A	N/A
12.	Beekman Ave./Hudson St.	a	7.6	0.04	a	8.3	0.06	N/A	N/A	N/A
13.	US Route 9/Willey St. (Tarrytown)	B	17.0	0.65	B	17.6	0.67	N/A	N/A	N/A
14.	US Route 9/Central Ave. (Tarrytown)	e	42.6	0.55	e	42.6	0.55	N/A	N/A	N/A
15.	Neperan Rd./County House Rd. (Tarrytown)	d	28.1	N/A	d	30.56	N/A	N/A	N/A	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	E	66.8	1.11	F	98.9	1.25	D	42.2	0.91
17.	Main St./Washington St. (Tarrytown)	B	13.5	0.47	B	14	0.52	N/A	N/A	N/A

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	D	44.2	0.49	F	137.3	0.76	B	20.0	0.76
19.	West Franklin St./Riverview Ave. (Tarrytown)	c	16.6	0.24	d	26.6	0.4	N/A	N/A	N/A
20A.	US Route 9/West Franklin St. (Tarrytown)	f	142.9	1.18	f	320.3	1.62	C	28.0	N/A
20B.	US Route 9/East Franklin St. (Tarrytown)	e	37.0	0.24	f	59.1	0.36	B	14.2	0.97
21.	US Route 9/Benedict Ave. (Tarrytown)	D	50.7	1.68	E	74.6	1.75	B	19.0	0.75
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	C	26.4	0.76	C	26.3	0.77	B	15.6	0.77
23.	US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)	b	18.0	N/A	b	19.3	N/A	N/A	N/A	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	C	24.3	0.72	D	43.6	0.87	C	23.3	0.75
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	C	31.1	0.00	D	35.8	N/A	C	29.0	N/A
26.	River St./Ichabod's Landing Driveway	N/A	N/A	N/A	a	9.57	N/A	N/A	N/A	N/A
27.	Beekman Ave./Beekman Ave. Ext./River Street	N/A	N/A	N/A	b	13.8	0.37	N/A	N/A	N/A
28.	River St./Proposed Cinema Driveway	N/A	N/A	N/A	b	11	0.04	N/A	N/A	N/A
29.	Beekman Ave. Ext./Internal Site Road	N/A	N/A	N/A	b	10.93	N/A	N/A	N/A	N/A
30.	River St. Ext./Internal Site Road	N/A	N/A	N/A	a	8.68	N/A	N/A	N/A	N/A
31.	Beekman Ave./Viaduct Driveway	N/A	N/A	N/A	b	12.1	N/A	N/A	N/A	N/A

- Note: (1) Signalized intersections represented by upper case letters.
(2) Unsignalized intersections represented by lower case letters.
(3) Delay is in seconds per vehicle.
(4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
(5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).

APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY

- (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
- (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

TABLE NO. 6-10 PEAK SATURDAY HOUR LEVEL OF SERVICE SUMMARY FUTURE CONDITIONS WITH THE PROJECT (BUILD – NO STATION ALTERNATIVE)										
Intersection		No-Build			Build			Build w/Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1.	US Route 9/Pierson Ave./Gordon Ave.	B	13.3	0.45	B	13.9	0.55	N/A	N/A	N/A
2.	US Route 9/Pocantico St./Old Broadway/Philipsburg Manor Driveway	C	20.9	0.00	D	47.4	N/A	C	20.5	N/A
3.	Pocantico St./Continental St.	b	10.8	0.02	b	12.4	0.02	N/A	N/A	N/A
4.	US Route 9/Lawrence Ave.	d	34.5	0.28	e	44.1	0.42	N/A	N/A	N/A
5.	US Route 9/Bedford Rd./New Broadway	C	32.8	0.61	D	37.5	0.71	N/A	N/A	N/A
6.	US Route 9/Beekman Ave./Hudson Terrace	E	62.5	0.66	E	72.2	0.74	D	37.4	0.63
7.	Beekman Ave./Lawrence Ave.	b	13.7	0.19	c	15.7	0.26	N/A	N/A	N/A
8.	Beekman Ave./Washington St.	B	18.6	0.55	C	23.4	0.67	N/A	N/A	N/A
9.	Beekman Ave./Pocantico St.	b	12.3	N/A	e	39.0	N/A	c	16.0	N/A
10.	Beekman Ave./Cortland St.	b	13.5	N/A	c	19.6	N/A	N/A	N/A	N/A
11.	Beekman Ave./Clinton St.	b	12.5	N/A	d	28.9	0.51	N/A	N/A	N/A
12.	Beekman Ave./Hudson St.	a	7.5	0.02	a	8.6	0.05	N/A	N/A	N/A
13.	US Route 9/Willey St. (Tarrytown)	B	11.0	0.58	B	11.3	0.60	N/A	N/A	N/A
14.	US Route 9/Central Ave. (Tarrytown)	e	48.7	0.54	e	48.7	0.54	N/A	N/A	N/A
15.	Neperan Rd./County House Rd. (Tarrytown)	a	9.4	N/A	a	9.6	N/A	N/A	N/A	N/A
16.	US Route 9/Main St./Neperan Rd. (Tarrytown)	E	69.8	1.06	F	114.8	1.27	D	43.0	0.92
17.	Main St./Washington St. (Tarrytown)	B	15.2	0.55	B	16.2	0.62	N/A	N/A	N/A

**APPENDIX 6 • ENVIRONMENTAL ANALYSES
TRAFFIC STUDY**

18.	H-Bridge/Main St./Cortland St./Depot Plaza (Tarrytown)	B	13.3	0.28	F	106.2	0.64	B	16.0	0.64
19.	West Franklin St./Riverview Ave. (Tarrytown)	b	12.7	0.15	c	20.8	0.32	N/A	N/A	N/A
20A.	US Route 9/West Franklin St. (Tarrytown)	f	81.6	0.99	f	320.2	1.62	C	29.9	N/A
20B.	US Route 9/East Franklin St. (Tarrytown)	C	25.0	0.10	N/A	N/A	N/A	A	7.9	0.86
21.	US Route 9/Benedict Ave. (Tarrytown)	C	27.2	0.73	E	60.5	1.11	B	18.7	0.77
22.	Benedict Ave./Highland Ave./Prospect Ave. (Tarrytown)	A	8.5	0.41	A	8.5	0.42	N/A	N/A	N/A
23.	US Route 9/I-87/I-287 Westbound On-Ramp (Tarrytown)	b	14.4	N/A	b	16.2	N/A	N/A	N/A	N/A
24.	US Route 9/NY Route 119 (Tarrytown)	C	20.7	0.65	C	33.3	0.82	C	22.1	0.72
25.	US Route 9/I-87/I-287 Eastbound Ramps (Tarrytown)	C	21.0	0.00	C	21.9	N/A	N/A	N/A	N/A
26.	River St./Ichabod's Landing Driveway	N/A	N/A	N/A	a	9.6	N/A	N/A	N/A	N/A
27.	Beekman Ave./Beekman Ave. Ext./River Street	N/A	N/A	N/A	c	17.0	0.54	N/A	N/A	N/A
28.	River St./Proposed Cinema Driveway	N/A	N/A	N/A	b	11.4	0.04	N/A	N/A	N/A
29.	Beekman Ave. Ext./Internal Site Road	N/A	N/A	N/A	b	13.5	N/A	N/A	N/A	N/A
30.	River St. Ext./Internal Site Road	N/A	N/A	N/A	a	8.7	N/A	N/A	N/A	N/A
31.	Beekman Ave./Viaduct Driveway	N/A	N/A	N/A	b	13.2	N/A	N/A	N/A	N/A

- Note: (1) Signalized intersections represented by upper case letters.
(2) Unsignalized intersections represented by lower case letters.
(3) Delay is in seconds per vehicle.
(4) Overall Level of Service/Delay/Volume to Capacity Ratios at two-way, STOP control intersections are based upon the critical approach. An overall approach Volume to Capacity Ratio is not provided for approaches with more than one lane.
(5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

- (6) Overall Volume to Capacity Ratio is not provided for all-way, STOP control intersections.
- (7) Due to program calculations, the overall Volume to Capacity Ratio is not provided for certain signalized intersections.

As illustrated in the above Tables, as well as the comparison table in Table No. 6A-8 in Attachment 2, in the absence of the new station/commuter parking lot, the intersections will generally operate at similar or better Levels of Service to the 2012 Build Condition with the new station/commuter parking lot. Additionally, similar roadway improvements identified earlier would also be suggested for this alternative, as most of the improvements are recommended with or without the Project.

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

6. DEIS/FEIS LEVEL OF SERVICE COMPARISON

As described earlier, the overall density of the Project has been reduced. However, the train station commuter lot has been requested to be increased from 400 parking spaces in the DEIS to 550 parking spaces in the FEIS. The background growth rate and the size of Ferry Landings has also changed from the DEIS to the FEIS. Table No. 6A-9 in Attachment 2 summarizes a comparison of the overall intersection Levels of Service both with and without the train station for the DEIS and the FEIS.

7. SENSITIVITY ANALYSIS

In response to comments received regarding the DEIS, additional analyses have been performed to review the sensitivity of various factors utilized in the trip generation calculations and volume projections. These adjusted traffic volumes were then analyzed at key intersections to determine if there would be any additional impact.

For the Sensitivity Analysis with the proposed train station, the percentage of Lighthouse Landing residents that would utilize the train was reduced from 40% to 30%. In addition, the amount of traffic traveling between the residential portion of the project and the retail portion of the project was reduced by 10%, from 45% to 35%. With these two modifications, revised traffic volumes were determined and capacity analyses were performed at the following key intersections:

1. Route 9 & Pocantico Street/Old Broadway/Phillipsburg Manor Driveway
2. Route 9/Bedford Road/New Broadway
3. Route 9/Beekman Avenue/Hudson Terrace
4. Route 9/West Franklin Street
5. Route 9/Route 119

Copies of the analyses are contained in Attachment 4. Review of the analyses indicates that with the traffic volume/distribution modifications, additional project traffic would travel through the intersections; however, the Levels of Service would remain essentially the same as with the FEIS analyses as illustrated on Table No. 6A-10 in Attachment 4.

8. COMPARISON WITH FEIS ALTERNATIVE PLAN WITH 400 SPACE COMMUTER LOT

If a train station was to be constructed under the DEIS Plan, it was to contain a 400 space parking lot. The Village has requested that there be a 550 space parking lot with the FEIS Alternative Plan. With the 550 space lot, additional trips would be generated to/from the commuter lot from outside of the area, as described earlier. Therefore, a Sensitivity Analyses was performed at some key locations to compare the impacts with the expanded lot. These are summarized in Table No. 6A-11 in Attachment 5. The analyses indicate that, as additional traffic is added, the delays will increase in comparison to a 400 space lot. The larger the lot becomes, the greater the impact.

9. TRAFFIC SIGNAL WARRANTS

In a response to a comment, Traffic Signal Warrants for potential future traffic signalization are included in Attachment 6. These Traffic Signal Warrants indicate that traffic signals will be warranted at the

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

intersection of Route 9 and West Franklin Street with or without the Project. The DEIS had previously recommended traffic signals at the intersections of Neperan Road at County House Road as well as Beekman Avenue and Pocantico Street. However, after accounting for the reduced background traffic as well as the reduced density of the retail and commercial portions of the Project, these signals are no longer recommended.

10. ONE-WAY ANALYSIS

In a response to comments, One-way Analyses were performed for a one-way couplet system with Main Street and West Franklin Street as well as for Hudson Street at Route 9.

The first One-way Analysis is of the potential couplet system with Main Street coming one way from Route 9 to the west and West Franklin Street coming one way eastbound towards Route 9. Volume projections were determined and capacity analyses were performed which indicate that to establish this one-way couplet system, significant traffic would have to divert and additional turn lanes would be required which would result in significant additional off-street parking being required to be eliminated to support the dual turn lanes. Thus, this is not currently recommended. Copies of the analyses and the Levels of Service summaries are contained in Attachment 7.

A potential long-range improvement to improve the intersection of Route 9 with Beekman Avenue is to convert Hudson Street to a one-way street eastbound from Route 9, as well as to convert New Broadway to a one-way street in the northbound direction. This would eliminate a traffic signal phase at the intersections of Route 9 with Beekman Avenue and Bedford Road. Converting Hudson Street and New Broadway to one-ways away from the intersections would improve the operation of the intersections and could be considered in the future. However, it is not currently recommended due to the diversions that would be necessary..

11. ROUTE 117/ROUTE 9 ANALYSIS

In response to a comment, traffic analyses have been performed for the intersection of Route 117 and Route 9 utilizing traffic volumes from the project, as well as from the Kendall on Hudson project and the Phelps Memorial Hospital Expansion project. These analyses, contained in Attachment 8, indicate that some delays are experienced for the left turns from the westbound ramp during the Peak Hours. The New York State Department of Transportation (NYSDOT) approved a Route 9 northbound right turn lane previously. The NYSDOT should monitor these intersections in the future to determine if signal warrants are met.

12. ADDITIONAL TARRYTOWN STUDY LOCATIONS

In response to comments, additional traffic counts and traffic analyses have been performed for nine other intersections in the Village of Tarrytown in addition to the thirteen Village of Tarrytown intersections analyzed in the DEIS. These additional intersections are:

1. US Route 9 & Park Avenue
2. US Route 9 & Independence Street
3. US Route 9 & Church Street
4. West Franklin Street & Washington Street
5. West Franklin Street & Miller Avenue

APPENDIX 6 • ENVIRONMENTAL ANALYSES TRAFFIC STUDY

6. US Route 9 & Prospect Avenue
7. Eastern H-Bridge Intersection
8. Western H-Bridge Intersection
9. H-Bridge & Cortland Street/Willey Street

Level of Service summaries for these locations are contained in Attachment 9. Some of these unsignalized intersections are currently operating at Level of Service e or f, particularly due to the delays experienced by vehicles turning left from the minor street during the peak hours. These turns are more easily made during other parts of the day or night. The unsignalized intersections along Route 9 will benefit from a proposed traffic signal at the intersection of Route 9 and West Franklin Street, which will provide additional gaps in the traffic stream. The proposed traffic signal and the potential traffic calming measures will limit the traffic in the Miller Park area.

At the H-Bridge intersections, the Ferry Landing DEIS recommended traffic signals. With these traffic signals and appropriate signal timing, good Levels of Service would be provided with the Project and Ferry Landings. If Ferry Landings is not constructed, the capacity analyses indicate that the traffic signals are not required.

The intersection of Route 9 and Prospect Avenue also experiences delays currently. Signal timing modifications are recommended. Improvements were previously proposed for this intersection in the 1998 Tarrytown CBD Traffic and Parking Study prepared by Adler Consulting. These should be considered by the Village and the New York State Department of Transportation.

13. SYNCHRO ANALYSIS

Synchro Analyses, in response to comments, were performed for the Route 9 Corridor. Synchro is a traffic analysis software which allows the input of some additional parameters beyond the Highway Capacity Software (HCS), such as actuated settings, signal coordination, and location of loop detectors. This software is used in conjunction with SimTraffic, which is a computer-animated simulation software. The simulation uses the information input in Synchro to illustrate the traffic conditions along the roadway network.

Synchro Analysis has been conducted for the Existing, No-Build and Build with Improvements (with and without the new Station) conditions for each peak hour. The analysis supports the findings of the HCS Analysis that the recommended improvements will provide an overall benefit to traffic operating conditions along the Route 9 Corridor. Furthermore, the analysis has been utilized to allow for time-based coordination at particular locations along the Corridor. This, in turn with the physical improvements, will allow the Route 9 Corridor to operate at generally the same or better overall Levels of Service than No-Build conditions.

The Synchro Analyses have been submitted to the Village's Traffic Consultant.

ATTACHMENT TABLE OF CONTENTS

Attachment 1
Figures

Attachment 2
Tables

Attachment 3
HCS Capacity Analyses

Attachment 4
Sensitivity Analyses

Attachment 5
FEIS Alternative Plan with 400 Space Lot Analysis

Attachment 6
Traffic Signal Warrants

Attachment 7
One Way Analyses

Attachment 8
Route 117/Route 9 Analyses

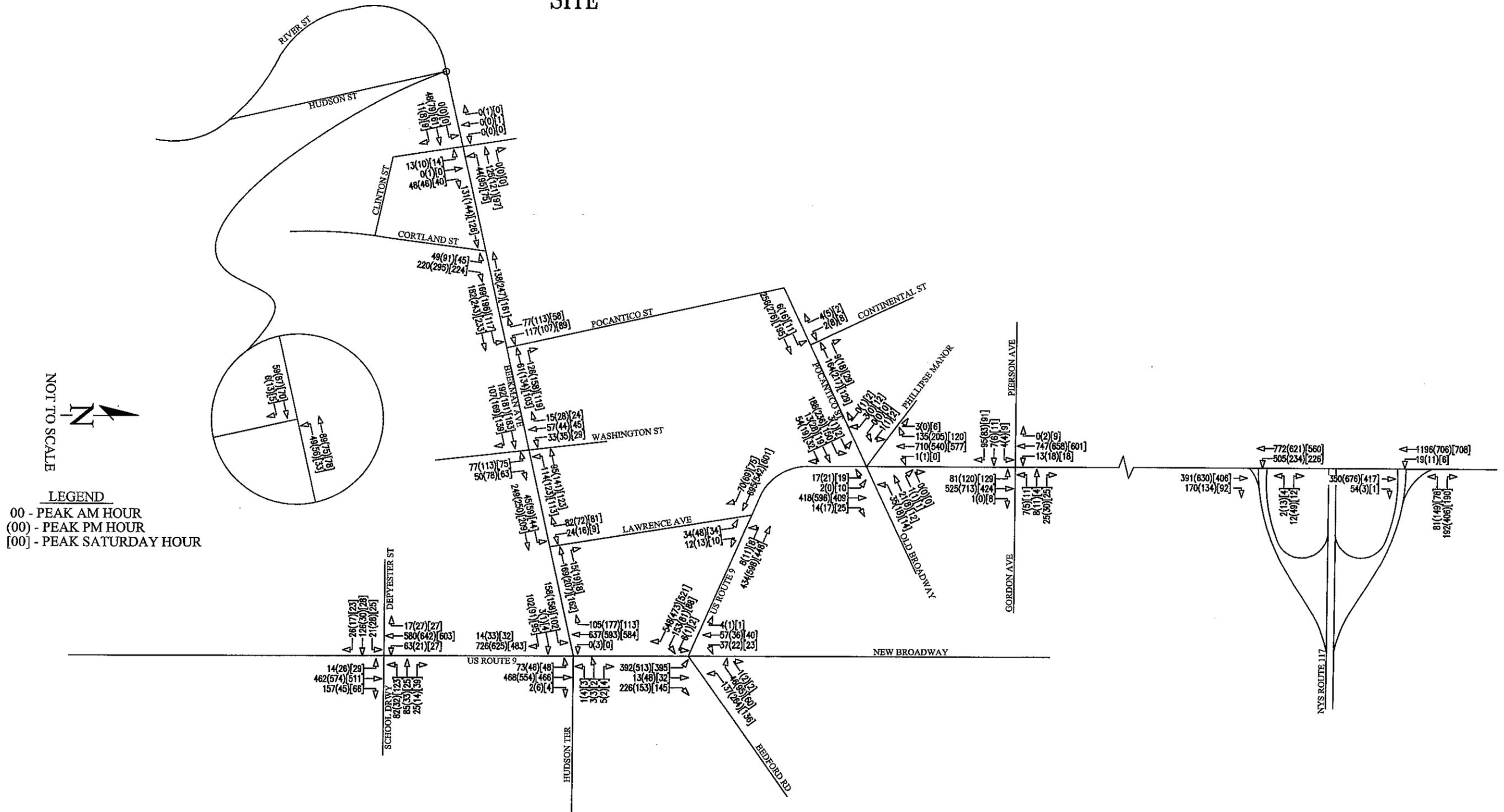
Attachment 9
Additional Tarrytown Locations

Attachment 10
Tarrytown CBD Traffic and Parking Study

ATTACHMENT 1

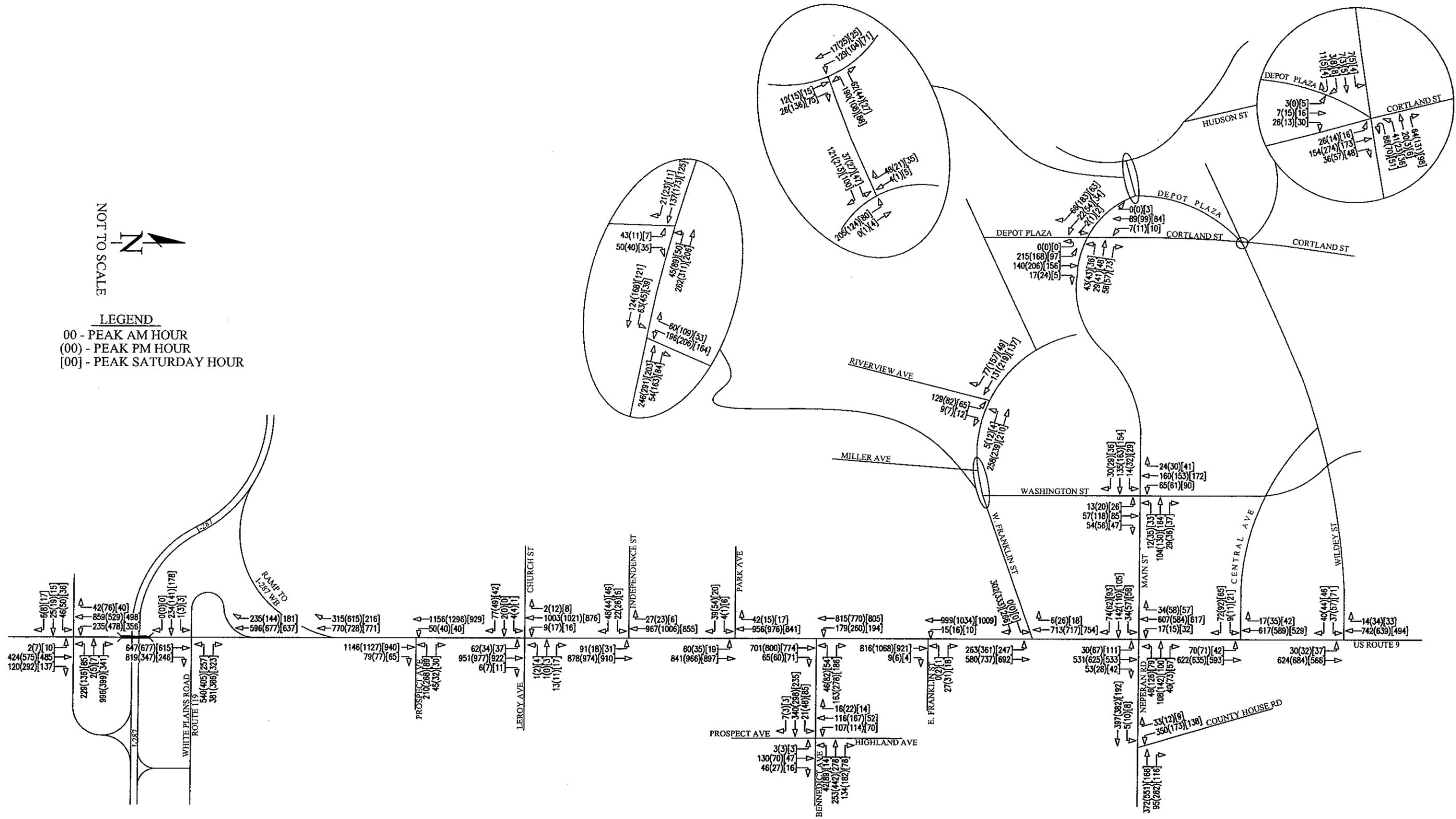
FIGURES

SITE

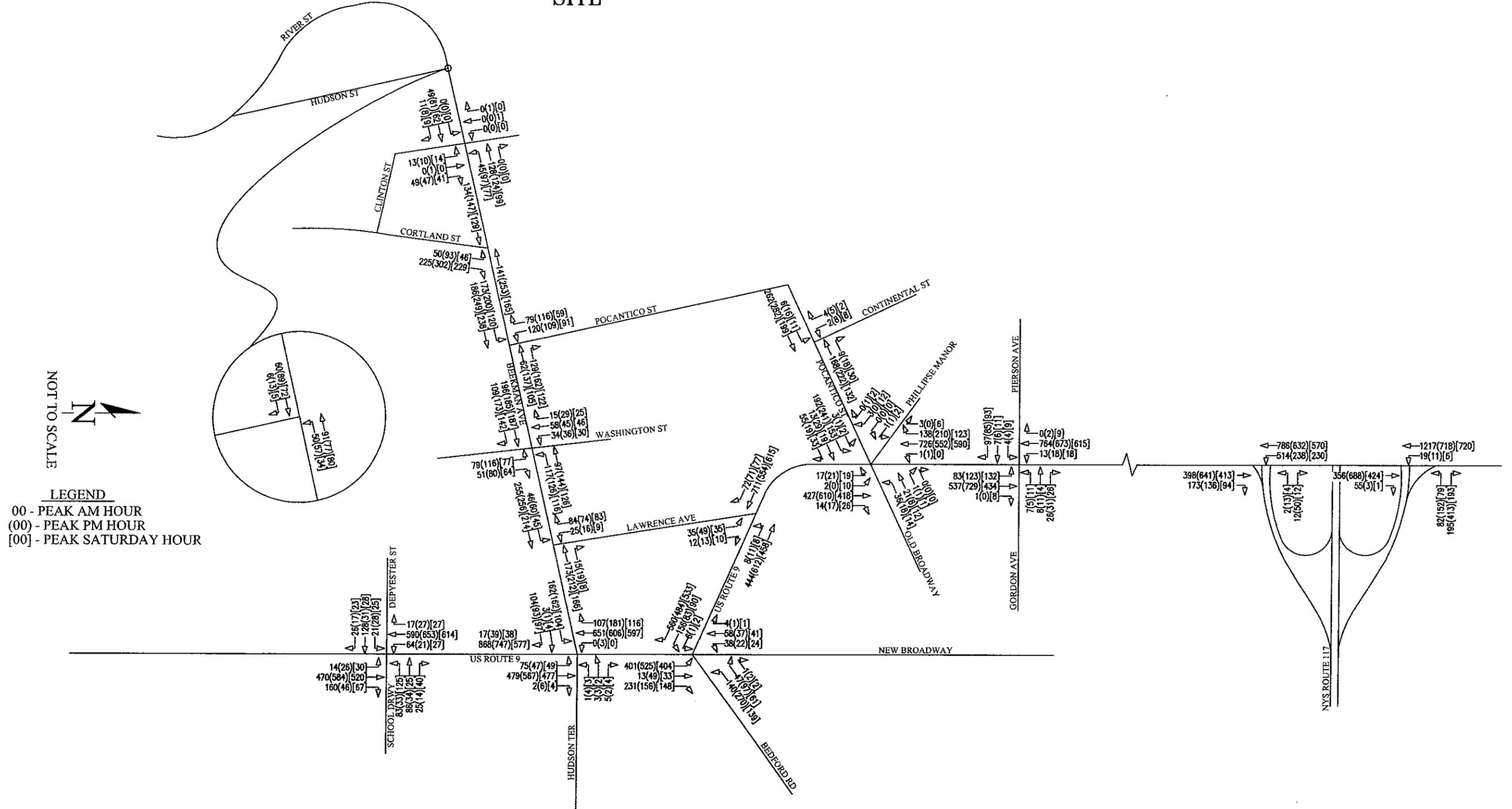




LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR



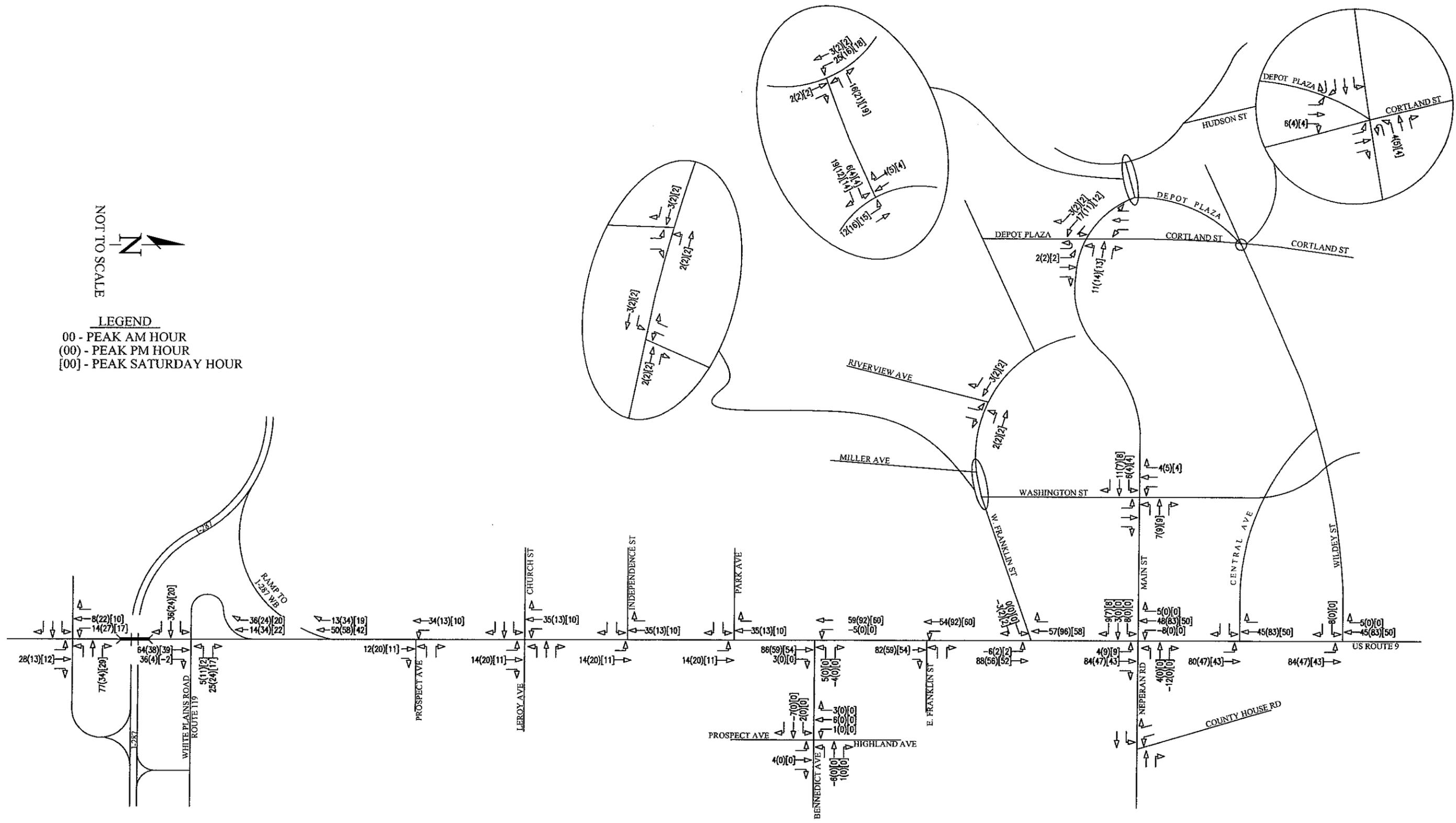
SITE



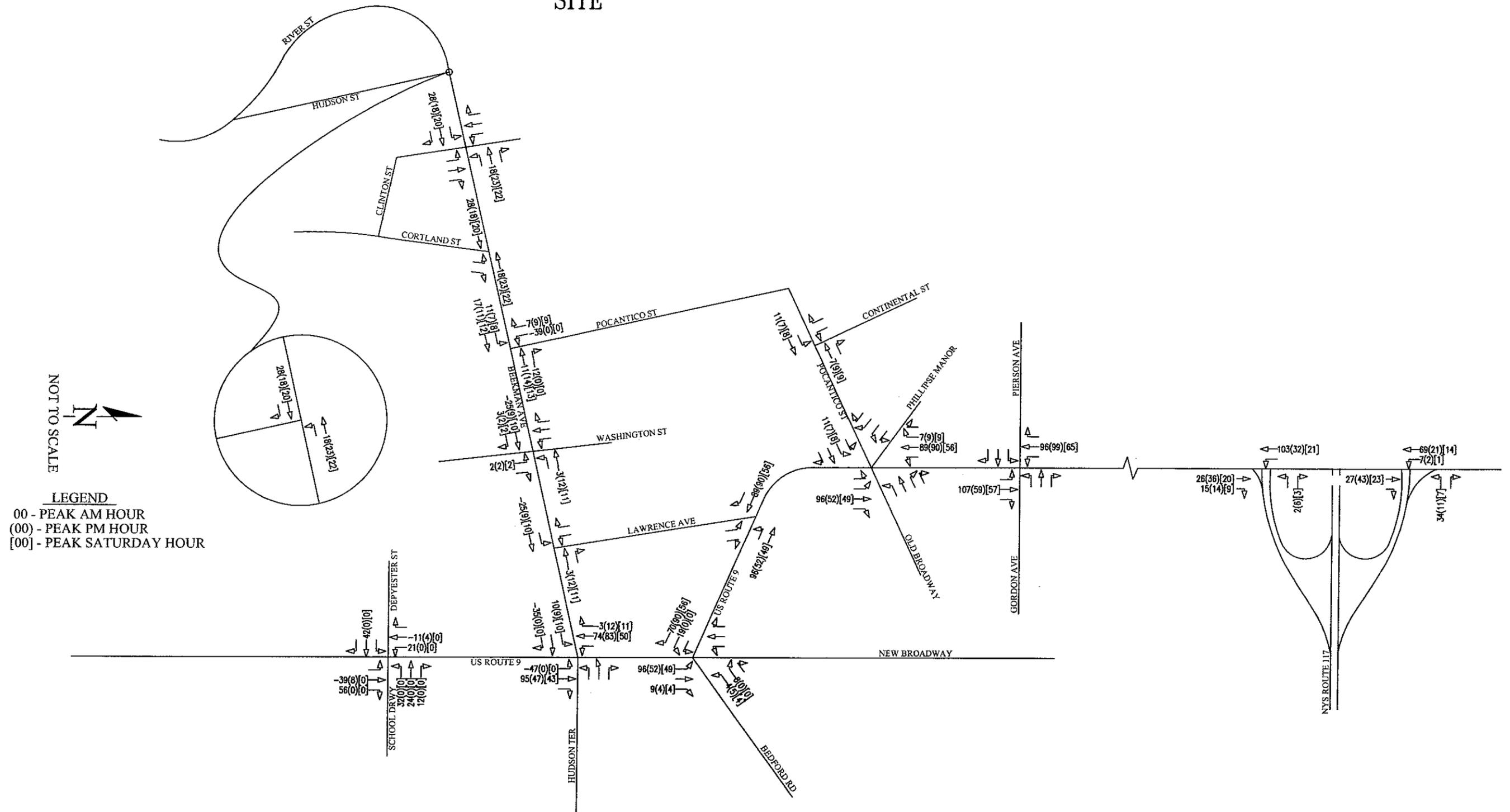
NOT TO SCALE



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR



SITE

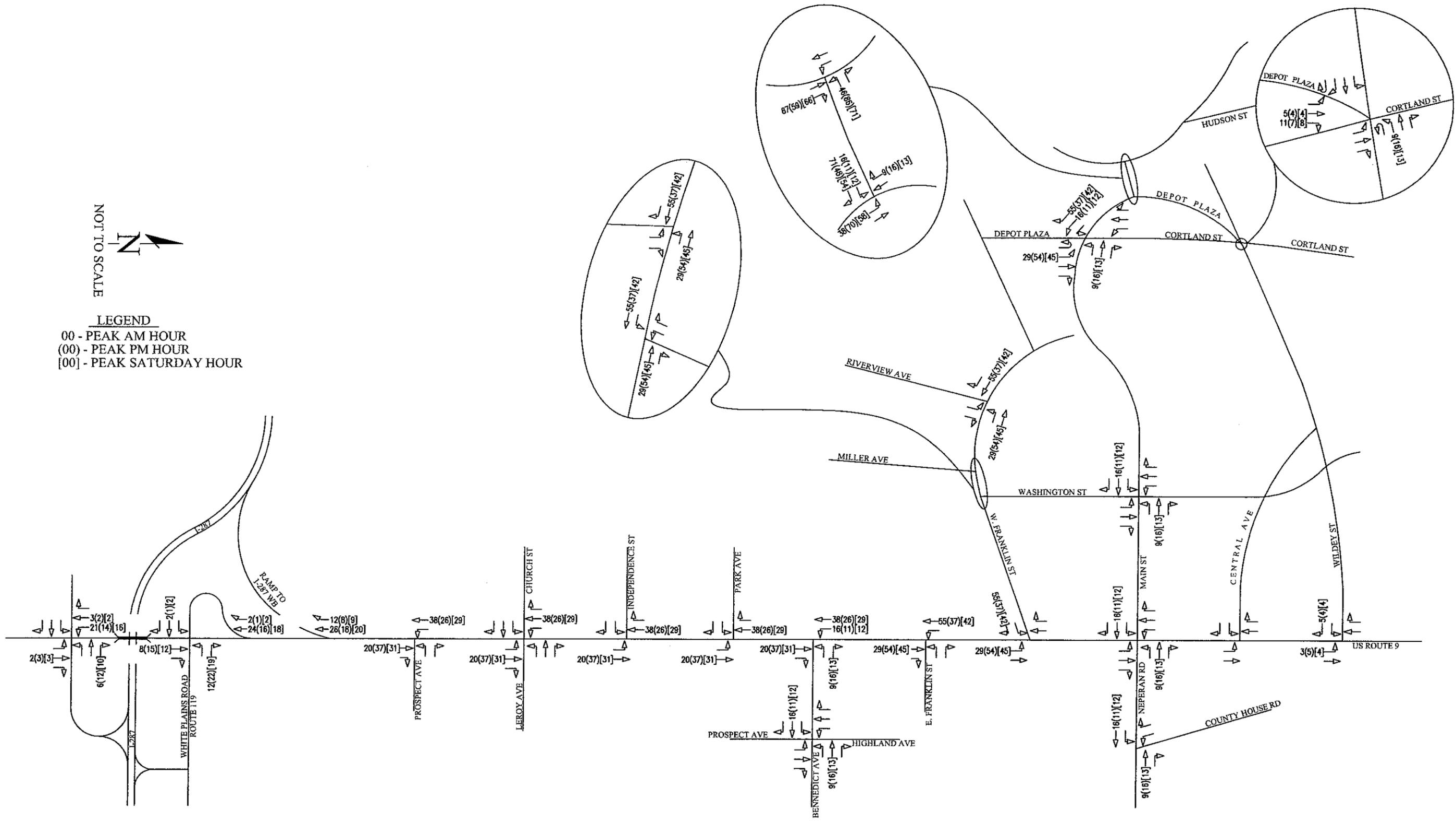


Adjacent Development Traffic Volumes
 (Without Ferry Landing)
 LIGHTHOUSE LANDING
 Sleepy Hollow, New York

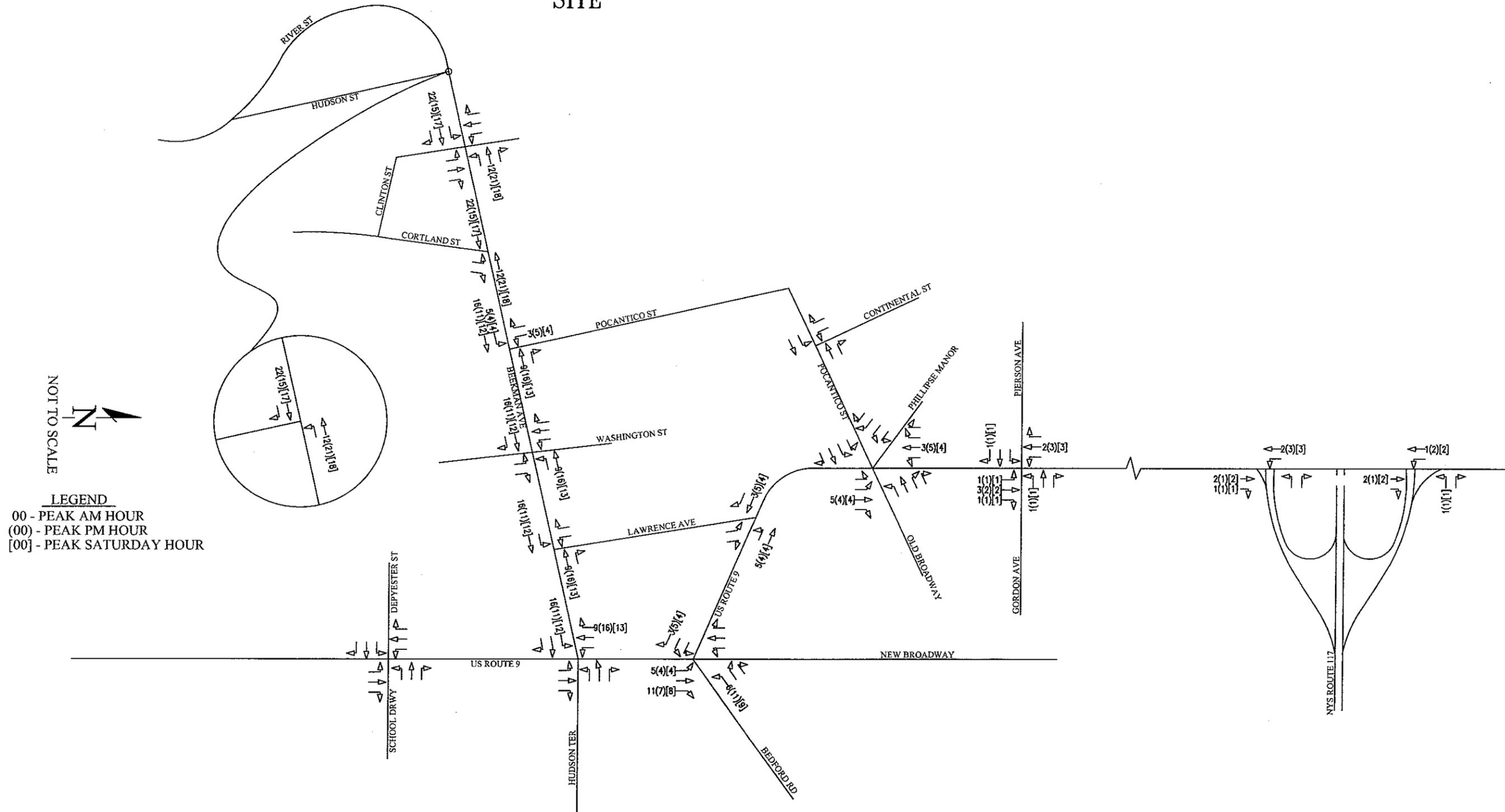
NOT TO SCALE

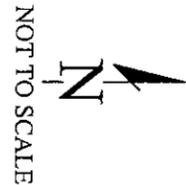


LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR

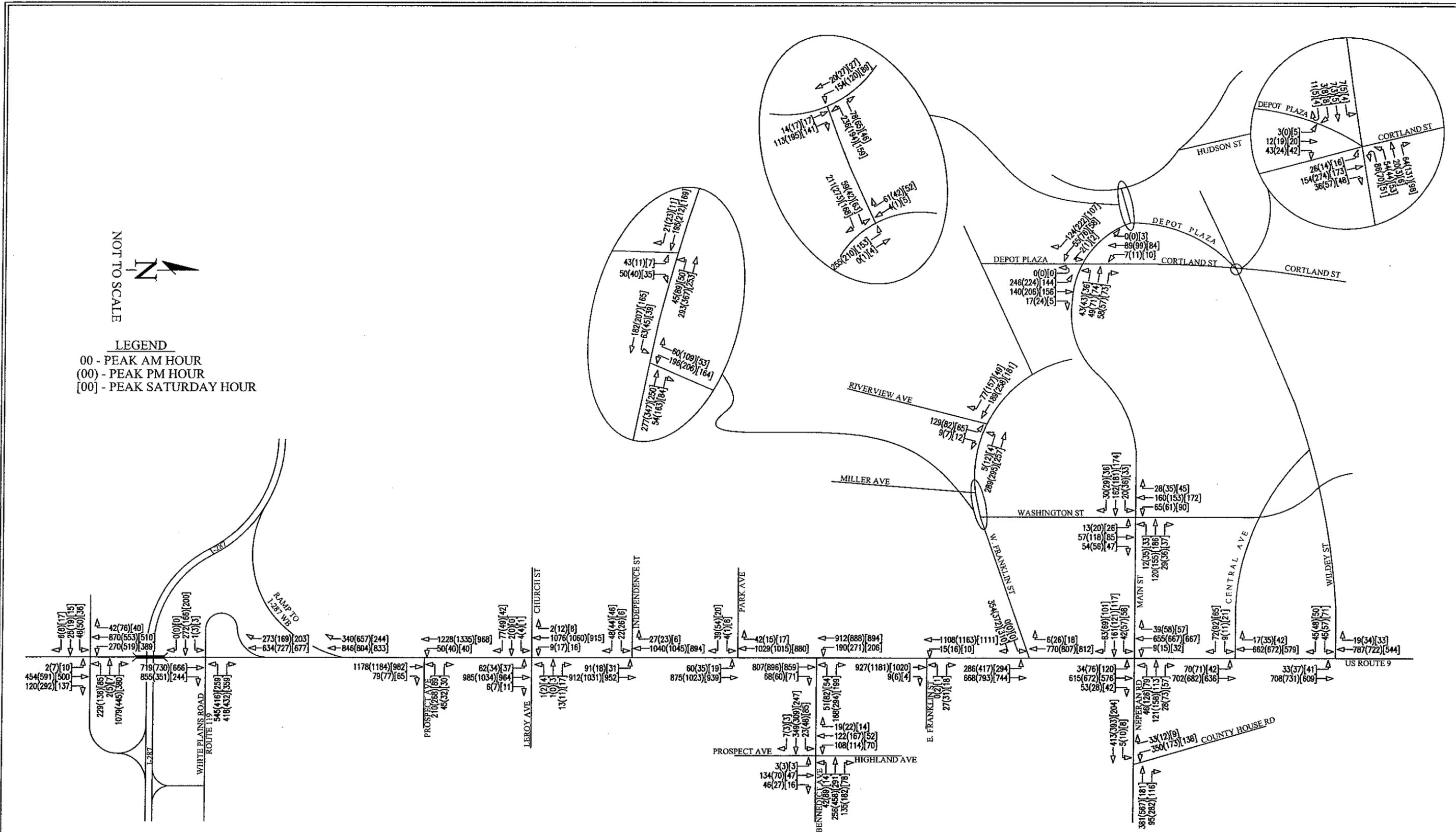


SITE

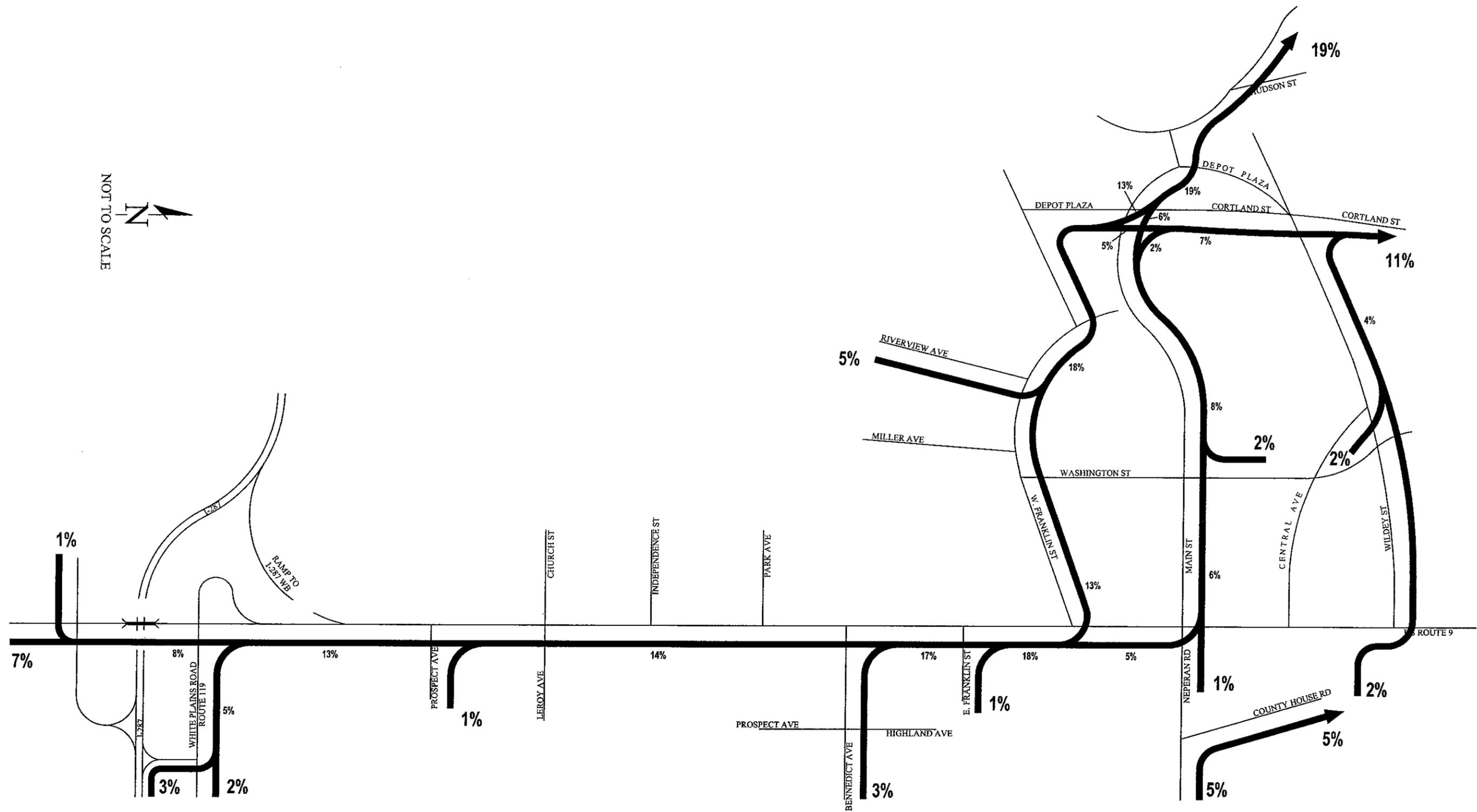




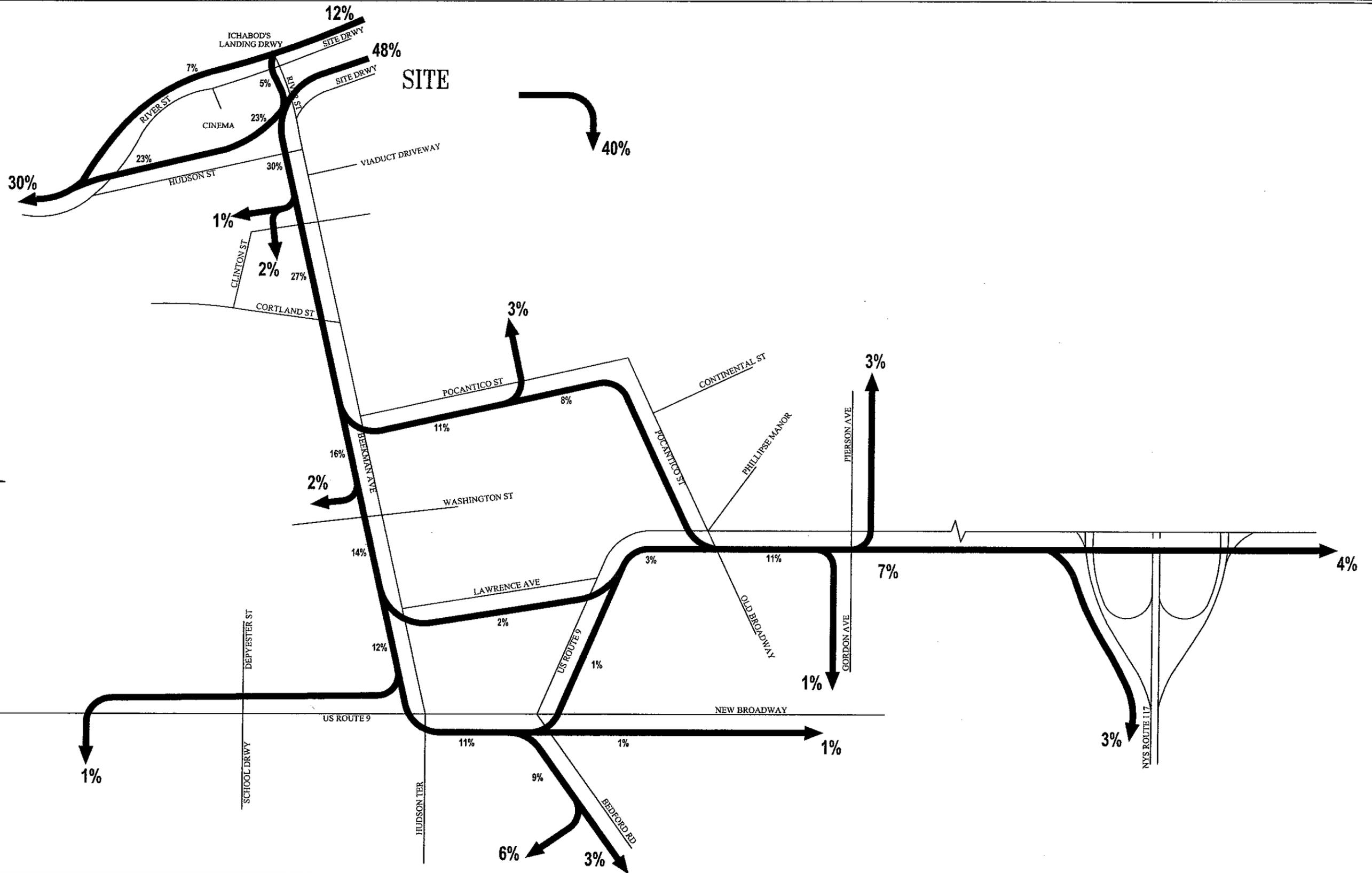
LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR



NOT TO SCALE

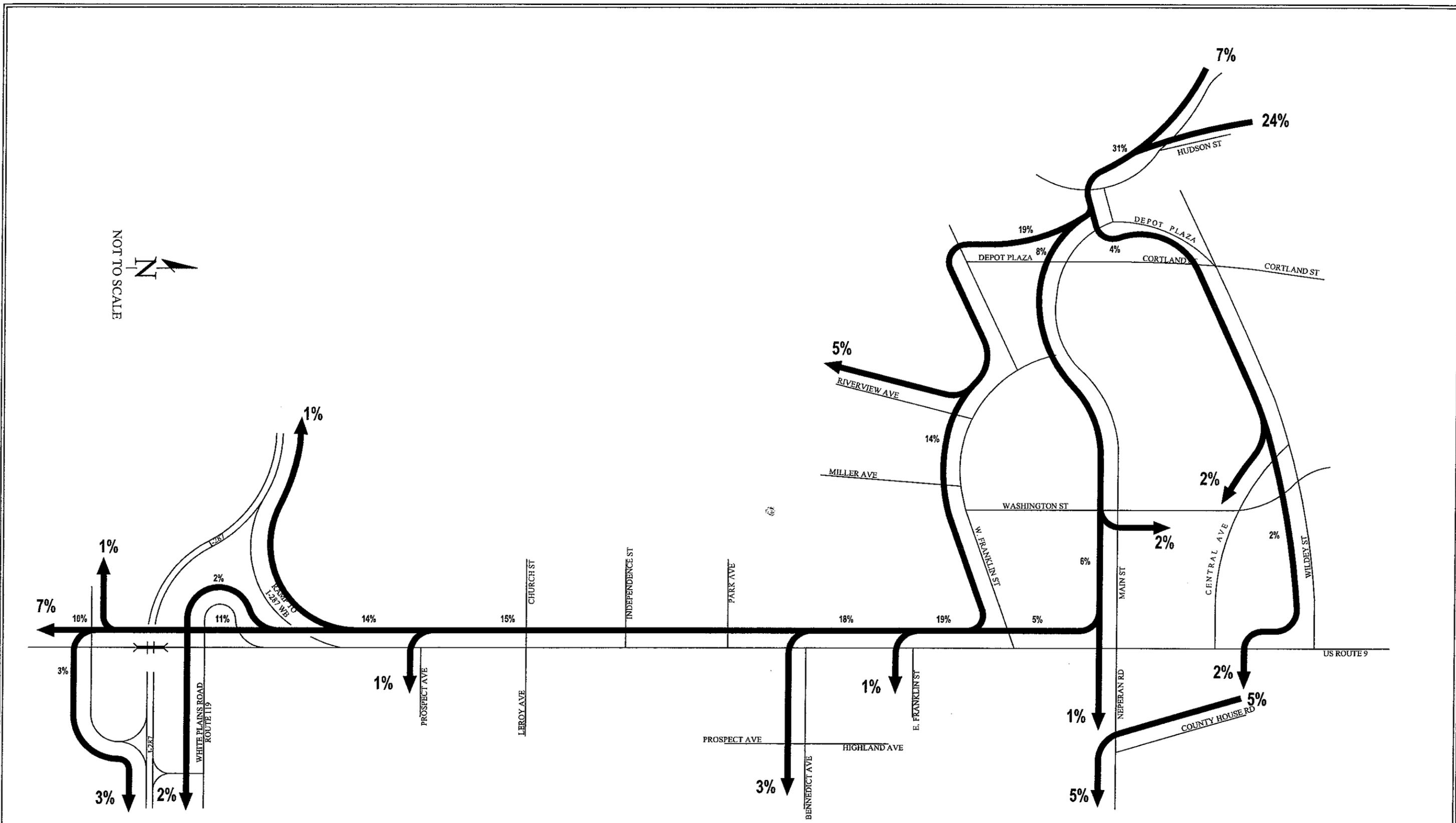


NOT TO SCALE

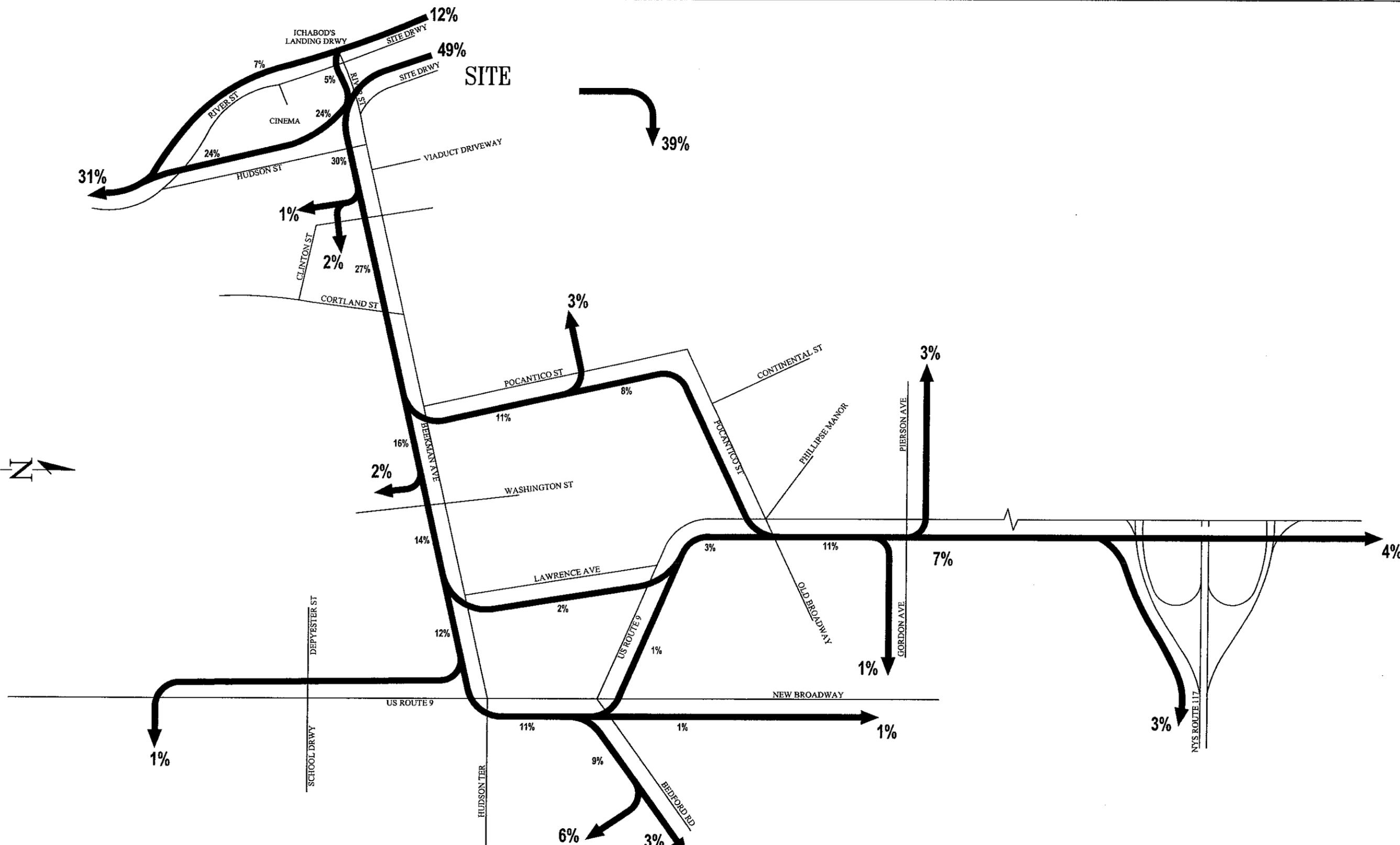


AM/PM Retail Departure Distribution

LIGHTHOUSE LANDING
Sleepy Hollow, New York

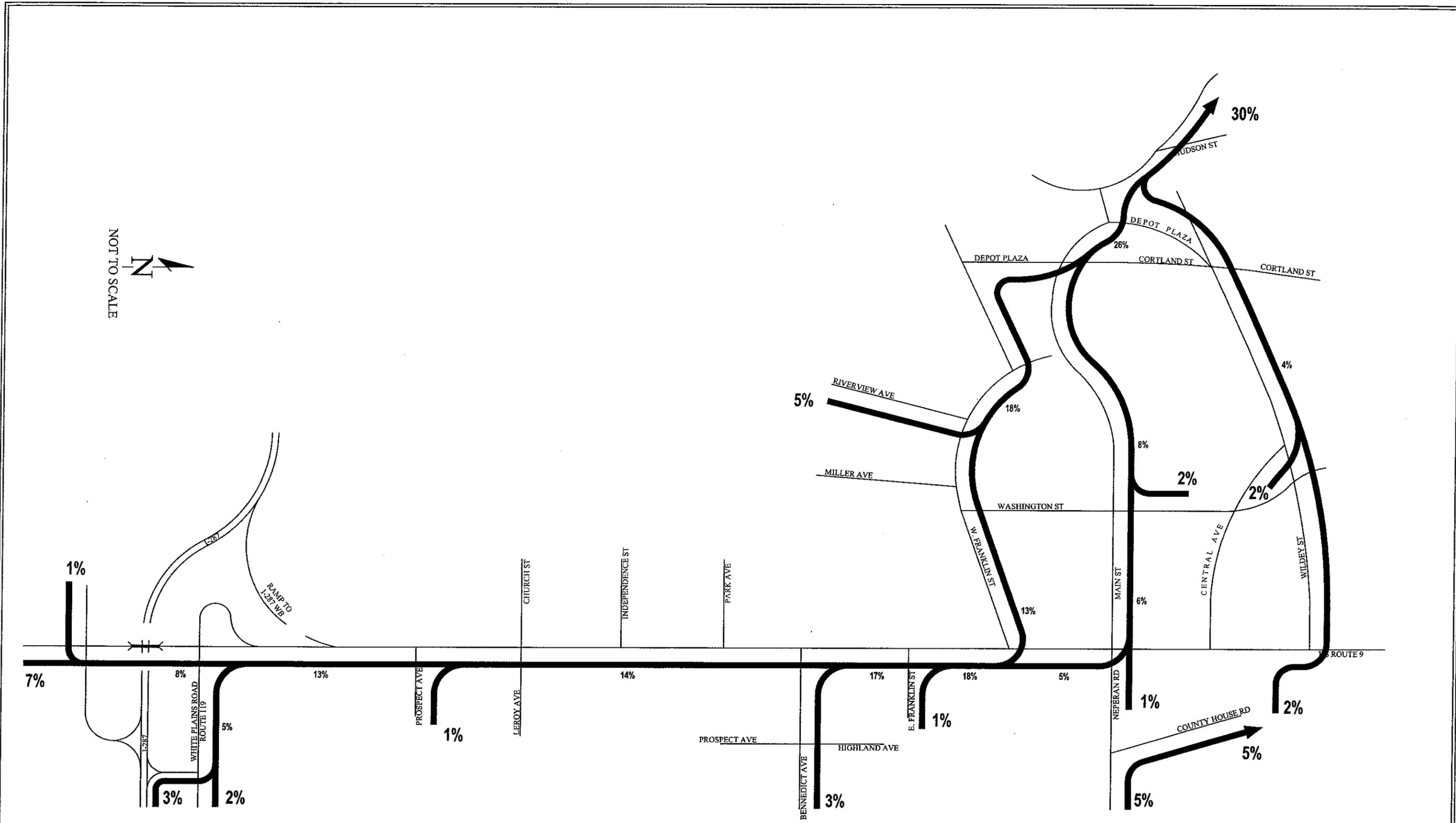


NOT TO SCALE



Saturday Retail Departure Distribution

LIGHTHOUSE LANDING
Sleepy Hollow, New York



TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

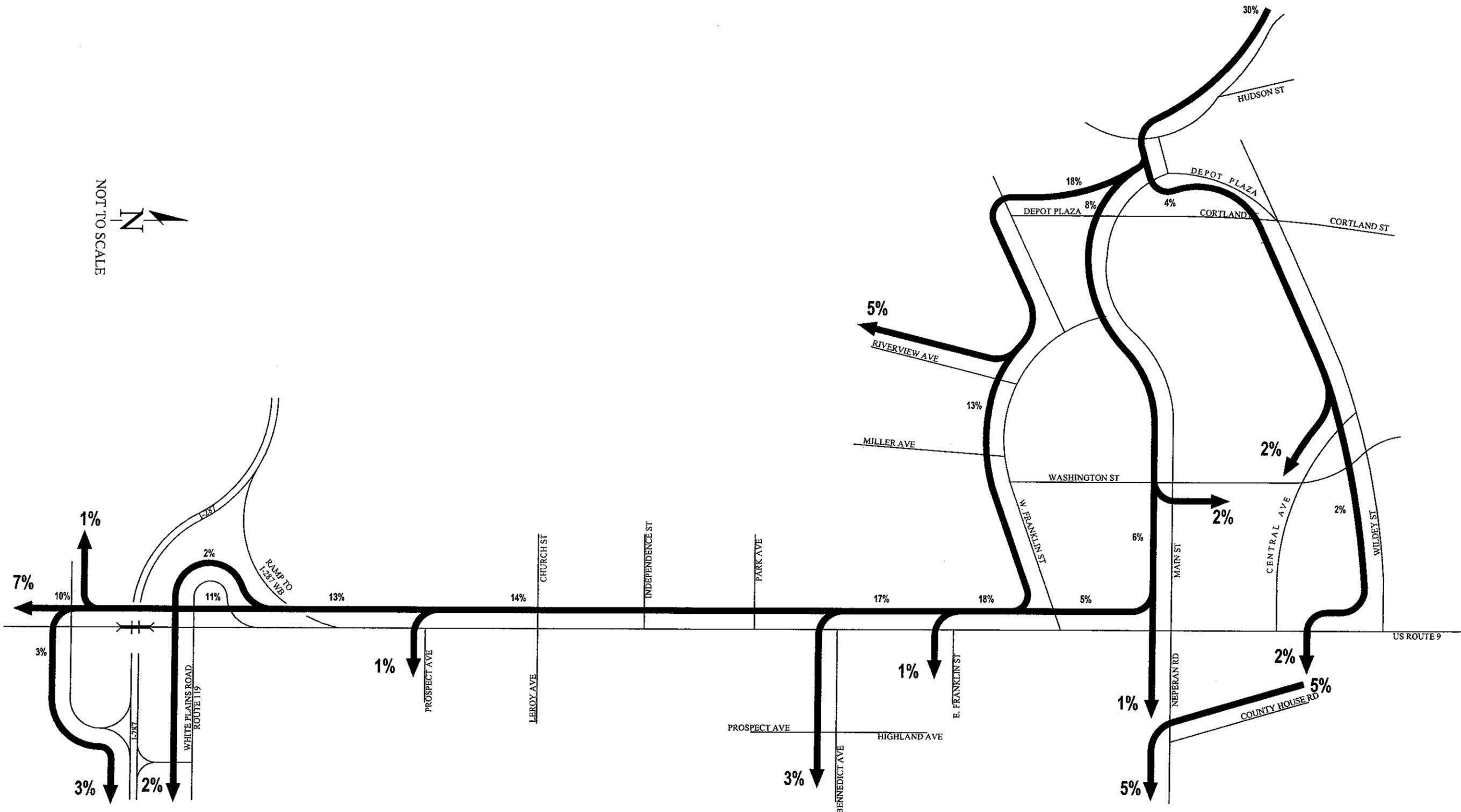
AM/PM Cinema Arrival Distribution
 LIGHTHOUSE LANDING
 Sleepy Hollow, New York

Project No. 38109
 Not to Scale

October 2005

Figure No. 6.11a

NOT TO SCALE

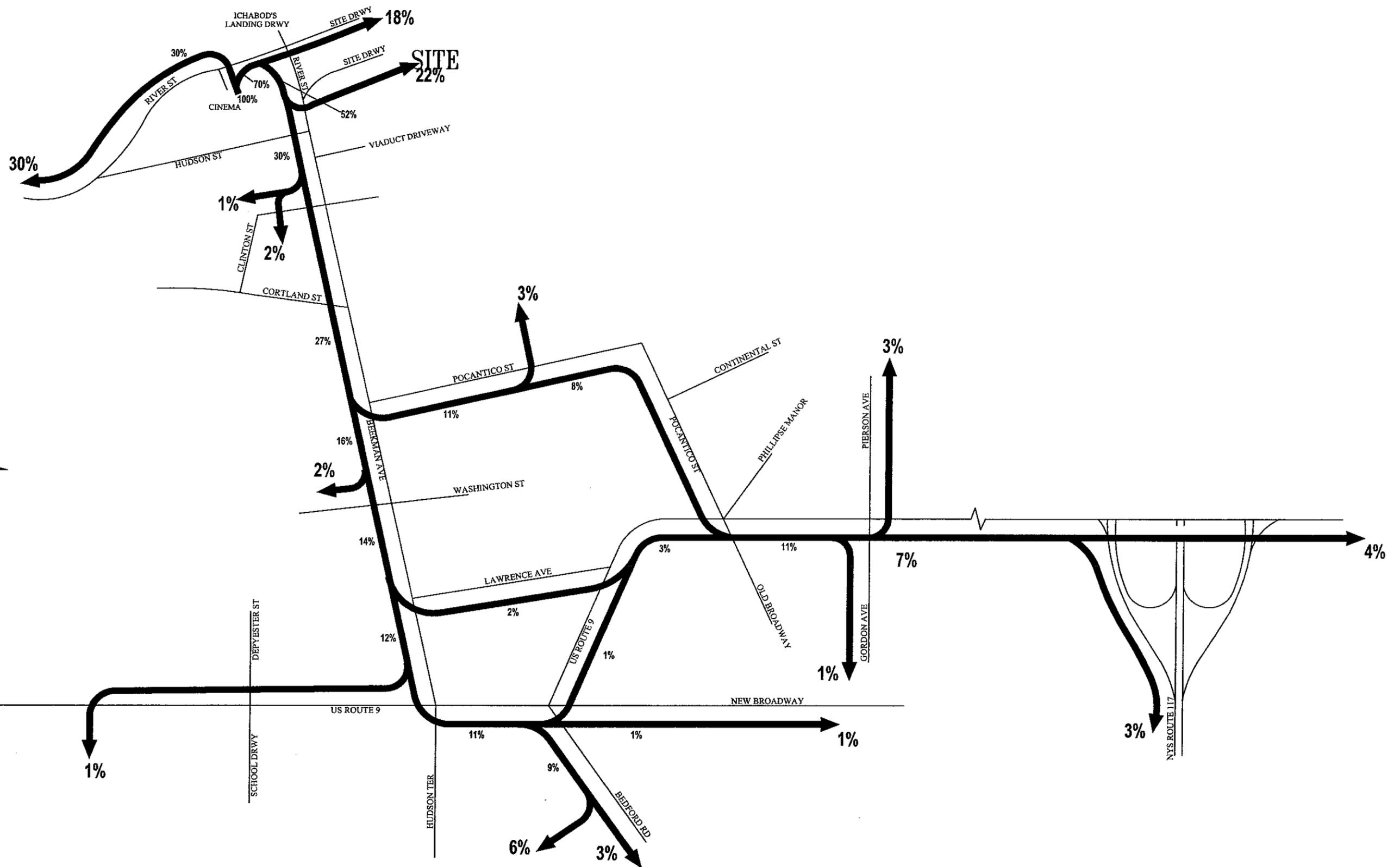



AM/PM Cinema Departure Distribution

LIGHTHOUSE LANDING

Sleepy Hollow, New York

NOT TO SCALE

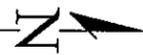
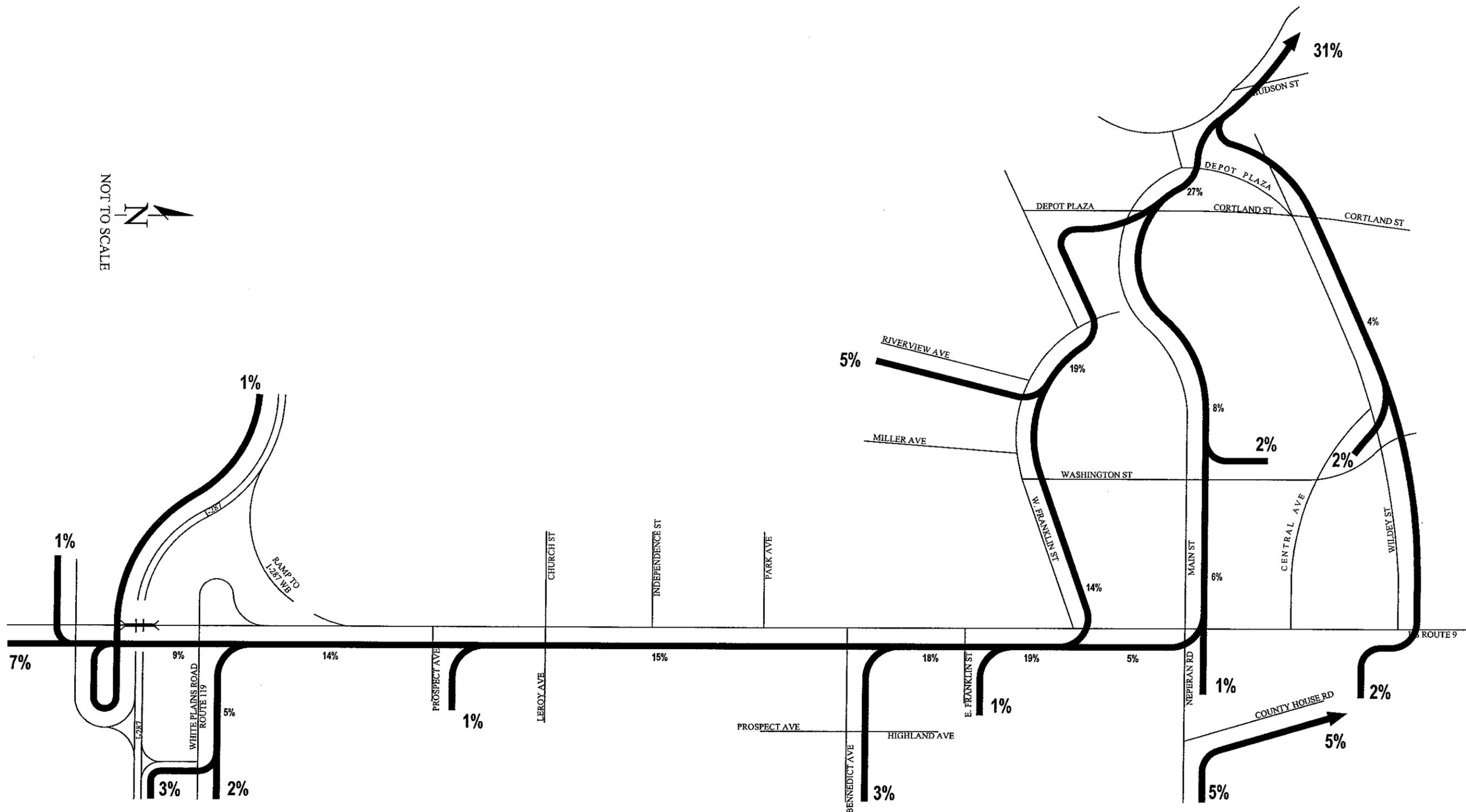


AM/PM Cinema Departure Distribution

LIGHTHOUSE LANDING

Sleepy Hollow, New York

NOT TO SCALE

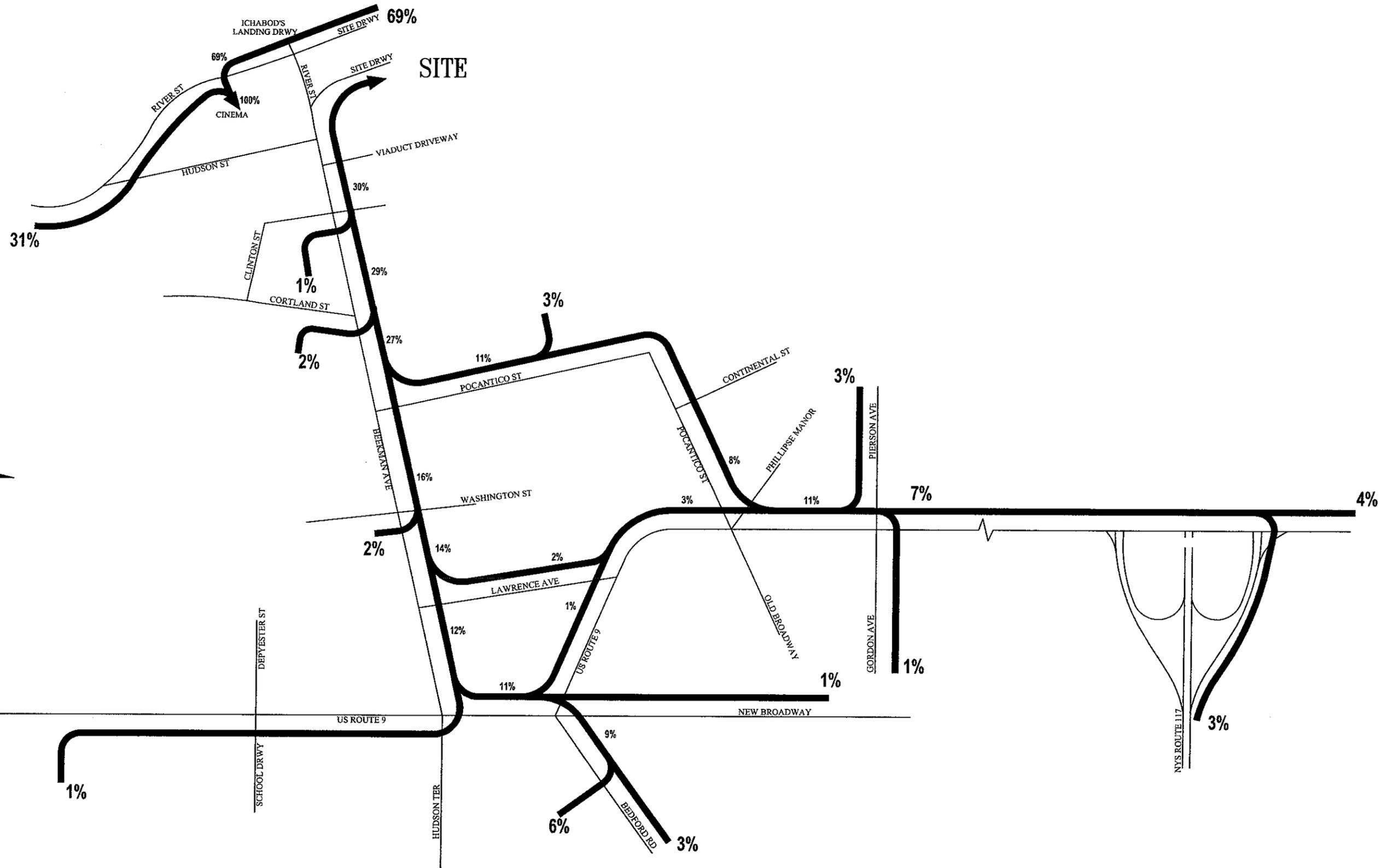



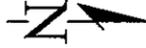
Saturday Cinema Arrival Distribution

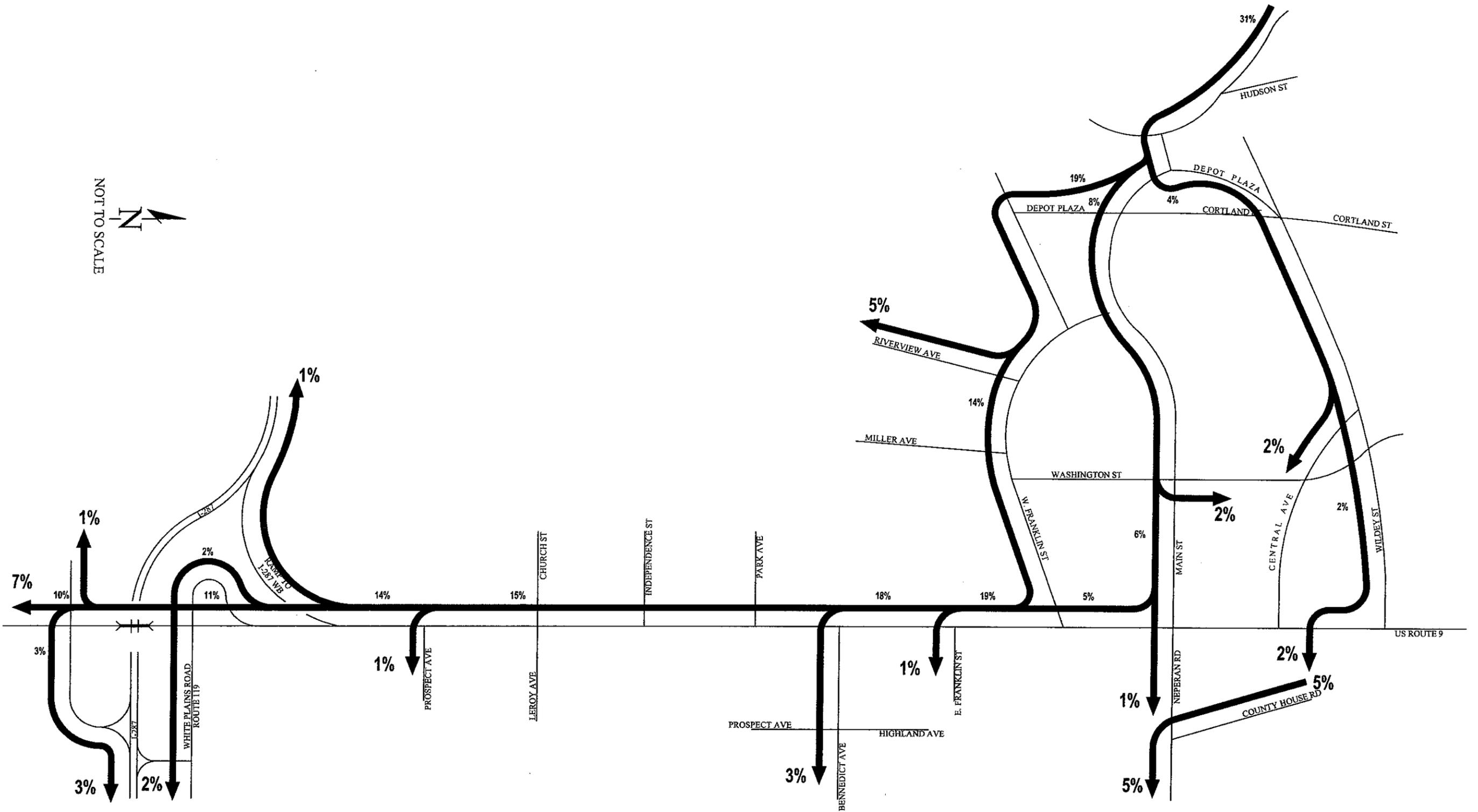
LIGHTHOUSE LANDING

Sleepy Hollow, New York

NOT TO SCALE
N



NOT TO SCALE




TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

Saturday Cinema Departure Distribution

LIGHTHOUSE LANDING

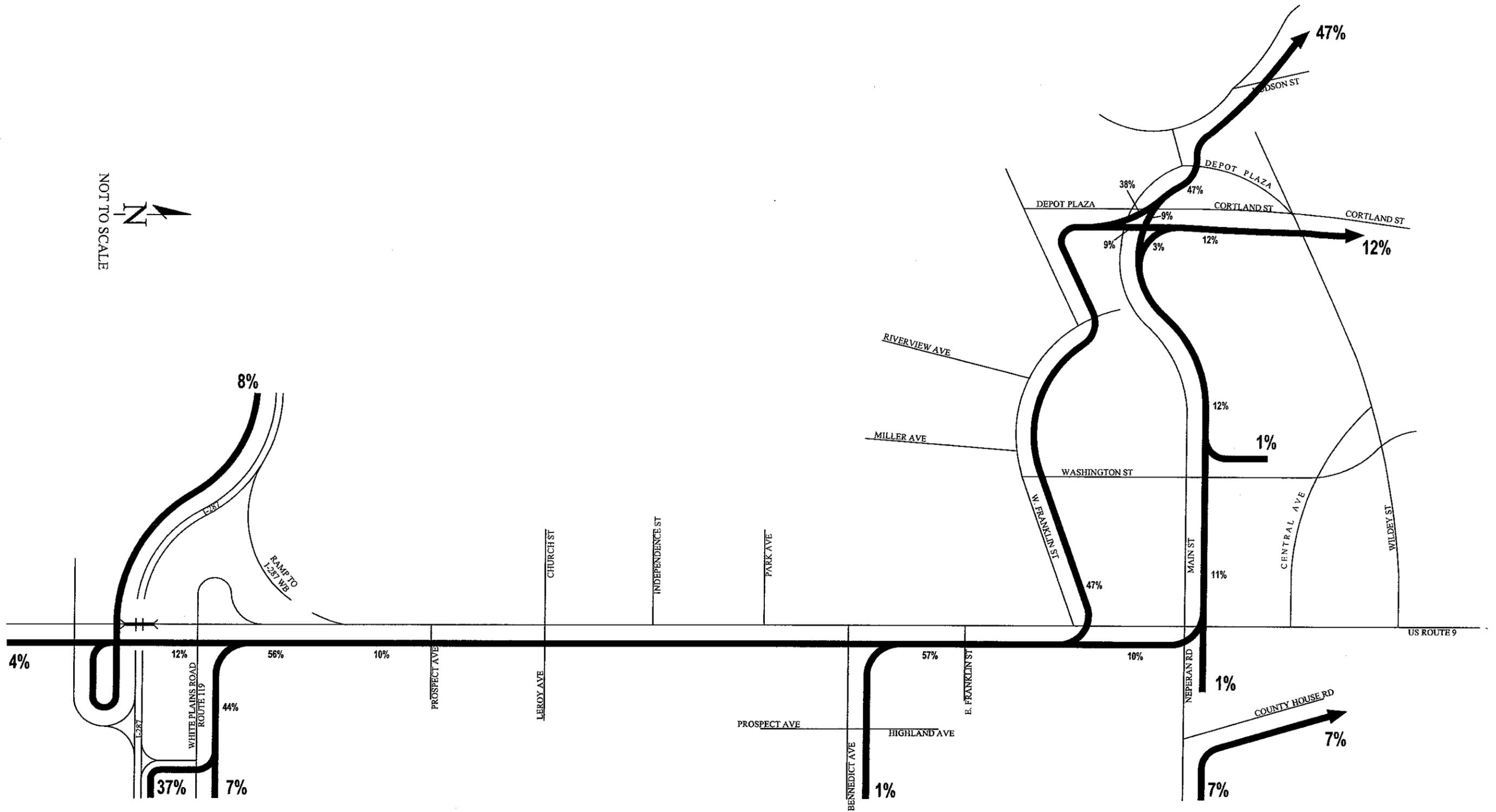
Sleepy Hollow, New York

Project No. 38109
 Not to Scale

October 2005

Figure No. 6.14a

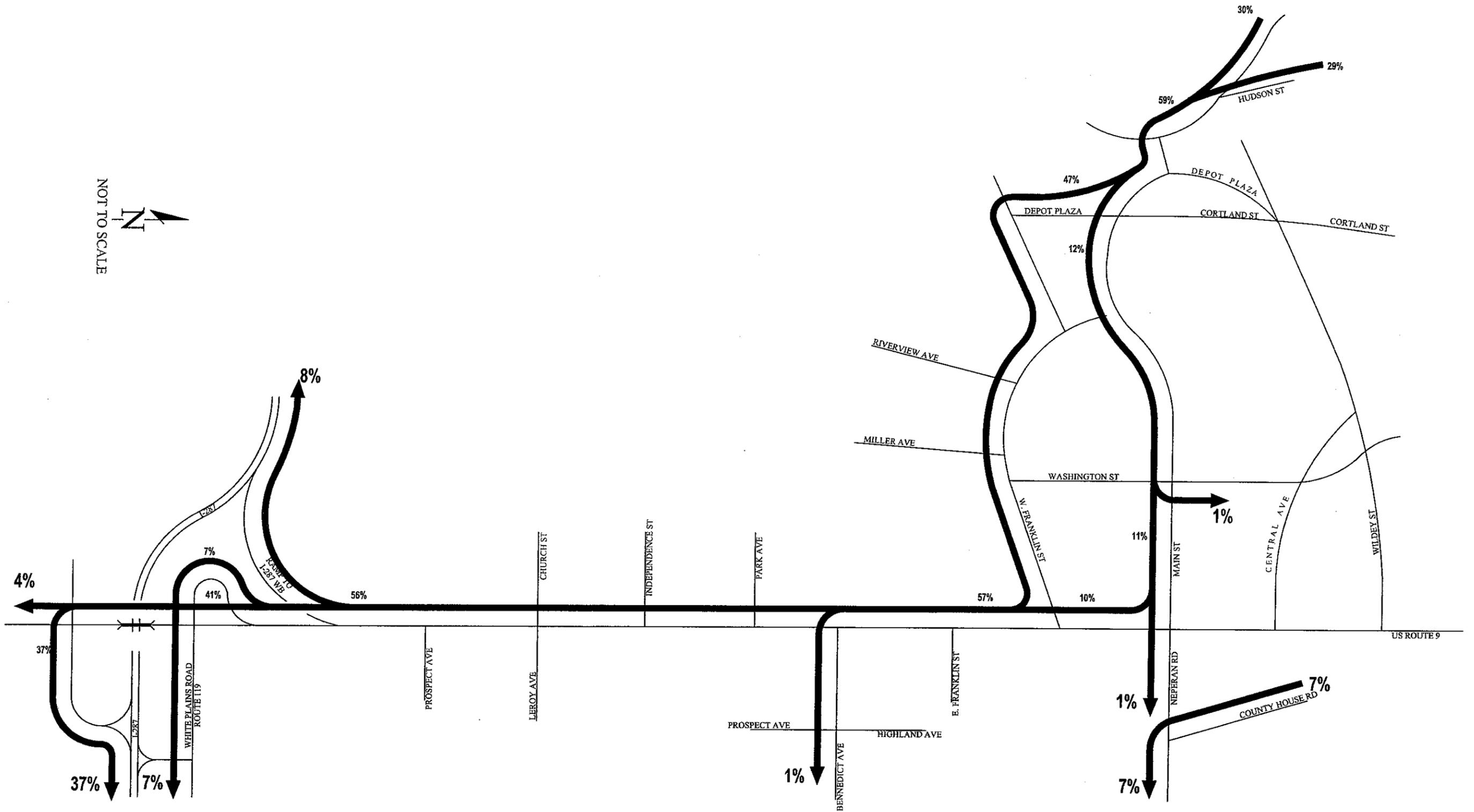
NOT TO SCALE



Residential Arrival Distribution

LIGHTHOUSE LANDING
Sleepy Hollow, New York

NOT TO SCALE



TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

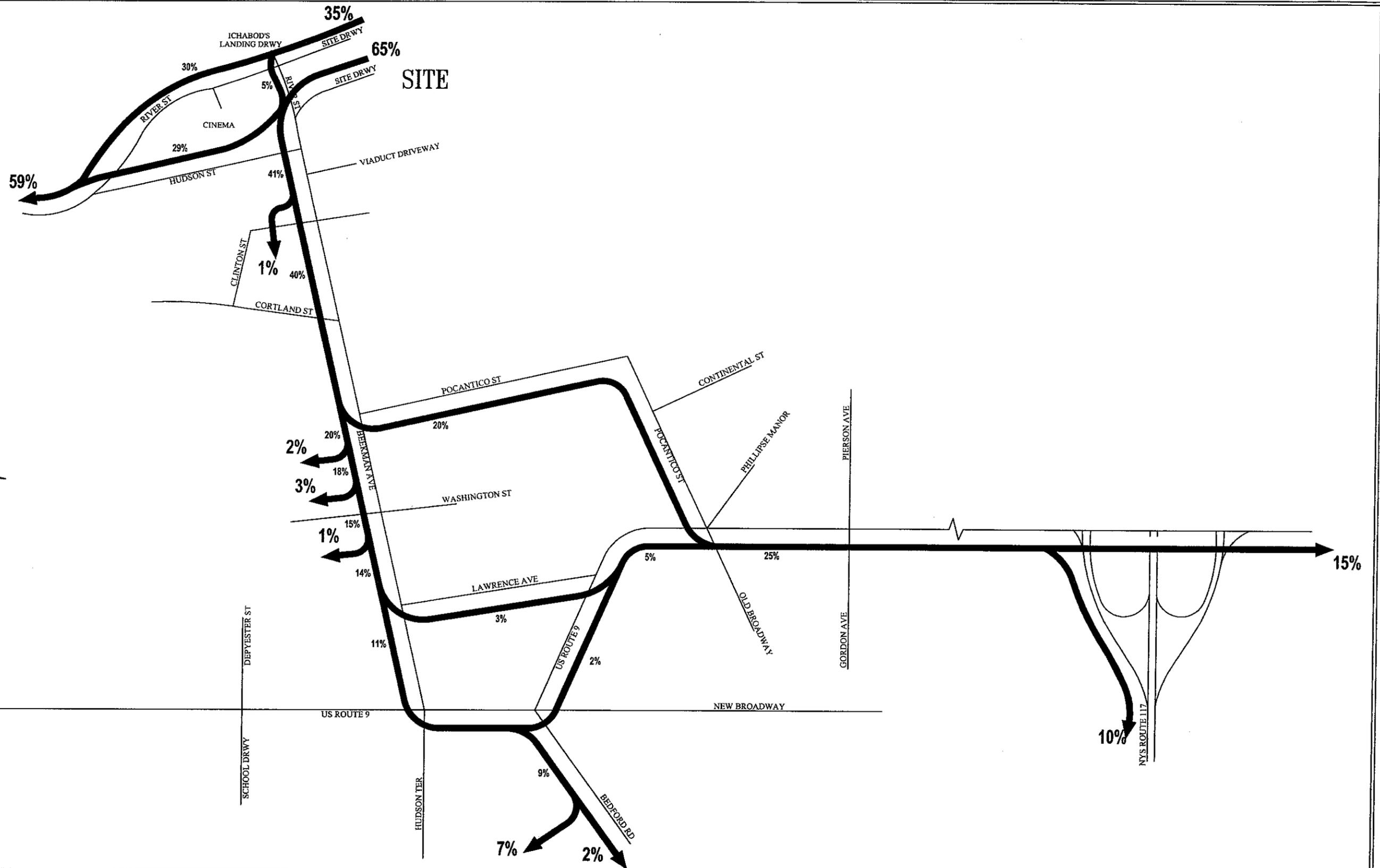
Residential Departure Distribution
 LIGHTHOUSE LANDING
 Sleepy Hollow, New York

Project No. 38109
 Not to Scale

October 2005

Figure No. 6.16a

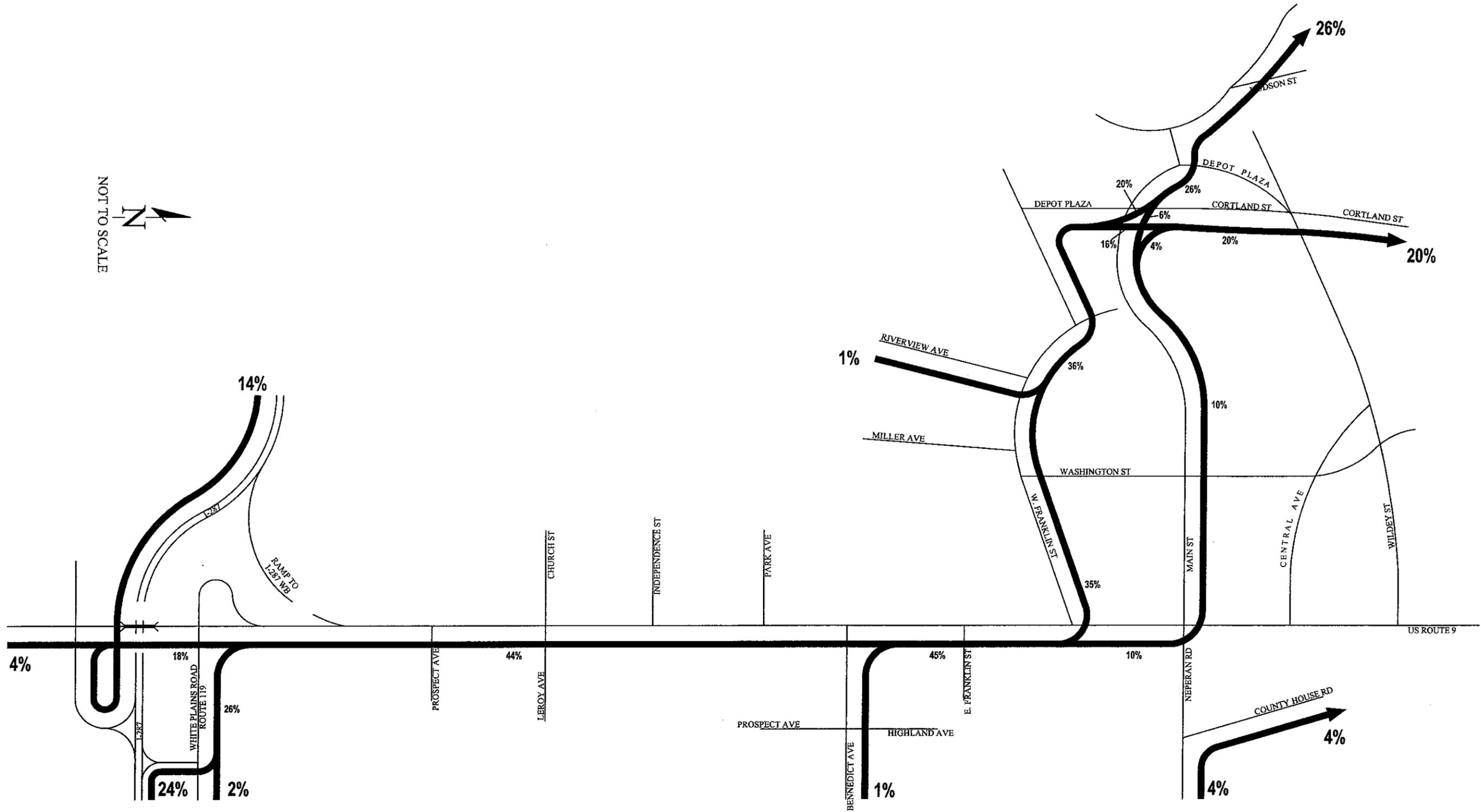
NOT TO SCALE
N



Residential Departure Distribution

LIGHTHOUSE LANDING
Sleepy Hollow, New York

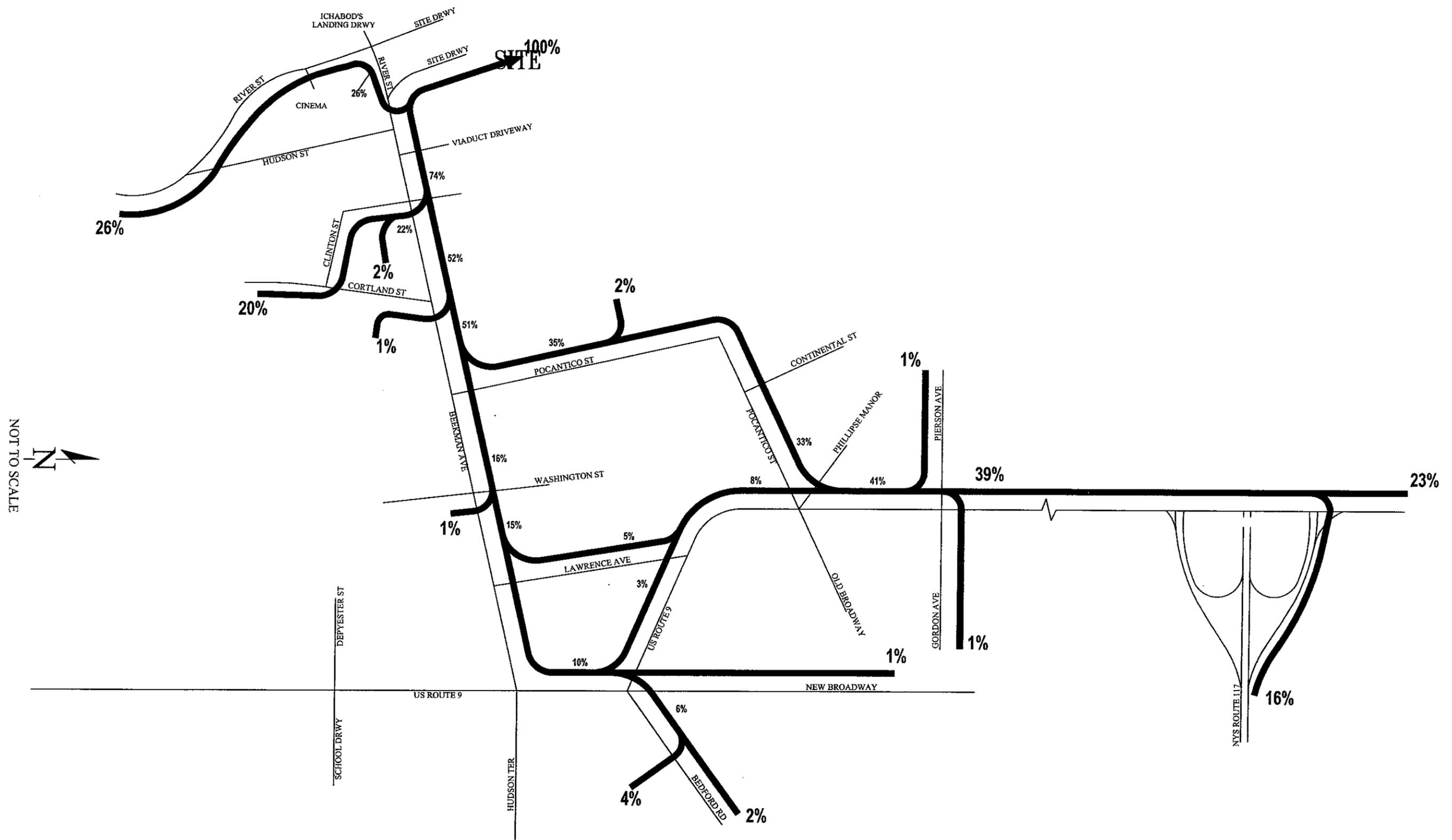
NOT TO SCALE
N



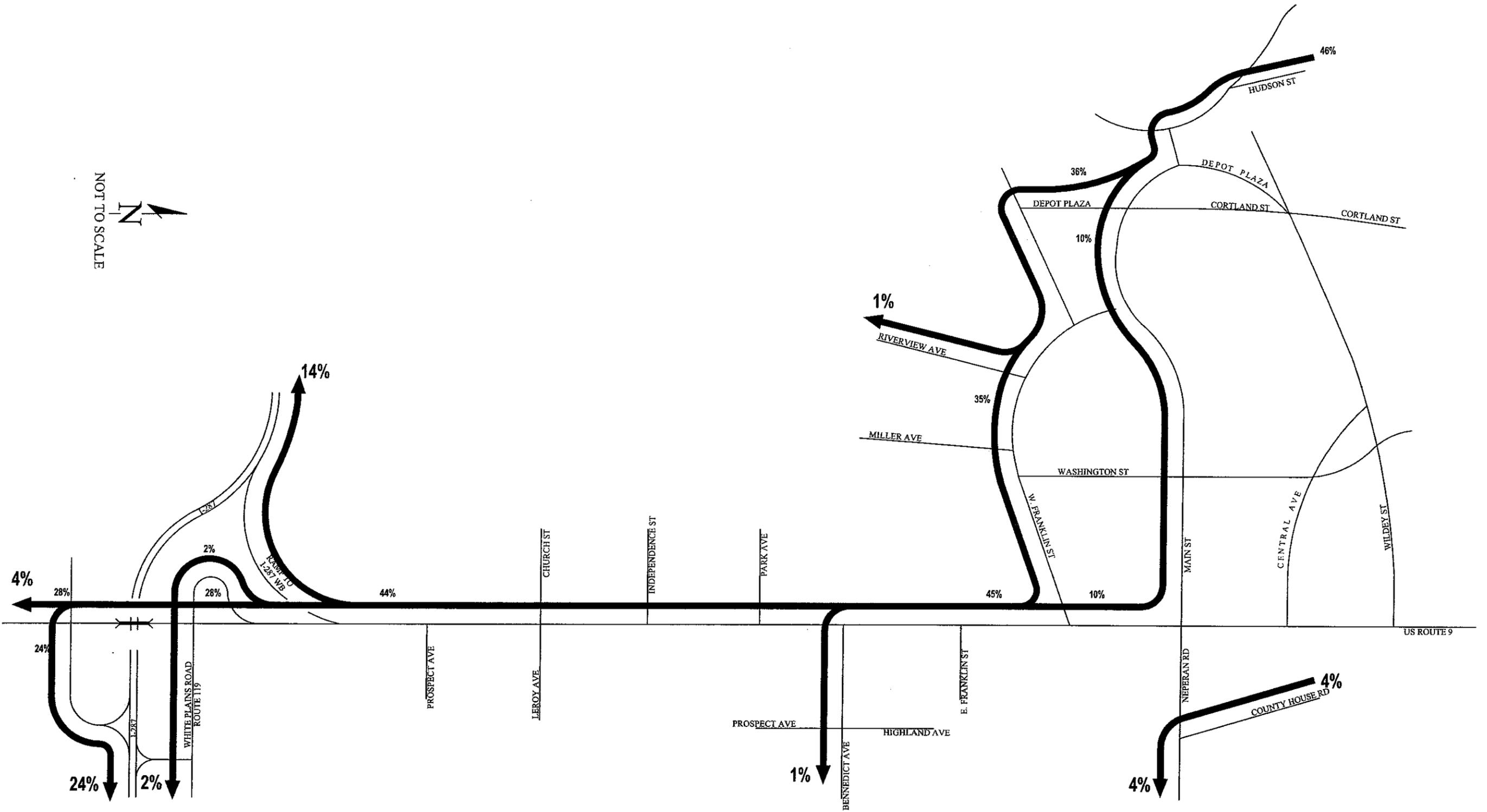
Office Arrival Distribution

LIGHTHOUSE LANDING

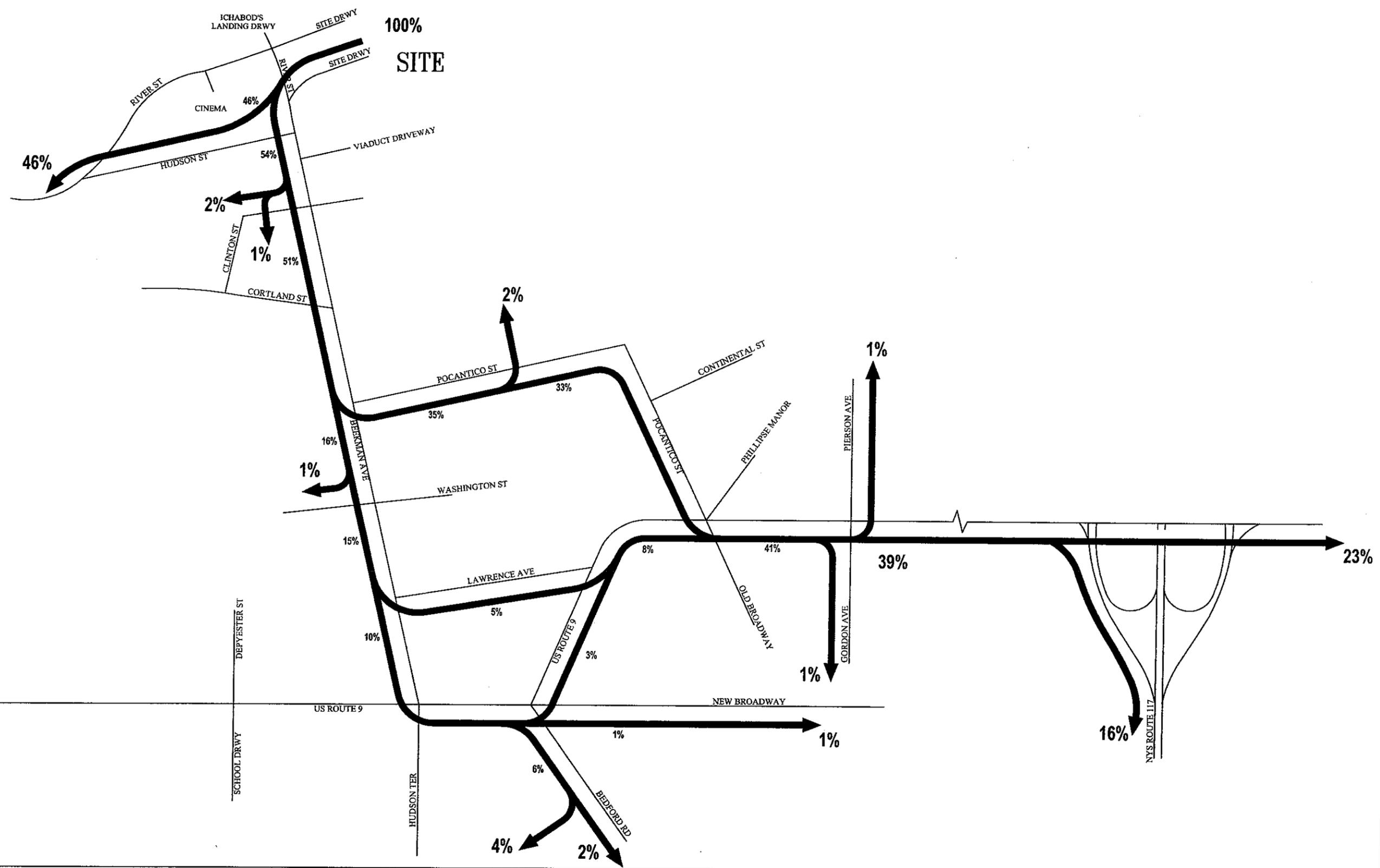
Sleepy Hollow, New York



NOT TO SCALE
N



NOT TO SCALE

TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

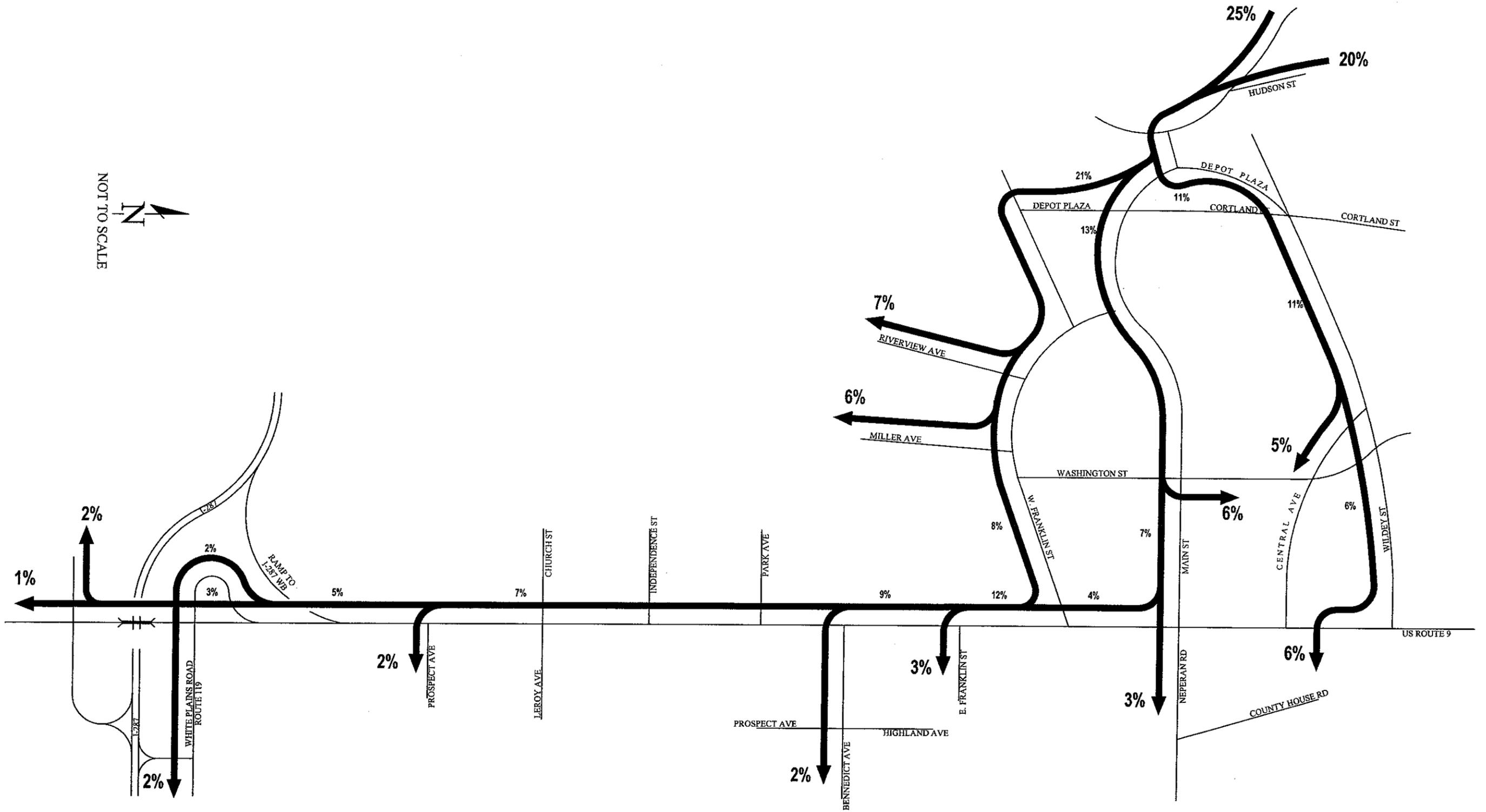
Office Departure Distribution
 LIGHTHOUSE LANDING
 Sleepy Hollow, New York

Project No. 38109
 Not to Scale

October 2005

Figure No. 6.18b

NOT TO SCALE

TRC Raymond Keyes
 Associates
 A Division of TRC Engineers, Inc.

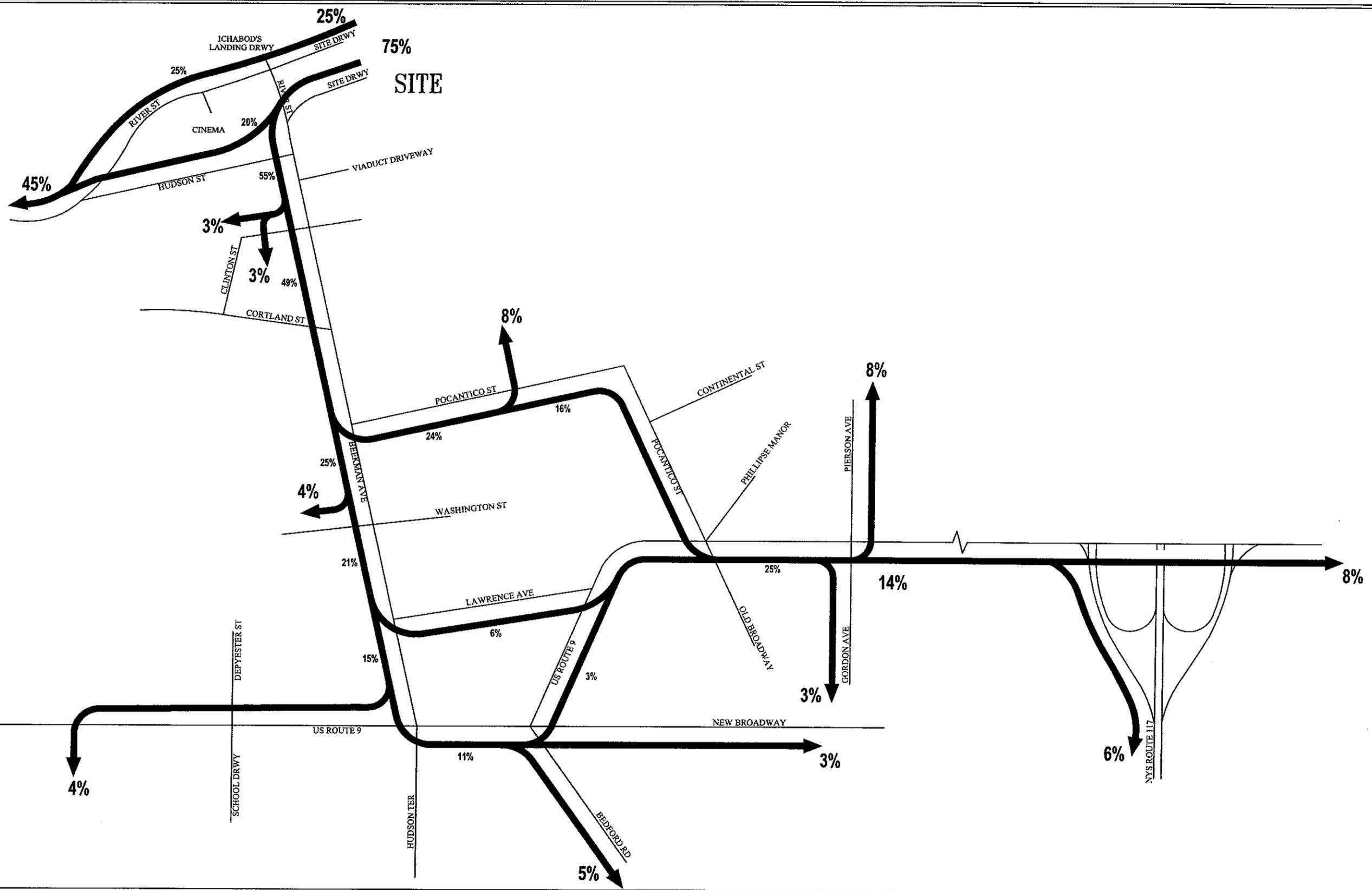
West Parcel Departure Distribution
 LIGHTHOUSE LANDING
 Sleepy Hollow, New York

Project No. 38109
 Not to Scale

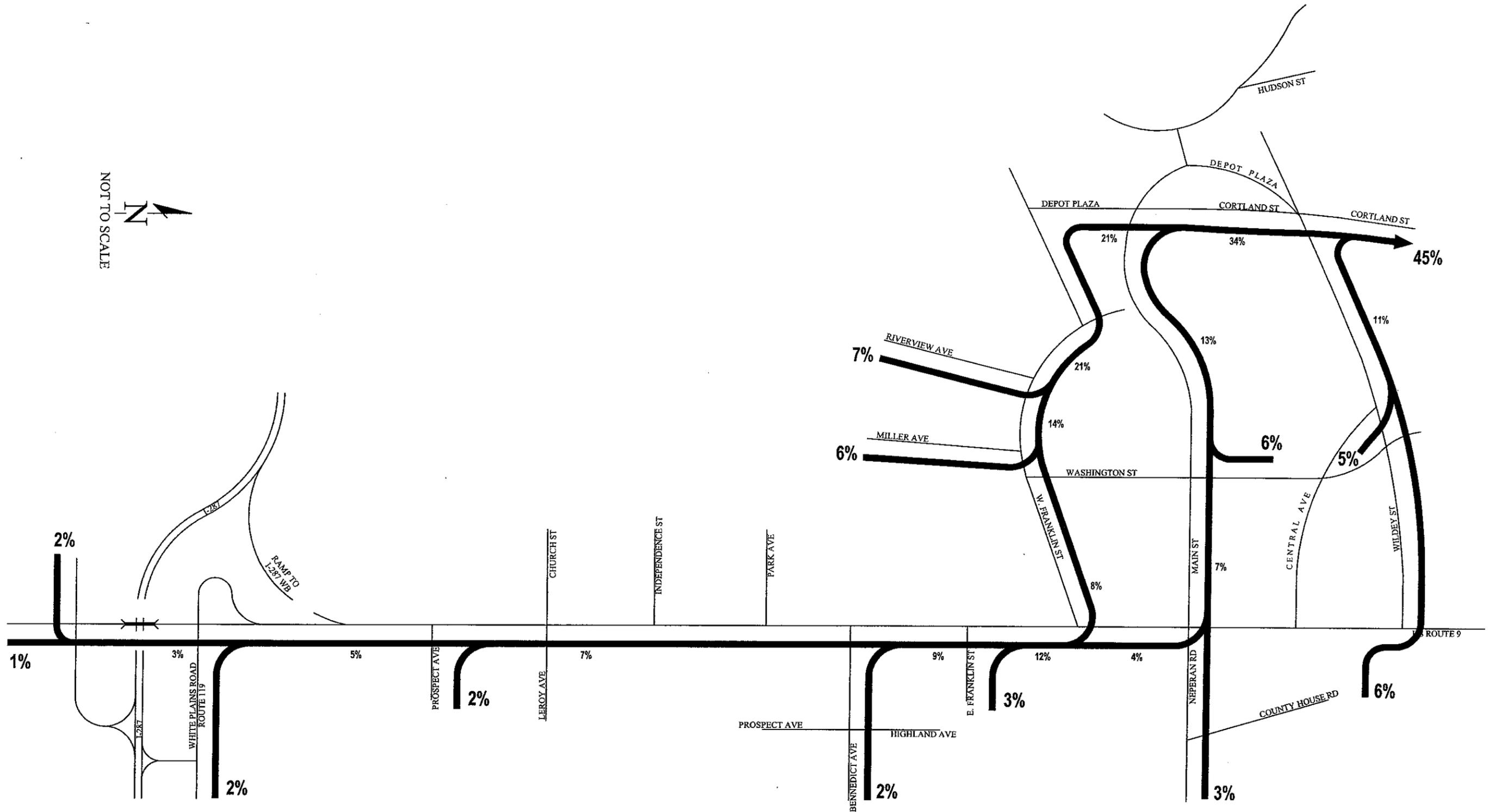
October 2005

Figure No. 6.20a

NOT TO SCALE
N

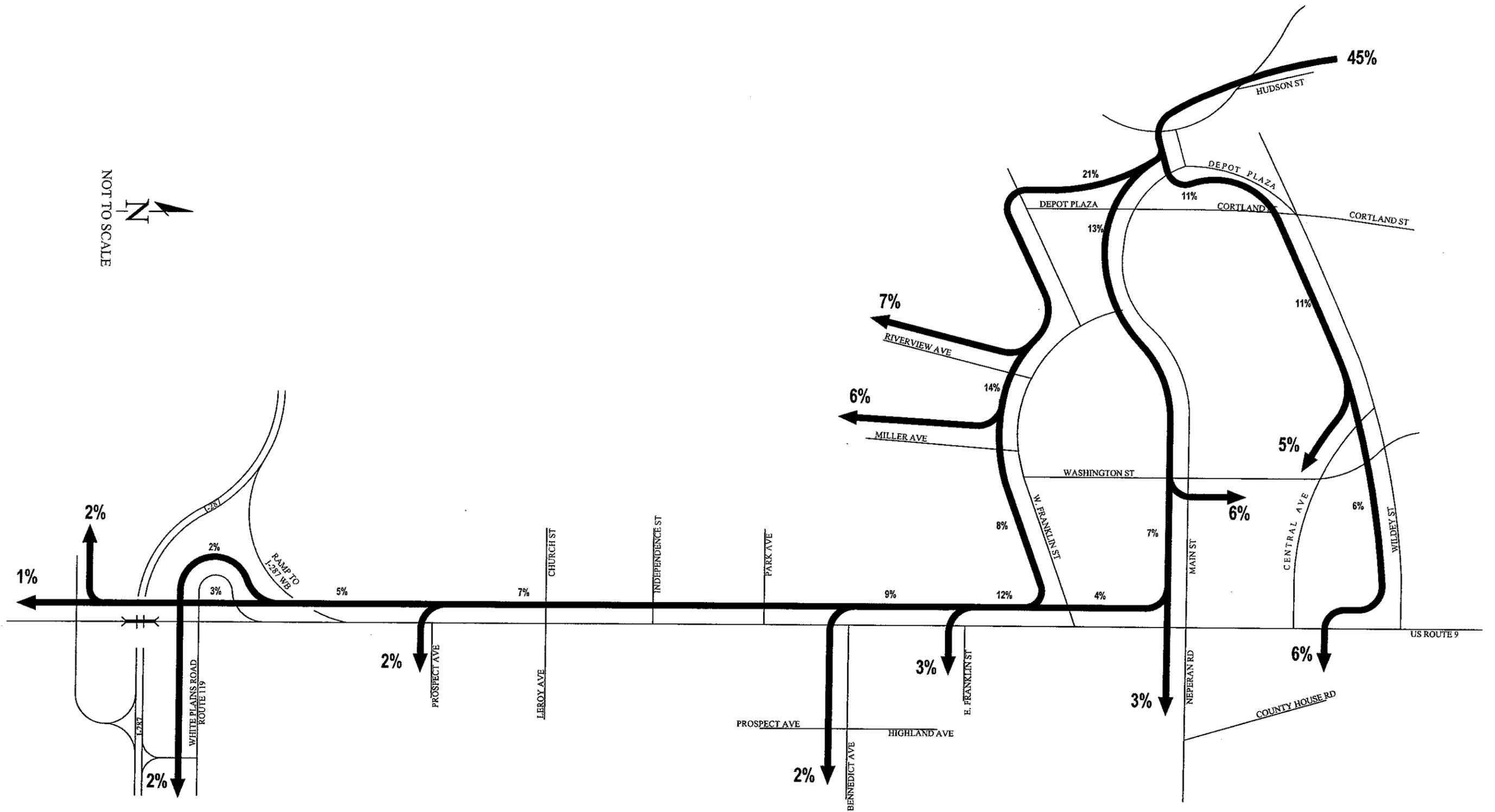


NOT TO SCALE
N

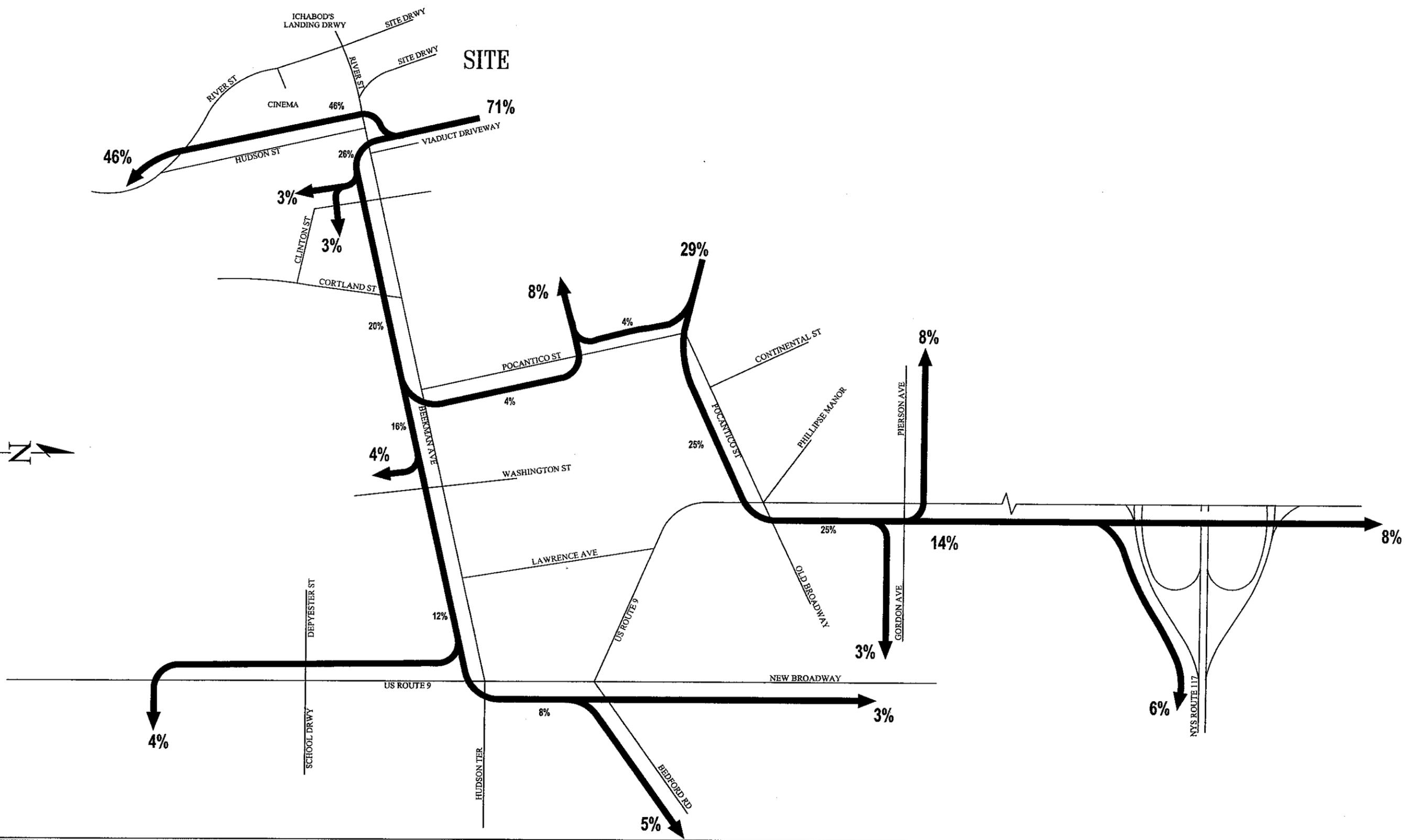


East Parcel Arrival Distribution

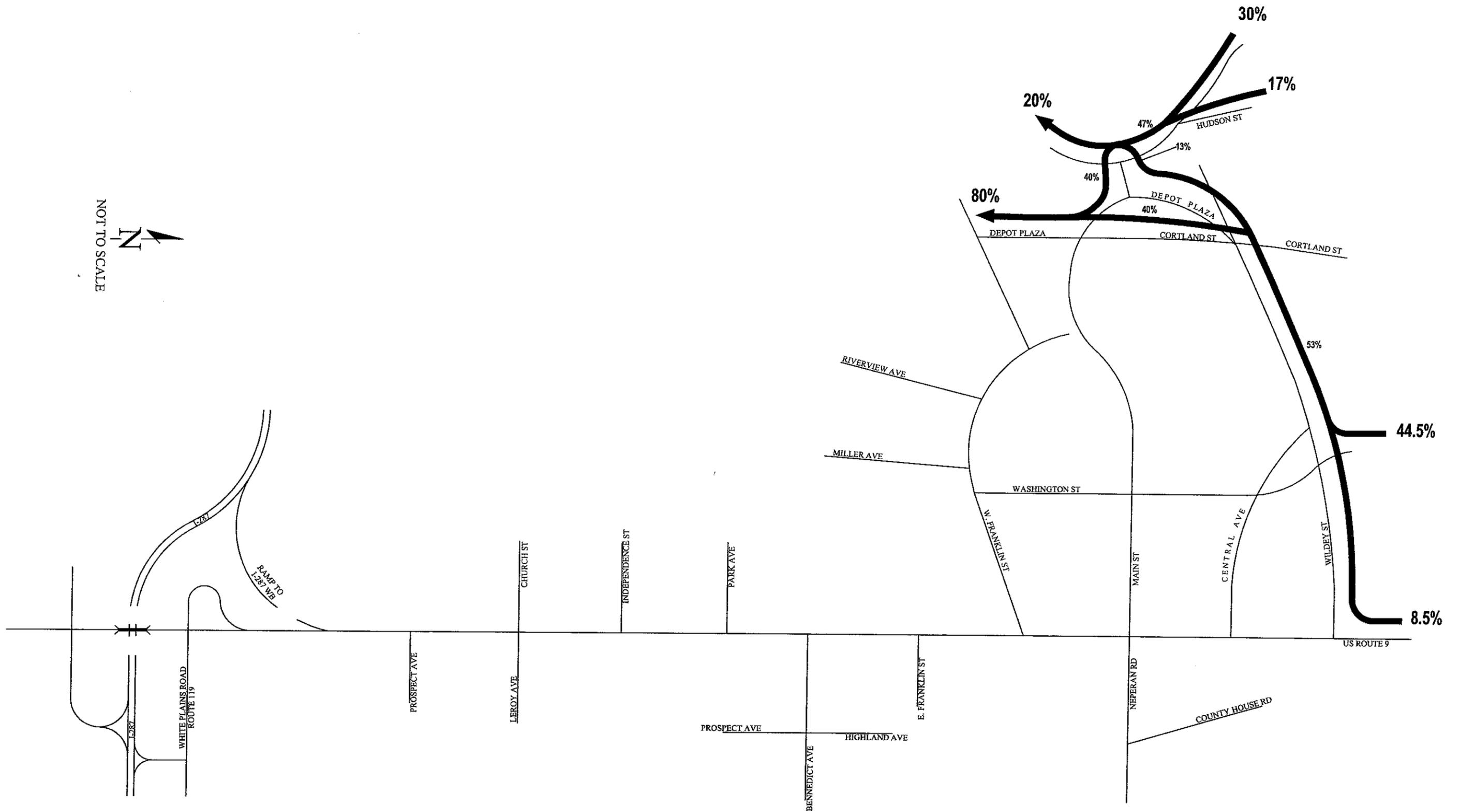
LIGHTHOUSE LANDING
Sleepy Hollow, New York



NOT TO SCALE
N

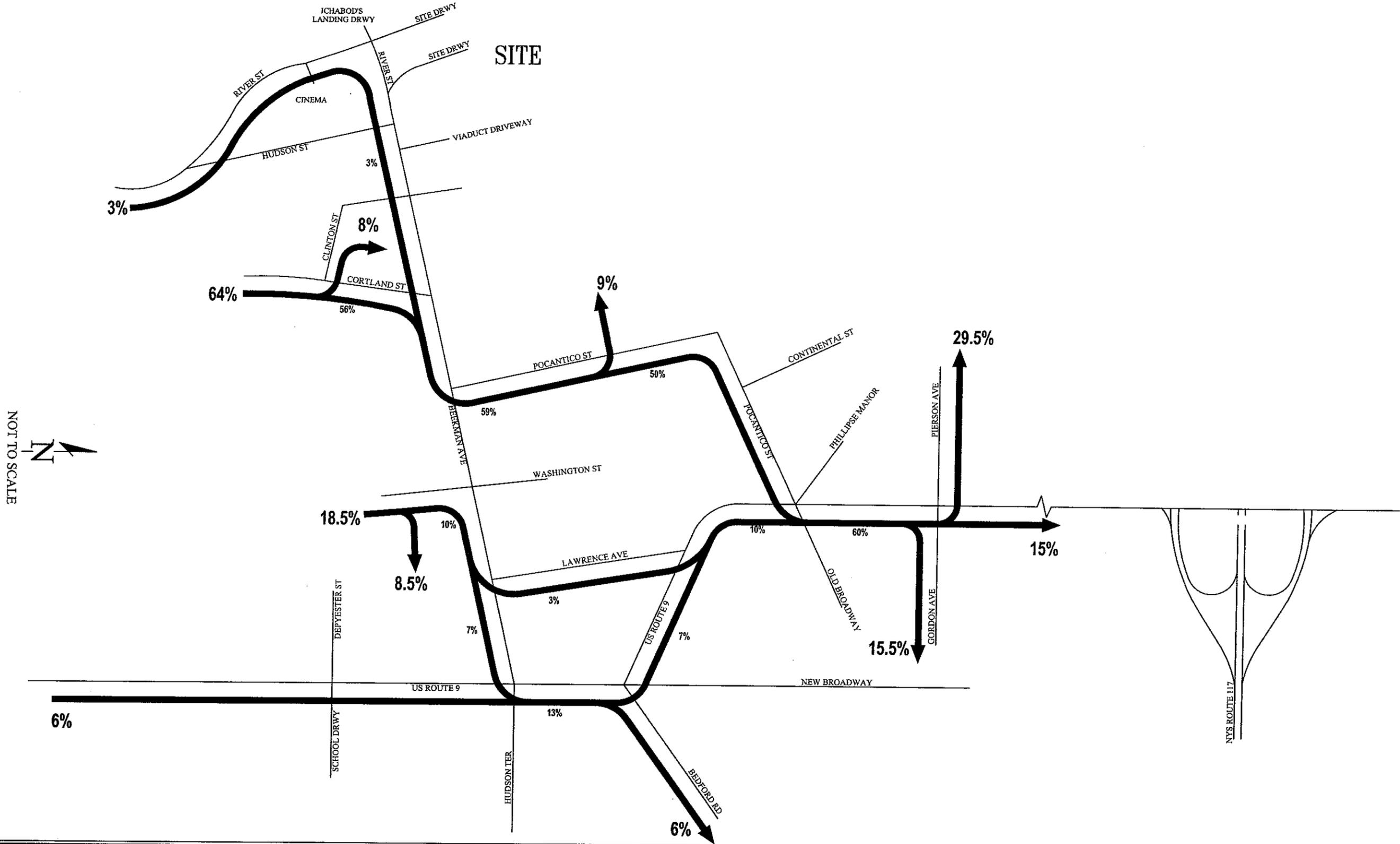


NOT TO SCALE



Existing Tarrytown Station Arrival Distribution

LIGHTHOUSE LANDING
Sleepy Hollow, New York



TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

Existing Tarrytown Station Departure Distribution

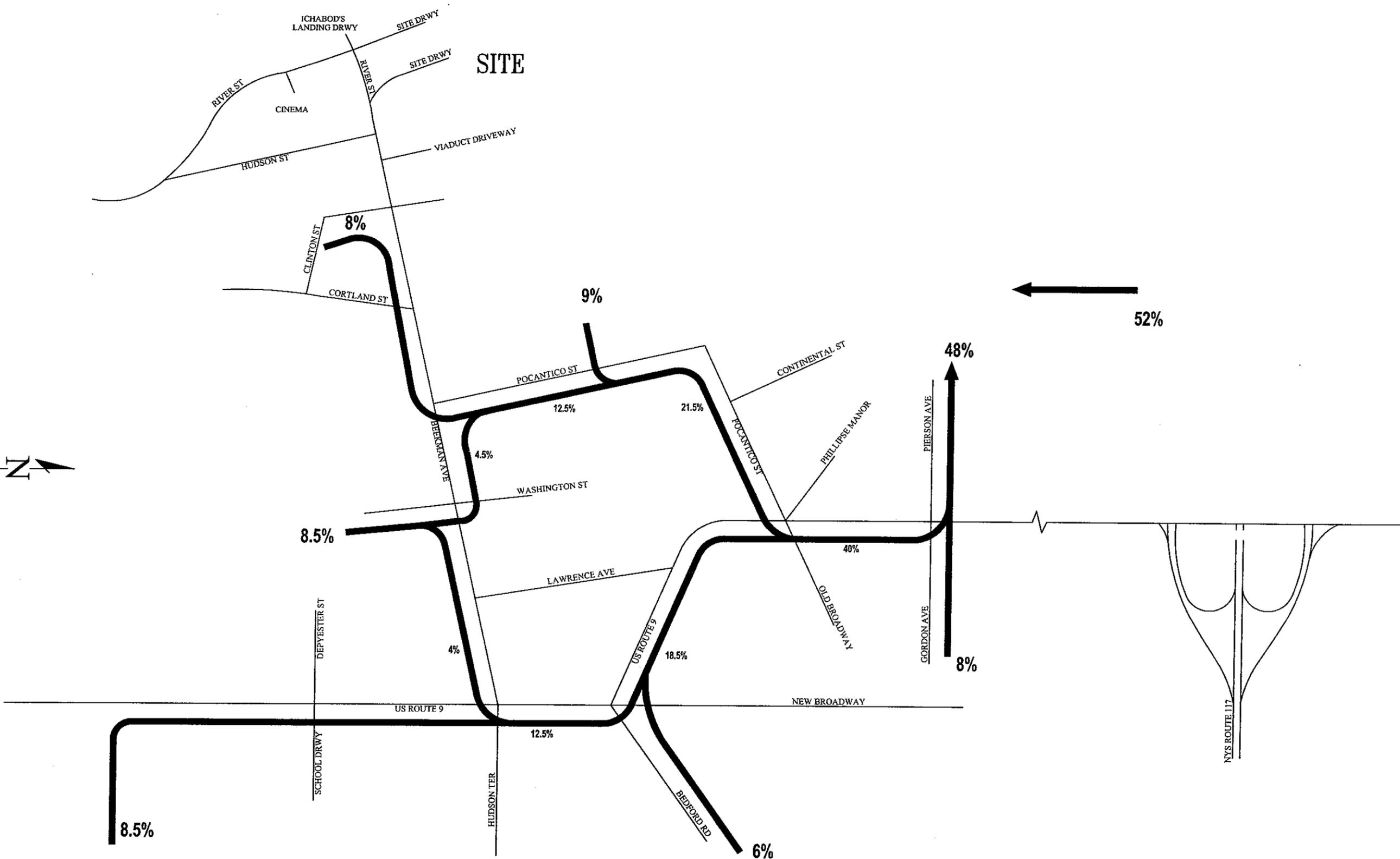
Project No. 38109
 Not to Scale

LIGHTHOUSE LANDING
 Sleepy Hollow, New York

October 2005

Figure No. 6.24b

NOT TO SCALE

TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

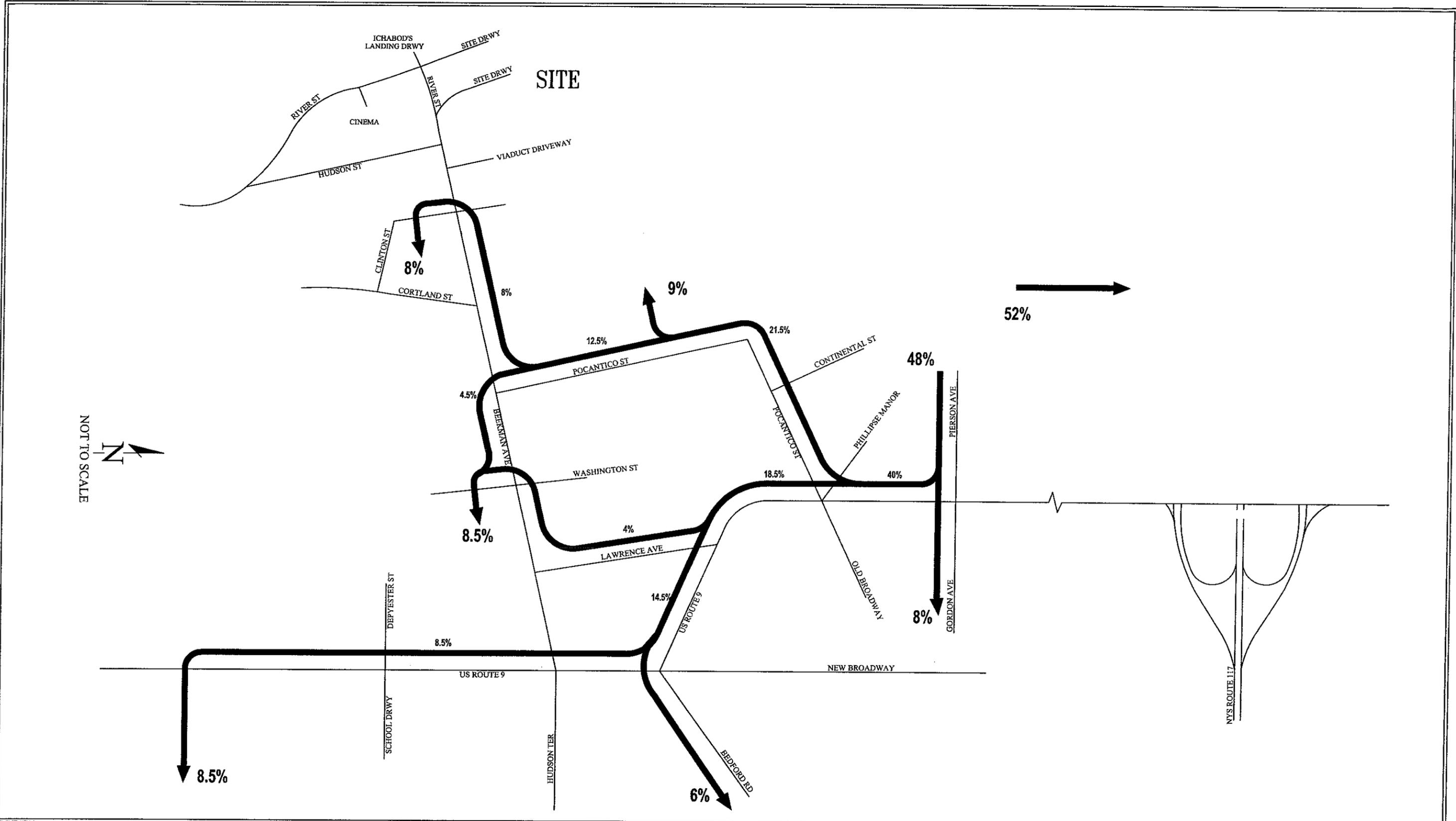
Existing Phillipse Manor Station Arrival Distribution

LIGHTHOUSE LANDING
 Sleepy Hollow, New York

Project No. 38109
 Not to Scale

October 2005

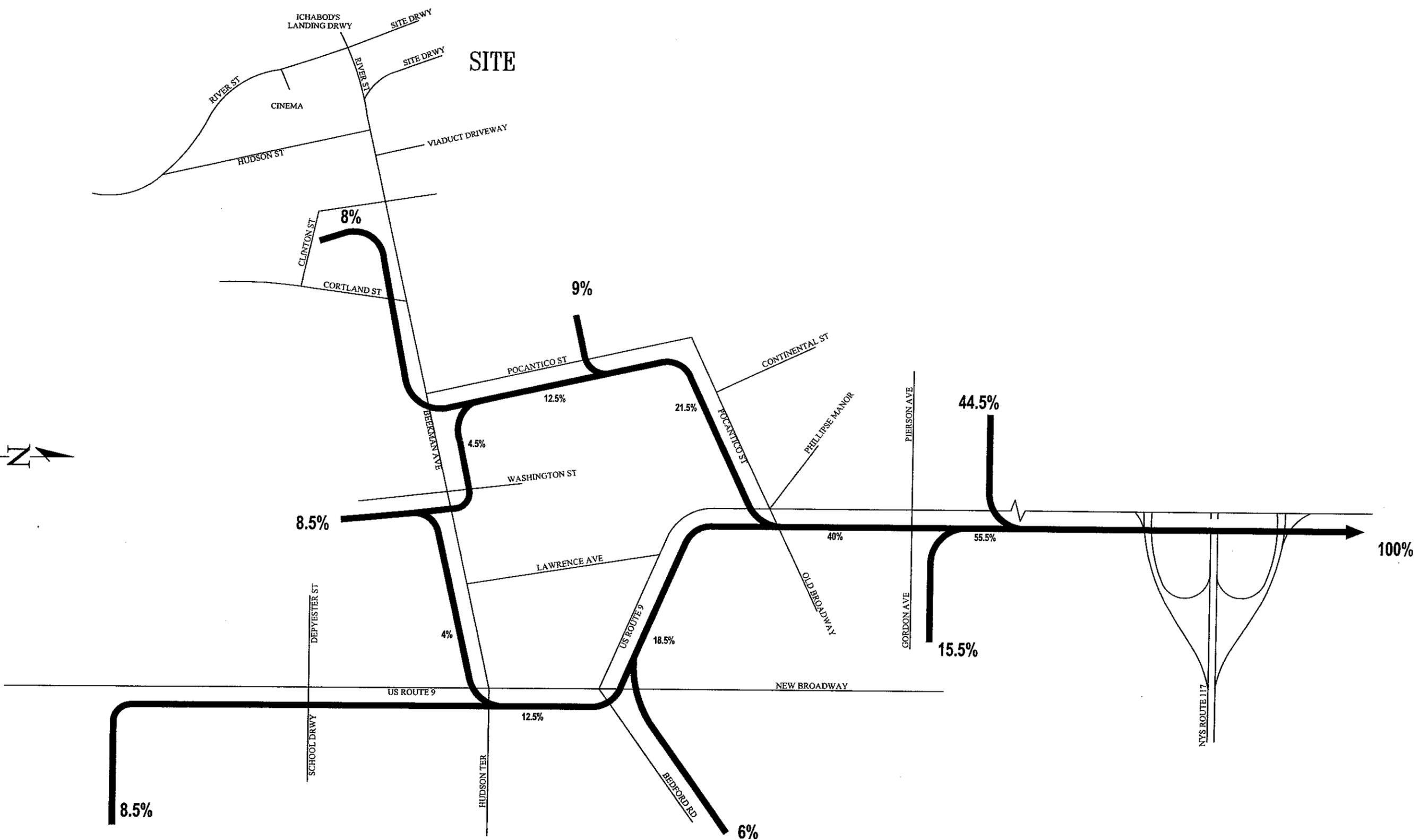
Figure No. 6.25a



Existing Phillipse Manor Station Departure Distribution

LIGHTHOUSE LANDING
 Sleepy Hollow, New York

NOT TO SCALE



TRC Raymond Keyes
Associates
A Division of TRC Engineers, Inc.

Existing Scarborough Station Arrival Distribution

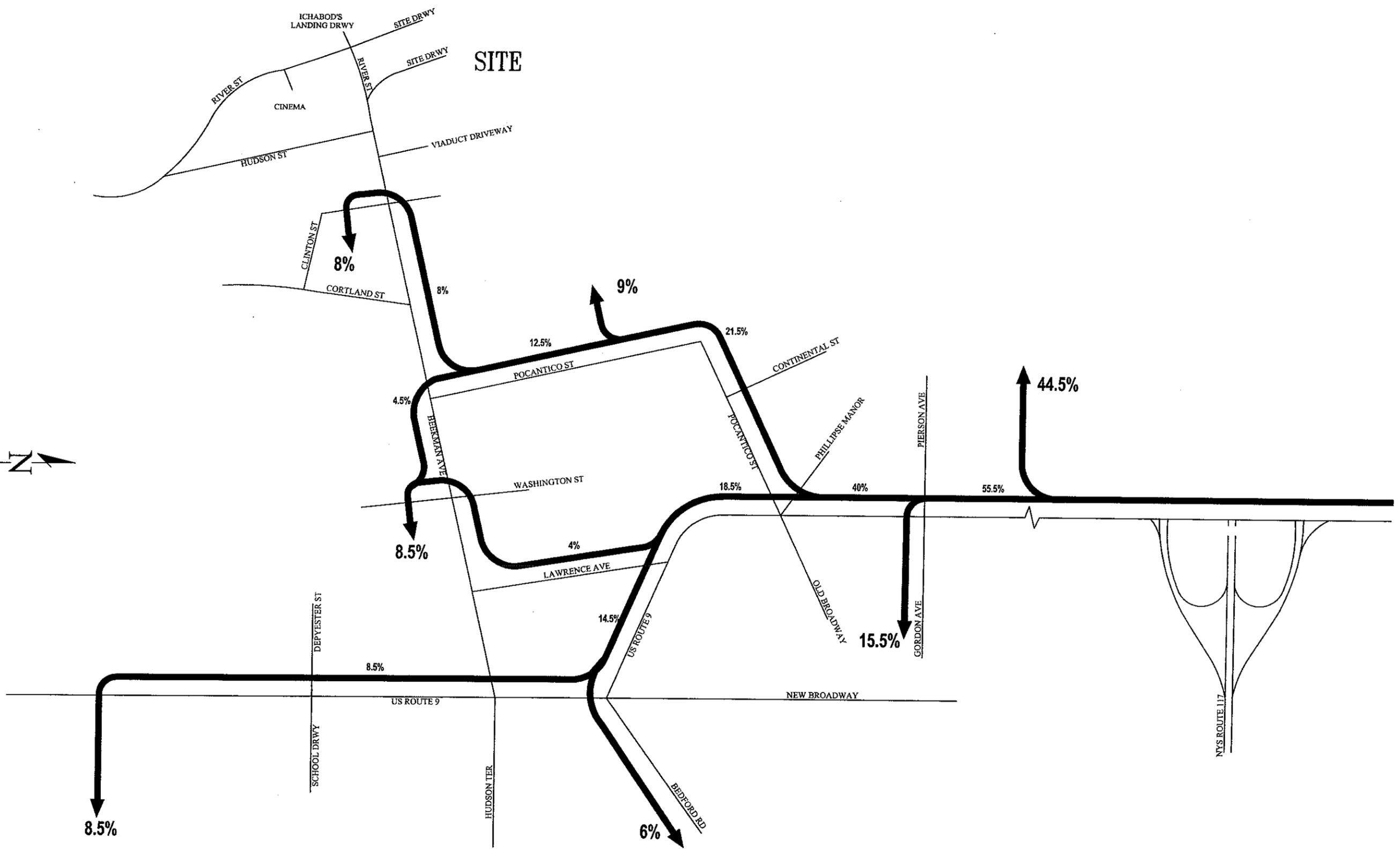
LIGHTHOUSE LANDING
Sleepy Hollow, New York

Project No. 38109
Not to Scale

October 2005

Figure No. 6.26a

NOT TO SCALE



TRC Raymond Keyes
Associates
A Division of TRC Engineers, Inc.

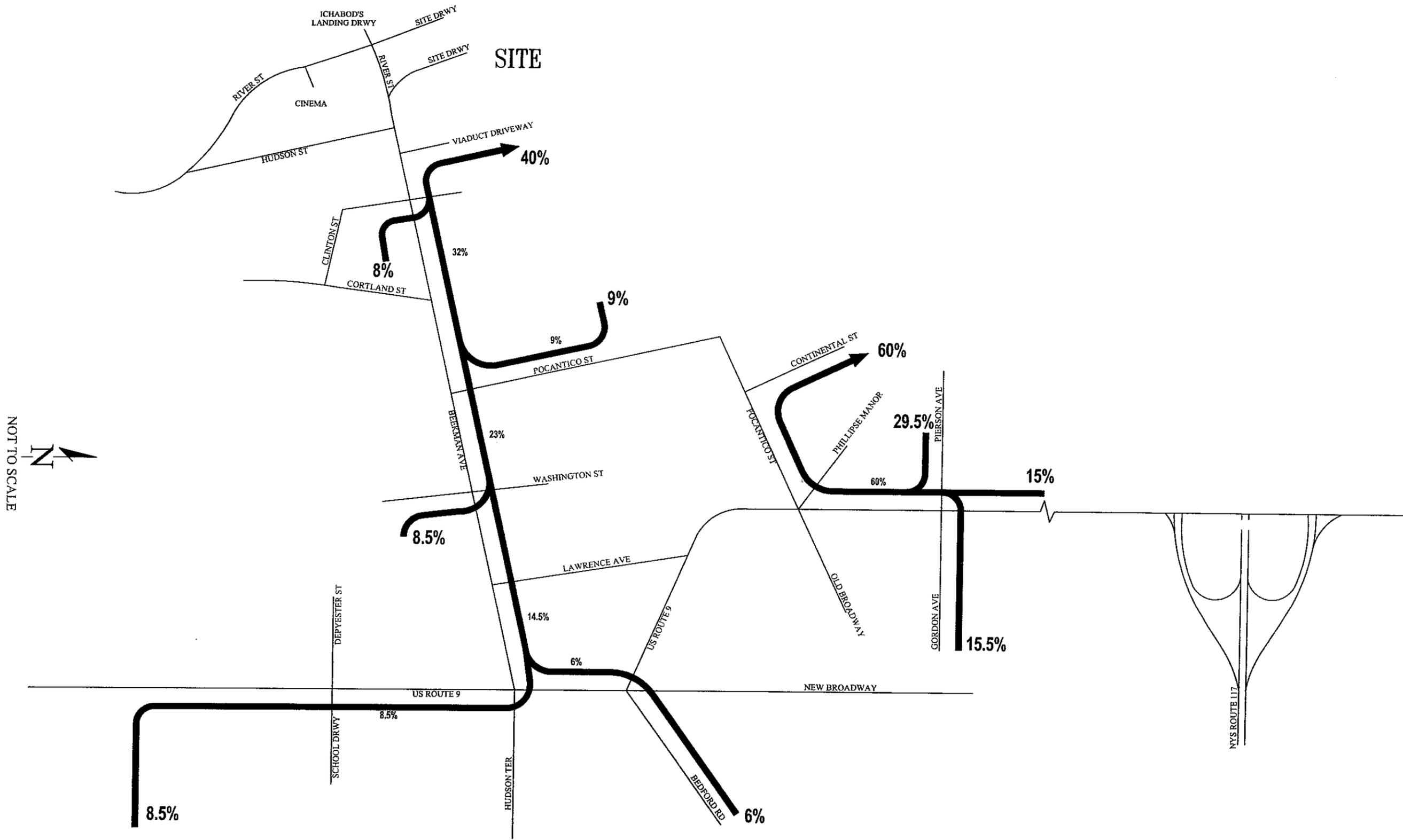
Existing Scarborough Station Departure Distribution

LIGHTHOUSE LANDING
Sleepy Hollow, New York

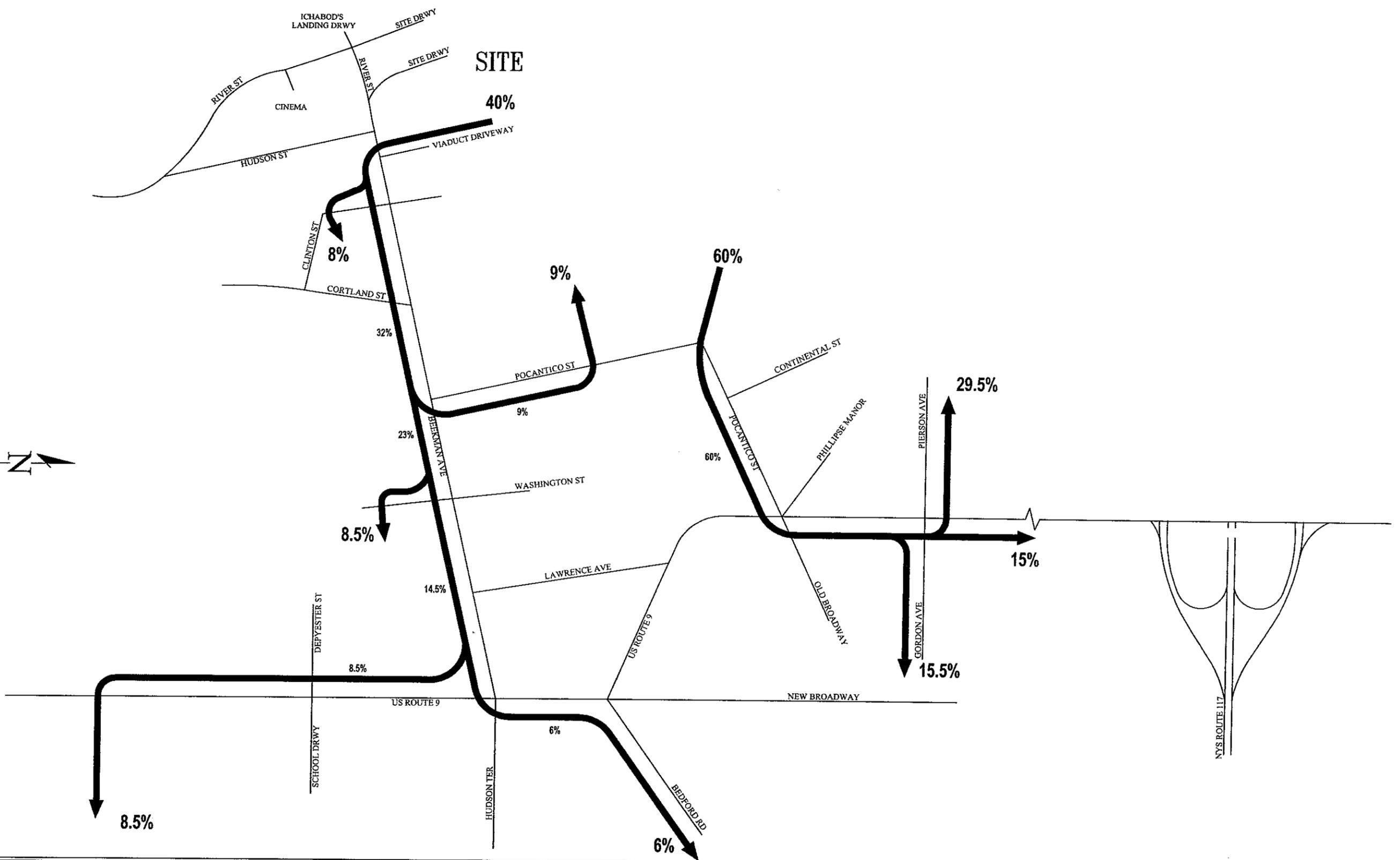
Project No. 38109
Not to Scale

October 2005

Figure No. 6.26b



NOT TO SCALE



TRC Raymond Keyes Associates
A Division of TRC Engineers, Inc.

Proposed Re-Routed Station Departure Distribution

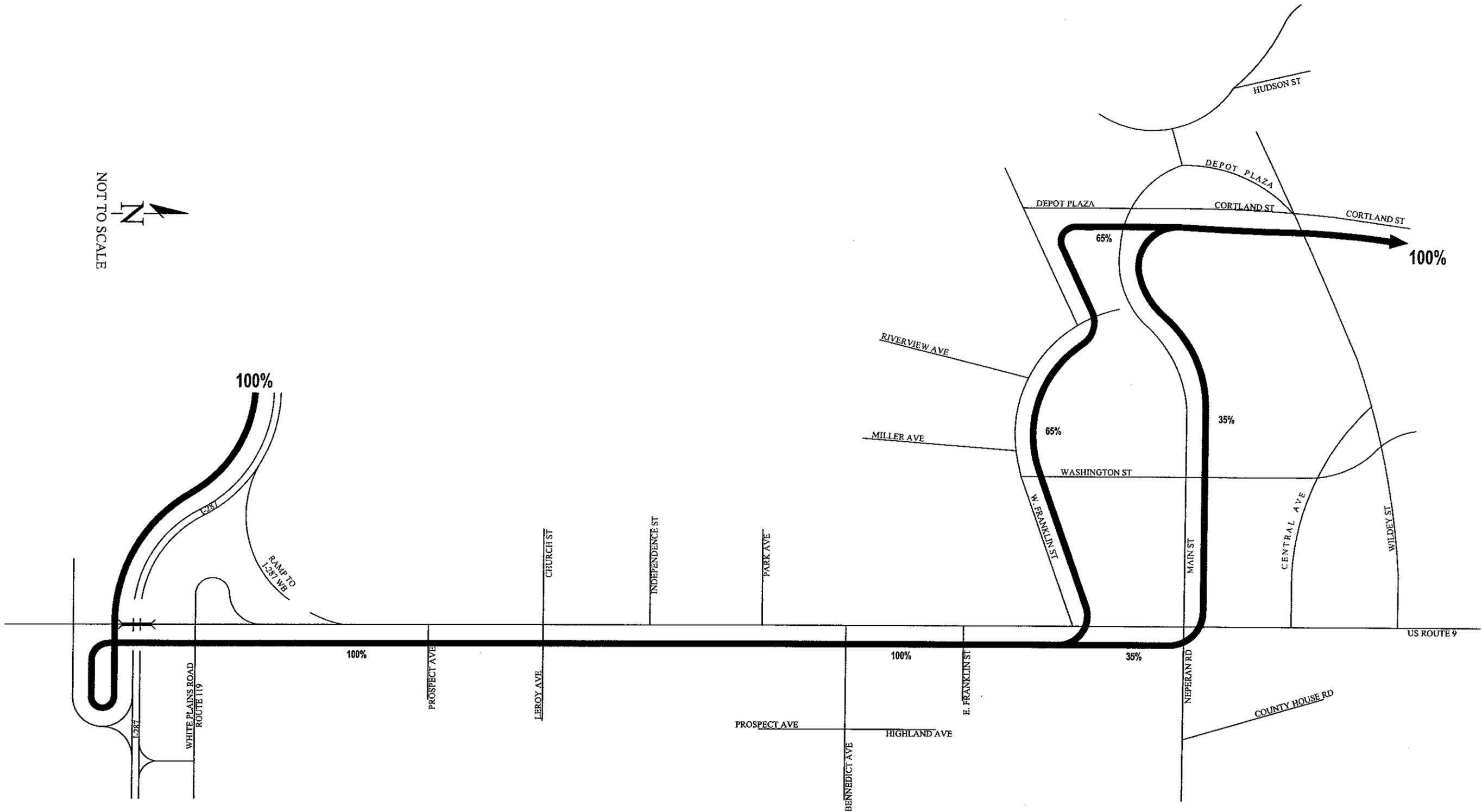
LIGHTHOUSE LANDING
Sleepy Hollow, New York

Project No. 38109
Not to Scale

October 2005

Figure No. 6.26d

NOT TO SCALE

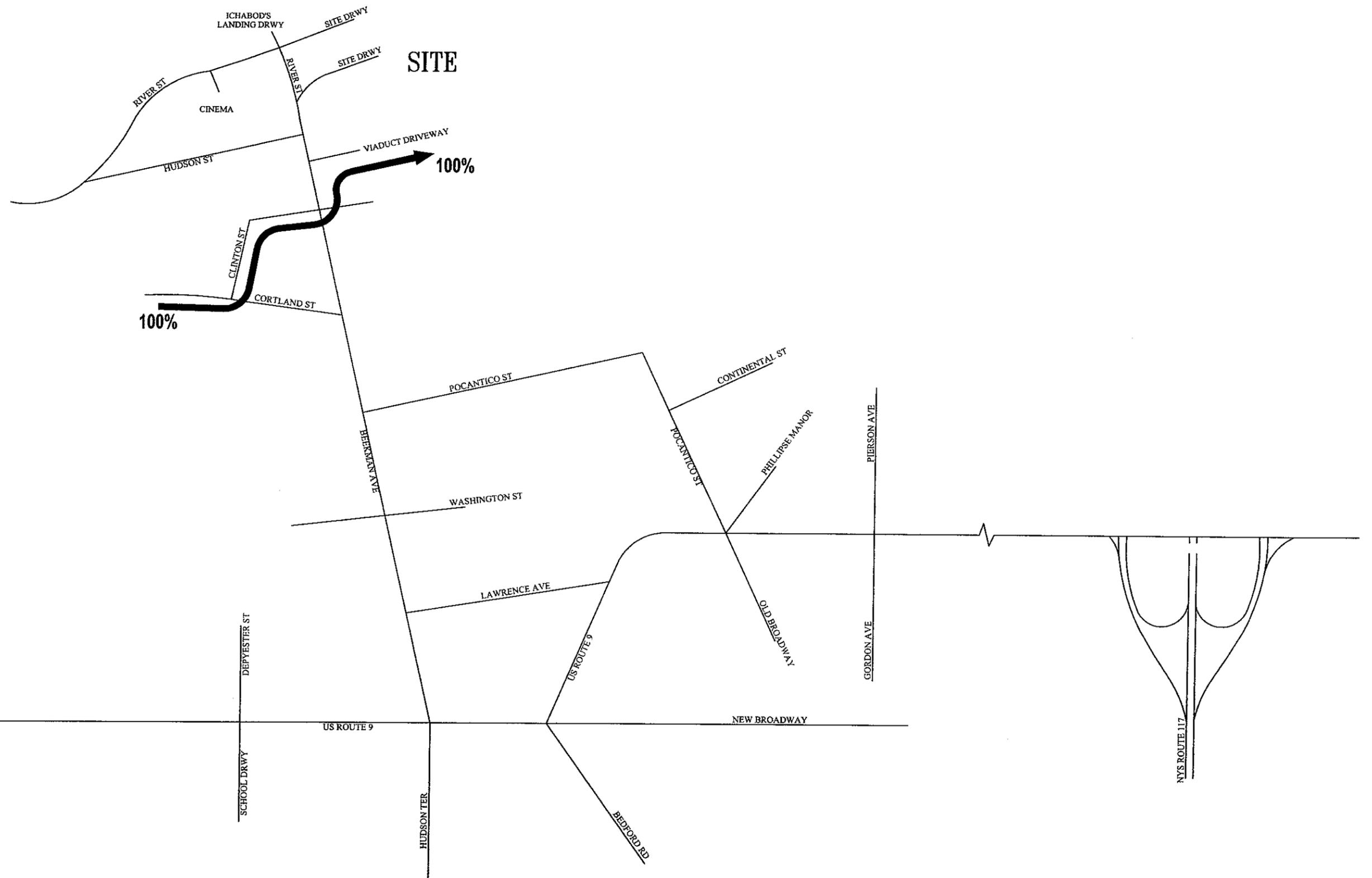


Station Arrival Distribution for Rockland County

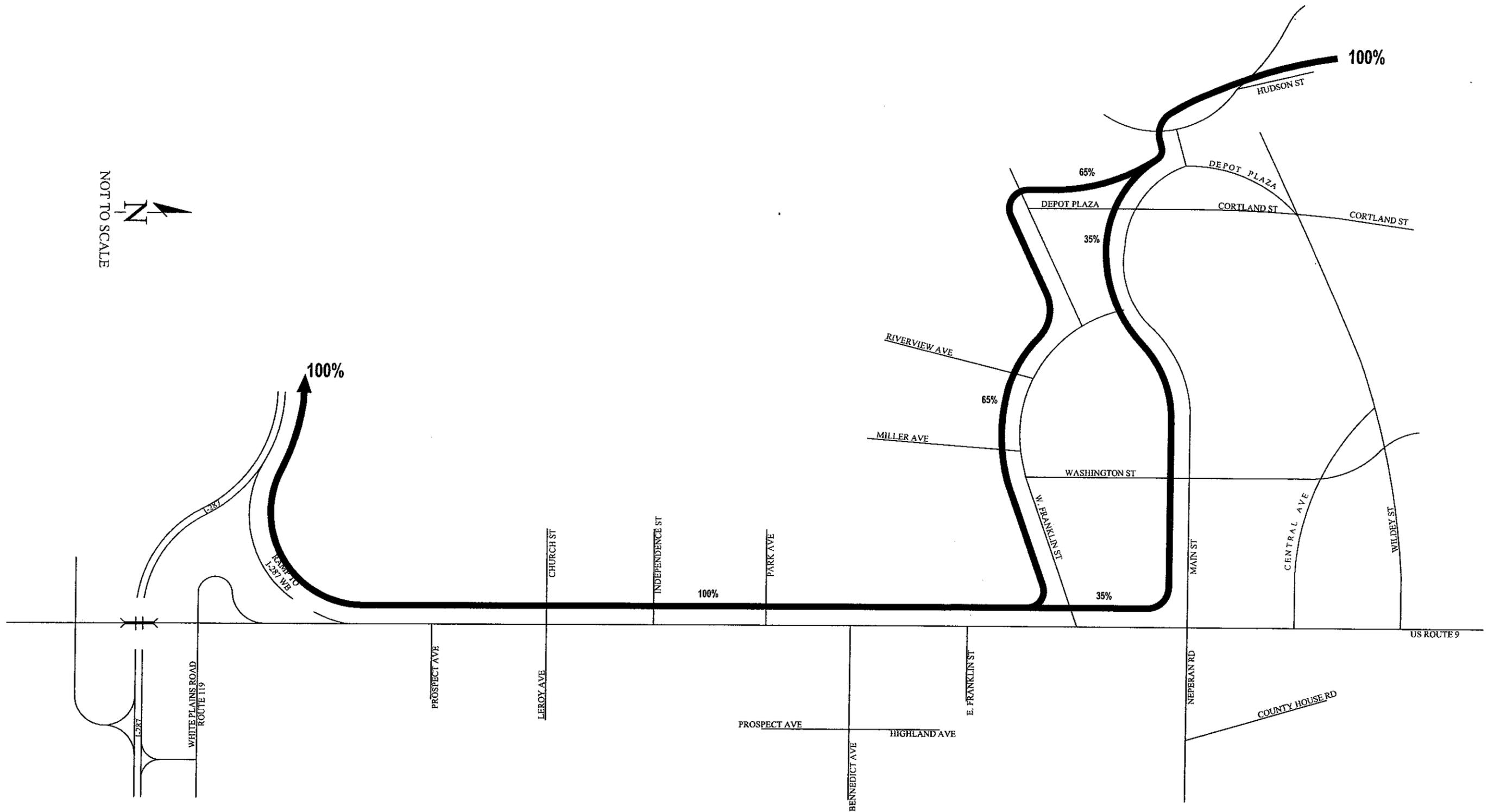
LIGHTHOUSE LANDING

Sleepy Hollow, New York

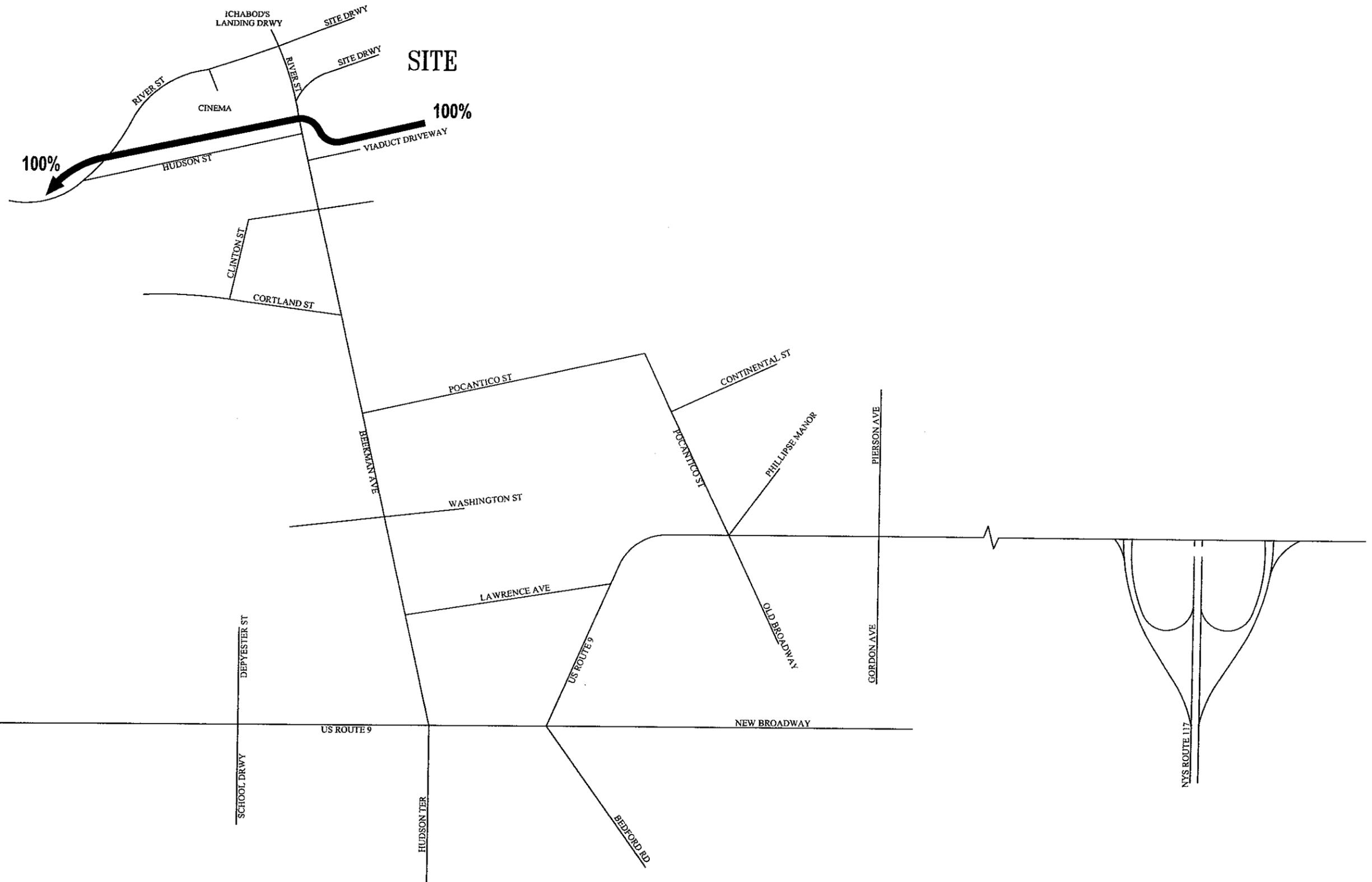
NOT TO SCALE

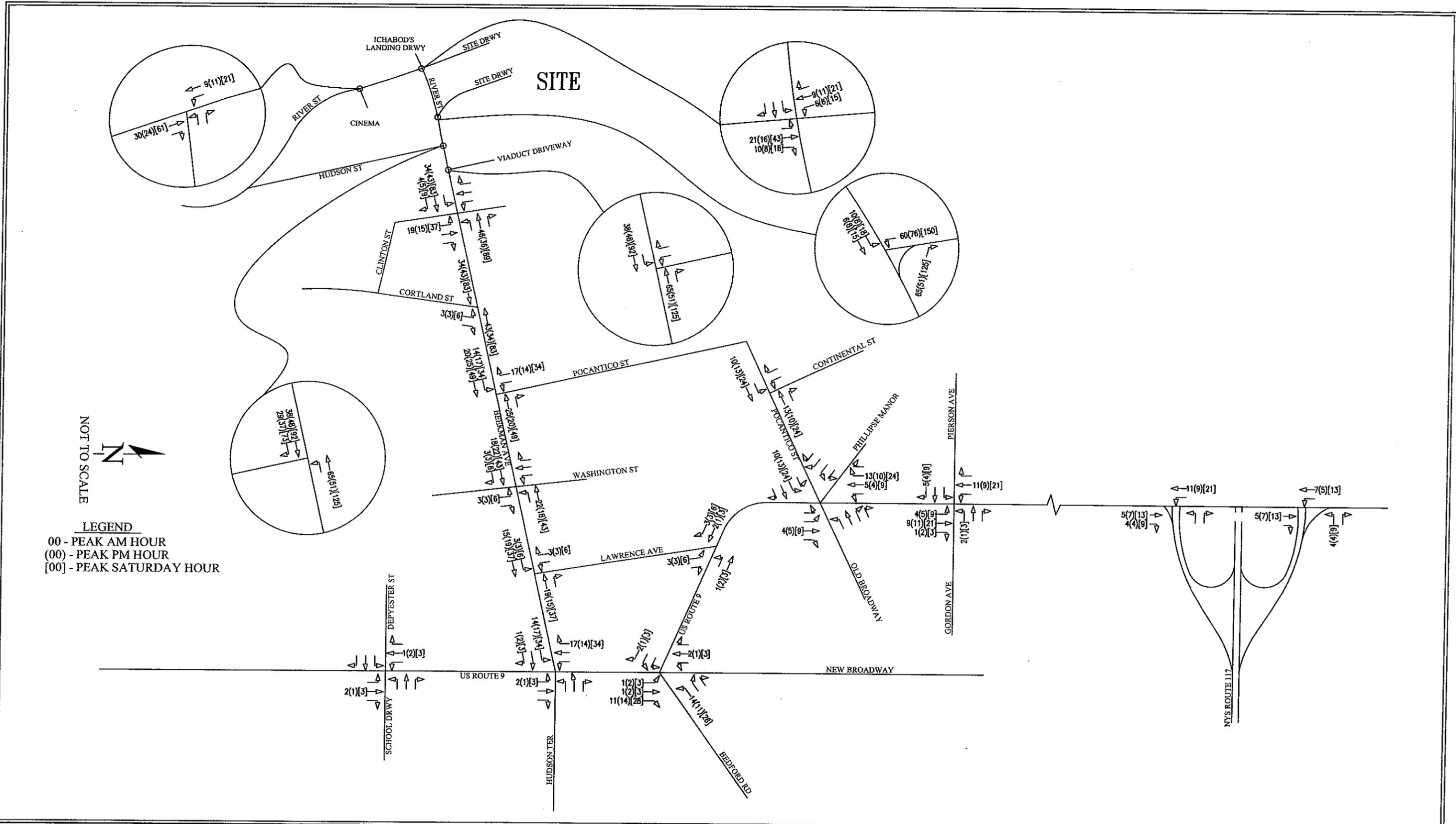


NOT TO SCALE
N



NOT TO SCALE

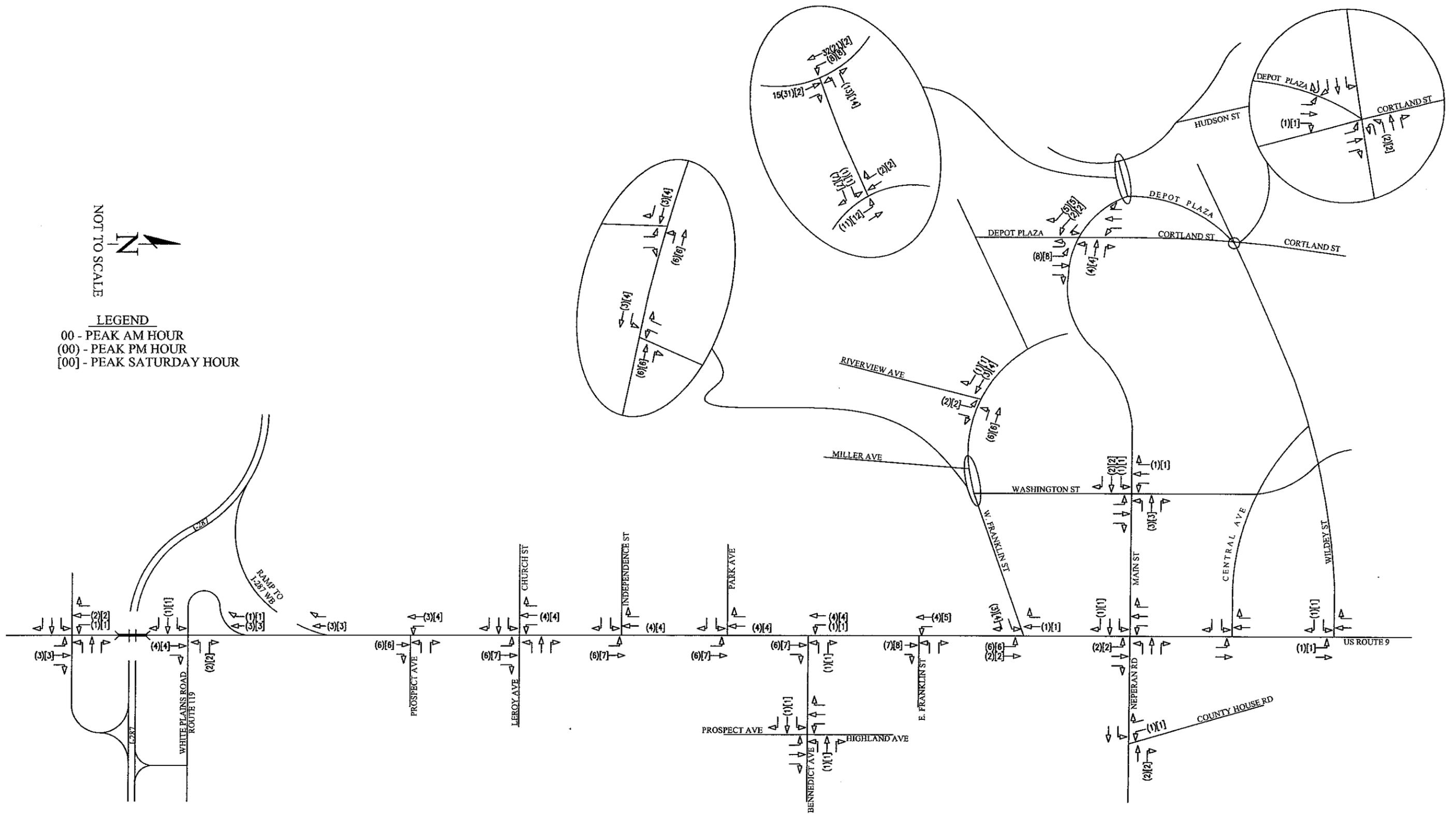


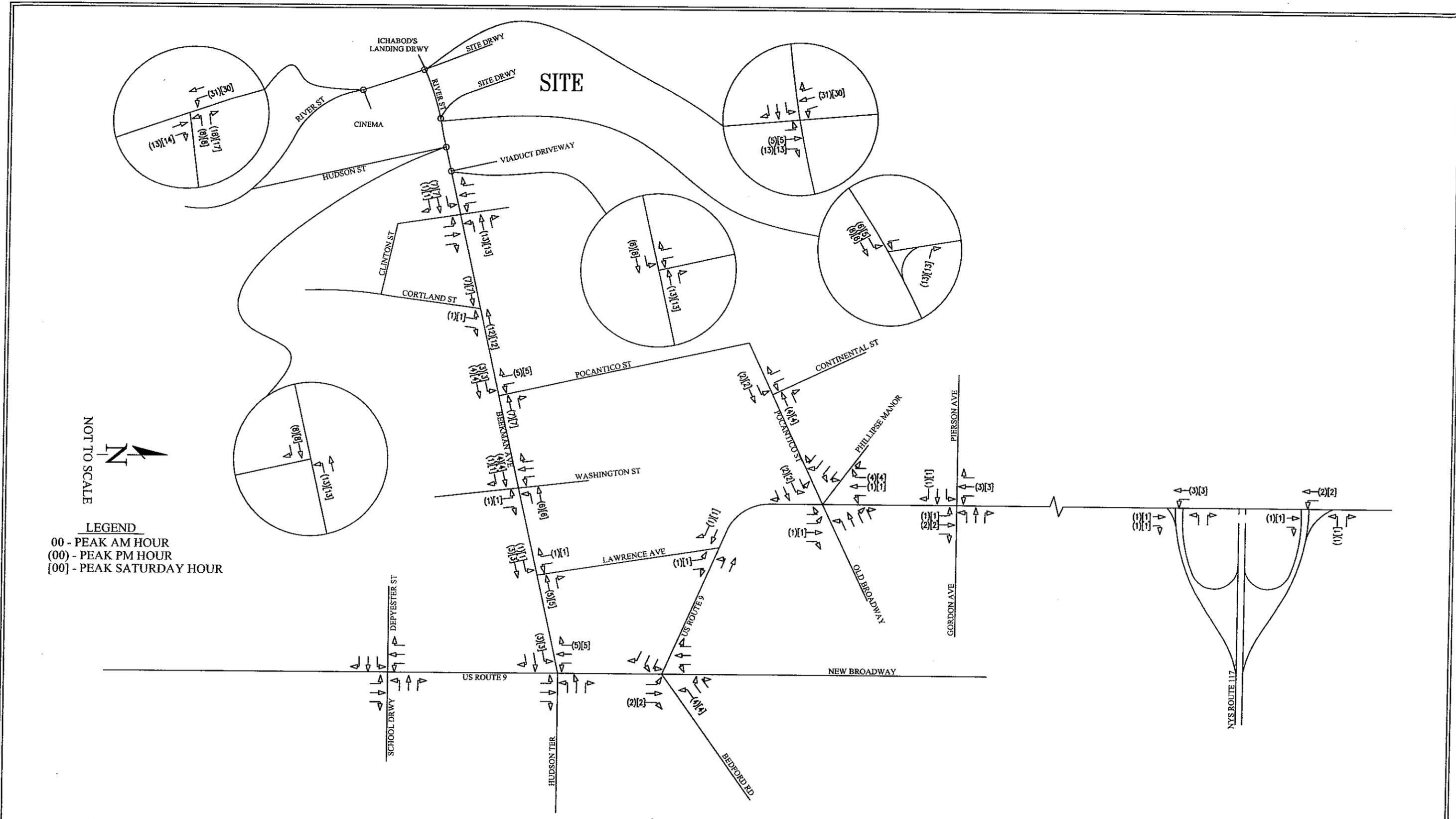


NOT TO SCALE



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR

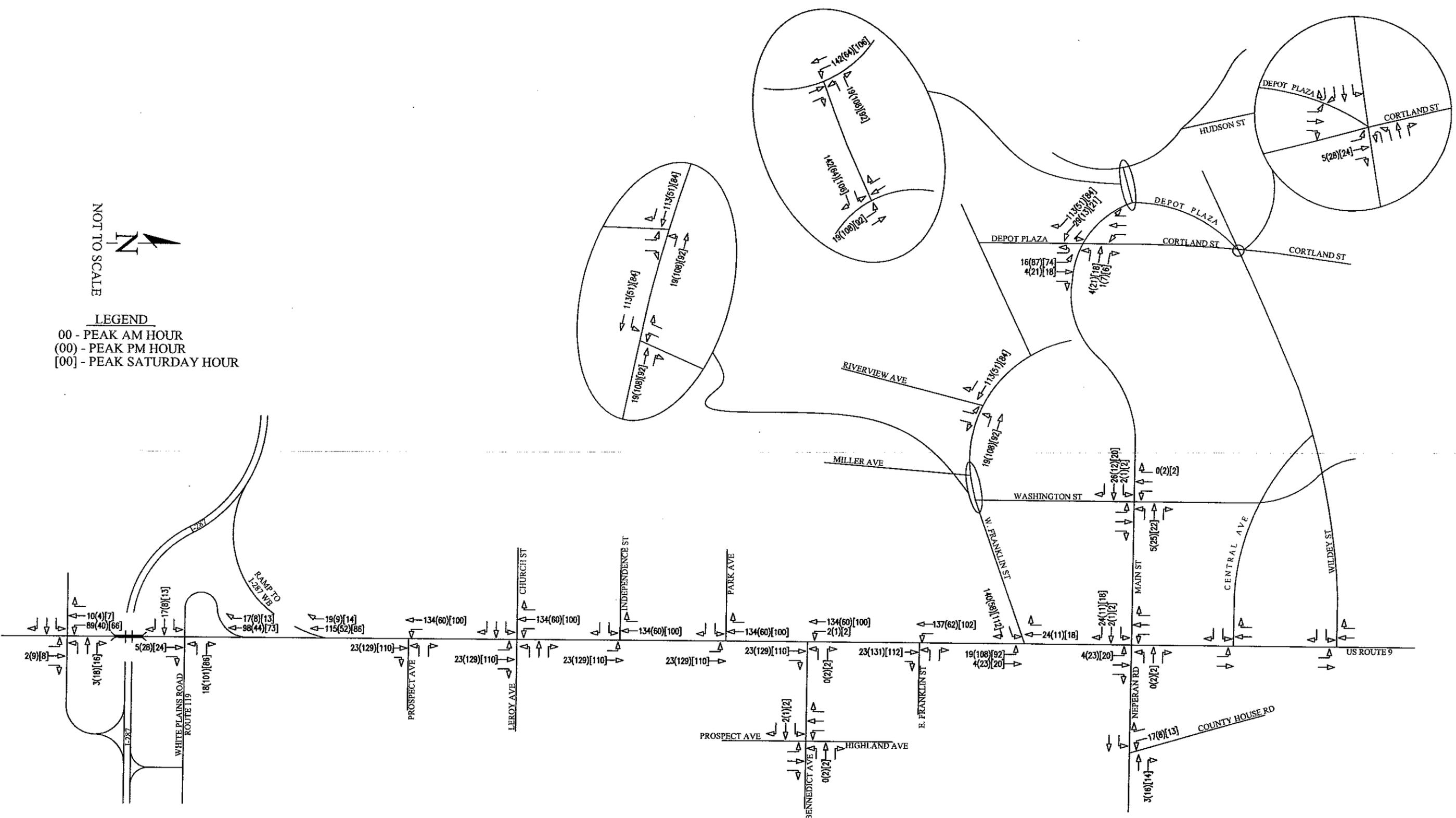




NOT TO SCALE



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR



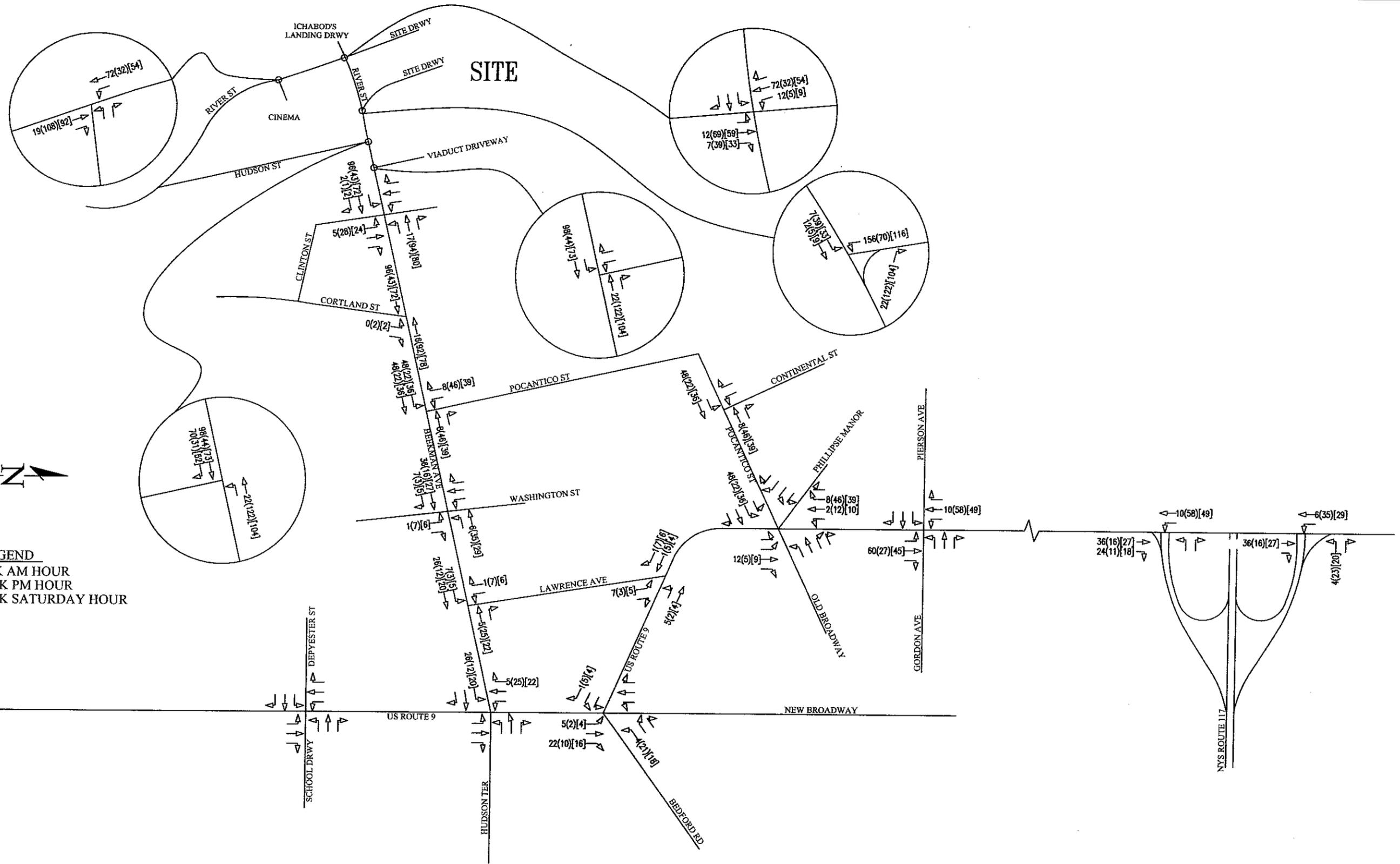
TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

Residential Site Generated Traffic Volumes
 LIGHTHOUSE LANDING
 Sleepy Hollow, New York

Project No. 38109
 Not to Scale

October 2005

Figure No. 6.30a



NOT TO SCALE

LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR

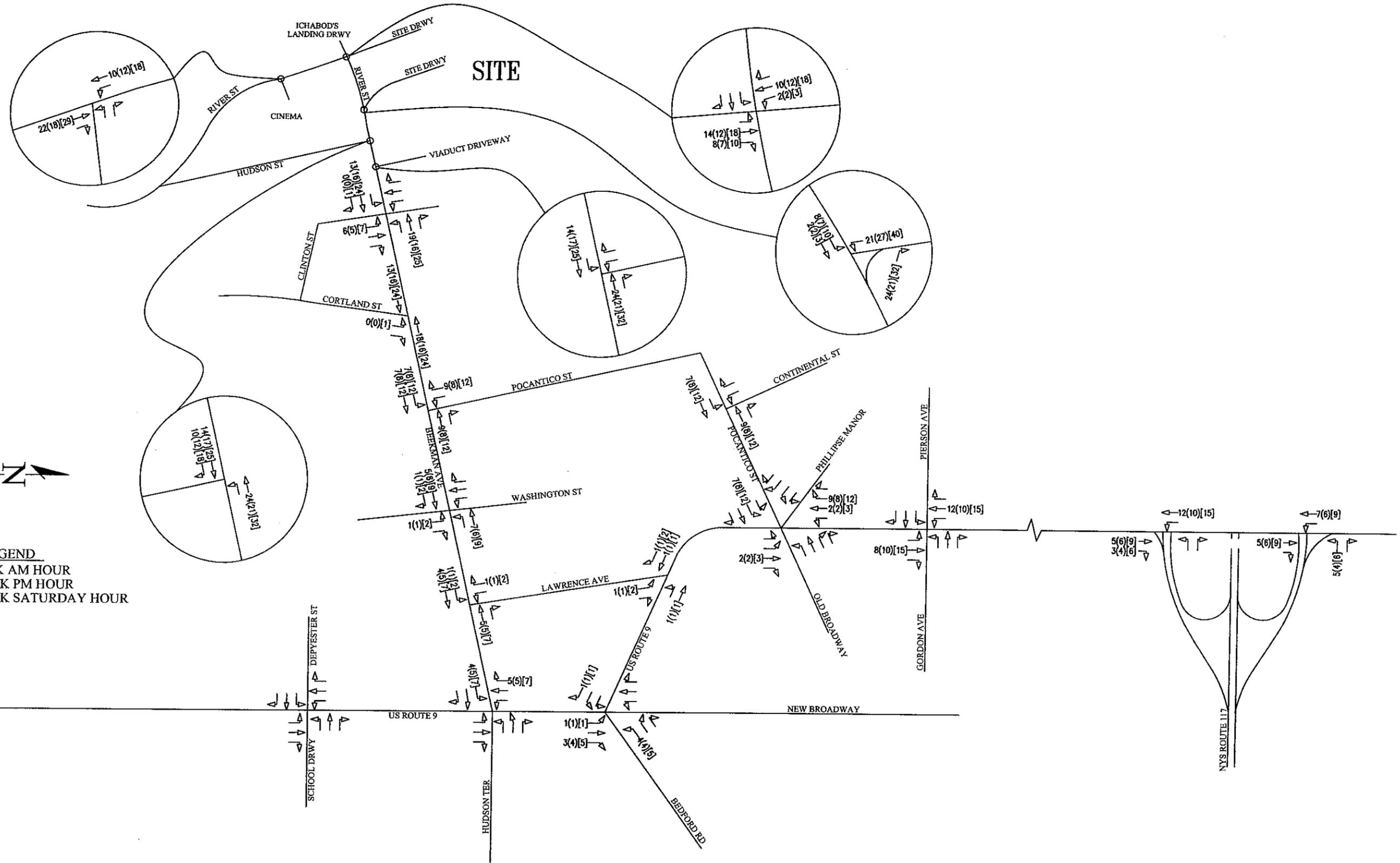
TRC Raymond Keyes Associates
 A Division of TRC Engineers, Inc.

Residential Site Generated Traffic Volumes
 LIGHTHOUSE LANDING
 Sleepy Hollow, New York

Project No. 38109
 Not to Scale

October 2005

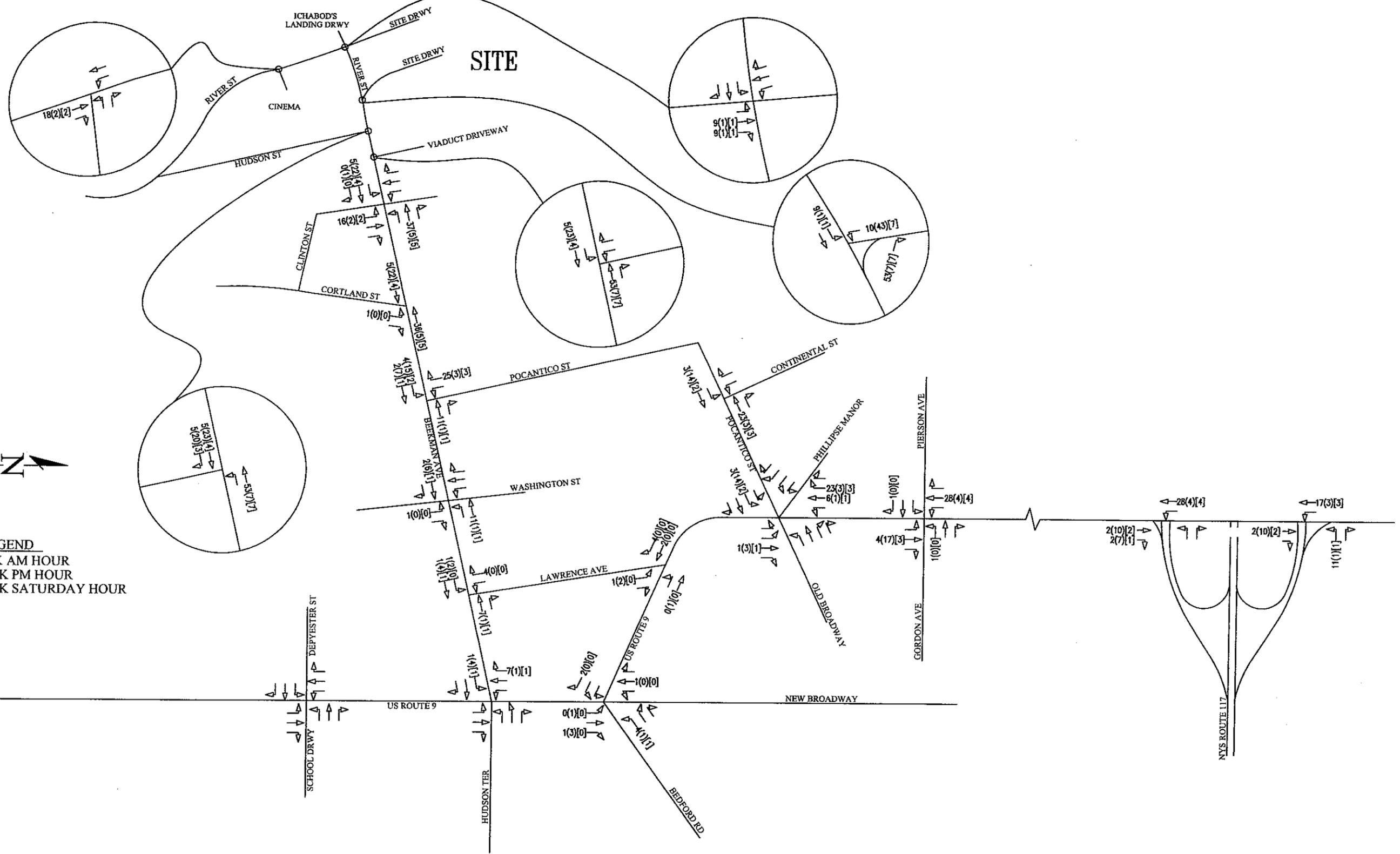
Figure No. 6.30b



Hotel Site Generated Traffic Volumes

LIGHTHOUSE LANDING

Sleepy Hollow, New York



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR

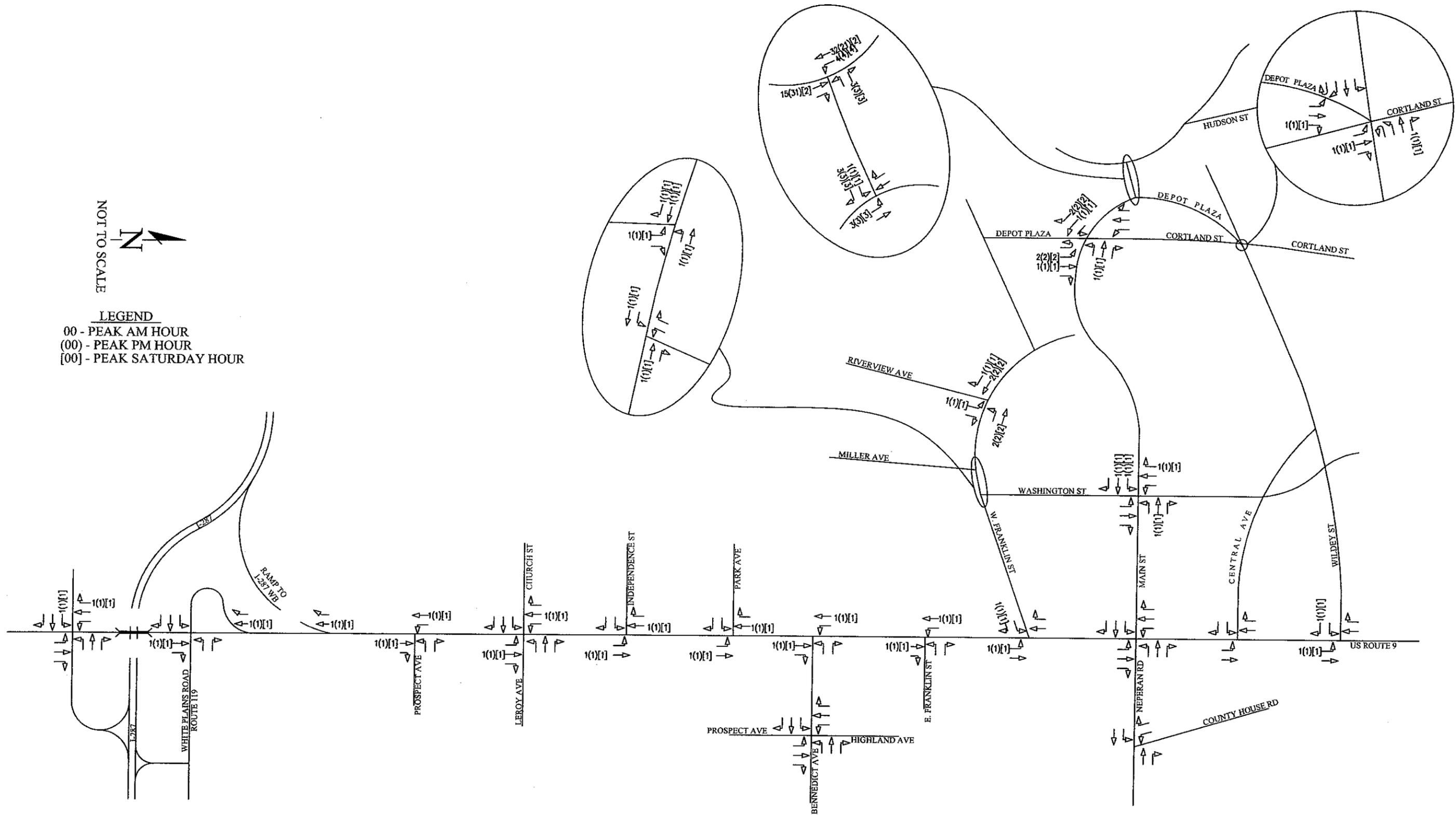
Office Site Generated Traffic Volumes

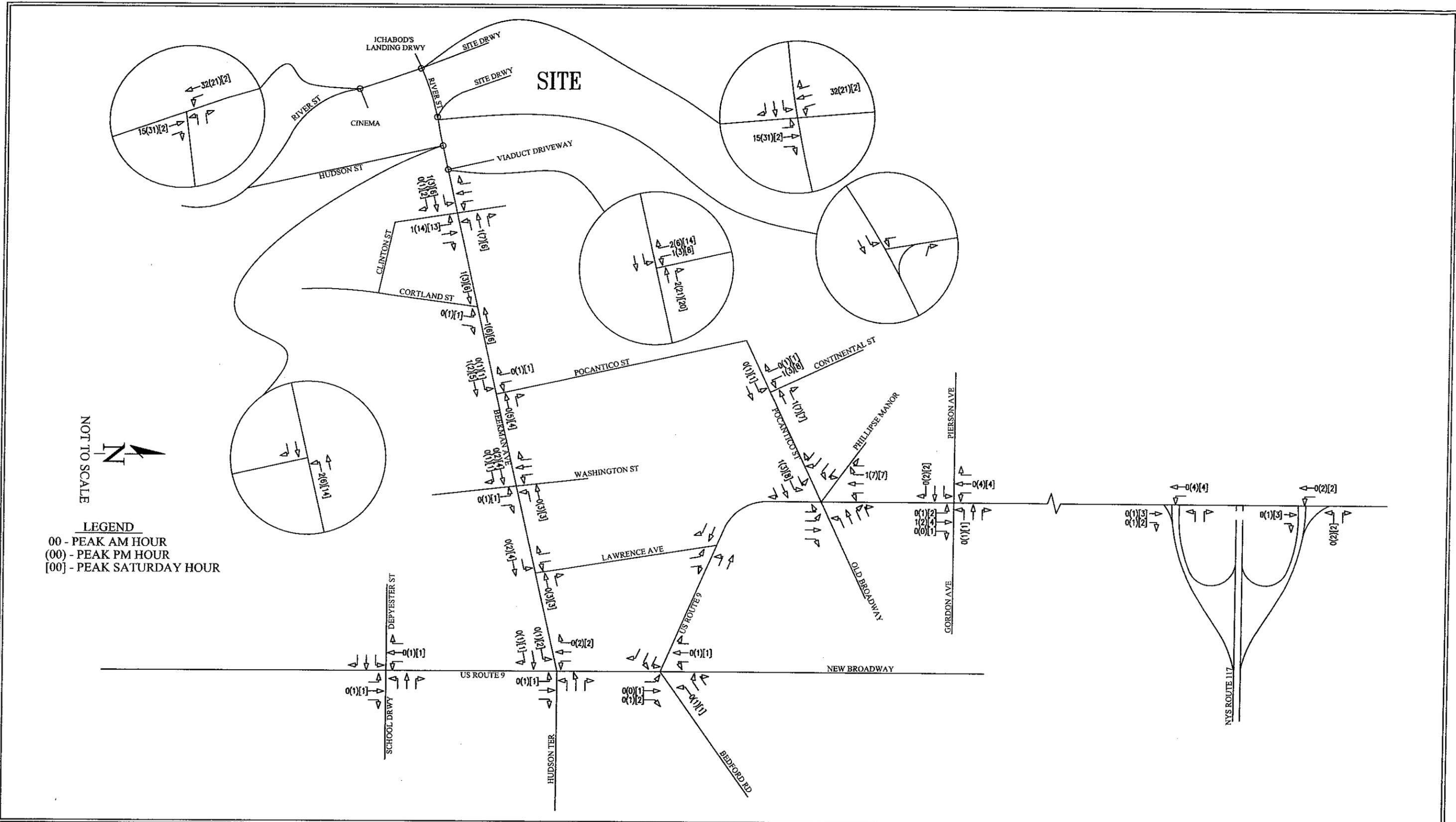
LIGHTHOUSE LANDING
 Sleepy Hollow, New York

NOT TO SCALE



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR





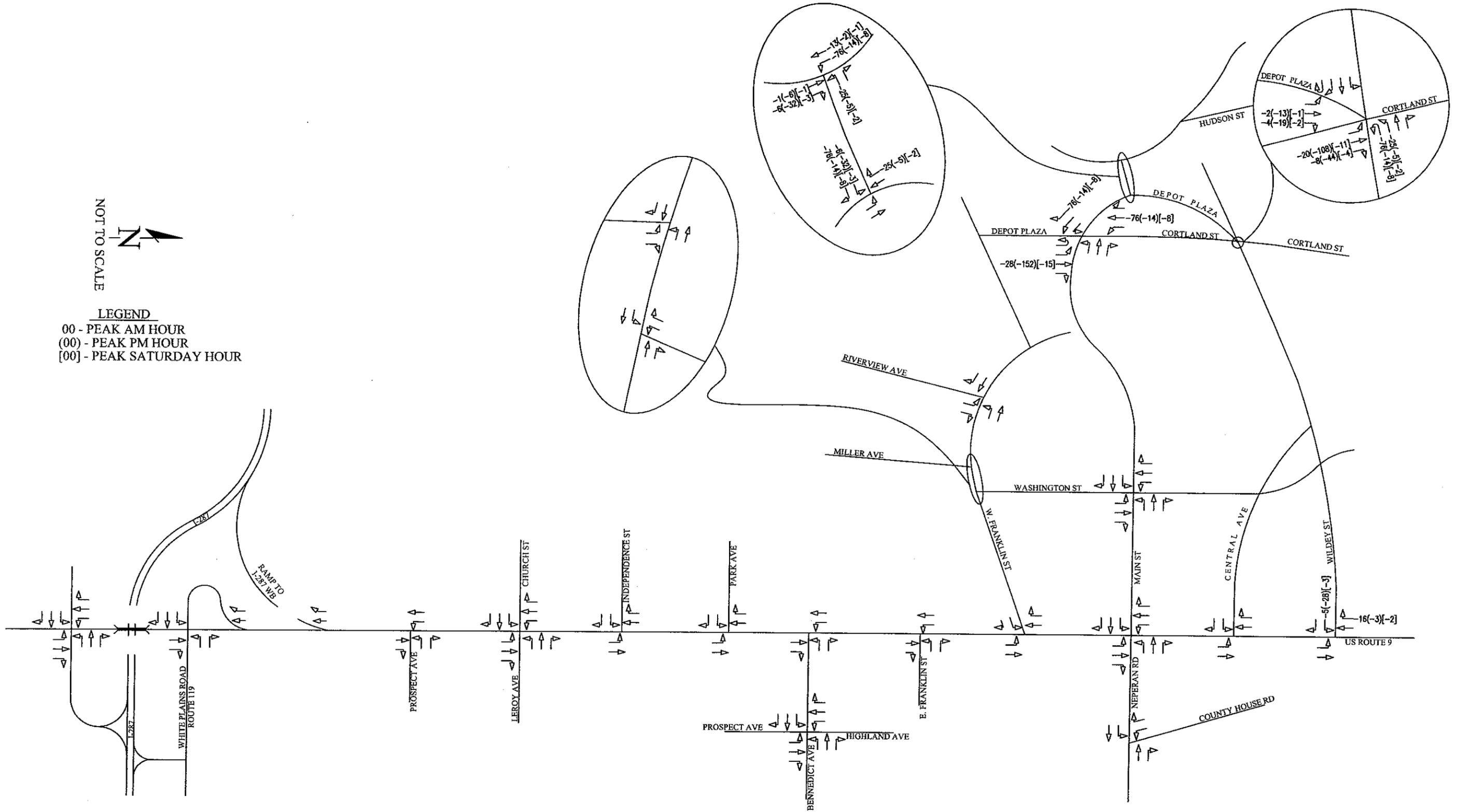
East Parcel Site Generated Traffic Volumes

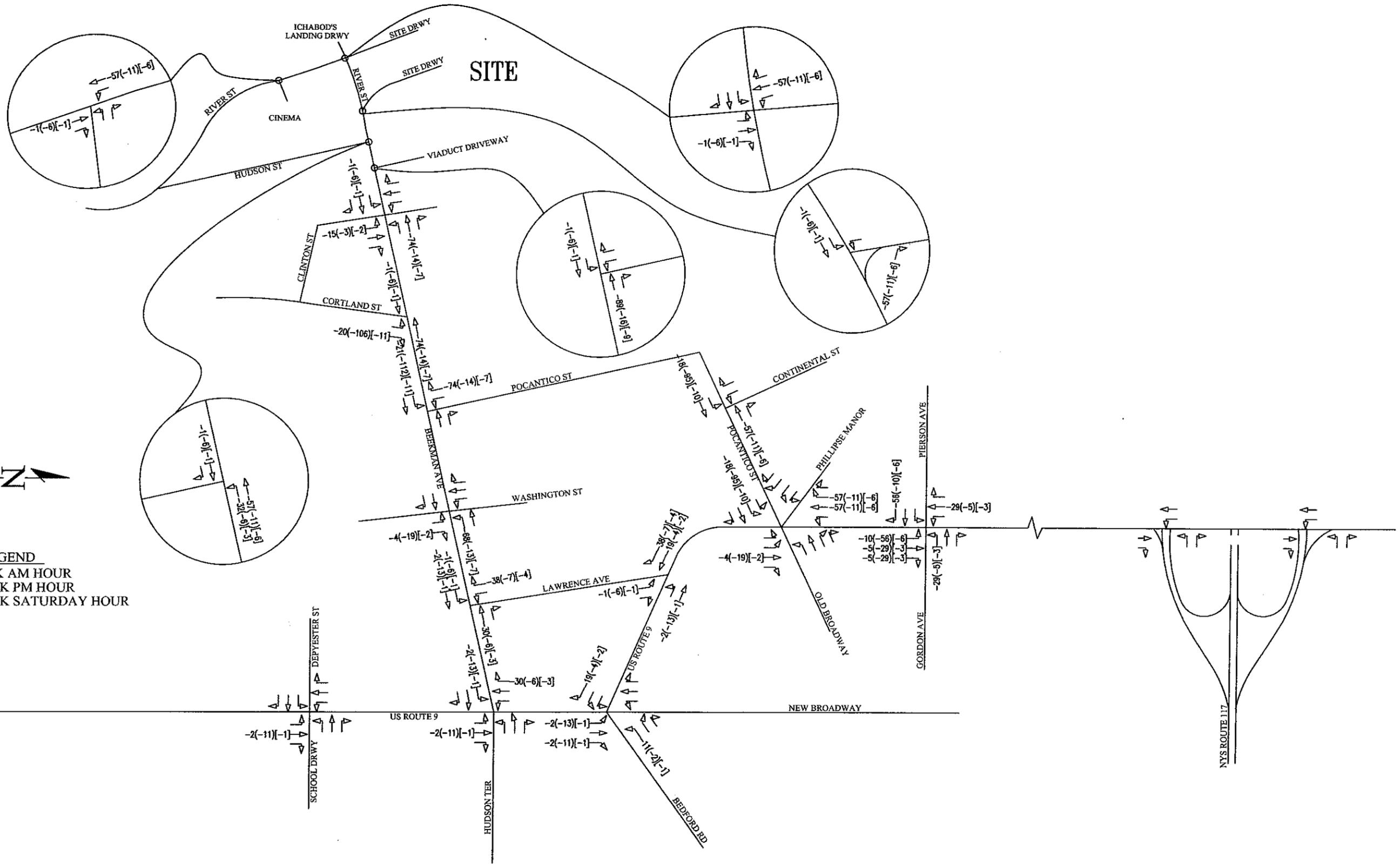
LIGHTHOUSE LANDING
 Sleepy Hollow, New York

NOT TO SCALE



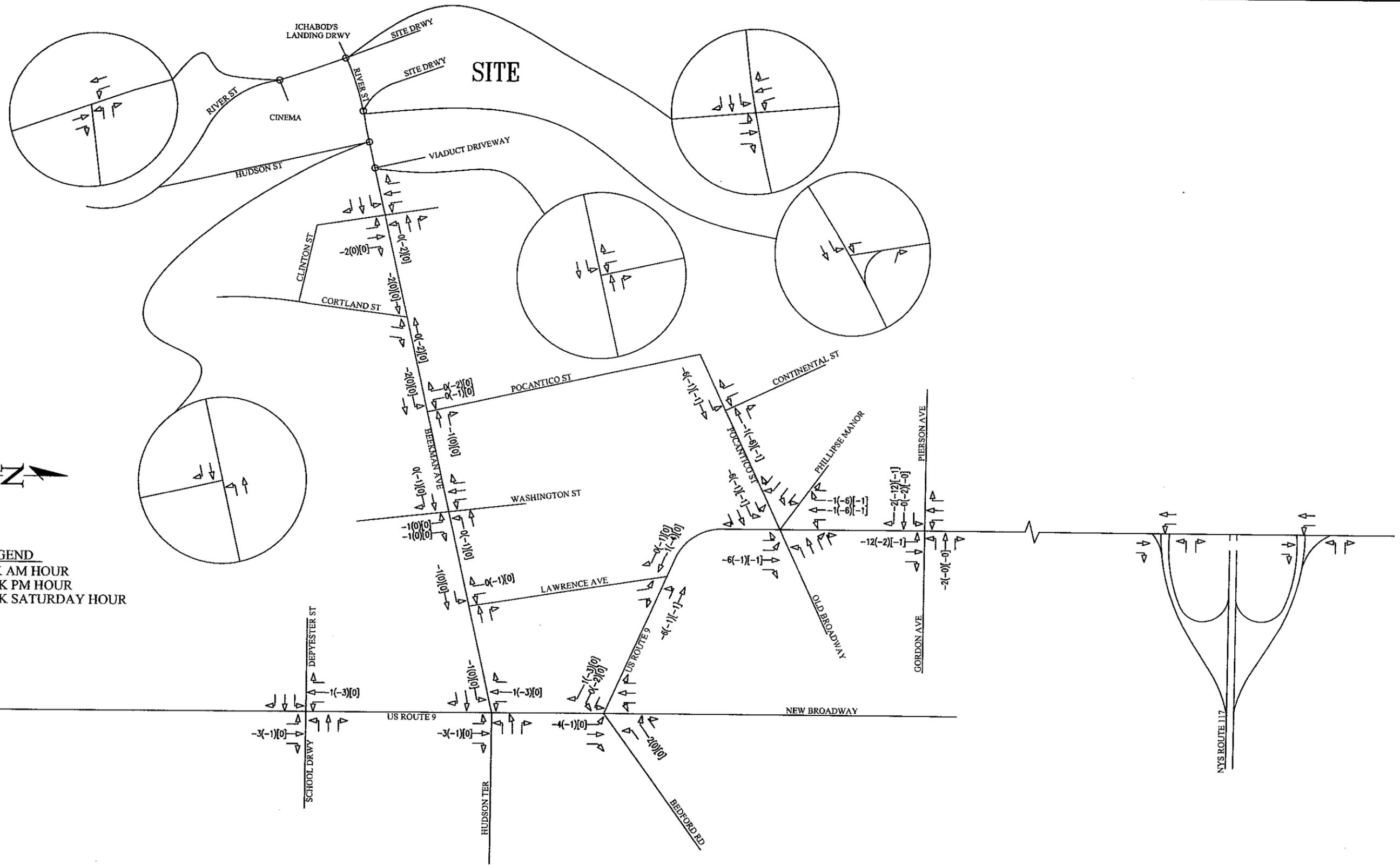
LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR





Redistributed Tarrytown Station Site Generated Traffic Volumes

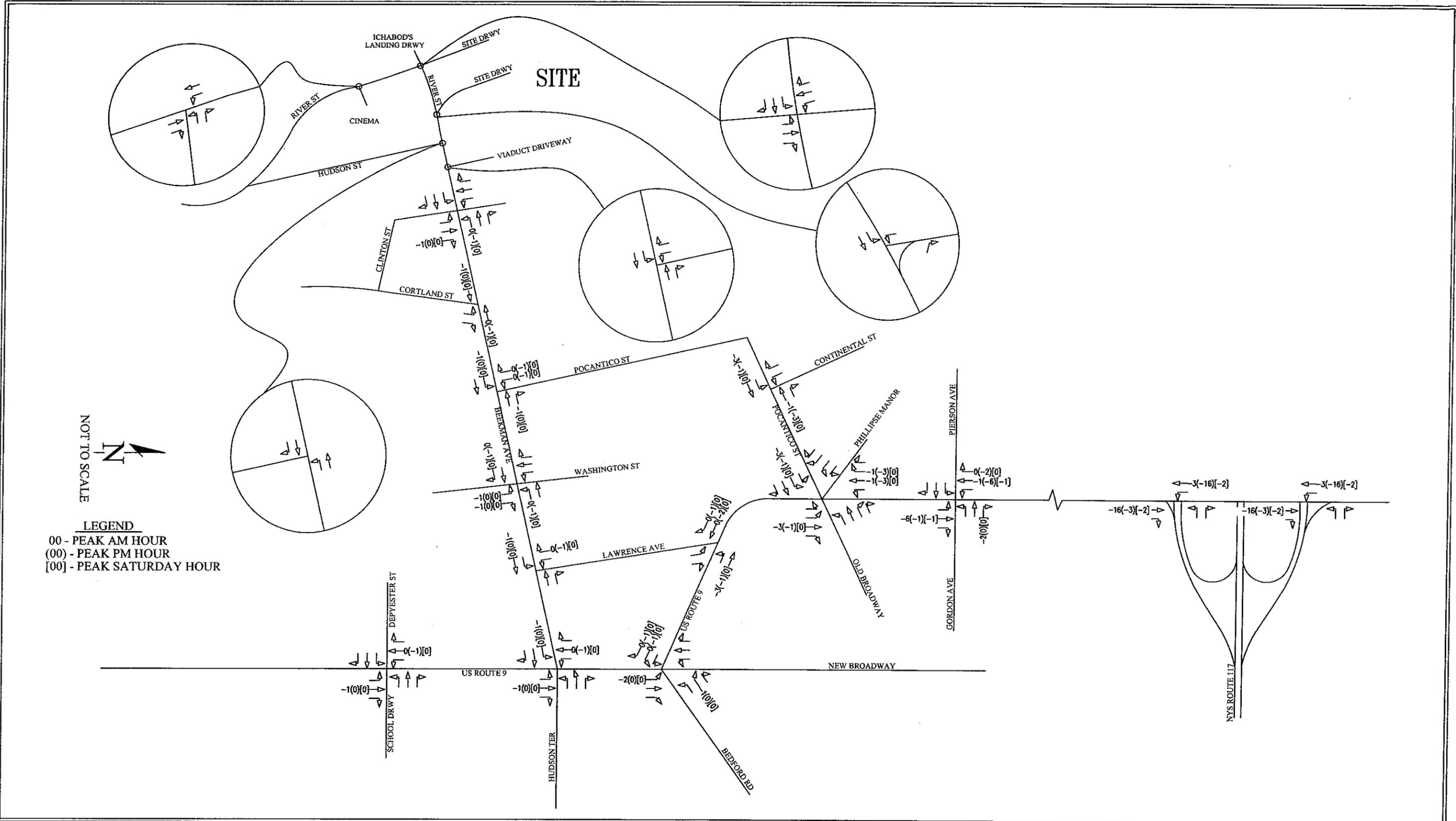
LIGHTHOUSE LANDING
 Sleepy Hollow, New York



Redistributed Phillipse Manor Station Site Generated Traffic Volumes

LIGHTHOUSE LANDING

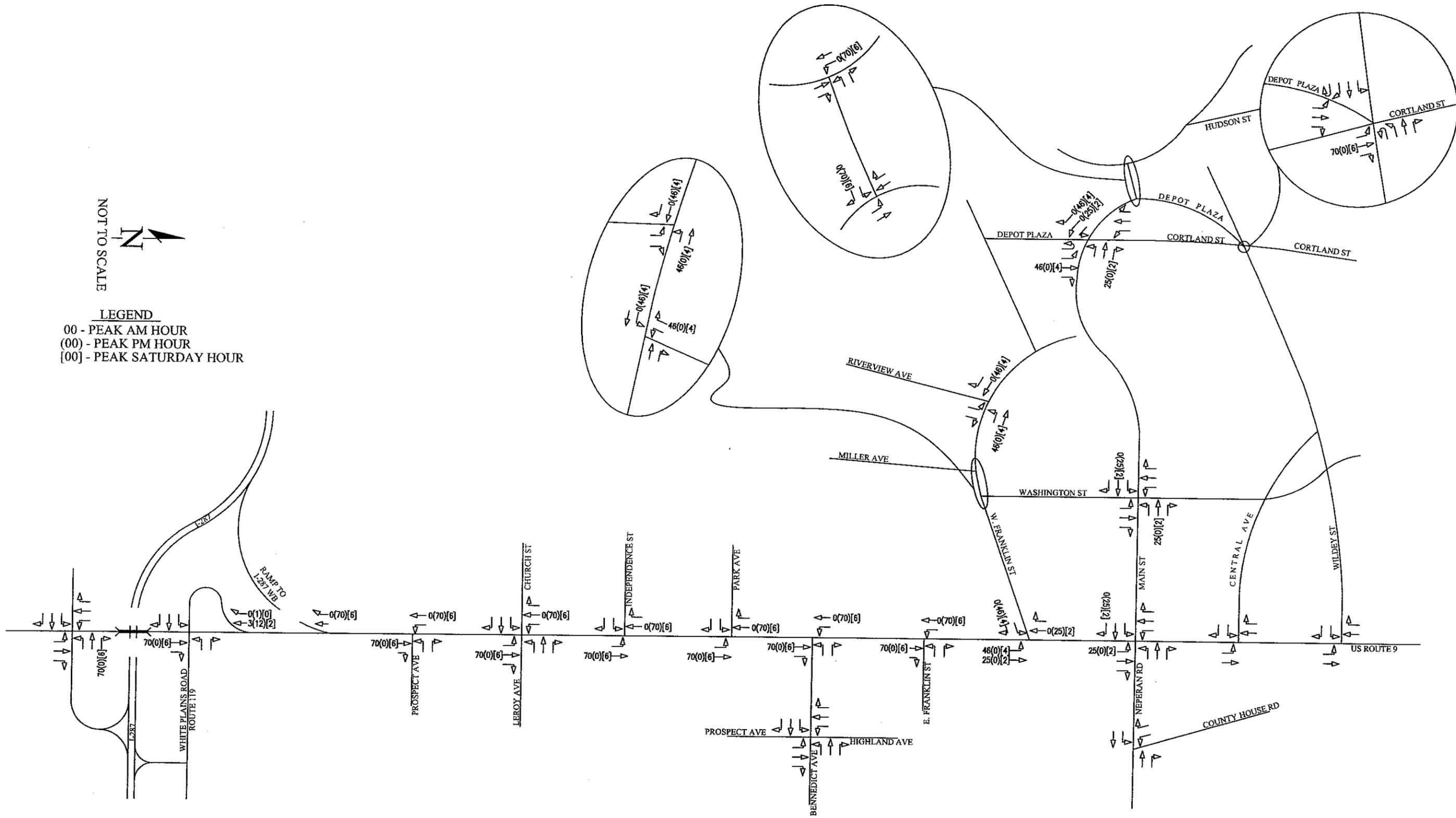
Sleepy Hollow, New York

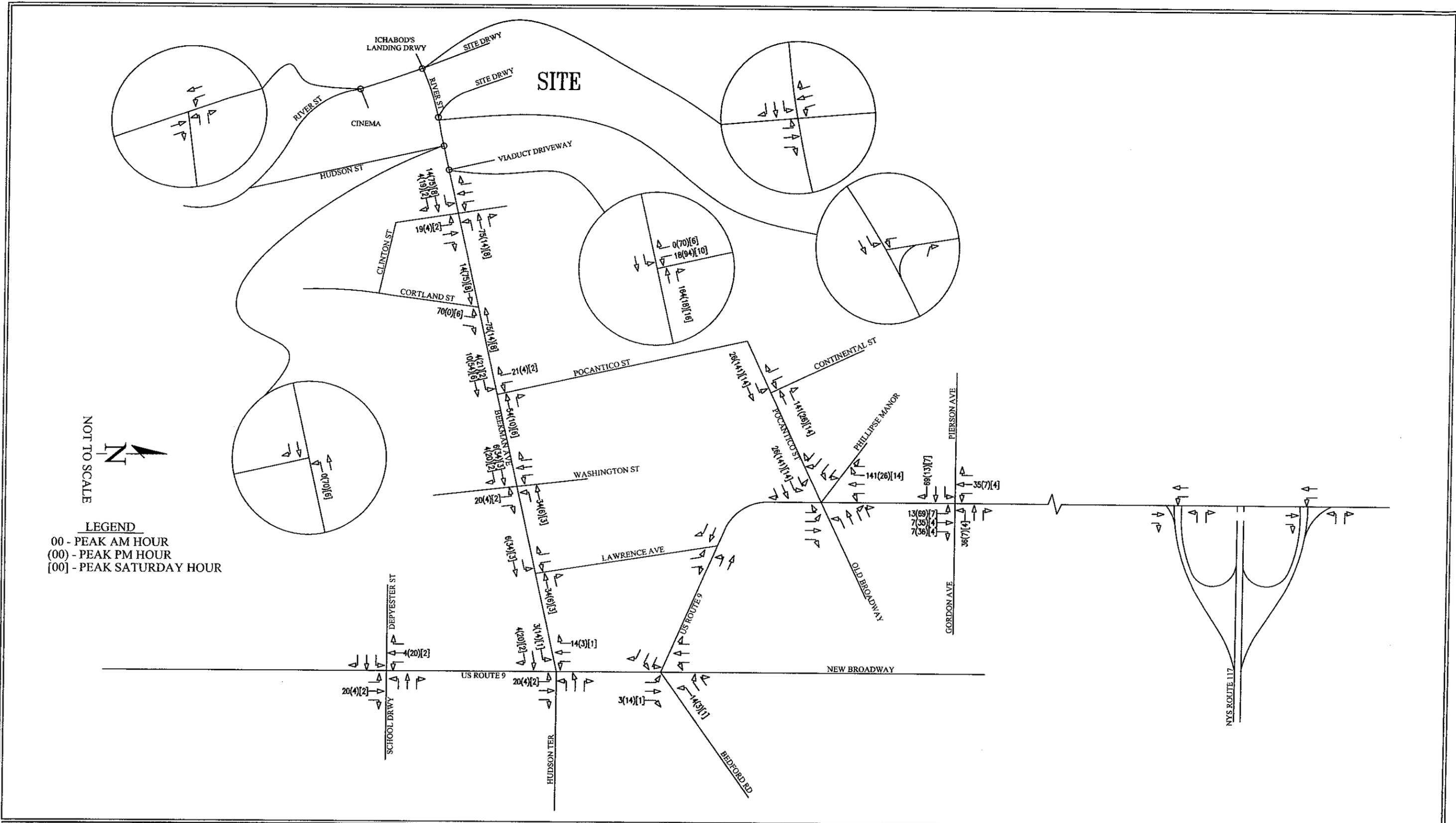


NOT TO SCALE



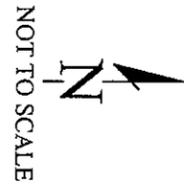
LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR



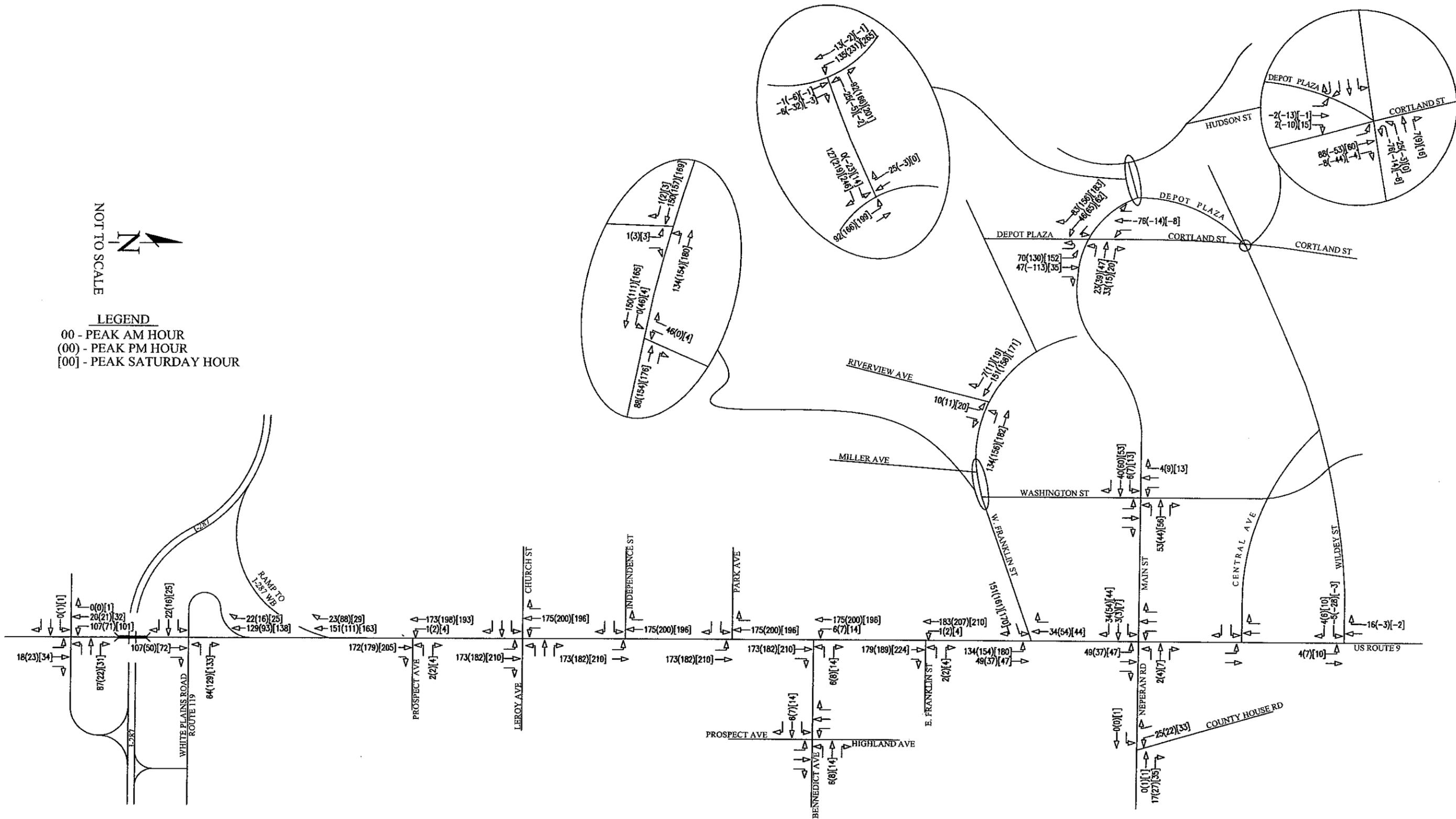


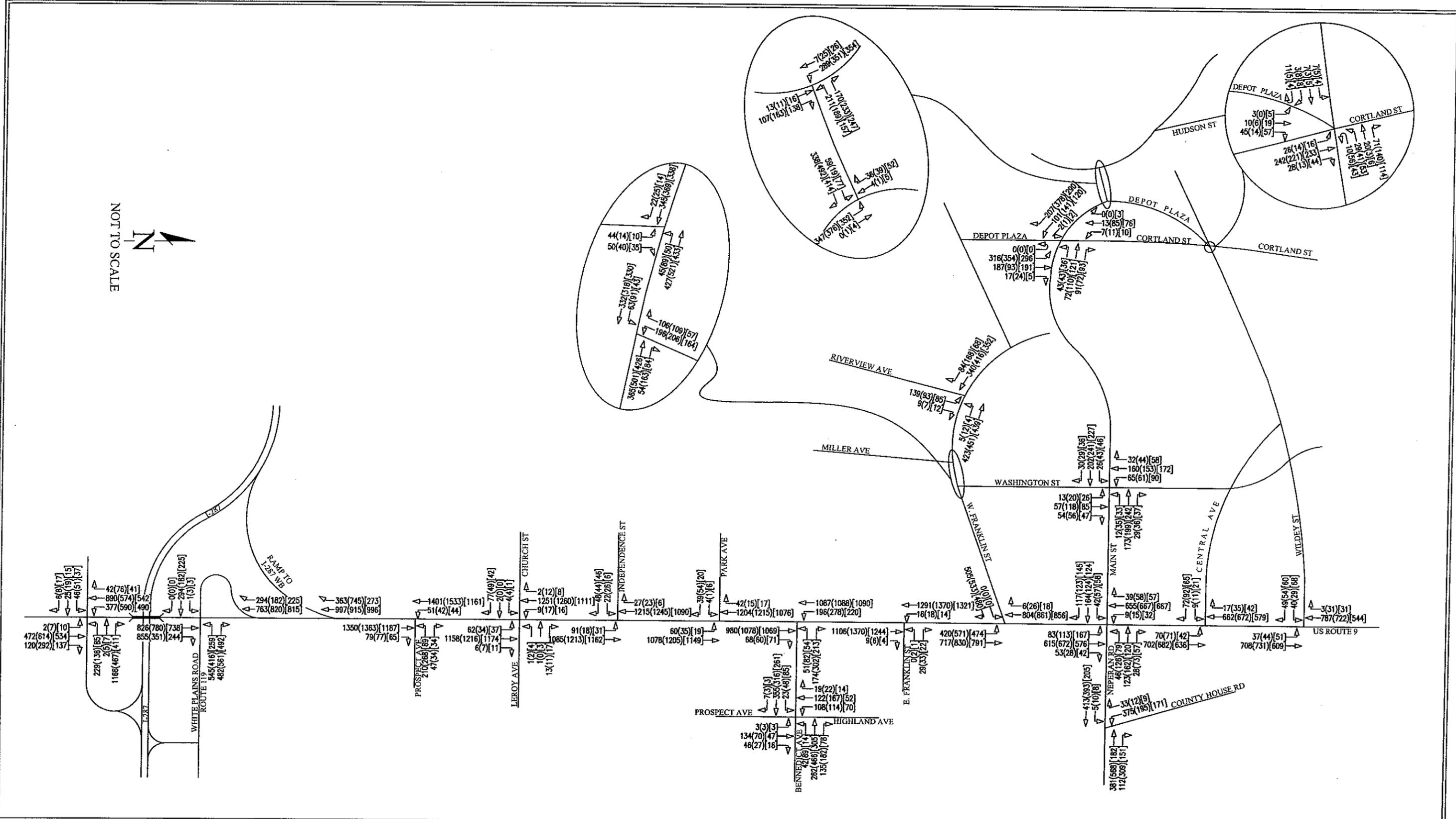
Proposed Sleepy Hollow Station Site Generated Traffic Volumes

LIGHTHOUSE LANDING
 Sleepy Hollow, New York

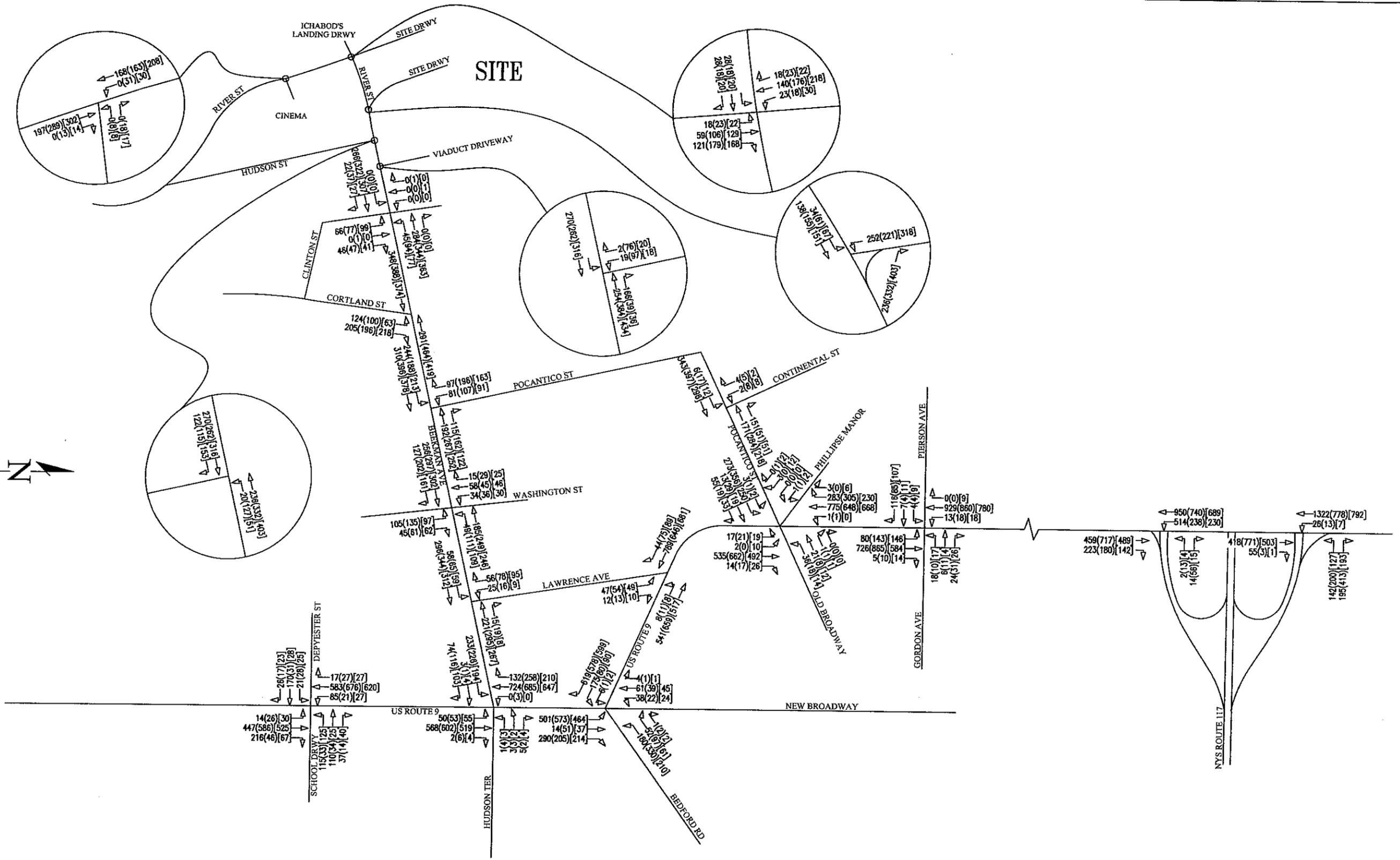


LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR





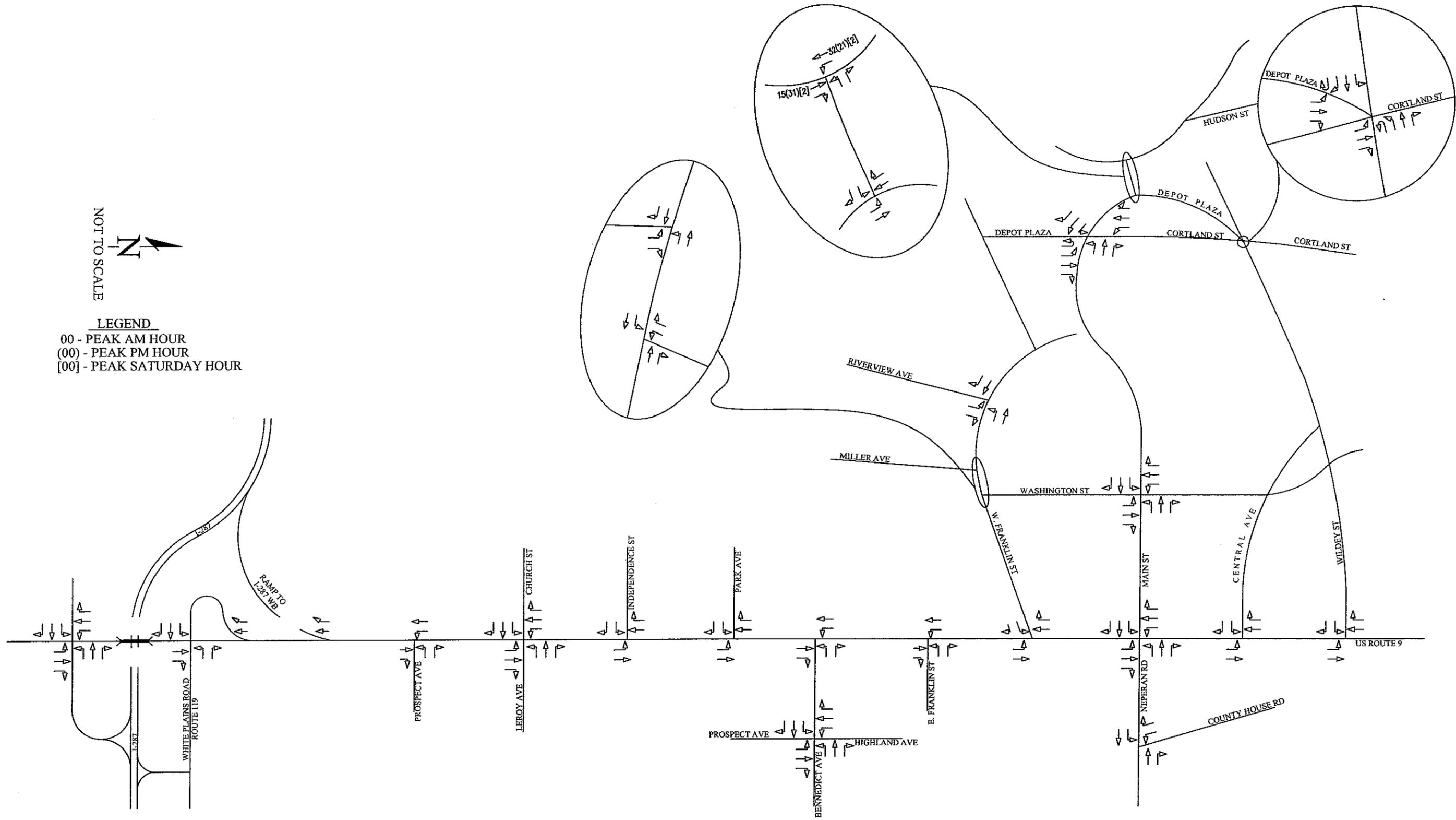
NOT TO SCALE

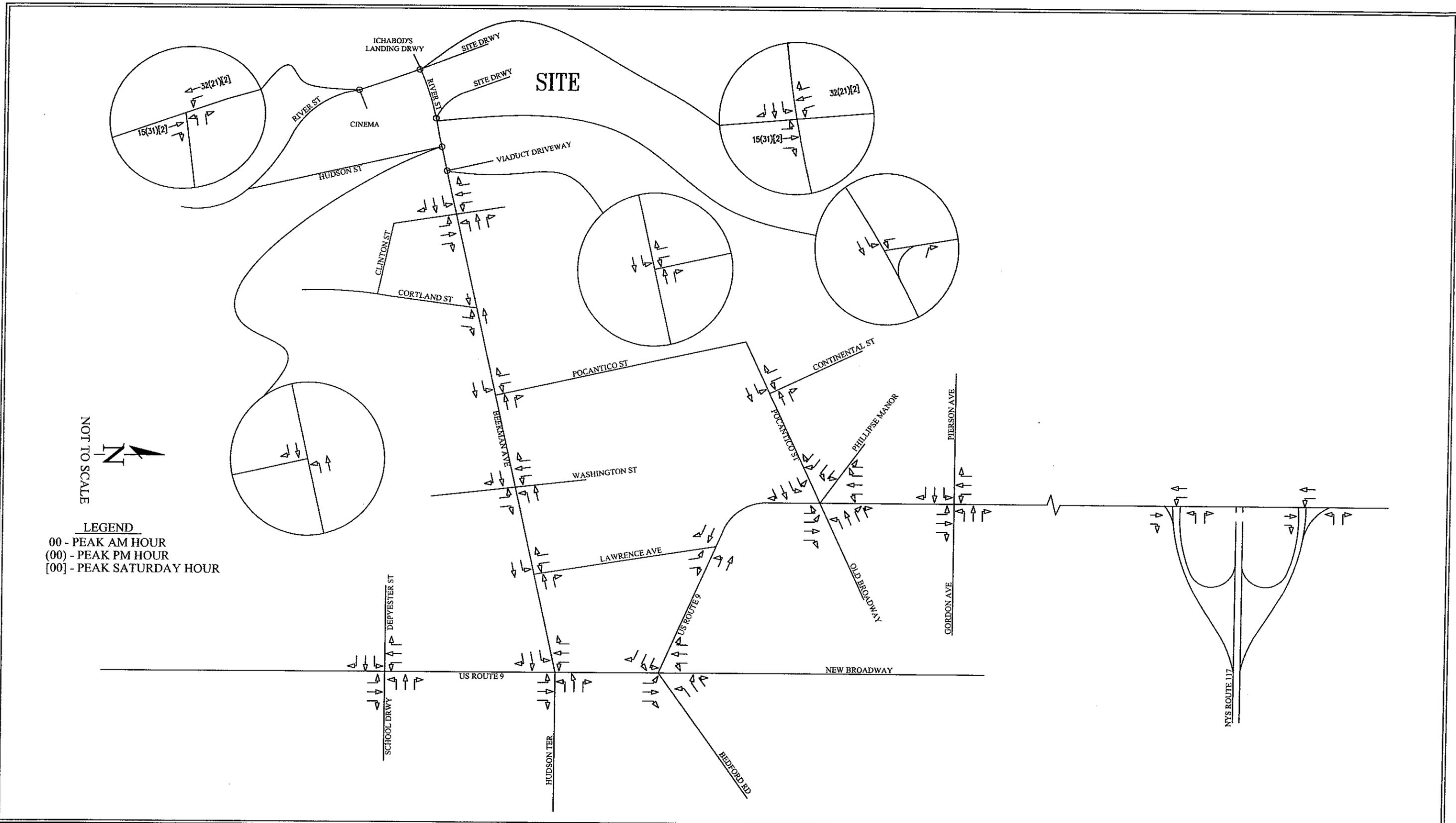



NOT TO SCALE



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR





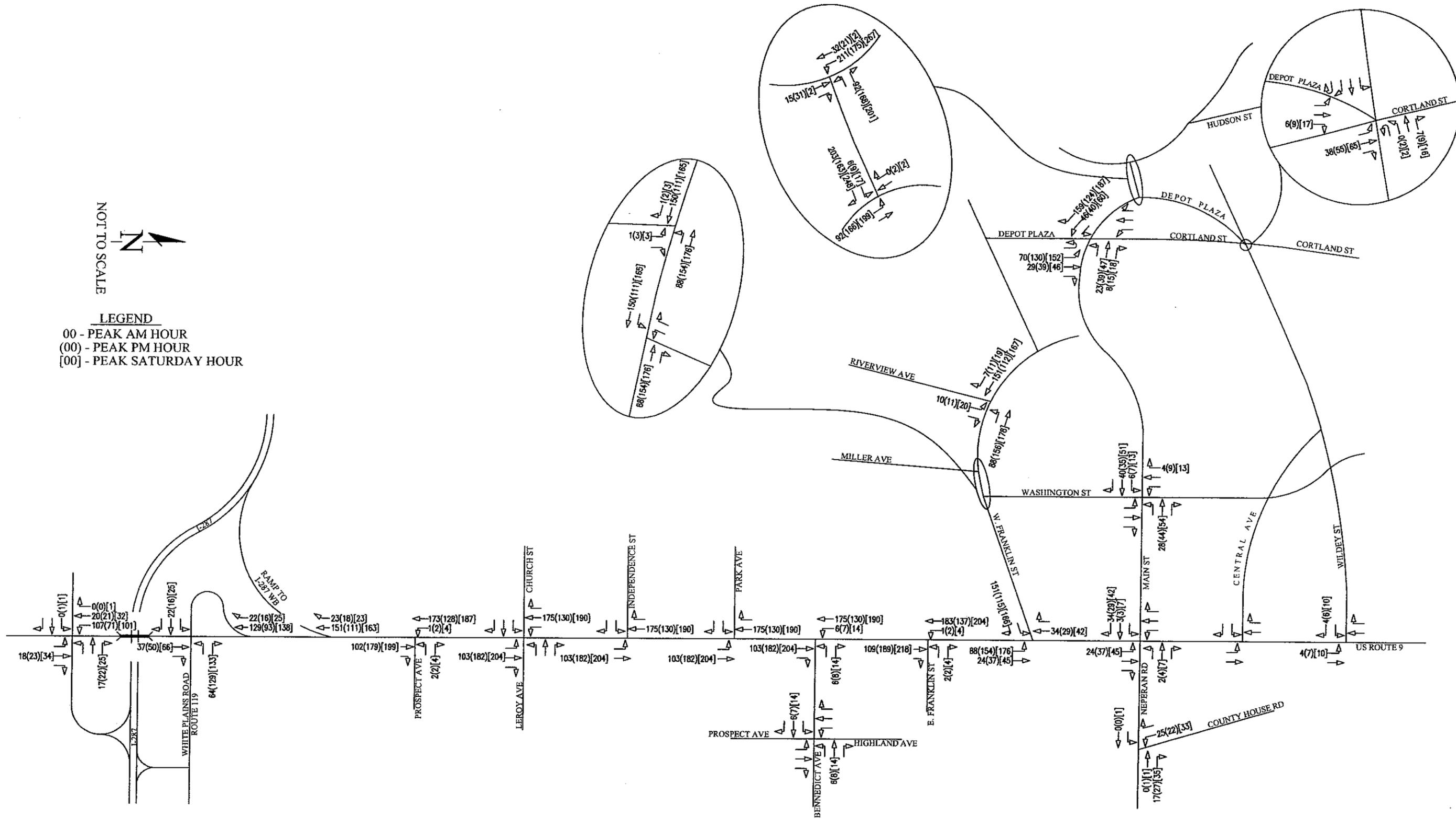
Residential Station and Jitney Site Generated Traffic Volumes

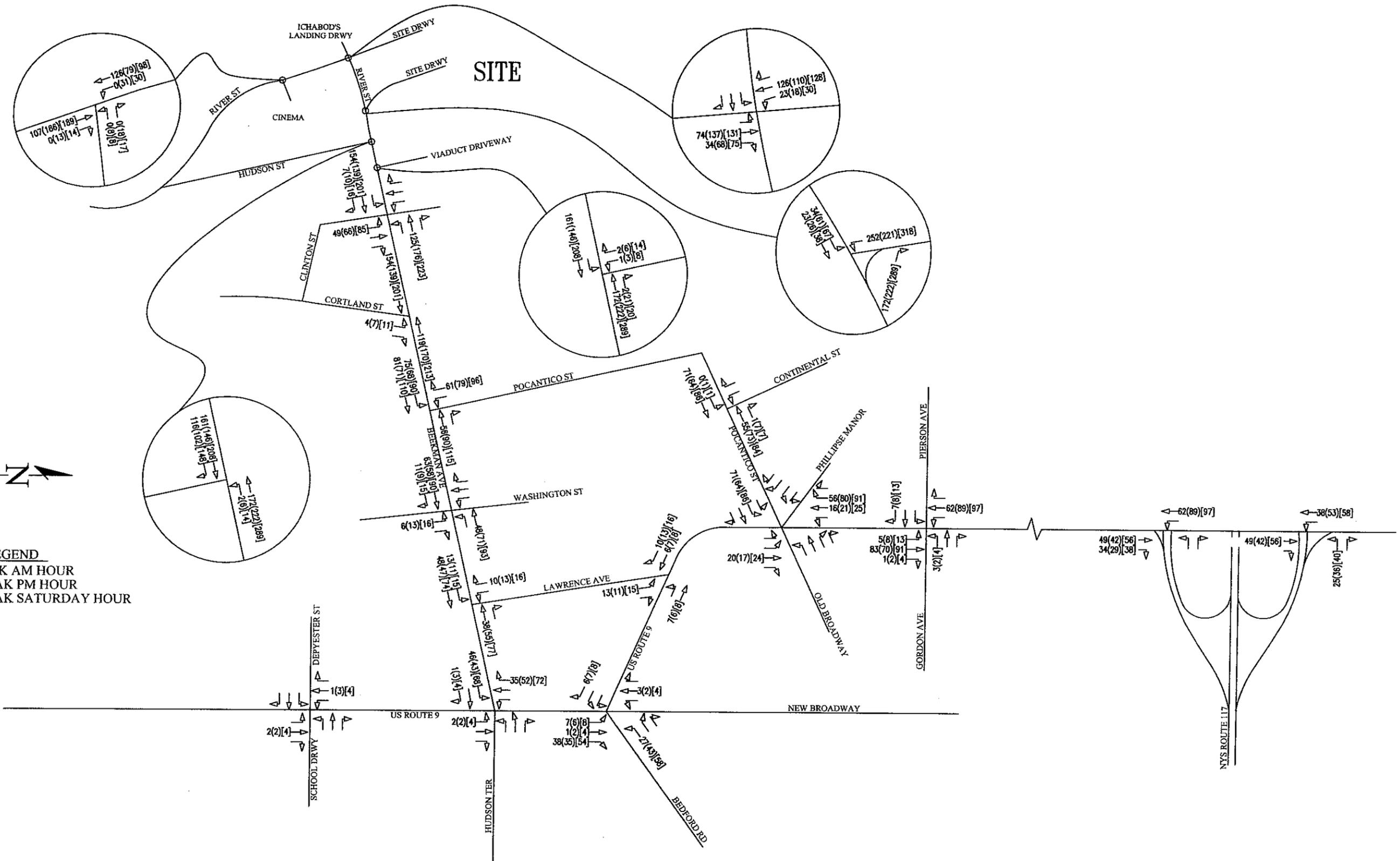
LIGHTHOUSE LANDING
 Sleepy Hollow, New York

NOT TO SCALE



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR

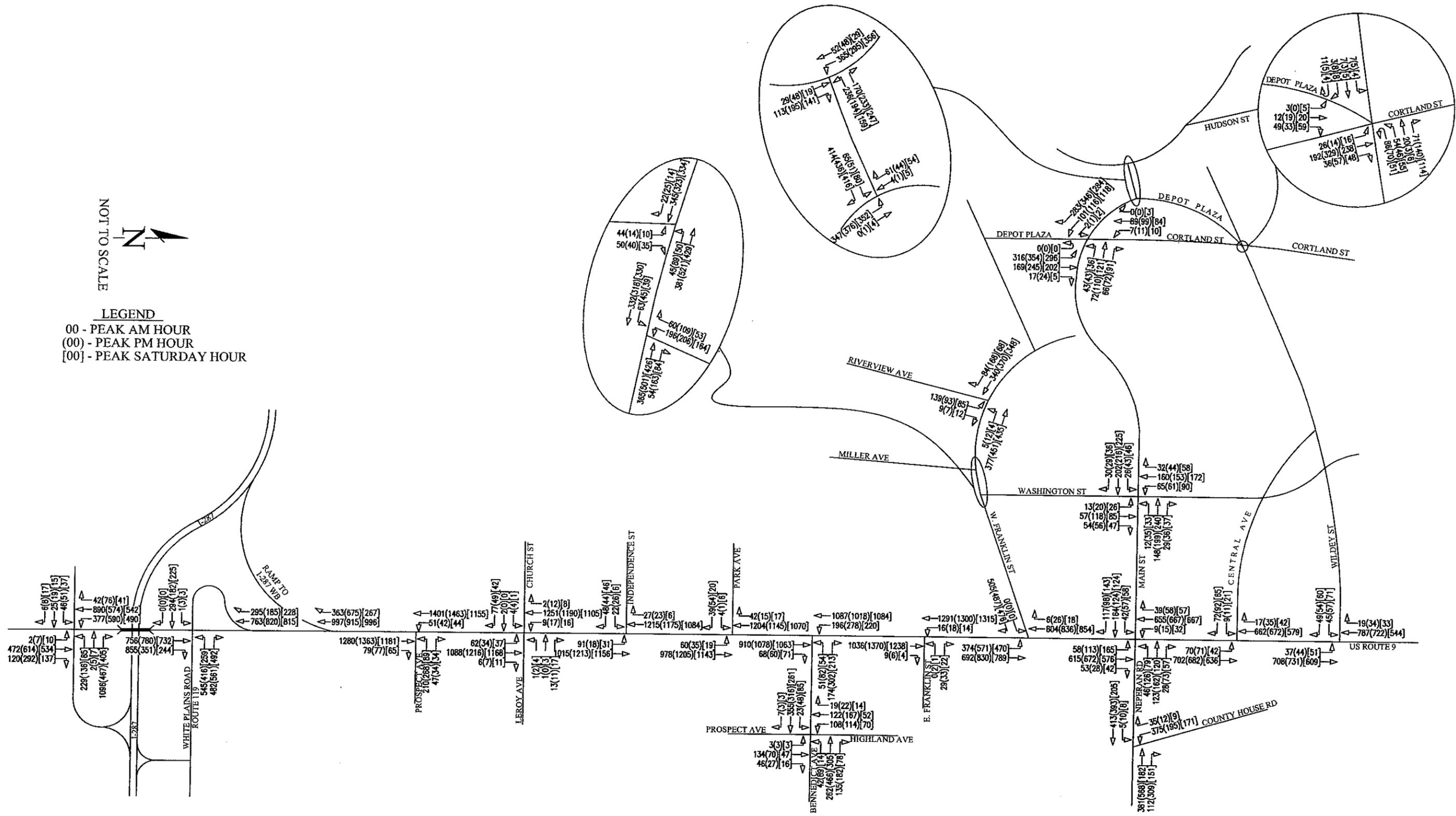


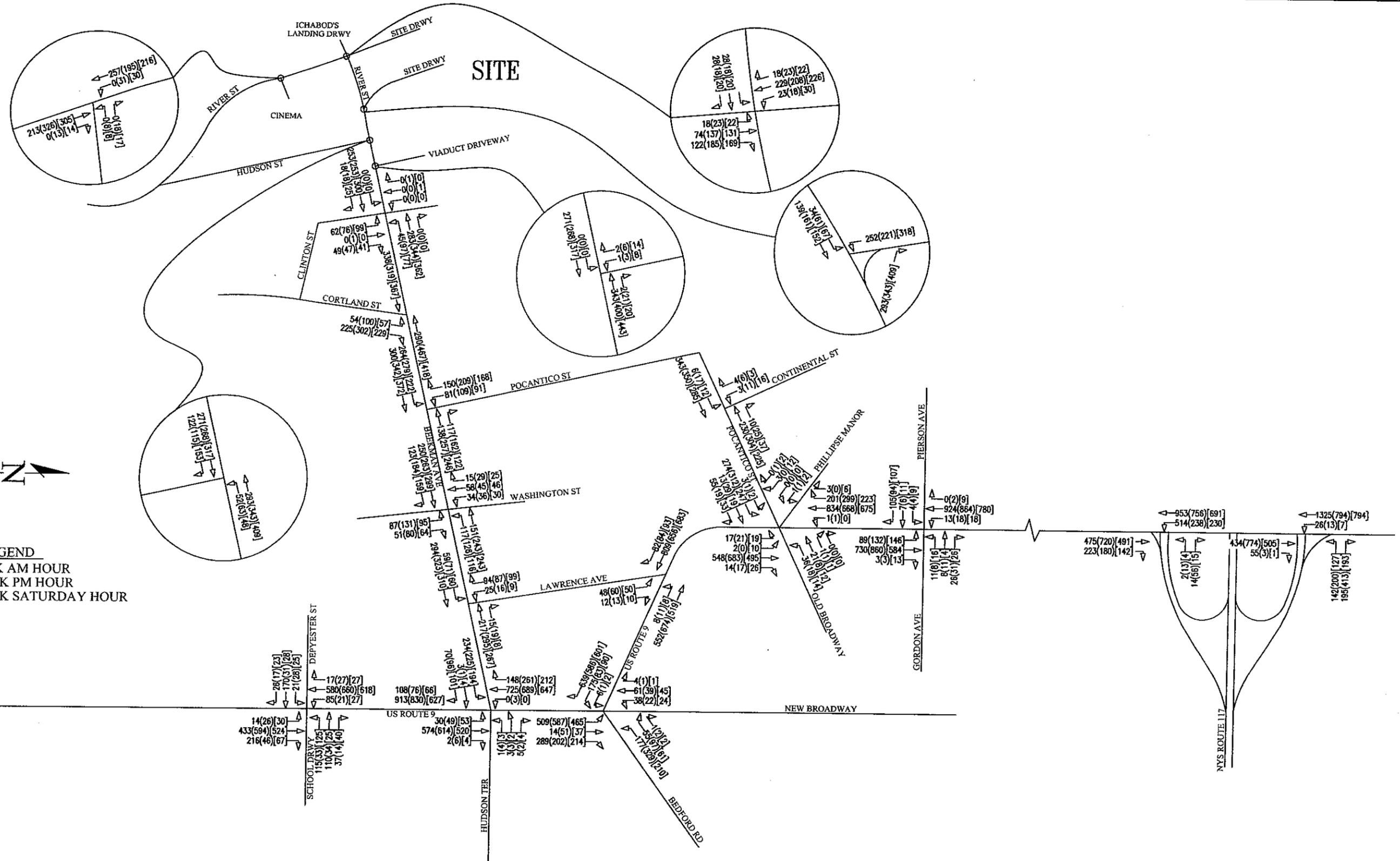


NOT TO SCALE



LEGEND
 00 - PEAK AM HOUR
 (00) - PEAK PM HOUR
 [00] - PEAK SATURDAY HOUR





ATTACHMENT 2

TABLES

TABLE NO. 6A-1											
DETAILED LEVEL OF SERVICE SUMMARY											
FOR EXISTING CONDITIONS											
Intersection	Movements	AM			PM			SAT.			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
1.	US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.01	C	29.7	0.01	C	29.9	0.03
		EB TR	C	32.4	0.33	C	32.0	0.29	C	32.4	0.33
		EB Overall	C	32.3	N/A	C	31.9	N/A	C	32.1	N/A
		WB L	C	29.8	0.03	C	29.7	0.02	C	30.0	0.04
		WB TR	C	30.4	0.10	C	30.6	0.13	C	30.3	0.09
		WB Overall	C	30.3	N/A	C	30.5	N/A	C	30.2	N/A
		NB LTR	A	2.6	0.36	A	3.4	0.51	A	2.6	0.35
		SB LTR	B	19.1	0.54	B	18.4	0.50	B	17.8	0.45
		OVERALL	B	13.7	0.39	B	11.9	0.52	B	13.0	0.40
2.	US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	149.0	1.18	F	189.8	1.28	E	67.1	0.90
		WB LTR	C	30.5	0.24	C	29.6	0.11	C	29.5	0.10
		NB LTR	B	11.7	0.30	B	12.8	0.41	B	11.8	0.32
		SB LTR	B	10.7	0.54	B	10.1	0.48	A	9.5	0.42
		PMD LTR	C	33.2	0.02	C	33.1	0.01	C	33.6	0.08
		OVERALL	C	33.8	0.00	D	41.6	0.00	B	19.1	0.00
3.	Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.6	0.00	a	7.8	0.01	a	7.6	0.01
		SB LR	b	10.0	0.01	b	11.6	0.02	b	10.6	0.02
4.	US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	d	29.7	0.25	e	35.6	0.36	d	26.9	0.22
		NB LT	a	9.6	0.01	a	9.0	0.01	a	9.2	0.01
5.	US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	59.9	0.45	E	57.5	0.27	E	57.8	0.29
		WB L	E	62.7	0.57	F	150.5	1.10	E	62.5	0.57
		WB R	E	57.0	0.23	E	59.9	0.45	E	57.9	0.30
		WB Overall	E	61.2	N/A	F	126.2	N/A	E	61.1	N/A
		NB TR	B	14.6	0.67	B	17.0	0.75	B	13.0	0.60
		SB LT	D	40.2	0.72	C	34.9	0.54	D	35.8	0.58
OVERALL	C	33.8	0.62	D	47.6	0.73	C	31.2	0.55		
6.	US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	E	75.1	0.76	E	75.1	0.76	E	60.5	0.49
		EB TR	E	63.2	0.56	E	60.1	0.46	E	60.4	0.48
		EB Overall	E	70.4	N/A	E	69.6	N/A	E	60.5	N/A
		WB LTR	D	55.0	0.04	D	54.9	0.03	D	55.0	0.04
		NB LTR	F	161.1	1.22	F	150.9	1.20	F	92.9	1.03
		SB LTR	B	10.4	0.42	B	10.6	0.44	B	10.2	0.40
		OVERALL	E	73.4	0.72	E	71.8	0.71	D	47.6	0.58
7.	Beekman Ave.(EB- WB)/Lawrence Ave.(SB)	EB LT	a	8.0	0.04	a	8.2	0.05	a	8.5	0.04
		SB LR	b	12.2	0.19	b	12.5	0.17	b	13.2	0.18
8.	Beekman Ave.(EB- WB)/Washington St.(NB-SB)	EB TR	B	15.6	0.44	B	17.4	0.54	B	16.5	0.49
		WB LT	B	11.4	0.43	B	14.2	0.56	B	12.5	0.48
		NB LR	C	25.9	0.40	C	31.8	0.60	C	26.6	0.43
		SB LTR	C	22.8	0.25	C	22.9	0.26	C	22.7	0.24
		OVERALL	B	17.2	0.48	C	20.2	0.61	B	17.8	0.52
9.	Beekman Ave.(EB- WB)/Pocantico St.(SB)	EB LT	b	12.9	N/A	c	18.9	N/A	b	12.4	N/A
		WB TR	a	9.2	N/A	b	11.9	N/A	a	9.5	N/A
		SB LR	b	10.5	N/A	b	12.1	N/A	a	9.8	N/A
		OVERALL	b	11.3	N/A	c	15.2	N/A	b	10.9	N/A
10.	Beekman Ave.(EB- WB)/Cortland St.(NB)	NB L	b	11.8	0.09	c	16.0	0.23	b	12.1	0.09
		NB R	b	12.3	0.33	c	15.6	0.49	b	12.8	0.34
		NB Overall	b	12.2	N/A	c	15.7	N/A	b	12.6	N/A
11.	Beekman Ave.(EB- WB)/Clinton St.(NB- SB)	EB LTR	a	7.5	0.00	a	7.5	0.00	a	7.4	0.00
		WB LTR	a	7.4	0.03	a	7.6	0.07	a	7.5	0.05
		NB LTR	a	9.3	0.07	a	9.7	0.07	a	9.6	0.07
		SB LTR	N/A	N/A	N/A	a	8.9	0.00	b	11.6	0.00

TABLE NO. 6A-1											
DETAILED LEVEL OF SERVICE SUMMARY											
FOR EXISTING CONDITIONS											
Intersection	Movements	AM			PM			SAT.			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
12.	Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.4	0.03	a	7.5	0.04	a	7.4	0.02
13.	US Route 9(NB-SB)/Willey St.(EB) (Tarrytown)	EB LR	C	25.2	0.32	C	22.2	0.26	C	23.9	0.34
		NB LT	A	7.3	0.58	B	14.5	0.72	A	9.3	0.58
		SB TR	A	8.1	0.64	B	12.5	0.65	A	7.9	0.49
		OVERALL	A	8.6	0.58	B	14.1	0.59	B	10.1	0.52
14.	US Route 9(NB-SB)/Central Ave. (EB) (Tarrytown)	NB LT	a	9.7	0.09	b	11.0	0.11	b	11.1	0.07
		EB LR	c	20.1	0.26	d	31.7	0.45	e	38.7	0.47
15.	Neperan Rd.(EB-WB)/County House Rd.(SB) (Tarrytown)	EB T	c	23.2	N/A	c	16.9	N/A	a	9.1	N/A
		WB T	c	21.3	N/A	d	30.9	N/A	a	8.9	N/A
		SB LR	c	24.6	N/A	b	13.2	N/A	a	9.3	N/A
		OVERALL	c	23.1	N/A	c	23.2	N/A	a	9.1	N/A
16.	US Route 9(NB-SB)/Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	37.7	0.62	D	41.3	0.67	D	44.8	0.73
		WB LTR	C	34.7	0.51	F	124.5	1.12	D	48.2	0.76
		NB LTR	C	20.3	0.73	C	34.9	0.92	E	60.5	1.02
		SB LTR	C	21.3	0.76	C	21.6	0.77	C	27.1	0.85
		OVERALL	C	24.8	0.71	D	46.9	0.98	D	44.3	0.93
17.	Main St.(EB-WB)/Washington St.(NB-SB) (Tarrytown)	EB LTR	A	10.0	0.28	B	10.9	0.36	B	10.8	0.36
		WB LTR	A	9.5	0.23	B	10.7	0.34	B	11.2	0.38
		NB LTR	B	12.4	0.25	B	14.1	0.39	B	13.4	0.33
		SB LTR	B	16.3	0.52	B	16.5	0.52	C	20.9	0.67
		OVERALL	B	12.6	0.39	B	13.1	0.44	B	14.7	0.51
18.	H-Bridge(EB)/Main St.(WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	C	21.9	0.35	E	56.7	0.92	C	22.0	0.37
		WB L	C	21.4	0.24	C	23.1	0.37	C	21.0	0.19
		WB T	C	20.3	0.09	C	20.5	0.13	C	20.7	0.16
		WB R	C	21.1	0.23	C	21.2	0.23	C	21.5	0.29
		WB Overall	C	21.0	N/A	C	21.6	N/A	C	21.1	N/A
		NB L	A	5.1	0.28	A	4.7	0.22	A	4.1	0.12
		NB T	A	4.0	0.12	A	4.2	0.18	A	4.0	0.14
		NB R	A	3.5	0.02	A	3.5	0.02	A	3.5	0.00
		NB Overall	A	4.6	N/A	A	4.4	N/A	A	4.0	N/A
		SB LTR	A	3.9	0.10	A	3.9	0.11	A	3.9	0.10
OVERALL	A	9.9	0.30	C	21.2	0.37	B	11.3	0.18		
19.	West Franklin St.(EB-WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	7.7	0.00	a	8.1	0.01	a	7.6	0.00
		NB LR	b	13.5	0.26	b	14.4	0.20	b	11.5	0.13
20A.	US Route 9(NB-SB)/West Franklin St.(EB) (Tarrytown)	EB R	e	40.1	0.79	f	54.3	0.89	e	37.5	0.74
		NB LT	b	11.3	0.33	b	13.0	0.46	b	11.6	0.33
20B.	US Route 9(NB-SB)/East Franklin St.(WB) (Tarrytown)	WB LR	c	16.2	0.08	d	27.5	0.18	c	20.6	0.08
		SB LT	a	9.8	0.02	b	11.0	0.03	b	10.2	0.01
21.	US Route 9(NB-SB)/Benedict Ave.(WB) (Tarrytown)	WB L	D	35.6	0.15	D	36.6	0.26	D	35.8	0.17
		WB R	C	26.6	0.33	C	30.1	0.56	C	27.1	0.38
		WB Overall	C	28.6	N/A	C	31.5	N/A	C	29.1	N/A
		NB T	B	18.9	0.72	C	23.6	0.82	C	22.1	0.80
		NB R	B	10.1	0.08	B	10.1	0.07	B	10.2	0.08
		NB Overall	B	18.1	N/A	C	22.7	N/A	C	21.1	N/A
		SB L	B	13.0	0.52	E	58.1	0.94	C	20.4	0.66
SB T	B	10.5	0.69	A	9.6	0.65	B	10.3	0.68		

TABLE NO. 6A-1											
DETAILED LEVEL OF SERVICE SUMMARY											
FOR EXISTING CONDITIONS											
Intersection	Movements	AM			PM			SAT.			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
		SB Overall	B	10.9	N/A	C	21.9	N/A	B	12.2	N/A
		OVERALL	B	15.6	0.58	C	23.7	0.78	B	17.8	0.64
22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	4.2	0.04	A	5.2	0.14	A	4.9	0.15
		EB TR	A	5.8	0.34	A	5.5	0.29	A	5.1	0.23
		EB Overall	A	5.7	N/A	A	5.5	N/A	A	5.1	N/A
		WB L	A	4.4	0.07	A	4.9	0.15	A	4.1	0.02
		WB TR	A	6.3	0.39	A	9.2	0.63	A	6.0	0.35
		WB Overall	A	6.1	N/A	A	8.7	N/A	A	5.9	N/A
		NB LTR	B	19.4	0.53	B	17.5	0.30	B	16.9	0.20
		SB LTR	D	48.3	0.90	F	88.1	1.06	B	19.1	0.49
		OVERALL	B	16.3	0.52	C	25.0	0.74	A	8.4	0.39
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	14.3	N/A	b	16.6	N/A	b	13.4	N/A
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	34.6	0.56	C	32.5	0.35	C	33.1	0.43
		WB L	C	23.2	0.53	C	21.9	0.40	C	20.7	0.25
		WB R	D	36.8	0.83	D	37.9	0.84	C	28.7	0.70
		WB Overall	C	28.9	N/A	C	29.7	N/A	C	25.1	N/A
		NB T	B	18.4	0.53	B	18.7	0.56	B	18.1	0.51
		NB R	A	3.7	0.73	A	0.9	0.31	A	0.8	0.22
		NB Overall	B	10.2	N/A	B	12.7	N/A	B	13.1	N/A
		SB T	B	17.9	0.49	B	18.7	0.56	B	18.3	0.52
	OVERALL	B	18.7	0.71	C	20.4	0.63	B	19.3	0.58	
25.	US Route 9(NB-SB)/I- 87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	38.5	0.31	D	37.7	0.25	D	36.7	0.18
		WB LT	D	50.2	0.72	D	40.2	0.44	D	37.9	0.27
		WB R	F	80.5	1.09	B	13.4	0.44	B	12.7	0.37
		WB Overall	E	74.8	N/A	C	20.4	N/A	B	18.1	N/A
		NB L	C	31.3	0.01	C	31.5	0.03	C	31.7	0.04
		NB TR	D	38.3	0.56	E	54.8	0.91	D	40.2	0.64
		NB Overall	D	38.3	N/A	D	54.6	N/A	D	40.0	N/A
		SB L	A	8.3	0.32	B	19.8	0.76	B	11.3	0.51
		SB TR	A	4.7	0.43	A	4.2	0.29	A	4.0	0.26
		SB Overall	A	5.5	N/A	B	11.1	N/A	A	6.9	N/A
	OVERALL	D	40.8	0.00	C	28.7	0.00	C	20.6	0.00	

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6A-2a								
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.01	C	29.7	0.01	
	EB TR	C	32.4	0.33	C	32.5	0.34	
	EB Overall	C	32.3	N/A	C	32.4	N/A	
	WB L	C	29.8	0.03	C	29.9	0.03	
	WB TR	C	30.4	0.10	C	30.4	0.11	
	WB Overall	C	30.3	N/A	C	30.3	N/A	
	NB LTR	A	2.6	0.36	A	3.0	0.45	
	SB LTR	B	19.1	0.54	C	20.6	0.62	
	OVERALL	B	13.7	0.39	B	14.2	0.48	
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	149.0	1.18	F	176.0	1.25	
	WB LTR	C	30.5	0.24	C	30.6	0.24	
	NB LTR	B	11.7	0.30	B	12.4	0.37	
	SB LTR	B	10.7	0.54	B	11.7	0.61	
	PMD LTR	C	33.2	0.02	C	33.2	0.02	
	OVERALL	C	33.8	0.00	D	36.7	0.00	
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.6	0.00	a	7.6	0.00	
	SB LR	b	10.0	0.01	b	10.2	0.01	
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	d	29.7	0.25	e	46.1	0.37	
	NB LT	a	9.6	0.01	b	10.1	0.01	
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	59.9	0.45	E	60.1	0.46	
	WB L	E	62.7	0.57	E	64.9	0.63	
	WB R	E	57.0	0.23	E	57.5	0.27	
	WB Overall	E	61.2	N/A	E	62.9	N/A	
	NB TR	B	14.6	0.67	B	20.0	0.81	
	SB LT	D	40.2	0.72	D	48.5	0.86	
	OVERALL	C	33.8	0.62	D	39.1	0.72	
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	E	75.1	0.76	F	96.8	0.90	
	EB TR	E	63.2	0.56	E	59.1	0.39	
	EB Overall	E	70.4	N/A	F	86.4	N/A	
	WB LTR	D	55.0	0.04	D	55.0	0.04	
	NB LTR	F	161.1	1.22	F	121.0	1.12	
	SB LTR	B	10.4	0.42	B	10.9	0.47	
	OVERALL	E	73.4	0.72	E	61.5	0.70	
7. Beekman Ave.(EB- WB)/Lawrence Ave.(SB)	EB LT	a	8.0	0.04	a	8.1	0.04	
	SB LR	b	12.2	0.19	b	12.4	0.19	
8. Beekman Ave.(EB- WB)/Washington St.(NB-SB)	EB TR	B	15.6	0.44	B	15.7	0.44	
	WB LT	B	11.4	0.43	B	11.8	0.45	
	NB LR	C	25.9	0.40	C	26.2	0.41	
	SB LTR	C	22.8	0.25	C	22.8	0.25	
	OVERALL	B	17.2	0.48	B	17.4	0.49	
9. Beekman Ave.(EB- WB)/Pocantico St.(SB)	EB LT	b	12.9	N/A	b	14.6	N/A	
	WB TR	a	9.2	N/A	a	9.5	N/A	
	SB LR	b	10.5	N/A	b	10.2	N/A	
	OVERALL	b	11.3	N/A	b	12.3	N/A	
10. Beekman Ave.(EB- WB)/Cortland St.(NB)	NB L	b	11.8	0.09	b	12.8	0.10	
	NB R	b	12.3	0.33	b	13.3	0.36	
	NB Overall	b	12.2	N/A	b	13.2	N/A	
11. Beekman Ave.(EB- WB)/Clinton St.(NB- SB)	EB LTR	a	7.5	0.00	a	7.6	0.00	
	WB LTR	a	7.4	0.03	a	7.5	0.03	
	NB LTR	a	9.3	0.07	a	9.7	0.08	
	SB LTR	N/A	N/A	N/A	N/A	N/A	N/A	

TABLE NO. 6A-2a								
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
12.	Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.4	0.03	a	7.6	0.04
13.	US Route 9(NB-SB)/Willey St.(EB) (Tarrytown)	EB LR	C	25.2	0.32	C	25.7	0.39
		NB LT	A	7.3	0.58	A	9.0	0.68
		SB TR	A	8.1	0.64	A	9.3	0.70
		OVERALL	A	8.6	0.58	B	10.1	0.64
14.	US Route 9(NB-SB)/Central Ave. (EB) (Tarrytown)	NB LT	a	9.7	0.09	a	10.0	0.10
		EB LR	c	20.1	0.26	c	23.3	0.31
15.	Neperan Rd.(EB-WB)/County House Rd.(SB) (Tarrytown)	EB T	c	23.2	N/A	d	28.2	N/A
		WB T	c	21.3	N/A	c	24.6	N/A
		SB LR	c	24.6	N/A	d	27.8	N/A
		OVERALL	c	23.1	N/A	d	26.9	N/A
16.	US Route 9(NB-SB)/Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	37.7	0.62	D	42.9	0.73
		WB LTR	C	34.7	0.51	D	35.7	0.54
		NB LTR	C	20.3	0.73	C	28.1	0.86
		SB LTR	C	21.3	0.76	C	24.5	0.82
		OVERALL	C	24.8	0.71	C	29.8	0.82
17.	Main St.(EB-WB)/Washington St.(NB-SB) (Tarrytown)	EB LTR	A	10.0	0.28	B	10.6	0.34
		WB LTR	A	9.5	0.23	A	9.8	0.26
		NB LTR	B	12.4	0.25	B	12.5	0.26
		SB LTR	B	16.3	0.52	B	16.7	0.54
		OVERALL	B	12.6	0.39	B	12.8	0.43
18.	H-Bridge(EB)/Main St.(WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	C	21.9	0.35	C	30.0	0.70
		WB L	C	21.4	0.24	C	22.3	0.32
		WB T	C	20.3	0.09	C	20.7	0.17
		WB R	C	21.1	0.23	C	21.1	0.23
		WB Overall	C	21.0	N/A	C	21.3	N/A
		NB L	A	5.1	0.28	A	5.5	0.33
		NB T	A	4.0	0.12	A	4.0	0.12
		NB R	A	3.5	0.02	A	3.5	0.02
		NB Overall	A	4.6	N/A	A	4.9	N/A
		SB LTR	A	3.9	0.10	A	3.9	0.10
OVERALL	A	9.9	0.30	B	13.2	0.41		
19.	West Franklin St.(EB-WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	7.7	0.00	a	7.8	0.00
		NB LR	b	13.5	0.26	c	15.4	0.30
20A.	US Route 9(NB-SB)/West Franklin St.(EB) (Tarrytown)	EB R	e	40.1	0.79	f	95.9	1.05
		NB LT	b	11.3	0.33	b	12.4	0.39
20B.	US Route 9(NB-SB)/East Franklin St.(WB) (Tarrytown)	WB LR	c	16.2	0.08	c	18.8	0.10
		SB LT	a	9.8	0.02	b	10.4	0.02
21.	US Route 9(NB-SB)/Benedict Ave.(WB) (Tarrytown)	WB L	D	35.6	0.15	D	35.7	0.16
		WB R	C	26.6	0.33	C	26.8	0.35
		WB Overall	C	28.6	N/A	C	28.8	N/A
		NB T	B	18.9	0.72	C	25.5	0.85
		NB R	B	10.1	0.08	B	10.2	0.08
		NB Overall	B	18.1	N/A	C	24.3	N/A
		SB L	B	13.0	0.52	C	29.3	0.75
SB T	B	10.5	0.69	B	13.7	0.79		

TABLE NO. 6A-2a								
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
		SB Overall	B	10.9	N/A	B	16.4	N/A
		OVERALL	B	15.6	0.58	C	20.8	0.66
22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	4.2	0.04	A	4.3	0.05
		EB TR	A	5.8	0.34	A	6.0	0.35
		EB Overall	A	5.7	N/A	A	5.9	N/A
		WB L	A	4.4	0.07	A	4.5	0.08
		WB TR	A	6.3	0.39	A	6.5	0.41
		WB Overall	A	6.1	N/A	A	6.3	N/A
		NB LTR	B	19.4	0.53	B	19.9	0.56
		SB LTR	D	48.3	0.90	E	65.7	0.97
		OVERALL	B	16.3	0.52	C	20.1	0.55
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	14.3	N/A	b	15.4	N/A
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	34.6	0.56	D	37.3	0.67
		WB L	C	23.2	0.53	C	23.5	0.55
		WB R	D	36.8	0.83	D	50.8	0.93
		WB Overall	C	28.9	N/A	D	35.3	N/A
		NB T	B	18.4	0.53	B	19.4	0.61
		NB R	A	3.7	0.73	A	4.9	0.78
		NB Overall	B	10.2	N/A	B	11.5	N/A
		SB T	B	17.9	0.49	B	18.4	0.53
		OVERALL	B	18.7	0.71	C	21.5	0.77
25.	US Route 9(NB-SB)/I- 87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	38.5	0.31	D	38.7	0.32
		WB LT	D	50.2	0.72	D	51.8	0.74
		WB R	F	80.5	1.09	F	126.8	1.20
		WB Overall	E	74.8	N/A	F	113.6	N/A
		NB L	C	31.3	0.01	C	31.3	0.01
		NB TR	D	38.3	0.56	D	39.3	0.60
		NB Overall	D	38.3	N/A	D	39.2	N/A
		SB L	A	8.3	0.32	A	9.6	0.38
		SB TR	A	4.7	0.43	A	4.8	0.44
		SB Overall	A	5.5	N/A	A	5.9	N/A
		OVERALL	D	40.8	0.00	E	57.7	0.00

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6A-2b								
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.01	C	29.7	0.01	
	EB TR	C	32.0	0.29	C	32.1	0.30	
	EB Overall	C	31.9	N/A	C	32.0	N/A	
	WB L	C	29.7	0.02	C	29.8	0.03	
	WB TR	C	30.6	0.13	C	30.6	0.13	
	WB Overall	C	30.5	N/A	C	30.5	N/A	
	NB LTR	A	3.4	0.51	A	4.0	0.58	
	SB LTR	B	18.4	0.50	B	19.8	0.58	
OVERALL	B	11.9	0.52	B	12.9	0.60		
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	189.8	1.28	F	215.1	1.34	
	WB LTR	C	29.6	0.11	C	29.6	0.11	
	NB LTR	B	12.8	0.41	B	13.4	0.46	
	SB LTR	B	10.1	0.48	B	10.9	0.56	
	PMD LTR	C	33.1	0.01	C	33.1	0.01	
	OVERALL	D	41.6	0.00	D	44.2	0.00	
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.8	0.01	a	7.8	0.01	
	SB LR	b	11.6	0.02	b	11.8	0.02	
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	e	35.6	0.36	f	55.4	0.50	
	NB LT	a	9.0	0.01	a	9.4	0.01	
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	57.5	0.27	E	57.6	0.28	
	WB L	F	150.5	1.10	F	183.5	1.20	
	WB R	E	59.9	0.45	E	60.1	0.47	
	WB Overall	F	126.2	N/A	F	151.7	N/A	
	NB TR	B	17.0	0.75	C	21.4	0.84	
	SB LT	C	34.9	0.54	D	37.8	0.65	
OVERALL	D	47.6	0.73	D	54.6	0.80		
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	E	75.1	0.76	F	91.5	0.87	
	EB TR	E	60.1	0.46	E	60.2	0.47	
	EB Overall	E	69.6	N/A	F	80.9	N/A	
	WB LTR	D	54.9	0.03	D	54.9	0.03	
	NB LTR	F	150.9	1.20	F	210.2	1.34	
	SB LTR	B	10.6	0.44	B	11.4	0.51	
	OVERALL	E	71.8	0.71	F	93.5	0.80	
	OVERALL	E	71.8	0.71	F	93.5	0.80	
7. Beekman Ave.(EB- WB)/Lawrence Ave.(SB)	EB LT	a	8.2	0.05	a	8.3	0.06	
	SB LR	b	12.5	0.17	b	13.0	0.18	
8. Beekman Ave.(EB- WB)/Washington St.(NB-SB)	EB TR	B	17.4	0.54	B	18.4	0.58	
	WB LT	B	14.2	0.56	B	16.5	0.63	
	NB LR	C	31.8	0.60	C	32.8	0.63	
	SB LTR	C	22.9	0.26	C	23.1	0.27	
	OVERALL	C	20.2	0.61	C	21.2	0.64	
9. Beekman Ave.(EB- WB)/Pocantico St.(SB)	EB LT	c	18.9	N/A	d	25.1	N/A	
	WB TR	b	11.9	N/A	b	13.9	N/A	
	SB LR	b	12.1	N/A	b	13.3	N/A	
	OVERALL	c	15.2	N/A	c	18.9	N/A	
10. Beekman Ave.(EB- WB)/Cortland St.(NB)	NB L	c	16.0	0.23	c	18.3	0.27	
	NB R	c	15.6	0.49	c	17.0	0.53	
	NB Overall	c	15.7	N/A	c	17.3	N/A	
11. Beekman Ave.(EB- WB)/Clinton St.(NB- SB)	EB LTR	a	7.5	0.00	a	7.6	0.00	
	WB LTR	a	7.6	0.07	a	7.7	0.07	
	NB LTR	a	9.7	0.07	b	10.1	0.08	
	SB LTR	a	8.9	0.00	a	9.2	0.00	

TABLE NO. 6A-2b								
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
12.	Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.5	0.04	a	7.6	0.04
13.	US Route 9(NB-SB)/Wildey St.(EB) (Tarrytown)	EB LR	C	22.2	0.26	C	22.3	0.27
		NB LT	B	14.5	0.72	B	17.9	0.81
		SB TR	B	12.5	0.65	B	15.3	0.75
		OVERALL	B	14.1	0.59	B	17.0	0.65
14.	US Route 9(NB-SB)/Central Ave. (EB) (Tarrytown)	NB LT	b	11.0	0.11	b	11.7	0.13
		EB LR	d	31.7	0.45	e	42.6	0.55
15.	Neperan Rd.(EB-WB)/County House Rd.(SB) (Tarrytown)	EB T	c	16.9	N/A	c	18.8	N/A
		WB T	d	30.9	N/A	e	39.3	N/A
		SB LR	b	13.2	N/A	b	13.7	N/A
		OVERALL	c	23.2	N/A	d	28.1	N/A
16.	US Route 9(NB-SB)/Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	41.3	0.67	D	45.6	0.74
		WB LTR	F	124.5	1.12	F	162.2	1.22
		NB LTR	C	34.9	0.92	E	65.4	1.05
		SB LTR	C	21.6	0.77	C	29.5	0.88
		OVERALL	D	46.9	0.98	E	66.8	1.11
17.	Main St.(EB-WB)/Washington St.(NB-SB) (Tarrytown)	EB LTR	B	10.9	0.36	B	11.6	0.41
		WB LTR	B	10.7	0.34	B	11.2	0.39
		NB LTR	B	14.1	0.39	B	14.2	0.40
		SB LTR	B	16.5	0.52	B	17.0	0.54
		OVERALL	B	13.1	0.44	B	13.5	0.47
18.	H-Bridge(EB)/Main St.(WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	E	56.7	0.92	F	131.7	1.17
		WB L	C	23.1	0.37	C	23.2	0.38
		WB T	C	20.5	0.13	C	21.1	0.24
		WB R	C	21.2	0.23	C	21.2	0.24
		WB Overall	C	21.6	N/A	C	21.7	N/A
		NB L	A	4.7	0.22	A	5.3	0.31
		NB T	A	4.2	0.18	A	4.3	0.18
		NB R	A	3.5	0.02	A	3.6	0.03
		NB Overall	A	4.4	N/A	A	4.7	N/A
		SB LTR	A	3.9	0.11	A	4.0	0.12
		OVERALL	C	21.2	0.37	D	44.2	0.49
19.	West Franklin St.(EB-WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	8.1	0.01	a	8.3	0.01
		NB LR	b	14.4	0.20	c	16.6	0.24
20A.	US Route 9(NB-SB)/West Franklin St.(EB) (Tarrytown)	EB R	f	54.3	0.89	f	142.9	1.18
		NB LT	b	13.0	0.46	c	16.8	0.60
20B.	US Route 9(NB-SB)/East Franklin St.(WB) (Tarrytown)	WB LR	d	27.5	0.18	e	37.0	0.24
		SB LT	b	11.0	0.03	b	11.9	0.03
21.	US Route 9(NB-SB)/Benedict Ave.(WB) (Tarrytown)	WB L	D	36.6	0.26	D	36.6	0.26
		WB R	C	30.1	0.56	C	31.2	0.61
		WB Overall	C	31.5	N/A	C	32.4	N/A
		NB T	C	23.6	0.82	D	36.8	0.94
		NB R	B	10.1	0.07	B	10.1	0.07
		NB Overall	C	22.7	N/A	D	35.2	N/A
		SB L	E	58.1	0.94	F	254.2	1.43
		SB T	A	9.6	0.65	B	12.8	0.77
SB Overall	C	21.9	N/A	E	69.3	N/A		

TABLE NO. 6A-2b								
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
22. Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	OVERALL	C	23.7	0.78	D	50.7	1.68	
	EB L	A	5.2	0.14	A	5.4	0.16	
	EB TR	A	5.5	0.29	A	5.6	0.31	
	EB Overall	A	5.5	N/A	A	5.6	N/A	
	WB L	A	4.9	0.15	A	4.9	0.16	
	WB TR	A	9.2	0.63	A	9.8	0.66	
	WB Overall	A	8.7	N/A	A	9.2	N/A	
	NB LTR	B	17.5	0.30	B	17.5	0.30	
	SB LTR	F	88.1	1.06	F	95.1	1.08	
OVERALL	C	25.0	0.74	C	26.4	0.76		
23. US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	16.6	N/A	b	18.0	N/A	
24. US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	32.5	0.35	C	32.9	0.41	
	WB L	C	21.9	0.40	C	22.0	0.42	
	WB R	D	37.9	0.84	E	57.9	0.96	
	WB Overall	C	29.7	N/A	D	40.3	N/A	
	NB T	B	18.7	0.56	B	19.5	0.61	
	NB R	A	0.9	0.31	A	0.9	0.32	
	NB Overall	B	12.7	N/A	B	13.5	N/A	
	SB T	B	18.7	0.56	B	19.5	0.61	
OVERALL	C	20.4	0.63	C	24.3	0.72		
25. US Route 9(NB-SB)/I- 87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	37.7	0.25	D	37.8	0.26	
	WB LT	D	40.2	0.44	D	40.4	0.45	
	WB R	B	13.4	0.44	B	14.3	0.50	
	WB Overall	C	20.4	N/A	C	20.5	N/A	
	NB L	C	31.5	0.03	C	31.6	0.04	
	NB TR	E	54.8	0.91	E	60.2	0.94	
	NB Overall	D	54.6	N/A	E	60.0	N/A	
	SB L	B	19.8	0.76	C	25.1	0.84	
	SB TR	A	4.2	0.29	A	4.2	0.31	
OVERALL	C	28.7	0.00	C	31.1	0.00		

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6A-2c								
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.9	0.03	C	29.9	0.03	
	EB TR	C	32.4	0.33	C	32.4	0.34	
	EB Overall	C	32.1	N/A	C	32.2	N/A	
	WB L	C	30.0	0.04	C	30.0	0.05	
	WB TR	C	30.3	0.09	C	30.3	0.09	
	WB Overall	C	30.2	N/A	C	30.2	N/A	
	NB LTR	A	2.6	0.35	A	2.8	0.41	
	SB LTR	B	17.8	0.45	B	18.6	0.51	
OVERALL	B	13.0	0.40	B	13.3	0.45		
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	E	67.1	0.90	E	80.8	0.96	
	WB LTR	C	29.5	0.10	C	29.5	0.10	
	NB LTR	B	11.8	0.32	B	12.3	0.36	
	SB LTR	A	9.5	0.42	A	10.0	0.48	
	PMD LTR	C	33.6	0.08	C	33.6	0.08	
OVERALL	B	19.1	0.00	C	20.9	0.00		
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.6	0.01	a	7.6	0.01	
	SB LR	b	10.6	0.02	b	10.8	0.02	
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	d	26.9	0.22	d	34.5	0.28	
	NB LT	a	9.2	0.01	a	9.5	0.01	
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	57.8	0.29	E	57.9	0.31	
	WB L	E	62.5	0.57	E	65.2	0.63	
	WB R	E	57.9	0.30	E	58.0	0.31	
	WB Overall	E	61.1	N/A	E	63.1	N/A	
	NB TR	B	13.0	0.60	B	14.9	0.69	
	SB LT	D	35.8	0.58	D	38.0	0.66	
OVERALL	C	31.2	0.55	C	32.8	0.61		
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	E	60.5	0.49	E	64.4	0.60	
	EB TR	E	60.4	0.48	E	60.6	0.49	
	EB Overall	E	60.5	N/A	E	62.7	N/A	
	WB LTR	D	55.0	0.04	D	55.0	0.04	
	NB LTR	F	92.9	1.03	F	133.8	1.15	
	SB LTR	B	10.2	0.40	B	10.7	0.45	
	OVERALL	D	47.6	0.58	E	62.5	0.66	
7. Beekman Ave.(EB- WB)/Lawrence Ave.(SB)	EB LT	a	8.5	0.04	a	8.6	0.05	
	SB LR	b	13.2	0.18	b	13.7	0.19	
8. Beekman Ave.(EB- WB)/Washington St.(NB-SB)	EB TR	B	16.5	0.49	B	17.3	0.53	
	WB LT	B	12.5	0.48	B	14.1	0.55	
	NB LR	C	26.6	0.43	C	27.1	0.45	
	SB LTR	C	22.7	0.24	C	22.8	0.25	
	OVERALL	B	17.8	0.52	B	18.6	0.55	
9. Beekman Ave.(EB- WB)/Pocantico St.(SB)	EB LT	b	12.4	N/A	b	14.3	N/A	
	WB TR	a	9.5	N/A	a	10.3	N/A	
	SB LR	a	9.8	N/A	a	10.4	N/A	
	OVERALL	b	10.9	N/A	b	12.3	N/A	
10. Beekman Ave.(EB- WB)/Cortland St.(NB)	NB L	b	12.1	0.09	b	13.1	0.10	
	NB R	b	12.8	0.34	b	13.6	0.37	
	NB Overall	b	12.6	N/A	b	13.5	N/A	
11. Beekman Ave.(EB- WB)/Clinton St.(NB- SB)	EB LTR	a	7.4	0.00	a	7.5	0.00	
	WB LTR	a	7.5	0.05	a	7.6	0.06	
	NB LTR	a	9.6	0.07	a	10.0	0.08	
	SB LTR	b	11.6	0.00	b	12.5	0.00	

TABLE NO. 6A-2c								
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
12.	Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.4	0.02	a	7.5	0.02
13.	US Route 9(NB-SB)/Willey St.(EB) (Tarrytown)	EB LR	C	23.9	0.34	C	24.1	0.36
		NB LT	A	9.3	0.58	B	10.6	0.65
		SB TR	A	7.9	0.49	A	8.7	0.54
		OVERALL	B	10.1	0.52	B	11.0	0.58
14.	US Route 9(NB-SB)/Central Ave. (EB) (Tarrytown)	NB LT	b	11.1	0.07	b	11.5	0.08
		EB LR	e	38.7	0.47	e	48.7	0.54
15.	Neperan Rd.(EB-WB)/County House Rd.(SB) (Tarrytown)	EB T	a	9.1	N/A	a	9.4	N/A
		WB T	a	8.9	N/A	a	9.2	N/A
		SB LR	a	9.3	N/A	a	9.5	N/A
		OVERALL	a	9.1	N/A	a	9.4	N/A
16.	US Route 9(NB-SB)/Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	44.8	0.73	D	50.8	0.81
		WB LTR	D	48.2	0.76	E	55.6	0.83
		NB LTR	E	60.5	1.02	F	115.7	1.18
		SB LTR	C	27.1	0.85	D	36.6	0.93
		OVERALL	D	44.3	0.93	E	69.8	1.06
17.	Main St.(EB-WB)/Washington St.(NB-SB) (Tarrytown)	EB LTR	B	10.8	0.36	B	11.5	0.41
		WB LTR	B	11.2	0.38	B	11.7	0.43
		NB LTR	B	13.4	0.33	B	13.5	0.34
		SB LTR	C	20.9	0.67	C	21.9	0.70
		OVERALL	B	14.7	0.51	B	15.2	0.55
18.	H-Bridge(EB)/Main St.(WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	C	22.0	0.37	C	26.6	0.63
		WB L	C	21.0	0.19	C	21.5	0.24
		WB T	C	20.7	0.16	C	21.2	0.25
		WB R	C	21.5	0.29	C	21.6	0.30
		WB Overall	C	21.1	N/A	C	21.4	N/A
		NB L	A	4.1	0.12	A	4.5	0.19
		NB T	A	4.0	0.14	A	4.0	0.14
		NB R	A	3.5	0.00	A	3.5	0.00
		NB Overall	A	4.0	N/A	A	4.2	N/A
		SB LTR	A	3.9	0.10	A	3.9	0.10
OVERALL	B	11.3	0.18	B	13.3	0.28		
19.	West Franklin St.(EB-WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	7.6	0.00	a	7.7	0.00
		NB LR	b	11.5	0.13	b	12.7	0.15
20A.	US Route 9(NB-SB)/West Franklin St.(EB) (Tarrytown)	EB R	e	37.5	0.74	f	81.6	0.99
		NB LT	b	11.6	0.33	b	13.2	0.42
20B.	US Route 9(NB-SB)/East Franklin St.(WB) (Tarrytown)	WB LR	c	20.6	0.08	c	25.0	0.10
		SB LT	b	10.2	0.01	b	10.8	0.02
21.	US Route 9(NB-SB)/Benedict Ave.(WB) (Tarrytown)	WB L	D	35.8	0.17	D	35.8	0.18
		WB R	C	27.1	0.38	C	27.5	0.41
		WB Overall	C	29.1	N/A	C	29.3	N/A
		NB T	C	22.1	0.80	C	30.9	0.90
		NB R	B	10.2	0.08	B	10.2	0.09
		NB Overall	C	21.1	N/A	C	29.4	N/A
		SB L	C	20.4	0.66	E	75.8	0.96
		SB T	B	10.3	0.68	B	13.0	0.77
SB Overall	B	12.2	N/A	C	24.8	N/A		

TABLE NO. 6A-2c								
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
22. Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	OVERALL	B	17.8	0.64	C	27.2	0.73	
	EB L	A	4.9	0.15	A	5.0	0.16	
	EB TR	A	5.1	0.23	A	5.2	0.25	
	EB Overall	A	5.1	N/A	A	5.2	N/A	
	WB L	A	4.1	0.02	A	4.1	0.02	
	WB TR	A	6.0	0.35	A	6.2	0.38	
	WB Overall	A	5.9	N/A	A	6.1	N/A	
	NB LTR	B	16.9	0.20	B	16.9	0.20	
	SB LTR	B	19.1	0.49	B	19.3	0.51	
OVERALL	A	8.4	0.39	A	8.5	0.41		
23. US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	13.4	N/A	b	14.4	N/A	
24. US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	33.1	0.43	C	33.5	0.50	
	WB L	C	20.7	0.25	C	20.7	0.26	
	WB R	C	28.7	0.70	C	34.2	0.80	
	WB Overall	C	25.1	N/A	C	28.6	N/A	
	NB T	B	18.1	0.51	B	18.8	0.56	
	NB R	A	0.8	0.22	A	0.8	0.22	
	NB Overall	B	13.1	N/A	B	13.9	N/A	
	SB T	B	18.3	0.52	B	18.9	0.57	
OVERALL	B	19.3	0.58	C	20.7	0.65		
25. US Route 9(NB-SB)/I- 87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	36.7	0.18	D	36.7	0.18	
	WB LT	D	37.9	0.27	D	38.0	0.28	
	WB R	B	12.7	0.37	B	13.3	0.42	
	WB Overall	B	18.1	N/A	B	18.1	N/A	
	NB L	C	31.7	0.04	C	31.7	0.04	
	NB TR	D	40.2	0.64	D	41.0	0.67	
	NB Overall	D	40.0	N/A	D	40.8	N/A	
	SB L	B	11.3	0.51	B	12.7	0.57	
	SB TR	A	4.0	0.26	A	4.1	0.27	
	SB Overall	A	6.9	N/A	A	7.6	N/A	
OVERALL	C	20.6	0.00	C	21.0	0.00		

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

**TABLE NO. 6A-3
FEIS TRIP GENERATION SUMMARY FOR LIGHTHOUSE LANDING ⁽¹⁾**

Land Use (Code)	Size	Dependent Variable	Peak AM Hour			Peak PM Hour			Peak Sat. Hour		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Specialty Retail Center (814) ⁽²⁾	109,000	SF	159	125	284	125	159	284	306	306	612
Gravity Model Reduction (40%-AM,PM & 40%-SAT)			64	50	114	50	64	114	122	122	245
Specialty Retail Center Primary Trips			95	75	170	75	95	170	184	184	367
Office Building (710)	35,000	SF	71	10	81	9	43	52	9	7	16
Apartment (220)	608	Units	60	241	301	229	123	352	134	134	268
Condominium/Townhouse (230)	600	Units	37	180	217	175	86	261	117	100	217
Total Residential (220& 230)	1,208	Units	97	421	518	404	209	613	251	234	485
50% of Gravity Model Reduction			32	25	57	25	32	57	61	61	122
Total Minus Internal			65	396	461	379	177	556	190	173	363
Mass Transit Credit (40%-AM,PM)			26	158	184	152	71	222	0	0	0
Residential Primary Trips			39	238	277	227	106	334	190	173	363
Senior Housing-Attached (252)	42	Units	2	2	4	3	2	5	6	6	12
Total Residential (220, 230 & 252) ⁽⁷⁾	1,250	Units	41	240	281	230	108	339	196	179	375
Hotel (310)	140	Rooms	46	33	79	39	41	80	61	61	122
Movie Theater w/ Matinee (444) ⁽³⁾	18,000	SF	0	0	0	44	25	69	44	25	69
TOTAL PRIMARY			254	358	612	397	313	710	493	455	948
Water Uses/Police Station/Fire Station			10	10	20	10	10	20	10	10	20
Soccer Complex (488) ⁽⁴⁾	2	Fields	1	1	2	29	13	42	28	30	58
DPW Facility ⁽⁵⁾	N/A	N/A	2	3	5	0	0	0	0	0	0
TOTAL EAST PARCEL			3	4	7	29	13	42	28	30	58
TOTAL W/ EAST PARCEL & WATER USES/STATIONS			267	372	639	436	336	772	531	495	1,026
Train Station ⁽⁶⁾	550	Parking Spaces	303	46	349	46	303	349	30	30	60
TOTAL PRIMARY WITH TRAIN STATION			570	418	988	482	639	1,121	561	525	1,086

(1) Trip Generation Rates based upon the Institute of Transportation Engineers' publication entitled "Trip Generation", 7th Edition.

(2) Peak PM Hour Rates were utilized for the Peak AM Hour with the Directional Distribution reversed. Peak PM Hour Generator was utilized for the Peak Saturday Hour.

(3) The Peak PM Hour Rates were utilized for the Peak Saturday Hour.

(4) Trip Generation Rates based upon Institute of Transportation Engineers' publication entitled "Trip Generation", 7th Edition. No credit was taken for Lighthouse Landing Residents walking to the park.

(5) Trip Generation Rates based upon counts conducted at the existing DPW Facility.

(6) Trip Generation Rates based upon rates determined by TRC. Not all trips were assumed to be new trips, but rather re-routed trips from the existing Tarrytown, Philipse Manor and Scarborough Stations

(7) Some of the above residential units may become Senior housing units which would slightly reduce the trip generation depicted above.

TABLE NO. 6A-3A

FEIS TRIP GENERATION SUMMARY FOR LIGHTHOUSE LANDING WITHOUT TRAIN STATION⁽¹⁾

Land Use (Code)	Size	Dependent Variable	Peak AM Hour			Peak PM Hour			Peak Sat. Hour		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Specialty Retail Center (814) ⁽²⁾	109,000	SF	159	125	284	125	159	284	306	306	612
Gravity Model Reduction (40%-AM,PM & 40%-SAT)			64	50	114	50	64	114	122	122	245
Specialty Retail Center Primary Trips			95	75	170	75	95	170	184	184	367
Office Building (710)	35,000	SF	71	10	81	9	43	52	9	7	16
Apartment (220)	608	Units	60	241	301	229	123	352	134	134	268
Condominium/Townhouse (230)	600	Units	37	180	217	175	86	261	117	100	217
Total Residential (220& 230)	1,208	Units	97	421	518	404	209	613	251	234	485
50% of Gravity Model Reduction			32	25	57	25	32	57	61	61	122
Total Minus Internal			65	396	461	379	177	556	190	173	363
Mass Transit Credit (35%-AM,PM)			23	139	161	133	62	195	0	0	0
Station Res. Trips (5%-AM,PM) + Jitney (12-AM, PM & 2 SAT)			15	32	47	31	21	52	2	2	2
Non Train Residential Primary Trips			39	238	277	227	106	334	190	173	363
Senior Housing-Attached (252)	42	Units	2	2	4	3	2	5	6	6	12
Total Residential (220, 230 & 252) ⁽⁷⁾	1,250	Units	41	240	281	230	108	339	196	179	375
Hotel (310)	140	Rooms	46	33	79	39	41	80	61	61	122
Movie Theater w/ Matinee (444) ⁽³⁾	18,000	SF	0	0	0	44	25	69	44	25	69
TOTAL PRIMARY			254	358	612	397	313	710	493	455	948
Water Uses/Police Station/Fire Station			10	10	20	10	10	20	10	10	20
Soccer Complex (488) ⁽⁴⁾	2	Fields	1	1	2	29	13	42	28	30	58
DPW Facility ⁽⁵⁾	N/A	N/A	2	3	5	0	0	0	0	0	0
TOTAL EAST PARCEL			3	4	7	29	13	42	28	30	58
TOTAL W/ EAST PARCEL & WATER USES/STATIONS			267	372	639	436	336	772	531	495	1,026

(1) Trip Generation Rates based upon the Institute of Transportation Engineers' publication entitled "Trip Generation", 7th Edition.

(2) Peak PM Hour Rates were utilized for the Peak AM Hour with the Directional Distribution reversed. Peak PM Hour Generator was utilized for the Peak Saturday Hour.

(3) The Peak PM Hour Rates were utilized for the Peak Saturday Hour.

(4) Trip Generation Rates based upon Institute of Transportation Engineers' publication entitled "Trip Generation", 7th Edition. No credit was taken for Lighthouse Landing Residents walking to the park.

(5) Trip Generation Rates based upon counts conducted at the existing DPW Facility.

(6) Trip Generation Rates based upon rates determined by TRC. Not all trips were assumed to be new trips, but rather re-routed trips from the existing Tarrytown, Philipse Manor and Scarborough Stations.

(7) Some of the above residential units may become Senior housing units which would slightly reduce the trip generation depicted above.

TABLE NO. 6A-4
LIGHTHOUSE LANDING DEIS VS. FEIS TRIP GENERATION SUMMARY COMPARISON

	Peak AM Hour			Peak PM Hour			Peak Saturday Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
DEIS Plan	303	436	739	485	381	866	594	519	1,113
FEIS Alternative Plan	254	358	612	397	313	710	493	455	948
Difference	49	78	127	88	68	156	101	64	165
% Reduction	16.2%	17.9%	17.2%	18.1%	17.8%	18.0%	17.0%	12.3%	14.8%

Notes:

1. For comparison purposes, Trip Generation includes a new train station, but does not include any trips to/from new Commuter Lot.
2. For comparison purposes, Trip Generation does not include any East Parcel Uses, Water Dependent Uses or Fire/Ambulance Station.
3. DEIS Traffic Volumes based upon ITE 6th Edition.
4. FEIS Traffic Volumes based upon ITE 7th Edition.

**TABLE NO. 6A-5
LIGHTHOUSE LANDING DEIS VS. FEIS TRIP GENERATION DETAILED COMPARISON**

Land Use	Peak AM Hour			Peak PM Hour			Peak Sat. Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
DEIS									
Residential/Commercial ⁽¹⁾	303	436	739	485	381	866	594	519	1,113
DPW Facility ⁽²⁾	2	3	5	0	0	0	0	0	0
Train Station ⁽³⁾	220	20	240	20	220	240	20	20	40
TOTAL DEIS	525	459	984	505	601	1,106	614	539	1,153
FEIS									
Residential/Commercial ⁽⁴⁾	254	358	612	397	313	710	493	455	948
DPW Facility ⁽²⁾	2	3	5	0	0	0	0	0	0
Soccer Complex ⁽⁴⁾	1	1	2	29	13	42	28	30	58
Water Dependent Uses & Fire/Ambulance Station	10	10	20	10	10	20	10	10	20
Train Station ⁽³⁾	305	44	349	44	305	349	30	30	60
TOTAL FEIS	572	416	988	480	641	1,121	561	525	1,086
DIFFERENCE									
NUMERICAL	47	-43	4	-25	40	15	-53	-14	-67
PERCENTAGE	9.0%	-9.4%	0.4%	-5.0%	6.7%	1.4%	-8.6%	-2.6%	-5.8%

Notes:

- (1) Trip Generation Rates based upon the Institute of Transportation Engineers' publication entitled "Trip Generation", 6th Edition.
- (2) Trip Generation Rates based upon counts conducted at the existing DPW Facility.
- (3) Trip Generation Rates based upon rates determined by TRC. Trips were not assumed to be new trips but rather re-routed trips from the existing Tarrytown, Philipse Manor & Scarborough Train Stations.
- (4) Trip Generation Rates based upon the Institute of Transportation Engineers' publication entitled "Trip Generation", 7th Edition.

TABLE NO. 6-6a										
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY										
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)										
Intersection	Movements	No-Build			Build			Build w/ Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.01	C	29.7	0.01			
	EB TR	C	32.5	0.34	C	33.1	0.40			
	EB Overall	C	32.4	N/A	C	33.0	N/A			
	WB L	C	29.9	0.03	C	30.3	0.08			
	WB TR	C	30.4	0.11	C	30.3	0.10			
	WB Overall	C	30.3	N/A	C	30.3	N/A			
	NB LTR	A	3.0	0.45	A	3.3	0.50			
	SB LTR	C	20.6	0.62	C	21.7	0.67			
OVERALL	B	14.2	0.48	B	14.9	0.54				
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	176.0	1.25	F	317.4	1.58	F	118.7	1.11
	WB LTR	C	30.6	0.24	C	30.5	0.24	C	27.9	0.17
	NB LTR	B	12.4	0.37	B	12.5	0.38	B	13.4	0.38
	SB LTR	B	11.7	0.61	B	12.9	0.69	B	13.4	0.68
	PMD LTR	C	33.2	0.02	C	33.2	0.02	D	42.9	0.04
	OVERALL	D	36.7	0.00	E	64.8	0.00	C	31.7	0.00
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.6	0.00	a	8.0	0.00			
	SB LR	b	10.2	0.01	b	11.0	0.01			
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	e	46.1	0.37	f	52.4	0.47			
	NB LT	b	10.1	0.01	a	9.9	0.01			
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	60.1	0.46	E	60.3	0.48			
	WB L	E	64.9	0.63	E	73.2	0.75			
	WB R	E	57.5	0.27	E	57.4	0.26			
	WB Overall	E	62.9	N/A	E	69.6	N/A			
	NB TR	B	20.0	0.81	C	23.2	0.86			
	SB LT	D	48.5	0.86	D	48.4	0.86			
	OVERALL	D	39.1	0.72	D	41.1	0.78			
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	F	96.8	0.90	F	157.9	1.11	E	72.8	0.82
	EB TR	E	59.1	0.39	E	59.5	0.41	D	51.5	0.29
	EB Overall	F	86.4	N/A	F	133.6	N/A	E	67.6	N/A
	WB LTR	D	55.0	0.04	D	55.0	0.04	D	55.0	0.04
	NB LTR/L	F	121.0	1.12	F	175.7	1.26	C	32.5	0.34
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	D	50.9	0.85
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	D	49.4	N/A
	SB LTR	B	10.9	0.47	B	11.0	0.48	C	21.1	0.73
OVERALL	E	61.5	0.70	F	89.2	0.80	D	39.1	0.68	
7. Beekman Ave.(EB-WB)/Lawrence Ave.(SB)	EB LT	a	8.1	0.04	a	8.2	0.05			
	SB LR	b	12.4	0.19	b	13.5	0.17			
8. Beekman Ave.(EB-WB)/Washington St.(NB-SB)	EB TR	B	15.7	0.44	B	17.9	0.56			
	WB LT	B	11.8	0.45	A	9.8	0.36			
	NB LR	C	26.2	0.41	C	28.0	0.48			
	SB LTR	C	22.8	0.25	C	22.8	0.25			
	OVERALL	B	17.4	0.49	B	18.1	0.58			
9. Beekman Ave.(EB-WB)/Pocantico St.(SB)	EB LT/L	b	14.6	N/A	d	30.5	N/A	b	13.4	N/A
	EB T	N/A	N/A	N/A	N/A	N/A	N/A	b	12.9	N/A
	EB Overall	N/A	N/A	N/A	N/A	N/A	N/A	b	13.1	N/A
	WB TR	a	9.5	N/A	b	12.8	N/A	b	12.5	N/A
	SB LR	b	10.2	N/A	b	11.2	N/A	b	11.2	N/A
	OVERALL	b	12.3	N/A	c	22.1	N/A	b	12.6	N/A
10. Beekman Ave.(EB-WB)/Cortland St.(NB)	NB L	b	12.8	0.10	c	22.3	0.39			
	NB R	b	13.3	0.36	c	16.3	0.41			
	NB Overall	b	13.2	N/A	c	18.6	N/A			
11. Beekman Ave.(EB-WB)/Clinton St.(NB-SB)	EB LTR	a	7.6	0.00	a	7.9	0.00			
	WB LTR	a	7.5	0.03	a	8.0	0.04			
	NB LTR	a	9.7	0.08	c	16.4	0.28			
	SB LTR	N/A	N/A	N/A	N/A	N/A	N/A			
12. Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.6	0.04	a	8.2	0.02			
13. US Route 9(NB-SB)/ Wildey St.(EB) (Tarrytown)	EB LR	C	25.7	0.39	C	25.8	0.39			
	NB LT	A	9.0	0.68	A	9.2	0.69			
	SB TR	A	9.3	0.70	A	9.0	0.69			
	OVERALL	B	10.1	0.64	B	10.0	0.64			
14. US Route 9(NB-SB)/ Central Ave. (EB)	NB LT	a	10.0	0.10	a	10.0	0.10			

TABLE NO. 6-6a											
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
(Tarrytown)	EB LR	c	23.3	0.31	c	23.3	0.31				
15. Neperan Rd.(EB-WB)/ County House Rd.(SB) (Tarrytown)	EB T	d	28.2	N/A	d	30.4	N/A				
	WB T	c	24.6	N/A	d	26.3	N/A				
	SB LR	d	27.8	N/A	d	33.2	N/A				
	OVERALL	d	26.9	N/A	d	30.0	N/A				
16. US Route 9(NB-SB)/ Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	42.9	0.73	D	50.5	0.83	D	39.9	0.73	
	WB LTR	D	35.7	0.54	D	36.8	0.57	C	30.9	0.48	
	NB LTR/L	C	28.1	0.86	D	37.8	0.93	C	21.4	0.51	
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	21.4	0.72	
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	21.2	NA	
	SB LTR/L	C	24.5	0.82	C	24.6	0.82	B	10.9	0.05	
	SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.5	0.75	
	SB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	22.4	NA	
	OVERALL	C	29.8	0.82	D	35.0	0.90	C	25.8	0.74	
17. Main St.(EB-WB)/ Washington St.(NB-SB) (Tarrytown)	EB LTR	B	10.6	0.34	B	11.5	0.42				
	WB LTR	A	9.8	0.26	B	10.6	0.34				
	NB LTR	B	12.5	0.26	B	12.5	0.26				
	SB LTR	B	16.7	0.54	B	16.9	0.55				
	OVERALL	B	12.8	0.43	B	13.1	0.48				
18. H-Bridge(EB)/Main St. (WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	C	30.0	0.70	F	139.4	1.19	B	17.2	0.59	
	WB L	C	22.3	0.32	C	23.2	0.38	B	13.6	0.18	
	WB T	C	20.7	0.17	C	21.1	0.24	B	13.1	0.12	
	WB R	C	21.1	0.23	C	22.0	0.36	B	13.4	0.18	
	WB Overall	C	21.3	N/A	C	22.0	N/A	B	13.3	NA	
	NB L	A	5.5	0.33	A	6.0	0.40	B	13.9	0.55	
	NB T	A	4.0	0.12	A	4.2	0.17	A	9.3	0.23	
	NB R	A	3.5	0.02	A	3.5	0.02	A	7.9	0.02	
	NB Overall	A	4.9	N/A	A	5.3	N/A	B	12.1	NA	
	SB LTR	A	3.9	0.10	A	3.5	0.02	A	8.0	0.03	
OVERALL	B	13.2	0.41	D	47.9	0.46	B	13.7	0.56		
19. West Franklin St.(EB- WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	7.8	0.00	a	8.3	0.00				
	NB LR	c	15.4	0.30	c	26.5	0.49				
20A. US Route 9(NB-SB)/ West Franklin St.(EB) (Tarrytown)	EB R	f	95.9	1.05	f	301.8	1.58	F	83.2	1.04	
	NB LT / L	b	12.4	0.39	c	16.3	0.59	A	9.8	0.49	
	NB T	N/A	N/A	N/A	N/A	N/A	N/A	A	2.1	0.49	
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	A	5.0	NA	
	SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	27.7	0.87	
	OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	C	28.6	0.00	
20B. US Route 9(NB- SB)/East Franklin St.(WB) (Tarrytown)	WB LR	c	18.8	0.10	c	23.6	0.14	D	52.5	0.42	
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	A	5.9	0.78	
	SB LT	b	10.4	0.02	b	11.4	0.03	A	4.7	0.84	
	OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	A	5.8	0.84	
21. US Route 9(NB-SB)/ Benedict Ave.(WB) (Tarrytown)	WB L	D	35.7	0.16	D	35.7	0.16	D	43.2	0.27	
	WB R	C	26.8	0.35	C	26.9	0.36	C	21.7	0.30	
	WB Overall	C	28.8	N/A	C	28.9	N/A	C	26.6	NA	
	NB T/TR	C	25.5	0.85	E	58.4	1.03	C	20.3	0.66	
	NB R	B	10.2	0.08	B	10.2	0.08	NA	NA	NA	
	NB Overall	C	24.3	N/A	E	55.3	N/A	NA	NA	NA	
	SB L	C	29.3	0.75	F	107.6	1.03	A	9.2	0.40	
	SB T	B	13.7	0.79	C	26.8	0.94	B	12.5	0.85	
	SB Overall	B	16.4	N/A	D	39.1	N/A	B	12.0	NA	
	OVERALL	C	20.8	0.66	D	44.8	0.84	B	16.7	0.77	
22. Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	4.3	0.05	A	4.3	0.05	A	6.7	0.06	
	EB TR	A	6.0	0.35	A	6.0	0.36	A	9.4	0.43	
	EB Overall	A	5.9	N/A	A	5.9	N/A	A	9.3	NA	
	WB L	A	4.5	0.08	A	4.5	0.08	A	7.0	0.10	
	WB TR	A	6.5	0.41	A	6.5	0.41	B	10.3	0.49	
	WB Overall	A	6.3	N/A	A	6.3	N/A	A	10.0	NA	
	NB LTR	B	19.9	0.56	B	19.9	0.56	B	14.2	0.37	
	SB LTR	E	65.7	0.97	E	65.7	0.97	B	17.9	0.62	
OVERALL	C	20.1	0.55	B	19.9	0.55	B	11.9	0.54		

TABLE NO. 6-6a											
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	15.4	N/A	b	17.1	N/A			
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	D	37.3	0.67	D	39.5	0.72	D	39.5	0.72
		WB L	C	23.5	0.55	C	23.5	0.55	C	21.2	0.40
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.6	0.51
		WB R	D	50.8	0.93	F	88.7	1.07	C	31.7	0.77
		WB Overall	D	35.3	N/A	D	54.1	N/A	C	25.2	N/A
		NB T	B	19.4	0.61	B	19.9	0.64	C	22.5	0.72
		NB R	A	4.9	0.78	A	4.9	0.78	A	4.9	0.78
		NB Overall	B	11.5	N/A	B	11.9	N/A	B	13.6	N/A
		SB T	B	18.4	0.53	B	20.0	0.64	C	21.3	0.66
		OVERALL	C	21.5	0.77	C	27.5	0.77	C	20.3	0.77
25.	US Route 9(NB-SB)/I-87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	38.7	0.32	D	38.7	0.32	D	38.7	0.32
		WB LT	D	51.8	0.74	D	51.8	0.74	D	51.8	0.74
		WB R	F	126.8	1.20	F	167.9	1.30	F	152.7	1.27
		WB Overall	F	113.6	N/A	F	148.7	N/A	F	136.0	N/A
		NB L	C	31.3	0.01	C	31.3	0.01	C	32.7	0.01
		NB TR	D	39.3	0.60	D	39.7	0.62	D	41.8	0.65
		NB Overall	D	39.2	N/A	D	39.7	N/A	D	41.8	N/A
		SB L	A	9.6	0.38	B	11.7	0.54	B	11.5	0.53
		SB TR	A	4.8	0.44	A	4.9	0.45	A	4.9	0.45
		OVERALL	A	5.9	N/A	A	6.8	N/A	A	6.8	N/A
26.	River St.(SB)/Ichabod's Landing(EB)	EB LTR	N/A	N/A	N/A	a	7.8	N/A			
		NB LTR	N/A	N/A	N/A	a	8.1	N/A			
		SB LTR	N/A	N/A	N/A	a	8.5	N/A			
		OVERALL	N/A	N/A	N/A	a	8.2	N/A			
27.	Beekman Ave.(WB)/ Beekman Ave Ext.(SB)/ River St.(EB)	EB LT	N/A	N/A	N/A	a	7.8	0.03			
		SB L	N/A	N/A	N/A	b	12.6	0.37			
28.	River Street(NB-SB)/ Proposed Cinema Driveway(WB)	SB LT	N/A	N/A	N/A	N/A	N/A	N/A			
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A			
29.	Beekman Ave. Ext(NB-SB)/ Internal Site Road(EB-WB)	EB LTR	N/A	N/A	N/A	a	8.5	N/A			
		WB LTR	N/A	N/A	N/A	a	8.5	N/A			
		NB LTR	N/A	N/A	N/A	a	9.6	N/A			
		OVERALL	N/A	N/A	N/A	a	9.4	N/A			
30.	River St. Ext(NB-SB)/ Internal Site Road(WB)	WB LR	N/A	N/A	N/A	a	7.9	N/A			
		NB TR	N/A	N/A	N/A	a	7.4	N/A			
		SB LT	N/A	N/A	N/A	a	7.9	N/A			
		OVERALL	N/A	N/A	N/A	a	7.8	N/A			
31.	Beekman Ave.(EB-WB)/Viaduct (SB)	EB LT	N/A	N/A	N/A	a	8.3	0.00			
		SB LR	N/A	N/A	N/A	b	13.5	0.05			

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6-6b										
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY										
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)										
Intersection	Movements	No-Build			Build			Build w/ Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.01	C	29.7	0.01			
	EB TR	C	32.1	0.30	C	32.0	0.29			
	EB Overall	C	32.0	N/A	C	31.9	N/A			
	WB L	C	29.8	0.03	C	29.9	0.04			
	WB TR	C	30.6	0.13	C	30.6	0.13			
	WB Overall	C	30.5	N/A	C	30.5	N/A			
	NB LTR	A	4.0	0.58	A	4.9	0.67			
	SB LTR	B	19.8	0.58	C	21.1	0.64			
OVERALL	B	12.9	0.60	B	13.8	0.65				
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	215.1	1.34	F	434.6	1.85	F	144.6	1.19
	WB LTR	C	29.6	0.11	C	29.6	0.11	C	25.6	0.07
	NB LTR	B	13.4	0.46	B	13.4	0.46	B	15.8	0.48
	SB LTR	B	10.9	0.56	B	11.8	0.62	B	14.2	0.64
	PMD LTR	C	33.1	0.01	C	33.1	0.01	D	42.8	0.02
	OVERALL	D	44.2	0.00	F	94.7	0.00	D	40.2	0.00
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.8	0.01	a	8.1	0.02			
	SB LR	b	11.8	0.02	b	13.6	0.03			
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	f	55.4	0.50	f	58.7	0.53			
	NB LT	a	9.4	0.01	a	9.4	0.01			
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	57.6	0.28	E	57.7	0.29			
	WB L	F	183.5	1.20	F	257.6	1.38			
	WB R	E	60.1	0.47	E	60.1	0.47			
	WB Overall	F	151.7	N/A	F	211.9	N/A			
	NB TR	C	21.4	0.84	C	24.4	0.87			
	SB LT	D	37.8	0.65	D	37.7	0.65			
	OVERALL	D	54.6	0.80	E	70.6	0.86			
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	F	91.5	0.87	F	147.8	1.08	E	70.3	0.79
	EB TR	E	60.2	0.47	E	63.7	0.58	D	53.4	0.42
	EB Overall	F	80.9	N/A	F	119.2	N/A	E	64.5	N/A
	WB LTR	D	54.9	0.03	D	54.9	0.03	D	54.9	0.03
	NB LTR/L	F	210.2	1.34	F	227.8	1.38	C	34.9	0.43
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	E	58.8	0.91
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	E	56.8	N/A
	SB LTR	B	11.4	0.51	B	11.7	0.54	B	17.9	0.61
OVERALL	F	93.5	0.80	F	103.7	0.85	D	39.4	0.63	
7. Beekman Ave.(EB-WB)/Lawrence Ave.(SB)	EB LT	a	8.3	0.06	a	8.5	0.06			
	SB LR	b	13.0	0.18	b	14.3	0.21			
8. Beekman Ave.(EB-WB)/Washington St.(NB-SB)	EB TR	B	18.4	0.58	C	24.1	0.75			
	WB LT	B	16.5	0.63	C	26.9	0.81			
	NB LR	C	32.8	0.63	C	33.6	0.64			
	SB LTR	C	23.1	0.27	C	23.1	0.27			
	OVERALL	C	21.2	0.64	C	26.5	0.73			
9. Beekman Ave.(EB-WB)/Pocantico St.(SB)	EB LT/L	d	25.1	N/A	f	77.8	N/A	b	13.9	N/A
	EB T	N/A	N/A	N/A	N/A	N/A	N/A	c	22.3	N/A
	EB Overall	N/A	N/A	N/A	N/A	N/A	N/A	c	19.5	N/A
	WB TR	b	13.9	N/A	d	26.3	N/A	c	24.3	N/A
	SB LR	b	13.3	N/A	c	18.8	N/A	c	17.1	N/A
	OVERALL	c	18.9	N/A	e	47.4	N/A	c	20.5	N/A
10. Beekman Ave.(EB-WB)/Cortland St.(NB)	NB L	c	18.3	0.27	e	37.5	0.50			
	NB R	c	17.0	0.53	c	19.1	0.46			
	NB Overall	c	17.3	N/A	d	25.3	N/A			
11. Beekman Ave.(EB-WB)/Clinton St.(NB-SB)	EB LTR	a	7.6	0.00	a	8.0	0.00			
	WB LTR	a	7.7	0.07	a	8.4	0.09			
	NB LTR	b	10.1	0.08	d	27.1	0.46			
	SB LTR	a	9.2	0.00	b	10.4	0.00			
12. Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.6	0.04	a	8.6	0.12			
13. US Route 9(NB-SB)/ Wildey St.(EB) (Tarrytown)	EB LR	C	22.3	0.27	C	22.0	0.23			
	NB LT	B	17.9	0.81	B	19.1	0.83			
	SB TR	B	15.3	0.75	B	15.2	0.75			
	OVERALL	B	17.0	0.65	B	17.4	0.65			
14. US Route 9(NB-SB)/ Central Ave. (EB)	NB LT	b	11.7	0.13	b	11.7	0.13			

TABLE NO. 6-6b											
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
15.	(Tarrytown)	EB LR	e	42.6	0.55	e	42.6	0.55			
	Neperan Rd.(EB-WB)/ County House Rd.(SB) (Tarrytown)	EB T	c	18.8	N/A	c	19.9	N/A			
		WB T	e	39.3	N/A	e	43.8	N/A			
		SB LR	b	13.7	N/A	b	14.7	N/A			
		OVERALL	d	28.1	N/A	d	30.6	N/A			
16.	US Route 9(NB-SB)/ Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	45.6	0.74	D	53.8	0.84	D	44.8	0.79
		WB LTR	F	162.2	1.22	F	192.9	1.30	F	130.3	1.15
		NB LTR/L	E	65.4	1.05	F	135.7	1.23	D	50.2	0.79
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.6	0.75
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	26.5	NA
		SB LTR/L	C	29.5	0.88	C	29.6	0.88	B	11.6	0.09
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	24.5	0.79
		SB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	24.2	NA
		OVERALL	E	66.8	1.11	F	98.9	1.25	D	45.1	0.93
17.	Main St.(EB-WB)/ Washington St.(NB-SB) (Tarrytown)	EB LTR	B	11.6	0.41	B	12.7	0.49			
		WB LTR	B	11.2	0.39	B	12.1	0.46			
		NB LTR	B	14.2	0.40	B	14.2	0.40			
		SB LTR	B	17.0	0.54	B	17.4	0.56			
		OVERALL	B	13.5	0.47	B	14.0	0.52			
18.	H-Bridge(EB)/Main St. (WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	F	131.7	1.17	F	497.7	2.03	D	54.8	0.99
		WB L	C	23.2	0.38	C	23.2	0.38	B	15.0	0.30
		WB T	C	21.1	0.24	C	22.0	0.37	B	13.4	0.19
		WB R	C	21.2	0.24	C	21.6	0.30	B	13.2	0.15
		WB Overall	C	21.7	N/A	C	22.1	N/A	B	13.7	NA
		NB L	A	5.3	0.31	A	7.0	0.48	B	17.1	0.66
		NB T	A	4.3	0.18	A	3.8	0.08	A	8.5	0.11
		NB R	A	3.6	0.03	A	3.6	0.03	A	8.0	0.03
		NB Overall	A	4.7	N/A	A	6.2	N/A	B	15.0	NA
		SB LTR	A	4.0	0.12	A	3.9	0.10	A	8.7	0.14
		OVERALL	D	44.2	0.49	F	203.5	0.80	C	30.1	0.80
19.	West Franklin St.(EB- WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	8.3	0.01	a	8.8	0.01			
		NB LR	c	16.6	0.24	d	29.1	0.42			
20A.	US Route 9(NB-SB)/ West Franklin St.(EB) (Tarrytown)	EB R	f	142.9	1.18	f	417.2	1.84	F	112.6	1.12
		NB LT	c	16.8	0.60	d	33.6	0.87	B	17.6	0.70
		NB T	N/A	N/A	N/A	N/A	N/A	N/A	A	2.7	0.58
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	A	8.8	NA
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	D	35.6	0.94
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	D	36.8	0.00
20B.	US Route 9(NB- SB)/East Franklin St.(WB) (Tarrytown)	WB LR	e	37.0	0.24	f	61.6	0.37	D	53.1	0.47
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	21.4	0.96
		SB LT	b	11.9	0.03	b	13.4	0.04	A	8.5	0.91
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	B	15.4	0.97
21.	US Route 9(NB-SB)/ Benedict Ave.(WB) (Tarrytown)	WB L	D	36.6	0.26	D	36.6	0.26	D	43.7	0.41
		WB R	C	31.2	0.61	C	31.7	0.62	C	23.7	0.51
		WB Overall	C	32.4	N/A	C	32.7	N/A	C	28.0	NA
		NB T/TR	D	36.8	0.94	F	94.8	1.13	C	22.6	0.73
		NB R	B	10.1	0.07	B	10.1	0.07	N/A	N/A	NA
		NB Overall	D	35.2	N/A	F	90.4	N/A	N/A	N/A	NA
		SB L	F	254.2	1.43	F	270.1	1.47	C	21.7	0.60
		SB T	B	12.8	0.77	C	26.9	0.94	B	13.7	0.86
		SB Overall	E	69.3	N/A	E	76.3	N/A	B	15.4	NA
22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	5.4	0.16	A	5.5	0.16	B	10.1	0.25
		EB TR	A	5.6	0.31	A	5.7	0.31	A	8.9	0.38
		EB Overall	A	5.6	N/A	A	5.6	N/A	A	9.0	NA
		WB L	A	4.9	0.16	A	5.0	0.16	A	7.8	0.20
		WB TR	A	9.8	0.66	A	10.0	0.67	B	17.9	0.80
		WB Overall	A	9.2	N/A	A	9.4	N/A	B	16.7	NA
		NB LTR	B	17.5	0.30	B	17.5	0.30	B	13.2	0.20
		SB LTR	F	95.1	1.08	F	95.1	1.08	C	21.4	0.73
		OVERALL	C	26.4	0.76	C	26.3	0.77	B	15.6	0.77

TABLE NO. 6-6b											
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	18.0	N/A	b	19.9	N/A			
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	32.9	0.41	C	33.2	0.45	C	33.2	0.45
		WB L	C	22.0	0.42	C	22.0	0.42	C	20.4	0.30
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.4	0.49
		WB R	E	57.9	0.96	F	155.0	1.25	D	45.0	0.90
		WB Overall	D	40.3	N/A	F	98.4	N/A	C	31.5	NA
		NB T	B	19.5	0.61	C	20.3	0.66	C	21.6	0.68
		NB R	A	0.9	0.32	A	0.9	0.32	A	0.9	0.32
		NB Overall	B	13.5	N/A	B	14.3	N/A	B	15.2	NA
		SB T	B	19.5	0.61	C	21.0	0.69	C	22.4	0.71
		OVERALL	C	24.3	0.72	D	43.6	0.87	C	23.3	0.75
25.	US Route 9(NB-SB)/I-87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	37.8	0.26	D	37.9	0.27	D	45.0	0.40
		WB LT	D	40.4	0.45	D	40.4	0.45	D	48.0	0.56
		WB R	B	14.3	0.50	B	14.7	0.52	B	15.3	0.53
		WB Overall	C	20.5	N/A	C	20.6	N/A	C	22.9	NA
		NB L	C	31.6	0.04	C	31.6	0.04	C	30.9	0.04
		NB TR	E	60.2	0.94	E	64.9	0.97	E	59.3	0.94
		NB Overall	E	60.0	N/A	E	64.6	N/A	E	59.1	NA
		SB L	C	25.1	0.84	D	41.2	0.96	B	16.9	0.85
		SB TR	A	4.2	0.31	A	4.3	0.32	A	1.6	0.29
		OVERALL	B	13.6	N/A	C	21.8	N/A	A	8.9	NA
26.	River St.(SB)/Ichabod's Landing(EB)	EB LTR	N/A	N/A	N/A	a	8.1	N/A			
		NB LTR	N/A	N/A	N/A	a	9.2	N/A			
		SB LTR	N/A	N/A	N/A	a	9.0	N/A			
		OVERALL	N/A	N/A	N/A	a	9.0	N/A			
27.	Beekman Ave.(WB)/ Beekman Ave Ext.(SB)/ River St.(EB)	EB LT	N/A	N/A	N/A	a	8.2	0.06			
		SB L	N/A	N/A	N/A	b	13.7	0.37			
28.	River Street(NB-SB)/ Proposed Cinema Driveway(WB)	SB LT	N/A	N/A	N/A	a	8.0	0.03			
		WB LR	N/A	N/A	N/A	b	11.0	0.04			
29.	Beekman Ave. Ext(NB-SB)/ Internal Site Road(EB-WB)	EB LTR	N/A	N/A	N/A	a	8.7	N/A			
		WB LTR	N/A	N/A	N/A	a	8.8	N/A			
		NB LTR	N/A	N/A	N/A	b	11.8	N/A			
		OVERALL	N/A	N/A	N/A	b	10.7	N/A			
30.	River St. Ext(NB-SB)/ Internal Site Road(WB)	WB LR	N/A	N/A	N/A	a	8.7	N/A			
		NB TR	N/A	N/A	N/A	a	8.1	N/A			
		SB LT	N/A	N/A	N/A	a	8.1	N/A			
		OVERALL	N/A	N/A	N/A	a	8.4	N/A			
31.	Beekman Ave.(EB-WB)/Viaduct (SB)	EB LT	N/A	N/A	N/A	a	8.3	0.00			
		SB LR	N/A	N/A	N/A	c	17.7	0.40			

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6-6c										
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY										
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)										
Intersection	Movements	No-Build			Build			Build w/ Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.9	0.03	C	29.9	0.03			
	EB TR	C	32.4	0.34	C	32.9	0.38			
	EB Overall	C	32.2	N/A	C	32.7	N/A			
	WB L	C	30.0	0.05	C	30.2	0.07			
	WB TR	C	30.3	0.09	C	30.3	0.09			
	WB Overall	C	30.2	N/A	C	30.3	N/A			
	NB LTR	A	2.8	0.41	A	3.3	0.49			
	SB LTR	B	18.6	0.51	B	19.9	0.58			
OVERALL	B	13.3	0.45	B	14.0	0.55				
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	E	80.8	0.96	F	227.1	1.37	D	37.7	0.77
	WB LTR	C	29.5	0.10	C	29.5	0.10	C	22.7	0.06
	NB LTR	B	12.3	0.36	B	12.5	0.38	B	17.4	0.43
	SB LTR	A	10.0	0.48	B	10.9	0.56	B	16.9	0.62
	PMD LTR	C	33.6	0.08	C	33.6	0.08	D	43.9	0.18
	OVERALL	C	20.9	0.00	D	48.6	0.00	C	20.7	0.00
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.6	0.01	a	7.9	0.01			
	SB LR	b	10.8	0.02	b	12.5	0.02			
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	d	34.5	0.28	e	42.5	0.40			
	NB LT	a	9.5	0.01	a	9.6	0.01			
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	57.9	0.31	E	58.1	0.32			
	WB L	E	65.2	0.63	F	89.5	0.88			
	WB R	E	58.0	0.31	E	58.0	0.31			
	WB Overall	E	63.1	N/A	F	82.3	N/A			
	NB TR	B	14.9	0.69	B	17.3	0.76			
	SB LT	D	38.0	0.66	D	38.5	0.67			
	OVERALL	C	32.8	0.61	D	37.5	0.71			
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	E	64.4	0.60	F	104.0	0.93	E	61.5	0.68
	EB TR	E	60.6	0.49	E	61.4	0.52	D	52.7	0.38
	EB Overall	E	62.7	N/A	F	88.9	N/A	E	58.4	NA
	WB LTR	D	55.0	0.04	D	55.0	0.04	E	55.0	0.04
	NB LTR/L	F	133.8	1.15	F	159.4	1.22	D	38.6	0.38
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	D	47.8	0.79
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	D	46.9	NA
	SB LTR	B	10.7	0.45	B	11.1	0.49	C	20.3	0.70
OVERALL	E	62.5	0.66	E	73.9	0.75	D	35.9	0.63	
7. Beekman Ave.(EB-WB)/Lawrence Ave.(SB)	EB LT	a	8.6	0.05	a	8.9	0.07			
	SB LR	b	13.7	0.19	c	15.6	0.25			
8. Beekman Ave.(EB-WB)/Washington St.(NB-SB)	EB TR	B	17.3	0.53	C	21.5	0.69			
	WB LT	B	14.1	0.55	C	22.6	0.76			
	NB LR	C	27.1	0.45	C	28.6	0.50			
	SB LTR	C	22.8	0.25	C	22.8	0.25			
	OVERALL	B	18.6	0.55	C	23.0	0.65			
9. Beekman Ave.(EB-WB)/Pocantico St.(SB)	EB LT/L	b	14.3	N/A	f	59.9	N/A	b	13.7	NA
	EB T	N/A	N/A	N/A	N/A	N/A	N/A	c	18.0	NA
	EB Overall	N/A	N/A	N/A	N/A	N/A	N/A	c	16.4	NA
	WB TR	a	10.3	N/A	c	18.6	N/A	c	17.3	NA
	SB LR	a	10.4	N/A	c	15.3	N/A	b	13.9	NA
	OVERALL	b	12.3	N/A	e	37.9	N/A	c	16.1	NA
10. Beekman Ave.(EB-WB)/Cortland St.(NB)	NB L	b	13.1	0.10	c	23.3	0.26			
	NB R	b	13.6	0.37	c	18.6	0.47			
	NB Overall	b	13.5	N/A	c	19.2	N/A			
11. Beekman Ave.(EB-WB)/Clinton St.(NB-SB)	EB LTR	a	7.5	0.00	a	8.1	0.00			
	WB LTR	a	7.6	0.06	a	8.2	0.07			
	NB LTR	a	10.0	0.08	d	29.5	0.51			
	SB LTR	b	12.5	0.00	c	19.7	0.00			
12. Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.5	0.02	a	8.6	0.05			
13. US Route 9(NB-SB)/ Wildey St.(EB) (Tarrytown)	EB LR	C	24.1	0.36	C	24.3	0.39			
	NB LT	B	10.6	0.65	B	11.1	0.67			
	SB TR	A	8.7	0.54	A	8.7	0.54			
	OVERALL	B	11.0	0.58	B	11.3	0.60			
14. US Route 9(NB-SB)/ Central Ave. (EB)	NB LT	b	11.5	0.08	b	11.5	0.08			

TABLE NO. 6-6c											
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
	(Tarrytown)	EB LR	e	48.7	0.54	e	48.7	0.54			
15.	Neperan Rd.(EB-WB)/ County House Rd.(SB) (Tarrytown)	EB T	a	9.4	N/A	a	9.7	N/A			
		WB T	a	9.2	N/A	a	9.4	N/A			
		SB LR	a	9.5	N/A	b	10.0	N/A			
		OVERALL	a	9.4	N/A	a	9.7	N/A			
16.	US Route 9(NB-SB)/ Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	50.8	0.81	E	74.1	0.96	D	48.7	0.83
		WB LTR	E	55.6	0.83	E	68.3	0.91	D	44.6	0.76
		NB LTR/L	F	115.7	1.18	F	229.6	1.44	F	146.9	1.17
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	B	19.6	0.67
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	D	46.8	NA
		SB LTR/L	D	36.6	0.93	D	37.1	0.93	B	12.4	0.15
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	24.5	0.79
		SB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	24.0	NA
		OVERALL	E	69.8	1.06	F	117.7	1.28	D	38.7	1.04
17.	Main St.(EB-WB)/ Washington St.(NB-SB) (Tarrytown)	EB LTR	B	11.5	0.41	B	13.4	0.53			
		WB LTR	B	11.7	0.43	B	13.1	0.52			
		NB LTR	B	13.5	0.34	B	13.5	0.34			
		SB LTR	C	21.9	0.70	C	23.2	0.73			
		OVERALL	B	15.2	0.55	B	16.2	0.62			
18.	H-Bridge(EB)/Main St. (WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	C	26.6	0.63	F	296.2	1.57	C	23.6	0.78
		WB L	C	21.5	0.24	C	22.5	0.31	B	13.7	0.19
		WB T	C	21.2	0.25	C	22.2	0.41	B	13.6	0.21
		WB R	C	21.6	0.30	C	22.2	0.38	B	13.5	0.19
		WB Overall	C	21.4	N/A	C	22.2	N/A	B	13.6	NA
		NB L	A	4.5	0.19	A	6.0	0.39	B	13.7	0.53
		NB T	A	4.0	0.14	A	4.2	0.17	A	9.3	0.23
		NB R	A	3.5	0.00	A	3.5	0.00	A	7.8	0.01
		NB Overall	A	4.2	N/A	A	5.3	N/A	B	12.0	NA
		SB LTR	A	3.9	0.10	A	3.9	0.09	A	8.6	0.13
		OVERALL	B	13.3	0.28	F	104.8	0.63	B	15.9	0.63
19.	West Franklin St.(EB- WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	7.7	0.00	a	8.3	0.00			
		NB LR	b	12.7	0.15	c	21.1	0.32			
20A.	US Route 9(NB-SB)/ West Franklin St.(EB) (Tarrytown)	EB R	f	81.6	0.99	f	327.9	1.63	E	77.6	1.01
		NB LT	b	13.2	0.42	c	21.2	0.71	B	13.2	0.57
		NB T	N/A	N/A	N/A	N/A	N/A	N/A	A	2.5	0.55
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	A	6.5	NA
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	33.5	0.92
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	C	28.5	0.00
20B.	US Route 9(NB- SB)/East Franklin St.(WB) (Tarrytown)	WB LR	c	25.0	0.10	e	37.3	0.18	D	50.6	0.31
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	B	10.2	0.87
		SB LT	b	10.8	0.02	b	12.3	0.03	A	5.5	0.86
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	A	8.1	0.86
21.	US Route 9(NB-SB)/ Benedict Ave.(WB) (Tarrytown)	WB L	D	35.8	0.18	D	35.8	0.18	D	42.4	0.27
		WB R	C	27.5	0.41	C	27.9	0.44	C	21.8	0.36
		WB Overall	C	29.3	N/A	C	29.5	N/A	C	26.0	NA
		NB T/TR	C	30.9	0.90	F	91.0	1.12	C	22.6	0.73
		NB R	B	10.2	0.09	B	10.2	0.09	N	NA	NA
		NB Overall	C	29.4	N/A	F	86.0	N/A	N	NA	NA
		SB L	E	75.8	0.96	F	148.3	1.16	B	15.7	0.48
		SB T	B	13.0	0.77	C	27.2	0.94	B	13.8	0.86
		SB Overall	C	24.8	N/A	D	47.5	N/A	B	14.2	NA
OVERALL	C	27.2	0.73	E	61.9	1.11	B	18.9	0.78		
22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	5.0	0.16	A	5.1	0.16			
		EB TR	A	5.2	0.25	A	5.3	0.26			
		EB Overall	A	5.2	N/A	A	5.3	N/A			
		WB L	A	4.1	0.02	A	4.1	0.02			
		WB TR	A	6.2	0.38	A	6.3	0.39			
		WB Overall	A	6.1	N/A	A	6.2	N/A			
		NB LTR	B	16.9	0.20	B	16.9	0.20			
		SB LTR	B	19.3	0.51	B	19.3	0.51			
		OVERALL	A	8.5	0.41	A	8.5	0.42			

TABLE NO. 6-6c											
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	14.4	N/A	b	16.2	N/A			
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	33.5	0.50	C	34.5	0.56	C	34.5	0.56
		WB L	C	20.7	0.26	C	20.7	0.26	B	19.5	0.19
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A	C	21.2	0.38
		WB R	C	34.2	0.80	F	96.2	1.09	C	32.7	0.79
		WB Overall	C	28.6	N/A	E	70.2	N/A	C	26.4	NA
		NB T	B	18.8	0.56	B	19.6	0.62	C	20.9	0.64
		NB R	A	0.8	0.22	A	0.8	0.22	A	0.8	0.22
		NB Overall	B	13.9	N/A	B	14.9	N/A	B	15.9	NA
		SB T	B	18.9	0.57	C	20.9	0.69	C	22.3	0.71
		OVERALL	C	20.7	0.65	C	33.3	0.82	C	22.2	0.72
25.	US Route 9(NB-SB)/I-87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	36.7	0.18	D	36.8	0.19			
		WB LT	D	38.0	0.28	D	38.0	0.28			
		WB R	B	13.3	0.42	B	13.7	0.45			
		WB Overall	B	18.1	N/A	B	18.2	N/A			
		NB L	C	31.7	0.04	C	31.7	0.05			
		NB TR	D	41.0	0.67	D	42.0	0.71			
		NB Overall	D	40.8	N/A	D	41.8	N/A			
		SB L	B	12.7	0.57	B	17.2	0.74			
		SB TR	A	4.1	0.27	A	4.1	0.28			
		SB Overall	A	7.6	N/A	B	10.1	N/A			
OVERALL	C	21.0	0.00	C	21.9	0.00					
26.	River St.(SB)/Ichabod's Landing(EB)	EB LTR	N/A	N/A	N/A	a	8.3	N/A			
		NB LTR	N/A	N/A	N/A	a	9.6	N/A			
		SB LTR	N/A	N/A	N/A	a	9.7	N/A			
		OVERALL	N/A	N/A	N/A	a	9.5	N/A			
27.	Beekman Ave.(WB)/ Beekman Ave Ext.(SB)/ River St.(EB)	EB LT	N/A	N/A	N/A	a	8.4	0.06			
		SB L	N/A	N/A	N/A	c	17.0	0.54			
28.	River Street(NB-SB)/ Proposed Cinema Driveway(WB)	SB LT	N/A	N/A	N/A	a	8.0	0.03			
		WB LR	N/A	N/A	N/A	b	11.3	0.04			
29.	Beekman Ave. Ext(NB-SB)/ Internal Site Road(EB-WB)	EB LTR	N/A	N/A	N/A	a	9.3	N/A			
		WB LTR	N/A	N/A	N/A	a	9.6	N/A			
		NB LTR	N/A	N/A	N/A	c	15.3	N/A			
		SB LTR	N/A	N/A	N/A	b	10.8	N/A			
OVERALL	N/A	N/A	N/A	b	13.3	N/A					
30.	River St. Ext(NB-SB)/ Internal Site Road(WB)	WB LR	N/A	N/A	N/A	a	9.0	N/A			
		NB TR	N/A	N/A	N/A	a	8.4	N/A			
		SB LT	N/A	N/A	N/A	a	8.6	N/A			
		OVERALL	N/A	N/A	N/A	a	8.7	N/A			
31.	Beekman Ave.(EB-WB)/Viaduct (SB)	EB LT	N/A	N/A	N/A	a	8.4	0.00			
		SB LR	N/A	N/A	N/A	b	14.2	0.08			

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6-7a										
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY										
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)										
Intersection	Movements	No-Build			Build			Build w/ Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.01	C	29.7	0.01			
	EB TR	C	32.5	0.34	C	32.7	0.36			
	EB Overall	C	32.4	N/A	C	32.6	N/A			
	WB L	C	29.9	0.03	C	30.0	0.05			
	WB TR	C	30.4	0.11	C	30.4	0.11			
	WB Overall	C	30.3	N/A	C	30.3	N/A			
	NB LTR	A	3.0	0.45	A	3.4	0.51			
	SB LTR	C	20.6	0.62	C	21.6	0.67			
OVERALL	B	14.2	0.48	B	14.7	0.55				
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	176.0	1.25	F	319.2	1.59	F	119.7	1.12
	WB LTR	C	30.6	0.24	C	30.5	0.24	C	27.9	0.17
	NB LTR	B	12.4	0.37	B	12.5	0.39	B	13.5	0.38
	SB LTR	B	11.7	0.61	B	12.5	0.66	B	13.0	0.65
	PMD LTR	C	33.2	0.02	C	33.2	0.02	D	43.0	0.05
	OVERALL	D	36.7	0.00	D	65.4	0.00	C	31.8	0.00
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.6	0.00	a	7.8	0.00			
	SB LR	b	10.2	0.01	b	10.9	0.01			
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	e	46.1	0.37	f	61.5	0.52			
	NB LT	b	10.1	0.01	b	10.2	0.01			
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	60.1	0.46	E	60.4	0.48			
	WB L	E	64.9	0.63	E	72.9	0.75			
	WB R	E	57.5	0.27	E	57.6	0.28			
	WB Overall	E	62.9	N/A	E	69.2	N/A			
	NB TR	B	20.0	0.81	C	24.7	0.88			
	SB LT	D	48.5	0.86	D	51.7	0.89			
	OVERALL	D	39.1	0.72	D	43.1	0.79			
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	F	96.8	0.90	F	159.4	1.12	F	159.4	1.12
	EB TR	E	59.1	0.39	E	59.2	0.39	E	59.2	0.39
	EB Overall	F	86.4	N/A	F	135.6	N/A	F	135.6	N/A
	WB LTR	D	55.0	0.04	D	55.0	0.04	D	55.0	0.04
	NB LTR/L	F	121.0	1.12	F	129.0	1.14	C	29.9	0.2
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	D	51.9	0.86
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	D	50.8	N/A
	SB LTR	B	10.9	0.47	B	11.1	0.50	B	13.7	0.66
OVERALL	E	61.5	0.70	E	72.4	0.75	D	47.3	0.69	
7. Beekman Ave.(EB-WB)/Lawrence Ave.(SB)	EB LT	a	8.1	0.04	a	8.2	0.05			
	SB LR	b	12.4	0.19	b	13.4	0.23			
8. Beekman Ave.(EB-WB)/Washington St.(NB-SB)	EB TR	B	15.7	0.44	B	17.6	0.55			
	WB LT	B	11.8	0.45	B	14.5	0.57			
	NB LR	C	26.2	0.41	C	26.7	0.43			
	SB LTR	C	22.8	0.25	C	22.8	0.25			
	OVERALL	B	17.4	0.49	B	18.7	0.55			
9. Beekman Ave.(EB-WB)/Pocantico St.(SB)	EB LT/L	b	14.6	N/A	e	35.9	N/A	b	14.5	N/A
	EB T	N/A	N/A	N/A	N/A	N/A	N/A	b	13.1	N/A
	EB Overall	N/A	N/A	N/A	N/A	N/A	N/A	b	13.8	N/A
	WB TR	a	9.5	N/A	b	12.1	N/A	b	11.7	N/A
	SB LR	b	10.2	N/A	b	12.9	N/A	b	12.0	N/A
	OVERALL	b	12.3	N/A	d	25.1	N/A	b	12.9	N/A
10. Beekman Ave.(EB-WB)/Cortland St.(NB)	NB L	b	12.8	0.10	c	17.5	0.17			
	NB R	b	13.3	0.36	c	16.8	0.45			
	NB Overall	b	13.2	N/A	c	16.9	N/A			
11. Beekman Ave.(EB-WB)/Clinton St.(NB-SB)	EB LTR	a	7.6	0.00	a	7.9	0.00			
	WB LTR	a	7.5	0.03	a	7.9	0.04			
	NB LTR	a	9.7	0.08	c	15.7	0.26			
	SB LTR	N/A	N/A	N/A	N/A	N/A	N/A			
12. Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.6	0.04	a	8.3	0.05			
13. US Route 9(NB-SB)/ Wildey St.(EB) (Tarrytown)	EB LR	C	25.7	0.39	C	25.9	0.40			
	NB LT	A	9.0	0.68	A	9.2	0.69			
	SB TR	A	9.3	0.70	A	9.3	0.70			
	OVERALL	B	10.1	0.64	B	10.2	0.65			
14. US Route 9(NB-SB)/ Central Ave. (EB)	NB LT	a	10.0	0.10	a	10	0.10			

TABLE NO. 6-7a											
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
15.	(Tarrytown) Neperan Rd.(EB-WB)/ County House Rd.(SB) (Tarrytown)	EB LR	c	23.3	0.31	c	23.3	0.31			
		EB T	d	28.2	N/A	d	30.41	N/A			
		WB T	c	24.6	N/A	d	26.26	N/A			
		SB LR	d	27.8	N/A	d	33.16	N/A			
		OVERALL	d	26.9	N/A	d	30.02	N/A			
16.	US Route 9(NB-SB)/ Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	42.9	0.73	D	50.5	0.83	D	39.9	0.73
		WB LTR	D	35.7	0.54	D	36.8	0.57	C	30.9	0.48
		NB LTR/L	C	28.1	0.86	D	37.8	0.93	B	18.0	0.35
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	21.4	0.72
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	21.2	NA
		SB LTR/L	C	24.5	0.82	C	24.6	0.82	B	10.9	0.05
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.5	0.75
		SB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	22.4	NA
		OVERALL	C	29.8	0.82	D	35.0	0.90	C	25.7	0.74
17.	Main St.(EB-WB)/ Washington St.(NB-SB) (Tarrytown)	EB LTR	B	10.6	0.34	B	11.5	0.42			
		WB LTR	A	9.8	0.26	B	10.2	0.30			
		NB LTR	B	12.5	0.26	B	12.5	0.26			
		SB LTR	B	16.7	0.54	B	16.9	0.55			
		OVERALL	B	12.8	0.43	B	13.0	0.48			
18.	H-Bridge(EB)/Main St. (WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	C	30.0	0.70	F	269.2	1.51	C	21.8	0.74
		WB L	C	22.3	0.32	C	23.2	0.38	B	13.9	0.21
		WB T	C	20.7	0.17	C	21.1	0.24	B	13.1	0.12
		WB R	C	21.1	0.23	C	21.3	0.26	B	13.2	0.13
		WB Overall	C	21.3	N/A	C	21.7	N/A	B	13.3	NA
		NB L	A	5.5	0.33	A	6.4	0.42	B	15.0	0.58
		NB T	A	4.0	0.12	A	4.1	0.15	A	9.1	0.2
		NB R	A	3.5	0.02	A	3.5	0.02	A	7.9	0.02
		NB Overall	A	4.9	N/A	A	5.5	N/A	B	12.8	NA
		SB LTR	A	3.9	0.10	A	3.9	0.10	A	8.7	0.14
OVERALL	B	13.2	0.41	F	95.3	0.65	B	15.5	0.65		
19.	West Franklin St.(EB- WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	7.8	0.00	a	8.3	0.00			
		NB LR	c	15.4	0.30	c	24.0	0.46			
20A.	US Route 9(NB-SB)/ West Franklin St.(EB) (Tarrytown)	EB R	f	95.9	1.05	f	301.8	1.58	F	83.2	1.04
		NB LT	b	12.4	0.39	b	14.8	0.53	A	8.4	0.44
		NB T	N/A	N/A	N/A	N/A	N/A	N/A	A	2.1	0.48
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	A	4.3	NA
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	27.7	0.87
OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	C	29.0	0.00		
20B.	US Route 9(NB- SB)/East Franklin St.(WB) (Tarrytown)	WB LR	c	18.8	0.10	c	21.6	0.13	D	52.2	0.42
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	A	4.7	0.73
		SB LT	b	10.4	0.02	b	11.0	0.03	A	4.6	0.84
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	A	5.3	0.84
21.	US Route 9(NB-SB)/ Benedict Ave.(WB) (Tarrytown)	WB L	D	35.7	0.16	D	35.7	0.16	D	43.2	0.27
		WB R	C	26.8	0.35	C	26.9	0.36	C	21.7	0.3
		WB Overall	C	28.8	N/A	C	28.9	N/A	C	26.6	NA
		NB T/TR	C	25.5	0.85	D	39.7	0.96	B	19.4	0.62
		NB R	B	10.2	0.08	B	10.2	0.08	NA	NA	NA
		NB Overall	C	24.3	N/A	D	37.6	N/A	NA	NA	NA
		SB L	C	29.3	0.75	F	106.4	1.03	A	7.8	0.38
		SB T	B	13.7	0.79	C	26.8	0.94	B	12.5	0.85
		SB Overall	B	16.4	N/A	D	38.9	N/A	B	11.8	NA
		OVERALL	C	20.8	0.66	D	37.5	0.84	B	16.1	0.77
22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	4.3	0.05	A	4.3	0.05	A	6.7	0.06
		EB TR	A	6.0	0.35	A	6.0	0.36	A	9.4	0.43
		EB Overall	A	5.9	N/A	A	5.9	N/A	A	9.3	NA
		WB L	A	4.5	0.08	A	4.5	0.08	A	7.0	0.1
		WB TR	A	6.5	0.41	A	6.5	0.41	B	10.3	0.49
		WB Overall	A	6.3	N/A	A	6.3	N/A	A	10.0	NA
		NB LTR	B	19.9	0.56	B	19.9	0.56	B	14.2	0.37
		SB LTR	E	65.7	0.97	E	65.7	0.97	B	17.9	0.62
OVERALL	C	20.1	0.55	B	19.9	0.55	B	11.9	0.54		

TABLE NO. 6-7a											
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	15.4	N/A	b	17.1	N/A			
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	D	37.3	0.67	D	39.5	0.72	D	39.5	0.72
		WB L	C	23.5	0.55	C	23.5	0.55	C	21.2	0.4
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.6	0.51
		WB R	D	50.8	0.93	D	88.7	1.07	C	31.7	0.77
		WB Overall	D	35.3	N/A	D	54.1	N/A	C	25.2	NA
		NB T	B	19.4	0.61	B	19.9	0.64	C	21.2	0.66
		NB R	A	4.9	0.78	A	4.9	0.78	A	4.9	0.78
		NB Overall	B	11.5	N/A	B	11.9	N/A	B	12.5	NA
		SB T	B	18.4	0.53	C	20.0	0.64	C	21.3	0.66
		OVERALL	C	21.5	0.77	C	27.5	0.77	C	20.0	0.77
25.	US Route 9(NB-SB)/I-87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	38.7	0.32	D	38.7	0.32	D	38.7	0.32
		WB LT	D	51.8	0.74	D	51.8	0.74	D	51.8	0.74
		WB R	F	126.8	1.20	F	134.5	1.22	F	120.5	1.19
		WB Overall	F	113.6	N/A	F	120.1	N/A	F	108.5	NA
		NB L	C	31.3	0.01	C	31.3	0.01	C	32.7	0.01
		NB TR	D	39.3	0.60	D	39.7	0.62	D	41.8	0.65
		NB Overall	D	39.2	N/A	D	39.7	N/A	D	41.8	NA
		SB L	A	9.6	0.38	B	11.7	0.54	B	11.5	0.53
		SB TR	A	4.8	0.44	A	4.9	0.45	A	4.9	0.45
		OVERALL	A	5.9	N/A	A	6.8	N/A	A	6.8	NA
26.	River St.(SB)/Ichabod's Landing(EB)	EB LTR	N/A	N/A	N/A	a	8.2	N/A			
		NB LTR	N/A	N/A	N/A	a	8.5	N/A			
		SB LTR	N/A	N/A	N/A	a	9.6	N/A			
		OVERALL	N/A	N/A	N/A	a	9.0	N/A			
27.	Beekman Ave.(WB)/ Beekman Ave Ext.(SB)/ River St.(EB)	EB LT	N/A	N/A	N/A	a	8.0	0.03			
		SB L	N/A	N/A	N/A	b	12.6	0.37			
28.	River Street(NB-SB)/ Proposed Cinema Driveway(WB)	SB LT	N/A	N/A	N/A	N/A	N/A	N/A			
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A			
29.	Beekman Ave. Ext(NB-SB)/ Internal Site Road(EB-WB)	EB LTR	N/A	N/A	N/A	a	8.69	N/A			
		WB LTR	N/A	N/A	N/A	a	8.69	N/A			
		NB LTR	N/A	N/A	N/A	b	10.58	N/A			
		OVERALL	N/A	N/A	N/A	a	10	N/A			
30.	River St. Ext(NB-SB)/ Internal Site Road(WB)	WB LR	N/A	N/A	N/A	a	8.65	N/A			
		NB TR	N/A	N/A	N/A	a	7.78	N/A			
		SB LT	N/A	N/A	N/A	a	8.45	N/A			
		OVERALL	N/A	N/A	N/A	a	8.39	N/A			
31.	Beekman Ave.(EB-WB)/Viaduct (SB)	EB LT	N/A	N/A	N/A	a	8	0.00			
		SB LR	N/A	N/A	N/A	b	11.4	0.01			

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6-7b										
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY										
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)										
Intersection	Movements	No-Build			Build			Build w/ Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.0	C	29.7	0.01			
	EB TR	C	32.1	0.3	C	32.3	0.32			
	EB Overall	C	32.0	N/A	C	32.2	N/A			
	WB L	C	29.8	0.0	C	29.9	0.03			
	WB TR	C	30.6	0.1	C	30.6	0.13			
	WB Overall	C	30.5	N/A	C	30.5	N/A			
	NB LTR	A	4.0	0.6	A	4.7	0.65			
	SB LTR	B	19.8	0.6	C	21.1	0.65			
OVERALL	B	12.9	0.6	B	13.9	0.65				
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	215.1	1.3	F	343	1.64	F	97.7	1.06
	WB LTR	C	29.6	0.1	C	29.6	0.11	C	25.6	0.07
	NB LTR	B	13.4	0.5	B	13.6	0.48	B	16.0	0.49
	SB LTR	B	10.9	0.6	B	11.9	0.63	B	14.4	0.64
	PMD LTR	C	33.1	0.0	C	33.1	0.01	D	42.8	0.02
	OVERALL	D	44.2	0.0	E	70.4	0.00	C	29.6	0.00
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.8	0.0	a	8	0.01			
	SB LR	b	11.8	0.0	b	13.3	0.03			
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	f	55.4	0.5	f	69.4	0.61			
	NB LT	a	9.4	0.0	a	9.5	0.01			
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	57.6	0.3	E	57.7	0.29			
	WB L	F	183.5	1.2	F	256	1.38			
	WB R	E	60.1	0.5	E	60.1	0.47			
	WB Overall	F	151.7	N/A	F	210.6	N/A			
	NB TR	C	21.4	0.8	C	25.4	0.88			
	SB LT	D	37.8	0.7	D	38.2	0.66			
	OVERALL	D	54.6	0.8	E	70.4	0.87			
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	F	91.5	0.9	F	146.4	1.08	F	146.4	1.08
	EB TR	E	60.2	0.5	E	60.4	0.48	E	60.4	0.48
	EB Overall	F	80.9	N/A	F	120.6	N/A	F	120.6	N/A
	WB LTR	D	54.9	0.0	D	54.9	0.03	D	54.9	0.03
	NB LTR/L	F	210.2	1.3	F	222.8	1.37	C	32.9	0.36
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	E	62.0	0.93
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	E	59.8	N/A
	SB LTR	B	11.4	0.5	B	11.8	0.55	B	12.0	0.56
OVERALL	F	93.5	0.8	F	102.2	0.85	D	46.5	0.64	
7. Beekman Ave.(EB-WB)/Lawrence Ave.(SB)	EB LT	a	8.3	0.1	a	8.5	0.07			
	SB LR	b	13.0	0.2	b	14.4	0.22			
8. Beekman Ave.(EB-WB)/Washington St.(NB-SB)	EB TR	B	18.4	0.6	C	21	0.67			
	WB LT	B	16.5	0.6	C	25.7	0.8			
	NB LR	C	32.8	0.6	D	35	0.67			
	SB LTR	C	23.1	0.3	C	23.1	0.27			
	OVERALL	C	21.2	0.6	C	25.3	0.74			
9. Beekman Ave.(EB-WB)/Pocantico St.(SB)	EB LT/L	d	25.1	N/A	f	105.2	NA	c	19.0	N/A
	EB T	N/A	N/A	N/A	N/A	N/A	N/A	c	18.6	N/A
	EB Overall	N/A	N/A	N/A	N/A	N/A	N/A	c	18.8	N/A
	WB TR	b	13.9	N/A	d	25.73	NA	c	24.1	N/A
	SB LR	b	13.3	N/A	c	19.7	NA	c	18.0	N/A
	OVERALL	c	18.9	N/A	f	60.66	NA	c	20.3	N/A
10. Beekman Ave.(EB-WB)/Cortland St.(NB)	NB L	c	18.3	0.3	d	32.3	0.46			
	NB R	c	17.0	0.5	c	23.7	0.64			
	NB Overall	c	17.3	N/A	d	25.8	NA			
11. Beekman Ave.(EB-WB)/Clinton St.(NB-SB)	EB LTR	a	7.6	0.0	a	8	0			
	WB LTR	a	7.7	0.1	a	8.1	0.08			
	NB LTR	b	10.1	0.1	c	22.6	0.4			
	SB LTR	a	9.2	0.0	b	10.4	0			
12. Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.6	0.0	a	8.3	0.06			
	EB LR	C	22.3	0.3	C	22.5	0.29			
	NB LT	B	17.9	0.8	B	19.1	0.83			
	SB TR	B	15.3	0.8	B	15.3	0.75			
OVERALL	B	17.0	0.7	B	17.6	0.67				
14. US Route 9(NB-SB)/ Central Ave. (EB)	NB LT	b	11.7	0.1	b	11.7	0.13			

TABLE NO. 6-7b											
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
15.	(Tarrytown)	EB LR	e	42.6	0.6	e	42.6	0.55			
	Neperan Rd.(EB-WB)/ County House Rd.(SB) (Tarrytown)	EB T	c	18.8	N/A	c	19.85	NA			
		WB T	e	39.3	N/A	e	43.75	NA			
		SB LR	b	13.7	N/A	b	14.67	NA			
		OVERALL	d	28.1	N/A	d	30.56	NA			
16.	US Route 9(NB-SB)/ Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	45.6	0.7	D	53.8	0.84	D	40.5	0.72
		WB LTR	F	162.2	1.2	F	192.9	1.3	F	115.6	1.11
		NB LTR/L	E	65.4	1.1	F	135.7	1.23	D	50.2	0.79
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.6	0.75
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	26.5	NA
		SB LTR/L	C	29.5	0.9	C	29.6	0.88	B	11.6	0.09
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	24.5	0.79
		SB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	24.2	NA
		OVERALL	E	66.8	1.1	F	98.9	1.25	D	42.2	0.91
17.	Main St.(EB-WB)/ Washington St.(NB-SB) (Tarrytown)	EB LTR	B	11.6	0.4	B	12.7	0.49			
		WB LTR	B	11.2	0.4	B	12.1	0.46			
		NB LTR	B	14.2	0.4	B	14.2	0.4			
		SB LTR	B	17.0	0.5	B	17.4	0.56			
		OVERALL	B	13.5	0.5	B	14	0.52			
18.	H-Bridge(EB)/Main St. (WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	F	131.7	1.2	F	402.1	1.81	C	33.6	0.89
		WB L	C	23.2	0.4	C	23.2	0.38	B	14.4	0.26
		WB T	C	21.1	0.2	C	22	0.37	B	13.4	0.19
		WB R	C	21.2	0.2	C	21.6	0.3	B	13.2	0.15
		WB Overall	C	21.7	N/A	C	22.1	NA	B	13.6	NA
		NB L	A	5.3	0.3	A	7.2	0.48	B	17.5	0.67
		NB T	A	4.3	0.2	A	4.4	0.22	A	9.9	0.30
		NB R	A	3.6	0.0	A	3.6	0.03	A	8.0	0.03
		NB Overall	A	4.7	N/A	A	5.9	NA	B	14.1	NA
		SB LTR	A	4.0	0.1	A	4	0.12	A	8.8	0.16
		OVERALL	D	44.2	0.5	F	137.3	0.76	B	20.0	0.76
19.	West Franklin St.(EB- WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	8.3	0.0	a	8.7	0.01			
		NB LR	c	16.6	0.2	d	26.6	0.4			
20A.	US Route 9(NB-SB)/ West Franklin St.(EB) (Tarrytown)	EB R	f	142.9	1.2	f	320.3	1.62	F	81.2	1.03
		NB LT	c	16.8	0.6	d	30.8	0.85	B	16.9	0.69
		NB T	N/A	N/A	N/A	N/A	N/A	N/A	A	2.7	0.58
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	A	8.5	NA
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	31.7	0.91
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	C	28.6	0.00
20B.	US Route 9(NB- SB)/East Franklin St.(WB) (Tarrytown)	WB LR	e	37.0	0.2	f	59.1	0.36	D	53.1	0.47
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	21.4	0.96
		SB LT	b	11.9	0.0	b	13.4	0.04	A	5.7	0.86
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	B	14.2	0.97
21.	US Route 9(NB-SB)/ Benedict Ave.(WB) (Tarrytown)	WB L	D	36.6	0.3	D	36.6	0.26	D	43.7	0.41
		WB R	C	31.2	0.6	C	31.7	0.62	C	23.7	0.51
		WB Overall	C	32.4	N/A	C	32.7	NA	C	28.0	NA
		NB T/TR	D	36.8	0.9	F	94.8	1.13	C	22.6	0.73
		NB R	B	10.1	0.1	B	10.1	0.07	NA	NA	NA
		NB Overall	D	35.2	N/A	F	90.4	NA	NA	NA	NA
		SB L	F	254.2	1.4	F	270.1	1.47	C	21.7	0.60
		SB T	B	12.8	0.8	B	19.4	0.88	B	10.7	0.80
		SB Overall	E	69.3	N/A	E	73.1	NA	B	13.1	NA
		OVERALL	D	50.7	1.68	E	74.6	1.75	B	19.0	0.75
22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	5.4	0.16	A	5.50	0.16	B	10.1	0.25
		EB TR	A	5.6	0.31	A	5.70	0.31	A	8.9	0.38
		EB Overall	A	5.6	N/A	A	5.60	NA	A	9.0	NA
		WB L	A	4.9	0.16	A	5.00	0.16	A	7.8	0.20
		WB TR	A	9.8	0.66	A	10.00	0.67	B	17.9	0.80
		WB Overall	A	9.2	N/A	A	9.4	NA	B	16.7	NA
		NB LTR	B	17.5	0.3	B	17.5	0.3	B	13.2	0.20
		SB LTR	F	95.1	1.1	F	95.1	1.08	C	21.4	0.73
		OVERALL	C	26.4	0.8	C	26.3	0.77	B	15.6	0.77

TABLE NO. 6-7b											
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	18.0	N/A	b	19.3	NA			
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	32.9	0.4	C	33.2	0.45	C	33.2	0.45
		WB L	C	22.0	0.4	C	22	0.42	C	20.4	0.30
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.4	0.49
		WB R	E	57.9	1.0	F	155.0	1.25	D	45.0	0.90
		WB Overall	D	40.3	N/A	F	98.4	NA	C	31.5	NA
		NB T	B	19.5	0.6	C	20.3	0.66	C	21.6	0.68
		NB R	A	0.9	0.3	A	0.9	0.32	A	0.9	0.32
		NB Overall	B	13.5	N/A	B	14.3	NA	B	15.2	NA
		SB T	B	19.5	0.6	C	21	0.69	C	22.4	0.71
		OVERALL	C	24.3	0.7	D	43.6	0.87	C	23.3	0.75
25.	US Route 9(NB-SB)/I-87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	37.8	0.3	D	37.9	0.27	D	45.0	0.40
		WB LT	D	40.4	0.5	D	40.4	0.45	D	48.0	0.56
		WB R	B	14.3	0.5	B	14.7	0.52	B	15.3	0.53
		WB Overall	C	20.5	N/A	C	20.6	NA	C	22.9	NA
		NB L	C	31.6	0.0	C	31.6	0.04	C	30.9	0.04
		NB TR	E	60.2	0.9	E	64.9	0.97	E	59.3	0.94
		NB Overall	E	60.0	N/A	E	64.6	NA	E	59.1	NA
		SB L	C	25.1	0.8	D	41.2	0.96	B	16.9	0.85
		SB TR	A	4.2	0.3	A	4.3	0.32	A	1.6	0.29
		OVERALL	B	13.6	N/A	C	21.8	NA	A	8.9	NA
26.	River St.(SB)/Ichabod's Landing(EB)	EB LTR	N/A	N/A	N/A	a	8.24	NA			
		NB LTR	N/A	N/A	N/A	a	9.8	NA			
		SB LTR	N/A	N/A	N/A	a	9.43	NA			
		OVERALL	N/A	N/A	N/A	a	9.57	NA			
27.	Beekman Ave.(WB)/ Beekman Ave Ext.(SB)/ River St.(EB)	EB LT	N/A	N/A	N/A	a	8.2	0.06			
		SB L	N/A	N/A	N/A	b	13.8	0.37			
28.	River Street(NB-SB)/ Proposed Cinema Driveway(WB)	SB LT	N/A	N/A	N/A	a	8	0.03			
		WB LR	N/A	N/A	N/A	b	11	0.04			
29.	Beekman Ave. Ext(NB-SB)/ Internal Site Road(EB-WB)	EB LTR	N/A	N/A	N/A	a	8.73	NA			
		WB LTR	N/A	N/A	N/A	a	8.85	NA			
		NB LTR	N/A	N/A	N/A	b	12	NA			
		OVERALL	N/A	N/A	N/A	b	10.93	NA			
30.	River St. Ext(NB-SB)/ Internal Site Road(WB)	WB LR	N/A	N/A	N/A	a	9.04	NA			
		NB TR	N/A	N/A	N/A	a	8.51	NA			
		SB LT	N/A	N/A	N/A	a	8.33	NA			
		OVERALL	N/A	N/A	N/A	a	8.68	NA			
31.	Beekman Ave.(EB-WB)/Viaduct (SB)	EB LT	N/A	N/A	N/A	a	8.3	0.00			
		SB LR	N/A	N/A	N/A	b	12.1	0.02			

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6-7c										
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY										
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)										
Intersection	Movements	No-Build			Build			Build w/ Improvements		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.9	0.03	C	29.9	0.03			
	EB TR	C	32.4	0.34	C	32.9	0.38			
	EB Overall	C	32.2	N/A	C	32.7	N/A			
	WB L	C	30.0	0.05	C	30.1	0.07			
	WB TR	C	30.3	0.09	C	30.3	0.09			
	WB Overall	C	30.2	N/A	C	30.3	N/A			
	NB LTR	A	2.8	0.41	A	3.3	0.49			
	OVERALL	B	18.6	0.51	B	19.9	0.58			
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	E	80.8	0.96	F	221.9	1.36	D	37.1	0.76
	WB LTR	C	29.5	0.10	C	29.5	0.10	C	22.7	0.06
	NB LTR	B	12.3	0.36	B	12.5	0.38	B	17.5	0.43
	SB LTR	A	10.0	0.48	B	10.9	0.56	B	16.9	0.62
	PMD LTR	C	33.6	0.08	C	33.6	0.08	D	43.9	0.18
	OVERALL	C	20.9	0.00	D	47.4	0.00	C	20.5	0.00
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	7.6	0.01	a	7.8	0.01			
	SB LR	b	10.8	0.02	b	12.4	0.02			
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	d	34.5	0.28	e	44.1	0.42			
	NB LT	a	9.5	0.01	a	9.6	0.01			
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	57.9	0.31	E	58.1	0.32			
	WB L	E	65.2	0.63	F	89.5	0.88			
	WB R	E	58.0	0.31	E	58.0	0.31			
	WB Overall	E	63.1	N/A	F	82.3	N/A			
	NB TR	B	14.9	0.69	B	17.4	0.76			
	OVERALL	D	38.0	0.66	D	38.6	0.67			
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	E	64.4	0.60	F	104.0	0.93	F	104.0	0.93
	EB TR	E	60.6	0.49	E	61.1	0.51	E	61.1	0.51
	EB Overall	E	62.7	N/A	F	88.9	N/A	F	88.9	N/A
	WB LTR	D	55.0	0.04	D	55.0	0.04	D	55.0	0.64
	NB LTR/L	F	133.8	1.15	F	154.7	1.21	D	36.4	0.34
	NB TR	N/A	N/A	N/A	N/A	N/A	N/A	D	47.9	0.79
	NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	D	46.8	N/A
	OVERALL	B	10.7	0.45	B	11.1	0.49	B	13.1	0.62
7. Beekman Ave.(EB-WB)/Lawrence Ave.(SB)	EB LT	a	8.6	0.05	a	8.9	0.07			
	SB LR	b	13.7	0.19	c	15.7	0.26			
8. Beekman Ave.(EB-WB)/Washington St.(NB-SB)	EB TR	B	17.3	0.53	C	21.2	0.68			
	WB LT	B	14.1	0.55	C	24.0	0.78			
	NB LR	C	27.1	0.45	C	28.6	0.50			
	SB LTR	C	22.8	0.25	C	22.8	0.25			
	OVERALL	B	18.6	0.55	C	23.4	0.67			
9. Beekman Ave.(EB-WB)/Pocantico St.(SB)	EB LT/L	b	14.3	N/A	f	62.1	N/A	b	14.1	N/A
	EB T	N/A	N/A	N/A	N/A	N/A	N/A	c	17.7	N/A
	EB Overall	N/A	N/A	N/A	N/A	N/A	N/A	c	16.3	N/A
	WB TR	a	10.3	N/A	c	18.3	N/A	c	17.0	N/A
	SB LR	a	10.4	N/A	c	15.4	N/A	b	14.0	N/A
	OVERALL	b	12.3	N/A	e	39.0	N/A	c	16.0	N/A
10. Beekman Ave.(EB-WB)/Cortland St.(NB)	NB L	b	13.1	0.10	c	22.4	0.23			
	NB R	b	13.6	0.37	c	18.9	0.49			
	NB Overall	b	13.5	N/A	c	19.6	N/A			
11. Beekman Ave.(EB-WB)/Clinton St.(NB-SB)	EB LTR	a	7.5	0.00	a	8.1	0.00			
	WB LTR	a	7.6	0.06	a	8.2	0.07			
	NB LTR	a	10.0	0.08	d	28.9	0.51			
	SB LTR	b	12.5	0.00	c	19.5	0.00			
12. Beekman Ave.(EB-WB)/Hudson St.(SB)	WB LT	a	7.5	0.02	a	8.6	0.05			
13. US Route 9(NB-SB)/ Wildey St.(EB) (Tarrytown)	EB LR	C	24.1	0.36	C	24.3	0.40			
	NB LT	B	10.6	0.65	B	11.1	0.67			
	SB TR	A	8.7	0.54	A	8.7	0.54			
	OVERALL	B	11.0	0.58	B	11.3	0.60			
14. US Route 9(NB-SB)/ Central Ave. (EB)	NB LT	b	11.5	0.08	b	11.5	0.08			

TABLE NO. 6-7c											
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
	(Tarrytown)	EB LR	e	48.7	0.54	e	48.7	0.54			
15.	Neperan Rd.(EB-WB)/ County House Rd.(SB) (Tarrytown)	EB T	a	9.4	N/A	a	9.6	N/A			
		WB T	a	9.2	N/A	a	9.4	N/A			
		SB LR	a	9.5	N/A	b	10.0	N/A			
		OVERALL	a	9.4	N/A	a	9.9	N/A			
16.	US Route 9(NB-SB)/ Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	50.8	0.81	E	72.3	0.95	D	41.6	0.74
		WB LTR	E	55.6	0.83	E	67.1	0.91	F	119.1	1.12
		NB LTR/L	F	115.7	1.18	F	223.1	1.43	D	51.1	0.79
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	22.6	0.75
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	26.6	NA
		SB LTR/L	D	36.6	0.93	D	37.1	0.93	B	11.6	0.09
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	24.6	0.79
		SB Overall	N/A	N/A	N/A	N/A	N/A	N/A	C	24.3	NA
		OVERALL	E	69.8	1.06	F	114.8	1.27	D	43.0	0.92
17.	Main St.(EB-WB)/ Washington St.(NB-SB) (Tarrytown)	EB LTR	B	11.5	0.41	B	13.3	0.53			
		WB LTR	B	11.7	0.43	B	13.0	0.52			
		NB LTR	B	13.5	0.34	B	13.5	0.34			
		SB LTR	C	21.9	0.70	C	23.2	0.73			
		OVERALL	B	15.2	0.55	B	16.2	0.62			
18.	H-Bridge(EB)/Main St. (WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	C	26.6	0.63	F	303.2	1.58	C	24.0	0.78
		WB L	C	21.5	0.24	C	22.5	0.31	B	13.8	0.19
		WB T	C	21.2	0.25	C	22.2	0.41	B	13.6	0.21
		WB R	C	21.6	0.30	C	22.1	0.37	B	13.5	0.18
		WB Overall	C	21.4	N/A	C	22.2	N/A	B	13.5	NA
		NB L	A	4.5	0.19	A	6.0	0.39	B	13.8	0.53
		NB T	A	4.0	0.14	A	4.2	0.18	A	9.4	0.24
		NB R	A	3.5	0.00	A	3.5	0.00	A	7.8	0.01
		NB Overall	A	4.2	N/A	A	5.3	N/A	B	12.0	NA
		SB LTR	A	3.9	0.10	A	3.9	0.10	A	8.7	0.14
OVERALL	B	13.3	0.28	F	106.2	0.64	B	16.0	0.64		
19.	West Franklin St.(EB- WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	7.7	0.00	a	8.3	0.00			
		NB LR	b	12.7	0.15	c	20.8	0.32			
20A.	US Route 9(NB-SB)/ West Franklin St.(EB) (Tarrytown)	EB R	f	81.6	0.99	f	320.2	1.62	E	75.1	1.00
		NB LT	b	13.2	0.42	c	20.9	0.70	B	13.0	0.57
		NB T	N/A	N/A	N/A	N/A	N/A	N/A	A	2.5	0.55
		NB Overall	N/A	N/A	N/A	N/A	N/A	N/A	A	6.4	NA
		SB TR	N/A	N/A	N/A	N/A	N/A	N/A	C	33.2	0.92
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	C	27.9	0.00
20B.	US Route 9(NB- SB)/East Franklin St.(WB) (Tarrytown)	WB LR	c	25.0	0.10	e	37.1	0.18	D	50.6	0.31
		NB TR	N/A	N/A	N/A	N/A	N/A	N/A	A	9.9	0.87
		SB LT	b	10.8	0.02	b	12.3	0.03	A	5.3	0.86
		OVERALL	N/A	N/A	N/A	N/A	N/A	N/A	A	7.9	0.86
21.	US Route 9(NB-SB)/ Benedict Ave.(WB) (Tarrytown)	WB L	D	35.8	0.18	D	35.8	0.18	D	42.4	0.27
		WB R	C	27.5	0.41	C	27.9	0.44	C	21.8	0.36
		WB Overall	C	29.3	N/A	C	29.5	N/A	C	26.0	NA
		NB T/TR	C	30.9	0.90	F	88.4	1.12	C	22.5	0.73
		NB R	B	10.2	0.09	B	10.2	0.09	NA	NA	NA
		NB Overall	C	29.4	N/A	F	83.5	N/A	NA	NA	NA
		SB L	E	75.8	0.96	F	148.3	1.16	B	15.2	0.48
		SB T	B	13.0	0.77	C	26.2	0.93	B	13.5	0.85
		SB Overall	C	24.8	N/A	D	46.8	N/A	B	13.8	NA
OVERALL	C	27.2	0.73	E	60.5	1.11	B	18.7	0.77		
22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	5.0	0.16	A	5.1	0.16			
		EB TR	A	5.2	0.25	A	5.3	0.26			
		EB Overall	A	5.2	N/A	A	5.3	N/A			
		WB L	A	4.1	0.02	A	4.1	0.02			
		WB TR	A	6.2	0.38	A	6.3	0.39			
		WB Overall	A	6.1	N/A	A	6.2	N/A			
		NB LTR	B	16.9	0.20	B	16.9	0.20			
		SB LTR	B	19.3	0.51	B	19.3	0.51			
		OVERALL	A	8.5	0.41	A	8.5	0.42			

TABLE NO. 6-7c											
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)	Diverge	b	14.4	N/A	b	16.2	N/A			
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	C	33.5	0.50	C	34.5	0.56	C	34.5	0.56
		WB L	C	20.7	0.26	C	20.7	0.26	B	19.5	0.19
		WB LR	N/A	N/A	N/A	N/A	N/A	N/A	C	21.2	0.38
		WB R	C	34.2	0.80	F	96.2	1.09	C	32.7	0.79
		WB Overall	C	28.6	N/A	E	70.2	N/A	C	26.4	NA
		NB T	B	18.8	0.56	B	19.6	0.62	C	20.8	0.64
		NB R	A	0.8	0.22	A	0.8	0.22	A	0.8	0.22
		NB Overall	B	13.9	N/A	B	14.9	N/A	B	15.8	NA
		SB T	B	18.9	0.57	C	20.9	0.69	C	22.3	0.71
OVERALL	C	20.7	0.65	C	33.3	0.82	C	22.1	0.72		
25.	US Route 9(NB-SB)/I-87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	36.7	0.18	D	36.8	0.19			
		WB LT	D	38.0	0.28	D	38.0	0.28			
		WB R	B	13.3	0.42	B	13.7	0.45			
		WB Overall	B	18.1	N/A	B	18.2	N/A			
		NB L	C	31.7	0.04	C	31.7	0.05			
		NB TR	D	41.0	0.67	D	42.0	0.71			
		NB Overall	D	40.8	N/A	D	41.8	N/A			
		SB L	B	12.7	0.57	B	17.2	0.74			
		SB TR	A	4.1	0.27	A	4.1	0.28			
OVERALL	A	7.6	N/A	B	10.1	N/A					
26.	River St.(SB)/Ichabod's Landing(EB)	EB LTR	N/A	N/A	N/A	a	8.3	N/A			
		NB LTR	N/A	N/A	N/A	a	9.6	N/A			
		SB LTR	N/A	N/A	N/A	a	9.8	N/A			
		OVERALL	N/A	N/A	N/A	a	9.6	N/A			
27.	Beekman Ave.(WB)/ Beekman Ave Ext.(SB)/ River St.(EB)	EB LT	N/A	N/A	N/A	a	8.4	0.06			
		SB L	N/A	N/A	N/A	c	17.0	0.54			
28.	River Street(NB-SB)/ Proposed Cinema Driveway(WB)	SB LT	N/A	N/A	N/A	a	8.0	0.03			
		WB LR	N/A	N/A	N/A	b	11.4	0.04			
29.	Beekman Ave. Ext(NB-SB)/ Internal Site Road(EB-WB)	EB LTR	N/A	N/A	N/A	a	9.4	N/A			
		WB LTR	N/A	N/A	N/A	a	9.6	N/A			
		NB LTR	N/A	N/A	N/A	c	15.6	N/A			
		SB LTR	N/A	N/A	N/A	b	10.8	N/A			
OVERALL	N/A	N/A	N/A	b	13.5	N/A					
30.	River St. Ext(NB-SB)/ Internal Site Road(WB)	WB LR	N/A	N/A	N/A	a	9.2	N/A			
		NB TR	N/A	N/A	N/A	a	8.4	N/A			
		SB LT	N/A	N/A	N/A	a	8.6	N/A			
		OVERALL	N/A	N/A	N/A	a	8.7	N/A			
31.	Beekman Ave.(EB-WB)/Viaduct (SB)	EB LT	N/A	N/A	N/A	a	8.4	0.00			
		SB LR	N/A	N/A	N/A	b	13.2	0.05			

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

TABLE NO. 6A-8
 DETAILED LEVEL OF SERVICE SUMMARY
 FOR BUILD (WITH IMPROVEMENTS) CONDITIONS

Intersection	Movements	WITH STATION												WITHOUT STATION					
		AM			PM			SAT.			AM			PM			SAT.		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
1. US Route 9(NB-SB)/ Pierson Ave.(EB)/ Gordon Ave.(WB)	EB L	C	29.7	0.01	C	29.7	0.01	C	29.7	0.03	C	29.7	0.01	C	29.7	0.01	C	29.9	0.03
	EB TR	C	33.1	0.40	C	32.0	0.29	C	32.9	0.38	C	32.7	0.36	C	32.3	0.32	C	32.9	0.38
	EB Overall	C	33.0	N/A	C	31.9	N/A	C	32.7	N/A	C	32.6	N/A	C	32.2	N/A	C	32.7	N/A
	WB L	C	30.3	0.08	C	29.9	0.04	C	30.2	0.07	C	30.0	0.05	C	29.9	0.03	C	30.1	0.07
	WB TR	C	30.3	0.10	C	30.6	0.13	C	30.3	0.09	C	30.4	0.11	C	30.6	0.13	C	30.3	0.09
	WB Overall	C	30.3	N/A	C	30.5	N/A	C	30.3	N/A	C	30.3	N/A	C	30.5	N/A	C	30.3	N/A
	NB LTR	A	3.3	0.50	A	4.9	0.67	A	3.3	0.49	A	3.4	0.51	A	4.7	0.65	A	3.3	0.49
	SB LTR	C	21.7	0.67	C	21.1	0.64	B	19.9	0.58	C	21.6	0.67	C	21.1	0.65	B	19.9	0.58
OVERALL	B	14.9	0.54	B	13.8	0.65	B	14.0	0.55	B	14.7	0.55	B	13.9	0.65	B	13.9	0.55	
2. US Route 9(NB-SB)/ Pocantico St.(EB)/Old Broadway(WB)/ Philipsburg Manor Driveway(PMD)	EB LTR	F	118.7	1.11	F	144.6	1.19	D	37.7	0.77	F	119.7	1.12	F	97.7	1.06	D	37.1	0.76
	WB LTR	C	27.9	0.17	C	25.6	0.07	C	22.7	0.06	C	27.9	0.17	C	25.6	0.07	C	22.7	0.06
	NB LTR	B	13.4	0.38	B	15.8	0.48	B	17.4	0.43	B	13.5	0.38	B	16.0	0.49	B	17.5	0.43
	SB LTR	B	13.4	0.68	B	14.2	0.64	B	16.9	0.62	B	13.0	0.65	B	14.4	0.64	B	16.9	0.62
	PMD LTR	D	42.9	0.04	D	42.8	0.02	D	43.9	0.18	D	43.0	0.05	D	42.8	0.02	D	43.9	0.18
	OVERALL	C	31.7	0.00	D	40.2	0.00	C	20.7	0.00	C	31.8	0.00	C	29.6	0.00	C	20.5	0.00
3. Pocantico St.(EB)/ Continental St.(SB)	EB LT	a	8.0	0.00	a	8.1	0.02	a	7.9	0.01	a	7.8	0.00	a	8.0	0.01	a	7.8	0.01
	SB LR	b	11.0	0.01	b	13.6	0.03	b	12.5	0.02	b	10.9	0.01	b	13.3	0.03	b	12.4	0.02
4. US Route 9(NB-SB)/ Lawrence Ave.(EB)	EB LR	f	52.4	0.47	f	58.7	0.53	e	42.5	0.40	f	61.5	0.52	f	69.4	0.61	e	44.1	0.42
	NB LT	a	9.9	0.01	a	9.4	0.01	a	9.6	0.01	b	10.2	0.01	a	9.5	0.01	a	9.6	0.01
5. US Route 9(NB-SB)/ Bedford Rd.(WB)/ New Broadway(EB)	EB LTR	E	60.3	0.48	E	57.7	0.29	E	58.1	0.32	E	60.4	0.48	E	57.7	0.29	E	58.1	0.32
	WB L	E	73.2	0.75	F	257.6	1.38	F	89.5	0.88	E	72.9	0.75	F	256.0	1.38	F	89.5	0.88
	WB R	E	57.4	0.26	E	60.1	0.47	E	58.0	0.31	E	57.6	0.28	E	60.1	0.47	E	58.0	0.31
	WB Overall	E	69.6	N/A	F	211.9	N/A	F	82.3	N/A	E	69.2	N/A	F	210.6	N/A	F	82.3	N/A
	NB TR	C	23.2	0.86	C	24.4	0.87	B	17.3	0.76	C	24.7	0.88	C	25.4	0.88	B	17.4	0.76
	SB LT	D	48.4	0.86	D	37.7	0.65	D	38.5	0.67	D	51.7	0.89	D	38.2	0.66	D	38.6	0.67
OVERALL	D	41.1	0.78	E	70.6	0.86	D	37.5	0.71	D	43.1	0.79	E	70.4	0.87	D	37.5	0.71	
6. US Route 9(NB-SB)/ Beekman Ave.(EB)/ Hudson Terrace(WB)	EB L	E	72.8	0.82	E	70.3	0.79	E	61.5	0.68	F	159.4	1.12	F	146.4	1.08	F	104.0	0.93
	EB TR	D	51.5	0.29	D	53.4	0.42	D	52.7	0.38	E	59.2	0.39	E	60.4	0.48	E	61.1	0.51
	EB Overall	E	67.6	N/A	E	64.5	N/A	E	58.4	N/A	F	135.6	N/A	F	120.6	N/A	F	88.9	N/A
	WB LTR	D	55.0	0.04	D	54.9	0.03	E	55.0	0.04	D	55.0	0.04	D	54.9	0.03	D	55.0	0.04
	NB LTR	C	32.5	0.34	C	34.9	0.43	D	38.6	0.38	C	29.9	0.20	C	32.9	0.36	D	36.4	0.34
	NB TR	D	50.9	0.85	E	58.8	0.91	D	47.8	0.79	D	51.9	0.86	E	62.0	0.93	D	47.9	0.79
	NB Overall	D	49.4	N/A	E	56.8	N/A	D	46.9	N/A	D	50.8	N/A	E	59.8	N/A	D	46.8	N/A
	SB LTR	C	21.1	0.73	B	17.9	0.61	C	20.3	0.70	B	13.7	0.66	B	12.0	0.56	B	13.1	0.62
	OVERALL	D	39.1	0.68	D	39.4	0.63	D	35.9	0.63	D	47.3	0.69	D	46.5	0.64	D	37.4	0.63
	7. Beekman Ave.(EB- WB)/Lawrence Ave.(SB)	EB LT	a	8.2	0.05	a	8.5	0.06	a	8.9	0.07	a	8.2	0.05	a	8.5	0.07	a	8.9
SB LR		b	13.5	0.17	b	14.3	0.21	c	15.6	0.25	b	13.4	0.23	b	14.4	0.22	c	15.7	0.26
8. Beekman Ave.(EB- WB)/Washington St.(NB-SB)	EB TR	B	17.9	0.56	C	24.1	0.75	C	21.5	0.69	B	17.6	0.55	C	21.0	0.67	C	21.2	0.68
	WB LT	A	9.8	0.36	C	26.9	0.81	C	22.6	0.76	B	14.5	0.57	C	25.7	0.80	C	24.0	0.78
	NB LR	C	28.0	0.48	C	33.6	0.64	C	28.6	0.50	C	26.7	0.43	D	35.0	0.67	C	28.6	0.50
	SB LTR	C	22.8	0.25	C	23.1	0.27	C	22.8	0.25	C	22.8	0.25	C	23.1	0.27	C	22.8	0.25
	OVERALL	B	18.1	0.58	C	26.5	0.73	C	23.0	0.65	B	18.7	0.55	C	25.3	0.74	C	23.4	0.67
9. Beekman Ave.(EB- WB)/Pocantico St.(SB)	EB LT	b	13.4	N/A	b	13.9	N/A	b	13.7	N/A	b	14.5	N/A	c	19.0	N/A	b	14.1	N/A
	EB T	b	12.9	N/A	c	22.3	N/A	c	18.0	N/A	b	13.1	N/A	c	18.6	N/A	c	17.7	N/A
	EB Overall	b	13.1	N/A	c	19.5	N/A	c	16.4	N/A	b	13.8	N/A	c	18.8	N/A	c	16.3	N/A
	WB TR	b	12.5	N/A	c	24.3	N/A	c	17.3	N/A	b	11.7	N/A	c	24.1	N/A	c	17.0	N/A
	SB LR	b	11.2	N/A	c	17.1	N/A	b	13.9	N/A	b	12.0	N/A	c	18.0	N/A	b	14.0	N/A
	OVERALL	b	12.6	N/A	c	20.5	N/A	c	16.1	N/A	b	12.9	N/A	c	20.3	N/A	c	16.0	N/A
10. Beekman Ave.(EB- WB)/Cortland St.(NB)	NB L	c	22.3	0.39	e	37.5	0.50	c	23.3	0.26	c	17.5	0.17	d	32.3	0.46	c	22.4	0.23
	NB R	c	16.3	0.41	c	19.1	0.46	c	18.6	0.47	c	16.8	0.45	c	23.7	0.64	c	18.9	0.49
	NB Overall	c	18.6	N/A	d	25.3	N/A	c	19.2	N/A	c	16.9	N/A	d	25.8	N/A	c	19.6	N/A
11. Beekman Ave.(EB- WB)/Clinton St.(NB- SB)	EB LTR	a	7.9	0.00	a	8.0	0.00	a	8.1	0.00	a	7.9	0.00	a	8.0	0.00	a	8.1	0.00
	WB LTR	a	8.0	0.04	a	8.4	0.09	a	8.2	0.07	a	7.9	0.04	a	8.1	0.08	a	8.2	0.07
	NB LTR	c	16.4	0.28	d	27.1	0.46	d	29.5	0.51	c	15.7	0.26	c	22.6	0.40	d	28.9	0.51
	SB LTR	N/A	N/A	N/A	b	10.4	0.00	c	19.7	0.00	N/A	N/A	N/A	b	10.4	0.00	c	19.5	0.00
12. Beekman Ave.(EB- WB)/Hudson St.(SB)	WB LT	a	8.2	0.02	a	8.6	0.12	a	8.6	0.05	a	8.3	0.05	a	8.3	0.06	a	8.6	0.05
	OVERALL	C	25.8	0.39	C	22.0	0.23	C	24.3	0.39	C	25.9	0.40	C	22.5	0.29	C	24.3	0.40
13. US Route 9(NB-SB)/ Willey St.(EB) (Tarrytown)	NB LT	A	9.2	0.69	B	19.1	0.83	B	11.1	0.67	A	9.2	0.69	B	19.1	0.83	B	11.1	0.67
	SB TR	A	9.0	0.69	B	15.2	0.75	A	8.7	0.54	A	9.3	0.70	B	15.3	0.75	A	8.7	0.54
	OVERALL	B	10.0	0.64	B	17.4	0.65	B	11.3	0.60	B	10.2	0.65	B	17.6	0.67	B	11.3	0.60
	OVERALL	a	10.0	0.10	b	11.7	0.13	b	11.5	0.08	a	10.0	0.10	b	11.7	0.13	b	11.5	0.08
14. US Route 9(NB-SB)/ Central Ave. (EB) (Tarrytown)	EB LR	c	23.3	0.31	e	42.6	0.55	e	48.7	0.54	c	23.3	0.31	e	42.6	0.55	e	48.7	0.54
	EB T	d	30.4	N/A	c	19.9	N/A	a	9.7	N/A	d	30.4	N/A	c	19.9	N/A	a	9.6	N/A
	WB T	d	26.3	N/A	e	43.8	N/A	a	9.4	N/A	d	26.3	N/A	e	43.8	N/A	a	9.4	N/A
	SB LR	d	33.2	N/A	b	14.7	N/A	b	10.0	N/A	d	33.2	N/A	b	14.7	N/A	b	10.0	N/A
OVERALL	d	30.0	N/A	d	30.6	N/A	a	9.7	N/A	d	30.0	N/A	d	30.6	N/A	a	9.9	N/A	
16. US Route 9(NB-SB)/ Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	39.9	0.73	D	44.8	0.79	D	48.7	0.83	D	39.9	0.73	D	40.5	0.72	D	41.6	0.74
	WB LTR	C	30.9	0.48	F	130.3	1.15	D	44.6	0.76	C	30.9	0.48	F	115.6	1.11	F	119.1	1.12
	NB LTR	C	21.4	0.51	D	50.2	0.79	F	146.9	1.17	B	18.0	0.35	D	50.2	0.79	D	51.1	0.79
	NB TR</																		

TABLE NO. 6A-8																				
DETAILED LEVEL OF SERVICE SUMMARY																				
FOR BUILD (WITH IMPROVEMENTS) CONDITIONS																				
Intersection	Movements	WITH STATION									WITHOUT STATION									
		AM			PM			SAT.			AM			PM			SAT.			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
17.	Main St.(EB-WB)/ Washington St.(NB-SB) (Tarrytown)	EB LTR	B	11.5	0.42	B	12.7	0.49	B	13.4	0.53	B	11.5	0.42	B	12.7	0.49	B	13.3	0.53
		WB LTR	B	10.6	0.34	B	12.1	0.46	B	13.1	0.52	B	10.2	0.30	B	12.1	0.46	B	13.0	0.52
		NB LTR	B	12.5	0.26	B	14.2	0.40	B	13.5	0.34	B	12.5	0.26	B	14.2	0.40	B	13.5	0.34
		SB LTR	B	16.9	0.55	B	17.4	0.56	C	23.2	0.73	B	16.9	0.55	B	17.4	0.56	C	23.2	0.73
		OVERALL	B	13.1	0.48	B	14.0	0.52	B	16.2	0.62	B	13.0	0.48	B	14.0	0.52	B	16.2	0.62
18.	H-Bridge(EB)/Main St. (WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	B	17.2	0.59	D	54.8	0.99	C	23.6	0.78	C	21.8	0.74	C	33.6	0.89	C	24.0	0.78
		WB L	B	13.6	0.18	B	15.0	0.30	B	13.7	0.19	B	13.9	0.21	B	14.4	0.26	B	13.8	0.19
		WB T	B	13.1	0.12	B	13.4	0.19	B	13.6	0.21	B	13.1	0.12	B	13.4	0.19	B	13.6	0.21
		WB R	B	13.4	0.18	B	13.2	0.15	B	13.5	0.19	B	13.2	0.13	B	13.2	0.15	B	13.5	0.18
		WB Overall	B	13.3	NA	B	13.7	NA	B	13.6	NA	B	13.3	NA	B	13.6	NA	B	13.5	NA
		NB L	B	13.9	0.55	B	17.1	0.66	B	13.7	0.53	B	15.0	0.58	B	17.5	0.67	B	13.8	0.53
		NB T	A	9.3	0.23	A	8.5	0.11	A	9.3	0.23	A	9.1	0.20	A	9.9	0.30	A	9.4	0.24
		NB R	A	7.9	0.02	A	8.0	0.03	A	7.8	0.01	A	7.9	0.02	A	8.0	0.03	A	7.8	0.01
		NB Overall	B	12.1	NA	B	15.0	NA	B	12.0	NA	B	12.8	NA	B	14.1	NA	B	12.0	NA
		SB LTR	A	8.0	0.03	A	8.7	0.14	A	8.6	0.13	A	8.7	0.14	A	8.8	0.16	A	8.7	0.14
		OVERALL	B	13.7	0.56	C	30.1	0.80	B	15.9	0.63	B	15.5	0.65	B	20.0	0.76	B	16.0	0.64
19.	West Franklin St.(EB- WB)/ Riverview Ave.(NB) (Tarrytown)	WB LT	a	8.3	0.00	a	8.8	0.01	a	8.3	0.00	a	8.3	0.00	a	8.7	0.01	a	8.3	0.00
		NB LR	c	26.5	0.49	d	29.1	0.42	c	21.1	0.32	c	24.0	0.46	d	26.6	0.40	c	20.8	0.32
20A.	US Route 9(NB-SB)/ West Franklin St.(EB) (Tarrytown)	EB R	F	83.2	1.04	F	112.6	1.12	E	77.6	1.01	F	83.2	1.04	F	81.2	1.03	E	75.1	1.00
		NB LT	A	9.8	0.49	B	17.6	0.70	B	13.2	0.57	A	8.4	0.44	B	16.9	0.69	B	13.0	0.57
		NB T	A	2.1	0.49	A	2.7	0.58	A	2.5	0.55	A	2.1	0.48	A	2.7	0.58	A	2.5	0.55
		NB Overall	A	5.0	NA	A	8.8	NA	A	6.5	NA	A	4.3	NA	A	8.5	NA	A	6.4	NA
		SB TR	C	27.7	0.87	D	35.6	0.94	C	33.5	0.92	C	27.7	0.87	C	31.7	0.91	C	33.2	0.92
OVERALL	C	28.6	N/A	D	36.8	N/A	C	28.5	N/A	C	29.0	N/A	C	28.6	N/A	C	27.9	N/A		
20B.	US Route 9(NB- SB)/East Franklin St.(WB) (Tarrytown)	WB LR	D	52.5	0.42	D	53.1	0.47	D	50.6	0.31	D	52.2	0.42	D	53.1	0.47	D	50.6	0.31
		NB TR	A	5.9	0.78	C	21.4	0.96	B	10.2	0.87	A	4.7	0.73	C	21.4	0.96	A	9.9	0.87
		SB LT	A	4.7	0.84	A	8.5	0.91	A	5.5	0.86	A	4.6	0.84	A	5.7	0.86	A	5.3	0.86
		OVERALL	A	5.8	0.84	B	15.4	0.97	A	8.1	0.86	A	5.3	0.84	B	14.2	0.97	A	7.9	0.86
21.	US Route 9(NB-SB)/ Benedict Ave.(WB) (Tarrytown)	WB L	D	43.2	0.27	D	43.7	0.41	D	42.4	0.27	D	43.2	0.27	D	43.7	0.41	D	42.4	0.27
		WB R	C	21.7	0.30	C	23.7	0.51	C	21.8	0.36	C	21.7	0.30	C	23.7	0.51	C	21.8	0.36
		WB Overall	C	26.6	NA	C	28.0	NA	C	26.0	NA	C	26.6	NA	C	28.0	NA	C	26.0	NA
		NB T	C	20.3	0.66	C	22.6	0.73	C	22.6	0.73	B	19.4	0.62	C	22.6	0.73	C	22.5	0.73
		NB R	NA	NA	NA	N/A	N/A	NA	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		NB Overall	NA	NA	NA	N/A	N/A	NA	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		SB L	A	9.2	0.40	C	21.7	0.60	B	15.7	0.48	A	7.8	0.38	C	21.7	0.60	B	15.2	0.48
		SB T	B	12.5	0.85	B	13.7	0.86	B	13.8	0.86	B	12.5	0.85	B	10.7	0.80	B	13.5	0.85
		SB Overall	B	12.0	NA	B	15.4	NA	B	14.2	NA	B	11.8	NA	B	13.1	NA	B	13.8	NA
		OVERALL	B	16.7	0.77	B	19.9	0.75	B	18.9	0.78	B	16.1	0.77	B	19.0	0.75	B	18.7	0.77
		22.	Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	6.7	0.06	B	10.1	0.25	A	5.1	0.16	A	6.7	0.06	B	10.1	0.25	A
EB TR	A			9.4	0.43	A	8.9	0.38	A	5.3	0.26	A	9.4	0.43	A	8.9	0.38	A	5.3	0.26
EB Overall	A			9.3	NA	A	9.0	NA	A	5.3	N/A	A	9.3	NA	A	9.0	NA	A	5.3	N/A
WB L	A			7.0	0.10	A	7.8	0.20	A	4.1	0.02	A	7.0	0.10	A	7.8	0.20	A	4.1	0.02
WB TR	B			10.3	0.49	B	17.9	0.80	A	6.3	0.39	B	10.3	0.49	B	17.9	0.80	A	6.3	0.39
WB Overall	A			10.0	NA	B	16.7	NA	A	6.2	N/A	A	10.0	NA	B	16.7	NA	A	6.2	N/A
NB LTR	B			14.2	0.37	B	13.2	0.20	B	16.9	0.20	B	14.2	0.37	B	13.2	0.20	B	16.9	0.20
SB LTR	B			17.9	0.62	C	21.4	0.73	B	19.3	0.51	B	17.9	0.62	C	21.4	0.73	B	19.3	0.51
OVERALL	B			11.9	0.54	B	15.6	0.77	A	8.5	0.42	B	11.9	0.54	B	15.6	0.77	A	8.5	0.42
23.	US Route 9/I-87/ I-287 Westbound On-Ramp (Tarrytown)			Diverge	b	17.1	N/A	b	19.9	N/A	b	16.2	N/A	b	17.1	N/A	b	19.3	NA	b
24.	US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	D	39.5	0.72	C	33.2	0.45	C	34.5	0.56	D	39.5	0.72	C	33.2	0.45	C	34.5	0.56
		WB L	C	21.2	0.40	C	20.4	0.30	B	19.5	0.19	C	21.2	0.40	C	20.4	0.30	B	19.5	0.19
		WB LR	C	22.6	0.51	C	22.4	0.49	C	21.2	0.38	C	22.6	0.51	C	22.4	0.49	C	21.2	0.38
		WB R	C	31.7	0.77	D	45.0	0.90	C	32.7	0.79	C	31.7	0.77	D	45.0	0.90	C	32.7	0.79
		WB Overall	C	25.2	N/A	C	31.5	NA	C	26.4	NA	C	25.2	NA	C	31.5	NA	C	26.4	NA
		NB T	C	22.5	0.72	C	21.6	0.68	C	20.9	0.64	C	21.2	0.66	C	21.6	0.68	C	20.8	0.64
		NB R	A	4.9	0.78	A	0.9	0.32	A	0.8	0.22	A	4.9	0.78	A	0.9	0.32	A	0.8	0.22
		NB Overall	B	13.6	N/A	B	15.2	NA	B	15.9	NA	B	12.5	NA	B	15.2	NA	B	15.8	NA
		SB T	C	21.3	0.66	C	22.4	0.71	C	22.3	0.71	C	21.3	0.66	C	22.4	0.71	C	22.3	0.71
		OVERALL	C	20.3	0.77	C	23.3	0.75	C	22.2	0.72	C	20.0	0.77	C	23.3	0.75	C	22.1	0.72
		25.	US Route 9(NB-SB)/I- 87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	38.7	0.32	D	45.0	0.40	D	36.8	0.19	D	38.7	0.32	D	45.0	0.40	D
WB LT	D			51.8	0.74	D	48.0	0.56	D	38.0	0.28	D	51.8	0.74	D	48.0	0.56	D	38.0	0.28
WB R	F			152.7	1.27	B	15.3	0.53	B	13.7	0.45	F	120.5	1.19	B	15.3	0.53	B	13.7	0.45
WB Overall	F			136.0	N/A	C	22.9	NA	B	18.2	N/A	F	108.5	NA	C	22.9	NA	B	18.2	N/A
NB L	C			32.7	0.01	C	30.9	0.04	C	31.7	0.05	C	32.7	0.01	C	30.9	0.04	C	31.7	0.05
NB TR	D			41.8	0.65	E	59.3	0.94	D	42.0	0.71	D	41.8	0.65	E	59.3	0.94	D	42.0	0.71
NB Overall	D			41.8	N/A	E	59.1	NA	D	41.8	N/A	D	41.8	NA	E	59.1	NA	D	41.8	N/A
SB L	B			11.5	0.53	B	16.9	0.85	B	17.2	0.74	B	11.5	0.53	B	16.9	0.85	B	17.2	0.74
SB TR	A			4.9	0.45	A	1.6	0.29	A	4.1	0.28	A	4.9	0.45	A	1.6	0.29	A	4.1	0.28
SB Overall	A			6.8	N/A	A	8.9	NA	B	10.1	N/A	A	6.8	NA	A	8.9	NA	B	10.1	N/A
OVERALL	E			67.1	0.00	C	29.0	0.00	C	21.9	0.00	D	54.6	0.00	C	29.0	0.00	C	21.9	0.00
26.	River St.(SB)/Ichabod's Landing(EB)	EB LTR	a	7.8	N/A	a	8.1	N/A	a	8.3										

TABLE NO. 6A-8																				
DETAILED LEVEL OF SERVICE SUMMARY																				
FOR BUILD (WITH IMPROVEMENTS) CONDITIONS																				
Intersection	Movements	WITH STATION									WITHOUT STATION									
		AM			PM			SAT.			AM			PM			SAT.			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
27.	Beekman Ave.(WB)/ Beekman Ave Ext.(SB)/ River St.(EB)	OVERALL	a	8.2	N/A	a	9.0	N/A	a	9.5	N/A	a	9.0	N/A	a	9.6	NA	a	9.6	N/A
		EB LT	a	7.8	0.03	a	8.2	0.06	a	8.4	0.06	a	8.0	0.03	a	8.2	0.06	a	8.4	0.06
28.	River Street(NB-SB)/ Proposed Cinema Driveway(WB)	SB LT	N/A	N/A	N/A	a	8.0	0.03	a	8.0	0.03	N/A	N/A	N/A	a	8.0	0.03	a	8.0	0.03
		WB LR	N/A	N/A	N/A	b	11.0	0.04	b	11.3	0.04	N/A	N/A	N/A	b	11.0	0.04	b	11.4	0.04
29.	Beekman Ave. Ext(NB- SB)/ Internal Site Road(EB-WB)	EB LTR	a	8.5	N/A	a	8.7	N/A	a	9.3	N/A	a	8.7	N/A	a	8.7	NA	a	9.4	N/A
		WB LTR	a	8.5	N/A	a	8.8	N/A	a	9.6	N/A	a	8.7	N/A	a	8.9	NA	a	9.6	N/A
		NB LTR	a	9.6	N/A	b	11.8	N/A	c	15.3	N/A	b	10.6	N/A	b	12.0	NA	c	15.6	N/A
		SB LTR	a	9.2	N/A	a	9.1	N/A	b	10.8	N/A	a	9.4	N/A	a	9.2	NA	b	10.8	N/A
		OVERALL	a	9.4	N/A	b	10.7	N/A	b	13.3	N/A	a	10.0	N/A	b	10.9	NA	b	13.5	N/A
30.	River St. Ext(NB-SB)/ Internal Site Road(WB)	WB LR	a	7.9	N/A	a	8.7	N/A	a	9.0	N/A	a	8.7	N/A	a	9.0	NA	a	9.2	N/A
		NB TR	a	7.4	N/A	a	8.1	N/A	a	8.4	N/A	a	7.8	N/A	a	8.5	NA	a	8.4	N/A
		SB LT	a	7.9	N/A	a	8.1	N/A	a	8.6	N/A	a	8.5	N/A	a	8.3	NA	a	8.6	N/A
		OVERALL	a	7.8	N/A	a	8.4	N/A	a	8.7	N/A	a	8.4	N/A	a	8.7	NA	a	8.7	N/A
31.	Beekman Ave.(EB- WB)/Viaduct (SB)	EB LT	a	8.3	0.00	a	8.3	0.00	a	8.4	0.00	a	8.0	0.00	a	8.3	0.00	a	8.4	0.00
		SB LR	b	13.5	0.05	c	17.7	0.40	b	14.2	0.08	b	11.4	0.01	b	12.1	0.02	b	13.2	0.05

- Notes:
- (1) Signalized intersections represented by uppercase letters.
 - (2) Unsignalized intersections represented by lowercase letters.
 - (3) Delay is in seconds per vehicle.
 - (4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
 - (5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
 - (6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
 - (7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
 - (8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
 - (9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

Table No. 6A - 9a

LIGHTHOUSE LANDING PEAK AM HOUR LOS SUMMARY

INTERSECTION	DEIS	FEIS
	With Station	With Station
Broadway @ Pierson/Gordon	C	B
Broadway @ Pocantico/Old Broadway ⁽¹⁾	D	C
Pocantico @ Continental	b	b
Broadway @ Lawrence	f	f
Broadway @ Bedford/New Broadway	F	D
Broadway @ Beekman/Hudson	E	D
Beekman @ Lawrence	c	b
Beekman @ Washington	C	B
Beekman @ Pocantico	C	b
Beekman @ Cortland	c	c
Beekman @ Clinton	d	c
Beekman @ Hudson ⁽²⁾	c	a
Broadway @ Wildey	B	B
Broadway @ Central	e	c
Neperan @ County House	B	B
Broadway @ Neperan/Main	D	C
Main @ Washington	B	B
Main @ Cortland/Depot Plaza	B	B
Franklin @ Riverview	f	c
Broadway @ Franklin	E	C
Broadway @ Benedict	C	B
Benedict @ Prospect/Highland	D	B
Broadway @ 287 WB On-Ramp	b	b
Broadway @ 119	C	C
Broadway @ 287 EB Ramps	F	E
Beekman @ River/Ichabod's Landing	b	a
Beekman @ Main Site Drive (signal)	A	NA
Beekman @ Main Site Drive (no signal)	b	b
River @ Cinema Driveway	a	NA
Beekman @ Viaduct Driveway	b	b

Table No. 6A - 9b

LIGHTHOUSE LANDING PEAK PM HOUR LOS SUMMARY

INTERSECTION	DEIS	FEIS
	With Station	With Station
Broadway @ Pierson/Gordon	B	B
Broadway @ Pocantico/Old Broadway ⁽¹⁾	D	D
Pocantico @ Continental	c	b
Broadway @ Lawrence	f	f
Broadway @ Bedford/New Broadway	F	E
Broadway @ Beekman/Hudson	F	D
Beekman @ Lawrence	c	b
Beekman @ Washington	C	C
Beekman @ Pocantico	C	c
Beekman @ Cortland	e	e
Beekman @ Clinton	e	d
Beekman @ Hudson ⁽²⁾	d	a
Broadway @ Wildey	C	B
Broadway @ Central	f	e
Neperan @ County House	B	B
Broadway @ Neperan/Main	F	D
Main @ Washington	B	B
Main @ Cortland/Depot Plaza	E	C
Franklin @ Riverview	f	d
Broadway @ Franklin	F	D
Broadway @ Benedict	D	B
Benedict @ Prospect/Highland	D	B
Broadway @ 287 WB On-Ramp	c	b
Broadway @ 119	C	C
Broadway @ 287 EB Ramps	E	C
Beekman @ River/Ichabod's Landing	b	a
Beekman @ Main Site Drive (signal)	B	NA
Beekman @ Main Site Drive (no signal)	c	b
River @ Cinema Driveway	a	b
Beekman @ Viaduct Driveway	d	c

Table No. 6A - 9c

LIGHTHOUSE LANDING PEAK SATURDAY HOUR LOS SUMMARY

INTERSECTION	DEIS	FEIS
	With Station	With Station
Broadway @ Pierson/Gordon	B	B
Broadway @ Pocantico/Old Broadway ⁽¹⁾	C	C
Pocantico @ Continental	b	b
Broadway @ Lawrence	f	e
Broadway @ Bedford/New Broadway	D	D
Broadway @ Beekman/Hudson	D	D
Beekman @ Lawrence	c	c
Beekman @ Washington	C	C
Beekman @ Pocantico	C	c
Beekman @ Cortland	c	c
Beekman @ Clinton	e	d
Beekman @ Hudson ⁽²⁾	d	a
Broadway @ Wildey	B	B
Broadway @ Central	f	e
Neperan @ County House	B	B
Broadway @ Neperan/Main	F	D
Main @ Washington	B	B
Main @ Cortland/Depot Plaza	B	B
Franklin @ Riverview	d	c
Broadway @ Franklin	E	C
Broadway @ Benedict	C	B
Benedict @ Prospect/Highland	A	A
Broadway @ 287 WB On-Ramp	b	b
Broadway @ 119	C	C
Broadway @ 287 EB Ramps	C	C
Beekman @ River/Ichabod's Landing	b	a
Beekman @ Main Site Drive (signal)	B	NA
Beekman @ Main Site Drive (no signal)	d	c
River @ Cinema Driveway	a	b
Beekman @ Viaduct Driveway	c	b

Table No. 6A - 9d		
LIGHTHOUSE LANDING PEAK AM HOUR LOS SUMMARY		
INTERSECTION	DEIS	FEIS
	Without Station	Without Station
Broadway @ Pierson/Gordon	C	B
Broadway @ Pocantico/Old Broadway ⁽¹⁾	D	C
Pocantico @ Continental	b	b
Broadway @ Lawrence	f	f
Broadway @ Bedford/New Broadway	F	D
Broadway @ Beekman/Hudson	E	D
Beekman @ Lawrence	b	b
Beekman @ Washington	C	B
Beekman @ Pocantico	C	B
Beekman @ Cortland	c	c
Beekman @ Clinton	c	c
Beekman @ Hudson ⁽²⁾	c	a
Broadway @ Wildey	C	B
Broadway @ Central	e	c
Neperan @ County House	B	B
Broadway @ Neperan/Main	D	C
Main @ Washington	B	B
Main @ Cortland/Depot Plaza	C	B
Franklin @ Riverview	f	c
Broadway @ Franklin	E	C
Broadway @ Benedict	C	B
Benedict @ Prospect/Highland	D	B
Broadway @ 287 WB On-Ramp	b	b
Broadway @ 119	C	C
Broadway @ 287 EB Ramps	F	D
Beekman @ River/Ichabod's Landing	b	a
Beekman @ Main Site Drive (signal)	A	NA
Beekman @ Main Site Drive (no signal)	b	b
River @ Cinema Driveway	a	NA

Table No. 6A - 9e

LIGHTHOUSE LANDING PEAK PM HOUR LOS SUMMARY

INTERSECTION	DEIS	FEIS
	Without Station	Without Station
Broadway @ Pierson/Gordon	B	B
Broadway @ Pocantico/Old Broadway ⁽¹⁾	D	C
Pocantico @ Continental	b	b
Broadway @ Lawrence	f	f
Broadway @ Bedford/New Broadway	F	E
Broadway @ Beekman/Hudson	F	D
Beekman @ Lawrence	c	b
Beekman @ Washington	C	C
Beekman @ Pocantico	C	c
Beekman @ Cortland	e	d
Beekman @ Clinton	d	c
Beekman @ Hudson ⁽²⁾	c	a
Broadway @ Wildey	C	B
Broadway @ Central	f	e
Neperan @ County House	B	B
Broadway @ Neperan/Main	F	D
Main @ Washington	B	B
Main @ Cortland/Depot Plaza	E	B
Franklin @ Riverview	f	d
Broadway @ Franklin	F	C
Broadway @ Benedict	D	B
Benedict @ Prospect/Highland	D	B
Broadway @ 287 WB On-Ramp	c	b
Broadway @ 119	C	C
Broadway @ 287 EB Ramps	E	C
Beekman @ River/Ichabod's Landing	b	a
Beekman @ Main Site Drive (signal)	B	NA
Beekman @ Main Site Drive (no signal)	c	b
River @ Cinema Driveway	a	a

Table No. 6A - 9f		
LIGHTHOUSE LANDING PEAK SATURDAY HOUR LOS SUMMARY		
INTERSECTION	DEIS	FEIS
	Without Station	Without Station
Broadway @ Pierson/Gordon	B	B
Broadway @ Pocantico/Old Broadway ⁽¹⁾	C	C
Pocantico @ Continental	b	b
Broadway @ Lawrence	f	e
Broadway @ Bedford/New Broadway	D	D
Broadway @ Beekman/Hudson	D	D
Beekman @ Lawrence	c	c
Beekman @ Washington	C	C
Beekman @ Pocantico	C	b
Beekman @ Cortland	c	c
Beekman @ Clinton	d	d
Beekman @ Hudson ⁽²⁾	d	a
Broadway @ Wildey	B	B
Broadway @ Central	f	e
Neperan @ County House	B	B
Broadway @ Neperan/Main	F	D
Main @ Washington	B	B
Main @ Cortland/Depot Plaza	B	B
Franklin @ Riverview	d	c
Broadway @ Franklin	E	C
Broadway @ Benedict	C	B
Benedict @ Prospect/Highland	A	A
Broadway @ 287 WB On-Ramp	b	b
Broadway @ 119	C	C
Broadway @ 287 EB Ramps	C	C
Beekman @ River/Ichabod's Landing	b	a
Beekman @ Main Site Drive (signal)	B	NA
Beekman @ Main Site Drive (no signal)	d	c
River @ Cinema Driveway	a	b

**Table No. 6A-15
FEIS ALTERNATIVE PLAN TRIP GENERATION COMPARISON**

	35% MTC w/o Station, w/ Shuttle	25% MTC w/o Station, w/ Shuttle
<u>Weekday AM Peak Hour</u>		
- LL Program	608	654
- Shuttle Bus & Resident Trips to TT Station	47	47
- New Train Station Commuter Lot	N/A	N/A
- Public Uses	<u>27</u>	<u>27</u>
Total	682	728
Diff. From FEIS Plan @35% MTC w/o Sta.	N/A	46
<u>Weekday PM Peak Hour</u>		
- LL Program	709	764
- Shuttle Bus & Resident Trips to TT Station	52	52
- New Train Station Commuter Lot	N/A	N/A
- Public Uses	<u>62</u>	<u>62</u>
Total	823	878
Diff. From FEIS Plan @35% MTC w/o Sta.	N/A	55

Notes:

1. The FEIS Alternative Plan scenarios shown above assume 5% of LL residents drive to the existing Tarrytown M-N Station for passenger drop-off and pick-up.
2. The FEIS Alternative Plan scenarios are based on the most current program with 61 affordable rental units including 40 senior units.
3. Public Uses = The water dependent uses on the West Parcel, the soccer fields and DPW facility on the East Parcel, and the proposed fire/EMS station on the South Parcel.

TABLE NO. 6A-16

DETAILED LEVEL OF SERVICE SUMMARY
FOR BUILD (WITH IMPROVEMENTS) CONDITIONS

Intersection	Movements	WITH STATION-FEIS						WITHOUT STATION-FEIS (MTC=35%)						WITHOUT STATION (MTC=25%)					
		AM			PM			AM			PM			AM			PM		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
2. US Route 9(NB-SB)/Pocantico St.(EB)/Old Broadway(WB)/Philipsburg Manor Driveway(PMD)	EB LTR	F	118.7	1.11	F	144.6	1.19	F	119.7	1.12	F	97.7	1.06	F	130.5	1.15	F	100.3	1.07
	WB LTR	C	27.9	0.17	C	25.6	0.07	C	27.9	0.17	C	25.6	0.07	C	27.9	0.17	C	25.6	0.07
	NB LTR	B	13.4	0.38	B	15.8	0.48	B	13.5	0.38	B	16.0	0.49	B	13.5	0.38	B	16.0	0.49
	SB LTR	B	13.4	0.68	B	14.2	0.64	B	13.0	0.65	B	14.4	0.64	B	13.1	0.66	B	14.5	0.65
	PMD LTR	D	42.9	0.04	D	42.8	0.02	D	43.0	0.05	D	42.8	0.02	D	42.9	0.04	D	42.8	0.02
	OVERALL	C	31.7	0.00	D	40.2	0.00	C	31.8	0.00	C	29.6	0.00	D	34.0	0.00	C	30.1	0.00
5. US Route 9(NB-SB)/Bedford Rd.(WB)/New Broadway(EB)	EB LTR	E	60.3	0.48	E	57.7	0.29	E	60.4	0.48	E	57.7	0.29	E	60.4	0.48	E	57.7	0.29
	WB L	E	73.2	0.75	F	257.6	1.38	E	72.9	0.75	F	256.0	1.38	E	72.9	0.75	F	260.8	1.39
	WB R	E	57.4	0.26	E	60.1	0.47	E	57.6	0.28	E	60.1	0.47	E	57.6	0.28	E	60.1	0.47
	WB Overall	E	69.6	N/A	F	211.9	N/A	E	69.2	N/A	F	210.6	N/A	E	69.2	N/A	F	214.6	N/A
	NB TR	C	23.2	0.86	C	24.4	0.87	C	24.7	0.88	C	25.4	0.88	C	25.2	0.88	C	25.7	0.89
	SB LT	D	48.4	0.86	D	37.7	0.65	D	51.7	0.89	D	38.2	0.66	D	51.8	0.89	D	38.3	0.66
	OVERALL	D	41.1	0.78	E	70.6	0.86	D	43.1	0.79	E	70.4	0.87	D	43.3	0.79	E	71.5	0.87
6. US Route 9(NB-SB)/Beekman Ave.(EB)/Hudson Terrace(WB)	EB L	E	72.8	0.82	E	70.3	0.79	F	159.4	1.12	F	146.4	1.08	F	168.5	1.15	F	149.2	1.09
	EB TR	D	51.5	0.29	D	53.4	0.42	E	59.2	0.39	E	60.4	0.48	E	59.2	0.39	E	60.4	0.48
	EB Overall	E	67.6	NA	E	64.5	NA	F	135.6	NA	F	120.6	NA	F	143.0	NA	F	122.7	NA
	WB LTR	D	55.0	0.04	D	54.9	0.03	D	55.0	0.04	D	54.9	0.03	D	55.0	0.04	D	54.9	0.03
	NB LTR	C	32.5	0.34	C	34.9	0.43	C	29.9	0.20	C	32.9	0.36	C	29.9	0.20	C	33.0	0.36
	NB TR	D	50.9	0.85	E	58.8	0.91	D	51.9	0.86	E	62.0	0.93	D	51.9	0.86	E	62.0	0.93
	NB Overall	D	49.4	NA	E	56.8	NA	D	50.8	NA	E	59.8	NA	D	50.8	NA	E	59.8	NA
	SB LTR	C	21.1	0.73	B	17.9	0.61	B	13.7	0.66	B	12.0	0.56	B	13.7	0.66	B	12.0	0.57
OVERALL	D	39.1	0.68	D	39.4	0.63	D	47.3	0.69	D	46.5	0.64	D	48.8	0.70	D	46.9	0.64	
9. Beekman Ave.(EB-WB)/Pocantico St.(SB)	EB LT	b	13.4	N/A	b	13.9	N/A	b	14.5	N/A	c	19.0	N/A	b	14.9	N/A	c	19.5	N/A
	EB T	b	12.9	N/A	c	22.3	N/A	b	13.1	N/A	c	18.6	N/A	b	13.4	N/A	c	19.1	N/A
	EB Overall	b	13.1	NA	c	19.5	N/A	b	13.8	N/A	c	18.8	N/A	b	14.1	N/A	c	19.3	N/A
	WB TR	b	12.5	N/A	c	24.3	N/A	b	11.7	N/A	c	24.1	N/A	b	11.8	N/A	d	25.5	N/A
	SB LR	b	11.2	N/A	c	17.1	N/A	b	12.0	N/A	c	18.0	N/A	b	12.1	N/A	c	18.6	N/A
	OVERALL	b	12.6	N/A	c	20.5	N/A	b	12.9	N/A	c	20.3	N/A	b	13.1	N/A	c	21.1	N/A
16. US Route 9(NB-SB)/Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	39.9	0.73	D	44.8	0.79	D	39.9	0.73	D	40.5	0.72	D	40.7	0.75	D	40.8	0.73
	WB LTR	C	30.9	0.48	F	130.3	1.15	C	30.9	0.48	F	115.6	1.11	C	30.9	0.48	F	117.8	1.12
	NB LTR	C	21.4	0.51	D	50.2	0.79	B	18.0	0.35	D	50.2	0.79	B	18.2	0.36	D	54.1	0.81
	NB TR	C	21.4	0.72	C	22.6	0.75	C	21.4	0.72	C	22.6	0.75	C	21.4	0.72	C	22.6	0.75
	NB Overall	C	21.2	NA	C	26.5	NA	C	21.2	NA	C	26.5	NA	C	21.2	NA	C	27.1	NA
	SB LTR	B	10.9	0.05	B	11.6	0.09	B	10.9	0.05	B	11.6	0.09	B	10.9	0.05	B	11.6	0.09
	SB TR	C	22.5	0.75	C	24.5	0.79	C	22.5	0.75	C	24.5	0.79	C	22.5	0.75	C	24.5	0.79
	SB Overall	C	22.4	NA	C	24.2	NA	C	22.4	NA	C	24.2	NA	C	22.4	NA	C	24.2	NA
	OVERALL	C	25.8	0.74	D	45.1	0.93	C	25.7	0.74	D	42.2	0.91	C	25.9	0.75	D	42.8	0.93
18. H-Bridge(EB)/Main St.(WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	B	17.2	0.59	D	54.8	0.99	C	21.8	0.74	C	33.6	0.89	C	23.9	0.78	D	36.4	0.91
	WB L	B	13.6	0.18	B	15.0	0.30	B	13.9	0.21	B	14.4	0.26	B	14.0	0.22	B	14.5	0.27
	WB T	B	13.1	0.12	B	13.4	0.19	B	13.1	0.12	B	13.4	0.19	B	13.1	0.12	B	13.5	0.19
	WB R	B	13.4	0.18	B	13.2	0.15	B	13.2	0.13	B	13.2	0.15	B	13.2	0.13	B	13.2	0.15
	WB Overall	B	13.3	NA	B	13.7	NA	B	13.3	NA	B	13.6	NA	B	13.3	NA	B	13.6	NA
	NB L	B	13.9	0.55	B	17.1	0.66	B	15.0	0.58	B	17.5	0.67	B	15.1	0.59	B	18.4	0.69
	NB T	A	9.3	0.23	A	8.5	0.11	A	9.1	0.20	A	9.9	0.30	A	9.1	0.20	A	9.9	0.30
	NB R	A	7.9	0.02	A	8.0	0.03	A	7.9	0.02	A	8.0	0.03	A	7.9	0.02	A	8.0	0.03
	NB Overall	B	12.1	NA	B	15.0	NA	B	12.8	NA	B	14.1	NA	B	12.8	NA	B	14.7	NA
	SB LTR	A	8.0	0.03	A	8.7	0.14	A	8.7	0.14	A	8.8	0.16	A	8.7	0.14	A	8.8	0.16
OVERALL	B	13.7	0.56	C	30.1	0.80	B	15.5	0.65	B	20.0	0.76	B	16.4	0.67	B	21.2	0.78	
20 A. US Route 9(NB-SB)/West Franklin St.(EB) (Tarrytown)	EB R	F	83.2	1.04	F	112.6	1.12	F	83.2	1.04	F	81.2	1.03	F	94.2	1.07	F	86.2	1.04
	NB LT	A	9.8	0.49	B	17.6	0.70	A	8.4	0.44	B	16.9	0.69	A	8.5	0.44	B	17.8	0.71
	NB T	A	2.1	0.49	A	2.7	0.58	A	2.1	0.48	A	2.7	0.58	A	2.1	0.49	A	2.7	0.58
	NB Overall	A	5.0	NA	A	8.8	NA	A	4.3	NA	A	8.5	NA	A	4.4	NA	A	8.9	NA
	SB TR	C	27.7	0.87	D	35.6	0.94	C	27.7	0.87	C	31.7	0.91	C	28.1	0.87	C	32.0	0.91
	OVERALL	C	28.6	N/A	D	36.8	N/A	C	29.0	N/A	C	28.6	N/A	D	31.9	N/A	C	29.8	N/A
20 B. US Route 9(NB-SB)/East Franklin St.(WB) (Tarrytown)	WB LR	D	52.5	0.42	D	53.1	0.47	D	52.2	0.42	D	53.1	0.47	D	52.2	0.42	D	53.1	0.47
	NB TR	A	5.9	0.78	C	21.4	0.96	A	4.7	0.73	C	21.4	0.96	A	4.8	0.74	C	24.8	0.98
	SB LT	A	4.7	0.84	A	8.5	0.91	A	4.6	0.84	A	5.7	0.86	A	5.2	0.87	A	6.0	0.87
	OVERALL	A	5.8	0.84	B	15.4	0.97	A	5.3	0.84	B	14.2	0.97	A	5.6	0.85	B	16.1	0.98
21. US Route 9(NB-SB)/Benedict Ave.(WB) (Tarrytown)	WB L	D	43.2	0.27	D	43.7	0.41	D	43.2	0.27	D	43.7	0.41	D	43.2	0.27	D	43.7	0.41
	WB R	C	21.7	0.30	C	23.7	0.51	C	21.7	0.30	C	23.7	0.51	C	21.7	0.30	C	23.8	0.51
	WB Overall	C	26.6	NA	C	28.0	NA	C	26.6	NA	C	28.0	NA	C	26.6	NA	C	28.0	NA
	NB T	C	20.3	0.66	C	22.6	0.73	B	19.4	0.62	C	22.6	0.73	B	19.4	0.62	C	23.0	0.74
	SB L	A	9.2	0.40	C	21.7	0.60	A	7.8	0.38	C	21.7	0.60	A	7.9	0.38	C	22.9	0.61
	SB T	B	12.5	0.85	B	13.7	0.86	B	12.5	0.85	B	10.7	0.80	B	13.6	0.86	B	11.1	0.81
	SB Overall	B	12.0	NA	B	15.4	NA	B	11.8	NA	B	13.1	NA	B	12.7	NA	B	13.6	NA
OVERALL	B	16.7	0.77	B	19.9	0.75	B	16.1	0.77	B	19.0	0.75	B	16.6	0.79	B	19.4	0.75	

TABLE NO. 6A-16

DETAILED LEVEL OF SERVICE SUMMARY
FOR BUILD (WITH IMPROVEMENTS) CONDITIONS

Intersection	Movements	WITH STATION-FEIS						WITHOUT STATION-FEIS (MTC=35%)						WITHOUT STATION (MTC=25%)					
		AM			PM			AM			PM			AM			PM		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
22. Benedict Ave.(EB-WB)/ Highland Ave.(SB)/ Prospect Ave.(NB) (Tarrytown)	EB L	A	6.7	0.06	B	10.1	0.25	A	6.7	0.06	B	10.1	0.25	A	6.7	0.06	B	10.1	0.25
	EB TR	A	9.4	0.43	A	8.9	0.38	A	9.4	0.43	A	8.9	0.38	A	9.4	0.43	A	8.9	0.38
	EB Overall	A	9.3	NA	A	9.0	NA	A	9.3	NA	A	9.0	NA	A	9.3	NA	A	9.0	NA
	WB L	A	7.0	0.10	A	7.8	0.20	A	7.0	0.10	A	7.8	0.20	A	7.0	0.10	A	7.8	0.20
	WB TR	B	10.3	0.49	B	17.9	0.80	B	10.3	0.49	B	17.9	0.80	B	10.3	0.49	B	18.0	0.80
	WB Overall	A	10.0	NA	B	16.7	NA	A	10.0	NA	B	16.7	NA	A	10.0	NA	B	16.7	NA
	NB LTR	B	14.2	0.37	B	13.2	0.20	B	14.2	0.37	B	13.2	0.20	B	14.2	0.37	B	13.2	0.20
	OVERALL	B	11.9	0.54	B	15.6	0.77	B	11.9	0.54	B	15.6	0.77	B	11.9	0.54	B	15.6	0.77
24. US Route 9(NB-SB)/ NY Route 119(EB-WB) (Tarrytown)	EB LTR	D	39.5	0.72	C	33.2	0.45	D	39.5	0.72	C	33.2	0.45	D	39.7	0.73	C	33.2	0.46
	WB L	C	21.2	0.40	C	20.4	0.30	C	21.2	0.40	C	20.4	0.30	C	21.2	0.40	C	20.4	0.30
	WB LR	C	22.6	0.51	C	22.4	0.49	C	22.6	0.51	C	22.4	0.49	C	22.6	0.51	C	22.5	0.50
	WB R	C	31.7	0.77	D	45.0	0.90	C	31.7	0.77	D	45.0	0.90	C	31.9	0.78	D	49.1	0.93
	WB Overall	C	25.2	N/A	C	31.5	NA	C	25.2	NA	C	31.5	NA	C	25.3	NA	C	33.2	NA
	NB T	C	22.5	0.72	C	21.6	0.68	C	21.2	0.66	C	21.6	0.68	C	21.6	0.66	C	21.7	0.68
	NB R	A	4.9	0.78	A	0.9	0.32	A	4.9	0.78	A	0.9	0.32	A	4.9	0.78	A	0.9	0.32
	NB Overall	B	13.6	N/A	B	15.2	NA	B	12.5	NA	B	15.2	NA	B	12.5	NA	B	15.2	NA
	SB T	C	21.3	0.66	C	22.4	0.71	C	21.3	0.66	C	22.4	0.71	C	21.6	0.68	C	22.6	0.72
	OVERALL	C	20.3	0.77	C	23.3	0.75	C	20.0	0.77	C	23.3	0.75	C	20.1	0.77	C	24.0	0.76
25. US Route 9(NB-SB)/I- 87/I-287 Eastbound Ramps(EB-WB) (Tarrytown)	EB LTR	D	38.7	0.32	D	45.0	0.40	D	38.7	0.32	D	45.0	0.40	D	38.7	0.32	D	45.0	0.40
	WB LT	D	51.8	0.74	D	48.0	0.56	D	51.8	0.74	D	48.0	0.56	D	51.8	0.74	D	48.0	0.56
	WB R	F	152.7	1.27	B	15.3	0.53	F	120.5	1.19	B	15.3	0.53	F	120.9	1.19	B	15.3	0.53
	WB Overall	F	136.0	N/A	C	22.9	NA	F	108.5	NA	C	22.9	NA	F	108.9	NA	C	22.9	NA
	NB L	C	32.7	0.01	C	30.9	0.04	C	32.7	0.01	C	30.9	0.04	C	32.7	0.01	C	30.9	0.04
	NB TR	D	41.8	0.65	E	59.3	0.94	D	41.8	0.65	E	59.3	0.94	D	41.8	0.65	E	59.8	0.95
	NB Overall	D	41.8	N/A	E	59.1	NA	D	41.8	NA	E	59.1	NA	D	41.8	NA	E	59.6	NA
	SB L	B	11.5	0.53	B	16.9	0.85	B	11.5	0.53	B	16.9	0.85	B	11.8	0.55	B	17.8	0.86
	SB TR	A	4.9	0.45	A	1.6	0.29	A	4.9	0.45	A	1.6	0.29	A	4.9	0.45	A	1.6	0.29
	OVERALL	E	67.1	0.00	C	29.0	0.00	D	54.6	0.00	C	29.0	0.00	D	54.6	0.00	C	29.3	0.00

- Note (1) Signalized intersections represented by uppercase letters.
(2) Unsignalized intersections represented by lowercase letters.
(3) Delay is in seconds per vehicle.
(4) Overall Level of Service/Delay/Volume to Capacity Ratios not provided for Two-Way STOP control intersections.
(5) Level of Service at ramp junctions is based upon density (passenger cars/mile/lane).
(6) Overall Volume to Capacity Ratio is not provided for All-Way STOP control intersections.
(7) Due to program calculations, the Overall Volume to Capacity Ratio is not provided for certain signalized intersections.
(8) PMD represents Philipsburg Manor Driveway Approach. However, this approach is not included in the Overall intersection calculations.
(9) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

ATTACHMENT 3

HCS CAPACITY ANALYSES

Full summary reports are available electronically upon request. A hard copy is on file in the Sleepy Hollow Village Clerk's office and is available upon request. All such requests should be made in writing to Mr. Dwight Douglas, Village Administrator.

ATTACHMENT 4

SENSITIVITY ANALYSES

TABLE NO. 6A-10																				
SENSITIVITY ANALYSIS																				
PEAK HOUR DETAILED LEVEL OF SERVICE SUMMARY																				
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)																				
Intersection	Movements	AM						PM						Saturday						
		Build			Build (Sensitivity Analysis)			Build			Build (Sensitivity Analysis)			Build			Build (Sensitivity Analysis)			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
2.	US Route 9/Pocantico St./ Old Broadway/ Philipsburg Manor Driveway	EB LTR	F	118.7	1.11	F	129.4	1.14	F	144.6	1.19	F	148.8	1.20	D	37.7	0.77	D	37.9	0.77
		WB LTR	C	27.9	0.17	C	27.9	0.17	C	25.6	0.07	C	25.6	0.07	C	22.7	0.06	C	22.7	0.06
		NB LTR	B	13.4	0.38	B	13.4	0.38	B	15.8	0.48	B	15.8	0.48	B	17.4	0.43	B	17.4	0.43
		SB LTR	B	13.4	0.68	B	13.5	0.68	B	14.2	0.64	B	14.3	0.64	B	16.9	0.62	B	16.9	0.62
		PMD LTR	D	42.9	0.04	D	42.9	0.04	D	42.8	0.02	D	42.8	0.02	D	43.9	0.18	D	43.9	0.18
		OVERALL	C	31.7	-	C	33.8	-	D	40.2	-	D	41.1	-	C	20.7	-	C	20.7	-
5.	US Route 9/ Bedford Rd./New Broadway	EB LTR	E	60.3	0.48	E	60.3	0.48	E	57.7	0.29	E	57.7	0.29	E	58.1	0.32	E	58.1	0.32
		WB L	E	73.2	0.75	E	74.3	0.77	F	257.6	1.38	F	265.6	1.40	F	89.5	0.88	F	92.5	0.89
		WB R	E	57.4	0.26	E	57.4	0.26	E	60.1	0.47	E	60.1	0.47	E	58.0	0.31	E	58.0	0.31
		WB Overall	E	69.6	N/A	E	70.5	N/A	F	211.9	N/A	F	218.6	N/A	F	82.3	N/A	F	84.6	N/A
		NB TR	C	23.2	0.86	C	23.8	0.87	C	24.4	0.87	C	24.9	0.88	B	17.3	0.76	B	17.5	0.76
		SB LT	D	48.4	0.86	D	48.6	0.86	D	37.7	0.64	D	37.8	0.64	D	38.5	0.67	D	38.6	0.67
		OVERALL	D	41.1	-	D	41.5	-	E	70.6	-	E	72.5	-	D	37.5	-	D	38.0	-
20A.	US Route 9/West Franklin St. (Tarrytown)	EB R	F	83.2	1.04	F	95.4	1.08	F	112.6	1.12	F	120.5	1.14	E	77.6	1.01	F	79.1	1.02
		NB LT / L	A	9.8	0.49	B	10.1	0.50	B	17.6	0.70	C	18.7	0.72	B	13.2	0.57	B	13.4	0.58
		NB T	A	2.1	0.50	A	2.2	0.50	A	2.7	0.58	A	2.7	0.59	A	2.5	0.55	A	2.5	0.56
		NB Overall	A	5.0	N/A	A	5.1	NA	A	8.8	N/A	B	9.3	NA	A	6.5	N/A	A	6.6	NA
		SB TR	C	27.7	0.87	C	28.3	0.87	D	35.6	0.94	B	36.3	0.94	C	33.5	0.92	C	34.2	0.93
		OVERALL	C	28.6	-	D	31.8	-	D	36.8	-	E	38.8	-	C	28.5	-	D	29.1	-
24.	US Route 9/NY Route 119 (Tarrytown)	EB LTR	D	39.5	0.72	D	39.8	0.73	C	33.2	0.45	C	33.2	0.46	C	34.5	0.56	C	34.5	0.56
		WB L	C	21.2	0.40	C	21.2	0.40	C	20.4	0.30	C	20.4	0.30	B	19.5	0.19	B	19.5	0.19
		WB LR	C	22.6	0.51	C	22.7	0.51	C	22.4	0.49	C	22.5	0.50	C	21.2	0.38	C	21.3	0.38
		WB R	C	31.7	0.70	C	32.0	0.78	D	45.0	0.90	D	49.8	0.93	C	32.7	0.79	C	33.1	0.80
		WB Overall	C	25.2	N/A	C	25.4	NA	C	31.5	NA	C	33.8	NA	C	26.4	NA	C	26.7	NA
		NB T	C	21.2	0.66	C	21.2	0.66	C	21.6	0.68	C	21.7	0.68	C	20.9	0.64	C	20.9	0.64
		NB R	A	4.9	0.78	A	4.9	0.78	A	0.9	0.32	A	0.9	0.32	A	0.8	0.22	A	0.8	0.22
		NB Overall	B	12.5	N/A	B	12.6	NA	B	15.2	NA	B	15.3	NA	B	15.9	NA	B	15.9	NA
		SB T	C	21.3	0.66	C	21.6	0.68	C	22.4	0.71	C	22.6	0.72	C	22.3	0.71	C	22.4	0.71
OVERALL	C	20.0	-	C	20.2	-	C	23.3	-	C	24.1	-	C	22.2	-	C	22.3	-		

- Notes: (1) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.
(2) Sensitivity Analysis based on Mass Transit Credit = 30% and Gravity Model Reduction = 35%

Full summary reports are available electronically upon request. A hard copy is on file in the Sleepy Hollow Village Clerk's office and is available upon request. All such requests should be made in writing to Mr. Dwight Douglas, Village Administrator.

ATTACHMENT 5

FEIS ALTERNATIVE PLAN WITH 400 SPACE LOT ANALYSIS

TABLE NO. 6A-11														
SENSITIVITY ANALYSIS														
PEAK HOUR DETAILED LEVEL OF SERVICE SUMMARY														
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)														
Intersection		Movements	AM						PM					
			Build (550 Space Station)			Build (400 Space Station)			Build (550 Space Station)			Build (400 Space Station)		
			LOS	Delay	V/C Ratio									
10.	Beekman Ave.(EB-WB)/Cortland St(NB)	NB L	c	22.3	0.39	c	17.8	0.17	e	37.5	0.50	e	37.5	0.50
		NB R	c	16.3	0.41	c	16.3	0.41	c	19.1	0.46	c	19.1	0.46
		NB Overall	c	18.6	N/A	c	16.6	NA	d	25.3	N/A	d	25.3	N/A
16.	US Route 9(NB-SB)/Main St.(EB)/Neperan Rd.(WB) (Tarrytown)	EB LTR	D	39.9	0.73	D	39.9	0.73	D	44.8	0.79	D	40.5	0.72
		WB LTR	C	30.9	0.48	C	30.9	0.48	F	130.3	1.15	F	115.6	1.11
		NB LTR/L	C	24.0	0.51	B	18.0	0.35	D	50.2	0.79	D	50.2	0.79
		NB TR	C	21.4	0.72	C	21.4	0.72	C	22.6	0.75	C	22.6	0.75
		NB Overall	C	21.7	NA	C	21.2	NA	C	26.5	NA	C	26.5	NA
		SB LTR/L	B	10.9	0.05	B	10.9	0.05	B	11.6	0.09	B	11.6	0.09
		SB TR	C	22.5	0.75	C	22.5	0.75	C	24.5	0.79	C	24.5	0.79
		SB Overall	C	22.4	NA	C	22.4	NA	C	24.2	NA	C	24.2	NA
		OVERALL	C	25.8	-	C	25.7	-	D	45.1	-	D	42.2	-
18.	H-Bridge(EB)/Main St.(WB)/ Cortland St.(SB)/Depot Plaza(NB) (Tarrytown)	EB LTR	B	17.2	0.59	B	17.2	0.59	D	54.8	0.99	C	30.3	0.86
		WB L	B	13.6	0.18	B	13.6	0.18	B	15.0	0.30	B	14.3	0.25
		WB T	B	13.1	0.12	B	13.1	0.12	B	13.4	0.19	B	13.4	0.19
		WB R	B	13.4	0.18	B	13.2	0.18	B	13.2	0.15	B	13.2	0.15
		WB Overall	B	13.3	NA	B	13.2	NA	B	13.7	NA	B	13.5	NA
		NB L	B	13.9	0.55	B	13.9	0.55	B	17.1	0.66	B	17.1	0.66
		NB T	A	9.3	0.23	A	8.9	0.23	A	8.5	0.11	A	8.5	0.11
		NB R	A	7.9	0.02	A	7.9	0.02	A	8.0	0.03	A	8.0	0.03
		NB Overall	B	12.1	NA	B	12.2	NA	B	15.0	NA	B	15.0	NA
		SB LTR	A	8.0	0.03	A	8.0	0.03	A	8.7	0.14	A	8.7	0.14
		OVERALL	B	13.7	-	B	13.9	-	C	30.1	0.80	B	19.8	-
20A.	US Route 9/West Franklin St. (Tarrytown)	EB R	F	83.2	1.04	F	83.2	1.04	F	112.6	1.12	F	81.2	1.03
		NB LT / L	A	9.8	0.49	A	8.4	0.44	B	17.6	0.70	B	16.9	0.69
		NB T	A	2.1	0.50	A	2.1	0.48	A	2.7	0.58	A	2.7	0.58
		NB Overall	A	5.0	N/A	A	4.3	N/A	A	8.8	N/A	A	8.5	NA
		SB TR	C	27.7	0.87	C	27.7	0.87	D	35.6	0.94	C	31.7	0.91
		OVERALL	C	28.6	-	C	29.0	-	D	36.8	-	C	28.6	-
31.	Beekman Ave.(EB-WB)/Viaduct Drwy(SB)	EB LT	a	8.3	0.00	a	8.1	0.00	a	8.3	0.00	a	8.3	0.00
		SB LR	b	13.5	0.05	b	13.1	0.05	c	17.7	0.40	c	17.3	0.28

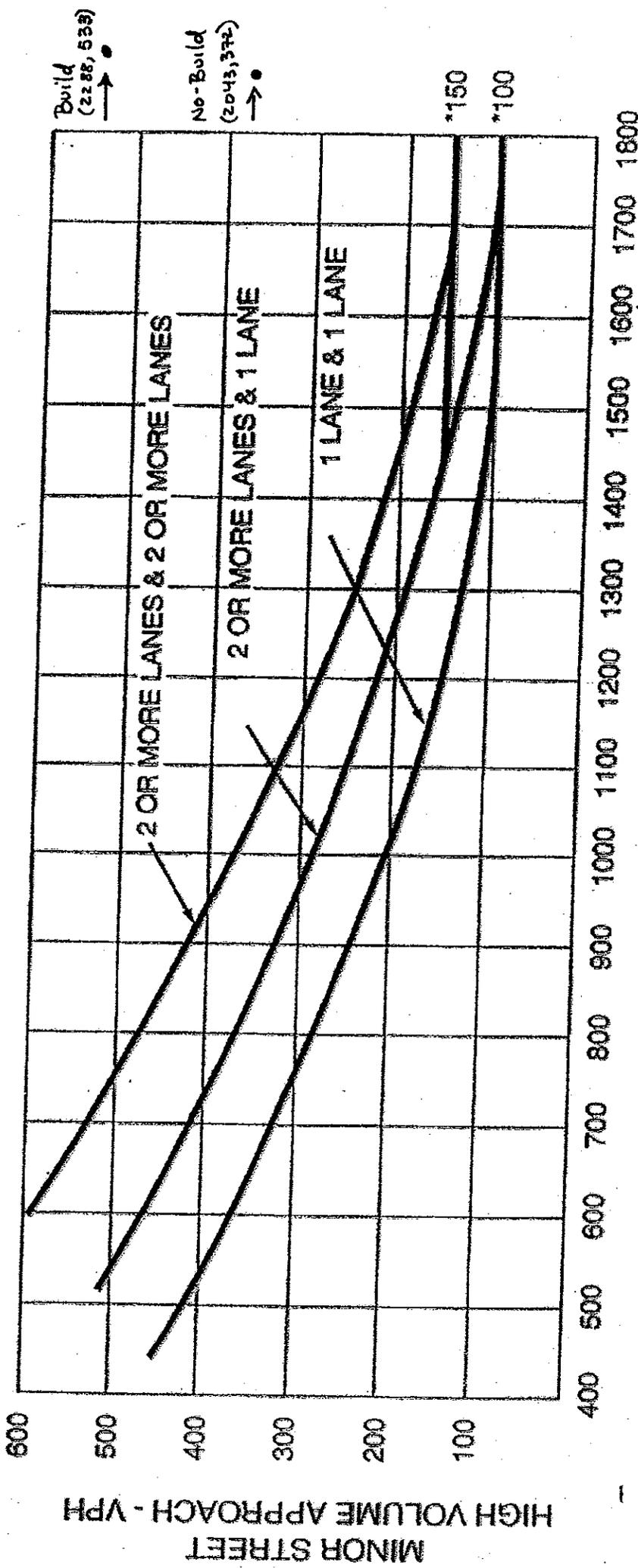
Full summary reports are available electronically upon request. A hard copy is on file in the Sleepy Hollow Village Clerk's office and is available upon request. All such requests should be made in writing to Mr. Dwight Douglas, Village Administrator.

ATTACHMENT 6

TRAFFIC SIGNAL WARRANTS

Figure 4C-3. Warrant 3, Peak Hour

Route 9 / West. Franklin.



**MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)**

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

ATTACHMENT 7

ONE WAY ANALYSIS

TABLE NO. 6A-12A

W. FRANKLIN AND MAIN STREET ONE-WAY ANALYSIS

PEAK HOUR DETAILED LEVEL OF SERVICE SUMMARY

FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)

Intersection	Movements	AM						PM						Saturday					
		Build			Build (One-Way Analysis)			Build			Build (One-Way Analysis)			Build			Build (One-Way Analysis)		
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
16. US Route 9(NB-SB)/Main St.(EB)/ Neperan Rd.(WB) (Tarrytown)	EB LTR	D	39.9	0.73	N/A	N/A	N/A	D	44.8	0.79	N/A	N/A	N/A	D	48.7	0.83	N/A	N/A	N/A
	WB L	N/A	N/A	N/A	C	34.9	0.15	N/A	N/A	N/A	D	42.9	0.46	N/A	N/A	N/A	C	33.7	0.23
	WB LTR/TR	C	30.9	0.48	D	39.9	0.44	F	130.3	1.15	E	61.7	0.82	D	44.6	0.76	D	38.8	0.49
	WB Overall	N/A	N/A	N/A	D	38.8	N/A	N/A	N/A	N/A	E	55.1	N/A	N/A	N/A	N/A	D	37.2	N/A
	NB LTR/L	C	24.0	0.51	E	59.1	0.89	D	50.2	0.79	D	52.0	0.9	F	146.9	1.17	E	55.5	0.91
	NB TR	C	21.4	0.72	B	15.7	0.78	C	22.6	0.75	B	13.7	0.8	B	19.6	0.67	B	15.9	0.74
	NB Overall	C	21.7	NA	C	31.5	N/A	C	26.5	NA	C	30.5	N/A	D	46.8	NA	C	33.5	N/A
	SB LTR/L	B	10.9	0.05	B	16.3	0.05	B	11.6	0.09	B	19.6	0.08	B	12.4	0.15	C	23.2	0.17
	SB TR/T	C	22.5	0.75	D	36.2	0.85	C	24.5	0.79	D	51.2	0.94	C	24.5	0.79	E	72.4	1.02
	SB R	N/A	N/A	N/A	C	16.2	0.07	N/A	N/A	N/A	C	20.1	0.16	N/A	N/A	N/A	C	22.0	0.16
	SB Overall	C	22.4	NA	C	34.6	N/A	C	24.2	NA	D	47.0	N/A	C	24.0	NA	E	65.3	N/A
	OVERALL	C	25.8	-	C	33.1	-	D	45.1	-	D	38.4	-	D	38.7	1.04	D	43.7	-
20A. US Route 9/West Franklin St. (Tarrytown)	EB L	N/A	N/A	N/A	B	16.7	0.27	N/A	N/A	N/A	B	18.9	0.26	N/A	N/A	N/A	B	17.6	0.25
	EB R	F	83.2	1.04	D	45.1	0.93	F	112.6	1.12	D	52.8	0.95	E	77.6	1.01	E	56.3	0.98
	EB Overall	N/A	N/A	N/A	D	38.0	N/A	N/A	N/A	N/A	D	44.7	N/A	N/A	N/A	N/A	D	47.6	N/A
	NB LT/L	A	9.8	0.49	N/A	N/A	N/A	B	17.6	0.70	N/A	N/A	N/A	B	13.2	0.57	N/A	N/A	N/A
	NB T	A	2.1	0.50	C	31.2	0.84	A	2.7	0.58	D	38.9	0.95	A	2.5	0.55	C	33.6	0.89
	NB Overall	A	5.0	N/A	N/A	N/A	N/A	A	8.8	N/A	N/A	N/A	N/A	A	6.5	N/A	N/A	N/A	N/A
	SB TR/T	C	27.7	0.87	D	52.7	0.96	D	35.6	0.94	D	46.5	0.95	C	33.5	0.92	D	49.2	0.95
OVERALL	C	28.6	-	D	38.9	-	D	36.8	-	D	42.4	-	C	28.5	-	D	41.7	-	

TABLE NO. 6A-12B																				
HUDSON AND NEW BROADWAY ONE-WAY ANALYSIS																				
PEAK HOUR DETAILED LEVEL OF SERVICE SUMMARY																				
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)																				
Intersection	Movements	AM						PM						Saturday						
		Build			Build (One-Way Analysis)			Build			Build (One-Way Analysis)			Build			Build (One-Way Analysis)			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
5.	US Route 9/ Bedford Rd./New Broadway	EB LTR	E	60.3	0.48	NA	NA	NA	E	57.7	0.29	NA	NA	NA	E	58.9	0.38	NA	NA	NA
		WB L	E	73.6	0.76	D	51.0	0.72	F	257.6	1.38	F	126.9	1.11	F	89.5	0.88	D	54.1	0.77
		WB R	E	57.3	0.25	D	39.6	0.21	E	60.1	0.47	D	41.1	0.34	E	58.0	0.31	D	39.9	0.23
		WB Overall	E	69.9	N/A	D	48.7	N/A	F	211.9	N/A	F	108.6	N/A	F	82.3	N/A	D	51.2	N/A
		NB TR	C	23.0	0.86	A	5.5	0.72	C	24.4	0.87	A	5.8	0.74	B	17.3	0.76	A	4.1	0.64
		SB LT	D	48.2	0.85	C	30.8	0.74	D	37.7	0.64	C	26.1	0.56	D	38.5	0.67	C	26.5	0.59
		OVERALL	D	41.0	-	C	23.1	-	E	70.6	-	D	37.6	-	D	37.6	-	C	22.0	-
6.	US Route 9(NB-SB) /Beekman Ave.(EB) /Hudson Terrace (WB)	EB L	E	72.1	0.81	E	57.1	0.79	E	70.0	0.79	D	55.1	0.76	E	61.5	0.68	D	48.3	0.66
		EB TR	D	51.5	0.29	D	40.4	0.28	D	53.2	0.41	D	41.9	0.34	D	52.7	0.38	D	41.4	0.36
		EB Overall	E	67.0	NA	D	53.0	NA	E	64.3	NA	D	50.6	NA	E	58.4	NA	D	45.9	NA
		WB LTR	D	55.0	0.04	NA	NA	NA	D	54.9	0.03	NA	NA	NA	E	55.0	0.04	NA	NA	NA
		NB LTR	C	32.1	0.32	C	22.2	0.25	C	34.7	0.43	C	23.0	0.30	D	38.6	0.38	C	22.6	0.28
		NB TR	D	50.7	0.85	C	34.8	0.79	E	59.0	0.92	D	38.8	0.84	D	47.8	0.79	C	31.5	0.73
		NB Overall	D	49.3	NA	C	33.8	NA	E	57.1	NA	D	37.5	NA	D	46.9	NA	C	30.6	NA
		SB LTR	C	21.1	0.73	A	2.8	0.50	B	17.9	0.61	A	2.6	0.46	C	20.3	0.70	A	2.7	0.50
OVERALL	D	38.9	-	C	22.2		D	39.4	-	C	22.8	-	D	35.9	-	B	19.4	-		

Notes: (1) Due to the operation of the intersection of US Route 9/Bedford Rd./New Broadway, SB US Route 9 was considered the SB approach and New Broadway was considered the EB approach.

Full summary reports are available electronically upon request. A hard copy is on file in the Sleepy Hollow Village Clerk's office and is available upon request. All such requests should be made in writing to Mr. Dwight Douglas, Village Administrator.

ATTACHMENT 8

ROUTE 117/ROUTE 9 ANALYSES

TABLE NO. 6A-13a											
DETAILED LEVEL OF SERVICE SUMMARY											
FOR EXISTING CONDITIONS											
Intersection		Movements	AM			PM			SAT.		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	8.3	0.02	a	9.3	0.01	a	8.3	0.01
		WB L	e	35.6	0.43	f	80.2	0.84	c	21.8	0.28
		WB R	b	11.2	0.26	c	23.0	0.70	b	11.3	0.27
		WB Overall	c	18.5	N/A	e	38.3	N/A	b	14.3	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	b	11.4	0.49	b	10.7	0.29	a	9.2	0.22
		WB LR	d	27.4	0.09	c	24.1	0.26	c	15.5	0.05

TABLE NO. 6A-13b								
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection		Movements	Existing			No-Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	8.3	0.02	a	8.5	0.03
		WB L	e	35.6	0.43	f	69.1	0.74
		WB R	b	11.2	0.26	b	11.5	0.28
		WB Overall	c	18.5	N/A	d	33.2	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	b	11.4	0.49	b	11.9	0.52
		WB LR	d	27.4	0.09	c	30.2	0.11

TABLE NO. 6A-13c								
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection		Movements	Existing			No-Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	9.3	0.01	a	9.6	0.02
		WB L	f	80.2	0.84	f	141.8	1.06
		WB R	c	23.0	0.70	d	26.4	0.75
		WB Overall	e	38.3	N/A	f	59.2	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	b	10.7	0.29	b	11.1	0.30
		WB LR	c	24.1	0.26	d	26.4	0.31

TABLE NO. 6A-13d								
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection		Movements	Existing			No-Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	8.3	0.01	a	8.5	0.01
		WB L	c	21.8	0.28	c	24.6	0.34
		WB R	b	11.3	0.27	b	11.6	0.28
		WB Overall	b	14.3	N/A	c	15.6	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	a	9.2	0.22	a	9.4	0.23
		WB LR	c	15.5	0.05	c	15.4	0.05

TABLE NO. 6A-13e								
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)								
Intersection		Movements	No-Build			Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	8.5	0.03	a	8.6	0.03
		WB L	f	69.1	0.74	f	120.2	0.97
		WB R	b	11.5	0.28	b	11.8	0.28
		WB Overall	d	33.2	N/A	f	57.5	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	b	11.9	0.52	b	12.4	0.54
		WB LR	c	30.2	0.11	d	33.8	0.12

TABLE NO. 6A-13f								
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)								
Intersection		Movements	No-Build			Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	9.6	0.02	a	9.8	0.02
		WB L	f	141.8	1.06	f	281.3	1.43
		WB R	d	26.4	0.75	d	28.9	0.77
		WB Overall	f	59.2	N/A	f	111.2	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	b	11.1	0.30	b	11.5	0.32
		WB LR	d	26.4	0.31	d	30.3	0.34

TABLE NO. 6A-13g								
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)								
Intersection		Movements	No-Build			Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	8.5	0.01	a	8.6	0.01
		WB L	c	24.6	0.34	e	38.2	0.57
		WB R	b	11.6	0.28	b	12.0	0.29
		WB Overall	c	15.6	N/A	c	22.4	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	a	9.4	0.23	a	9.7	0.25
		WB LR	c	15.4	0.05	c	17.0	0.06

TABLE NO. 6A-13h								
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)								
Intersection		Movements	No-Build			Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	8.5	0.03	a	8.7	0.03
		WB L	f	69.1	0.74	f	130.9	1.00
		WB R	b	11.5	0.28	b	11.9	0.29
		WB Overall	d	33.2	N/A	f	62.1	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	b	11.9	0.52	b	12.6	0.54
		WB LR	c	30.2	0.11	e	35.5	0.13

TABLE NO. 6A-13i								
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)								
Intersection		Movements	No-Build			Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	9.6	0.0	a	9.8	0.02
		WB L	f	141.8	1.1	f	289.9	1.45
		WB R	d	26.4	0.8	d	29.1	0.77
		WB Overall	f	59.2	N/A	f	114.2	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	b	11.1	0.3	b	11.5	0.32
		WB LR	d	26.4	0.3	d	30.8	0.35

TABLE NO. 6A-13j

PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY

FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)

	Intersection	Movements	No-Build			Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A.	US Route 9(NB-SB)/ Northern Route 117(WB)	SB L	a	8.5	0.01	a	8.6	0.01
		WB L	c	24.6	0.34	e	38.5	0.57
		WB R	b	11.6	0.28	b	12.0	0.29
		WB Overall	c	15.6	N/A	c	22.5	N/A
B.	US Route 9(NB-SB)/ Southern Route 117(WB)	SB L	a	9.4	0.23	a	9.7	0.25
		WB LR	c	15.4	0.05	c	17.0	0.06

Full summary reports are available electronically upon request. A hard copy is on file in the Sleepy Hollow Village Clerk's office and is available upon request. All such requests should be made in writing to Mr. Dwight Douglas, Village Administrator.

ATTACHMENT 9

ADDITIONAL TARRYTOWN LOCATIONS

TABLE NO. 6A-14a											
DETAILED LEVEL OF SERVICE SUMMARY											
FOR EXISTING CONDITIONS											
Intersection	Movements	AM			PM			SAT.			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	26.0	0.44	C	24.0	0.21	C	24.0	0.21
		WBLTR	C	30.0	0.62	C	24.1	0.23	C	29.0	0.59
		NB LTR	B	10.6	0.64	B	11.2	0.67	B	10.3	0.62
		SBLTR	A	7.6	0.71	A	7.1	0.70	A	6.3	0.66
		OVERALL	B	13.2	-	B	10.6	-	B	11.6	-
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.7	0.10	C	28.4	0.05	C	28.4	0.06
		WB LTR	D	45.8	0.78	D	48.5	0.81	D	38.7	0.68
		NB LT	B	16.2	0.24	B	18.1	0.38	B	16.4	0.25
		NB R	B	14.4	0.06	B	14.7	0.09	B	14.6	0.07
		NB Overall	B	15.9	N/A	B	17.5	N/A	B	16.0	N/A
		SB LTR	C	31.4	0.14	C	31.1	0.10	C	31.8	0.19
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	b	10.50	0.21	a	9.90	0.26	a	9.60	0.17
		NB LT	a	7.7	0.14	a	7.5	0.08	a	7.4	0.05
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	b	13.7	0.39	b	11.9	0.24	b	10.6	0.16
		SB LT	a	7.5	0.09	a	7.8	0.08	a	7.5	0.05
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	7.6	0.03	a	7.8	0.07	a	7.6	0.04
		NB LR	b	11.50	0.15	b	10.90	0.08	a	9.70	0.05
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	10.3	N/A	b	12.0	N/A	a	9.5	N/A
		WB TR	b	11.6	N/A	c	18.8	N/A	b	10.6	N/A
		SB LR	b	11.7	N/A	c	15.0	N/A	b	10.5	N/A
		OVERALL	b	11.3	N/A	c	16.1	N/A	b	10.3	N/A
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	11.0	0.10	b	10.7	0.05	a	9.9	0.03
		EB LR	d	28.10	0.22	d	27.00	0.26	c	23.60	0.12
H	US Route 9(NB-SB)/ Independence St.(EB) (Tarrytown)	NB LT	b	11.4	0.15	b	10.8	0.03	b	10.0	0.04
		EB LR	f	96.50	0.70	f	104.50	0.73	d	25.20	0.23
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	11.2	0.10	b	11.0	0.06	b	10.2	0.05
		SB LTR	b	10.4	0.01	b	10.6	0.03	b	10.3	0.02
		WB LTR	e	45.8	0.15	f	51.6	0.14	f	54.5	0.26
		EB LTR	f	52.6	0.55	e	43.0	0.38	c	21.2	0.17
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	C	33.4	0.69	D	42.3	0.82	C	26.4	0.33
		NB TR	C	28.2	0.94	C	28.9	0.95	C	22.2	0.89
		SB L	A	7.9	0.22	A	7.2	0.18	A	6.8	0.16
		SB T	C	25.1	0.92	C	24.9	0.92	B	15.4	0.79
		SB Overall	C	24.3	N/A	C	24.3	N/A	B	15.1	N/A
		OVERALL	C	27.0	0.88	C	28.5	0.91	B	19.2	0.75

TABLE NO. 6A-14b								
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	26.0	0.44	C	27.4	0.54
		WBLTR	C	30.0	0.62	E	72.7	0.97
		NB LTR	B	10.6	0.64	B	11.4	0.67
		SBLTR	A	7.6	0.71	A	9.6	0.78
		OVERALL	B	13.2	-	C	21.4	-
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.7	0.10	C	28.7	0.10
		WB LTR	D	45.8	0.78	D	53.6	0.84
		NB LT	B	16.2	0.24	B	16.3	0.24
		NB R	B	14.4	0.06	B	14.4	0.06
		NB Overall	B	15.9	N/A	B	16.0	N/A
		SB LTR	C	31.4	0.14	C	32.0	0.22
		OVERALL	C	30.7	0.35	C	34.4	0.39
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	b	10.5	0.21	B	18.8	0.40
		NB LT	a	7.7	0.14	B	19.8	0.47
		SB TR	N/A	N/A	N/A	C	33.8	0.22
		OVERALL	N/A	N/A	N/A	C	20.9	0.45
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	b	13.7	0.39	C	23.1	0.50
		NB TR	N/A	N/A	N/A	B	13.7	0.17
		SB LT	a	7.5	0.09	D	41.7	0.68
		OVERALL	N/A	N/A	N/A	C	26.4	0.32
E	West Franklin St.(EB- WB)/Miller Ave.(NB) (Tarrytown)	WB LT	a	7.6	0.03	a	7.8	0.04
		NB LR	b	11.5	0.15	b	12.9	0.18
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	10.3	N/A	b	12.2	N/A
		WB TR	b	11.6	N/A	b	13.5	N/A
		SB LR	b	11.7	N/A	b	12.9	N/A
		OVERALL	b	11.3	N/A	b	12.9	N/A
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	11.0	0.10	b	11.6	0.11
		EB LR	d	28.1	0.22	d	33.9	0.27
H	US Route 9(NB-SB)/ Independence St.(EB) (Tarrytown)	NB LT	b	11.4	0.15	b	12.0	0.16
		EB LR	f	96.5	0.70	f	157.2	0.89
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	11.2	0.10	b	11.8	0.11
		SB LTR	b	10.4	0.01	b	10.6	0.01
		WB LTR	e	45.8	0.15	f	59.2	0.20
		EB LTR	f	52.6	0.55	f	80.8	0.70
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	C	33.4	0.69	C	34.7	0.71
		NB TR	C	28.2	0.94	F	86.4	1.14
		SB L	A	7.9	0.22	B	10.7	0.31
		SB T	C	25.1	0.92	E	78.1	1.12
		SB Overall	C	24.3	N/A	E	75.5	N/A
		OVERALL	C	27.0	0.88	E	76.7	1.03

TABLE NO. 6A-14c								
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection		Movements	Existing			No-Build		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	24.0	0.21	C	24.0	0.21
		WBLTR	C	24.1	0.23	C	24.2	0.23
		NB LTR	B	11.2	0.67	B	11.8	0.69
		SBLTR	A	7.1	0.70	A	7.5	0.72
		OVERALL	B	10.6	-	B	11.1	-
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.4	0.05	C	28.4	0.05
		WB LTR	D	48.5	0.81	E	63.9	0.91
		NB LT	B	18.1	0.38	B	18.1	0.39
		NB R	B	14.7	0.09	B	14.7	0.09
		NB Overall	B	17.5	N/A	B	17.6	N/A
		SB LTR	C	31.1	0.10	C	31.6	0.16
		OVERALL	C	29.8	0.43	D	36.4	0.47
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	a	9.9	0.26	B	12.0	0.37
		NB LT	a	7.5	0.08	C	29.3	0.56
		SB TR	N/A	N/A	N/A	C	34.9	0.16
		OVERALL	N/A	N/A	N/A	C	20.1	0.40
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	b	11.9	0.24	C	32.9	0.59
		NB TR	N/A	N/A	N/A	A	8.5	0.23
		SB LT	a	7.8	0.08	D	46.2	0.70
		OVERALL	N/A	N/A	N/A	C	27.7	0.34
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	7.8	0.07	a	8.0	0.07
		NB LR	b	10.9	0.08	b	11.7	0.09
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	12.0	N/A	b	14.4	N/A
		WB TR	c	18.8	N/A	d	30.7	N/A
		SB LR	c	15.0	N/A	c	17.5	N/A
		OVERALL	c	16.1	N/A	c	23.0	N/A
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	10.7	0.05	b	11.1	0.06
		EB LR	d	27.0	0.26	d	30.2	0.29
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	10.8	0.03	b	11.1	0.03
		EB LR	f	104.5	0.73	f	149.4	0.87
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	11.0	0.06	b	11.4	0.06
		SB LTR	b	10.6	0.03	b	11.0	0.03
		WB LTR	f	51.6	0.14	f	67.8	0.19
		EB LTR	e	43.0	0.38	f	54.0	0.45
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	D	42.3	0.82	D	43.9	0.83
		NB TR	C	28.9	0.95	F	88.1	1.14
		SB L	A	7.2	0.18	A	9.3	0.25
		SB T	C	24.9	0.92	F	117.9	1.21
		SB Overall	C	24.3	N/A	F	114.7	N/A
		OVERALL	C	28.5	0.91	F	96.0	1.12

TABLE NO. 6A-14d								
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY								
FOR FUTURE CONDITIONS WITHOUT THE PROJECT (NO-BUILD)								
Intersection	Movements	Existing			No-Build			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	24.0	0.21	C	24.1	0.22
		WBLTR	C	29.0	0.59	C	29.7	0.61
		NB LTR	B	10.3	0.62	B	10.9	0.65
		SBLTR	A	6.3	0.66	A	6.9	0.69
		OVERALL	B	11.6	-	B	12.1	-
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.4	0.06	C	28.4	0.05
		WB LTR	D	38.7	0.68	D	43.2	0.75
		NB LT	B	16.4	0.25	B	16.3	0.25
		NB R	B	14.6	0.07	B	14.6	0.07
		NB Overall	B	16.0	N/A	B	16.0	N/A
		SB LTR	C	31.8	0.19	C	32.2	0.24
OVERALL	C	26.8	0.35	C	29.2	0.37		
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	a	9.6	0.17	B	15.0	0.31
		NB LT	a	7.4	0.05	C	21.2	0.33
		SB TR	N/A	N/A	N/A	C	33.6	0.19
		OVERALL	N/A	N/A	N/A	B	19.5	0.34
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	b	10.6	0.16	C	24.7	0.37
		NB TR	N/A	N/A	N/A	B	11.4	0.19
		SB LT	a	7.5	0.05	C	32.2	0.41
		OVERALL	N/A	N/A	N/A	C	22.1	0.26
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	7.6	0.04	a	7.7	0.04
		NB LR	a	9.7	0.05	b	10.2	0.06
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	a	9.5	N/A	b	10.5	N/A
		WB TR	b	10.6	N/A	b	12.1	N/A
		SB LR	b	10.5	N/A	b	11.3	N/A
		OVERALL	b	10.3	N/A	b	11.4	N/A
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	a	9.9	0.03	b	10.2	0.03
		EB LR	c	23.6	0.12	d	26.2	0.14
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	10.0	0.04	b	10.3	0.05
		EB LR	d	25.2	0.23	d	28.6	0.27
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	10.2	0.05	b	10.5	0.06
		SB LTR	b	10.3	0.02	b	10.6	0.03
		WB LTR	f	54.5	0.26	f	69.3	0.31
		EB LTR	c	21.2	0.17	c	23.8	0.19
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	C	26.4	0.33	C	26.5	0.34
		NB TR	C	22.2	0.89	C	28.9	0.95
		SB L	A	6.8	0.16	A	7.3	0.18
		SB T	B	15.4	0.79	C	20.8	0.88
		SB Overall	B	15.1	N/A	C	20.3	N/A
		OVERALL	B	19.2	0.75	C	24.8	0.79

TABLE NO. 6A-14e											
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
	Intersection	Movements	No-Build			Build			Build w/ Improvements		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	27.4	0.54	C	27.4	0.54	C	22.4	0.43
		WBLTR	E	72.7	0.97	E	72.7	0.97	C	30.8	0.72
		NB LTR	B	11.4	0.67	B	11.7	0.69	B	17.0	0.75
		SBLTR	A	9.6	0.78	A	9.6	0.78	B	19.4	0.86
		OVERALL	C	21.4	-	C	21.5	-	C	20.5	-
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.7	0.10	C	28.7	0.09			
		WB LTR	D	53.6	0.84	C	31.4	0.40			
		NB LT	B	16.3	0.24	B	17.8	0.36			
		NB R	B	14.4	0.06	B	14.3	0.04			
		NB Overall	B	16.0	N/A	B	17.5	N/A			
		OVERALL	C	34.4	0.39	C	23.1	0.34			
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	B	18.8	0.40	C	21.9	0.59			
		NB LT	B	19.8	0.47	C	22.7	0.61			
		SB TR	C	33.8	0.22	C	33.1	0.13			
		OVERALL	C	20.9	0.45	C	22.8	0.58			
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	C	23.1	0.50	C	25.6	0.62	D	42.8	0.82
		NB TR	B	13.7	0.17	B	13.7	0.16	A	8.8	0.13
		SB LT	D	41.7	0.68	F	155.7	1.19	D	38.5	0.78
		OVERALL	C	26.4	0.32	E	72.2	0.36	D	36.1	0.36
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	7.8	0.04	a	8.2	0.04			
		NB LR	b	12.9	0.18	c	16.9	0.25			
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	12.2	N/A	c	21.3	N/A			
		WB TR	b	13.5	N/A	c	22.2	N/A			
		SB LR	b	12.9	N/A	c	17.3	N/A			
		OVERALL	b	12.9	N/A	c	20.5	N/A			
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	11.6	0.11	b	13.0	0.13			
		EB LR	d	33.9	0.27	f	50.8	0.37			
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	12.0	0.16	b	13.6	0.19			
		EB LR	f	157.2	0.89	f	422.1	1.47			
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	11.8	0.11	b	13.2	0.13			
		SB LTR	b	10.6	0.01	b	11.7	0.02			
		WB LTR	f	59.2	0.20	f	219.6	0.53			
		EB LTR	f	80.8	0.70	f	346.0	1.37			
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	C	34.7	0.71	D	35.0	0.72	F	83.8	0.98
		NB TR	F	86.4	1.14	F	151.7	1.29	F	97.0	1.17
		SB L	B	10.7	0.31	B	15.4	0.40	A	8.7	0.31
		SB T	E	78.1	1.12	F	143.7	1.27	F	90.3	1.15
		SB Overall	E	75.5	N/A	F	139.2	N/A	F	87.4	N/A
		OVERALL	E	76.7	1.03	F	136.4	1.14	F	91.5	1.14

TABLE NO. 6A-14f											
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
	Intersection	Movements	No-Build			Build			Build w/ Improvements		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	24.0	0.21	C	24.0	0.20			
		WBLTR	C	24.2	0.23	C	24.1	0.22			
		NB LTR	B	11.8	0.69	B	11.2	0.66			
		SBLTR	A	7.5	0.72	A	7.5	0.72			
		OVERALL	B	11.1	-	B	10.8	-			
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.4	0.05	C	28.4	0.05			
		WB LTR	E	63.9	0.91	D	41.7	0.73			
		NB LT	B	18.1	0.39	B	17.1	0.31			
		NB R	B	14.7	0.09	B	14.1	0.02			
		NB Overall	B	17.6	N/A	B	16.9	N/A			
		OVERALL	D	36.4	0.47	C	28.4	0.37			
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	B	12.0	0.37	B	15.4	0.61	C	21.8	0.70
		NB LT	C	29.3	0.56	E	77.9	1.00	C	32.6	0.77
		SB TR	C	34.9	0.16	C	34.8	0.15	C	34.8	0.15
		OVERALL	C	20.1	0.40	D	41.6	0.75	C	26.7	0.69
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	C	32.9	0.59	E	72.9	0.98	D	36.2	0.79
		NB TR	A	8.5	0.23	A	8.3	0.19	B	11.6	0.21
		SB LT	D	46.2	0.70	F	425.0	1.82	D	50.5	0.91
		OVERALL	C	27.7	0.34	F	197.7	0.43	D	37.3	0.43
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	8.0	0.07	a	8.5	0.08			
		NB LR	b	11.7	0.09	b	15.5	0.14			
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	14.4	N/A	d	28.5	N/A			
		WB TR	d	30.7	N/A	f	120.8	N/A			
		SB LR	c	17.5	N/A	c	21.2	N/A			
		OVERALL	c	23.0	N/A	f	71.1	N/A			
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	11.1	0.06	b	12.4	0.07			
		EB LR	d	30.2	0.29	e	47.3	0.42			
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	11.1	0.03	b	12.4	0.04			
		EB LR	f	149.4	0.87	f	452.5	1.53			
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	11.4	0.06	b	12.8	0.07			
		SB LTR	b	11.0	0.03	b	12.2	0.03			
		WB LTR	f	67.8	0.19	f	216.5	0.46			
		EB LTR	f	54.0	0.45	f	177.7	0.86			
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	D	43.9	0.83	D	44.8	0.84	F	134.4	1.15
		NB TR	F	88.1	1.14	F	156.4	1.30	F	101.1	1.18
		SB L	A	9.3	0.25	B	13.2	0.34	A	7.8	0.26
		SB T	F	117.9	1.21	F	196.0	1.39	F	136.2	1.26
		SB Overall	F	114.7	N/A	F	191.1	N/A	F	132.7	NA
		OVERALL	F	96.0	1.12	F	162.7	1.25	F	119.2	1.24

TABLE NO. 6A-14g											
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FOR FUTURE CONDITIONS WITH THE PROJECT (BUILD)											
	Intersection	Movements	No-Build			Build			Build w/ Improvements		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	24.1	0.22	C	24.1	0.22			
		WBLTR	C	29.7	0.61	C	29.7	0.61			
		NB LTR	B	10.9	0.65	B	10.9	0.65			
		SBLTR	A	6.9	0.69	A	7.0	0.69			
		OVERALL	B	12.1	-	B	12.1	-			
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.4	0.05	C	28.4	0.05			
		WB LTR	D	43.2	0.75	D	44.6	0.77			
		NB LT	B	16.3	0.25	B	17.3	0.33			
		NB R	B	14.6	0.07	B	14.5	0.07			
		NB Overall	B	16.0	N/A	B	16.9	N/A			
		OVERALL	C	29.2	0.37	C	29.2	0.43			
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	B	15.0	0.31	C	20.7	0.66			
		NB LT	C	21.2	0.33	C	32.5	0.76			
		SB TR	C	33.6	0.19	C	33.6	0.19			
		OVERALL	B	19.5	0.34	C	26.1	0.67			
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	C	24.7	0.37	C	34.4	0.76	C	34.4	0.76
		NB TR	B	11.4	0.19	B	11.4	0.19	B	11.4	0.19
		SB LT	C	32.2	0.41	F	251.6	1.43	D	47.8	0.90
		OVERALL	C	22.1	0.26	F	118.7	0.41	D	36.1	0.41
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	7.7	0.04	a	8.2	0.05			
		NB LR	b	10.2	0.06	b	12.7	0.09			
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	10.5	N/A	c	17.7	N/A			
		WB TR	b	12.1	N/A	d	27.5	N/A			
		SB LR	b	11.3	N/A	b	14.0	N/A			
		OVERALL	b	11.4	N/A	c	21.5	N/A			
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	10.2	0.03	b	11.3	0.03			
		EB LR	d	26.2	0.14	e	39.2	0.20			
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	10.3	0.05	b	11.4	0.06			
		EB LR	d	28.6	0.27	f	50.5	0.42			
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	10.5	0.06	b	11.7	0.07			
		SB LTR	b	10.6	0.03	b	11.9	0.03			
		WB LTR	f	69.3	0.31	f	247.7	0.74			
		EB LTR	c	23.8	0.19	e	40.3	0.31			
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	C	26.5	0.34	C	26.6	0.35	C	33.4	0.48
		NB TR	C	28.9	0.95	F	84.4	1.13	D	43.2	1.02
		SB L	A	7.3	0.18	A	9.8	0.27	A	6.2	0.21
		SB T	C	20.8	0.88	E	55.9	1.06	C	27.1	0.96
		SB Overall	C	20.3	N/A	D	54.2	N/A	C	26.3	NA
		OVERALL	C	24.8	0.79	E	67.5	0.93	C	34.8	0.92

TABLE NO. 6A-14h											
PEAK AM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	27.4	0.54	C	27.4	0.54	C	22.4	0.43
		WBLTR	E	72.7	0.97	E	72.7	0.97	C	30.8	0.72
		NB LTR	B	11.4	0.67	B	11.4	0.67	B	16.5	0.75
		SBLTR	A	9.6	0.78	A	9.5	0.77	B	18.8	0.86
	OVERALL	C	21.4	-	C	21.4	-	C	20.1	-	
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.7	0.10	C	28.7	0.10			
		WB LTR	D	53.6	0.84	C	32.7	0.51			
		NB LT	B	16.3	0.24	B	16.9	0.29			
		NB R	B	14.4	0.06	B	14.4	0.06			
		NB Overall	B	16.0	N/A	B	16.5	N/A			
		SB LTR	C	32.0	0.22	C	32.2	0.24			
	OVERALL	C	34.4	0.39	C	24	0.34				
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	B	18.8	0.40	C	25.7	0.72			
		NB LT	B	19.8	0.47	C	23.6	0.64			
		SB TR	C	33.8	0.22	C	33.8	0.22			
		OVERALL	C	20.9	0.45	C	25.5	0.67			
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	C	23.1	0.50	C	26.7	0.65	D	54.3	0.9
		NB TR	B	13.7	0.17	B	13.9	0.19	A	8.5	0.15
		SB LT	D	41.7	0.68	F	349.9	1.66	C	33.7	0.83
		OVERALL	C	26.4	0.32	F	164.4	0.39	D	38.6	0.39
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	7.8	0.04	a	8.2	0.04			
		NB LR	b	12.9	0.18	c	16.2	0.24			
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	12.2	N/A	c	19.4	N/A			
		WB TR	b	13.5	N/A	c	20.1	N/A			
		SB LR	b	12.9	N/A	c	15.0	N/A			
		OVERALL	b	12.9	N/A	c	18.6	N/A			
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	11.6	0.11	b	13.0	0.13			
		EB LR	d	33.9	0.27	f	50.2	0.37			
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	12.0	0.16	b	13.6	0.19			
		EB LR	f	157.2	0.89	f	368.7	1.36			
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	11.8	0.11	b	13.2	0.13			
		SB LTR	b	10.6	0.01	b	11.2	0.02			
		WB LTR	f	59.2	0.20	f	145.5	0.40			
		EB LTR	f	80.8	0.70	f	240.1	1.14			
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	C	34.7	0.71	D	35.0	0.72	F	83.8	0.98
		NB TR	F	86.4	1.14	F	124.9	1.23	E	74.2	1.11
		SB L	B	10.7	0.31	B	13.1	0.36	A	7.8	0.28
		SB T	E	78.1	1.12	F	143.7	1.27	F	90.3	1.15
		SB Overall	E	75.5	N/A	F	139.1	N/A	F	87.4	N/A
		OVERALL	E	76.7	1.03	F	124.1	1.13	F	81.2	1.13

TABLE NO. 6A-14i											
PEAK PM HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection	Movements	No-Build			Build			Build w/ Improvements			
		LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	24.0	0.2	C	24	0.20			
		WBLTR	C	24.2	0.2	C	24.2	0.22			
		NB LTR	B	11.8	0.7	B	11.7	0.66			
		SBLTR	A	7.5	0.7	A	7.5	0.72			
	OVERALL	B	11.1	-	B	11	-				
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.4	0.1	C	28.5	0.07			
		WB LTR	E	63.9	0.9	E	72.7	0.95			
		NB LT	B	18.1	0.4	B	19.3	0.46			
		NB R	B	14.7	0.1	B	14.7	0.09			
		NB Overall	B	17.6	N/A	B	18.7	NA			
		SB LTR	C	31.6	0.2	C	31.8	0.19			
	OVERALL	D	36.4	0.5	D	39	0.53				
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	B	12.0	0.4	B	14.7	0.58	C	23.8	0.70
		NB LT	C	29.3	0.6	E	79.3	1	C	26.9	0.70
		SB TR	C	34.9	0.2	C	35	0.17	C	35.0	0.17
		OVERALL	C	20.1	0.4	D	42.5	0.73	C	25.7	0.65
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	C	32.9	0.6	E	75.8	0.99	D	36.9	0.80
		NB TR	A	8.5	0.2	A	8.7	0.26	B	12.2	0.29
		SB LT	D	46.2	0.7	F	385.8	1.73	D	43.6	0.86
		OVERALL	C	27.7	0.3	F	164.7	0.49	C	33.2	0.49
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	8.0	0.1	a	8.3	0.08			
		NB LR	b	11.7	0.1	b	14.7	0.13			
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	14.4	N/A	c	22.13	NA			
		WB TR	d	30.7	N/A	f	110.42	NA			
		SB LR	c	17.5	N/A	c	20.43	NA			
		OVERALL	c	23.0	N/A	f	65.48	NA			
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	11.1	0.1	b	11.9	0.07			
		EB LR	d	30.2	0.3	e	40.1	0.37			
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	11.1	0.0	b	11.9	0.04			
		EB LR	f	149.4	0.9	f	368.7	1.36			
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	11.4	0.1	b	12.3	0.07			
		SB LTR	b	11.0	0.0	b	12.2	0.03			
		WB LTR	f	67.8	0.2	f	172.5	0.39			
		EB LTR	f	54.0	0.5	f	141.7	0.77			
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	D	43.9	0.8	D	44.8	0.84	F	134.4	1.15
		NB TR	F	88.1	1.1	F	156.4	1.3	F	101.1	1.18
		SB L	A	9.3	0.3	B	13.2	0.34	A	7.8	0.26
		SB T	F	117.9	1.2	F	168.1	1.33	F	111.5	1.20
		SB Overall	F	114.7	N/A	F	163.7	NA	F	108.6	NA
		OVERALL	F	96.0	1.1	F	149.4	1.20	F	107.7	1.20

TABLE NO. 6A-14j											
PEAK SATURDAY HOUR DETAILED LEVEL OF SERVICE SUMMARY											
FUTURE CONDITIONS WITH THE PROJECT (BUILD - NO STATION ALTERNATIVE)											
Intersection		Movements	No-Build			Build			Build w/ Improvements		
			LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
A	US Route 9(NB-SB)/ Depyester St(EB)/ School Drwy(WB)	EB LTR	C	24.1	0.22	C	24.1	0.22			
		WBLTR	C	29.7	0.61	C	29.7	0.61			
		NB LTR	B	10.9	0.65	B	10.9	0.65			
		SBLTR	A	6.9	0.69	A	6.9	0.69			
		OVERALL	B	12.1	-	B	12.1	-			
B	Cortlandt St(NB)/ Willey St.(EB-WB)/ Depot Plaza(SB) (Tarrytown)	EB LTR	C	28.4	0.05	C	24.8	0.05			
		WB LTR	D	43.2	0.75	D	48.5	0.81			
		NB LT	B	16.3	0.25	B	17.4	0.33			
		NB R	B	14.6	0.07	B	14.6	0.07			
		NB Overall	B	16.0	N/A	B	17.0	N/A			
		SB LTR	C	32.2	0.24	C	32.8	0.31			
		OVERALL	C	29.2	0.37	C	30.7	0.45			
C	Depot Plaza(NB-SB)/ Eastbound H- Bridge(EB)	EB LR	B	15.0	0.31	C	20.8	0.67			
		NB LT	C	21.2	0.33	C	32.7	0.76			
		SB TR	C	33.6	0.19	C	33.6	0.20			
		OVERALL	B	19.5	0.34	C	26.3	0.68			
D	Railroad Ave.(NB- SB)/Westbound H- Bridge(WB)	WB LR	C	24.7	0.37	C	34.6	0.76	D	50.9	0.89
		NB TR	B	11.4	0.19	B	11.4	0.19	A	9.0	0.18
		SB LT	C	32.2	0.41	F	262.8	1.46	D	50.9	0.91
		OVERALL	C	22.1	0.26	F	123.2	0.41	D	43.8	0.41
E	West Franklin St.(EB- WB)/Miller Ave.(NB)	WB LT	a	7.7	0.04	a	8.2	0.05			
		NB LR	b	10.2	0.06	b	12.6	0.09			
F	West Franklin St.(EB- WB)/South Washington St.(SB) (Tarrytown)	EB LT	b	10.5	N/A	c	17.3	N/A			
		WB TR	b	12.1	N/A	d	27.0	N/A			
		SB LR	b	11.3	N/A	b	13.8	N/A			
		OVERALL	b	11.4	N/A	c	21.1	N/A			
G	US Route 9(NB-SB)/ Park Ave.(EB) (Tarrytown)	NB LT	b	10.2	0.03	b	11.2	0.03			
		EB LR	d	26.2	0.14	e	38.8	0.20			
H	US Route 9(NB-SB)/ Independence St.(EB)	NB LT	b	10.3	0.05	b	11.4	0.06			
		EB LR	d	28.6	0.27	e	49.4	0.41			
I	US Route 9(NB-SB)/ Church St.(EB)/Leroy Ave.(WB) (Tarrytown)	NB LTR	b	10.5	0.06	b	11.7	0.07			
		SB LTR	b	10.6	0.03	b	11.9	0.03			
		WB LTR	f	69.3	0.31	f	236.4	0.71			
		EB LTR	c	23.8	0.19	e	40.3	0.31			
J	US Route 9(NB-SB)/ Prospect Ave.(WB) (Tarrytown)	WB LR	C	26.5	0.34	C	26.6	0.35	C	33.3	0.52
		NB TR	C	28.9	0.95	F	82.4	1.13	D	38.2	1.01
		SB L	A	7.3	0.18	A	9.7	0.27	A	5.6	0.21
		SB T	C	20.8	0.88	D	54.0	1.05	C	23.6	0.94
		SB Overall	C	20.3	N/A	D	52.3	N/A	C	22.9	NA
		OVERALL	C	24.8	0.79	E	65.7	0.93	C	30.8	0.93

Full summary reports are available electronically upon request. A hard copy is on file in the Sleepy Hollow Village Clerk's office and is available upon request. All such requests should be made in writing to Mr. Dwight Douglas, Village Administrator.

ATTACHMENT 10

TARRYTOWN CBD TRAFFIC AND PARKING STUDY



**Tarrytown CBD
Traffic and Parking Study**

Prepared by:
Adler Consulting
Traffic Engineering and Transportation Planning, PLLC

Date:
December 1, 1998



TABLE OF CONTENTS

I. INTRODUCTION 1
 1.0 A Historical Review. 1
 2.0 A View to the Future 3

II. TRAFFIC OPERATING CONDITIONS 6
 1.0 General Overview 6
 2.0 Improvement Strategy 7
 3.0 Existing Traffic Volumes 9
 4.0 Existing Traffic Operating Conditions 11

III. RECOMMENDED TRAFFIC IMPROVEMENTS 13
 1.0 Broadway at Prospect Avenue 13
 2.0 Broadway from Prospect Avenue to Benedict Avenue 14
 3.0 Broadway at Benedict Avenue 15
 4.0 Broadway at Franklin Street 17
 5.0 Broadway at Main Street 20
 6.0 Broadway from Main Street to Wildey Street 25
 7.0 Broadway at Wildey Street 27
 8.0 Funding of Improvements 29

IV. PARKING SUPPLY AND DEMAND 30
 1.0 Existing Parking Inventory 31
 2.0 Existing Parking Demand 35

V. RECOMMENDED PARKING IMPROVEMENTS 42
 1.0 Near Term Measures 43
 2.0 Long-Term Measures 50

I. INTRODUCTION

Adler Consulting has been engaged by the Village of Tarrytown to review traffic and parking operations within the Village's Central Business District (CBD). The purpose of this study is to find practical measures, which could be implemented to alleviate any identified traffic or parking deficiencies.

1.0 A Historical Review.

In evaluating the current traffic and parking needs of the Village's CBD, it is beneficial to consider the genesis of current conditions and what changes can be expected in the future. The Tarrytown CBD is essentially a product of the 1890's, when many of the current buildings were constructed, which is coping with the traffic and parking demands of the 1990's.

When the bulk of the current downtown properties were developed, the automobile was almost unheard of and most citizens were within walking distance of their everyday needs. Travel over longer distances was typically centered around the railroad, which accommodated north/south travel, with a considerably smaller volume of horse and cart traffic to the east of the village and ferry traffic

west across the Hudson River. As a result, parking needs for the CBD were minimal, as was the volume of traffic, automobile or otherwise, which plied the Village's streets.

Since that time, the availability and affordability of the automobile has totally changed peoples lives and the way they conduct their daily business. The ability of the individual to easily travel up to 30 miles in any direction in one hour has opened vast tracts of land in Westchester County (and elsewhere) to development, with the result that County's population has increased from about 180,000 to approximately 910, 000 in the last 100 years (Westchester County Databook, 1998). Many of these people in Tarrytown or the adjoining communities, resulting in daily travel back and forth through the CBD. Similarly, the population of the Village itself has also increased considerably. At the turn of the Century it stood at 4,770. It is now almost 11,000 people.

Not only has the population of the Village and its hinterlands changed dramatically in the last 100 years, so too has the way we conduct the everyday business of our lives. From an era when only a nominal percentage of the

population traveled by road on a daily basis, we have turned to the automobile in such great numbers that, nationally, almost 90 percent of travel associated with the activities of daily living involve the use of the automobile (ITE Mobility Facts, 1992).

2.0 A View to the Future

The population of the Village and the surrounding communities (Greenburgh, Mount Pleasant, and Briarcliff Manor) continues to grow at almost one percent per year (County Databook), despite the fact that it appears that almost all developable land has been exploited. Nationally, growth in the number of licensed drivers, the number of vehicle registrations and the number of vehicle miles traveled have outstripped population increase dramatically between 1969 and 1989 (the latest years for which data is available - ITE Mobility Facts, 1992). This data indicates that, even in a stagnant population, motor vehicle activity has increased at a rate of approximately two percent per year in recent times.

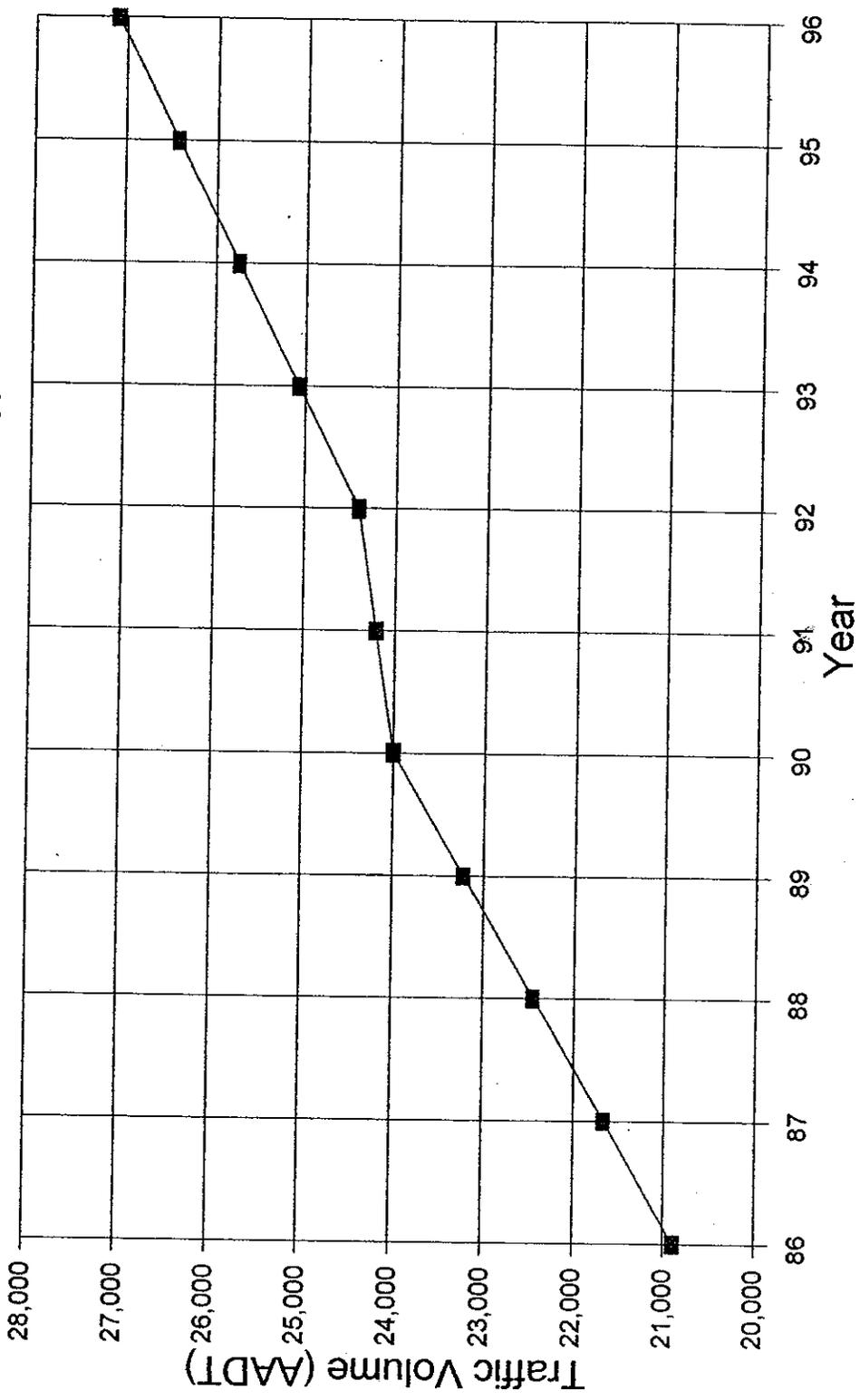
These national trends are also present in Tarrytown, as reflected by the most recent traffic counts contained in the New York State Department of

Transportation's (NYSDOT) Traffic volume Report. This data, which is presented graphically in Figure 1, shows that traffic volumes on Broadway at Prospect Avenue increased by 30 percent between 1986 and 1996. All data indicates the traffic volumes in the Tarrytown CBD will continue to increase, placing an additional burden on a roadway system already operating at capacity.

If the Village wishes to maintain its economic vitality, which is supported by the availability of access to the CBD businesses, it seriously needs to consider providing a second north/south route through the Village. This new route should be similar in nature to Broadway. It should provide one lane of travel in each direction, possibly with left-turn lanes, and support a mix of commercial and residential development, with a suitable mix of on-street as well as off-street parking.

This second route should not be a "Westway", designed solely to speed traffic past the river villages. Rather, it should be a means to accommodate the increased growth in commerce between the villages. Redevelopment of the Tarrytown Waterfront provides a good opportunity to plan for this second north/south route.

Tarrytown CBD Study
Figure 1 - Daily Traffic (Broadway)



Source: NYSDOT Traffic Volume Reports

It is noted that, to operate effectively, this new route will need the cooperation of the Village of Sleepy Hollow.

Alternatively, the Village should push for the implementation of a regional improvement program which will reduce, or at least hold at present levels, the volume of traffic on the Tappan Zee Bridge and, by direct correlation, the volume of traffic on Broadway.

II. TRAFFIC OPERATING CONDITIONS

I.0 General Overview

Current traffic problems in the Tarrytown CBD are the direct result of the CBD's development history, as well as the Village's and the area's economic success. Because the bulk of the buildings in the downtown area were built around the turn of the Century, they were not provided with off-street parking, a feature which was totally unnecessary at that time. As a result, in order to support the commercial enterprises in these buildings at the end of the 20th Century, parking has been prohibited at most locations on all streets in the CBD.

On-street parking has two detrimental effects on street capacity. Firstly, it occupies a substantial portion of the street width, which could otherwise potentially be used to provide additional travel lanes. Secondly, the act of parking a vehicle, particularly on a two-lane roadway, further reduces a street's capacity to carry traffic by blocking the flow of traffic while a vehicle backs into an available parking space.

With the tremendous economic growth and development of the Westchester area in the last half a century, regional and local travel on Westchester's roadways has skyrocketed. Construction of the Tappan Zee Bridge draws thousands of motorists daily from surrounding business and residential developments through Tarrytown's CBD. Furthermore, the continued economic strength of the region has led to a considerable increase in inter-village travel between Dobbs Ferry, Irvington, Elmsford, Sleep Hollow, Ossining and Tarrytown.

In addition, the success of merchants in the Tarrytown CBD, who benefit directly from the increasing volumes of traffic passing their storefronts, has led to increased parking activity on the downtown streets. Thus, as traffic volumes have increased, the vehicle carrying capacity of the Village's streets has diminished, leading to a situation where vehicles virtually crawl through the downtown area for considerable periods of time each day.

2.0 Improvement Strategy

The measures recommended to improve traffic operating conditions in this Study are intended to increase the carrying capacity and safety of the roadways, without

significantly reducing available, on-street parking capacity. These measures generally fall into three categories: near-term measures; intermediate measures; and, optional improvements.

Near Term Measures - Near term measures are those which should be implemented as soon as possible to improve operating conditions. They generally involve improvements which do not require a substantial capital expense and which can be implemented with a minimum of difficulty.

Intermediate Measures - Intermediate measures are those which will require a considerable capital expense and/or have significant engineering/property considerations. These improvements are not considered critical to current operational performance, however, it is **Adler Consulting's** opinion that, absent a major change in traffic patterns in the Village, it will be necessary to implement these improvements at some time in the foreseeable future.

Optional Improvements - These improvements involve measures which, while they may not significantly improve the street capacity of the Village, they will

result in a general improvement in quality of life issues such as reduced delays during off-peak hours. These measures are recommended in the event that the Village can secure a source of outside funding for general infrastructure improvements.

In addition to the three improvement categories detailed above, it is reiterated that, with traffic volumes anticipated to climb ever higher in the Central Westchester region, the Village needs to explore a longer term strategy, which will either provide a second north/south travel route through the Village or maintain traffic activity on Broadway at or below current levels.

3.0 Existing Traffic Volumes

A review of the roadways in the Village CBD indicates that the Major thoroughfare is Broadway, which runs in a north/south direction. The other principal north/south travel corridor is Washington Street, with Windle Park, John Street and Kaldenberg Place providing additional north/south circulation in the CBD. In the east/west direction, Main Street, Central Avenue, McKeel Avenue and Wildey Street are the main thoroughfares, with Elizabeth Street, Hamilton Place, and Dixon Street providing additional east/west circulation.

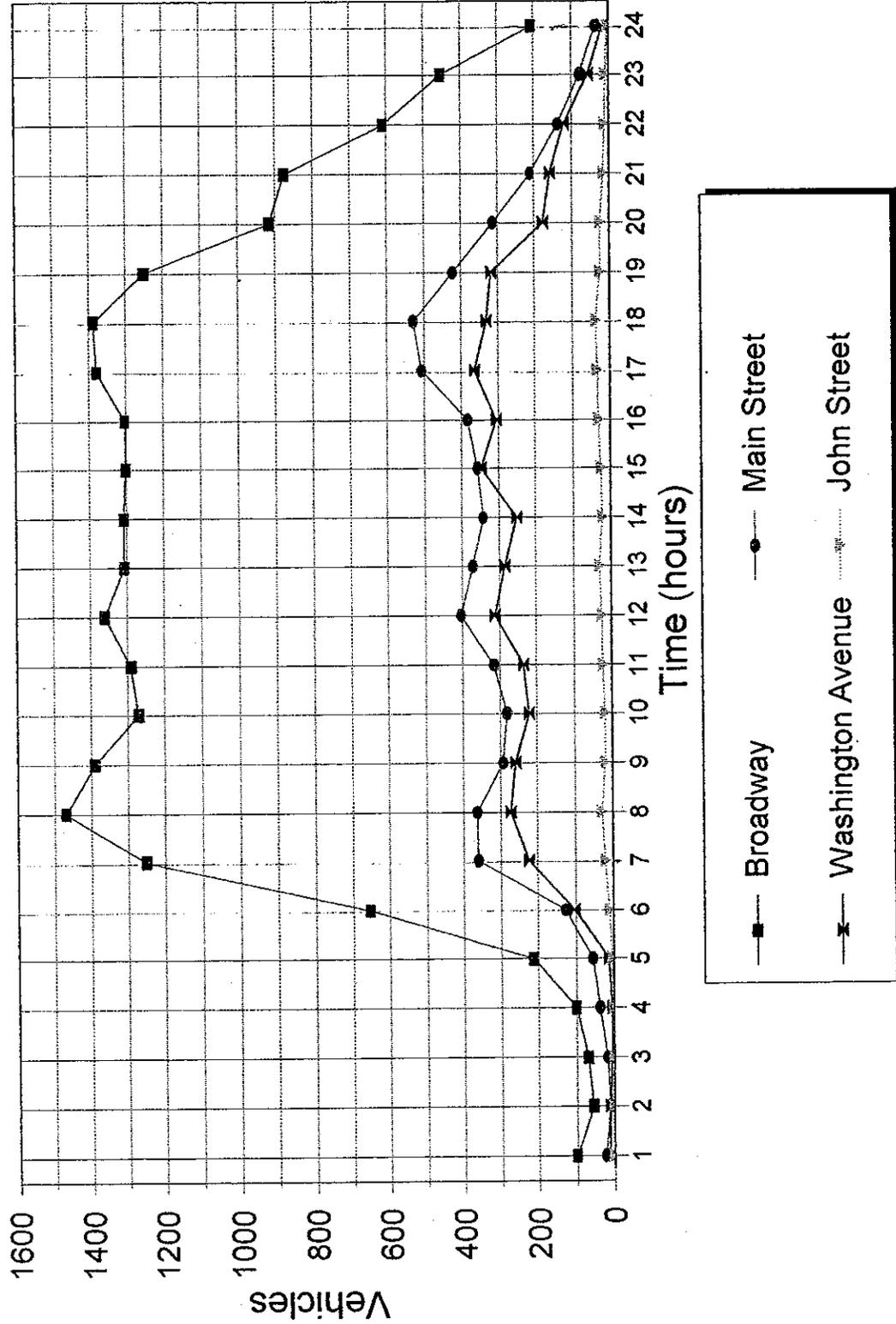
Automatic traffic counters were placed on Broadway, Main Street, South Washington Street and John Street to record traffic activity during typical weekdays and weekend days. The results of these surveys are presented graphically in Figures 2 and 3.

As can be seen from these figures, the volume of traffic on Broadway is over three times that of any of the other streets in the Village. This demonstrates that Broadway is clearly the critical street in the Village, from traffic flow standpoint, and that the interruption of traffic flow on Broadway should be kept to a minimum. It is also noted that the vehicular demand on Broadway may be considerably higher than shown on the graph for two reasons.

Firstly, observations of peak traffic activity, particularly during the evening period, revealed near gridlock conditions, where it was physically impossible to have any more vehicles on the road. Secondly, the road tubes used to record traffic activity on Broadway have a documented inability to record all vehicles when gridlock conditions prevail.

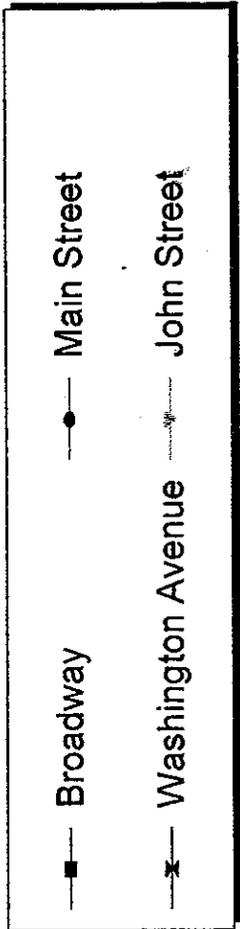
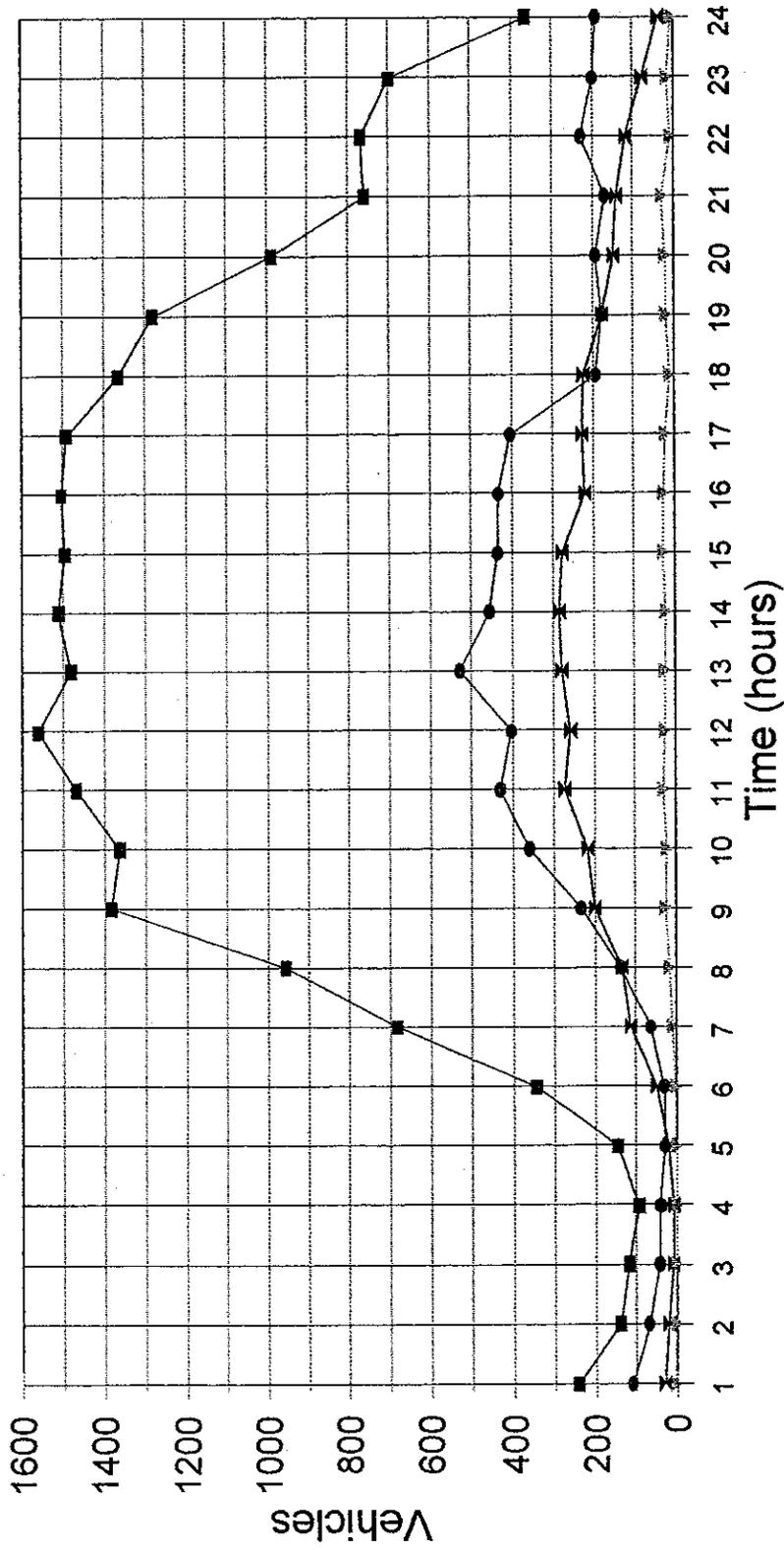
Tarrytown CBD Study

Figure 2 - Weekday Traffic Volumes



Tarrytown CBD Study

Figure 3 - Saturday Traffic Volumes



Traffic volumes on Main Street, Washington Street and McKeel Avenue are generally believed to be in the same, manageable range, with slightly lower levels of traffic activity on Wildey Street and Central Avenue. Finally, traffic activity on John Street, Kaldenberg Place, Dixon Street, Hamilton Place Elizabeth Street and Windle Park appear to be relatively light.

4.0 Existing Traffic Operating Conditions

Based on visual observations of traffic operating conditions on the streets in the CBD, it was concluded that the overwhelming traffic volume demand on Broadway resulted in breakdown traffic operating conditions for short periods during the morning rush hour and for more extensive periods during the evening hours. Breakdown conditions typically occurred at the busier intersections of Broadway with the east/west corridors of Main Street, Franklin Street, and Prospect Avenue.

Parking activity and left-turns to Hamilton Place near Main Street exacerbate poor operating conditions caused by sheer volume at that location, while the morning and evening onslaught to and from the train station overburden the

intersection of Franklin Street. At prospect Avenue, the short signal cycle and sheer volume of southbound traffic in only one lane overwhelms the intersection daily.

III. RECOMMENDED TRAFFIC IMPROVEMENTS

1.0 Broadway at Prospect Avenue

This location, while outside the Village CBD, is probably the worst intersection in the Village. Daily queues on the southbound approach to this intersection form around 4:00 p.m. and, by 5:00 p.m., directly impact southbound traffic operating conditions as far back as Wildey Street, a condition reminiscent of when Route 119 fed directly into the Tappan Zee Bridge.

The cycle length of the existing traffic signal at this location is approximately 60 seconds, which results in a loss of approximately 13 percent of the signal cycle to phase changes. Furthermore, the cumulative volume of traffic traveling to this intersection from Benedict Avenue, Broadway, Independence Street, Park Avenue, and Church Street overwhelms the single southbound lane provided.

Recommended Improvements

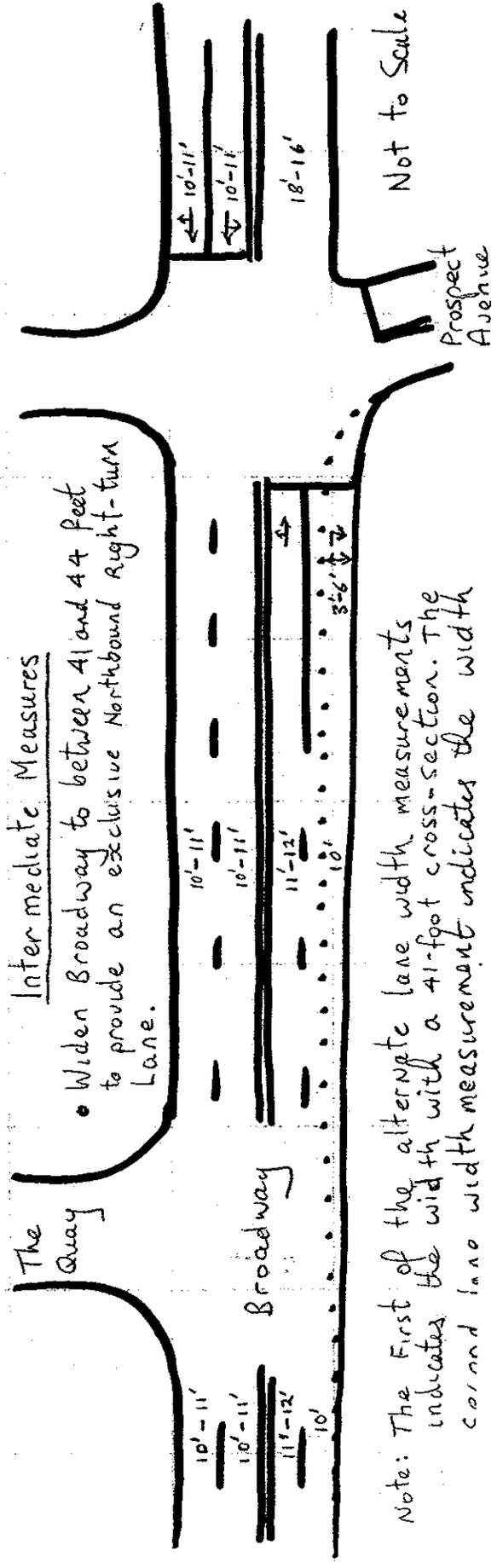
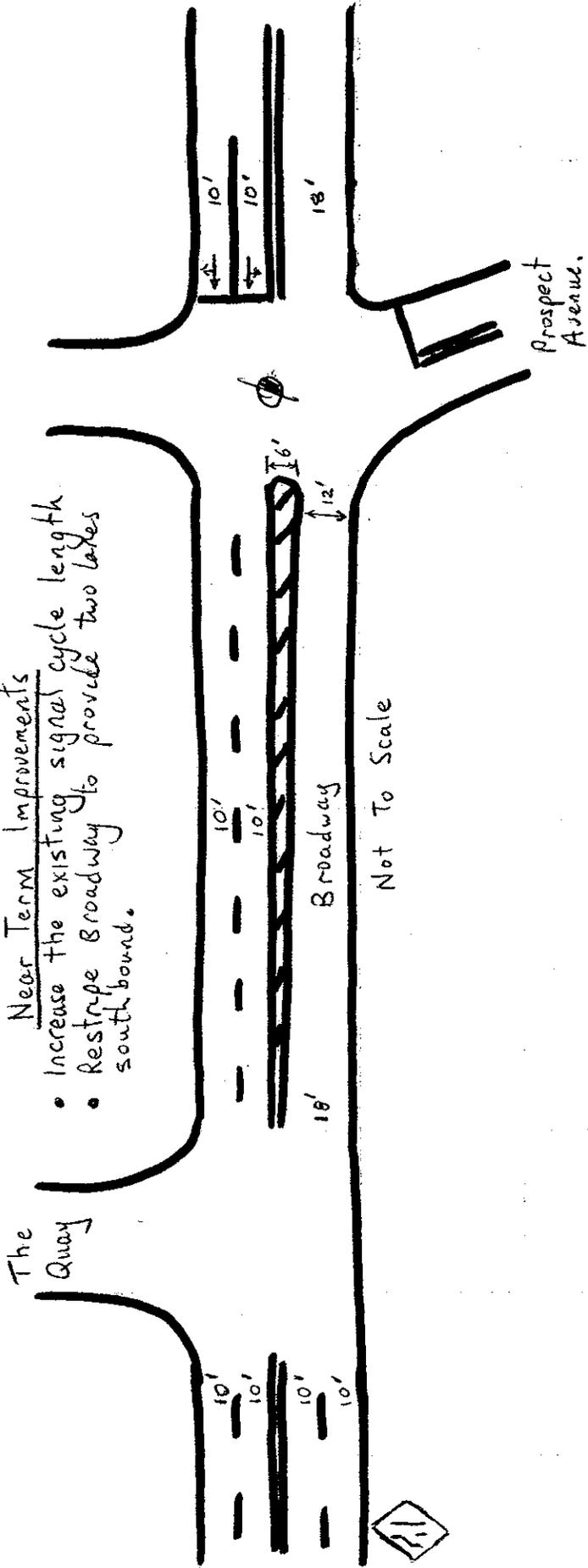
Near Term

1. Increase the signal cycle length to 90 seconds. This will reduce the lost time to approximately nine percent of the signal cycle, with a corresponding increase in capacity (no cost); and,

Tarrytown CBD Study

Figure 4 - Broadway at Prospect Avenue.

N →



Note: The First of the alternate lane width measurements indicates the width with a 41-foot cross-section. The second lane width measurement indicates the width

2. Restripe Broadway southbound to provide two travel lanes for through traffic, as shown on the top of Figure 4. This will increase the capacity of the intersection by approximately 25 percent and should considerably alleviate current conditions (order of magnitude cost - \$3,000).

Intermediate Measures

Widen Broadway by between three (3) and (6) feet from Prospect Avenue to approximately 75 south of the entrance to the Quay, as shown on the bottom of Figure 4. Although not needed immediately, as traffic volumes on Broadway continue to grow, at some point in the future, it is anticipated that the additional capacity provided by this measure will be needed on the northbound approach (order of magnitude cost - \$30,000).

2.0 Broadway from Prospect Avenue to Benedict Avenue

With uninterrupted flow on Broadway along this section of Broadway, one lane of travel per direction should be sufficient to accommodate projected demand, except at the signalized intersections at Prospect Avenue and Benedict Avenue.

Recommended Improvements

Near Term

1. Restripe Broadway in this vicinity to provide one travel lane per direction, with a dual-opposing, center, left-turn lane, except at Prospect Avenue and Benedict Avenue, as shown on Figure 5. Provide two southbound lanes for through travel at Benedict Avenue and Prospect Avenue. Provide a through lane and a right-turn lane northbound at Prospect Avenue (order of magnitude cost - \$8,000).

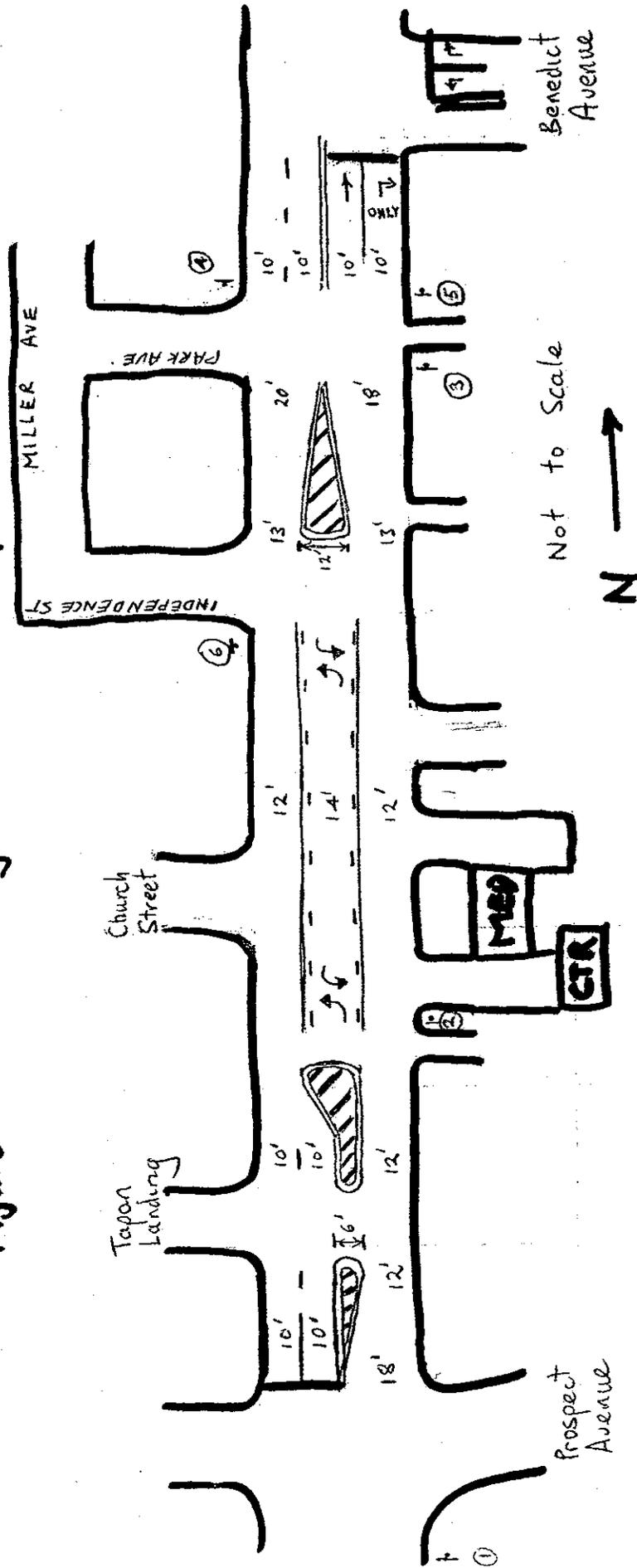
In order to improve northbound traffic flow, it is recommended that left-turns be prohibited to Park Avenue. To compensate for the increased volumes of traffic that may be subsequently use Independence Street, it is recommended that right turns be prohibited from Independence Street (order of magnitude cost \$300).

3.0 Broadway at Benedict Avenue

While operating conditions at this location are reasonably good, when compared to those at Prospect Avenue, it is largely because a substantial portion of traffic traveling to and from the train station during the Peak AM and PM hours cuts

Tarrytown CBD Study

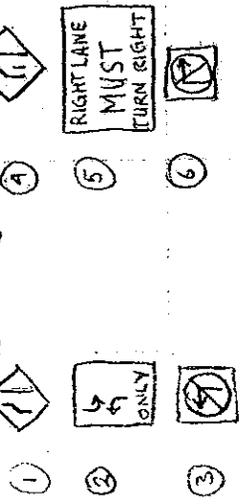
Figure 5- Broadway between Prospect and Benedict.



Near Term Improvements

- Restripe Broadway to provide a center, dual-opposing, left-turn lane
- Prohibit left-turns to Park Avenue and offset the impact on Independence Street by Prohibiting Right Turns from that street.

Sign Legend



through the Riverview Avenue/Miller Avenue neighborhood. While this issue is outside the scope of work for this Study, any measures that would improve capacity at the intersection of Broadway with Benedict Avenue would make this route more attractive than it currently is to railroad commuters.

Field Observations revealed that the cast aluminum junction box in the left lane of the southbound approach has been irreparably damaged, rendering the inductance loop useless.

Recommended Improvements

Near Term

1. Replace the damaged junction box in the left lane of the southbound approach (order of magnitude cost - \$1,000).
2. Restripe Broadway to provide two through travel lanes southbound and one through lane with one right-turn lane northbound, as shown in Figure 6 (order of magnitude cost - \$1,000). Analyses reveal that the additional lane southbound could increase the intersection's capacity by almost 10 percent, while providing

a through lane and a right-turn lane northbound results in approximately six percent more capacity.

3. Should a signal be installed at the intersection of East Franklin Street and Broadway, co-ordinate the signal at Benedict Avenue with the new signal and the existing signal at Main Street (order of magnitude cost - \$2,000).

4.0 Broadway at Franklin Street

Vehicular demand to execute a left turn to West Franklin Street or a right turn from West Franklin Street considerably exceeds the available capacity at this unsignalized intersection. Operating conditions at this location are so poor that a police is stationed at this location to direct traffic every morning and a substantial volume of traffic diverts through the Miller Avenue/Riverview Avenue residential neighborhood each evening. In addition, a police office is also stationed at this intersection each afternoon, when Washington Irving Middle School is dismissed.

Observations of traffic operating conditions along Broadway in this vicinity revealed that the queue of northbound left-turning vehicles in the morning sometimes stretches back to Benedict Avenue, blocking that intersection. Similarly when the police officer stops southbound traffic on Broadway to allow motorists to make the left turn to West Franklin Street, the queue on the southbound approach sometimes back up to Main Street, blocking that intersection.

Recommended Improvements

Near Term

1. Install a new traffic signal at this location (order of magnitude cost - \$100,000). It is Adler Consulting's opinion, based on a review of peak PM hour traffic volumes at this intersection, that signal installation is justified at this location, although, for a quantitative determination a complete signal warrant analysis would need to be performed. The installation of a traffic signal at this location would significantly improve the flow of traffic between Broadway and West Franklin Street, making it a more appealing route between the train station and the south end of the Village than current operating conditions provide. The

signal would also provide a signalized pedestrian crossing of both Broadway and West Franklin street at this location. It is the considered opinion of Adler Consulting that the installation of a traffic signal at this location will be of tremendous benefit to the Village as West Franklin Street is the Main gateway to the Village's waterfront, as well as its transportation hub.

2. Installation of a signal at this location will require the coordination of the adjacent signals at Main Street and Benedict Avenue (order of magnitude cost - \$2,000).

3. The existing left-turn prohibition from West Franklin Street to Broadway should be maintained. Traffic patterns are already accustomed to this condition, the abolishment of which would drastically reduce the ability of West Franklin Street right turns from running concurrently with left turn from Broadway to West Franklin Street.

4. The East Franklin Street approach to Broadway should remain unsignalized and left-turns should be prohibited at this location. Vehicles wishing to make this

maneuver could easily be accommodated via Grove Street and Benedict Avenue (order of magnitude cost - \$250).

5. The existing crosswalk on Broadway at East Franklin Street should be relocated approximately 15 feet north to West Franklin Street, as shown in Figure 7, when the new signal is installed (order of magnitude cost - \$750).

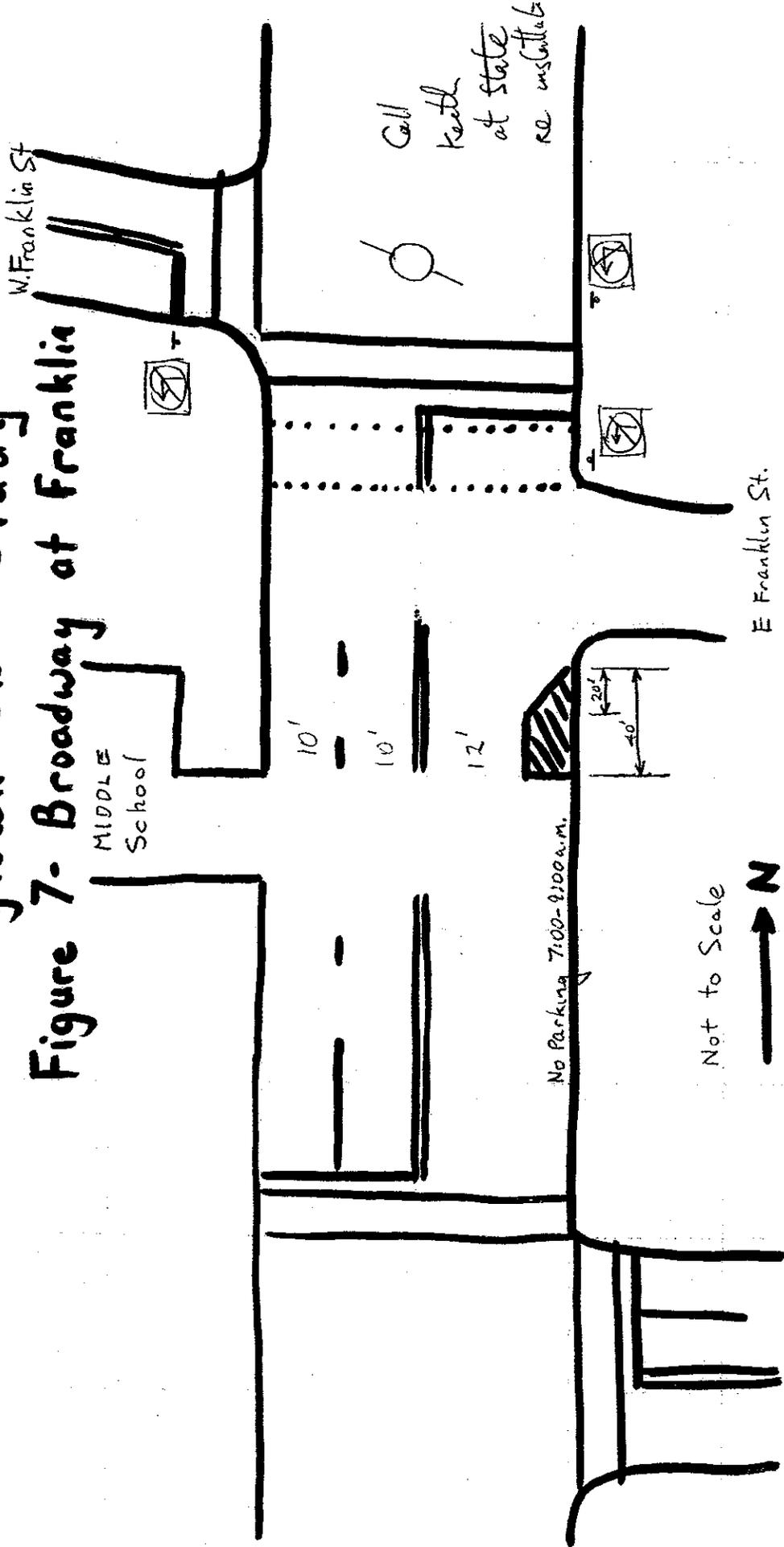
6. Eliminate the First two parking spaces on the east side of Broadway south of East Franklin Street by restriping Broadway as shown on Figure 7 (order of magnitude cost \$200). This will provide improved sight distance and will help position vehicles appropriately to allow northbound through traffic to pass vehicles waiting to turn left to West Franklin Street.

5.0 Broadway at Main Street

Although the primary cause of congestion at this intersection is the sheer volume of traffic on Broadway, there were several other factors which were observed to substantially reduce the capacity of this intersection. The intersection of Broadway and Main Street is the pivotal intersection in the Village CBD. As

Tarrytown CBD Study

Figure 7- Broadway at Franklin



Benedict Ave.

Near Term Improvements

- Install a new traffic signal at the intersection of Broadway with W. Franklin St.
- Relocate the existing crosswalk from E. Franklin St. to West. Franklin St.
- Prohibit left turns from E. Franklin St.
- Maintain left turn prohibition from W. Franklin St.
- Coordinate the signal with those at Benedict Avenue and Main St.
- Provide two lanes southbound on Broadway to Benedict Avenue.
- Eliminate the first two parking spaces on the east side of Broadway just south of East Franklin Street.

such, it experiences a substantial amount of pedestrian, parking and delivery activity, all of which impact intersection capacity. Field observations noted that the intersection controller at this location is antiquated, and that a police officer is stationed at this intersection in the evenings to manually operate the traffic signal and assist pedestrians.

Capacity at this intersection was also observed to be adversely impacted by vehicles traveling south on Broadway waiting for a suitable gap in opposing traffic to make a left turn to Hamilton Place, as well as by vehicles queuing to make the left-turn to Main Street from Broadway and to Broadway from Neperan Road. A review of traffic volumes provided by the Village confirmed this observation.

Recommended Improvements

Near Term

1. In order to provide sufficient storage for left-turning vehicles from northbound Broadway to Main Street, it is recommended that the bus stop on northbound Broadway, which is now located on the far side of the intersection, next to Harnik's jewelry store, be relocated to the near side of the intersection, next to the

First Union bank (order of magnitude cost - \$500). This action will eliminate two parking spaces by the bank and create one new space by the jewelry store.

2. In order to prevent southbound vehicles on Broadway from blocking the flow of through traffic, it is recommended that left turns from Broadway to Hamilton Place be prohibited between the hours of 7:00 a.m. and 7:00 p.m., from Monday to Friday, inclusive (order of magnitude cost - \$200).

3. Install a new traffic signal controller at this location, along with inductance loops on Main Street and Neperan Road (order of magnitude cost - \$30,000). This new controller will allocate green time to Neperan Road and Broadway on an as needed basis, reducing delays and pollution during off peak periods.

4. Provide a two (2) second all-red clearance interval between the Broadway and Main Street phases. This will provide pedestrians more time to enter onto the street they wish to cross than the current one second provided, making it easier for pedestrians to establish their presence requiring motorists to yield Right-of-Way.

Intermediate

1. On-Street parallel parking is possibly one of the most disruptive activities on a two-lane, two-way street, particularly when the spaces are small making forward entry impossible and reversing difficult. By virtue of the fact that a motorist can easily drive or reverse into the first and last parallel parking space on a block, or a section of a block, respectively, these spaces need not be any larger than necessary to park the vehicle (20 feet). For internal parallel spaces, where the carrying capacity of the street is a concern, particularly near signalized intersections, sufficient distance should be provided between spaces to allow the more proficient driver to drive into a parallel space and the average motorist to easily reverse into it.

In order to make on-street parking spaces in the vicinity of the intersection of Main Street and Broadway easier to access some reconfiguration of existing spaces is recommended, as shown on Figure 8 (order of magnitude cost - \$2,000). This reconfiguration, which is proposed on both sides of Main Street between Broadway and John Street, as well as on Broadway between Main Street and Central Avenue, will not result in the loss of any parking spaces. It is suggested

that this work be performed at some time in the future, coincident perhaps, with other street scape improvements.

In addition to reconfiguring existing spaces, it is recommended that parking on both sides of Broadway south of Main Street be modified, as shown on Figure 8, at some point in the future (order of magnitude cost - \$2,000). These modifications will result in the loss of three parking spaces and, due to the current shortage of parking in this area, should only be implemented if effective replacement parking is provided.

A discussion of existing parking supply and demand, as well as possible means to provide additional parking are discussed in the Parking sections of this Study. However, due to the constant flow of traffic through this intersection during peak hours, the recommended parking reconfigurations and modifications will make a small but much needed improvement in the intersection's capacity.

Optional Improvements

Should funds become available from an outside source at some time in the future to implement improvements that are intended to relieve congestion, it is

recommended that the southside of Neperan Road be reconstructed, as shown on Figure 8 (Order of magnitude cost - \$20,000). The bank building at this location is not parallel to the street and the recommended three (3) foot widening would make it easier for vehicles traveling down Neperan Road to Main Street or northbound Broadway to get around vehicles waiting to turn left.

6.0 Broadway from Main Street to Wildey Street

Traffic flows relatively uninterrupted from Main Street to Wildey Street. Observations of current activities noted that the newly acquired "Yield to Pedestrians in Crosswalk" signs have two positive effects: they cause motorists to slow down slightly and be more observant for pedestrians; and, they provide the pedestrian with a greater comfort level in stepping onto the street at the crosswalks.

It was further noted that the existing pavement markings prohibiting stopping/parking on northbound Broadway at Central Avenue, Dixon Street, and Wildey Street are starting to wear away. Finally, the Broadway driveway to and from the CVS parking lot was observed to be in a state of disrepair and not very effective at designating pedestrian and vehicular Right-of-Way.

Recommended Improvements

Near Term

1. Reexamine the current stationing of the "Yield to Pedestrian in Crosswalk" signs. It is recommended that every crosswalk at an unsignalized location on Broadway in the CBD be reenforced with such a sign. These signs should be placed within six feet of the crosswalk, where possible. In those instances where this is not possible, due to the need to turn large vehicles, extra care should be taken to ensure that the signs are placed in the best possible location.

To accommodate the Village's retail, restaurant and entertainment activities, which generate a substantial amount of pedestrian activity in the evenings and on weekends, it is recommended that the pedestrian signs be left out from 9:00 a.m. to 9:00 p.m., Monday through Saturday and from 10:00 a.m. to 6:00 p.m. on Sundays.

2. Restripe the no stopping/parking zones on northbound Broadway at Central Avenue, Dixon Street and Wildey Street with long-lasting, high relief, high-visibility thermoplastic (order of magnitude cost - \$1,500).

3. It is recommended that the Broadway entrance to the CVS parking lot be reconstructed in a two-tone surface, as shown on Figure 9 (order of magnitude cost \$20,000). The 10-foot wide crosswalk portion of the driveway should be the same material and color as the existing sidewalk in front of CVS and Caravella. The cobblestone-type surface on either side of the designated crosswalk, will remind motorists to slow down from the crosswalk.

7.0 Broadway at Wildey Street

Although traffic operating conditions are generally reasonably good at the intersection of Wildey Street, it was noted that left-turning vehicles to Wildey Street, as well as to the C-Town parking lot occasionally block through traffic on Broadway. It was also noted that the antiquated traffic signal controller, while functional, wastes valuable green time on the Wildey Street phase, when there are no vehicles on that approach.

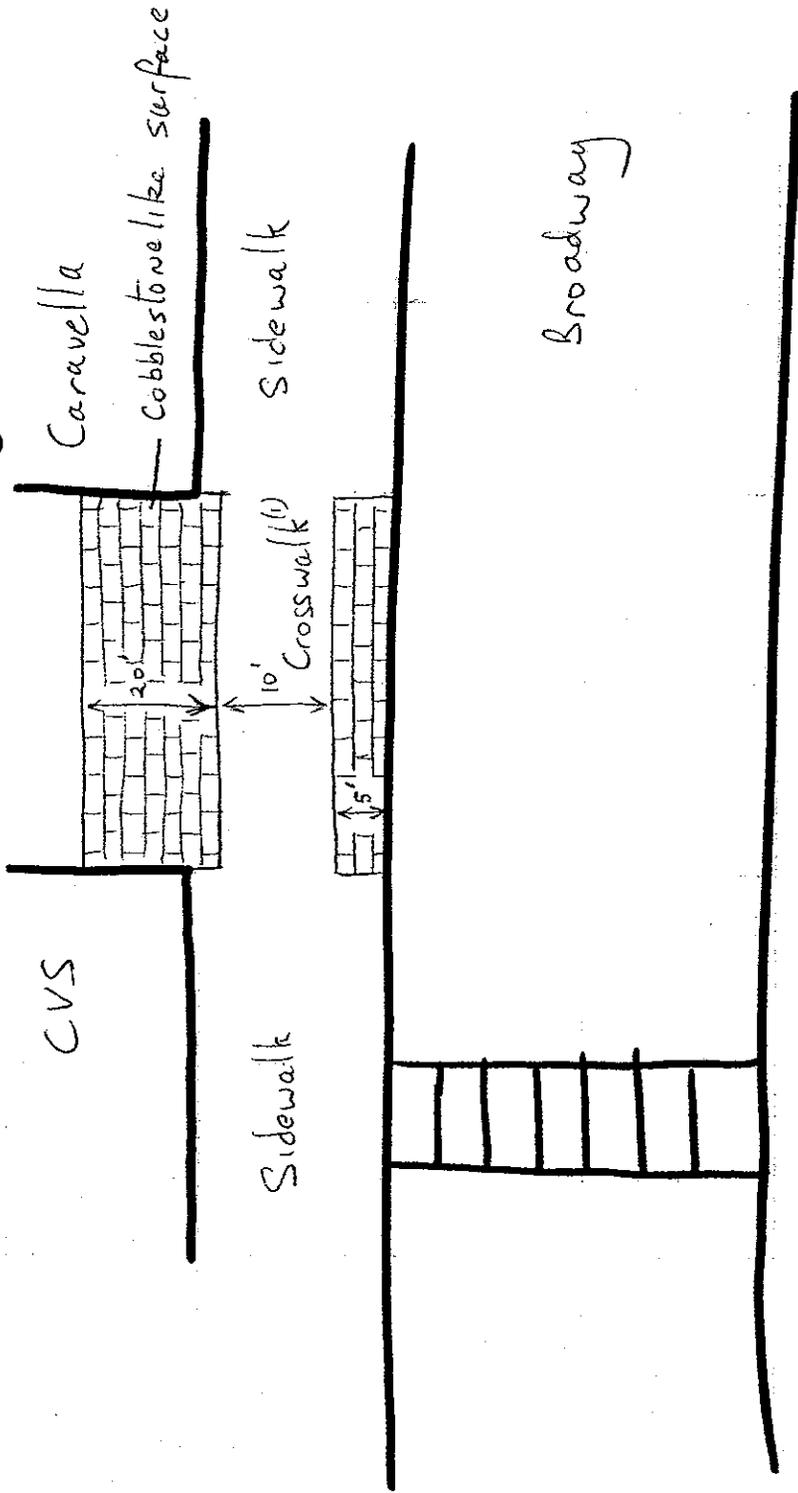
Recommended Improvements

Near Term

1. Since there is not enough distance from the driveway next to the video store to Wildey Street to develop a left-turn storage lane, it is recommended that the

Tarrytown CBD Study

Figure 9 - Broadway from Main to Wildey.



Not To Scale
→ N

Note: 1) Construct the "crosswalk" to look and feel like the adjacent sidewalk

“No Parking” pavement marking be modified, as shown on Figure 10, and that thermoplastic be used to delineate the pavement (order of magnitude cost - \$750). This will more appropriately position left-turning vehicles on Broadway, so that through traffic will be able to pass them by while they wait for an acceptable gap.

2. Similarly, at the entrance to the Library, it is recommended that a “No Parking” zone be marked, as shown on Figure 10, from north of the fire hydrant to 60 feet south of the library driveway (order of magnitude cost - \$1,000).

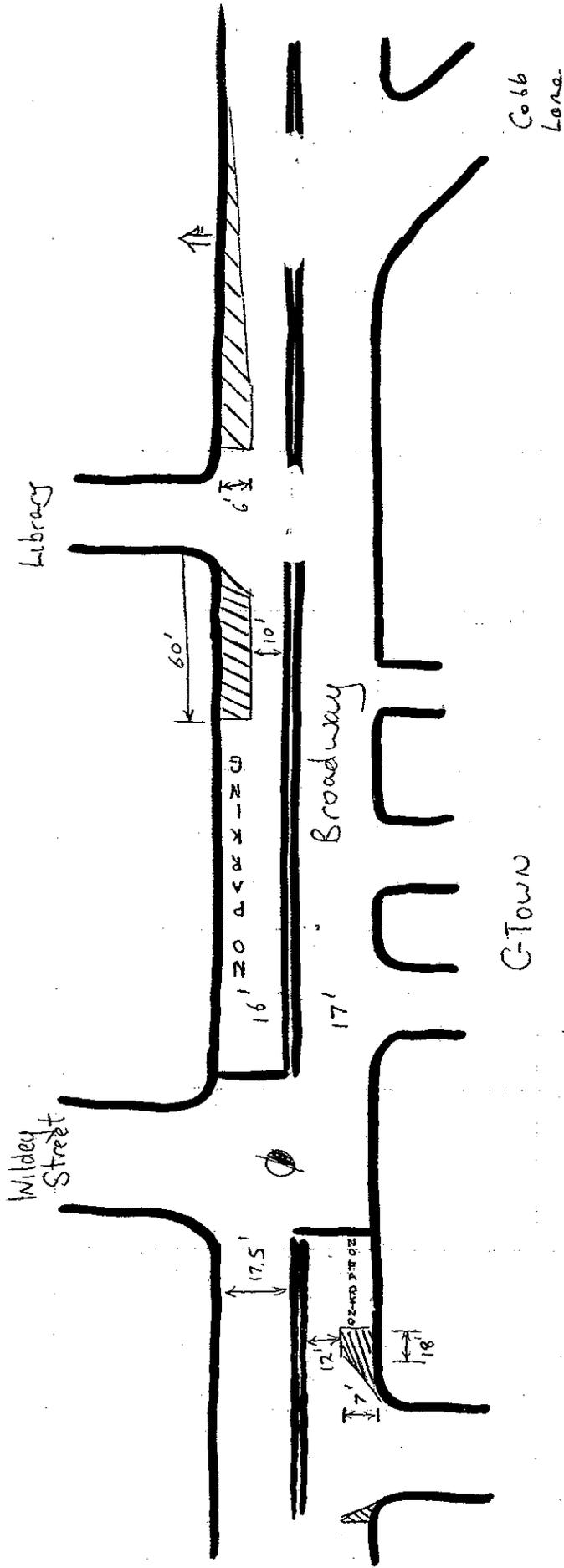
3. If additional capacity is needed at this intersection, the signal cycle length could be increased from approximately 60 seconds to 90 seconds, at virtually no additional cost. However, for the convenience of pedestrians, it is recommended that this measure is not implemented until it is needed.

Optional Improvements

Should funds become available from an outside source at some time in the future to implement improvements that are intended to relieve congestion, it is

Tarrytown CBD Study

Figure 10 - Broadway at Wildey Street.



Near term Improvements

- Restripe the existing "No Parking" zone by G-TOWN.
- Stripe a new "No Parking" zone by the library
- Increase the cycle length from 60 sec to 90 sec if needed.

Optional Improvements

- Install a new signal controller and inductance loops.

Not to Scale

recommended that the signal controller be updated and that inductance loops be placed in the pavement on Wildey Street (order of magnitude cost \$25,000).

8.0 Funding of Improvements

A review of the improvements recommended to improve traffic operating conditions indicates that the Village could expect the cost of this work to exceed \$250,000. It is noted that many of the improvements recommended need to be implemented to sustain the Village's economy. It is also noted that many of the improvements recommended are intended to ease congestion and the associated air pollution, as well as to maintain or improve access to the Railroad station. Improvements related to both of these topics may be eligible for federal funding under the Transportation Equity Act for the 21st Century (TEA 21).

It is therefore recommended that the Village set up a committee, perhaps in conjunction with neighboring communities, to research availability of such funding, perhaps under the auspices of a Village Traffic and Parking Department, as discussed later in this report.

IV. PARKING SUPPLY AND DEMAND

There is a general perception in the Village, held by both residents and merchants alike, that there is insufficient parking in the CBD to meet peak parking demand during the middle of the day and in the evenings on weekends. Furthermore, due to the unique nature of activities at the Music Hall, this facility is sometimes viewed as the source of much of the parking "angst" that abounds. It is worthy of note, however, that while the engineering industry considers up to one quarter mile (approximately 1,300 feet) to be an acceptable walking distance, if a visitor to or resident of the CBD cannot find parking on the block where they are going they are often mildly disappointed. If they cannot find parking on a block adjacent to where they are going, they are mildly frustrated and if they have to walk more than 1,000 feet (approximately two to three blocks) they are sure there is a parking problem in the Village.

In order to quantify current parking conditions, Adler Consulting conducted an inventory of all available parking in the CBD, both public and private (except for residential driveways). Following this, and with considerable assistance from the Police Department, parking demand surveys were conducted for three peak periods: weekday middays; weekend evenings without an event at the Music Hall; and, weekend evenings

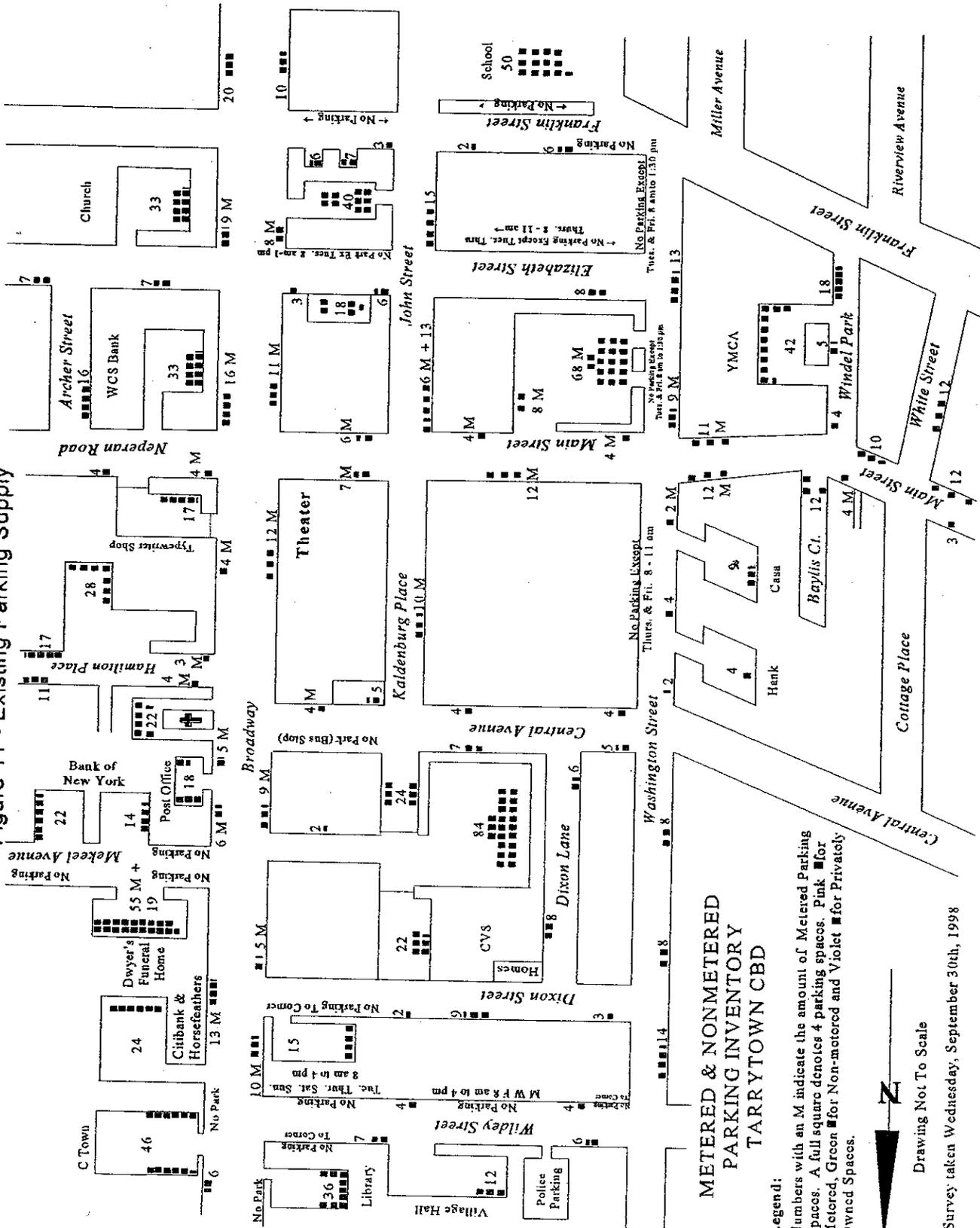
with an event at the Music Hall. In addition, in order to ascertain demand for parking by residents, a parking survey was also conducted on a Sunday night at 11:30.

Following this, an approximate inventory of existing CBD development was made, which was used to estimate relative parking demand, by block. This was then compared to the available parking supply, as well as the surveyed parking demand to identify the areas most in need of additional parking, if any, and which of the contemplated new parking facilities would best serve the CBD's needs.

1.0 Existing Parking Inventory

An inventory of existing parking supply in the CBD is summarized in Table 1 and presented graphically in Figure 11.

Tarrytown CBD Study
Figure 11 - Existing Parking Supply



Church 33
 Archer Street 7
 WGS Bank 7
 Neperan Road 16
 Typewriter Shop 17
 Hamilton Place 11
 Bank of New York 22
 Post Office 14
 Dwyer's Funeral Home 19
 Citibank & Horsefeathers 24
 C Town 46

Theater 7
 Kaldenburg Place 10
 John Street 11
 Elizabeth Street 15
 Main Street 68
 School 50
 Franklin Street 10
 Windel Park 4

CVS 84
 Homes 22
 Dixon Lane 6
 Washington Street 12
 Central Avenue 9
 Broadway 12
 Theater 7
 Kaldenburg Place 10
 Main Street 12
 Baylis Ct. 12
 Casa 4
 Hank 4
 Windel Park 4

Village Hall 12
 Library 36
 Police Parking 6
 Wildley Street 7
 Dixon Street 15
 CVS 84
 Homes 22
 Dixon Lane 6
 Washington Street 12
 Central Avenue 9
 Broadway 12
 Theater 7
 Kaldenburg Place 10
 Main Street 12
 Baylis Ct. 12
 Casa 4
 Hank 4
 Windel Park 4

YMCA 42
 Franklin Street 10
 White Street 12
 Riverview Avenue
 Miller Avenue
 Windel Park 4

CVS 84
 Homes 22
 Dixon Lane 6
 Washington Street 12
 Central Avenue 9
 Broadway 12
 Theater 7
 Kaldenburg Place 10
 Main Street 12
 Baylis Ct. 12
 Casa 4
 Hank 4
 Windel Park 4

Village Hall 12
 Library 36
 Police Parking 6
 Wildley Street 7
 Dixon Street 15
 CVS 84
 Homes 22
 Dixon Lane 6
 Washington Street 12
 Central Avenue 9
 Broadway 12
 Theater 7
 Kaldenburg Place 10
 Main Street 12
 Baylis Ct. 12
 Casa 4
 Hank 4
 Windel Park 4

Table 1 - Existing Parking Supply

Location	Number of Spaces	Type	Hours	Time Limit
Wildey Street	21	On-Street, unmetered	-	None
Village Hall	12	Public Lot, unmetered	8 am - 5 pm	official business
Warner Library	36	Public Lot, unmetered	8 am - 9 pm	Library use
Broadway, North of Wildey	6	On-street, unmetered	-	None
C-Town	46	Private Lot, unmetered	-	Store use
Broadway, from Wildey to Dixon	23	On-Street, metered	9 am - 6 pm	2 hours
Tarrytowns Bank	15	Private Lot, unmetered	9 am - 7 pm	Bank use
Broadway, from Dixon to McKeel	5	On-Street, metered	9 am - 6 pm	2 hours
McKeel Lot	19 36	permit metered	24 hours 24 hours	- 12 hours
Bank of New York	22 14	Private Lots, unmetered	9 am - 6 pm	Bank use
Broadway, From McKeel to Central	20	On-street, metered	9 am - 6 pm	2 hours
US Post Office	18	Private Lot, unmetered	8 am - 6 pm	Post Office use
2 nd Reformed Church	22	Private Lot, unmetered	8 am - 6 pm	School and Church use
Hamilton Place	7	On-Street, metered	9 am - 6 pm	2 hours
Hamilton Place Lot	28	Private Lot, unmetered	8 am - 6 pm	Office use
Broadway, From Central to Main	16	On-street, metered	9 am - 6 pm	2 hours
Law Offices Lot	17	Private Lot, gated	8 am - 6 pm	Office use
Neperan Road	4 4	metered unmetered	9 am - 6 pm -	2 hours None
First Union Bank	33	Private Lot, unmetered	8 am - 6 pm	April-Nov
Archer Place	16	On-Street, unmetered	-	None
Broadway, From Main to Elizabeth	27	On-street, metered	9 am - 6 pm	2 hours
Junior League	18	Private Lot, unmetered	9 am - 9 pm	Tues & Fri

Table I - Existing Parking Supply, Continued

Location	Number of Spaces	Type	Hours	Time Limit
E. Elizabeth Street	14	On-Street, unmetered	-	None
Church	33	Private, unmetered	8 am - 12 pm	Church use
55 S. Broadway	40	Private Lot, unmetered	8 am - 6 pm	office use
Broadway, from Elizabeth to Franklin	17	On-street, metered	9 am - 6 pm	2 hours
W Elizabeth Street	17	On-Street, unmetered	-	None
Main Street, from Broadway to Washington Street	33	On-Street, metered	9 am - 6 pm	2 hours
S. Washington Lot	76	Public Lot, metered	24 hours	12 hours
Central Avenue, from Broadway to Washington Street	4 20	On-Street, metered On-Street, unmetered	9 am - 6 pm -	2 hours None
CVS Parking Lot	130	Private Lot, unmetered	8 am - 10 pm	Store use
Dixon Street	14	On-Street, unmetered	-	None
N. Washington St. from Central to Main	2 6	On-street, metered On-Street, unmetered	9 am - 6 pm -	2 hours None
Hank's Alley	4	Private Lot, unmetered	8 am - 6 pm	store use
Casa Victoria	9	Private Lot, unmetered	8 am - 6 pm	Store use
Main Street from Washington to White St.	27 10	On-Street, metered On-Street, unmetered	9 am - 6 pm -	2 hours None
Baylis Court	12	On-Street, unmetered	-	None
Windle Park, from the "Y" north	9	On-Street, unmetered	-	None
YMCA	18 24	Public /Private Lot, metered	24 Hours	2 Hours
S. Washington St. from Main to Eliz.	9 3	On-Street, metered On Street, unmetered	9 am - 6 pm -	2 hours None
S. Washington St. from Elizabeth to Franklin	11	On-Street, unmetered	-	None
Total	1054	163 On-Street, unmetered; 48 Public Lot, unmetered; 194 On-street, metered (2-hr limit); 129 Public Lot, metered (12-hr limit); 50 Public Lot, metered (2-hr limit); 19 Public Lot (permit); 449 Private lots.		

As can be seen from Table 1, there are over 1,000 parking spaces in the CBD area. However, many of these (approximately 45 percent) are for the exclusive use of customers/employees of certain CBD businesses and property owners. Consequently, there are periods of the day when, a particular property may not generate any parking activity, but the spaces remain unused at the property owner's desire. Other property owners, however, may not be as concerned if non-business related motorists use their property when the spaces are not needed.

Of the approximately public 600 parking spaces, over 210 are unmetered, with few restrictions. These are located primarily on the residential streets of the CBD, such as John Street and Dixon Street, etc., with a few unmetered, public spaces, located at Village hall and the Library. On-street metered parking accounts for almost 200 spaces, all of which have a two-hour time limit, as do the 50 spaces in the YMCA parking lot. Twelve hour meters account for almost 130 spaces located in the South Washington lot and the McKeel lot, with permit parking for almost 20 vehicles in the latter lot.

2.0 Existing Parking Demand

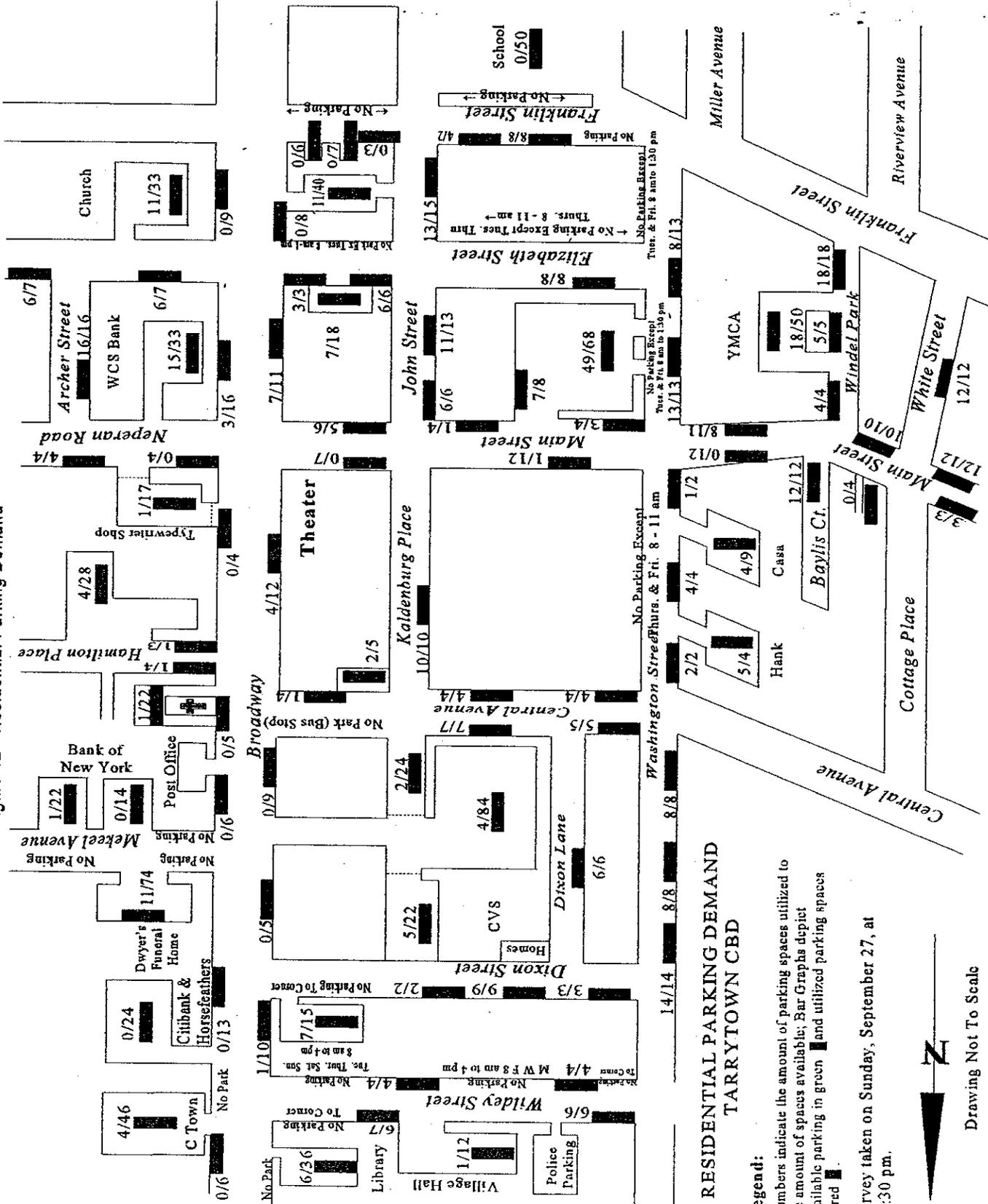
Residential - The overnight demand for residents in the CBD was the easiest to determine because, late in the evening on Sundays through Tuesday there is little commercial activity in the CBD. A survey conducted at 11:30 p.m. on Sunday, September 27, 1998 is presented graphically on Figure 12.

A total of 420 vehicles were observed parked in the CBD on the Sunday when the survey was conducted, almost all of which were residentially generated. While this there are approximately 560 public parking spaces provided in the CBD, only about 460 are available for overnight parking on any given night, due to street sweeping regulations. It can be seen from Figure 12 that almost every space was full on the following streets:

- Dixon Street;
- Washington Street from West Elizabeth to Wildey Street;
- Central Avenue from Kaldenberg Place to North Washington Street;
- Kaldenberg Place;
- John Street;

Tarrytown CBD Study

Figure 12 - Residential Parking Demand



RESIDENTIAL PARKING DEMAND TARRYTOWN CBD

Legend:

Numbers indicate the amount of parking spaces utilized to the amount of spaces available; Bar Graphs depict available parking in green and utilized parking spaces in red.

Survey taken on Sunday, September 27, at 11:30 pm.



Drawing Not To Scale

- Elizabeth Street;
- Archer Place;
- Baylis Court;
- Windle Park; and,
- Main Street from Washington Street west.

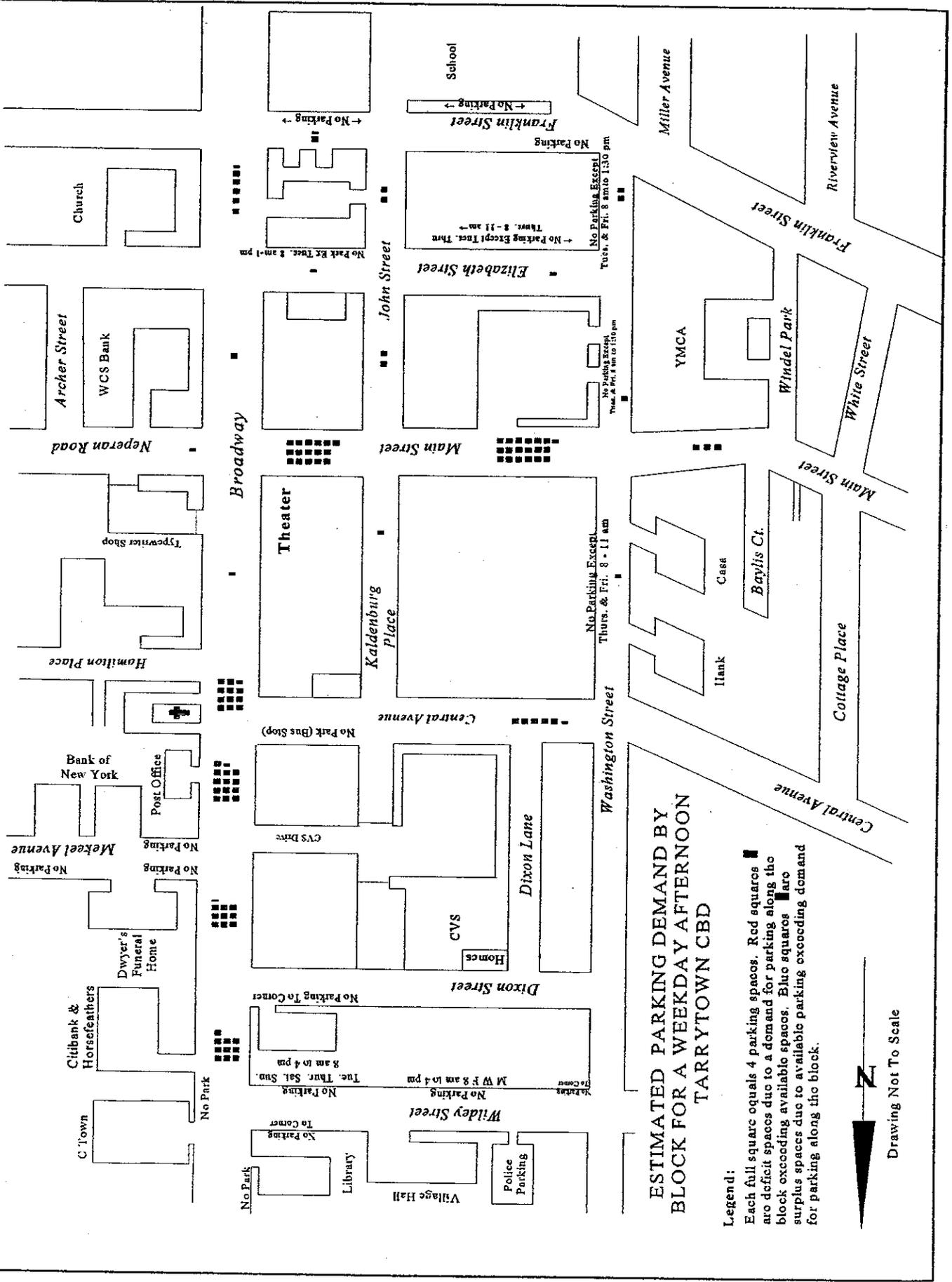
These streets are the predominantly residential streets, where the houses are closely spaced and many do not have driveways. It is noted that the CVS parking lot, which is adjacent to Dixon Street, Kaldenberg Place and Central Avenue, is virtually empty at night. Similarly, there were over 30 vacant spaces in the YMCA parking lot on Windle Park. There were almost 20 unused spaces in the First Union parking lot, next to Archer Place, 22 unused spaces in the Church parking lot on East Elizabeth Street, 30 unused spaces in the parking lot for 55 South Broadway, off John Street, and 20 unused spaces in the South Washington Street lot. The only streets which do not a reasonable amount of adjacent free parking are North Washington Street and the bottom of Main Street.

Weekday at Noon - Based on a visual survey of the type and density of development in the CBD, and using nationally accepted standards to generate for various development types, a block-by-block parking projection was prepared for the weekday noontime. This projection, which is presented graphically in Figure 13, indicates the relative intensity of parking demand on each block in the CBD.

The parking demand is made up of those residents who are home, as well as employees and customers of local businesses, shops and restaurants. The parking turnover rate, or the inverse of the length of time each vehicle is parked, varies greatly during this period. A low turnover rate is typically associated with local employees, while convenience store visitors typically have a very high turnover rate, with a broad range of turnover rates in between for residents, restaurant diners and office customers.

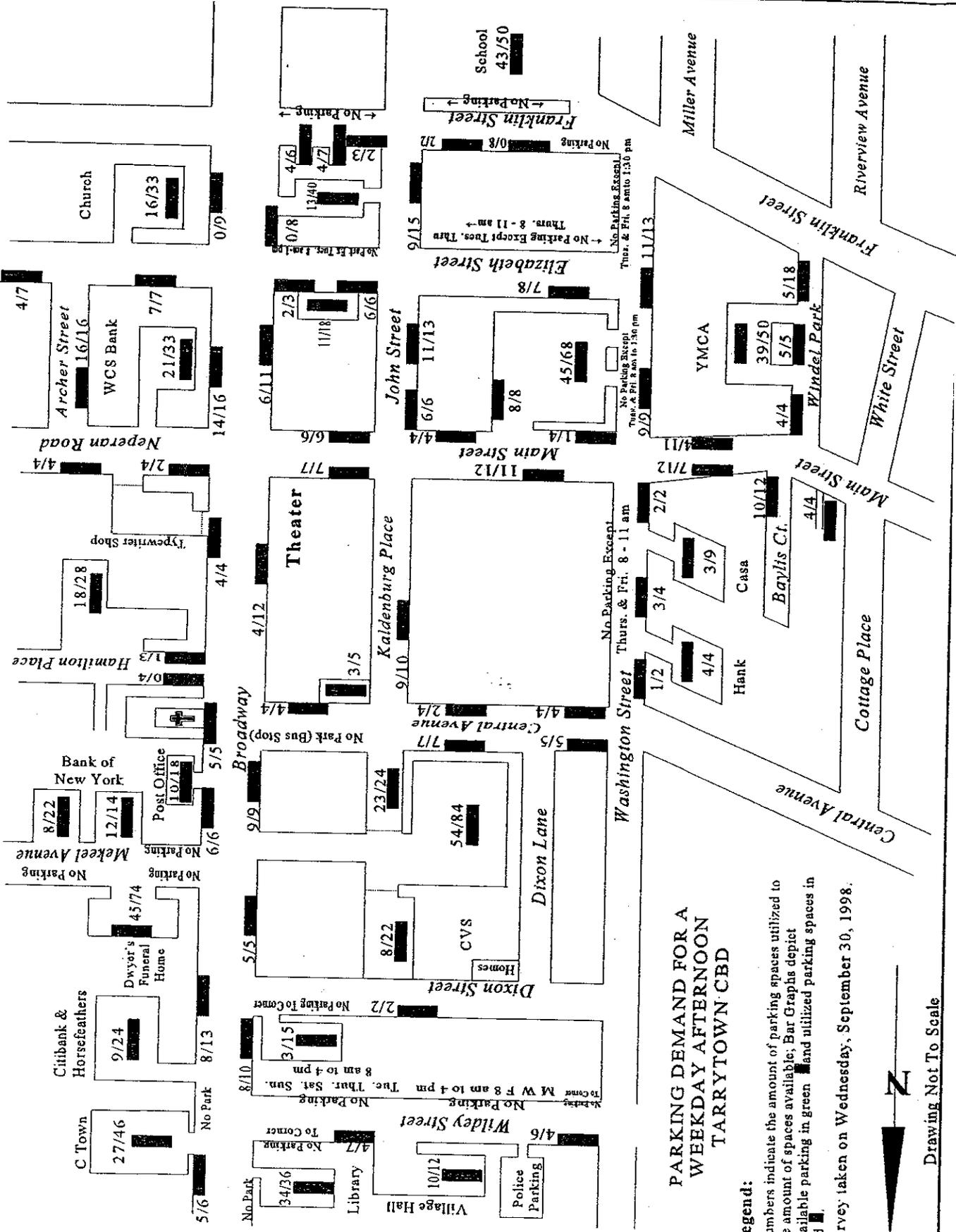
The actual parking demand, which was surveyed on Wednesday, September 30, 1998 and is presented in Figure 14, is considerably different than the by-block projections. This is because when demand is considerably greater than supply on a given block, visitors migrate to the surrounding blocks, seeking a parking space.

Tarrytown CBD Study
Figure 13 - Weekday Projections



Tarrytown CBD Study

Figure 14 - Weekday Demand



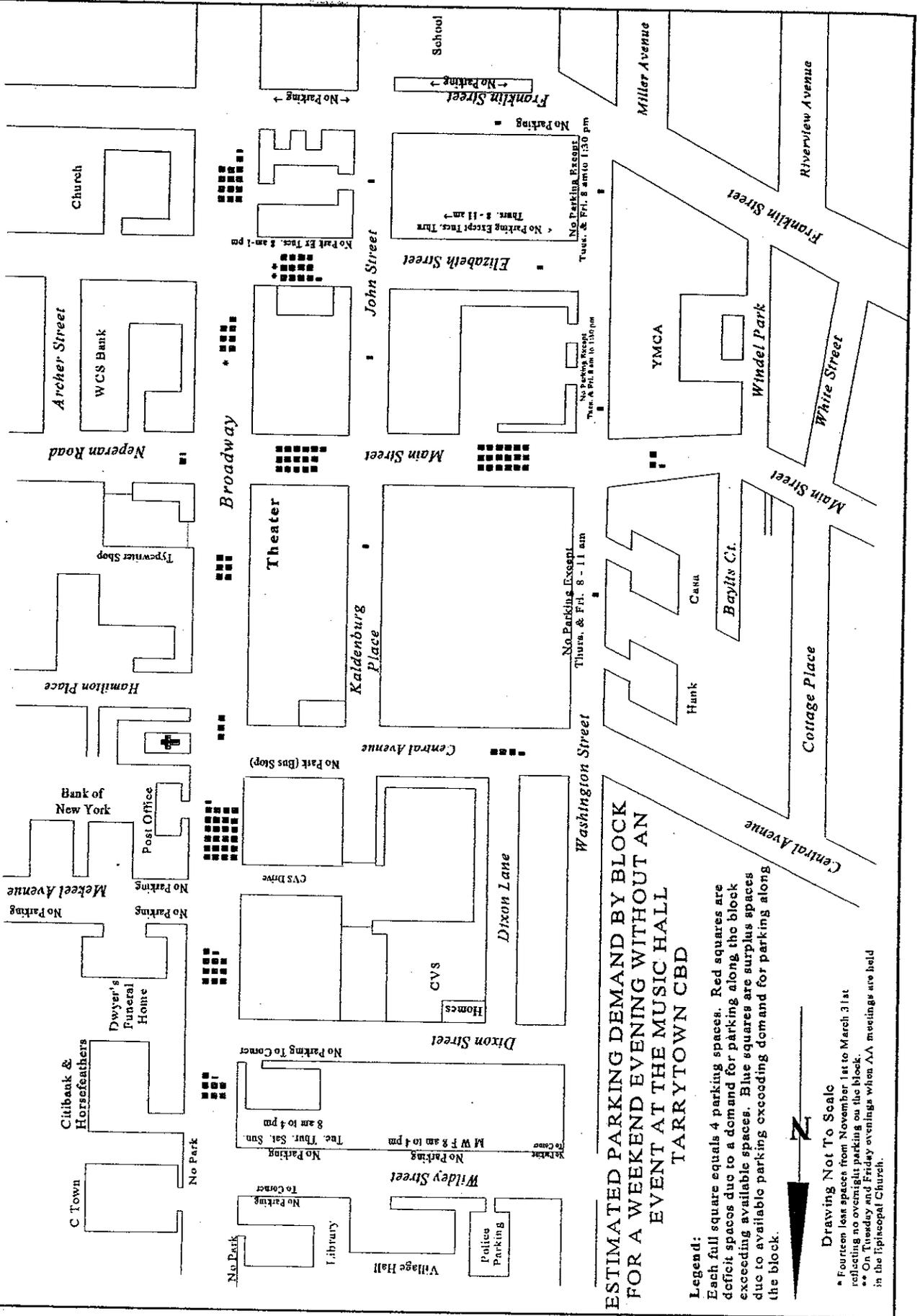
This in turn can cause demand on the adjoining block to exceed supply sending visitors of those blocks to even more remote locations.

A review and comparison of Figures 13 and 14 reveals that both the projected demand and the surveyed demand equal or exceed the available capacity on Broadway at Central Avenue, on Central Avenue and Main Street, between Broadway and Kaldenberg Place, as well as on Kaldenberg Place. It is noted that considerable reserve capacity is available in the larger section of the CVS lot, not far from Broadway, Central Avenue and Kaldenberg Place, while a similar condition exists in the North Washington Street Lot.

Weekend Evening without an Event at the Music Hall - The projected parking demand by-block for this condition is presented graphically in Figure 15, and indicates the relative intensity of parking demand on each block in the CBD.

Once again, the parking turnover rate, varies greatly during this period. A low turnover rate is typically associated with local residents in the evenings, while convenience store visitors have a high turnover rate, with a broad range of

Tarrytown CBD Study
Figure 15 - Weekend Evening (Without An Event At The Music Hall) Projections

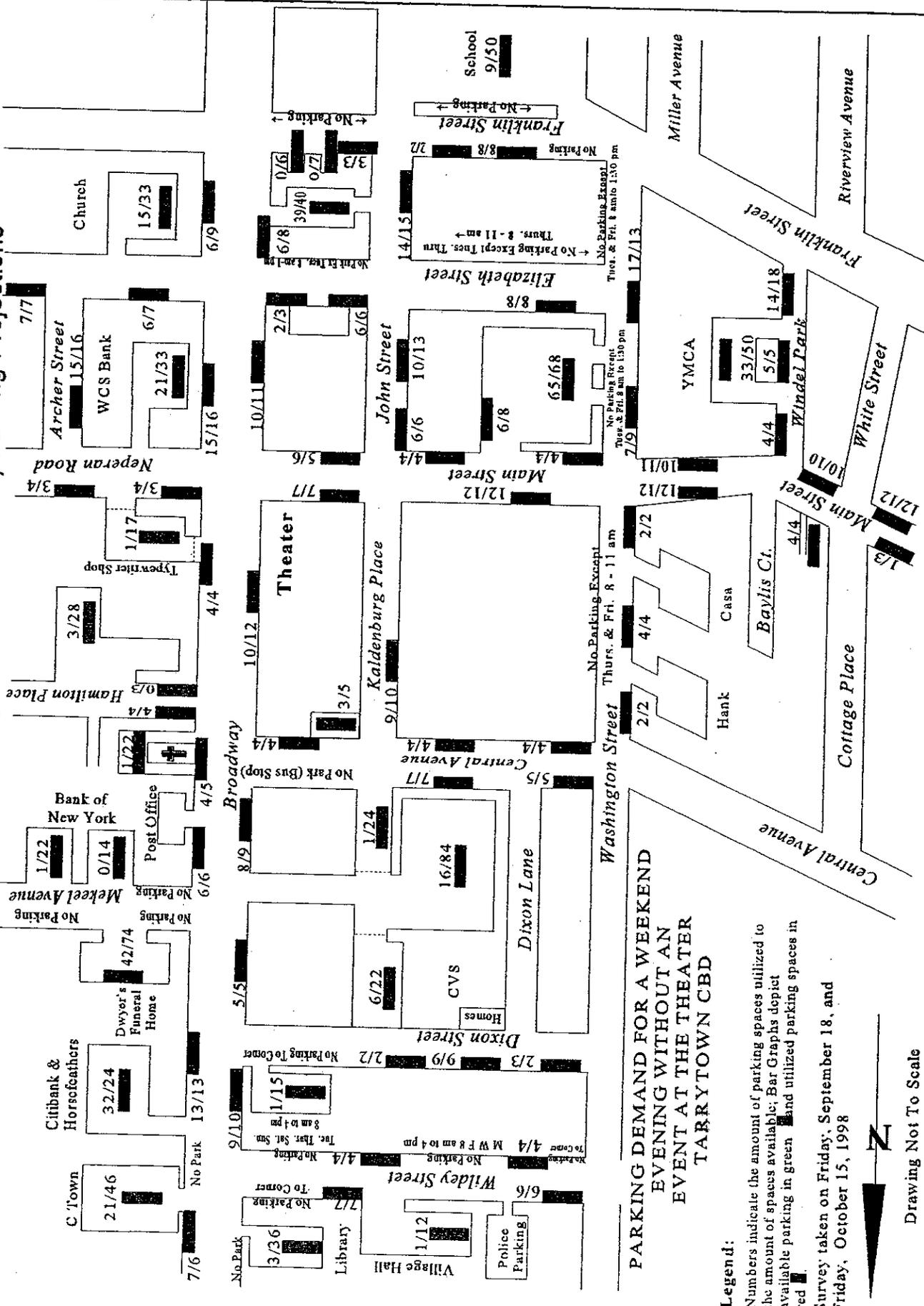


turnover rates in between for restaurant diners. The actual parking demand, which was surveyed on Friday, September 18, 1998 and is presented in Figure 16, is also considerably different than the by-block projections, due to parker migration.

A review and comparison of Figures 15 and 16 reveals that both the projected demand and the surveyed demand equal or exceed the available capacity on Broadway from Central Avenue to Main Street, on Central Avenue between Broadway and Kaldenberg Place, on Main Street from Broadway to White Street, as well as on Kaldenberg Place. It is also noted that parking demand exceeds capacity around the episcopal Church on West Elizabeth Street on Tuesdays and Fridays, when Alcoholics Anonymous have meetings. This condition is compounded on Tuesdays, when the Junior League also meets.

A comparison with the midday conditions and projections, as presented in Figures 13 and 14, reveals that conditions are considerably worse on weekend evenings, when little or no parking is available in a four square block area centered on Main Street and Kaldenberg Place/John Street.

Tarrytown CBD Study
Figure 16 - Weekend Evening (Without An Event) Parking Projections



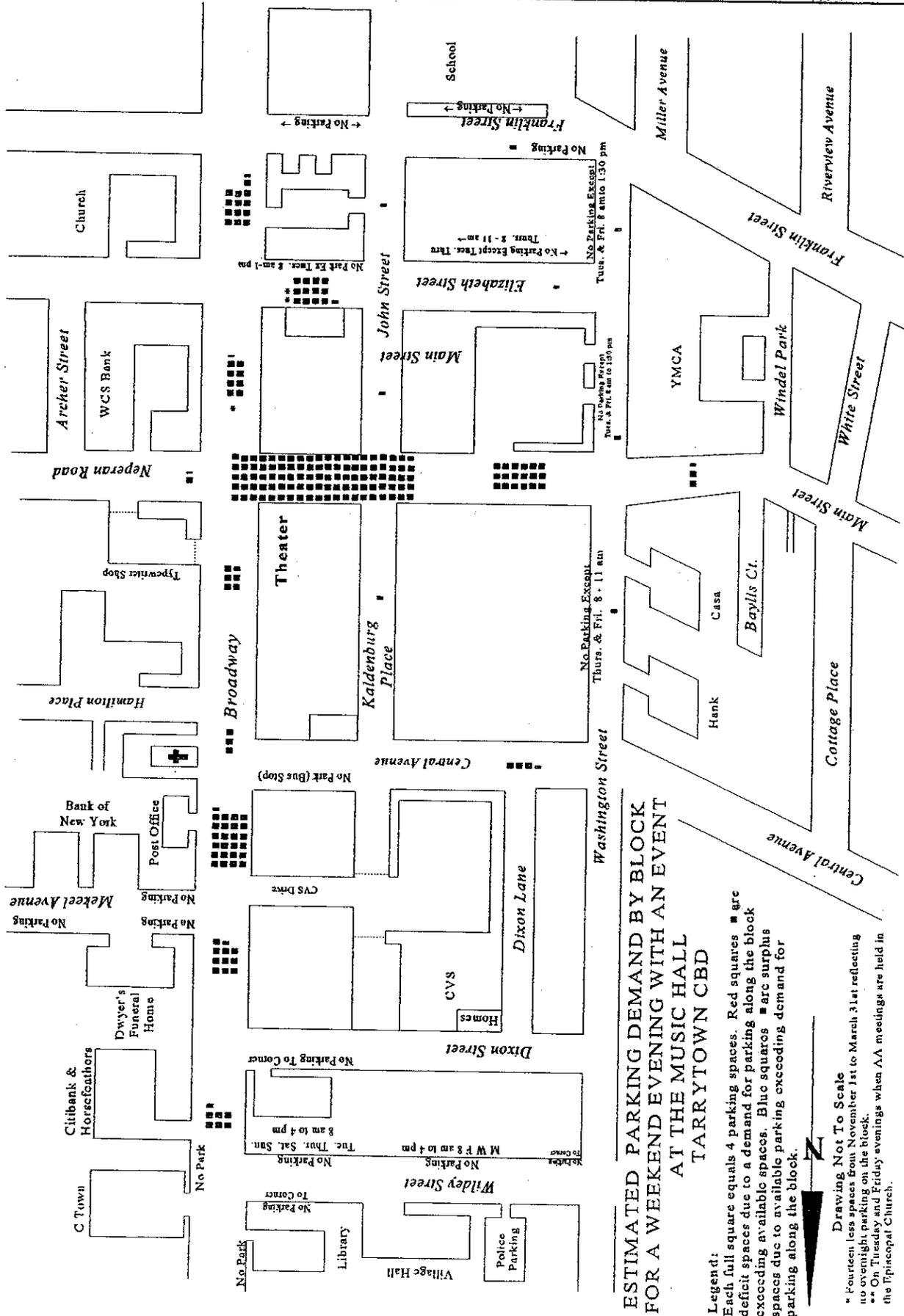
It is noted that considerable reserve capacity is available in the CVS lot, not far from Broadway, Central Avenue and Kaldenberg Place. A similar condition does not exist at the North Washington Street Lot.

Weekend Evening with an Event at the Music Hall - The projected parking demand by-block for this condition is presented graphically in Figure 17, and indicates the relative intensity of parking demand on each block in the CBD.

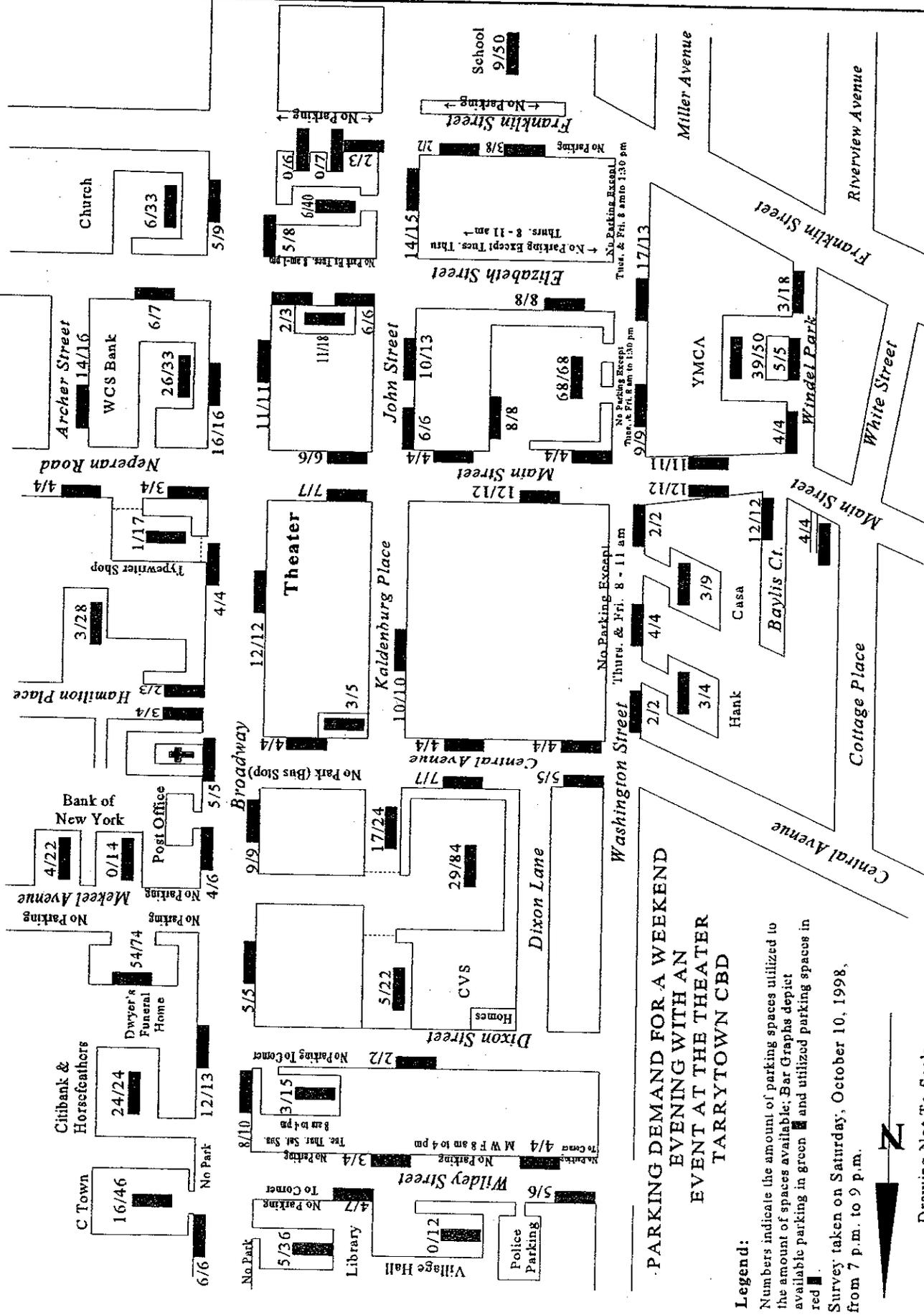
Once again, the parking turnover rate, varies greatly during this period. However, with the influx of over two hundred vehicles attending at the Music Hall the proportion of vehicles that have a turnover rate of one hour or more is considerably increased. The actual parking demand, which was surveyed on Saturday, October 10, 1998 and is presented in Figure 18, is dramatically different than the by-block projections, due to parker migration.

A review and comparison of Figures 17 and 18 reveals that both the projected demand and the surveyed demand equal or exceed the available capacity on Broadway from McKeel Avenue to Elizabeth Street, on Central Avenue between

Tarrytown CBD Study
Figure 17 - Weekend Evening (With An Event) Projections



Tarrytown CBD Study
Figure 18 - Weekend Evening (With An Event) Demand



Broadway and North Washington Street, on Main Street from Broadway to White Street, on Washington Street from Central Avenue to Franklin Street, as well as on Kaldenberg Place, John Street, West Elizabeth Street and the bottom of Neperan Road.

A comparison with the weekend evening without an event conditions and projections, as presented in Figures 15 and 16, reveals that conditions are considerably worse when the Music Hall holds an event. However, it is noted that, although little or no parking is available in a six square block area centered on Main Street and Broadway, a considerable reserve capacity (more than 60 spaces) is still available in the CVS lot.

It is also important to recognize that the Music Hall, despite the fact that it generates a large demand for parking, is a pre automobile era development, which enjoys the same rights of access as do its contemporary buildings along Main Street and Broadway.

V. RECOMMENDED PARKING IMPROVEMENTS

Like water in the desert, parking is a precious resource for a Central Business District and there are many competing interests vying for the choicest spaces. With the high cost of real estate and the pressing need for parking spaces, it is of considerable importance that this resource should be prudently managed. It is for this reason that Adler Consulting endorses the concept of establishing a Village agency with the authority to regulate and enforce parking, as well as to negotiate on behalf of the Village for the rights to use currently underutilized parking. Obviously, a final decision regarding any major capital expenditures would lie with the Village Board of Trustees.

Attached with this report is a Chapter from a publication entitled "Parking", by Robert A. Weant and Herbert S. Levinson. This Chapter addresses the issues involved in public parking administration. The principal reason for organizing a body to over see parking is that the need for good parking management will be promoted to the forefront and not subjugated by the more pressing agendas of some of the other Village departments. Parenthetically, should such an agency be established, it would seem logical to delegate the responsibilities for pedestrian management activities, such as placement and removal of the portable "Yield to Pedestrian" signs.

1.0 Near Term Measures

1. Space management - In investigating measures which could be implemented in the near term to maximize parking efficiency, one of the key elements identified was the need to provide a fair distribution of parking to all of the motorists in the Village CBD.

Currently, residents require longer term parking, predominantly overnight, and preferably without a fee. For the most part this is provided on the minor streets in the CBD, although the residential parking survey did reveal heavy demand on the Washington Avenue corridor, as well as on Dixon Street, John Street and Kaldenberg Place.

Employees of the local business require long term parking during the day and evenings. Currently, the only long-term parking available is in the South Washington Street lot and the McKeel Lot, with the result that many employees park in the short-term spots, competing with customers for spaces, and feed the meters throughout the day.

Depending on the nature of the individual businesses in the CBD, the customer turnover rate could be moderate to high. Customers of restaurants and professional businesses generally stay between 30 minutes and two hours, while retail store customers generally stay under half an hour. By comparison, the average stop at a convenience store can last just a couple of minutes. If a visitor to such a store has to drive around for five minutes to make a two minute transaction, the perceived inconvenience is considerably greater than the same delay for an employee, who will be staying a period of several hours.

To encourage employees to park somewhere other than in prime commercial parking spaces, it is recommended that the Village provide more geographical diversity in the location of the twelve hour meters. It is suggested that the easternmost meter on Neperan Road, the two meters on either side of Broadway just north of Elizabeth Street, as well as the westernmost two meters in the CBD on Main Street be changed from two hour to twelve hour. In order to prevent commuters parking at the new Main Street long-term meters, it may be necessary to install a six-hour meter or to post an 8:00 a.m. to 9:00 a.m. street cleaning time.

To provide additional parking for the restaurant and entertainment businesses when it is most needed, it is suggested that meter enforcement be extended to 8:00 p.m. or 9:00 p.m., six days a week.

To compensate residents for the potential loss of residential parking in the early evening, it is recommended that one meter be removed from John Street, One Meter be Remove from South Washington Street, One meter be removed from Kaldenberg Place and one meter be removed from Hamilton Place.

To accommodate the heavy volume of short-term parkers frequenting the Main Street laundromats, A Taste of China, 7-11, Bella's , Gyros, and other establishments, it is recommended that a suitable number of metered spaces be designated for short-term parking use.

The number of these spaces can be determined on a trial basis. However, initially, it is recommended that one space be provided on Broadway next to Bella's, one on Broadway next to Baskin & Robins, and one on Main Street next to A Taste of China. For these spaces to most effectively serve their intended user, they

should be the first in a series of spaces, so that the user can drive in, and then reverse and drive out. In order to keep these spaces from being used by longer term parkers, it is recommended that the meters be set and signed for a premium of 25 cents per five minutes.

2. Reconfiguration of Existing Parking - Numerous alternatives were considered, which might yield more parking in the core of the CBD, but all were ruled out as it was concluded that the resulting disruption to traffic patterns and operating conditions would be significantly more detrimental than the benefits associated with the additional spaces. The options considered were:

- Making South Washington Street one-way southbound and providing 16 to 18 additional spaces on the east side of the street. Although this is a substantial increase in the number of parking spaces provided, some of these spaces are south of Elizabeth Street, and somewhat removed from Main Street. Northbound South Washington Street currently carries approximately 1,700 vehicles per day.

If South Washington Avenue were made one way southbound, traffic volumes would be increased on Windle Park, a street which is currently busy from activity at the YMCA and has poor horizontal and vertical alignment. Further, if John Street were reversed to accommodate some of the 1,700 diverted vehicles per day, would enter Main Street just a short distance from one of the busiest intersections in the CBD, adding to the general congestion in that area.

Due to these two issues of concern, it is suggested that this option be held in abeyance until such time as traffic volumes on Broadway, and consequently on Washington Avenue can be reduced.

- Providing Parking on Both Sides of Washington Avenue from the South Washington Street lot to Central Avenue. South of Main Street, Washington Street is 30 feet wide for a period, wide enough to support two seven-foot parking lanes and a 16-foot travel lane. Cars traveling in opposite directions would be able to pass at a reduced speed and the fire truck would still be able to make the turn. If a truck was encountered, one

vehicle would have to yield. This option would not only provide three more parking spaces but it would also act as a traffic calming measure. However, with almost 4,000 vehicles per day, the inconvenience to motorists was considered too severe.

Between Main Street and Central Avenue, Washington Street is 32 feet wide for a period, wide enough to support two seven-foot parking lanes and an 18-foot travel lane. Cars traveling in opposite directions would be able to pass at a reduced speed. If a truck or bus was encountered, one vehicle would have to yield. This option would also only provide three more parking spaces and would again act as a traffic calming measure. However, the volume of traffic in conjunction with the two turns that need to be made by the Benedict Avenue bus were deemed too substantial to implement this measure.

- Providing Angled Parking on the north side of Main Street from Kaldenberg Place to John Street. Main Street varies from 45 to 43 feet wide at this location and could provide three more spaces if striped.

However, angled parking typically is disruptive to other on-street activity and can sometimes lead to an increased accident rate. For this reason, this option is not recommended.

3. Utilization of Existing Private Lots - A review of the parking surveys reveals that the private parking behind CVS is consistently under utilized, particularly in the evenings, when it would be most effective. Several options exist which could provide increased use of this facility while preserving the owners' needs during hours of peak activity. One such option, a valet service from Main Street could even produce revenue.

It is recommended that the Village offer to perform a more extensive survey of the facility to more comprehensively determine the associated properties' needs. In addition, if the Village intends to spend in the region of \$ 10,000 per space, which will be used primarily on weekends and the occasional midday, it should seriously consider paying a significantly less, though not insubstantial amount to obtain parking rights to existing spaces which essentially fulfill the same function.

In addition to the CVS lot, the 28 space private lot off of McKeel Avenue, the 17-space private lot behind Harnik's and the 33 space church lot on East Elizabeth Street, each are considerably underutilized and reasonably close to the CBD core.

2.0 Long-Term Measures

The Village currently has the opportunity to provide additional parking in close proximity to the core of the CBD at four locations. In evaluating each of these locations, the number of spaces provided, the cost per unit space, and the proximity to the areas of greatest demand were all carefully considered. Each space that was within a one block walk of an above capacity block was considered a practically viable space. Each alternative was then compared using a matrix to determine which most effectively meets the Village's needs. This matrix is summarized in Table 2.

Table 2 - Comparison of Parking Alternatives.

Alternative	Number of Spaces	Number of Effective Spaces	Cost	Cost per Space	Cost per Effective Space
Bannon	13	10	\$453,000	\$35,000	\$45,000
Bannon w/ Strip	40	31	\$558,000	\$14,000	\$18,000
Bannon w/ 11 Kaldenberg Pl.	24	24	\$730,000	\$30,000	\$30,000
Bannon w/ strip and 11 Kaldenberg Place	46	46	\$835,000	\$18,000	\$18,000
Caggiano	5	5	\$285,000	\$57,000	\$57,000
Capalbo	10	10	\$304,000	\$30,000	\$30,000
South Washington Lot Tier	62	46	\$712,000	\$11,000	\$15,000

I.a. Bannon Property - The Bannon property is a 35 foot by 180 foot strip of property, which stretches east from the middle of North Washington Street between Central Avenue and Main Street. Due to its narrow width, this property, as currently configured can only yield 13 spaces, the back three of which are considered less effective, due to their distance from Main Street. At an estimated cost of \$453,000 to develop the Site, the cost per parking space is \$35,000, while the cost per effective parking space is \$45,000. Both values are exorbitantly high and not worthy of further pursuit.

1.b. Bannon Property, with a 25-foot strip to the South - The addition of a 25 foot wide strip of property to the south of the Bannon property not only make it significantly more effective to park vehicles head-in, but it also opens up a whole second bay of spaces for no extra aisle width. A standard parking layout yields 40 spaces, the back nine of which are considered less effective, due to their distance from Main Street. At an estimated cost of \$558,000 to develop the Site, the cost per parking space is \$14,000, while the cost per effective parking space is \$18,000. These values are still quite expensive.

1.c. Bannon Property and 11 Kaldenberg Place property - Immediately abutting the Bannon property in the rear is 11 Kaldenberg Place. If this property were added to the Bannon property, a parking lot could be created that would run one-way from Kaldenberg Place to North Washington Street. Due to its narrow width, this alternative would only yield 24 spaces. However all of the spaces would be effective, due to the lot's dual access by foot. At an estimated cost of \$730,000 to develop the Site, the cost per parking space is \$30,000, which is the same as the cost per effective space. This value is exorbitantly high.

1.d. Bannon Property, with a 25-foot strip to the South and 11 Kaldenberg Place-
The addition of the 25 foot wide strip to the south of the Bannon property, as well as the 11 Kaldenberg Place property makes this efficiently shaped lot more effective, due to the dual access by foot. A standard parking layout yields 46 spaces, all of which would be attractive to customers of the Main Street businesses. At an estimated cost of \$835,000 to develop the Site, the cost per parking space is \$18,000, wich is the same as the cost per effective space. This value is identical to the cost per effective space for the "Bannon property with the strip" alternative.

2. Caggiano Property - The Caggiano property is a 105 foot by 25 foot strip of property, at the southeast corner of the intersection of Kaldenberg Place with Central Avenue. Due to its narrow width, this property can only yield 5 spaces, all of which are considered attractive to the customers of Broadway and Main Street businesses. At an estimated cost of \$285,000 to develop the Site, the cost per parking space is \$57,000, which is the same as the cost per effective space. This value is exorbitantly high.

3. Capalbo Property - The Capalbo property is a 34 foot by 130 foot strip of property, which stretches east from the middle of Kaldenberg Place, between Central Avenue and Main Street. Due to its narrow width, this property can only yield 10 spaces, all of which are considered attractive to the customers of Main Street businesses. At an estimated cost of \$304,000 to develop the Site, the cost per parking space is \$30,000, which is the same as the cost per effective space. This value is identical to the cost per space for the "Bannon property with 11 Kaldenberg Place" alternative.

4. South Washington Lot Tier - under this alternative, a second tier would be added above the existing surface lot at this location. The second tier would be provided vehicular access from South Washington Street. It is estimated that this alternative would yield 62 spaces. In order to maximize the effectiveness of the new tier, a stairway would have to be constructed from the tier to grade level by Continental Liquors. Even with this stairway, the 16 spaces in the south of the structure are considered to be too far from Main Street to be effective. At an estimated cost of \$712,000 to construct the facility, the cost per parking space is \$11,000, while the cost per effective parking space is \$15,000. These values are still quite expensive.

Based on a review of the parking matrix, it is the considered professional opinion of Adler Consulting that more detailed plans and cost estimates should be prepared for the Bannon property, with the 25-foot strip, the Bannon Property with 11 Kaldenberg Place and the 25-foot strip, as well as the South Washington Street Lot alternative. These analyses also give the Village an indication of the relative value of the existing, underutilized, private parking spaces in the CBD.

CHAPTER 4

Public Parking Administration

The organization and management of parking activities varies from city to city. Specific responsibilities and arrangements reflect local circumstances and needs. Major variables include who the parking is for, amount and location of parking involved, community size and resources, state enabling legislation, and local precedents and attitudes.

There is no one best way to administer and manage public parking activities. There is a role for both the public and private sectors. Both roles continue to change with evolving needs and priorities.

This chapter explains some of the more common approaches to public parking organization and administration. It cites their strengths and weaknesses, and provides examples of each.

ROLES AND RESPONSIBILITIES

Most parking space in North America is provided and operated by the private sector. This parking mainly serves as an ancillary to specific developments. Examples include shopping centers, office buildings and banks. The private sector also builds and operates parking as commercial business ventures.

Public involvement in parking activities reflect government's responsibility to protect the health,

safety and welfare of its citizens. Within this context, government's role is to:

- Establish parking program goals and objectives;
- Develop policies and plans;
- Establish program standards and performance criteria;
- Establish zoning requirements for parking;
- Regulate commercial parking;
- Provide parking for specific public uses (i.e., schools, parks, transit stations)
- Manage and regulate on-street parking and loading; and
- Enforce laws, regulations and codes concerning parking, and adjudicate offenses.

In addition, government develops and operates parking facilities when the private sector is not able or willing to do so.

Role of Government

Public agencies perform certain essential planning, administrative and regulatory, enforcement and adjudication services, regardless of who has assumed the primary responsibility for developing and operating parking. This is necessary to assure that parking needs are properly addressed and that parking activities are coordinated with community objectives and goals.

Changing Role. The role of local government has evolved over time. In the early years, parking regulations and enforcement activities typically were assigned to police departments. In larger communities, parking facility development often became the responsibility of public works departments.

With growing concern over parking issues, many communities created special government or quasi-government agencies to handle parking matters. Parking bureaus or departments were established, and in the years following World War II, parking authorities were formed to allow more flexibility in developing and financing parking.

In recent years, many municipal governments have been confronted with a broad array of socio-economic concerns, increasing the burden on public resources. This posed problems for parking authorities that relied on financial aid from the city. And, because of diminishing federal and state financial assistance during the 1980s, some communities sought greater private sector involvement in parking development. This created new challenges for parking managers.

Responsibilities. The role and responsibilities of the public sector continue to change in many communities. The public sector's role in parking may involve planning a park-and-ride facility, building and operating a downtown garage; or merely setting guidelines for the private sector. Implicit is its responsibility to provide essential community services and to plan for the community's future.

Local government must establish community goals and objectives, and develop policies and plans necessary for the community's existence and improvement. To effectively provide vehicle parking, local government should continually acquire, maintain and disseminate current data on transportation, including inventories of land use, economic trends, traffic data, and parking supply and use characteristics. Factual and current information is essential to both private and public interests as a basis for establishing parking needs and for determining the most appropriate and cost-effective way of providing for the need.

Local government has responsibility for regulating the provision and use of parking space. Accordingly, most communities establish and enforce zoning ordinances, subdivision regulations,

and building codes that help assure acceptable quantity and quality of off-street parking. Parking facilities operated as commercial venture are regulated further through licensing or operating certification, and increasingly are required to submit to periodic safety and structural inspections.

Regulation of on-street parking and loading is an important governmental activity. These regulations must be an integral part of each community's overall traffic management activities.

Parking enforcement is another area of local government responsibility. Whether it is performed by the police department, a special civilian agency, or a private contractor or combination, it varies by local jurisdiction. The trend, particularly for larger cities, is to assign the enforcement responsibility to civilian departments of government — usually the department having overall responsibility for street traffic and parking.

Administrative adjudication for parking violations increasingly is being substituted for the traditional criminal court process. Para-legal hearing examiners, who work under the department charged with parking enforcement, are used to replace criminal court judges in hearings of contested parking violations.

The extent of government participation in on-street parking varies among communities and reflects attitudes, needs, precedence, and the ability of private enterprise to get the job done. Government should play a complementary role to the private sector's provision of parking, consistent with overall public mandates.

The Pittsburgh Parking Authority, for example, once stated that its function is to supplement private garage operation, not to supersede it, and that the facilities shall be operated by experienced private operators under a lease agreement or management contract. The rationale was that experienced private management can attain better efficiency over the long run.

Sources of Local Government Powers

The amount of public responsibility that can be assumed for provision and operation of parking is related to the legal authority allowed local government by state law. The right of a municipal or local government unit to establish park

facilities and to perform other functions necessary to parking may be provided through home-rule powers, through powers delegated by state enabling legislation, or by means of implied powers — those not specifically delegated but considered to be covered by some broadly assigned authority.

Five general types of laws delegate authority for parking actions to local government: (1) general laws, authorizing all municipalities or designated class thereof within a given state, to provide parking facilities; (2) local laws, authorizing specified cities to deal with their parking problems in a more or less comprehensive manner; (3) special laws, authorizing the use of a specified piece of property for parking or the provision of parking facilities in connection with a single development or establishment; (4) laws applicable to state properties; and (5) laws applicable to private businesses, authorizing the provision of parking facilities in connection with localized business areas or specified types of private business.

Fundamental powers required by public entities to enable them to deal with parking problems (exclusive of private-sector initiative) are the ability to (1) plan and design facilities, (2) finance, (3) assemble land, (4) construct parking facilities, and (5) operate and maintain facilities.

The power to acquire land for lease has been included in many state and local laws. Most of these laws merely enumerate leasing as one of the permissible methods for acquiring parking sites. In a few, however, there are limitations on the leasing privilege.

In a number of instances, private interests have been allowed to build parking facilities on public property, and then to operate them under a lease arrangement. This matter has been given specific attention in many parking laws and appears to be implied in a number of other statutes. Usually, local government retains some contractual control over leased parking facilities to assure equitable parking rates and proper use of the facilities.

New laws or special authority may be needed for local government to institute a particular type of parking action. Decisionmakers should determine the adequacy of existing powers with respect to the nature of proposed actions. If there is a lack of any necessary authority, immediate steps should be taken to obtain some. If it appears

that the desired legislative action will be very difficult to secure or that it will require considerable time, it may be best to alter the nature of the proposed parking action.

A broad and legally enforceable state parking law can enable local government to institute and implement their parking programs without recourse to special legislation or court decisions. Otherwise, when parking action is required, a program may be seriously delayed pending the convening of the state legislature and adoption of measures delegating the essential authority.

ORGANIZATIONAL ARRANGEMENTS

Administration of parking activities within local government can take many forms, depending on community needs. Responsibilities may be vested in a traditional city department (i.e., public works), in a department of traffic and parking, or within a special parking department. They may be vested in a parking utility or a more autonomous parking authority.

Organizational arrangement and powers should be carefully matched to local conditions and needs. It should take into account the legal authority, political pressures, financial resources, character and magnitude of needs. It should strive to achieve managerial efficiency, operating and financing autonomy, and accountability.

Different public (and private) organizational arrangements have been used to successfully implement and manage parking. No absolute principles or formulas exist for achieving the ideal form or model of structure to manage parking activities. Many factors that vary from community to community must be considered. There are advantages and disadvantages to every organizational form and, though the form is important, it is management's capability and the processes and systems used that enable the parking program objectives to be realized.

Local Government Department

The parking function can be delegated to an existing department within the city government or it can be assigned to a separate parking department or utility. The parking department or divi-

sion should have responsibility for: (1) planning parking and loading facilities; (2) regulating the location, construction, and operation of municipal facilities; (3) setting rates for municipal facilities; and (4) developing and operating municipal facilities as required.

Existing Department. Placing parking responsibilities in an existing municipal department is the simplest way to establish a parking program. This is a common means of dealing with parking in smaller cities. The Department of Public Works or Police Department is the logical place to assign parking activities in communities where there is no traffic or transportation department (often with communities of under 100,000 people). However, parking needs may not receive the necessary attention where such an arrangement is used in larger cities.

Combined Department. A combined department of traffic and parking has merit, since it enables all street traffic related activities to be brought into one agency. The parking agency also could form a major unit in an overall department of transportation. Such a department could result from a coalition of existing agencies. However, it could pose problems of manageability in very large cities.

Separate Department. Parking responsibilities can be placed in a separate department that is primarily devoted to parking. This gives parking activities equal status with other departments. A separate department enables direct lines of authority, and its duties and responsibilities can be clearly defined. In addition, capable management personnel can be more easily attracted by the prestige, salary and authority of a city department head. A full-time staff experienced in parking can give the parking program the attention and expertise required. This arrangement calls for close coordination between departments, such as between the parking department and the traffic engineering or transportation department.

Parking Utility. Some states (i.e., Wisconsin) allow formation of a parking utility. The utility operates basically as any other municipal agency, but with a separate corporate structure. It is a legal entity of local government with power to make contracts and to exercise responsibility for its own activities. Utilities remain under the direct control of local government. Madison,

Wisconsin, and Buffalo, New York, provide parking utilities. Figure 4.1 shows Madison's organization for parking.

Strengths and Weaknesses. Each of the options offers an administrative form directly controllable by local government and is consequently responsive to public demands. Income from parking revenues are returned to local government's budget, and funds for improvements, maintenance and operation can be raised by taxation and other sources normally available to government.

Placing the responsibility for off-street parking in a municipal or county department (separate or combined) has the potential advantages of: (1) coordinating the community's parking system and including on-street spaces; (2) facilitating proper integration of parking with street and other transportation access elements; (3) permitting maximum use of the municipality's power, equipment and personnel; (4) keeping parking fees lower because no taxes or profits need be reflected; and (5) facilitating regulation and enforcement of parking operations, fees and usage patterns. Figure 4.2 illustrates a division of parking organized within a department of transportation.

Perhaps the greatest disadvantage of administering parking through a city department is that funds for major capital expenditures must come from local government's budget. Therefore, parking must compete for funding with other community needs. At the same time, parking expenditures add to local government's total indebtedness, which is limited by law. Moreover, changes in political leadership can disrupt the continuity of management and the efficiency of parking program administration. And, political influence is more apt to override objectivity than with more autonomous arrangements.

Parking Boards or Commissions

A slight departure from direct control of municipal parking by local government is the parking board or commission that oversees the parking program and operation. This type of arrangement is under local government auspices. The mayor and council, for example, form the board by appointing a group of interested businesspeople and community leaders who are cog-

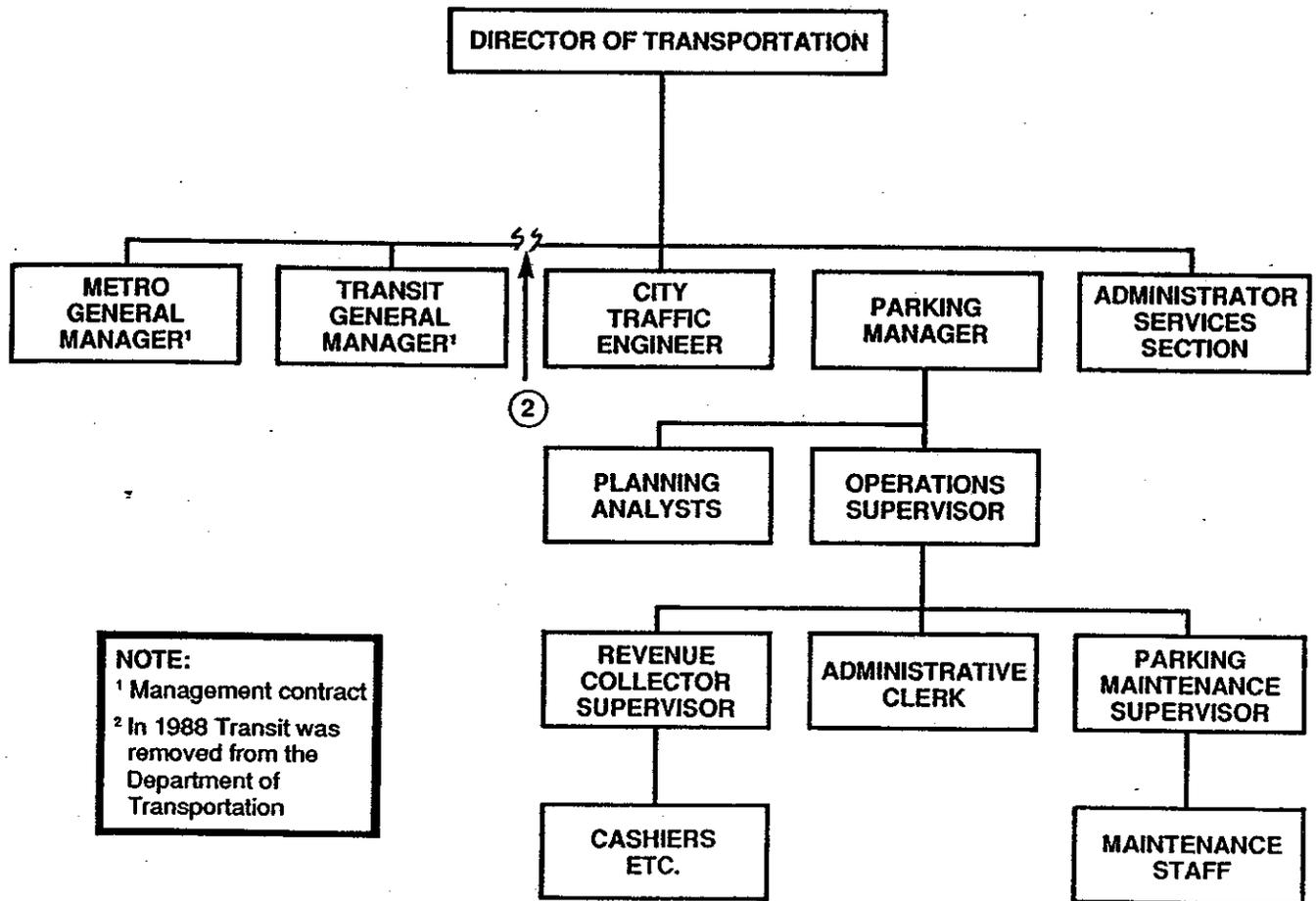


Figure 4.1. Parking organization for Madison, Wisconsin

nizant of parking needs. This group has the power to employ outside services to operate and maintain the parking facilities.

Basic ingredients for the success of this approach include:

- Escrow financial support of bonds by business community;
- City financing of parking investment;
- Strong control of parking program by Board of Parking;
- Careful planning of additional parking facilities by specialists;
- Sound operation of facilities by specialists;
- Energetic support of new plans, maintenance and improvements; and
- Unilateral board decisions with no political influence.

Members of most parking boards or commissions serve without pay. Their role is primarily an advisory and policy-setting one. This type of

organization gives a voice to representative members of local groups interested in improving parking conditions.

Boards are helpful in the formative stages of a parking program in obtaining public support and in setting initial policies. A weakness is the limitation of powers to act, since in most cases, financial support and the final authority rests with the elected officials. In addition, the decision-making process of a large group can become cumbersome and time consuming. Interaction and communication with professional and technical staff within city departments could pose problems.

Parking Authority

Parking authorities are established as autonomous parking agencies. However, the degree of actual autonomy varies from place to place. The

City Department Parking Administration

The Madison Parking Utility created in 1947 was the first municipality-operated parking system in the United States. It was originally administered by a 5-member Board of Parking Commissioners. This number was increased to 11 in 1966. In 1973 the Board was superseded by the City Transportation Commission with an advisory Parking Committee.

The organization of parking activities in Madison, Wisconsin, illustrates (1) diffusion of functions within various agencies, and (2) organization of a parking division within the Department of Transportation (DOT).

Public city parking is operated as a unified system administered by a parking utility. Parking in central Madison is provided by state, county, city and private sectors. The city has review and approval of public and private parking supply but has limited control over management and usage of private parking and that provided by other governmental units.

Eight different city and county agencies and committees share city parking management responsibilities. These include the Parking Division of the Madison DOT, the Parking Utility Committee, the Transportation Commission, the Police Department, the Data Processing Department, the City Treasurer in the Department of Administration, the City Attorney, and the Dane County Court. The city operates a total of 8,100 parking spaces in the central areas. Approximately 3,700 off-street parking spaces are located in six garages and five lots. The remaining 4,400 spaces are located on-street.

The Parking Division within the Madison DOT includes a staff of about 60 full- and part-time persons who oversee, regulate, manage, and perform the day-to-day operations of the major types of public parking. Residential permit parking, attended/metered parking ramps and lots, 2-hour free parking, on-street metered parking, and loading zones are included. The Division also coordinates establishment of on-street parking regulations with the Traffic Engineering and

Transit Division. Figure 1 shows how the parking division functions within the city DOT.

The Transportation Commission functions as the parking utility for the operation of the Parking Utility System pursuant to Sections 66.066 and 66.079 of the Wisconsin statutes. It advises the Common Council on parking policy. The commission has complete jurisdiction over off-street parking time limits and rates. (Common Council approval is not required; however, the council does retain veto power.) On-street parking is regulated by ordinances adopted by the Common Council.

A six-member Parking Committee functions as an advisory body to the Transportation Commission and the Parking Committee chair is a member of the Commission. The committee supervises the assets and operation of the Parking Utility System.

Operation of the Parking Utility is financed completely by parking revenue. The utility receives no subsidies or tax money from the city of Madison, nor does it receive any parking fines collected from tickets issued for parking violations. Moreover, the utility is required to make a payment in lieu of taxes to the city's general fund each year, and it pays the salaries of five parking monitors to enforce parking at the meters.

The Police Department also shares in parking management responsibilities. It enforces parking regulations with the help of a 17-person civilian ticket writing force of parking monitors. The Police Department pays the Data Processing Department an annual fee to process parking tickets. The City Treasurer (in the Department of Administration) collects parking ticket payments and counts parking facility revenues. The Dane County Court adjudicates parking tickets. Finally, the City Attorney writes parking ordinances and writes opinions on the implementation of ordinances and statutes.

parking authority is a special purpose corporation that is a legal entity with board members under most state statutes. The authority can function independently of other local government departments and is normally responsible for administration, planning, financing, development and operation of an off-street parking program. It has the power to: acquire property through use of eminent domain; purchase, construct, improve, and operate parking facilities;

borrow money and issue necessary revenue-supported bonds; regulate use of parking facilities; establish parking rates; consummate contracts; and execute all instruments necessary to conduct its business. It does not have the power to tax, nor police power to enforce traffic and parking laws.

Members of the authority board, usually five members, are appointed by the mayor (subject to approval of the local legislative body) to serve in unsalaried positions normally for staggered 5-

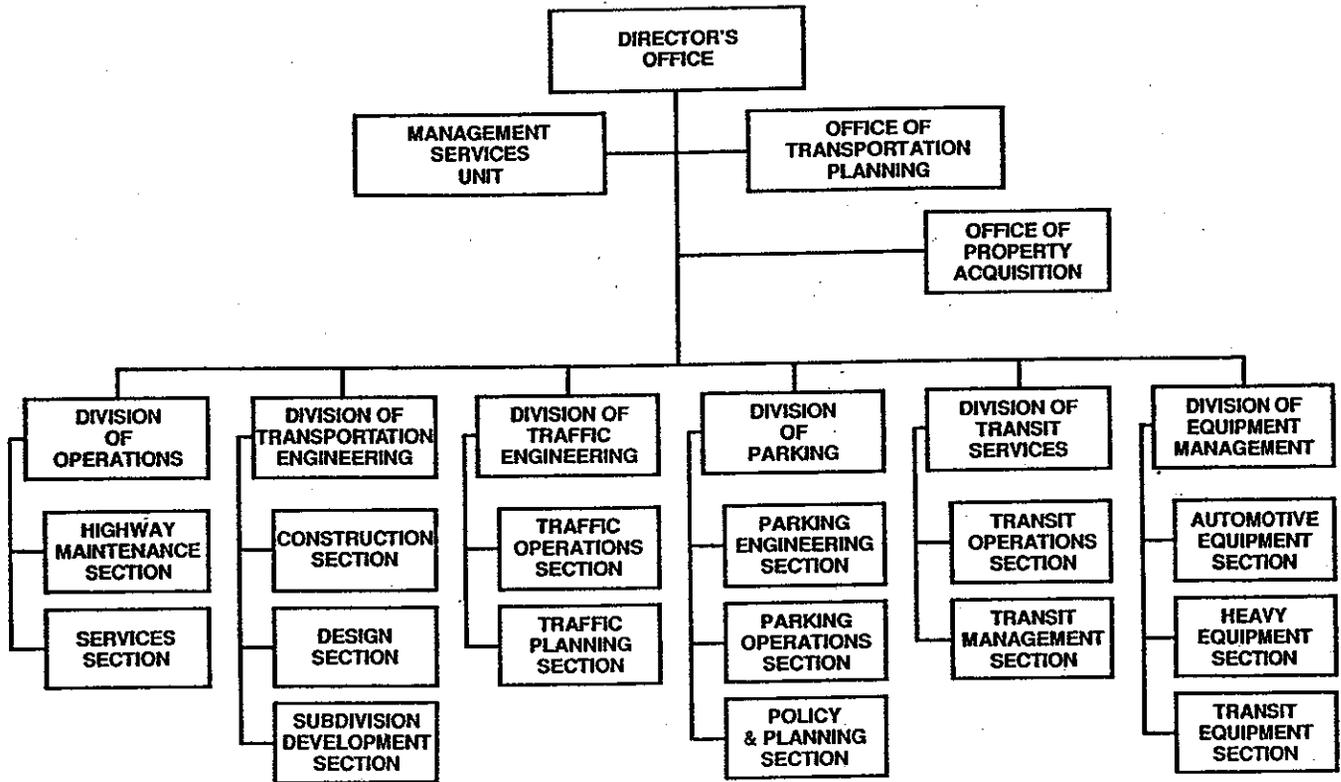


Figure 4.2 Organizational chart for the Department of Transportation in Montgomery County, Maryland, showing the relative position of the Divisions of Parking

year terms, ensuring membership continuity through elections. This continuity is an important consideration to the financial community when evaluating the authority's bond rating. Members can be removed during a term by the mayor and council only if just cause is demonstrated.

The authority establishes its own organization and hires a staff. It can contract for management, accounting, planning, engineering, maintenance and other services. Careful coordination with other agencies and private businesses is necessary to ensure that the parking program fits community needs. To fulfill its responsibilities to its bondholders, the parking authority normally requires separate auditing of its bond indentures and independent fiscal and legal counseling, and consulting engineering services.

Functions. Parking authority staff normally have responsibility for planning, financial, and supervisory functions (Figure 4.3). Some authorities have an engineering function as well, but

this is not essential. The goal should be to provide necessary management resources without excessively increasing administrative costs — to adopt a businesslike approach to planning, development and operations of off-street parking.

Strengths and Weaknesses. The primary advantage of an authority is that it can provide an agency, staff capabilities and legal authority nec-

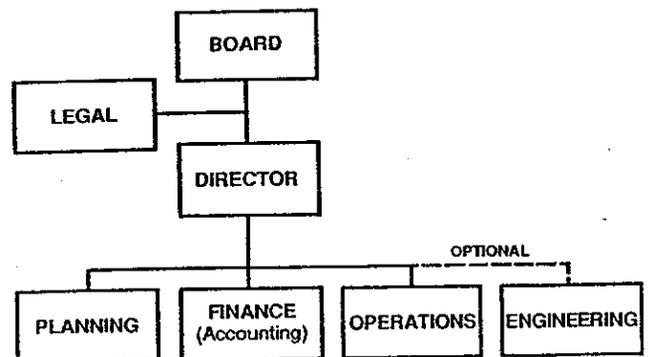


Figure 4.3. Typical parking authority organization

County Department Parking Administration

In 1945, the Montgomery County government and the private business sector both recognized the vital role that off-street parking would play in the economic development and welfare of the county. As a result, legislation was enacted authorizing creation of a comprehensive program to provide parking needs for the unincorporated business communities within the county area. The program was initiated with the Silver Spring Parking Lot District in 1945, followed in 1950 with Bethesda and in 1951 with the Wheaton and Montgomery Hills Districts.

Within each district, the program is totally self-sufficient, generating its own operating and capital funds without burdening the county's General Fund. Funding is accomplished through direct contributions by property owners in the form of special ad valorem parking lot district taxes, parking receipts from users based on a nominal rate structure, enforcement income, income from investments, and proceeds from bond equity unto itself for funding purposes. The current level of operation and service, including debt service on capital projects, is paid in total from operating revenues with surplus funds available for future programs and capital projects.

The basic purpose of the public parking program is to support the comprehensive development of the central business districts (CBD) of Silver Spring, Bethesda, Wheaton and Montgomery Hills by providing, operating and maintaining economically self-sufficient parking facilities that keep pace with the needs generated by growth in these districts. To this end, emphasis is directed toward planning and defin-

ing the future role of parking as it relates to a comprehensive, multi-use transportation system and master plans for the affected business districts.

Montgomery County's public parking program has grown to a system of nearly 13,000 parking spaces both on and off-street. Off-street facilities number 11 multi-level garages and 37 surface lots. Parking needs of each parking district are based primarily on master/sector plans for that area, together with a knowledge of the development patterns that have actually taken place.

The county's parking policy is twofold. First, the public parking program must promote the economic welfare of the CBD by supplying a sufficient number of parking spaces to accommodate that segment of public demand that is not provided for by developers or is not served by alternate travel modes.

Second, it must promote and complement a total transportation system through careful balance of rates and supply to encourage use of the most efficient and economical transportation modes available.

The program is administered through the Division of Parking within the county's Department of Transportation. As shown in Figure 4.2, the division is one of six divisions within the department. It contains sections in: (1) engineering, (2) operations and policy planning. Collectively, it has 46 full-time positions. One reason for the program's success has been the cooperative and excellent working relationship between the Chambers of Commerce and the Department of Transportation.

essary to deal with the scope of parking problems. Its powers are normally broad and flexible and it can plan and initiate a parking program suitable to overall community needs. Other advantages include: (1) centralization of extensive authority and responsibility for the parking program in a single agency; (2) relative freedom from political pressures; (3) avoidance of certain governmental processes and other delays; and (4) payment of costs, as a rule, from user revenues, possibly without affecting the regular municipal budget or tax program. In addition, it can issue non-taxable revenue bonds to finance parking developments.

The authority form also has weaknesses. Au-

thorities may bypass city legal debt limits and issue their own revenue bonds. This ability is not considered a blessing by some financial analysts since debt to the community can be increased beyond the amount considered financially sound. The interest rate on the authority's revenue bonds is high, and the debt greater than if the city finances the undertaking with general obligation bonds. Coordination of parking programs with other city activities relating to planning and transportation and traffic may be reduced (at least potentially) by the autonomous character of an authority. The authority also may duplicate the work or even conflict with development plans of city departments.

Board of Parking Administration

Buffalo, New York, has a seven-person Board of Parking. The Buffalo plan for development and operation of parking garages has been in existence since 1954; it resulted from the cooperation of the downtown merchants, the Board of Parking and the officials of the city of Buffalo through the office of the Mayor, the Common Council and the office of the Comptroller.

The city of Buffalo, by the issuance of general city obligation bonds (interest at the going market rate) finances the land acquisition and construction of the parking garages (\$30 million to date). Downtown merchants, through a private not-for-profit corporation, the Buffalo Civic Auto Ramps, Inc., lease the ramps for the term of 30 to 40 years as reflected in the bond life, with ownership remaining with the city. Rent is set at a figure that provides a yearly rental in an amount sufficient to retire the bonds, with interest, over the 30- to 40-year period. All profits over and above rental and operating costs are paid to the city in lieu of property taxes. Buffalo has constructed 12 parking ramps and one surface parking lot in the downtown core. It received over \$4 million from operation of the facilities between 1954 and 1985.

The Buffalo plan of public development and private operation of garages is somewhat unique. It used the city's credit to acquire sites and construct garages at the lowest possible cost. The garages then were turned over to a private corporation comprised of downtown merchants and bankers to operate on a non-profit basis.

Ideally, a parking authority can combine the public responsibility of government with the potential efficiency of private enterprise. An authority that is financially independent is likely to be most effective. In actual practice, however, parking authority financial independence varies. Some agencies are totally independent from their local government's resources. Yet, some parking authorities are obliged to share resources with local government, often in exchange for certain public services. In other cases, municipalities may finance all or part of the authority's development costs.

During periods when interest rates are particularly high, there are sometimes public moves to shut down parking authorities, and transfer (often through purchase) facilities to the municipality itself. When this occurs, the parking authority experiences economic hardship and does not have the legal ability to generate non-parking revenues to help support the existing parking program and/or develop new parking.

The parking authority adds another entity to the local government structure. This could pose problems of government responsiveness and coordination where a large number of such agencies exist outside of the formal local government structure.

Parking Authority Examples. Examples of several parking authorities follow.

- *New Haven Parking Authority.* The New Haven Parking Authority was created in 1951 in response to growing community concerns over the availability of downtown public parking and the perceived inability of the private sector to adequately serve the needs of the downtown business community and its patrons. The charge was led by the Chamber of Commerce and brought to vote by New Haven residents in a public referendum, provided for by the terms of enabling legislation approved by the Connecticut General Assembly.

The authority, a quasi-independent municipal agency, was created to acquire, construct, reconstruct, improve, operate and maintain off-street parking facilities. Its autonomy is mainly geared towards financial matters, such as providing a vehicle to finance revenue bonds. It has its own independent operating budget and largely subsists on user fees. Aside from certain capital agreements, it is not part of the city's General Fund. Subject to authorization and approval of the Board of Aldermen, it has power to acquire real property, including use of the power of eminent domain; enter into contracts for construction, reconstruction and improvement of parking facilities; lease facilities to individuals, firms and corporations; and establish and collect off-street parking fees.

The ties to the city, particularly in the past, have been very close. For example, the mayor appoints the Parking Authority Board members and the mayor is an ex-officio board member.

Board of Aldermen approval is required for developing and financing the authority's parking facilities. The City Traffic Engineer, until 1987, also served as part-time executive director to assure coordination of traffic and parking activities. The Parking Authority is part of the development team that includes various city departments engaged in development matters. It has been an integral component of major urban renewal and development projects.

The New Haven Parking Authority owns and/or operates 10,000 parking spaces, including seven garage structures and 26 surface parking lots, serving retailing, commercial, banking, professional offices, government offices, entertainment facilities, and other uses with hourly, daily and monthly parking. Although its main emphasis is downtown parking, it operates several parking facilities that serve two major medical centers, and several neighborhood business and residential areas. It also operates the Union Station Transportation Center (railroad station building and 900-space garage). It controls over

\$60 million worth of parking facility investment. Its 1989 operating budget was approximately \$10 million. It makes no tax or in-lieu payment to the city. The authority's administrative staff was substantially enlarged when its first full-time director was appointed in 1987. An organizational chart of the New Haven Authority is shown in Figure 4.4.

White Plains Parking Authority. The White Plains Parking Authority, established in 1941 was the first such agency created by the New York State Legislature. It contains seven members named by the mayor; the chairman always has been a member of the City Council.

The authority has power to acquire land by purchase and lease. It has the power to construct and operate off-street facilities, to issue bonds and to pledge revenue for their amortization. It was established as a separate entity on the premise that "parking could pay for itself." Revenue traditionally have covered debt service, operating, and maintenance costs. Because of this constraint, no new garages have been constructed.

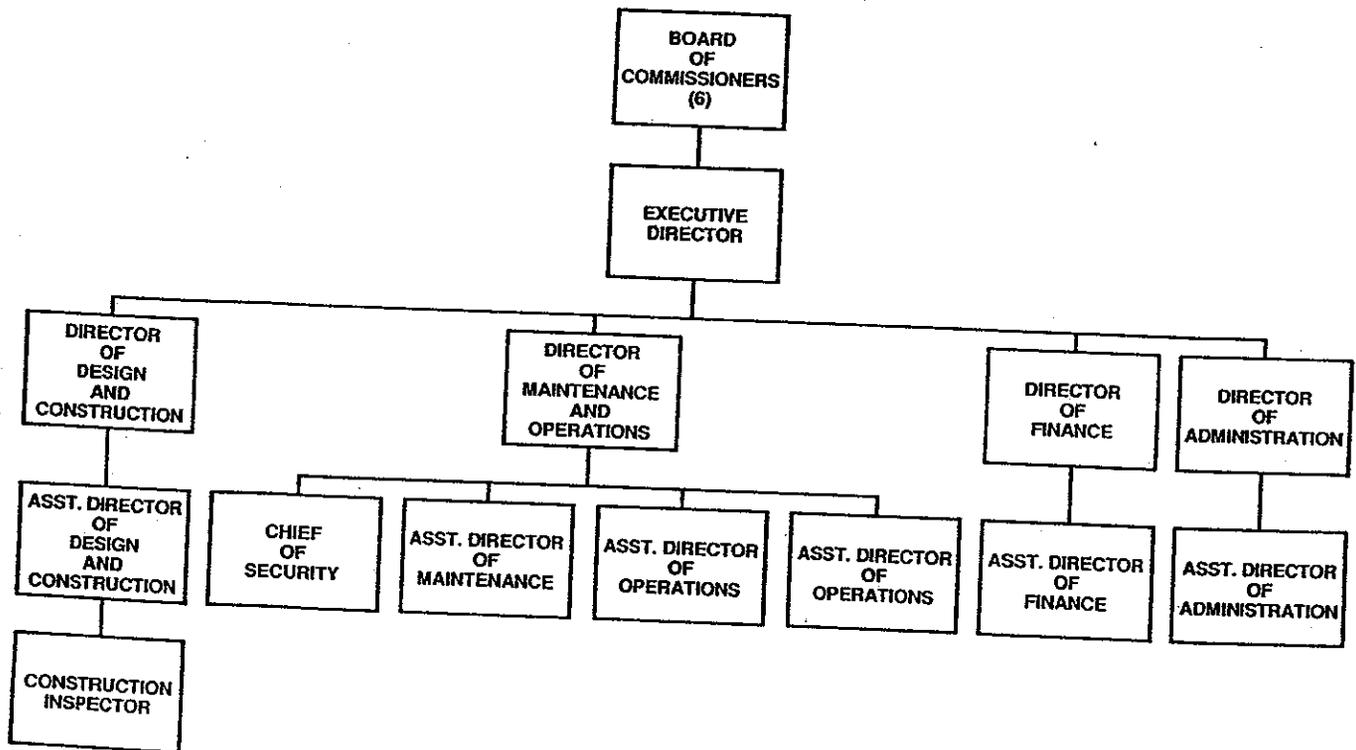


Figure 4.4 New Haven, Connecticut Parking Authority organization.

recently, except a public-private cooperative venture at the Metro North train station. The authority is constantly looking for arrangements with the private sector where it would provide the land and let the private sector build the parking.

The authority operates more than 11,000 metered parking spaces in its many lots and garages, and it has both conventional meters and centralized parking fee payment boxes. Its parking facilities have been an important catalyst for the economic resurgence of White Plains since World War II.

Parking rates are approved by the City Council. The council also must approve expenditures of over \$10,000. Parking meter fine revenues are paid to the authority regardless of who collects them. The authority pays no taxes; however it makes a small payment to the city for administrative services rendered.

The authority draws upon city agencies for support services, thereby enabling it to function with minimum administrative staff. The city's Law Department negotiates purchases; the Department of Public Works provides engineering services, and the Finance Department handles payroll functions. Cash collection and processing — once handled by the Police and Finance Department — are now handled by the authority.

The White Plains' administrative structure is shown in Figure 4.5. The authority is in the process of taking over the operation of the Parking Violations Bureau run by New York State. Accordingly, it is expanding its staff and computer facilities to provide this service.

Other Agencies

Public transport agencies in many communities have developed extensive park-and-ride programs. Facility planning, location, design and, in some cases, operation, is the responsibility of the transit agency.

A few states have assumed responsibility for parking development. The Connecticut DOT, for example, has developed a statewide program of park-and-ride facilities for both transit riders and carpools.

Finally, special public activities, such as airport authorities, hospitals and universities de-

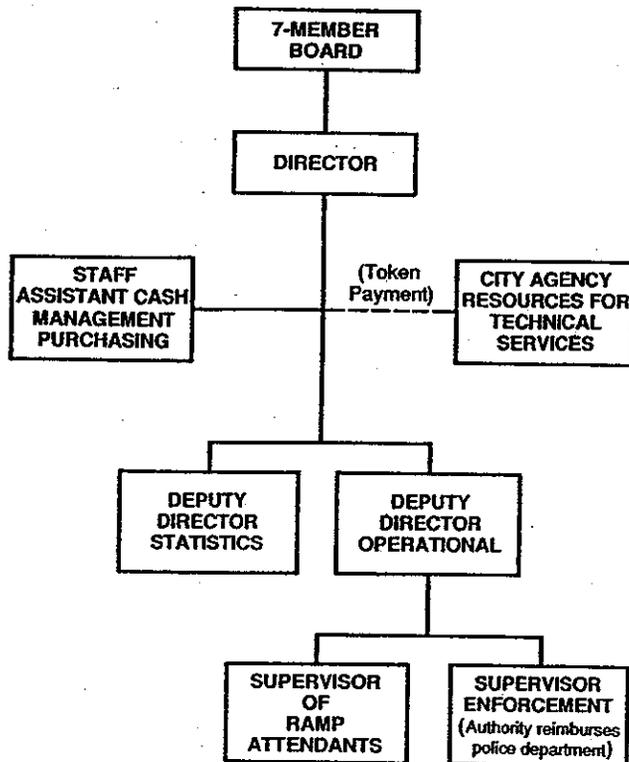


Figure 4.5. White Plains, New York Parking Authority organization

velop and/or operate their own parking. Often, these activities have the ability to finance the parking developments from user (parking) fees they collect.

CONCLUSIONS

Since parking is important to the local economy, its administration calls for concerted actions by both public and private sectors. In each community, appropriate groups or agencies must take the initiative to get programs started and to keep them functioning. Responsibility must be assigned and resources must be made available.

Local officials should be aware of their parking problems and remedy them. They should assume a key role in assuring adequate parking space. Government leadership is essential, even where local government does not build and operate parking facilities.

Administrative arrangements are varied. The key is an efficient, responsive and responsible

structure. The job is large enough and important enough to warrant coordination and continuous attention of regular municipal departments or concentrated efforts of an autonomous body.

There is no substitute for competent personnel. Parking administrators must have vision, under-

stand traffic and parking problems, comprehend business management principles and possess an intimate knowledge of public administration. They must have the freedom to act within the guidelines established by the community.