VILLAGE PARKING & TRAFFIC STUDY



VILLAGE OF ROSLYN, NY

NOVEMBER 2016



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1. INTRODUCTION

The Village of Roslyn has engaged Level G Associates to conduct a Village Parking and Traffic Study. This report summarizes our findings and conclusions and sets forth a series of recommendations designed to improve parking and traffic conditions in the Village of Roslyn.

Background

Roslyn is a picturesque and historic Village of about 2,700 located at the head of Hempstead Harbor on the north shore of Nassau County. It is the oldest settlement in Nassau County and its strategic location at the head of the harbor made it one of Long Island's busiest and most important commercial centers in the 1700's and 1800's.

By the mid 1800's, with the introduction of steamship service to New York City and later a nearby LIRR station with service to New York City, Roslyn began to attract residential development in areas adjacent to and outlying the Village center. This basic layout has remained relatively unchanged since then.

In the 1900's Roslyn was already established as an affluent community. This, coupled with the historic charm and walkability of the downtown district, attracted a number of popular nightclubs and restaurants. By the mid to late 1900's downtown Roslyn was one of the most popular night spots on Long Island attracting large crowds that challenged the Village's infrastructure including its parking and traffic facilities.

While today's parking and traffic problems are not as intense as they were in the 1970's, the Village is still a popular destination and continues to experience parking and traffic issues that frustrate local businesses and visitors and limit the Village's ability to attract new investment.

Communities with the characteristics described above are often faced with congestion and other challenges due to expanding or evolving parking and traffic demand patterns generated by the diverse number of user groups utilizing the roads and competing for parking spaces – shoppers, visitors, residents, downtown employees, delivery vehicles, etc.

Purpose of Report

The purpose of this study is to examine existing and anticipated parking and traffic conditions in the Village of Roslyn and to prepare a coordinated program plan designed to address parking and traffic concerns in the Village, improve mobility, improve safety, improve aesthetics, and make adequate parking available for residents, visitors, businesses and future economic development opportunities.

Study Area

The study area is the entire Village of Roslyn but data collection and other study efforts were focused on a primary study area where a fee is charged for parking or where certain parking or traffic patterns are problematic. Figure 1, next page, is map of the village indicating the primary study area.

Study Process

The study convened in the spring of 2016 and included the following elements:

- Meetings with Village officials to discuss current parking and traffic issues, the current downtown business / development environment, and related items;
- Inventory of the municipal parking supply including fees, classifications, regulations, time limits, hours of operation, restrictions, equipment, etc.;
- Occupancy counts of selected on-street and off-street municipal parking facilities between the hours of 10AM and 10PM on Wednesday May 18, Thursday May 19, and Saturday May 21, 2016;
- General observations of on-street and off-street parking patterns by senior personnel;
- Tactical studies of specific parking and traffic patterns in the CBD based on observations of senior personnel, project database, and input and feedback from the Village. These included measurement of streets or parking areas, observations of valet operations, and traffic signal operations, among others;
- Evaluations to determine appropriate and potential sites for parking expansion;
- An examination of the age, capability, and effectiveness of the Village parking meter stock;
- Review and evaluate redevelopment proposals or other programs to estimate their potential impact on downtown parking;
- Identification of existing traffic flow / street system conditions, adjacent land uses, existing operating speeds, existing traffic control, existing signalization, existing traffic volumes, peak periods and conditions, growth rates, and other proposed developments or potential changes;
- Conduct traffic analyses at key intersections and roadway segments and provide mitigation strategies to improve adverse conditions that are found to exist;
- Evaluations and development of strategies for traffic calming, roadway signage, and intersection redesigns.

A draft report was submitted to the village in August 2016 and formally presented to the Village Board in September 2016. This final report is based on input and feedback received at the September meeting.

Acknowledgements

We are indebted to Mr. Richard Belziti for providing insight and background information that were essential to the preparation of this report.

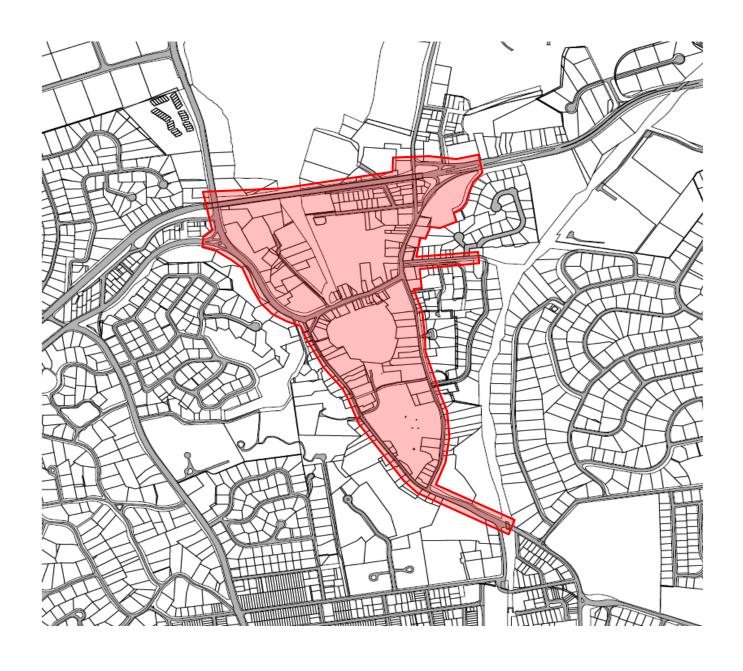


FIGURE 1 PRIMARY STUDY AREA PARKING AND TRAFFIC STUDY - 2016 VILLAGE OF ROSLYN, NY



2. PARKING SPACE SUPPLY

The Village of Roslyn maintains and administers a parking supply consisting of three metered parking lots, five unmetered parking lots, one parking lot containing meters and permits, 119 on-street metered spaces, 138 on-street unmetered spaces (in the primary study area) plus hundreds of other parking spaces on streets serving mostly residential areas throughout the Village.

Figure 2 (page 7) is a map showing the capacity, classification and location of village parking areas in the Primary Study Area.

Off-Street Metered Parking

The village maintains and administers 104 parking spaces in 3 metered parking lots located in the central business district (CBD). The cost for parking in these lots is 25¢ per 15 minutes (\$1 per hour) and the meters are in effect from 6AM to 6PM, 7 days per week. These parking areas are owned by the Village of Roslyn. They are:

Lumber Road Lot - The Lumber Road parking lot is located on the east side of Lumber Road just north of Old Northern Boulevard. It is a relatively new parking facility containing 39 parking spaces, including 2 handicap stalls. The lot is controlled by two (2) multi-space (pay and display) parking meters and is in excellent condition. The lot has a 3-hour parking time limit and meters are in force from 6AM to 6PM seven days per week.

Village Center Lot - The Village Center Lot is located on the south side of Old Northern Boulevard in the heart of the CBD. It contains 53 parking spaces; 46 are for general public parking, 3 are handicap, 2 are reserved for Police, and 2 are loading zone spaces. The lot is controlled by two (2) multi-space (pay and display) parking meters and is in fair condition. The lot has a 3-hour parking time limit and meters are in force from 6AM to 6PM seven days per week. The village has plans to reconstruct this lot and the bulkhead along Roslyn Pond in the near term.

East Broadway Lot – The East Broadway Lot is located at the northwest corner of East Broadway and Old Northern Boulevard. It contains 12 parking spaces, including one (1) handicap stall. The lot is controlled by one (1) multi-space (pay and display) parking meter and is in fair condition. The lot has a 3-hour parking time limit and meters are in force from 6AM to 6PM seven days per week.

The village maintains 231 parking spaces in one (1) parking lot located on the west side of Edwards Street serving a local residential complex. This lot is located outside of the Primary Study Area:

Edwards Street Lot — The 231-space Edwards Street lot includes 20 metered spaces plus 211 spaces reserved for permit holders. Permit spaces are numbered and each permit holder is assigned a numbered parking space for their exclusive use. The cost of a permit is \$384 per year and there is a waiting list for an available permit. The metered spaces are located closest to

Edwards Street and the fee is 25ϕ per 2 hours with a 12 hour time limit. The meters are Duncan single space meters in VIP housings with a duplex (paired) housing.

Off-Street Non Metered Parking

The village maintains and administers five (5) unmetered parking lots containing 231 spaces in the primary study area. In addition, 10 public parking spaces are provided in the southeast corner of the bank parking lot located off the southwest corner of Old Northern Boulevard and East Broadway. The village also maintains and administers about 30 parking spaces at Village Hall but these spaces are reserved for village vehicles, village employees, or Village Hall visitors only. The following is a summary of these parking areas:

Viaduct Lots – These three (3) parking lots totaling 115 spaces are located beneath the Roslyn Viaduct and were constructed by New York State as part of the recent viaduct replacement project. They are all in excellent condition. The West Lot is unregulated and contains 43 parking spaces, including 2 handicap stalls. The Center lot contains 28 parking spaces, including 2 handicap stalls and is also unregulated. The East lot contains 44 regulated and unregulated parking spaces – 5 spaces have a 1-hour parking time limit, 14 spaces have a 2-hour parking limit, 23 spaces are unregulated, and 2 spaces are handicap. These lots are owned by New York State but conferred to the village for their exclusive use.

Roosevelt Avenue Lot - The Roosevelt Avenue lot is located at the west end of Roosevelt Avenue and contains 86 unregulated parking spaces, including 4 handicap stalls. This lot was recently reconstructed and is in excellent condition. The lot is owned by the Village of Roslyn.

East End Lot – This is a recently reconstructed / blacktopped parking area lot located just south of Hillcrest Avenue where Old Northern Boulevard forms a "T" with East Broadway. The lot is unstriped and unregulated but can probably accommodate about 30 cars if restriped just for parking. This lot is sometimes referred to as the "Old Gas Station Lot" and is owned by the Village of Roslyn. The village has leased some parking rights in this lot to a local restaurant who uses it to store valet parked vehicles during peak periods.

Bank Lot – As part of an arrangement with the village, the private entity that owns the 100 space parking lot behind the New York Community Bank building on the southwest corner of Old Northern Boulevard and East Broadway maintains 10 parking spaces in the southeast corner of the lot for "public" use. These spaces appear to be heavily utilized by postal workers.

On-Street Metered Parking

The village maintains and administers 92 metered parking spaces controlled by Multi-space meters on several streets in the central business district broken down as follows:

Tower Place	4 spaces
Old Northern Blvd between Main & Lumber	14 spaces
Old Northern Blvd between Lumber & Crosswalk	22 spaces
Old Northern Blvd between Crosswalk & E. Broadway	21 spaces

Old Northern Blvd between Hillcrest & Skillman	11 spaces
Main Street (West Side) Immediately South of ONB	13 spaces
Bryant Avenue between Skillman & Viaduct	7 spaces
Total On-Street Meters / Multi-space Control	92 spaces

Like the off-street multi-space meters, the on-street multi-space meters are manufactured by Amano-Metric and configured for a "pay and display" operation. The cost is 25ϕ per 15 minutes and the parking time limit is 3 hours. On-street meters are in effect from 6AM to 6PM, seven days per week.

The village maintains and administers 9 metered parking spaces controlled by single-space meters on two streets in the central business district:

Main Street	4 spaces
Old Northern Blvd between Skillman & 25A	5 spaces
Total On-Street Meters / Single-space Control	9 spaces

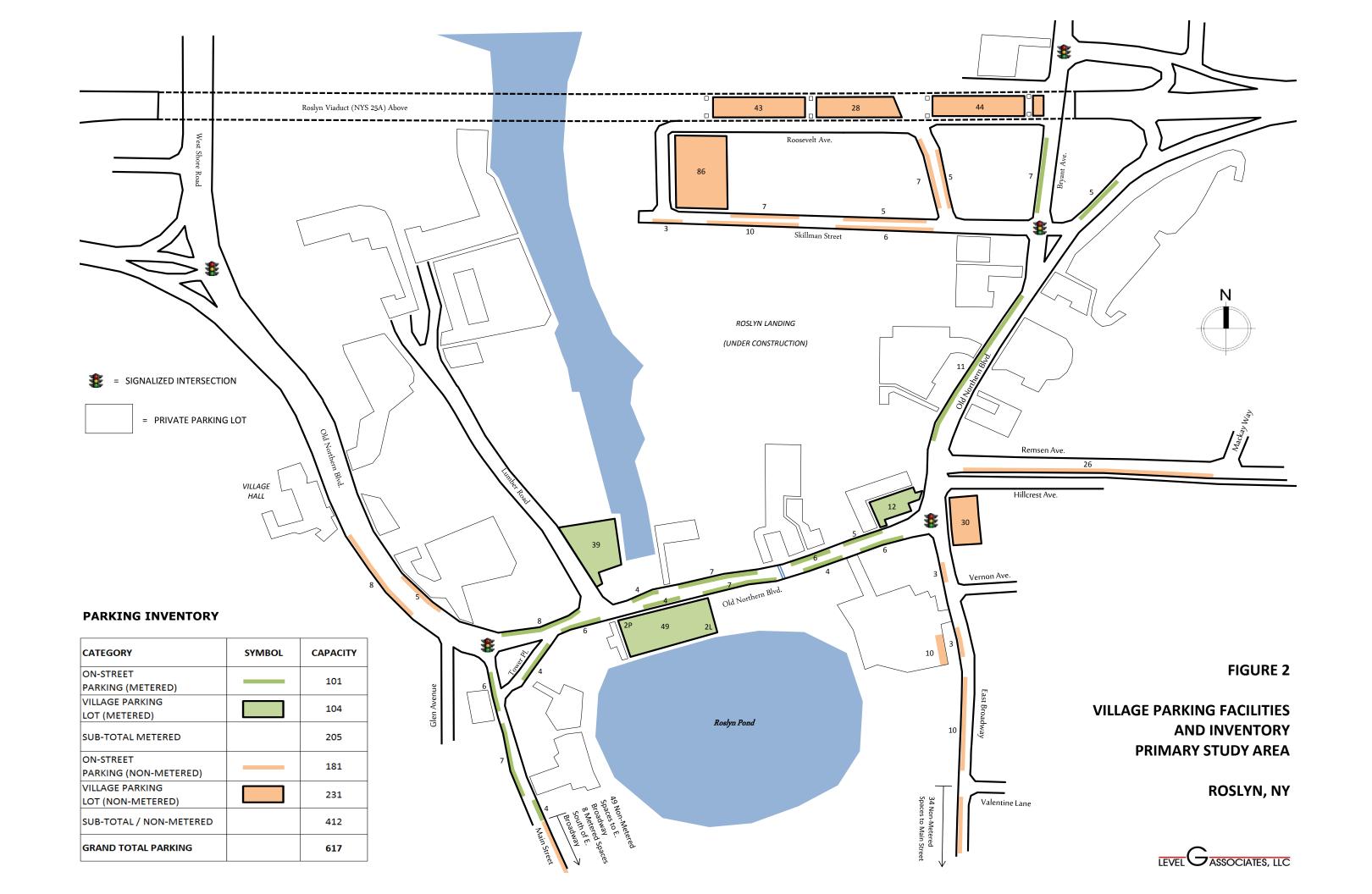
Like the single-space meters in the Edwards Street lot, the on-street multi-space meters are Duncan VIP's. The cost is 25ϕ per 30 minutes hour and the parking time limit is 2 hours.

The village also maintains 8 metered parking spaces on the east side of Main Street just south of East Broadway. These spaces are controlled by single space meters and are not located in the central business district. Time limit is 24 hours and the fee is 25¢ per 2 hours.

On-Street Non Metered Parking

The village maintains and administers 158 non metered and unregulated on-street parking spaces in the Primary Study Area. These spaces are located on both sides of Old Northern Boulevard between Village Hall and Main Street (13), on the east side of Main Street between the Carpenters Hall building and East Broadway (49), on the west side of East Broadway between Old Northern Boulevard and Main Street (50), on the south side Remsen Avenue between Old Northern Boulevard and Mackay Way (26), and on both sides of Skillman Street toward the west end (20).

The village maintains and administers 23 non metered on-street parking spaces with a 2-hour time limit in the Primary Study Area. These spaces are located on both sides of Skillman Street between the unregulated parking section and Landing Avenue (11) and on both sides of Landing Avenue between Roosevelt Avenue and Skillman Street (12).

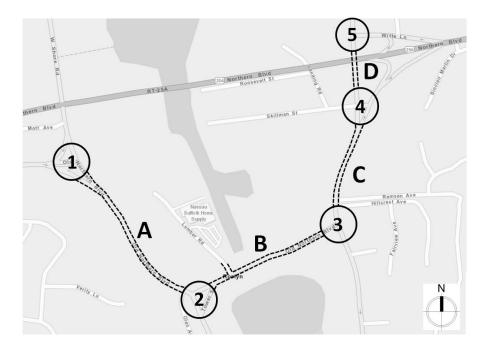


3. TRAFFIC FACILITIES

Evaluations of traffic are focused along Old Northern Boulevard, Bryant Avenue, and the central business district but include other areas of the village as well.

Primary Traffic Study Area

The Primary traffic study area is defined by the U-Shaped roadway segment formed by Old Northern Boulevard and Bryant Avenue between West Shore Road on the west and NYS 25A (Northern Boulevard) on the east. It traverses a distance of approximately ¾ mile and was once a section of NYS 25A until the original Roslyn Viaduct was constructed in 1949 to bypass the Roslyn central business district. There a five (5) signalized intersections plus four (4) roadway segments connecting the five intersections along this route as indicated below.



The five signalized intersections are:

- 1) Old Northern Boulevard at West Shore Road;
- 2) Old Northern Boulevard at Main Street / Tower Place;
- (3) Old Northern Boulevard at East Broadway;
- 4 Old Northern Boulevard at Skillman Street; and
- 5 Bryant Avenue at Witte Lane.

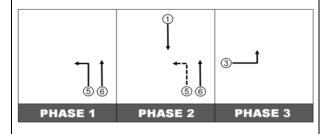
Data sheets that include a description of each intersection plus existing traffic control, operation, signal phasing and the most recent available traffic volume information are provided on the next five pages.



TRAFFIC CONTROL

Three Phase Traffic Signal Channelized Right Turns - SB to WB & EB to SB No Pedestrian Controls

PHASING DIAGRAM



PEAK HOUR VOLUMES

MOVEMENT	AM PEAK	PM PEAK
1	422	889
2	190	707
3	855	225
4	203	332
(5)	253	311
6	946	577

COMMENTS

➡ Movements 2 and 4 are free / unsignalized

FIGURE 3 EXISTING CONDITIONS

Intersection of Old Northern Boulevard and West Shore Road





TRAFFIC CONTROL

Two Phase Traffic Signal Pedestrian Pushbuttons & Signals

PHASING DIAGRAM		2 → →
	PHASE 1	PHASE 2
	① —	② → → 3
	PHASE 1P	PHASE 2P

PEAK HOUR VOLUMES			
<u>MOVEMENT</u>	AM PEAK	PM PEAK	
1	303	673	
2	363	530	
3	683	376	
4	257	369	
(5)	532	430	
6	39	91	

COMMENTS

- Movement 4 is free / unsignalized
- Advance Traffic Signal Warning Device on southbound approach

FIGURE 4 EXISTING CONDITIONS

Intersection of Old Northern Boulevard and Main Street





TRAFFIC CONTROL

Two Phase Traffic Signal Pedestrian Pushbuttons & Signals

PHASING DIAGRAM	20	© 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	PHASE 1	PHASE 2	
	P1 1		

PHASE 1P

PEAK HOUR VOLUMES

MOVEMENT	AM PEAK	<u>PM PEAK</u>
1	412	258
2	583	384
3	422	749
4	75	111

COMMENTS

 ➡ Phase 1P only cycles when called

FIGURE 5 EXISTING CONDITIONS

Intersection of Old Northern Boulevard and East Broadway

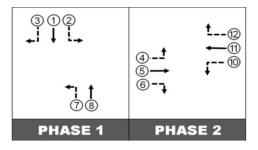




TRAFFIC CONTROL

Two Phase Semi-Actuated Traffic Signal Pedestrian Pushbuttons To Call 2nd Phase

PHASING DIAGRAM



PEAK HOUR VOLUMES

<u> </u>	AM PEAK	PM PEAK		AM PEAK	PM PEAK
(1)	1011	547	(7)	30	23
2	58	61	8	216	543
3	9	6	9	125	159
4	13	3	10	12	51
(5)	5	12	(11)	14	14
6	17	45	(12)	185	419

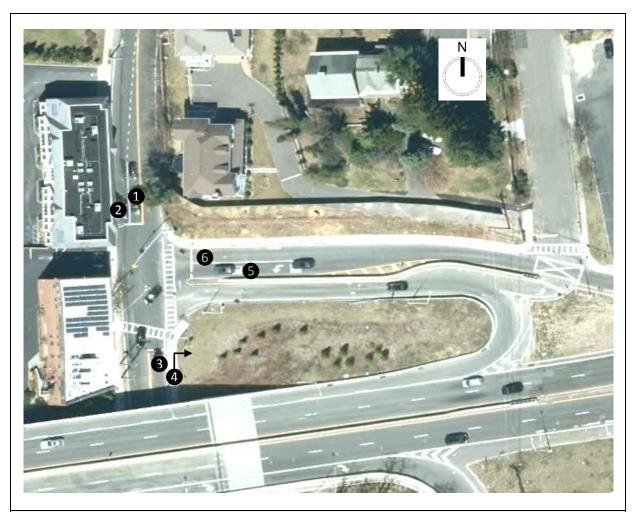
COMMENTS

- ⇒ Phase 2 cycles when called by vehicle detection or pedestrian pushbutton
- Movement 9 is free / unsignalized
- $\boldsymbol{\boxminus}$ Movements 2 & 5 yield to Movement 9 just east of intersection

FIGURE 6 EXISTING CONDITIONS

Intersection of
Old Northern Boulevard
and
Skillman Street





TRAFFIC CONTROL

Three Phase Traffic Signal Pedestrian Pushbuttons & Signals

PHASING DIAGRAM PHASE 1 PHASE 2 PHASE 3 PHASE 3P

PEAK HOUR VOLUMES				
MOVEMENT	AM PEAK	PM PEAK		
1	457	197		
2	721	497		
3	493	877		
4	29	36		
(5)	391	282		
6	36	95		

COMMENTS

- ➡ Phase 3P only cycles when called
- ₽1 and P2 are independent
- North-south crosswalk shown in aerial image above no longer exists

FIGURE 7 EXISTING CONDITIONS

Intersection of Bryant Avenue and Witte Lane



The following is a description of each roadway segment connecting the five signalized intersections.

Segment A – Old Northern Boulevard between West Shore Road and Main Street

Characteristics

This segment is a four lane local arterial roadway with a posted speed limit of 25 MPH. The north terminus of the segment forms a seamless connection with West Shore Road which is one of two north/south 4-lane arterial roadways serving the Port Washington / Sands Point Peninsula. The south terminus forms a T intersection with Main Street which becomes Roslyn Road connecting to the Long Island Expressway and points south.

There is no parking on either side of the majority of the segment with the exception of the southern end where there are free and unregulated parallel parking spaces on both sides of the street, about 5 spaces on the east side and 8 on the west side. This southern portion of the segment also features bus stops on both sides of the street for the N20, N21, and N23 bus routes. There are sidewalks on both sides of the street.

The west side of the segment features wooded areas, the Roslyn School of Painting and Roslyn Village Hall. Both facilities have on-site parking. The east side features a 500 seat restaurant / catering hall, a small office building, and the Roslyn Hotel, a 77 room boutique hotel with ample on-site parking. The restaurant / catering hall (currently named Hendricks Tavern), the largest and busiest restaurant in Roslyn, has on-site parking that is not capable of accommodating typical parking demand. As a result, the establishment runs a valet parking operation during all business hours utilizing stacked on-site parking, on-street parking, and a number of off-site parking areas.

General Usage

The top three general uses of this roadway segment in descending order are estimated to be: through traffic between the Port Washington / Sands Point peninsula and I-495 / Northern State Parkway; connecting downtown Roslyn destinations to and from points north and west, and service to destinations within the segment.

- 1. Excessive speed Due to the high volume of through traffic plus physical characteristics that include open stretches and wide lanes.
- 2. Congestion Due to insufficient reservoir capacity related to valet parking and pick up / drop off activity in the vicinity of the restaurant / catering hall.
- 3. Sight Distance Due to roadway curvature in southern portion plus profile differential and roadway curvature in northern portion.

4. Illegal Parking – On the east side of the southern portion due to insufficient on-site reservoir and parking capacity at the restaurant / catering hall. Activity includes improper placement of vehicles and partial travel lane obstructions.

Segment B – Old Northern Boulevard between Main Street and East Broadway

This segment is a two lane local arterial roadway with a posted speed limit of 25 MPH that serves the Roslyn central business district. The west terminus forms a T intersection with Main Street and the east terminus forms a T intersection with East Broadway.

There are parallel parking spaces on both sides of the street, about 30 spaces on the north side and 27 on the south side. These are metered spaces with a three hour time limit and the fee is 25¢ for 15 minutes. The western portion of the segment features a T intersection with Lumber Road, intersecting from the north. The central section includes a mid-block pedestrian crosswalk and the 53 space Village Center municipal parking lot. There are driveways located throughout the corridor on both the north and south sides serving the many business establishments and eateries in the downtown area. There are sidewalks on both sides of the street.

The north and south side of this segment include typical downtown commercial establishments including banks, restaurants and retail establishments. The north side also includes the Village Post Office and the Roslyn Grist Mill, a significant historic structure that is scheduled to be restored in the near future.

General Usage

The top three general uses of this roadway segment in descending order are estimated to be: through traffic to and from West Shore Drive and NYS 25A; service to destinations within the segment and on Lumber Road; through traffic to and from Roslyn's northeast business district on Old Northern Boulevard (between East Broadway and Witte) and points south and west.

- 1. Friction Due to high volume of turning movements in and out of Lumber Road and numerous driveways along this segment.
- 2. Illegal Parking Due to high demand for on-street parking in close proximity to popular business establishments. Activity includes improper placement of vehicles, double parking, and full lane obstructions.
- 3. Congestion Due to high volume of through traffic coupled with friction and illegal parking activities described above.
- 4. Unnecessary Traffic Volume Due to parkers circling for open on-street parking spaces in close proximity to their destinations.

5. Periods of Reckless Driving – Due to pressures on valet jockeys to park and retrieve vehicles in compressed time periods.

Segment C - Old Northern Boulevard between East Broadway and Skillman Street

This segment is a two lane local arterial roadway that serves the northeast leg of Roslyn's business district. The south terminus features a near right angle jog of Old Northern Boulevard and forms a T intersection with East Broadway. The north terminus forms an intersection with Skillman Street and is also the point where Old Northern Boulevard ends and Bryant Avenue begins.

There are approximately 11 parallel parking spaces on the west sides of the street. These are metered spaces with a three hour time limit and the fee is 25ϕ for 15 minutes. There is no parking on the east side of the street. The southern portion of the segment features T intersections with both Hillcrest Avenue and Remsen Avenue, intersecting from the east. There are several driveways located throughout the corridor on both the east and west sides serving business establishments and eateries in the area. There are sidewalks on both sides of the street.

There are two village parking lots located at the south end of this segment. One is a 12-space lot located at the northwest corner of Old Northern Boulevard and East Broadway. The lot has metered parking with a three hour time limit and the fee is 25ϕ for 15 minutes. The other is the former "gas station" site which the village acquired and has recently improved. The lot is located at the head of the T formed by Old Northern Boulevard and East Broadway and was recently reconstructed with new asphalt, sidewalks and driveways. At the time this report was prepared the lot was free and unregulated and there were no pavement markings, but it is estimated that the lot could accommodate up to 30 cars if striped exclusively for parking.

The east side of the street features a clothing store, furniture store and two popular restaurants, side by side. In addition to typical restaurant activity, one of the two restaurants is also a popular night spot that attracts large crowds, especially on Thursday, Friday and Saturday evenings. The west side features several business establishments as well as two vacant buildings.

General Usage

The top three general uses of this roadway segment in descending order are estimated to be: through traffic to and from NYS 25 and Roslyn Road; through traffic to and from West Shore Drive and NYS 25A; service to destinations within the segment as well as Remsen and Hillcrest.

- 1. Illegal Parking Due to high demand for on-street parking in close proximity to popular restaurants. Activity includes improper placement of vehicles and partial lane obstructions.
- 2. Periods of Friction Due to insufficient reservoir capacity related to valet parking and pick up / drop off activity in the vicinity of restaurants.

- 3. Periods of Reckless Driving Due to pressures on valet jockeys to park and retrieve vehicles in compressed time periods.
- 4. Periods of Congestion Due to high volume of through traffic coupled with friction and illegal parking activities described above.

Segment D – Bryant Avenue between Skillman Street and Witte Lane

This segment is a two lane local arterial roadway that serves the northeast leg of Roslyn's business district. The north terminus forms a T intersection with Witte Lane which primarily acts as the exit ramp for westbound NYS 25A. The south terminus forms an intersection with Skillman Street and is also the point where Bryant Avenue begins.

There are approximately 7 parallel parking spaces on the west sides of the street. These are metered spaces with a three hour time limit and the fee is 25ϕ for 15 minutes. There is no parking on the east side of the street. There are several driveways located throughout the corridor on both the east and west sides serving parking lots and business establishments in the area. There are sidewalks on both sides of the street.

The northern portion of this segment passes below the Roslyn Viaduct. Beneath the Viaduct, on the west side of Bryant Avenue, are a string of free public parking lots that are owned by NY State but deeded to the Village for municipal use. Access driveways to and from these lots are located on the west side Bryant Avenue in the area below the Viaduct. The parking lot nearest to Bryant Avenue contains 44 spaces and includes 1-hour limit stalls, 2-hour limit stalls, unrestricted stalls and handicap parking areas.

This segment currently features retail / commercial establishments, a beauty salon, a popular restaurant / café, and the Roslyn Village Motel.

General Usage

The top three general uses of this roadway segment in descending order are estimated to be: through traffic to and from NYS 25 and Roslyn Road; through traffic to and from West Shore Drive and NYS 25A; service to destinations within the segment as well as Remsen and Hillcrest.

- 1. Periods of Friction Due to lack of sufficient roadway width to allow northbound motorists to pass northbound vehicles waiting to turn left into the Viaduct parking areas.
- 2. Periods of Congestion Due to high volumes of through traffic to and from NYS 25A.

Other Traffic Study Areas

In addition to the intersections and roadway segments described in this section there are two other areas of the village where traffic issues were observed. They are: Lumber Road and the southern section of Main Street.

Lumber Road

Lumber Road is local dead end street that intersects with Old Northern Boulevard and runs norths for a distance of about 800 feet. It features several commercial establishments, parking areas, and a Verizon warehouse / office. The north terminus feeds two driveways that serve as access points to two large properties; an office / warehouse at 34 Lumber Street, and a Retail / Entertainment Center at 55 Lumber Street.

The southern portion of Lumber Street features a 39-space village public parking lot on the east side and a private parking area on the west side. The private parking area is used by a valet parking company to park / stack cars from a local restaurant / catering hall.

The Street has a commercial / light industrial character and does not present a pedestrian friendly environment. There are no pavement markings or sidewalks with the exception of an attractive and effective sidewalk on the lower east side connecting the 39-space municipal parking lot to the north sidewalk on Old Northern Boulevard.

The intersection with Old Northern Boulevard features a stop sign for southbound Lumber Road and a crosswalk that connects the north side the Old Northern Boulevard sidewalk in an eastwest direction. There are no turning movement restrictions.

Observed Issues

- 1. Left Turns Onto Old Northern Boulevard The left turn from southbound Lumber Road to eastbound Old Northern Boulevard is at times precarious due to high volumes of traffic on Old Northern Boulevard, the presence of pedestrians, cars entering Old Northern Boulevard from Tower Place, and / or cars pulling in and out of parking spaces along Old Northern Boulevard. This condition is exacerbated by sight distance limitations caused by the curvature of Old Northern Boulevard just west of the intersection.
- 2. Periods of Reckless Driving Due to pressures on valet jockeys to park and retrieve vehicles in compressed time periods.

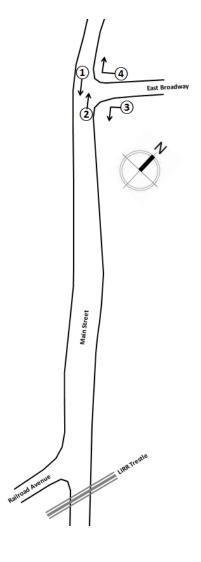
Southern Section of Main Street

Main Street is a two lane collector road that links Old Northern Boulevard to Roslyn Road and points south. The southern section runs from the intersection of Main Street and East Broadway southeast to the village line. Along the way it forms a T intersection with Railroad Avenue, entering from the southwest. An LIRR trestle crosses over Main Street just south of this T intersection.

There are 8 single space parking meters located on the east side of Main Street and 8 free onstreet spaces with a 9AM to 5PM restriction on the west side.

Observed Issues

1. Congestion – Due to volume. A 2007 study by Nelson & Pope identified this intersection as the worst performing of 6 signalized intersections in the village during the AM rush hour. The study indicates this intersection operates at Level of Service (LOS) "D" during the AM rush hour meaning "tolerable delay – occasionally wait through more than one traffic signal cycle before proceeding". Our observations were consistent with this definition however but we believe this intersection has probably degraded to an LOS closer to "E" in the AM rush hour 1. In addition, traffic queues for the northbound movement extended through the T intersection with Railroad Avenue and beyond the LIRR trestle which is over 900' from the intersection. This condition made left turn movements from Railroad Avenue onto Main Street almost impossible as the saturated traffic condition afforded no measurable gaps during this period. See diagram below.



Movement	AM Peak	PM Peak
1	370	534
2	916	808
3	431	463
4	11	16

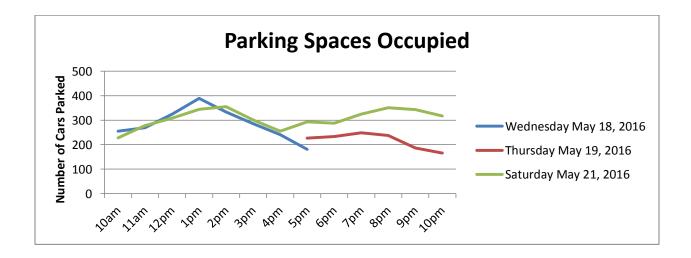
19

¹ Northbound movement never cleared during AM rush hour.

4. PARKING OCCUPANCY COUNTS

The number of vehicles parked in all municipal off-street spaces and all on-street parking spaces in the Primary Study Area were counted on an hourly basis between 10AM and 10PM on Wednesday May 18, Thursday May 19, and Saturday May 21, 2016. The purpose of these counts was to gauge existing parking demand and the unique parking demand characteristics in each section of the study area. Appendix A presents the results of the occupancy counts.

Parking space occupancy patterns in municipal parking spaces where a fee is charged for parking are especially important to understand because these spaces are located in areas of the village where parking demand from the commercial district is most intense and needs to be properly managed and calibrated. The following graph summarizes the count results.



As indicated, peak parking occupancy occurred on Wednesday at 1PM indicating a business district with a strong restaurant component. Other suburban centers with business districts lacking a developed restaurant component would typically indicate peak parking occupancy recordings around 11AM.

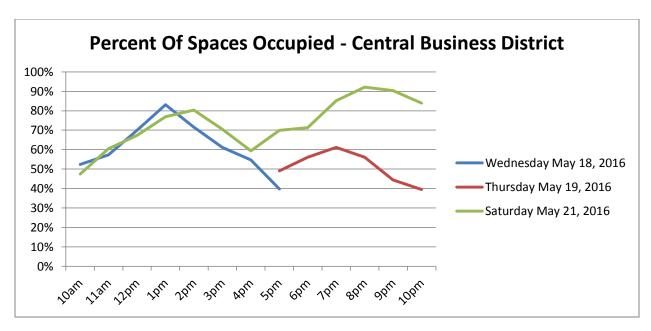
Another indicator of the strength of Roslyn's restaurant land uses are the significant parking occupancy recordings on Saturday evening. The PM peak recording of 351 cars parked on Saturday at 8PM was only 38 cars less than the overall peak recording on Wednesday at 1PM when all stores and businesses in the CBD were open for business.

If remote parking spaces² in the Primary Study Area are removed from the data set another picture emerges that illustrates the lack of available parking in the village center during critical time periods.

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² Southern portion of Main Street, East Broadway beyond the Library, distant parking areas along Skillman and beneath the Viaduct.

The following graph, with the distant study area parking areas removed, indicates that peak parking conditions occur 8PM on Saturday evening in the most centralized parking areas of downtown Roslyn. At that time it was determined that 315 cars were parked in 342 spaces, an occupancy rates of 92.1%.



The 90% parking space occupancy level is a significant threshold in parking program planning and design. Because of the constant in-flow and out-flow of vehicles, improperly parked vehicles and typical vacancies in handicap parking areas a parking supply that is 90% occupied is considered "full".

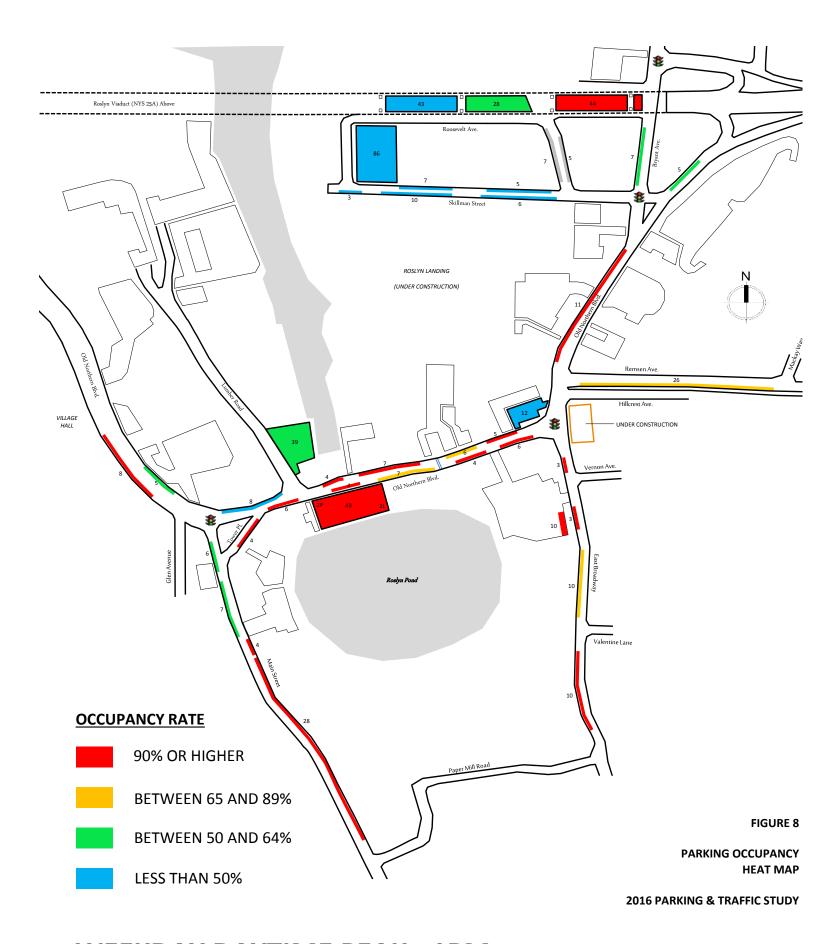
Parking Occupancy Heat Maps

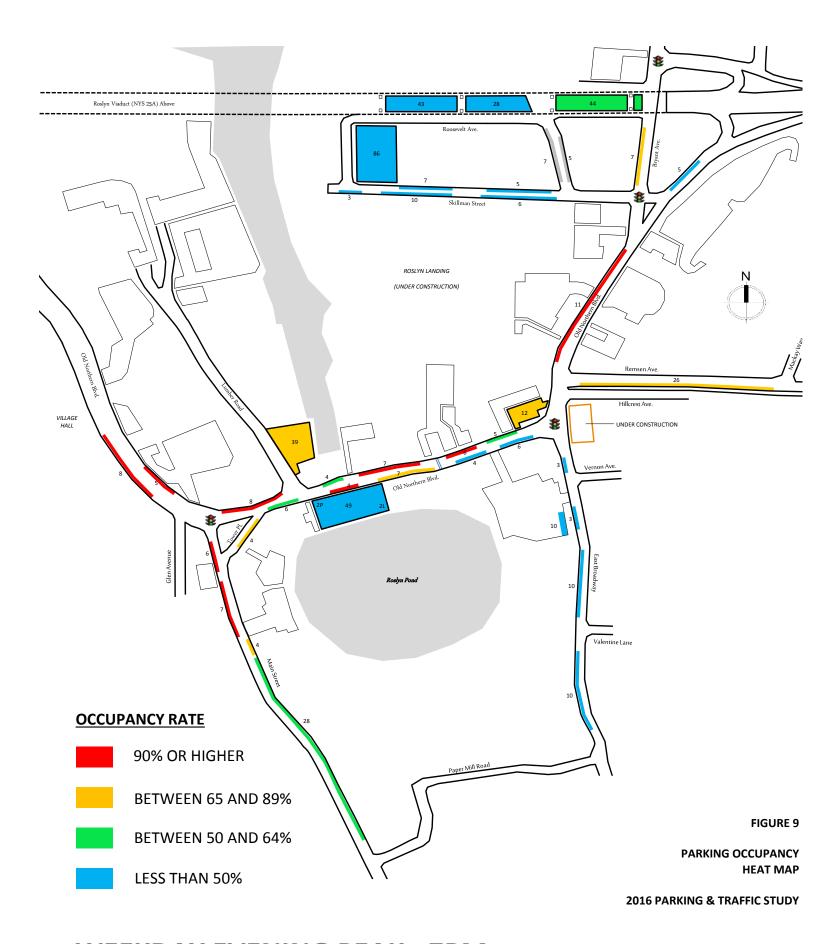
A Parking Occupancy Heat Map is an illustration that depicts parking space utilization patterns in specific blocks or groupings of parking spaces in a parking study area. Heat maps are based on occupancy percentages and have been generated for the measured peak parking periods in downtown Roslyn which are:

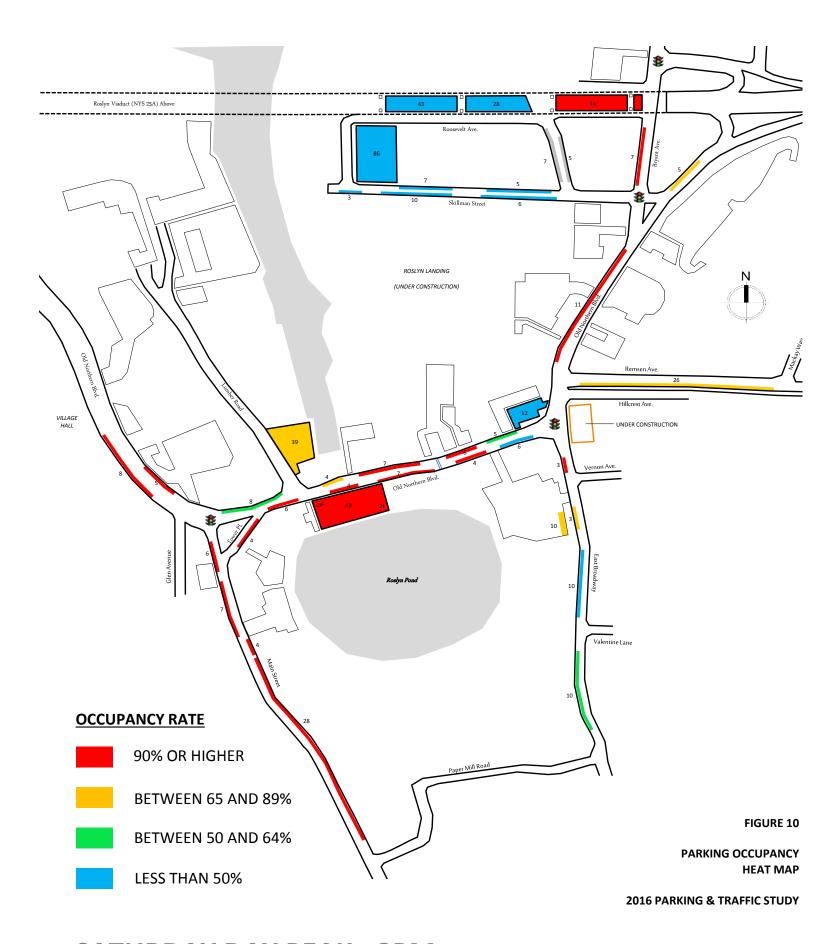
- Weekday Day Peak (1PM)
- Weekday PM Peak (7PM)
- Saturday Day Peak (2PM)
- Saturday PM Peak (8PM)

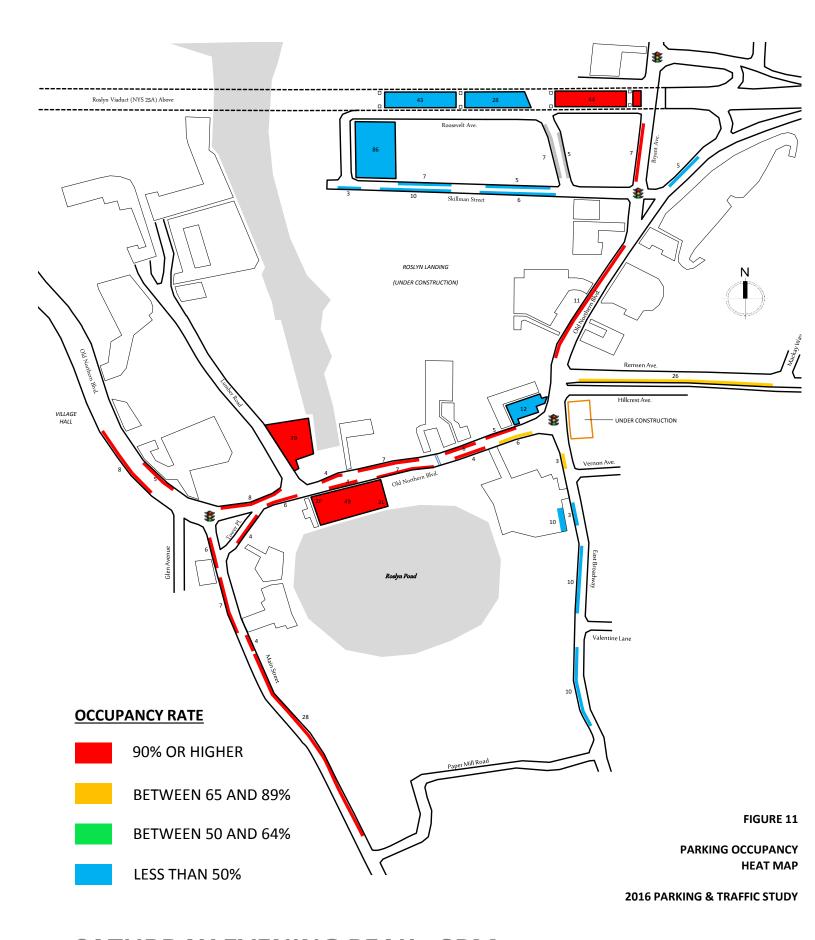
On each heat map, blocks and groupings of parking spaces have been color coded to reflect their measured occupancy level during each of the four peak intervals described above. Parking areas colored **Blue** had a measured occupancy level of less than 50%; **Green** between 50 and 64%; **Gold** between 65 and 89%; and **Red** 90% or higher.

Heat maps are presented in Figures 8 through 11 (next four pages).









Discussion

The heat maps reveal a number of interesting characteristics of the use and utilization of the village's on and off-street parking supply:

Weekday Day Peak (1PM) - Figure 3

- Unregulated portions of Main Street and East Broadway north of Paper Mill Road were heavily utilized, presumably by downtown employees and/or parkers who wish to avoid parking fees;
- Metered parking spaces in the village center along Old Northern Boulevard (ONB) were heavily utilized, but there were available spaces not far away in the Lumber Road Lot, the north side of ONB west of Lumber Road, and in the East Broadway Lot;
- Restaurants / Cafes along Bryant Avenue and ONB north of Remson attract parkers to metered on-street spaces and unmetered spaces in the two Viaduct Lots.

Weekday – PM Peak (7PM) – Figure 4

- Parking space vacancies along previously "full" unregulated portions of Main Street and East Broadway north of Paper Mill Road are primarily indicative of the departure of the daytime downtown workforce;
- High parking space occupancy levels were clustered near the village's five most popular restaurants as of spring 2016 – The Jolly Fisherman, Hendrick's Tavern, MP Taverna, Kyma, and Trattoria Diane;
- Although all three screens at the Bow Tie Cinema were active during our counts, about 40 available parking spaces in the Lumber Road Lot and Village Center Lot (combined) indicate no significant parking issues on weekday evenings.

Saturday – Day Peak (2PM) – Figure 5

- As shown on this Heat Map and the line graph on page 10, Saturday daytime parking space occupancy levels in downtown Roslyn rival and or surpass Weekday occupancy levels;
- On this particular Saturday at 2PM there was very little available parking in the village center but there were about 18 spaces available at the east end of ONB before it turns north and about 13 spaces available in the Lumber Road Lot;
- We observed greater than 100% parking space occupancy on several block sides as illegal parking activity, including double parking, caused or exacerbated localized areas of congestion.

Saturday – PM Peak (8PM) – Figure 6

- As shown on this Heat Map and the line graph on page 10, overall peak parking space occupancy levels in the village center occur on Saturday evenings around 8PM;
- On this particular Saturday at 8PM there was very little available parking in the village center including the Lumber Road Lot;
- We observed greater than 100% parking space occupancy on several block sides as illegal parking activity, including double parking, caused or exacerbated localized areas of congestion;
- We observed low parking space turnover and motorists circling streets and parking lots waiting for available parking to open up;
- We observed high levels of valet parking activity and queuing at the valet stations. These
 queues sometimes backed up onto the local roadway network creating congestion and
 hazardous conditions;
- We observed valet jockeys driving between valet stations and valet parking areas at unsafe speeds creating hazardous conditions. During a non-counting Saturday evening in April 2016 we observed a three car accident the ONB / Lumber Road intersection caused by a valet jockey operating a vehicle at unsafe speeds.

5. NEW DEVELOPMENTS

There are several new developments that may impact parking and traffic conditions in the Village of Roslyn. Two of these projects are under construction while others are in the planning stages and / or before the zoning board.

Under Construction

Roslyn Landing – This is a residential development encompassing a large portion of the interior section of the block formed by Old Northern Boulevard, Hempstead Harbor Creek and Skillman Street. The development includes 78 townhouses, public amenities and on-site parking. Each dwelling unit includes a 2-car garage plus there are 86 on-street and off-street parking spaces located on the site itself yielding a parking ratio of 3.1 parking spaces per unit.

<u>Parking Impacts</u> – A parking supply ratio of 3.1 parking spaces per unit is more than adequate to accommodate project parking demand, therefore we would expect no adverse impacts or parking overflow activity to occur as a result of this project.

<u>Traffic Impacts</u> – Traffic studies performed by Nelson & Pope in 2007 and 2015 conclude that "the proposed project will not create any significant (traffic) impacts and mitigation measures are not required".

17 Lumber Road – This is a redevelopment of the old Nassau–Suffolk Lumber property on the east side of Lumber Road between Lumber Road and Hempstead Harbor Creek. The site is also north-adjacent to the village's 39-Space Lumber Road parking lot. The project includes 20 luxury rental residential units, 21,000 square feet of retail space, and 72 on-site parking spaces.

<u>Parking Impacts</u> - The building program will probably yield a peak parking requirement of about 85 spaces on a Saturday evening around 7PM (Multiple sources including: Urban Land Institute. *Shared Parking, Second Edition and ITE. Parking Generation, 4th Edition*). However, this figure could be higher or lower depending on the occupancy of the retail space and the mix of retail tenants. Our parking space occupancy counts indicated that the 39-space village parking lot was occupied in excess of 100% on the Saturday 7PM count. Therefore, this project is likely to produce an unmet parking demand of about 13 spaces during peak conditions:

Estimated Parking Demand – Saturday 7PM		
On-Site Parking Supply		
Unmet Parking Demand – Saturday 7PM	13	
Spaces Available in Lumber St. Lot – Saturday 7PM	0	
Adjusted Unmet Parking Demand – Saturday 7PM	13	

<u>Traffic Impacts</u> – A traffic study for this project was not available.

Under Review or In Planning Stages

The following former restaurants in downtown Roslyn are currently vacant. The reactivation of these properties or spaces may or may not have a detrimental effect on downtown parking conditions depending on the proposed new land use and the accompanying parking plan.

- Former "Friend of The Farmer" Restaurant
- Former "Poco Loco" Restaurant
- Block 539 (Former Restaurant Behind Post Office)
- Former "Pomodoro" Restaurant

The reactivation of these properties or spaces as restaurant uses could pose a significant burden on parking conditions in downtown Roslyn for the following reasons:

- 1. Restaurants generate significantly higher parking demand than most other land uses;
- 2. The current downtown parking peaks (periods of time when downtown parking spaces are "full") coincide with peak periods experienced by restaurants;

There are many non-restaurant land uses that are consistent with a historic downtown setting and business environment such as retail establishments, professional offices, salon, yoga studio, day care, or residential, among others.

6. RECOMMENDED PARKING PROGRAM PLAN

Our studies have led us to a number of conclusions regarding Roslyn parking conditions and parking supply.

- 1. Peak parking demand in the Primary Study Area occurs at 1PM on a typical weekday;
- 2. Peak parking demand in the Central Business District (CBD) occurs on a Saturday evening at 8PM;
- 3. To achieve a recommended parking occupancy rate of 85% in the Central Business parking areas that are currently occupied in excess of 90% during peak periods, an additional 58 parking spaces are required;
- 4. The 17 Lumber Road redevelopment project is likely to further stress CDB parking conditions adding another 13 spaces to the 8PM Saturday peak;
- 5. There are vacant properties in the CBD that, when occupied, may generate additional parking demand.

It is clear from our counts, observations and studies that parking facilities in downtown Roslyn have reached a saturated condition. Moreover, if the currently vacant properties are permitted to reopen without proving sufficient on-site parking conditions are sure to deteriorate even further.

Discussion

The Village of Roslyn has a historic charm and character that is unique on Long Island and deserving of preservation. As a result, the development of a multi-level parking structure to ease parking shortages in the CBD is not a viable alternative. Moreover, there are no available properties with the requisite size to develop any meaningful additional surface parking within reasonable walking distance of the CBD.

Therefore, our recommended parking program attempts to effectuate incremental changes that will have positive impacts on the Roslyn parking experience in the near term and long term. We are suggesting a two-pronged approach. The first prong includes the physical development or creation of additional parking plus operational changes that could make more parking available to downtown visitors and customers. The second prong involves policy changes designed to responsibly manage the tide of new projects or redevelopment proposals that will further burden the CBD parking supply.

Recommendations – Physical & Operational

Table 1, next page, is a matrix that summarizes our recommended parking program plan and includes the rationale used to develop each recommendation.

TABLE 1 RECOMMENDED PARKING PROGRAM PLAN PHYSICAL & OPERATIONAL

REF	Location	Recommendation	Rationale
P.1	Village Center Lot	Reconstruct / Redesign the existing parking lot to become an attractive parking "plaza". Net gain 26 spaces. Tie into new mid-block crosswalk. See Appendix B.1.	Help alleviate local parking shortages; downtown beautification; eliminates two driveways on Old Northern Boulevard; traffic calming via mid-block crosswalk. As part of this initiative, the re-routing of the Roslyn Landing public walkway should be considered. A new route that takes the walkway due south to the current driveway between the Grist Mill and 1353 Old Northern Boulevard would tie directly into the new mid-block crosswalk and parking plaza. Access to the parking area behind 1353 Old Northern Boulevard can be accommodated off the main ONB access road as originally proposed on the Roslyn Landing Site Plan.
P.2	Former Gas Station Lot	Configure this lot to to provide up to 20 additional parking spaces and a turnaround manuever for eastbound ONB motorists seeking a U-turn to circulate back into the central business district. See Appendix B.2.	Expand village parking supply; enabling U-turn will allow motorists to access vacant on-street parking spaces on north side of ONB; the formalized striping of 20 new parking stalls can be used for downtown employee parking.
P.3	East Broadway Lot	Improve lighting and visibility.	Lack of adequate signage and lighting levels contributes to under use of this conveniently located parking facility.
P.4	Metered Lots	Improve instructions at pay stations (see Appendix B.3). Eliminate space numbers in Lumber Road Lot.	We noted confusion and queuing at parking pay stations probably due to lack of simple / intuitive instructions for first time users.
P.5	All Lots	Improve wayfinding and lot identifier signage. See Appendix B.4.	In many cases lots are neither identified nor have advance indication of their existence. A family of attractive signs will effectively brand the municipal parking facilities and make them easier to find.
P.6	On-Street Parking	Remove stripes between parking stalls.	Research has shown that block sides without painted parking stalls will usually accommodate a greater number parked cars than those with painted parking stalls.
P.7	System	Create / Sell Employee Parking Permits	Downtown employees do not have many parking options. We believe most are parking for free along Main Street, East Broadway, ONB (north of Main), the Bank Lot, Remsen Avenue, and other locations. The village should consider making spaces available in lots such as East Broadway, Bank Lot, or Gas Station for this purpose.
P.8	Public Parking Spaces in Bank Lot	Convert to 3 Hour Limit or Employee Permit Parking Only	These stalls were found to be occupied by long duration (probably downtown employee) parkers between 10A and 4P on weekdays and Saturdays.
P.9	Junior League Parking Lot	Explore Revenue Sharing Arrangement With Owner.	The rear portion of this lot is in the heart of the CBD and goes largely unused. It is estimated that at least 30 spaces in this lot can be converted to public parking on certain days and time periods. If operated by the village and metered for this purpose, the resulting revenue can be split between the village and the Juniior League to the benefit of both parties.
P.10	All Metered Spaces	Change Hours of Operation from 6AM to 6PM to 6AM to 11PM.	Valet operators and downtown employees are using parking spaces intended for downtown visitors / customers after 6PM.

Recommendations – Policy

Physical and operational changes described in the Table 1 may effectively increase the usable parking supply in downtown Roslyn by up to 70 or 80 spaces. However, this program would only be accommodating land uses that currently exist or scheduled on come on-line within the next year or so.

As mentioned, if currently vacant properties are permitted to reopen without providing sufficient on-site parking conditions will deteriorate. Assuming parking demand levels from currently occupied properties in the CBD persist, the following conditions³ are recommended for any new or pending projects or applications:

- 1. Any new application, project, or redevelopment must provide all required parking on-site or on a physically adjacent property if the adjacent property can be accessed by an internal pedestrian and vehicular connection and can be shown to be secured perpetually for as long as the subject project / application is occupied and /or operating;
- 2. Valet parking will only be permitted on-site or on an adjacent property as described above;
- 3. Any proposed valet operation must be fully contained on site or on an adjacent property as described above including but not limited to pick-up / drop-off areas, staging areas, reservoir / queueing areas, and parking areas;
- 4. If a valet parking operation is proposed, a dedicated reservoir / queuing area must be provided between the street and the valet drop-off area. One (1) reservoir space of at least 7' x 20' must be provided for every 20 spaces included in the valet parking plan;
- 5. Any valet operation shall include a dedicated pick-up / drop-off area capable of safely accommodating two idling vehicles;
- 6. Any valet operation shall include a dedicated vehicle staging area capable of safely accommodating two vehicles or 5% of the proposed valet parking supply, whichever is greater;
- 7. Dedicated reservoir spaces and spaces in dedicated pick-up / drop-off areas are not permitted to be included in the valet parking supply. Fifty percent (50%) of the spaces in vehicle staging areas are permitted to be included in the valet parking supply;
- 8. Businesses and / or valet operators who are found to be in violation of these conditions are subject to fines up to \$5,000 per occurrence.

Existing Valet Parking Operations

Existing valet parking operations, such as those at Jolly Fisherman, Hendricks, MP Taverna, or Kyma create periods of congestion due to insufficient reservoir capacity, queueing space, and staging areas. The village should consider imposing valet parking regulations designed to reduce or eliminate local roadway congestion caused by valet operations. An example of municipal valet parking rules and regulations is provided in Appendix C.

³ Requires review by the Village Court and Zoning Board attorney.

7. RECOMMENDED TRAFFIC PROGRAM PLAN

Please refer to Table 2, next page, for a matrix that summarizes our recommended traffic plan and includes the rationale used to develop each recommendation.

Recommendations T.1 through T.10 are program elements that can be pursued and initiated in the near term.

Recommendations T.11 and T.12 are longer term considerations that may require considerable planning, property acquisitions and/or taking(s), County and/or State approvals, and cost.

TABLE 2 RECOMMENDED TRAFFIC PROGRAM PLAN ROSLYN PARKING & TRAFFIC STUDY - 2016

REF	Location	Recommendation	Rationale
T.1	Old Northern Boulevard at Main Street / Tower Place	Traffic calming; turnaround; lane use; signage. See Appendix B.5.	Attractive median would help to symbolize arrival to the downtown district. Speeds entering this intersection from Segment A average 39.4 MPH (14.4 MPH over the speed limit). Westbound motorists seeking on-street parking on the south side of ONB will be able to U-turn around. Westbound approach lane definitions are unclear. Need advance R3-7R (Right Lane Must Turn Right) for SB approach.
	Old Northern Boulevard at East Broadway	Traffic calming; turnaround. See Appendix B.2.	Attractive median symbolizes your arrival to the central business district. Bumpouts help to channelized traffic and make pedestrian crosswalks shorter. Eastbound motorists seeking on-street parking on the north side of ONB will be able to turn around.
T.3	CBD Traffic Signals	Add countdown timers to pedestrian signals.	Signals with pedestrian countdown timers (PCT) are strongly preferred by users / pedestrians. Studies indicate that PCT reduce accidents involving pedestrians by 65% among pedestrians 65 and older and 32% overall. Their relatively low cost provides a very high cost-benefit ratio.
T.4	Segment B	Add Second Mid-Block Crosswalk and Re-Design	A second mid-block crosswalk near the Grist Mill will effectively divide Segment B into three sections providing a nice traffic calming rhythm through the CBD. Redesigning the crosswalks with stone or textured pavement and adding bump out landings will improve visibility, make handicap ramps easier to develop and shorten the crossing distance.
T.5	CBD Traffic Signals 4 and 5	Improve Demand Responsiveness; Split AM/PM timing plan.	Northbound movement experiences excessive back-ups / does not clear during PM peak periods while Witte Lane westbound movement clears every cycle. Timing needs to be rebalanced.
T.6	Segment D	Widen Bryant Avenue; Create Left Turn Lane. See Appendix B.6. ROW needs verification.	Traffic back-ups on northbound Bryant Avenue are common when northbound vehicles stop to turn left into the Viaduct Parking area and wait for gaps in southbound traffic. There is no room for through traffic to pass.
	Main Street at East Broadway / Railroad Avenue	Signal Timing Adjustment; Signage; Pavement Markings	Northbound movement nevers clears during AM peak while left turn from East Broadway to Main clears every cycle, often with 3 to 5 seconds of unused green remaining. Need for R10-7 (Do Not Block Intersection) signage and pavement markings for NB approach of Main Street at Railroad Avenue.
T.8	Segment A	Install Speed Awareness Device for southbound movement. Need to coordinate location and/or design with Advance Traffic Signal Warning Device. See Appendix B.4.	85th percentile southbound speed in this 25 MPH segment was measured to be 43 MPH. More than 1/2 of the data points were 40 MPH or higher.
	Segments A through D	Traffic Calming - General. Form a committee to explore other traffic calming measures throughout the village including but not limited to Parklets, Transverse and Other Pavement Markings; Textured Pavement; Streetscaping; Etc.	Traffic calming is an effective and widely utilized strategy to create safer pedestrian and motorist environments in a downtown district. See Appendix B.4 for examples.
T.10	Segments A through D	Complete Streets - The same committee described in T.9 should inlcude Complete Streets initiative in its explorations. Including but not limited to bicycle accommodations; access to walking trails; Etc. See Appendix B.4.	Complete streets initiatives seek to create safe, convenieint, and comfortable access for users of all ages and abilities including those who are walking, driving, cycling, riding public transportation or delivering goods. For example, a walking trail connecting downtown streets and other parts of the village with Gerry Park and new pedestrian facilities that are part of the Roslyn Landing project can be explored. There may also be grants available to fund such improvements.
The i	following strategies are t	for longer term consideration	
T.11	Lumber Road	Eliminate "Dead End" condition. See Appendix B.7.	With the success of "The Waterfront At Roslyn" and "17 Lumber Street" there will be significant interest in redevelopment on both sides of Lumber Street. Unfortunately, this redevelopment may be stunted due to traffic limitiations caused by the dead end.
T.12	West Shore Road at Old Northern Boulevard	Create NYS25A W/B Entrance Ramp. See Appendix B.7.	A considerable amount of through traffic in the Roslyn CBD is due to the lack of a proper interchange at West Shore Road and NYS 25A.

APPENDIX A.1 WEEKDAY PARKING OCCUPANCY COUNTS ROSLYN PARKING & TRAFFIC STUDY - 2016

5pm	1	3	21	2	9	4	_	8	7		_ (0	0	0	19	0	0	-	-	2	4	8	9	4	-	0	0	0	2	3	3	15	3	2	4	0	16	1	0	1	8	2	1	2	1	22	181
4pm	1	3	42	1	3	5	2	5	4		၇	2	0	0	18	0	2	3	3	2	7	14	12	2	3	0	0	1	2	3	2	15	2	3	9	0	22	1	0	1	6	3	1	2	1	27	241
3pm	1	3	27	2	2	2	1	2	Ā	+ 4	င	2	0	0	24	0	2	2	4	4	9	16	14	4	3	0	0	1	3	2	3	14	4	2	9	1	36	1	3	4	8	7	2	2	7	40	285
2pm 3	1	2	29	3	3	3	4	2	9	+ <	4	9	2	0	21	0	3	3	3	4	10	18	19	3	3	2	0	2	5	2	2	24	3	2	7	1	37	0	3	4	10	2	2	3	10	47	333
w edilesday n	1	8	29	4	4	4	3	9	8	- 4	C	9	5	0	19	0	3	4	4	5	13	19	17	7	3	13	3	2	4	9	2	23	3	3	8	0	48	1	3	4	8	10	8	3	10	48	389
12pm	2	9	30	3	7	5	4	9	Ā	r 0	0 (က	2	0	19	0	2	2	4	4	10	19	6	4	2	0	1	2	9	4	2	16	2	3	7	2	42	0	3	4	8	2	7	2	10	49	325
11am	0	0	28	2	4	2	3	2	۱ ۳	0 0	၇	က	2	0	17	0	2	1	4	4	11	19	6	3	2	1	0	3	1	2	3	15	1	1	8	1	21	1	3	4	8	8	2	0	10	46	269
10am	0	1	25	0	2	2	2	2	4	-	4 (2	0	0	16	0	က	1	2	4	6	19	11	3	3	က	1	2	3	က	3	12	1	1	4	0	19	0	3	4	4	6	2	0	10	44	255
%06	7.2	18.9	25.2	3.6	6.3	5.4	3.6	5.4	. 9	0.0	0.0	3.6	5.4	10.8	23.4	6	4.5	6.3	5.4	4.5	12.6	17.1	25.2	38.7	77.4	6.6	10.8	3.6	5.4	6.3	3.6	35.1	7.2	4.5	7.2	1.8	44.1	1.8	2.7	3.6	6	6	6.6	11.7	6	81	9.909
Capacity	8	21	28	4	7	9	4	9	9	- 1	,	4	9	12	56	10	2	7	9	22	14	19	28	43	98	11	12	4	9	7	4	36	8	2	8	2	49	2	3	4	10	10	11	13	10	06	674
REF	1	2	3	4	2	9	7	8	ο	, ;	2 ;	11	12	13	14	15	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	41	42	43	44	45	46	Bank-T	Bank-O	Totals

	⊥	hursday M	ay	9	
2bm	6pm	7pm	8pm	9pm	10pm
0		0	0	0	0
8	7	9	2	4	2
20	19	15	16	6	2
2	4	3	4	0	1
4	2	7	4	4	3
2	4	2	9	3	3
3	3	3	3	4	1
2	4	3	2	2	4
4	4	2	2	3	2
2	4	2	3	4	4
4	4	0	4	3	2
0	0	0	0	1	1
0	0	2	8	12	10
19	23	21	22	22	22
0	0	0	0	0	0
1	0	0	0	0	0
0	4	2	2	4	2
3	4	2	2	2	1
4	0	0	1	1	1
9	9	8	8	4	1
10	8	11	2	9	2
7	2	7	7	3	1
3	2	11	12	11	11
2	4	1	1	1	7
9	12	15	11	12	17
0	2	6	2	3	0
1	3	1	2	2	2
4	3	9	3	3	2
3	3	9	9	7	4
3	1	2	1	0	1
59	27	56	21	19	18
-	7	7	6	7	8
5	2	9	7	2	10
8	4	6	6	6	8
0	0	1	0	0	0
12	23	23	22	11	8
0	1	1	0	0	0
-	0	1	1	1	1
0	0	0	0	0	0
4	2	1	0	1	0
3	3	2	9	0	0
0	0	4	10	0	0
9	4	7	0	0	1
2	3	2	1	1	1
29	15	6	1	3	3
226	233	248	237	186	165



APPENDIX A.2 SATURDAY PARKING OCCUPANCY COUNTS ROSLYN PARKING & TRAFFIC STUDY - 2016

П								1					1	I		l	I		l																				I	I	1	l	I	ı	<u> </u>	\Box	\neg
	10pm	1	2	56	4	9	9	3	7	4	7	7	2	0	18	0	0	7	2	10	12	25	3	6	7	10	2	4	9	7	3	37	9	5	7	0	43	1	2	0	1	0	2	2	-	4	317
	9pm	1	8	27	4	7	6	4	7	4	7	7	5	0	20	0	0	8	2	11	13	27	4	6	2	11	4	5	9	7	3	38	7	6	6	0	45	1	2	0	2	0	2	3	1	5	343
	8pm	0	8	27	4	7	9	3	9	4	7	7	4	0	21	0	0	9	9	6	14	29	2	8	1	11	5	5	6	6	3	38	9	6	8	0	49	1	2	0	2	0	3	2	7	9	351
	7pm	0	8	24	4	8	9	4	9	4	9	7	3	0	20	0	0	9	2	7	14	19	2	4	1	11	_	5	6	7	4	38	8	5	8	0	48	1	_	0	3	0	3	3	2	10	325
	6pm	0	6	26	4	7	9	4	9	4	7	7	1	0	19	0	0	0	3	1	8	10	4	3	1	10	0	3	5	7	4	31	8	4	4	0	46	1	_	0	3	1	2	4	4	19	287
, 2016	5pm	2	7	26	4	4	5	4	9	4	9	4	2	0	16	0	4	3	3	0	4	6	9	4	2	7	0	2	9	7	3	38	9	4	8	0	44	1	1	0	4	3	3	4	4	23	293
ay May 21	4pm	1	4	28	4	2	9	3	2	4	2	5	2	0	12	0	4	1	3	1	4	7	2	4	1	9	_	3	2	4	1	24	9	5	6	1	33	1	1	0	3	4	1	2	4	27	255
Saturday May	3pm	2	5	28	4	2	5	4	9	4	5	4	2	0	17	0	4	3	2	2	13	17	8	9	0	6	_	4	2	4	3	22	7	5	8	0	58	0	3	3	4	9	0	4	9	29	301
	2pm	2	8	26	4	9	4	4	5	4	7	4	2	0	18	0	4	7	7	8	14	18	6	7	0	10	0	2	6	7	2	26	5	5	8	1	43	0	3	င	4	9	0	4	8	44	355
	1pm	2	5	27	4	9	3	4	5	4	5	9	3	0	17	0	4	3	7	10	14	19	6	10	0	9	0	3	4	6	4	21	0	5	8	0	44	0	3	င	2	7	-	2	10	42	344
	12pm	2	9	26	3	4	3	4	4	4	9	5	3	0	16	0	4	7	2	7	11	13	2	12	1	1	0	3	4	9	4	18	1	6	8	1	36	1	3	4	2	4	0	2	10	43	308
	11am	2	1	23	2	2	0	4	3	4	9	4	3	0	16	0	4	1	9	7	7	16	2	13	1	2	0	2	6	5	1	20	1	6	7	0	27	0	3	4	2	4	0	4	10	41	278
	10am	1	2	14	1	0	2	3	0	4	2	4	2	0	11	0	4	2	2	2	4	10	2	19	0	2	0	3	4	7	1	21	0	3	3	0	21	1	3	4	9	2	0	2	10	35	228
	%06	7.2	18.9	25.2	3.6	6.3	5.4	3.6	5.4	3.6	6.3	3.6	5.4	10.8	23.4	6	4.5	6.3	5.4	4.5	12.6	17.1	25.2	38.7	77.4	6.6	10.8	3.6	5.4	6.3	3.6	35.1	7.2	4.5	7.2	1.8	44.1	1.8	2.7	3.6	6	6	6.6	11.7	6	81	9.909
	Capacity	8	21	28	4	7	9	4	9	4	7	4	9	12	26	10	2	7	9	2	14	19	28	43	98	11	12	4	9	7	4	39	8	2	8	2	49	2	က	4	10	10	11	13	10	06	674
ŀ	REF (1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	18	19	20	21	22	23	24	25	56	27	28	29	30	31	32	33	34	35	36	37	38	39	41	42	43	44	45	46	Bank-T	Bank-O	Totals
L																																													<u>L</u>	Ĺ	Ш



REF	DESCRIPTION	COMMENTS
7	E/S MAIN STREET - SOUTH OF E. BROADWAY	ON-STREET / 24HR METERS
2	E/S MAIN BET. PAPER MILL & E. BROADWAY	FREE CURBS
3	E/S MAIN BET. PAPER MILL & SINGLE SPACE METERS	FREE CURBS
4	E/S MAIN METERED SPACES SOUTH OF JOLLY DRIVEWAY	ON-STREET / SINGLE SPACE METERS
2		ON-STREET / MULTI-SPACE METER CONTROL
9	W/S MAIN METERED SPACES NORTH OF JOLLY LOT DRIVEWAY	ON-STREET / MULTI-SPACE METER CONTROL
2	TOWER PLACE	ON-STREET / MULTI-SPACE METER CONTROL
8	S/S OLD NORTHERN BET. TOWER & LUMBER	ON-STREET / MULTI-SPACE METER CONTROL
6	S/S OLD NORTHERN ADJACENT TO VILLAGE CENTER LOT	ON-STREET / MULTI-SPACE METER CONTROL
10		ON-STREET / MULTI-SPACE METER CONTROL
11	S/S OLD NORTHERN BET. MID-BLOCK X-WALK AND BANK DRIVEWAY	ON-STREET / MULTI-SPACE METER CONTROL
12	S/S OLD NORTHERN BET. BANK DRIVEWAY & E. BROADWAY	ON-STREET / MULTI-SPACE METER CONTROL
13	OLD GAS STATION LOT	FREE / UNREGULATED
14	S/S REMSEN BET. OLD NORTHERN & MACKAY	FREE / UNREGULATED
15	S/S REMSEN EAST OF MACKAY	FREE / UNREGULATED
18	W/S OLD NORTHERN BET. SKILLMAN & 25A	ON-STREET / SINGLE SPACE METERS
19	W/S BRYANT BET. SKILLMAN & VIADUCT	ON-STREET / MULTI-SPACE METER CONTROL
20	EAST VIADUCT LOT	FREE / UNREGULATED
21	1HR SPACES IN EAST-CENTRAL VIADUCT LOT	FREE / 1 HR LIMIT
22	2HR SPACES IN EAST-CENTRAL VIADUCT LOT	FREE / 2HR LIMIT
23	NO TIME LIMIT SPACES IN EAST-CENTRAL VIADUCT LOT	FREE / UNREGULATED
24	WEST-CENTRAL VIADUCT LOT (W/O LANDING RD)	FREE / UNREGULATED
22	WEST VIADUCT LOT	FREE / UNREGULATED
56	ROOSEVELT AVENUE LOT	FREE / UNREGULATED
27	W/S OLD NORTHERN BET. SKILLMAN & REMSEN	ON-STREET / MULTI-SPACE METER CONTROL
28	EAST BROADWAY LOT	OFF-STREET / MULTI-SPACE METER CONTROL
29	N/S OLD NORTHERN BET. E. BROADWAY & POST OFFICE DRIVEWAY	ON-STREET / MULTI-SPACE METER CONTROL
30	N/S OLD NORTHERN BET. P.O. DRIVEWAY & MID BLOCK X-WALK	ON-STREET / MULTI-SPACE METER CONTROL
31	N/S OLD NORTHERN BET. MID BLOCK X-WALK & 1353 ONB DRIVEWAY	ON-STREET / MULTI-SPACE METER CONTROL
32	N/S OLD NORTHERN BET. 1353 ONB DRIVEWAY & LUMBER ROAD	ON-STREET / MULTI-SPACE METER CONTROL
33		OFF-STREET / MULTI-SPACE METER CONTROL
34	N/S OLD NORTHERN BET. LUMBER ROAD & MAIN STREET	ON-STREET / MULTI-SPACE METER CONTROL
32	N/S OLD NORTHERN WEST OF CLOCK TOWER	FREE / UNREGULATED
36	S/S OLD NORTHERN WEST OF CLOCK TOWER	FREE / UNREGULATED
37	POLICE SPACES IN VILLAGE CENTER LOT	FREE / RESTRICTED
38	PUBLIC SPACES IN VILLAGE CENTER LOT	OFF-STREET / MULTI-SPACE METER CONTROL
36	LOADING SPACES IN VILLAGE CENTER LOT	FREE / RESTRICTED
41	W/S EAST BROADWAY BET. OLD NORTHERN & BANK DRIVEWAY	FREE / UNREGULATED
42	W/S EAST BROADWAY BET. BANK DRIVEWAY & 1ST FIRE HYDRANT	FREE / UNREGULATED
43	W/S EAST BROADWAY BET. 1ST FIRE HYDRANT & 2ND FIRE HYDRANT	FREE / UNREGULATED
44	W/S EAST BROADWAY BET. 2ND FIRE HYDRANT & PAPER MILL RD	FREE / UNREGULATED
45	W/S EAST BROADWAY BET. PAPER MILL & FIRE HYDRANT ON CURVE	FREE / UNREGULATED
46	W/S EAST BROADWAY BET. FIRE HYDRANT ON CURVE & MAIN ST	FREE / UNREGULATED
Bank-T	BANK LOT - PUBLIC PARKING	FREE / UNREGULATED
Bank-O	BANK LOT - ALL THER SPACES	FREE / RESTRICTED
		COMPLETE.





CONCEPTUAL RECONFIGURATION AND RELATED IMPROVEMENTS

VILLAGE CENTER LOT

ROSLYN PARKING & TRAFFIC STUDY - 2016



10 and 20 feet into Roslyn Pond. Boardwalk can be cantilevered. Promenade access from early versions of Roslyn Landing site plan shown.

Not to scale.

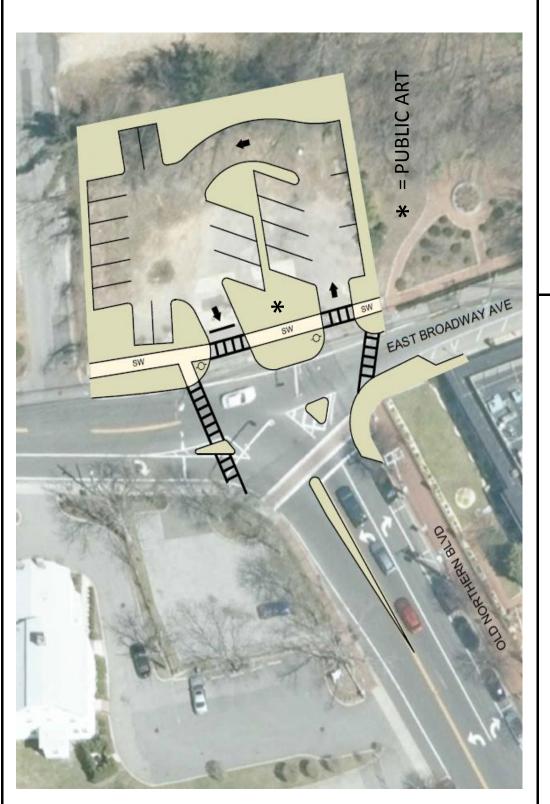
2 %

Plan requires new bulkhead and fill extending between

Notes

Z





CONCEPTUAL RECONFIGURATION AND RELATED IMPROVEMENTS

OLD NORTHERN BLVD @ E. BROADWAY

ROSLYN PARKING & TRAFFIC STUDY - 2016

Center island shall have mountable curbs and no fixed objects or

Plan requires traffic signal reconstruction.

Not to scale.

sightline obstructions.

Notes

LEVEL ASSOCIATES, LLC



"WELCOME TO HISTORIC ROSLYN" WOULD **BE FRIENDLIER**

FROM 6AM TO 6PM. "24 HOURS" IMPLIES CONFUSING. METERS ARE ONLY IN EFFECT THEY ARE IN EFFECT AT ALL TIMES.

RECOMMENDED PANEL

METER ID NUMBER SHOULD BE ON SIDE OF MACHINE. INCORRECT. FIRST STEP IS TO INSERT CASH PRESS KEY" SHOULD BE REPLACED WITH NOTHING TO BEGIN TRANSACTION. "1 -PRESSSING THIS BUTTON FIRST DOES OR CREDIT CARD AS STATED ABOVE. "PRESS KEY FOR TICKET"

MAXIMUM PURCHASE

25¢ = 15 MINS

6AM TO 11PM

MON - SUN

FEES IN EFFECT

3 HOURS (\$3.00)

CREDIT CARD = \$1.00

MINIMUM FOR

STRICTLY ENFORCED 3 HOUR TIME LIMIT

> **KEYPAD SERVES NO PURPOSE. SHOULD BE** REMOVED OR CONCEALED.

APPENDIX B.3

MULTI-SPACE METER OBSERVATIONS AND RECOMMENDATIONS

METERED LOTS AND STREETS

ROSLYN PARKING & TRAFFIC STUDY - 2016

Notes

The "Recommended Panel" reflects recommendation P.10 to extend effective meter time period from 6PM to 11PM.































COMPLETE STREETS TRAFFIC CALMING



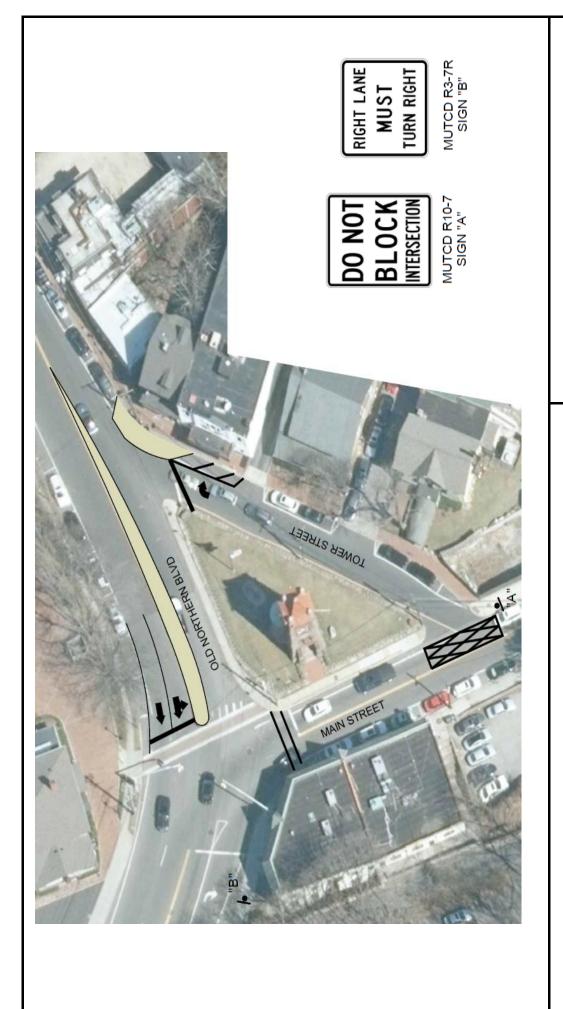
ILLUSTRATED EXAMPLES

WAYFINDING SIGNS; SPEED AWARENESS DEVICES TRAFFIC CALMING; COMPLETE STREETS

ROSLYN PARKING & TRAFFIC STUDY - 2016







Center island shall have mountable curbs and no fixed objects or

Sign "B" shall also be posted in advance of intersection.

Not to scale.

2, %

sightline obstructions.

Notes

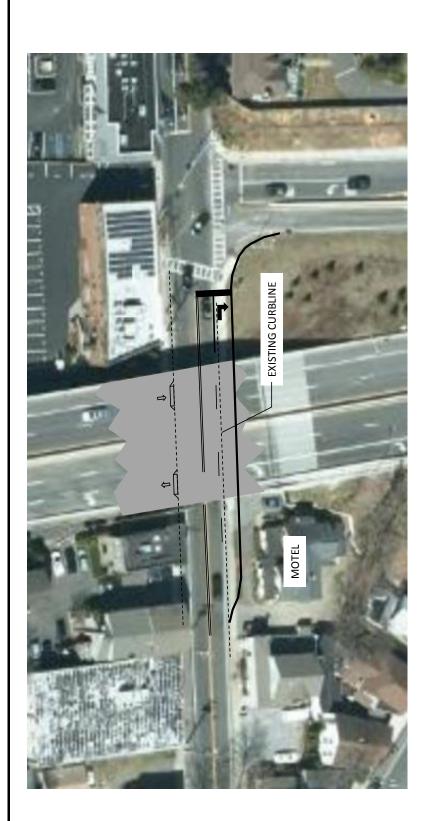
OLD NORTHERN BLVD @ MAIN STREET





CONCEPTUAL RECONFIGURATION AND RELATED IMPROVEMENTS

ROSLYN PARKING & TRAFFIC STUDY - 2016



CONCEPTUAL ROADWAY WIDENING AND RELATED IMPROVEMENTS

BRYANT AVE @ VIADUCT PARKING

ROSLYN PARKING & TRAFFIC STUDY - 2016

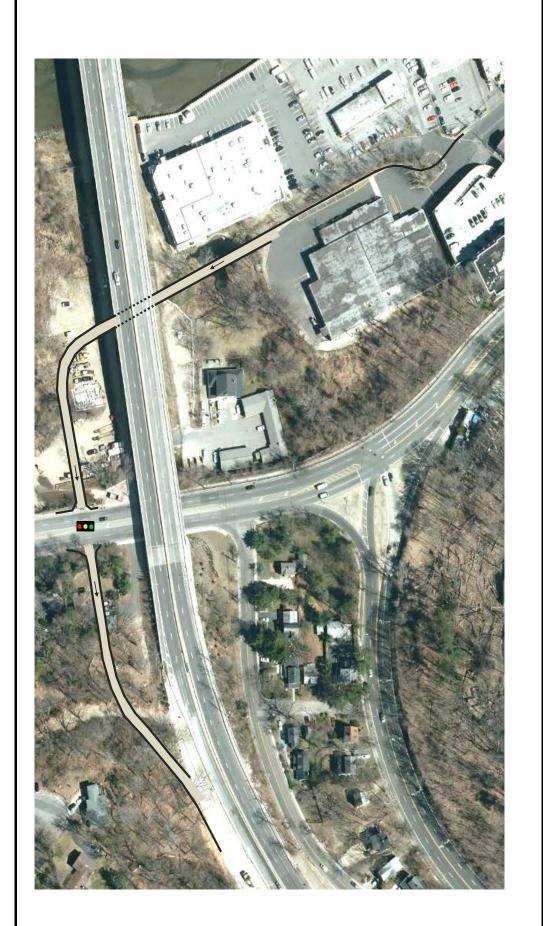


Notes

- This is a sketch version. Final version to be fine tuned and developed in greater detail if recommendation is carried to FINAL draft.
 - R.O.W. at Motel needs to be verified. ბ რ
 - Not to scale.







LUMBER ROAD EXTENSION CONCEPTUAL PLAN

FUTURE NYS 25A WB ENTRANCE

ROSLYN PARKING & TRAFFIC STUDY - 2016

Not to scale. ς;

Notes

LEVEL ASSOCIATES, LLC

Considerable study will be required to determine optimal geometry, routing and integration with existing roadway network.

APPENDIX C SAMPLE VALET PARKING REGULATIONS

Valet Parking Permit – Policies and Regulations

With the emergence of restaurant and entertainment venues in the downtown area, demand for valet parking has increased. The following outlines the City's policies and regulations pertaining to valet operations in the City of Norfolk.

The City of Norfolk, through the Division of Parking and the Office of the City Manager may issue a permit for valet parking within the central business district or other areas as deemed appropriate. No person, company or entity, may engage in the business of offering and providing valet-parking services within the City without first having obtained a permit from the City. A permit may be issued by and at the sole discretion of the City, under the following procedures:

- I. Application Process:
- A. An application must be submitted for each location from which valet services

will be provided. The application must list each business to be served at that location. Incomplete applications will not be accepted. The City shall be the sole determinant as to whether an application is complete.

B. Applications shall be submitted on the form(s) provided by the Division of

Parking. Applications will be submitted in the Office of the Division of Parking, located at 230 E. Main Street.

C. Applications must be submitted by a responsible party. Responsible party

shall be limited to either the owner/co-owner, president, managing partner/member/principal, or manager as designated in writing by one of the aforementioned persons.

- D. A permit will not be issued to, or held, by any person convicted of a felony or crime of moral turpitude within seven (7) years before the date of the application. The permit shall be denied if the applicant has been denied a permit, or has had, a permit revoked for any reason.
- E. The application must be accompanied by a \$5,000 performance bond, or bank letter of credit, issued by a surety company authorized to do business in the Commonwealth of Virginia and such bond must conform to the Code of Virginia and approved by the City Attorney. The Division of Parking will hold the surety bond as a surety bond against damages, fines and losses incurred by the City of Norfolk due to operation of the valet parking service on a public right-of-way. The surety bond will be held in escrow by the Division of Parking

until the start of the next fiscal year. At the conclusion of the current fiscal year, the Division of Parking will refund the balance of the surety bond, minus outstanding fines, fees, damages or losses due the Division of Parking or the City of Norfolk. The owner must submit a surety bond within five (5) business days of the start of the next fiscal year to renew their permit to operate.

- F. Applications must include proof of the following items:
- 1) Applicant must produce and attached to the application a complete copy of a valid contract or agreement in writing with a restaurant, entertainment or retail establishment having a valid, current, business license issued by the City of Norfolk.
- 2) Applicant must produce and attach to the application a copy of a current City of Norfolk Business License.
- 3) The applicant must produce proof that it meets the Indemnification and Insurance Requirements as prescribed by the City (see attached). This includes the minimum acceptable limits of liability insurance of \$1,000,000; bodily injury insurance of \$1,000,000; and property damage insurance of \$1,000,000.
- 4) The applicant must produce and attach to the application a copy of assigned and dated agreement, covering the term of the permit, with an entity to provide for off-street storage of vehicles. This may include privately owned lots, garages, or an agreement with the Division of Parking to store vehicles in city-owned facilities.
- 5) The permit shall be valid for a period of one (1) year from the date of issuance. The permit may be renewed in the same manner in which the permit was initially issued. At his sole discretion, the Director may terminate a permit at any time.
- 6) Special Event Permits shall be valid for one night only and can be transferred if event is postponed.
- II. Designation of Valet Loading Zone:

The Division of Parking, with the assistance of the Departments of Public Works and Police if necessary, will determine the appropriate location for the valet stand and loading/unloading zone. These designated valet-loading zones will be located to ensure public safety and the safe passage of vehicular and pedestrian traffic.

- A. Each application shall include an approved Valet loading zone.
- B. Valet loading zones may not exceed 66' linear feet at curbside or be smaller than 22' linear feet at curbside.
- C. Valet Loading Zones are for the purpose of loading and unloading vehicular passengers and the temporary staging of vehicles prior to locating them to an off-street facility. A vehicle is not permitted to be within the valet zone for more than 10 minutes. Besides this temporary staging, there is no parking at all times in the valet zone.

- D. Designation of dimensions of Valet loading zones is the sole responsibility of the City, pending a review of peak vehicle volume processed by the operator.
- E. At least 100 linear feet must separate Valet Zones.
- F. In areas where adjacent establishments offer valet service, valet-loading Zones may be shared. The City reserves the sole right to make such determinations.
- G. Valet Loading Zones will be located a safe distance from pedestrian crosswalks and traffic intersections.
- H. Valet zones may not be located in designated handicapped parking spaces, fire lanes or any other area that impacts access and safety.
- I. For each valet zone, operator will be permitted to use a temporary operating stand and a single a-frame sign.
- J. Valet stands and signage must conform to city requirements.
- III. Rules and Regulations:

Once application and site have been approved, the applicant to the following rules and regulations:

- All requirements of the approved application including business license and insurance must remain valid at all times.
- Operator will store all valet parked vehicles in designated off-street facilities.
- Operator will provide enough staff to operate safely and effectively within the boundaries of their designated valet loading zone. Double parking, staging outside a designated valet loading zone, vehicles stored in the valet loading zone over fifteen (15) minutes and vehicles stored in locations other than designated off-street facilities will be considered indicators of inadequate staffing to meet vehicle volumes. The City reserves the right to require additional staffing to correct these conditions.
- Hours of operation will be from 6:00 p.m. to 3:00 a.m. unless agreed to in advance by the City.
- Valet service shall be provided in a professional and friendly manner and should only serve customers of downtown establishments.
- The Division of Parking regulates the above requirements with assistance of the Norfolk Police Department and Public Works, Transportation Division. The City reserves the right to determine in its sole discretion if the permit holder is responsibly meeting the requirements of the permit and may rescind the permit at

its sole discretion and without notice or appeal.

- The permit issued by the City shall create no rights of ownership, or otherwise in the applicant, or holder of the permit.
- The permit shall not be transferable.
- The assigned of a curbside zone is for unloading and loading of customers only. No parking of vehicles would be allowed.
- The spaces would be signed with appropriate "Valet Loading Zone" signage.
- Only one "sandwich-board" styled sign would be allowed.
- Valets will not store vehicles on-street or in public parking facilities without prior arrangement with the City of Norfolk.
- The valet service will be responsible for submitting payment for all parking and traffic fines incurred during the time a vehicle is in the operator's control with five (5) days of issue.
- If a citizen demonstrates that a violation levied against their vehicle was incurred during the time the vehicle was in control of a valet service, the resulting fine plus a \$50 per violation surcharge will be levied against the valet operator.
- The applicant/valet operator shall obey at all times all laws, ordinances and regulations.
- Vehicles parked by a valet service outside designated loading and parking areas will be subject to following fines:

Parking Violation

Parking At A Public Meter	\$25.00
Parking In A Time Zone	\$40.00
No Parking	\$40.00
No Parking - Fire Hydrant	\$75.00
No Parking - Cross Walk	\$40.00