Section 3.12: Traffic and Transportation

This section describes the existing traffic conditions in the immediate and affected vicinity of the Nation's properties subject to the Proposed Action. This analysis is divided into two subsections, which separately address the Nation's LakeSide Trading Parcels, in Seneca Falls and Union Springs, and the Nation's vacant parcel in Springport. As discussed in the Project Description, the Montezuma parcel has been withdrawn from the fee-to-trust application and is therefore no longer part of the Proposed Action or alternatives. Therefore, any analysis of the Montezuma parcel that was included in the DEIS has been removed from this FEIS.

The traffic analysis presented does not reflect the actual environmental baseline on the date of the tribal application. Environmental baseline traffic conditions would reflect an operational gaming facility. The temporary closing of the gaming operations necessitated the analyses presented.

Since the publication of the DEIS, the background conditions of the Project Area have not changed to any degree that would substantively affect the analyses or the conclusions drawn thereon. The Nation continues to utilize its properties in the manner described in the DEIS. Furthermore, there have been no substantive environmental or socioeconomic changes in the vicinity of the Project Site that warrant further analysis of the existing conditions, or future with or without the Proposed Action.

A. LAKESIDE TRADING PARCELS

The discussion below assesses existing conditions of traffic on the roadways in the vicinity of the Nation's LakeSide Trading properties located on NYS Route 89 in the Town of Seneca Falls, Seneca County, New York, and on NYS Route 90 in the Village of Union Springs, Cayuga County, New York, and then assesses future conditions in 2010 for both the Seneca Falls and Union Springs LakeSide Trading properties. Potential traffic impacts associated with the Proposed Action and its alternatives are discussed in Section 4.12.

SENECA FALLS ENTERPRISE PROPERTIES

PROPERTY DESCRIPTION

The Seneca Falls property is comprised of LakeSide Trading (gas station/convenience store), currently in operation. The Nation's LakeSide Entertainment gaming operation, located within the convenience store building, is considered a current use of the property due to its presence at the time of the Nation's fee-to-trust application, however the use is temporarily not in operation. The property is located at the northwest corner of the intersection of NYS Route 89 and Garden Street in the Town of Seneca Falls as shown in Figure 3.12-1.

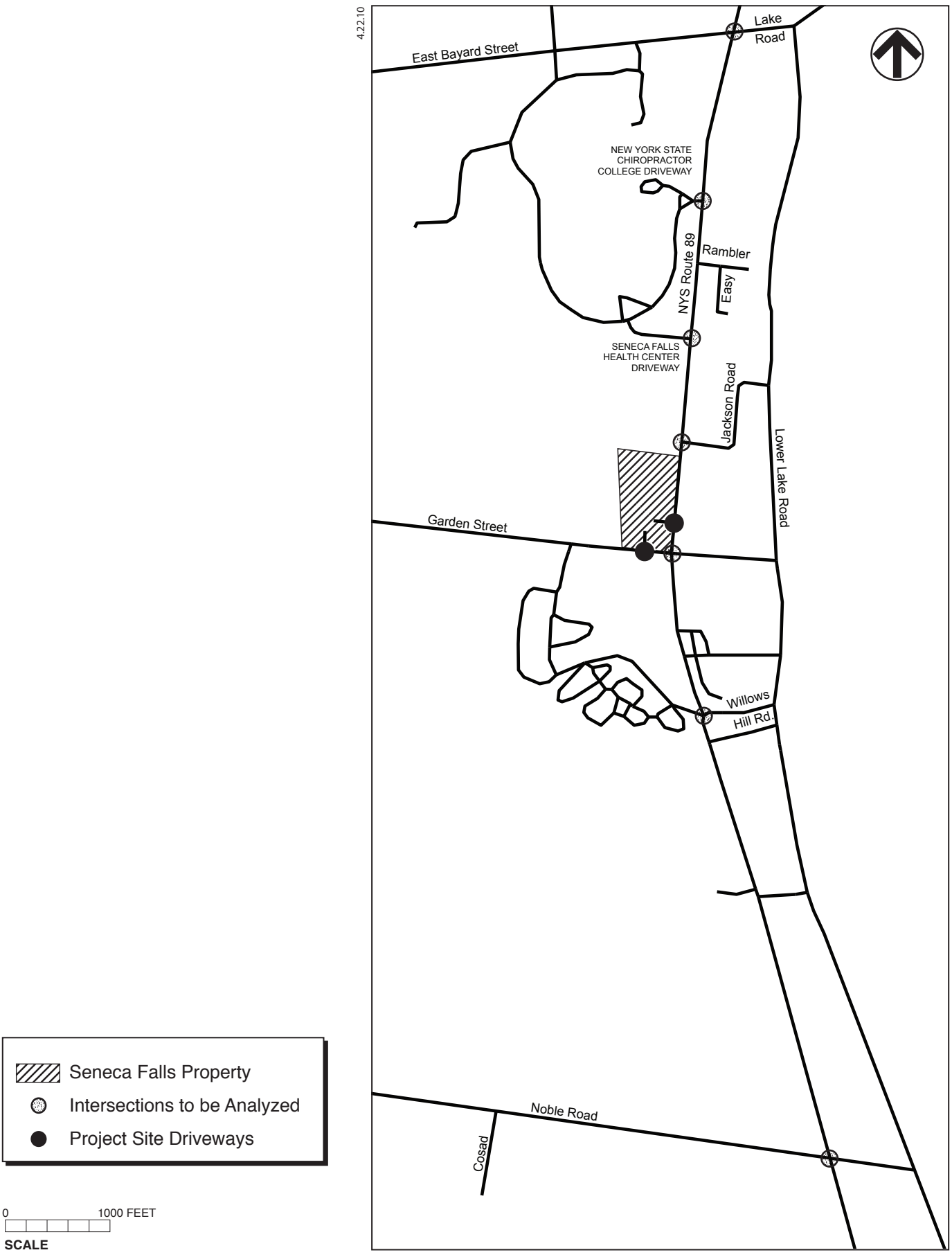

Figure 3.12-1

Seneca Falls Traffic Study Area

SENECA FALLS STUDY AREA

To assess the traffic impacts associated with LakeSide Entertainment, an overall study area was determined that considered key intersections likely to be affected by project-generated trips. The Seneca Falls traffic study area is shown in Figure 3.12-1. As shown in Figures 3.12-1, nine (9) intersections were identified for detailed analysis in the Seneca Falls area. These were:

1. NYS Route 89 & East Bayard Street/Lake Road
2. NYS Route 89 & NY Chiropractor College Main Entrance Driveway
3. NYS Route 89 & Seneca Falls Health Center Driveway
4. NYS Route 89 & Jackson Road
5. NYS Route 89 & Project Site (Gas Station/Convenience Store & Gaming Facility) Driveway
6. Garden Street & Project Site (Gas Station/Convenience Store & Gaming Facility) Driveway
7. NYS Route 89 & Garden Street
8. NYS Route 89 & Willows Hill Road
9. NYS Route 89 & Noble Road

All nine (9) of the intersections listed above are unsignalized. The Seneca Falls project site is accessible by curb cuts along both NYS Route 89 and Garden Street.

ROADWAY AND INTERSECTION CHARACTERISTICS

The following is a brief description of the major roadways and intersections within the study area.

NYS Route 89. NYS Route 89 is a rural arterial that generally runs in a north-south direction and is under the jurisdiction of the New York State Department of Transportation (NYSDOT). NYS Route 89 provides one moving lane in each direction and varies in width between 30 and 33 feet within the study area. According to NYSDOT's *Highway Sufficiency Ratings*[1] and based on field observations, the pavement along NYS Route 89 is generally in fair-to-good condition.

East Bayard Street. East Bayard Street is a Seneca County-owned roadway that generally runs in an east-west direction. East Bayard Street provides one moving lane in each direction and is approximately 40 feet wide within the study area. Based on field observations, the pavement along East Bayard Street within the study area is generally in good-to-excellent condition.

Garden Street, Noble Road. Garden Street and Noble Road are Town-owned roadways that generally run in an east-west direction. Garden Street and Noble Road generally provide one moving lane in each direction. Garden Street varies in width between 21 and 27 feet wide within the study area. Noble Road varies in width between 20 and 21 feet within the study area. Based on field observations, the pavements along Garden Street and Noble Road within the study area are generally in good condition.

[1] Available from the New York State Department of Transportation (NYSDOT).

Jackson Road. Jackson Road is a privately-owned roadway that generally traverses in an east-west direction within the study area. Jackson Road generally provides one moving lane in each direction and is approximately 17 feet wide within the study area. Based on field observations, the pavement along Jackson Road within the study area is generally in good condition.

Willows Hill Road. Willows Hill Road is owned by the New York State Department of Parks, Recreation, and Historic Preservation and traverses through Cayuga Lake State Park. Willows Hill Road generally provides one moving lane in each direction and is approximately 22 feet wide within the study area. Based on field observations, the pavement along Willows Hill Road within the study area is generally in good condition.

NY Chiropractor College and Seneca Falls Health Center Driveways. The NY Chiropractor College and Seneca Falls Health Center Driveways are owned by their respective institutions and generally traverse in an east-west direction within the study area. Each of the driveways generally provides one moving lane in each direction and both driveways are approximately 22 feet wide within the study area. Based on field observations, the pavement along both the NY Chiropractor College and Seneca Falls Health Center Driveways are generally in good condition.

Property Site Driveways. There are 3 driveways to the project site accessible by 1 curb cut along NYS Route 89 and 2 curb cuts along Garden Street. Each of the curb cuts is approximately 22 to 23 feet wide. Based on field observations, the pavement along the 3 project site driveways are in fair-to-good condition.

UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS METHODOLOGY

The LOS criteria for unsignalized intersections are summarized in Table 3.12-1. For the purposes of this analysis, control delay is defined as the total elapsed time that includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation.

Table 3.12-1
LOS Criteria for Unsignalized Intersections

Level-of-Service (LOS)	Control Delay Per Vehicle
A	≤ 10.0 seconds
B	>10.0 and ≤ 15.0 seconds
C	>15.0 and ≤ 25.0 seconds
D	>25.0 and ≤ 35.0 seconds
E	>35.0 and ≤ 50.0 seconds
F	>50.0 seconds
Sources: Transportation Research Board. *Highway Capacity Manual*, 2000.	

EXISTING TRAFFIC CONDITIONS

Existing traffic conditions in the study area were established based on traffic counts conducted in August, 2009 (during the peak summer months). The data collection program consisted of manual and Automatic Traffic Recorder (ATR) counts conducted at various locations throughout the study area. No unusual weather or traffic conditions were observed during the count period.

Figures 3.12-2 and 3.12-3 show the roadway volumes in the study area for existing conditions for the peak hours analyzed. It is important to note that traffic volumes along study area roadways may not necessarily balance because of the presence of various sinks and sources (e.g. driveways) that are located between intersections.

The peak hours of the roadway network are as follows:

- Friday PM Peak Hour – 4:30 PM to 5:30 PM
- Saturday Midday Peak Hour – 12:00 PM to 1:00 PM

The data was then analyzed using the *HCM* methodology to compute delays, v/c ratios, and LOS as described above. See Appendix B of this FEIS for Highway Capacity Software (HCS) outputs for all study area intersections.

As shown in Table 3.12-2, the lane groups/approaches of the intersections in the study area generally operate acceptably at LOS B or better under 2009 Existing conditions during the peak hours analyzed.

ACCIDENT ANALYSIS

Table 3.12-3 summarizes the most recent six years' traffic accident data for the study area intersections compiled from the NYSDOT records for the period of February 1, 2003 through January 31, 2009 (see Appendix B). A review of this data shows that the intersection of NYS Route 89 and Garden Street has the highest number of accidents (11) during this time period (this translates to an average rate of approximately 2 accidents per year). There were no fatalities at any of the study area intersections. Overall, no significant accident patterns were identified at any of the study area intersections during this time period.

Table 3.12-3 also summarizes the most recent six years' traffic accident data for the roadway segments (along NYS Route 89) compiled from the NYSDOT records for the period of February 1, 2003 through January 31, 2009. A review of this data shows that the segment of NYS Route 89 between Noble Road and Willow Hill Road had the highest number of accidents (8) during this time period (this translates to an average rate of approximately 1 accident per year). There were no fatalities along any of the study area roadway segments. Overall, no significant accident patterns were identified along any of the study area road segments during this time period.

There are no high accident locations (intersections or roadway segments) in the study area.

THE FUTURE WITHOUT THE PROPOSED ACTION

Traffic Conditions

The No Build traffic condition is an interim scenario that establishes a future baseline condition. No Build traffic conditions are ascertained based on a number of factors: (1) improvements in the study area road network that are planned or underway; (2) traffic from general population growth in the local area (i.e., "background growth"); and (3) traffic from identified development projects in the project site vicinity.

No major roadway improvements in the study roadway network were identified. A 1 percent growth factor was used in this traffic study as recommended by NYSDOT. This results in an overall growth rate of 1 percent for the 2010 No Build Year. No major development projects were identified in the immediate project site vicinity.

Table 3.12-2
Level-of-Service Analysis Results :
2009 Existing Traffic Conditions
Seneca Falls Study Area

Intersection	No.	Control Type	Approach	Lane Group	2009 Existing Conditions					
					Friday PM Peak Hr.			Sat. Midday Peak Hr.		
					v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS
NYS Route 89 (N-S) @ East Bayard Street/Lake Road	1	Unsignalized (4-way stop control)	Eastbound	LTR	0.24*	9.8	A	0.21*	9.2	A
			Westbound	LTR	0.06*	8.9	A	0.06*	8.5	A
			Northbound	LTR	0.45*	11.8	B	0.32*	10.1	B
			Southbound	LTR	0.32*	10.2	B	0.31*	9.8	A
			Intersection			10.7	B		9.7	A
NYS Route 89 (N-S) @ NYS Chiropractor College Driveway	2	Unsignalized	Northbound	LT	0.00	7.8	A	0.00	7.8	A
			Eastbound	LR	0.16	13.0	B	0.02	11.1	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Seneca Falls Health Center Driveway	3	Unsignalized	Northbound	LT	0.00	7.8	A	0.01	7.9	A
			Eastbound	LR	0.05	10.7	B	0.03	11.6	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Jackson Road	4	Unsignalized	Southbound	LT	0.00	7.8	A	0.00	7.7	A
			Westbound	LR	0.07	11.5	B	0.02	10.9	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Project Site Driveway	5	Unsignalized	Northbound	LT	0.03	7.9	A	0.02	7.9	A
			Eastbound	LR	0.14	13.2	B	0.07	12.0	B
			Intersection		Unsignalized			Unsignalized		
Garden Street (E-W) @ Project Site Driveway	6	Unsignalized	Eastbound	LT	0.02	7.4	A	0.03	7.4	A
			Southbound	LR	0.08	9.5	A	0.10	9.7	A
			Intersection		Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Garden Street	7	Unsignalized	Northbound	LTR	0.03	7.8	A	0.04	7.8	A
			Southbound	LTR	0.02	7.8	A	0.02	7.8	A
			Westbound	LTR	0.10	13.4	B	0.14	14.0	B
			Eastbound	LTR	0.23	14.4	B	0.23	14.1	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Willows Hill Road	8	Unsignalized	Northbound	LTR	0.00	7.7	A	0.00	7.7	A
			Southbound	LTR	0.02	7.8	A	0.03	7.7	A
			Westbound	LTR	0.16	13.8	B	0.15	12.7	B
			Eastbound	LTR	0.15	14.4	B	0.15	14.0	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Noble Road	8	Unsignalized	Northbound	LTR	0.00	7.6	A	0.00	7.7	A
			Southbound	LTR	0.00	7.7	A	0.00	7.6	A
			Westbound	LTR	0.03	11.3	B	0.07	11.1	B
			Eastbound	LTR	0.03	12.2	B	0.05	12.1	B
			Intersection		Unsignalized			Unsignalized		

Notes:
L = Left Turn, T = Through, R = Right Turn; LOS = Level of Service.
*For 4-way stop controlled unsignalized intersections, HCS calculates a lane-utilization factor and not a v/c ratio.

Table 3.12-3
Accident Data Summary
Seneca Falls Study Area

INTERSECTION									NON-INTERSECTION*								
	No. of Accidents (2003-2009**)									No. of Accidents (2003-2009**)							
Location	2003	2004	2005	2006	2007	2008	2009	Total	Location	2003	2004	2005	2006	2007	2008	2009	Total
NYS Route 89 & Noble Road	0	0	1	0	1	1	0	3	NYS Route 89 – Between Noble Road & Willows Hill Road	2	1	1	1	2	1	0	8
NYS Route 89 & Garden Street	1	1	2	1	3	3	0	11	NYS Route 89 – Between Willows Hill Road & Garden Street	1	0	1	0	0	1	0	3
NYS Route 89 & Site Driveway	0	0	0	0	0	1	0	1	NYS Route 89 – Between Garden Street & Jackson Road	3	1	0	1	0	1	0	6
NYS Route 89 & Chiropractic College Driveway	0	0	0	1	0	0	1	2	NYS Route 89 – Between Jackson Road & Health Center Driveway	1	2	2	1	0	1	0	7
									NYS Route 89 – Between Health Center Driveway & East Bayard Street	1	0	2	0	0	0	0	3

Source: NYSDOT

Notes: *Non-Intersection accident data refers to accidents that occurred on roadway segments between intersections.

**Accident Data for February 1, 2003 through January 31, 2009.

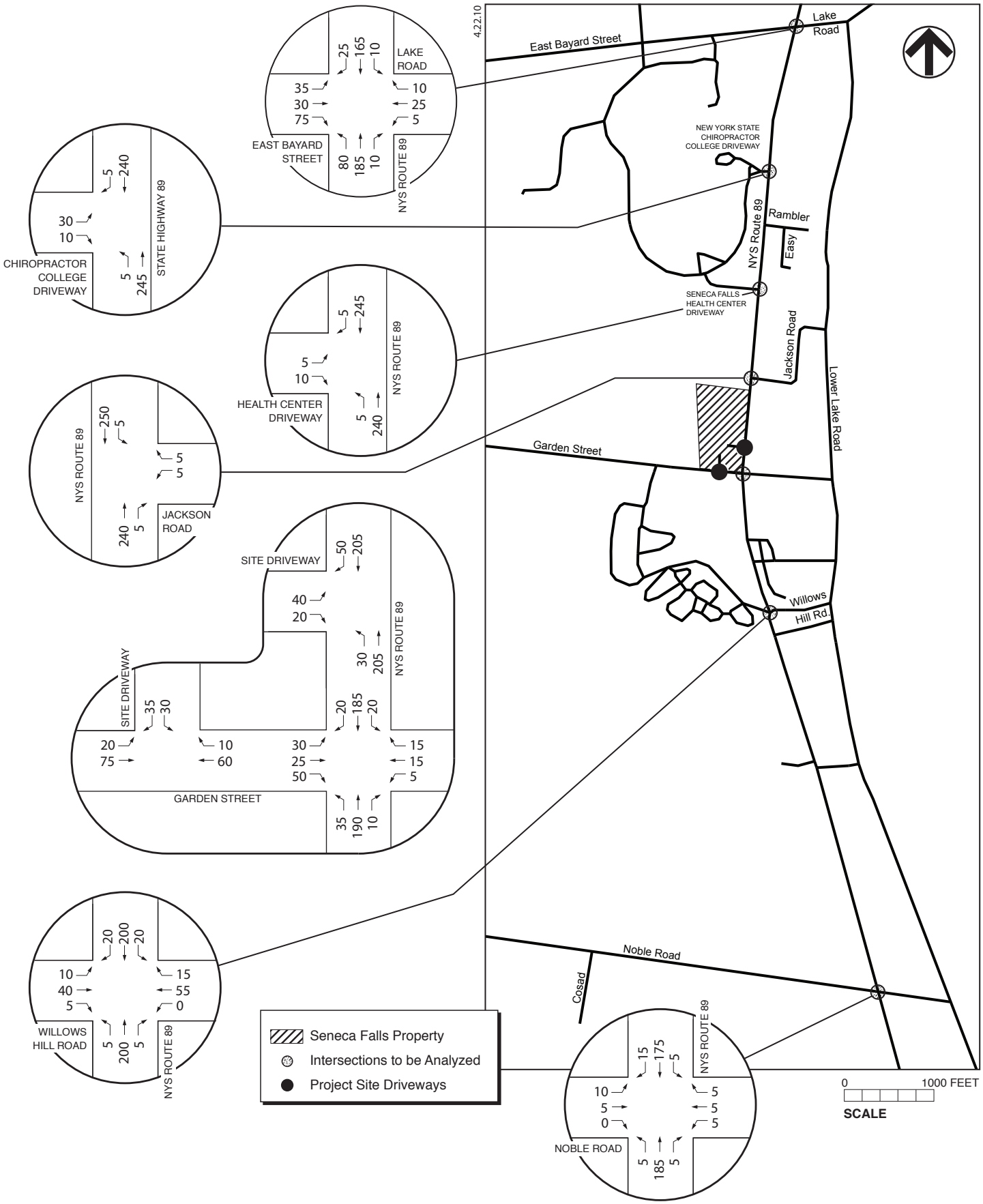

Figure 3.12-2

Seneca Falls
2009 Existing Traffic Volumes
Friday PM Peak Hour (4:30-5:30 PM)

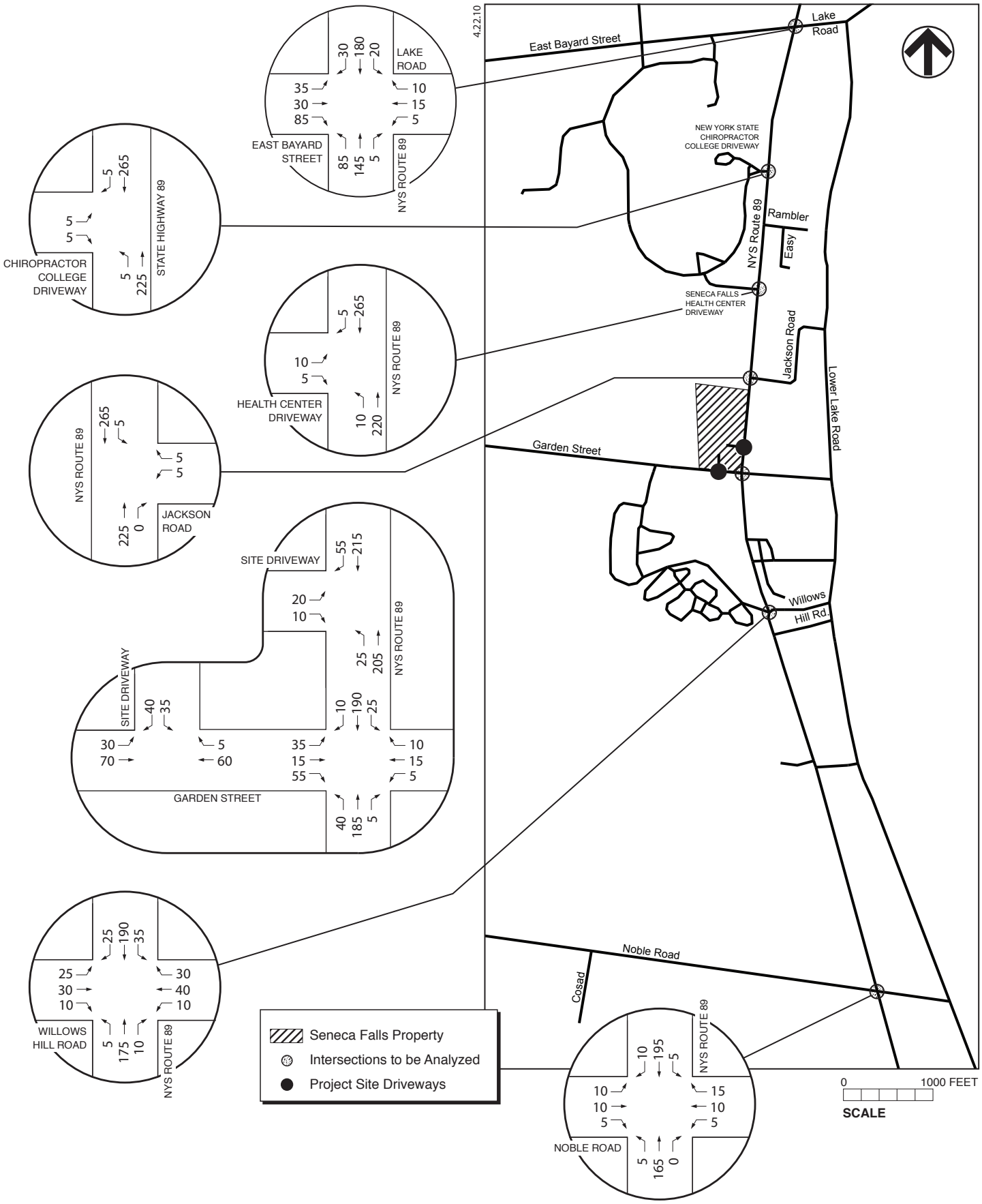

Figure 3.12-3

Seneca Falls

2009 Existing Traffic Volumes

Saturday Midday Peak Hour (12:00-1:00 PM)

Peak hour traffic volumes for the Friday PM and Saturday Midday peak hours are shown in Figures 3.12-4 and 3.12-5, respectively, for the 2010 No Build conditions.

Table 3.12-4 presents a comparison of 2009 Existing and 2010 No Build LOS conditions for the study area intersections.

Under the 2010 No Build conditions it is projected that there would be no notable changes in LOS for any of the lane groups/approaches at the study area intersections.

Accident Analysis

No significant change in the accident experience in the study area is expected under 2010 No Build conditions.

UNION SPRINGS ENTERPRISE PROPERTIES

PROPERTY DESCRIPTION

The Union Springs property is located on a land parcel on the west side of NYS Route 90, north of McDonalds Point Road. The property consists of LakeSide Trading (gas station/convenience store) and LakeSide car wash which are currently in operation. The Nation's LakeSide Entertainment gaming facility is located in a separate building to the south. This facility is considered a current use due to its presence at the time of the Nation's fee-to-trust application, however it has been temporarily closed and is not currently in operation, therefore it is not evaluated on the basis that it does not generate traffic.

STUDY AREA

To assess the traffic impacts associated with the Nation's Union Springs LakeSide Trading operations, an overall study area was determined that considered key intersections likely to be affected by property-generated trips. The Union Springs traffic study area is shown in Figure 3.12-6. As shown in Figure 3.12-6, five (5) intersections were identified for detailed analysis for the Union Springs area. These were:

1. NYS Route 90 & NYS Route 326
2. NYS Route 90 & Old NYS Route 326/Car Wash Driveway/Gas Station Driveway
3. NYS Route 90 & Project Site Driveway (Gaming Facility).
4. NYS Route 90 & McDonalds Point Road
5. NYS Route 90 & High School Main Entrance Driveway

All five (5) of the intersections listed above are unsignalized. The Union Springs project site is accessible by two (2) driveways along NYS Route 90. The southern driveway includes pavement markings which designate and channelize traffic flow to and from the project site.

ROADWAY AND INTERSECTION CHARACTERISTICS

The following is a brief description of the major roadways and intersections within the study areas.

NYS Route 90. NYS Route 90 is a rural arterial that generally runs in a north-south direction and is under the jurisdiction of the NYSDOT. NYS Route 90 provides one moving lane in each

Table 3.12-4
Level-of-Service Analysis Results :
2009 Existing and 2010 No-Build Traffic Conditions
Seneca Falls Study Area

Intersection	No.	Approach	Lane Group	Friday PM Peak Hour						Saturday Midday Peak Hour					
				2009 Existing			2010 No Build			2009 Existing			2010 No Build		
				v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS
NYS Route 89 (N-S) @ East Bayard Street/Lake Road	1	Eastbound	LTR	0.24*	9.8	A	0.24*	9.8	A	0.21*	9.2	A	0.21*	9.2	A
		Westbound	LTR	0.06*	8.9	A	0.06*	8.9	A	0.06*	8.5	A	0.06*	8.5	A
		Northbound	LTR	0.45*	11.8	B	0.45*	11.9	B	0.32*	10.1	B	0.33*	10.1	B
		Southbound	LTR	0.32*	10.2	B	0.32*	10.3	B	0.31*	9.8	A	0.31*	9.9	A
		Intersection			10.7	B		10.8	B		9.7	A		9.7	A
NYS Route 89 (N-S) @ NYS Chiropractor College Driveway	2	Northbound	LT	0.00	7.8	A	0.00	7.8	A	0.00	7.8	A	0.00	7.9	A
		Eastbound	LR	0.16	13.0	B	0.16	13.1	B	0.02	11.1	B	0.02	11.1	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Seneca Falls Health Center Driveway	3	Northbound	LT	0.00	7.8	A	0.00	7.8	A	0.01	7.9	A	0.01	7.9	A
		Eastbound	LR	0.05	10.7	B	0.05	10.7	B	0.03	11.6	B	0.03	11.7	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Jackson Road	4	Southbound	LT	0.00	7.8	A	0.00	7.8	A	0.00	7.7	A	0.00	7.7	A
		Westbound	LR	0.07	11.5	B	0.07	11.5	B	0.02	10.9	B	0.02	11.0	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Project Site Driveway	5	Northbound	LT	0.03	7.9	A	0.03	7.9	A	0.02	7.9	A	0.02	7.9	A
		Eastbound	LR	0.14	13.2	B	0.14	13.2	B	0.07	12.0	B	0.07	12.1	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
Garden Street (E-W) @ Project Site Driveway	6	Eastbound	LT	0.02	7.4	A	0.02	7.4	A	0.03	7.4	A	0.03	7.4	A
		Southbound	LR	0.08	9.5	A	0.08	9.5	A	0.10	9.7	A	0.10	9.8	A
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Garden Street	7	Northbound	LTR	0.03	7.8	A	0.03	7.8	A	0.04	7.8	A	0.04	7.8	A
		Southbound	LTR	0.02	7.8	A	0.02	7.8	A	0.02	7.8	A	0.02	7.8	A
		Westbound	LTR	0.10	13.4	B	0.10	13.5	B	0.14	14.0	B	0.14	14.1	B
		Eastbound	LTR	0.23	14.4	B	0.24	14.5	B	0.23	14.1	B	0.23	14.1	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Willows Hill Road	8	Northbound	LTR	0.00	7.7	A	0.00	7.7	A	0.00	7.7	A	0.00	7.7	A
		Southbound	LTR	0.02	7.8	A	0.02	7.8	A	0.03	7.7	A	0.03	7.7	A
		Westbound	LTR	0.16	13.8	B	0.17	13.9	B	0.15	12.7	B	0.15	12.8	B
		Eastbound	LTR	0.15	14.4	B	0.15	14.5	B	0.15	14.0	B	0.15	14.1	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 89 (N-S) @ Noble Road	8	Northbound	LTR	0.01	7.6	A	0.00	7.6	A	0.00	7.7	A	0.00	7.7	A
		Southbound	LTR	0.01	7.7	A	0.00	7.7	A	0.00	7.6	A	0.00	7.6	A
		Westbound	LTR	0.02	11.3	B	0.03	11.3	B	0.07	11.1	B	0.07	11.2	B
		Eastbound	LTR	0.03	12.2	B	0.03	12.2	B	0.05	12.1	B	0.05	12.2	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		

Notes:
L = Left Turn, T = Through, R = Right Turn; LOS = Level of Service.
*For 4-way stop controlled unsignalized intersections, HCS calculates a lane-utilization factor and not a v/c ratio.

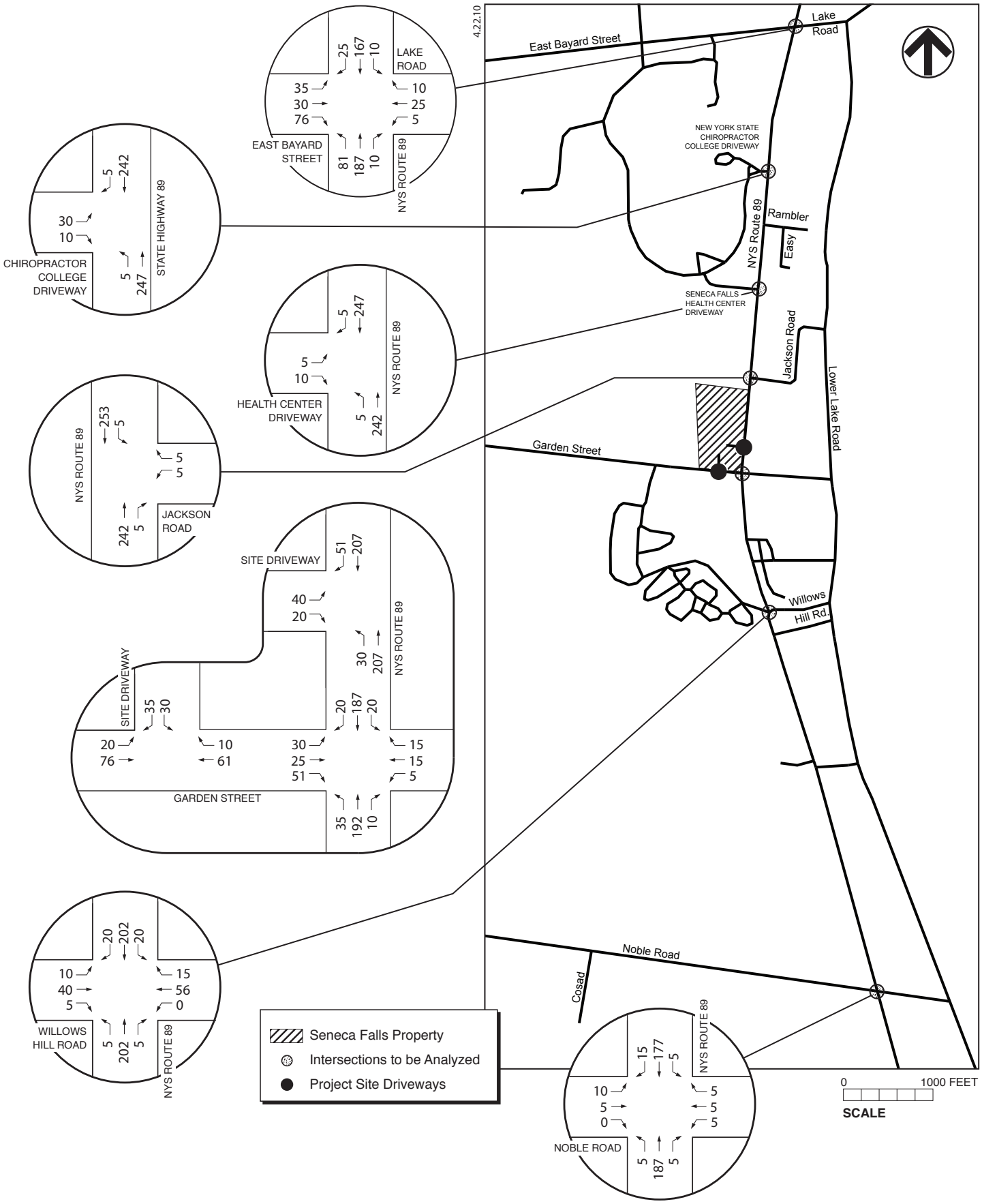

Figure 3.12-4

Seneca Falls
2010 No-Build Traffic Volumes
Friday PM Peak Hour (4:30-5:30 PM)

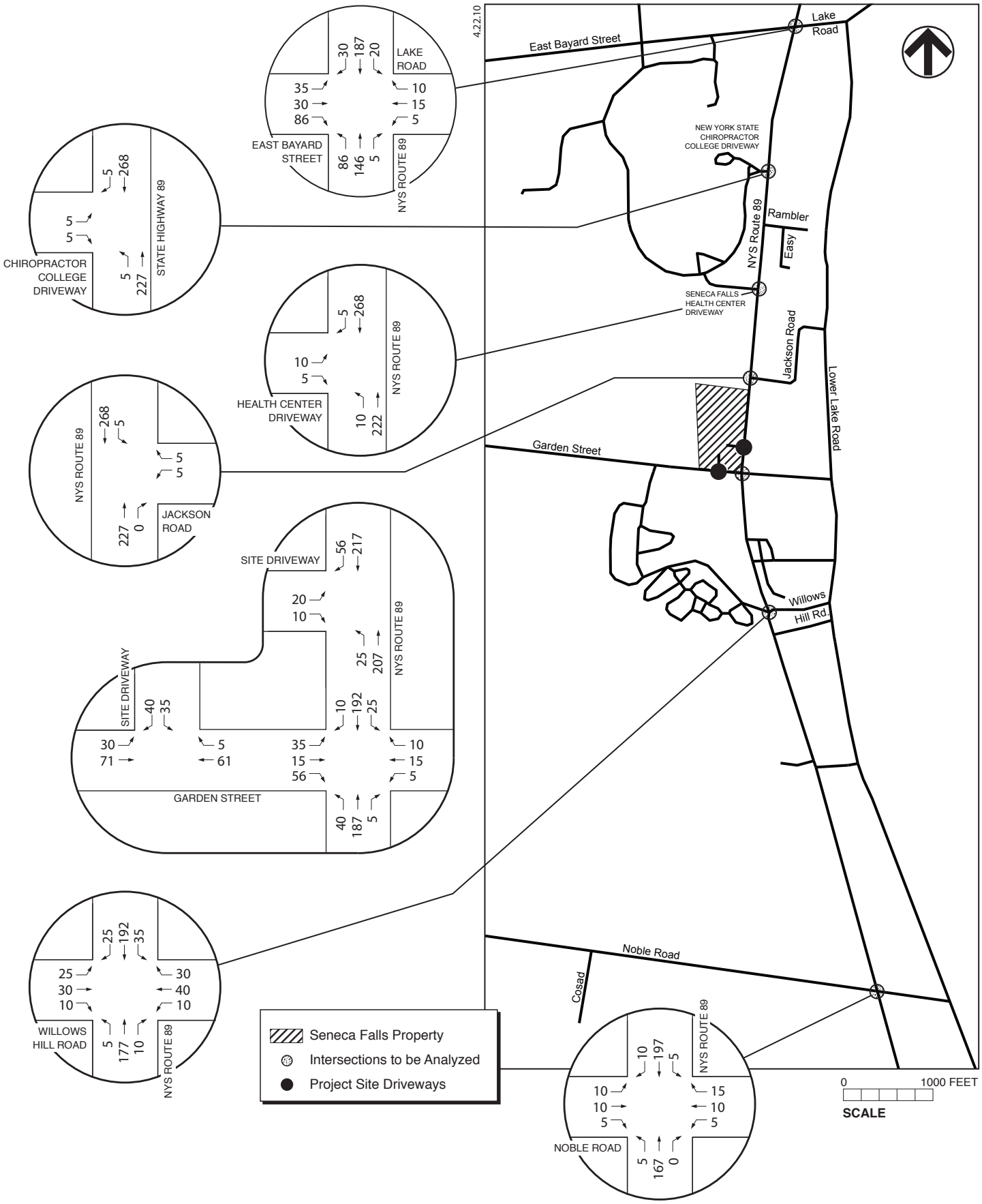

Figure 3.12-5

Seneca Falls

2010 No-Build Traffic Volumes

Saturday Midday Peak Hour (12:00-1:00 PM)

Figure 3.12-6

Union Springs Traffic Study Area

direction and varies in width between 30 and 36 feet within the study area. According to NYSDOT's *Highway Sufficiency Ratings* and based on field observations, the pavement along NYS Route 90 is generally in good-to-excellent condition.

NYS Route 326. NYS Route 326 is a rural arterial that generally runs in an east-west direction and is under the jurisdiction of the NYSDOT. NYS Route 326 provides one moving lane in each direction and is approximately 46 feet wide within the study area. Based on field observations, the pavement along Old NYS Route 326 is generally in good condition.

Old NYS Route 326. Old NYS Route 326 is a Village-owned roadway that generally runs in an east-west direction and connects NYS Route 90 and NYS Route 326. Old NYS Route 326 generally provides one moving lane in each direction and is approximately 27 feet wide within the study area. Based on field observations, the pavement along Old Route 326 within the study area is generally in fair-to-good condition.

Property Site Driveway, McDonald's Point Road, Car Wash Driveway, High School Driveway. The property driveway, McDonald's Point Road, the Car Wash Driveway, and the High School Driveway are all privately-owned driveways. These driveways generally provide one moving lane in each direction and provide access to and from NYS Route 90. These driveways/curb cuts vary in width between approximately 13 and 40 feet. There is an additional curb cut of approximately 109 feet wide that is used to access the gas station/convenience store just south of the car wash driveway. Because of the close proximity of this curb cut to the car wash driveway, for this analysis the car wash driveway and gas station/convenience store driveway are analyzed collectively as a single approach at NYS Route 90.

UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS METHODOLOGY

The LOS criteria for unsignalized intersections are summarized in Table 3.12-5. For the purposes of this analysis, control delay is defined as the total elapsed time that includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation.

Table 3.12-5
LOS Criteria for Unsignalized Intersections

Level-of-Service (LOS)	Control Delay Per Vehicle
A	≤ 10.0 seconds
B	>10.0 and ≤ 15.0 seconds
C	>15.0 and ≤ 25.0 seconds
D	>25.0 and ≤ 35.0 seconds
E	>35.0 and ≤ 50.0 seconds
F	>50.0 seconds
Sources: Transportation Research Board. *Highway Capacity Manual*, 2000.	

EXISTING TRAFFIC CONDITIONS

Existing traffic conditions in the study area were established based on traffic counts conducted in August, 2009 (during the peak summer months). The data collection program consisted of

manual and Automatic Traffic Recorder (ATR) counts conducted at various locations throughout the study area. No unusual weather or traffic conditions were observed during the count period.

Figures 3.12-7 and 3.12-8 show the roadway volumes in the study area for existing conditions for the peak hours analyzed. It is important to note that traffic volumes along study area roadways may not necessarily balance because of the presence of various sinks and sources (e.g. driveways) that are located between intersections.

The peak hours of the roadway network are as follows:

- Friday PM Peak Hour – 3:45 PM to 4:45 PM
- Saturday PM Peak Hour – 4:30 PM to 5:30 PM

The data was then analyzed using the *HCM* methodology to compute delays, v/c ratios, and LOS as described above. See Appendix B for Highway Capacity Software (HCS) outputs for all study area intersections.

As shown in Table 3.12-6, the lane groups/approaches of the intersections in the study area generally operate acceptably at LOS C or better under 2006 Existing Conditions during the peak hours analyzed.

ACCIDENT ANALYSIS

Table 3.12-7 summarizes the most recent six years' traffic accident data for the study area intersections compiled from the NYSDOT records for the period of February 1, 2003 through January 31, 2009. A review of this data shows that the intersection of NYS Route 90 and NYS Route 326 has the highest number of accidents (9) during this time period (this translates to an average rate of approximately 1 accident per year). No high accident intersection locations were identified within the study area and there were no fatalities at any of the study area intersections. Overall, no significant accident patterns were identified at any of the study area intersections during this time period.

Table 3.12-7 also summarizes the most recent six years' traffic accident data for the roadway segments (along NYS Route 90) compiled from the NYSDOT records for the period of January 1, 1997 through December 31, 2002. A review of this data shows that the segment of NYS Route 90 between the High School Main Driveway and Old NYS Route 326 had the highest number of accidents (10) during this time period (this translates to an average rate of approximately 2 accidents per year). No high accident locations were identified along any of the roadway segments within the study area and there were no fatalities along any of the study area roadway segments.

Overall, no significant accident patterns were identified along any of the study area road segments during this time period.

THE FUTURE WITHOUT THE PROPOSED ACTION

Traffic Conditions

The No Build traffic condition is an interim scenario that establishes a future baseline condition. No Build traffic conditions are ascertained based on a number of factors: (1) improvements in the study area road network that are planned or underway; (2) traffic from general population growth in the local area (i.e., "background growth"); and (3) traffic from identified development projects in the vicinity of the property.

Table 3.12-6
Level-of-Service Analysis Results :
2009 Existing Traffic Conditions
Union Springs Study Area

Intersection	No.	Control Type	Approach	Lane Group	2009 Existing Conditions					
					Friday PM Peak Hr.			Sat. PM Peak Hr.		
					v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS
NYS Route 90 (N-S) @	1	Unsignalized	Southbound	LT	0.01	8.0	A	0.02	7.8	A
NYS Route 326			Westbound	LR	0.23	15.0	B	0.11	11.9	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	2	Unsignalized	Northbound	LTR	0.00	8.0	A	0.00	7.8	A
Old NYS Route 326			Southbound	LTR	0.00	7.9	A	0.01	7.8	A
			Westbound	LTR	0.03	12.9	B	0.06	12.7	B
			Eastbound	LTR	0.09	14.6	B	0.06	13.1	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	3	Unsignalized	Northbound	LT	0.00	7.9	A	0.00	7.8	A
Project Site Driveway			Eastbound	LR	0.01	13.1	B	0.00	11.9	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	4	Unsignalized	Northbound	LT	0.00	7.9	A	0.00	7.8	A
McDonald's Point Road			Eastbound	LR	0.04	13.4	B	0.00	11.9	B
			Intersection		Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	5	Unsignalized	Northbound	LT	0.00	7.9	A	0.00	7.8	A
High School Driveway			Eastbound	LR	0.04	11.7	B	0.01	9.8	A
			Intersection		Unsignalized			Unsignalized		

Notes:
L = Left Turn, T = Through, R = Right Turn; LOS = Level of Service.

Table 3.12-7
Accident Data Summary
Union Springs Study Area

INTERSECTION									NON-INTERSECTION*								
	No. of Accidents (2003-2009**)									No. of Accidents (2003-2009**)							
Location	2003	2004	2005	2006	2007	2008	2009	Total	Location	2003	2004	2005	2006	2007	2008	2009	Total
NYS Route 90 & Old NYS Route 326	0	0	3	0	3	1	0	7	NYS Route 90 – Between High School Main Driveway & Old NYS Route 326	0	1	3	1	3	2	0	10
NYS Route 90 & NYS Route 326	4	2	2	0	0	0	1	9									

Source: NYSDOT

Notes: *Non-Intersection accident data refers to accidents that occurred on roadway segments between intersections.

**Accident Data for February 1, 2003 through January 31, 2009.

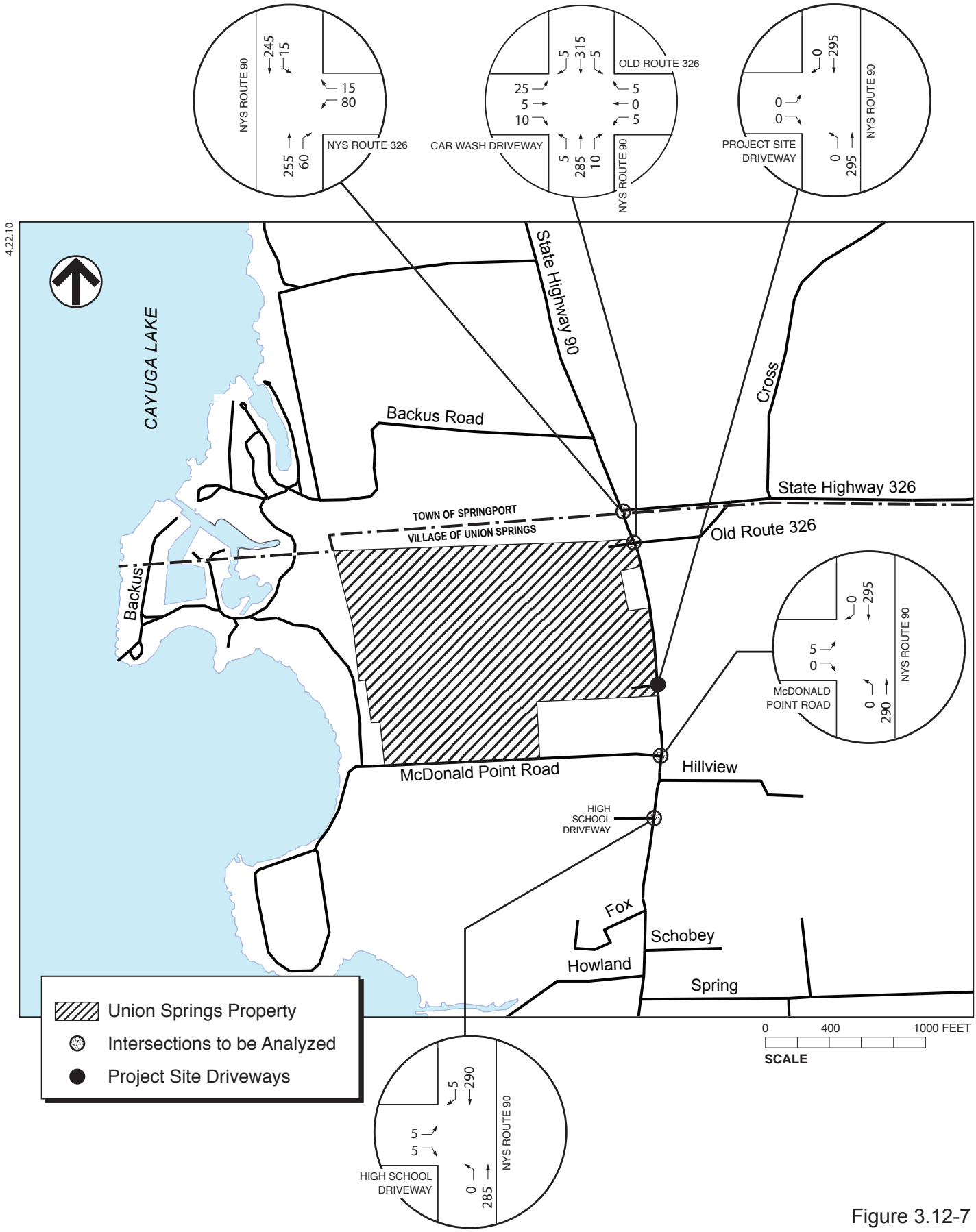

Figure 3.12-7

Union Springs
2009 Existing Traffic Volumes
Friday PM Peak Hour (3:45-4:45 PM)

Cayuga Indian Nation of New York

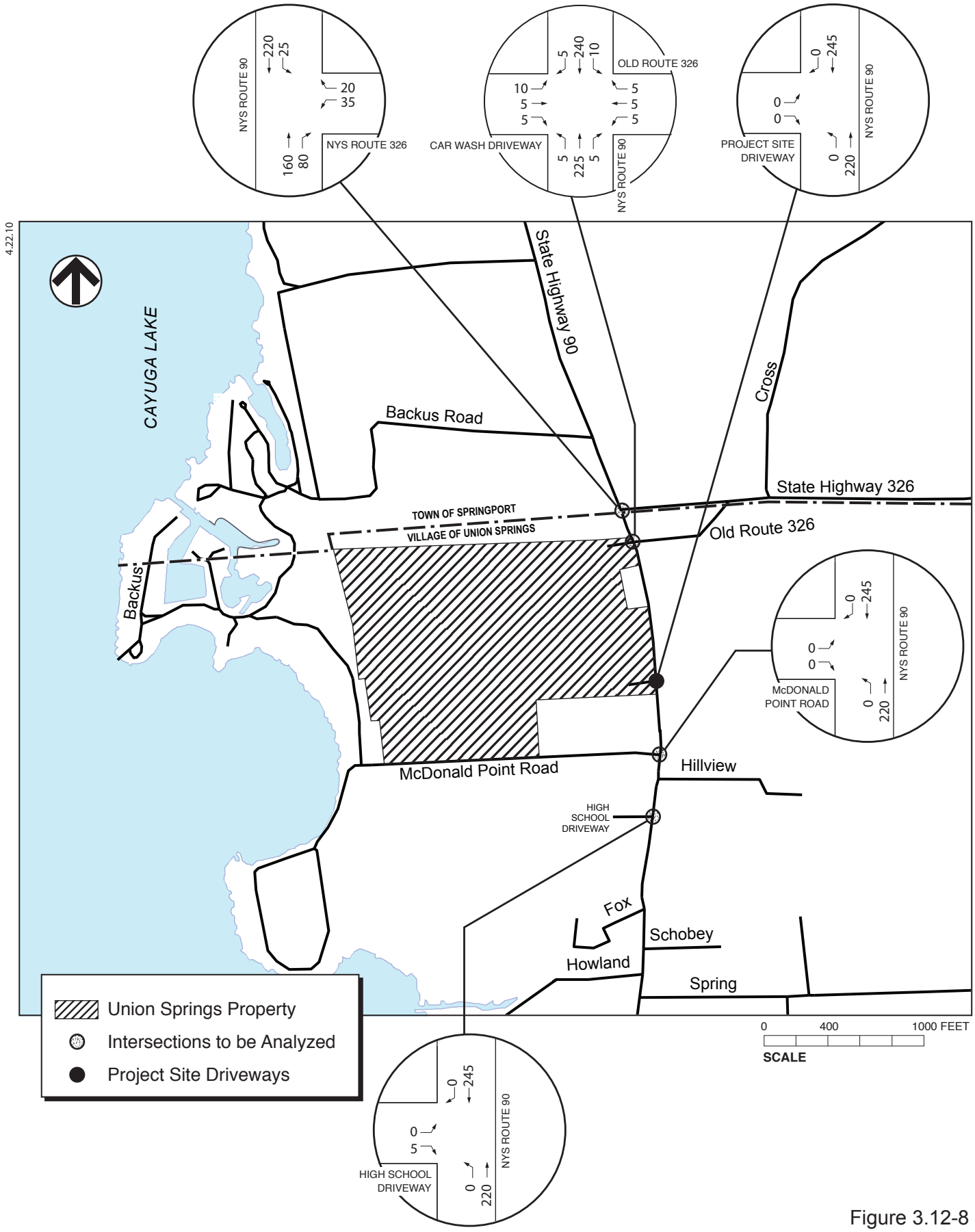

Figure 3.12-8

Union Springs
2009 Existing Traffic Volumes
Saturday PM Peak Hour (4:30-5:30 PM)

No major roadway improvements in the study roadway network were identified. A 1 percent growth factor was used in this traffic study as recommended by NYSDOT. This results in an overall growth rate of 1 percent for the 2010 No Build Year. No major development projects were identified in the immediate vicinity of the property.

Peak hour traffic volumes for the Friday PM and Saturday PM peak hours are shown in Figures 3.12-9 and 3.12-10, respectively, for the 2010 Build conditions.

Table 3.12-8 presents a comparison of 2009 Existing and 2010 No Build LOS conditions for the study area intersections.

Under the 2010 No Build conditions it is projected that there would be no notable changes in LOS for any of the lane groups/approaches at the study area intersections.

Accident Analysis

No significant change in the accident experience in the study area is expected under 2010 No Build conditions.

B. SPRINGPORT VACANT PARCEL

This section assesses the potential traffic impacts of the Nation's vacant property in the Town of Springport, Cayuga County. The discussion below assesses 2008 existing conditions and then assesses future conditions in 2010. The 2008 existing conditions can be considered valid for 2009 as: 1) the property is in a remote, lightly traveled area; and 2) the property is currently vacant and undeveloped.

STUDY AREA

The Springport property is located just on the west side of NYS Route 90 in the Town of Springport as shown in Figure 3.12-11.

To assess the traffic conditions in the study area, traffic counts were performed on a Friday and Saturday in February, 2008 at selected locations in the Town of Springport. An overall study area was determined that considered key intersections and roadways likely to be utilized to access the property. The Springport traffic study area is shown in Figure 3.12-11.

As shown in Figure 3.12-11, five (5) intersections were identified for traffic volume analysis in the Springport area. These were:

1. NYS Route 90 & Great Gully Road
2. NYS Route 90 & Hardy Road
3. NYS Route 90 & Farleys Point Road
4. NYS Route 90 & Carrs Cove Road

All four (4) of the intersections listed above are unsignalized.

ROADWAY AND INTERSECTION CHARACTERISTICS

The following is a brief description of the major roadways and intersections within the study area.

Table 3.12-8
Level-of-Service Analysis Results :
2009 Existing and 2010 No Build Traffic Conditions
Union Springs Study Area

Intersection	No.	Approach	Lane Group	Friday PM Peak Hour						Saturday PM Peak Hour					
				2009 Existing			2010 No Build			2009 Existing			2010 No Build		
				v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS	v/c Ratio	Delay (sec)	LOS
NYS Route 90 (N-S) @	1	Southbound	LT	0.01	8.0	A	0.01	8.0	A	0.02	7.8	A	0.02	7.8	A
NYS Route 326		Westbound	LR	0.23	15.0	B	0.23	15.1	C	0.11	11.9	B	0.11	12.0	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	2	Northbound	LTR	0.00	8.0	A	0.00	8.0	A	0.00	7.8	A	0.00	7.8	A
Old NYS Route 326		Southbound	LTR	0.00	7.9	A	0.00	7.9	A	0.01	7.8	A	0.01	7.8	A
		Westbound	LTR	0.03	12.9	B	0.03	13.0	B	0.06	12.7	B	0.06	12.7	B
		Eastbound	LTR	0.09	14.6	B	0.11	15.0	B	0.06	13.1	B	0.06	13.2	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	3	Northbound	LT	0.00	7.9	A	0.00	7.9	A	0.00	7.8	A	0.00	7.8	A
Project Site Driveway		Eastbound	LR	0.01	13.1	B	0.01	13.2	B	0.00	11.9	B	0.00	11.9	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	4	Northbound	LT	0.00	7.9	A	0.00	7.9	A	0.00	7.8	A	0.00	7.8	A
McDonald's Point Road		Eastbound	LR	0.04	13.4	B	0.05	13.5	B	0.00	11.9	B	0.00	11.9	B
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		
NYS Route 90 (N-S) @	5	Northbound	LT	0.00	7.9	A	0.00	7.9	A	0.00	7.8	A	0.00	7.8	A
High School Driveway		Eastbound	LR	0.04	11.7	B	0.04	11.8	B	0.01	9.8	A	0.01	9.8	A
		Intersection		Unsignalized			Unsignalized			Unsignalized			Unsignalized		

Notes:
L = Left Turn, T = Through, R = Right Turn; LOS = Level of Service.

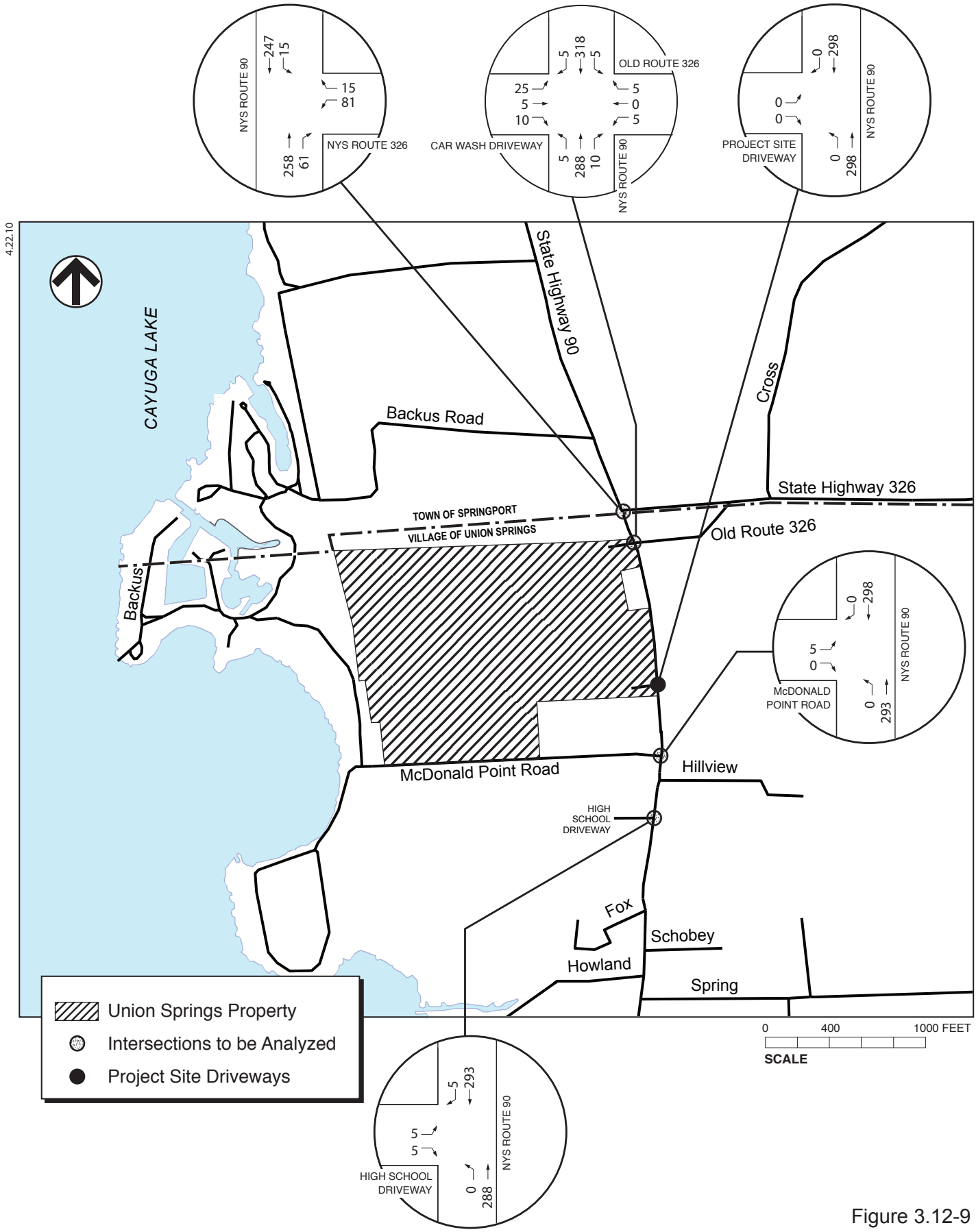

Figure 3.12-9

Union Springs
2010 No-Build Traffic Volumes
Friday PM Peak Hour (3:45-4:45 PM)

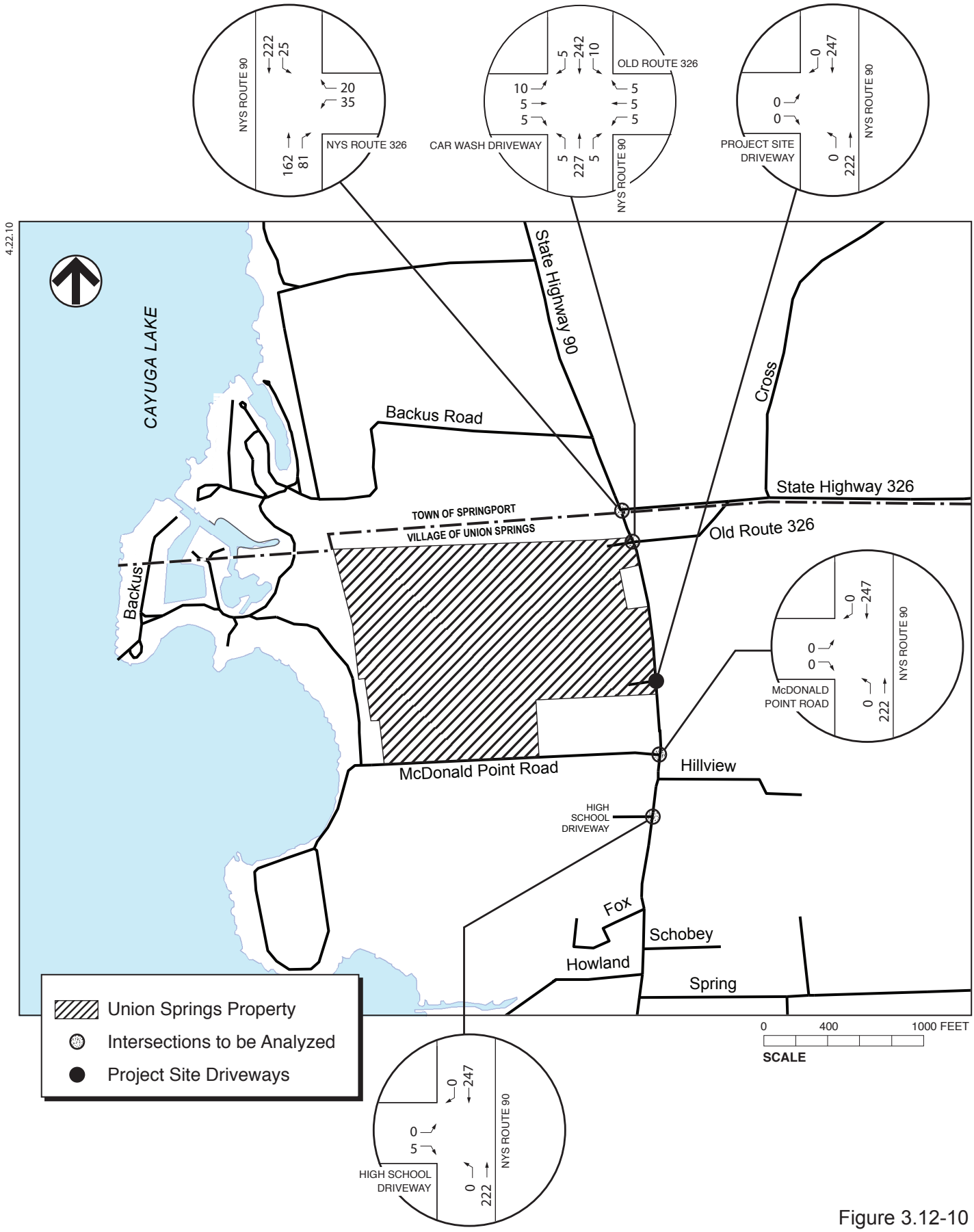

Figure 3.12-10

Union Springs
2010 No-Build Traffic Volumes
Saturday PM Peak Hour (4:30-5:30 PM)

Cayuga Indian Nation of New York

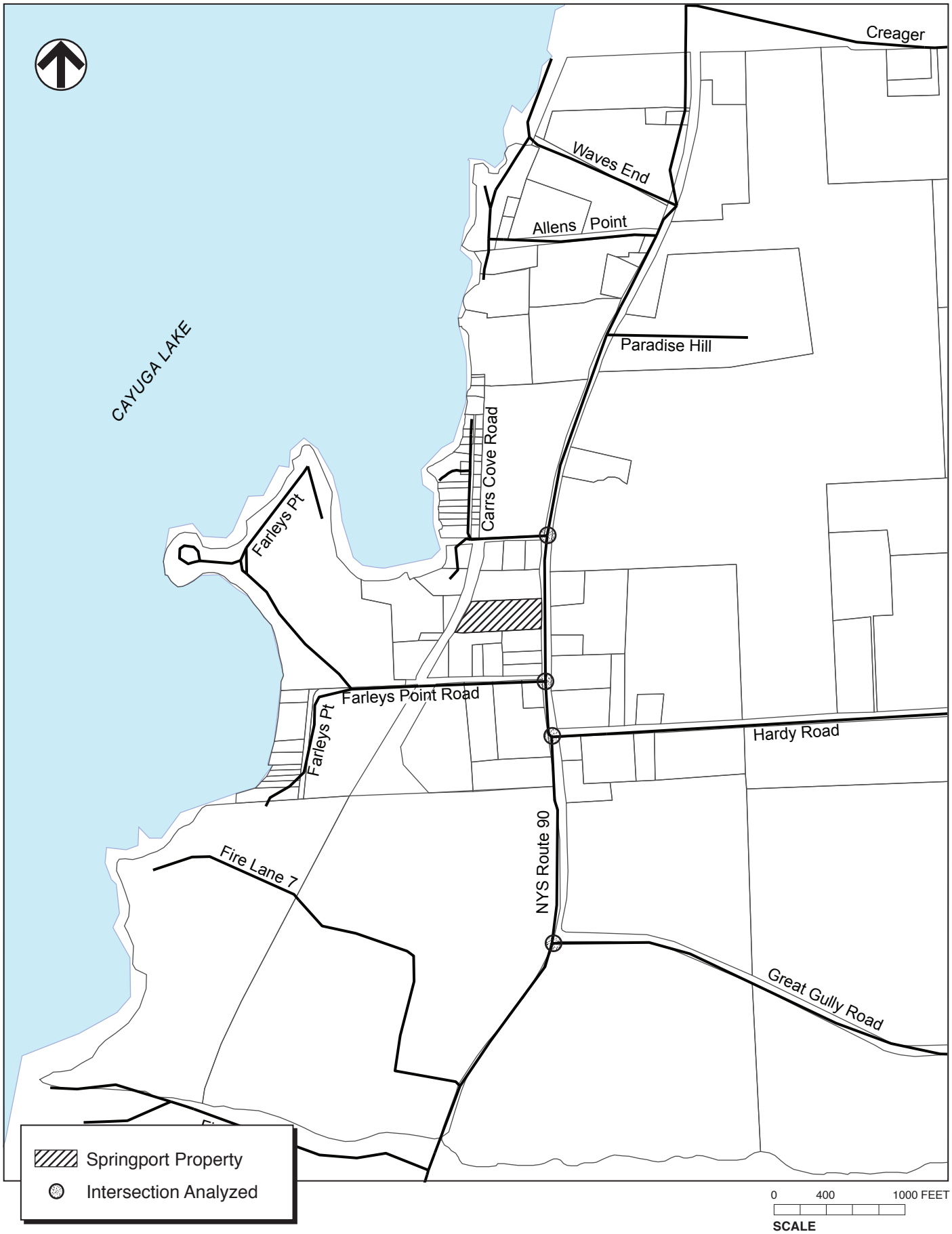

Figure 3.12-11

Springport Traffic Study Area

Cayuga Indian Nation of New York

NYS Route 90. NYS Route 90 is a rural arterial that generally runs in a north-south direction and is under the jurisdiction of the NYSDOT. NYS Route 90 provides one moving lane in each direction. NYS Route 90 provides direct access to the project site. According to NYSDOT's *Highway Sufficiency Ratings* and based on field observations, the pavement along NYS Route 90 is generally in good to excellent condition.

Great Gully Road (County Route 89). Great Gully Road is a Cayuga County-owned roadway that generally runs in an east-west direction. Great Gully Road provides one moving lane in each direction and is approximately. Based on field observations, the pavement along Great Gully Road within the study area is generally in good-to-excellent condition.

Farleys Point Road. The eastern section of Farleys Point Road is a Cayuga County-owned roadway that generally runs in an east-west direction. The western section of Farleys Point Road is privately owned. Farleys Point Road provides one moving lane in each direction. Based on field observations, the pavement along McDonald Road within the study area is generally in good condition.

Carrs Cove Road. The eastern section of Carrs Cove Road is a Cayuga County-owned roadway that generally runs in an east-west direction. The western section of Carrs Cove Road is privately owned. Farleys Point Road provides one moving lane in each direction. Based on field observations, the pavement along McDonald Road within the study area is generally in good condition.

Hardy Road. Hardy Road is a local Town-owned roadway that generally runs in an east-west direction. Based on field observations, the pavements along Hardy Road within the study area is generally in good condition.

UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS METHODOLOGY

The LOS criteria for unsignalized intersections are summarized in Table 3.12-9. For the purposes of this analysis, control delay is defined as the total elapsed time that includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation.

Table 3.12-9
LOS Criteria for Unsignalized Intersections

Level-of-Service (LOS)	Control Delay Per Vehicle
A	≤ 10.0 seconds
B	>10.0 and ≤ 15.0 seconds
C	>15.0 and ≤ 25.0 seconds
D	>25.0 and ≤ 35.0 seconds
E	>35.0 and ≤ 50.0 seconds
F	>50.0 seconds
Sources: Transportation Research Board. *Highway Capacity Manual*, 2000.	

EXISTING TRAFFIC CONDITIONS

Existing traffic conditions in the study area were established based on traffic counts conducted in February, 2008. The data collection program consisted of manual counts conducted at various

locations throughout the study area. No unusual weather or traffic conditions were observed during the count period.

The peak hours of the roadway network are as follows:

- Friday PM Peak Hour – 4:45 PM to 5:45 PM
- Saturday Midday Peak Hour – 12:45 PM to 1:45 PM

Table 3.12-10 summarizes the traffic volumes along the study roadways during the peak hours studied.

LOS A and B (indicates good operating conditions with minimal delay) were observed at the study area intersections during field visits and no notable traffic problems were observed.

ACCIDENT ANALYSIS

Table 3.12-11 summarizes the most recent six years' traffic accident data for the study area intersections compiled from the NYSDOT records for the period of July 1, 2001 through June 30, 2007. A review of this data shows that the intersection of NYS Route 90 and Great Gully Road has the highest number of accidents (1) during this time period (this translates to an average rate of less than 1 accident per year). Overall, no significant accident patterns were identified at any of the study area intersections during this time period.

Table 3.12-11 also summarizes the most recent six years' traffic accident data for the roadway segments along NYS Route 90 compiled from the NYSDOT records for the period of July 1, 2001 through June 30, 2007. A review of this data shows that at non-intersection locations along NYS Route 90, 9 accidents occurred during this time period (this translates to an average rate of less than 2 accidents per year).

There are no high accident locations (intersections or roadway segments) in the study area and no fatalities were reported at these locations.

2010 FUTURE CONDITIONS WITHOUT THE PROPOSED ACTION

TRAFFIC CONDITIONS

The 2010 Future conditions in the Springport Study area are ascertained based on a number of factors: (1) improvements in the study area road network that are planned or underway; (2) traffic from general population growth in the local area (i.e., "background growth"); and (3) traffic from identified development projects in the project site vicinity.

Based on conversations with NYSDOT, Cayuga County, and the Town of Springport, no major roadway improvements in the study roadway network were identified. A 1 percent growth factor was used in this traffic study as recommended by NYSDOT. This results in an overall growth rate of 2 percent for the 2010 Future Conditions Year. No major development projects were identified in the immediate project site vicinity.

Table 3.12-12 summarizes the traffic volumes along the study roadways during the peak hours studied under 2010 Future conditions.

Under the 2010 Future conditions it is projected that there would be no notable changes in LOS at the study area intersections and that these intersections would continue to operate acceptably

Table 3.12-10
2008 Existing Conditions Traffic Volumes
Springport Study Area

Intersection Name	Roadway	Friday PM Peak Hour Peak 2-way Traffic Volume	Saturday PM Peak Hour Peak 2-way Traffic Volume
NYS Route 90 and Great Gully Road	**NYS Route 90**	**190**	**160**
	Great Gully Road	**25**	**15**
	Total	215	175
NYS Route 90 and Hardy Road	**NYS Route 90**	**195**	**185**
	Hardy Road	**10**	**5**
	Total	205	190
NYS Route 90 and Farleys Point Road	**NYS Route 90**	**190**	**185**
	Farleys Point Road	**10**	**10**
	Total	200	195
NYS Route 90 and Carrs Cove Road	**NYS Route 90**	**195**	**190**
	Carrs Cove Road	**15**	**10**
	Total	210	200

Table 3.12-11
Accident Data Summary
Springport Study Area

INTERSECTION								
Location	No. of Accidents (2001-2007**)							
	2001	2002	2003	2004	2005	2006	2007	Total
NYS Route 90 & Great Gully Road	0	0	0	0	0	0	1	1
NYS Route 90 & Hardy Road	0	0	0	0	0	0	0	0
NYS Route 90 & Farleys Point Road	0	0	0	0	0	0	0	0
NYS Route 90 & Carrs Cove Road	0	0	0	0	0	0	0	0

NON-INTERSECTION*								
Location	No. of Accidents (2001-2007**)							
	2001	2002	2003	2004	2005	2006	2007	Total
Fuller Road – Between Great Gully Road & Carrs Cove Road	0	1	2	0	1	4	1	9

Source: NYSDOT

Notes: *Non-Intersection accident data refers to accidents that occurred on roadway segments between intersections.

**Accident Data for July 1, 2001 through June 30, 2007.

Table 3.12-12
2008 Existing and 2010 Future Conditions Traffic Volumes
Springport Study Area

Intersection Name	Roadway	Friday PM Peak Hour Peak 2-way Traffic Volume		Saturday PM Peak Hour Peak 2-way Traffic Volume	
		2008 Existing	2010 Future	2008 Existing	2010 Future
NYS Route 90 and Great Gully Road	NYS Route 90	190	194	160	163
	Great Gully Road	25	26	15	15
	Total	215	219	175	179
NYS Route 90 and Hardy Road	NYS Route 90	195	199	185	189
	Hardy Road	10	10	5	5
	Total	205	209	190	194
NYS Route 90 and Farleys Point Road	NYS Route 90	190	194	185	189
	Farleys Point Road	10	10	10	10
	Total	200	204	195	199
NYS Route 90 and Carrs Cove Road	NYS Route 90	195	199	190	194
	Carrs Cove Road	15	15	10	10
	Total	210	214	200	204

at LOS A and B. The project site is currently vacant and will remain vacant in the future condition (no project is proposed to be constructed on-site).

ACCIDENT ANALYSIS

No significant change in the accident experience in the study area is expected under 2010 Future conditions.