

## **CITY OF RYE**

### **NOTICE**

There will be a regular meeting of the City Council of the City of Rye on Wednesday, October 21, 2015, at 7:30 p.m. in Council Chambers at City Hall. *The Council will convene at 6:30 p.m. and it is expected they will adjourn into Executive Session at 6:31 p.m. to discuss litigation and personnel matters.*

### **AGENDA**

1. Pledge of Allegiance.
2. Roll Call.
3. General Announcements.
4. Draft unapproved minutes of the regular meetings of the City Council held October 7, 2015.
5. Issues Update/Old Business.
6. Continuation of Public Hearing to amend local law Chapter 197, "Zoning", of the Rye City Code by amending Section §197-2, "Districts, A: Residence Districts" to change the zoning designation of a property at 120 Old Post Road from the B-4, Office Building, District to a New RA-6, Active Senior Residence, District; and amending Section §197-86, "Tables of Regulations: Table A, Residence Districts – Area Yard, Height and Miscellaneous Regulations" to add the proposed RA-6 zone.
7. Public Hearing to amend local law Chapter 191, "Vehicles and Traffic", of the Rye City Code by amending Section §191-19, "No parking any time", to prohibit parking on the north side of Osborn Road between Theall Road and the Harrison line and on the south side of Osborn Road between Boston Post Road and the Harrison line.
8. Residents may be heard on matters for Council consideration that do not appear on the agenda.
9. Consideration of referral to the Board of Architectural Review and City Consultant, the Special Permit Application submitted by New Cingular Wireless PCS, LLC ("AT&T") for modifications to its existing wireless telecommunications facility located at 66 Milton Road.
10. Miscellaneous communications and reports.
11. New Business.
12. Adjournment.

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The next regular meeting of the City Council will be held on Wednesday, November 4, 2015 at 7:30 p.m. including the presentation of the 2016 Budget. The City Council will hold Budget Workshops on Monday, November 9, 2015, Monday, November 16, 2015 and Wednesday, November 18, 2015 beginning at 7:30 p.m.

\*\* City Council meetings are available live on Cablevision Channel 75, Verizon Channel 39, and on the City Website, indexed by Agenda item, at [www.ryeny.gov](http://www.ryeny.gov) under “RyeTV Live”.

\* Office Hours of the Mayor by appointment by emailing [jsack@ryeny.gov](mailto:jsack@ryeny.gov) or contacting the City Manager’s Office at (914) 967-7404.



# CITY COUNCIL AGENDA

NO. 4

DEPT.: City Clerk

DATE: October 21, 2015

CONTACT: City Clerk

**AGENDA ITEM** Draft unapproved minutes of the regular meeting of the City Council held October 7, 2015.

**FOR THE MEETING OF:**

October 21, 2015

**RYE CITY CODE,**

CHAPTER

SECTION

**RECOMMENDATION:** That the Council approve the draft minutes.

**IMPACT:** ☐ Environmental ☐ Fiscal ☐ Neighborhood ☒ Other:

**BACKGROUND:** Approve the minutes of the regular meeting of the City Council held October 7, 2015, as attached.

***DRAFT UNAPPROVED MINUTES*** of the  
Regular Meeting of the City Council of the City of  
Rye held in City Hall on October 7, 2015 at 7:30 P.M.

PRESENT:

JOSEPH A. SACK Mayor  
LAURA BRETT  
KIRSTIN BUCCI  
JULIE KILLIAN  
TERRENCE McCARTNEY  
RICHARD MECCA  
RICHARD SLACK  
Councilmembers

ABSENT:     None

Councilwoman Brett made a motion, seconded by Councilman Slack and unanimously carried to adjourn into executive session to discuss a personnel matter at 6:31 p.m. Councilwoman Brett made a motion, seconded by Councilman Slack and unanimously carried, to adjourn the meeting at 7:32 p.m. The regular meeting convened at 7:35 p.m.

1.     Pledge of Allegiance

Mayor Sack called the meeting to order and invited the Council to join in the Pledge of Allegiance.

2.     Roll Call

Mayor Sack asked the City Manager to call the roll; a quorum was present to conduct official city business.

3.     General Announcements by the Council

Councilman Mecca reported that he attended the Boat Basin Meeting and that boat slips were available. The Chamber of Commerce Meeting was held that morning: Judge Latwin gave a presentation on what the Rye City Court does; the City Manager presented on the new configuration for Smith, Elm and Purchase streets. He noted that the Chamber expressed interest in using the snow field as overflow parking for the merchants and asked that they be part of the conversation moving forward. He reminded residents that the Farmer's Market is open every Sunday until December from 8 a.m. to 2:30 p.m. Two new stores are opening including Rosemary's Vine and Mrs. Greens. Upcoming events include the Edith Read Fall Fest on October 17<sup>th</sup> from noon to five p.m. The Fire Department will be having an Open House on Sunday, October 11<sup>th</sup> as part of Fire Prevention Week at the Locust Avenue Firehouse from 10:00 am to 2:00 pm. The professional firefighters are selling pink t-shirts to raise money for breast cancer; they are available at the Locust Avenue Firehouse.



Councilman McCartney reported that the Rye Harrison game would be held on Saturday, October 10<sup>th</sup> at Harrison at 11:00 a.m. The RGC course has been open for five weeks and is improving. Night Life golf will be held on Thursday, October 8<sup>th</sup> at 7:00 p.m.; the closing scramble is on October 18<sup>th</sup>. He was pleased to note that the pool program for Rye Recreation seniors was very successful including 48 visits from Recreation members. Rye Recreation was in full swing with many events listed on the Recreation website. He asked for all user groups to weigh in on the new proposed Field Use Policy, noting that it will be discussed at a Recreation Commission meeting on October 29<sup>th</sup>.

Mayor Sack called Liz Northshield and Ann Moller to the podium to present the Blue Star Memorial which was installed at Rye City Hall. Ms. Northshield presented the City Council and the City with the Blue Star Memorial By-Way Marker on behalf of the Ceres Garden Club. They thanked the Council for their support and approval, Joe and Joe, Jr. of Lorono Construction for their generous donation and delivery of the stone, and Joe Alfredo of Alfredo Landscaping for the installation of the plaque. The Blue Star Memorial will stand as a way for everyone to say thank you to all members of the armed services, past, present and future.

4. Draft unapproved minutes of the regular meeting of the City Council held September 16, 2015.

Councilwoman Brett made a motion, seconded by Councilwoman Killian and unanimously carried to approve the minutes of the regular meeting of the City Council held on September 16, 2015.

5. Issues Update/Old Business.

Mayor Sack referred to an article in one of the local newspapers regarding the Rye Golf Club that included allegations made by the RGC Commission Chairman about purchasing practices. He directed the City Manager to conduct an investigation into the matter and outside counsel has been retained. He asked that the City Manager report back to the City Council when the investigation is completed.

Mayor Sack also gave an update on the United Hospital development, noting that the Public Hearings continued and that the City Staff had a meeting with the NYSDOT which was productive. He noted that one of the things discussed, and a way to mitigate traffic, is to add ramps to the highways instead of traffic circling through Rye. He noted that two of the biggest highways, 95 and I287, intersect at Rye; we are asking the State to identify this change as a regional issue. The Mayor also appeared at a Community panel in Port Chester that shares an interest in making sure the Starwood project is done in a correct and manageable way. He suggested that Rye and Port Chester's concern about traffic are very similar. The Mayor addressed the overlay district as the most significant as it has the most impact; it is 50 acres which is three times the size of the United Hospital site. A Port Chester Board member indicated that the overlay may be removed; he noted that the City has the ability to file a lawsuit. While that is not something that the City wants or prefers, they will do what they have to if the overlay is not removed. The City will continue to provide updates as the process progresses.

Councilwoman Brett provided an update on the building where the Smoke Shop is located. The site plan was approved by the Planning Commission whose scope of review regards the use of the building; the new use of the building is the apartments located on the second and third floors. The building is being renovated not torn down; any changes will be reviewed by the Board of Architectural Review. The Smoke Shop continuing as a tenant is an issue for the landlord. The City Council incentivized the landlord to keep the Smoke Shop as a tenant but the landlord did not avail themselves of that option. The building will be preserved but the aesthetic issue of the building will be reviewed by the BAR.

Councilman McCartney spoke about the claim submitted to TKI regarding the damages to the RGC greens. A meeting was held with TKI and negotiations are underway.

Mayor Sack announced that Mark Blanchard of the firm Blanchard and Wilson would be filling in for Corporation Counsel Kristen Wilson.

Councilwoman Killian reminded everyone that there would be a Consumer Solar Workshop at the Rye Free Reading Room on Tuesday, October 20<sup>th</sup> from 7:00 to 9:00 p.m.

6. Resolution authorizing the acceptance of funding through the NY Rising Community Reconstruction Program and providing authorization for the Mayor and City Council to Manager to enter into the following agreement and resolutions:

- NY Rising Community Reconstruction Program Subrecipient Agreement
- Resolution to adopt a Procurement Policy
- Resolution to adopt a Citizen Participation Plan
- Resolution to adopt an Affirmative Action Plan
- Resolution to adopt Section 504 Policies and Grievance Procedures

*Councilwoman Brett* thanked the NY Rising Committee for their hard work in identifying flood mitigation projects eligible for this grant. An important part of the Council's responsibility is to determine what accepting the grant money means to the City, noting that flood mitigation is of paramount importance. She also thanked the staff of the Governor's Office of Storm Recovery for providing the City with a thorough document outlining the City's obligation to the State and to HUD if the funding is accepted.

*Mayor Sack* agreed that the NY Rising Committee should be commended for their hard work; that flood mitigation is an incredible problem in Rye that needs to be addressed but that the Subrecipient Agreement is wrong for the City of Rye. The Agreement sets rules that the City must agree to, some existing, some to be established, regarding the grant funding. The City would be obligated to HUD's rule if the money is accepted and the Mayor is not prepared to expose the City to HUD's criteria. He noted that he would not be voting for the agreement.

*Councilman McCartney* indicated that he was on the conference call with the State and agreed that the City needs to balance the need for flood mitigation money with the risk to do everything that HUD says. The wording in the memo from the State gives him peace of mind that we can accept the funding to improve the City's flood mitigation problem.

*Councilwoman Killian* spoke about the job of the City Council to research the obligations associated with accepting the NY Rising funding. She noted that other communities who had previously signed the NY Rising agreement, did so prior to July 2015 when HUD came out with their final AFFH rules so there was more onus on this Council to look at the impact of this agreement. She indicated that she would be voting to accept the funding.

*Councilman Slack* raised a question regarding the agreement, where the City is a subrecipient with the State, not HUD: does the agreement allow HUD to directly enforce any

breaches of the agreement or would the City's privity be with the State. Mark Blanchard said our privity is with the State who would be acting as an agent of HUD. HUD would enforce against the State in terms of how the grant would be administered but noted that it would not be impossible for HUD to intervene. Councilman Slack pointed out that the City has accepted HUD grant monies in the past and sought to confirm that since the City previously took HUD money, hasn't that already committed the City to the same type of agreements and conditions before the Council presently. Mark Blanchard noted that the City is not agreeing in perpetuity to the requirements of the grants, the grants have a lifespan connected to (a) the expenditure of the money or (b) proving that the money was expended properly. The Mayor noted the language of those agreements from over twenty years ago is not the same as what is currently before the Council and these grants are for considerably more money.

Speakers on the NY Rising funding included:

*Bernie Althoff*, co-Chair of the NY Rising Committee and Chair of the Rye Flood Advisory Committee, said that the NY Rising Committee was tasked with gathering data and identifying flood mitigation projects, noting that they cited work by the engineering firm Parsons and Brinckerhoff. They identified four projects including (1) stopping water at the airport, (2) reprogramming the Bowman Avenue Sluice Gate, (3) expanding the capacity of the upper pond above the dam, and (4) implement changes on Milton Road to reduce flooding. He noted that the Council had directed the Rye Flood Committee to obtain grant funding. He said if this funding is not accepted that flood mitigation efforts in Rye will be damaged for ten years. The letter from the State provides protection to the City and notes that it does not increase the City's exposure to HUD by accepting this funding. He urged the Council to accept the funding to move the flood mitigation projects forward.

*Holly Kennedy*, co-Chair of the NY Rising Committee and member of the Rye Flood Advisory Committee, extended her appreciation to the Council for their efforts on flood mitigation. The NY Rising Committee strongly recommends that the funding be accepted, especially given the assurances by the NY Rising attorney that Rye would not be subject to additional HUD fair housing requirements. The risk to the City is minimal given that the State would be beholden to HUD, and that the chosen flood mitigation are infrastructure projects. She reviewed physical and financial damage from recent storms. Flood mitigation is extremely expensive and requires collaboration with different levels of government for upstream mitigation that will help flooding in Rye. She urged the Council to accept the funding as being in the best interest of Rye taxpayers to address the risk of future flooding in Rye.

*Greg Howells*, member of the NY Rising Committee and director of the YMCA, spoke about the damage to the YMCA in previous storms and the mitigation steps that they have already taken, noting that those efforts are still not enough given the amount of flooding in Rye. He felt that the acceptance of the funding not only provides help now, but assist the City in leveraging additional larger grants in the future with help from the Governor's office.

*Pat Levine*, former Councilwoman, spoke on behalf of the Milton Harbor House noting that the NY Rising funding is a unique opportunity and hopes that the Council accepts the funding.

*Carolina Johnson* thanked the Council for their due diligence but said that even if the Council does not accept the funding it will not prevent HUD from coming after the City.

*Mayor Sack* said accepting the funding would go against a tradition in Rye of not letting other entities tell the City what to do. He cited the example of the Nursery Field where Westchester County was willing to provide funding, but with the proviso that they would be able to use the field for their own use; Rye declined the County funding. It is evident in looking at White Plains that HUD has engaged in serious protracted litigation with Westchester County over the same issue. In exchange for three million dollars we would be giving up Rye's right to govern itself and not have to take orders from another layer of government. He stated that he would not be signing the agreement.

Councilwoman Brett made a motion, seconded by Councilman McCartney to adopt the following Resolution:

**RESOLVED**, that the City Council authorize the acceptance of funding from the New York Rising Community Reconstruction Program including the necessary agreements and resolutions and authorize the City Manager to enter into those agreements.

**ROLL CALL:**

AYES: Councilmembers Brett, Bucci, Killian, McCartney, Mecca, and Slack  
NAYS: Mayor Sack  
ABSENT: None

The Resolution was adopted by a 6-1 vote.

7. Continuation of Public Hearing to amend local law Chapter 197, "Zoning", of the Rye City Code by amending Section §197-2, "Districts, A: Residence Districts" to change the zoning designation of a property at 120 Old Post Road from the B-4, Office Building, District to a New RA-6, Active Senior Residence, District; and amending Section §197-86, "Tables of Regulations: Table A, Residence Districts – Area Yard, Height and Miscellaneous Regulations" to add the proposed RA-6 zone.

This item was deferred to the October 21, 2015 City Council meeting.

Councilwoman Brett made a motion, seconded by Councilman McCartney and unanimously carried to continue the Public Hearing to October 21, 2015.

8. Continuation of Public Hearing to amend local law Chapter 133, "Noise", of the Rye City Code regarding regulations on mechanical rock removal.

*Mayor Sack* outlined revisions to the original draft local law including: a more precise definition of mechanical rock excavation, dust mitigation requirements, changed the consecutive calendar day limit to 38 days, eliminated the certified mail requirement, added a one time 7-day calendar day waiver at the discretion of the City Manager, two chipping machines can be used simultaneously, and added a more precise definition of the utilities exemption. These revisions were the result of public comment and City Council feedback. Additionally, the Council added some clarifications: definition of the term "unexpected circumstances", certification by the property owner that any mechanical rock excavation can be completed within the allowed 38 days, a copy of the certificate of mailing must be supplied to the Building Department prior to the commencement of chipping or blasting, a property owner who applied for a permit and complied with the provisions of the law may apply for an additional 7-day waiver, in addition to the original 38 days, from the City Manager due to unexpected circumstances. The Mayor said that the changes to the law are significant and historic as previously there were no restrictions on rock chipping.

Mayor Sack asked for input from the City Council on the proposed law:

*Councilwoman Brett* spoke of the lengthy and thorough process which resulted in a chipping restriction which provides certainty to neighbors surrounding chipping projects. It requires builders and developers to better plan their projects. The Council reached a consensus by working together and listening to those who engaged in the Public Hearings.

*Councilman Mecca* noted that the Council listened to all the comments from the public and the Rock Chipping group and felt the law before them was a good compromise.

*Councilman Slack* thanked the Rock Chipping Study Group for their hard work, extensive diligence, robust discussion, tremendous thought and ultimately an open mind. Those recommendations formed the basis for the original proposed law and for the bill currently before the Council. He thanked Richard Mecca for his leadership and work on the Study Group noting that his wisdom and balance helped to bring the recommendations of the Study Group to life as part of the proposed law. He was pleased to note that the proposed law is still based on the recommendations of the Study Group originally presented at the June 10<sup>th</sup> Council Meeting with little deviation. The eight features regarding rock chipping include: duration, allowed hours, required permit, notice to neighbors, holiday restrictions, school testing restrictions, number of chippers/hammers, and restrictions on rock crushing on site. He thanked the Council for coming to a consensus without being disagreeable, especially on a difficult issue with strong differences of opinion. The legislation will greatly benefit the community as Rye will have the most comprehensive set of rock chipping regulations in Westchester, and perhaps all of the State. No other community has addressed the issue of rock chipping in a comprehensive or thoughtful way. Rye is once again a leader, not a follower.

*Councilman McCartney* thanked the Rock Chipping Group as well as all those who spoke up during the Public Hearings. The Council sought to balance all the issues and comments in arriving at a compromise encompassing all these factors. He urged everyone to look dispassionately at the proposed law and recognize how much of what the Rock Chipping Group outlined was included and that it is a fair compromise.

*Councilwoman Bucci* noted that the compromise was difficult to reach and thanked the Council for their hard work. She thanked the Rock Chipping Committee for their hard work and for the community engagement on this issue.

*Councilwoman Killian* thanked the Council for being gracious and respectful despite their disagreements, noting that there are many other items outstanding in the community that the Council has been thinking about amidst the rock chipping discussion. She thanked all those who participated in the Public Hearings as it helped the Council frame the issue. She also hoped that there would be some healing in the community so everyone could move forward. She was happy that dust mitigation was included but indicated that the issue of dust from stones being installed on houses may not be addressed by this law. More research may be necessary with input from the Building Department to revisit this item. Extending the allowable days to chip in this proposed law addresses the unintended consequence of pushing construction projects to the time with better weather. The proposed law addresses this and she is comfortable with the draft law reached by the Council.

*Jonathan Kraut*, representing a coalition of builders in Rye, asked the Council to consider two changes to the proposed law: (1) that days that are declared states of emergency for inclement weather not be counted in allowable chipping days and (2) storm water utility connections should also be exempt. He urged the Council to note that they were about to adopt the most restrictive law not only in Westchester County but New York State; the builders would

like the law to be more liberal. He commended the Council for their handling of the issue. The City Council agreed to include the exemption for storm water utility connections.

Members of the public who commented on rock chipping issues and the proposed law included: *Lori Fontanes, Bob Zahm, Alan Clark, Sal Inguanti, and Nancy Collins*, who spoke about the process arriving at the proposed law, expanding the distance for notification to neighbors, publication of all extensions given by the City Manager along with the reason for the extension, the removal of the Thanksgiving and Christmas exclusions, and public health ramifications from allowing two chippers.

Councilwoman Brett made a motion, seconded by Councilman Mecca and unanimously carried to close the Public Hearing.

Councilman Mecca made a motion, seconded by Councilman Slack to adopt the following local law:

**CITY OF RYE  
LOCAL LAW NO. 2015**

A local law to amend Chapter 133 “Noise” of the Code of the City of Rye by renaming and amending Section 8 as follows “Permit Required; Construction work, mechanical rock removal and blasting restrictions”; amending Section 133-9 “Penalties for Offenses” to increase the penalties, and amending Section 133-10 “Exempt Acts” to exempt certain entities from the requirements as follows:

Be it enacted by the City Council of the City of Rye as follows:

**Section 1:** Chapter 133-8 “Permit Required; Construction work, mechanical rock removal and blasting restrictions:

**A.** Whenever used in this section, the following terms shall have the meanings indicated:

**ROCK EXCAVATION PERMIT** – A permit issued for rock excavation on a Subject Property.

**SUBJECT PROPERTY** – The lot for which a mechanical rock excavation permit or blasting permit pursuant to Chapter 98 is issued.

**TESTING DAYS** – A day when a school is administering a state or federally mandated test or a day when the school is administering an advanced placement test, PSAT, SAT, ACT, final examinations or other similar tests, as long as the school or district posts on their web site at the beginning of each school year such dates and provides such information at the beginning of the school year to the Building Department.

**MECHANICAL ROCK EXCAVATION** – Mechanical Rock Removal with the

use of a mechanical hammer or similar device, but excluding drilling or boring of holes, and excluding the removal of man-made structures such as concrete steps or driveways.

**UNEXPECTED CIRCUMSTANCES** – Circumstances unforeseen by the property owner including mechanical failure of a machine, unexpected conditions or inclement weather.

- B.** No Mechanical Rock Excavation or blasting may take place unless a permit is obtained. All permits shall identify the purpose for which the Rock Excavation Permit or blasting permit is being issued, the owner of the Subject Property, including any partners of any limited liability company, and the permitted duration of the Mechanical Rock Excavation or blasting. The application for a Mechanical Rock Excavation or blasting Permit shall include a certification by the property owner that the property owner has reasonably determined that any Mechanical Rock Excavation can be completed within the period in subsection B(i) below.
- (i) Mechanical Rock Excavation and blasting shall be restricted to thirty (38) consecutive calendar days.
  - (ii) No new/additional Mechanical Rock Excavation Permit or blasting permit (see Chapter 98) shall be issued for the same Subject Property for 18 months from the date any previously issued permit expires.
- C.** No Mechanical Rock Excavation Permit or blasting permit shall be issued unless the Applicant has a dust mitigation plan approved by the Building Department. Such dust mitigation plan shall incorporate the best dust control practices including, but not limited to, a water spray system (air suppression or surface wetting). All dust mitigation plans shall include measures to control water runoff as a result of any water spray program.
- (i) Trucks and other vehicles used to transport particulate matter shall be covered and any particulate matter kept on site shall be sufficiently wetted or stored to prevent particulate matter from becoming airborne.
  - (ii) Portable hand water sprinklers or hose sprinklers are acceptable means of wetting for dust control. The water sprays or jets shall be designed to break the water stream into small droplets or otherwise to provide effective wetting.
  - (iii) Suitable drainage means shall be provided for the removal of water and sludge which drains from the operation.
  - (iv) Soil or debris piles shall be moistened if dust is being emitted from the piles due to prevailing winds and not from a momentary gust. Adequately secured tarps, plastic or other material may be required by the Building Department to further reduce dust emissions.

- D.** Upon receiving a Mechanical Rock Excavation Permit or blasting permit, any individual who intends to engage in Mechanical Rock Excavation or blasting on any property in the City of Rye shall register with the City at least seven (7) calendar days prior to the commencement of such activities. Upon such notification, the Subject Property will be listed on the City of Rye website showing the earliest commencement date and when the thirty-eight (38) day period ceases. Such notice shall be displayed in a visible location at the Subject Property.
- (i) In addition to notifying the City as required above, the individual must also notify the neighbors by sending out a public notification prepared by the Building Department. The applicant shall prepare a notification list, using the most current City of Rye Tax Maps and Tax Assessment Roll, showing the Tax Map sheet, block and lot number, the owner's name and owner's mailing address for each property located wholly or partially within 500 feet of the Subject Property. If a property on the public notification list is also listed as a cooperative or an apartment, the notice shall only be mailed to the property owner of record. These mailing requirements must be performed in accordance with the following requirements:
  - (ii) The mailing shall be limited solely to the public notice provided by the City Building Department.
  - (iii) The notice shall be mailed to all property owners by regular U.S. mail at a post office or official depository of the Postal Service, at least ten (10) days prior to the commencement of Mechanical Rock Excavation or blasting.
  - (iv) The individual must provide a copy of the certificate of mailing to the City Building Department prior to the commencement of any Mechanical Rock Excavation or blasting.
- E.** Construction work prohibited at certain hours and on certain days. No person shall engage in construction work earlier than 7:30 a.m. or later than 6:30 p.m., prevailing time, on weekdays; earlier than 10:00 a.m. or later than 5:00 p.m., prevailing time, on Saturdays; or at any hour on Sundays or any of the following holidays: New Year's Day, Presidents' Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Yom Kippur, Thanksgiving Day, Christmas Day and New Year's Day.
- F.** Notwithstanding any provision of §133-8 to the contrary, an individual may perform construction work him/herself on property on which such individual then resides as follows:
- (i) Weekdays, between 7:30 a.m. and 8:00 p.m.
  - (ii) Saturdays and Sundays (including holidays), between the hours of 10:00 a.m. and 8:00 p.m.



- G.** Mechanical Rock Removal, including Mechanical Rock Excavation, and blasting are prohibited at certain hours and on certain days. No person shall engage in Mechanical Rock Removal, including Mechanical Rock Excavation, as defined in Subsection A, or blasting operations using explosives as defined by § 98-40, within the City of Rye after the hour of 3:30 p.m. or before 9:00 a.m. on weekdays or at any time on Saturday and Sunday; or on any of the following holidays and time periods: New Year's Day, Presidents' Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Yom Kippur, Thanksgiving Day through Thanksgiving weekend and Christmas Day through New Year's Day except under authority of a special permit issued by the City Manager. In addition, Mechanical Rock Removal, including Mechanical Rock Excavation, and blasting will be prohibited within 500 feet of a school on Testing Days.
- H.** No person performing Mechanical Rock Removal shall have more than two machines and two hammers operating on the Subject Property at the same time. Rock crushing shall not be permitted on the Subject Property.
- I.** A property owner who has properly applied for and received a permit for Mechanical Rock Excavation or blasting, and has otherwise complied with the provisions of this law, may apply to the City Manager for an additional, one-time seven (7) calendar day waiver in addition to the thirty eight (38) days above, subject to all the other restrictions contained herein, to be granted at the discretion of the City Manager on a reasonable basis under a totality of the circumstances presented. If the waiver is granted, the additional seven (7) day period will be set by the City Manager, and the period will be listed on the City website.
- J.** A property owner who has properly applied for and received a permit for Mechanical Rock Excavation or blasting, and has otherwise complied with the provisions of this law, may apply to the City Manager for an additional, one-time seven (7) consecutive calendar day waiver in addition to the thirty-eight (38) days above, subject to all the other restrictions contained herein. The property owner shall have the burden of demonstrating to the City Manager that a waiver is warranted due to Unexpected Circumstances. The City Manager, at his sole discretion, can require documentation supporting Unexpected Circumstances including a certification that the Unexpected Circumstances prevented the completion of Mechanical Rock Excavation or blasting during this period. If the waiver is granted the period will be listed on the City website.

**Section 2: Chapter 133-9. "Penalties for offenses".**

In the event an activity is not being performed in accordance with this chapter, the owner of the property or the owner's agent or the person performing such violation shall be notified to suspend all work, and any such persons shall forthwith stop such work and suspend all activities. Any person who violates

any provision of this chapter shall be guilty of an offense and shall, upon conviction thereof, be subject to a fine of not more than \$250 or imprisonment for a term of not more than 15 days, or both except that violations under § 133-8, Permit Required; Construction Work, Mechanical Rock Excavation and blasting restrictions, shall be treated as individual violations for each and every such violation and noncompliance, respectively, thereof, shall be punished upon such first conviction by a fine of not more than \$1,000, an order to suspend construction work, mechanical rock removal and/or mechanical rock removal and/or excavation and/or blasting on the site for a period of not more than 72 hours, or by imprisonment not exceeding 15 days, or any combination of such fine, suspension, and imprisonment, and each day that such violation shall continue shall be construed as a separate offense. Upon any subsequent conviction for the same offense such person shall be subject to a fine of not more than \$2,000, or an order to suspend construction work, mechanical rock removal and/or excavation and/or blasting on the site for a period of not more than 72 hours, or by imprisonment not exceeding 15 days, or any combination of such fine, suspension and imprisonment. The imposition of one penalty for any violation shall not excuse or remedy such violations.

**Section 3: Chapter 133-10. “Exempt acts”.**

**§ 133-10. Exempt acts.**

The following activities and agencies are exempt from the requirement of this Chapter:

- A. The actions of governmental agencies, including the Rye City School District and the Rye Neck Union Free School District, shall be specifically exempt from the requirements of this chapter.
- B. Removal of rock for the sole purpose of the installation of gas or electrical service, and the installation of water, sewer service or storm water drainage, shall be exempt from sections B and D above. Any property owner seeking to utilize this exemption must certify in writing that the rock removal is solely for this purpose, and must provide at least 24 hours notice to the City of same. The property owner must provide new certification and notice if the removal lasts more than three (3) days. Upon such notice(s), the activity will be listed on the City website.

**Section 4: Severability.**

If any clause, sentence, paragraph, section or part of any section of this title shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or part thereof directly involved in the controversy and in which such judgment shall have been rendered.

**Section 5: Effective date.**

This local law will take effect immediately on filing in the office of the Secretary of State.

**ROLL CALL:**

**AYES:** Councilmembers Brett, Bucci, Killian, McCartney, Mecca, Slack  
and Mayor Sack

**NAYS:** None

**ABSENT:** None

The Local Law was adopted by a 7-0 vote.

- 8A. Discussion to amend local law Chapter 191, "Vehicles and Traffic", of the Rye City Code by amending Section §191-19, "No parking any time", to prohibit parking on the north side of Osborn Road between Theall Road and the Harrison line and on the south side of Osborn Road between Coolidge Avenue and the Harrison line.

City Manager Serrano explained that the City had received emails regarding parking on the lower section of Osborn Road which will be discussed the next night at the Traffic and Pedestrian Safety Committee meeting. Sam DiEdwards, 161 Osborn Road, said that commuters have been parking on the road and it is simply not wide enough. Harrison eliminated parking and moved the yellow line over so it is safe in Harrison. Jane Fitzpatrick, 152 Osborn Road, said there has never been a parking problem and raised the safety concern and their desire to avoid any accidents. Cian Ribetto, an Osborn parent, asked the Council to consider the bigger picture on Osborn road and the safety of the school children. Councilwoman Killian noted that the Traffic and Pedestrian Safety Committee has discussed the issues around the Osborn school many times and is pleased that there will be a meeting tomorrow with the School Administration. Ann Schrock, 2 Walker Avenue, also an Osborn parent mentioned that there was a request to make Osborn one-way during pickup and requested that a police officer be at Osborn at dismissal. Mayor Sack noted that a meeting was being held the next day to discuss the situation.

Mayor Sack made a motion, seconded by Councilwoman Brett and unanimously carried, to adopt the following Resolution:

**WHEREAS**, the Council wishes to consider amending Chapter 191, "Vehicles and Traffic" of the Code of the City of Rye by amending Sections 191-19; and

**WHEREAS**, it is now desired to call a public hearing on such proposed amendments to the law, now, therefore, be it

**RESOLVED**, by the Council of the City of Rye as follows:

Section 1. Pursuant to Section 20 of the Municipal Home Rule Law and the Charter of the City of Rye, New York, a public hearing will be held by the Council of said City on October 21, 2015 at 7:30 P.M. at

City Hall, Boston Post Road, in said City, for the purpose of affording interested persons an opportunity to be heard concerning such proposed local law.

Section 2. Such notice of public hearing shall be in substantially the following form:

**PUBLIC NOTICE  
CITY OF RYE**

**Notice of Public Hearing on a proposed local law to amend  
Chapter 191, "Vehicles & Traffic" of the Rye City Code by  
amending §191-19, "No parking any time" to prohibit parking on the north  
side of Osborn Road between Theall Road and the Harrison line and on the south  
side of Osborn Road between Boston Post Road and the Harrison line.**

Notice is hereby given that a public hearing will be held by the City Council of the City of Rye on the 21st day of October 2015 at 7.30 P.M. at City Hall, Boston Post Road, in said City, at which interested persons will be afforded an opportunity to be heard concerning a proposal to amend Chapter 191 "Vehicles and Traffic" of the Code of the City of Rye, New York, by amending Section §191-19, "No parking any time" to prohibit parking on the north side of Osborn Road between Theall Road and the Harrison line and on the south side of Osborn Road between Boston Post Road and the Harrison line.

Copies of said local law may be obtained from the office of the City Clerk.

Diane C. Moore  
Deputy City Clerk  
Dated: October 9, 2015

9. Summary of the 2016 Budget Process and Consideration of setting the 2016 Budget Workshop schedule.

The 2016 Budget schedule dates were set as follows:

Wednesday, November 4 <sup>th</sup> :	Presentation of the Budget
Monday, November 9 <sup>th</sup> :	Capital Projects Fund
	Building & Vehicle Fund
	Department of Public Works
Monday, November 16 <sup>th</sup> :	Public Safety: Police and Fire
	Recreation
	Golf Enterprise Fund
	Boat Basin Enterprise Fund
	Rye TV Special Review Fund
Wednesday, November 18 <sup>th</sup> :	Rye Free Reading Room
	Contract Service Agencies

Wednesday, December 2<sup>rd</sup>: Public Hearing on the Budget  
Wednesday, December 16<sup>th</sup>: Adoption of the Budget

10. Residents may be heard on matters for Council consideration that do not appear on the agenda.

Bob Zahm, 7 Ridgewood Drive, thanked the Council for taking action on multiple issues noting that they are a deliberative body taking appropriate action for the City. He identified a safety issue on Midland Avenue under the I-95 bridge going towards Home Depot which needs to be cleaned and remediated; the City will notify the appropriate authority to correct the situation. He asked if parking was allowed on the snow field, and if not, when would enforcement commence. The City Manager said that parking is currently allowed but a discussion is ongoing regarding possible parking permits and hours of operation.

10A. Consideration of a request for a waiver from the Rock Chipping Moratorium for the project located at 50 Cowles Avenue.

Councilman McCartney made a motion, seconded by Councilwoman Brett to adopt the following Resolution:

**RESOLVED**, that the City Council of the City of Rye hereby approves the request for a waiver from the Rock Chipping Moratorium and authorizes no more than eight (8) chipping days within a fourteen (14) calendar day period upon notice and coordination with the City Manager's office and notify the City Manager's office at the completion of each chipping day so that the amount of chipping is recorded.

ROLL CALL:

AYES: Councilmembers Brett, Bucci, Killian, McCartney, Mecca, Slack and Mayor Sack  
NAYS: None  
ABSENT: None

The Resolution was adopted by a 7-0 vote.

11. Resolution to transfer \$15,000 from the Contingency account to fund the restoration and placement of the City of Rye Mile Markers.

Councilwoman Brett said that beyond the cost of the restoration of Mile Markers 25 and 26, the Landmarks Committee was advised to create a stone cast of Mile Marker 25 as it is the only mile marker in Rye that still has the original inscription. The cost of these projects exceeded the original estimates so additional money must be taken from contingency. Mayor Sack asked that the City Manager approve all future expenditures; Mr. Serrano noted that the Landmarks Committee has been advised of this.

Mayor Sack made a motion, seconded by Councilwoman Brett, to adopt the following Resolution:

**WHEREAS**, City staff has determined that the amounts required for the cost of restoration and placement of the City of Rye Mile Markers has exceeded the amount budgeted, and;

**WHEREAS**, the General Fund Contingent Account has a balance of \$50,000, now, therefore, be it;

**RESOLVED**, that the City Comptroller is authorized to transfer \$15,000 from the General Fund Contingent Account to the Street Maintenance Account.

**ROLL CALL:**

**AYES:** Mayor Sack, Councilmembers Brett, Bucci, Killian, Mecca, McCartney and Slack

**NAYS:** None

**12. Resolution to declare certain City of Rye Police equipment as surplus.**

Mayor Sack made a motion, seconded by Councilwoman Brett, to adopt the following Resolution:

**WHEREAS**, the City has been provided with a list of City equipment identified as being obsolete or will become obsolete during 2015, and

**WHEREAS**, the Police Department have recommended that said equipment be declared surplus, now, therefore, be it

**RESOLVED**, that said equipment are declared surplus, and, be it further

**RESOLVED**, that authorization is given to the City Comptroller to sell or dispose of said equipment in a manner that will serve in the best interests of the City.

**ROLL CALL:**

**AYES:** Mayor Sack, Councilmembers Brett, Bucci, Killian, McCartney, Mecca and Slack

**NAYS:** None

**List of Surplus Equipment:**

- 2011 – 5 Ton model M925A1 Military transport truck (Vin#2320012064088)
- 1983 – Dresser Forklift, Model M10A (Vin#3930010543833)
- Cummings Diesel Engine s/n# NSN 2825015555483 model ISL – 400E
- 1 Self-powered Heater s/n# NSN 4520-10-559-837
- Portable Latrine s/n# NSN 4510012011614
- (2) Salamander Heaters
- (18) MSA Respirators – SX12932354F409
- 1 set of forklift forks
- Sony Beta Cam s/n# 5836DSVIDEORE #W13G8623030024

- Sony DXC-3009A VIDEO CAMERA s/n#5836DS VIDEORE  
#W13G8623030025

13. Consideration of a request by the Recreation Department to hold their 39<sup>th</sup> annual *Turkey Run* on Saturday, November 28, 2015 during Thanksgiving Weekend.

Mayor Sack made a motion and unanimously carried, to adopt the following Resolution:

**RESOLVED**, that the City Council of the City of Rye hereby approves the request of the Recreation Department for the use of city streets to hold their 39<sup>th</sup> annual *Turkey Run* on Saturday, November 28, 2015 during Thanksgiving Weekend.

14. Consideration of a request by the Rye Merchants Association to close a portion of Purchase Street on Sunday, November 29, 2015 from 10:00 a.m. to 3:00 p.m. for the *Mistletoe Magic* event.

Mayor Sack made a motion and unanimously carried, to adopt the following Resolution:

**RESOLVED**, that the City Council of the City of Rye hereby approves the request of the Rye Chamber of Commerce to close a portion of Purchase Street on Sunday, November 29, 2015 from 10:00 a.m. to 3:00 p.m. for the *Mistletoe Magic* event.

15. Miscellaneous communications and reports.

There was nothing reported under this Agenda item.

16. New Business.

There was nothing reported under this Agenda item.

17. Adjournment.

There being no further business, Councilwoman Brett made a motion, seconded by Councilwoman Bucci to adjourn the meeting at 10:45 p.m.

Respectfully submitted,

Eleanor M. Militana  
Assistant City Manager



# CITY COUNCIL AGENDA

NO. 5

DEPT.: City Council

DATE: October 21, 2015

CONTACT: Mayor Joseph A. Sack

**AGENDA ITEM:** Issues Update/Old Business

**FOR THE MEETING OF:**

October 21, 2015

**RYE CITY CODE,**

CHAPTER

SECTION

**RECOMMENDATION:** That an update be provided on outstanding issues or Old Business.

**IMPACT:** ☐ Environmental ☐ Fiscal ☐ Neighborhood ☐ Other:

**BACKGROUND:**





# CITY COUNCIL AGENDA

NO. 6      DEPT.: Planning      DATE: October 21, 2015  
CONTACT: Christian K. Miller, AICP, City Planner

**AGENDA ITEM:** Public Hearing to amend local law Chapter 197, "Zoning", of the Rye City Code by amending Section §197-2, "Districts, A: Residence Districts" to change the zoning designation of a property at 120 Old Post Road from the B-4, Office Building, District to a New RA-6, Active Senior Residence, District; and amending Section §197-86, "Tables of Regulations: Table A, Residence Districts – Area Yard, Height and Miscellaneous Regulations" to add the proposed RA-6 zone.

**FOR THE MEETING OF:**

October 21, 2015

**RYE CITY CODE,**

CHAPTER      197  
SECTION      7

**RECOMMENDATION:** That the City Council hold a Public Hearing to review the Planning Commission's advisory memorandum and the petitioner's amended submission.

**IMPACT:** ☒ Environmental ☐ Fiscal ☒ Neighborhood ☐ Other:

**BACKGROUND:** The City Council declared themselves Lead Agency under SEQRA at the October 8, 2014 City Council meeting and referred the petition of Old Post Road Associates to the Planning Commission for their review. Old Post Road Associates, LLC, seeks an amendment to the City Zoning Map to change the zoning district designation of an approximately 7.0-acre property located at the intersection of Old Post Road and Playland Access Drive. The request would change the zoning of the property from the B-4, *Office Building*, District to a new zone RA-6, *Active Senior Residence*, District. The petitioner is seeking to construct units of age-restricted housing limited to those individuals over age 55 who are not interested or in need of residing within a retirement community or nursing facility.

See attached Traffic Study submitted by the applicant, the Planning Commission advisory memorandum and applicant's amended petition with supporting documents.



**FREDERICK P. CLARK ASSOCIATES, INC.**

PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK                      FAIRFIELD, CONNECTICUT

**DAVID H. STOLMAN**  
AICP, PP  
PRESIDENT

**MICHAEL A. GALANTE**  
EXECUTIVE  
VICE PRESIDENT

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LONG ISLAND  
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September 24, 2015

Rye City Council  
1051 Boston Post Road  
Rye, New York 10580

Subject:        **Analysis and Comparison of Potential Area Roadway  
Conditions – Proposed Senior Housing Development, 120  
Old Post Road, Rye, New York**

Dear Mayor Joseph Sack and Members of the Council:

As requested by the City Planner and Engineer at a recent meeting, we have conducted analyses of each of the existing traffic patterns surrounding the project site at 120 Old Post Road to provide the City with a comparison to identify potential benefits with and without off-site transportation improvements and, in one case, a modification to access to the subject property.

**Project Description**

The proposal is to demolish the existing, vacant office building located on the subject property and construct a senior housing development comprising approximately 135 units. Access will be maintained in proximity to the existing site driveway to Playland Access Drive.

We understand there is a concern over traffic congestion currently found on adjacent and nearby roadways in proximity to the subject property during peak hours between 8:00 to 9:00 A.M. and 5:00 to 6:00 P.M. It should be noted that in the pre- and post-build conditions of the proposed project the subject property has a minimal impact on the existing traffic patterns and that the conversion of the property to an age-restricted multi-family development will generate less traffic than a fully tenanted office building. Notwithstanding the foregoing, the City is interested in investigating possible mitigation to address current traffic congestion and has requested that as part of this review for the proposed residential development of the subject property, these options be investigated to determine potential benefits, if any, on each of these items.

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Mayor Joseph Sack and  
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September 24, 2015

### **Possible Transportation Improvements**

The following options were considered and included in this analysis:

1. Construct a right turn lane on the southern side of Playland Access Drive along the site frontage from the intersection with Old Post Road to the vicinity of the Medical Building Access Drive;
2. Convert the existing Emergency Access Drive to the site to a full-movement access drive – in addition to maintaining the existing site access drive to Playland Access Drive; and,
3. Modify the northbound Boston Post Road exit ramp to Playland Parkway to permit left turn movements on Playland Parkway to access Interstate 95.
4. Install a traffic signal at the Old Post Road/Playland Access Drive and/or install a second traffic signal at the Old Post Road/Thruway Access Drive.

### **Analysis and Comparison**

1. *Added Right Turn Lane* – Field observations and the results of analyses of the southbound approach of Playland Access Drive to Old Post Road indicate motorists experience traffic delays during peak hours. If a separate right turn lane was to be constructed on the southbound approach beginning at Old Post Road and terminating approximately 350 Feet to the north towards the medical building driveway, the results of the analysis indicate that during the weekday morning peak hour the Level of Service would improve from Level of Service “F” to “E,” with a reduction of delay of an average of 21.1 seconds per vehicle. During the afternoon peak hour this same movement would show an improvement in Level of Service from “D” to “C” and a reduction in average vehicle delay per vehicle of 5.4 seconds. The new right turn movement would operate at Level of Service “B” and “A” during the weekday morning and weekday afternoon peak hours, respectively.



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RYE, NEW YORK FAIRFIELD, CONNECTICUT

Mayor Joseph Sack and  
Members of the Council

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September 24, 2015

Table 1 provides a more detailed summary of the results of this analysis and the comparison noted above. The results of the analysis clearly indicate a benefit, with the construction of a separate right turn lane along the site's frontage to address current traffic congestion. Capacity analysis worksheets are included in the Appendix of this report.

2. *Open Emergency Access Drive* – This analysis assumes a conversion of the current emergency access only driveway from the subject property to Old Post Road to full-time use. To determine the appropriate shift of site traffic a new distribution pattern for site traffic was developed and graphically illustrated in Figure 1. Figures 2 and 3 show the redistribution of site traffic generation and assignment for the weekday morning and weekday afternoon peak hours, respectively. Figures 4 and 5 graphically illustrate the new combined traffic volumes for the weekday morning and weekday afternoon peak hours, respectively, with the new driveway.

The results of the analyses and comparison to a background condition indicate little or no benefit by permitting a second access drive to the site to Old Post Road. The nearby intersections would continue to operate at the same Levels of Service and essentially the same delay.

The development is expected to generate an insignificant level of additional traffic added to area roadways and; therefore, the results of the analysis, as presented in Table 2, indicates no measurable improvement. Capacity analysis worksheets for this condition are included in the Appendix of this report.

A second analysis was completed with the construction of the right turn lane noted above and with a provision to provide a second access drive to the subject property via the existing emergency access drive to Old Post Road. Results of the analysis at the Old Post Road/Playland Access Drive indicate any benefit is the result of the additional lane and not the second driveway. The approach would operate at a Level of Service "D," which represents an improvement from Level of Service "F" and a reduction in average vehicle delay of 22.0 seconds. During the afternoon peak hour the Level of Service would remain the same at "D" and with a minimal reduction of delay of 6.1 seconds.

Table 1  
2016 FUTURE CONDITIONS WITH SOUTHBOUND RIGHT TURN POCKET – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT ASSESSMENT – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

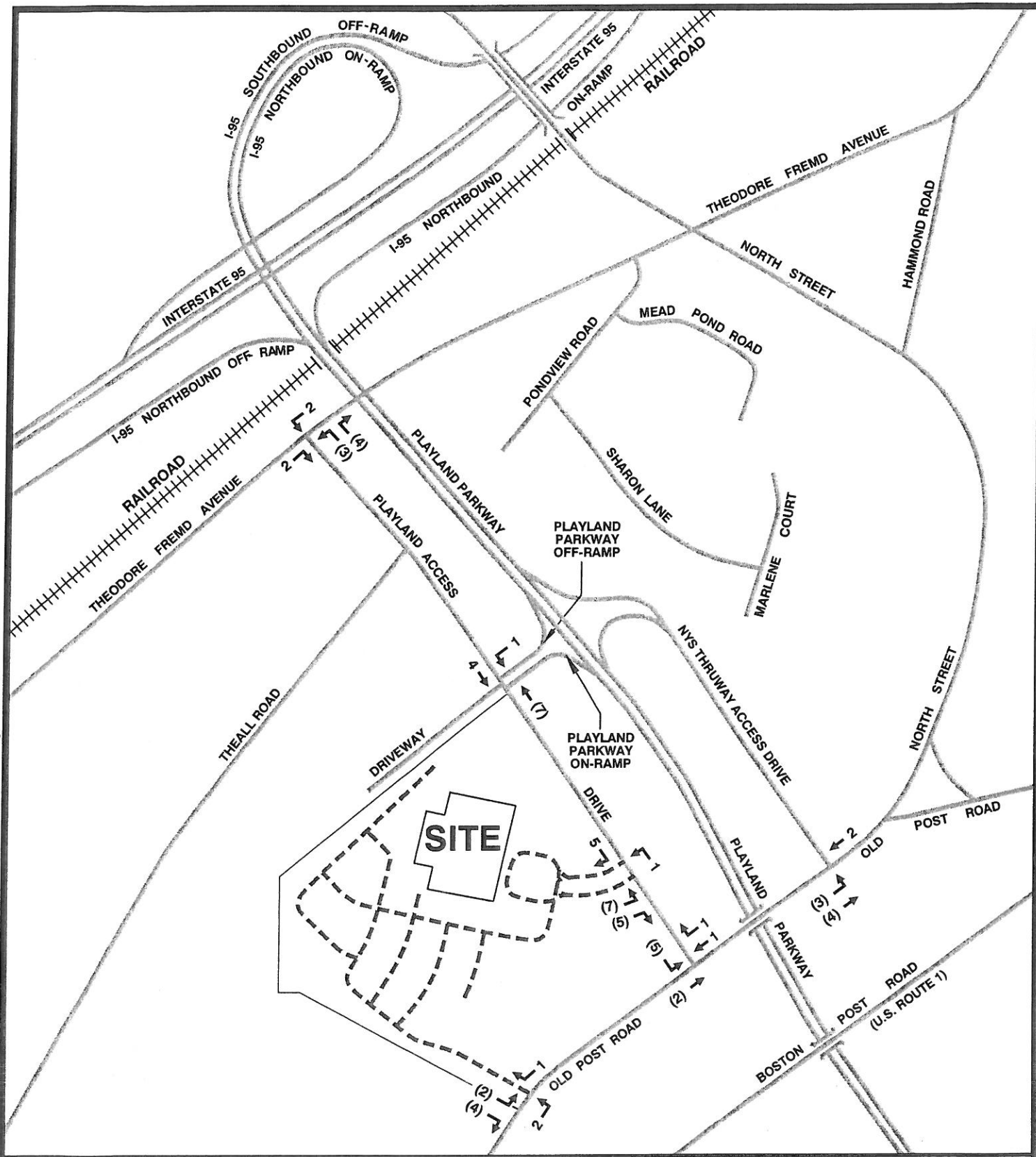
INTERSECTION	CONTROL TYPE	STORAGE/ LINK LENGTH	PHYSICAL UNITS	2016 BACKGROUND CONDITIONS						2016 COMBINED CONDITIONS WITH SOUTHBOUND RIGHT TURN POCKET						PROJECT IMPACTS			
				Weekday Morning			Weekday Afternoon			Weekday Morning			Weekday Afternoon			Weekday Morning		Weekday Afternoon	
				LOS/ Delay	V/C Ratio	Queue Length (Veh)	LOS/ Delay	V/C Ratio	Queue Length (Veh)	LOS/ Delay	V/C Ratio	Queue Length (Veh)	LOS/ Delay	V/C Ratio	Queue Length (Veh)	Change in LOS	Project Delay (Seconds)	Change in LOS	Project Delay (Seconds)
Playland Access Drive at Office Building Access Drive	TWSC		EB Ln NB Ln	B/12.4 A/8.3	0.00 0.00	0 0	B/11.4 A/8.3	0.01 0.00	0 0	B/11.2 A/8.3	0.03 0.01	0.1 0	B/11.0 A/8.3	0.03 0.01	0.1 0	No No	-1.2 0.0	No No	-0.4 0.0
Old Post Road at Playland Access Drive	TWSC	39 4.4 4.4	EB Ln SB Ln1 SB Ln2	A/8.0 F/56.6	0.02 0.95	0.1 11.9	A/7.7 D/28.5	0.01 0.79	0 7.6	A/8.0 B/11.0	0.02 0.22	0.1 0.8	A/7.7 C/23.1	0.01 0.67	0 5	No F – E	0.0 -21.1	No D – C	0.0 -5.4

Notes:

- Synchro 8.0/HCM 2010 results is used for unsignalized capacity analysis.
- Level of Service determining parameter is called the service measure.
- TWSC = Two-Way STOP Control.
- For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
- V/C ratio indicates the amount of congestion for each Movement. Any V/C ratio greater than or equal to one indicates that the Movement is operating at above capacity.
- Synchro 8.0 Macroscopic model is used for storage/queue analysis.
- The Queue Length rows show the 95<sup>th</sup> percentile maximum queue length in vehicles.
- The Queue Length is for each lane. The total queue length is divided by the number of lanes and the lane utilization factor.
- The 95<sup>th</sup> percentile queue is the maximum back of the queue with the 95<sup>th</sup> percentile traffic volumes.
- **Bolded** 95<sup>th</sup> percentile queue exceeds the storage available.
- Physical Units consist of the following:
  1. Movement for TWSC Intersections.

NB = Northbound    EB = Eastbound    SB = Southbound    WB = Westbound  
L = Left Turn    T = Through    R = Right Turn

1



**SITE TRAFFIC**  
Enter 9  
Exit (18)  
Total 27 Vehicle Trip Ends

**LEGEND**  
--- SITE ACCESS DRIVE

**SITE TRAFFIC GENERATION  
AND ASSIGNMENT  
WEEKDAY MORNING PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**

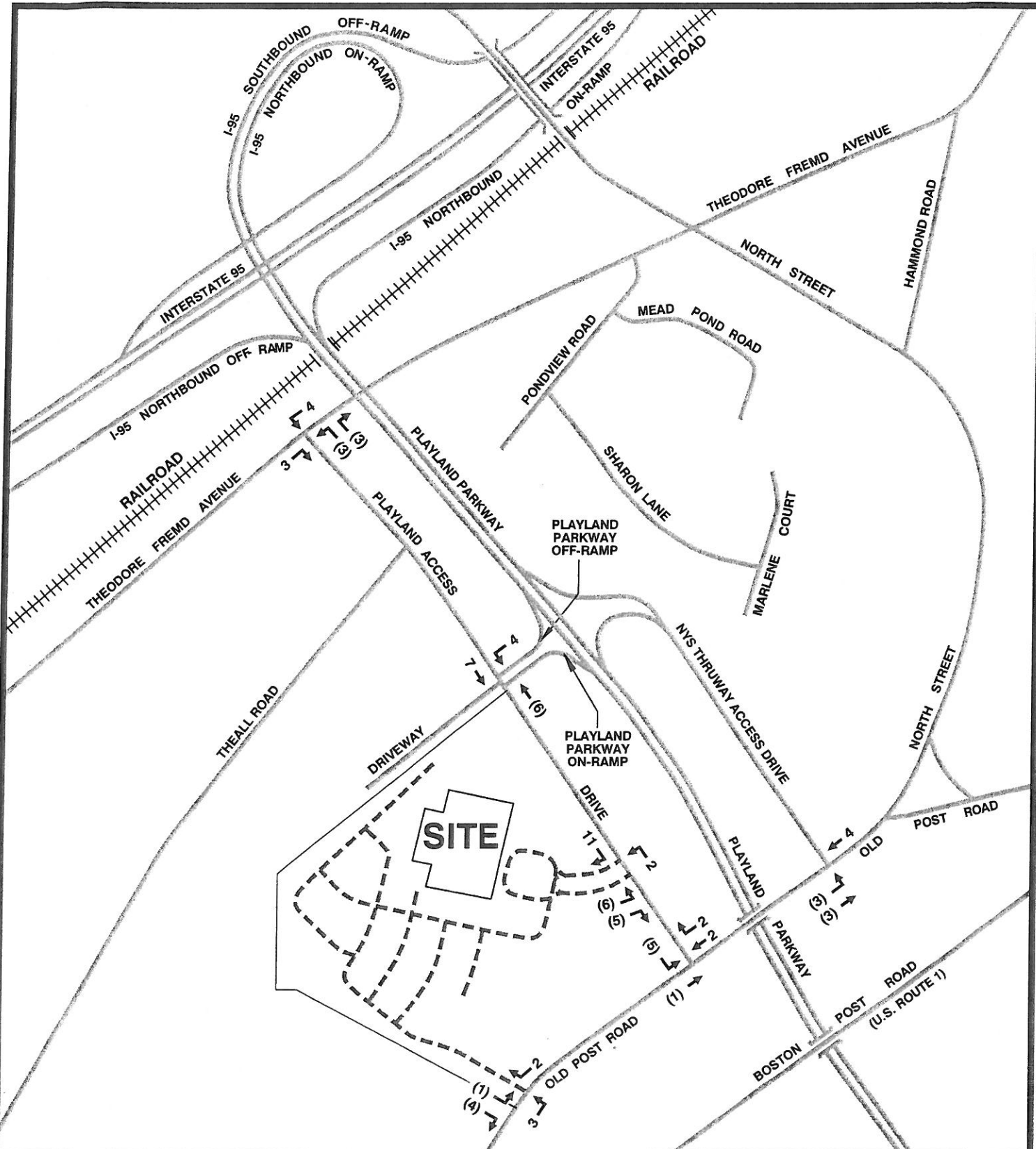


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RYE, NEW YORK FAIRFIELD, CONNECTICUT

Not to Scale

Date: 8/25/15





**SITE TRAFFIC**  
Enter 18  
Exit (16)  
Total 34 Vehicle Trip Ends

**LEGEND**  
- - - - - SITE ACCESS DRIVE

**SITE TRAFFIC GENERATION  
AND ASSIGNMENT  
WEEKDAY AFTERNOON PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**

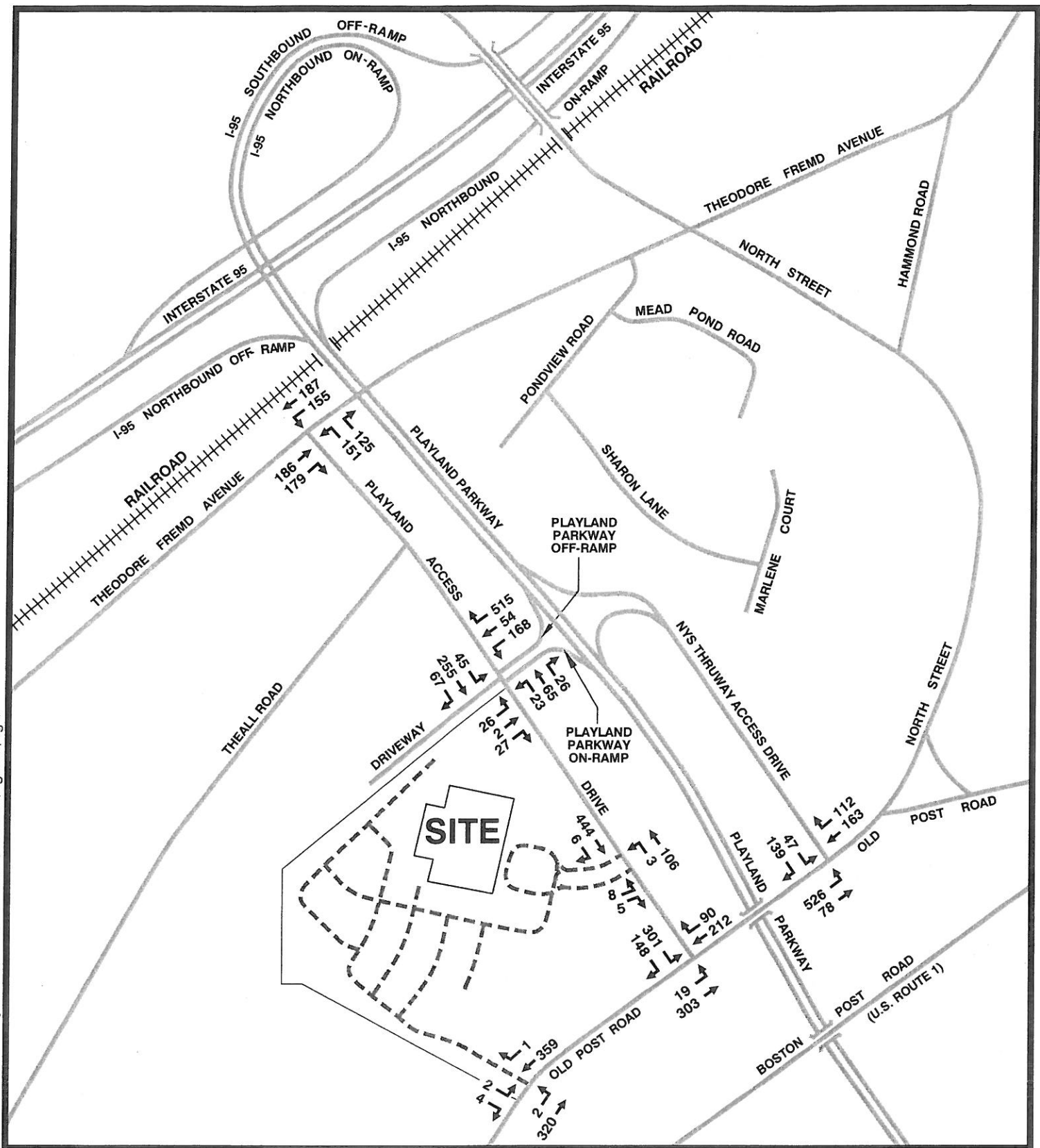


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RYE, NEW YORK FAIRFIELD, CONNECTICUT

Not to Scale

Date: 8/25/15





Note: The 2016 Combined Traffic Volumes include the 2016 Background Traffic Volumes and the Site Traffic Generation.

LEGEND  
--- SITE ACCESS DRIVE

2016 COMBINED TRAFFIC VOLUMES  
WEEKDAY MORNING PEAK HOUR

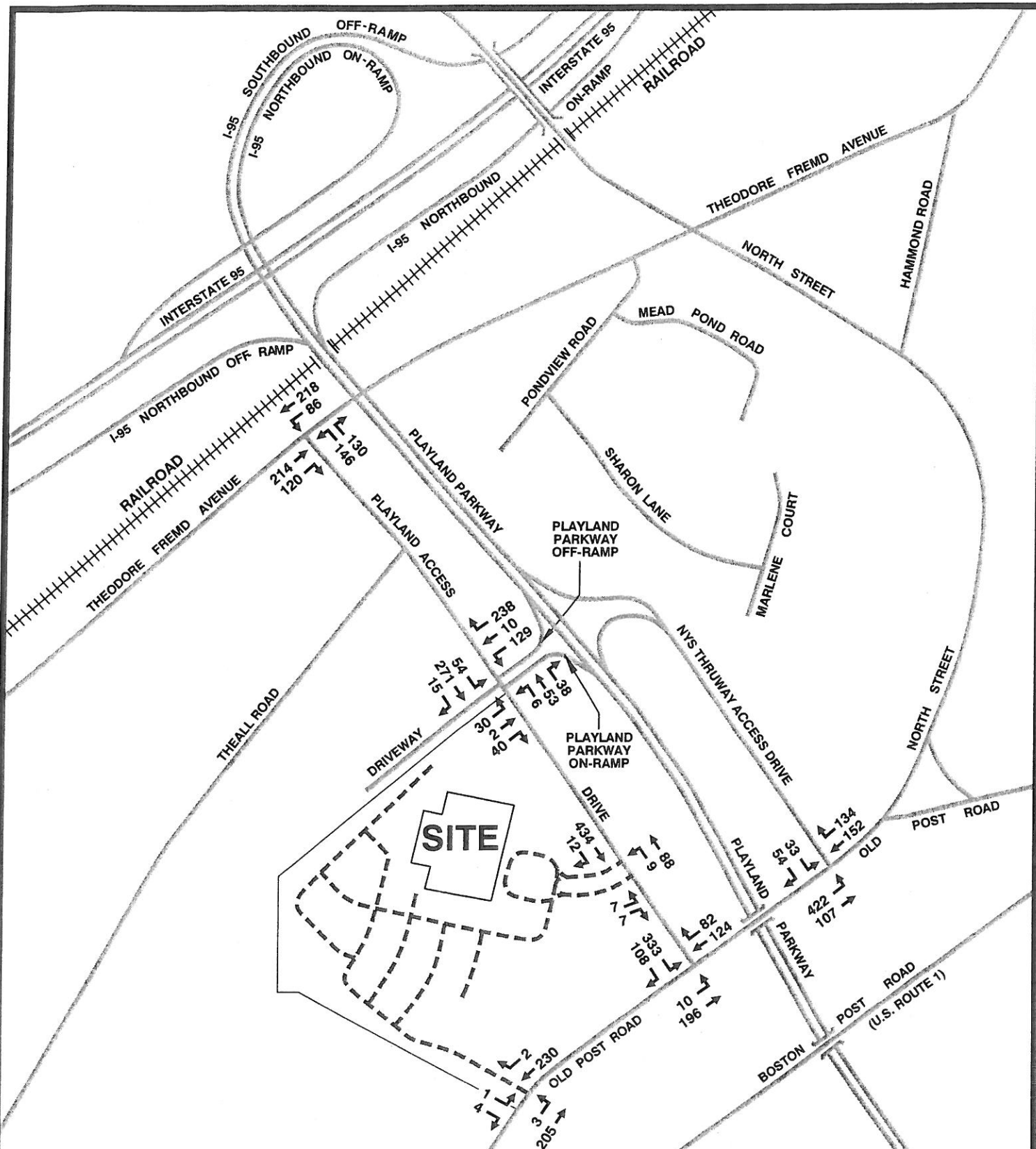
AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York

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PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK  
FAIRFIELD, CONNECTICUT

Not to Scale

Date: 8/25/15





Note: The 2016 Combined Traffic Volumes include the 2016 Background Traffic Volumes and the Site Traffic Generation.

**LEGEND**  
----- SITE ACCESS DRIVE

**2016 COMBINED TRAFFIC VOLUMES  
WEEKDAY AFTERNOON PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**



FREDERICK P. CLARK ASSOCIATES, INC.  
PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

Not to Scale

Date: 8/25/15

Table 2  
2016 FUTURE CONDITIONS WITH SECOND SITE ACCESS DRIVE – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT ASSESSMENT – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

INTERSECTION	CONTROL TYPE	STORAGE/ LINK LENGTH	PHYSICAL UNITS	2016 BACKGROUND CONDITIONS						2016 COMBINED CONDITIONS WITH SECOND SITE ACCESS DRIVE						PROJECT IMPACTS		
				Weekday Morning			Weekday Afternoon			Weekday Morning			Weekday Afternoon			Weekday Morning		Project Delay (Seconds)
				LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	Change in LOS	Project Delay (Seconds)	Change in LOS
Playland Access Drive at Office Building Access Drive	TWSC	5.2 4.4	EB Ln NB L	B/12.4 A/8.3	0.00 0.00	0 0	B/11.4 A/8.3	0.01 0.00	0 0	B/12.1 A/8.3	0.03 0.00	0.1 0	B/11.9 A/8.3	0.03 0.00	0.1 0	No No	-0.3 0.0	0.5 0.0
Old Post Road at Playland Access Drive	TWSC	39 4.4	EB L SB Ln1	A/8.0 F/56.6	0.02 0.95	0.1 11.9	A/7.7 D/28.5	0.01 0.79	0 7.6	A/8.0 F/60.8	0.02 0.97	0.1 12.5	A/7.7 D/29.9	0.01 0.80	0 8	No No	0.0 4.2	0.0 1.3
Old Post Road at Site Access Drive	TWSC	20.8 4	EB L SB Ln1	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	A/8.1 B/11.9	0.00 0.01	0 0	A/7.7 B/10.0	0.00 0.01	0 0	N/A N/A	N/A N/A	N/A

Notes:

- Synchro 8.0/HCM 2010 results is used for unsignalized capacity analysis.
- Level of Service determining parameter is called the service measure.
- TWSC = Two-Way STOP Control.
- For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
- V/C ratio indicates the amount of congestion for each Movement. Any V/C ratio greater than or equal to one indicates that the Movement is operating at above capacity.
- Synchro 8.0 Macroscopic model is used for storage/queue analysis.
- The Queue Length rows show the 95<sup>th</sup> percentile maximum queue length in vehicles.
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- Bolded** 95<sup>th</sup> percentile queue exceeds the storage available.
- Physical Units consist of the following:
  - Movement for TWSC Intersections.

NB = Northbound      EB = Eastbound      SB = Southbound      WB = Westbound  
L = Left Turn      T = Through      R = Right Turn

Mayor Joseph Sack and

## Members of the Council

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September 24, 2015

The right turn lane would operate at Level of Service “B” and “A” during the weekday morning and weekday afternoon peak hours, respectively. This would indicate a significant improvement, with the right turn lane constructed. Table 3 provides a more detailed summary of the results of the analysis. The capacity analysis worksheets are included in the Appendix of this report.

3. *Playland Parkway Ramp* – This analysis assumes additional signing is provided on northbound Boston Post Road, with the modification of the existing off ramp to Playland Parkway to access Playland to permit a left turn movement from this ramp to access Playland Parkway and Interstate 95. As part of this analysis the right turn lane addition along the site frontage along Playland Access Drive is included.

To develop an assumption of a diversion of current traffic volumes, which is unrelated to site traffic from Boston Post Road from the south, an evaluation of current traffic volumes on Old Post Road at the intersection with Playland Access Drive and the Thruway Access Drive intersections was completed for both peak hours. This option could shift 106 and 62 vehicle trips traveling northbound on Boston Post Road from using Old Post Road to access the New York State Thruway Access Drive to this existing ramp to Playland Parkway during the two peak hours. See Figures 6 and 7.

An analysis of providing a left turn movement from the off-ramp from Boston Post Road to Playland Parkway was completed to determine the potential impacts to Old Post Road intersections. The results of this analysis indicate that during the weekday morning peak hour the southbound left turn movement from Playland Access Drive would improve from Level of Service "F" to "C" and result in an reduction in delay of 32.0 seconds. During the afternoon peak hour the same approach lane there will be improvement from Level of Service "D" to "C" and a decrease in average vehicle delay of 9.2 seconds. The right turn lane would operate at Level of Service "B" and "A" during the weekday morning and afternoon peak hours, respectively.

At the Old Post Road/Thruway Access Drive the eastbound left turn movement from Old Post Road to the Thruway ramp would improve from Level of Service



Table 3  
2016 FUTURE CONDITIONS WITH SECOND SITE ACCESS DRIVE AND SOUTHBOUND RIGHT TURN POCKET – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT ASSESSMENT – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

INTERSECTION	CONTROL TYPE	STORAGE/ LINK LENGTH	PHYSICAL UNITS	2016 BACKGROUND CONDITIONS						2016 COMBINED CONDITIONS WITH SECOND SITE ACCESS DRIVE AND SOUTHBOUND RIGHT TURN POCKET						PROJECT IMPACTS			
				Weekday Morning			Weekday Afternoon			Weekday Morning			Weekday Afternoon			Weekday Morning		Weekday Afternoon	
				LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	Change in LOS	Project Delay (Seconds)	Change in LOS	Project Delay (Seconds)
Playland Access Drive at Office Building Access Drive	TWSC	5.2 4.4	EB Ln NB L	B/12.4 A/8.3	0.00 0.00	0 0	B/11.4 A/8.3	0.01 0.00	0 0	B/11.7 A/8.3	0.02 0.00	0.1 0	B/11.3 A/8.3	0.03 0.00	0.1 0	No No	-0.7 0.0	No No	-0.1 0.0
Old Post Road at Playland Access Drive	TWSC	39 4.4 4.4	EB L SB Ln1 SB Ln2	A/8.0 F/56.6 --	0.02 0.95 --	0.1 11.9 --	A/7.7 D/28.5 --	0.01 0.79 --	0 7.6 --	A/8.0 D/34.6 B/11.0	0.02 0.76 0.21	0.1 6.3 0.8	A/7.7 A/22.5 A/9.9	0.01 0.66 0.14	0 4.8 0.5	No F - D --	0.0 -22.0 --	No D - C --	0.0 -6.1 --
Old Post Road at Site Access Drive	TWSC	20.8 4	EB L SB Ln1	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	A/8.1 B/11.9	0.00 0.01	0 0	A/7.7 B/10.0	0.00 0.01	0 0	N/A N/A	N/A N/A	N/A N/A	N/A N/A

Notes:

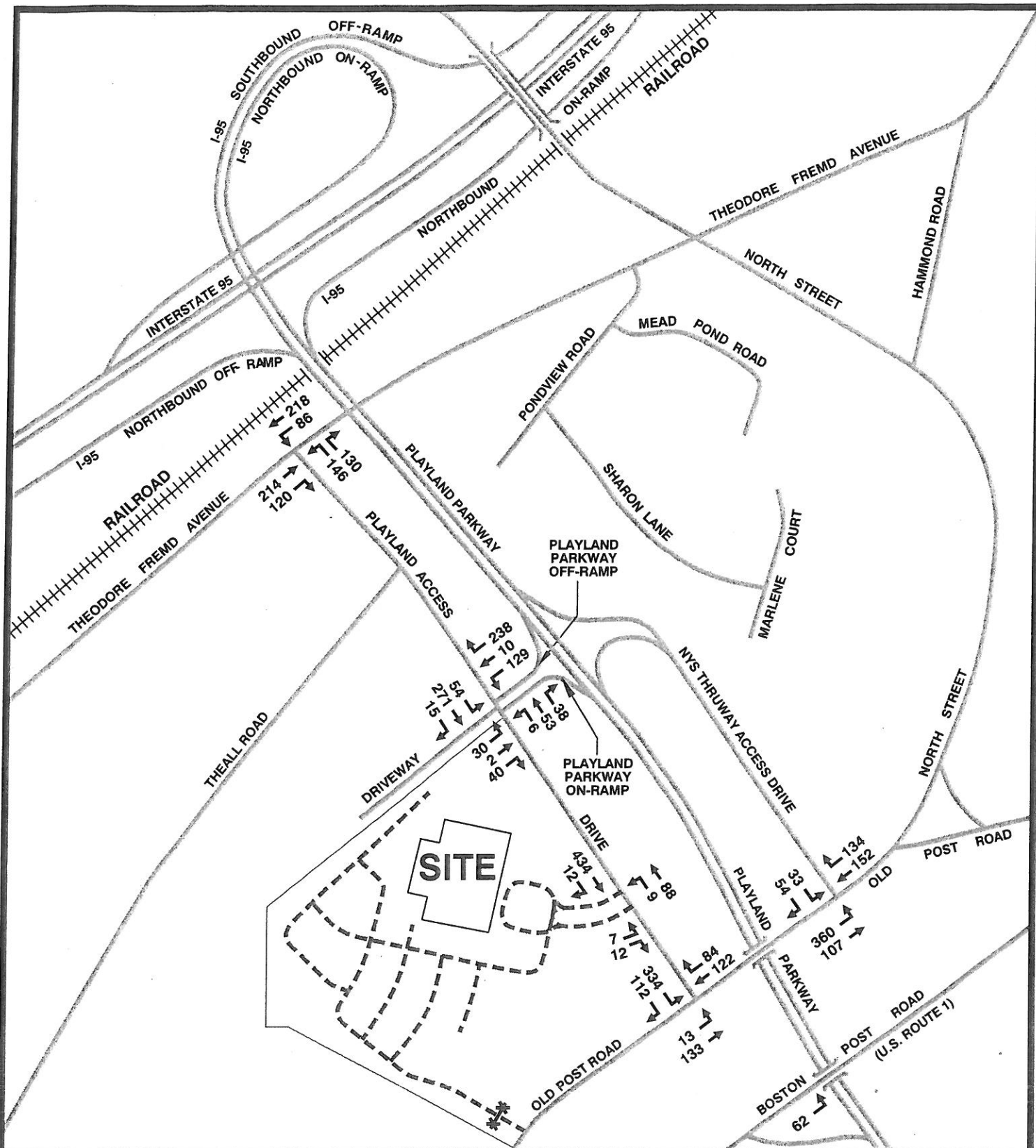
- Synchro 8.0/HCM 2010 results is used for unsignalized capacity analysis.
- Level of Service determining parameter is called the service measure.
- TWSC = Two-Way STOP Control.
- For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
- V/C ratio indicates the amount of congestion for each Movement. Any V/C ratio greater than or equal to one indicates that the Movement is operating at above capacity.
- Synchro 8.0 Macroscopic model is used for storage/queue analysis.
- The Queue Length rows show the 95<sup>th</sup> percentile maximum queue length in vehicles.
- The Queue Length is for each lane. The total queue length is divided by the number of lanes and the lane utilization factor.
- The 95<sup>th</sup> percentile queue is the maximum back of the queue with the 95<sup>th</sup> percentile traffic volumes.
- **Bolded** 95<sup>th</sup> percentile queue exceeds the storage available.
- Physical Units consist of the following:
  1. Movement for TWSC Intersections.

NB = Northbound      EB = Eastbound      SB = Southbound      WB = Westbound  
L = Left Turn      T = Through      R = Right Turn

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Note: The 2016 Combined Traffic Volumes include the 2016 Background Traffic Volumes and the Site Traffic Generation.

**LEGEND**

- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

**2016 COMBINED TRAFFIC VOLUMES  
WEEKDAY AFTERNOON PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**



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Not to Scale

Date: 8/25/15

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“B” to “A” during the weekday morning peak hour and remain at Level of Service “A” during the weekday afternoon peak hour. The left turn movement from the off-ramp from Playland Parkway at this location would improve from Level of Service “F” to “E” and reduction in delay of 63.9 seconds during the weekday morning peak hour and remain the same Level of Service “D” during the afternoon peak hour, with reduction in delay of 8.8 seconds. The results of this analysis indicate the greatest improvement in traffic flow and reduction in delay would occur during the weekday morning peak hour at both STOP sign controlled intersections on Old Post Road. Table 4 provides a more detailed summary of the results of this analysis. The capacity analysis worksheets are included in the Appendix of this report. Photographs of the intersection are included in the Appendix of this report.

At the Old Post Road/Thruway Access Drive there would be an improvement in reduction in delay from the ramp to Old Post Road with an improvement in Level of Service from “F” to “D” and a reduction in delay of 22.2 seconds during the weekday morning peak hour. During the afternoon peak hour the left turn movement from Playland Access Drive would operate at Level of Service “C” with a reduction in delay of 6.1 seconds.

Based on a field investigation and evaluation of the possible conversion of the off-ramp from Boston Post Road northbound to Playland Parkway both eastbound and westbound, a Speed Study was conducted of motorists traveling on Playland Parkway to determine the average speed and 85<sup>th</sup> percentile speed of motorists traveling to determine if adequate intersection sight distance (ISD) is currently available at this location. It was determined that the average speed of motorists traveling both eastbound and westbound on Playland Parkway at the location of the ramp noted above was 38 miles per hour. The 85<sup>th</sup> percentile speed of motorists traveling on this same section of Playland Parkway and used to determine if adequate ISD is available was found to be 44 and 46 miles per hour for eastbound and westbound movements, respectively.

Based on criteria followed by the Westchester County Department of Public Works, for the identified 85<sup>th</sup> percentile speed of motorists traveling on this section of Playland Parkway the desirable distance needed for a left turn from the



Table 4  
2016 FUTURE CONDITIONS WITH U.S. ROUTE 1 ACCESS TO PLAYLAND PARKWAY WESTBOUND AND SOUTHBOUND RIGHT TURN POCKET – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT  
ASSESSMENT – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

INTERSECTION	CONTROL TYPE	STORAGE/ LINK LENGTH	PHYSICAL UNITS	2016 BACKGROUND CONDITIONS						2016 COMBINED CONDITIONS WITH U.S. ROUTE 1 ACCESS TO PLAYLAND PARKWAY AND SOUTHBOUND RIGHT TURN POCKET									
				Weekday Morning			Weekday Afternoon			Weekday Morning					Weekday Afternoon				
				LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	Change in LOS	Project Delay (Seconds)	Change in LOS	Project Delay (Seconds)
Playland Access Drive at Office Building Access Drive	TWSC	5.2 4.4	EB Ln NB L	B/12.4 A/8.3	0.00 0.00	0 0	B/11.4 A/8.3	0.01 0.00	0 0	B/11.2 A/8.3	0.03 0.01	0.1 0	B/11.0 A/8.3	0.03 0.01	0.1 0	No No	1.2 0.0	No No	-0.4 0.1
Old Post Road at Playland Access Drive	TWSC	39 4.4 4.4	EB L SB Ln1 SB Ln2	A/8.0 F/56.6 --	0.02 0.95 --	0.1 11.9 --	A/7.7 D/28.5 --	0.01 0.79 --	0 7.6 --	A/8.0 C/24.6 B/11.0	0.02 0.65 0.22	0.1 4.7 0.8	A/7.7 C/19.3 A/9.9	0.01 0.61 0.15	0 4.1 0.5	No F - C --	0.0 -32.0 --	No D - C --	0.0 -9.2 --
Old Post Road at Thruway Access Drive	TWSC	9.6 37	EB L SB Ln	B/10.4 F/101.3	0.47 0.97	2.6 8.5	A/9.8 D/34.8	0.39 0.46	1.9 2.2	A/9.6 E/37.4	0.38 0.67	1.8 4.5	A/9.4 D/26.0	0.34 0.37	1.5 1.6	B - A F - E	-0.8 -63.9	No No	-0.4 -8.8

Notes:

- Synchro 8.0/HCM 2010 results is used for unsignalized capacity analysis.
- Level of Service determining parameter is called the service measure.
- TWSC = Two-Way STOP Control.
- For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
- V/C ratio indicates the amount of congestion for each Movement. Any V/C ratio greater than or equal to one indicates that the Movement is operating at above capacity.
- Synchro 8.0 Macroscopic model is used for storage/queue analysis.
- The Queue Length rows show the 95<sup>th</sup> percentile maximum queue length in vehicles.
- The Queue Length is for each lane. The total queue length is divided by the number of lanes and the lane utilization factor.
- The 95<sup>th</sup> percentile queue is the maximum back of the queue with the 95<sup>th</sup> percentile traffic volumes.
- **Bolded** 95<sup>th</sup> percentile queue exceeds the storage available.
- Physical Units consist of the following:

1. Movement for TWSC Intersections.

NB = Northbound      EB = Eastbound      SB = Southbound      WB = Westbound  
L = Left Turn      T = Through      R = Right Turn

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ramp was found to be 512 feet and for a right turn movement the desirable ISD was determined to be 421 feet. Based on field observations the available ISD is well above the needed distance, with several hundred feet provided in both directions.

A further evaluation of the ramp layout and pavement width is needed to finalize lane arrangement. The ramp should be controlled with a STOP sign and lane description (right and left turns) and appropriate INTERSECTION WARNING signs should be installed on Playland Parkway.

The shifting of traffic in general from Old Post Road traveling to the Interstate 95 ramps via the Playland Parkway and shifted to Boston Post Road and directly to Playland Parkway would decrease traffic volumes on Old Post Road and improve overall operation with the intersections along Old Post Road. Results of the analysis show a benefit of providing this new connection to by-pass using Old Post Road. Table A-1 shows the results of the Speed Study on Playland Parkway. Table A-2 provides a summary of the ISD analysis, for reference purposes. Both tables are included in the Appendix of this report.

4. *Installation of Traffic Signals on Old Post Road* – This analysis was completed to determine the benefit of the installation of traffic signals at Old Post Road/Playland Access Drive intersection and a further benefit, if any, with the installation of a traffic signal at the Old Post Road Thruway Access Drive. Note that previous Studies indicated that these intersections did not meet traffic signal warrants.

Previous traffic signal warrant analyses conducted by our office for the previous proposal for a Hotel on the subject property indicated that warrants were not met for the unsignalized intersection of Old Post Road at Playland Access Drive. These analyses were conducted based on traffic volumes obtained in May 2012 for existing conditions and for a future condition, with the Hotel. In both cases the traffic signal warrants, which are required for an 8-hour period, were not met based on the Minimum Traffic Volumes (Warrant #1, Condition A) necessary or Interruption of Continuous Traffic (Warrant #1, Condition B) based on the minimum criteria for volumes at this intersection.

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It was found that for Warrant #1, Condition A, which is Minimum Traffic Volumes, Warrants were not met for any of the 8-hours since the hourly volumes on Old Post Road were too low for each of the 8-hours. For Warrant #1, Condition B, which is the Interruption of Traffic warrant, again the analysis results indicate that none of the 8-hours met the warrants. The two-way volume on Old Post Road is significantly below the minimum standard to consider a traffic signal control.

The analysis indicated that hourly traffic volumes were too low on Old Post Road and did not meet the minimum requirements for consideration.

Since the results of the warrant analyses indicate that not only the warrants are not met, but the warrants are not close to meeting the minimum criteria and ..it is very unlikely with any scenario for land use of the subject property, including the proposal for Senior Housing, or re-occupancy as an office building would indicate that volumes would increase to meet the criteria to install a traffic signal. See attached Tables 7 and 8 from the other report.

The criteria set forth in the Manual of Uniform Traffic Control Devices (MUTCD) 2009 is followed by the New York State Department of Transportation (NYSDOT), Westchester County Department of Public Works (WCDPW) and the City of Rye.

The previous warrants completed and referenced above and submitted to the City as part of the Traffic Study completed for the Hotel in 2012 are attached for reference purposes. Although a traffic signal warrant analysis was not completed for the Old Post Road/New York State Thruway Access Drive intersection it is likely the results would be very similar.

Notwithstanding the foregoing, the results of analysis further indicate that with traffic signals installed at both intersections noted above, both intersections would operate at Level of Service "C" or better during both the weekday morning and weekday afternoon peak hours and eliminate the current delays found on the Playland Access Drive southbound approach during the weekday afternoon peak hour. Installation of a traffic signal at the Old Post Road/Thruway Access Drive



Table 7

TRAFFIC SIGNAL WARRANT ANALYSIS – OLD POST ROAD AT PLAYLAND ACCESS DRIVE –  
 2012 EXISTING CONDITIONS  
 Office to Hotel Building Conversion  
 120 Old Post Road  
 Rye, New York

HOUR	MAJOR STREET TWO -WAY APPROACHES VOLUMES – OLD POST ROAD	MINOR STREET ONE-WAY VOLUMES (PLAYLAND ACCESS DRIVE)	SIGNAL WARRANT			
			Warrant #1 Condition A	Warrant #1 Condition B	Warrant #2	Warrant # 3
7 – 8 A.M.	369	354	No	No	No	No
8 – 9 A.M.	495	401	No	No	Yes	No
9 – 10 A.M.	324	319	No	No	No	No
10 – 11 A.M.	243	268	No	No	No	No
11 A.M. – 12 Noon	253	255	No	No	No	No
12 Noon – 1 P.M.	325	306	No	No	No	No
1 – 2 P.M.	315	339	No	No	No	No
2 – 3 P.M.	336	354	No	No	No	No
3 – 4 P.M.	436	458	No	No	No	No
4 – 5 P.M.	389	485	No	No	No	No
5 – 6 P.M.	309	506	No	No	No	No
6 – 7 P.M.	282	437	No	No	No	No
Hours Met	--	--	0	0	1	0
Hours Needed	--	--	8	8	4	1
Warrant Met	--	--	No	No	No	No

Notes:

- Major Street: Number of lanes moving traffic on each approach is one.
- Minor Street: Number of lanes moving traffic is one.
- Warrant #1, Condition A: Minimum Vehicle Volume – 500 vehicles (two-way) on Old Post Road and 150 vehicles (one-way) on Playland Access Drive – Major and Minor road volumes are for the same eight consecutive hours.
- Warrant #1, Condition B: Interruption of Continuous Traffic – 750 vehicles (two-way) on Old Post Road and 75 vehicles (one-way) on Playland Access Drive. Major and Minor Road volumes are for the same eight consecutive hours.
- Warrant #2: Four-Hour Vehicular Volume – Refer to Figure 4C-1, Warrant 2, Four-Hour Vehicular Volume, MUTCD page 440.
- Warrant #3: Peak Hour – Refer to Figure 4C-3, Warrant 3, Peak Hour, MUTCD page 441.

Source:

- Manual on Uniform Traffic Control Devices for Streets and Highways, published by the Federal Highway Administration in 2009.

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Table 8

TRAFFIC SIGNAL WARRANT ANALYSIS – OLD POST ROAD AT PLAYLAND ACCESS DRIVE –  
 2013 FUTURE CONDITIONS  
 Office to Hotel Building Conversion  
 120 Old Post Road  
 Rye, New York

HOUR	MAJOR STREET TWO -WAY APPROACHES VOLUMES – OLD POST ROAD	MINOR STREET ONE-WAY VOLUMES (PLAYLAND ACCESS DRIVE)	SIGNAL WARRANT		
			Warrant #1 Condition A	Warrant #1 Condition B	Warrant #2 Warrant #3
7 – 8 A.M.	382	388	No	No	No
8 – 9 A.M.	513	440	Yes	No	Yes
9 – 10 A.M.	336	350	No	No	No
10 – 11 A.M.	252	294	No	No	No
11 A.M. – 12 Noon	262	280	No	No	No
12 Noon – 1 P.M.	337	336	No	No	No
1 – 2 P.M.	327	389	No	No	No
2 – 3 P.M.	349	406	No	No	No
3 – 4 P.M.	453	526	No	No	Yes
4 – 5 P.M.	404	557	No	No	No
5 – 6 P.M.	321	581	No	No	No
6 – 7 P.M.	293	502	No	No	No
Hours Met	--	--	1	0	2
Hours Needed	--	--	8	8	1
Warrant Met	--	--	No	No	Yes

Notes:

- Major Street: Number of lanes moving traffic on each approach is one.
- Minor Street: Number of lanes moving traffic is one.
- Warrant #1, Condition A: Minimum Vehicle Volume – 500 vehicles (two-way) on Old Post Road and 150 vehicles (one-way) on Playland Access Drive – Major and Minor road volumes are for the same eight consecutive hours.
- Warrant #1, Condition B: Interruption of Continuous Traffic – 750 vehicles (two-way) on Old Post Road and 75 vehicles (one-way) on Playland Access Drive. Major and Minor Road volumes are for the same eight consecutive hours.
- Warrant #2: Four-Hour Vehicular Volume – Refer to Figure 4C-1, Warrant 2, Four-Hour Vehicular Volume, MUTCD page 440.
- Warrant #3: Peak Hour – Refer to Figure 4C-3, Warrant 3, Peak Hour, MUTCD page 441.

Source:

- Manual on Uniform Traffic Control Devices for Streets and Highways, published by the Federal Highway Administration in 2009.

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indicates a similar benefit of eliminating the Level of Service "F" on the off-ramp approach to the intersection and reducing delays significantly during the weekday morning peak hour. Table 5 provides the results. Worksheets are included.

Table 6 provides an analysis if a traffic signal was installed only at the Old Post Road/Playland Access Drive. Results of this analysis indicate it would operate at an overall Level of Service "B" during both peak hours and result in a similar benefit during the weekday morning peak hour.

The overall results of the analysis indicate that it would likely be beneficial to install both traffic signals so that they operate in a coordinated fashion and minimize delays on both side street approaches. Installation of traffic signals at both locations would also result in a benefit due to the limited sight distance when exiting the Thruway ramp and also minimizing the limited sight distance exiting Playland Access Drive at Old Post Road. Capacity analysis worksheets for each of these analyses are included in the Appendix of this report.

## **Findings**

Although the existing condition of the property as a largely vacant office building is not contributing to the existing traffic patterns and the post-build condition would be an improvement over a fully tenanted office building, the results of these analyses, as described above, indicate the greatest benefit would be to provide the right turn lane along the site's frontage on Playland Access Drive. It results in an improvement in Levels of Service and reduction in delay during both the weekday morning and weekday afternoon peak hours.

The provision of providing a second driveway to the site directly to Old Post Road does not necessarily indicate a significant benefit and reduction in delay on area roads. This is due to the low site traffic generation as part of the redevelopment of the subject property.

Providing an alternative to motorists traveling northbound on Boston Post Road to access Playland Parkway, it would remove traffic from Old Post Road, with an improvement in Levels of Service and a reduction in delay at the STOP sign approach of Playland Access Drive to Old Post Road and the same at the Thruway Access Drive southbound approach



Table 5  
2016 FUTURE CONDITIONS WITH TRAFFIC SIGNALS AND RIGHT TURN POCKET – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT ASSESSMENT – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

	CONTROL TYPE	STORAGE/ LINK LENGTH	PHYSICAL UNITS	2016 BACKGROUND CONDITIONS						2016 COMBINED CONDITIONS WITH TRAFFIC SIGNALS AND RIGHT TURN POCKET										PROJECT IMPACTS					
				Weekday Morning			Weekday Afternoon			STORAGE/ LINK LENGTH	CONTROL TYPE	PHYSICAL UNITS	Weekday Morning			Weekday Afternoon			Queue Length (Feet)	V/C Ratio	Change in LOS	Project Delay (Seconds)	Change in LOS	Project Delay (Seconds)	
				LOS/ Delay	V/C Ratio	Queue Length (Veh)	LOS/ Delay	V/C Ratio	Queue Length (Veh)				LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)							
Playland Access Drive at Office Building Access Drive	TWSC	5.2	EB Ln	B/12.4	0.00	0	B/11.4	0.01	0	5.2	EB Ln	5.2	TWSC	EB Ln	B/11.2	0.03	0.1	B/11.0	0.03	0.1	No	-1.2	No	-0.4	
		4.4	NB L	A/8.3	0.00	0	A/8.3	0.00	0	4.4	NB L	4.4		NB L	A/8.3	0.01	0	A/8.3	0.01	0	No	0.0	No	0.0	
Old Post Road at Playland Access Drive	TWSC	39	EB L	A/8.0	0.02	0.1	A/7.7	0.01	0	975	EB LT	975	Traffic Signal	EB LT	C/21.4	0.53	202	B/16.6	0.36	121	A - C	13.4	A - B	8.9	
		--	--	--	--	--	--	--	--	--	--	--		APP.	C/21.4	--	--	B/16.6	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	285	WB LT	285		WB LT	A/7.7	0.44	68	A/6.7	0.34	49	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	APP.	--	APP.	A/7.7	--	--	A/6.7	--	--	--	--	--	--	--
		4.4	SB Ln	F/56.6	0.95	11.9	D/28.5	0.79	7.6	110	SB L	110		SB L	D/44.7	0.77	286	D/47.5	0.86	313	F - D	-11.9	No	19.0	
Old Post Road at Thruway Access Drive	TWSC	4.4	--	--	--	--	--	--	--	110	R	110		R	A/2.7	0.25	19	A/2.6	0.20	17	--	--	--	--	
		--	--	--	--	--	--	--	--	--	APP.	--	APP.	C/30.7	--	--	D/36.3	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	Overall	--	Overall	C/21.6	--	--	C/24.4	--	--	--	--	--	--	--	
		9.6	EB L	B/10.4	0.47	2.6	A/9.8	0.39	1.9	240	EB LT	240	Traffic Signal	EB LT	C/21.0	0.86	308	B/13.4	0.75	108	B - C	10.6	A - B	3.6	
		--	--	--	--	--	--	--	--	--	285	WB LT	285		WB LT	C/31.0	0.67	230	C/31.0	0.70	208	--	--	--	--
		--	--	--	--	--	--	--	--	--	APP.	--	APP.	C/31.7	--	--	C/31.0	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		37	SB Ln	F/101.3	0.97	8.5	D/34.8	0.46	2.2	925	SB LR	925		SB LR	B/16.7	0.59	82	B/19.6	0.40	55	F - B	84.6	D - B	-15.2	
		--	--	--	--	--	--	--	--	--	APP.	--	APP.	B/16.7	--	--	B/19.6	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	Overall	--	Overall	C/23.0	--	--	B/19.6	--	--	--	--	--	--	--	--

- Notes:
- Synchro 8.0 is used for traffic signal capacity analysis.
  - Synchro 8.0/HCM 2010 results is used for unsignalized capacity analysis.
  - Level of Service determining parameter is called the service measure.
  - TWSC = Two-Way STOP Control.
  - V/C ratio indicates the amount of congestion for each movement. Any V/C ratio greater than or equal to one indicates that the Movement is operating at above capacity.
  - For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
  - Synchro 8.0 Macroscopic model is used for storage/queue analysis.
  - The Queue Length rows show the 95<sup>th</sup> percentile maximum queue length in feet.
  - The Queue Length is for each lane. The total queue length is divided by the number of lanes and the lane utilization factor.
  - The 95<sup>th</sup> percentile queue is the maximum back of the queue with the 95<sup>th</sup> percentile traffic volumes.
  - Bolded** 95<sup>th</sup> percentile queue exceeds the storage available.
  - Physical Units consist of the following:
    - Lane Group and Intersection Overall for Traffic Signal Controlled Intersections.
    - Movement for TWSC Intersections.

NB = Northbound EB = Eastbound SB = Southbound WB = Westbound  
L = Left Turn T = Through R = Right Turn APP. = Approach

Table 6  
2016 FUTURE CONDITIONS WITH TRAFFIC SIGNAL AND RIGHT TURN POCKET – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT ASSESSMENT – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

INTERSECTION	CONTROL TYPE	STORAGE/ LINK LENGTH	PHYSICAL UNITS	2016 BACKGROUND CONDITIONS						2016 COMBINED CONDITIONS WITH TRAFFIC SIGNAL AND RIGHT TURN POCKET						PROJECT IMPACTS			
				Weekday Morning			Weekday Afternoon			Weekday Morning			Weekday Afternoon			Weekday Morning		Weekday Afternoon	
				LOS/ Delay	V/C Ratio	Queue Length (Veh)	LOS/ Delay	V/C Ratio	Queue Length (Veh)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	Change in LOS	Project Delay (Seconds)	Change in LOS	Project Delay (Seconds)
Playland Access Drive at Office Building Access Drive	TWSC	5.2 4.4	EB Ln NB Ln	B/12.4 A/8.3	0.00 0.00	0 0	B/11.4 A/8.3	0.01 0.00	0 0	B/11.2 A/8.3	0.03 0.01	0.1 0	B/11.0 A/8.3	0.03 0.01	0.1 0	No No	-1.2 0.0	No No	-0.4 0.0
Old Post Road at Playland Access Drive	TWSC	39 -- -- 4.4 -- --	EB Ln -- -- SB Ln -- --	A/8.0 -- -- F/56.6 -- --	0.02 -- -- 0.95 -- --	0.1 -- -- 11.9 -- --	A/7.7 -- -- D/28.5 -- --	0.01 -- -- 0.79 -- --	0 -- -- 7.6 -- --	A/9.6 A/9.6 B/19.4 C/28.4 A/2.0 B/19.6	0.41 -- 0.56 0.73 0.19 --	117 -- 158 171 21 --	A/9.5 A/9.5 B/14.5 B/14.5 B/15.9 B/12.3	0.26 -- 0.47 -- 0.13 --	61 -- 94 157 16 --	No -- -- F - C -- --	1.6 -- -- -28.2 -- --	No -- -- D - B -- --	1.8 -- -- -12.6 -- --
			Overall																

Notes:

- Synchro 8.0 is used for traffic signal capacity analysis.
- Synchro 8.0/HCM 2010 results is used for unsignalized capacity analysis.
- Level of Service determining parameter is called the service measure.
- TWSC = Two-Way STOP Control.
- For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
- V/C ratio indicates the amount of congestion for each Movement. Any V/C ratio greater than or equal to one indicates that the Movement is operating at above capacity.
- Synchro 8.0 Macroscopic model is used for storage/queue analysis.
- The Queue Length rows show the 95<sup>th</sup> percentile maximum queue length in feet.
- The Queue Length is for each lane. The total queue length is divided by the number of lanes and the lane utilization factor.
- The 95<sup>th</sup> percentile queue is the maximum back of the queue with the 95<sup>th</sup> percentile traffic volumes.
- Physical Units consist of the following:
  - Lane Group and Intersection Overall for Traffic Signal Controlled Intersections.
  - Movement for TWSC Intersections.

NB = Northbound EB = Eastbound SB = Southbound WB = Westbound  
L = Left Turn T = Through R = Right Turn APP = Approach

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8/20/15

**FREDERICK P. CLARK ASSOCIATES, INC.**

PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

Mayor Joseph Sack and  
Members of the Council

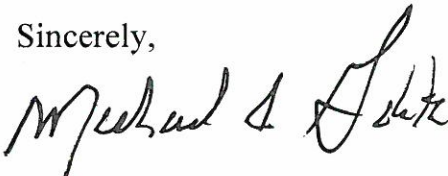
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to Old Post Road. Therefore, the provision of providing an alternative for commuters to access Playland Parkway and travel to the New York State Thruway would result in a benefit to overall traffic conditions along Old Post Road.

The analysis with traffic signal control indicate significant benefits and a reduction in delay at the STOP sign approaches.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael A. Galante". The signature is fluid and cursive, with the first name "Michael" being the most prominent part.

Michael A. Galante  
Executive Vice President

Enclosure

cc: Alan Weisman  
Jonathan Kraut, Esq.

## TABLES

Table A-1  
**SPEED STUDY – OFF-PEAK HOURS**  
**Age-Restricted Residential Development**  
**120 Old Post Road**  
**Rye, New York**

<b>SPEED STUDY RESULTS – PLAYLAND PARKWAY AT RAMP FROM U.S. ROUTE 1</b>		
	<b>Eastbound</b>	<b>Westbound</b>
	44	32
	34	47
	40	40
	39	26
	37	34
	30	31
	45	34
	31	38
	24	51
	32	34
	40	40
	33	41
	46	30
	37	33
	31	48
	38	41
	33	41
	40	28
	48	29
	37	39
	43	38
	44	45
	38	34
	35	34
	40	41
	33	38
	36	44
	41	47
	31	37
	43	46
<b>Average Speed</b>	38	38
<b>85<sup>TH</sup> Percentile Speed</b>	44	46

Source: Speed Study conducted by portable radar speed gun by Frederick P. Clark Associates, Inc., on Friday, August 07, 2015 between 12:30 and 1:15 P.M.

Table A-2  
INTERSECTION SIGHT DISTANCE ANALYSIS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

INTERSECTION SIGHT DISTANCE (ISD) ANALYSIS						
INTERSECTION Playland Parkway at Ramp from U.S. Route 1	Left Turn From Stop			Right Turn From Stop		
	Distance Available (Feet)		Distance Desirable (Feet)		Distance Desirable (Feet)	
			Posted Speed	Measured Speed	Posted Speed	Measured Speed
	Left	Right	30 MPH	46 MPH	30 MPH	44 MPH
	Adequate ISD Available		335	512	Adequate ISD Available	290
						421

Notes:

- Intersection Sight Distance (ISD) desirable are from the Minimum Acceptable Sight Distances Table provided on the Intersection Sight Distance Requirement Form prepared by Westchester County Department of Public Works (WCDPW).
- The posted speed limit is 30 miles per hour on Playland Parkway.
- The operational speed (85<sup>th</sup> percentile speed) was measured to be 44 miles per hour in the eastbound direction and 46 miles per hour in the westbound direction from Speed Study conducted by portable radar speed gun by Frederick P. Clark Associates, Inc., on Friday, August 07, 2015 between 12:30 and 1:15 P.M.

Frederick P. Clark Associates, Inc.

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PHOTOGRAPHS



**Playland Parkway at Ramp from U.S. Route 1 Looking West**



**Playland Parkway at Ramp from U.S. Route 1 Looking East**





**Playland Parkway at Ramp from U.S. Route 1 Looking West at 15 Feet from Edge of Pavement**



**Playland Parkway at Ramp from U.S. Route 1 Looking East at 15 Feet from Edge of Pavement**

BACKGROUND

Intersection

Int Delay, s/veh 0.1

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	444	1	2	106	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	1	2	108	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	454	0	566	454
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	112	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1107	-	486	606
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	913	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1107	-	485	606
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	911	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	485	1107	-	-	-
HCM Lane V/C Ratio	0.002	0.002	-	-	-
HCM Control Delay (s)	12.4	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0	0	-	-	-

Intersection

Int Delay, s/veh 24.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	296	148	19	301	211	89
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	322	161	20	324	220	93

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	631	273	313	0	-	0
Stage 1	266	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	445	766	1247	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	702	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	436	762	1240	-	-	-
Mov Cap-2 Maneuver	436	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	688	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	56.6	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1240	- 509	-	-
HCM Lane V/C Ratio	0.016	- 0.948	-	-
HCM Control Delay (s)	8	0 56.6	-	-
HCM Lane LOS	A	A F	-	-
HCM 95th %tile Q(veh)	0.1	- 11.9	-	-

Intersection

Int Delay, s/veh 23

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	47	139	523	74	161	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	156	588	83	181	126

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1502	244	307
Stage 1	244	-	-
Stage 2	1258	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	134	795	1254
Stage 1	797	-	-
Stage 2	268	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	68	795	1254
Mov Cap-2 Maneuver	68	-	-
Stage 1	797	-	-
Stage 2	136	-	-

Approach	SE	NE	SW
HCM Control Delay, s	101.3	9.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1254	-	215	-	-
HCM Lane V/C Ratio	0.469	-	0.972	-	-
HCM Control Delay (s)	10.4	0	101.3	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q(veh)	2.6	-	8.5	-	-

Intersection

Int Delay, s/veh 0.1

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	434	1	2	88	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	452	1	2	92	1	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	453	0	549	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	96	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1108	-	497	607
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	928	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1108	-	496	607
Mov Cap-2 Maneuver	-	-	-	-	496	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	926	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	565	1108	-	-	-
HCM Lane V/C Ratio	0.006	0.002	-	-	-
HCM Control Delay (s)	11.4	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0	0	-	-	-

Intersection

Int Delay, s/veh 14.8

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	328	108	10	195	122	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	373	123	11	222	139	91

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	428	184	230
Stage 1	184	-	-
Stage 2	244	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	584	858	1338
Stage 1	848	-	-
Stage 2	797	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	579	858	1338
Mov Cap-2 Maneuver	579	-	-
Stage 1	848	-	-
Stage 2	790	-	-

Approach	SE	NE	SW
HCM Control Delay, s	28.5	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1338	- 630	-	-
HCM Lane V/C Ratio	0.008	- 0.786	-	-
HCM Control Delay (s)	7.7	0 28.5	-	-
HCM Lane LOS	A	A D	-	-
HCM 95th %tile Q(veh)	0	- 7.6	-	-



Intersection

Int Delay, s/veh 8

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	33	54	419	104	148	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	62	482	120	170	154

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1330	247	324	0	-	0
Stage 1	247	-	-	-	-	-
Stage 2	1083	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	171	792	1236	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	100	792	1236	-	-	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	189	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	34.8	7.8	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1236	- 218	-	-
HCM Lane V/C Ratio	0.39	- 0.459	-	-
HCM Control Delay (s)	9.8	0 34.8	-	-
HCM Lane LOS	A	A D	-	-
HCM 95th %tile Q(veh)	1.9	- 2.2	-	-

## SCENARIO 1

Intersection

Int Delay, s/veh 0.4

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	444	6	6	106	8	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	6	6	108	8	11

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	459	576
Stage 1	-	-	456
Stage 2	-	-	120
Critical Hdwy	-	4.14	6.63
Critical Hdwy Stg 1	-	-	5.83
Critical Hdwy Stg 2	-	-	5.43
Follow-up Hdwy	-	2.22	3.519
Pot Cap-1 Maneuver	-	1098	463
Stage 1	-	-	606
Stage 2	-	-	905
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1098	460
Mov Cap-2 Maneuver	-	-	460
Stage 1	-	-	606
Stage 2	-	-	900

Approach	SE	NW	NE
HCM Control Delay, s	0	0.4	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	601	1098	-	-	-
HCM Lane V/C Ratio	0.032	0.006	-	-	-
HCM Control Delay (s)	11.2	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 11.8

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	303	152	21	301	211	91
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	329	165	23	324	220	95

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	636	274	315
Stage 1	267	-	-
Stage 2	369	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	442	765	1245
Stage 1	778	-	-
Stage 2	699	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	432	761	1238
Mov Cap-2 Maneuver	432	-	-
Stage 1	778	-	-
Stage 2	683	-	-

Approach	SE	NE	SW
HCM Control Delay, s	27.3	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1238	-	432	761	-	-
HCM Lane V/C Ratio	0.018	-	0.762	0.217	-	-
HCM Control Delay (s)	8	0	35.5	11	-	-
HCM Lane LOS	A	A	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	6.4	0.8	-	-

Intersection

Int Delay, s/veh 0.5

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	434	12	9	88	7	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	452	12	9	92	7	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	465	0	568	232
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	4.14	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.22	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1093	-	468	771
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1093	-	464	771
Mov Cap-2 Maneuver	-	-	-	-	464	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	906	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.8	11
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	620	1093	-	-	-
HCM Lane V/C Ratio	0.032	0.009	-	-	-
HCM Control Delay (s)	11	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 10.4

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	334	112	13	195	122	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	380	127	15	222	139	95

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	437	186	234	0	-	0
Stage 1	186	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	577	856	1333	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	569	856	1333	-	-	-
Mov Cap-2 Maneuver	569	-	-	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	19.8	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1333	-	569	856	-	-
HCM Lane V/C Ratio	0.011	-	0.667	0.149	-	-
HCM Control Delay (s)	7.7	0	23.1	9.9	-	-
HCM Lane LOS	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0	-	5	0.5	-	-

## SCENARIO 2



Intersection

Int Delay, s/veh 0.3

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	444	6	3	106	8	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	6	3	108	8	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	459	570
Stage 1	-	-	456
Stage 2	-	-	114
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1102	483
Stage 1	-	-	638
Stage 2	-	-	911
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1102	482
Mov Cap-2 Maneuver	-	-	482
Stage 1	-	-	638
Stage 2	-	-	908

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	523	1102	-	-	-
HCM Lane V/C Ratio	0.025	0.003	-	-	-
HCM Control Delay (s)	12.1	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 26

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	301	148	19	303	212	90
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	327	161	20	326	221	94

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	635	275	315	0	-	0
Stage 1	268	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	443	764	1245	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	434	760	1238	-	-	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	687	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	60.8	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1238	- 505	-	-
HCM Lane V/C Ratio	0.017	- 0.966	-	-
HCM Control Delay (s)	8	0 60.8	-	-
HCM Lane LOS	A	A F	-	-
HCM 95th %tile Q(veh)	0.1	- 12.5	-	-

Intersection

Int Delay, s/veh 0.2

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	2	4	2	320	359	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	4	2	348	390	1

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	743	391	391
Stage 1	391	-	-
Stage 2	352	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	383	658	1168
Stage 1	683	-	-
Stage 2	712	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	382	658	1168
Mov Cap-2 Maneuver	382	-	-
Stage 1	683	-	-
Stage 2	711	-	-

Approach	SE	NE	SW
HCM Control Delay, s	11.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1168	- 530	-	-
HCM Lane V/C Ratio	0.002	- 0.012	-	-
HCM Control Delay (s)	8.1	0 11.9	-	-
HCM Lane LOS	A	A B	-	-
HCM 95th %tile Q(veh)	0	0	-	-

Intersection

Int Delay, s/veh 0.4

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	434	12	4	88	7	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	452	12	4	92	7	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	465	0	558	458
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	100	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1096	-	491	603
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	924	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1096	-	489	603
Mov Cap-2 Maneuver	-	-	-	-	489	-
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	920	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.4	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	540	1096	-	-	-
HCM Lane V/C Ratio	0.027	0.004	-	-	-
HCM Control Delay (s)	11.9	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 15.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	333	108	10	196	124	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None		None
Storage Length	0		-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0		-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	378	123	11	223	141	93

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	433	188	234	0	-	0
Stage 1	188	-				
Stage 2	245					
Critical Hdwy	6.42	6.22	4.12		-	-
Critical Hdwy Stg 1	5.42					
Critical Hdwy Stg 2	5.42		-	-	-	
Follow-up Hdwy	3.518	3.318	2.218		-	-
Pot Cap-1 Maneuver	580	854	1333	-		
Stage 1	844			-	-	
Stage 2	796					-
Platoon blocked, %				-		
Mov Cap-1 Maneuver	575	854	1333		-	-
Mov Cap-2 Maneuver	575					-
Stage 1	844		-	-		
Stage 2	789				-	-

Approach	SE	NE	SW
HCM Control Delay, s	29.9	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1333	-	625		
HCM Lane V/C Ratio	0.009	-	0.802	-	
HCM Control Delay (s)	7.7	0	29.9		
HCM Lane LOS	A	A	D		
HCM 95th %tile Q(veh)	0		8	-	

Intersection

Int Delay, s/veh 0.2

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	1	4	3	205	230	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	4	3	223	250	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	480	251	252	0	-	0
Stage 1	251	-	-	-	-	-
Stage 2	229	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	545	788	1313	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	543	788	1313	-	-	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1313	-	723	-	-
HCM Lane V/C Ratio	0.002	-	0.008	-	-
HCM Control Delay (s)	7.7	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

## SCENARIO 3



Intersection

Int Delay, s/veh 0.3

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	444	6	3	106	8	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	6	3	108	8	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	459	570
Stage 1	-	-	456
Stage 2	-	-	114
Critical Hdwy	-	4.14	6.63
Critical Hdwy Stg 1	-	-	5.83
Critical Hdwy Stg 2	-	-	5.43
Follow-up Hdwy	-	2.22	3.519
Pot Cap-1 Maneuver	-	1098	467
Stage 1	-	-	606
Stage 2	-	-	910
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1098	466
Mov Cap-2 Maneuver	-	-	466
Stage 1	-	-	606
Stage 2	-	-	907

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	550	1098	-	-	-
HCM Lane V/C Ratio	0.024	0.003	-	-	-
HCM Control Delay (s)	11.7	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 11.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	301	148	19	303	212	90
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	327	161	20	326	221	94

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	635	275	315	0	-	0
Stage 1	268	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	443	764	1245	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	434	760	1238	-	-	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	687	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	26.8	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1238	-	434	760	-	-
HCM Lane V/C Ratio	0.017	-	0.754	0.212	-	-
HCM Control Delay (s)	8	0	34.6	11	-	-
HCM Lane LOS	A	A	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	6.3	0.8	-	-

Intersection

Int Delay, s/veh 0.2

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	2	4	2	320	359	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	4	2	348	390	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	743	391	391	0	-	0
Stage 1	391	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	383	658	1168	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	382	658	1168	-	-	-
Mov Cap-2 Maneuver	382	-	-	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	711	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	11.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1168	-	530	-	-
HCM Lane V/C Ratio	0.002	-	0.012	-	-
HCM Control Delay (s)	8.1	0	11.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection

Int Delay, s/veh 0.4

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	434	12	4	88	7	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	452	12	4	92	7	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	465	0	558	232
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	100	-
Critical Hdwy	-	-	4.14	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.22	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1093	-	475	771
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1093	-	473	771
Mov Cap-2 Maneuver	-	-	-	-	473	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	919	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.4	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	586	1093	-	-	-
HCM Lane V/C Ratio	0.025	0.004	-	-	-
HCM Control Delay (s)	11.3	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 10.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	333	108	10	196	124	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	378	123	11	223	141	93

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	433	188	234
Stage 1	188	-	-
Stage 2	245	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	580	854	1333
Stage 1	844	-	-
Stage 2	796	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	575	854	1333
Mov Cap-2 Maneuver	575	-	-
Stage 1	844	-	-
Stage 2	789	-	-

Approach	SE	NE	SW
HCM Control Delay, s	19.4	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1333	-	575	854	-	-
HCM Lane V/C Ratio	0.009	-	0.658	0.144	-	-
HCM Control Delay (s)	7.7	0	22.5	9.9	-	-
HCM Lane LOS	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0	-	4.8	0.5	-	-

Intersection

Int Delay, s/veh 0.2

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	1	4	3	205	230	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	4	3	223	250	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	480	251	252	0	-	0
Stage 1	251	-	-	-	-	-
Stage 2	229	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	545	788	1313	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	543	788	1313	-	-	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1313	-	723	-	-
HCM Lane V/C Ratio	0.002	-	0.008	-	-
HCM Control Delay (s)	7.7	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

## SCENARIO 4



Intersection

Int Delay, s/veh 0.4

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	444	6	6	106	8	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	6	6	108	8	11

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	459	576
Stage 1	-	-	456
Stage 2	-	-	120
Critical Hdwy	-	4.14	6.63
Critical Hdwy Stg 1	-	-	5.83
Critical Hdwy Stg 2	-	-	5.43
Follow-up Hdwy	-	2.22	3.519
Pot Cap-1 Maneuver	-	1098	463
Stage 1	-	-	606
Stage 2	-	-	905
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1098	460
Mov Cap-2 Maneuver	-	-	460
Stage 1	-	-	606
Stage 2	-	-	900

Approach	SE	NW	NE
HCM Control Delay, s	0	0.4	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	601	1098	-	-	-
HCM Lane V/C Ratio	0.032	0.006	-	-	-
HCM Control Delay (s)	11.2	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 9.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	303	152	21	195	211	91
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	329	165	23	210	220	95

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	522	274	315
Stage 1	267	-	-
Stage 2	255	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	515	765	1245
Stage 1	778	-	-
Stage 2	788	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	504	761	1238
Mov Cap-2 Maneuver	504	-	-
Stage 1	778	-	-
Stage 2	771	-	-

Approach	SE	NE	SW
HCM Control Delay, s	20.1	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1238	-	504	761	-	-
HCM Lane V/C Ratio	0.018	-	0.653	0.217	-	-
HCM Control Delay (s)	8	0	24.6	11	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	4.7	0.8	-	-

Intersection

Int Delay, s/veh 11.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	47	139	420	78	163	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	156	472	88	183	126

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1277	246	309	0	-	0
Stage 1	246	-	-	-	-	-
Stage 2	1031	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	184	793	1252	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	111	793	1252	-	-	-
Mov Cap-2 Maneuver	111	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	208	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	37.4	8.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NEL	NET SELn1	SWT	SWR
Capacity (veh/h)	1252	- 311	-	-
HCM Lane V/C Ratio	0.377	- 0.672	-	-
HCM Control Delay (s)	9.6	0 37.4	-	-
HCM Lane LOS	A	A E	-	-
HCM 95th %tile Q(veh)	1.8	- 4.5	-	-

Intersection

Int Delay, s/veh 0.5

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	434	12	9	88	7	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	452	12	9	92	7	12

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	465	568
Stage 1	-	-	458
Stage 2	-	-	110
Critical Hdwy	-	4.14	6.63
Critical Hdwy Stg 1	-	-	5.83
Critical Hdwy Stg 2	-	-	5.43
Follow-up Hdwy	-	2.22	3.519
Pot Cap-1 Maneuver	-	1093	468
Stage 1	-	-	604
Stage 2	-	-	914
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1093	464
Mov Cap-2 Maneuver	-	-	464
Stage 1	-	-	604
Stage 2	-	-	906

Approach	SE	NW	NE
HCM Control Delay, s	0	0.8	11
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	620	1093	-	-	-
HCM Lane V/C Ratio	0.032	0.009	-	-	-
HCM Control Delay (s)	11	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 9.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	334	112	13	133	122	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0		-	0	0	-
Grade, %	0		-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	380	127	15	151	139	95

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	367	186	234	0	-	0
Stage 1	186		-		-	
Stage 2	181		-		-	-
Critical Hdwy	6.42	6.22	4.12		-	
Critical Hdwy Stg 1	5.42		-		-	
Critical Hdwy Stg 2	5.42		-		-	-
Follow-up Hdwy	3.518	3.318	2.218		-	
Pot Cap-1 Maneuver	633	856	1333		-	
Stage 1	846		-		-	-
Stage 2	850		-		-	
Platoon blocked, %					-	
Mov Cap-1 Maneuver	625	856	1333	-	-	-
Mov Cap-2 Maneuver	625		-		-	
Stage 1	846		-		-	
Stage 2	840		-		-	-

Approach	SE		NE		SW
HCM Control Delay, s	16.9		0.7		0
HCM LOS	C				

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1333	-	625	856	-	
HCM Lane V/C Ratio	0.011	-	0.607	0.149	-	
HCM Control Delay (s)	7.7	0	19.3	9.9	-	
HCM Lane LOS	A	A	C	A	-	
HCM 95th %tile Q(veh)	0	-	4.1	0.5	-	

Intersection

Int Delay, s/veh 6.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Vol, veh/h	33	54	360	107	152	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None	-	None
Storage Length	0		-	-	-	-
Veh in Median Storage, #	0		-	0	0	-
Grade, %	0		-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	62	414	123	175	154

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1203	252	329	0	-	0
Stage 1	252		-	-	-	-
Stage 2	951		-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42		-	-	-	-
Critical Hdwy Stg 2	5.42		-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	204	787	1231	-	-	-
Stage 1	790		-	-	-	-
Stage 2	375		-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	130	787	1231	-	-	-
Mov Cap-2 Maneuver	130		-	-	-	-
Stage 1	790		-	-	-	-
Stage 2	240		-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	26	7.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1231	-	270	-	-
HCM Lane V/C Ratio	0.336	-	0.37	-	-
HCM Control Delay (s)	9.4	0	26	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	1.5	-	1.6	-	-

## SCENARIO 5



Intersection











Int Delay, s/veh 0.4







Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	444	6	6	106	8	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	6	6	108	8	11

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	459	576
Stage 1	-	-	456
Stage 2	-	-	120
Critical Hdwy	-	4.14	6.63
Critical Hdwy Stg 1	-	-	5.83
Critical Hdwy Stg 2	-	-	5.43
Follow-up Hdwy	-	2.22	3.519
Pot Cap-1 Maneuver	-	1098	463
Stage 1	-	-	606
Stage 2	-	-	905
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1098	460
Mov Cap-2 Maneuver	-	-	460
Stage 1	-	-	606
Stage 2	-	-	900

Approach	SE	NW	NE
HCM Control Delay, s	0	0.4	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	601	1098	-	-	-
HCM Lane V/C Ratio	0.032	0.006	-	-	-
HCM Control Delay (s)	11.2	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

								
Lane Group	SEL	SER	NEL	NET	SWT	SWR	ø2	ø4
Lane Configurations								
Volume (vph)	303	152	21	301	211	91		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12		
Grade (%)	0%			0%	0%			
Storage Length (ft)	0	0	0			0		
Storage Lanes	1	1	0			0		
Taper Length (ft)	25		25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Ped Bike Factor	0.98			1.00	0.99			
Frt		0.850			0.959			
Flt Protected	0.950			0.997				
Satd. Flow (prot)	1770	1583	0	1857	1770	0		
Flt Permitted	0.950			0.975				
Satd. Flow (perm)	1730	1583	0	1815	1770	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		165			33			
Link Speed (mph)	30			30	30			
Link Distance (ft)	139			484	335			
Travel Time (s)	3.2			11.0	7.6			
Confl. Peds. (#/hr)	10	10	10			10		
Confl. Bikes (#/hr)								
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96		
Growth Factor	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0		
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%	0%			
Adj. Flow (vph)	329	165	23	324	220	95		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	329	165	0	347	315	0		
Turn Type	Prot	pt+ov	pm+pt	NA	NA			
Protected Phases	3	3 1	1	1 2	2 4		2	4
Permitted Phases			1 2					
Detector Phase	3	3 1	1	1 2	2 4			
Switch Phase								
Minimum Initial (s)	8.0		5.0				15.0	8.0
Minimum Split (s)	13.0		10.0				20.0	13.0
Total Split (s)	24.0		13.0				24.0	24.0
Total Split (%)	28.2%		15.3%				28%	28%
Yellow Time (s)	3.0		3.0				3.0	3.0
All-Red Time (s)	2.0		2.0				2.0	2.0
Lost Time Adjust (s)	0.0							
Total Lost Time (s)	5.0							
Lead/Lag	Lead		Lead				Lag	Lag
Lead-Lag Optimize?								
Recall Mode	None		None				None	None
Act Effct Green (s)	18.4	26.5		27.0	29.6			
Actuated g/C Ratio	0.24	0.35		0.35	0.39			

								
Lane Group	SEL	SER	NEL	NET	SWT	SWR	ø2	ø4
v/c Ratio	0.77	0.25		0.53	0.44			
Control Delay	41.2	2.7		21.4	7.7			
Queue Delay	3.5	0.0		0.0	0.0			
Total Delay	44.7	2.7		21.4	7.7			
LOS	D	A		C	A			
Approach Delay	30.7			21.4	7.7			
Approach LOS	C			C	A			
Queue Length 50th (ft)	143	0		113	25			
Queue Length 95th (ft)	#286	19		202	68			
Internal Link Dist (ft)	59			404	255			
Turn Bay Length (ft)								
Base Capacity (vph)	442	668		649	901			
Starvation Cap Reductn	0	0		0	0			
Spillback Cap Reductn	53	0		0	0			
Storage Cap Reductn	0	0		0	0			
Reduced v/c Ratio	0.85	0.25		0.53	0.35			









#### Intersection Summary










Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 76.1  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.86  
 Intersection Signal Delay: 21.6  
 Intersection Capacity Utilization 58.2%  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.







Intersection LOS: C

ICU Level of Service B

#### Splits and Phases: 8: OLD POST ROAD & PLAYLAND A.D.

  ø1	  ø2	  ø3	  ø4
13 s	24 s	24 s	24 s









							ø1	ø3
Lane Group	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Volume (vph)	47	139	526	78	163	112		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12		
Grade (%)	0%			0%	0%			
Storage Length (ft)	0	0	0			0		
Storage Lanes	1	0	0			0		
Taper Length (ft)	25		25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Ped Bike Factor	0.96			1.00	0.98			
Frt	0.899				0.945			
Flt Protected	0.987			0.958				
Satd. Flow (prot)	1601	0	0	1785	1730	0		
Flt Permitted	0.987			0.359				
Satd. Flow (perm)	1592	0	0	666	1730	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)	156				38			
Link Speed (mph)	30			30	30			
Link Distance (ft)	589			335	220			
Travel Time (s)	13.4			7.6	5.0			
Confl. Peds. (#/hr)	10	10	10			10		
Confl. Bikes (#/hr)								
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89		
Growth Factor	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0		
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%	0%			
Adj. Flow (vph)	53	156	591	88	183	126		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	209	0	0	679	309	0		
Turn Type	Prot		pm+pt	NA	NA			
Protected Phases	4		1 3	1 2 3	2		1	3
Permitted Phases			1 2 3					
Detector Phase	4		1 3	1 2 3	2			
Switch Phase								
Minimum Initial (s)	8.0				15.0		5.0	8.0
Minimum Split (s)	13.0				20.0		10.0	13.0
Total Split (s)	24.0				24.0		13.0	24.0
Total Split (%)	28.2%				28.2%		15%	28%
Yellow Time (s)	3.0				3.0		3.0	3.0
All-Red Time (s)	2.0				2.0		2.0	2.0
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	5.0				5.0			
Lead/Lag	Lag				Lag		Lead	Lead
Lead-Lag Optimize?								
Recall Mode	None				None		None	None
Act Effct Green (s)	10.6			45.5	19.0			
Actuated g/C Ratio	0.14			0.60	0.25			

								
Lane Group	SEL	SER	NEL	NET	SWT	SWR	ø1	ø3
v/c Ratio	0.59			0.86	0.67			
Control Delay	16.7			21.0	31.7			
Queue Delay	0.0			0.0	0.0			
Total Delay	16.7			21.0	31.7			
LOS	B			C	C			
Approach Delay	16.7			21.0	31.7			
Approach LOS	B			C	C			
Queue Length 50th (ft)	23			82	115			
Queue Length 95th (ft)	82			#308	#230			
Internal Link Dist (ft)	509			255	140			
Turn Bay Length (ft)								
Base Capacity (vph)	517			800	460			
Starvation Cap Reductn	0			0	0			
Spillback Cap Reductn	0			0	0			
Storage Cap Reductn	0			0	0			
Reduced v/c Ratio	0.40			0.85	0.67			

#### Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 76.1  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.86  
 Intersection Signal Delay: 23.0  
 Intersection Capacity Utilization 73.5%  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

#### Splits and Phases: 9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

 #8  #9 ø1	 #8  #9 ø2	 #8  #9 ø3	 #8  #9 ø4
13 s	24 s	24 s	24 s

Intersection











Int Delay, s/veh 0.5

Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	434	12	9	88	7	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	452	12	9	92	7	12







Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	465	0	568	232
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	4.14	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.22	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1093	-	468	771
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1093	-	464	771
Mov Cap-2 Maneuver	-	-	-	-	464	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	906	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.8	11
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	620	1093	-	-	-
HCM Lane V/C Ratio	0.032	0.009	-	-	-
HCM Control Delay (s)	11	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

								
Lane Group	SEL	SER	NEL	NET	SWT	SWR	ø2	ø4
Lane Configurations								
Volume (vph)	334	112	13	195	122	84		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12		
Grade (%)	0%			0%	0%			
Storage Length (ft)	0	0	0			0		
Storage Lanes	1	1	0			0		
Taper Length (ft)	25		25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Ped Bike Factor	0.98			1.00	0.99			
Frt		0.850			0.945			
Flt Protected	0.950			0.997				
Satd. Flow (prot)	1770	1583	0	1857	1738	0		
Flt Permitted	0.950			0.985				
Satd. Flow (perm)	1730	1583	0	1834	1738	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		127			52			
Link Speed (mph)	30			30	30			
Link Distance (ft)	139			484	335			
Travel Time (s)	3.2			11.0	7.6			
Confl. Peds. (#/hr)	10	10	10			10		
Confl. Bikes (#/hr)								
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88		
Growth Factor	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0		
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%	0%			
Adj. Flow (vph)	380	127	15	222	139	95		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	380	127	0	237	234	0		
Turn Type	Prot	pt+ov	pm+pt	NA	NA			
Protected Phases	3	3 1	1	1 2	2 4		2	4
Permitted Phases			1 2					
Detector Phase	3	3 1	1	1 2	2 4			
Switch Phase								
Minimum Initial (s)	8.0		5.0				15.0	8.0
Minimum Split (s)	13.0		10.0				20.0	13.0
Total Split (s)	24.0		13.0				24.0	24.0
Total Split (%)	28.2%		15.3%				28%	28%
Yellow Time (s)	3.0		3.0				3.0	3.0
All-Red Time (s)	2.0		2.0				2.0	2.0
Lost Time Adjust (s)	0.0							
Total Lost Time (s)	5.0							
Lead/Lag	Lead		Lead				Lag	Lag
Lead-Lag Optimize?								
Recall Mode	None		None				None	None
Act Effct Green (s)	18.7	26.7		27.0	27.8			
Actuated g/C Ratio	0.25	0.36		0.36	0.37			



								
Lane Group	SEL	SER	NEL	NET	SWT	SWR	ø2	ø4
v/c Ratio	0.86	0.20		0.36	0.34			
Control Delay	47.5	2.6		16.6	6.7			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	47.5	2.6		16.6	6.7			
LOS	D	A		B	A			
Approach Delay	36.3			16.6	6.7			
Approach LOS	D			B	A			
Queue Length 50th (ft)	165	0		68	10			
Queue Length 95th (ft)	#313	17		121	m49			
Internal Link Dist (ft)	59			404	255			
Turn Bay Length (ft)								
Base Capacity (vph)	451	654		666	911			
Starvation Cap Reductn	0	0		0	0			
Spillback Cap Reductn	0	0		0	0			
Storage Cap Reductn	0	0		0	0			
Reduced v/c Ratio	0.84	0.19		0.36	0.26			

#### Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 74.5

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 24.4

Intersection LOS: C

Intersection Capacity Utilization 47.8%

ICU Level of Service A

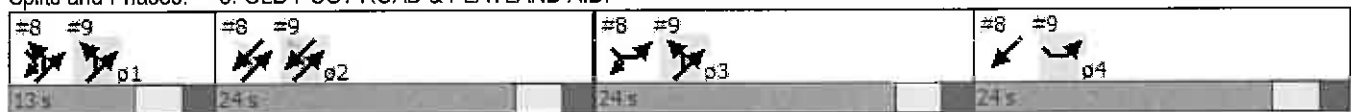
Analysis Period (min) 15










# 95th percentile volume exceeds capacity, queue may be longer.







Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

#### Splits and Phases: 8: OLD POST ROAD & PLAYLAND A.D.











								
Lane Group	SEL	SER	NEL	NET	SWT	SWR	ø1	ø3
Lane Configurations								
Volume (vph)	33	54	422	107	152	134		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12		
Grade (%)	0%			0%	0%			
Storage Length (ft)	0	0	0			0		
Storage Lanes	1	0	0			0		
Taper Length (ft)	25		25					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Ped Bike Factor	0.97			1.00	0.98			
Frt	0.916				0.937			
Flt Protected	0.981			0.962				
Satd. Flow (prot)	1630	0	0	1792	1711	0		
Flt Permitted	0.981			0.349				
Satd. Flow (perm)	1616	0	0	647	1711	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)	62				48			
Link Speed (mph)	30			30	30			
Link Distance (ft)	589			335	220			
Travel Time (s)	13.4			7.6	5.0			
Confl. Peds. (#/hr)	10	10	10			10		
Confl. Bikes (#/hr)								
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		
Growth Factor	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0		
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%	0%			
Adj. Flow (vph)	38	62	485	123	175	154		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	100	0	0	608	329	0		
Turn Type	Prot		pm+pt	NA	NA			
Protected Phases	4		1 3	1 2 3	2		1	3
Permitted Phases			1 2 3					
Detector Phase	4		1 3	1 2 3	2			
Switch Phase								
Minimum Initial (s)	8.0				15.0		5.0	8.0
Minimum Split (s)	13.0				20.0		10.0	13.0
Total Split (s)	24.0				24.0		13.0	24.0
Total Split (%)	28.2%				28.2%		15%	28%
Yellow Time (s)	3.0				3.0		3.0	3.0
All-Red Time (s)	2.0				2.0		2.0	2.0
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	5.0				5.0			
Lead/Lag	Lag				Lag		Lead	Lead
Lead-Lag Optimize?								
Recall Mode	None				None		None	None
Act Effct Green (s)	8.8			45.7	19.0			
Actuated g/C Ratio	0.12			0.61	0.26			

								
Lane Group	SEL	SER	NEL	NET	SWT	SWR	ø1	ø3
v/c Ratio	0.40			0.75	0.70			
Control Delay	19.6			13.4	31.0			
Queue Delay	0.0			0.0	0.0			
Total Delay	19.6			13.4	31.0			
LOS	B			B	C			
Approach Delay	19.6			13.4	31.0			
Approach LOS	B			B	C			
Queue Length 50th (ft)	16			56	116			
Queue Length 95th (ft)	55			m108	#208			
Internal Link Dist (ft)	509			255	140			
Turn Bay Length (ft)								
Base Capacity (vph)	461			814	471			
Starvation Cap Reductn	0			0	0			
Spillback Cap Reductn	0			0	0			
Storage Cap Reductn	0			0	0			
Reduced v/c Ratio	0.22			0.75	0.70			

#### Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 74.5  
 Natural Cycle: 60  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.86  
 Intersection Signal Delay: 19.6  
 Intersection Capacity Utilization 64.8%  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

#### Splits and Phases: 9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

#8	#9	#8	#9	#8	#9	#8	#9
							
ø1		ø2		ø3		ø4	
13 s		24 s		24 s		24 s	

## SCENARIO 6

Intersection











Int Delay, s/veh 0.4







Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	444	6	6	106	8	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	6	6	108	8	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	459	0	576	230
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	120	-
Critical Hdwy	-	-	4.14	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.22	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1098	-	463	773
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	905	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1098	-	460	773
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	900	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.4	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	601	1098	-	-	-
HCM Lane V/C Ratio	0.032	0.006	-	-	-
HCM Control Delay (s)	11.2	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	303	152	21	301	211	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98			1.00	0.99	
Frt		0.850			0.959	
Flt Protected	0.950			0.997		
Satd. Flow (prot)	1770	1583	0	1857	1766	0
Flt Permitted	0.950			0.981		
Satd. Flow (perm)	1742	1583	0	1827	1766	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		165			36	
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)	10	10	10			10
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	329	165	23	324	220	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	329	165	0	347	315	0
Turn Type	Prot	pt+ov	pm+pt	NA	NA	
Protected Phases	3	3 1	1	1 2	2	
Permitted Phases			1 2			
Detector Phase	3	3 1	1	1 2	2	
Switch Phase						
Minimum Initial (s)	8.0		5.0		15.0	
Minimum Split (s)	13.0		10.0		20.0	
Total Split (s)	24.0		14.0		22.0	
Total Split (%)	40.0%		23.3%		36.7%	
Yellow Time (s)	3.0		3.0		3.0	
All-Red Time (s)	2.0		2.0		2.0	
Lost Time Adjust (s)	0.0				0.0	
Total Lost Time (s)	5.0				5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Recall Mode	None		None		None	
Act Effct Green (s)	13.4	26.5		23.9	15.9	
Actuated g/C Ratio	0.26	0.50		0.46	0.30	




						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
v/c Ratio	0.73	0.19		0.41	0.56	
Control Delay	28.4	2.0		9.6	19.4	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	28.4	2.0		9.6	19.4	
LOS	C	A		A	B	
Approach Delay	19.6			9.6	19.4	
Approach LOS	B			A	B	
Queue Length 50th (ft)	93	0		52	73	
Queue Length 95th (ft)	171	21		117	158	
Internal Link Dist (ft)	59			404	255	
Turn Bay Length (ft)						
Base Capacity (vph)	649	895		922	603	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.51	0.18		0.38	0.52	

#### Intersection Summary

Area Type: Other  
 Cycle Length: 60  
 Actuated Cycle Length: 52.5  
 Natural Cycle: 50  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.73  
 Intersection Signal Delay: 16.5  
 Intersection Capacity Utilization 58.2%  
 Analysis Period (min) 15

Intersection LOS: B  
 ICU Level of Service B

Splits and Phases: 8: OLD POST ROAD & PLAYLAND A.D.

 p1	 p2	 p3
14 s	22 s	24 s

Intersection

Int Delay, s/veh 0.5











Movement	SET	SER	NWL	NWT	NEL	NER
Vol, veh/h	434	12	9	88	7	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	452	12	9	92	7	12







Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	465	0	568	232
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	4.14	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.22	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1093	-	468	771
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1093	-	464	771
Mov Cap-2 Maneuver	-	-	-	-	464	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	906	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.8	11
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	620	1093	-	-	-
HCM Lane V/C Ratio	0.032	0.009	-	-	-
HCM Control Delay (s)	11	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-



						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	334	112	13	133	122	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.945	
Flt Protected	0.950			0.996		
Satd. Flow (prot)	1770	1583	0	1855	1760	0
Flt Permitted	0.950			0.977		
Satd. Flow (perm)	1770	1583	0	1820	1760	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		127			62	
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	380	127	15	151	139	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	380	127	0	166	234	0
Turn Type	Prot	pt+ov	pm+pt	NA	NA	
Protected Phases	3	3 1	1	1 2	2	
Permitted Phases			1 2			
Detector Phase	3	3 1	1	1 2	2	
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	
Minimum Split (s)	20.0		8.0		20.0	
Total Split (s)	27.0		9.0		24.0	
Total Split (%)	45.0%		15.0%		40.0%	
Yellow Time (s)	3.5		3.5		3.5	
All-Red Time (s)	0.5		0.5		0.5	
Lost Time Adjust (s)	0.0				0.0	
Total Lost Time (s)	4.0				4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Min		None		Min	
Act Effct Green (s)	14.6	24.5		13.9	10.2	
Actuated g/C Ratio	0.36	0.61		0.34	0.25	




						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
v/c Ratio	0.59	0.13		0.26	0.47	
Control Delay	15.9	1.7		9.5	14.5	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	15.9	1.7		9.5	14.5	
LOS	B	A		A	B	
Approach Delay	12.3			9.5	14.5	
Approach LOS	B			A	B	
Queue Length 50th (ft)	69	0		20	33	
Queue Length 95th (ft)	157	16		61	94	
Internal Link Dist (ft)	59			404	255	
Turn Bay Length (ft)						
Base Capacity (vph)	1103	1103		1166	989	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.34	0.12		0.14	0.24	

#### Intersection Summary

Area Type: Other  
 Cycle Length: 60  
 Actuated Cycle Length: 40.3  
 Natural Cycle: 50  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.59  
 Intersection Signal Delay: 12.4  
 Intersection Capacity Utilization 43.0%  
 Analysis Period (min) 15

Intersection LOS: B  
 ICU Level of Service A

#### Splits and Phases: 8: OLD POST ROAD & PLAYLAND A.D.

 p1	 p2	 p3
9 s	24 s	27 s

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July 30, 2015  
***VIA HAND DELIVERY***

Mayor Joseph Sack and  
Members of the City Council  
1051 Boston Post Road  
Rye, New York 10580

Re: ***Re-zoning of 120 Old Post Road***

Dear Mayor Sack and Members of the City Council:

As you know, we represent Old Post Road Associates, LLC (the "Petitioner"), in connection with a Petition for Zone Change, Zoning Map Amendment and Amendment to City of Rye Zoning Ordinance (the "Petition") for the above referenced property (the "Subject Property"). We respectfully enclose supplemental materials and information for your review and consideration concerning the Petition as requested at the last City Council meeting.

At the last City Council meeting there were various recommendations of the Planning Commission that were discussed. Attached hereto as Exhibit 1 is a revised version of the Proposed Text Amendments to Chapter 197 reflecting some of those suggested revisions. The changes to the Proposed Text Amendments are as follows:

- §197-8.1.B(4) – included a minimum landscaping buffer of 10 feet on the perimeter of the site
- §197-8.1.B(5) – included a maximum building coverage of thirty-five percent (35%)
- §197-28 – revised the parking requirements to provide a minimum of 1.5 spaces per dwelling unit
- §197-30.E – included a provision allowing for tandem parking for multiple spaces reserved to a single dwelling unit
- Table 2 – revised to include a minimum 50 foot setback for the shortest side yard and rear yard

We have also met with the City Planner and City Engineer to review potential traffic circulation improvements within the immediate vicinity of the Subject Property. While our review of these issues is ongoing, the Petitioner's traffic engineer anticipates being able to present at your upcoming meeting the potential benefits and impacts of the following concepts:

- The introduction of a right-turn only lane on Playland Access Drive onto Old Post Road immediately adjacent to and in front of the Subject Property;
- The utilization of the "emergency access" driveway from the Subject Property onto Old Post Road; and
- The creation of a left-turn onto Playland Parkway from the access ramp heading northbound on Boston Post Road which currently only permits eastbound access onto Playland Parkway and the diversion of traffic destined for I-95 to this entrance and off Old Post Road by way of new signage on northbound Boston Post Road.

At the last Council meeting there was also a question raised by a member of the public considering other alternative uses of the Subject Property and a potential subdivision with conventional single-family homes. If the Council were to consider re-zoning the Subject Property to a single-family zoning district the most logical zone would be the R-2 District which abuts the Subject Property to the south and east. The R-2 zoning district requires a minimum lot size of ½ acre; therefore, under a subdivision of the Subject Property there could potentially be 14 new single family residences. The Petitioner has not analyzed the impacts of such development as that is not the Petitioner's desired objective in the instant Petition and we do not believe the Council would find such a use desirable. We believe the contemplated use for multi-family age restricted housing is a more appropriate transition between the single-family residential development to the east to the office use to the west and multi-family / assisted living use of the Osborn to the south.

Finally, as requested by the City Council, the Petitioner has engaged a site contractor and geotechnical engineer to perform some preliminary subsurface investigations in order to understand the extent of the anticipated rock removal in order to construct the project. We do not yet have test results but will continue to provide that information to your Council upon completion of the testing.

HKP

We look forward to presenting this information to the City Council and addressing any comments or questions of the Council or the public. Thank you for your attention to this matter.

Very Truly Yours,

HARFENIST KRAUT & PERLSTEIN LLP

By: Jonathan D. Kraut/lp  
Jonathan D. Kraut

# PROPOSED TEXT AMENDMENTS TO CHAPTER 197 OF RYE CITY CODE

## **§ 197-2 Districts**

RA-6 Active Senior Residence District – Minimum area per family 2,000 square feet

## **§ 197-8.1 Active Senior Residence District Regulations**

### **A. Limitations on Occupancy.**

- (1) The occupancy of residential units within the Active Senior Residence Zone shall be limited to:
  - a) A single person 55 years of age or older;
  - b) Two or three persons, all of whom are 55 years of age or older;
  - c) A married couple, live-in companion, or partner, one of which is 55 years of age or older;
  - d) The surviving spouse of a person 55 years of age or older, provided that the surviving spouse was duly registered as a resident of the development at the time of the elderly person's death;
  - e) One adult 18 years of age or older residing with a person who is 55 years of age or older, provided that said adult is essential to the long-term care of the elderly person as certified by a physician duly licensed in New York State
- (2) Persons under the age of 55 not specifically permitted to be occupants shall not be permitted to be permanent residents of dwelling units. For the purposes of this section, a "permanent resident" shall mean any person who resides within the dwelling for more than three consecutive weeks or in excess of 30 days in any calendar year, or has listed the residence as an abode for any purpose whatsoever, including, but not limited to, enrollment in public or private schools. Temporary occupancy by guests of families shall be permitted, provided that such occupancy does not exceed a total of 30 days in any calendar year.
- (3) Notwithstanding the foregoing, one dwelling unit within the community may be set aside to be occupied by a superintendent or building manager, to which the limitations on occupancy set forth above shall not apply.
- (4) The limitations on occupancy shall be included in the marketing materials for the development as well as within the rules and regulations or terms of any



leases, by-laws or covenants and restrictions for the development. Violations of the limitations on occupancy shall be enforceable by the City of Rye Building Inspector against the owner or lessee or the agent of any of them and shall be punishable by a fine of \$250 per day or by imprisonment not exceeding 15 days, or by both such fine and imprisonment. Exceptions to these regulations shall be granted if any limitations are determined to be in violation of any State or Federal law.

- (5) The Planning Commission shall have the right to require that the owner execute agreements and covenants as it may deem to be required during any site plan approval process as it may reasonably deem to be required to ensure compliance with the stated intent of this section. Said agreements or covenants shall be recorded in the office of the Westchester County Clerk and constitute a covenant running with the land. Such covenant or agreement may be modified or released only as set forth in said covenant or agreement or by the City Council.

#### B. Site Development

- (1) At least eighty percent (80%) of the required parking for the development shall be provided in a covered parking structure within the basement level of the principal structure(s).
- (2) For any corner lot abutting Boston Post Road or Old Post Road, the front lot line of the lot shall be Boston Post Road or Old Post Road for purposes of the applicable front yard setback irrespective of building arrangement. The provisions of § 197-52 shall not apply to properties in the RA-6 zone.
- (3) The provisions of § 197-8.A & C shall not apply to properties in the RA-6 zone.
- (4) A landscaping buffer a minimum of ten (10) feet wide shall be required to be provided around the perimeter of the site.
- (5) A maximum building coverage of thirty-five percent (35%) shall be permitted.

#### **§ 197-28 Schedule of Off-Street Parking Requirements**

- A. Schedule of parking requirements. Off-street automobile parking facilities shall be provided as follows:

<b>Number of Spaces per Unit (by Parking District)</b>				
<b>Use</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>Unit of Measurement and Conditions</b>
Apartments for active seniors located in RA-6 Districts	1.5	1.5	1.5	Dwelling unit

#### **§ 197-30 Layout and Location of Off-Street Parking Facilities**

- D. In RA-1, RA-2, RA-3, RA-4, RA-5 and RA-6 Districts, no off-street parking facility accessory to apartments or office buildings shall be developed within five feet of any lot line. Required off-street parking facilities accessory to other main uses shall conform to the provisions of Subsection C above.
- E. Subject to the discretion of the Planning Commission during site plan review, in the RA-6 District tandem parking arrangements may be utilized for multiple spaces reserved to a single dwelling unit.

#### **§ 197-44 Minimum Residential Floor Area**

- E. For dwelling units in apartments or other buildings containing three or more dwelling units in an RA-6 District, the minimum amount of residential floor area in each unit shall be 750 square feet for one bedroom units, 900 square feet for two bedroom units and 1,100 square feet for three bedroom units. Additionally, three-bedroom units must be equipped with at least 1 ½ bathrooms.



**§ 197-86 Tables of Regulations**

**TABLE OF REGULATIONS: TABLE A  
RESIDENCE DISTRICTS – USE REGULATIONS**

**Column 1**

**Permitted Main Uses**

RA-6 Districts

- (1) Apartments for active seniors. A detached residence for three or more families or housekeeping units, or a group of buildings housing three or more families on one lot, subject to the requirements of § 197-7 and § 197-8.1.

**TABLE OF REGULATIONS: TABLE A  
RESIDENCE DISTRICTS – USE REGULATIONS**

**Column 2**

**Uses Permitted Subject to Additional  
Standards and Requirements**

**(Subject to the requirements and provisions of §197-10)**

RA-6 Districts

(Reserved)

**TABLE OF REGULATIONS: TABLE A  
RESIDENCE DISTRICTS – USE REGULATIONS**

**Column 3**

**Permitted Accessory Uses**

**(Subject to the requirements and provisions of §197-9)**

RA-6 Districts

- (1) Off-street parking facilities, subject to the requirements and provisions of § 197-8.1.
- (2) Other accessory uses or structures customarily incidental to any permitted main use, including active and passive recreational facilities (i.e. fitness center, pool, library, media room, storage areas, etc.) for the use of the residents of the principle structure. Outside storage on land of boats and boat trailers is prohibited.

- (3) The filming of movies, commercials, documentaries, serials, shows, performances or other similar events and activities, including still photography, as regulated in RA-4 Districts.

Table No. 2. Existing and Proposed Multi-Family Zoning Districts &amp; Bulk Regulations

4		5	6	7	8	9	10	11	12	13	14	15	16
District	Use	Maximum Ratio of Floor Area to Lot Area <sup>(i)</sup>	Minimum Size of Lot (AC or SF) per a. Family or Equiv. <sup>(a)</sup> or b. Nonresidential Use	Minimum Width (feet) [See § 197-36]	Minimum Yard Dimensions (feet)				Specified Distance (feet) as required in Column 2 (Uses)	Maximum Height		One-Story Accessory Structures	
					Front <sup>(b)</sup>	One Side <sup>(b)(c)</sup>	Total of Two Side Yards	Rear <sup>(b)</sup>		(stories)	(feet)	Maximum Coverage of Required Rear Yard	Minimum Distance to Side Line (feet)
RA-1	Single-family house	0.40	5,000	50	25	8	20	30	40	2.5	35	30%	5
	Two-family house	0.40	5,000	60	25	8	20	30	--	2.5	35	30%	5
	Apartment house	0.40	5,000 <sup>(c)</sup>	100	70	50	100	50	--	2.5	35	30%	10
RA-2	Single-family house	0.45	5,000	50	25	8	20	50	30	2.5	35	30%	5
	Two-family house	0.45	3,500	60	25	8	20	50	--	2.5	35	30%	5
	Apartment house	0.45	3,500 <sup>(c)</sup>	100	25	20	50	40	--	2.5	35	30%	10
RA-3	Single-family house	0.50	5,000	50	25	8	20	30	20	2.5	35	35%	5
	Two-family house	0.50	3,000	60	25	8	20	30	--	2.5	35	35%	5
	Apartment house	0.50	2,500 <sup>(c)</sup>	80	25	20	40	40	--	2.5	40	35%	10
RA-4	Single-family house	0.50	5,000	50	25	8	20	30	--	2.5	35	35%	5
	Two-family house	0.50	3,000	60	25	8	20	30	--	2.5	35	35%	5
	Apartment house	0.50	2,500 <sup>(c)</sup>	80	25	20 <sup>(d)</sup>	40 <sup>(d)</sup>	40 <sup>(d)</sup>	--	2.5 <sup>(f)</sup>	35 <sup>(f)</sup>	35%	10
RA-5	Apartments for senior citizens and handicapped persons	1.00	1 AC	80	25		40	40	--	4	50	35%	10
RA-6	Apartments for active senior citizens	0.8	2,000	400	100	50	100	50	--	4	45	35%	10

(a) Equivalent to one (1) family in computing minimum lot sizes:

[1] Hotels and lodging houses, each two (2) guest sleeping rooms.

[2] Hospitals and similar institutions, each two (2) hospital beds.

[3] Medical offices, each two (2) doctors plus three (3) other employees.

[4] Other nonresidential main uses not specifically provided for in this Table of Regulations or elsewhere in Chapter 197, each one thousand five hundred (1,500) square feet of floor space

(b) [1] Wherever a required yard abuts a street less than fifty (50) feet in width, the minimum yard dimension(s) shall be measured from a line of twenty-five (25) feet from parallel to the center line of said street.

[2] No building shall be nearer than one hundred (100) feet to center line of Post Road between Mamaroneck town line and Central Avenue.

(c) For corner lots, corner side yards at least one fifth (1/5) of the lot width at the location of the building, but need not be more than front yard minimum, except as provided in § 197-62. Permitted nonresidential main uses shall have minimum side yard one and one half (1 1/2) times width specified for a single-family house (See § 197-52).

(d) Twenty-five (25) feet for any side yard containing a driveway serving more than six (6) parking spaces. For a one-, two-, or three-family structure existing on effective date of Chapter 197 (August 9, 1956) and proposed for conversion for up to four (4) families, the Board of Appeals may reduce side yard requirement to eight (8) feet. For side yard requirements for other apartments, see See § 197-54. For spacing between buildings on the same lot, see § 197-70. For the rear and side yards of apartment houses adjoining the right-of-way of a railroad, a parkway or a limited access highway, see § 197-64.

(e) For usable open space requirement, see § 197-68

(f) For buildings in variable height apartment groups (a use permitted in RA-4 Districts subject to additional standards and requirements), see § 197-13.

[g,h,i omitted]

(j) See § 197-43.1 for floor area ratio reductions for single-family residences on oversized properties in one-family districts.

Robert P. Astorino  
County Executive

County Planning Board

June 29, 2015

Christian K. Miller, City Planner  
Rye City Planning Department  
1051 Boston Post Road  
Rye, NY 10580

**Subject: Referral File No. RYC 15 – 001 – Old Post Road Associates, LLC  
Petition for Zoning Text and Map Amendments**

Dear Mr. Miller:

The Westchester County Planning Board has received a copy of a petition to amend the text of the City's Zoning Ordinance and to amend the City's Zoning Map so as to allow the redevelopment of an existing office site with a new age-restricted (age 55 and over) apartment building containing 135 one- and two-bedroom units and parking for 240 vehicles.

The 7.0-acre site is located at 120 Old Post Road (County Road 73) with additional frontage along the Playland Parkway Access Drive (County Road 147). The site is currently zoned B-4 and is developed with an office building, described as underutilized. The applicants are petitioning the City to create a new RA-6 Active Senior Residence District and to rezone the subject site to RA-6. If successful, the applicant would then seek site plan approval to develop the proposed apartment building under the new zoning. The site was previously proposed for redevelopment with a hotel.

Because the referred material does not include a site plan, we reserve comment on the potential development under the provisions of Section 239 L, M and N of the General Municipal Law and Section 277.61 of the County Administrative Code until plans are prepared and referred. We are able to offer the following preliminary comments:

**1. Affirmatively further fair housing.** The proposed zoning text amendment does not include provisions that would affirmatively further fair housing (AFFH) in the new RA-6 district. We recommend that this be added to ensure that no less than 10% of the total number of units developed would be set aside as affordable AFFH units. We also recommend that the affordable AFFH units be made available to people of all ages.

We note that the City of Rye has not adopted the County's *Model Ordinance Provisions* with respect to affordable AFFH. We encourage the City adopt these provisions to ensure that affordable AFFH units are constructed city-wide as part of all proposed developments.

**2. Occupancy restrictions.** The proposed RA-6 district regulations contain occupancy restrictions that go beyond the usual requirement that one resident in each housing unit be 55 years of age or older. The proposed regulations specify that all persons living in a dwelling unit be 55 years of age or older unless they are married to or are a “live-in companion, or partner” of someone who is 55 or older. Further, the proposed regulations state that any other resident younger than 55 must be at least 18 years of age and have a certification from a physician stating that “said adult is essential to the long-term care of the elderly person.” The proposed zoning text also establishes fines and jail time for persons who violate these occupancy rules.

We suggest that the City exercise caution in adopting regulations that are more restrictive than those typically used for senior housing developments. We are unaware of any zoning regulations in place in the county that have restrictions and penalties similar to what is proposed by this applicant.

**3. County road.** Old Post Road (CR 73) and the Playland Parkway Access Drive (CR 147) are County roads. Because the site contains frontage on each of these roads, approval for work related to or with an impact on these roads will be required from the Westchester County Department of Public Works and Transportation (WCDPW&T) under Section 239 F of the General Municipal Law. Pertinent drainage, utility, erosion control and curb cut details need to be provided at the time of Section 239 F submittal. All driveways must be designed in accordance with current County, State and AASHTO standards.

Please note that WCDPW&T must be listed as an Involved Agency pursuant to SEQR.

Thank you for calling this matter to our attention.

Respectfully,

WESTCHESTER COUNTY PLANNING BOARD

For:

By:



Edward Buroughs, AICP  
Commissioner

EEB/LH

cc: Michael Dispenza, Contract Administrator, County Department of Public Works and Transportation  
Kevin Roseman, Traffic Engineer, County Department of Public Works and Transportation

Nick Everett, Chairman  
Martha Monserrate, Vice Chair  
Andy Ball  
Laura Brett  
Barbara Cummings  
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## **CITY OF RYE**

### **Planning Commission**

#### **Memorandum**

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To: Rye City Council

From: Rye City Planning Commission

Date: May 5, 2015

Subject: **Advisory Recommendation Regarding a Petition from Old Post Road Associates, LLC to amend the City Zoning Code and Zoning Map to Change the Zoning Designation of a property at 120 Old Post Road from the B-4, Office Building, District to a New RA-6, Active Senior Residence, District.**

As requested, this memorandum provides a recommendation to the Rye City Council regarding the above-referenced matter.

#### **Background**

Last fall the applicant submitted to the City Council a petition to change the zoning district of a 7-acre property currently zoned B-4, *Office Building*, District at 120 Old Post Road to a new RA-6, *Active Senior Residence*, District. The petitioner submitted the zoning request in order to advance the construction of a 135-unit age restricted multi-family community. Consistent with City practice, the petition was referred to the Planning Commission for its advisory recommendation. The City Council also declared its intent to be Lead Agency for the environmental review of the application.

At five public meetings since February the Planning Commission has reviewed the petitioner's request and requested supplemental information. All information submitted to the Commission will be repacked into one complete submission to the City Council upon receipt of this memorandum. This memorandum was unanimously adopted by the Planning Commission at its May 5, 2015 meeting.

## **Existing Permitted and Proposed Uses**

The Commission supports the proposed age-restricted multi-family use based on current and anticipated office market trends, land use compatibility considerations and the balance of potential positive and negative impacts

### *Market Trends*

The market analysis provided by the petitioner appears to support that there is demand for the age-restricted multi-family housing within the area. The analysis also affirms long-term historic and future challenges to office use.

The existing office building on the property has struggled to find tenants and has remained vacant for many years. The building age and configuration makes it difficult to re-adapt for multi-tenant users, which is how many former single-tenant buildings have been successful in reducing vacancy rates. While it appears that the office vacancy is relatively low in Rye, area market analysis suggests that office buildings continue their multi-year trend of high vacancy rates and flat or declining rents. There does not appear to be any demographic or economic factor on the horizon to reverse this downward trend. There is little new office construction in the region and other area communities such as Rye Brook and Harrison have amended their zoning codes to allow the reprogramming of existing or approved office space to other uses including multi-family residential, retail and private recreational uses. Age-restricted housing serves the growing needs of the aging baby boom generation, which is consistent with regional and national demographic trends.

The Commission notes that petitioner's characterization that the units would serve a "luxury" market (which is a relative term) cannot be guaranteed because zoning cannot legislate minimum rents or housing values. Actual rents could be higher or lower and housing tenure (i.e. rental vs. ownership) could also change and cannot be legislated in a zoning district.

### *Land Use Compatibility*

The proposed age-restricted multi-family use is not incompatible with surrounding office, medical, institutional and single-family uses. The proposed zoning would create more opportunity for the creation of age-restricted housing and would add to the existing or approved 140 units of senior affordable housing in the nearby RA-5 Districts on Theall Road and Theodore Fremd Avenue. Land use compatibility concerns could be further alleviated by amending the proposed RA-6 District to include some or all of the Planning Commission's recommendations under the *Bulk and Density* section of this memorandum.

## **Advisory Recommendation Proposed RA-6, Active Senior Residence, District**

May 5, 2015

Page 3 of 7

In consideration of the petitioner's request, the City Council should contemplate whether other properties in the area may seek similar requests and whether a change in land use or amenities (such as improvements in the pedestrian network) may be necessary to support the growth in age-restricted housing within the area.

### *Consideration of Impacts*

Potentially beneficial and detrimental impacts of the proposed use must be compared to those associated with the continuation of the existing office building. Office may have lower taxes than other uses, but it also generates relatively low municipal costs and no school-age children costs. On a per square-foot basis office generates higher traffic than the proposed use. Office generates less water, sewer and most other utility use than the proposed use. Office provides Rye residents with the potential to work in the City they reside in, but the proposed use offers an expansion of housing opportunities that the City may desire. The City Council needs to consider a comparison of these and other impacts associated with the maximum permitted development under existing and proposed zoning as it conducts its environmental review as Lead Agency under the State Environmental Quality Review (SEQR).

### School-age Children

Age-restricted housing has no direct impact on school-age children costs and would likely provide an overall fiscal benefit to the City, County and School District budgets. The petitioner has provided a fiscal impact analysis in its submission. Much is noted that the age-restriction required by proposed zoning will not result in any direct impacts on school district costs because there will be no generation of school-age children.

The City should expect, however that there may be an indirect impact of the proposed development on school age generation based on the statements of need represented by the petitioner and its market study. Those indirect costs will be borne as Rye residents housing choices are expanded, which may induce movement in the housing migration cycle. Those households residing in existing single-family homes over age 55 and without children will have the opportunity to move to the petitioner's proposed development within the Rye community, which may be better suited to their housing needs. This type of housing choice is fairly limited in the City. As those single-family "empty nester" homes are sold they may go to households with children. Studies by the Rye City School District show that sellers of single-family homes typically have fewer children than buyers. Though challenging to quantify, this indirect impact on school-age children generation should be considered.



## **Advisory Recommendation Proposed RA-6, Active Senior Residence, District**

May 5, 2015

Page 4 of 7

It is acknowledged that this housing migration could occur independent of whether the petition is approved. For instance, if a similar housing product is offered in another nearby community this too could induce the sale of empty nester single-family homes in the City.

### Fiscal Impact

The existing B-4 District on a 7.01-acre property is very limited in terms of the types and range of permitted uses that are both economically feasible for a property owner and fiscally beneficial to municipal and school district tax revenue. Other permitted uses available on this property include *public recreational uses, public uses, nursery schools (not to exceed 30 children), agricultural uses, railroad passenger station and electric substations, religious uses, and residential care facility uses (limited to care of 10 or fewer disabled persons or persons in need of supervision or juvenile delinquents)*. Given these use restrictions of the existing zoning it's not surprising that the property owner is seeking changes from the City Council to amend the City Zoning Code.

The existing office building is vacant and therefore does not put significant demands on municipal or school district services. However, the vacancy position of the building has resulted in the property owner's successful reduction in property tax. This contributes to a destabilizing tax assessment position and when reductions are successfully secured it requires other tax payers, new revenue sources or service modifications to compensate for lost revenue. Continued vacancy of the office building may result in further future tax reductions.

The existing property pays approximately \$21,500 in City tax and \$80,300 in Rye City School District tax. The RA-6 District offers an opportunity to increase tax revenue and greater tax assessment stability. The petitioner has estimated that the age-restricted rental multi-family project currently under consideration could generate almost \$98,000 in City tax and \$365,000 in Rye City School District tax. The City Council should discuss the potential tax generation on this property and what restrictions might be implemented to prevent or limit future tax certioraris.

### Traffic

Full development under the proposed zoning would generate less peak hour traffic than full office development permitted by existing Zoning.

Vehicle delays and traffic volumes can be high on some area roadways and intersections. Level of service is particularly poor at the Old Post Road/Playland Parkway Access Drive intersections. Interestingly, peak-hour vehicle trips and delays are generally less today than were shown in traffic studies conducted in 2009 and 2013. Certain turning movements have seen increases, which may be

## **Advisory Recommendation Proposed RA-6, Active Senior Residence, District**

May 5, 2015

Page 5 of 7

reduced with potential turning movement restrictions. A traffic signal at congested intersections does not appear to meet the required warrant analysis. There may be opportunities to make traffic improvements to address existing or anticipated traffic challenges.

### **Bulk and Density**

The Commission notes concerns with the increase in overall development density of the proposed zoning as compared to the existing zoning. The proposed zoning would provide for a 166% increase in permitted floor area on the 7.01-acre property. It would also allow for a multi-family development density of 21.78 units per acre. The petitioner has provided a comparison of the unit density of the proposed zoning to other multi-family buildings in the City and similar age-restricted housing in the area. In that analysis they note that Rye Manor on Theall Road has 53 units per acre, Highland Hall has 83 units per acre and Blind Brook Lodge has 51 units per acre. The recently approved 41 units of senior housing at 150 North Street/Theodore Fremd Avenue has 19.8 units per acre. The Commission is sensitive to concerns regarding the proposed bulk and scale of future development under the proposed district. To address these concerns the Commission recommends at a minimum the following adjustments in the proposed RA-6 District standards (see summary in Table 1 attached hereto).

### ***Building/Lot Coverage***

The existing B-4 District limits building coverage to 15%. There is no maximum lot coverage in the B-4 District so all at-grade parking is not included in the calculation. The Petitioner represents that the existing total impervious coverage on the property is 44%. Under the proposed RA-6 District there would be no building or lot coverage standard, but there would be a requirement that 80% of all required parking be located below grade in the basement. The Commission supports this requirement since it will reduce the overall lot coverage on the property. If a building coverage standard is desired by the City Council the applicant's current plan requires a building coverage of approximately 35%, which *includes* the portion of the court-yard building with basement parking.

### ***Setbacks***

The existing B-4 District requires a minimum building setback of 100 feet from all front, side and rear property lines. The proposed RA-6 District would reduce proposed building setbacks to as little as 25 feet for the rear yard and 40 feet for the side yard and the front yard along Playland Parkway Access Drive. Building height in both the existing and proposed districts would be 45 feet, however there would be a notable increase in overall development potential and an allowance for four stories (within 45 feet) rather than three stories in the B-4 District. Given these bulk increases the Commission recommends that no setback be less than

**Advisory Recommendation Proposed RA-6, Active Senior Residence, District**

May 5, 2015

Page 6 of 7

50 feet and that perimeter landscape screening requirements be added to the proposed RA-6 District.

*Bedroom Mix and Parking*

The Commission recommends that the parking standard be increased from 1.25 spaces per unit rather than 1.5 spaces per unit and that development be limited to one- and two-bedroom units. A higher parking standard is necessary because it is likely that future development have assigned parking spaces, which means sharing of parking is not possible. Giving the nature of the use the Commission would not object to amending the proposed RA-6 District to allow tandem parking.

Attached hereto is a table that summarizes the Planning Commission's recommendations to assist the City Council's continued review of this matter.

## Summary of Planning Commission Recommendations

### Proposed RA-6, Active Senior Residence, District

<b>Zoning Standard</b>	<b>Existing B-4 Office District*</b>	<b>Proposed RA-6 District**</b>	<b><i>Summary of Planning Comments and Recommendations</i></b>
Permitted Use	Office	Age-Restricted Multi-Family	<i>Proposed use is acceptable.</i>
Max. Floor Area Ratio	0.3 (or 91,257 s.f.)	0.8 (or 243,936 s.f.)	<i>Represents a 166% increase in maximum permitted development potential, however proposed use would be residential rather than existing office development and is considered acceptable if other recommendations provided below are implemented.</i>
Max. Building Coverage	15%	No max.	<i>A maximum building coverage standard of 35% would meet the project needs of the petitioner. Commission supports the proposed requirement that 80% of required parking be within a basement to reduce overall site coverage.</i>
Min. Lot Area	7 Acre	0	<i>No minimum lot area is proposed however a 2,000 square foot minimum lot area per unit (or 21.78 units per acre) is proposed, which could yield a maximum of 152 units on the property. Planning Commission recommends limiting the unit type to one- and two-bedroom units only.</i>
Min. Lot Width	400 feet	400 feet	
Front Yard Setback	100 feet	100/40 feet	<i>The front yard setback would only apply to the Post Road frontage. The setback from Playland Parkway Access Drive would be considered a side yard setback. The Commission recommends that this setback be increased to not less than 50 feet.</i>
One Side Setback	100 feet	40 feet	<i>Planning Commission recommends that this setback be increased to not less than 50 feet.</i>
Total of Two Yards	200 feet	100 feet	<i>Due to proposed reduction in setbacks and increase in permitted floor area the Planning Commission recommends a new landscape buffer standard.</i>
Rear Yard Setback	100 feet	25 feet	<i>Planning Commission recommends that this setback be increased to not less than 50 feet.</i>
Max. Stories	3	4	<i>Proposed standard is acceptable.</i>
Max. Building Height	45 feet	45 feet	<i>Proposed standard is acceptable.</i>
Required Parking	7 spaces per 10 persons employed at one time.	1.25 spaces/unit	<i>Planning Commission recommends a minimum parking requirement of 1.50 spaces per unit provided that unit type is limited to one- and two-bedroom units only. Tandem parking for residential units should also be allowed.</i>
Min. Floor Area per Unit	N/A	1-BR: 750 s.f. 2-BR: 900 s.f. 3-BR: 1,100 s.f.	<i>Planning Commission finds proposed standard acceptable noting that it meets or exceeds standards for multi-family units in the Zoning Code. Three bedrooms are not recommended.</i>

\*Based on setback requirements for office buildings. Other uses permitted in the B-4 District generally have lesser standards and requirements.

\*\* Based on standards included in applicant's March 4, 2015 submission.

## **Proposed Re-zoning of 120 Old Post Road**

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- Ex. 2: Petition of Old Post Road Associates and Proposed Amended Text of Chapter 197: Zoning
- Ex. 3: Zoning, Land Use and Fiscal Impacts Memorandum prepared by Divney Tung Schwalbe
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- Ex. 5: Westchester County Office Market: Summary Data prepared by Goman & York Property Advisors, LLC
- Ex. 6: Rye Office Market Analysis: 120 Old Post Road prepared by Goman & York Property Advisors, LLC
- Ex. 7: Market Feasibility Analysis of the Rye, NY Market for Active Adult (55+) Housing prepared by Goman & York Property Advisors, LLC
- Ex. 8: Proposed Property Tax Exposure Report prepared by McCarthy Appraisal / Consulting Svc. Inc.
- Ex. 9: Traffic Access & Impact Study prepared by Frederick P. Clark Associates, Inc.

JONATHAN D. KRAUT

DIRECT TEL.: 914-701-0800  
MAIN FAX: 914-701-0808  
[JKRAUT@HKPLAW.COM](mailto:JKRAUT@HKPLAW.COM)

June 3, 2015  
**VIA HAND DELIVERY**

Mayor Joseph Sack and  
Members of the City Council  
1051 Boston Post Road  
Rye, New York 10580

Re: ***Re-zoning of 120 Old Post Road***

Dear Mayor Sack and Members of the City Council:

We represent Old Post Road Associates, LLC (the "Petitioner"), in connection with a Petition for Zone Change, Zoning Map Amendment and Amendment to City of Rye Zoning Ordinance (the "Petition") in connection with the above referenced property (the "Subject Property"). The Petition was referred by you to the Planning Commission for a report and recommendation. The Petition contemplates creating a new zoning district within the City of Rye and re-zoning the Subject Property to an age-restricted (55+) multifamily housing zone (the "Project"). The Petitioner went through a series of meetings with the Planning Commission spanning several months and we understand the Planning Commission has issued a positive report and recommendation concerning the proposed zone change and proposed use of the Subject Property.

As the City Council may recall, the Subject Property is currently improved with a near fully vacant office building. The Petitioner has previously proposed repurposing the Subject Property with a hotel, which was met with large opposition by members of the community. After careful review of market conditions, the Petitioner believes the Project will provide a desirable housing alternative and product that is not currently available within the City of Rye. (See Market Feasibility Analysis attached hereto as Exhibit 7). Specifically, the Project contemplates the development of the Subject Property with an age-restricted luxury residential community for active adults.

The Project would also benefit the City of Rye as a whole by providing a housing alternative for those individuals 55 years and older who are not interested or in need of residing within a retirement community or nursing facility while not causing any increased burden on the expenses of the City of Rye School District due to the age-restricted residency requirements.

# HKP

Simultaneously, if approved, the proposed real estate development would have a very beneficial impact on the property's market tax assessment – which has steadily decreased over the past years due to the erosion in market value of office use generally and the Subject Property specifically. (See Westchester County Office Market Report and Rye Office Market Analysis attached hereto as Exhibits 5 & 6). As set forth in the proposed fiscal impacts information attached hereto, the Project is anticipated to generate a significant increase in property taxes, without any burden on the School District due to the age restriction prohibiting occupancy by any school age children and a de minimis demand for other public services over the current use (See Proposed Property Tax Exposure attached hereto as Exhibit 8).

In addition, as further set forth in the attached reports, the Project would not have any significant adverse environmental or traffic impacts. As is described Traffic Impact and Impact Study, prepared by Frederick P. Clark Associates, Inc. (Exhibit 9), the Project “will result in a significant reduction in site traffic, with a decrease of 82 and 70 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively.” Moreover, as detailed in the Zoning, Land Use and Fiscal Impacts Memorandum prepared by Divney Tung Schwalbe, the Project will reduce impervious surfaces on the site by over 10%.

The Proposed Text Amendments have been modified slightly since the Petition was first submitted to the City Council reflecting some comments and clarifications requested by the Planning Commission. The Petitioner has included a requirement that at least eighty percent (80%) of the required off-street parking be provided in a covered parking structure within the basement of the proposed structure(s). The Proposed Text Amendments also include a maximum density of 2,000 square feet per unit. The Zoning, Land Use and Fiscal Impacts Memorandum (Exhibit 3) contains a density analysis and references other multi-family developments within the City of Rye as well as more recent projects in other municipalities for comparison.

In sum, we believe the proposed zoning change to permit a multi-family development is much more harmonious with the neighborhood than the existing office use, serving as a transition from the single family neighborhood on one side to the office districts on the other. We look forward to presenting this information to the City Council and addressing any comments or questions of the Council or the public. Thank you for your attention to this matter.

Very Truly Yours,

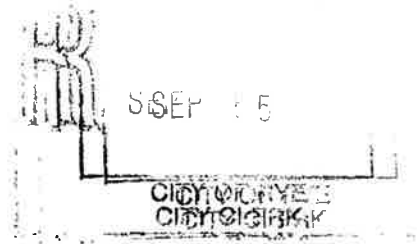
HARFENIST KRAUT & PERLSTEIN LLP

By: 

Jonathan D. Kraut



CITY OF RYE: RYE CITY COUNCIL  
COUNTY OF WESTCHESTER: STATE OF NEW YORK



-----X  
In the Matter of the Application of  
  
OLD POST ROAD ASSOCIATES, LLC

**PETITION  
FOR ZONE CHANGE,  
ZONING MAP  
AMENDMENT, AND  
AMENDMENT TO  
CITY OF RYE ZONING  
ORDINANCE**

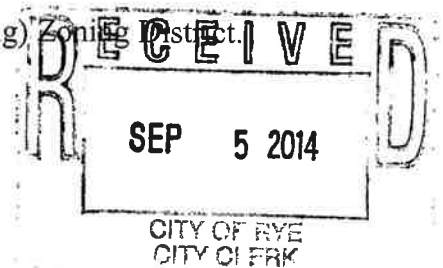
PROPERTY LOCATION:  
120 Old Post Road, Rye, New York  
Sheet 146.13, Block 1, Lot 7

-----X  
Petitioner, OLD POST ROAD ASSOCIATES, LLC, by its attorneys, Harfenist Kraut & Perlstein, LLP, hereby petitions the City Council of the City of Rye for a zone change, a zoning map amendment and an amendment to the City of Rye Zoning Ordinance as follows:

1. Old Post Road Associates, LLC, (hereinafter "Petitioner"), with an address at 120 Old Post Road, Rye, New York 10580, is a Limited Liability Company duly formed and existing under the laws of the State of New York.

**SUBJECT PROPERTY**

2. The Petitioner is the owner of the subject premises located at 120 Old Post Road, as further set forth in the caption of this Petition (hereinafter the "Property").
3. The Property is a single parcel of approximately 7.0 acres located at the intersection of Old Post Road and Playland Access Drive which is known and designated on the Tax Assessment Map of the City of Rye as Sheet 146.13, Block 1, Lot 7.
4. The Property currently lies wholly within the B-4 (Office Building) Zoning District.



5. The Property is currently improved with a three story office building and related parking infrastructure.
6. The Property has the following uses adjacent to its boundaries: i) the Osborn senior living facility is immediately adjacent to the southwest; ii) single family residences in the R-2 zone are located to the southeast across Old Post Road; iii) Playland Parkway to the northeast; and iv) the WestMed Medical Group facility is located to the northwest.

ZONE CHANGE, ZONING MAP AMENDMENT AND  
AMENDMENT TO ZONING ORDINANCE

7. The Petitioner requests a change in the zoning of the Property, including a zoning map amendment and zoning ordinance text amendment of the Zoning Ordinance of the City of Rye, to rezone the Subject Property from B-4 (Office Building) to a new zone RA-6 (Active Senior Residence District) proposed herein. The Petitioner requests that the relief sought be granted and the zoning map and zoning ordinance of the City of Rye be amended to reflect the relief requested herein.
8. The Petitioner specifically requests that the official zoning map of the City of Rye be redrawn and amended to identify the Subject Premises known and designated on the Tax Assessment Map of the City of Rye, as Sheet 146.13, Block 1, Lot 7 as wholly within the RA-6 Zone as set forth hereinbelow.
9. The Petitioner also specifically requests that the Zoning Code of the City of Rye, Chapter 197: Zoning, Section 197-2: Districts, last amended 6-19-1991 by Local Law No. 13-1991, be further amended. Specifically, the Petitioners request that Section 197-2: Districts, A. Residence Districts, therein be amended to include a new residential district as follows:

*RA-6: Active Senior Residence District – Minimum lot size area per family  
2,000 square feet*

10. Further, the Petitioner specifically requests that the Zoning Code of the City of Rye, Chapter 197: Zoning, Section 197-86: Tables of Regulations: Table A, be amended. Specifically, the Petitioners request that Section 197-86: Tables of Regulations: Table A, Residence Districts – Use Regulations, Column 1: Permitted Main Uses, therein be amended to include as a permitted main use in the RA-6 district the following:

*(1) Apartments for active seniors in an age-restricted development. A building or group of buildings housing three or more families on one lot, subject to the requirements of §197-7 and Table A.*

11. The Petitioner also specifically requests that the Zoning Code of the City of Rye, Chapter 197: Zoning, be amended to include a new Section entitled *Active Senior Residence District*. Specifically, the Petitioners request that this new Section contain the particulars of the design parameters and limitations as set forth on Exhibit A attached hereto.

12. Lastly, the Petitioner specifically requests that the Zoning Code of the City of Rye, Chapter 197: Zoning, Section 197-86: Tables of Regulations: Table A, be amended. Specifically, the Petitioners request that Section 197-86: Tables of Regulations: Table A, Residence Districts – Area Yard, Height and Miscellaneous Regulations, last amended 7-16-03 by Local Law No. 6-2003; be further amended. Specifically, the Petitioners request that a new row for the proposed RA-6 zone be added, an amendment be made to footnote “C” and a new footnote “K” be added to Table A, all as more specifically set forth on Exhibit B attached hereto.

#### FACTS SUPPORTING PETITIONER’S REQUEST

13. The existing office building at the Property has been largely vacant for a significant period of time. As this condition of high vacancy rates for office space is not isolated to the Property but is a macro-trend throughout Westchester and other metropolitan areas the Petitioner is not optimistic on the likelihood of the existing office building becoming reoccupied to a sustainable level. Accordingly, the Petitioner has explored various options for uses at the Property.

14. The Petitioner has noted that with property values continuing to increase in Rye, there is a shortage of independent living accommodations for active adults ages 55 and older who wish to remain in Rye but no longer have the necessity of maintaining the related costs and expense necessarily attendant to home ownership within the City of Rye.
15. The Petitioner believes that due to the unique location and size of the Property, the Property could accommodate a viable alternative for those older individuals seeking alternative housing arrangements in an age-restricted community that does not provide nursing care.
16. The requested amendments to the Zoning Ordinance would not have any adverse impacts on the City of Rye. If this Petition were granted it would not only allow the Property to be redeveloped and put back to a sustainable use, it would also provide an alternative housing opportunity that is not currently being offered within the City of Rye. The redevelopment of the Property would also provide a benefit to the City of Rye by reestablishing the taxable value of the Property for real property tax purposes, which has continued to erode year after year as the Property remains vacant. Furthermore, the redevelopment of the Property in accordance with the residency limitations proposed herein would not create any additional strain on the Rye City School District as the development would expressly prohibit residency of any school age children.

#### SEQRA REVIEW

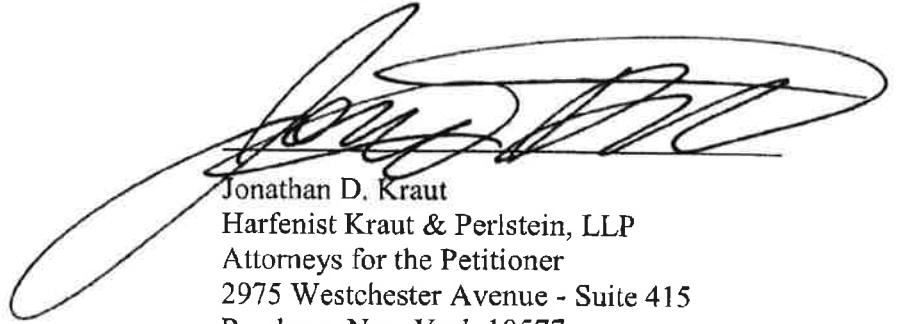
17. With respect to the environmental procedure and review of this Petition pursuant to Article 8 of the Environmental Conservation Law of the State of New York and Part 617 of the New York Codes, Rules and Regulations promulgated pursuant to the New York State Environmental Quality Review Act, it is respectfully submitted that the requested zoning amendments are consistent with the long range planning goals of the City of Rye and would permit a harmonious use between the Property and the community at large.

18. Petitioner has reviewed all pertinent environmental issues relating to the proposed zone change and has prepared a short form Environmental Assessment Form (EAF) in connection with this application. It is submitted herewith, so as to enable the City Council to take steps necessary to consider, and to issue, a negative declaration pursuant to the New York State Environmental Quality Review Act.

WHEREFORE, it is respectfully requested that this matter be placed on the calendar of the City Council for a hearing and that the relief sought herein be in all respects granted.

Dated: Purchase, New York  
September 5, 2014

Respectfully submitted,

A large, stylized handwritten signature in dark ink, likely belonging to Jonathan D. Kraut, is written over the typed name and address.

Jonathan D. Kraut  
Harfenist Kraut & Perlstein, LLP  
Attorneys for the Petitioner  
2975 Westchester Avenue - Suite 415  
Purchase, New York 10577  
Tel: (914) 701-0800

## PROPOSED TEXT AMENDMENTS TO CHAPTER 197 OF RYE CITY CODE

### § 197-2 Districts

RA-6 Active Senior Residence District – Minimum area per family 2,000 square feet

### § 197-8.1 Active Senior Residence District Regulations

#### A. Limitations on Occupancy.

- (1) The occupancy of residential units within the Active Senior Residence Zone shall be limited to:
  - a) A single person 55 years of age or older;
  - b) Two or three persons, all of whom are 55 years of age or older;
  - c) A married couple, live-in companion, or partner, one of which is 55 years of age or older;
  - d) The surviving spouse of a person 55 years of age or older, provided that the surviving spouse was duly registered as a resident of the development at the time of the elderly person's death;
  - e) One adult 18 years of age or older residing with a person who is 55 years of age or older, provided that said adult is essential to the long-term care of the elderly person as certified by a physician duly licensed in New York State
- (2) Persons under the age of 55 not specifically permitted to be occupants shall not be permitted to be permanent residents of dwelling units. For the purposes of this section, a "permanent resident" shall mean any person who resides within the dwelling for more than three consecutive weeks or in excess of 30 days in any calendar year, or has listed the residence as an abode for any purpose whatsoever, including, but not limited to, enrollment in public or private schools. Temporary occupancy by guests of families shall be permitted, provided that such occupancy does not exceed a total of 30 days in any calendar year.
- (3) Notwithstanding the foregoing, one dwelling unit within the community may be set aside to be occupied by a superintendent or building manager, to which the limitations on occupancy set forth above shall not apply.
- (4) The limitations on occupancy shall be included in the marketing materials for the development as well as within the rules and regulations or terms of any

leases, by-laws or covenants and restrictions for the development. Violations of the limitations on occupancy shall be enforceable by the City of Rye Building Inspector against the owner or lessee or the agent of any of them and shall be punishable by a fine of \$250 per day or by imprisonment not exceeding 15 days, or by both such fine and imprisonment. Exceptions to these regulations shall be granted if any limitations are determined to be in violation of any State or Federal law.

- (5) The Planning Commission shall have the right to require that the owner execute agreements and covenants as it may deem to be required during any site plan approval process as it may reasonably deem to be required to ensure compliance with the stated intent of this section. Said agreements or covenants shall be recorded in the office of the Westchester County Clerk and constitute a covenant running with the land. Such covenant or agreement may be modified or released only as set forth in said covenant or agreement or by the City Council.

#### B. Site Development

- (1) At least eighty percent (80%) of the required parking for the development shall be provided in a covered parking structure within the basement level of the principal structure(s).
- (2) For any corner lot abutting Boston Post Road or Old Post Road, the front lot line of the lot shall be Boston Post Road or Old Post Road for purposes of the applicable front yard setback irrespective of building arrangement. The provisions of § 197-52 shall not apply to properties in the RA-6 zone.
- (3) The provisions of § 197-8.A & C shall not apply to properties in the RA-6 zone.

## **§ 197-28 Schedule of Off-Street Parking Requirements**

- A. Schedule of parking requirements. Off-street automobile parking facilities shall be provided as follows:

### **Number of Spaces per Unit (by Parking District)**

<b>Use</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>Unit of Measurement and Conditions</b>
Apartments for active seniors located in RA-6 Districts	1.25	1.25	1.25	Dwelling unit

## **§ 197-30 Layout and Location of Off-Street Parking Facilities**

- D. In RA-1, RA-2, RA-3, RA-4, RA-5 and RA-6 Districts, no off-street parking facility accessory to apartments or office buildings shall be developed within five feet of any lot line. Required off-street parking facilities accessory to other main uses shall conform to the provisions of Subsection C above.

## **§ 197-44 Minimum Residential Floor Area**

- E. For dwelling units in apartments or other buildings containing three or more dwelling units in an RA-6 District, the minimum amount of residential floor area in each unit shall be 750 square feet for one bedroom units, 900 square feet for two bedroom units and 1,100 square feet for three bedroom units. Additionally, three-bedroom units must be equipped with at least 1 ½ bathrooms.



## **§ 197-86 Tables of Regulations**

### **TABLE OF REGULATIONS: TABLE A RESIDENCE DISTRICTS – USE REGULATIONS**

#### **Column 1 Permitted Main Uses**

RA-6 Districts

- (1) Apartments for active seniors. A detached residence for three or more families or housekeeping units, or a group of buildings housing three or more families on one lot, subject to the requirements of § 197-7 and § 197-8.1.

### **TABLE OF REGULATIONS: TABLE A RESIDENCE DISTRICTS – USE REGULATIONS**

#### **Column 2 Uses Permitted Subject to Additional Standards and Requirements (Subject to the requirements and provisions of §197-10)**

RA-6 Districts

(Reserved)

### **TABLE OF REGULATIONS: TABLE A RESIDENCE DISTRICTS – USE REGULATIONS**

#### **Column 3 Permitted Accessory Uses (Subject to the requirements and provisions of §197-9)**

RA-6 Districts

- (1) Off-street parking facilities, subject to the requirements and provisions of § 197-8.1.
- (2) Other accessory uses or structures customarily incidental to any permitted main use, including active and passive recreational facilities (i.e. fitness center, pool, library, media room, storage areas, etc.) for the use of the residents of the principle structure. Outside storage on land of boats and boat trailers is prohibited.

- (3) The filming of movies, commercials, documentaries, serials, shows, performances or other similar events and activities, including still photography, as regulated in RA-4 Districts.

## **MEMORANDUM**

TO: City Council of the City of Rye

DATE: June 3, 2015

FROM: Gerhard M. Schwalbe, P.E.

RE: 120 Old Post Road

### **INTRODUCTION**

Old Post Road Associates, LLC (the "Applicant") is seeking a zoning change, amendment to the City of Rye zoning map and amendment to the City of Rye Zoning Ordinance (the "Proposed Action" or "Action") to facilitate the redevelopment of 120 Old Post Road as an age-restricted multi-family residential community (the "Proposed Project" or "Project").

The subject property, located 120 Old Post Road (the "Project Site" or "Site"), is currently improved with an existing 75,000 square foot, 3-story office building, a parking lot for approximately 240 vehicles, and an entrance on Playland Access Drive. The existing building has remained mostly vacant and underutilized for over four years and, as documented below, current real estate market conditions suggest that re-occupancy with the existing office use is unlikely for the foreseeable future.

The Applicant proposes to replace the existing office building with a 245,000 square foot age-restricted, luxury residential building. The Project would consist of approximately 135 one and two bedroom units for residents aged 55 and older, along with underground parking, stormwater management facilities, landscape screening, and amenities typical of a luxury residential building. The driveway entrance would remain near its current location and provide access to Playland Access Drive. The existing emergency access driveway to Old Post Road would be retained for emergencies only. See Figure No. 1, *Illustrative Site Plan*.

This memorandum summarizes the land use and fiscal considerations that support the Proposed Action and Project. In addition, a full form NYS Environmental Assessment Form (EAF) is attached hereto for the Action, and an assessment of the potential environmental impacts and mitigation measures related to the Project is included, following the EAF.

### **OFFICE MARKET CONDITIONS**

As set forth in greater detail in a report titled *Rye Office Market Analysis* prepared by Goman & York Property Advisors, LLC, dated March 2, 2015 ("Office Market Study"), vacancy rates for office buildings in southeastern Westchester County have steadily increased over the past decade and are currently at a 10-year high reducing the direct asking average rent. In addition, during this same time period operating costs have further increased, reducing net rent returns on office buildings in

Westchester County. Most current leasing activity in the market is a result of renewals or extensions and not a result of any positive change in market conditions. *See*, Office Market Study.

The following table summarizes the supply of office space within the City of Rye. The information contained in the chart below was obtained from the City of Rye Tax Assessment Cards. The property list is limited to other office buildings or facilities within the City of Rye and does not include mixed use structures along Purchase Street or elsewhere.

**Table No. 1. *Summary of Rye Office Space***

<b>Property</b>	<b>Lot Area (AC) <sup>1</sup></b>	<b>Floor Area (SF) <sup>1</sup></b>	<b>Rye Office Space (% of Floor Area)</b>
2 Clinton Avenue	0.79	10,600	1%
14-16 Elm	0.26	19,600	2%
22 Elm	0.26	20,000	2%
150 Purchase Street	0.86	22,245	2%
31 Purchase Street	0.10	10,000	1%
600 Midland Avenue	7.83	30,000	3%
601 Midland Avenue	N/A	173,315	18%
2 Second Street	0.20	15,000	2%
16 School Street	1.61	18,316	2%
1 Theall Road	7	65,000	7%
350 Theodore Fremd Avenue	1.80	34,000	4%
401 Theodore Fremd Avenue	7	59,522	6%
411 Theodore Fremd Avenue	8.2	150,946	16%
555 Theodore Fremd Avenue	13.02	165,592	17%
511 Theodore Fremd Avenue	7.53	90,080	9%
<b>120 Old Post Road</b>	<b>7.01</b>	<b>76,000</b>	<b>8%</b>

<sup>1</sup>Data obtained through City of Rye Tax Assessment Cards and confirmed with City of Rye GIS.

With increasing vacancy rates throughout the Rye area along with decreasing rents and the abundance of available office space, re-occupancy under existing market conditions appears highly challenging and doubtful. With regard to the Property, the existing structure is configured primarily as an open plan headquarters building. This configuration places the building in a highly uncompetitive market position since the majority of office leasing activity is focused upon smaller spaces. As a result of these market conditions and the continued vacancy of the building the tax assessment of the property has been reduced by over fifty percent (50%).

On some similar properties, the conversion costs have been determined to be prohibitive and the building has been torn down as a result. However, conversions of underutilized office space have occurred or are proposed on sites in the general vicinity of the Property. Examples include the development of LifeTime Fitness Center and a proposed residential development at 103-105 Corporate Park Drive in Harrison, as well as a recent application for a residential development at the Reckson Executive Park in Rye Brook. As set forth in greater detail in the attached Market Feasibility Analysis prepared by Goman & York Property Advisors, LLC, dated November 2014 ("Market Feasibility Analysis"), an age-restricted, luxury residential community is a viable repurposing of the Site and would offer a housing alternative that is not available within the City of Rye.

## **ZONING AND LAND USE CONDITIONS**

### ***Zoning***

The Project Site contains 7.0 acres located north of Old Post Road and west of Playland Access Drive in the City of Rye. It is located within the B-4 office building zone, and is bordered by the R-3 residential district to the northeast, the R-2 residential district to the southeast and southwest, and the B-4 district extends to the north and west. See Figure No. 2, *Area Zoning Map*. In the project area, the R-4 and R-5 districts lie further to the south, with the RA-1 and RA-5 districts lying further to the north and southwest respectively.

The B-4 zone is designated as an “Office Building District” with a minimum area requirement of 7 acres. Permitted main uses in the B-4 zone are “Nonresidence main uses permitted in the R-2 Districts and as limited therein.” However, there are no “nonresidence” main uses permitted in the R-2 district (i.e. the only permitted main use in the R-2 district are single family residences). Therefore, while there are special exception uses, in essence there are no permitted main uses allowed in the B-4 zone.

The uses permitted subject to additional standards and requirements (i.e. special permit uses) in the B-4 zone are:

- a) Office buildings
- b) Educational uses (requires a minimum of 10 acres)
- c) Public recreational uses
- d) Private recreational uses (requires a minimum of 7.5 acres)
- e) Extension of welfare uses (operated by nonprofits in existence or which had a permit before January 1, 1958)
- f) Public uses
- g) Nursery schools (not to exceed 30 children)
- h) Agricultural uses (i.e. nurseries, truck gardens, greenhouses and similar agricultural uses)
- i) Railroad passenger stations and electric substations
- j) Temporary real estate offices in connection with a subdivision containing 10 or more lots
- k) Religious headquarters offices (requires a minimum of 20 acres)
- l) Religious uses
- m) Residential care facility uses (limited to care of 10 or fewer disabled persons or persons in need of supervision or juvenile delinquents)

In sum, outside of the existing use of the Subject Property as an office building there are virtually no other permitted or special permit uses allowed in the B-4 zone for which the Site could be expected to yield a reasonable return.

### ***The Proposed Action***

The City currently permits multi-family residences in the following districts:

- 1. RT – Two Family District
- 2. RA-1 – Garden Apartment District

3. RA-2, 3, and 4 – Apartment House Districts
4. RA-5 – Apartment District for Senior Citizens and Handicapped Persons
5. RFWP – Residential Floodplain and Wetlands Preservation

The RA-5 is the only district in Rye that currently restricts residential occupancy for senior citizens, and it is intended for housing developments that are undertaken by private nonprofit sponsors with public financial assistance. Therefore, its dimensional regulations are generally more permissive than the current standards for apartment buildings in other districts (e.g., a maximum height of 4 stories compared to 2.5, and a maximum F.A.R. of 1.0 compared to .40-.50). While the proposed age-restricted housing district would allow for less restrictive dimensional standards than most multi-family districts in the City, it would be more restrictive than the RA-5. See Table No. 2, *Existing and Proposed Multi-Family Zoning Districts and Bulk Regulations*, attached at the end of this memo.

The proposed dimensional and use regulations are generally consistent with similar districts across the region. See Table No. 3, *Bulk Characteristics of Regional Active Adult Zoning Districts*. The proposed yard dimensions and maximum building height would either be consistent with existing zoning or more restrictive than in comparable districts, requiring them to be greater than average. Alternatively, the proposed lot area and FAR would be less restrictive than in the comparable districts. However, these regulations would be offset by the Action's requirement for underground parking, which would minimize surface coverage and preserve open green space on the site. For example, as applied to the Project Site, these regulations maintain building and surface coverage rates that are below the minimum requirements for every comparable district at 22% and 33% of the site area respectively. By maintaining lower rates of surface coverage, it is the applicant's belief that this requirement will help preserve a desirable community character for both residents of the Proposed Project and its neighbors.

The proposed off-street parking provision of 1.25 spaces per dwelling unit is based on the supply ratio from the Institute of Transportation Engineers (ITE) *Parking Generation*, Land Use 252 – Senior Adult Housing, as well as characteristics of the Project's target market<sup>1</sup>. While ITE rates indicate that a ratio of 1 space per dwelling unit is sufficient for residences with active seniors, the 0.25 fractional spaces would accommodate facility staff, visitors, or some residents who may wish to maintain more than one vehicle. These provisions are consistent with the comparable districts' range of .75 to 2 spaces per unit as indicated in Table 3.

It is the Applicant's opinion that these proposed standards are appropriate based on the district's age restriction, as it would permit housing for a sector of the population that would not create any additional strain on the Rye City School District.

### ***Existing and Proposed Conditions***

The existing office building on the Project Site is compliant with both use and bulk regulations in the B-4 Zoning District with potential for further as-of-right expansion. The following compares the Site's current dimensional characteristics to the limits of its existing zoning, and to the corresponding conditions in the Proposed Zoning and the Proposed Project. These characteristics are also illustrated in Table No. 4, *120 Old Post Road - Existing and Proposed Zoning Districts*, Figure No. 3, *Existing Zone*

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<sup>1</sup> Institute of Transportation Engineers, *Parking Generation*, 4<sup>th</sup> Edition, 2010

(B-4) *Max. Build Out* and Figure No. 4, *Proposed Zone (RA-6) Max Build Out*, attached at the end of this report.

*Lot Area*

As a nonresidential use, the existing B-4 zoning district requires a 7-acre minimum lot area, with which the Property is compliant at approximately 7.01 acres. The proposed use would be residential, and therefore lot area would be measured per family or equivalent rather than minimum acreage. The Proposed Zoning district would require 2,000 square feet of lot area per family, permitting a maximum of approximately 152 units.

*Floor Area Ratio and Lot Coverage*

As described below in Table No. 5, *Floor Area Ratio and Lot Coverage*, the existing building on the Property has approximately 75,000 square feet of floor area, and a Floor Area Ratio (FAR) of 0.25. Under these existing conditions, the site has approximately 25,000 square feet of building coverage and 240 parking spaces, for approximately 135,400 square feet of total lot coverage (approximately 44% of the lot area). Existing zoning permits a maximum FAR of 0.3, indicating the potential for as-of-right expansion of approximately 16,000 square feet of floor area. Under full build out conditions, there would be approximately 8,000 additional square feet of building coverage and approximately 105 additional parking spaces would be required, increasing the total lot coverage to approximately 58%.

The Proposed RA-6 Zoning District would permit an FAR of 0.8, or approximately 244,500 square feet of floor area on the Property. Therefore, full build out of the Property under Proposed Zoning would permit approximately 75,000 square feet of building coverage at maximum height, and underground parking would be required for a total lot coverage of approximately 108,600 square feet (approximately 36% of the lot area). This is the maximum FAR and coverage that would be permitted on the Property in the Proposed Action. Therefore, under Proposed Zoning, total site coverage would be reduced by approximately 27,000 square feet from what the existing zone permits. See Figure No. 5, *Site Development Analysis – Impervious Coverage*, attached at the end of this memo.

**Table No. 5. *Floor Area Ratio and Lot Coverage***

	<b>Maximum FAR</b>	<b>Maximum Floor Area</b>	<b>Building Coverage (SF / Percent of Lot Area)</b>	<b>Lot Coverage (SF / Percent of Lot Area)</b>
<b>Existing Office Building – B-4</b>	0.25	76,000 SF	28,000 / 9%	135,400 / 44%
<b>Potential Office Build-out – B-4</b>	0.30	91,500 SF	36,600 / 12%	176,200 / 58%
<b>Proposed Zoning – RA-6</b>	0.80	244,500 SF	75,300 / 25%	108,650 / 36%

As described above, the increased FAR and building coverage under Proposed Zoning is offset by the requirement of underground parking, which preserves approximately two-thirds of the site as open green space, to be attractively landscaped and maintain the existing character of the community. As described below in the Surface Parking Alternative, if underground parking is



not required by zoning, potential coverage rates would be more than double the rate in the Proposed Project. See Table No. 5, *Floor Area Ratio and Lot Coverage*.

#### Yard Dimensions

As described below in Table No. 6, *Minimum Yard Dimensions*, the existing office building meets the minimum yard dimensions for the front and one side yard at 100 feet each. The total of the two current side yards, however, is 300 feet, which exceeds the 200-foot minimum that is required. The current rear yard is approximately 290', also in excess the 100-foot minimum that is required. In short, existing zoning would permit building expansion into one side or the rear yard area.

Under Proposed Zoning, yard dimensions would either be maintained from the existing zone or adjusted to be greater than or equal to dimensions in the City's other multi-family districts, as described above. The front yard dimension would be maintained at 100 feet. One side yard would be 40 feet, and the total of the two side yards would be 100 feet. The rear yard, which abuts the parking area of a commercial property in the case of the Project Site, would be 25 feet. The yard dimensions in the Proposed Project would be generally more conservative than the minimum requirements permitted in the Proposed Action.

**Table No. 6, *Minimum Yard Dimensions***

	Front Yard	One Side Yard	Total of Two Side Yards	Rear Yard
Existing Office Building (B-4)	100'	100'	300'	290'
Potential Office Build-out (B-4)	100'	100'	200'	100'
Proposed Zoning (RA-6)	100'	40'	100'	25'

#### Building Height

The existing building is 40 feet in height over three stories. Current zoning would maintain the three-story limit, but would permit a building 45 feet in height.

Proposed zoning would maintain the existing 45-foot height limit, with an increase from three to four stories. The increase in stories corresponds with the change in use, as typical residential buildings have a smaller distance between stories than office buildings. Although the Project Site does not contain steep slopes, there is a gradual but significant change in ground elevation from approximately 50 feet at the southeast corner to approximately 100 feet at the northwest. The Proposed Project has been designed to accommodate this topography with the average height being maintained as the elevation changes. See Figure No. 6, *Building Height Diagram*, Figure No. 7, *Site Section Diagram*, and Figure No. 8, *Site Section Diagram – Proposed Building*.

### **Multi-Family Housing Mass and Density Analysis**

Table No. 7 below summarizes the building mass and density characteristics of comparable multi-family residence developments in the City of Rye. These sites are located in different zoning districts and may be subject to different permits or restrictions, but are intended to provide a point of comparison for the scales of mass and density that exist within the City's multi-family residence developments. Aerial and street-level imagery for each property is provided at the end of this memo.



The proposed development of the Project Site would be less intense from a bulk and density perspective than all but The Osborn.

**Table No. 7, Summary of Comparable Properties in Rye**

Property	Lot Area (AC)	Floor Area (SF)	FAR	Units	Density (Units/Acre)	Height		Yard			Parking	
						Feet	Stories	Front	Side	Rear	Spaces	Spaces/Unit
Rye Manor <sup>1</sup>	1.9	71,000	0.86	100	53	50'	4	95'	30'/50'	30'	34	0.34
The Osborn <sup>1</sup>	55.9	N/A	N/A	377	7	N/A	5	160'	160'	160'	484	1.28
Highland Hall <sup>2</sup>	1.23	86,153	1.61	102	83	N/A	4	30'	5'	15'	0	0
Blind Brook Lodge <sup>2</sup>	2.7	134,401	1.14	137	51	N/A	6	30'	5'	30'	76	0.55
<b>120 Old Post Road</b>												
Proposed Zoning	7.01	244,500	0.80	152	21	45'	4	100'	40'/100'	25'	168	1.25
Proposed Project	7.01	222,500	0.73	135	19	45'	4	100'	100'/200'	25'	205	1.51

<sup>1</sup>Data obtained through City of Rye Site Plan Approval Records and confirmed with City of Rye GIS.

<sup>2</sup>Data obtained through the City of Rye Tax Assessment Cards and confirmed with City of Rye GIS.

Below, Table No. 8 summarizes the building mass and density characteristics of comparable multi-family developments in other municipalities in the region. As noted in the table, these properties may have different classifications than the Proposed Project, but the figures below are for their residential components. Available imagery for each property is provided at the end of this memo. The proposed development of the Project Site is generally less intense from a bulk and density perspective than these other projects, except for The Ambassador which is an assisted living facility.

**Table No. 8, Summary of Comparable Properties in Other Municipalities**

Property	Lot Area (AC)	Floor Area (SF)	FAR	Units	Density (Units/Acre)	Height		Yard			Parking	
						Feet	Stories	Front	Side	Rear	Spaces	Spaces/Unit
The Cambium, Larchmont <sup>1</sup>	2.94	222,075	1.17	186	63	75'	6	15'	15'	15'	267	1.44
Christie Place, Scarsdale <sup>2</sup>	1.73	105,500	1.4	42	24	46'	4	N/A	N/A	N/A	67	1.6
The Ambassador, Scarsdale <sup>3</sup>	6.98	119,779	0.4	115	16.7	N/A	3	40'	25'	30'	43	0.37
<b>120 Old Post Road</b>												
Proposed Zoning	7.01	244,500	0.80	152	21	45'	4	100'	40'/100'	25'	168	1.25
Proposed Project	7.01	222,500	0.73	135	19	45'	4	100'	100'/200'	25'	205	1.51

<sup>1</sup> Mixed use development; Data obtained through City of Mamaroneck Site Plan Approval Records and Westchester County GIS

<sup>2</sup> Mixed use development; Data obtained from Scarsdale Town Planner and As-Built Survey.

<sup>3</sup> Assisted living facility; Data obtained from Scarsdale Town Planner and As-Built Survey.

### ***Surface Parking Alternative***

The Applicant has contemplated an alternative plan in which surface level parking would be permitted in lieu of the requirement for structured, subterranean parking. See Figure No. 9, *Surface Parking Alternative*. With the same dimensional constraints that the Proposed Action would permit, this alternative would have an approximate FAR of 0.8, and building coverage of approximately 60,000 square feet. The surface parking area would cover approximately 118,000 square feet for total lot coverage of 178,000 square feet (58% of the total lot area). In order to provide parking spaces at the ratio required in the Proposed Action, the series of four-story buildings shown in Figure 9 would also require more permissive setbacks than the Action proposes.

Although surface parking would likely save construction costs, significant impacts to stormwater management and visual resources could be anticipated in this alternative. Potential lot coverage rates would be nearly double what the Proposed Action would permit, and this alternative would limit the Applicant's ability to provide a site-sensitive design with an attractive landscape plan and adequate stormwater management facilities. This alternative illustrates the crucial role that subterranean parking would play in the Proposed Action's ability to preserve open green space, maintain community character, and minimize lot coverage. In sum, the applicant believes that this alternative would lead to a less desirable outcome for residents of the Project and the neighboring community, and requiring underground parking will help to mitigate these impacts.

### ***Land Use***

The Project Site is bordered by Playland Access Drive to the northeast with access to Playland Parkway located at the Site's northeast corner. Old Post Road forms the southeast border with single family homes extending south and east of the Project Site, and to the north and east beyond Playland Parkway. The Site is also adjacent to The Osborn retirement community to the southwest, and WESTMED Medical Group's Rye office to the northwest. Additional office uses extend north and south of the Project Site, with additional multi-family residences to the southwest and north along Theall Road. In the larger context, the Project Site is located at the edge of an office district, with a variety of different land uses in the area which are generally characterized by single and multi-family residences, office buildings, institutional and public assembly spaces, cemeteries, public parks and parkway lands, nature preserves, and vacant land. See Figure No. 10, *Area Land Use Map*.

We believe the age-restricted luxury rental apartment building would provide an ideal transition between the residential community and office building district. It would also complement the scale and use characteristics of The Osborn as a multi-family residential community for senior citizens, while diversifying housing options in Rye specifically for active adults who do not require nursing care but no longer have the necessity of maintaining the costs of home ownership. See Figures 11, 12, and 13, *Conceptual Renderings*.

The City of Rye's Development Plan was adopted in 1985, and intended to guide land use decisions in the City through the year 2000<sup>2</sup>. Although the Plan describes a "great pressure in Westchester County in recent years to build corporate office buildings [... which] has led to pressure from builders for the

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<sup>2</sup> City of Rye, NY. *City of Rye 1985 Development Plan*. Adopted April 23, 1985.

rezoning of Rye land from residential to commercial,” the Plan acknowledges that it “is not a static document to be followed without regard to changing conditions.” As previously stated, such conditions in the office market have changed significantly since the Plan’s adoption. However, the Proposed Action is consistent with the Plan’s goals and policies related to residential development as follows:

*II.1 Residential Development, Goal 4 – Provide an opportunity for the development of housing of various types, sizes, and costs to meet the needs of people at various stages in the life cycle, income, age levels, and household compositions, without compromising the integrity of Rye’s single family residential areas.*

Consistent with the Development Plan’s goal, the Proposed Action would provide an opportunity for living accommodations in Rye in a way that is not currently regulated in the Zoning Ordinance. It would address what the Plan identifies as “an increasing need to provide housing for senior citizens who are no longer able to (or wish to) maintain a home,” with a viable alternative for those older individuals seeking alternative housing arrangements who are able to remain active and independent.

Further, the Proposed Project’s location near the office buildings and major roadways is identified in the plan as highly desirable for redevelopment with higher density multi-family residences. Located within the Post Road Residential/ Institutional Area, its vicinity was “envisioned as a mixed use area blending in with the surrounding residential areas. Permitted uses would be a variety of residential uses and densities.” Therefore, it is expected that the project would enhance the integrity of the adjacent single family residential area by providing an added buffer of residential use between it and the office building district, with an aesthetic style that would complement the adjacent single family community as well as The Osborn.

## **FISCAL IMPACTS**

### ***Property Taxes***

The Project Site is subject to real property taxation by the City of Rye, the Rye City School District, Westchester County, and special benefit assessments for Westchester County (e.g., sewer and solid waste special districts). The project site currently has a full market value for assessment purposes of \$7,492,146. The City’s equalization rate is 1.91%, which results in an assessed value of \$143,100. The 2014 tax rates for the taxing jurisdictions are presented below in Table No. 9, *120 Old Post Road Current Tax Bill*.

The Project Site is currently occupied by one office tenant. As indicated above, the property has an assessed value of \$143,000. The existing tax generation from the site is provided below in Table No. 9, below.

**Table No. 9, 120 Old Post Road Current Tax Bill**

<i>Equalization Rate: 1.91%</i>				
	<b>Tax Rate (per \$1,000 value)</b>	<b>2014 Market Value Valuation</b>	<b>2014 Assessed Value</b>	<b>Tax Bill</b>
City of Rye	\$ 150.38	\$ 7,492,146	\$ 143,100	\$ 21,519
Rye School District	\$ 561.33	--	--	\$ 80,327
Westchester County	\$ 187.92	--	--	\$ 26,891
Refuse Disposal District	\$ 17.61	--	--	\$ 2,519
Blind Brook Sewer	\$ 29.68	--	--	\$ 4,248
<b>Total Tax Rate (Rye School District)</b>	<b>\$ 946.93</b>	<b>\$ 7,492,146</b>	<b>\$ 143,100</b>	<b>\$ 135.504</b>
<i>2014 numbers were obtained from the Westchester County Government's published Property Tax Rates and 2014 City of Rye Adopted Tax Rate.</i>				

As further detailed in the attached Proposed Property Tax Exposure Report prepared by McCarthy Appraisal / Consulting Svc. Inc. dated January 9, 2014, the Project could be anticipated to have a future market value for assessment purposes of approximately \$34,000,000, resulting in an approximate assessed value of \$650,414. This would obviously be a marked increase over the existing tax base. The details of this increase on the tax roll are set forth in Table No. 10, below.

**Table No. 10, 120 Old Post Road Anticipated Tax Bill based on 2014 Tax Rates**

<i>Equalization Rate: 1.91%</i>				
	<b>Tax Rate (per \$1,000 value)</b>	<b>Anticipated Market Value Valuation</b>	<b>Anticipated Assessed Value</b>	<b>Approx. Tax Bill</b>
City of Rye	\$ 150.38	\$ 34,053,067	\$ 650,414	\$ 97,809
Rye School District	\$ 561.33	--	--	\$ 365,096
Westchester County	\$ 187.92	--	--	\$ 122,225
Refuse Disposal District	\$ 17.61	--	--	\$ 11,453
Blind Brook Sewer	\$ 29.68	--	--	\$ 19,310
<b>Total Tax Rate (Rye School District)</b>	<b>\$ 946.93</b>	<b>\$ 34,053,067</b>	<b>\$ 650,414</b>	<b>\$ 615,896</b>
<i>2014 numbers were obtained from the Westchester County Government's published Property Tax Rates and 2014 City of Rye Adopted Tax Rate.</i>				

In total, the Project is anticipated to produce an increase of approximately \$480,000 in tax total tax revenue. Perhaps most significantly, as the Project will be an age-restricted residential community there will be no additional burden on the Rye City School District caused by the Project, while generating approximately \$280,000 in additional School Taxes.

### **Service Costs**

The Subject Property is located within the City of Rye, and is presently served by the Rye Police Department, Rye Fire Department, Rye Public Works, and the Port Chester-Rye-Rye Brook

Volunteer Ambulance Corps. The existing and potential fiscal impacts of community services for its current and proposed land use have been considered by analyzing the Property within the context of all properties in Rye that receive these services. Based on 2014 tax rates, the Property currently has a full market value of \$7.5 million, and an assessed value of \$143,100. As per the City of Rye Annual Budget adopted for 2014, the City's total assessed value was \$165,669,516. Therefore, the Property currently accounts for approximately 0.09% of the value of City property that is currently covered by the City's services. As indicated above with regard to property taxes, the Proposed Action would permit residential use on the Property, and the resulting project would have an anticipated assessed value of \$650,414. Based on the methodology above, the Project's anticipated portion of the City's assessed value would be 0.39%.

It is the applicant's opinion that this change in use for an existing developed property represents such a small portion of the overall property to be served, and therefore no significant adverse impacts would be anticipated for overall departmental operations or City budgeting. As per Tables 9 and 10 above, the Property's 2014 tax bill for the City of Rye taxes was \$21,519, and with the Proposed Project it would be approximately \$97,809. Table 11 below outlines the applicable service costs that could potentially increase from the existing to the proposed conditions, their portion of the 2014 Combined Operating budget, and how those same portions could be applied to the existing and proposed bills for City taxes.

**Table No. 11, City of Rye Operating Budget, Services and 120 Old Post Road City Tax Bill**

			Existing Tax Bill	Proposed Tax Bill
Combined Operating Budget	\$ 50,371,169	100%	\$ 21,519	\$ 97,809
Police Services	\$ 9,214,601	18%	\$ 3,873	\$ 17,606
Fire Department	\$ 4,993,909	10%	\$ 2,152	\$ 9,781
Emergency Medical Services	\$ 221,748	0.4%	\$ 86	\$ 391
Sanitation Services	\$ 3,934,282	8%	\$ 1,722	\$ 7,824
Senior Adult Programs	\$ 8,600	0.1%	\$ 22	\$ 98

It should be noted that some City services are generally supported as pay for use services, and as such would not increase the City budget. Based on information described in the 2014 City Budget, emergency medical services are provided by a contract service agency using their own facilities, equipment, supplies and staff, and are costs that are typically charged to the individual seeking services. In addition, senior adult programs are part of the City's culture and recreation services, and typically charge participants for various programs, realizing revenue that exceeds the Budget's allocated cost. Overall, even if minor costs were incurred as a result of the change in use of the property, the anticipated increased revenue from City taxes as described above would likely exceed these costs.

### **Police and EMS Service Calls**

The following table summarizes calls made to the Rye Police Department from 2010 to 2013, from the Rye Manor apartments, located at 300 Theall Road in Rye. Rye Manor was selected for this analysis because it is the only other age-restricted multi-family residence development in Rye. As noted in the table, calls are categorized by their respective CFS codes, with the exception of calls classified as "other," which represents calls received in low volumes across various categories. Calls classified as



“other” include reports of missing persons, hit and run accidents, larceny, property damage, disorderly conduct, city code violations, illegally parked vehicles, flood conditions, unattended deaths, noise complaints, requests to assist other police departments, and hang-ups.

**Table No. 12, *Summary of Police Service Calls from 300 Theall Road***

<b>RMS CFS Code<sup>1</sup></b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Ambulance Request – CFS.013	28	22	19	12
Aided Case – CFS.012	20	18	13	17
Assist Citizen – CFS.014	12	21	11	8
Are You Ok Resident Check – CFS.246	18	11	1	2
Other	6	10	6	5
<b>Total Police Service Calls per Year</b>	<b>84</b>	<b>82</b>	<b>50</b>	<b>44</b>

<sup>1</sup>City of Rye Police Department, Incident Search Result Report for 300 Theall Rd, Rye NY, obtained from Rye City Planner.

## **CONCLUSION**

As described above, the existing office building at the Property has been mostly vacant for a significant period of time. As this condition is not isolated to the Property but is a macro-trend throughout Westchester County and other metropolitan areas, re-occupancy by substantial office use would be highly challenging and unlikely.

The Proposed Action would not only allow the property to be redeveloped and put back to sustainable use, it would also provide a housing opportunity that is not currently being offered within the City of Rye and would further reestablish the taxable value of the Property for real property tax purposes, which has continued to erode as the property has remained vacant. Furthermore, the Proposed Project would not create any additional strain on the Rye City School District as the development would expressly prohibit school age children from residing in the development. Therefore, it is the Applicant’s view that the Proposed Action and Project present a reasonable and logical alternative for the potentially valuable and underutilized Property while at the same time achieving the goal of providing a diverse housing stock within the City of Rye in a form that is not currently available.

**Table No. 2. Existing and Proposed Multi-Family Zoning Districts & Bulk Regulations**

4	5	6	7	8	9	10	11	12	13	14	15	16	
District	Use	Maximum Ratio of Floor Area to Lot Area <sup>(i)</sup>	Minimum Size of Lot (AC or SF) per a. Family or Equiv. <sup>(i)</sup> or b. Nonresidential Use	Minimum Width (feet) [See § 197-36]	Minimum Yard Dimensions (feet)			Specified Distance (feet) as required in Column 2 (Uses)	Maximum Height		One-Story Accessory Structures		
					Front <sup>(b)</sup>	One Side <sup>(b)(c)</sup>	Total of Two Side Yards		Rear <sup>(b)</sup>	(stories)	(feet)	Maximum Coverage of Required Rear Yard	Minimum Distance to Side Lane (feet)
RA-1	Single-family house	0.40	5,000	50	25	8	20	30	40	2.5	35	30%	5
	Two-family house	0.40	5,000	60	25	8	20	30	--	2.5	35	30%	5
	Apartment house	0.40	5,000 <sup>(c)</sup>	100	70	50	100	50	--	2.5	35	30%	10
RA-2	Single-family house	0.45	5,000	50	25	8	20	50	30	2.5	35	30%	5
	Two-family house	0.45	3,500	60	25	8	20	50	--	2.5	35	30%	5
	Apartment house	0.45	3,500 <sup>(c)</sup>	100	25	20	50	40	--	2.5	35	30%	10
RA-3	Single-family house	0.50	5,000	50	25	8	20	30	20	2.5	35	35%	5
	Two-family house	0.50	3,000	60	25	8	20	30	--	2.5	35	35%	5
	Apartment house	0.50	2,500 <sup>(c)</sup>	80	25	20	40	40	--	2.5	40	35%	10
RA-4	Single-family house	0.50	5,000	50	25	8	20	30	--	2.5	35	35%	5
	Two-family house	0.50	3,000	60	25	8	20	30	--	2.5	35	35%	5
	Apartment house	0.50	2,500 <sup>(c)</sup>	80	25	20 <sup>(d)</sup>	40 <sup>(d)</sup>	40 <sup>(d)</sup>	--	2.5 <sup>(f)</sup>	35 <sup>(f)</sup>	35%	10
RA-5	Apartment house for senior citizens and handicapped persons	1.00	1 AC	80	25		40	40	--	4	50	35%	10
RA-6	Apartment house for active senior citizens	0.8	2,000	400	100	40	100	25	--	4	45	35%	10

- (a) Equivalent to one (1) family in computing minimum lot sizes:
- [1] Hotels and lodging houses, each two (2) guest sleeping rooms.
  - [2] Hospitals and similar institutions, each two (2) hospital beds.
  - [3] Medical offices, each two (2) doctors plus three (3) other employees.
  - [4] Other nonresidential main uses not specifically provided for in this Table of Regulations or elsewhere in Chapter 197, each one thousand five hundred (1,500) square feet of floor space.
- (b) [1] Whenever a required yard about a street less than fifty (50) feet in width, the minimum yard dimension(s) shall be measured from a line of twenty-five (25) feet from parallel to the center line of said street.
- [2] No building shall be nearer than one hundred (100) feet to center line of Post Road between Mamaroneck town line and Central Avenue.
- (c) For corner lots, corner side yards at least one fifth (1/5) of the lot width at the location of the building, but need not be more than front yard minimum, except as provided in § 197-62. Permitted nonresidential main uses shall have minimum side yard one and one half (1 1/2) times width specified for a single-family house (See § 197-52).
- (d) Twenty-five (25) feet for any side yard containing a driveway serving more than six (6) parking spaces. For a one-, two-, or three-family structure existing on effective date of Chapter 197 (August 9, 1956) and proposed for conversion for up to four (4) families, the Board of Appeals may reduce side yard requirement to eight (8) feet. For side yard requirements for other apartments, see See § 197-54. For spacing between buildings on the same lot, see § 197-70. For the rear and side yards of apartment houses adjoining the right-of-way of a railroad, a parkway or a limited access highway, see § 197-64.
- (e) For usable open space requirement, see § 197-68.
- (f) For buildings in variable height apartment groups (a use permitted in RA-4 Districts subject to additional standards and requirements), see § 197-13.
- [g, h: omitted]
- (i) See § 197-43.1 for floor area ratio reductions for single-family residences on oversized properties in one-family districts.

**Table No. 3. *Bulk Characteristics of Regional Active Adult Zoning Districts***

Municipality	Maximum Ratio of Floor Area to Lot Area	Maximum Dwelling Units	Lot Building Coverage (%)	Lot Surface Coverage (%)	Required Parking Spaces Per Unit	Minimum Size of Lot (A/C)	Minimum Width (feet)	Minimum Yard Dimensions (feet)				Maximum Height	
								Front	One Side	Total of Two Side Yards	Rear	(stories)	(feet)
<b>Rye</b>	<b>0.8</b>	<b>21/AC</b>	<b>—</b>	<b>—</b>	<b>1.25</b>	<b>2,000 sq' min</b>	<b>125</b>	<b>100</b>	<b>40</b>	<b>100</b>	<b>25</b>	<b>4</b>	<b>45</b>
Carmel <sup>1</sup>	--	8/A/C	35%	--	1.5	5	125	40	--	--	--	2	40
Massapequa Park <sup>2</sup>	--	25/A/C	35%	--	1.5	2.5	--	25	25/35	50/70	25/50	2.5	30
Newburgh <sup>3</sup>	--	--	30%	80%	2	3	100	60	30	60	40	--	35
North Greenbush <sup>4</sup>	--	20/A/C	40%	--	1.4	2	--	40	40	80	40	Existing	Existing
Smithtown <sup>5</sup>	0.25	--	--	--	0.75	10	200	60	60	120	60	2.5	35

<sup>1</sup> Values based on Proposed Project and not proposed zoning standard. Values used for comparison purposes.

<sup>2</sup> Village of Carmel, NY; Chapter 183 Zoning, Article X VAC (Planned Adult Community) Residential Districts.

<sup>3</sup> Town of Carmel, NY; Chapter 156 Zoning, Section 39 Senior Citizen Multifamily Dwellings.

<sup>4</sup> Village of Massapequa Park, NY; Chapter 334 Zoning, Article VII "Golden Age Dwellings".

<sup>5</sup> Town of Newburgh, NY; Chapter 185 Zoning, Section 48 "Senior Citizen Housing".

<sup>6</sup> Town of North Greenbush, NY; Chapter 197 Zoning, Article XV "Senior Citizen Housing District".

<sup>7</sup> Town of Smithtown, NY; Chapter 322 Zoning, Article VII "Retirement Community District".



**Table No. 4. 120 Old Post Road - Existing and Proposed Zoning Districts**

Zoning Compliance & Maximum Site Build Out	B-4 <sup>1</sup>		RA-6			
	Existing Office Building	Zoning-Compliant Maximum Build Out	Active Senior Residence District	Proposed Apartment House		
Maximum Floor Area Ratio	0.25	0.3	0.8	0.73		
Minimum Size of Lot per a. Family or Equiv. or b. Nonresidential Use	7 AC	7 AC	2,000 SF	2,280		
Minimum Yard Dimensions (feet)						
Front	200'	100'	100'	100'		
One Side	100'	100'	40'	100'		
Total of Two Side Yards	390'	200'	100'	125'		
Rear	100'	100'	25'	25'		
Maximum Height						
Stories	3	3	4	4		
Feet	40'	45'	45'	45'		
Parking Requirement <sup>2</sup> (approx.)	240 Spaces	345 Spaces	1.25 Spaces/ Unit	205 Spaces (168 req.)		
Project Development Analysis						
Total Building Floor Area	SF 75,000	% Coverage 0.25	SF 91,600	% Coverage 0.30	SF <sup>4</sup> 244,260	% Coverage <sup>4</sup> 0.80
Total Impervious Coverage	135,400	44%	176,200	58%	108,650	36%
Building Footprint	28,000	9%	36,600	12%	75,300	25%
Paved Area	107,400	35%	139,600	46%	33,350	11%

1 City of Rye, Chapter 197 "Zoning," Art. 2

2 Based on § 197-28 "Schedule of off-street parking requirements," which provides 7 spaces per 10 people employed or intended to be employed in office buildings or other permitted uses in the B-4 District. Parking ratio for maximum build out conditions is estimated at 3.8/1000 SF

3 Potential build out conditions are estimated using existing conditions and are prorated by F.A.R. regulations.

4 Coverage calculations are based on the lot area of the Project Site, which is approximately 7.01 acres or 305,322 square feet.





# ILLUSTRATIVE SITE PLAN

120 OLD POST ROAD  
 RYE, NY

AWR/SAR 06 - 1/12/2015 revised 6/2/2016

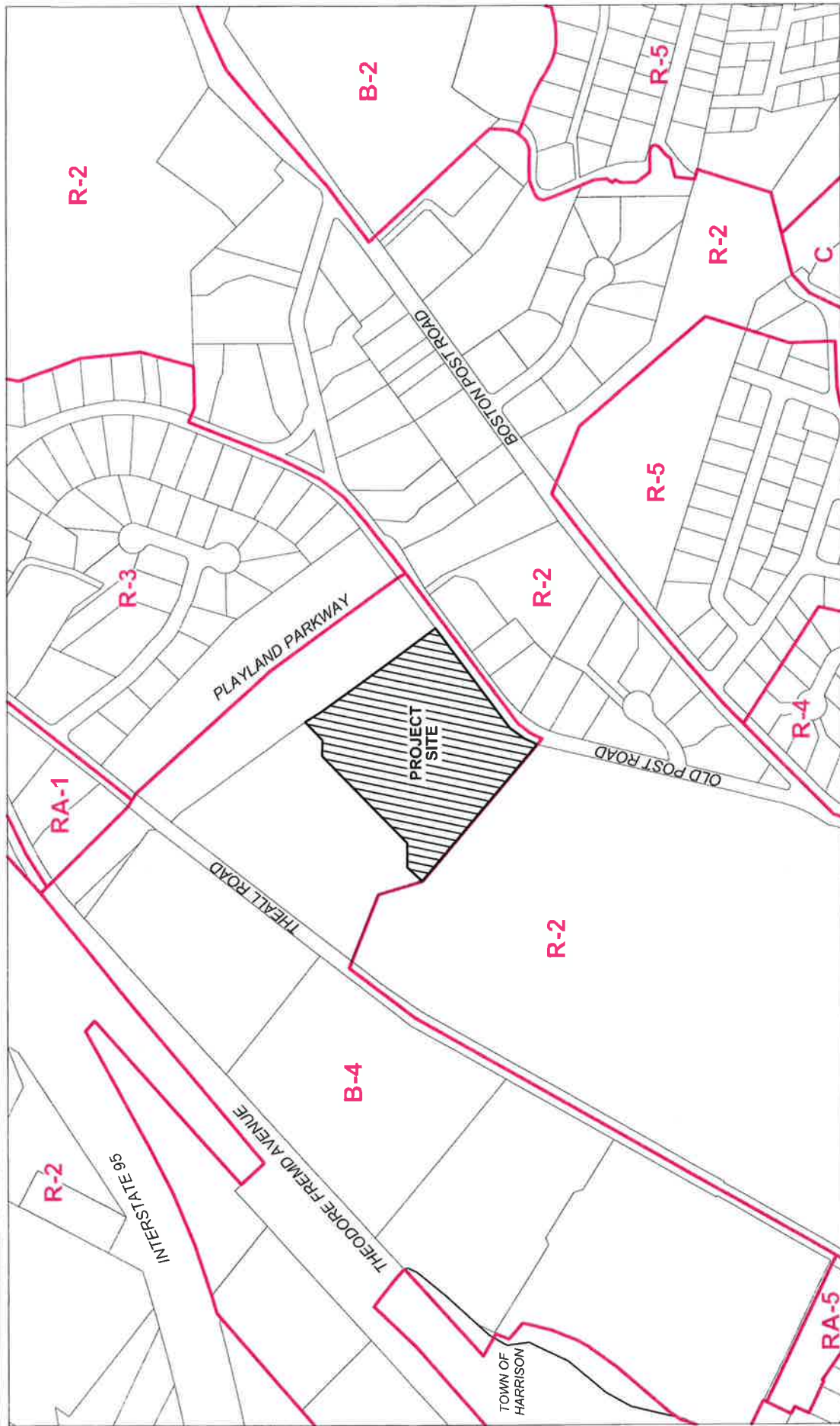


DWYER, TUNG & SCHWABE  
 Landscape Architects  
 100 West 10th Street  
 New York, NY 10011  
 Tel: 212 333 3333  
 Fax: 212 333 3334  
 www.dtschwa.com



FIGURE NO. 1



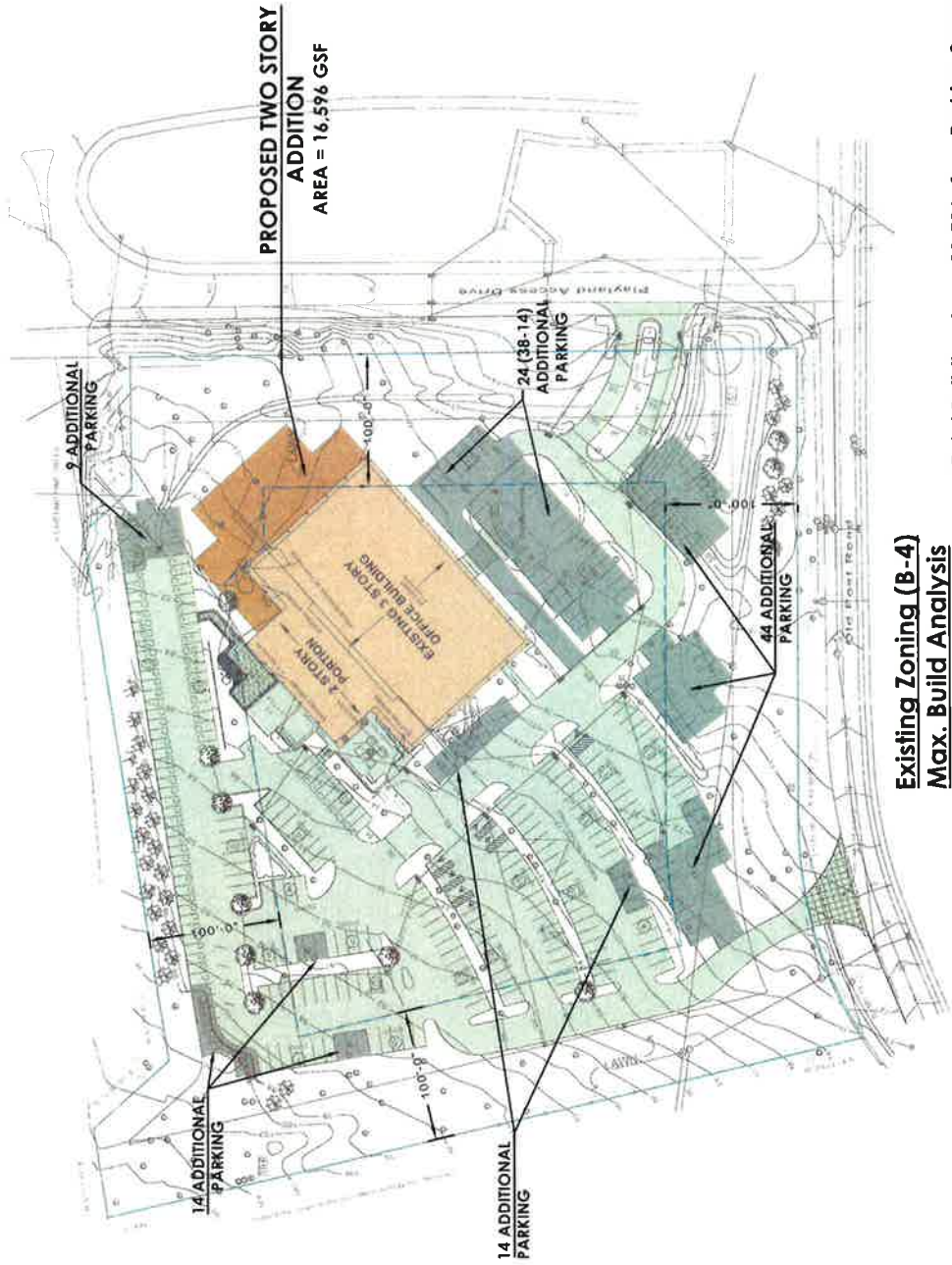


AREA ZONING MAP

120 OLD POST ROAD  
CITY OF RYE, NEW YORK

FIGURE NO. 2

DOWNEY TUNG SCHWABE  
ARCHITECTS LLP



**Existing Zoning (B-4)**

**Max. Build Analysis**

FAR: 0.30  
 Max. Floor Area: 91,596 sf  
 Site Area ~ 305,322 sf

<b>Total Building Area: 91,596 sf</b>	
Existing Building:	75,000 sf
Proposed Addition:	16,596 sf
(Two story @ 8,250 sf per floor)	
<b>Parking Summary</b>	
Existing ~	240 Spaces
Proposed:	105 Spaces
Total ~	345 Spaces
Parking Ratio ~	3.8/1000

**EXISTING ZONE (B-4) MAX. BUILD OUT**

120 OLD POST ROAD  
 RYE, NY

DIVNEY • TUNG • SCHWALBE  
 and  
 Associates  
 1000 Old Post Road  
 Rye, NY 10580  
 914.937.8800  
 www.divneytung.com



AWP 16A 04 - 3/2/2015 revised 4/2/2015

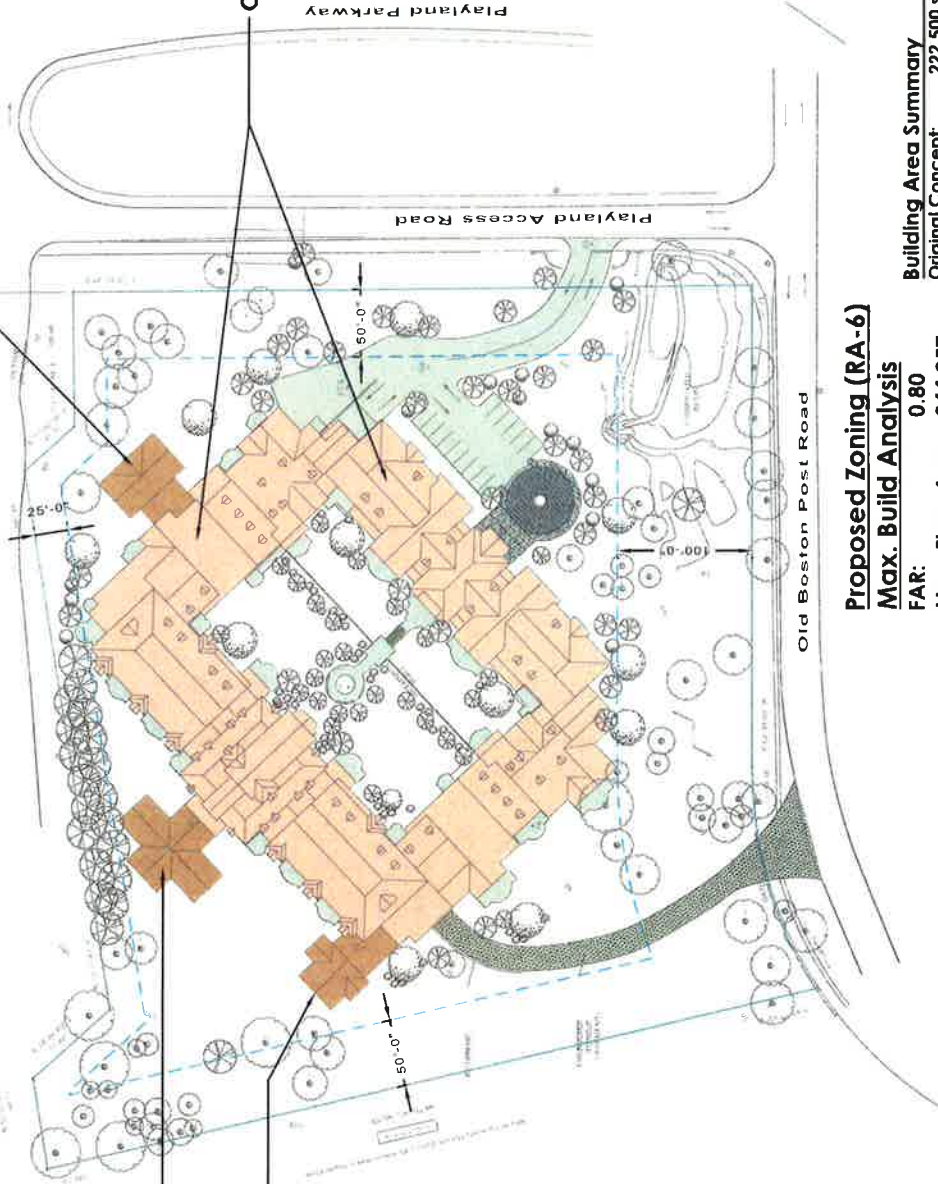


**PROPOSED THREE STORY  
ADDITION**  
AREA = 7,500 GSF

**PROPOSED TWO STORY  
ADDITION**  
AREA = 7,000 GSF

**PROPOSED THREE STORY  
ADDITION**  
AREA = 7,257 GSF

**ORIGINAL CONCEPTUAL  
DESIGN BUILDING  
FOOTPRINT**  
AREA = 222,500 GSF  
(three and four story)



**Proposed Zoning (RA-6)**

**Max. Build Analysis**

FAR: 0.80  
Max. Floor Area: 244,257  
Site Area ~ 305,322 sf

Building Area Summary	
Original Concept:	222,500 sf
Max. Build Additions:	21,757 sf
Total Building Area:	244,257 sf

Parking Summary	
Covered ~	190 Spaces
Surface ~	15 Spaces
Total ~	205 Spaces

**PROPOSED ZONE (RA-6) MAX. BUILD OUT**

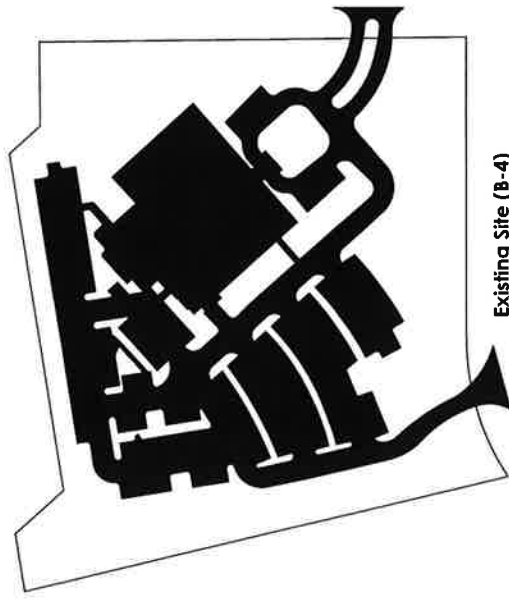
120 OLD POST ROAD  
RYE, NY



DAWNEY • TUG • SCHWABE  
ARCHITECTS LLP  
1000 WEST 10TH STREET  
SUITE 200  
DENVER, CO 80202  
P: 303.733.8800

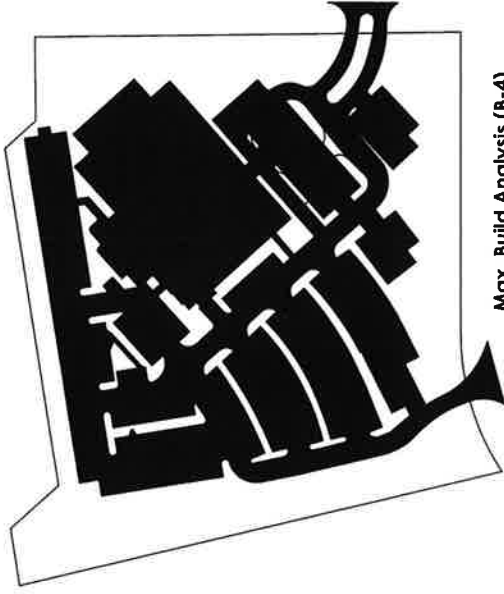






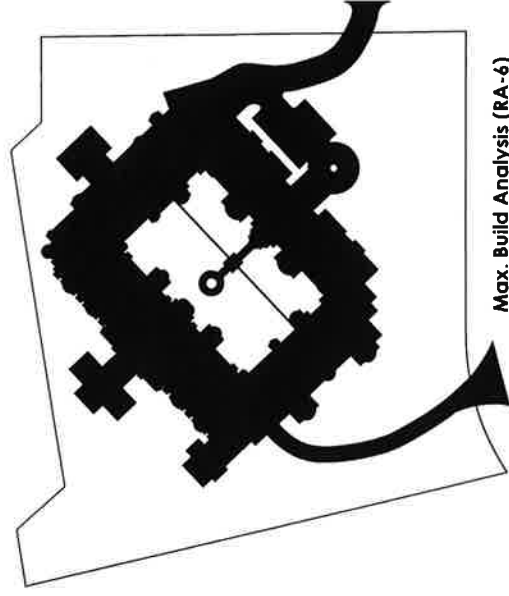
#### Existing Site (B-4)

Building Footprint ~	27,935 sf
Paved Areas ~	107,418
Total Impervious ~	135,353
Site Area ~	305,322
% Impervious ~	44.33%



#### Max. Build Analysis (B-4)

Building Footprint ~	36,505 sf
Paved Areas ~	139,616
Total Impervious ~	176,121
Site Area ~	305,322
% Impervious ~	57.68%



#### Max. Build Analysis (RA-6)

Building Footprint ~	75,315 sf
Paved Areas ~	33,347
Total Impervious ~	108,662
Site Area ~	305,322
% Impervious ~	35.59%

## SITE DEVELOPMENT ANALYSIS - IMPERVIOUS CONDITIONS

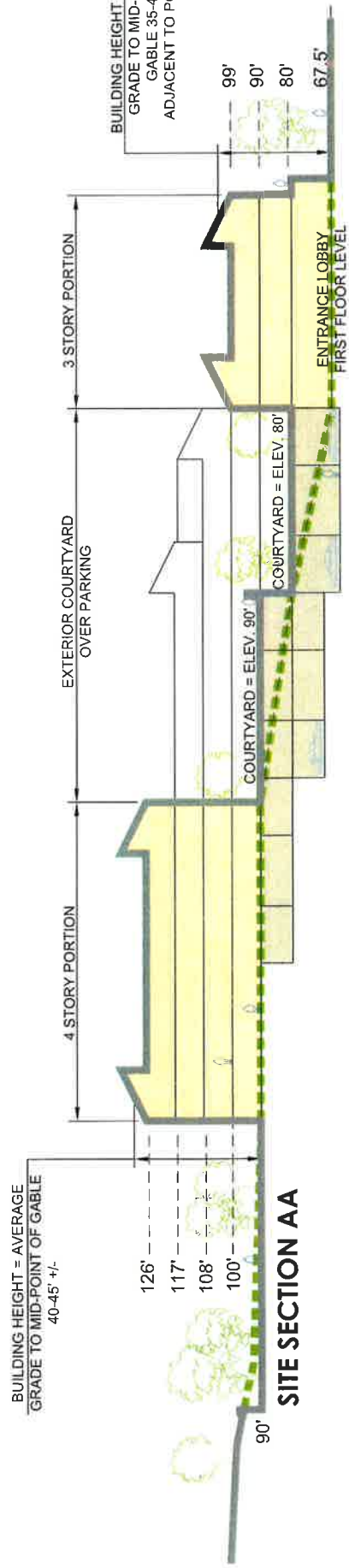
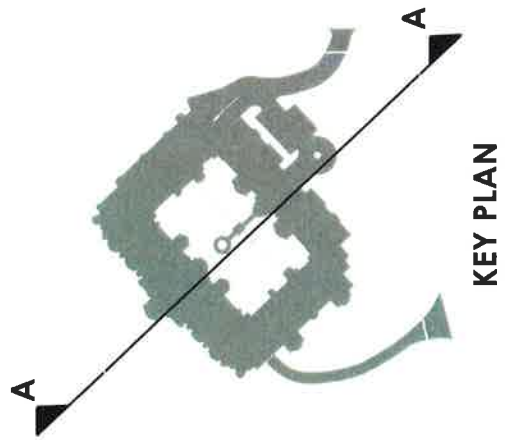
120 OLD POST ROAD  
RYE, NY

AMERICAN - 3/6/2015, Revised 4/2/2015



DWYER • TUNG • SCHWALBE  
Intelligent Land Use  
300 West 10th Street, Suite 200  
New York, NY 10011  
Tel: 212.693.1111  
Fax: 212.693.1112





## BUILDING HEIGHT DIAGRAM

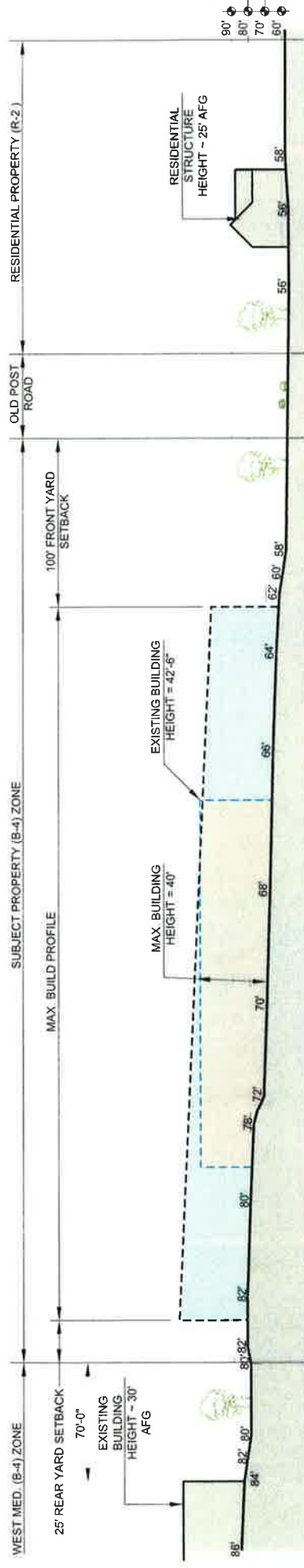
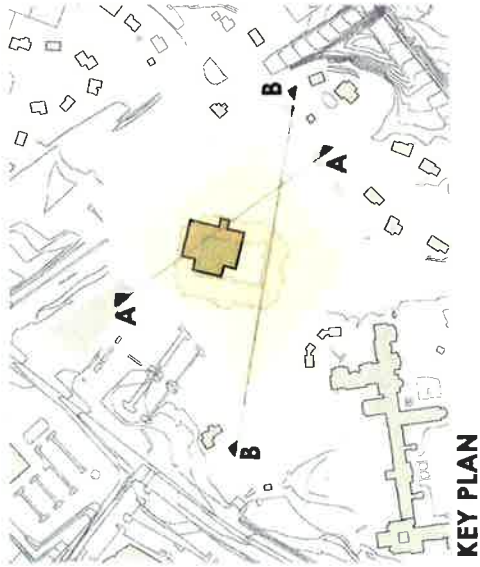
120 OLD POST ROAD  
RYE, NY

DATE: 11/22/2018, REVISED: 6/27/2018



**DIVNEY • TUNG • SCHWABE**  
ARCHITECTS LLP  
100 West 17th Street, Suite 100  
New York, NY 10011  
Tel: 212.250.1000  
Fax: 212.250.1001  
www.divneytung.com





## SITE SECTION DIAGRAM

120 OLD POST ROAD  
RYE, NY

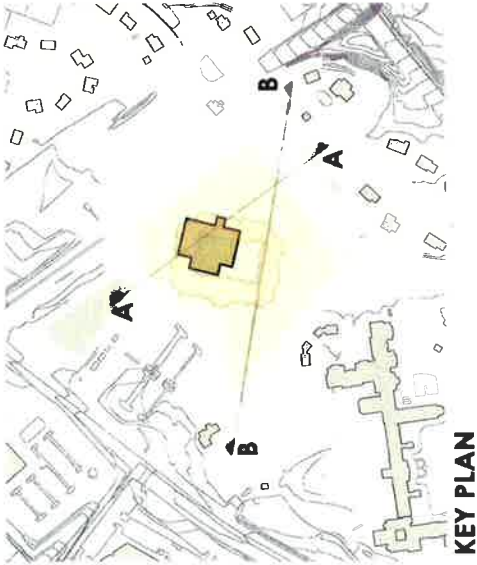
AWR/SLAR/CL - 3-31-2015, modified 4-2-2015



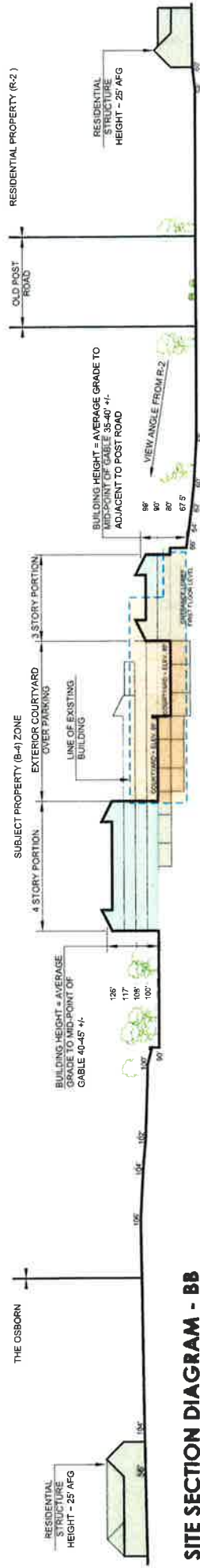
**DAWNEY • LUNG • SCHWARTZ**  
Architectural Firm  
300 Westchester Ave., 10th Floor  
New York, NY 10601  
Tel: (212) 692-1234







**KEY PLAN**



**SITE SECTION DIAGRAM - BB**

# **SITE SECTION DIAGRAM - PROPOSED BUILDING**

**120 OLD POST ROAD  
RYE, NY**

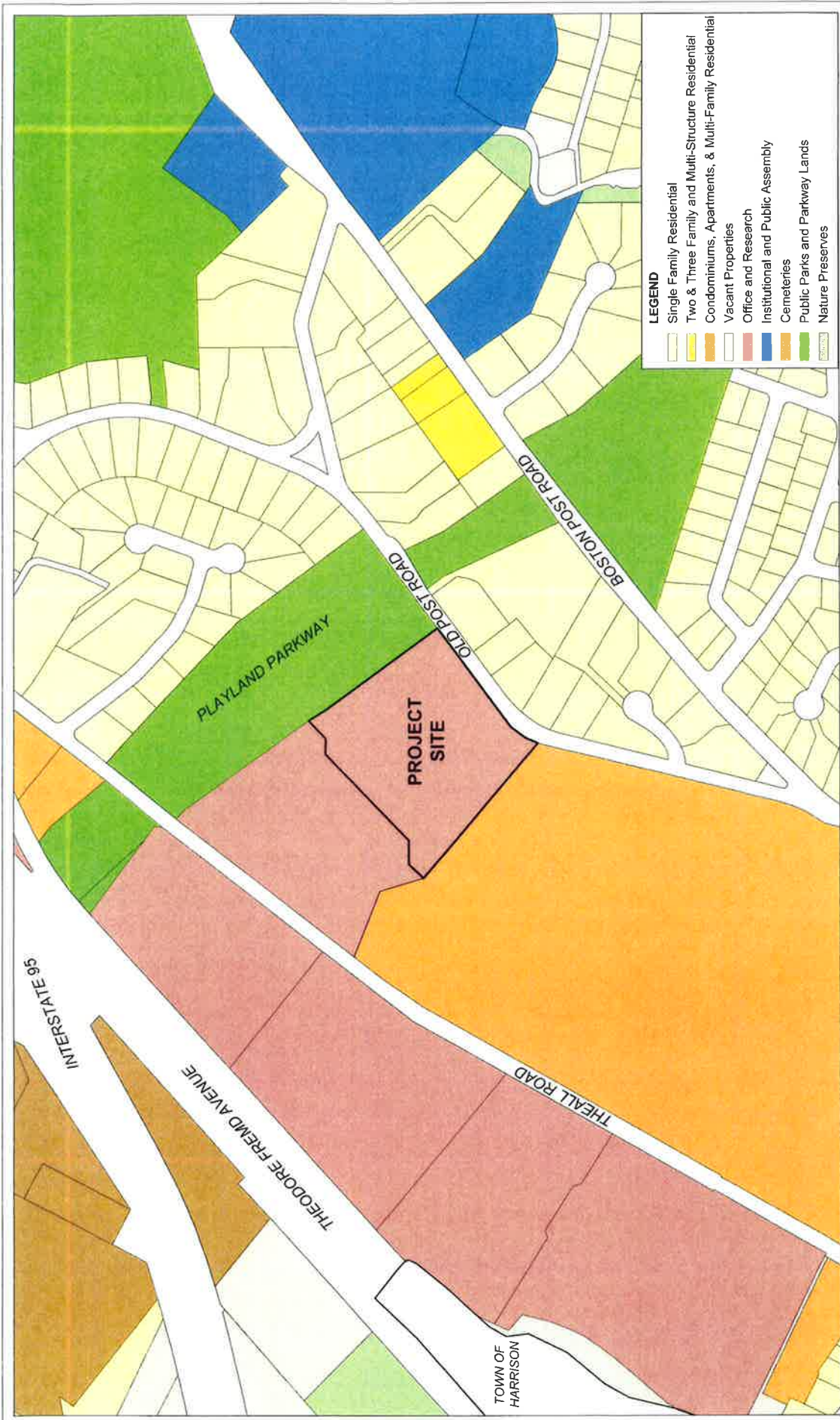
AWTISBARKER - 3-31-2015 REVISED 4-2-2015



**Design - TAC - Schematic**  
 Design - TAC - Schematic  
 TAC Engineering, LLC  
 1000 West 10th Street  
 Suite 100  
 P.O. Box 1000







**AREA LAND USE MAP**

120 OLD POST ROAD  
CITY OF RYE, NEW YORK





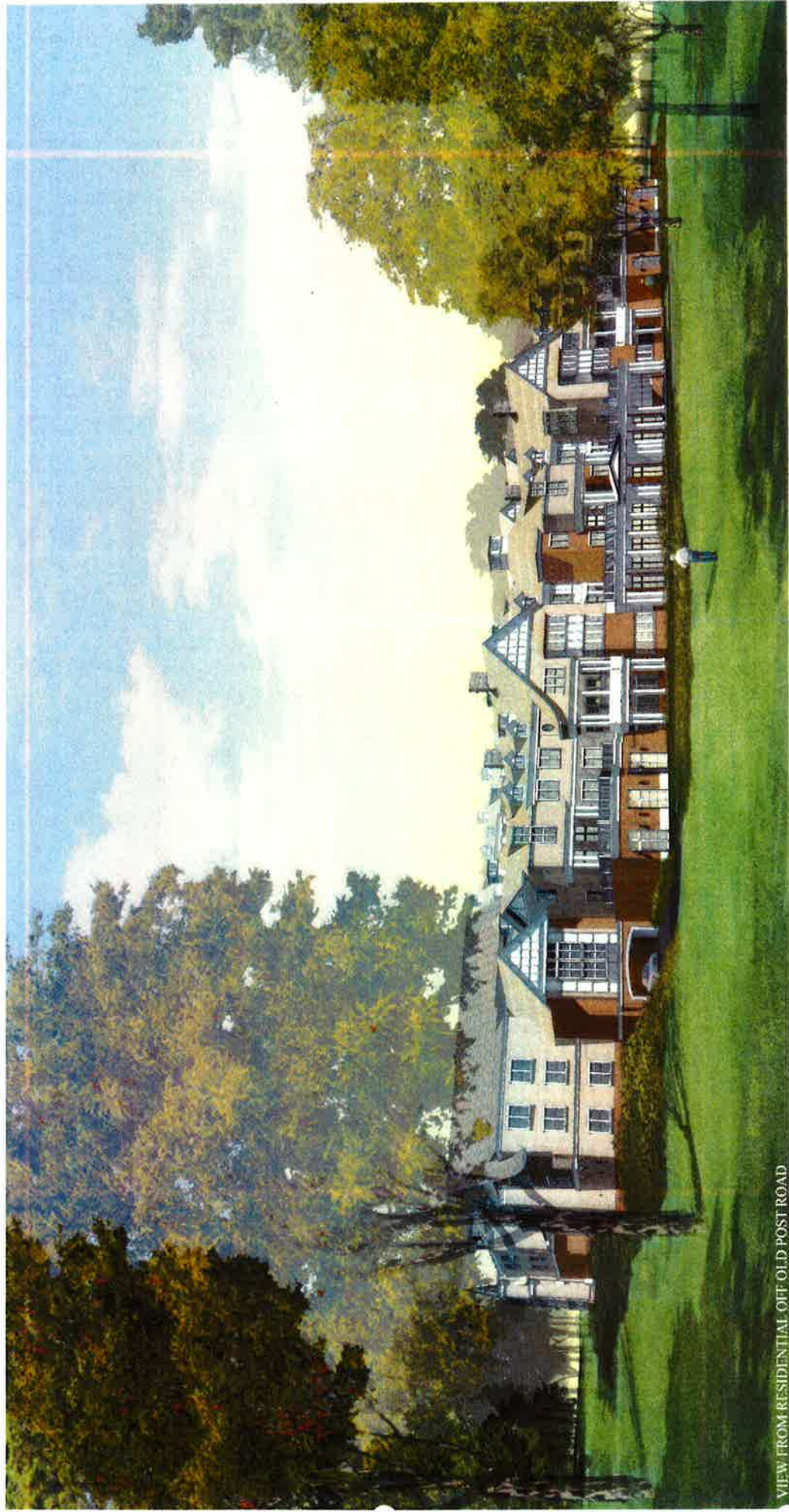
CONCEPTUAL RENDERING - VIEW FROM PLAYLAND ACCESS DRIVE

120 OLD POST ROAD  
RYE, NY

**FIGURE NO. 11**

**DIVNEY • TUNG • SCHWALBE**  
 Intelligent Land Use  
 200 West 10th Street, Suite 1000  
 Chicago, IL 60604  
 Tel: 312.467.1234  
 Fax: 312.467.1235





VIEW FROM RESIDENTIAL OFF OLD POST ROAD

# CONCEPTUAL RENDERING - VIEW FROM OLD POST ROAD

120 OLD POST ROAD  
 RYE, NY  
 AMSTERDAM 06-1-1-12 2016, REVISED 8-3-16



DIVNEY • TUNG • SCHWABE  
 Architects and Planners  
 100 West Broadway  
 New York, NY 10012  
 Tel: 212.691.1000  
 Fax: 212.691.1001









VIEW OF INTERIOR COURTYARD

# CONCEPTUAL RENDERING - VIEW OF INTERIOR COURTYARD

120 OLD POST ROAD  
 RYE, NY



**DINEY + TUNG + SCHWALBE**  
 ARCHITECTS



N

AWT/SAR 06 - 11/2/2015 revised 6-2-2015

**Full Environmental Assessment Form**  
**Part 1 - Project and Setting**

**Instructions for Completing Part 1**

**Part 1 is to be completed by the applicant or project sponsor.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

**A. Project and Sponsor Information.**

Name of Action or Project: Rezoning of 120 Old Post Road		
Project Location (describe, and attach a general location map): 120 Old Post Road, City of Rye, Westchester County		
Brief Description of Proposed Action (include purpose or need): Rezoning of the property at 120 Old Post Road for an age-restricted, multi-family residential development.		
Name of Applicant/Sponsor: Old Post Road Associates LLP c/o Harfenist Kraut & Perlstein LLP		Telephone: 914-701-0800 E-Mail: jkraut@hkplaw.com
Address: 2975 Westchester Ave, Suite 415		
City/PO: Purchase	State: New York	Zip Code: 10577
Project Contact (if not same as sponsor; give name and title/role):		Telephone: E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):		Telephone: E-Mail:
Address:		
City/PO:	State:	Zip Code:

## B. Government Approvals

**B. Government Approvals, Funding, or Sponsorship.** ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Planning Board or Commission		
c. City Council, Town or <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Village Zoning Board of Appeals		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources. i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

## C. Planning and Zoning

### C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☒ Yes ☐ No

- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part I

### C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☒ Yes ☐ No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐ Yes ☒ No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐ Yes ☒ No

If Yes, identify the plan(s):

---



---



---

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐ Yes ☒ No

If Yes, identify the plan(s):

---



---



---



### C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance.  
If Yes, what is the zoning classification(s) including any applicable overlay district?

☒ Yes ☐ No

B-4 Office Building District

b. Is the use permitted or allowed by a special or conditional use permit?

☒ Yes ☐ No

c. Is a zoning change requested as part of the proposed action?

☒ Yes ☐ No

If Yes,

i. What is the proposed new zoning for the site? RA-6 Apartments for Active Senior Citizens

### C.4. Existing community services.

a. In what school district is the project site located? City of Rye

b. What police or other public protection forces serve the project site?

City of Rye

c. Which fire protection and emergency medical services serve the project site?

City of Rye

d. What parks serve the project site?

Project Site is adjacent to Playland Parkway Lands and approximately 1/4 mile from Rye Nature Center.

### D. Project Details

#### D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Residential

b. a. Total acreage of the site of the proposed action? 7 acres

b. Total acreage to be physically disturbed? 7 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 7 acres

c. Is the proposed action an expansion of an existing project or use?

☐ Yes ☒ No

i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % Units:

d. Is the proposed action a subdivision, or does it include a subdivision?

☐ Yes ☒ No

If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed?

☐ Yes ☐ No

iii. Number of lots proposed?

iv. Minimum and maximum proposed lot sizes? Minimum Maximum

e. Will proposed action be constructed in multiple phases?

☐ Yes ☒ No

i. If No, anticipated period of construction:

months

ii. If Yes:

- Total number of phases anticipated

- Anticipated commencement date of phase I (including demolition) month year

- Anticipated completion date of final phase month year

- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

f. Does the project include new residential uses? ☒ Yes ☐ No  
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	135

g. Does the proposed action include new non-residential construction (including expansions)? ☐ Yes ☒ No  
 If Yes,

i. Total number of structures \_\_\_\_\_  
 ii. Dimensions (in feet) of largest proposed structure: \_\_\_\_\_ height; \_\_\_\_\_ width; and \_\_\_\_\_ length  
 iii. Approximate extent of building space to be heated or cooled: \_\_\_\_\_ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☒ No  
 If Yes,

i. Purpose of the impoundment: \_\_\_\_\_  
 ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify: \_\_\_\_\_  
 iii. If other than water, identify the type of impounded/contained liquids and their source. \_\_\_\_\_  
 iv. Approximate size of the proposed impoundment. Volume: \_\_\_\_\_ million gallons; surface area: \_\_\_\_\_ acres  
 v. Dimensions of the proposed dam or impounding structure: \_\_\_\_\_ height; \_\_\_\_\_ length  
 vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): \_\_\_\_\_

**D.2. Project Operations**

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☐ Yes ☒ No  
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)  
 If Yes:

i. What is the purpose of the excavation or dredging? \_\_\_\_\_  
 ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?  
     • Volume (specify tons or cubic yards): \_\_\_\_\_  
     • Over what duration of time? \_\_\_\_\_  
 iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. \_\_\_\_\_  
 \_\_\_\_\_  
 iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No  
 If yes, describe. \_\_\_\_\_  
 \_\_\_\_\_  
 v. What is the total area to be dredged or excavated? \_\_\_\_\_ acres  
 vi. What is the maximum area to be worked at any one time? \_\_\_\_\_ acres  
 vii. What would be the maximum depth of excavation or dredging? \_\_\_\_\_ feet  
 viii. Will the excavation require blasting? ☐ Yes ☐ No  
 ix. Summarize site reclamation goals and plan: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☒ No  
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): \_\_\_\_\_  
 \_\_\_\_\_

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

iii. Will proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No  
If Yes, describe: \_\_\_\_\_

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No  
If Yes:

- acres of aquatic vegetation proposed to be removed: \_\_\_\_\_
- expected acreage of aquatic vegetation remaining after project completion: \_\_\_\_\_
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): \_\_\_\_\_
- proposed method of plant removal: \_\_\_\_\_
- if chemical/herbicide treatment will be used, specify product(s): \_\_\_\_\_

v. Describe any proposed reclamation/mitigation following disturbance: \_\_\_\_\_

\_\_\_\_\_

c. Will the proposed action use, or create a new demand for water? ☒ Yes ☐ No  
If Yes:

i. Total anticipated water usage/demand per day: \_\_\_\_\_ 16,250 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☒ Yes ☐ No  
If Yes:

- Name of district or service area: United Water
- Does the existing public water supply have capacity to serve the proposal? ☒ Yes ☐ No
- Is the project site in the existing district? ☒ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☒ No
- Do existing lines serve the project site? ☒ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☒ No  
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_
- Source(s) of supply for the district: \_\_\_\_\_

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☒ No  
If Yes:

- Applicant/sponsor for new district: \_\_\_\_\_
- Date application submitted or anticipated: \_\_\_\_\_
- Proposed source(s) of supply for new district: \_\_\_\_\_

v. If a public water supply will not be used, describe plans to provide water supply for the project: \_\_\_\_\_

N/A

vi. If water supply will be from wells (public or private), maximum pumping capacity: \_\_\_\_\_ N/A gallons/minute.

d. Will the proposed action generate liquid wastes? ☒ Yes ☐ No  
If Yes:

i. Total anticipated liquid waste generation per day: \_\_\_\_\_ 14,775 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): \_\_\_\_\_

Sanitary Discharge

\_\_\_\_\_

iii. Will the proposed action use any existing public wastewater treatment facilities? ☒ Yes ☐ No  
If Yes:

- Name of wastewater treatment plant to be used: Blind Brook Wastewater Treatment Facility
- Name of district: Blind Brook
- Does the existing wastewater treatment plant have capacity to serve the project? ☒ Yes ☐ No
- Is the project site in the existing district? ☒ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☒ No

<ul style="list-style-type: none"> <li>• Do existing sewer lines serve the project site? _____</li> <li>• Will line extension within an existing district be necessary to serve the project? _____</li> </ul> <p>If Yes:</p> <ul style="list-style-type: none"> <li>• Describe extensions or capacity expansions proposed to serve this project: _____</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? _____</p> <p>If Yes:</p> <ul style="list-style-type: none"> <li>• Applicant/sponsor for new district: _____</li> <li>• Date application submitted or anticipated: _____</li> <li>• What is the receiving water for the wastewater discharge? _____</li> </ul> <p>v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans): _____</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>N/A _____</p> <p>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____</p> <p>N/A _____</p>		
<p>e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? _____</p> <p>If Yes:</p> <p>i. How much impervious surface will the project create in relation to total size of project parcel?</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (impervious surface)</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (parcel size)</p> <p>ii. Describe types of new point sources. _____</p> <p>iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? _____</p> <p style="padding-left: 40px;">_____</p> <ul style="list-style-type: none"> <li>• If to surface waters, identify receiving water bodies or wetlands: _____</li> <li>• Will stormwater runoff flow to adjacent properties? _____</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? _____</p> <p>f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? _____</p> <p>If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? _____</p> <p>If Yes:</p> <p>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) _____</p> <p>ii. In addition to emissions as calculated in the application, the project will generate:</p> <ul style="list-style-type: none"> <li>• _____ Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)</li> <li>• _____ Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)</li> <li>• _____ Tons/year (short tons) of Perfluorocarbons (PFCs)</li> <li>• _____ Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)</li> <li>• _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)</li> <li>• _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)</li> </ul>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐ Yes ☒ No

If Yes:

i. Estimate methane generation in tons/year (metric): \_\_\_\_\_

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): \_\_\_\_\_

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i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐ Yes ☒ No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): \_\_\_\_\_

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j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☒ Yes ☐ No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☒ Morning ☐ Evening ☐ Weekend  
☐ Randomly between hours of \_\_\_\_\_ to \_\_\_\_\_.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: \_\_\_\_\_

iii. Parking spaces: Existing 240 Proposed 186 Net increase/decrease -54

iv. Does the proposed action include any shared use parking? ☐ Yes ☒ No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:  
N/A \_\_\_\_\_

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vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☒ Yes ☐ No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☒ Yes ☐ No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☒ Yes ☐ No

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k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐ Yes ☐ No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: \_\_\_\_\_

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): \_\_\_\_\_

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐ Yes ☐ No

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l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: \_\_\_\_\_
- Saturday: \_\_\_\_\_
- Sunday: \_\_\_\_\_
- Holidays: \_\_\_\_\_

ii. During Operations:

- Monday - Friday: \_\_\_\_\_
- Saturday: \_\_\_\_\_
- Sunday: \_\_\_\_\_
- Holidays: \_\_\_\_\_

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>Describe: _____</p>	
<p>n.. Will the proposed action have outdoor lighting? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>To be determined _____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>Describe: <u>Vegetation and Landscape Screening</u></p>	
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p>	
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally describe proposed storage facilities: _____</p>	
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action use Integrated Pest Management Practices? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>	
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> <li>• Construction: _____ tons per _____ (unit of time)</li> <li>• Operation : _____ tons per _____ (unit of time)</li> </ul> <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> <li>• Construction: _____</li> <li>• Operation: _____</li> </ul> <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> <li>• Construction: _____</li> <li>• Operation: _____</li> </ul>	

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☒ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): \_\_\_\_\_

ii. Anticipated rate of disposal/processing:

- \_\_\_\_\_ Tons/month, if transfer or other non-combustion/thermal treatment, or
- \_\_\_\_\_ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: \_\_\_\_\_ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☒ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: \_\_\_\_\_

ii. Generally describe processes or activities involving hazardous wastes or constituents: \_\_\_\_\_

iii. Specify amount to be handled or generated \_\_\_\_\_ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: \_\_\_\_\_

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: \_\_\_\_\_

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: \_\_\_\_\_

#### E. Site and Setting of Proposed Action

**E.1. Land uses on and surrounding the project site**

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☒ Commercial ☒ Residential (suburban) ☐ Rural (non-farm)

☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): Parkway, Institutional

ii. If mix of uses, generally describe: \_\_\_\_\_

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	3.0	1.8	-1.2
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: <u>Lawn and Landscaped Area</u>	4.0	5.2	+1.2

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☒ No  
i. If Yes: explain: \_\_\_\_\_

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☒ Yes ☐ No  
If Yes,  
i. Identify Facilities:  
The Osborn Senior Living Facility  
\_\_\_\_\_

e. Does the project site contain an existing dam? ☐ Yes ☒ No  
If Yes:  
i. Dimensions of the dam and impoundment:  
• Dam height: \_\_\_\_\_ feet  
• Dam length: \_\_\_\_\_ feet  
• Surface area: \_\_\_\_\_ acres  
• Volume impounded: \_\_\_\_\_ gallons OR acre-feet  
ii. Dam's existing hazard classification: \_\_\_\_\_  
iii. Provide date and summarize results of last inspection: \_\_\_\_\_

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☒ No  
If Yes:  
i. Has the facility been formally closed? ☐ Yes ☐ No  
• If yes, cite sources/documentation: \_\_\_\_\_  
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: \_\_\_\_\_  
iii. Describe any development constraints due to the prior solid waste activities: \_\_\_\_\_

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☒ No  
If Yes:  
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: \_\_\_\_\_

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☒ Yes ☐ No  
If Yes:  
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☒ No  
☐ Yes – Spills Incidents database Provide DEC ID number(s): \_\_\_\_\_  
☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): \_\_\_\_\_  
☐ Neither database  
ii. If site has been subject of RCRA corrective activities, describe control measures: \_\_\_\_\_  
N/A  
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☒ Yes ☐ No  
If yes, provide DEC ID number(s): V00571  
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):  
The Rye Gas Works site indicated in (iii) is located between Theodore Fremd Avenue and the New York, New Haven, and Hartford Railroad tracks in the Town of Rye. It is currently used as a ConEdison service center. Remediation was completed 06/28/2010 through NYSDEC Voluntary Cleanup Program.



v. Is the project site subject to an institutional control limiting property uses? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>	
<ul style="list-style-type: none"> <li>• If yes, DEC site ID number: _____</li> <li>• Describe the type of institutional control (e.g., deed restriction or easement): _____</li> <li>• Describe any use limitations: _____</li> <li>• Describe any engineering controls: _____</li> <li>• Will the project affect the institutional or engineering controls in place? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></li> <li>• Explain: _____</li> </ul>	
<b>E.2. Natural Resources On or Near Project Site</b>	
a. What is the average depth to bedrock on the project site? _____ >5 feet	
b. Are there bedrock outcroppings on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span> If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %	
c. Predominant soil type(s) present on project site: <u>PnC/PnB - Paxton Fine Sandy Loam</u> <span style="float: right;">100 %</span> _____ <span style="float: right;">%</span> _____ <span style="float: right;">%</span>	
d. What is the average depth to the water table on the project site? Average: <u>1.5-2.5</u> feet	
e. Drainage status of project site soils: <input checked="" type="checkbox"/> Well Drained: <u>100</u> % of site <input type="checkbox"/> Moderately Well Drained: _____ % of site <input type="checkbox"/> Poorly Drained _____ % of site	
f. Approximate proportion of proposed action site with slopes: <input checked="" type="checkbox"/> 0-10%: _____ % of site <input type="checkbox"/> 10-15%: _____ % of site <input type="checkbox"/> 15% or greater: _____ % of site	
g. Are there any unique geologic features on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span> If Yes, describe: _____	
h. Surface water features.	
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>	
ii. Do any wetlands or other waterbodies adjoin the project site? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>	
If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i.	
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>	
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:	
<ul style="list-style-type: none"> <li>• Streams: Name _____ Classification _____</li> <li>• Lakes or Ponds: Name _____ Classification _____</li> <li>• Wetlands: Name _____ Approximate Size _____</li> <li>• Wetland No. (if regulated by DEC) _____</li> </ul>	
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span> If yes, name of impaired water body/bodies and basis for listing as impaired: _____	
i. Is the project site in a designated Floodway? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>	
j. Is the project site in the 100 year Floodplain? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>	
k. Is the project site in the 500 year Floodplain? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>	
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span> If Yes:	
i. Name of aquifer: _____	

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <p>N/A</p>	
<p>n. Does the project site contain a designated significant natural community? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Describe the habitat/community (composition, function, and basis for designation):</p> <p>ii. Source(s) of description or evaluation:</p> <p>iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> <li>• Currently: _____ acres</li> <li>• Following completion of project as proposed: _____ acres</li> <li>• Gain or loss (indicate + or -): _____ acres</li> </ul>	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If yes, give a brief description of how the proposed action may affect that use:</p>	
<p><b>E.3. Designated Public Resources On or Near Project Site</b></p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes, provide county plus district name/number:</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>i. If Yes: acreage(s) on project site?</p> <p>ii. Source(s) of soil rating(s):</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p>ii. Provide brief description of landmark, including values behind designation and approximate size/extent:</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. CEA name: County &amp; State Park Lands</p> <p>ii. Basis for designation: Exceptional or unique character</p> <p>iii. Designating agency and date: Date: 1-31-90, Agency: Westchester County</p>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> <li>i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site    <input type="checkbox"/> Historic Building or District</li> <li>ii. Name: _____</li> <li>iii. Brief description of attributes on which listing is based: _____</li> </ul>	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> <li>i. Describe possible resource(s): _____</li> <li>ii. Basis for identification: _____</li> </ul>	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> <li>i. Identify resource: _____</li> <li>ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____</li> <li>iii. Distance between project and resource: _____ miles.</li> </ul>	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> <li>i. Identify the name of the river and its designation: _____</li> <li>ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></li> </ul>	

#### F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

#### G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Leo Nappi Date 1/29/15

Signature [Signature] Title Attorney

**PRINT FORM**



E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	Yes
E.3.d [Critical Environmental Area - Name]	County & State Park Lands
E.3.d.ii [Critical Environmental Area - Reason]	Exceptional or unique character
E.3.d.iii [Critical Environmental Area – Date and Agency]	Date:1-31-90, Agency:Westchester County
E.3.e. [National Register of Historic Places]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

## **SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS**

The following provides a brief evaluation of the potential environmental impacts of the proposed project to supplement the analysis of Zoning, Land Use, and Fiscal Impacts previously identified in this petition. In this case, the types of impacts often associated with a development proposal are limited since the project involves a previously developed site. In addition, the site is not constrained by wetlands or other regulated waterbodies, floodplains, significant steep slopes, or other identified sensitive natural resources:

### ***Transportation***

The results of the Traffic Analysis prepared by Frederick P. Clark Associates, attached herein, indicate that the Proposed Project will generate 27 and 34 vehicle trip ends during a typical weekday morning and weekday afternoon peak hour, respectively. For comparison purposes, the existing office building, if fully occupied with a variety of commercial tenants, could generate 109 and 104 vehicle trip ends during the same weekday morning and weekday afternoon peak hours, respectively. Therefore, the Proposed Project would result in a significant reduction in site traffic, with a decrease of 82 and 80 vehicle trip ends during the weekday morning and weekday afternoon peak periods, respectively.

The results of the analyses indicate that area roadways will continue to operate with essentially no change in Level of Service, except for an overall decrease in Level of Service at the signalized intersection of Theodore Fremd Avenue and Playland Access Drive. At this intersection, the Level of Service will change from “B” to “C” during the weekday and morning peak hour, resulting in an overall increase in average delay per vehicle of only 0.3 seconds, which is considered insignificant.

The results of these analyses and a comparison between a background and combined conditions indicate that traffic control and pavement markings at each of these intersections should remain unchanged as no modifications are necessary to accommodate this residential development. Based on these results, it is the applicant’s opinion that no significant adverse impacts to transportation are expected.

### ***Visual Resources***

The Project would maintain the existing 100 foot buffer to Old Post Road, and further enhance local visual resources by providing subterranean parking within the proposed structure. This allows for the implementation of an attractive landscape plan and the preservation of many of the Site’s existing mature trees. The Project also contemplates the development having a traditional architectural style that is typical of Rye, and a design which will complement the historic character of the adjacent Osborn property, serving as an appropriate visual transition from the adjacent single family neighborhoods to the adjacent office parks. See Figures 7, 8, and 9, *Conceptual Renderings*.

***Air Quality and Noise***

The Proposed Project will include below grade parking for the tenants and the loading area has been located toward Playland Access Road so as to minimize noise associated with vehicles and trucks. Similarly, air quality impacts should be lessened since there will be a significant reduction in site traffic.

***Utilities***

Water usage and sanitary discharge will increase from current land use approximately 16,250 and 14,775 gallons per day (gpd) respectively. It is not anticipated that this increase will have a significant impact on water and sanitary facilities since these values are conservative when compared to typical units with families. Actual usage is anticipated to be lower. All units will be equipped with low-flow fixtures. Further site specific review will be conducted during the Site Plan review process. Electric, gas, and communications also exist in the area to support the new project. The utility providers will be contacted once the land use zoning has been approved to identify connections and service modifications needed to support the Proposed Project. All existing utilities are anticipated to support the demand of the Proposed Project.

# WESTCHESTER COUNTY OFFICE MARKET: SUMMARY DATA



Prepared for **ALFRED WEISSMAN REAL ESTATE, LLC**

NOVEMBER, 2014







Goman+York Property Advisors LLC was engaged by Alfred Weissman Real Estate LLC to review several issues related to the possible redevelopment of the property located at 120 Old Post Road in Rye, NY. Those issues include:

**Impact of Current Market Conditions**

- Regional Trends in Local Office Market
  - History and growth
  - Current supply and demand parameters
  - Current vacancy rates
  - Impact of current market/vacancies on market valuations and property taxes

**Impact of Current Market Conditions**

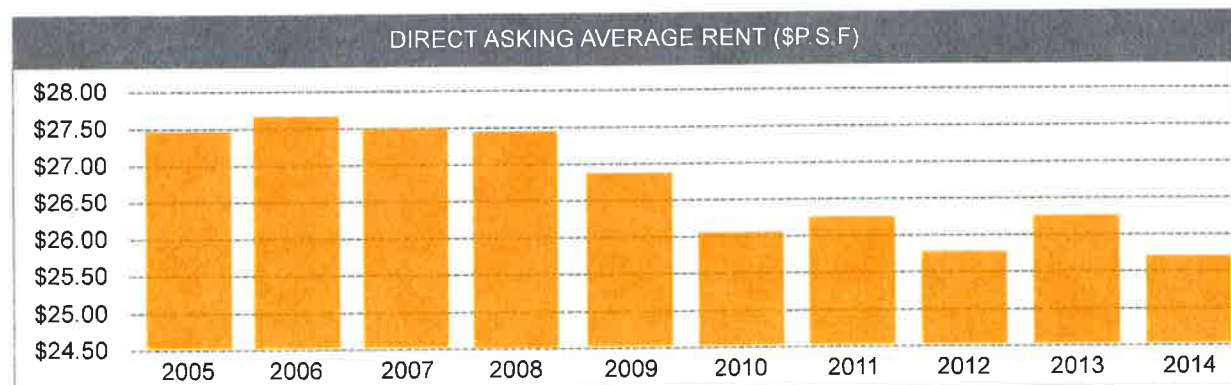
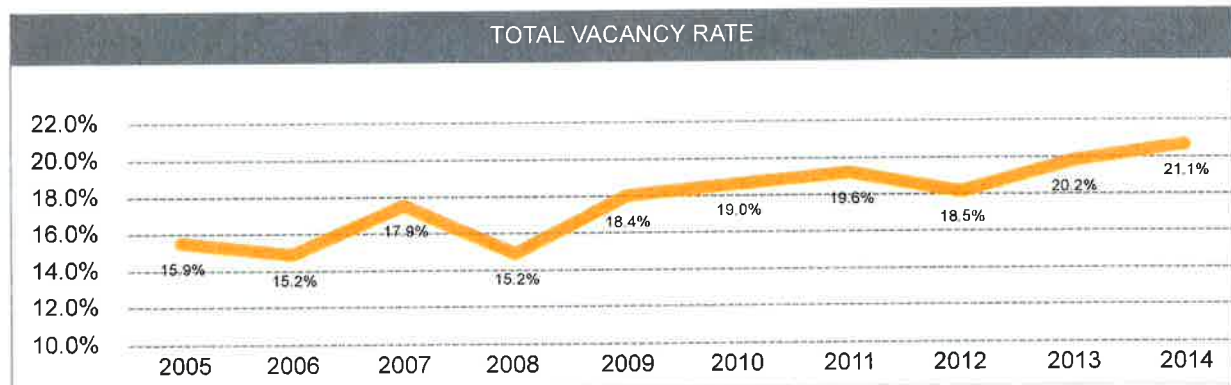
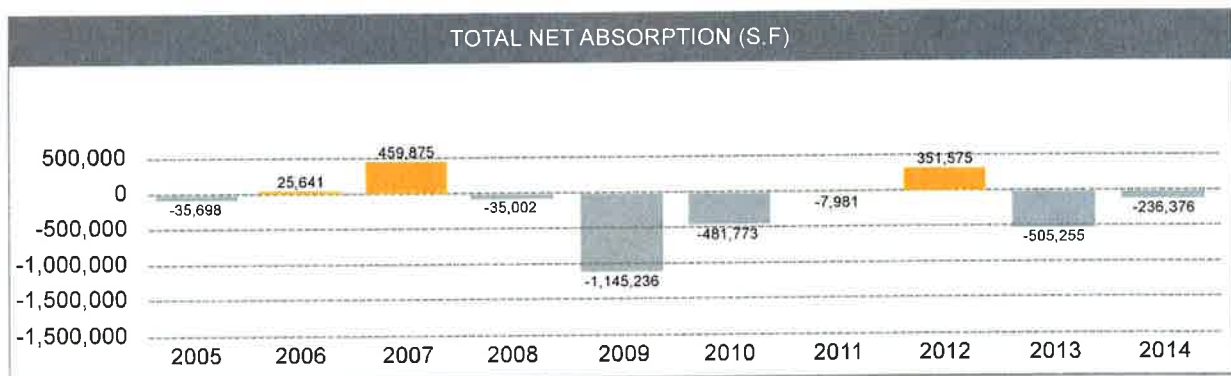
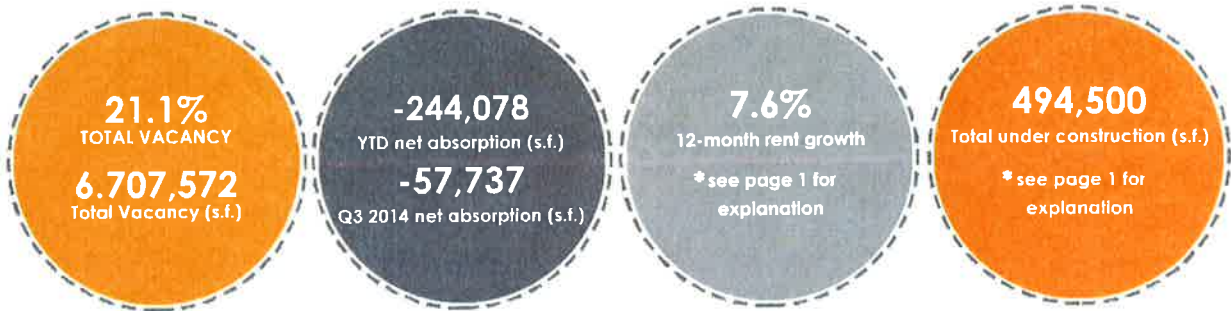
**Office Market Trends**

Vacancy rates for Westchester County historically have increased over the past 10 years, from a low of 15.2% in 2006 to its current high of 21.1% as of Q3 2014. In that same time period, direct asking average rent has decreased from \$27.50 per square foot in 2005 to its current low of \$25.65 per square foot. While rent growth over the last year has been 7.6%, this is due to significant renewal activity in the market and not any changes in the market conditions. It should be noted that operating costs have risen during that same period, pushing net rents on office properties even lower.

Since the 2008 recession, overall net absorption has been negative, only showing positive net absorption during 2012. Current availability has exceeded 5 million square feet and current absorption trends indicate that is yet to peak. 494,500 square feet of office space is currently under construction for Regeneron Pharmaceuticals and WestMed Medical Group. Both companies have been located within Westchester County and this is likely the result of obsolete office stock. We reviewed a variety of industry sources and all indicate vacancy rates are currently at a 10-year high.

Tax certiorari proceedings have increased in recent years by 10% to 86 in 2013 compared to 78 in 2012. Pressures from the courts to settle these cases has further impacted the value of commercial real estate in that potential buyers see it as a complicating factor to their business model and thus it serves as a disincentive to making investments in this asset class.

# WESTCHESTER COUNTY OFFICE MARKET: SUMMARY DATA



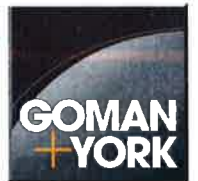
\*Data compiled from various industry sources

# RYE OFFICE MARKET ANALYSIS

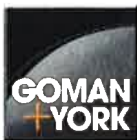
## 120 OLD POST RD



Prepared for **ALFRED WEISSMAN REAL ESTATE, LLC**  
March 2, 2015







## Office Market Analysis – 120 Old Post Road, Rye, NY

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### Market Definition

The competitive office market for Rye, NY includes parts of southeastern Westchester County, southeastern White Plains, along with the southeastern I-287 corridor and the I-95 corridor.

The information contained in this analysis was taken from a variety of sources including regional market reports from the major commercial real estate brokerage houses along with data on commercial real estate activity from several real estate research and listing services.

### Office Market Demand

While we have seen modest improvement in the national, regional and local economies and encouraging improvement in the unemployment rate during the past year, the demand for office space in the subject area continues to be very slow. In the portions of the market most relevant to Rye, the office vacancy rate continues to hover around 20% while the vacancy rate in the overall market area has continued to edge slightly higher in recent quarters.



### Market Trends

The trend of utilizing less square footage of space for each worker is one factor influencing the slow rate of leasing activity despite increasing employment. We expect this will continue to be of significant influence for an extended period of time, as many older buildings are adapted to the new layouts.

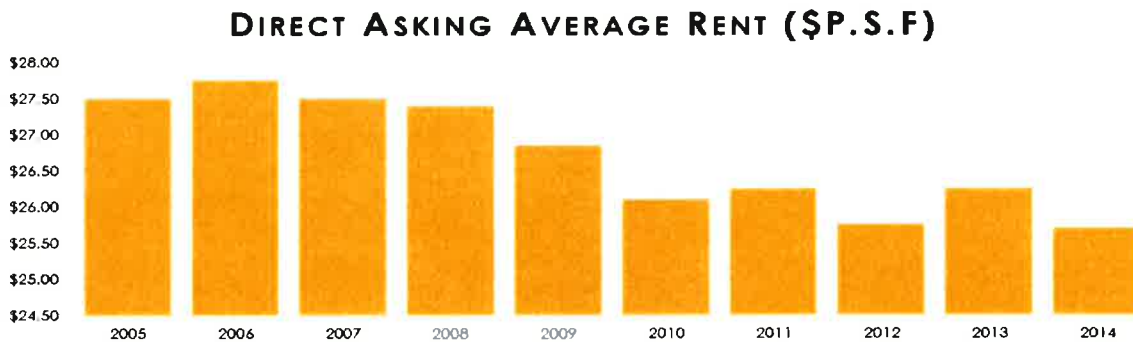


## Office Market Analysis – 120 Old Post Road, Rye, NY

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Much of the low level of office leasing activity has been in the medical, financial and business services sectors. Although not an unusually large amount of space, the lease to Acadia Realty Trust for approximately 30,000 square feet at 411 Theodore Fremd Avenue ranks as one largest transactions in the Westchester County market in Q4-2014, and the largest in the eastern submarket of Westchester County. While an important transaction, the fact that this is one of the largest deals done in the entire Westchester County market speaks to the continuing low level of activity.

### Market Outlook



Each of the eastern sub-markets of Westchester County are currently showing reported vacancy of more than 1 million square feet of Class A office. Correspondingly, average asking rates have generally continued to decline slightly and are currently at their lowest reported level in the past 10 years. As expected, leasing velocity remains at record low levels. Non-CBD markets are particularly experiencing long term vacancy and low rental rates, and we don't expect improvement in this regard in the foreseeable future.



## **Office Market Analysis – 120 Old Post Road, Rye, NY**

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### **120 Old Post Rd**

It should be noted that the subject property is configured primarily as an open plan headquarters building. This configuration places the building in a highly uncompetitive market position since the majority of office leasing activity is focused upon smaller spaces. The cost of reconfiguring the subject property will be significant as it will require major modifications to essentially all the existing mechanical, electrical and plumbing systems, as well as extensive re-demising of the building to create competitive leasable spaces. In many similar cases involving similar headquarters buildings the conversion cost has been determined to be prohibitive and the building has eventually been torn down as a result. We know of numerous situations involving millions of square feet of 1980's vintage headquarters buildings where this has been the outcome.

# MARKET FEASIBILITY ANALYSIS OF THE RYE, NY MARKET FOR ACTIVE ADULT (+55) HOUSING



Prepared for **ALFRED WEISSMAN REAL ESTATE, LLC**

NOVEMBER, 2014



This report and plan was prepared for **ALFRED WEISSMAN REAL ESTATE, LLC**

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# T A B L E O F C O N T E N T S

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# EXECUTIVE SUMMARY

## The Assignment

Goman+York Property Advisors LLC was engaged by Alfred Weissman Real Estate LLC to provide a preliminary study examining the market capacity and the for-sale and for-rent parameters for the development of approximately 135 new senior (+55) independent living luxury housing units in Rye, New York.

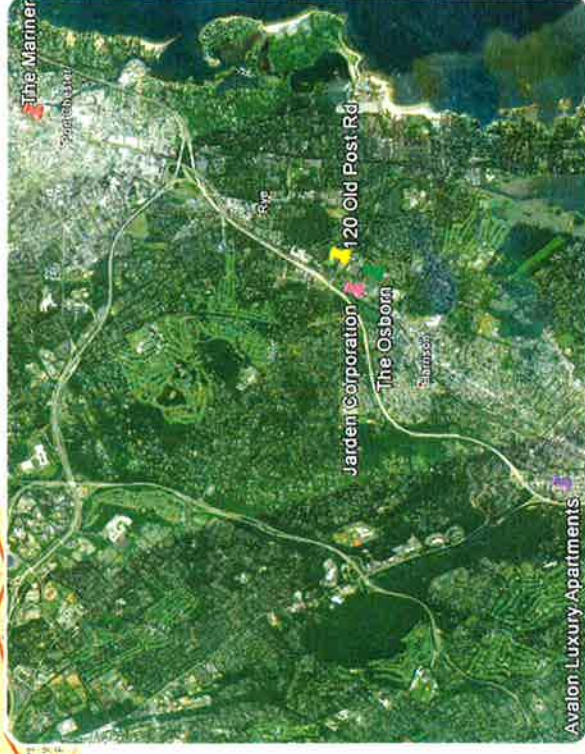
The following report is a market feasibility analysis of the proposed senior (+55) housing project in Rye, New York based upon the conceptual design and project scope as provided by Alfred Weissman Real Estate LLC and Tecton Architects.

This analysis should be viewed as a macro level review of the market feasibility of the conceptual development plan. Essentially this analysis is intended to provide information adequate to assist the developer in deciding whether further work on the given project is warranted. More specifically, the analysis assists the developer in making a "go or no go" decision before expending substantially more time and effort on the next level of detailed development tasks, including design development, cost estimating, geotechnical and environmental analysis, detailed financial projections and similar development related work.

It is important to point out that this analysis is not intended to provide the detailed information necessary for the purpose of formally underwriting debt or equity investment with respect to the given project.

## The Project

The proposed project, as presented in the conceptual plans from Tecton Architects dated April 25, 2014, envisions a three-story independent living facility targeted at active adults (+55). The proposed design contains 135 luxury residential units and includes a variety of amenities such as a cafe/bistro, theater, study/game room, natatorium and fitness center along with locker rooms, multipurpose room and several courtyard areas. The overall facility is proposed to be approximately 245,000 square ft. with parking for 186 vehicles. The project site is located at the northwest corner of Old Post Road and Play Land Access Drive in Rye, New York.



### The Market

We established 3 discrete study areas for the project based upon drive time parameters of 5, 13 and 23 minutes. In our experience, study areas based upon driving times provide a more accurate and realistic picture than, for example, concentric rings. Essentially, this is simply saying that the particular study area consists of those residents who live within the given drive time parameter from the project site.

The 23 minute drive time study area should be viewed as the regional market (based on 2010 US DOT Federal Highway Administration Report) for the project. The average commute to work drive time for the US is approximately 23 minutes and we believe that it serves as a reasonable proxy for the largest study area. While the project is likely to attract some residents from outside that study area, the majority are likely to come from within it. The 5 minute drive time study area should be viewed as the immediate neighborhood market for the project. We would expect the project to receive very significant consideration from potential buyers who currently reside within this study area. The 13 minute drive time study area simply bisects the other two study areas and provides an additional way to view the market for this project.

The data for the residents living within all 3 study areas shows that the market possesses exceptionally attractive socioeconomic indicators. In particular, the 5 minute drive time trade area contains very high percentages of residents who are in the top socioeconomic segments in the US in terms of wealth, education and employment status. While the socioeconomic characteristics decline somewhat as the trade area size increases, the overall market remains remarkably strong. Ethnic diversity increases significantly along with the size of the study area. In summary, our analysis shows that the drive time trade area is ideally suited for the contemplated project.

### The Competitive Environment

We conducted a review of available rental and for sale housing within the applicable study area. Our review identified several projects which we consider to be directly competitive and which we believe are reflective of the tenant profile being sought for the project. Rental rates and multi-family unit values within the reviewed projects are high while vacancy rates are low, relative to the averages. These conditions are positive indicators for a proposed new entrant to the market.

Given the prominent position it occupies within this study area, we paid particular attention to The Osborn development adjacent to the planned project. Goman+York personnel confidentially "shopped" The Osborn to determine unit availability, pricing and occupancy. The very low vacancy at The Osborn, combined with their focus on providing a comprehensive service offering including meal plans and other services not being contemplated as part of the proposed project leads us to conclude that there will be limited overlap between potential tenants for The Osborn and the proposed project. In fact, we think it is more likely that these two projects will complement each other as opposed to competing with each other.

### Conclusion

Based upon our review of the study area characteristics and the competitive environment, we believe that the market response to the contemplated project will be very positive.

We recommend that further and more specific market research and testing be done once the project plans have been more fully developed, unit designs/layouts and features have been detailed, specific amenities can be described and a professional marketing campaign, along with appropriate collateral materials, are available.

# STUDY METHODOLOGY

The Study prepared for **Rye, NY** provides an overview of the **Active Adult (+55) Housing Market**. The analysis will inform projections that will allow Rye, NY to accurately plan for its future development.

## Potential Market

The potential market for active senior housing derives from the pool of households, aged 55 and older, who move within the market area in a given year, and those who move to the area from other counties and even other states.

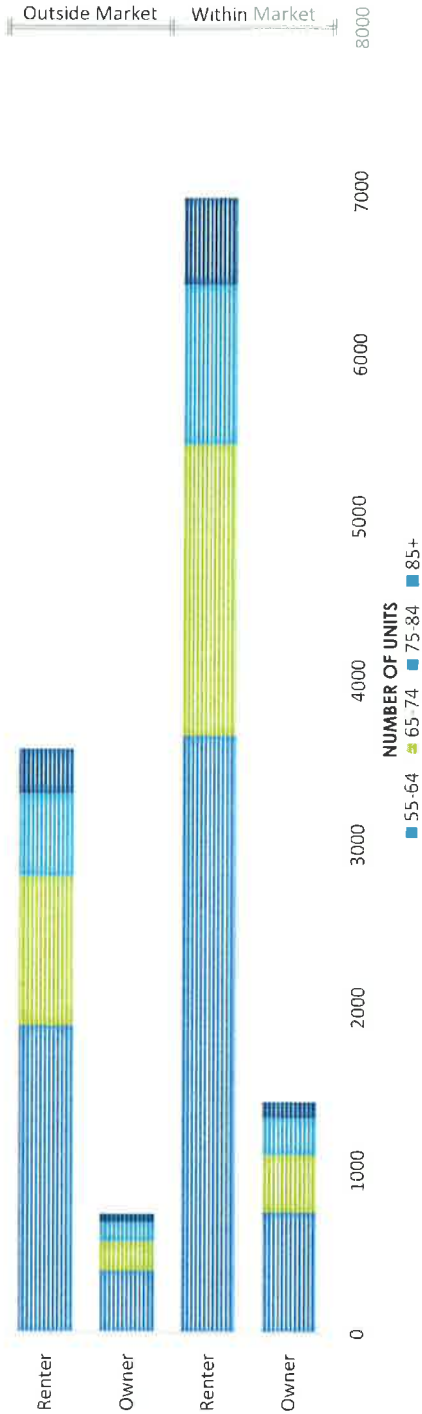
Mobility rates for seniors, who often prefer to age in place, are much lower than for younger households. Rates are, however, higher for seniors who rent rather than own their own homes. To estimate the size of the potential market, national

in-county mobility rates were used as a proxy for the rates at which seniors within various age cohorts are likely to relocate somewhere within the target market area. Table below shows that for seniors 55 and older already living within the 23-minute

radius of the proposed project, from which approximately 8,400 are likely to move in a given year based on 2010 Census data. More than 80% of those moving are expected to come from among the ranks of existing renters who are likely to prefer

rental units, as would many of those who might choose to downsize from homes they currently own.

POTENTIAL DEMAND  
FOR ACTIVE +55 HOUSING

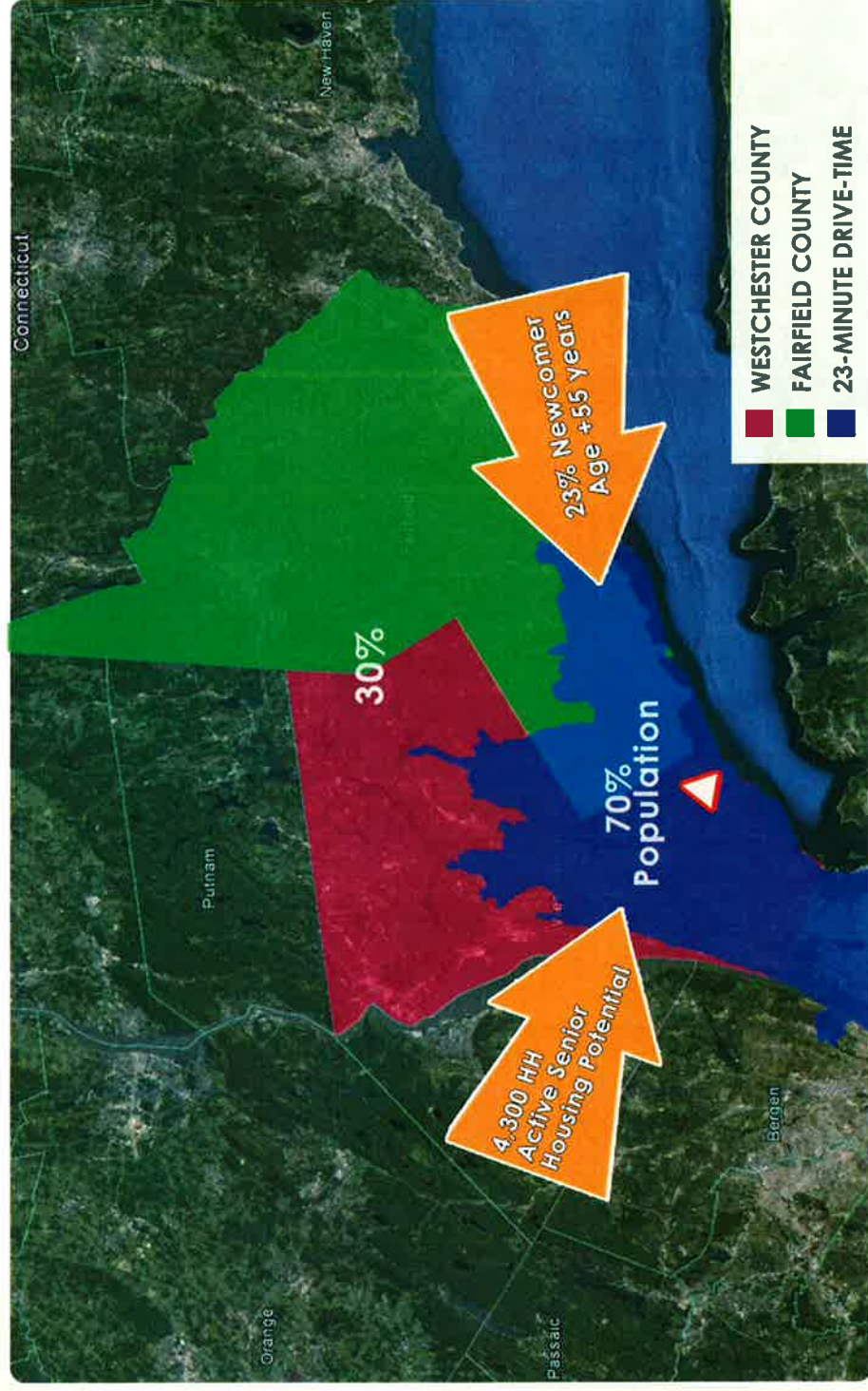




### Population Migration

Households moving into the market area were assumed to have characteristics that are similar to current residents. Approximately 27,000 households moved into the two-county area of Westchester, NY and Fairfield, CT between 2009 and 2010, according to the latest IRS data. The 23-minute target market holds nearly 70% of the two-county population and will presumably attract a similar share of the new households. And reflecting the national migration patterns of households, about 23% of the newcomers are likely to be 55 and older. Consequently, about 4,300 households that move into the 23-minute target market each year are potential candidates for active senior housing.

Combining the 8,400 senior households that move within the market area each year with 4,300 in from outside produces a potential market for active senior housing of 12,000 households or more. That is an average of approximately 1,000 households monthly. However, these estimates should be narrowed further to adjust for characteristics, such as target income and age ranges, that are in keeping with the design and scope of this project.



# DEMOGRAPHIC & SOCIOECONOMIC CHARACTERISTICS

To get a grasp of the social elements that make up the community, we explored the **Demographic and Socioeconomic characteristics** of the study area.

## Demographic

The target markets surrounding the proposed Rye, NY active senior housing project are predominantly white, well-educated, and wealthy.

The majority of residents in all three study areas are white, with shares in 2013 ranging from 84% to 73% and 55% within the 5, 13 and 23 minute drive-times, respectively. The larger markets exhibit more racial and ethnic diversity with the black share of the population growing from just 2% within the 5-minute range to 24% within the 23-minute range.

Similarly, residents of Hispanic origin make up 27% of the population within the 23-minute market area but only 12% of the market at the 5-minute mark. All three markets are expected to become more diverse, largely as a result of a growing Hispanic population.

Within a 23-minute drive time, the median age of area residents matches the US average in 2013 of 38.5 years, but in the two smaller markets residents tend to be older. Seniors 55 and older represented about 27% of the population in the

two larger markets—a figure that is likely to top 29% by 2018.

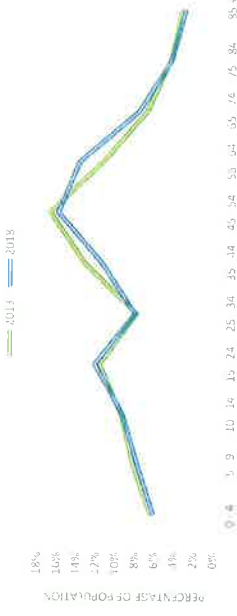
Housing is evenly divided between owner and renter occupied units at the 23-minute drive time from the Rye, NY center point. But within closer radii, owner occupied units are in the majority—58% at the 5-minute mark, 53% within a 13-minute drive time.

Owner-occupied housing is expected to represent a slightly larger share of all three markets by 2018.

## INCOME DISTRIBUTION OF RYE - 23 MINUTE



## 5 MIN AGE DISTRIBUTION



## 23 MIN AGE DISTRIBUTION

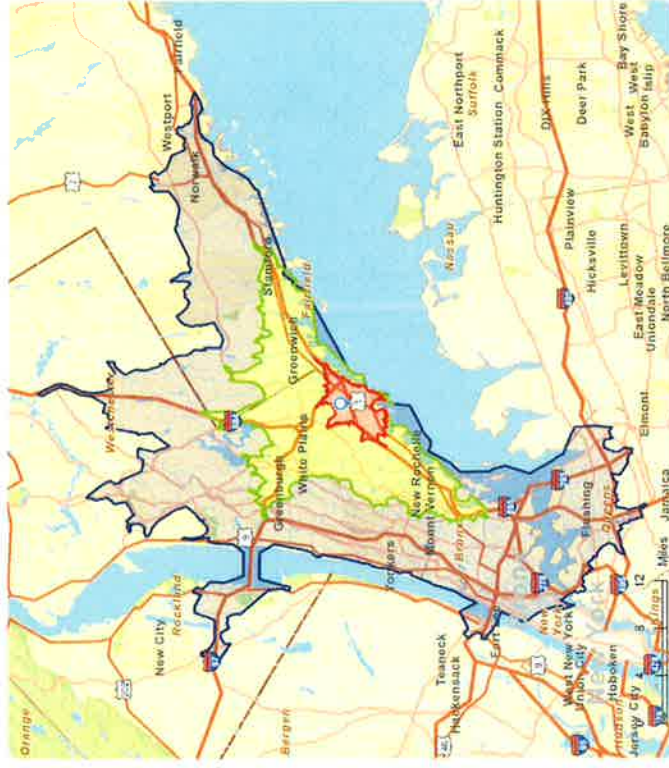


## Education

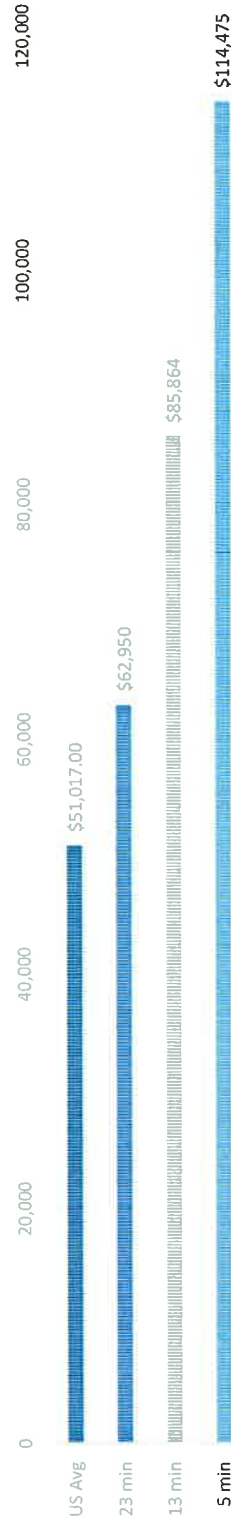
Rye area residents are highly educated, with the share of the population 25 and older holding a Bachelor's degree or higher at 62%, 49% and 38% within a 5, 13 and 23-minute drive of Rye, respectively. The comparable US figure is just 32%. The employed population of the area works predominantly in the services sector and in white-collar occupations, earning exceptional levels of income.

## Income

Median household income within a 5-minute drive time of Rye exceeds \$114,000, more than double the US median. Incomes are lower in the two broader market areas—\$86,000 and \$63,000 in the 13-minute and 23-minute rings, respectively—but still above the comparable US figure.



## MEDIAN INCOME BY MARKET





# HOUSING OCCUPANCY

The target market is characterized by a relatively low vacancy rate, and a large share of **renter-occupied** as opposed to **owner-occupied** housing.

## Vacancy Rates

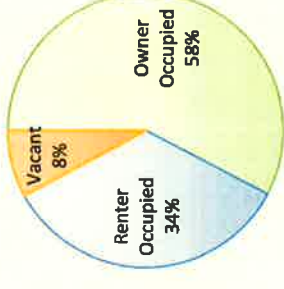
Vacancy rates within 23-minutes of the subject property were 6.1%, according to 2010 Census data. That compares favorably to a U.S. average rate of 11.4% the same year, and to rates of 9.7%, 7.9% and 9.5%, respectively in the states of New York, Connecticut and New Jersey.

Current (2013) vacancy rates in the 23-minute radius have inched up a bit since 2010 (to 6.3%) but they remain lower in this larger market than in the more narrowly defined drive time markets where they are 7.9% within a 5-minute area and 7.5% within the 13-minute area. The housing market is expected to remain tight for the foreseeable future, with projected 2018 vacancy rates of 6.2% within the 23-minute drive time and 7.2% within the 13-minute market. Even an anticipated 9.0% vacancy rate for the 5-minute drive time market in 2018 compares favorably to current national and regional rates.

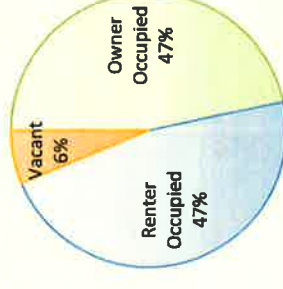
## Rental Market Demand

The low vacancy rates in the local markets surrounding the proposed project are particularly noteworthy given the relatively high share of rental housing in the area. Within the 23-minute drive time market, housing is divided evenly between owner and rental occupied units at about 47% each. That represents a relatively large share of rental-occupied units which tend to have much higher vacancy rates than do owner-occupied units. Nationally, and in Connecticut and New Jersey, renter-occupied housing makes up 25% or less of the total number of housing units. New York's statewide renter occupancy rate is 37%.

2013 Housing Summary  
- 5 minute



2013 Housing Summary  
- 23 minute





# COMPETITION ANALYSIS & PRICING- RENTAL

Our review included properties in Rye, as well as properties in markets immediately adjacent to Rye and properties in markets located same distance from Rye but which have similar demographic and socioeconomic characteristics. With respect to properties located in Rye, we looked closely at four apartment complexes: The Osborn in Rye, NY, 101 Park Place in Stamford, CT, Scarsdale Commons, Scarsdale, NY and The Avalon Bronxville in Bronxville, NY all built since 2005.

## Comparison

They range in size from 336 to 100 units and offer both 1-bedroom, 1-bathroom and 2-bedroom, 2-bathroom options (see table below).

All three complexes can be described as luxury properties, offering unit amenities that include parking, full kitchens, washer/dryers, and central air. Community amenities include fitness centers, clubrooms, and picnic/barbecue areas.

## Pricing- Rental

The accompanying scatter plot shows the monthly rental prices and square footage for three competitive projects. The smaller units, each around 800 square feet, are all 1-bedroom, 1-bathroom apartments; the larger units, each around 1,200 square feet, are all 2-bedroom, 2-bathroom units. Assuming area renters judge the amenities of the Rye project as significantly better than these apartments, an appropriate price for 1-bedroom units would be +/- \$2,800 and an appropriate price for 2-bedroom units would be +/- \$3,900.



23-MINUTE DRIVE-TIME

## CHARACTERISTICS OF COMPARABLE UNITS

	UNITS	BEDROOMS	BATHS	SQ. FT.	RENT	DISTANCE TO TRANSIT
THE OSBORN	138	1	1	756	\$5,400	3 min
		2	2	1186	\$3,356	
101 PARK PLACE	336	1	1	806	\$2,450	1 min
		2	2	1023	\$2,560	
SCARSDALE COMMONS	43	1	1	855	\$3,000	2 min
		2	2	1175	\$3,900	
THE AVALON BRONXVILLE	146	1	1	821	\$3,010	2 min
		2	2	985	\$4,125	

## SIZE VERSUS RENT OF COMPETITORS



**GOMAN+YORK**  
NOVEMBER, 2014

# COMPETITION ANALYSIS & PRICING- SALE

Local Property Records served as the comparison for potential market value.

## Comparison

We examined similar for-sale condominium properties in a variety of markets in Rye, several markets which are immediately proximate to Rye, and additional markets located some distance from Rye but which have similar demographic and socioeconomic characteristics.

It should be noted that in looking at comparable properties, our focus was on well-located luxury residential properties having a high level of finish and extensive in-suite features, and which offer a significant list of common facilities and amenities.

## Pricing- Sale

The accompanying charts show sale prices and square footage for luxury properties in similar markets. Assuming potential buyers judge the level of finish, features and amenities of the Rye project to be equal to or better than these properties, appropriate prices for 1 bedroom units would be about \$385,600 or \$482 per square foot, and for 2 bedroom units would be about \$522,000 or \$475 per square foot.

## RYE COMPARABLE SALES

	UNIT TYPE	BEDROOMS	BATHS	SQFT	PRICE	\$/SQFT
RYE	CONDO	2	2	1104	\$521,088	\$472
WESTBURY	APT	2	2	1261	\$616,667	\$492
PORT WASHINGTON	CONDO	2	2	1371	\$572,479	\$417



# PHASING AND IMPLEMENTATION

The analysis of **senior migration patterns** in the study area concluded that approximately 1,000 households could be in the market each month. Only some of these households, however, are likely to match the income and age profile that would make **living in an active senior community** either feasible or attractive.

## Defining the Market

Given the proposed pricing structure, the target market for the units should include seniors with incomes of \$112,000 or more annually. (Industry rules-of-thumb suggest that income should be at least 40 times the monthly cost of housing.) According to current (2013) estimates, about 27.8% of senior (55+) households in the area meet this income criterion. It is likely, therefore, that only 278 of the 1,000 monthly, house-hunting, senior households would pass the income test for the proposed project.

However, active lifestyle arrangements are unlikely to appeal to the oldest senior cohort. And 16% of area seniors are 80 and older. Limiting the market to seniors between 55 and 79 reduces the target market of potential new tenants to about 233 per month.

## Implementation

Assuming that all 135 of the proposed Rye units go on the market simultaneously and that the units are expected to be occupied within 90 days, the project would have to capture just over 15% of the market. Extending the marketing time would reduce the necessary capture rate. Over a 180-day period, for example, the Rye project would only have to capture less than 8% of the market. Alternatively, intensive pre-marketing or unit discounting would improve the chances of capturing a 15% market share within 90 days.

# CONCLUSION - PRICING

Goman+York was asked to review the market feasibility of the proposed conversion of the subject property into a luxury, age-restricted (55+) residential development positioned at the upper end of the price spectrum. Our review included both rental and for-sale properties. The primary focus of our review was to assess the rents or sales prices which can be reasonably expected to be achieved if the redeveloped subject property is positioned at the upper end of the market.

A component of our work in this regard involved establishing several study areas based upon specific geographic parameters and subsequently conducting a review of residential projects having similar market positioning within those study areas. In broad terms, the study areas we established and examined included:

- a) the city of Rye,
- b) similar markets in close or immediate proximity to Rye, and,
- c) markets in the greater metropolitan New York City area having similar demographic and socioeconomic characteristics to those present in Rye but which are located some distance from Rye.

The estimates of achievable rents and sales pricing contained in these conclusions are conditioned upon certain specific assumptions about the redeveloped property, including:

1. that it is positioned as a luxury, age-restricted (55+) community,
2. that an experienced firm with a successful track record with similar luxury projects be engaged to market the project,
3. that individual units feature gourmet kitchens, luxury baths, and extensive entryway, trim, tile and general levels of finish
4. the the property offers on-site amenities equal to or exceeding the best available at competitive luxury properties

Based upon the entirety of our review, we conclude that the redeveloped project can reasonably be expected to achieve rents of between \$3.25 and \$3.75 per square foot per month or approximately \$2,800 to \$3,200 per month for a 1 bedroom and from approximately \$3,900 to \$4,900 per month for a 2 bedroom. In the case of condominium units offered for sale, we conclude that the redeveloped project can reasonably be expected to achieve pricing between \$480 and \$550 per square foot or approximately \$425,000 to \$475,000 for a 1 bedroom and from approximately \$575,000 to \$715,000 for a 2 bedroom.





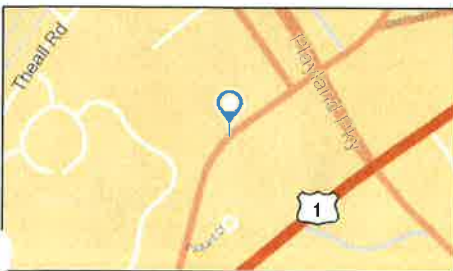
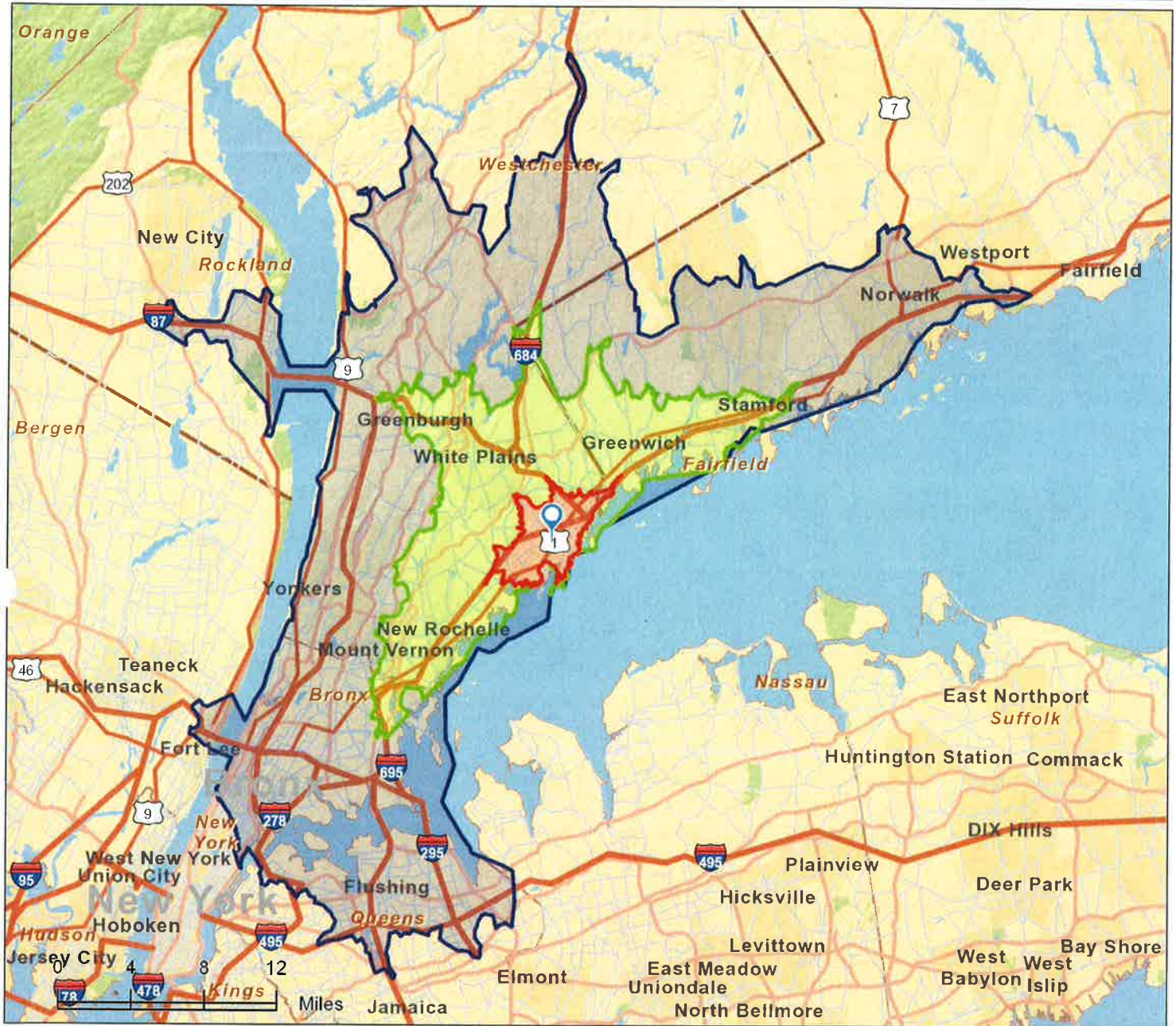
## Site Map

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 Minutes

Prepared by Robert Goman

Latitude: 40.921932

Longitude: -73.696125





# AERIAL OF COMPETITORS

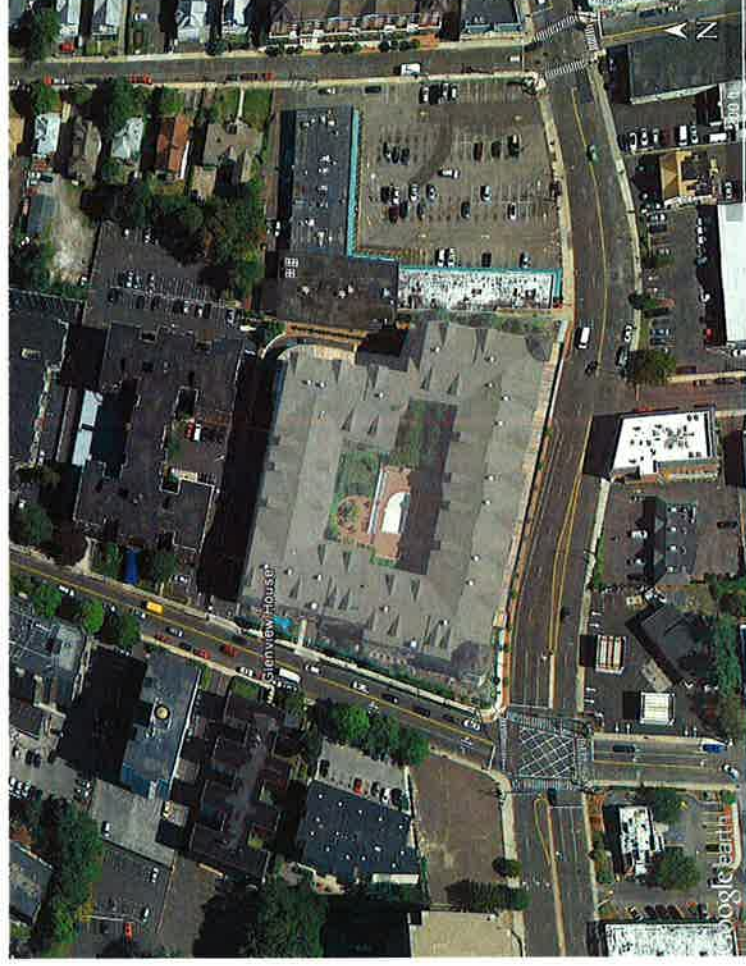
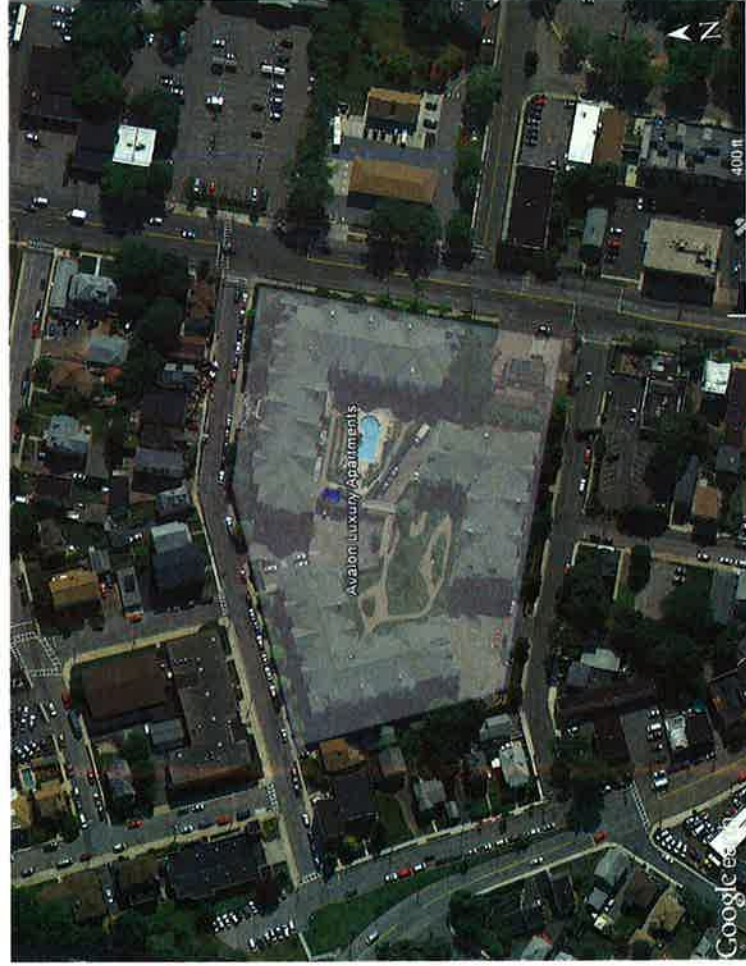
The Osborn and The Mariner





# AERIAL OF COMPETITORS

Avalon and Glenview House

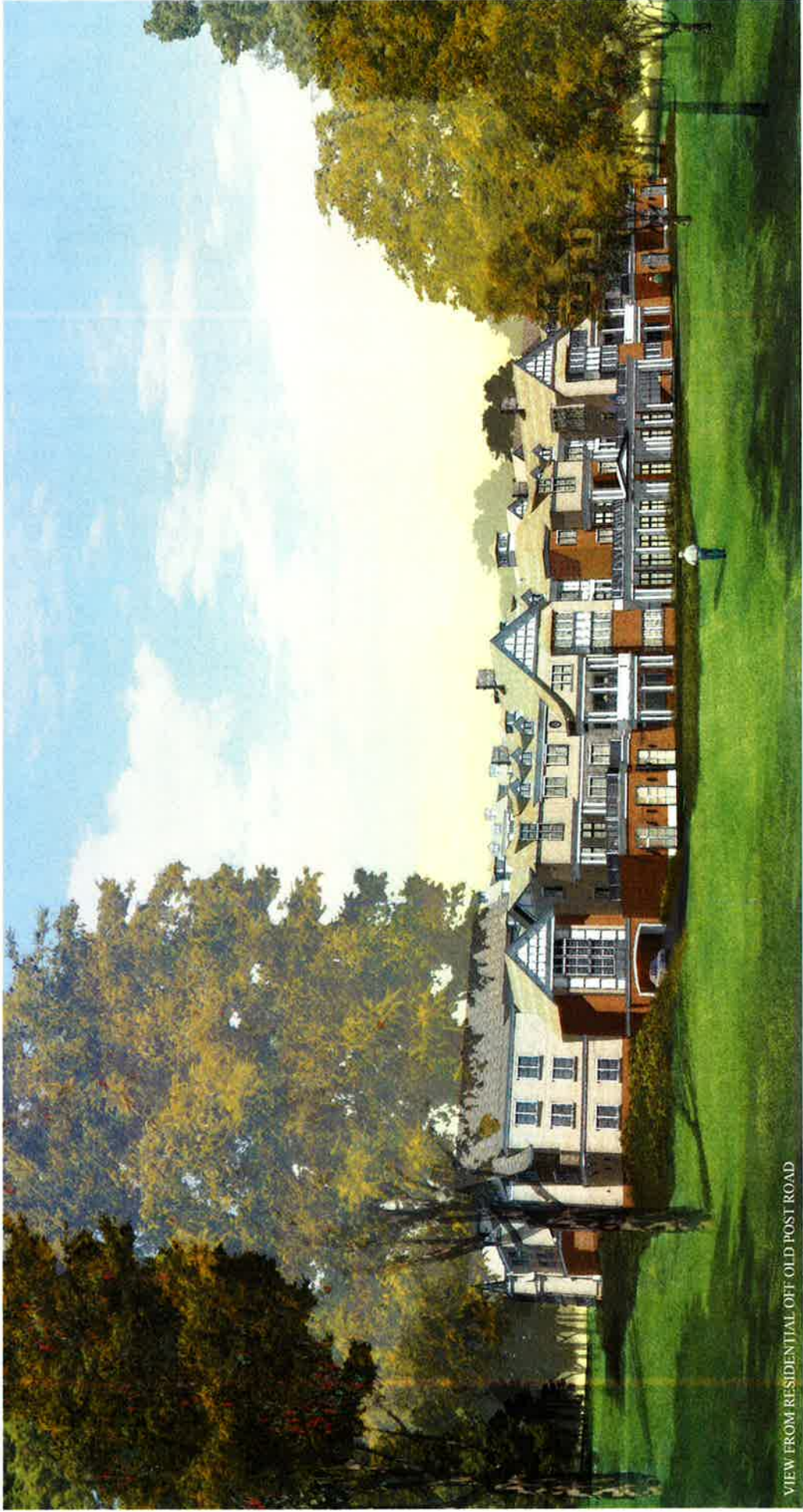




# SITE AND FLOOR PLANS



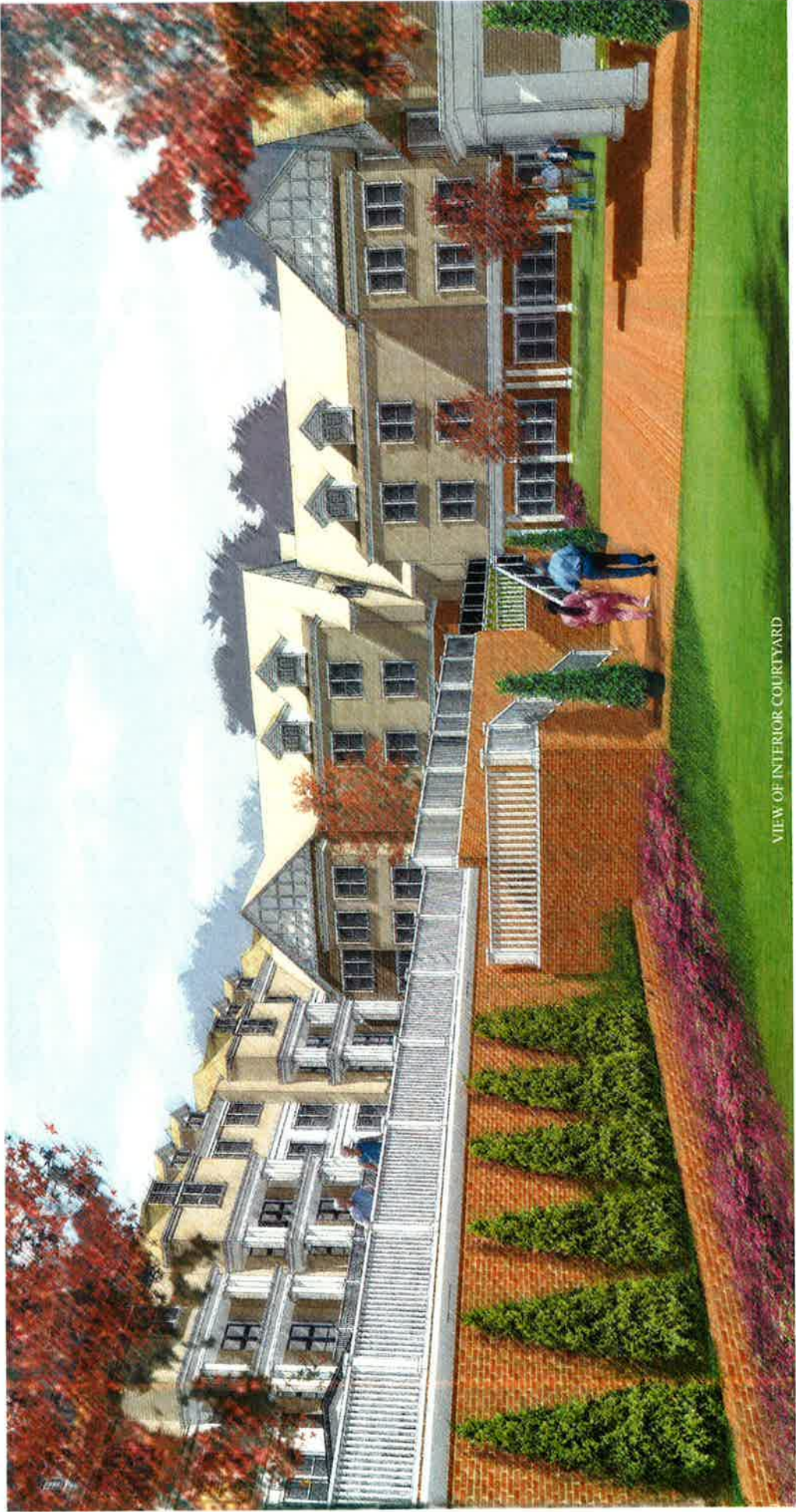




VIEW FROM RESIDENTIAL OFF OLD POST ROAD

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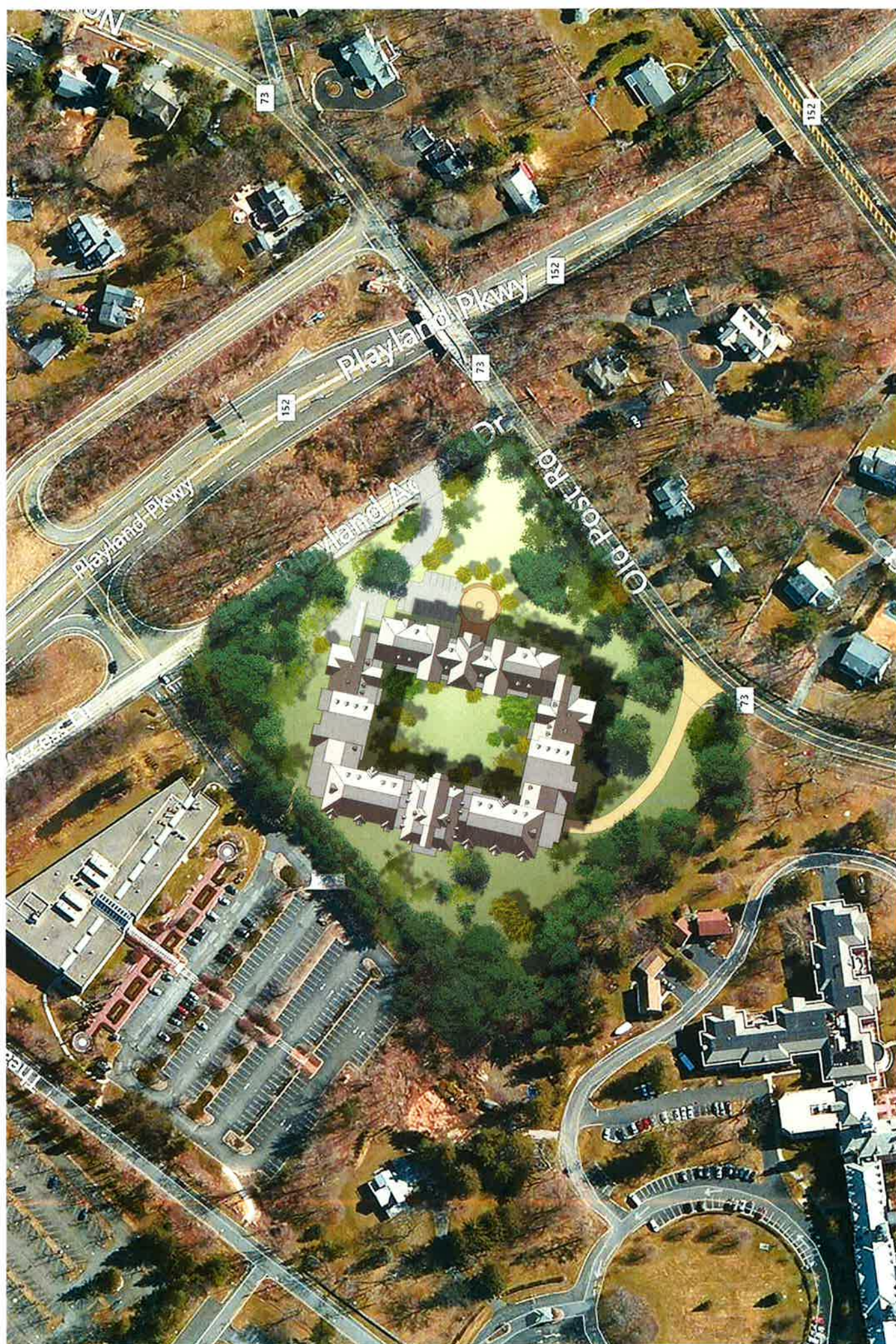


VIEW OF INTERIOR COURTYARD



















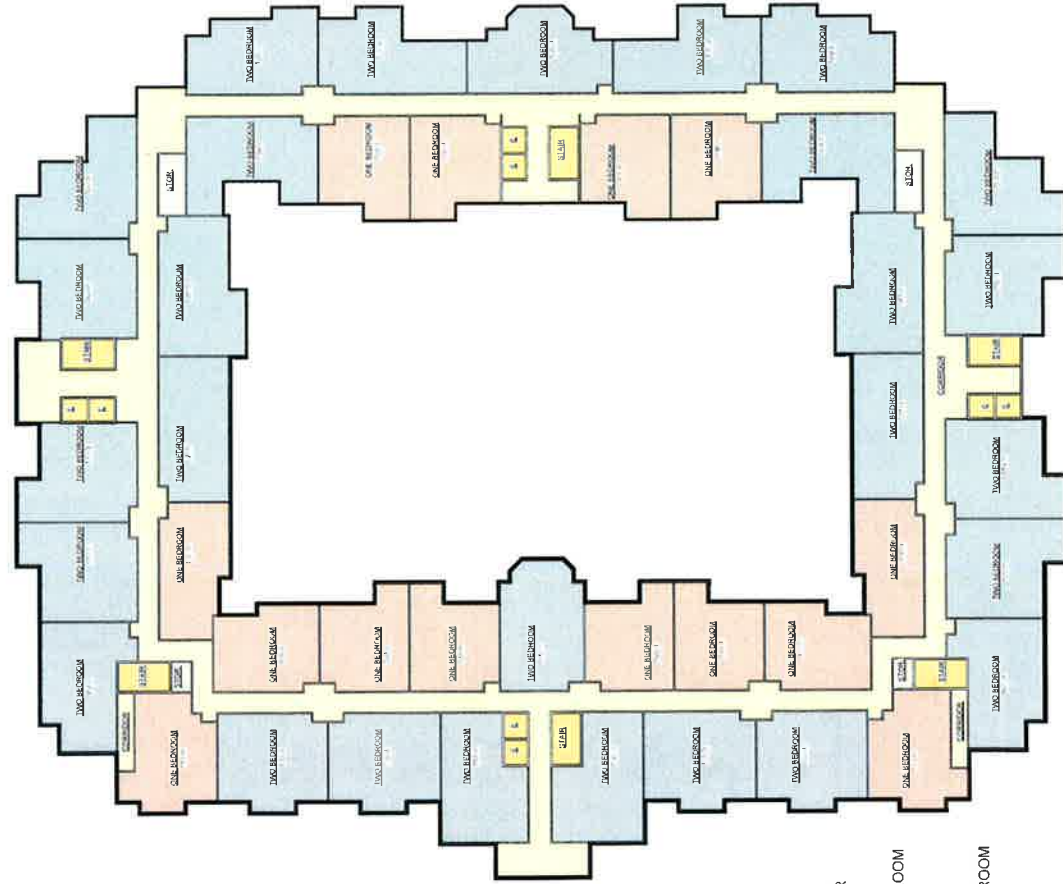


ROOM AREAS		
Name	Area	
ONE BEDROOM	14,132 SF	
TWO BEDROOM	18,110 SF	
2ND FLOOR 17	73,447 SF	
ONE BEDROOM	14,027 SF	
TWO BEDROOM	14,700 SF	
3RD FLOOR 47	49,260 SF	
ONE BEDROOM	14,429 SF	
TWO BEDROOM	17,112 SF	
4TH FLOOR 32	37,762 SF	
ONE BEDROOM	14,103 SF	
TWO BEDROOM	17,112 SF	
5TH FLOOR 25	29,352 SF	
ONE BEDROOM	14,103 SF	
TWO BEDROOM	17,112 SF	
6TH FLOOR 17	73,254 SF	
ONE BEDROOM	14,103 SF	
TWO BEDROOM	17,112 SF	
Grand total	133	159,071 SF

UNITS - ONE BEDROOM		
Level	Name	
2ND FLOOR	ONE BEDROOM	
3RD FLOOR	ONE BEDROOM	
4TH FLOOR	ONE BEDROOM	
5TH FLOOR	ONE BEDROOM	
6TH FLOOR	ONE BEDROOM	
Grand total	46	

UNITS - TWO BEDROOM		
Level	Name	
2ND FLOOR	TWO BEDROOM	
3RD FLOOR	TWO BEDROOM	
4TH FLOOR	TWO BEDROOM	
5TH FLOOR	TWO BEDROOM	
6TH FLOOR	TWO BEDROOM	
Grand total	47	

Area Schedule (Gross Building)		
Level	Area	
1ST FLOOR	2172 SF	
2ND FLOOR	18,110 SF	
3RD FLOOR	14,700 SF	
4TH FLOOR	17,112 SF	
5TH FLOOR	17,112 SF	
6TH FLOOR	18,110 SF	
Grand total	86,916 SF	
2ND FLOOR	18,110 SF	
3RD FLOOR	14,700 SF	
4TH FLOOR	17,112 SF	
5TH FLOOR	17,112 SF	
6TH FLOOR	18,110 SF	
Grand total	86,916 SF	



3RD FLOOR  
1" = 20'-0"

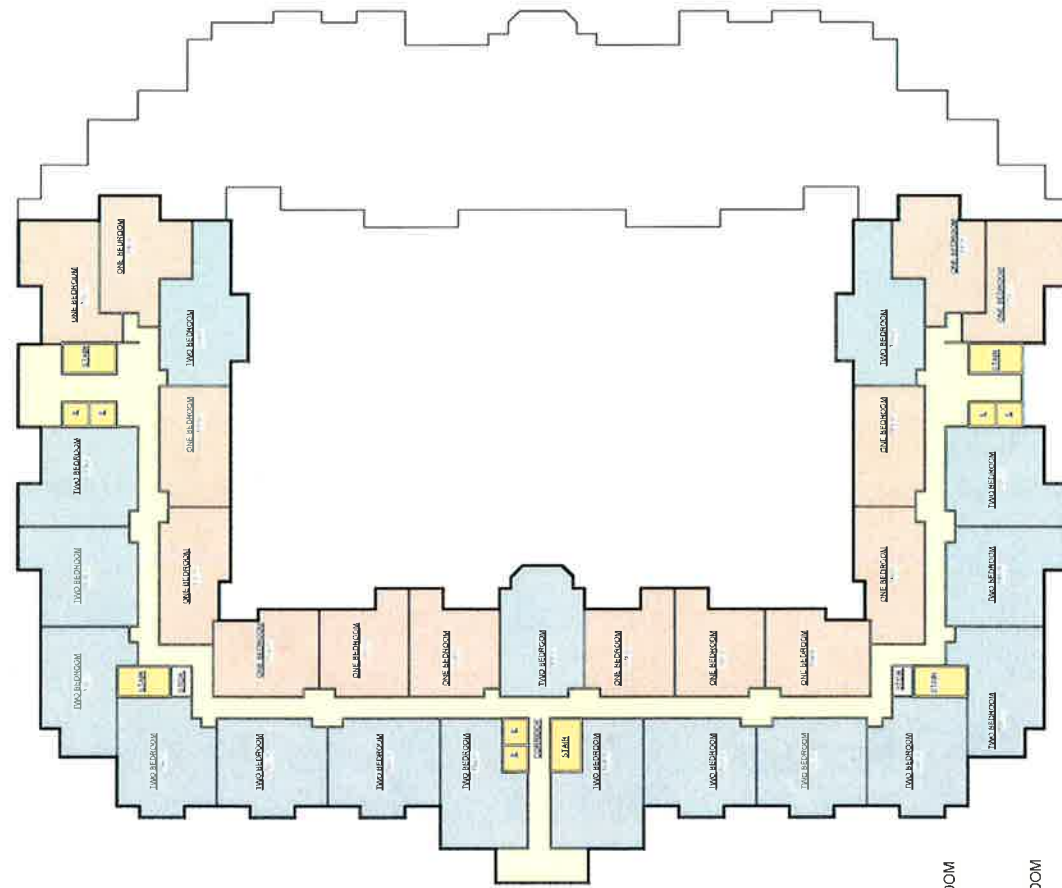
- CORRIDOR
- ONE BEDROOM
- TWO BEDROOM
- STAIR
- STOR.

Room Areas	
Name	Area
ONE BEDROOM 14.131 SF	
TWO BEDROOM 16.713 SF	
2ND FLOOR 17 20.442 SF	
ONE BEDROOM 14.071 SF	
TWO BEDROOM 16.713 SF	
3RD FLOOR 12 19.303 SF	
ONE BEDROOM 14.131 SF	
TWO BEDROOM 16.713 SF	
4TH FLOOR 12 20.14 SF	
ONE BEDROOM 14.131 SF	
TWO BEDROOM 16.713 SF	
5TH FLOOR 12 19.303 SF	
ONE BEDROOM 14.131 SF	
TWO BEDROOM 16.713 SF	
6TH FLOOR 12 19.303 SF	
ONE BEDROOM 14.131 SF	
TWO BEDROOM 16.713 SF	
Grand Total 13 188.071 SF	

Units - One Bedroom	
Level	Name
2ND FLOOR	ONE BEDROOM
3RD FLOOR	ONE BEDROOM
4TH FLOOR	ONE BEDROOM
5TH FLOOR	ONE BEDROOM
6TH FLOOR	ONE BEDROOM
Grand Total 6	6

Units - Two Bedroom	
Level	Name
2ND FLOOR	TWO BEDROOM
3RD FLOOR	TWO BEDROOM
4TH FLOOR	TWO BEDROOM
5TH FLOOR	TWO BEDROOM
6TH FLOOR	TWO BEDROOM
Grand Total 6	6

Area Schedule (Gross Building)	
Level	Area
1ST FLOOR	171.34
2ND FLOOR	16.713 SF
3RD FLOOR	16.713 SF
4TH FLOOR	16.713 SF
5TH FLOOR	16.713 SF
6TH FLOOR	16.713 SF
Grand Total 6	188.071 SF



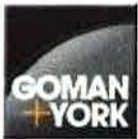
- CORRIDOR
- ONE BEDROOM
- STAIR
- STOR.
- TWO BEDROOM

4TH FLOOR  
1" = 20'-0"

222 5546 5547 5548 5549 5550 5551 5552 5553 5554 5555 5556 5557 5558 5559 5560 5561 5562 5563 5564 5565 5566 5567 5568 5569 5570 5571 5572 5573 5574 5575 5576 5577 5578 5579 5580 5581 5582 5583 5584 5585 5586 5587 5588 5589 5590 5591 5592 5593 5594 5595 5596 5597 5598 5599 5600 5601 5602 5603 5604 5605 5606 5607 5608 5609 5610 5611 5612 5613 5614 5615 5616 5617 5618 5619 5620 5621 5622 5623 5624 5625 5626 5627 5628 5629 5630 5631 5632 5633 5634 5635 5636 5637 5638 5639 5640 5641 5642 5643 5644 5645 5646 5647 5648 5649 5650 5651 5652 5653 5654 5655 5656 5657 5658 5659 5660 5661 5662 5663 5664 5665 5666 5667 5668 5669 5670 5671 5672 5673 5674 5675 5676 5677 5678 5679 5680 5681 5682 5683 5684 5685 5686 5687 5688 5689 5690 5691 5692 5693 5694 5695 5696 5697 5698 5699 5700 5701 5702 5703 5704 5705 5706 5707 5708 5709 5710 5711 5712 5713 5714 5715 5716 5717 5718 5719 5720 5721 5722 5723 5724 5725 5726 5727 5728 5729 5730 5731 5732 5733 5734 5735 5736 5737 5738 5739 5740 5741 5742 5743 5744 5745 5746 5747 5748 5749 5750 5751 5752 5753 5754 5755 5756 5757 5758 5759 5760 5761 5762 5763 5764 5765 5766 5767 5768 5769 5770 5771 5772 5773 5774 5775 5776 5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787 5788 5789 5790 5791 5792 5793 5794 5795 5796 5797 5798 5799 5800 5801 5802 5803 5804 5805 5806 5807 5808 5809 5810 5811 5812 5813 5814 5815 5816 5817 5818 5819 5820 5821 5822 5823 5824 5825 5826 5827 5828 5829 5830 5831 5832 5833 5834 5835 5836 5837 5838 5839 5840 5841 5842 5843 5844 5845 5846 5847 5848 5849 5850 5851 5852 5853 5854 5855 5856 5857 5858 5859 5860 5861 5862 5863 5864 5865 5866 5867 5868 5869 5870 5871 5872 5873 5874 5875 5876 5877 5878 5879 5880 5881 5882 5883 5884 5885 5886 5887 5888 5889 5890 5891 5892 5893 5894 5895 5896 5897 5898 5899 5900 5901 5902 5903 5904 5905 5906 5907 5908 5909 5910 5911 5912 5913 5914 5915 5916 5917 5918 5919 5920 5921 5922 5923 5924 5925 5926 5927 5928 5929 5930 5931 5932 5933 5934 5935 5936 5937 5938 5939 5940 5941 5942 5943 5944 5945 5946 5947 5948 5949 5950 5951 5952 5953 5954 5955 5956 5957 5958 5959 5960 5961 5962 5963 5964 5965 5966 5967 5968 5969 5970 5971 5972 5973 5974 5975 5976 5977 5978 5979 5980 5981 5982 5983 5984 5985 5986 5987 5988 5989 5990 5991 5992 5993 5994 5995 5996 5997 5998 5999 6000 6001 6002 6003 6004 6005 6006 6007 6008 6009 6010 6011 6012 6013 6014 6015 6016 6017 6018 6019 6020 6021 6022 6023 6024 6025 6026 6027 6028 6029 6030 6031 6032 6033 6034 6035 6036 6037 6038 6039 6040 6041 6042 6043 6044 6045 6046 6047 6048 6049 6050 6051 6052 6053 6054 6055 6056 6057 6058 6059 6060 6061 6062 6063 6064 6065 6066 6067 6068 6069 6070 6071 6072 6073 6074 6075 6076 6077 6078 6079 6080 6081 6082 6083 6084 6085 6086 6087 6088 6089 6090 6091 6092 6093 6094 6095 6096 6097 6098 6099 6100 6101 6102 6103 6104 6105 6106 6107 6108 6109 6110 6111 6112 6113 6114 6115 6116 6117 6118 6119 6120 6121 6122 6123 6124 6125 6126 6127 6128 6129 6130 6131 6132 6133 6134 6135 6136 6137 6138 6139 6140 6141 6142 6143 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6159 6160 6161 6162 6163 6164 6165 6166 6167 6168 6169 6170 6171 6172 6173 6174 6175 6176 6177 6178 6179 6180 6181 6182 6183 6184 6185 6186 6187 6188 6189 6190 6191 6192 6193 6194 6195 6196 6197 6198 6199 6200 6201 6202 6203 6204 6205 6206 6207 6208 6209 6210 6211 6212 6213 6214 6215 6216 6217 6218 6219 6220 6221 6222 6223 6224 6225 6226 6227 6228 6229 6230 6231 6232 6233 6234 6235 6236 6237 6238 6239 6240 6241 6242 6243 6244 6245 6246 6247 6248 6249 6250 6251 6252 6253 6254 6255 6256 6257 6258 6259 6260 6261 6262 6263 6264 6265 6266 6267 6268 6269 6270 6271 6272 6273 6274 6275 6276 6277 6278 6279 6280 6281 6282 6283 6284 6285 6286 6287 6288 6289 6290 6291 6292 6293 6294 6295 6296 6297 6298 6299 6300 6301 6302 6303 6304 6305 6306 6307 6308 6309 6310 6311 6312 6313 6314 6315 6316 6317 6318 6319 6320 6321 6322 6323 6324 6325 6326 6327 6328 6329 6330 6331 6332 6333 6334 6335 6336 6337 6338 6339 6340 6341 6342 6343 6344 6345 6346 6347 6348 6349 6350 6351 6352 6353 6354 6355 6356 6357 6358 6359 6360 6361 6362 6363 63222 506 85-

# APPENDIX



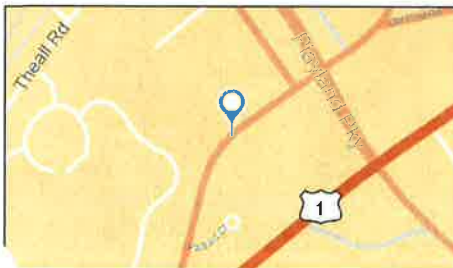
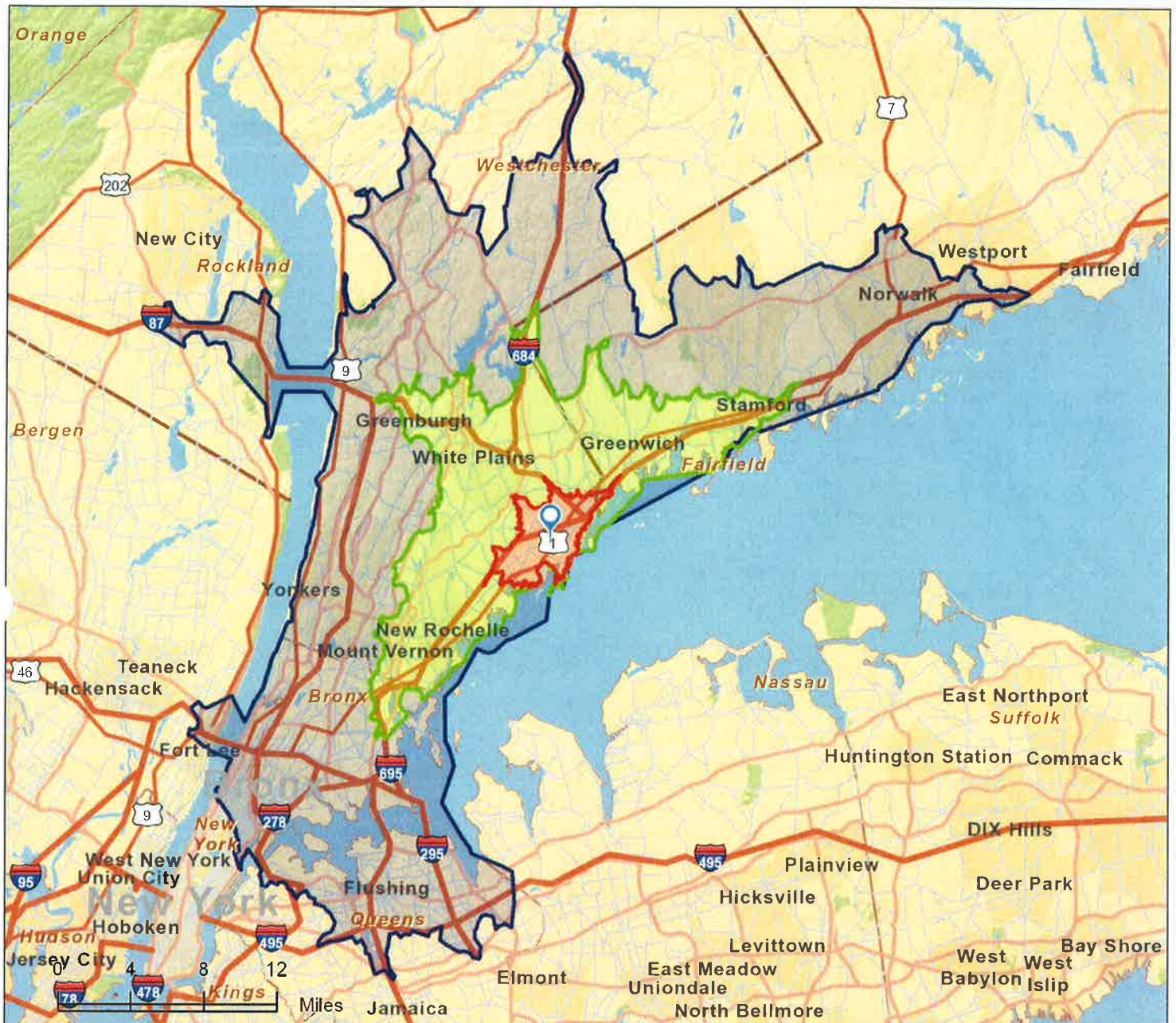


## Site Map

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 Minutes

Prepared by Robert Goman

Latitude: 40.911112  
Longitude: -73.696325





[illegible]



Rye Sale Comparable

Prepared for Alfred Weissman Real Estate, LLC

Rye Sale Comparable

Address	Type	Bedrooms	Baths	Sqft	Built in	Price Listed	Date Listed	Sold Price	Date Sold
720 Milton Rd	Apartment	1	2	1,100	1963	425,000	14-Jul		
66 Milton Rd	Apartment	2	1	1,060	1929	409,000	13-May		
66 Milton Rd	Apartment	1	1	1,000	1927	405,000	14-Sep		
20 Chestnut St.	Condo	2	1	780	1954	389,000	14-May		
4 Walnut St	Condo	2	1	850	1955	349,000	14-Oct		
24 Peck Ave	Condo	2	1	1,025	1948	335,000	14-Sep		
6 Davis Ave	Apartment	2	1	1,150	1926	329,000	14-Jun		
66 Milton Rd	Apartment	1	1	750	1927	297,700	14-Oct		
79 Peck Ave	Apartment	2	1	1,000	1948	289,000	14-Jul		
222 Peck Ave	Apartment	2	1	1,010	1948	274,999	14-Oct		
33 Peck Ave	Apartment	1	1	800	1948	149,000	14-Jul		
30 Pondview Rd	Condo	2	2	1,000	1940	439,000			
102 Peck Ave	Apartment	2	2	1,288	1989			1,250,000	13-Jul
30 Pondview Rd	Condo	2	2	900	1940			349,500	12-Nov
2 Walnut St	Condo	2	1	875	1955			374,900	14-Jan
1 Walnut St	Condo	2	1	850	1954			295,000	14-Jan
216 Purchase St.	Apartment	2	2	1,100	1965			530,000	14-Mar
6 Davis Ave	Apartment	2	2	1,400	1926			330,000	14-Oct
66 Milton Rd	Apartment	1	1	750	1929			310,000	13-Jun
110 Theodore	Apartment	2	2.5	1,130	1986			470,000	13-Jul
3 Peck Ave	Apartment	2	1	1,000	1948			265,000	13-Apr
216 Purchase St.	Apartment	3	2	1,400	1969			635,000	14-Feb
216 Purchase St.	Apartment	3	2	1,400	1969			654,321	13-Jun

Sale Comparable Around Rye

Business	Address	City	State	Units	Type	Bedrooms	Baths	Square Footage	Price
The Ritz Carlton	1 Renaissance Sq	White Plains	NY		Condo	2	3	1,445	859,000
The Ritz Carlton	1 Renaissance Sq	White Plains	NY		Condo	2	2.5	1,445	899,900
The Seasons	124 Spring Dr	East Meadow	NY		Condo	2	3	974	559,900
The Wyndham at Garden City	111 Cherry Valley Ave	Garden City	NY		Condo	2	3	1,440	1,250,000
The Wyndham at Garden City	111 Cherry Valley Ave	Garden City	NY		Condo	2	3	1,397	964,000
	4312 214th PL	Bayside	NY		Condo	2	2	928	670,000
	4312 214th PL	Bayside	NY			2	2	871	668,000
The Seasons	124 Spring Dr	East Meadow	NY		Condo	2	3	974	559,900
The Cabium	10 Byron Place	Larchmont	NY	149	Condo	1	1	811	567,700
	10 Byron Place	Larchmont	NY	149	Condo	1	2	1,280	730,000
	10 Byron Place	Larchmont	NY	149	Condo	2	2	1,442	829,150
	500 Central Park Ave	Scarsdale	NY		Condo	2	2	1,350	539,000
	72 Pondfield Rd.	Bronxville	NY		Condo	2	2	1,225	699,000
River House	701 Ridge Hill Blvd	Yonkers	NY		Condo	2	2	1,232	512,000
	55 1st St	Pelham	NY		Condo	1	1.5	1,264	529,000
The Addison		Port Washington	NY		Apartment	2	3	1,630	625,000
					Apartment	1	2	1,064	460,000
					Apartment	2	2.5	1,420	620,000
					Apartment	2	2	1,461	695,000
Meadowbrook Pointe		Westbury	NY		Apartment	2	2	1,353	650,000
					Apartment	1	1.5	970	505,000



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 5 minutes

Prepared by Robert Goman

	2005-2009 ACS Estimate	Percent	MOE (±)	Reliability
<b>TOTALS</b>				
Total Population	15,109		769	High
Total Households	5,528		242	High
Total Housing Units	5,840		234	High
<b>OWNER-OCCUPIED HOUSING UNITS BY VALUE</b>				
Total	3,562	100.0%	181	High
Less than \$10,000	4	0.1%	35	Low
\$10,000 to \$14,999	1	0.0%	20	Low
\$15,000 to \$19,999	0	0.0%	0	Low
\$20,000 to \$24,999	0	0.0%	0	Low
\$25,000 to \$29,999	9	0.3%	14	Low
\$30,000 to \$34,999	1	0.0%	14	Low
\$35,000 to \$39,999	5	0.1%	21	Low
\$40,000 to \$49,999	0	0.0%	0	Low
\$50,000 to \$59,999	4	0.1%	15	Low
\$60,000 to \$69,999	9	0.3%	61	Low
\$70,000 to \$79,999	0	0.0%	0	Low
\$80,000 to \$89,999	0	0.0%	0	Low
\$90,000 to \$99,999	27	0.8%	27	Low
\$100,000 to \$124,999	34	1.0%	25	Low
\$125,000 to \$149,999	32	0.9%	37	Low
\$150,000 to \$174,999	85	2.4%	74	Low
\$175,000 to \$199,999	142	4.0%	51	Low
\$200,000 to \$249,999	187	5.2%	61	Low
\$250,000 to \$299,999	200	5.6%	85	Low
\$300,000 to \$399,999	179	5.0%	59	Low
\$400,000 to \$499,999	512	14.4%	92	Low
\$500,000 to \$749,999	636	17.9%	80	Low
\$750,000 to \$999,999	1,435	40.0%	117	Low
\$1,000,000 or more				
Median Home Value	\$887,579		N/A	N/A
Average Home Value	N/A		N/A	N/A
<b>OWNER-OCCUPIED HOUSING UNITS BY MORTGAGE STATUS</b>				
Total	3,562	100.0%	181	High
Housing units with a mortgage/contract to purchase/similar debt	2,419	67.9%	167	High
Second mortgage only	18	0.5%	10	Low
Home equity loan only	652	18.6%	89	Low
Both second mortgage and home equity loan	29	0.8%	33	Low
No second mortgage and no home equity loan	1,710	48.0%	163	Low
Housing units without a mortgage	1,144	32.1%	130	Low
<b>AVERAGE VALUE BY MORTGAGE STATUS</b>				
Housing units with a mortgage	N/A		N/A	N/A
Housing units without a mortgage	N/A		N/A	N/A

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: High Medium Low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 5 minutes

Prepared by Robert Goman

	2005-2009 ACS Estimate	Percent	MOE (±)	Reliability
<b>RENTER-OCCUPIED HOUSING UNITS BY CONTRACT RENT</b>				
Total	1,955	100.0%	200	High
With cash rent	1,837	93.5%	200	High
Less than \$100	0	0.0%	0	Low
\$100 to \$149	73	3.7%	59	Low
\$150 to \$199	51	2.6%	29	Low
\$200 to \$249	12	0.6%	44	Low
\$250 to \$299	68	3.5%	52	Low
\$300 to \$349	20	1.0%	20	Low
\$350 to \$399	19	1.0%	14	Low
\$400 to \$449	5	0.3%	34	Low
\$450 to \$499	0	0.0%	0	Low
\$500 to \$549	9	0.5%	14	Low
\$550 to \$599	4	0.2%	13	Low
\$600 to \$649	24	1.2%	68	Low
\$650 to \$699	11	0.6%	43	Low
\$700 to \$749	32	1.6%	10	Low
\$750 to \$799	52	2.6%	50	Low
\$800 to \$899	131	6.7%	57	Low
\$900 to \$999	72	3.7%	27	Low
\$1,000 to \$1,249	145	7.4%	85	Low
\$1,250 to \$1,499	395	20.1%	136	Low
\$1,500 to \$1,999	343	17.5%	82	Low
\$2,000 or more	372	18.9%	102	Low
No cash rent	128	6.5%	41	Low
Median Contract Rent	N/A		N/A	N/A
Average Contract Rent	N/A		N/A	N/A
<b>RENTER-OCCUPIED HOUSING UNITS BY INCLUSION OF UTILITIES IN RENT</b>				
Total	1,955	100.0%	200	High
Pay extra for one or more utilities	1,655	84.2%	196	High
No extra payment for any utilities	310	15.8%	63	Low
<b>HOUSING UNITS BY UNITS IN STRUCTURE</b>				
Total	5,840	100.0%	254	High
1, detached	3,004	51.4%	146	High
1, attached	425	7.3%	104	High
2 or 3	596	10.2%	146	High
4 or 5	138	2.3%	32	Low
6 or 9	366	6.3%	111	Low
10 to 19	169	2.9%	75	Low
20 to 49	753	12.9%	144	Low
50 or more	1	0.0%	14	Low
Mobile home	11	0.2%	16	Low
Boat, RV, van, etc.				

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: High Medium Low

April 13, 2014

**GOMAN+YORK**  
NOVEMBER 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 5 minutes

Prepared by Robert Goman

HOUSING UNITS BY YEAR STRUCTURE BUILT	2005-2009			Percent	MOE(±)	Reliability
	ACS Estimate					
Total	5,840			100.0%	254	High
Built 2005 or later	45			0.8%	22	High
Built 2000 to 2004	152			2.6%	60	High
Built 1990 to 1999	210			3.6%	41	High
Built 1980 to 1989	361			6.2%	77	High
Built 1970 to 1979	467			8.0%	112	High
Built 1960 to 1969	810			13.9%	122	High
Built 1950 to 1959	883			15.1%	122	High
Built 1940 to 1949	843			14.4%	131	High
Built 1939 or earlier	2,068			35.4%	224	High
Median Year Structure Built	1950				N/A	
OCCUPIED HOUSING UNITS BY YEAR HOUSEHOLDER MOVED INTO UNIT						
Total	5,528			100.0%	242	High
Owner occupied						
Moved in 2005 or later	509			9.2%	116	High
Moved in 2000 to 2004	796			14.4%	115	High
Moved in 1990 to 1999	940			17.0%	110	High
Moved in 1980 to 1989	534			9.7%	65	High
Moved in 1970 to 1979	397			7.2%	75	High
Moved in 1969 or earlier	386			7.0%	67	High
Renter occupied						
Moved in 2005 or later	731			13.2%	147	High
Moved in 2000 to 2004	702			12.7%	147	High
Moved in 1990 to 1999	286			5.2%	69	High
Moved in 1980 to 1989	142			2.6%	84	High
Moved in 1970 to 1979	63			1.1%	27	High
Moved in 1969 or earlier	42			0.8%	37	High
Median Year Householder Moved Into Unit	2000				N/A	
OCCUPIED HOUSING UNITS BY HOUSE HEATING FUEL						
Total	5,528			100.0%	242	High
Utility gas	3,317			60.0%	229	High
Bottled, tank, or LP gas	126			2.3%	40	High
Electricity	257			4.6%	55	High
Fuel oil, kerosene, etc.	1,796			32.5%	177	High
Coal or coke	0			0.0%	0	Low
Wood	1			0.0%	14	Low
Solar energy	0			0.0%	0	Low
Other fuel	0			0.0%	0	Low
No fuel used	32			0.6%	35	Low

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: High Low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 5 minutes

Prepared by Robert Goman

OCCUPIED HOUSING UNITS BY VEHICLES AVAILABLE	2005-2009			Percent	MOE(±)	Reliability
	ACS Estimate					
Total	5,528			100.0%	242	High
Owner occupied						
No vehicle available	152			2.7%	66	High
1 vehicle available	843			15.2%	96	High
2 vehicles available	1,807			32.7%	162	High
3 vehicles available	553			10.0%	86	High
4 vehicles available	165			3.0%	37	High
5 or more vehicles available	43			0.8%	35	High
Renter occupied						
No vehicle available	316			5.7%	72	High
1 vehicle available	1,102			19.9%	178	High
2 vehicles available	491			8.9%	126	High
3 vehicles available	42			0.8%	24	High
4 vehicles available	3			0.1%	15	Low
5 or more vehicles available	11			0.2%	18	Low
Average Number of Vehicles Available	N/A				N/A	

Data Note: N/A means not available.

**2005-2009 ACS Estimates:** The American Community Survey (ACS) replaces census sample data. ESRI is releasing the 2005-2009 ACS estimates, five-year period data collected monthly from January 1, 2005 through December 31, 2009. Although the ACS includes many of the subjects previously covered by the decennial census sample, there are significant differences between the two surveys including fundamental differences in survey design and methodology.

**Margin of error (MOE):** The MOE is a measure of the variability of the estimate due to sampling error. MOEs enable the data user to measure the range of uncertainty for each estimate with 90 percent confidence. The range of uncertainty is called the confidence interval, and it is calculated by taking the estimate +/- the MOE. For example, if the ACS reports an estimate of 100 with an MOE of +/- 20, then you can be 90 percent certain the value for the whole population falls between 80 and 120.

**Reliability:** These symbols represent threshold values that ESRI has established from the Coefficients of Variation (CV) to designate the usability of the estimates. The CV measures the amount of sampling error relative to the size of the estimate, expressed as a percentage.

High Reliability: Small CVs (less than or equal to 12 percent) are flagged green to indicate that the sampling error is small relative to the estimate, and the estimate is reasonably reliable.

Medium Reliability: Estimates with CVs between 12 and 40 are flagged yellow—use with caution.

Low Reliability: Large CVs (over 40 percent) are flagged red to indicate that the sampling error is large relative to the estimate. The estimate is considered very unreliable.

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: High Low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 13 minutes

Prepared by Robert Goman

	2005-2009 ACS Estimate	Percent	MOR(±)	Reliability
<b>TOTALS</b>				
Total Population	193,147		4,135	U
Total Households	72,174		1,445	U
Total Housing Units	76,616		1,170	U
<b>OWNER-OCCUPIED HOUSING UNITS BY VALUE</b>				
Total	45,394	100.0%	942	U
Less than \$10,000	96	0.2%	46	U
\$10,000 to \$14,999	30	0.1%	15	U
\$15,000 to \$24,999	30	0.1%	28	U
\$25,000 to \$34,999	46	0.1%	53	U
\$35,000 to \$49,999	24	0.1%	26	U
\$50,000 to \$74,999	19	0.0%	12	U
\$75,000 to \$99,999	45	0.1%	30	U
\$100,000 to \$149,999	41	0.1%	19	U
\$150,000 to \$249,999	155	0.3%	81	U
\$250,000 to \$499,999	96	0.2%	65	U
\$500,000 to \$999,999	144	0.3%	97	U
\$1,000,000 or more	155	0.3%	55	U
Median Home Value	110	0.2%	60	U
Average Home Value	580	1.3%	150	U
<b>OWNER-OCCUPIED HOUSING UNITS BY MORTGAGE STATUS</b>				
Total	30,227	66.6%	890	U
Housing units with a mortgage/contract to purchase/similar debt	729	1.6%	157	U
Second mortgage only	7,853	17.3%	456	U
Home equity loan only	269	0.6%	113	U
Both second mortgage and home equity loan	21,375	47.1%	824	U
No second mortgage and no home equity loan	15,167	33.4%	619	U
Housing units without a mortgage				
<b>AVERAGE VALUE BY MORTGAGE STATUS</b>				
Housing units with a mortgage	N/A		N/A	
Housing units without a mortgage	N/A		N/A	

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: U high M medium L low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 13 minutes

Prepared by Robert Goman

	2005-2009 ACS Estimate	Percent	MOR(±)	Reliability
<b>RENTER-OCCUPIED HOUSING UNITS BY CONTRACT RENT</b>				
Total	26,781	100.0%	943	U
With cash rent	25,677	95.9%	928	U
Less than \$100	146	0.5%	72	U
\$100 to \$149	253	0.9%	110	U
\$150 to \$199	397	1.5%	113	U
\$200 to \$249	423	1.6%	142	U
\$250 to \$299	237	0.9%	91	U
\$300 to \$349	269	1.0%	127	U
\$350 to \$399	290	1.1%	97	U
\$400 to \$449	409	1.5%	130	U
\$450 to \$499	361	1.3%	147	U
\$500 to \$549	349	1.3%	136	U
\$550 to \$599	386	1.4%	122	U
\$600 to \$649	736	2.7%	194	U
\$650 to \$699	660	2.5%	173	U
\$700 to \$749	524	2.0%	128	U
\$750 to \$799	484	1.8%	143	U
\$800 to \$899	1,716	6.4%	288	U
\$900 to \$999	1,382	5.2%	255	U
\$1,000 to \$1,249	3,755	14.0%	429	U
\$1,250 to \$1,499	4,268	15.9%	474	U
\$1,500 to \$1,999	4,671	17.4%	458	U
\$2,000 or more	3,960	14.8%	433	U
No cash rent	1,103	4.1%	241	U
Median Contract Rent	N/A		N/A	
Average Contract Rent	N/A		N/A	
<b>RENTER-OCCUPIED HOUSING UNITS BY INCLUSION OF UTILITIES IN RENT</b>				
Total	26,781	100.0%	943	U
Pay extra for one or more utilities	22,679	84.7%	891	U
No extra payment for any utilities	4,102	15.3%	443	U
<b>HOUSING UNITS BY UNITS IN STRUCTURE</b>				
Total	76,616	100.0%	1,170	U
1, detached	35,480	43.6%	423	U
1, attached	4,591	6.0%	617	U
2	6,787	11.5%	349	U
2 or 4	6,344	8.3%	337	U
3 to 9	3,859	4.7%	334	U
10 to 19	2,859	3.7%	244	U
20 to 49	5,637	7.0%	552	U
50 or more	11,115	14.5%	185	U
Mobile home	17	0.1%	16	U
Boat, RV, van, etc.	11	0.0%	16	U

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: U high M medium L low

April 13, 2014

**GOMAN+YORK**  
NOVEMBER 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 13 minutes

Prepared by Robert Goman

2005-2009 ACS Estimate			
Housing Units by Year Structure Built	Percent	MOE (±)	Reliability
Total	100.0%	1,170	Low
Built 2005 or later	1.5%	209	Low
Built 2000 to 2004	3.2%	303	Low
Built 1990 to 1999	5.2%	358	Low
Built 1980 to 1989	8.0%	439	Low
Built 1970 to 1979	6.13%	504	Low
Built 1960 to 1969	8.6%	504	Low
Built 1950 to 1959	10.65%	623	Low
Built 1940 to 1949	13.9%	684	Low
Built 1930 to 1939	18.6%	536	Low
Built 1920 to 1929	9.5%	724	Low
Built 1910 to 1919	31.4%	905	Low
Median Year Structure Built		1955	
Occupied Housing Units by Year Householder Moved Into Unit			
Total	100.0%	1,145	Low
Owner occupied	8.4%	490	Low
Moved in 2005 or later	14.3%	576	Low
Moved in 2000 to 2004	16.6%	600	Low
Moved in 1990 to 1999	9.0%	427	Low
Moved in 1980 to 1989	6.5%	362	Low
Moved in 1970 to 1979	8.1%	417	Low
Moved in 1960 or earlier	14.9%	691	Low
Renter occupied	11.9%	536	Low
Moved in 2005 or later	5.9%	428	Low
Moved in 2000 to 2004	2.1%	253	Low
Moved in 1990 to 1999	1.3%	178	Low
Moved in 1980 to 1989	1.0%	176	Low
Moved in 1970 to 1979			
Moved in 1960 or earlier			
Median Year Householder Moved Into Unit		N/A	
Occupied Housing Units by House Heating Fuel			
Total	100.0%	1,145	Low
Utility gas	56.2%	1,053	Low
Bottled, tank, or LP gas	7.4%	170	Low
Electricity	7.2%	402	Low
Fuel oil, kerosene, etc	24.3%	594	Low
Coal or coke	0.0%	34	Low
Wood	0.1%	40	Low
Solar energy	0.0%	20	Low
Other fuel	0.5%	115	Low
No fuel used	0.2%	70	Low

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: Low High medium low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 13 minutes

Prepared by Robert Goman

2005-2009 ACS Estimate			
Housing Units by Year Structure Built	Percent	MOE (±)	Reliability
Total	100.0%	1,170	Low
Built 2005 or later	1.5%	209	Low
Built 2000 to 2004	3.2%	303	Low
Built 1990 to 1999	5.2%	358	Low
Built 1980 to 1989	8.0%	439	Low
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Built 1960 to 1969	8.6%	504	Low
Built 1950 to 1959	10.65%	623	Low
Built 1940 to 1949	13.9%	684	Low
Built 1930 to 1939	18.6%	536	Low
Built 1920 to 1929	9.5%	724	Low
Built 1910 to 1919	31.4%	905	Low
Median Year Structure Built		1955	
Occupied Housing Units by Year Householder Moved Into Unit			
Total	100.0%	1,145	Low
Owner occupied	8.4%	490	Low
Moved in 2005 or later	14.3%	576	Low
Moved in 2000 to 2004	16.6%	600	Low
Moved in 1990 to 1999	9.0%	427	Low
Moved in 1980 to 1989	6.5%	362	Low
Moved in 1970 to 1979	8.1%	417	Low
Moved in 1960 or earlier	14.9%	691	Low
Renter occupied	11.9%	536	Low
Moved in 2005 or later	5.9%	428	Low
Moved in 2000 to 2004	2.1%	253	Low
Moved in 1990 to 1999	1.3%	178	Low
Moved in 1980 to 1989	1.0%	176	Low
Moved in 1970 to 1979			
Moved in 1960 or earlier			
Median Year Householder Moved Into Unit		N/A	
Occupied Housing Units by House Heating Fuel			
Total	100.0%	1,145	Low
Utility gas	56.2%	1,053	Low
Bottled, tank, or LP gas	7.4%	170	Low
Electricity	7.2%	402	Low
Fuel oil, kerosene, etc	24.3%	594	Low
Coal or coke	0.0%	34	Low
Wood	0.1%	40	Low
Solar energy	0.0%	20	Low
Other fuel	0.5%	115	Low
No fuel used	0.2%	70	Low

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: Low High medium low

April 13, 2014





## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S, 13, 23 DT  
Drive Time: 23 minutes

Prepared by Robert Goman

	2005-2009 ACS Estimate	Percent	MOE(z)	Reliability
<b>TOTALS</b>				
Total Population	1,289,719		11,485	Low
Total Households	470,798		3,018	Low
Total Housing Units	501,069		3,003	Low
<b>OWNER-OCCUPIED HOUSING UNITS BY VALUE</b>				
Total	252,892	100.0%	2,424	Low
Less than \$10,000	1,249	0.5%	713	Low
\$10,000 to \$14,999	1,395	0.5%	216	Low
\$15,000 to \$19,999	1,312	0.4%	192	Low
\$20,000 to \$24,999	560	0.2%	155	Low
\$25,000 to \$29,999	592	0.2%	163	Low
\$30,000 to \$34,999	465	0.2%	147	Low
\$35,000 to \$39,999	398	0.1%	97	Low
\$40,000 to \$49,999	739	0.3%	179	Low
\$50,000 to \$59,999	1,658	0.7%	329	Low
\$60,000 to \$69,999	1,272	0.5%	249	Low
\$70,000 to \$79,999	1,671	0.7%	310	Low
\$80,000 to \$89,999	1,949	0.8%	340	Low
\$90,000 to \$99,999	1,599	0.6%	255	Low
\$100,000 to \$124,999	4,651	1.8%	480	Low
\$125,000 to \$149,999	3,923	1.6%	434	Low
\$150,000 to \$174,999	5,758	2.3%	513	Low
\$175,000 to \$199,999	4,314	1.7%	459	Low
\$200,000 to \$249,999	11,131	4.4%	677	Low
\$250,000 to \$299,999	6,757	3.5%	631	Low
\$300,000 to \$399,999	39,997	12.3%	1,135	Low
\$400,000 to \$499,999	37,108	14.7%	1,208	Low
\$500,000 to \$749,999	65,979	26.5%	1,489	Low
\$750,000 to \$999,999	27,811	11.0%	952	Low
\$1,000,000 or more	36,902	14.6%	908	Low
Median Home Value	N/A		N/A	
Average Home Value	N/A		N/A	
<b>OWNER-OCCUPIED HOUSING UNITS BY MORTGAGE STATUS</b>				
Total	252,892	100.0%	2,424	Low
Housing units with a mortgage/contract to purchase/rental debt	156,566	65.9%	2,231	Low
Second mortgage only	5,863	2.3%	487	Low
Home equity loan only	36,608	14.5%	1,121	Low
Both second mortgage and home equity loan	2,069	0.8%	326	Low
No second mortgage and no home equity loan	122,008	48.2%	2,059	Low
Housing units without a mortgage	86,324	34.1%	1,626	Low
<b>AVERAGE VALUE BY MORTGAGE STATUS</b>				
Housing units with a mortgage	N/A		N/A	
Housing units without a mortgage	N/A		N/A	

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: Low High Medium Low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S, 13, 23 DT  
Drive Time: 23 minutes

Prepared by Robert Goman

	2005-2009 ACS Estimate	Percent	MOE(z)	Reliability
<b>RENTER-OCCUPIED HOUSING UNITS BY CONTRACT RENT</b>				
Total	217,907	100.0%	2,632	Low
With cash rent	211,634	97.1%	2,611	Low
Less than \$100	1,017	0.5%	237	Low
\$100 to \$149	2,034	0.9%	322	Low
\$150 to \$199	3,949	1.8%	421	Low
\$200 to \$249	4,305	2.0%	457	Low
\$250 to \$299	2,481	1.1%	323	Low
\$300 to \$349	2,808	1.3%	349	Low
\$350 to \$399	2,341	1.1%	353	Low
\$400 to \$449	3,486	1.6%	418	Low
\$450 to \$499	3,679	1.7%	433	Low
\$500 to \$549	5,154	2.4%	516	Low
\$550 to \$599	4,072	2.1%	478	Low
\$600 to \$649	6,886	3.2%	563	Low
\$650 to \$699	7,415	3.4%	611	Low
\$700 to \$749	8,407	3.9%	681	Low
\$750 to \$799	9,385	4.3%	688	Low
\$800 to \$899	21,218	9.7%	1,016	Low
\$900 to \$999	23,723	10.9%	1,081	Low
\$1,000 to \$1,249	38,443	17.6%	1,324	Low
\$1,250 to \$1,499	28,442	13.0%	1,197	Low
\$1,500 to \$1,999	27,702	12.7%	1,137	Low
\$2,000 or more	12,482	5.7%	739	Low
No cash rent	6,272	2.9%	569	Low
Median Contract Rent	N/A		N/A	
Average Contract Rent	N/A		N/A	
<b>UTILITIES IN RENT</b>				
Total	217,907	100.0%	2,632	Low
Pay extra for one or more utilities	174,076	79.9%	2,464	Low
No extra payment for any utilities	43,831	20.1%	1,281	Low
<b>HOUSING UNITS BY UNITS IN STRUCTURE</b>				
Total	501,069	100.0%	3,003	Low
1 detached	167,394	33.4%	1,958	Low
1 attached	31,375	6.3%	1,100	Low
2	56,525	11.7%	1,623	Low
3 or 4	48,130	9.6%	1,511	Low
5 to 9	25,122	5.0%	1,076	Low
10 to 19	20,426	4.1%	964	Low
20 to 49	48,758	9.7%	1,422	Low
50 or more	100,482	20.1%	1,650	Low
Mobile home	734	0.1%	219	Low
Boat, RV, van, etc.	125	0.0%	97	Low

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: Low High Medium Low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 23 minutes

Prepared by Robert Goman

		2005-2009 ACS Estimate		Percent	MOE(±)	Reliability
HOUSING UNITS BY YEAR STRUCTURE BUILT						
Total		501,069		100.0%	3,003	
Built 2005 or later		5,192		1.0%	482	
Built 2000 to 2004		12,762		2.6%	730	
Built 1990 to 1999		18,329		3.7%	861	
Built 1980 to 1989		27,716		5.5%	1,080	
Built 1970 to 1979		43,218		8.6%	1,365	
Built 1960 to 1969		73,598		14.7%	1,732	
Built 1950 to 1959		103,759		20.7%	2,005	
Built 1940 to 1949		59,934		12.0%	1,627	
Built 1939 or earlier		156,541		31.2%	2,373	
Median Year Structure Built		N/A			N/A	
OCCUPIED HOUSING UNITS BY YEAR HOUSEHOLDER MOVED						
INTO UNIT						
Total		470,798		100.0%	3,018	
Owner occupied						
Moved in 2005 or later		32,401		6.9%	1,182	
Moved in 2000 to 2004		56,552		12.0%	1,480	
Moved in 1990 to 1999		68,031		14.5%	1,583	
Moved in 1980 to 1989		36,964		7.9%	1,153	
Moved in 1970 to 1979		28,892		6.1%	1,015	
Moved in 1969 or earlier		29,962		6.4%	1,006	
Renter occupied						
Moved in 2005 or later		73,200		15.5%	1,904	
Moved in 2000 to 2004		65,455		13.9%	1,820	
Moved in 1990 to 1999		42,736		9.1%	1,426	
Moved in 1980 to 1989		15,960		3.4%	869	
Moved in 1970 to 1979		13,923		3.0%	760	
Moved in 1969 or earlier		6,633		1.4%	515	
Median Year Householder Moved Into Unit		N/A			N/A	
OCCUPIED HOUSING UNITS BY HOUSE HEATING FUEL						
Total		470,798		100.0%	3,018	
Utility gas		209,989		44.6%	2,594	
Bottled, tank, or LP gas		7,033		1.5%	536	
Electricity		45,576		9.7%	1,341	
Fuel oil, kerosene, etc.		202,529		43.0%	2,603	
Coal or coke		409		0.1%	149	
Wood		493		0.1%	131	
Solar energy		36		0.0%	33	
Other fuel		2,734		0.6%	308	
No fuel used		1,999		0.4%	302	

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: High Medium Low

April 13, 2014



## ACS Housing Summary

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 23 minutes

Prepared by Robert Goman

OCCUPIED HOUSING UNITS BY VEHICLES AVAILABLE		2005-2009 ACS Estimate	Percent	MOE(±)	Reliability
Total		470,798	100.0%	3,018	
Owner occupied					
No vehicle available		22,621	4.8%	995	
1 vehicle available		85,284	18.1%	1,762	
2 vehicles available		99,472	21.1%	1,781	
3 vehicles available		33,304	7.1%	1,074	
4 vehicles available		9,081	1.9%	582	
5 or more vehicles available		3,130	0.7%	351	
Renter occupied					
No vehicle available		85,908	18.2%	1,834	
1 vehicle available		93,457	19.9%	2,075	
2 vehicles available		32,336	6.9%	1,291	
3 vehicles available		4,952	1.1%	521	
4 vehicles available		948	0.2%	232	
5 or more vehicles available		406	0.1%	123	
Average Number of Vehicles Available		N/A		N/A	

**ta Note:** N/A means not available.

**2005-2009 ACS Estimates:** The American Community Survey (ACS) replaces census sample data. Esri is releasing the 2005-2009 ACS estimates, which are based on a 1-year period data collected monthly from January 1, 2005 through December 31, 2009. Although the ACS includes many of the subjects previously covered by the decennial census sample, there are significant differences between the two surveys including fundamental differences in survey design and residency rules.

**Margin of Error (MOE):** The MOE is a measure of the variability of the estimate due to sampling error. MOEs enable the data user to measure the confidence in the estimate. The larger the MOE, the less confidence the user can have in the estimate. The MOE is calculated by Esri based on the standard error of the estimate. For example, if the ACS reports an estimate of 100 with an MOE of +/- 20, then you can be 90 percent certain a value for the whole population falls between 80 and 120.

**Reliability:** These symbols represent threshold values that Esri has established from the Coefficients of Variation (CV) to designate the usability of estimates. The CV measures the amount of sampling error relative to the size of the estimate, expressed as a percentage.

**High Reliability:** Small CVs (less than or equal to 12 percent) are flagged green to indicate that the sampling error is small relative to the estimate and the estimate is reasonably reliable.

**Medium Reliability:** Estimates with CVs between 12 and 40 are flagged yellow—use with caution.

**Low Reliability:** Large CVs (over 40 percent) are flagged red to indicate that the sampling error is large relative to the estimate. The estimate is considered very unreliable.

Data Note: N/A means not available.

**2005-2009 ACS Estimates:** The American Community Survey (ACS) replaces census sample data. Esri is releasing the 2005-2009 ACS estimates, five-year period data collected monthly from January 1, 2005 through December 31, 2009. Although the ACS includes many of the subjects previously covered by the decennial census sample, there are significant differences between the two surveys including fundamental differences in survey design and residency rules.

**Margin of error (MOE):** The MOE is a measure of the variability of the estimate due to sampling error. MOEs enable the data user to measure the range of uncertainty for each estimate with 90 percent confidence. The range of uncertainty is called the confidence interval, and it is calculated by taking the estimate +/- the MOE. For example, if the ACS reports an estimate of 100 with an MOE of +/- 20, then you can be 90 percent certain the value for the whole population falls between 80 and 120.

**Reliability:** These symbols represent threshold values that Esri has established from the Coefficients of Variation (CV) to designate the usability of the estimates. The CV measures the amount of sampling error relative to the size of the estimate, expressed as a percentage.

High Reliability: Small CVs (less than or equal to 12 percent) are flagged green to indicate that the sampling error is small relative to the estimate and the estimate is reasonably reliable.

Medium Reliability: Estimates with CVs between 12 and 40 are flagged yellow—use with caution.

Low Reliability: Large CVs (over 40 percent) are flagged red to indicate that the sampling error is large relative to the estimate. The estimate is considered very unreliable.

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Reliability: High Medium Low

April 13, 2014

**GOMAN+YORK**  
NOVEMBER 2014





## Age 55+ Profile

Prepared by Robert Goman  
120 Old Post Rd  
120 Old Post Rd, Rye, New York, 10580,  
Drive Time: 5 minutes

### 2013 Population 55+ by Race

	Number	Percent	% Pop
Total	5,422	100.0%	34.6%
White Alone	4,968	91.6%	37.6%
Black Alone	112	2.1%	30.6%
American Indian Alone	6	0.1%	17.1%
Asian Alone	203	3.7%	17.9%
Pacific Islander Alone	0	0.0%	0.0%
Some Other Race Alone	86	1.6%	14.4%
Two or More Races	47	0.9%	13.5%
Hispanic Origin (Any Race)	364	6.7%	18.7%

### Census 2010 Households and Age of Householder

	Number	Percent	% Total HHs
Total	2,525	100.0%	42.8%
Family Households	1,440	57.0%	24.4%
Householder Age 55-64	692	27.4%	11.7%
Householder Age 65-74	392	15.5%	6.6%
Householder Age 75-84	246	9.7%	4.2%
Householder Age 85+	110	4.4%	1.9%
Nonfamily Households	1,085	43.0%	18.4%
Householder Age 55-64	270	10.7%	4.6%
Householder Age 65-74	257	10.2%	4.4%
Householder Age 75-84	277	11.0%	4.7%
Householder Age 85+	281	11.1%	4.8%

### Census 2010 Occupied Housing Units by Age of Householder

	Number	Percent	% Total HHs
Total	2,526	100.0%	42.8%
Owner Occupied Housing Units	1,798	71.2%	30.5%
Householder Age 55-64	715	28.3%	12.1%
Householder Age 65-74	507	20.1%	8.6%
Householder Age 75-84	378	15.0%	6.4%
Householder Age 85+	198	7.6%	3.4%
Renter Occupied Housing Units	728	28.8%	12.3%
Householder Age 55-64	248	9.8%	4.2%
Householder Age 65-74	142	5.6%	2.4%
Householder Age 75-84	145	5.7%	2.5%
Householder Age 85+	193	7.6%	3.3%

**Data Note:** A family is defined as a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. Nonfamily households consist of people living alone and households that do not contain any members who are related to the householder. The base for % Pop is specific to the row. A Non relative is not related to the householder by birth, marriage, or adoption.

**Source:** U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018.

November 25, 2014



## Age 55+ Profile

Prepared by Robert Goman  
120 Old Post Rd  
120 Old Post Rd, Rye, New York, 10580,  
Drive Time: 13 minutes

### Demographic Summary

	Census 2010	2013	2018	2013-2018 Change	2013-2018 Annual Rate
Total Population	194,677	195,142	198,781	3,639	0.37%
Population 55+	50,632	53,226	58,623	5,397	1.36%
Median Age	39.3	39.9	40.5	0.6	0.30%
Households	72,575	72,725	74,093	1,368	0.37%
% Householders 55+	43.1%	45.2%	48.2%	3.0	1.29%
Owner/Renter Ratio	1.4	1.4	1.4	0.0	0.00%
Median Home Value	-	\$629,865	\$852,654	\$222,789	6.24%
Average Home Value	-	\$706,169	\$844,621	\$138,452	3.65%
Median Household Income	-	\$85,864	\$100,543	\$14,679	3.21%
Median Household Income for Householder 55+	-	\$75,797	\$91,667	\$15,870	3.88%

### Population by Age and Sex

	Census 2010		2013		2018	
	Number	% of 55+	Number	% of 55+	Number	% of 55+
<b>Male Population</b>						
Total (55+)	21,956	100.0%	23,442	100.0%	26,351	100.0%
55-59	5,687	25.9%	6,207	26.5%	6,789	25.8%
60-64	4,697	21.4%	5,067	21.6%	5,754	21.8%
65-69	3,472	15.8%	3,827	16.3%	4,599	17.5%
70-74	2,556	11.6%	2,789	11.9%	3,353	12.7%
75-79	2,201	10.0%	2,122	9.1%	2,348	8.9%
80-84	1,754	8.0%	1,738	7.4%	1,687	6.4%
85+	1,589	7.2%	1,692	7.2%	1,821	6.9%

	Census 2010		2013		2018	
	Number	% of 55+	Number	% of 55+	Number	% of 55+
<b>Female</b>						
Total (55+)	28,676	100.0%	29,784	100.0%	32,272	100.0%
55-59	6,249	21.8%	6,781	22.8%	7,305	22.5%
60-64	5,436	19.0%	5,744	19.3%	6,365	19.7%
65-69	4,235	14.8%	4,581	15.4%	5,300	16.4%
70-74	3,422	11.9%	3,629	12.2%	4,192	13.0%
75-79	3,031	10.6%	2,953	9.9%	3,157	9.8%
80-84	2,926	10.2%	2,616	8.8%	2,453	7.6%
85+	3,377	11.8%	3,480	11.7%	3,500	10.8%

	Census 2010		2013		2018	
	Number	% of Total	Number	% of Total Pop	Number	% of Total
<b>Total Population</b>						
Total (55+)	50,630	33.4%	53,225	34.9%	58,623	36.6%
55-59	11,935	6.1%	12,988	6.7%	14,094	7.1%
60-64	10,133	5.2%	10,810	5.5%	12,119	6.1%
65-69	7,707	4.0%	8,408	4.3%	9,899	5.0%
70-74	5,978	3.1%	6,418	3.3%	7,544	3.8%
75-79	5,232	2.7%	5,075	2.6%	5,505	2.8%
80-84	4,680	2.4%	4,354	2.2%	4,140	2.1%
85+	4,965	2.6%	5,172	2.7%	5,322	2.7%
65+	28,562	14.7%	29,427	15.1%	32,410	16.3%
75+	14,877	7.6%	14,601	7.5%	14,967	7.5%

**Data Note:** A "-" indicates that the variable was not collected in the 2010 Census.  
**Source:** U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018.



## Age 55+ Profile

120 Old Post Rd  
120 Old Post Rd, Rye, New York, 10580,  
Drive Time: 13 minutes

Prepared by Robert Goman

	2013 Households by Income and Age of Householder 55+			
	55-64	65-74	75+	Percent
Total	13,819	9,202	9,847	100%
<\$15,000	873	590	1,388	14.1%
\$15,000-\$24,999	632	827	1,388	8.7%
\$25,000-\$34,999	845	749	1,262	12.8%
\$35,000-\$49,999	1,219	1,060	1,221	8.3%
\$50,000-\$74,999	1,622	1,429	1,151	8.6%
\$75,000-\$99,999	1,426	997	1,430	10.4%
\$100,000-\$149,999	2,354	1,288	894	13.6%
\$150,000-\$199,999	1,441	686	536	10.1%
\$200,000+	3,407	1,576	1,074	13.8%

Median HH Income	\$104,339	\$73,698	\$48,335	\$75,797
Average HH Income	\$153,984	\$122,517	\$90,290	\$126,093

	2018 Households by Income and Age of Householder 55+			
	55-64	65-74	75+	Percent
Total	15,045	10,702	9,988	100%
<\$15,000	803	596	1,326	13.3%
\$15,000-\$24,999	487	735	957	7.6%
\$25,000-\$34,999	728	740	1,087	6.1%
\$35,000-\$49,999	1,156	1,071	1,069	7.1%
\$50,000-\$74,999	1,422	1,391	1,225	9.2%
\$75,000-\$99,999	1,754	1,321	1,186	11.3%
\$100,000-\$149,999	2,802	1,713	1,116	11.9%
\$150,000-\$199,999	1,868	1,020	726	15.8%
\$200,000+	4,025	2,113	1,295	10.1%

Median HH Income	\$116,298	\$88,863	\$59,332	\$91,667
Average HH Income	\$186,997	\$152,307	\$113,651	\$156,066

**Data Note:** Income is reported for July 1, 2013 and represents annual income for the preceding year, expressed in current (2012) dollars, including an adjustment for inflation. Income is reported for July 1, 2018 and represents annual income for the preceding year, expressed in current (2017) dollars, including an adjustment for inflation.

**Source:** U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018

November 25, 2014



## Age 55+ Profile

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Drive Time: 13 minutes

Prepared by Robert Goman

2013 Population 55+ by Race			
	Number	Percent	% Pop
Total	68,040	100.0%	34.9%
White Alone	56,442	83.0%	39.7%
Black Alone	5,087	7.5%	34.2%
American Indian Alone	143	0.2%	18.4%
Asian Alone	2,756	4.1%	23.3%
Pacific Islander Alone	11	0.0%	9.6%
Some Other Race Alone	2,635	3.9%	13.9%
Two or More Races	966	1.4%	15.6%
Hispanic Origin (Any Race)	8,972	13.2%	17.9%

### Census 2010 Households and Age of Householder

	Number	Percent	% Total HHs
Total	31,283	100.0%	43.1%
Family Households	18,101	57.9%	24.9%
Householder Age 55-64	8,685	27.8%	12.0%
Householder Age 65-74	5,028	16.1%	6.9%
Householder Age 75-84	3,233	10.3%	4.5%
Householder Age 85+	1,155	3.7%	1.6%
Nonfamily Households	13,182	42.1%	18.2%
Householder Age 55-64	4,112	13.1%	5.7%
Householder Age 65-74	3,447	11.0%	4.7%
Householder Age 75-84	3,389	10.8%	4.7%
Householder Age 85+	2,234	7.1%	3.1%

### Census 2010 Occupied Housing Units by Age of Householder

	Number	Percent	% Total HHs
Total	31,281	100.0%	43.1%
Owner Occupied Housing Units	22,169	70.9%	30.5%
Householder Age 55-64	8,905	28.5%	12.3%
Householder Age 65-74	6,144	19.6%	8.5%
Householder Age 75-84	4,833	15.5%	6.7%
Householder Age 85+	2,287	7.3%	3.2%
Renter Occupied Housing Units	9,112	29.1%	12.6%
Householder Age 55-64	3,892	12.4%	5.4%
Householder Age 65-74	2,331	7.5%	3.2%
Householder Age 75-84	1,788	5.7%	2.5%
Householder Age 85+	1,101	3.5%	1.5%

**Data Note:** A family is defined as a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. Nonfamily households consist of people living alone and households that do not contain any members who are related to the householder. The base for "% Pop" is specific to the row. A Nonrelative is not related to the householder by birth, marriage, or adoption.

**Source:** U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018

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## Age 55+ Profile

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### Demographic Summary

Total Population	1,280,138	1,285,824	1,313,850	2018	2013-2018 Change	2013-2018 Annual Rate
Population 55+	327,938	346,633	373,364	1.41%	37,364	1.41%
Median Age	38.5	38.9	39.4	0.26%	0.5	0.26%
Households	480,532	482,959	493,813	0.45%	10,854	0.45%
% Householders 55+	42.0%	44.0%	47.1%	1.37%	3.1	1.37%
Owner/Renter Ratio	1.0	1.0	1.0	0.00%	0.0	0.00%
Median Home Value	-	\$479,179	\$650,510	6.30%	\$171,331	6.30%
Average Home Value	-	\$568,406	\$686,423	3.85%	\$118,017	3.85%
Median Household Income	-	\$62,950	\$76,657	4.02%	\$13,707	4.02%
Median Household Income for Householder 55+	-	\$57,134	\$69,130	3.89%	\$11,996	3.89%

### Population by Age and Sex

	Census 2010			2013			2018		
	Number	% of 55+	% of Total Pop	Number	% of 55+	% of Total	Number	% of 55+	% of Total
<b>Male Population</b>									
Total (55+)	139,502	100.0%	100.0%	149,114	100.0%	100.0%	167,319	100.0%	100.0%
55-59	36,286	26.0%	26.0%	39,041	26.2%	25.0%	41,761	25.0%	25.0%
60-64	30,956	22.2%	22.3%	33,226	22.3%	17.8%	36,691	21.9%	17.8%
65-69	22,612	16.2%	16.8%	25,051	16.8%	13.4%	29,744	17.8%	13.4%
70-74	16,645	11.9%	12.2%	18,223	12.2%	9.3%	22,419	13.4%	9.3%
75-79	13,563	9.7%	9.1%	13,548	9.1%	6.3%	15,592	9.3%	6.3%
80-84	10,459	7.5%	6.9%	10,353	6.9%	6.3%	10,516	6.3%	6.3%
85+	8,981	6.4%	6.5%	9,672	6.5%	6.3%	10,596	6.3%	6.3%
<b>Female</b>									
Total (55+)	237,453	100.0%	100.0%	197,519	100.0%	100.0%	216,678	100.0%	100.0%
55-59	42,429	17.9%	22.8%	47,084	22.8%	22.0%	47,600	22.0%	22.0%
60-64	37,244	15.7%	20.2%	39,843	15.7%	19.9%	43,138	19.9%	19.9%
65-69	28,713	12.1%	15.9%	31,469	12.1%	17.1%	37,024	17.1%	17.1%
70-74	22,876	9.6%	12.4%	24,534	12.4%	13.6%	29,448	13.6%	13.6%
75-79	19,701	8.3%	9.9%	19,599	9.9%	10.2%	22,058	10.2%	10.2%
80-84	17,538	7.4%	8.3%	16,415	8.3%	7.5%	16,253	7.5%	7.5%
85+	19,935	8.4%	10.4%	20,575	10.4%	9.8%	21,157	9.8%	9.8%
<b>Total Population</b>									
Total (55+)	420,226	32.8%	34.3%	346,631	34.3%	36.0%	383,998	36.0%	36.0%
55-59	78,715	6.1%	6.5%	84,125	6.5%	6.8%	89,361	6.8%	6.8%
60-64	68,200	5.3%	5.7%	73,069	5.7%	6.1%	79,830	6.1%	6.1%
65-69	51,325	4.0%	4.4%	56,519	4.4%	5.1%	66,768	5.1%	5.1%
70-74	39,521	3.1%	3.3%	42,756	3.3%	3.9%	51,867	3.9%	3.9%
75-79	33,264	2.6%	2.9%	33,147	2.6%	2.9%	37,650	2.9%	2.9%
80-84	27,997	2.2%	2.4%	26,768	2.1%	2.0%	26,769	2.0%	2.0%
85+	28,916	2.3%	2.4%	30,247	2.4%	2.4%	31,753	2.4%	2.4%
65+	181,023	14.1%	14.7%	189,437	14.7%	16.3%	214,807	16.3%	16.3%
75+	90,177	7.0%	7.0%	90,162	7.0%	7.3%	96,172	7.3%	7.3%

**Data Note** - A "-" indicates that the variable was not collected in the 2010 Census.  
**Source:** U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2013 and 2018.

November 25, 2014



## Age 55+ Profile

120 Old Post Rd  
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Drive Time: 23 minutes

Prepared by Robert Goman

### 2013 Households by Income and Age of Householder 55+

	55-64	Percent	65-74	Percent	75+	Percent	Total	Percent
Total	92,994	100%	61,180	100%	58,445	100%	212,619	100%
<\$15,000	9,714	10.4%	6,005	9.8%	5,845	10.0%	25,512	12.2%
\$15,000-\$24,999	5,645	6.1%	5,753	9.4%	8,852	15.1%	20,250	9.5%
\$25,000-\$34,999	7,041	7.6%	6,587	10.8%	7,022	12.0%	20,650	9.7%
\$35,000-\$49,999	10,995	11.8%	9,074	14.8%	7,379	12.6%	27,448	12.9%
\$50,000-\$74,999	13,840	14.9%	10,145	16.6%	8,972	15.4%	32,957	15.5%
\$75,000-\$99,999	10,321	11.1%	6,398	10.5%	5,348	9.2%	22,067	10.4%
\$100,000-\$149,999	14,875	16.0%	7,793	12.7%	4,959	8.5%	27,627	13.0%
\$150,000-\$199,999	7,560	8.1%	3,639	5.9%	2,277	3.9%	13,476	6.3%
\$200,000+	13,001	14.0%	5,786	9.5%	3,443	5.9%	22,230	10.5%
Median HH Income	\$73,179		\$55,920		\$40,316		\$57,134	
Average HH Income	\$113,965		\$92,666		\$69,820		\$95,701	

### 2018 Households by Income and Age of Householder 55+

	55-64	Percent	65-74	Percent	75+	Percent	Total	Percent
Total	98,857	100%	72,140	100%	61,816	100%	232,813	100%
<\$15,000	9,401	9.5%	6,661	9.2%	10,606	17.2%	26,668	11.5%
\$15,000-\$24,999	4,433	4.5%	5,387	7.5%	7,150	11.6%	16,970	7.3%
\$25,000-\$34,999	6,462	6.5%	7,147	9.9%	6,854	11.1%	20,463	8.8%
\$35,000-\$49,999	10,593	10.7%	9,737	13.5%	7,376	11.9%	27,706	11.9%
\$50,000-\$74,999	11,988	12.1%	9,975	13.8%	8,117	13.1%	30,080	12.9%
\$75,000-\$99,999	12,941	13.1%	8,947	12.4%	7,431	12.0%	29,319	12.6%
\$100,000-\$149,999	18,062	18.3%	10,869	15.1%	6,688	10.8%	35,619	15.3%
\$150,000-\$199,999	9,808	9.9%	5,522	7.7%	3,258	5.3%	18,598	8.0%
\$200,000+	15,170	15.3%	7,895	10.9%	4,325	7.0%	27,390	11.8%
Median HH Income	\$85,945		\$66,085		\$47,214		\$69,130	
Average HH Income	\$136,200		\$111,712		\$84,884		\$114,987	

**Data Note:** Income is reported for July 1, 2013 and represents annual income for the preceding year, expressed in current (2012) dollars, including an adjustment for inflation. Income is reported for July 1, 2018 and represents annual income for the preceding year, expressed in current (2017) dollars, including an adjustment for inflation.  
**Source:** U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2013 and 2018.

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## Age 55+ Profile

120 Old Post Rd  
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Drive Time: 23 minutes

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### 2013 Population 55+ by Race

	Number	Percent	% Pop
Total	441,145	100.0%	34.3%
White Alone	285,754	64.8%	40.6%
Black Alone	100,257	22.7%	32.2%
American Indian Alone	1,384	0.3%	19.8%
Asian Alone	21,128	4.8%	25.9%
Pacific Islander Alone	142	0.0%	20.6%
Some Other Race Alone	23,183	5.3%	17.1%
Two or More Races	9,297	2.1%	20.1%
Hispanic Origin (Any Race)	74,484	16.9%	21.5%

### Census 2010 Households and Age of Householder

	Number	Percent	% Total HHs
Total	201,619	100.0%	42.0%
Family Households	114,945	57.0%	23.9%
Householder Age 55-64	56,958	28.3%	11.9%
Householder Age 65-74	32,378	16.1%	6.7%
Householder Age 75-84	19,283	9.6%	4.0%
Householder Age 85+	6,326	3.1%	1.3%
Nonfamily Households	86,674	43.0%	18.0%
Householder Age 55-64	30,146	15.0%	6.3%
Householder Age 65-74	23,734	11.8%	4.9%
Householder Age 75-84	20,543	10.2%	4.3%
Householder Age 85+	12,251	6.1%	2.5%

### Census 2010 Occupied Housing Units by Age of Householder

	Number	Percent	% Total HHs
Total	201,619	100.0%	42.0%
Owner Occupied Housing Units	123,716	61.4%	25.7%
Householder Age 55-64	52,066	25.8%	10.8%
Householder Age 65-74	35,049	17.4%	7.3%
Householder Age 75-84	25,716	12.5%	5.4%
Householder Age 85+	10,885	5.4%	2.3%
Renter Occupied Housing Units	77,903	38.6%	16.2%
Householder Age 55-64	35,037	17.4%	7.3%
Householder Age 65-74	21,063	10.4%	4.4%
Householder Age 75-84	14,111	7.0%	2.9%
Householder Age 85+	7,692	3.8%	1.6%

**Data Note:** A family is defined as a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. Nonfamily households consist of people living alone and households that do not contain any members who are related to the householder. The base for % Pop is specific to the row. A Nonrelative is not related to the householder by birth, marriage, or adoption.

Source: U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2016.

November 25, 2014



## Housing Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5 minutes

Prepared by Robert Goman

Population		Households	
2010 Total Population	15,771	2013 Median Household Income	\$114,475
2013 Total Population	15,686	2018 Median Household Income	\$130,946
2018 Total Population	15,605	2013-2018 Annual Rate	2.75%
2013-2018 Annual Rate	0.15%		

Housing Units by Occupancy Status and Tenure		Census 2010		2013		2018	
Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Housing Units		6,412	100.0%	6,379	100.0%	6,508	100.0%
Occupied	92.0%	5,895	92.1%	5,872	92.1%	5,925	91.0%
Owner	58.1%	3,726	58.1%	3,676	57.6%	3,840	59.0%
Renter	33.8%	2,170	33.8%	2,196	34.4%	2,085	32.0%
Vacant	8.0%	516	8.0%	507	7.9%	583	9.0%

Owner Occupied Housing Units by Value		2013		2018	
Number	Percent	Number	Percent	Number	Percent
Total		3,676	100.0%	3,840	100.0%
<\$50,000		4	0.1%	0	0.0%
\$50,000-\$99,999		30	0.8%	1	0.0%
\$100,000-\$149,999		57	1.6%	8	0.2%
\$150,000-\$199,999		74	2.0%	33	0.9%
\$200,000-\$249,999		84	2.3%	58	1.5%
\$250,000-\$299,999		133	3.6%	56	1.5%
\$300,000-\$399,999		368	10.0%	70	1.8%
\$400,000-\$499,999		395	10.7%	179	4.7%
\$500,000-\$749,999		852	23.2%	366	9.5%
\$750,000-\$999,999		589	16.0%	1,592	41.5%
\$1,000,000+		1,090	29.7%	1,477	38.5%
Median Value		\$703,332		\$930,553	
Average Value		\$760,373		\$939,678	

Sources: U.S. Census Bureau, Census 2010 Summary File 1, ERI forecasts for 2013 and 2018

April 13, 2014



## Housing Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5 minutes

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Census 2010 Owner Occupied Housing Units by Mortgage Status		Number		Percent	
Total		3,726		100.0%	
Owned with a Mortgage/Loan		2,480		66.6%	
Owned Free and Clear		1,246		33.4%	

Census 2010 Vacant Housing Units by Status		Number		Percent	
Total		516		100.0%	
For Rent		155		30.0%	
Rented - Not Occupied		8		1.6%	
For Sale Only		53		10.3%	
Sold - Not Occupied		37		7.2%	
Seasonal/Recreational/Occasional Use		57		11.0%	
For Migrant Workers		0		0.0%	
Other Vacant		134		26.0%	

Census 2010 Occupied Housing Units by Age of Householder and Home Ownership		Owner Occupied Units		Occupied Units	
Number	% of Occupied	Number	% of Occupied	Number	% of Occupied
Total		3,728		5,698	
15-24		11		76	
25-34		168		560	
35-44		697		1,441	
45-54		1,054		1,495	
55-64		715		963	
65-74		507		649	
75-84		378		523	
85+		195		391	

Census 2010 Occupied Housing Units by Race/Ethnicity of Householder and Home Ownership		Owner Occupied Units		Occupied Units	
Number	% of Occupied	Number	% of Occupied	Number	% of Occupied
Total		3,726		5,696	
White Alone		3,515		5,203	
Black/African American		35		133	
American Indian/Alaska		11		11	
Asian Alone		113		328	
Pacific Islander Alone		0		1	
Other Race Alone		31		145	
Two or More Races		29		75	
Hispanic Origin		160		497	

Census 2010 Occupied Housing Units by Size and Home Ownership		Owner Occupied Units		Occupied Units	
Number	% of Occupied	Number	% of Occupied	Number	% of Occupied
Total		3,726		5,897	
1-Person		760		1,595	
2-Person		1,044		1,529	
3-Person		588		904	
4-Person		735		1,087	
5-Person		427		554	
6-Person		128		165	
7+ Person		44		63	

Data Note: Persons of Hispanic Origin may be of any race  
Source: U.S. Census Bureau, Census 2010 Summary File 1

April 13, 2014



## Housing Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 13 minutes

Prepared by Robert Goman

Population		Households	
2010 Total Population	194,677	2013 Median Household Income	\$85,664
2013 Total Population	195,142	2018 Median Household Income	\$100,543
2018 Total Population	198,781	2013-2018 Annual Rate	3.21%
2013-2018 Annual Rate	0.37%		

Census 2010		2013		2018	
Number	Percent	Number	Percent	Number	Percent
78,349	100.0%	78,660	100.0%	79,864	100.0%
72,574	92.6%	72,726	92.5%	74,093	92.8%
42,649	54.4%	41,999	53.4%	43,813	54.8%
29,925	38.2%	30,727	39.1%	30,280	37.9%
5,774	7.4%	5,935	7.5%	5,771	7.2%

Housing Units by Occupancy Status and Tenure		Census 2010		2013		2018	
Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total		78,349	100.0%	78,660	100.0%	79,864	100.0%
Owner Occupied		72,574	92.6%	72,726	92.5%	74,093	92.8%
Renter		42,649	54.4%	41,999	53.4%	43,813	54.8%
Vacant		29,925	38.2%	30,727	39.1%	30,280	37.9%
Owner Occupied Housing Units by Value		72,574	100.0%	72,726	100.0%	74,093	100.0%
Total		72,574	100.0%	72,726	100.0%	74,093	100.0%
<\$50,000		100	0.2%	100	0.2%	100	0.2%
\$50,000-\$99,999		496	0.7%	496	0.7%	54	0.1%
\$100,000-\$149,999		774	1.1%	774	1.1%	133	0.3%
\$150,000-\$199,999		1,274	1.8%	1,274	1.8%	578	1.2%
\$200,000-\$249,999		1,487	2.1%	1,487	2.1%	1,044	2.4%
\$250,000-\$299,999		1,950	2.7%	1,950	2.7%	1,350	3.1%
\$300,000-\$399,999		4,471	6.2%	4,471	6.2%	2,058	4.7%
\$400,000-\$499,999		5,174	7.1%	5,174	7.1%	3,673	8.4%
\$500,000-\$749,999		10,148	14.0%	10,148	14.0%	7,400	16.9%
\$750,000-\$999,999		5,231	7.2%	5,231	7.2%	13,774	31.4%
\$1,000,000+		10,892	15.0%	10,892	15.0%	13,789	31.5%
Median Value		\$629,865		\$629,865		\$852,654	
Average Value		\$706,169		\$706,169		\$844,621	

Source: U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018

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Census 2010 Owner Occupied Housing Units by Mortgage Status		Number		Percent	
Total		42,649		100.0%	
Owned with a Mortgage/Loan		28,737		67.4%	
Owned Free and Clear		13,912		32.6%	

Census 2010 Vacant Housing Units by Status		Number		Percent	
Total		5,774		100.0%	
For Rent		1,966		34.0%	
Rented - Not Occupied		126		2.2%	
For Sale Only		1,051		18.2%	
Sold - Not Occupied		229		4.0%	
Seasonal/Recreational/Occasional Use		845		14.6%	
For Migrant Workers		1		0.0%	
Other Vacant		1,563		27.1%	

Census 2010 Occupied Housing Units by Age of Householder and Home Ownership		Owner Occupied Units		Occupied Units	
Total		42,650		72,576	
15-24		142		1,301	
25-34		2,803		9,357	
35-44		7,328		14,386	
45-54		10,208		16,250	
55-64		8,905		12,797	
65-74		6,144		8,475	
75-84		4,833		6,621	
85+		2,297		3,388	

Census 2010 Occupied Housing Units by Race/Ethnicity of Householder and Home Ownership		Owner Occupied Units		Occupied Units	
Total		42,650		72,576	
White Alone		37,915		57,264	
Black/African American		1,748		5,705	
American Indian/Alaska		191		191	
Asian Alone		1,696		3,590	
Pacific Islander Alone		4		29	
Other Race Alone		796		4,317	
Two or More Races		450		1,480	
Hispanic Origin		3,167		12,195	

Census 2010 Occupied Housing Units by Size and Home Ownership		Owner Occupied Units		Occupied Units	
Total		42,650		72,576	
1-Person		10,607		20,823	
2-Person		13,321		20,707	
3-Person		6,733		11,301	
4-Person		6,912		10,926	
5-Person		3,447		5,402	
6-Person		1,069		1,991	
7+ Person		561		1,426	

Data Notes: Percentages of Hispanic Origin may be of any race.  
Source: U.S. Census Bureau, Census 2010 Summary File 1.

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## Housing Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S. 13, 23 DT  
Drive Time: 23 minutes

Prepared by Robert Goman

Population		Households		2013		2018	
2010 Total Population	1,280,138	2013 Median Household Income	\$62,950				
2013 Total Population	1,285,824	2018 Median Household Income	\$75,657				
2018 Total Population	1,313,850	2013-2018 Annual Rate	4.02%				
2013-2018 Annual Rate	0.43%						
Housing Units by Occupancy Status and Tenure		Census 2010		2013		2018	
Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Housing Units		511,672	100.0%	515,655	100.0%	526,582	100.0%
Occupied	93.9%	480,532	93.9%	482,959	93.7%	493,814	93.8%
Owner	47.4%	242,638	47.4%	240,160	46.6%	252,421	47.9%
Renter	46.5%	237,894	46.5%	242,799	47.1%	241,393	45.8%
Vacant	6.1%	31,140	6.1%	32,696	6.3%	32,749	6.2%
Owner Occupied Housing Units by Value		2013		2018			
Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total		240,051	100.0%	252,298	100.0%		
<\$50,000		1,410	0.6%	190	0.1%		
\$50,000-\$99,999		6,567	2.7%	1,342	0.5%		
\$100,000-\$149,999		6,306	2.6%	1,840	0.7%		
\$150,000-\$199,999		8,407	3.5%	7,879	3.1%		
\$200,000-\$249,999		10,573	4.4%	9,863	3.9%		
\$250,000-\$299,999		14,379	6.0%	11,576	4.6%		
\$300,000-\$399,999		39,260	16.4%	23,583	9.3%		
\$400,000-\$499,999		41,834	17.4%	33,603	13.3%		
\$500,000-\$749,999		59,270	24.7%	60,250	23.9%		
\$750,000-\$999,999		19,574	8.2%	60,481	24.0%		
\$1,000,000+		32,471	13.5%	41,691	16.5%		
Median Value		\$479,179		\$650,510			
Average Value		\$588,405		\$886,423			

Sources: U.S. Census Bureau, Census 2010 Summary File 1, ERI forecasts for 2013 and 2018

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## Housing Profile

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Census 2010 Owner Occupied Housing Units by Mortgage Status		Number		Percent	
Total		242,638		100.0%	
Owned with a Mortgage/Loan		167,449		69.0%	
Owned Free and Clear		75,189		31.0%	
Census 2010 Vacant Housing Units by Status		Number		Percent	
Total		31,140		100.0%	
For Rent		12,413		39.9%	
Renter- Not Occupied		797		2.6%	
For Sale Only		4,528		14.5%	
Sold - Not Occupied		1,086		3.5%	
Seasonal/Recreational/Occasional Use		3,301		10.6%	
For Migrant Workers		5		0.0%	
Other Vacant		9,029		29.0%	
Census 2010 Occupied Housing Units by Age of Householder and Home Ownership		Owner Occupied Units		Occupied Units	
Total		242,637		480,531	
15-24		1,293		10,797	
25-34		17,073		65,173	
35-44		42,446		124,295	
45-54		59,107		107,607	
55-64		52,066		82,416	
65-74		35,152		57,113	
75-84		35,716		39,837	
85+		10,855		18,577	
Census 2010 Occupied Housing Units by Race/Ethnicity of Householder and Home Ownership		Owner Occupied Units		Occupied Units	
Total		242,638		480,532	
White Alone		177,262		285,600	
Black/African American		39,851		117,481	
American Indian/Alaska		525		2,072	
Asian Alone		12,223		24,091	
Pacific Islander Alone		50		203	
Other Races Alone		8,550		36,470	
Two or More Races		4,177		12,615	
Hispanic Origin		27,189		101,165	
Census 2010 Occupied Housing Units by Size and Home Ownership		Owner Occupied Units		Occupied Units	
Total		242,638		480,531	
1-Person		58,207		140,255	
2-Person		73,259		134,804	
3-Person		40,738		79,960	
4-Person		39,343		68,520	
5-Person		19,454		34,130	
6-Person		6,959		13,165	
7+ Person		4,638		9,697	

Data Note: Persons of Hispanic Origin may be of any race.  
Source: U.S. Census Bureau, Census 2010 Summary File 1.

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**GOMAN+YORK**  
NOVEMBER 2014





## Lifestyle Report

Prepared by Robert Goman

120 old post rd  
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Drive Time: 23 minutes

### Top 10 Tapestry Segments



### Top 10 Tapestry Segments:

**20. City Lights**  
The City Lights segment is composed of diverse neighborhoods situated primarily in the Northeast. This dense urban market is a mixture of housing, household types, and culture that all share the same city space. Households include families and singles, similar to the U.S. distribution by household type. With a median age of 38.5 years, the population is slightly older than that of the U.S. Compared to the U.S. population, there are fewer children and slightly more people aged 75 or older. The ethnic or racial diversity is slightly higher than the U.S. level, with higher ratios of Asian, Hispanic, and multiracial populations. City Lights residents earn a good living working in white collar and service occupations. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/20\\_city\\_lights.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/20_city_lights.pdf)

**45. City Strivers**  
Residents of this young, relatively diverse urban market have a median age of 33.8 years and a 60 percent mix of family types, such as married couples, single-parent families, and singles. They are more educated than the U.S. average, with 45 percent having a bachelor's degree or higher. Most residents are employed in the service and health care industry sectors in the city. Twenty-two percent of the residents who are employed are government workers, employed primarily by the local government. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/45\\_city\\_strivers.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/45_city_strivers.pdf)

**01. Top Rung**  
Residents of Top Rung neighborhoods are mature, married, highly educated, and wealthy. The median age is 45.0 years; one-third of the residents are in their peak earning years of 45-64. More than 77 percent of these households are composed of married couples; half of them have children. Except for the presence of children, this is a low-diversity, monocultural market. Top Rung, the wealthiest consumer market, represents less than 1 percent of the population. Median household income of \$173,172 is more than three and one-half times that of the U.S. median. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/01\\_top\\_rung.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/01_top_rung.pdf)

**61. High Rise Renters**  
High Rise Renters residents are a diverse mix of race and ethnicity. More than half of the residents are Hispanic, mainly from Puerto Rico or the Dominican Republic. Forty percent of the residents are black, 21 percent are white, and 7 percent are of two or more races. A higher-than-average proportion (28 percent) of other races is also represented. Many residents speak a language other than English. Household types are mainly single parent and single person; however, a higher-than-average proportion of other family households is also present. Their median age of 31.9 years is younger than the U.S. median. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/61\\_high\\_rise\\_renters.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/61_high_rise_renters.pdf)

**Data Notes:** This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the U.S. average.

Source: Esri

April 13, 2014



## Lifestyle Report

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### 35. International Marketplace

Located primarily in cities in "gateway" states on both U.S. coasts, International Marketplace neighborhoods are developing urban markets with a rich blend of ethnic and cultural diversity. With a median age of 37 years, the population is slightly older than the U.S. average. Approximately 63 percent of the households are married couples with children and single-parent families. The median age of children is 7.7 years, and 37 percent of the population is under 18 years old. Most families of the Tapestry segments have more than half of the total population under 18. The diversity index is 45. A median household income of \$91,299 is slightly higher than the U.S. median. Many residents are employed in the service and health care industry sectors. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/35\\_international\\_marketplace.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/35_international_marketplace.pdf)

### 09. Urban Chic

Urban Chic residents are professionals who live a sophisticated, exclusive lifestyle. More than half of these households are married-couple families, similar to the U.S. proportion. Fewer than half of them have children. Unlike the United States, there is a smaller proportion of single parents and a higher proportion of singles and shared households. The median age is 43 years; the diversity index is 45. A median household income of \$91,299 is slightly higher than the U.S. median. Many residents are employed in the service and health care industry sectors. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/09\\_urban\\_chic.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/09_urban_chic.pdf)

### 03. Connoisseurs

Residents of Connoisseur neighborhoods are somewhat older, with a median age of 47.7 years. Approximately 70 percent of the population is married. Although residents appear closer to retirement than child-rearing age, 30 percent of the households are married couples with children living at home. Ethnic diversity is negligible. Connoisseurs are second in affluence only to the Top Rung segment. This market is well educated; 63 percent of the population aged 25 years and older hold a bachelor's or graduate degree. Employed residents earn wages from high-paying management, professional, and sales jobs. Many are self-employed; the rate is twice that of the national average. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/03\\_connoisseurs.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/03_connoisseurs.pdf)

### 44. Urban Melting Pot

Recently settled immigrants live in ethnically rich Urban Melting Pot neighborhoods. More than half of the population is foreign born; half of these have come to the U.S. in the last 10 years. The median age is 36.4 years, slightly younger than the U.S. median of 37.3. Distinctly diverse, more than one in four are Hispanic. Whites represent 47 percent of the population; Asians, 30 percent; and 6 percent are multiracial. Household types are equally diverse: 45 percent are married couple families; 30 percent are singles who live alone; single parents, other family types, and shared households also live in these neighborhoods. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/44\\_urban\\_melting\\_pot.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/44_urban_melting_pot.pdf)

### 05. Wealthy Seaboard Suburbs

Wealthy Seaboard Suburbs are older, established, affluent neighborhoods characteristic of U.S. coastal metropolitan areas. Two-thirds of the population aged 15+ years is married; more than half of the married couples have no children. The median age is 43.3 years. Ethnic diversity is low; most residents are white. Wealthy Seaboard Suburbs neighborhoods are affluent; the median household income is \$98,852. Income is derived from a variety of sources; approximately 60 percent of the households receive supplemental income from interest, dividends, and rental properties; 23 percent collect retirement income. More than half of those who work hold professional or management positions. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/05\\_wealthy\\_seaboard\\_suburbs.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/05_wealthy_seaboard_suburbs.pdf)

### 30. Retirement Communities

Most of the households in Retirement Communities neighborhoods are single seniors who live alone; a fourth is married couples with no children living at home. This older market has a median age of 64.3 years, significantly older than the U.S. median of 37.3 years. The population is 65 percent or older. Twenty-three percent of the population and 31 percent of householders are aged 75 years or older. Most of the residents are white. The median household income for Retirement Communities is \$48,319, slightly below the U.S. median. Nearly half of the households earn income from interest, dividends, and rental properties; 45 percent receive Social Security benefits; and 26 percent receive retirement income. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/30\\_retirement\\_communities.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/30_retirement_communities.pdf)

**Data Notes:** This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the U.S. average.

Source: Esri

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## Lifestyle Report

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### Top 10 Tapestry Segments



### Top 10 Tapestry Segments:

01. Top Rung  
Residents of Top Rung neighborhoods are mature, married, highly educated, and wealthy. The median age is 45.0 years; one-third of the residents are in their peak earning years of 45-64. More than 77 percent of these households are composed of married couples; half of them have children. Except for the presence of children, this is a low-diversity, monochromatic market. Top Rung, the wealthiest consumer market, represents less than 1 percent of all U.S. households. The median household income is \$173,172 is more than three-and-one-half times that of the U.S. median. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/01\\_top\\_rung.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/01_top_rung.pdf)

09. Urban Chic  
Urban Chic residents are professionals who live a sophisticated, exclusive lifestyle. More than half of these households are married-couple families, similar to the U.S. proportion. Fewer than half of them have children. Unlike the United States, there is a smaller proportion of single parents and a higher proportion of singles and shared households. The median age is 43 years; the diversity index is 48. A median household income of \$91,298 enables residents of Urban Chic neighborhoods to live in style. They are well educated; more than half of residents aged 25 years and older hold a bachelor's or graduate degree; 80 percent have attended college. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/09\\_urban\\_chic.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/09_urban_chic.pdf)

20. City Lights  
The City Lights segment is composed of diverse neighborhoods situated primarily in the Northeast. This diverse urban market is a mixture of housing, including high-rise apartments, townhouses, and single-family homes. The median age is 36.5 years; the population is slightly older than that of the U.S. Compared to the U.S. population, they are fewer children and slightly more people aged 75 or older. The ethnic or racial diversity is slightly higher than the U.S. level, with higher ratios of Asian, Hispanic, and multi-racial populations. City Lights residents earn a good living working in white collar and service occupations. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/20\\_city\\_lights.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/20_city_lights.pdf)

03. Connorsseurs  
Residents of Connorsseurs neighborhoods are somewhat older, with a median age of 47.7 years. Approximately 70 percent of the population is married. Although residents appear closer to retirement than child rearing age, 30 percent of the households are married couples with children living at home. Ethnic diversity is high; Connorsseurs are second in affluence only to the Top Rung segment. This market is well educated; 63 percent of residents aged 25 years and older have a bachelor's degree or higher. Many are self-employed; the rate is twice that of the national average. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/03\\_connorsseurs.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/03_connorsseurs.pdf)

Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the households or population in the area by Tapestry Segment, to the percent of households or population in the United States, by segment. An index of 100 is the U.S. average.

Source: Esri

April 13, 2014

## Lifestyle Report

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Prepared by Robert Goman

### 35. International Marketplace

Located primarily in cities in "gateway" states on both U.S. coasts, International Marketplace neighborhoods are developing urban markets with a rich blend of cultures and household types. The population is young, diverse, and mobile. More than half the households are singles who live alone or in shared housing. The median age is 34.8 years, slightly younger than the U.S. median of 37.3. Distinctly diverse, more than 44 percent are married couples with children and single parents. The average family size is 3.7. International Marketplace is the second most diverse of the Tapestry segments. More than half of the total population is Hispanic; 11.5 percent is Asian, and 7 percent is of two or more races. A high proportion of immigrants, including recent arrivals, live in these neighborhoods. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/35\\_international\\_marketplace.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/35_international_marketplace.pdf)

### 23. Trendsetters

On the cutting edge of urban style, Trendsetters residents are young, diverse, and mobile. More than half the households are singles who live alone or share the rent with a roommate. Families comprise the remainder. With a median age of 34.8 years, this segment is slightly younger than the U.S. median of 37.3. The population is young, diverse, and mobile. More than 44 percent are married couples with children and single parents. The average family size is 3.7. International Marketplace is the second most diverse of the Tapestry segments. More than half of the total population is Hispanic; 11.5 percent is Asian, and 7 percent is of two or more races. A high proportion of immigrants, including recent arrivals, live in these neighborhoods. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/23\\_trendsetters.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/23_trendsetters.pdf)

### 05. Wealthy Seaboard Suburbs

Wealthy Seaboard Suburbs are older, established, affluent neighborhoods characteristic of U.S. coastal metropolitan areas. Two-thirds of the population aged 15+ years is married; more than half of the married couples have no children. The median age is 43.2 years. Ethnic diversity is low; most residents are white. Wealthy Seaboard Suburbs neighborhoods are affluent; the median household income is \$98,652. Income is derived from a variety of sources; approximately 40 percent of the households receive supplemental income from interest, dividends, and rental properties. 23 percent of residents are retired. More than half of those who work hold professional or management positions. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/05\\_wealthy\\_seaboard\\_suburbs.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/05_wealthy_seaboard_suburbs.pdf)

### 44. Urban Melting Pot

Recently settled immigrants live in ethnically rich Urban Melting Pot neighborhoods. More than half of the population is foreign born; half of these have come to the U.S. in the last 10 years. The median age is 36.4 years, slightly younger than the U.S. median of 37.3. Distinctly diverse, more than one in four are Hispanic. Whites represent 47 percent of the population; Asians, 30 percent; and 6 percent are multi-racial. Household types are equally diverse: 45 percent are married couple families; 30 percent are singles who live alone; single parents, other family types, and shared households also live in these neighborhoods. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/44\\_urban\\_melting\\_pot.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/44_urban_melting_pot.pdf)

### 22. Metropolitans

Residents of Metropolitans communities prefer to live in older city neighborhoods. Approximately half of these households are singles who live alone or with others; 40 percent are married-couple families. One in four of the residents is aged 20-34 years; the median age is 37.1 years. Diversity is low; most of the population is white. Half of the residents who are employed work in professional or managerial positions. More than 77 percent of the population aged 25 years and older have attended college or completed a degree program. Thirty percent have earned a bachelor's degree, and 22 percent hold a graduate degree. The median household income is \$54,926. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/22\\_metroplaitans.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/22_metroplaitans.pdf)

### 30. Retirement Communities

Most of the households in Retirement Communities neighborhoods are single seniors who live alone; a fourth is married couples with no children living at home. This older market has a median age of 56.9 years. One-third of the population is aged 75 years or older. Most of the residents are white. The median household income for Retirement Communities is \$48,319, slightly below the U.S. median. Nearly half of the households earn income from interest, dividends, and rental properties; 45 percent receive Social Security benefits; and 26 percent receive retirement income. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/30\\_retirement\\_communities.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/30_retirement_communities.pdf)

Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the households or population in the area by Tapestry Segment, to the percent of households or population in the United States, by segment. An index of 100 is the U.S. average.

Source: Esri

April 13, 2014



## Lifestyle Report

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S, 13, 23 DT  
Drive Time: 5 minutes

Prepared by Robert Goman

### Top 10 Tapestry Segments



### Top 10 Tapestry Segments:

01. Top Runge  
Residents of Top Runge neighborhoods are mature, married, highly educated, and wealthy. The median age is 45.0 years; one-third of the residents are in their peak earning years of 45-64. More than 77 percent of these households are composed of married couples; half of them have children. Except for the presence of children, this is a low-diversity, monochromatic market. Top Runge, the wealthiest consumer market, represents less than 1 percent of all U.S. households. The median household income of \$173,172 is more than three-and-one-half times that of the U.S. median. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/01\\_top\\_runge.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/01_top_runge.pdf)

09. Urban Chic  
Urban Chic residents are professionals who live a sophisticated, exclusive lifestyle. More than half of these households are married-couple families, similar to the U.S. proportion. Fewer than half of them have children. Unlike the United States, there is a smaller proportion of single parents and a higher proportion of singles and shared households. The median age is 43 years; the diversity index is 48. A median household income of \$91,298 enables residents of Urban Chic neighborhoods to live in style. They are well educated; more than half of residents aged 25 years and older hold a bachelor's or graduate degree; 80 percent have attended college. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/09\\_urban\\_chic.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/09_urban_chic.pdf)

03. Connoisseurs  
Residents of Connoisseurs neighborhoods are somewhat older, with a median age of 43.7 years. Approximately 70 percent of the population is married, though residents appear to be less likely to raise children. Unlike the United States, there is a smaller proportion of single parents and a higher proportion of singles and shared households. The median age is 43 years; the diversity index is 48. A median household income of \$91,298 enables residents of Urban Chic neighborhoods to live in style. They are well educated; more than half of residents aged 25 years and older hold a bachelor's or graduate degree; 80 percent have attended college. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/03\\_connoisseurs.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/03_connoisseurs.pdf)

23. Trendsetters  
On the cutting edge of urban style, Trendsetters residents are young, diverse, and mobile. More than half the households are singles who live alone or share the rent with a roommate. Families comprise the remainder. With a median age of 34.8 years, this segment is slightly younger than the U.S. median. Ethnically diverse, 13.7 percent of the residents are Asian and 23 percent are Hispanic; both percentages are well above those of the U.S. median. These residents are educated professionals who work in substantial jobs. More than 70 percent of residents are aged 25 years and older and 44 percent have earned a bachelor's degree, and 73 percent have attended college. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/23\\_trendsetters.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/23_trendsetters.pdf)

**Data Note:** This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the U.S. average.  
Source: Esri

April 13, 2014



## Lifestyle Report

120 old post rd  
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Drive Time: 5 minutes

Prepared by Robert Goman

### 20. City Lights

The City Lights segment is composed of diverse neighborhoods situated primarily in the Northeast. This dense urban market is a mixture of housing, household types, and cultures that all share the same city space. Households include families and singles, similar to the U.S. distribution by household type. With a median age of 36.5 years, the population is slightly older than that of the U.S. Compared to the U.S. population, there are fewer children and slightly more people aged 75 or older. The ethnic or racial diversity is slightly higher than the U.S. level, with higher ratios of Asian, Hispanic, and multiracial populations. City Lights residents earn a good living working in white collar and service occupations. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/20\\_city\\_lights.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/20_city_lights.pdf)

### 35. International Marketplace

Located primarily in cities in "gateway" states on both U.S. coasts, International Marketplace neighborhoods are developing urban markets with a rich blend of cultures and household types. The population is young, with a median age of only 32 years. Approximately 70 percent of the households are married-couple families, with a smaller proportion of single parents and a higher proportion of singles and shared households. The median age is 32 years; the diversity index is 48. A median household income of \$91,298 enables residents of Urban Chic neighborhoods to live in style. They are well educated; more than half of residents aged 25 years and older hold a bachelor's or graduate degree; 80 percent have attended college. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/35\\_international\\_marketplace.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/35_international_marketplace.pdf)

### 44. Urban Melting Pot

Recently settled immigrants live in ethnically rich Urban Melting Pot neighborhoods. More than half of the population is foreign born; half of these have come to the U.S. in the last 10 years. The median age is 36.4 years, slightly younger than the U.S. median of 37.3. Distinctly diverse, more than one in four are Hispanic. Whites represent 47 percent of the population; Asians, 30 percent; and 6 percent are multiracial. Household types are equally diverse: 45 percent are married couple families; 30 percent are singles who live alone; single parents, other family types, and shared households. The median age is 36.4 years; the diversity index is 48. A median household income of \$91,298 enables residents of Urban Chic neighborhoods to live in style. They are well educated; more than half of residents aged 25 years and older hold a bachelor's or graduate degree; 80 percent have attended college. For additional information on this lifestyle, click here:  
[http://www.esri.com/~media/Files/Pdfs/data/esri\\_data/pdfs/tapestry-singles/44\\_urban\\_melting\\_pot.pdf](http://www.esri.com/~media/Files/Pdfs/data/esri_data/pdfs/tapestry-singles/44_urban_melting_pot.pdf)

**Data Note:** This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the U.S. average.  
Source: Esri

April 13, 2014



## Market Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 minutes

Prepared by Robert Goman

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
<b>Population Summary</b>			
2000 Total Population	15,024	166,613	1,244,533
2010 Total Population	15,771	194,677	1,280,138
2013 Total Population	15,686	155,142	1,285,824
2013 Group Quarters	158	4,418	29,898
2018 Total Population	15,605	198,781	1,313,850
2013-2018 Annual Rate	0.15%	0.37%	0.43%
<b>Household Summary</b>			
2000 Households	5,743	71,508	469,699
2010 Households	2,60	2,60	2,60
2010 Average Household Size	5.896	72,575	480,532
2013 Households	2,65	2,62	2,62
2013 Average Household Size	5.872	72,725	482,959
2018 Households	2,84	2,62	2,62
2018 Average Household Size	5.925	74,093	493,613
2013-2018 Annual Rate	0.19%	0.45%	0.46%
2010 Average Family Size	4.089	47,872	315,302
2013 Average Family Size	3.26	3,22	3,23
2013 Families	4,060	47,854	316,078
2013 Average Family Size	3.26	3,22	3,22
2018 Families	4,071	48,461	321,151
2018 Average Family Size	3.26	3,23	3,23
2013-2018 Annual Rate	0.05%	0.25%	0.32%
<b>Housing Unit Summary</b>			
2000 Housing Units	5,990	73,982	490,221
Owner Occupied Housing Units	61.8%	56.4%	48.2%
Renter Occupied Housing Units	34.1%	40.2%	47.6%
Vacant Housing Units	4.1%	3.3%	4.2%
2010 Housing Units	6,412	78,349	511,672
Owner Occupied Housing Units	58.1%	54.4%	47.4%
Renter Occupied Housing Units	33.8%	38.2%	46.5%
Vacant Housing Units	8.0%	7.4%	6.1%
2013 Housing Units	6,379	78,660	513,655
Owner Occupied Housing Units	57.6%	53.4%	46.8%
Renter Occupied Housing Units	33.6%	37.5%	47.1%
Vacant Housing Units	7.9%	7.5%	6.3%
2018 Housing Units	6,504	79,864	526,562
Owner Occupied Housing Units	59.0%	54.9%	47.9%
Renter Occupied Housing Units	32.0%	37.9%	45.8%
Vacant Housing Units	9.0%	7.2%	6.2%
<b>Median Household Income</b>			
2013	\$114,475	\$85,864	\$62,950
2018	\$130,946	\$100,543	\$76,657
<b>Median Home Value</b>			
2013	\$703,312	\$629,865	\$479,179
2018	\$930,553	\$852,654	\$650,510
<b>Per Capita Income</b>			
2013	\$61,544	\$50,803	\$38,559
2018	\$76,101	\$61,562	\$45,805
<b>Median Age</b>			
2010	40.0	39.3	38.5
2013	40.3	38.5	38.5
2018	41.1	40.5	39.4

Data Notes: Household population includes persons not residing in group quarters. Average Household Size is the household population divided by total households. Persons in families include the householder and persons related to the householder by birth, marriage, or adoption. Per Capita Income represents the income received by all persons aged 15 years and over divided by the total population.

Source: U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018. Est. converted Census 2000 data into 2010 geography.

April 13, 2014



## Market Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 minutes

Prepared by Robert Goman

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
<b>2013 Households by Income</b>			
Household Income Base	5,872	72,725	482,959
<\$15,000		7.1%	10.8%
\$15,000 - \$24,999	4.2%	6.6%	8.0%
\$25,000 - \$34,999	2.9%	7.7%	9.1%
\$35,000 - \$49,999	7.1%	9.8%	12.6%
\$50,000 - \$74,999	13.0%	13.5%	15.7%
\$75,000 - \$99,999	10.1%	10.9%	11.2%
\$100,000 - \$149,999	16.6%	15.8%	14.6%
\$150,000 - \$199,999	10.5%	8.7%	6.8%
\$200,000 +	29.0%	20.0%	11.2%
Average Household Income	\$158,314	\$135,087	\$101,518
<b>2018 Households by Income</b>			
Household Income Base	5,925	74,093	493,613
<\$15,000	5.2%	6.2%	10.1%
\$15,000 - \$24,999	2.9%	4.9%	6.1%
\$25,000 - \$34,999	2.5%	6.3%	8.1%
\$35,000 - \$49,999	5.7%	8.5%	11.5%
\$50,000 - \$74,999	9.3%	11.1%	13.1%
\$75,000 - \$99,999	11.4%	12.6%	13.3%
\$100,000 - \$149,999	18.6%	17.7%	16.9%
\$150,000 - \$199,999	12.6%	10.7%	8.5%
\$200,000 +	31.8%	21.9%	12.4%
Average Household Income	\$207,993	\$163,973	\$120,756
<b>2013 Owner Occupied Housing Units by Value</b>			
Total	3,676	41,998	240,032
<\$50,000	0.1%	0.2%	0.6%
\$50,000 - \$99,999	0.8%	1.2%	2.7%
\$100,000 - \$149,999	1.6%	1.8%	2.6%
\$150,000 - \$199,999	2.0%	3.0%	3.5%
\$200,000 - \$249,999	2.3%	3.5%	4.4%
\$250,000 - \$299,999	3.6%	6.0%	6.0%
\$300,000 - \$399,999	10.0%	10.6%	16.4%
\$400,000 - \$499,999	10.7%	12.3%	17.4%
\$500,000 - \$749,999	23.2%	24.2%	24.7%
\$750,000 - \$999,999	16.0%	12.5%	8.2%
\$1,000,000 +	29.7%	25.9%	13.5%
Average Home Value	\$760,373	\$706,169	\$568,406
<b>2018 Owner Occupied Housing Units by Value</b>			
Total	3,840	43,813	252,300
<\$50,000	0.0%	0.0%	0.1%
\$50,000 - \$99,999	0.0%	0.1%	0.5%
\$100,000 - \$149,999	0.2%	0.7%	0.7%
\$150,000 - \$199,999	0.9%	1.2%	3.1%
\$200,000 - \$249,999	1.5%	2.4%	3.9%
\$250,000 - \$299,999	1.5%	3.1%	4.6%
\$300,000 - \$399,999	1.8%	4.7%	9.3%
\$400,000 - \$499,999	4.7%	13.3%	23.9%
\$500,000 - \$749,999	9.5%	16.9%	23.9%
\$750,000 - \$999,999	41.5%	31.4%	24.0%
\$1,000,000 +	38.5%	31.5%	16.5%
Average Home Value	\$939,878	\$844,621	\$666,423

Data Notes: Income represents the preceding year, expressed in current dollars. Household income includes wage and salary earnings, interest, dividends, net rents, pensions, SSI and welfare payments, child support, and alimony.

Source: U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018. Est. converted Census 2000 data into 2010 geography.

April 13, 2014

**GOMAN+YORK**  
NOVEMBER 2014





## Market Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 minutes

Prepared by Robert Goman

### 2010 Population by Age

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	15,770	194,679	1,280,139
0 - 4	7.0%	6.2%	6.3%
5 - 9	8.9%	6.7%	6.4%
10 - 14	9.0%	6.8%	6.6%
15 - 24	9.9%	11.7%	12.9%
25 - 34	8.5%	13.2%	12.6%
35 - 44	15.3%	14.6%	14.1%
45 - 54	16.8%	15.3%	14.9%
55 - 64	10.0%	11.3%	11.5%
65 - 74	6.5%	7.0%	7.1%
75 - 84	4.9%	5.1%	4.8%
85 +	3.4%	2.6%	2.3%
18 +	70.1%	76.1%	76.5%

### 2013 Population by Age

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	15,695	195,142	1,285,822
0 - 4	6.4%	5.9%	6.0%
5 - 9	8.2%	6.6%	6.4%
10 - 14	9.5%	7.1%	6.7%
15 - 24	11.7%	12.2%	13.0%
25 - 34	7.9%	12.1%	12.9%
35 - 44	13.3%	13.8%	13.4%
45 - 54	16.8%	15.1%	14.6%
55 - 64	11.4%	12.2%	12.2%
65 - 74	6.9%	7.6%	7.7%
75 - 84	4.5%	4.8%	4.7%
85 +	3.3%	2.7%	2.4%
18 +	70.8%	76.4%	76.9%

### 2018 Population by Age

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	15,807	198,781	1,313,849
0 - 4	6.1%	5.8%	5.9%
5 - 9	7.8%	6.4%	6.2%
10 - 14	9.3%	7.1%	6.8%
15 - 24	12.2%	11.8%	12.5%
25 - 34	8.1%	11.7%	12.7%
35 - 44	11.5%	13.3%	13.0%
45 - 54	16.0%	14.4%	13.6%
55 - 64	13.8%	13.2%	12.9%
65 - 74	7.7%	8.8%	9.0%
75 - 84	4.4%	4.9%	4.9%
85 +	3.0%	2.7%	2.4%
18 +	71.6%	76.5%	77.2%

### 2010 Population by Sex

Males	7,557	94,606	606,410
Females	8,204	100,071	673,728

### 2013 Population by Sex

Males	7,564	95,201	610,686
Females	8,122	99,941	675,138

### 2018 Population by Sex

Males	7,657	97,492	626,258
Females	8,148	101,289	687,592

Source: U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018. Est. converted Census 2000 data into 2010 geography.

April 13, 2014



## Market Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 minutes

Prepared by Robert Goman

### 2010 Population by Race/Ethnicity

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	15,771	194,676	1,280,137
White Alone	85.2%	74.3%	55.6%
Black Alone	2.3%	7.5%	24.3%
American Indian Alone	0.2%	0.4%	0.5%
Asian Alone	6.8%	5.8%	6.0%
Pacific Islander Alone	0.0%	0.1%	0.1%
Some Other Race Alone	3.5%	9.0%	10.1%
Two or More Races	2.0%	3.0%	3.3%
Hispanic Origin	11.3%	23.9%	25.6%
Diversity Index	41.6	64.3	77.0

### 2013 Population by Race/Ethnicity

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	15,685	195,143	1,285,823
White Alone	84.2%	72.9%	54.7%
Black Alone	2.3%	7.6%	24.2%
American Indian Alone	0.2%	0.4%	0.5%
Asian Alone	7.2%	6.1%	6.3%
Pacific Islander Alone	0.0%	0.1%	0.1%
Some Other Race Alone	3.8%	9.7%	10.5%
Two or More Races	2.2%	3.2%	3.6%
Hispanic Origin	12.4%	25.7%	26.9%
Diversity Index	44.1	66.5	78.0

### 2018 Population by Race/Ethnicity

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	15,804	198,782	1,313,849
White Alone	82.5%	70.8%	53.3%
Black Alone	2.4%	7.8%	24.1%
American Indian Alone	0.2%	0.4%	0.6%
Asian Alone	8.0%	6.6%	6.9%
Pacific Islander Alone	0.0%	0.1%	0.1%
Some Other Race Alone	4.4%	10.8%	11.2%
Two or More Races	2.5%	3.5%	3.9%
Hispanic Origin	14.6%	28.8%	29.3%
Diversity Index	48.4	69.8	79.7

### 2010 Population by Relationship and Household Type

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	15,771	194,677	1,280,138
In Households	99.0%	97.7%	97.7%
In Family Households	86.1%	82.1%	82.2%
Householder	25.4%	24.6%	24.6%
Spouse	21.4%	19.1%	16.4%
Child	35.6%	30.7%	32.5%
Other relative	2.3%	4.9%	6.0%
Nonrelative	1.4%	2.9%	2.7%
In Nonfamily Households	12.9%	15.5%	15.5%
In Group Quarters	1.0%	2.3%	2.3%
Institutionalized Population	0.8%	0.6%	1.0%
Noninstitutionalized Population	0.2%	1.7%	1.3%

Data Note: Persons of Hispanic Origin may be of any race. The Diversity Index measures the probability that two people from the same area will be from different racial/ethnic groups.  
Source: U.S. Census Bureau, Census 2010 Summary File 1. Est. forecasts for 2013 and 2018. Est. converted Census 2000 data into 2010 geography.

April 13, 2014

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## Market Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 minutes

Prepared by Robert Goman

2013 Population 25+ by Educational Attainment			
	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	10,069	133,304	872,305
Less than 9th Grade	2.1%	7.2%	7.6%
9th - 12th Grade, No Diploma	4.0%	5.0%	7.6%
High School Graduate	15.3%	21.2%	24.7%
Some College, No Degree	10.6%	12.3%	15.3%
Associate Degree	6.4%	5.3%	6.5%
Bachelor's Degree	33.7%	24.9%	20.7%
Graduate/Professional Degree	27.9%	24.1%	17.6%
2013 Population 15+ by Marital Status			
Total	11,502	157,048	1,040,002
Never Married	24.7%	30.8%	36.1%
Married	61.8%	54.8%	48.5%
Widowed	7.3%	6.6%	6.8%
Divorced	6.3%	7.7%	8.6%
2013 Civilian Population 16+ in Labor Force			
Civilian Employed	90.4%	91.1%	90.0%
Civilian Unemployed	9.6%	8.9%	10.0%
2013 Employed Population 16+ by Industry			
Total	6,666	95,209	591,245
Agriculture/Mining	0.2%	0.1%	0.1%
Construction	6.4%	6.5%	5.6%
Manufacturing	3.2%	4.9%	4.2%
Wholesale Trade	2.3%	2.5%	2.0%
Retail Trade	8.5%	9.2%	9.8%
Transportation/Utilities	2.6%	3.1%	4.6%
Information	4.8%	2.6%	2.5%
Finance/Insurance/Real Estate	21.5%	13.6%	11.2%
Services	48.2%	54.8%	56.4%
Public Administration	2.2%	2.6%	3.4%
2013 Employed Population 16+ by Occupation			
Total	6,664	95,210	591,244
White Collar	78.8%	67.5%	64.1%
Management/Business/Financial	28.1%	21.2%	16.8%
Professional	26.3%	23.9%	23.5%
Sales	15.8%	11.6%	10.8%
Administrative Support	8.6%	10.8%	13.0%
Services	13.4%	20.0%	22.1%
Blue Collar	7.8%	12.5%	13.8%
Farming/Forestry/Fishing	0.0%	0.1%	0.1%
Construction/Extraction	3.2%	5.3%	4.7%
Installation/Maintenance/Repair	1.5%	1.4%	2.0%
Production	0.5%	2.6%	2.6%
Transportation/Material Moving	2.7%	3.2%	4.4%

Source: U.S. Census Bureau, Census 2010 Summary File 1. Ben forecasts for 2013 and 2018. Ben converted Census 2000 data into 2010 geography.

April 13, 2014



## Market Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, 5, 13, 23 DT  
Drive Time: 5, 13, 23 minutes

Prepared by Robert Goman

2010 Households by Type			
	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
Total	5,897	72,576	480,533
Households with 1 Person	27.0%	28.7%	29.2%
Households with 2+ People	73.0%	71.3%	70.8%
Family Households	69.3%	66.0%	65.6%
Husband-wife Families	58.5%	51.1%	43.7%
With Related Children	34.3%	26.1%	21.7%
Other Family (No Spouse Present)	10.8%	14.8%	21.9%
Other Family with Male Householder	2.8%	4.0%	5.0%
With Related Children	1.3%	1.8%	2.3%
Other Family with Female Householder	8.1%	10.8%	16.9%
With Related Children	4.6%	6.0%	10.1%
Nonfamily Households	3.6%	5.3%	5.2%
All Households with Children	40.3%	34.2%	34.4%
Multigenerational Households	1.9%	3.2%	5.0%
Unmarried Partner Households	3.3%	4.6%	5.4%
Male-female	2.8%	4.0%	4.7%
Same-sex	0.4%	0.6%	0.7%
2010 Households by Size			
Total	5,896	72,576	480,533
1 person Household	27.1%	28.7%	29.2%
2 person Household	25.9%	28.5%	28.1%
3 person Household	15.3%	15.6%	15.6%
4 person Household	18.4%	15.1%	14.3%
5 person Household	9.4%	7.4%	7.1%
6 person Household	2.8%	2.7%	2.7%
7+ person Household	1.1%	2.0%	2.0%
2010 Households by Tenure and Mortgage Status			
Total	5,896	72,574	480,532
Owner Occupied	63.2%	59.8%	50.5%
Owned with a Mortgage/Loan	42.1%	39.6%	34.6%
Owned Free and Clear	21.1%	19.2%	15.9%
Renter Occupied	36.8%	41.2%	49.5%

Data Note: Households with children include all households with people under age 18, related or not. Multigenerational households are families with 3 or more parent-child relationships. Unmarried partner households are usually classified as nonfamily households, unless there is an adult member of the household related to the householder. Multigenerational and unmarried partner households are reported only to the tract level. Ben estimated block group data, which is used to estimate polygons or non-standard geography.

Source: U.S. Census Bureau, Census 2010 Summary File 1. Ben forecasts for 2013 and 2018. Ben converted Census 2000 data into 2010 geography.

April 13, 2014

## Market Profile

120 old post rd  
120 Old Post Rd, Rye, New York, 10580, S, 13, 23 DT  
Drive Time: 5, 13, 23 minutes  
Prepared by Robert Goman

### Top 3 Tapasstry Segments

	0 - 5 minutes	0 - 13 minutes	0 - 23 minutes
<b>2013 Consumer Spending</b>			
Apparel & Services: Total \$			
Average Spent	\$21,043.161	\$214,578.681	\$1,107,360.395
Spending Potential Index	\$3,583.64	\$2,950.55	\$2,292.87
Computers & Accessories: Total \$			
Average Spent	\$3,594,245	130	101
Spending Potential Index	\$612.13	\$35,789.453	\$177,005.496
Education: Total \$			
Average Spent	\$23,809.183	\$492.12	\$366.50
Spending Potential Index	\$4,054.70	198	148
Entertainment/Recreation: Total \$			
Average Spent	\$23,809.183	\$238,553.726	\$1,209,900.074
Spending Potential Index	\$4,054.70	\$2,280.22	\$2,505.18
Food at Home: Total \$			
Average Spent	\$46,092.098	225	172
Spending Potential Index	\$7,849.47	\$453,258.425	\$2,240,208.627
Food away from Home: Total \$			
Average Spent	\$63,861.629	\$6,232.50	\$4,638.51
Spending Potential Index	\$10,875.62	192	143
Health Care: Total \$			
Average Spent	\$43,110.309	\$659,730.119	\$3,426,697.578
Spending Potential Index	\$7,341.67	\$9,071.57	\$7,095.21
Home Furnishings & Equipment: Total \$			
Average Spent	\$58,245.351	\$439,390.644	\$2,222,385.619
Spending Potential Index	\$9,919.17	\$6,041.81	\$4,601.60
Investments: Total \$			
Average Spent	\$21,872.352	\$570,430.339	\$2,819,516.811
Spending Potential Index	\$3,724.86	\$7,843.66	\$5,838.00
Merchandise: Total \$			
Average Spent	\$21,872.352	\$215,281.628	\$1,056,815.578
Spending Potential Index	\$3,724.86	\$2,960.21	\$2,188.21
Personal Services: Total \$			
Average Spent	\$56,917.095	\$449,725.178	\$1,687,220.723
Spending Potential Index	\$9,692.97	\$6,183.91	\$3,493.51
Retail Goods: Total \$			
Average Spent	\$303,506.741	\$3,022,079.791	\$15,036,417.854
Spending Potential Index	\$51,687.12	\$41,554.90	\$31,138.08
Shelter: Total \$			
Average Spent	\$240,936.105	\$2,415,405.134	\$12,207,087.382
Spending Potential Index	\$41,031.35	\$33,212.86	\$25,275.64
TV/Video/Audio: Total \$			
Average Spent	\$15,985.547	\$164,919.984	\$856,736.321
Spending Potential Index	\$2,722.33	\$2,267.72	\$1,773.93
Travel: Total \$			
Average Spent	\$78,946.598	\$273,462.214	\$1,295,737.576
Spending Potential Index	\$4,929.60	\$3,760.22	\$2,682.91
Vehicle Maintenance & Repairs: Total \$			
Average Spent	\$14,769.798	\$145,734.314	\$714,080.836
Spending Potential Index	\$2,515.29	\$2,003.91	\$1,478.55
	230	183	135

**Data Note:** Consumer spending shows the amount spent on a variety of goods and services by households that reside in the area. Expenditures are shown by broad budget categories that are not mutually exclusive. Consumer spending does not equal business revenue. Total and Average Annual Spend for individual segments are annual figures. The Spending Potential Index represents the amount spent in the area relative to a national average of 100.

**Source:** Consumer Spending data are derived from the 2010 and 2011 Consumer Expenditure Surveys, Bureau of Labor Statistics. BLS.

**Source:** U.S. Census Bureau, Census 2010 Summary 1 & 2. Estimates for 2011 and 2012. For converted Census 2000 data into 2010 geography.

April 13, 2014

# *McCarthy Appraisal / Consulting Svc. Inc.*

1364 Rte 6, Carmel, New York 10512 (914)420-8757

[apprbyedye@comcast.net](mailto:apprbyedye@comcast.net)

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Alfred Weissman  
c/o: HKP – Harfenist Kraut & Prsltein LLP  
2975 Westchester Avenue  
Suite 415  
Purchase, NY 10577

January 9, 2014

RE: 120 Old Post Road, Rye, NY  
Potential development - Proposed Property Tax Exposure

Dear Mr. Weissman:

As per your request through my conversations with your attorney, Jonathan Kraut, I am respectfully enclosing this report on the potential tax exposure on the proposed development plan located at above noted address. The documentation enclosed, illustrates both the current property taxes and an analysis for the proposed development. As you will see, there is a substantial increase in taxes from the current use. This analysis is based on the required methodology for apartments/condominiums and cooperatives in the New York State Real Property Tax Law.

The analysis and potential tax exposure is based on information received to date and based on the project reaching stabilization. We based our analysis on the following information, and if current proposal changes throughout the approval process, the valuation may change as well.

46 1 Bedroom with 1,215 square feet

89 2 Bedroom with 1,395 square feet

There will be 1.25 parking for each unit which will be included  
in the rental rates.

As can be seen from the enclosed, the rental income was established by gathering information from the most comparable properties in the market place. As this will be a new complex with several amenities, the market rental rates are assumed to be higher than typical within the City of Rye. However, they are included in the report for reference. Therefore we expanded our search to newer developed apartment complexes. The expenses, and capitalization rate were also derived from the market and reliable real estate publications. I will be happy to discuss this with you in further detail if necessary.

Sincerely

Edye McCarthy  
Commercial Real Estate Appraiser/Consultant

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# Projected Market Value

First Assessment Year	2014
File No.	
Parcel I.D. S-B-L	146.13-1-7
Property Address	120 Old Post Road
Property Owner	Old Post Rd Assoc.
Property Representative	Kraut
Property Class	

E:\[weissman.xls\lanal]	
Date	01/20/15
Time	05:44 PM
1bdm	46
2bdm	89
Total Sq.ft.	135

Sq.Ft.

1,215

1,395

## INCOME / EXPENSE WORKSHEET

1bdm	\$2,800.00
2bdm	\$3,200.00
Assessment Year	2014
Tax Year	#N/A
Income	
Residential	1,545,600
Commercial	3,417,600
Owner Occupied Space	
Real Estate Tax Escalations	
Operating Escalation Income	
Other Operating Income	
- Vacancy/Collection	5.0%
= Effective Gross Income	248,160
Expenses	4,715,040
Audit/Adjusted Expenses	30%
Management	1,414,512
Amortized/Other Expense Adj.	5.0%
1	235,752
2	
5	
= Total Expenses	1,650,264
Net Operating Income	3,064,776

EZ Expense Data Entry		\$ Amounts
EXPENSES:		2014
a. Fuel		
b. Light and power		
c. Cleaning contract		
d. Wages and payroll		
e. Repairs and maintenance		
f. Management and administration		
g. Insurance (annual)		
h. Water and sewer		
i. Advertising		
j. Interior painting and decorating		
k. Amort. leasing and tenant impr.costs		
l. Miscellaneous expenses		
m. TOTAL EXPENSES		#N/A

## VALUATION CONCLUSIONS

Assessment Year	2014
Net Operating Income	\$3,064,776
Expense / Income Ratio	35%
Capitalization Rate	9.00%
Full Market Value	\$34,053,067
per unit	\$252,244.94
Assessed Valuation	1.91%
Equalized Value	143,100
Under/Over Assessed	\$7,492,147
AV should be	\$26,560,920
	\$615,896

Total Tax Rate \$ 946.93

value per unit \$ 252,245

MLSNumbr	PropertyTy	Status	StreetNum	StreetSuffi	ListPrice	ClosePrice	BathsTotal	BedsTotal	SqFtTotal	YearBuilt	DOM	City
94623	Rental	Sold	15	Street	\$ 1,550	\$ 1,450	1	2	980			14 Rye City
85417	Rental	Sold	42	Avenue	\$ 1,200	\$ 1,200	1	1	650	1949		84 Rye City
83638	Rental	Sold	50		\$ 3,200	\$ 2,800	3	3	1800	1981		101 Rye City
89367	Rental	Sold	4	Street	\$ 1,500	\$ 1,400	1	2	852	1954		33 Rye City
85011	Rental	Sold	1	Street	\$ 1,600	\$ 1,450	1	2	950	1954		58 Rye City
84862	Rental	Sold	181	Street	\$ 1,100	\$ 1,050	1	1	500	1954		17 Rye City
72750	Rental	Sold	181	Street	\$ 1,450	\$ 1,400	2	2	900	1954		33 Rye City
69716	Rental	Sold	645	Avenue	\$ 2,500	\$ 2,200	3	2	2000	1985		46 Rye City
70522	Rental	Sold	181	Street	\$ 1,200	\$ 1,200	1	1		1954		27 Rye City
69112	Rental	Sold	3		\$ 1,050	\$ 1,000	1	1	750	1954		41 Rye City
69081	Rental	Sold	5	Street	\$ 1,495	\$ 1,435	1	2	950	1942		24 Rye City
65915	Rental	Sold	181		\$ 1,050	\$ 975	1	1	500	1954		60 Rye City
68592	Rental	Sold	110		\$ 2,450	\$ 2,400	3	2	1300	1987		13 Rye City
63850	Rental	Sold	40		\$ 3,500	\$ 3,500	3	2	1930	1980		67 Rye City
55818	Rental	Sold	130		\$ 1,500	\$ 1,500	1	2	900	1953		56 Rye City
59558	Rental	Sold	14		\$ 3,500	\$ 3,300	3	3	2300	1988		15 Rye City
46316	Rental	Sold	10		\$ 3,200	\$ 3,000	3	2	1800	1989		160 Rye City
55081	Rental	Sold	181		\$ 1,300	\$ 1,250	1	1	700	1954		52 Rye City
55614	Rental	Sold	75		\$ 3,100	\$ 3,000	3	2	1950	1981		46 Rye City
56705	Rental	Sold	100		\$ 1,250	\$ 1,200	1	1	700	1955		29 Rye City
50653	Rental	Sold	130		\$ 1,000	\$ 1,000	1	1	700	1955		48 Rye City
50162	Rental	Sold	599	Avenue	\$ 2,500	\$ 2,350	3	2	1600	1989		10 Rye City
46106	Rental	Sold	6	Avenue	\$ 1,800	\$ 1,700	1	2	1000	1926		47 Rye City
40096	Rental	Sold	39	Avenue	\$ 1,600	\$ 1,500	1	2	900	1949		121 Rye City
41675	Rental	Sold	645	Avenue	\$ 3,200	\$ 3,200	7	2	2100	1987		94 Rye City



**MARKET DATA**

Apartment Site	1 Bedroom			2 Bedroom / 1 Bath			2 Bedroom / 2 Bath		
	average	price range	Sq Ft	average	price range	Sq Ft	average	price range	Sq Ft
<b>Avalon Green</b>									
500 Town Green Drive, Elmsford, NY 10523 / 914-610-4306		NL	642	\$ 2,038	2030-2045	700	\$ 2,668	2655-2680	1192
	\$ 2,025	1920-2130	679-702		n/a	n/a	\$ 2,485	2485	1260
	\$ 2,100	1995-2205	774-841		n/a	n/a	\$ 2,750	2745-2755	1450
	\$ 2,005	1985-2025	870		n/a	n/a		NL	1601-1721
		NL	885		n/a	n/a	\$ 2,715	2715	1361-1372
	\$ 2,313	2175-2350	969-990		n/a	n/a	\$ 2,718	2705-2730	1362
	\$ 2,575	2575	1076		n/a	n/a	\$ 2,720	2715-2725	1421-1436
	\$ 2,500	2300	1103		n/a	n/a		n/a	n/a
		NL	1205		n/a	n/a		n/a	n/a
Average:	\$ 2,220			\$ 2,038			\$ 2,678		
<b>Talleyrand Apartments</b>									
1202 Crescent Drive, Tarrytown, NY 10591 / 914-449-1383	\$ 1,805	1805	658	\$ 2,018	2015-2020	828	\$ 2,028	2025-2030	934
		NL	794	\$ 2,183	2170-2195	971	\$ 2,190	2180-2200	1064
Average:	\$ 1,805			\$ 2,100			\$ 2,100		
<b>Ridgeview Apartments</b>									
32 Nob Hill Drive, Elmsford, NY 10523 / 914-610-4229	\$ 1,637	1587-1637	658	\$ 1,833	1833	828	\$ 1,948	1925-1970	934 (1.5 bath)
Average:	\$ 1,637			\$ 1,833			\$ 1,948		
<b>Various Irvington Apartment Listings</b>									
Irvington Village / South Eckar		n/a	n/a	\$ 1,975	1975	NL, 7 Bath		n/a	n/a
111 North Broadway, Irvington, NY		n/a	n/a		n/a	n/a	\$ 2,100	2100	NL
635 South Broadway, Irvington, NY		n/a	n/a	\$ 3,100	3100	1300		n/a	n/a
Irvington, NY		n/a	n/a	\$ 2,050	2050	900		n/a	n/a
Irvington, NY		n/a	n/a	\$ 1,350	1950	NL		n/a	n/a
86 Main Street, Irvington, NY 10533	\$ 1,250	1250	566		n/a	n/a		n/a	n/a
Irvington, NY		n/a	n/a		NL	1650		n/a	n/a
5 Eckar Street, Irvington, NY 10533		n/a	n/a	\$ 1,975	1975	NL		n/a	n/a
106 Main Street, #1, Irvington, NY 10533		n/a	n/a	\$ 2,750	2750	1000		n/a	n/a
106 Main Street, #2, Irvington, NY 10533		n/a	n/a	\$ 2,200	2200	1000		n/a	n/a
80 S Broadway-carriage House, Irvington, NY 10533		n/a	n/a	\$ 1,800	1800	1100		n/a	n/a
1 S Aster St, #303, Irvington, NY 10533	\$ 2,900	2600	1150		n/a	n/a		n/a	n/a
1 S Aster St, Irvington, NY 10533		2500	850		n/a	n/a		n/a	n/a
1 S Aster St, Irvington, NY 10533		n/a	n/a		n/a	n/a	\$ 3,250	5250	1150
24 S Eckar Street, Irvington, NY 10533		n/a	n/a	\$ 2,000	2000	700		n/a	n/a
36 Hamilton Road, Apt 3, Irvington, NY 10533		n/a	n/a	\$ 2,700	2700	1000		n/a	n/a
2 BR unit with hardwood floors throughout		n/a	n/a	\$ 2,000	2000	850		n/a	n/a
UNFURNISHED in four-family private house		n/a	n/a	\$ 1,800	1800	850		n/a	n/a
Average:	\$ 1,925			\$ 2,192			\$ 2,675		
<b>One City Place</b>									
One City Place, White Plains, NY 10601 / 914-368-9177	\$ 2,877	2401-3352	807	\$ 4,056	3518-4593	1183	\$ 4,222	3678-4765	947
	\$ 3,871	2445-3697	626		n/a	n/a	\$ 4,046	3415-4676	921
	\$ 2,965	2376-3553	827		n/a	n/a	\$ 3,588	3151-4024	1013
	\$ 3,028	2577-3478	641		n/a	n/a	\$ 4,232	3521-4943	1033
	\$ 2,911	2363-3458	644		n/a	n/a	\$ 4,350	3656-5044	1036
	\$ 3,108	2477-3738	652		n/a	n/a	\$ 3,587	2864-4310	1044
	\$ 3,108	2477-3738	653		n/a	n/a	\$ 3,834	3156-4502	1249
		n/a	n/a		n/a	n/a	\$ 3,403	2771-4034	1271
Average:	\$ 3,009			\$ 4,056			\$ 3,908		
<b>Halestead White Plains Metro North</b>									
84 South Lexington Avenue, White Plains, NY 10606 / 914-449-1355	\$ 2,242	2153-2330	599	\$ 2,816	2595-3037	988	\$ 2,958	2717-3200	809
	\$ 2,274	2124-2423	656		n/a	n/a	\$ 3,271	2912-3629	1039
Average:	\$ 2,256			\$ 2,816			\$ 3,115		
<b>Avalon White Plains</b>									
27 Barker Avenue, White Plains, NY 10601 / 914-368-7166	\$ 2,185	2115-2255	678-711		n/a	n/a	\$ 3,185	3185	1075
	\$ 2,248	2110-2385	694-708		n/a	n/a	\$ 3,205	3205	1193
	\$ 2,258	2155-2360	723-726		n/a	n/a	\$ 3,945	3945	1464
	\$ 2,275	2255-2295	758		n/a	n/a	\$ 3,995	3995	1473
	\$ 2,280	2280	813		n/a	n/a	\$ 4,080	4080	1533
	\$ 2,500	2500	835		n/a	n/a		n/a	n/a
	\$ 2,515	2515	850		n/a	n/a		n/a	n/a
Average:	\$ 2,323						\$ 3,662		

PROPERTY TAX PROJECTIONS			
	Tax Rates 2014/2015	Current Property Taxes	Proposed Development 2014/2015 Property Taxes
CITY	\$ 150.38	\$ 21,519.38	\$ 97,809.19
COUNTY	\$ 187.92	\$ 26,891.35	\$ 122,225.72
SCHOOL	\$ 561.33	\$ 80,326.32	\$ 365,096.65
COUNTY REFUSE	\$ 17.61	\$ 2,519.99	\$ 11,453.78
BLIND BROOK SEWER	\$ 29.69	\$ 4,248.64	\$ 19,310.78
	<u>\$ 946.93</u>	<u>\$ 135,505.68</u>	<u>\$ 615,896.12</u>
Current Assessed Value	143,100		
Proposed Assessed value per analysis	650,414		

7/22/2014	2014 MUNICIPAL COUNTY TAX RATES FOR THE COUNTY GENERAL LEVY			
MUNICIPALITY	SWIS CODE	PARCELS	TAXABLE ASSESSED VALUE	TAX RATE PER \$1,000
City of Mount Vernon	550800	11,281	151,232,793	101.980000
City of New Rochelle	551000	16,084	267,270,832	123.532000
City of Peekskill	551200	6,395	61,921,656	86.011050
City of Rye	551400	4,935	137,863,523	187.923444
City of White Plains	551700	14,088	276,979,095	100.990000
City of Yonkers	551800	36522	475,391,550	117.860000
Town of Bedford	552000	6,296	577,140,508	32.123240
Town of Cortlandt	552200	15,379	107,009,202	183.970000
Town of Eastchester	552400	9,286	104,755,180	248.241100
Town of Greenburgh	552600	28,629	547,521,601	105.209400
Town of Harrison	552800	6,975	135,255,052	211.545407
Town of Lewisboro	553000	5,822	302,173,880	33.875600
Town of Mamaroneck	553200	8,739	8,686,517,881	3.702300
Town of Mount Kisco	555600	2,796	300,589,735	17.534800
Town of Mount Pleasant	553400	13,982	142,780,965	230.323644
Town of New Castle	553600	6,703	1,065,375,856	17.475340
Town of North Castle	553800	4,793	116,236,017	155.863400
Town of North Salem	554000	2,482	146,582,255	33.102261
Town of Ossining	554200	10,169	257,517,106	58.713265
Town of Pelham	554400	3,691	2,698,331,757	3.676420
Town of Pound Ridge	554600	2,471	368,913,586	20.061500
Town of Rye	554800	11,091	6,141,245,975	3.650718
Town of Scarsdale*	555000	5,955	140,100,756	216.627300
Town of Somers	555200	9,184	497,081,609	26.568026
Town of Yorktown	555400	14,377	126,394,696	133.284000

\*

	B	C	D	E	F	G
1	6/2/2014	2014 SPECIAL DISTRICT TAX RATES (CITIES & TOWNS)				
2	MUNICIPALITY	DISTRICT CODE	SPECIAL DISTRICT NAME	PARCELS	TAXABLE ASSESSED VALUE OR UNITS	TAX RATE PER \$1,000 OR CHARGE PER UNIT
3	City of Mount Vernon	CS001	Hutchinson Valley County Sewer District	8,566	150,844,745.00	15.560000
4		CS002	Bronx River County Sewer District	2,715	42,537,257.00	15.560000
5		RF001	County Refuse Disposal District #1	11,281	159,791,272.00	9.020000
6		CR001	County Refuse District	16,057	291,474,408	11.541000
7	City of New Rochelle	CS000	New Rochelle Sewer District	11,805	261,652,893	50.227000
8		CS001	Mamaroneck Sewer District	1,790	33,323,093	19.566000
9		CS002	Hutchinson Valley Sewer District	2,463	40,206,103	20.292000
10		SD001	Peekskill County Sewer District	6,368	120,178,034	14.884500
11	City of Peekskill	CW001	County Refuse Disposal District #1	6,252	67,965,830	8.042400
12	City of Rye	TXREF	County Refuse Disposal District #1	4,935	140,101,716	17.608906
13		TXBBS	Blind Brook County Sewer District	4,326	140,390,701	29.865684
14		TXMVS	Mamaroneck Valley County Sewer District	609	18,114,965	29.808843
15		GA174	County Refuse Disposal District #1	14,079	296,332,440	9.140000
16	City of White Plains	SB171	Bronx Valley County Sewer District	8,239	230,646,314	14.800000
17		SM172	Mamaroneck Valley County Sewer District	5,862	176,588,595	15.530000
18		GW001	County Refuse Disposal District #1	36,461	557,425,596	10.900000
19		CS001	Bronx Valley Sewer District #1	19,525	367,021,443	17.710000
20	City of Yonkers	CS002	South Yonkers County Sewer District #2	3,628	90,891,529	18.380000
21		CS003	Central Yonkers Sewer District #3	3,629	70,329,069	20.700000
22		CS004	North Yonkers County Sewer District #4	4,007	82,741,311	19.540000
23		CS005	Saw Mill Valley County Sewer District #5	5,147	87,249,743	17.790000
24	Town of Bedford	AM001	Paramedic Dist. No. 1	6,268	583,338,785	0.571560
25		FD030	Bedford Village Fire District	2,063	226,232,257	4.142390
26		PD011	Bedford Village Park District	2,066	226,586,921	2.980040
27		LT010	Bedford Village Lighting Dist	494	41,430,220	0.352160
28		FD031	Bedford Hills Fire District	1,965	173,466,578	11.258570
29		PD012	Bedford Hills Park District	2,030	187,805,234	3.738480
30		LT011	Bedford Hills Light	937	48,441,685	0.724460
31		FD032	Katonah Fire District	2,224	168,938,149	7.613140
32		PD013	Katonah Park District	2,224	168,946,335	4.406220
33		LT012	Katonah Light District	930	50,485,830	0.565370
34		WD039	Cedar Downs Water District	84	3,342,402	13.413710
35		WD040	Consolidated Water District	2,463	126,313,346	12.124360
36		WD042	Farms Water District (Cap)	99	6,138,622	5.422060
37		WD041	Farms Water District (O&M)	95	5,350,673	9.324810
38		WD043	Old Post Road Water District	76	6,107,136	9.174680
39		FD033	Fire Protection District No. 1	79	14,704,401	4.934920
40	SD472	Ossining Sanitary Sewer	2,664	19,776,712	41.200000	
41	SD473	Peekskill Sanitary Sewer	1,561	14,277,672	32.480000	
42	CW495	County Refuse Disposal #1	14,825	109,964,035	17.350000	
43	FD411	Montrose Fire District	1,881	16,719,912	48.180000	
44	FD412	Verplank Fire District	862	4,567,636	58.230000	
45	FD413	Mohegan Fire District	6,852	44,597,345	93.840000	
46	WD430	Montrose Water District	868	5,805,329	23.620000	
47	PK481	Cort. Cont. Village Park	253	1,360,810	31.900000	
48	FD415	Furnace Dock Road Fire Protection	165	1,369,806	37.560000	
49	FD416	Mt. Airy Quaker Br. Rd. Fire Protection	652	6,723,336	58.310000	
50	FD418	Continental Village Fire Protection	617	3,205,851	48.680000	
51	WD457	Cortlandt Consolidated Water District	9,094	62,733,622	20.070000	
52	LT460	Montrose Lighting District	867	5,847,630	15.820000	
53	LT451	Verplank Lighting District	856	3,914,988	7.160000	



# 2014/2015 SCHOOL DISTRICT TAX RATES

10/15/2014	SCHOOL DISTRICT SWIS CODE	SCHOOL DISTRICT NAME	NUMBER OF PARCELS	TAXABLE ASSESSED VALUE	TAX RATE PER 1,000
<b>MUNICIPALITY</b>					
City of Mount Vernon	550800	Mount Vernon City School District	11,281	124,801,238	880.150000000
City of New Rochelle	551000	New Rochelle City School District	16,071	266,740,126	728.684000000
City of Peekskill	551200	Peekskill City School District	6,060	56,845,845	668.773300000
	552203	Hendrick Hudson CSD	357	5,811,894	468.945100000
City of Rye	551400	Rye City School District	4,499	124,684,852	561.328000000
	554801	Rye Neck UFSD - Homestead	414	13,405,107	847.987786000
	554801	Rye Neck UFSD - Non-Homestead	22	307,671	1,096.677945000
City of White Plains	551700	White Plains City School District	14,080	278,335,896	600.220000000
City of Yonkers	551800	Yonkers City School District	36506	472,896,126	487.960000000
Town of Bedford	552002	Bedford CSD	3,962	403,149,715	134.178712000
	552001	Katonah-Lewisboro UFSD	1,957	174,104,003	193.318100000
	553801	Byram Hills CSD	31	2,166,550	139.619963000
Town of Cortlandt	552202	Croton-Harmon SD	3,813	31,839,113	1,145.540000000
	552202	Croton-Harmon Library	3,813	31,839,113	24.330000000
	552203	Hendrick Hudson CSD	5,324	38,570,674	994.740000000
	552203	Hendrick Hudson Library	5,324	38,570,674	19.880000000
	555401	Lakeland CSD	5,611	34,653,504	1,400.130000000
	552803	Putnam Valley CSD	512	2,585,340	1,316.870000000
	555402	Yorktown CSD	119	1,108,437	1,329.820000000
Town of Eastchester	552401	Eastchester UFSD	5,115	53,152,077	1,290.555400000
	552402	Tuckahoe UFSD	2,227	19,272,855	1,366.812100000
	552403	Bronxville UFSD	1,589	2,711,860,473	14.296000000
Town of Greenburgh	552601	UFSD of the Tarrytowns	3,129	44,554,911	722.383290196
	552602	Irvington UFSD	2,824	74,838,217	665.350589467
	552603	Dobbs Ferry UFSD	2,514	44,712,007	788.018621582
	552604	Hastings-On-Hudson UFSD	2,823	46,977,407	783.308914417
	552605	Ardsley UFSD	3,894	67,510,668	735.292598085
	552606	Edgemont UFSD	2,515	69,852,801	668.360130394
	552607	Greenburgh Central 7 SD	6,846	112,193,406	493.616733948
	552609	Elmsford UFSD	2,735	48,240,760	578.463934437
	553402	Potomac Hills CSD	553	27,961,069	279.170874921
	553405	Valhalla CSD	796	14,218,174	585.584036601
Town of Harrison	552801	Harrison CSD	6,975	135,936,590	732.583659000
Town of Lewisboro	553000	Katonah-Lewisboro UFSD	5822	303,998,481	203.927000000
Town of Mamaroneck	553201	Mamaroneck UFSD	8,473	8,379,665,708	13.758120000
	555001	Scarsdale UFSD	266	345,726,253	16.020630000



# 2014 CITY/TOWN TAX RATES

7/22/2014 MUNICIPALITY	SWIS CODE	PARCELS	UNINCORPORATED TAXABLE ASSESSED VAL	UNINCORPORATED TAX RATE PER 1,000	GENERAL TAXABLE ASSESSED VALUE	GENERAL TAX RATE PER 1,000
City of Mount Vernon	550800	11,281			152,910,735	367.940000
City of New Rochelle	551000	16,084			268,901,252	202.593000
City of Peekskill*	551200	6,395			61,839,156	238.371600
City of Rye	551400	4,937			138,126,937	150.380000
City of White Plains	551700	14,080			276,979,095	196.140000
City of Yonkers	551800	36,506			472,896,126	214.22
Town of Bedford	552000	6,296			577,191,217	19.827190
Town of Cortlandt**	552200	15,379	79,781,520	170.79000	106,988,706	31.830000
Town of Eastchester	552400	9,286	57,835,125	266.17400	104,760,180	33.441200
Town of Greenburgh	552600	28,629	291,103,075	194.89810	254,579,096	15.582900
Town of Harrison	552800	6,975			135,603,693	326.594970
Town of Lewisboro	553000	5,822			302,173,880	18.299330
Town of Mamaroneck	553200	8,739	3,696,089,147	3.62821	8,686,122,513	0.422350
Town of Mount Kisco	555600	2,796			See Village Tax Rate Table	
Town of Mount Pleasant	553400	13,982	107,445,134	112.563737	143,258,568	8.938931
Town of New Castle	553600	6,703			1,065,375,856	14.091754
Town of North Castle	553800	4,793			116,258,878	158.295000
Town of North Salem	554000	2,482			146,602,975	38.522407
Town of Ossining	554200	10,169	49,509,918	101.179222	258,552,497	12.315124
Town of Pelham	554400	3,691		Homestead	2,334,800,766	0.548500
				Non-Homestead	391,340,996	0.744500
Town of Pound Ridge	554600	2,471			368,913,586	13.666300
Town of Rye	554800	11,091		Homestead	4,656,961,386	0.043754
				Non-Homestead	1,528,272,027	0.063407
Town of Scarsdale	555000	5,955			See Village Tax Rate Table	
Town of Somers	555200	9,184			497,254,606	13.717295
Town of Yorktown	555400	14,377			126,394,411	147.318100

\*There is also a City Library tax

Taxable Assessed value	Tax Rate Per 1,000
63,498,073	12.363000

\*\*There is also a town library tax, which applies to the entire town except Village of Croton-on-Hudson.

Taxable Assessed Value	Tax Rate Per 1000
86,495,165	6.880000

Please note that the general town tax rate is charged throughout a town including villages, if any. The unincorporated tax rate is charged in town areas outside of villages in towns that have villages. Therefore, if you live in the unincorporated area of a town that has villages you must add the two rates together to compute your



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PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

RYE

FAIRFIELD

HUDSON VALLEY

LONG ISLAND

## **TRAFFIC ACCESS & IMPACT STUDY**

### **Age-Restricted Residential Development 120 Old Post Road Rye, New York**



**Prepared for:**  
**Alfred Weissman Real Estate, Inc.**

**November 2014**



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PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK                      FAIRFIELD, CONNECTICUT

RYE

FAIRFIELD

HUDSON VALLEY

LONG ISLAND

# **TRAFFIC ACCESS & IMPACT STUDY**

---

## **Age-Restricted Residential Development 120 Old Post Road Rye, New York**

### **PROJECT STAFF**

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## **FREDERICK P. CLARK ASSOCIATES, INC.**

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November 25, 2014

Mr. Alfred Weissman

Mr. Alan Weissman

Alfred Weissman Real Estate, Inc.

120 Old Post Road

Rye, New York 10580

Gentlemen:

As requested, we have completed this Traffic Study for the proposed development of the subject property located at 120 Old Post Road in Rye, New York. The proposal is to demolish the existing, but mostly vacant office building comprising 70,000 square feet and construct a 135-unit residential, age-restricted, development. Access will remain to Playland Access Drive, essentially at the same location, and immediately south of the unsignalized intersection with Old Post Road.

The results of this Traffic Analysis indicate a development of this type and size will generate 27 and 34 vehicle trip ends during a typical weekday morning and weekday afternoon peak hour, respectively. This is based on trip generation rates provided by the Institute of Transportation Engineers (ITE). For comparison purposes, the existing office building, if fully occupied with a variety of commercial tenants, could generate 109 and 104 vehicle trip ends during the same weekday morning and weekday afternoon peak hours, respectively. Therefore, the redevelopment of the subject property as a residential development will result in a significant reduction in site traffic, with a decrease of 82 and 70 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively.

The results of the analyses indicate that area roadways, although certain roadways approaches to intersections experience short-term delays during peak hours, each location will continue to operate with no change in Level of Service, except for an overall decrease in Level of Service at the signalized intersection of Theodore Fremd Avenue and Playland Access Drive from "B" to "C" during the weekday morning peak hour. However, this change in Level of Service will result in an overall increase in average vehicle delay per vehicle of only 0.3 seconds, which is considered insignificant. The results of

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Mr. Alan Weissman

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November 25, 2014

these analyses and a comparison between a background and combined conditions, which includes the proposed residential development, indicate that traffic control and pavement markings at each of these intersections should remain unchanged as no modifications are necessary to accommodate this residential development. Any approach with a Level of Service "F" will have a maximum increase in average delay of 7.2 seconds, which occurs during the morning peak hour.

This Traffic Study incorporates traffic related to a proposed residential development to be located on Theodore Fremd Avenue and potential development to be generated by Playland in the future.

Sincerely,

A handwritten signature in cursive script that reads "Michael A. Galante". To the right of the signature, the letters "TD" are printed.

Michael A. Galante  
Executive Vice President

Enclosure



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## **SUMMARY**

The purpose of this Traffic Report is to provide the City of Rye with a detailed analysis of potential impacts from this proposed development on adjacent roadways and nearby intersections in the designated Study Area. The proposal is to demolish the existing, but mostly vacant, office building comprising 70,000 square feet of space and construct an age-restricted residential development which will have 135 units. Access will remain the same from Playland Access Drive to the immediate south of the Old Post Road STOP sign-controlled intersection.

The Traffic Study is based on traffic volumes obtained in 2012 through 2014. These volumes were obtained by Frederick P. Clark Associates, Inc. and other Traffic Consultants for different nearby projects.

In this Traffic Study it addresses traffic conditions for existing, no-build and build peak hour volumes near the site. It includes the weekday morning and weekday afternoon peak hours. Under the no-build condition it includes other developments, as well as an appropriate growth rate.

The proposal is to demolish the existing, but mostly vacant, office building and construct the age-restricted development, as noted above. To estimate site traffic for the proposed development trip generation rates were obtained from the Institute of Transportation Engineers (ITE) in "Trip Generation," 9th Edition, published 2012. Based on these trip generation rates it is estimated a development of this type and size will generate 27 and 34 vehicle trip ends during the typical weekday morning and weekday afternoon peak hours, respectively. For comparison purposes the current 70,000 square-foot office building, if it was to be fully reoccupied, could generate 109 and 104 vehicle trip ends during the same weekday morning and weekday afternoon peak hours, respectively. Therefore, the proposed residential development would result in a decrease

in site traffic generation of 82 and 70 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. This is a significant reduction in site traffic generation potential directly related to the change in land use from an office building to a residential development.

The results of the capacity analysis for existing conditions indicate the Theodore Fremd Avenue/Playland Access Drive signalized intersections operates at an acceptable overall Level of Service "B" during peak hours. During the weekday morning peak hour motorists experience delays at the unsignalized intersection of Playland Access Drive /Playland Parkway/Medical Building, Old Post Road at Playland Access Drive and Old Post Road at Thruway Access Drive. All of the Study Area intersections operate at acceptable Levels of Service during the weekday afternoon peak hour. Similar results are found for 2016 background conditions. In both existing and background conditions analyses the office building located on the site is considered vacant.

Under a future combined condition, which includes the proposed residential development, each of these unsignalized intersections will continue to operate at acceptable Levels of Service, except for some Levels of Service "E" or "F" identified in a background condition. A comparison of the background and combined traffic conditions for each of these intersections indicate that Levels of Service will remain unchanged, except for change from an overall Level of Service "B" to "C" at the signalized intersection of Theodore Fremd Avenue at Playland Access Drive, with an insignificant overall delay due to the residential development of 0.3 seconds per vehicle during this one peak hour. Results of the analyses for the weekday afternoon peak hour indicate Levels of Service will remain the same at each of the unsignalized intersections and at each of the lane groups or approaches with minimal, if any, increase in average vehicle delay due to the proposed residential development.



Based on the results of these analyses it is recommended that the current traffic control and pavement markings at each of these locations remain unchanged. The analysis indicates that the added site traffic for a residential development is insignificant and will not change the overall operation of any of the intersections in the Study Area. In addition, there is a significant benefit of converting this office building to a residential development, which results in a significant decrease in site traffic generation during the key weekday morning and weekday afternoon peak hours.

The results of these analyses have been compared to field observations at each of these locations during both the weekday morning and weekday afternoon peak hours. It is noted that motorists do experience short-term delays at the Playland Parkway off ramp to Playland Access Drive and on the Playland Access Drive and Thruway Access Drive approaches to Old Post Road during peak hours. However, based on the results of this analysis each intersection should maintain STOP control. Any consideration for signalization, if warranted, at the Playland Parkway ramps to Playland Access Drive may actually result in an increase in delays, which could impact the mainline of Playland Parkway (southbound lanes).

At the Old Post Road intersection at Playland Access Drive and Thruway Access Drive it is likely that either location would meet the minimum standards for consideration for traffic signals.

## **INTRODUCTION**

The purpose of this report is to provide the City of Rye with an analysis of current operations on the surrounding roadway network and nearby intersections and the potential impact of removing the existing 70,000 square-foot office building and constructing a 135 age-restricted residential unit development at 120 Old Post Road.

This analysis addresses traffic conditions surrounding the subject property for a typical weekday morning and weekday afternoon peak hour condition. It addresses traffic conditions along Playland Access Drive, Old Post Road, Theodore Fremd Avenue and the Access Ramps to Playland Parkway. It includes an evaluation of current and future background and combined traffic volumes at the nearby intersections for both the weekday morning and weekday afternoon peak hours.

### **Project Description**

The existing office building comprises 70,000 square feet of gross floor area. At the time of the traffic counts, the building was mostly vacant, with minimal traffic generated throughout the day.

The proposal is to demolish this building and construct a 135-unit, age-restricted residential development. Access for the existing building will remain unchanged, with full access to Playland Access Drive.

## EXISTING CONDITIONS

This section of the report describes the current traffic volumes obtained through actual manual traffic volume counts and volumes provided by others at nearby intersections. In this section of the report there is a description of existing roadway conditions, traffic control, site access, capacity analysis procedures and the results of these analyses.

### Roadways

The site is located in the northwest corner of the T-type intersection of Playland Access Drive and Old Post Road. The following is a description of the roadways serving the subject property.

1. *Playland Access Drive* – This is a two-lane, County-maintained roadway, beginning to the northwest at the signalized intersection with Theodore Fremd Avenue. It intersects with the southbound ramps for Playland Parkway, provides access to the subject property and terminates at an unsignalized intersection with Old Post Road. It has a posted speed limit of 30 miles per hour, provides a double yellow centerline, curbs and paved shoulders in certain sections. Sidewalks are not provided on this roadway.
2. *Old Post Road* – It is a generally both a north-south and east-west, County-maintained roadway. This roadway begins to the southwest at a Y-type intersection with Boston Post Road (U.S. Route 1), continues in an easterly direction intersecting with Playland Access Drive, the Playland Parkway Northbound Ramps and continues to the northeast terminating again at T-type intersection with Boston Post Road (U.S. Route 1). The section of Old Post Road between the intersection of North Street and northerly intersection with Boston Post Road is a one-way, one-lane roadway limited to westbound movements.

The Old Post Road/southerly intersection with Boston Post Road intersection is controlled with a traffic signal, which is maintained by the City of Rye. Other intersections are controlled with STOP signs at the Playland Access Drive southbound and the Thruway Access Road southbound approaches. The westbound approach of Old Post Road at North Street is controlled with STOP signs on both approaches. The posted speed limit on this roadway is 30 miles per hour. It provides a double yellow centerline, curbing and sidewalks in certain sections.

3. *North Street* – North Street is a north-south, County-maintained roadway, which begins at the Old Post Road intersection immediately north of the Playland Parkway northbound ramps intersection. This road continues in a northerly direction intersecting with Theodore Fremd Avenue, providing an overpass over Interstate 95 and continuing north to the Hutchinson River Parkway. It is a two-lane road maintained by the County to the intersection of Harrison Avenue. From this intersection to the Parkway it is designated New York Route 127. For its entire length it provides a double yellow centerline. It has a posted speed limit of 30 miles per hour in the Study Area.
4. *Theodore Fremd Avenue* – This is an east-west, County-maintained roadway. It provides one travel lane in each direction and a center turning lane for its entire length between the Harrison Village/Town line to the west and the intersections with North Street to the northeast and ends at Purchase Street. It has a posted speed limit of 30 miles per hour, provides sidewalks generally along the southerly side for its entire length, with sidewalks in the vicinity of the North Street intersection on the northerly side. The intersections with North Street and Theodore Fremd Avenue are controlled with traffic signals, which are maintained by the City of Rye.

5. *Playland Parkway* – This is a generally north-south, limited-access arterial, beginning at Interchange 19 on the New England Thruway (Interstate 95) and terminating to the southeast at Playland, which is a County-owned Park. A full-movement interchange provides access to Playland Access Drive and Old Post Road/North Street near the site. Playland Parkway provides two travel lanes in each direction and is median divided to a point south of the Boston Post Road Overpass. There are bridges at Old Post Road and Boston Post Road providing continuous traffic flow on Playland Parkway.
6. *New England Thruway (Interstate 95)* – This is a north-south, limited-access, Interstate Highway serving Westchester County. It provides three lanes in each direction and is median divided. The posted speed limit is 55 miles per hour for vehicles and 50 miles per hour for trucks. Access is provided to the Study Area via Interchange 19, which provides ramps in both directions on Interstate 95. These ramps connect directly to Playland Parkway, which provides direct to Playland Access Drive and Old Post Road.

Figure 1 provides a reference of the site location for all of the roads described above. Figure 2 provides the current street system characteristics for each of these roads, as described above. Photographs of the area roads are included in the Appendix of this report.

### **Traffic Volumes**

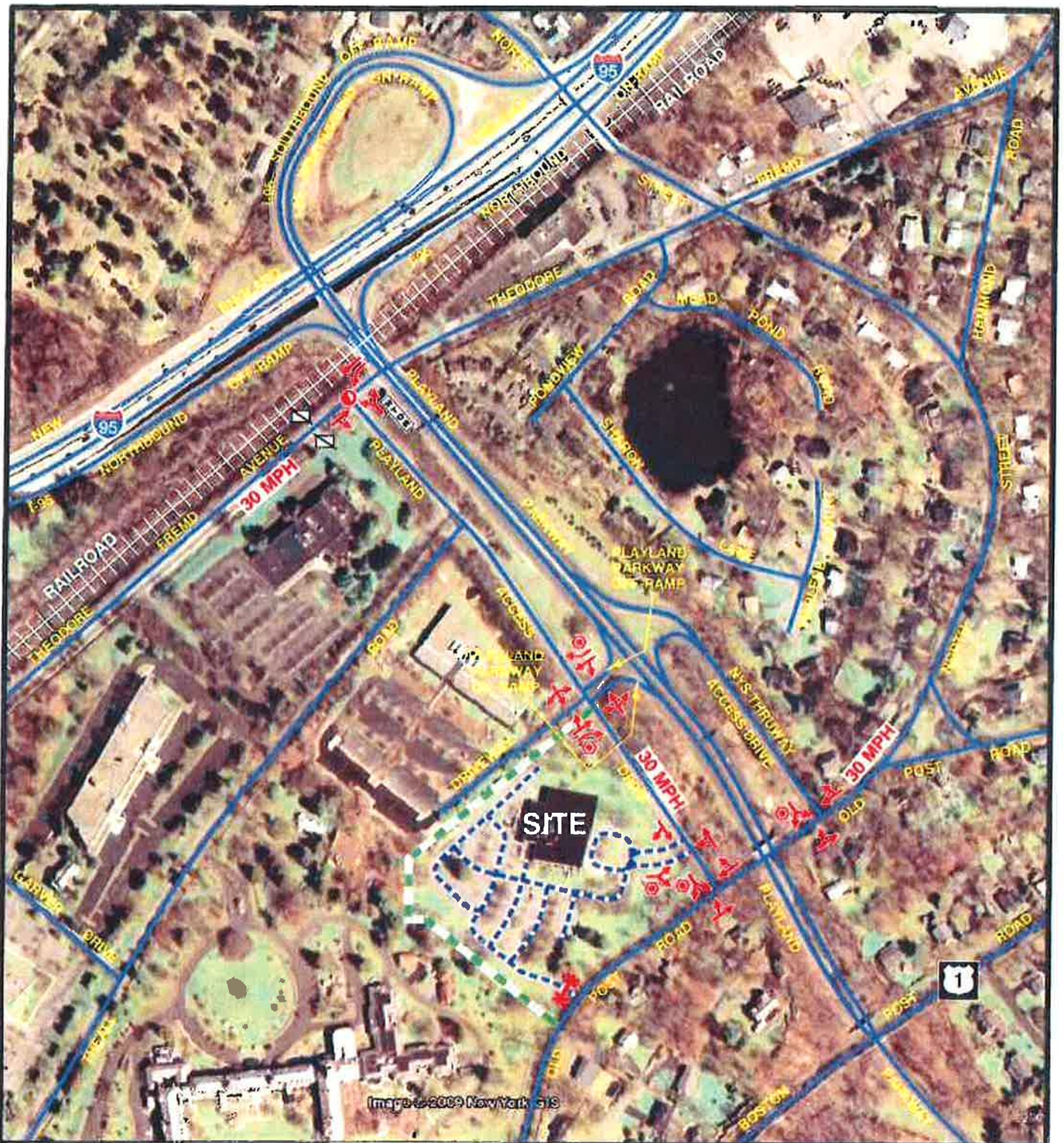
To identify baseline conditions for area roads, 2014 traffic volumes available in the Traffic Study completed for the proposal to develop 150 North Street were used for the following intersections during the weekday morning peak hour:

- Theodore Fremd Avenue at Playland Access Drive;


















**LEGEND**

-  TRAFFIC LANE
-  TRAFFIC SIGNAL
-  STOP SIGN
-  NO TURN ON RED
-  BUS STOP (BEE-LINE BUS #61)
-  SPEED LIMIT
-  SITE ACCESS DRIVE
-  CLOSED SITE ACCESS DRIVE
-  PROPERTY LINE

**CURRENT STREET SYSTEM  
CHARACTERISTICS**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT**  
120 Old Post Road  
Rye, New York

**FREDERICK P. CLARK ASSOCIATES, INC.**  
Planning/Development/Environment/Transportation

Not to Scale

Date: 11/3/14



**2**



- Playland Access Drive at Playland Parkway Eastbound On/Off Ramps/Medical Office Building Access Drive; and,
- Old Post Road at Playland Parkway Northbound On/Off Ramps.

The 2012 existing traffic volumes from the Office to Hotel Building Conversion Traffic Study prepared by Frederick P. Clark Associates, Inc. were adjusted and balanced to the most recent traffic data for the site access drive. For the intersection of Old Post Road at Playland Access Road, manual turning movement counts were conducted by Frederick P. Clark Associates on Thursday, October 30, 2014 from 7:00 A.M. to 9:00 A.M. These volumes were adjusted where appropriate to the surrounding intersection volumes to generate the 2014 existing traffic volumes for a weekday morning peak hour. The highest volumes found at each intersection were used.

For the weekday afternoon peak hour existing traffic volumes for 2013 obtained from a Playland Traffic Study were used for the four Study Area intersections. The 2012 existing traffic volumes from the Office to Hotel Building Conversion Traffic Study prepared by Frederick P. Clark Associates, Inc. were adjusted, as needed, at the site frontage. A one percent growth rate was applied to these volumes to the baseline year, 2014.

Based on the results of the field surveys, the peak hour volumes were identified to occur during the following time periods:

- Weekday morning – Vary by intersection; and,
- Weekday afternoon – 4:45 to 5:45 P.M.

Old Post Road, east of Playland Parkway Northbound On/Off Ramps, had a two-way volume of 380 and 399 vehicles during the two peak hours noted above. On Old Post Road west of the same intersection the two-way volume was recorded at 878 and

699 vehicles during the same two peak hours. For the section of Old Post Road west of the Playland Access Drive the two-way volume was 665 and 417 vehicles during the two peak hours noted above. Playland Access Drive, north of Old Post Road the two-way volume was 541 and 512 vehicles during the two peak hours noted above

Theodore Fremd Avenue, west of the Playland Access Drive intersection had a two-way volume of 681 and 669 vehicles during the two peak hours noted above. For the section east of the Playland Parkway Access Drive the two-way volume was found to be 628 and 617 vehicles during the same peak hours noted above.

For reference purposes, the medical office building access drive intersection with Playland Access Drive had a driveway volume of 195 and 101 vehicles during the two peak hours. The site driveway had a two-way volume of 4 and 6 vehicles during the two peak hours. Table 1 provides a summary of the volumes noted above. Figures 3 and 4 show the peak hour volumes for the weekday morning and weekday afternoon peak hours, respectively. The field sheets for the 2014 traffic counts at the Old Post Road/Playland Access Road intersection are included in the Appendix of this report

### **Accident Experience**

The latest available accident data was obtained from the City of Rye Police Department for a period beginning January 1, 2011 through December 31, 2013 for Playland Access Road and Old Post Road. For the intersection of Playland Access Road at Theodore Fremd Avenue, there were a total of 7 accidents recorded during this three-year period. Data indicates that 57 percent of the accidents were limited to only property damage and 43 percent involved injuries. The collision types were 86 percent involving a rear-end collision and 14 percent involved a left turn collision. The contributing factors were 44 percent unknown and 14 percent were driver fell asleep, pavement slippery, traffic control disregarded and driver inattention. It was found that 86 percent of the accidents occurred during daylight hours and 57 percent occurred on dry road conditions.

Table 1  
2014 TWO-WAY TRAFFIC VOLUMES – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

LOCATION	VEHICLES	
	Weekday Morning	Weekday Afternoon
Playland Parkway Northbound On/Off Ramps, North of Old Post Road	800	606
Old Post Road, East of Playland Parkway Northbound On/Off Ramps	380	399
Old Post Road, West Playland Parkway Northbound On/Off Ramps	878	699
Playland Access Drive, North of Old Post Road	541	512
Old Post Road, East of Playland Access Drive	878	699
Old Post Road, West of Playland Access Drive	665	417
Office Building Access Drive, West of Playland Access Drive	4	6
Playland Access Drive, South of Office Building Access Drive	541	512
Playland Access Drive, North of Office Building Access Drive	541	510
Playland Parkway Southbound On/Off Ramp, East of Playland Access Drive	791	448
Medical Office Building Access Drive, West of Playland Access Drive	195	101
Playland Access Drive, South of Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive	541	507
Playland Access Drive, North of Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive	939	622
Playland Access Drive, South of Theodore Fremd Avenue	585	448
Theodore Fremd Avenue, West of Playland Access Drive	681	669
Theodore Fremd Avenue, East of Playland Access Drive	628	617

## Table 1 Cont'd

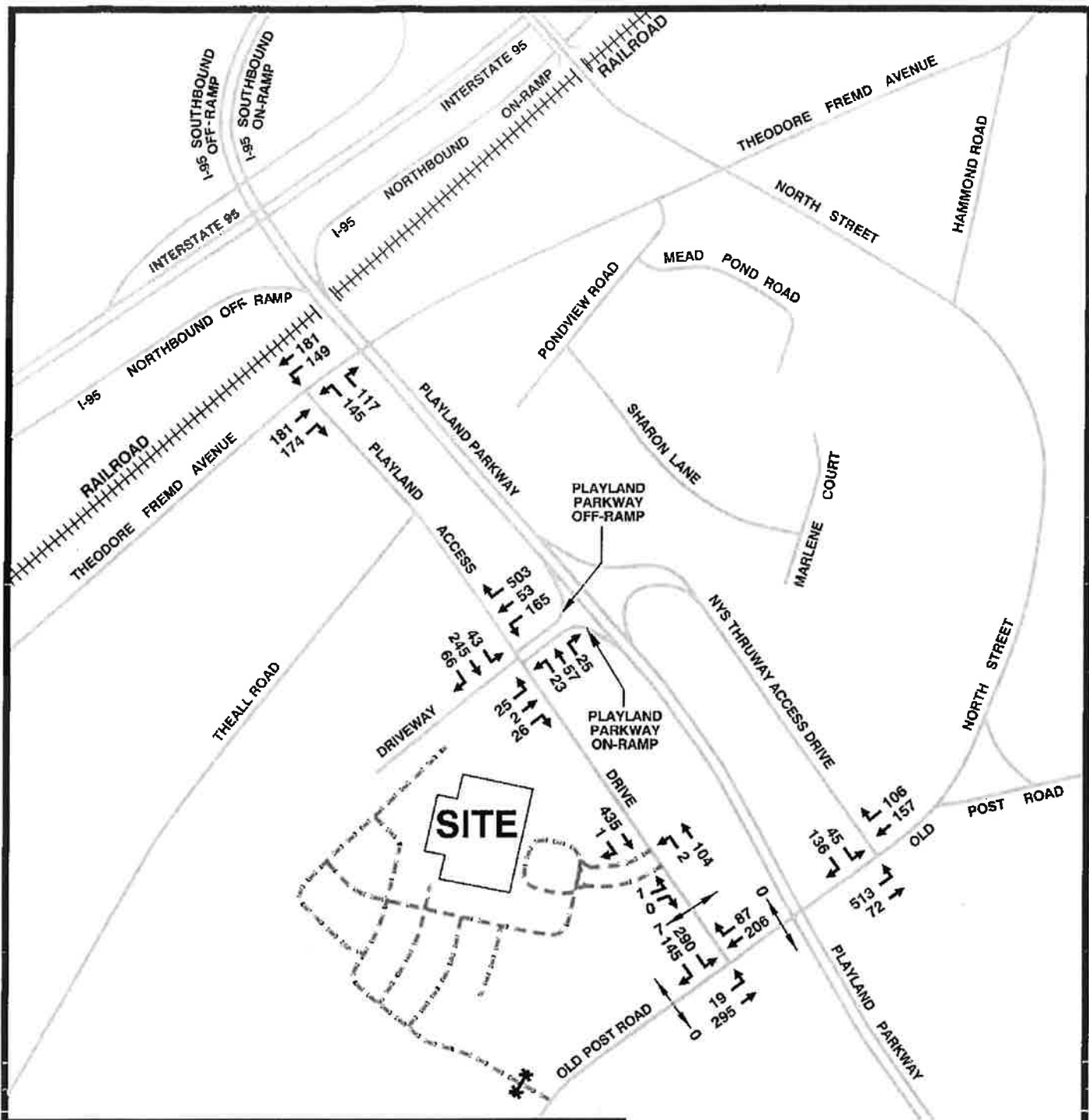
### Source:

- 1) 2014 traffic volumes from Tim Miller Associates, Inc. Traffic Study for 150 North Street were utilized for the Playland Parkway Southbound Ramps at Playland Access Drive, Theodore Fremd Avenue at Playland Access Drive and Playland Parkway Northbound On/Off Ramps at Old Post Road intersections for the weekday morning peak hour.
- 2) 2012 existing traffic volumes from the office to hotel building conversion traffic study prepared by Frederick P. Clark Associates, Inc. were adjusted and balanced to the Tim Miller Associates, Inc. volumes for the site access drive for the weekday morning peak hour.
- 3) Manual turning movement counts conducted by Frederick P. Clark Associates, Inc. on Thursday, October 30, 2014 from 7:00 A.M. to 9:00 A.M. at the Old Post Road/Playland Access Drive intersection.
- 4) 2013 existing traffic volumes with the park open from Playland, Year One Development Program, prepared by John Meyers Consulting, P.C., October, 2013, were utilized for the weekday afternoon peak hour. These volumes had a one percent growth rate applied to the baseline year, 2014.

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**Notes:**

- 1- The 2014 Traffic Volumes from Tim Miller Associates, Inc. Traffic Study for 150 North Street, were utilized for the Playland Parkway Southbound Ramps at Playland Access Drive, Theodore Fremd Avenue at Playland Access Drive and Old Post Road at New York State Thruway Access Drive Intersections. Peak Hour of each intersection was used.
- 2- The 2012 Existing Traffic Volumes from the Office To Hotel Building Conversion Traffic Study prepared by Frederick P. Clark Associates, Inc. were adjusted and balanced to the Tim Miller Associates, Inc. volumes for the Site Access Drive.
- 3- Manual turning movement counts conducted by Frederick P. Clark Associates, Inc. on Thursday, October 30, 2014 from 7:00 to 9:00 A.M. for Old Post Road at Playland Access Road. Peak Hour of this intersection is utilized.

**LEGEND**

- 0 PEDESTRIAN TRAFFIC
- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

**2014 EXISTING TRAFFIC VOLUMES  
WEEKDAY MORNING PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**



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RYE, NEW YORK FAIRFIELD, CONNECTICUT

**3**

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- 1- 2013 Existing Traffic Volumes with the Park open from Playland, Year One Development Program, prepared by John Meyer Consulting, P.C. October, 2013, were utilized.
- 2- A one percent growth rate was applied to the baseline year, 2014.

### LEGEND

Head Joint Left Hand **SITE ACCESS DRIVE**



**CLOSED SITE ACCESS DRIVE**

**2014 EXISTING TRAFFIC VOLUMES  
WEEKDAY AFTERNOON PEAK HOUR  
(4:45 - 5:45 P.M.)**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT**  
120 Old Post Road  
Rye, New York



**FREDERICK P. CLARK ASSOCIATES, INC.**  
PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK                      FAIRFIELD, CONNECTICUT

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Date: 11/3/14

For the section of Playland Access Road between Theodore Fremd Avenue and Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive, there were a total of 11 accidents recorded during this three-year period. Data indicates that 82 percent of the accidents were limited to only property damage and 18 percent involved injuries. The collision types were 55 percent involving a rear-end collision, 27 percent were right angle collisions and 9 percent involved left turn and right turn collision. The contributing factors were 55 percent driver inattention and 9 percent were following too closely, failure to grant right-of-way, unknown and view obstructed. It was found that all of the accidents occurred during daylight hours and 55 percent occurred on dry road conditions.

For the intersection of Playland Access Road at Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive, there were a total of 18 accidents recorded during this three-year period. Data indicates that 83 percent of the accidents were limited to only property damage and 17 percent involved injuries. The collision types were 44 percent involving a right angle collision, 21 percent involved left turn collision, 17 percent involved a rear-end collision and 6 percent involved right turn collision, sideswipe in the same direction and backing. The contributing factors were 38 percent for failure to grant right-of-way, 33 percent driver inattention, 11 percent were unknown and 6 percent involved pavement slippery, traffic control disregarded and unsafe backing. It was found that 89 percent of the accidents occurred during daylight hours and on dry road conditions. For the section of Playland Access Road between Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive and Site Access Drive, there were no recorded accidents.

For the intersection of Playland Access Road at Site Access Drive, there were no recorded accidents. For the section of Playland Access Road between Site Access Drive and Old Post Road, there were no recorded accidents.

For the intersection of Old Post Road at Playland Access Road, there were a total of 3 accidents recorded during this three-year period. Data indicates that all of the accidents were limited to only property damage. The collision types were 67 percent involving a rear-end collision and 33 percent involved a left turn collision. The contributing factors were 34 percent for following too closely and 33 percent were failure to grant right-of-way and traffic control disregarded. It was found that 67 percent of the accidents occurred during daylight hours and 33 percent occurred on dry road conditions. For the section of Old Post Road between Playland Access Road and Playland Parkway Northbound On/Off Ramps, there were no recorded accidents.

For the intersection of Old Post Road at Playland Parkway Northbound On/Off Ramps, there were a total of 3 accidents recorded during this three-year period. Data indicates that 67 percent of the accidents were limited to only property damage and 33 percent involved injuries. The collision types were 67 percent involving a rear-end collision and 33 percent involved a left turn collision. The contributing factors were 67 percent for following too closely and 33 percent were failure to grant right-of-way. It was found that all of the accidents occurred during daylight hours and on dry road conditions. Table 2 provides a more detailed summary of the accident data

### **Capacity Analysis Procedures**

Capacity analysis procedures are provided in the Appendix of this report. The analyses follow a SYNCHRO computer model and information provided by the Transportation Research Board (TRB) and the Highway Capacity Manual (HCM) published in 2010.

### **Capacity Analysis Results**

The results of the analysis for the Study Area intersections included in the designated Study Area are described below:

Table 2  
ACCIDENT EXPERIENCE SUMMARY - PLAYLAND ACCESS ROAD/OLD POST ROAD  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

ACCIDENT CHARACTERISTICS	PLAYLAND ACCESS ROAD												OLD POST ROAD																										
	At Theodore Fremd Avenue				Between Theodore Fremd Avenue and Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive				At Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive				Between Playland Parkway Southbound On/Off Ramp/Medical Office Drive and Site Access Drive				At Site Access Drive				Between Site Access Drive and Old Post Road				At Playland Access Road				Between Playland Access Road and Playland Parkway Northbound On/Off Ramps				At Playland Parkway Northbound On/Off Ramps						
	Total		%		Total		%		Total		%		Total		%		Total		%		Total		%		Total		%		Total		%		Total		%				
	Year		2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total	
ACCIDENT SEVERITY	Property Damage	4	57	9	82	15	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Injury	3	43	2	18	3	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Collision Type	6	86	6	55	3	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Rear End	1	14	1	9	4	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTRIBUTING FACTOR	Left Turn	0	0	1	9	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right Turn	0	0	3	27	8	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right Angle	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sideswipe-Same Dir.	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Backing	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Contributing Factor	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Following Too Closely	0	0	1	9	7	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Failure to Grant ROW	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SURFACE CONDITION	Fell Asleep	1	14	1	9	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pavement Slippery	1	14	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Traffic Control Disregard	1	14	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Driver Inattention	1	14	0	0	6	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Unknown	3	44	1	9	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	View Obstructed	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Unsafe Backing	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Light Condition	6	86	11	100	16	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SURFACE CONDITION	Daylight	1	14	0	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Dark Lit																																						
	Surface Condition	4	57	6	55	16	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Dry	3	43	4	36	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SURFACE CONDITION	Wet	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Snow/Ice																																						



Table 2 Cont'd

ACCIDENT CHARACTERISTICS	PLAYLAND ACCESS ROAD										OLD POST ROAD							
	At Theodore Fremd Avenue		Between Theodore Fremd Avenue and Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive		At Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive		Between Playland Parkway Southbound On/Off Ramp/Medical Office Building Access Drive and Site Access Drive		At Site Access Drive		Between Site Access Drive and Old Post Road		At Playland Access Road		Between Playland Access Road and Playland Parkway Northbound On/Off Ramps		At Playland Parkway Northbound On/Off Ramps	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
	4	57	5	46	15	83	0	0	0	0	0	0	2	67	0	0	2	67
	1	14	1	9	3	17	0	0	0	0	0	0	0	0	0	0	1	33
Weather Conditions	2	29	4	36	0	0	0	0	0	0	0	0	1	33	0	0	0	0
	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Rye Police Department

Notes: The latest accident data available is from January 1, 2011 to December 31, 2013.

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1. *Theodore Fremd Avenue at Playland Access Drive* – Results of the analysis of this signalized intersection indicate it is currently operating at an overall Level of Service “B” during both the weekday morning and weekday afternoon peak hours. It includes a fixed time westbound left turn leg, which should be modified.
2. *Playland Access Drive at Playland Parkway Eastbound On/Off Ramp/Medical Office Building Access Drive* – Results of the analysis of this unsignalized intersection indicate it is currently operating at a Level of Service “E” and “C” or better during the weekday morning and weekday afternoon peak hours, respectively.
3. *Playland Access Drive at Office Building Access Drive* – Results of the analysis of this unsignalized intersection indicate it is currently operating at a Level of Service “B” or better during each peak hour analyzed.
4. *Old Post Road at Playland Access Drive* – Results of the analysis of this unsignalized intersection indicate it is currently operating at a Level of Service “F” and “D” or better during the weekday morning and weekday afternoon peak hours, respectively. This reflects conditions exiting from the STOP sign.
5. *Old Post Road at Thruway Access Drive* – Results of the analysis of this unsignalized intersection indicate it is currently operating at a Level of Service “F” and “D” or better during the weekday morning and weekday afternoon peak hours, respectively. This represents conditions exiting the ramp.

Table 3 provides a more detailed summary of the results of the analyses, as described above. This table includes the type of control, lane group/movement, description, the Level of Service, average vehicle per vehicle and the volume to capacity ratio. The capacity analysis worksheets are included in the Appendix of this report.

Table 3  
2014 EXISTING CONDITIONS – MEASURE OF EFFECTIVENESS (MOE) – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

INTERSECTION	CONTROL TYPE	PHYSICAL UNITS	2014 EXISTING CONDITIONS			
			Weekday Morning		Weekday Afternoon	
			LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio
Theodore Fremd Avenue at Playland Access Drive	Traffic Signal	EB TR APP.	B/18.2	0.48	B/17.6	0.40
		WB L T APP.	B/18.2	--	B/17.6	--
		NB LR APP.	B/11.4	0.28	A/9.2	0.14
		Overall	A/9.0	0.18	A/9.3	0.21
			B/10.1	--	A/9.3	--
			C/33.3	0.55	C/33.2	0.54
			C/33.3	--	C/33.2	--
Playland Access Drive at Playland Parkway Eastbound On/Off Ramp/Medical Office Building Access Drive	TWSC	EB L	B/19.6	--	B/19.5	--
		T	E/37.1	0.33	C/17.5	0.19
		R	E/37.1	0.33	C/17.5	0.19
		WB L	E/37.1	0.33	C/17.5	0.19
		T	D/26.5	0.60	C/20.9	0.43
		R	D/26.5	0.60	C/20.9	0.43
		NB L	B/13.5	0.58	B/10.2	0.29
Playland Access Drive at Office Building Access Drive	TWSC	SB L	A/0.2	0.02	A/0.1	0.01
			A/0.3	0.03	A/0.4	0.04
Old Post Road at Playland Access Drive	TWSC	EB L	B/12.3	0.00	B/11.3	0.01
		R	A/0.0	0.00	B/11.3	0.01
		NB L	A/0.0	0.00	A/0.0	0.00
Old Post Road at Thruway Access Drive	TWSC	EB L	A/0.2	0.02	A/0.1	0.01
		SB L	F/51.7	0.92	D/25.6	0.75
		R	F/51.7	0.92	D/25.6	0.75
Old Post Road at Thruway Access Drive	TWSC	EB L	A/4.9	0.46	A/3.9	0.38
		SB L	F/69.8	0.85	D/26.9	0.32
		R	F/69.8	0.85	D/26.9	0.32

Notes:

- Synchro 8.0 is used for capacity analysis.
- Level of Service determining parameter is called the service measure.
- For Signalized Intersections: Level of Service/Average Total delay per vehicle (seconds/vehicle).
- TWSC = Two-Way STOP Control.
- For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).

### Table 3 Cont'd

- ITE publication for Traffic Access and Impact Studies for site development "A Recommended Practice" indicated that overall Level of Service ratings of A to D are normally considered acceptable for signalized intersections (Level C or better are considered desirable). Levels of Service E and F are normally undesirable.
- V/C ratio indicates the amount of congestion for each Lane Group or Movement. Any V/C ratio greater than or equal to one indicates that the Lane Group or Movement is operating at above capacity.
- Physical Units consist of the following:
  1. Lane Group, Approach and Intersection Overall for Traffic Signal Controlled Intersections.
  2. Movements for TWSC Intersections.

NB = Northbound

EB = Eastbound

SB = Southbound

WB = Westbound

L = Left Turn

T = Through

R = Right Turn

APP. = Approach

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## **FUTURE TRAFFIC IMPACTS**

In this section of the report there is a description of the background and combined traffic volumes for a 2016 condition at each of the intersections included in the designated Study Area for the weekday morning and weekday afternoon peak hours. It includes a description of site traffic generation, distribution and assignment of site traffic and results of capacity analyses for a background and combined condition. A comparison of the results of these analyses indicates the potential impact to area roads and intersections. Capacity analyses were conducted to determine impact and if any mitigation is needed.

### **Background Traffic Volumes**

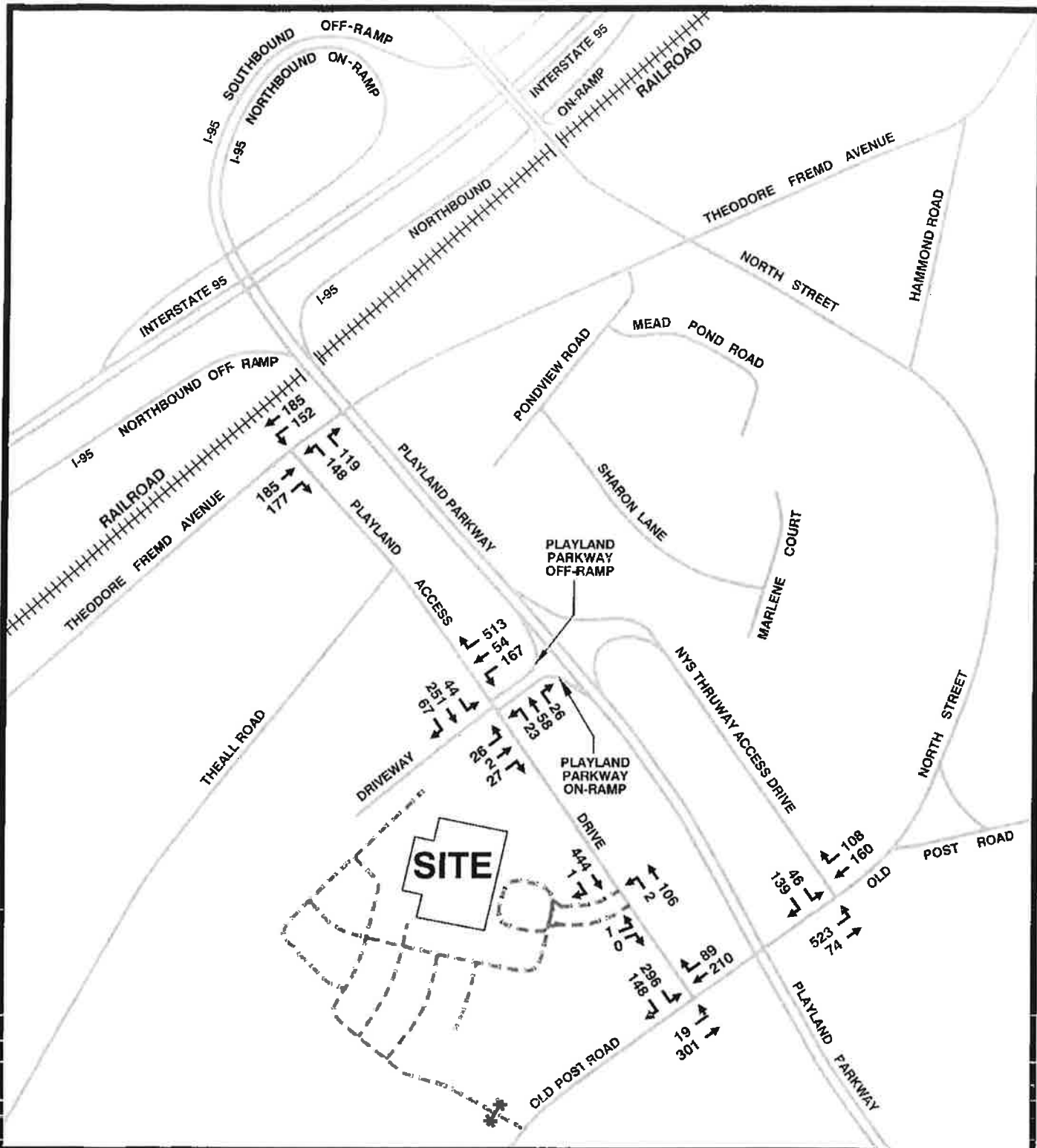
The baseline traffic volumes for 2014 were expanded to reflect a 2016 condition by applying an annual growth rate of one percent. The volumes for this condition are graphically illustrated in Figures 5 and 6 for the peak hours noted above.

In addition to a general growth rate for traffic in the surrounding area, field observations and discussions with the City of Rye Planning department identified the following other developments:

- 58 Attached Senior Residential units at 150 North Street, Traffic Study prepared by Tim Miller Associates, Inc.;
- Year One Development Program, Playland, Traffic Study prepared by John Meyer Consulting, P.C. October, 2013; and,
- 5,000 square-feet of vacant office space located at 555 Theodore Fremd Avenue. This traffic is included in the growth rate.

For planning purposes no additional traffic was added during the weekday morning peak hour for the Year One Development Program, Playland. Figures 7 and 8





Note: An annual growth rate of one percent was employed to the horizon year 2016.

**LEGEND**

- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

**2016 PROJECTED TRAFFIC VOLUMES  
WEEKDAY MORNING PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**



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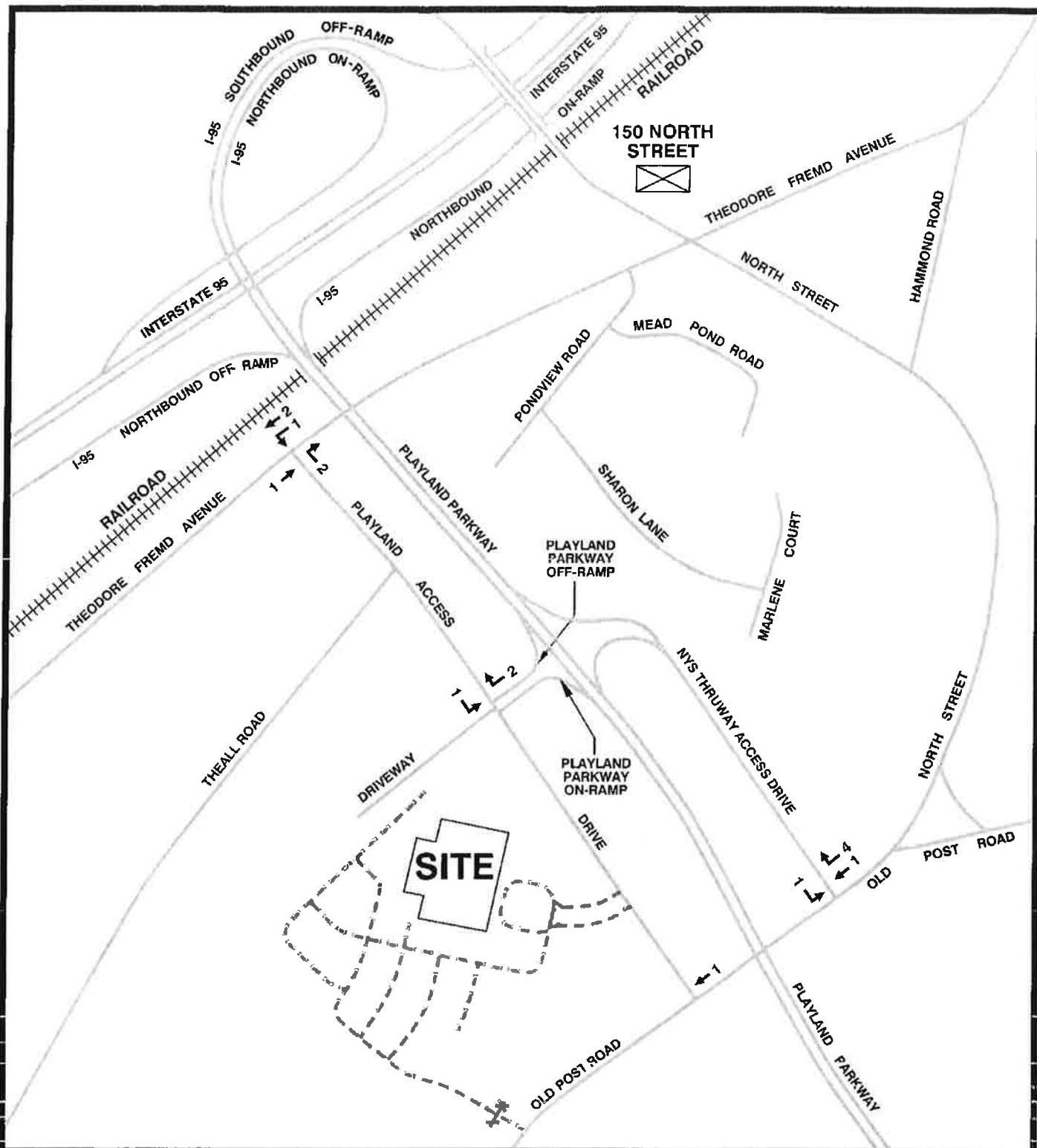
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6



**Notes: Other Developments include:**

- 5,000 Square Feet vacant office space located at 555 Theodore Fremd Avenue. This traffic is included in the growth rate.
- 58 Attached Senior Residential Units located at 150 North Street from Traffic Study prepared by Tim Miller Associates.

**LEGEND**

- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

**OTHER DEVELOPMENTS TRAFFIC VOLUMES  
WEEKDAY MORNING PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**

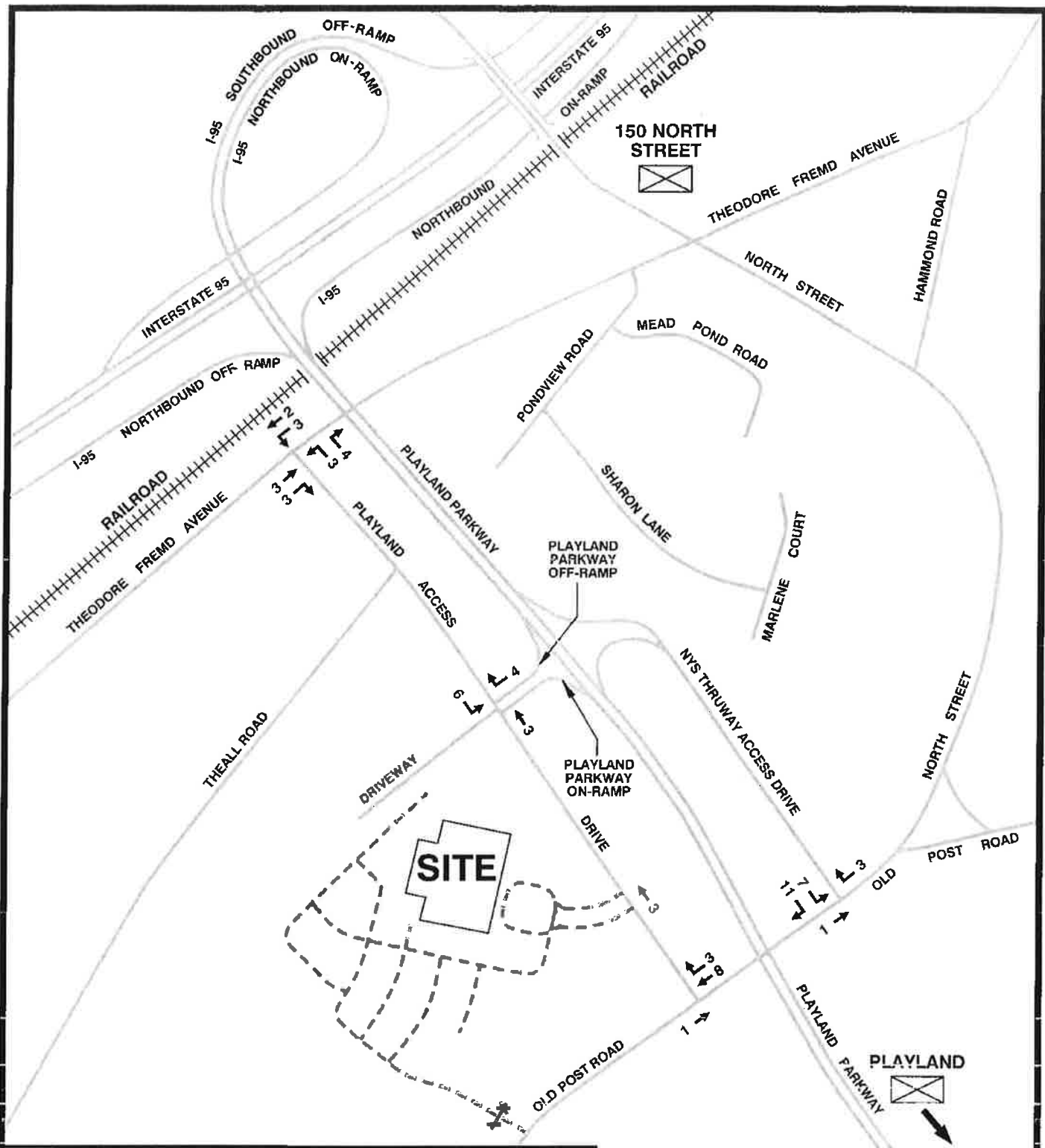


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**Notes: Other Developments include:**

- 5,000 Square Feet vacant office space located at 555 Theodore Fremd Avenue. This traffic is included in the growth rate.
- 58 Attached Senior Residential Units located at 150 North Street from Traffic Study prepared by Tim Miller Associates.
- Year One Development Program, Playland, Traffic Study prepared by John Meyer Consulting, P.C. October 2013.

**LEGEND**

- SITE ACCESS DRIVE**
- CLOSED SITE ACCESS DRIVE**

**OTHER DEVELOPMENTS TRAFFIC VOLUMES  
WEEKDAY AFTERNOON PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**



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show the other development traffic volumes for each peak hour. Figures 9 and 10 graphically illustrate the 2016 background traffic volumes for area roads and include the growth rate and traffic related to the other developments. It is important to note that the senior residential development and Playland development are not approved applications.

### **Site Traffic Generation**

To estimate the total number of vehicle trips for the proposed 135 age-restricted residential units, trip generation rates were obtained from the 9<sup>th</sup> Edition of “Trip Generation,” published by the Institute of Transportation Engineers (ITE) in 2012. Using the Senior Adult Housing – Attached Code #252 and applying the average rates available, the expected site traffic is 27 and 34 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively.

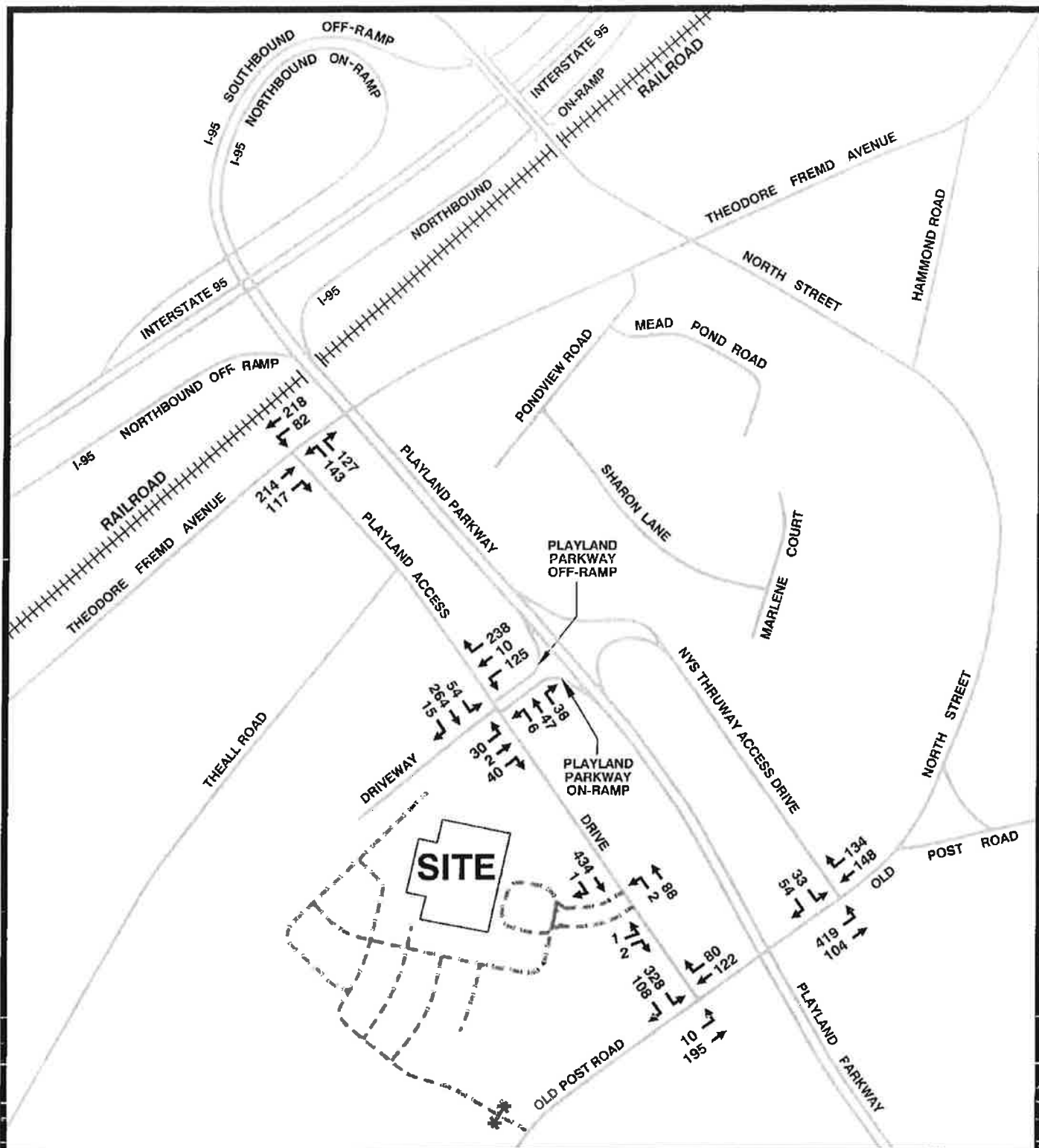
The current office building comprises 70,000 square feet of gross floor area. The building is vacant, except for the Owners of the building offices, which currently generates 4 and 6 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively.

To estimate the total number of vehicle trips for this type of building fully occupied with a multi-tenant occupancy, trip generation rates were obtained from the 9<sup>th</sup> Edition of “Trip Generation,” published by the Institute of Transportation Engineers (ITE) in 2012. Using the General Office Code #710 and applying the average rates available for this type of building, the expected estimate for total site traffic is 109 and 104 vehicle trip ends for the weekday morning and weekday afternoon peak hours, respectively. Comparing the current land use to the proposed age-restricted attached residential units, there will be a net decrease in site traffic of 82 and 70 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. Table 4 provides a more detailed breakdown of previous land use and proposed age-restricted attached residential units site traffic generation.



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Note: The 2016 Background Traffic Volumes include the 2016 Projected Traffic Volumes and the Other Developments Traffic Volumes.

**LEGEND**

- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

**2016 BACKGROUND TRAFFIC VOLUMES  
WEEKDAY AFTERNOON PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**



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Table 4  
 SITE TRAFFIC GENERATION COMPARISON – PEAK HOURS  
 Age-Restricted Residential Development  
 120 Old Post Road  
 Rye, New York

PROPOSED LAND USE				
LAND USE	SIZE	TRAFFIC DIRECTION	VEHICLE TRIP ENDS	
			Weekday Morning	Weekday Afternoon
Senior Adult	135	Enter	9	18
Housing –	Dwelling	Exit	<u>18</u>	<u>16</u>
Attached	Units	Total	27	34

Source: "Trip Generation," 9<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE), 2012 using Senior Adult Housing – Attached, Code #252 average rates.

CURRENT LAND USE				
LAND USE	SIZE	TRAFFIC DIRECTION	VEHICLE TRIP ENDS	
			Weekday Morning	Weekday Afternoon
General Office	70,000 S.F.	Enter	96	18
Building		Exit	<u>13</u>	<u>86</u>
		Total	109	104

Source: "Trip Generation," 9<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE), 2012 using General Office Building, Code #710 Average Rates.

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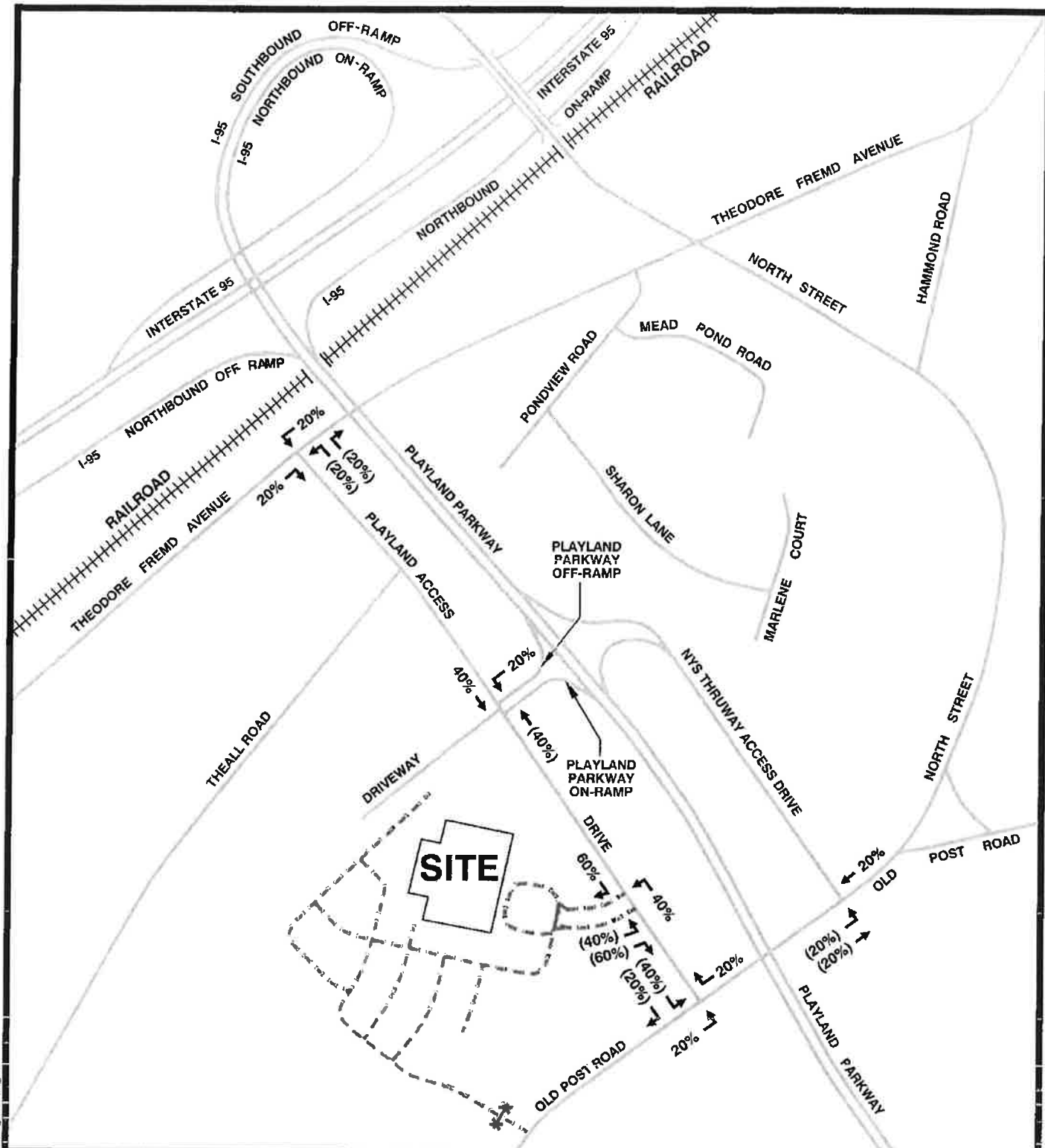
### **Site Traffic Distribution and Assignment**

To develop the anticipated distribution patterns for the additional site traffic, an evaluation of current patterns at the site access drive and patterns for traffic conditions on area roads were analyzed. Based on the results of this analysis it was determined that for arrivals 60 percent of the site traffic will turn right into the subject driveway from Playland Access Drive. It is anticipated that 20 percent will arrive from the southbound off-ramp of Playland Parkway from Interstate 95, 20 percent from the southwest on Theodore Fremd Avenue and the remaining 20 percent from the northeast on Theodore Fremd Avenue. The remaining 40 percent arriving at the site driveway from the south on Playland Access Drive is expected to breakdown to 20 percent arriving from the northeast on Old Post Road and the remaining 20 percent arriving from the southwest on Old Post Road.

For exiting movements it was found that 60 percent of the site traffic will exit and turn right from the driveway to travel southbound on Playland Access Drive to the intersection with Old Post Road. At Old Post Road 40 percent will turn left to travel northeast on Old Post Road, 20 percent turning left onto the Playland Parkway northbound ramps and the remaining 20 percent continuing northeast on Old Post Road to North Street. The remaining 20 percent traveling southeast on Playland Access Drive will turn right onto Old Post Road to travel to Boston Post Road. For the exiting movements turning left at the access drive 40 percent of the site traffic will continue northwest on Playland Access Drive to Theodore Fremd Avenue, where 20 percent will turn left and the remaining 20 percent will turn right.

Figure 11 graphically shows the distribution patterns anticipated for the additional to be added to area roads during the peak hours. Figures 12 and 13 show the site traffic generation and assignment for the peak hours.

File: G:\760 Uva 120 Old Post Road, Rye\AutoCad\Figures\Fig 11



**SITE TRAFFIC**

Enter 00%  
Exit (00%)

**LEGEND**

- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

**SITE TRAFFIC DISTRIBUTION**

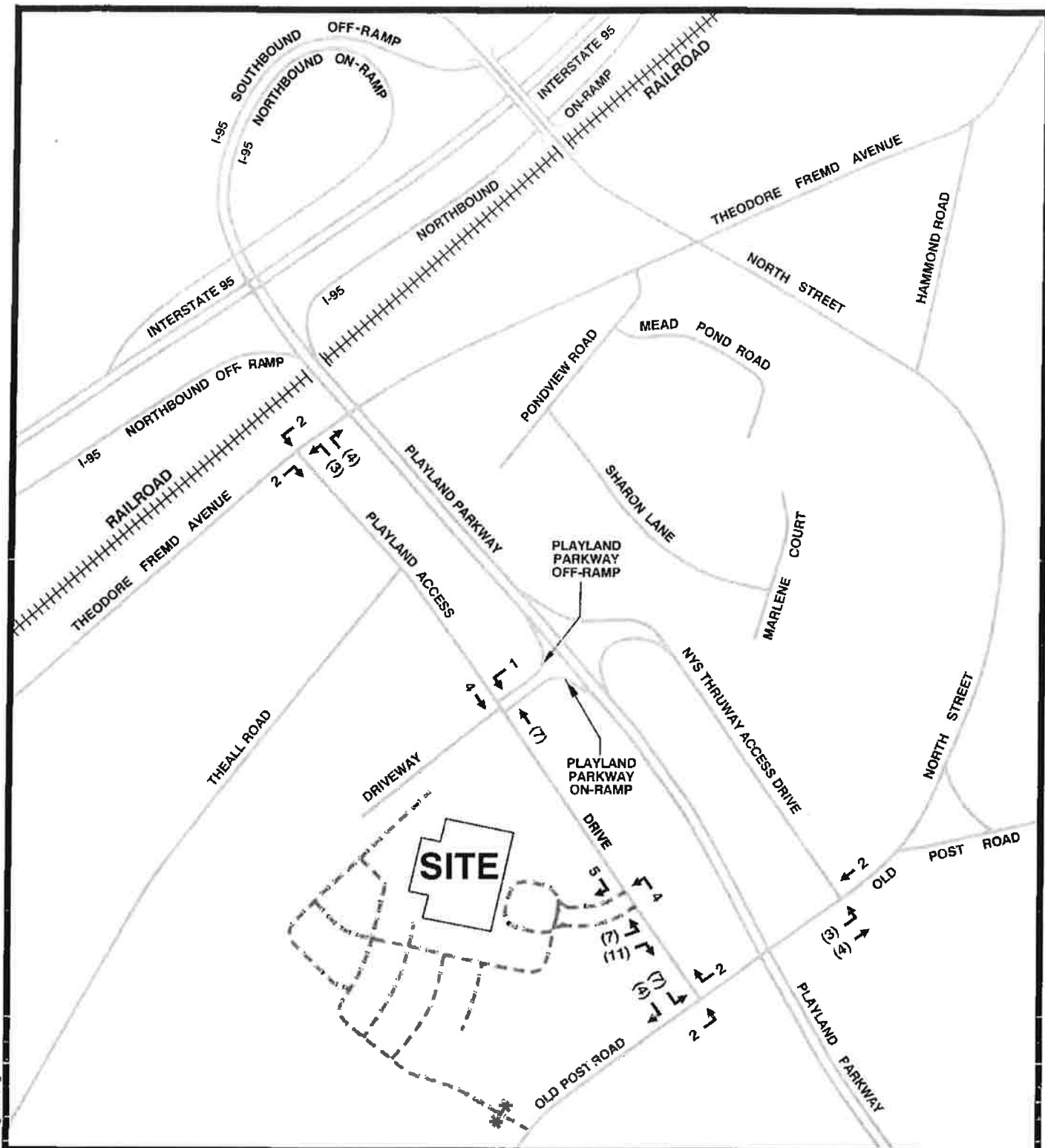
**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT  
120 Old Post Road  
Rye, New York**



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#### SITE TRAFFIC

Enter 9

Exit (18)

Total 27 Vehicle Trip Ends

#### LEGEND

- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

#### SITE TRAFFIC GENERATION AND ASSIGNMENT WEEKDAY MORNING PEAK HOUR

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT**  
120 Old Post Road  
Rye, New York

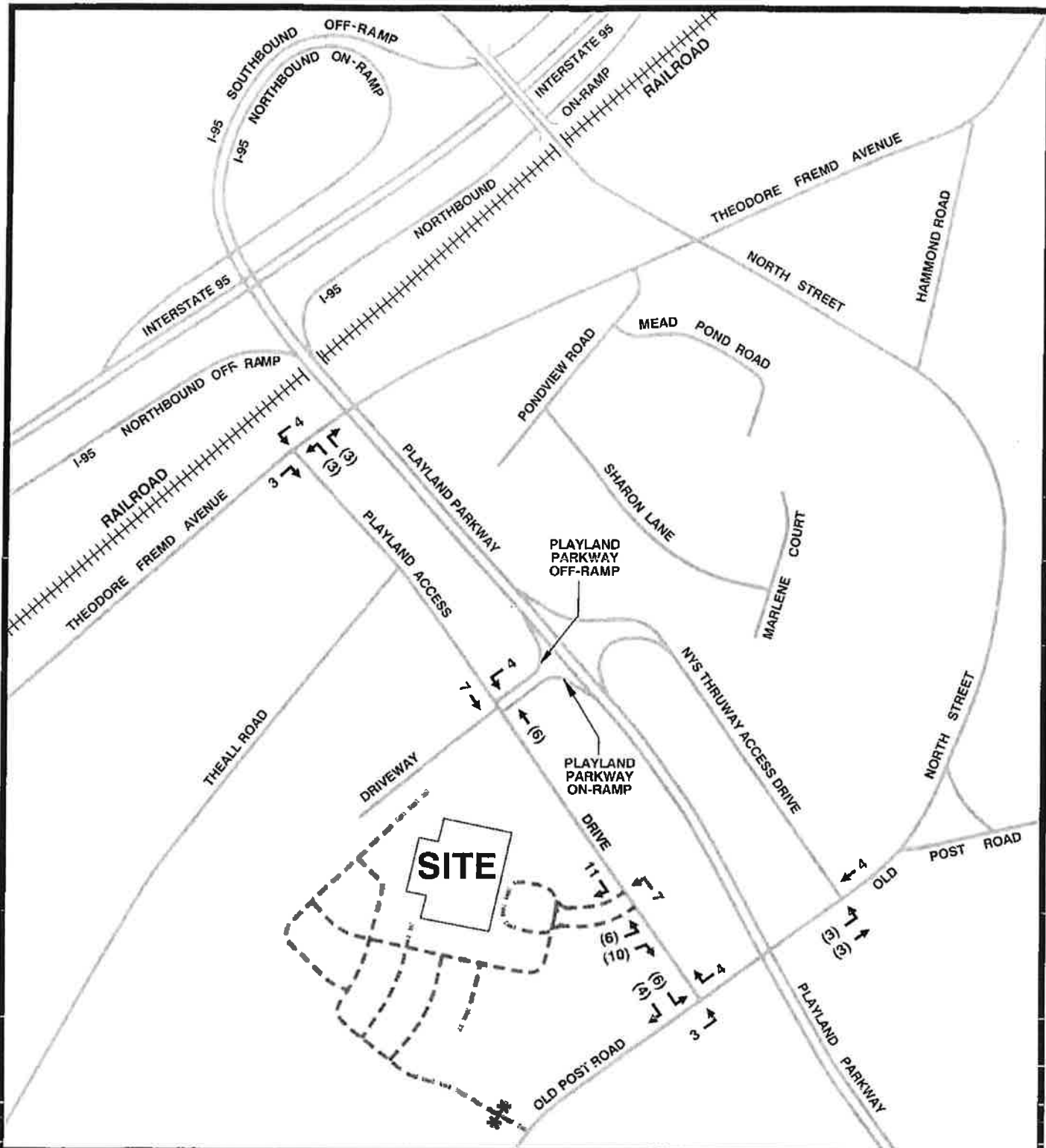


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#### SITE TRAFFIC

Enter 18

Exit (16)

Total 34 Vehicle Trip Ends

#### LEGEND

--- SITE ACCESS DRIVE

--- CLOSED SITE ACCESS DRIVE

#### SITE TRAFFIC GENERATION AND ASSIGNMENT WEEKDAY AFTERNOON PEAK HOUR

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT**  
120 Old Post Road  
Rye, New York



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## **Combined Traffic Volumes**

The combined traffic volumes were developed by adding the residential-related traffic to the area roadways for both peak periods to develop a 2016 combined traffic volume condition. Results of this combination of volumes, with the background traffic volumes, which are previously described in this report, Figures 14 and 15, were prepared.

## **Capacity Analysis Results – Background and Combined Conditions**

The following is a summary of the results of the analyses of the intersections included in this Study Area for both a background and combined condition for the four peak hours:

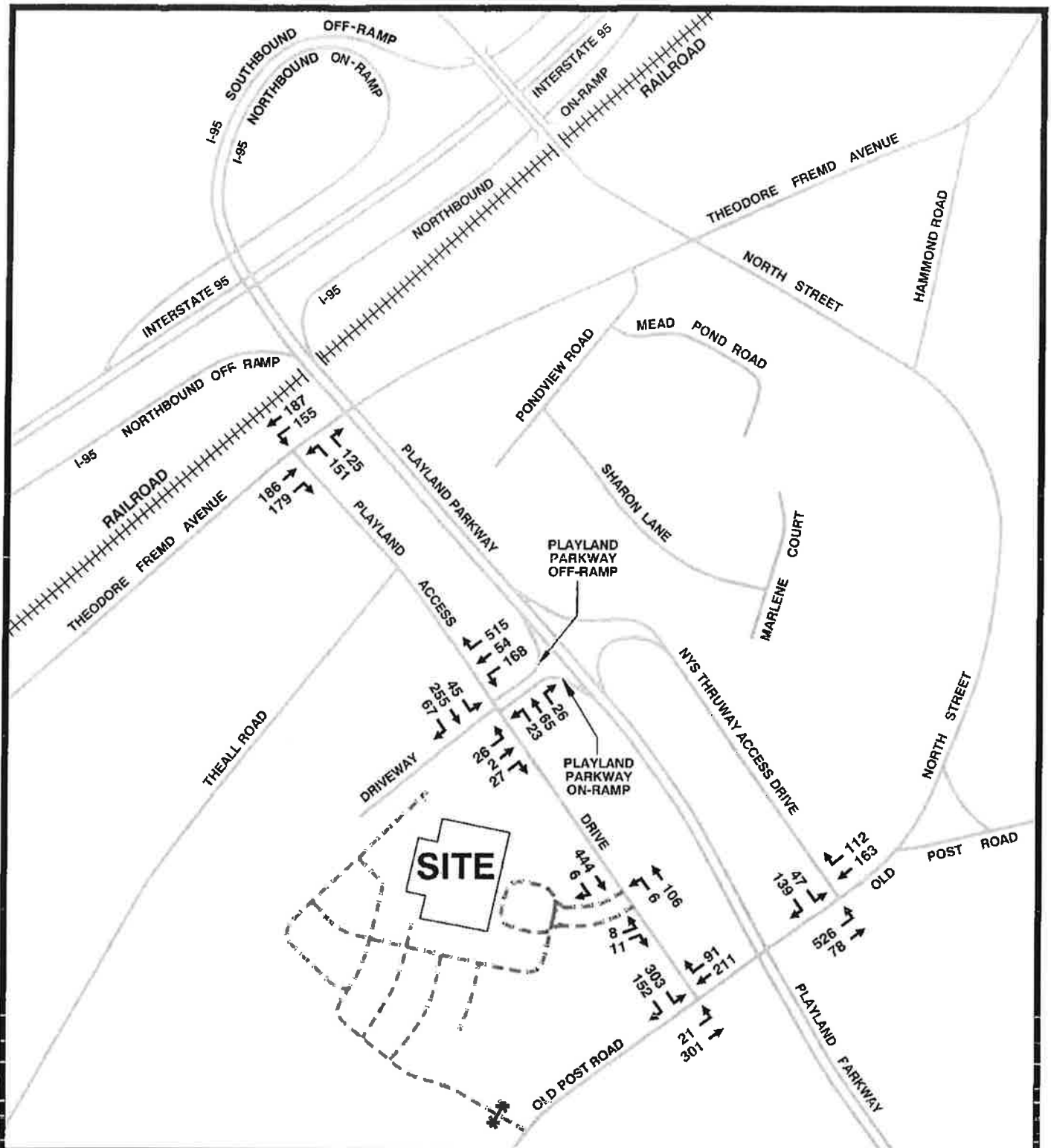
### **1. *Theodore Fremd Avenue at Playland Access Drive***

**Background** – Results of the analysis of this signalized intersection indicate it will operate at an overall Level of Service “B” during both the weekday morning and weekday afternoon peak hours.

**Combined** – Results of the analysis indicate this intersection will continue to operate the same overall Level of Service during the weekday afternoon peak hour. During the weekday morning peak hour there will be an acceptable change in Levels of Service from “B” to “C” with a change in average vehicle delay of 0.3 seconds.

### **2. *Playland Access Drive at Playland Parkway Southbound On/Off-Ramps/Medical Office Building Access Drive***

**Background** – Results of the analysis of this unsignalized intersection indicate that for the critical movements on the ramp and access drive approaches to the intersection will operate at Level of Service “E” and “C” or better during the weekday morning and weekday afternoon peak hours, respectively. The northbound and southbound critical movements on Playland Access Drive will operate at Level of Service “A” during both peak hours.



Note: The 2016 Combined Traffic Volumes include the 2016 Background Traffic Volumes and the Site Traffic Generation.

#### LEGEND

- SITE ACCESS DRIVE
- CLOSED SITE ACCESS DRIVE

#### 2016 COMBINED TRAFFIC VOLUMES WEEKDAY MORNING PEAK HOUR

**AGE-RESTRICTED RESIDENTIAL  
DEVELOPMENT**  
120 Old Post Road  
Rye, New York

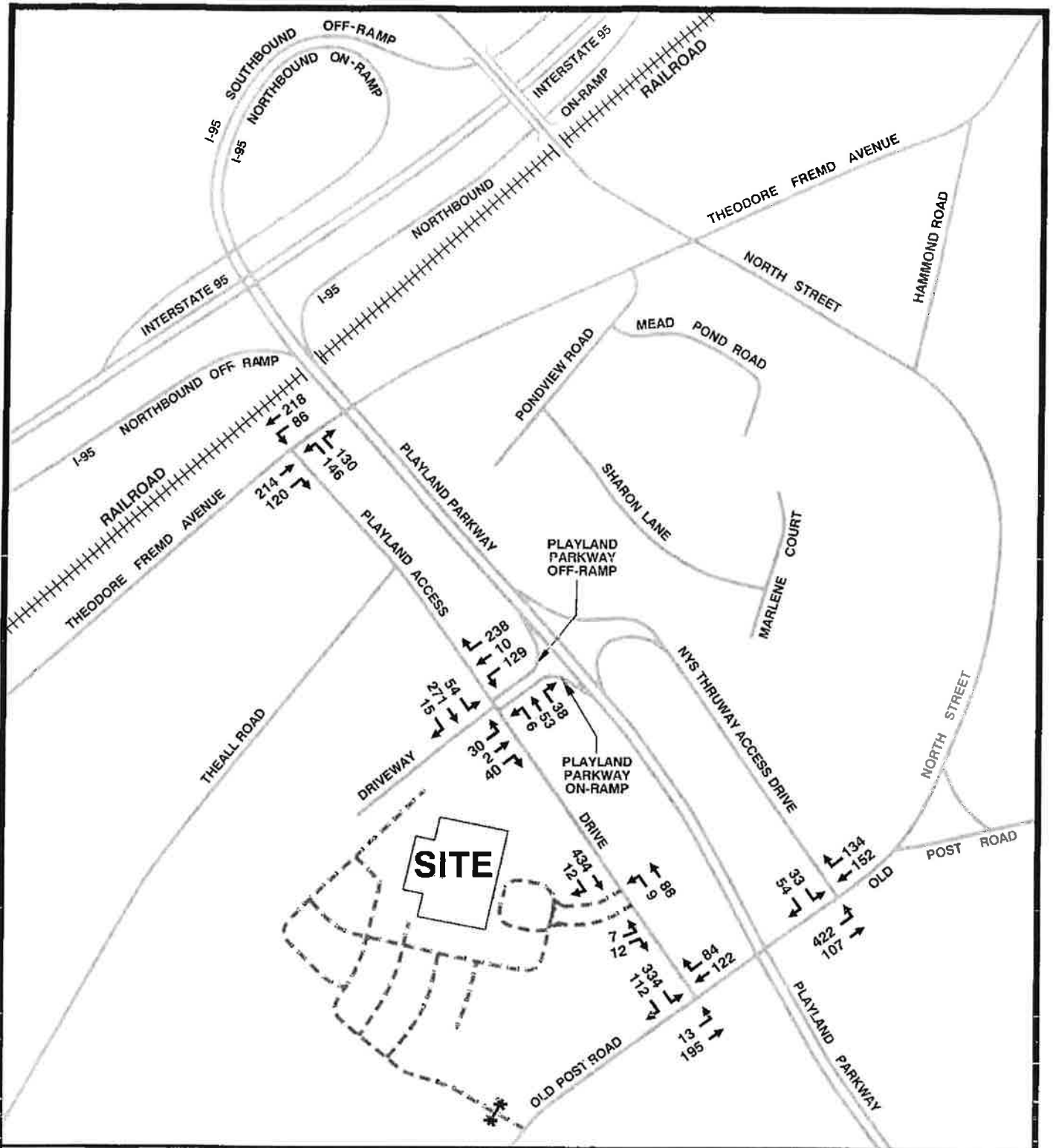


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Note: The 2016 Combined Traffic Volumes include the 2016 Background Traffic Volumes and the Site Traffic Generation.

**LEGEND**

-  **SITE ACCESS DRIVE**
-  **CLOSED SITE ACCESS DRIVE**

**2016 COMBINED TRAFFIC VOLUMES**  
**WEEKDAY AFTERNOON PEAK HOUR**

**AGE-RESTRICTED RESIDENTIAL DEVELOPMENT**  
**120 Old Post Road**  
**Rye, New York**



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**Combined** - Results of the analysis of this unsignalized intersection indicate that the Level of Service will remain the same for all movements with an increase in average vehicle delay of at most 1.5 seconds.

3. *Playland Access Drive at Office Building Access Drive*

**Background** – Results of the analysis indicate the critical movements will operate at Level of Service “B” or better during both peak hours.

**Combined** – Results of the analysis indicate critical movements at this intersection will continue to operate at Level of Service “B” or better during the two peak hours. The eastbound right turn movement will change from a Level of Service “A” to “B” during the weekday morning peak hour with an increase in average vehicle delay of 11.9 seconds.

4. *Old Post Road at Playland Access Drive*

**Background** – Results of the analysis indicate the critical movements on the southbound approach of Playland Access Drive (STOP sign approach) will operate at Level of Service “F” and “D” during the weekday morning and weekday afternoon peak hours, respectively. Results of the analysis indicate queue lengths totaling an average up to 13 vehicles during the peak hours.

Field observations of this intersection during the peak hours indicate similar vehicle queues and delays; however, these delays typically occur for less than 15 minutes during the peak hours.

**Combined** – Results of the analysis indicate that the critical movements on the southbound approach of this intersection will maintain the same Level of Service during both peak hours with an increase in average vehicle delay of at most 7.2 seconds. Reuse of the existing building will result in longer delays.

5. *Old Post Road at Thruway Access Drive*

**Background** – Results of the analysis of this unsignalized intersection indicate the critical southbound movements from the ramp are operating at Level of Service “F” and “D” during the weekday morning and weekday afternoon peak hours, respectively. The critical movements on Old Post Road are operating at Level of Service “A” during both peak hours.

**Combined** – Results of the analysis indicate that the critical movements on the southbound approach of this intersection will maintain the same Level of Service during both peak hours with an increase in average vehicle delay of at most 5.9 seconds. Again, reuse of the existing building will result in longer delays.

Table 5 provides a more detailed summary of the results of the analysis of each of these intersections with background and combined conditions. Capacity analysis worksheets are included in the Appendix of this report.

**Findings**

The purpose of this Traffic Report is to provide the City of Rye with a detailed analysis of potential impacts from this proposed development on adjacent roadways and nearby intersections in the designated Study Area. The proposal is to demolish the existing, but mostly vacant, office building comprising 70,000 square feet of space and construct an age-restricted residential development which will have 135 units. Access will remain the same from Playland Access Drive to the immediate south of the Old Post Road STOP sign-controlled intersection.

The Traffic Study is based on traffic volumes obtained in 2012 through 2014. These volumes were obtained by Frederick P. Clark Associates, Inc. and other Traffic Consultants for different nearby projects.

Table 5  
2016 FUTURE CONDITIONS – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT ASSESSMENT – PEAK HOURS  
Age-Restricted Residential Development  
120 Old Post Road  
Rye, New York

INTERSECTION	CONTROL TYPE	STORAGE/ LINK LENGTH	PHYSICAL UNITS	2016 BACKGROUND CONDITIONS						2016 COMBINED CONDITIONS						PROJECT IMPACTS		
				Weekday Morning			Weekday Afternoon			Weekday Morning			Weekday Afternoon			Weekday Morning Delay in LOS (Seconds)	Weekday Afternoon Delay in LOS (Seconds)	Project Delay (Seconds)
				LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)	LOS/ Delay	V/C Ratio	Queue Length (Feet)			
Theodore Fremd Avenue at Playland Access Drive	Traffic Signal	670	EB TR	B/18.5	0.49	229	B/17.9	0.42	216	B/18.6	0.49	231	B/17.9	0.42	218	No	No	0.0
			APP	B/18.5	--	--	B/17.9	--	--	B/18.6	--	--	B/17.9	--	--	No	No	0.0
		150	WB L	B/11.7	0.29	72	A/9.4	0.15	42	B/11.8	0.29	73	A/9.5	0.16	44	No	No	0.1
		260	T	A/9.0	0.18	86	A/9.3	0.21	100	A/9.0	0.18	86	A/9.3	0.21	100	No	No	0.0
			APP	B/10.2	--	--	A/9.3	--	--	B/10.3	--	--	A/9.4	--	--	No	No	0.1
		300	NB LR	C/33.8	0.56	243	C/33.9	0.56	244	C/34.2	0.57	250	C/34.2	0.58	250	No	No	0.3
Playland Access Drive at Playland Parkway Eastbound On/Off Ramp/Medical Office Building Access Drive	TWSC		APP	C/33.8	--	--	C/33.9	--	--	C/34.2	--	--	C/34.2	--	--	No	No	0.3
			Overall	B/19.8	--	--	B/19.8	--	--	C/20.1	--	--	B/20.0	--	--	B-C	No	0.2
		245	EB L	E/41.0	0.37	40	C/18.7	0.21	20	E/42.5	0.38	41	C/19.2	0.22	20	No	No	0.5
		245	T	E/41.0	0.37	40	C/18.7	0.21	20	E/42.5	0.38	41	C/19.2	0.22	20	No	No	0.5
		75	R	E/41.0	0.37	40	C/18.7	0.21	20	E/42.5	0.38	41	C/19.2	0.22	20	No	No	0.5
		350	WB L	D/28.1	0.63	103	C/22.6	0.46	58	D/29.4	0.64	108	C/23.9	0.48	63	No	No	1.3
Playland Access Drive at Office Building Access Drive	TWSC	350	T	D/28.1	0.63	103	C/22.6	0.46	58	D/29.4	0.64	108	C/23.9	0.48	63	No	No	1.3
		50	R	B/13.8	0.59	100	B/10.3	0.30	32	B/14.0	0.60	102	B/10.4	0.31	33	No	No	0.1
		400	NB L	A/0.2	0.02	2	A/0.1	0.01	0	A/0.2	0.02	2	A/0.1	0.01	0	No	No	0.0
		485	SB L	A/0.3	0.03	3	A/0.4	0.05	4	A/0.3	0.03	3	A/0.4	0.05	4	No	No	0.0
		130	EB L	B/12.4	0.00	0	B/11.4	0.01	0	B/11.9	0.04	3	B/11.8	0.04	3	No	No	0.4
		130	R	A/0.0	0.00	0	B/11.4	0.01	0	B/11.9	0.04	3	B/11.8	0.04	3	A-B	No	0.4
Old Post Road at Playland Access Drive	TWSC	110	NB L	A/0.0	0.00	0	A/0.0	0.00	0	A/0.0	0.01	0	A/0.1	0.01	1	No	No	0.1
		975	EB L	A/0.2	0.02	1	A/0.1	0.01	1	A/0.2	0.02	1	A/0.1	0.01	1	No	No	0.0
		110	SB L	F/58.9	0.96	305	D/28.6	0.79	191	F/66.1	0.99	331	D/31.2	0.81	209	No	No	2.6
Old Post Road at Thruway Access Drive	TWSC		R	F/58.9	0.96	305	D/28.6	0.79	191	F/66.1	0.99	331	D/31.2	0.81	209	No	No	2.6
		240	EB L	A/5.1	0.47	64	A/4.1	0.39	47	A/5.2	0.47	65	A/4.2	0.39	48	No	No	0.1
		925	SB L	F/91.1	0.94	201	D/33.0	0.44	53	F/97.0	0.96	208	D/34.2	0.45	54	No	No	1.2
		925	R	F/91.1	0.94	201	D/33.0	0.44	53	F/97.0	0.96	208	D/34.2	0.45	54	No	No	1.2

Notes:

- Synchro 8.0 is used for capacity analysis.
- Level of Service determining parameter is called the service measure.
- For Signalized Intersections Level of Service/Average Total delay per vehicle (seconds/vehicle).
- TWSC = Two-Way STOP Control
- For TWSC Intersections Level of Service/Average Control delay per vehicle (seconds/vehicle).
- ITE publication for Traffic Access and Impact Studies for site development "A Recommended Practice" indicated that overall Level of Service ratings of A to D are normally considered acceptable for signalized intersections (Level C or better are considered desirable). Levels of Service E and F are normally undesirable.



Table 5 Cont'd

- V/C ratio indicates the amount of congestion for each Lane Group or Movement. Any V/C ratio greater than or equal to one indicates that the Lane Group or Movement is operating at above capacity.
- Synchro 8.0 Macroscopic model is used for storage/ queue analysis.
- The Queue Length rows show the 95<sup>th</sup> percentile maximum queue length in feet.
- The Queue Length is for each lane. The total queue length is divided by the number of lanes and the lane utilization factor.
- The 95<sup>th</sup> percentile queue is the maximum back of the queue with the 95<sup>th</sup> percentile traffic volumes.
- **Bolded 95<sup>th</sup>** percentile queue exceeds the storage available.
- Physical Units consist of the following:
  - 1. Lane Group and Intersection Overall for Traffic Signal Controlled Intersections
  - 2. Movement for TWSC Intersections.

NB = Northbound EB = Eastbound SB = Southbound WB = Westbound  
L = Left Turn T = Through R = Right Turn APP = Approach

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In this Traffic Study it addresses traffic conditions for existing, no-build and build peak hour volumes near the site. It includes the weekday morning and weekday afternoon peak hours. Under the no-build condition it includes other developments, as well as an appropriate growth rate.

The proposal is to demolish the existing, but mostly vacant, office building and construct the age-restricted development, as noted above. To estimate site traffic for the proposed development trip generation rates were obtained from the Institute of Transportation Engineers (ITE) in "Trip Generation," 9th Edition, published 2012. Based on these trip generation rates it is estimated a development of this type and size will generate 27 and 34 vehicle trip ends during the typical weekday morning and weekday afternoon peak hours, respectively. For comparison purposes the current 70,000 square-foot office building, if it was to be fully reoccupied, could generate 109 and 104 vehicle trip ends during the same weekday morning and weekday afternoon peak hours, respectively. Therefore, the proposed residential development would result in a decrease in site traffic generation of 82 and 70 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. This is a significant reduction in site traffic generation potential directly related to the change in land use from an office building to a residential development.

The results of the capacity analysis for existing conditions indicate the Theodore Fremd Avenue/Playland Access Drive signalized intersections operates at an acceptable overall Level of Service "B" during peak hours. During the weekday morning peak hour motorists experience delays at the unsignalized intersection of Playland Access Drive/Playland Parkway/Medical Building, Old Post Road at Playland Access Drive and Old Post Road at Thruway Access Drive. All of the Study Area intersections operate at acceptable Levels of Service during the weekday afternoon peak hour. Similar results are found for 2016 background conditions. In both existing and background conditions analyses the office building located on the site is considered vacant.

Under a future combined condition, which includes the proposed residential development, each of these unsignalized intersections will continue to operate at acceptable Levels of Service, except for some Levels of Service "E" or "F" identified in a background condition. A comparison of the background and combined traffic conditions for each of these intersections indicate that Levels of Service will remain unchanged, except for change from an overall Level of Service "B" to "C" at the signalized intersection of Theodore Fremd Avenue at Playland Access Drive, with an insignificant overall delay due to the residential development of 0.3 seconds per vehicle during this one peak hour. Results of the analyses for the weekday afternoon peak hour indicate Levels of Service will remain the same at each of the unsignalized intersections and at each of the lane groups or approaches with minimal, if any, increase in average vehicle delay due to the proposed residential development.

Based on the results of these analyses it is recommended that the current traffic control and pavement markings at each of these locations remain unchanged. The analysis indicates that the added site traffic for a residential development is insignificant and will not change the overall operation of any of the intersections in the Study Area. In addition, there is a significant benefit of converting this office building to a residential development, which results in a significant decrease in site traffic generation during the key weekday morning and weekday afternoon peak hours.

The results of these analyses have been compared to field observations at each of these locations during both the weekday morning and weekday afternoon peak hours. It is noted that motorists do experience short-term delays at the Playland Parkway off ramp to Playland Access Drive and on the Playland Access Drive and Thruway Access Drive approaches to Old Post Road during peak hours. However, based on the results of this analysis each intersection should maintain STOP control. Any consideration for signalization, if warranted, at the Playland Parkway ramps to Playland Access Drive may

actually result in an increase in delays, which could impact the mainline of Playland Parkway (southbound lanes).

At the Old Post Road intersection at Playland Access Drive and Thruway Access Drive it is likely that either location would meet the minimum standards for consideration for traffic signals.

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11/3/14

## APPENDIX

PHOTOGRAPHS





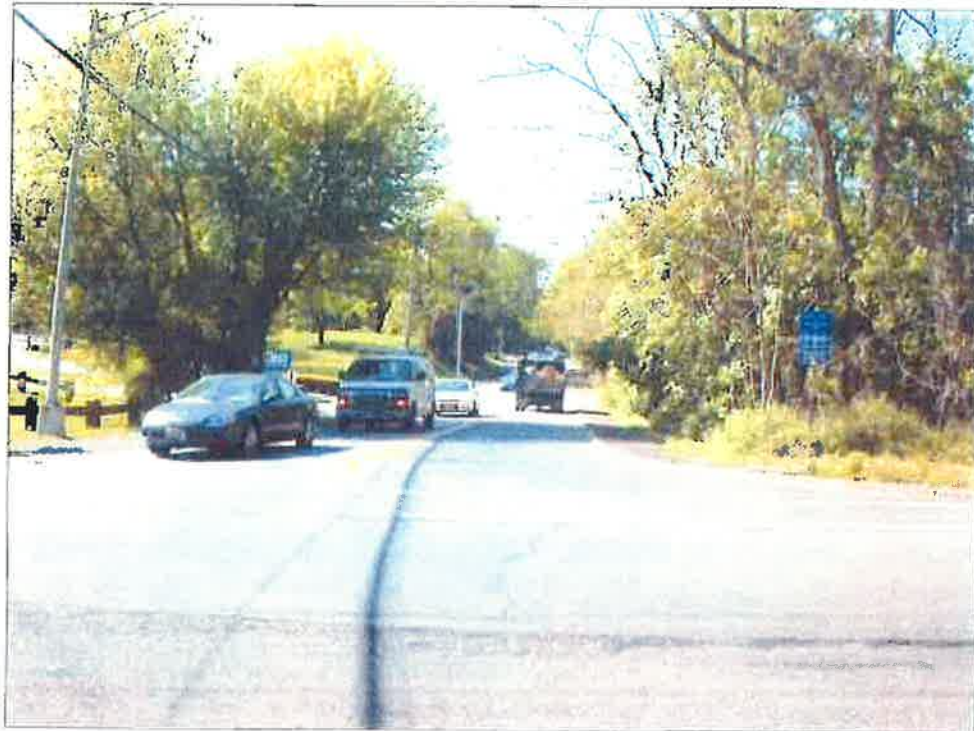
**SITE ACCESS DRIVE AT PLAYLAND ACCESS DRIVE,  
LOOKING WEST**



**PLAYLAND ACCESS DRIVE AT SITE ACCESS DRIVE,  
LOOKING NORTH**



**PLAYLAND ACCESS DRIVE AT SITE ACCESS DRIVE,  
LOOKING SOUTH**



**PLAYLAND ACCESS DRIVE AT OLD POST ROAD,  
LOOKING NORTH**

**Frederick P. Clark Associates, Inc.**

**November 2014**

File: L:\700\NEW YORK\Krye\Office Building 764.00\Exhibits\Exhibit-2

**Exhibit-2**





**OLD POST ROAD AT PLAYLAND ACCESS DRIVE,  
LOOKING WEST**



**OLD POST ROAD AT PLAYLAND ACCESS DRIVE,  
LOOKING EAST**



**PLAYLAND PARKWAY NORTHBOUND ON/OFF RAMP  
AT OLD POST ROAD, LOOKING NORTH**



**OLD POST ROAD AT PLAYLAND PARKWAY  
NORTHBOUND ON/OFF RAMP, LOOKING WEST**





**OLD POST ROAD AT PLAYLAND PARKWAY  
NORTHBOUND ON/OFF RAMP, LOOKING EAST**



**PLAYLAND PARKWAY SOUTHBOUND ON/OFF-RAMP  
AT PLAYLAND ACCESS DRIVE, LOOKING EAST**

**Frederick P. Clark Associates, Inc.**

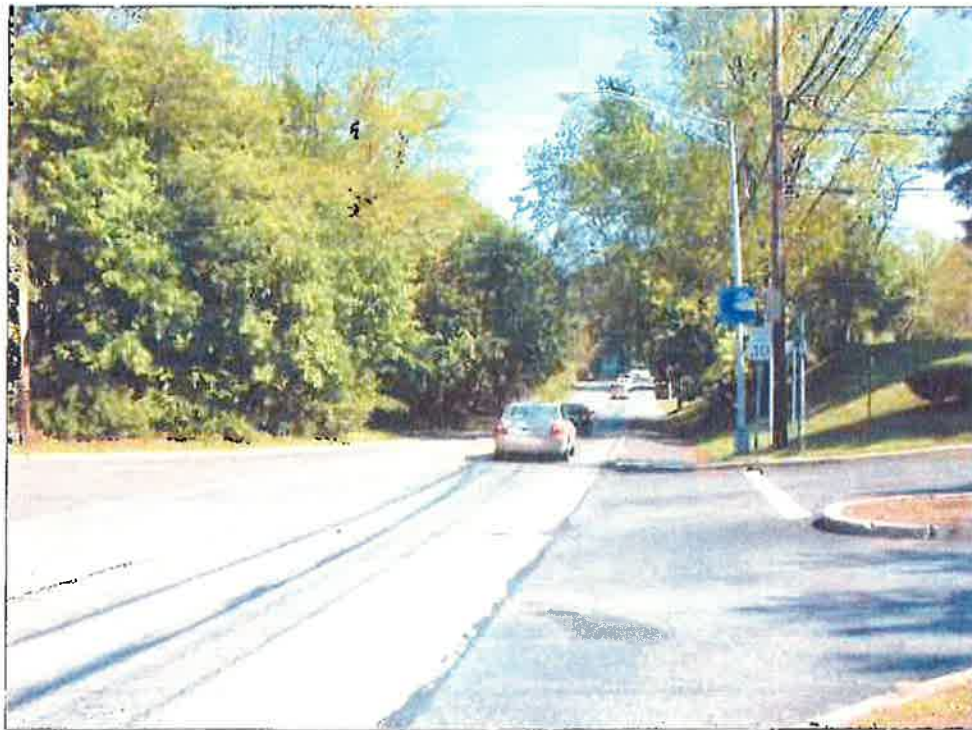
**November 2014**

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**Exhibit-5**



**MEDICAL OFFICE ACCESS DRIVE AT PLAYLAND ACCESS DRIVE,  
LOOKING WEST**



**PLAYLAND ACCESS DRIVE AT MEDICAL OFFICE ACCESS DRIVE/  
PLAYLAND PARKWAY SOUTHBOUND ON/OFF-RAMP, LOOKING SOUTH**

**Frederick P. Clark Associates, Inc.**

**November 2014**

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**Exhibit-6**





**PLAYLAND ACCESS DRIVE AT MEDICAL OFFICE ACCESS DRIVE/  
PLAYLAND PARKWAY SOUTHBOUND ON/OFF-RAMPS, LOOKING NORTH**



**PLAYLAND ACCESS DRIVE AT THEODORE FREMD AVENUE,  
LOOKING SOUTH**



**THEODORE FREMD AVENUE AT PLAYLAND ACCESS DRIVE,  
LOOKING WEST**



**THEODORE FREMD AVENUE AT PLAYLAND ACCESS DRIVE,  
LOOKING EAST**

## **CAPACITY ANALYSIS PROCEDURES**

## CAPACITY ANALYSIS PROCEDURES

*Intersections* – Four methods of analysis are needed to evaluate different kinds of intersections. These methods are based on procedures found in the Fifth Edition of the Highway Capacity Manual 2010 and are described below.

### *Signalized Intersections*

This chapter's methodology applies to three-leg and four-leg intersections of two streets or highways where the signalization operates in isolation from nearby intersections.

*Performance Measure* – An intersection's performance is described by the use of one or more quantitative measures that characterize some aspect of the service provided to a specific road user group. Performance measures include automobile volume-to-capacity ratio, automobile delay, queue storage ratio, pedestrian delay, pedestrian circulation area, pedestrian perception score, bicycle delay, and bicycle perception score. LOS is considered a performance measure. It is computed for the automobile, pedestrian, and bicycle travel modes.

*Travel Modes* – There are three methodologies that can be used to evaluate intersection performance from the perspective of motorists, pedestrians, and bicyclists. They are referred to as the automobile methodology, the pedestrian methodology, and the bicycle methodology.

*Lane Groups and Movement Groups* – A separate lane group is established to (a) each lane (or combination of adjacent lanes) that exclusively serves one movement and (b) each lane shared by two or more movements. The concept of movement groups is also established to facilitate data entry. A separate movement group is established for (a) each turn movement with one or more exclusive turn lanes and (b) the through movement (inclusive of any turn movements that share a lane).

*LOS Criteria* – LOS criteria for the automobile mode are different from those for the non-automobile modes. The automobile-mode criteria are based on performance measures that are field measurable and perceivable by travelers. The criteria for the non-automobile modes are based on scores reported by travelers indicating their perception of service quality.

*Automobile Mode* – LOS for Automobile Mode can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for entire intersection or an approach. Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a surrogate measure of driver discomfort

and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group. The following describes each LOS.

*Level of Service A* – It describes operations with a control delay of 10.0 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

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

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

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

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

*Level of Service F* – It describes operations with control delay between 55 to 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

The LOS thresholds established for automobile mode at a signalized intersection

CONTROL DELAY (SECONDS PER VEHICLE)	LOS BY VOLUME-TO- CAPACITY RATIO	
	$\leq 1.0$	$>1.0$
$\leq 10$	A	F
$>10$ to 20	B	F
$>20$ to 35	C	F
$>35$ to 55	D	F
$>55$ to 80	E	F
$>80$	F	F

Note: For approach-based and intersection-wide assessments, LOS is defined by control delay.

### ***Two-Way STOP-Controlled Intersections (TWSC)***

One typical configuration is a four-leg intersection, where the major street is uncontrolled, while the minor street is controlled by STOP signs. The other typical configuration is a three-leg intersection, where the single minor-street approach is controlled by a STOP sign.

*Theoretical Basic* – Gap-acceptance models begin with the recognition that TWSC Intersections give no positive indication or control to the driver on the minor street as to when it is appropriate to leave the stop line and enter the major street. The driver must determine when a gap on the major street is large enough to permit entry and when to enter, on the basis of the relative priority of the competing movements. This decision-making process has been formalized analytically into what is commonly known as gap-acceptance theory. Gap-acceptance theory includes three basic elements: the size and distribution (availability) of gaps on the major street, the usefulness of these gaps to the minor-street drivers, and the relative priority of the various movements at the intersection.

*Critical Headway and Follow-Up Headway* – The *critical headway* is defined as the minimum interval in the major street traffic stream that allows intersection entry for one minor-street vehicle. Thus, the driver's critical headway is the minimum headway that would be acceptable. Critical headway can be estimated on the basis of observations of the largest rejected and smallest accepted headway for a given intersection. The *follow-up headway* is defined as the time between the departure of one vehicle from the minor street



and the departure of the next vehicle using the same major-street headway, under a condition of continuous queuing on the minor street.

#### Base Critical Headways for TWSC Intersections

VEHICLE MOVEMENT	BASE CRITICAL HEADWAY		
	Two Lanes	Four Lanes	Six Lanes
Left turn from major	4.1	4.1	5.3
U-turn from major	N/A	6.4 (wide) 6.9 (narrow)	5.6
Right turn from minor	6.2	6.9	7.1
Through traffic On major	1-stage:6.5 2-stage, stage I: 5.5 2-stage, Stage II: 5.5	1-stage:6.5 2-stage, stage I: 5.5 2-stage, Stage II: 5.5	1-stage:6.5* 2-stage, stage I: 5.5* 2-stage, Stage II: 5.5*
Left turn from minor	1-stage:7.1 2-stage, stage I: 6.1 2-stage, Stage II: 6.1	1-stage:7.5 2-stage, stage I: 6.5 2-stage, Stage II: 6.5	1-stage:6.4 2-stage, stage I: 7.3 2-stage, Stage II: 6.7

\*Use caution; values estimated

#### Base Follow-up Headways for TWSC Intersections

VEHICLE MOVEMENT	BASE FOLLOW-UP HEADWAY		
	Two Lanes	Four Lanes	Six Lanes
Left turn from major	2.2	2.2	3.1
U-turn from major	N/A	2.5 (wide) 3.1 (narrow)	2.3
Right turn from minor	3.3	3.3	3.9
Through traffic on major	4.0	4.0	4.0
Left turn from minor	3.5	3.5	3.8

*Level Of Service Criteria* – LOS for a TWSC intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turn. LOS is not defined for the intersection as a whole or for major-street approaches. LOS F is assigned to

the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

*Automobile Mode* – The methodology applies to TWSC intersections with up to three lanes (either shared or exclusive) on the major-street approaches and up to three lanes on the minor-street approaches (with no more than one exclusive lane for each movement on the minor-street approach). Effects from other intersections are accounted for only in situations in which a TWSC intersection is located on an urban street segment between coordinated signalized intersections. In this situation, the intersection can be analyzed by using the procedures in urban street segment.

#### Level-of Service Criteria for Automobile Mode

CONTROL DELAY (SECONDS PER VEHICLE)	LOS BY VOLUME-TO-CAPACITY RATIO	
	1.0	>1.0
0- 10	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

g:\760.004 120 old post road, rye\word\cap.doc:

## TURNING MOVEMENT COUNTS

AGE-RESTRICTED RESIDENTIAL DEVELOPMENT, 120 OLD POST ROAD, RYE, NY (#760.004)  
FIELD DATA SUMMARY - Old Post Road at Playland Access Drive

Thursday 30-Oct-14	Eastbound - Old Post Road			Westbound - Old Post Road			Northbound			Southbound - Playland Access Drive			Last 4 Quarters		Pedestrians (Approaches)		
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total	Quarters	EB	WB	SB
7:00 AM	4	31	0	35	0	5	0	5	0	49	0	14	63	108	0	0	0
7:15 AM	2	28	0	30	0	12	0	13	0	60	0	45	105	160	0	0	0
7:30 AM	3	55	0	58	0	27	0	23	0	57	0	43	100	208	0	0	2
7:45 AM	4	80	0	84	0	47	0	67	0	67	0	47	114	265	741	0	0
8:00 AM	2	72	0	74	0	49	0	23	0	66	0	30	96	242	875	0	0
8:15 AM	30	74	0	84	0	49	0	20	0	82	0	36	118	271	986	0	0
8:30 AM	3	69	0	72	0	46	0	21	0	75	0	32	107	247	1,025	0	0
8:45 AM	6	54	0	60	0	21	0	24	0	90	0	30	120	225	985	0	0
9:00 AM	19	295	0	314	0	191	0	85	0	290	0	145	435	1,025	0	0	7
AM Peak Hour Vol																	
Peak Hour Factor				0.93				0.96					0.92	0.95			

## ATI #14153

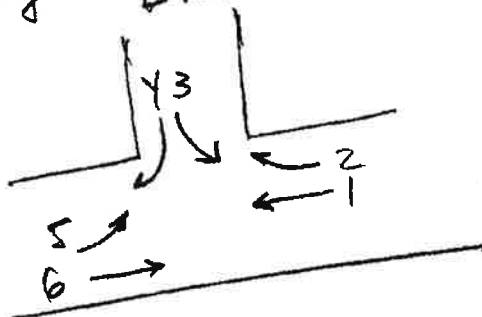
Surveyor: \_\_\_\_\_

Day/Date:

10.30.14



Playland Access  
Drive

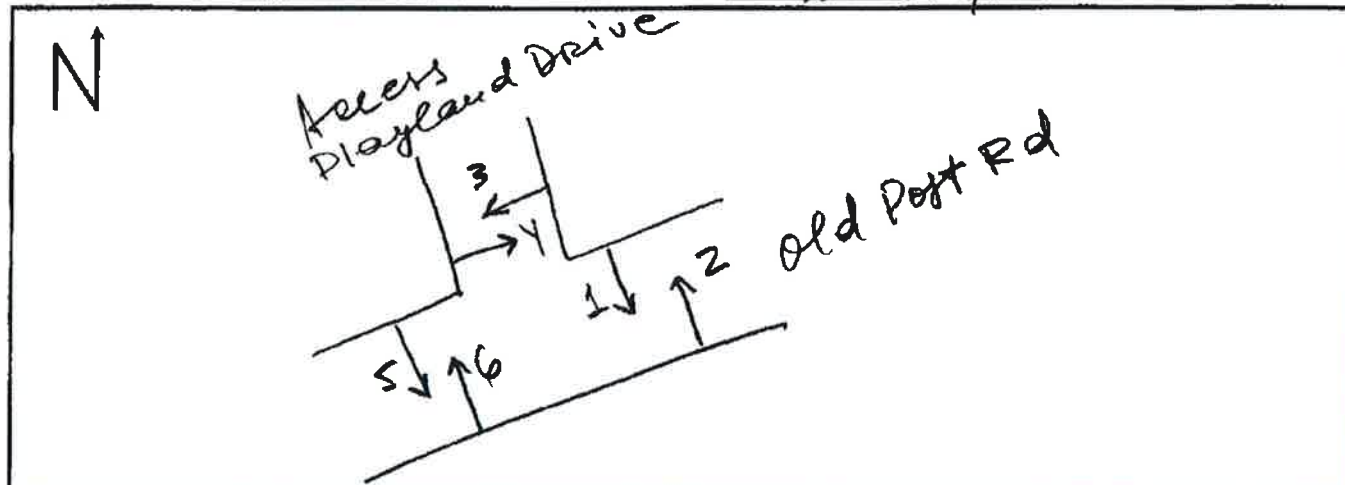


old Post Rd

[illegible]

**Location:** **Old Post Road & Access Playland Drive**

Surveyors: \_\_\_\_\_ Day/Date: 10.30.14

[illegible]



## **CAPACITY ANALYSIS WORKSHEETS**

# **CAPACITY ANALYSIS WORKSHEETS**

**Existing Conditions**











CA-1

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	145	117	181	174	149	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Fr't	0.940		0.934			
Flt Protected	0.973				0.950	
Satd. Flow (prot)	1704	0	1740	0	1770	1863
Flt Permitted	0.973				0.410	
Satd. Flow (perm)	1704	0	1740	0	764	1863
Right Turn on Red		No		Yes		
Satd. Flow (RTOR)			63			
Link Speed (mph)	30		30			30
Link Distance (ft)	375		786			931
Travel Time (s)	8.5		17.9			21.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	159	129	199	191	164	199
Shared Lane Traffic (%)						
Lane Group Flow (vph)	288	0	390	0	164	199
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	4		2		1	5
Permitted Phases					5	
Detector Phase	4		2		1	5
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	35.0		49.0		16.0	65.0
Total Split (s)	35.0		49.0		16.0	65.0
Total Split (%)	35.0%		49.0%		16.0%	65.0%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	0.5		0.5		0.5	0.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0		4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Max		Max		Max	Max
Act Effct Green (s)	31.0		45.0		61.0	61.0
Actuated g/C Ratio	0.31		0.45		0.61	0.61

11/3/2014

FREDERICK P. CLARK ASSOCIATES, INC. - STC

Synchro 8 Report

Page 1







CA-2

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
v/c Ratio	0.55		0.48		0.28	0.18
Control Delay	33.3		18.2		11.4	9.0
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	33.3		18.2		11.4	9.0
LOS	C		B		B	A
Approach Delay	33.3		18.2			10.1
Approach LOS	C		B			B
Queue Length 50th (ft)	152		140		41	51
Queue Length 95th (ft)	236		223		70	83
Internal Link Dist (ft)	295		706			851
Turn Bay Length (ft)					150	
Base Capacity (vph)	528		817		586	1136
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.55		0.48		0.28	0.18

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 19.6










Intersection LOS: B

Intersection Capacity Utilization 53.6%

ICU Level of Service A

Analysis Period (min) 15

#### Splits and Phases: 1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE



















CA-3

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS & PLAYLAND A.D.

2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	43	245	66	23	57	25	25	2	26	165	53	503
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		75	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.968				0.850			0.850
Flt Protected		0.994			0.989			0.955			0.964	
Satd. Flow (prot)	0	1805	0	0	1783	0	0	1779	1583	0	1796	1583
Flt Permitted		0.994			0.989			0.955			0.964	
Satd. Flow (perm)	0	1805	0	0	1783	0	0	1779	1583	0	1796	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			484			289			91	
Travel Time (s)		12.8			11.0			6.6			2.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	48	275	74	26	64	28	28	2	29	185	60	565
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	397	0	0	118	0	0	30	29	0	245	565
Sign Control		Free			Free			Stop			Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 50.3%

ICU Level of Service A

Analysis Period (min) 15



















CA-4

# HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS & PLAYLAND A.D.

2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	43	245	66	23	57	25	25	2	26	165	53	503
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	48	275	74	26	64	28	28	2	29	185	60	565
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									3			
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		997										
pX, platoon unblocked												
vC, conflicting volume	92			349			1134	553	312	554	576	78
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	92			349			1134	553	312	554	576	78
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			98			57	99	96	54	85	42
cM capacity (veh/h)	1503			1209			65	418	728	406	405	983
Direction, Lane #	SE 1	NW 1	NE 1	SW 1	SW 2							
Volume Total	398	118	60	245	565							
Volume Left	48	26	28	185	0							
Volume Right	74	28	29	0	565							
cSH	1503	1209	179	406	983							
Volume to Capacity	0.03	0.02	0.33	0.60	0.58							
Queue Length 95th (ft)	2	2	34	96	95							
Control Delay (s)	1.2	1.9	37.1	26.5	13.5							
Lane LOS	A	A	E	D	B							
Approach Delay (s)	1.2	1.9	37.1	17.4								
Approach LOS			E	C								
Intersection Summary												
Average Delay			12.3									
Intersection Capacity Utilization			50.3%		ICU Level of Service				A			
Analysis Period (min)			15									












CA-5

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

7: OFFICE ACCESS DRIVE & PLAYLAND ACCESS DRIVE/PLAYLAND A.D2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (vph)	435	1	2	104	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	1863	0	0	1861	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	1863	0	0	1861	1770	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	484			139	157	
Travel Time (s)	11.0			3.2	3.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	444	1	2	106	1	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	445	0	0	108	1	0
Sign Control	Free			Free	Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.0%

ICU Level of Service A










Analysis Period (min) 15

CIA-6

# HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

7: OFFICE ACCESS DRIVE & PLAYLAND ACCESS DRIVE/PLAYLAND A.D2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (veh/h)	435	1	2	104	1	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	444	1	2	106	1	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			445		555	444
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			445		555	444
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1115		492	614
Direction, Lane #	SE 1	NW 1	NE 1			
Volume Total	445	108	1			
Volume Left	0	2	1			
Volume Right	1	0	0			
cSH	1700	1115	492			
Volume to Capacity	0.26	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.2	12.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	12.3			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.1			
Intersection Capacity Utilization			33.0%	ICU Level of Service	A	
Analysis Period (min)			15			

11/3/2014

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

Synchro 8 Report

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Lanes, Volumes, Timings  
8: OLD POST ROAD & PLAYLAND ACCESS DRIVE

120 OLD POST ROAD, RYE, NY  
2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	290	145	19	295	206	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.955				0.960	
Flt Protected	0.968			0.997		
Satd. Flow (prot)	1722	0	0	1857	1788	0
Flt Permitted	0.968			0.997		
Satd. Flow (perm)	1722	0	0	1857	1788	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)			7			7
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	315	158	20	317	215	91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	473	0	0	337	306	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 62.7%










ICU Level of Service B

Analysis Period (min) 15

CA-8

HCM Unsignalized Intersection Capacity Analysis  
 8: OLD POST ROAD & PLAYLAND ACCESS DRIVE

120 OLD POST ROAD, RYE, NY  
 2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	290	145	19	295	206	87
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96
Hourly flow rate (vph)	315	158	20	317	215	91
Pedestrians	7					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	625	267	312			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	625	267	312			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	28	79	98			
cM capacity (veh/h)	439	767	1241			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	473	338	305			
Volume Left	315	20	0			
Volume Right	158	0	91			
cSH	512	1241	1700			
Volume to Capacity	0.92	0.02	0.18			
Queue Length 95th (ft)	278	1	0			
Control Delay (s)	51.7	0.6	0.0			
Lane LOS	F	A				
Approach Delay (s)	51.7	0.6	0.0			
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay			22.1			
Intersection Capacity Utilization			62.7%	ICU Level of Service		B
Analysis Period (min)			15			










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Lanes, Volumes, Timings

9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

120 OLD POST ROAD, RYE, NY

2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	45	136	513	72	157	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.899				0.946	
Flt Protected	0.988			0.958		
Satd. Flow (prot)	1655	0	0	1785	1762	0
Flt Permitted	0.988			0.958		
Satd. Flow (perm)	1655	0	0	1785	1762	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	589			335	220	
Travel Time (s)	13.4			7.6	5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	51	153	576	81	176	119
Shared Lane Traffic (%)						
Lane Group Flow (vph)	204	0	0	657	295	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 67.8%

ICU Level of Service C

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

120 OLD POST ROAD, RYE, NY  
2014 EXISTING CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	45	136	513	72	157	106
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	51	153	576	81	176	119
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1470	236	296			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1470	236	296			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	34	81	54			
cM capacity (veh/h)	76	803	1266			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	203	657	296			
Volume Left	51	576	0			
Volume Right	153	0	119			
cSH	239	1266	1700			
Volume to Capacity	0.85	0.46	0.17			
Queue Length 95th (ft)	170	61	0			
Control Delay (s)	69.8	9.5	0.0			
Lane LOS	F	A				
Approach Delay (s)	69.8	9.5	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay			17.7			
Intersection Capacity Utilization		67.8%		ICU Level of Service	C	
Analysis Period (min)			15			













CA-11

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	138	121	207	112	77	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.937		0.953			
Flt Protected	0.974				0.950	
Satd. Flow (prot)	1700	0	1775	0	1770	1863
Flt Permitted	0.974				0.459	
Satd. Flow (perm)	1700	0	1775	0	855	1863
Right Turn on Red		No		Yes		
Satd. Flow (RTOR)			35			
Link Speed (mph)	30		30			30
Link Distance (ft)	375		786			931
Travel Time (s)	8.5		17.9			21.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	152	133	227	123	85	233
Shared Lane Traffic (%)						
Lane Group Flow (vph)	285	0	350	0	85	233
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	4		2		1	5
Permitted Phases					5	
Detector Phase	4		2		1	5
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	35.0		49.0		16.0	65.0
Total Split (s)	35.0		49.0		16.0	65.0
Total Split (%)	35.0%		49.0%		16.0%	65.0%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	0.5		0.5		0.5	0.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0		4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Max		Max		None	Max
Act Effct Green (s)	31.0		48.2		61.0	61.0
Actuated g/C Ratio	0.31		0.48		0.61	0.61

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Synchro 8 Report

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Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
v/c Ratio	0.54		0.40		0.14	0.21
Control Delay	33.2		17.6		9.2	9.3
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	33.2		17.6		9.2	9.3
LOS	C		B		A	A
Approach Delay	33.2		17.6			9.3
Approach LOS	C		B			A
Queue Length 50th (ft)	150		132		20	61
Queue Length 95th (ft)	234		207		40	97
Internal Link Dist (ft)	295		706			851
Turn Bay Length (ft)					150	
Base Capacity (vph)	527		874		631	1136
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.54		0.40		0.13	0.21

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 19.5





Intersection Capacity Utilization 47.0%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service A

#### Splits and Phases: 1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

 p2	 p1	 p4
 p5		

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Synchro 8 Report



















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Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

5: MEDICAL OFFICE A.D./PLAYLAND PKWY EB RAMP & PLAYLAND A.D. 2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	47	259	15	6	43	37	29	2	39	123	10	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		75	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.942				0.850			0.850
Flt Protected		0.993			0.996			0.955			0.956	
Satd. Flow (prot)	0	1839	0	0	1748	0	0	1779	1583	0	1781	1583
Flt Permitted		0.993			0.996			0.955			0.956	
Satd. Flow (perm)	0	1839	0	0	1748	0	0	1779	1583	0	1781	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			484			289			91	
Travel Time (s)		12.8			11.0			6.6			2.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	59	324	19	8	54	46	36	3	49	154	13	286
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	402	0	0	108	0	0	38	49	0	166	286
Sign Control		Free			Free			Stop			Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 44.5%

ICU Level of Service A

Analysis Period (min) 15

11/3/2014

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Synchro 8 Report



















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# HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

5: MEDICAL OFFICE A.D./PLAYLAND PKWY EB RAMPS & PLAYLAND A.D. 2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	47	259	15	6	43	37	29	2	39	123	10	229
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	59	324	19	8	54	46	36	2	49	154	12	286
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									3			
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		997										
pX, platoon unblocked												
vC, conflicting volume	100			342			835	566	333	568	552	77
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	100			342			835	566	333	568	552	77
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			99			81	99	93	60	97	71
cM capacity (veh/h)	1493			1217			192	414	709	388	422	984
Direction, Lane #	SE 1	NW 1	NE 1	SW 1	SW 2							
Volume Total	401	108	88	166	286							
Volume Left	59	8	36	154	0							
Volume Right	19	46	49	0	286							
cSH	1493	1217	466	390	984							
Volume to Capacity	0.04	0.01	0.19	0.43	0.29							
Queue Length 95th (ft)	3	0	17	52	30							
Control Delay (s)	1.4	0.6	17.5	20.9	10.2							
Lane LOS	A	A	C	C	B							
Approach Delay (s)	1.4	0.6	17.5	14.1								
Approach LOS			C	B								
Intersection Summary												
Average Delay			8.1									
Intersection Capacity Utilization			44.5%		ICU Level of Service				A			
Analysis Period (min)			15									

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Synchro 8 Report

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Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

7: OFFICE ACCESS DRIVE &amp; PLAYLAND ACCESS DRIVE/PLAYLAND A.D2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (vph)	425	1	2	83	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.910	
Flt Protected				0.999	0.984	
Satd. Flow (prot)	1863	0	0	1861	1668	0
Flt Permitted				0.999	0.984	
Satd. Flow (perm)	1863	0	0	1861	1668	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	484			139	157	
Travel Time (s)	11.0			3.2	3.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	443	1	2	86	1	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	444	0	0	88	3	0
Sign Control	Free			Free	Stop	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.4%

ICU Level of Service A










Analysis Period (min) 15

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## HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

7: OFFICE ACCESS DRIVE &amp; PLAYLAND ACCESS DRIVE/PLAYLAND A.D2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (veh/h)	425	1	2	83	1	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	443	1	2	86	1	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			444		534	443
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			444		534	443
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1116		506	615
Direction, Lane #	SE 1	NW 1	NE 1			
Volume Total	444	89	3			
Volume Left	0	2	1			
Volume Right	1	0	2			
cSH	1700	1116	573			
Volume to Capacity	0.26	0.00	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.2	11.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	11.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			32.4%	ICU Level of Service		A
Analysis Period (min)			15			












CA-17

Lanes, Volumes, Timings

8: OLD POST ROAD & PLAYLAND ACCESS DRIVE

120 OLD POST ROAD, RYE, NY

2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	322	105	10	190	112	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.967				0.946	
Flt Protected	0.964			0.998		
Satd. Flow (prot)	1736	0	0	1859	1762	0
Flt Permitted	0.964			0.998		
Satd. Flow (perm)	1736	0	0	1859	1762	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	366	119	11	216	127	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	485	0	0	227	212	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 49.1%

ICU Level of Service A

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
 8: OLD POST ROAD & PLAYLAND ACCESS DRIVE

120 OLD POST ROAD, RYE, NY  
 2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	322	105	10	190	112	75
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	366	119	11	216	127	85
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	409	170	212			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	409	170	212			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	38	86	99			
cM capacity (veh/h)	594	874	1358			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	485	227	212			
Volume Left	366	11	0			
Volume Right	119	0	85			
cSH	645	1358	1700			
Volume to Capacity	0.75	0.01	0.13			
Queue Length 95th (ft)	170	1	0			
Control Delay (s)	25.6	0.5	0.0			
Lane LOS	D	A				
Approach Delay (s)	25.6	0.5	0.0			
Approach LOS	D					
<b>Intersection Summary</b>						
Average Delay			13.5			
Intersection Capacity Utilization			49.1%	ICU Level of Service		A
Analysis Period (min)			15			










CHA-19

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	25	42	411	101	145	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.916				0.937	
Flt Protected	0.982			0.961		
Satd. Flow (prot)	1676	0	0	1790	1745	0
Flt Permitted	0.982			0.961		
Satd. Flow (perm)	1676	0	0	1790	1745	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	589			335	220	
Travel Time (s)	13.4			7.6	5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	29	48	472	116	167	147
Shared Lane Traffic (%)						
Lane Group Flow (vph)	77	0	0	588	314	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 57.5%

ICU Level of Service B

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
 9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

120 OLD POST ROAD, RYE, NY  
 2014 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	25	42	411	101	145	128
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	29	48	472	116	167	147
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1301	240	314			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1301	240	314			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	94	62			
cM capacity (veh/h)	110	799	1246			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	77	589	314			
Volume Left	29	472	0			
Volume Right	48	0	147			
cSH	240	1246	1700			
Volume to Capacity	0.32	0.38	0.18			
Queue Length 95th (ft)	33	45	0			
Control Delay (s)	26.9	8.5	0.0			
Lane LOS	D	A				
Approach Delay (s)	26.9	8.5	0.0			
Approach LOS	D					
<b>Intersection Summary</b>						
Average Delay			7.2			
Intersection Capacity Utilization			57.5%	ICU Level of Service		B
Analysis Period (min)			15			

# **CAPACITY ANALYSIS WORKSHEETS**

**2016 Background Conditions**











CA-21

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	148	121	186	177	153	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.939		0.934			
Flt Protected	0.973				0.950	
Satd. Flow (prot)	1702	0	1740	0	1770	1863
Flt Permitted	0.973				0.402	
Satd. Flow (perm)	1702	0	1740	0	749	1863
Right Turn on Red		No		Yes		
Satd. Flow (RTOR)			63			
Link Speed (mph)	30		30			30
Link Distance (ft)	375		786			931
Travel Time (s)	8.5		17.9			21.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	163	133	204	195	168	205
Shared Lane Traffic (%)						
Lane Group Flow (vph)	296	0	399	0	168	205
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	4		2		1	5
Permitted Phases					5	
Detector Phase	4		2		1	5
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	35.0		49.0		16.0	65.0
Total Split (s)	35.0		49.0		16.0	65.0
Total Split (%)	35.0%		49.0%		16.0%	65.0%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	0.5		0.5		0.5	0.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0		4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Max		Max		Max	Max
Act Effct Green (s)	31.0		45.0		61.0	61.0
Actuated g/C Ratio	0.31		0.45		0.61	0.61

11/3/2014

FREDERICK P. CLARK ASSOCIATES, INC. - STC

Synchro 8 Report

Page 1









CW-22

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
v/c Ratio	0.56		0.49		0.29	0.18
Control Delay	33.8		18.5		11.7	9.0
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	33.8		18.5		11.7	9.0
LOS	C		B		B	A
Approach Delay	33.8		18.5			10.2
Approach LOS	C		B			B
Queue Length 50th (ft)	157		145		43	53
Queue Length 95th (ft)	243		229		72	86
Internal Link Dist (ft)	295		706			851
Turn Bay Length (ft)					150	
Base Capacity (vph)	527		817		579	1136
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.56		0.49		0.29	0.18

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 19.8







Intersection LOS: B

Intersection Capacity Utilization 54.7%

ICU Level of Service A

Analysis Period (min) 15

#### Splits and Phases: 1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE



















		
		

CA-23

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS & PLAYLAND A.D. 2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	45	251	67	23	58	26	26	2	27	167	54	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		75	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.967				0.850			0.850
Flt Protected		0.994			0.989			0.955			0.964	
Satd. Flow (prot)	0	1805	0	0	1781	0	0	1779	1583	0	1796	1583
Flt Permitted		0.994			0.989			0.955			0.964	
Satd. Flow (perm)	0	1805	0	0	1781	0	0	1779	1583	0	1796	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			484			289			91	
Travel Time (s)		12.8			11.0			6.6			2.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	51	282	75	26	65	29	29	2	30	188	61	579
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	408	0	0	120	0	0	31	30	0	249	579
Sign Control		Free			Free			Stop			Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.1%

ICU Level of Service A



















Analysis Period (min) 15

CVA-24

## HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMP &amp; PLAYLAND A.D. 2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	45	251	67	23	58	26	26	2	27	167	54	515
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	51	282	75	26	65	29	29	2	30	188	61	579
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									3			
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		997										
pX, platoon unblocked												
vC, conflicting volume	94			357			1161	567	320	569	590	80
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	94			357			1161	567	320	569	590	80
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			98			51	99	96	53	85	41
cM capacity (veh/h)	1500			1201			60	410	721	396	397	980
Direction, Lane #	SE 1	NW 1	NE 1	SW 1	SW 2							
Volume Total	408	120	62	248	579							
Volume Left	51	26	29	188	0							
Volume Right	75	29	30	0	579							
cSH	1500	1201	166	396	980							
Volume to Capacity	0.03	0.02	0.37	0.63	0.59							
Queue Length 95th (ft)	3	2	40	103	100							
Control Delay (s)	1.2	1.9	41.0	28.1	13.8							
Lane LOS	A	A	E	D	B							
Approach Delay (s)	1.2	1.9	41.0	18.1								
Approach LOS			E	C								
<b>Intersection Summary</b>												
Average Delay			12.9									
Intersection Capacity Utilization			51.1%		ICU Level of Service				A			
Analysis Period (min)			15									










CA-25

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

7: OFFICE ACCESS DRIVE & PLAYLAND A.D.

2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (vph)	444	1	2	106	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	1863	0	0	1861	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	1863	0	0	1861	1770	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	484			139	157	
Travel Time (s)	11.0			3.2	3.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	453	1	2	108	1	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	454	0	0	110	1	0
Sign Control	Free			Free	Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 33.4%

ICU Level of Service A

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
7: OFFICE ACCESS DRIVE & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY  
2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (veh/h)	444	1	2	106	1	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	453	1	2	108	1	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			454		566	454
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			454		566	454
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1107		485	606
Direction, Lane #	SE 1	NW 1	NE 1			
Volume Total	454	110	1			
Volume Left	0	2	1			
Volume Right	1	0	0			
cSH	1700	1107	485			
Volume to Capacity	0.27	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.2	12.4			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	12.4			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.1			
Intersection Capacity Utilization			33.4%	ICU Level of Service		A
Analysis Period (min)			15			










CA-27

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

8: OLD POST ROAD & PLAYLAND A.D.

2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	296	148	19	301	211	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.955				0.960	
Flt Protected	0.968			0.997		
Satd. Flow (prot)	1722	0	0	1857	1788	0
Flt Permitted	0.968			0.997		
Satd. Flow (perm)	1722	0	0	1857	1788	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)			7			7
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	322	161	20	324	220	93
Shared Lane Traffic (%)						
Lane Group Flow (vph)	483	0	0	344	313	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 63.5%

ICU Level of Service B










Analysis Period (min) 15



CA-28

HCM Unsignalized Intersection Capacity Analysis  
8: OLD POST ROAD & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY  
2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	296	148	19	301	211	89
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96
Hourly flow rate (vph)	322	161	20	324	220	93
Pedestrians	7					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	638	273	320			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	638	273	320			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	25	79	98			
cM capacity (veh/h)	431	761	1233			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	483	344	312			
Volume Left	322	20	0			
Volume Right	161	0	93			
cSH	504	1233	1700			
Volume to Capacity	0.96	0.02	0.18			
Queue Length 95th (ft)	305	1	0			
Control Delay (s)	58.9	0.6	0.0			
Lane LOS	F	A				
Approach Delay (s)	58.9	0.6	0.0			
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay			25.1			
Intersection Capacity Utilization			63.5%	ICU Level of Service		B
Analysis Period (min)			15			

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Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	47	139	523	74	161	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.899				0.945	
Flt Protected	0.987			0.958		
Satd. Flow (prot)	1653	0	0	1785	1760	0
Flt Permitted	0.987			0.958		
Satd. Flow (perm)	1653	0	0	1785	1760	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	589			335	220	
Travel Time (s)	13.4			7.6	5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	53	156	588	83	181	126
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	0	0	671	307	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 69.3%

ICU Level of Service C










Analysis Period (min) 15

## HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

9: OLD POST ROAD &amp; NYS THRUWAY ACCESS DRIVE

2016 BACKGROUND CONDITIONS, WEEKDAY A.M. PEAK HOUR











						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	47	139	523	74	161	112
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	53	156	588	83	181	126
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1502	244	307			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1502	244	307			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	26	80	53			
cM capacity (veh/h)	71	795	1254			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	209	671	307			
Volume Left	53	588	0			
Volume Right	156	0	126			
cSH	223	1254	1700			
Volume to Capacity	0.94	0.47	0.18			
Queue Length 95th (ft)	201	64	0			
Control Delay (s)	91.1	9.7	0.0			
Lane LOS	F	A				
Approach Delay (s)	91.1	9.7	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay		21.5				
Intersection Capacity Utilization		69.3%		ICU Level of Service		C
Analysis Period (min)		15				

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE &amp; PLAYLAND ACCESS DRIVE

2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	143	127	214	117	82	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.936		0.952			
Flt Protected	0.974				0.950	
Satd. Flow (prot)	1698	0	1773	0	1770	1863
Flt Permitted	0.974				0.447	
Satd. Flow (perm)	1698	0	1773	0	833	1863
Right Turn on Red		No		Yes		
Satd. Flow (RTOR)			36			
Link Speed (mph)	30		30			30
Link Distance (ft)	375		786			931
Travel Time (s)	8.5		17.9			21.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	157	140	235	129	90	240
Shared Lane Traffic (%)						
Lane Group Flow (vph)	297	0	364	0	90	240
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	4		2		1	5
Permitted Phases					5	
Detector Phase	4		2		1	5
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	35.0		49.0		16.0	65.0
Total Split (s)	35.0		49.0		16.0	65.0
Total Split (%)	35.0%		49.0%		16.0%	65.0%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	0.5		0.5		0.5	0.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0		4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Max		Max		None	Max
Act Effct Green (s)	31.0		48.2		61.0	61.0
Actuated g/C Ratio	0.31		0.48		0.61	0.61

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Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
v/c Ratio	0.56		0.42		0.15	0.21
Control Delay	33.9		17.9		9.4	9.3
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	33.9		17.9		9.4	9.3
LOS	C		B		A	A
Approach Delay	33.9		17.9			9.3
Approach LOS	C		B			A
Queue Length 50th (ft)	157		139		22	63
Queue Length 95th (ft)	244		216		42	100
Internal Link Dist (ft)	295		706			851
Turn Bay Length (ft)					150	
Base Capacity (vph)	526		873		620	1136
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.56		0.42		0.15	0.21

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 19.8







Intersection Capacity Utilization 48.6%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service A



















Splits and Phases: 1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS &amp; PLAYLAND A.D. 2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	54	264	15	6	47	38	30	2	40	125	10	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		75	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt		0.994			0.944				0.850			0.850
Flt Protected		0.992			0.997			0.955			0.956	
Satd. Flow (prot)	0	1837	0	0	1753	0	0	1779	1583	0	1781	1583
Flt Permitted		0.992			0.997			0.955			0.956	
Satd. Flow (perm)	0	1837	0	0	1753	0	0	1779	1583	0	1781	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			484			289			91	
Travel Time (s)		12.8			11.0			6.6			2.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	68	330	19	8	59	48	38	3	50	156	13	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	417	0	0	115	0	0	40	50	0	168	298
Sign Control		Free			Free			Stop			Stop	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.2%

ICU Level of Service A

Analysis Period (min) 15





















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# HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS & PLAYLAND A.D. 2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	54	264	15	6	47	38	30	2	40	125	10	238
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	68	330	19	8	59	48	38	2	50	156	12	298
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									3			
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		997										
pX, platoon unblocked												
vC, conflicting volume	106			349			876	596	339	598	581	82
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	106			349			876	596	339	598	581	82
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			79	99	93	58	97	70
cM capacity (veh/h)	1485			1210			176	396	703	368	403	977
Direction, Lane #	SE 1	NW 1	NE 1	SW 1	SW 2							
Volume Total	416	114	90	169	298							
Volume Left	68	8	38	156	0							
Volume Right	19	48	50	0	298							
cSH	1485	1210	427	370	977							
Volume to Capacity	0.05	0.01	0.21	0.46	0.30							
Queue Length 95th (ft)	4	0	20	58	32							
Control Delay (s)	1.6	0.6	18.7	22.6	10.3							
Lane LOS	A	A	C	C	B							
Approach Delay (s)	1.6	0.6	18.7	14.8								
Approach LOS			C	B								
Intersection Summary												
Average Delay			8.6									
Intersection Capacity Utilization			45.2%		ICU Level of Service				A			
Analysis Period (min)			15									

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Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

7: OFFICE ACCESS DRIVE & PLAYLAND A.D.

2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (vph)	434	1	2	88	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.910	
Flt Protected				0.999	0.984	
Satd. Flow (prot)	1863	0	0	1861	1668	0
Flt Permitted				0.999	0.984	
Satd. Flow (perm)	1863	0	0	1861	1668	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	484			139	157	
Travel Time (s)	11.0			3.2	3.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	452	1	2	92	1	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	453	0	0	94	3	0
Sign Control	Free			Free	Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 32.9%

ICU Level of Service A

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
7: OFFICE ACCESS DRIVE & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY  
2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (veh/h)	434	1	2	88	1	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	452	1	2	92	1	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			453		548	453
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			453		548	453
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1107		496	607
Direction, Lane #	SE 1	NW 1	NE 1			
Volume Total	453	94	3			
Volume Left	0	2	1			
Volume Right	1	0	2			
cSH	1700	1107	565			
Volume to Capacity	0.27	0.00	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.2	11.4			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	11.4			
Approach LOS			B			
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			32.9%	ICU Level of Service	A	
Analysis Period (min)			15			










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Lanes, Volumes, Timings

8: OLD POST ROAD & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY

2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	328	108	10	195	122	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.967				0.947	
Flt Protected	0.964			0.998		
Satd. Flow (prot)	1736	0	0	1859	1764	0
Flt Permitted	0.964			0.998		
Satd. Flow (perm)	1736	0	0	1859	1764	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	373	123	11	222	139	91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	496	0	0	233	230	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.8%










ICU Level of Service A










Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
8: OLD POST ROAD & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY

2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	328	108	10	195	122	80
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	373	123	11	222	139	91
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	428	184	230			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	428	184	230			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	36	86	99			
cM capacity (veh/h)	578	858	1338			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	495	233	230			
Volume Left	373	11	0			
Volume Right	123	0	91			
cSH	629	1338	1700			
Volume to Capacity	0.79	0.01	0.14			
Queue Length 95th (ft)	191	1	0			
Control Delay (s)	28.6	0.4	0.0			
Lane LOS	D	A				
Approach Delay (s)	28.6	0.4	0.0			
Approach LOS	D					
Intersection Summary						
Average Delay			14.9			
Intersection Capacity Utilization			49.8%	ICU Level of Service		A
Analysis Period (min)			15			

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	33	54	419	104	148	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.916				0.936	
Flt Protected	0.981			0.962		
Satd. Flow (prot)	1674	0	0	1792	1744	0
Flt Permitted	0.981			0.962		
Satd. Flow (perm)	1674	0	0	1792	1744	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	589			335	220	
Travel Time (s)	13.4			7.6	5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	38	62	482	120	170	154
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	0	0	602	324	0
Sign Control	Stop			Free	Free	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 59.8%

ICU Level of Service B

Analysis Period (min) 15












## HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

9: OLD POST ROAD &amp; NYS THRUWAY ACCESS DRIVE

2016 BACKGROUND CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	33	54	419	104	148	134
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	38	62	482	120	170	154
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1330	247	324			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1330	247	324			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	64	92	61			
cM capacity (veh/h)	104	792	1236			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	100	601	324			
Volume Left	38	482	0			
Volume Right	62	0	154			
cSH	226	1236	1700			
Volume to Capacity	0.44	0.39	0.19			
Queue Length 95th (ft)	53	47	0			
Control Delay (s)	33.0	8.6	0.0			
Lane LOS	D	A				
Approach Delay (s)	33.0	8.6	0.0			
Approach LOS	D					
<b>Intersection Summary</b>						
Average Delay			8.3			
Intersection Capacity Utilization			59.8%	ICU Level of Service		B
Analysis Period (min)			15			

# **CAPACITY ANALYSIS WORKSHEETS**

**2016 Combined Conditions**











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## Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE &amp; PLAYLAND ACCESS DRIVE

2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR







						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	151	125	186	179	155	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.939		0.934			
Flt Protected	0.973				0.950	
Satd. Flow (prot)	1702	0	1740	0	1770	1863
Flt Permitted	0.973				0.400	
Satd. Flow (perm)	1702	0	1740	0	745	1863
Right Turn on Red		No		Yes		
Satd. Flow (RTOR)			63			
Link Speed (mph)	30		30			30
Link Distance (ft)	375		786			931
Travel Time (s)	8.5		17.9			21.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	166	137	204	197	170	205
Shared Lane Traffic (%)						
Lane Group Flow (vph)	303	0	401	0	170	205
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	4		2		1	5
Permitted Phases					5	
Detector Phase	4		2		1	5
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	35.0		49.0		16.0	65.0
Total Split (s)	35.0		49.0		16.0	65.0
Total Split (%)	35.0%		49.0%		16.0%	65.0%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	0.5		0.5		0.5	0.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0		4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Max		Max		Max	Max
Act Effct Green (s)	31.0		45.0		61.0	61.0
Actuated g/C Ratio	0.31		0.45		0.61	0.61

11/3/2014

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Synchro 8 Report

Page 1

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
v/c Ratio	0.57		0.49		0.29	0.18
Control Delay	34.2		18.6		11.8	9.0
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	34.2		18.6		11.8	9.0
LOS	C		B		B	A
Approach Delay	34.2		18.6			10.3
Approach LOS	C		B			B
Queue Length 50th (ft)	161		146		43	53
Queue Length 95th (ft)	250		231		73	86
Internal Link Dist (ft)	295		706			851
Turn Bay Length (ft)					150	
Base Capacity (vph)	527		817		577	1136
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.57		0.49		0.29	0.18

## Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 20.1




Intersection Capacity Utilization 55.3%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service B

## Splits and Phases: 1: THEODORE FREMD AVENUE &amp; PLAYLAND ACCESS DRIVE

		
#2	#1	#4
#5		



















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Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS & PLAYLAND A.D.

2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	45	255	67	23	65	26	26	2	27	168	54	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		75	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.969				0.850			0.850
Flt Protected		0.994			0.990			0.955			0.964	
Satd. Flow (prot)	0	1805	0	0	1787	0	0	1779	1583	0	1796	1583
Flt Permitted		0.994			0.990			0.955			0.964	
Satd. Flow (perm)	0	1805	0	0	1787	0	0	1779	1583	0	1796	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			484			289			91	
Travel Time (s)		12.8			11.0			6.6			2.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	51	287	75	26	73	29	29	2	30	189	61	579
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	413	0	0	128	0	0	31	30	0	250	579
Sign Control		Free			Free			Stop			Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.5%

ICU Level of Service A



















Analysis Period (min) 15

## HCM Unsignalized Intersection Capacity Analysis










120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS &amp; PLAYLAND A.D.

2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	45	255	67	23	65	26	26	2	27	168	54	515
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	51	287	75	26	73	29	29	2	30	189	61	579
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									3			
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		997										
pX, platoon unblocked												
vC, conflicting volume	102			362			1174	579	324	581	602	88
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	102			362			1174	579	324	581	602	88
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			98			49	99	96	51	84	40
cM capacity (veh/h)	1490			1197			58	403	717	388	391	971
Direction, Lane #	SE 1	NW 1	NE 1	SW 1	SW 2							
Volume Total	412	128	62	249	579							
Volume Left	51	26	29	189	0							
Volume Right	75	29	30	0	579							
cSH	1490	1197	162	389	971							
Volume to Capacity	0.03	0.02	0.38	0.64	0.60							
Queue Length 95th (ft)	3	2	41	108	102							
Control Delay (s)	1.2	1.8	42.5	29.4	14.0							
Lane LOS	A	A	E	D	B							
Approach Delay (s)	1.2	1.8	42.5	18.7								
Approach LOS			E	C								
Intersection Summary												
Average Delay			13.1									
Intersection Capacity Utilization			51.5%		ICU Level of Service				A			
Analysis Period (min)			15									



						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (vph)	444	6	6	106	8	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.998				0.922	
Flt Protected				0.997	0.979	
Satd. Flow (prot)	1859	0	0	1857	1681	0
Flt Permitted				0.997	0.979	
Satd. Flow (perm)	1859	0	0	1857	1681	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	484			139	157	
Travel Time (s)	11.0			3.2	3.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	453	6	6	108	8	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	459	0	0	114	19	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.7%










ICU Level of Service A

Analysis Period (min) 15

CA-46

HCM Unsignalized Intersection Capacity Analysis  
7: OFFICE ACCESS DRIVE & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY  
2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR










						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (veh/h)	444	6	6	106	8	11
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	453	6	6	108	8	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			459		577	456
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			459		577	456
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		98	98
cM capacity (veh/h)			1102		476	604
Direction, Lane #	SE 1	NW 1	NE 1			
Volume Total	459	114	19			
Volume Left	0	6	8			
Volume Right	6	0	11			
cSH	1700	1102	543			
Volume to Capacity	0.27	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.5	11.9			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.5	11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			33.7%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

8: OLD POST ROAD & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY

2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	303	152	21	301	211	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.955				0.959	
Flt Protected	0.968			0.997		
Satd. Flow (prot)	1722	0	0	1857	1786	0
Flt Permitted	0.968			0.997		
Satd. Flow (perm)	1722	0	0	1857	1786	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)			7			7
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	329	165	23	324	220	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	494	0	0	347	315	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 65.8%

ICU Level of Service C

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
8: OLD POST ROAD & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY  
2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR










						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	303	152	21	301	211	91
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.93	0.93	0.96	0.96
Hourly flow rate (vph)	329	165	23	324	220	95
Pedestrians	7					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	643	274	322			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	643	274	322			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	23	78	98			
cM capacity (veh/h)	427	760	1231			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	495	346	315			
Volume Left	329	23	0			
Volume Right	165	0	95			
cSH	501	1231	1700			
Volume to Capacity	0.99	0.02	0.19			
Queue Length 95th (ft)	331	1	0			
Control Delay (s)	66.1	0.7	0.0			
Lane LOS	F	A				
Approach Delay (s)	66.1	0.7	0.0			
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay		28.5				
Intersection Capacity Utilization		65.8%		ICU Level of Service	C	
Analysis Period (min)		15				

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

9: OLD POST ROAD &amp; NYS THRUWAY ACCESS DRIVE

2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	47	139	526	78	163	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.899				0.945	
Flt Protected	0.987			0.958		
Satd. Flow (prot)	1653	0	0	1785	1760	0
Flt Permitted	0.987			0.958		
Satd. Flow (perm)	1653	0	0	1785	1760	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	589			335	220	
Travel Time (s)	13.4			7.6	5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	53	156	591	88	183	126
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	0	0	679	309	0
Sign Control	Stop			Free	Free	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 69.8%

ICU Level of Service C

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
 9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

120 OLD POST ROAD, RYE, NY  
 2016 COMBINED CONDITIONS, WEEKDAY A.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	47	139	526	78	163	112
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	53	156	591	88	183	126
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1516	246	309			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1516	246	309			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	24	80	53			
cM capacity (veh/h)	69	793	1252			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	209	679	309			
Volume Left	53	591	0			
Volume Right	156	0	126			
cSH	218	1252	1700			
Volume to Capacity	0.96	0.47	0.18			
Queue Length 95th (ft)	208	65	0			
Control Delay (s)	97.0	9.7	0.0			
Lane LOS	F	A				
Approach Delay (s)	97.0	9.7	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay			22.5			
Intersection Capacity Utilization			69.8%	ICU Level of Service		C
Analysis Period (min)			15			













CA-51

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

1: THEODORE FREMD AVENUE & PLAYLAND ACCESS DRIVE

2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR







						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	146	130	214	120	86	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.936		0.951			
Flt Protected	0.974				0.950	
Satd. Flow (prot)	1698	0	1771	0	1770	1863
Flt Permitted	0.974				0.444	
Satd. Flow (perm)	1698	0	1771	0	827	1863
Right Turn on Red		No		Yes		
Satd. Flow (RTOR)			37			
Link Speed (mph)	30		30			30
Link Distance (ft)	375		786			931
Travel Time (s)	8.5		17.9			21.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	160	143	235	132	95	240
Shared Lane Traffic (%)						
Lane Group Flow (vph)	303	0	367	0	95	240
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	4		2		1	5
Permitted Phases					5	
Detector Phase	4		2		1	5
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	35.0		49.0		16.0	65.0
Total Split (s)	35.0		49.0		16.0	65.0
Total Split (%)	35.0%		49.0%		16.0%	65.0%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	0.5		0.5		0.5	0.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.0		4.0		4.0	4.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Max		Max		None	Max
Act Effect Green (s)	31.0		48.2		61.0	61.0
Actuated g/C Ratio	0.31		0.48		0.61	0.61

11/3/2014

FREDERICK P. CLARK ASSOCIATES, INC. - STC

Synchro 8 Report

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Lane Group	NWL	NWR	NET	NER	SWL	SWT
v/c Ratio	0.58		0.42		0.16	0.21
Control Delay	34.2		17.9		9.5	9.3
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	34.2		17.9		9.5	9.3
LOS	C		B		A	A
Approach Delay	34.2		17.9			9.4
Approach LOS	C		B			A
Queue Length 50th (ft)	161		140		23	63
Queue Length 95th (ft)	250		218		44	100
Internal Link Dist (ft)	295		706			851
Turn Bay Length (ft)					150	
Base Capacity (vph)	526		872		617	1136
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.58		0.42		0.15	0.21

## Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 20.0





Intersection Capacity Utilization 49.4%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service A

## Splits and Phases: 1: THEODORE FREMD AVENUE &amp; PLAYLAND ACCESS DRIVE

		
15%	15%	35%
		
15%		



















CA-53

Lanes, Volumes, Timings

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS &amp; PLAYLAND A.D.

2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	54	271	15	6	53	38	30	2	40	129	10	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		75	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.947				0.850			0.850
Flt Protected		0.992			0.997			0.955			0.956	
Satd. Flow (prot)	0	1837	0	0	1759	0	0	1779	1583	0	1781	1583
Flt Permitted		0.992			0.997			0.955			0.956	
Satd. Flow (perm)	0	1837	0	0	1759	0	0	1779	1583	0	1781	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			484			289			91	
Travel Time (s)		12.8			11.0			6.6			2.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	68	339	19	8	66	48	38	3	50	161	13	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	426	0	0	122	0	0	40	50	0	173	298
Sign Control		Free			Free			Stop			Stop	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.8%

ICU Level of Service A

Analysis Period (min) 15

11/3/2014

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Synchro 8 Report

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CMA-54

HCM Unsignalized Intersection Capacity Analysis

120 OLD POST ROAD, RYE, NY

5: MEDICAL A.D./PLAYLAND PKWY EB RAMPS & PLAYLAND A.D.

2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR










												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (veh/h)	54	271	15	6	53	38	30	2	40	129	10	238
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	68	339	19	8	66	48	38	2	50	161	12	298
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									3			
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		997										
pX, platoon unblocked												
vC, conflicting volume	114			358			892	612	348	614	598	90
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	114			358			892	612	348	614	598	90
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			78	99	93	55	97	69
cM capacity (veh/h)	1475			1201			171	387	695	358	395	968
Direction, Lane #	SE 1	NW 1	NE 1	SW 1	SW 2							
Volume Total	425	121	90	174	298							
Volume Left	68	8	38	161	0							
Volume Right	19	48	50	0	298							
cSH	1475	1201	414	361	968							
Volume to Capacity	0.05	0.01	0.22	0.48	0.31							
Queue Length 95th (ft)	4	0	20	63	33							
Control Delay (s)	1.6	0.5	19.2	23.9	10.4							
Lane LOS	A	A	C	C	B							
Approach Delay (s)	1.6	0.5	19.2	15.4								
Approach LOS			C	C								
Intersection Summary												
Average Delay			8.8									
Intersection Capacity Utilization			45.8%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings

7: OFFICE ACCESS DRIVE &amp; PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY

2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (vph)	434	12	9	88	7	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.997				0.915	
Flt Protected				0.996	0.982	
Satd. Flow (prot)	1857	0	0	1855	1674	0
Flt Permitted				0.996	0.982	
Satd. Flow (perm)	1857	0	0	1855	1674	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	484			139	157	
Travel Time (s)	11.0			3.2	3.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	452	13	9	92	7	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	464	0	0	101	19	0
Sign Control	Free			Free	Stop	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 33.6%

ICU Level of Service A

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
 7: OFFICE ACCESS DRIVE & PLAYLAND A.D.










120 OLD POST ROAD, RYE, NY  
 2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Volume (veh/h)	434	12	9	88	7	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	452	12	9	92	7	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			465		569	458
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			465		569	458
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		98	98
cM capacity (veh/h)			1097		480	603
Direction, Lane #	SE 1	NW 1	NE 1			
Volume Total	465	101	20			
Volume Left	0	9	7			
Volume Right	12	0	12			
cSH	1700	1097	551			
Volume to Capacity	0.27	0.01	0.04			
Queue Length 95th (ft)	0	1	3			
Control Delay (s)	0.0	0.8	11.8			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.8	11.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			33.6%	ICU Level of Service*		A
Analysis Period (min)			15			



Lanes, Volumes, Timings  
8: OLD POST ROAD & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY  
2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	334	112	13	195	122	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.966				0.945	
Flt Protected	0.964			0.997		
Satd. Flow (prot)	1735	0	0	1857	1760	0
Flt Permitted	0.964			0.997		
Satd. Flow (perm)	1735	0	0	1857	1760	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	139			484	335	
Travel Time (s)	3.2			11.0	7.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	380	127	15	222	139	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	507	0	0	237	234	0
Sign Control	Stop			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 52.9%

ICU Level of Service A

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
8: OLD POST ROAD & PLAYLAND A.D.

120 OLD POST ROAD, RYE, NY  
2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR










						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	334	112	13	195	122	84
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	380	127	15	222	139	95
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	438	186	234			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	438	186	234			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	33	85	99			
cM capacity (veh/h)	570	856	1333			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	507	236	234			
Volume Left	380	15	0			
Volume Right	127	0	95			
cSH	622	1333	1700			
Volume to Capacity	0.81	0.01	0.14			
Queue Length 95th (ft)	209	1	0			
Control Delay (s)	31.2	0.6	0.0			
Lane LOS	D	A				
Approach Delay (s)	31.2	0.6	0.0			
Approach LOS	D					
<b>Intersection Summary</b>						
Average Delay			16.3			
Intersection Capacity Utilization			52.9%	ICU Level of Service	A	
Analysis Period (min)			15			

## Lanes, Volumes, Timings

9: OLD POST ROAD &amp; NYS THRUWAY ACCESS DRIVE

120 OLD POST ROAD, RYE, NY

2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	33	54	422	107	152	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.916				0.937	
Flt Protected	0.981			0.962		
Satd. Flow (prot)	1674	0	0	1792	1745	0
Flt Permitted	0.981			0.962		
Satd. Flow (perm)	1674	0	0	1792	1745	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	589			335	220	
Travel Time (s)	13.4			7.6	5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	38	62	485	123	175	154
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	0	0	608	329	0
Sign Control	Stop			Free	Free	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized










Intersection Capacity Utilization 60.3%

ICU Level of Service B

Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis  
 9: OLD POST ROAD & NYS THRUWAY ACCESS DRIVE

120 OLD POST ROAD, RYE, NY  
 2016 COMBINED CONDITIONS, WEEKDAY P.M. PEAK HOUR

						
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Volume (veh/h)	33	54	422	107	152	134
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	38	62	485	123	175	154
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1345	252	329			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1345	252	329			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	63	92	61			
cM capacity (veh/h)	101	787	1231			
Direction, Lane #	SE 1	NE 1	SW 1			
Volume Total	100	608	329			
Volume Left	38	485	0			
Volume Right	62	0	154			
cSH	221	1231	1700			
Volume to Capacity	0.45	0.39	0.19			
Queue Length 95th (ft)	54	48	0			
Control Delay (s)	34.2	8.7	0.0			
Lane LOS	D	A				
Approach Delay (s)	34.2	8.7	0.0			
Approach LOS	D					
Intersection Summary						
Average Delay			8.4			
Intersection Capacity Utilization			60.3%	ICU Level of Service		B
Analysis Period (min)			15			



# CITY COUNCIL AGENDA

NO. 7

DEPT.: City Manager's Office

DATE: October 21, 2015

CONTACT: Marcus Serrano, City Manager

**AGENDA ITEM:** Public Hearing to amend local law Chapter 191, "Vehicles and Traffic", of the Rye City Code by amending Section §191-19, "No parking any time", to prohibit parking on the north side of Osborn Road between Theall Road and the Harrison line and on the south side of Osborn Road between Boston Post Road and the Harrison line.

**FOR THE MEETING OF:**

October 21, 2015

**RYE CITY CODE,**

CHAPTER 191

SECTION 19

**RECOMMENDATION:** That the City Council hold a Public Hearing change to prohibit parking in the specified sections on Osborn road.

**IMPACT:** ☐ Environmental ☐ Fiscal ☒ Neighborhood ☐ Other:

**BACKGROUND:** A request has been made from residents to prohibit parking on Osborn Road to provide for pedestrian and traffic safety. Parking would be prohibited on the north side of Osborn Road between Theall Road and the Harrison line and on the south side of Osborn Road between Boston Post Road and the Harrison line. The Traffic and Pedestrian Safety Committee reviewed the request at their meeting on Thursday, October 8<sup>th</sup>.

See attached.

Chapter 191. Vehicles and Traffic  
Part 1. General Regulations  
Article III. Parking Regulations

§ 191-19. No parking any time.

The parking of vehicles is hereby prohibited in all of the following locations:

<b>Name of Street</b>	<b>Side</b>	<b>Location</b>
<i><b>*Promulgated by City Manager with approval of City Council.</b></i>		
Apawamis Avenue	North	From Milton Road to Midland Avenue
Apawamis Avenue	South	Extending 40 feet east and west of Cowles Avenue
Blind Brook Lane	South	
Boston Post Road	East	From northeast corner of Parsons Street to Mamaroneck line
Boston Post Road	East	From Rectory Street to Port Chester boundary line
*Boston Post Road	West	From Port Chester line to Mamaroneck line
Boston Post Road	West	From Rectory Street to Port Chester boundary line
*Cedar Street	North	From Purchase Street to Post Road
Central Avenue	Both	From Clinton Avenue to Theodore Fremd Avenue
Central Avenue	North	From Maple Avenue to Clinton Avenue
*Chestnut Street	West	From Orchard Avenue to Central Avenue
*Clinton Avenue	West	From High Street to Central Avenue
*Cottage Street	Both	From Midland Avenue to the Port Chester line
Davis Avenue	East	From Manursing Avenue to Sylvan Place
Elizabeth Street	South	
Evergreen Avenue	All	On all three sides of the triangle abutting Grandview Avenue and Evergreen Avenue
*First Street	Both, except within designated parking area	
*First Street	Both	From Purdy Avenue to Station Plaza
*First Street	West	From loading zone from Purdy Avenue to Smith Street
*Forest Avenue	East	From Cornell Place to Playland Parkway
Gramercy Avenue	Both	
Grandview Avenue	East	From High Street to Cedar Street
Grandview Avenue	West	From the northern property boundary of Rye Country Day School property on the west side of Grandview Avenue to Cedar Street
Grapal Street	Both	From Grace Church Street to a point 30 feet southwest of its intersection with Grace Church Street
Hammond Road	Both	
Harbor Terrace Drive	East	To Westbank Road
Harbor Terrace Drive	South	From Westbank Road to Hix Avenue



<b>Name of Street</b>	<b>Side</b>	<b>Location</b>
*Haviland Lane		Parking lot side of main firehouse - "Firemen Only"
Hewlett Avenue	East	From the crosswalk opposite the southerly entrance of the driveway which runs along the easterly side of Milton School for a distance of 50 feet northerly
*Highland Road	South	From Mendota Avenue to Purchase Street
*Highland Road	West	Harrison line to Club Road
*High Street	North	From Summit Avenue to Clinton Avenue
Hillside Road	Both	From Purchase Street to Boston Post Road
*LaSalle Avenue	East	At the terminus for a distance of 50 feet
*LaSalle Avenue	West	At the terminus for a distance of 35 feet
*Locust Avenue	Both	From Purchase Street to the easterly corner of Mead Place
Locust Avenue	Both	From Theodore Fremd Avenue to Harrison boundary line
Locust Avenue	North	From the easterly end of Mead Place to Theodore Fremd Avenue
*Manursing Avenue	North	From Davis Avenue to Midland Avenue
*Manursing Avenue	South	From Davis Avenue east to Forest Avenue
*Maple Avenue	East	From North Street to Locust Avenue
Maple Avenue	West	From North Street to Locust Avenue
*Mead Place	South	
*Mead Place	West	Across from side of YMCA Locust Avenue to curve in road
*Midland Avenue		
Midland Avenue	East	Ellis Court to Grace Church Street
*Midland Avenue	East	From a point 20 feet north of northerly entrance to Mi from 8:15 a.m. to 8:45 and from 2:30 p.m. to 3:30 p.m. Friday
Midland Avenue	East	From entrance ramp of New England Thruway to Cottage Street
*Midland Avenue	West	From Cottage Street to Peck Avenue
*Milton Road	East	Palisade Road to Halstead Lane then from Hewlett Avenue to Stuyvesant Avenue
*Milton Road	West	Parsons Street to Brookdale Place
Natoma Street	South	
*North Street	Both	From Old Post Road to Harrison line
*Oakland Beach Avenue	Both	From Post Road to Milton Road
<b>Osborn Road</b>	<b>North</b>	<b>Between Theall Road to the Harrison line</b>
<b>Osborn Road</b>	<b>South</b>	<b>Between Boston Post Road and the Harrison line</b>
*Orchard Avenue	South	Entire length
*Palisade Road	Both	From a point 153 feet east of the intersection with Richard Place to a point 158 feet west of the

<b>Name of Street</b>	<b>Side</b>	<b>Location</b>
*Palisade Road	North	intersection with Midland Avenue From a point 153 feet east of the intersection with Richard Place to a point 158 feet west of the intersection with Midland Avenue
*Palisade Road	South	From a point 153 feet east of the intersection with Richard Place to Midland Avenue
Parsons Street	North	Milton Road to Post Road, except Sundays
Pondview Road	Both	From northerly driveway to Theodore Fremd Avenue
Purdy Avenue	Both	From Purchase Street to First Street
Purdy Avenue	North	From Boston Post Road to east side of post office property
Purdy Avenue	North	From Third Street to a point 50 feet west thereof
Purdy Avenue	South	From School Street to Boston Post Road
*Rectory Street	North	Entire length, except Sundays
*Rye Beach Avenue		
Rye Beach Avenue	South	From Forest Avenue to Old Rye Beach Avenue
School Street	East	
Second Street	Both	
Smith Street	Both	
*Summit Avenue	East	From High Street to Locust Avenue
Theodore Fremd Avenue	Both	From Purchase Street to entrance of Car Park No. 2
*Walnut Street	West	From Orchard Avenue to Central Avenue
West Purdy Avenue	Both	



# CITY COUNCIL AGENDA

NO. 9

DEPT.: Corporation Counsel

DATE: October 21, 2015

CONTACT: Kristen K. Wilson, Esq., Corporation Counsel

**AGENDA ITEM:** Consideration of referral to the Board of Architectural Review and City Consultant, the Special Permit Application submitted by New Cingular Wireless PCS, LLC ("AT&T") for modifications to its existing wireless telecommunications facility located at 66 Milton Road.

**FOR THE MEETING OF:**

October 21, 2015

**RYE CITY CODE,**

CHAPTER  
SECTION

**RECOMMENDATION:** That the Council refer the Special Use Permit Application from New Cingular Wireless PCS, LLC ("AT&T") to the BAR.

**IMPACT:** ☐ Environmental ☐ Fiscal ☒ Neighborhood ☐ Other:

**BACKGROUND:** AT&T is seeking approval for modifications to its existing wireless telecommunications facility on the roof of the Blind Brook Lodge located at 66 Milton Road. AT&T is replacing three (3) existing panel antennas with new panel antennas and adding three (3) additional remote radio units to existing unistrut mounts located out of view behind the existing parapet. The modifications represent an upgrade and enhancement of the technology and operation of AT&T's site at this location with little visual change from the current conditions.

Pursuant to Sections 196-13 and 196-16 of the Code of the City of Rye the Council may refer the application to the Board of Architectural Review (BAR) who will provide a written assessment to the Council.

See attached.

October 5, 2015

**BY FEDEX**

Mayor Joe Sack and Members of the City Council  
City of Rye  
3rd Floor City Hall  
1051 Boston Post Road  
Rye, NY 10580  
(914) 967-7404

Re: New Cingular Wireless PCS, LLC ("AT&T") Site NYCNNY2Q73  
Modification of Existing Wireless Facility – Blind Brook Lodge  
66 Milton Road, Rye, New York 10580

Dear Mayor Sack and Members of the City Council:

We are writing to you on behalf of our client, New Cingular Wireless PCS, LLC ("AT&T"), with respect to AT&T's intent to modify to the existing rooftop wireless facility ("Facility") at the captioned location ("Site"). AT&T previously submitted a building permit application dated August 27, 2015 for modifications to the Site and AT&T's representatives have now been advised approval of the City Council is required prior to issuance of a building permit.

AT&T's modifications to this existing telecommunications facility are proposed to provide enhanced 4G services to this area of Rye. AT&T is proposing to replace three (3) existing panel antennas with new panel antennas and add three (3) additional remote radio units ("RRUs") to existing unistrut mounts located out of view behind the existing parapet. While these modifications represent an upgrade and enhancement of the technology and operation of AT&T's site at this location there will be little to no discernable visual change from current conditions.

In keeping with Federal law as further described below, AT&T is requesting waivers of application requirements as set forth under City of Rye Code Section 196-5(U) ("Where the application is for the shared use of an existing telecommunications tower(s) or other high structure, the applicant can seek to waive any application requirements that may not be applicable") and the ability to proceed with the submitted building permit application.

**Federal Law Requires a Limited and Expedited Review Process**

AT&T is applied for a building permit as an eligible facility under Section 6409(a) of the federal Middle Class Tax Relief and Job Creation Act of 2012, signed into law on February 22, 2012 ("Section 6409").<sup>1</sup> The Federal Communications Commission ("FCC"), which has interpretative

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<sup>1</sup> See February 2012 link located at <http://www.whitehouse.gov/briefing-room/signed-legislation>. Section 6409(a) of the 2012 Middle Class Tax Relief and Job Creation Act is codified at 47 U.S.C.A § 1455 ("Section 6409").

authority in this field of federal law,<sup>2</sup> last year adopted rules to clarify and implement the requirements of Section 6409(a) (the “2014 FCC Order”).<sup>3</sup> The 2014 FCC Order sets forth rules governing the manner in which municipalities must handle requests by carriers to modify existing telecommunications facilities, such as the application currently proposed by AT&T. The FCC confirmed that:

A State or local government may *only require* applicants to provide documentation that is reasonably related to determining *whether the eligible facilities request meets the requirements of Section 6409(a)*; (Emphasis added).<sup>4</sup>

The FCC also confirmed that a municipality must complete its review and approve the application “within 60 days from the date of filing, accounting for tolling, a State or local government shall approve an application covered by Section 6409(a).”<sup>5</sup> If the City does not comply with this process and mandatory timeframe, then the application is automatically deemed to be granted.<sup>6</sup>

#### The City is Limited to Reviewing the Criteria of Section 6409

The FCC confirmed that a shortened review period “is warranted to reflect the more restricted scope of review applicable to applications under Section 6409(a).”<sup>7</sup> As noted above, Section 6409 requires that the City approve “any *eligible facilities request* for a modification of an existing wireless tower or base station that does not *substantially change* the physical dimensions of such tower or base station”. This restricts the City’s review to deciding the following issues:

1. Whether AT&T’s proposal constitutes an eligible facilities request; and
2. Whether AT&T’s proposal would cause a substantial change to the existing facility.

Once AT&T demonstrates that its proposal is an eligible facility and it will not cause a substantial change to the physical dimensions of the existing facility, then the City of Rye is required to approve AT&T’s request within the 60 day period.

#### AT&T’s Proposal Constitutes an “Eligible Facilities Request”

As noted above, this proposal consists of AT&T replacing three existing antennas and adding some minimal additional equipment (3 RRUs) which will not be visible. It should be noted that the proposed modifications will not result in an increase to the overall height of the facility and they do not alter the use as a telecommunications facility.

<sup>2</sup> See, *City of Arlington v. F.C.C.*, 133 S. Ct. 1863 (2013).

<sup>3</sup> FCC Report and Order, adopted October 17, 2014 (FCC 14-153).

<sup>4</sup> 2014 FCC Order at ¶ 21.

<sup>5</sup> 2014 FCC Order at ¶¶ 21, 216.

<sup>6</sup> 2014 FCC Order at ¶¶ 21, 216.

<sup>7</sup> 2014 FCC Order at ¶ 216.

Section 6409 defines an “eligible facilities request” as “(A) collocation of new transmission equipment; (B) removal of transmission equipment; or (C) replacement of transmission equipment.” The definition of “collocation” for purposes of applying Section 6409 is “the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.”<sup>8</sup> Accordingly, AT&T’s proposal constitutes “collocation” as it involves the replacement of existing equipment on an existing structure that currently supports the existing facilities of AT&T, Verizon, Sprint, T-Mobile and their affiliate MetroPCS.<sup>9</sup>

AT&T’s Proposal Does Not Constitute a “Substantial Change”

AT&T’s proposal does not constitute a substantial change to the physical dimensions of the existing facility as that term is intended by Section 6409 and defined in the 2014 FCC Order.<sup>10</sup> AT&T’s proposal does not increase the height of the facility in any way and does not protrude from the building (base station) structure by more than 6 feet. No at-grade work is proposed and AT&T’s proposal does not conflict with any approval conditions or compromise concealment elements of the existing wireless facility.

As such, AT&T’s proposal satisfies the criteria of Section 6409 while also enhancing wireless communication services to the community and enabling users to access a state-of-the-art, fully digital system for voice communications, messaging, and data transmission and reception.

Federal Law Mandates Approval Through a Non-discretionary Review Process

While the City of Rye retains certain discretionary zoning review over the construction of new facilities, collocations and equipment upgrades (such as this request) must now be approved – and this approval must be granted on an expedited basis. Section 6409 provides that:

*Notwithstanding Section 704 of the Telecommunications Act of 1996 or any other provision of law, a state or local government may not deny and shall approve any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. (Emphasis added).<sup>11</sup>*

This important federal law effectively pre-empts the use of discretionary approval processes by local governments, including requiring variances, special use permits and site plan approvals, for

<sup>8</sup> 2014 FCC Order at ¶ 178.

<sup>9</sup> See 2014 FCC Order at ¶¶ 167 (“As proposed in the Infrastructure NPRM, we interpret “base station” to extend the scope of the provision to certain support structures other than towers. Specifically, we define that term as the equipment and non-tower supporting structure at a fixed location that enable Commission-licensed or authorized wireless communications between user equipment and a communications network. We find that the term includes any equipment associated with wireless communications service including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supply, and comparable equipment” (Emphasis added, citations omitted). See also 168 FN450, 167, 172, 178.

<sup>10</sup> See 2014 FCC Order at ¶¶ 21.

<sup>11</sup> 47 U.S.C.A. § 1455(a)(1).

modifications to existing, eligible facilities so that critical wireless infrastructure can be timely deployed.

### Conclusion

As noted we seek the grant of waivers in accordance with federal law without the need for any additional approvals. One of the primary purposes of Section 6409 is to “promote the deployment of the network facilities needed to provide broadband wireless services.”<sup>12</sup> The FCC, while allowing for limited review processes, confirmed that municipalities must approve any application within 60 days from the date of filing or a default approval is granted by operation of federal law. Additionally, the scope of any review is ministerial, without discretion and limited to confirming compliance with the FCC’s “eligible facilities” criteria. This modification is de minimus in nature and its expedited completion will be to the benefit of City residents, businesses, visitors and emergency responders.

Based on federal laws and regulations applicable to this project, AT&T respectfully requests that waivers be granted for any further review by the City Council and this matter be processed by the Building Department without the need for further review by the City Council. In support of this request please find an original and nine copies of the following:

1. FCC Statement Regarding the 2014 FCC Order;
2. A structural analysis completed by NB+C Engineering Services certifying the structural capacity of the building to accommodate the modifications; and
3. Drawings prepared by NB+C Engineering Services dated February 11, 2015 and last revised May 8, 2015 providing details of the planned upgrades.

We look forward to hearing from you concerning this minor modification. If you should have any questions or require anything further, please do not hesitate to contact me. Thank you in advance for your consideration of the attached materials.

Very truly yours,



Daniel M. Laub

### Attachments

cc: Kristen Wilson, Esq., Corporation Counsel  
Christian K. Miller, AICP, City Planner  
Joe Pawlecza, AT&T  
Paul Spurlock, NB+C  
Jason Yokom, NB+C  
Christopher B. Fisher, Esq.

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<sup>12</sup> 2014 FCC Order at ¶ 137.





# NEWS

Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D. C. 20554

News Media Information 202 / 418-0500  
Internet: <http://www.fcc.gov>  
TTY: 1-888-835-5322

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This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action.  
See MCI v. FCC, 515 F.2d 385 (D.C. Cir. 1974).

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**FOR IMMEDIATE RELEASE:**  
October 17, 2014

**NEWS MEDIA CONTACTS:**  
Cecilia Sulhoff, 202-418-0587  
Email: [Cecilia.Sulhoff@fcc.gov](mailto:Cecilia.Sulhoff@fcc.gov)

## FCC BOOSTS WIRELESS BROADBAND BY EASING INFRASTRUCTURE BURDENS

*New rules continue to protect the environment and historic properties,  
safeguard Tribal, State, and local priorities*

Washington, D.C. – The Federal Communications Commission adopted a *Report and Order* that takes critical steps to promote deployment of the wireless infrastructure necessary to provide the public with ubiquitous, advanced wireless broadband services.

The *Report and Order* updates and tailors the manner in which the FCC evaluates the impact of proposed deployments on the environment and historic properties. It also adopts rules to clarify and implement statutory limitations on State and local government authority to review infrastructure siting applications—including a “deemed granted” remedy if a State or local government fails to act on an eligible facilities modification request under Section 6409(a) of the Spectrum Act. Finally, it adopts an exemption from the environmental public notification process for “temporary towers” that are in place only for short periods of time.

Taken together, these steps lay the groundwork necessary for delivering more wireless capacity in more locations to consumers throughout the United States. At the same time, it adheres to statutory obligations to protect the environment and historic properties, and it safeguards Tribal, State, and local land-use priorities as well as safety and aesthetic interests.

Action by the Commission October 17, 2014, by Report and Order (FCC 14-153). Chairman Wheeler, Commissioners Clyburn, Rosenworcel, Pai and O’Rielly. Chairman Wheeler, Commissioners Clyburn, Rosenworcel, Pai and O’Rielly issuing statements

WT Docket No. 13-238

-FCC-

News and information about the Federal Communications Commission is available at [www.fcc.gov](http://www.fcc.gov).



February 12, 2015

Joe Pawelczak  
AT&T Mobility  
One AT&T Way  
Bedminster, NJ 07921

**Structural Certification for LTE 2C/CSOF Project**

Site Address: 66 Milton Rd, Rye, New York 10580, Westchester County  
Site Name: Playland  
Site Number: NYCNNY2Q73  
FA Number: 10105111

Dear Mr. Pawelczak:

Pursuant to your request, Network Building + Consulting Engineering Services ("NB+C ES") has evaluated the existing structure and mounts at the subject location. The existing structure is a 59'-0" building with steeple. The below listed appurtenances are to be located on the existing steeple wall at an approximate elevation of 88'-0" AGL. The following tables below show the existing and proposed antenna installation by AT&T for the LTE2C equipment upgrade.

**Table 1 - Existing AT&T Antenna and Cable Information**

Center Line Elevation (ft)	Total No. of Antennas	Antenna Model / Mount	Carrier	Feed Line (in)
88'-0"	6	(3) Katherin 742-264 Panel Antennas <sup>1</sup> (3) Powerwave P65-15-XLH-RR Panel Antennas <sup>2</sup> (3) ALU RRH2x40-07L 700MHz RRHs <sup>1</sup> (3) DC-2 Power and Fiber distribution boxes <sup>1</sup> (9) Pipe masts (3) RRH Unistrut Mounts	AT&T	Existing to Remain

1. Existing equipment to remain. 2. Existing equipment to be removed

**Table 2 - Proposed AT&T Antenna and Cable Information**

Center Line Elevation (ft)	Total No. of Antennas	Antenna Model / Mount	Carrier	Feed Line (in)
88'-0"	6	(2) Andrew SBNHH-1D65A Panel Antennas (2) ALU RRH2x60-1900A-4R 1900MHz RRHs (3) existing pipe masts (3) existing RRH unistrut mounts	AT&T	-

As part of this review and analysis, NB+C ES has reviewed Construction Documents dated June 23, 2011 and a Structural Analysis dated January 18, 2011 prepared by URS Corporation as well as AT&T Site Audit photos dated March 11, 2014. This certification assumes that all structural members are in good condition. The contractor shall be responsible for the means and methods of construction. No structural qualification is made or implied by this analysis for existing structural members not supporting the proposed installation. Any deterioration or localized damage or distress to the structure or mounts, should be documented and reported to the engineer and repaired by the contractor prior to the installation of the proposed antennas.

1777 Sentry Parkway West  
Dublin Hall  
Suite 210  
Blue Bell, PA 19422  
267.460.0122  
www.networkbuilding.com



AT&T Site No: NYNYNY2Q73  
AT&T Site Name: Playland

February 12, 2015  
Structural Certification cont. from pg. 1

Based on an assessment of the existing site conditions and by reviewing the aforementioned documents, and per the code provision of the 2010 *Building Code of New York State and Structural Standards for Steel Antenna Towers and Antenna Supporting Structures ANSI/TIA-222-G* code for applied gravity and lateral loads, using a basic design wind speed of one-hundred-and-ten (110) mph at 88'-0" above ground level with no ice, NB+C ES has determined that the existing structure is adequate and can support the proposed installation without any structural modification or reinforcement to the existing structure. The proposed antennas will be mounted to the existing pipe masts on the steeple façade. The proposed RRHs will be mounted to the existing unistrut mounts on the interior steeple wall.

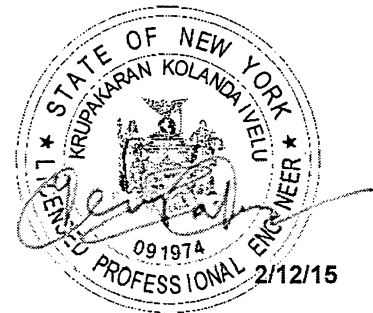
Please refer to the construction drawings prepared by NB+C ES for additional details. Should you have any questions or require additional information, please feel free to contact us.

NB+C Engineering Services, LLC

Prepared by: Gary K. Lucas Jr., PE

Respectfully submitted by:

**Krupakaran Kolandaivelu, PE**  
Engineering Manager – Structural  
NY PE License No. 091974



**Effective Projected Area (EPA)**  
Area Comparison Tool for Antenna Modifications

Date:	2/11/2015
Site Name:	Playland
Site ID:	NYCNY2Q73
Carrier:	AT&T
Antenna Elevation:	88'

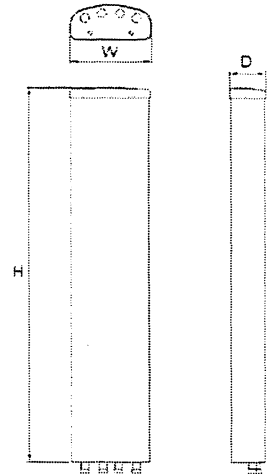


Legend:	
Input	
Output	

**Existing Loading (include all existing equipment for the carrier)**

Antennas, TMAs, Diplexers, & RETs

Manufacturer	Model Number	Round or Flat	Dimensions			No. of Antennas Per Sector			Total No. of Antennas
			Height (in)	Width (in)	Depth (in)	Alpha	Beta	Gamma	
POWERWAVE TECHNOLOGIES	P65-15-XLH-RR	F	51	12	6	1			1
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				



**Proposed Loading (include the total loading configuration for the carrier)**

Antennas, TMAs, Diplexers, & RETs

Manufacturer	Model Number	Round or Flat	Dimensions			No. of Antennas Per Sector			Total No. of Antennas
			Height (in)	Width (in)	Depth (in)	Alpha	Beta	Gamma	
ANDREW	SBNHH-1D65A	F	55	11.9	7.1	1			1
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				
		F	0	0	0				

Proposed EPA = 6.36 ft<sup>2</sup>

Existing EPA = 5.95 ft<sup>2</sup>

Dish EPA  ft<sup>2</sup>

Net Change in Wind Area = 0.41 ft<sup>2</sup>

Net Percentage Change in Wind Area = 6.94 %

Existing Structure EPA (Component that loading is attached to) = 0.00 ft<sup>2</sup>

Net Percentage increase in Wind Area to existing structure with antenna loading = 0.00 %

(see TIA-222-G section 2.6.9.1.1 - 2.6.9.2.5 for equations)

**User Notes:**

- 1) Search for your antenna manufacturer and model no. from the drop down menus before searching for the dimensions, if the antenna is in the database the size will auto-populate, if the antenna is not in the database you can manually input the dimensions
- 2) If there are existing or proposed dishes you will need to input the front EPA into the box provided

**Spreadsheet notes:**

- 1) Areas do not include mount frames or mount pipes.
- 2) Alpha, Beta, Gamma sectors assumed to be 120 degree separation.



Sponsored by the ATC Endowment Fund Applied Technology Council 201 Redwood Shores Parkway, Suite 240 Redwood City, California 94065 (650) 595-1542

## Antenna Mast Structural Analysis:

### Site Information:

Site Name: Playland

Address: 66 Milton Rd, Rye, New York 10580, Westchester County

### Wind Loads on Antennas Per 2010 BCNYS

### ASCE/SEI 7-05 Reference

Location:	Rye, NY	
Risk Category:	II	Table 1-1, Pg. 3
Exposure:	B	Section 6.5.6.3, Pg 25
Velocity Pressure Coefficient:	$K_z := .96$	Table 6-3, Pg. 79
Topographic Factor:	$K_{zt} := 1.0$	Section 6.5.7.2, Pg 26
Wind Directional Factor:	$K_d := 0.95$	Table 6-4, Pg. 80
Basic Wind Speed (mph):	$V := 110$	Figure 6-1, Pg. 36
Equipment Mid Height AGL (ft):	$h := 88\text{ft}$	
Importance Factor:	$I := 1.0$	Table 6-1, Pg. 77
Gust Response Factor:	$G := .85$	Section 6.5.8.1, Pg. 26
Velocity Pressure (psf):	$q_z := 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2 \cdot I \cdot \text{psf}$	Equation 6-15, Pg. 31
	$q_z = 28.3 \cdot \text{psf}$	

### Mast Dimensions:

$Qnt_1 := 1$	
$h_{\text{mast}} := 48\text{in}$	Mast height
$d_{\text{in}} := 2.469\text{in}$	Mast diameter IN
$d_{\text{out}} := 2.875\text{in}$	Mast diameter OUT
$m_{\text{mast}} := 5.79\text{plf}$	Mast weight per foot
$M_{\text{mast}} := m_{\text{mast}} \cdot h_{\text{mast}}$	Mast total weight

## Antenna Dimensions

	<u>Antenna 1:</u>	<u>RRU 1:</u>
Quantity	$Qnt_1 := 1$	$Qnt_2 := 1$
Antenna height	$h_1 := 55\text{in}$	$h_2 := 20.1\text{in}$
Antenna width	$w_1 := 11.9\text{in}$	$w_2 := 11.2\text{in}$
Antenna depth	$d_1 := 7.1\text{in}$	$d_2 := 7.6\text{in}$
Antenna weight	$m_{ant} := 33.5\text{lbf}$	$m_{rru} := 46\text{lbf}$
Wind area front	$A_{1f} := h_1 \cdot w_1$	$A_{2f} := h_2 \cdot w_2$
Wind area side	$A_{1s} := h_1 \cdot d_1$	$A_{2s} := h_2 \cdot d_2$
Aspect ratio	$A_{ratio} := \frac{h_1}{w_1}$	$A_{ratio} := \frac{h_2}{w_2}$
Force Coeff front	$C_{f1x} := 1.36$	$C_{f2x} := 1.31$
Force Coeff side	$C_{f1z} := 1.43$	$C_{f2z} := 1.32$

Figure 6-21, Pg. 74

## Wind Loads:

$$W_{x1} := q_z \cdot G \cdot C_{f1x} \cdot A_{1f} \quad W_{x2} := q_z \cdot G \cdot C_{f2x} \cdot A_{2f}$$

$$W_{x1} = 148.4 \cdot \text{lbf}$$

$$W_{x2} = 49.2 \cdot \text{lbf}$$

$$W_{z1} := q_z \cdot G \cdot C_{f1z} \cdot A_{1s} \quad W_{z2} := q_z \cdot G \cdot C_{f2z} \cdot A_{2s}$$

$$W_{z1} = 93.1 \cdot \text{lbf}$$

$$W_{z2} = 33.6 \cdot \text{lbf}$$



**Reactions: X-dir**

$$F_{1x} := W_{x1}$$

$$F_{2x} := W_{x2}$$

$$F_{1x} = 148.43 \cdot \text{lbf}$$

$$F_{2x} = 49.18 \cdot \text{lbf}$$

$$R_{ax} := \frac{F_{1x}}{2}$$

$$R_{ax} = 74.2 \cdot \text{lbf}$$

**Reactions: Z-dir**

$$F_{1z} := W_{z1}$$

$$F_{2z} := W_{z2}$$

$$F_{1z} = 93.118 \cdot \text{lbf}$$

$$F_{2z} = 33.625 \cdot \text{lbf}$$

$$R_{az} := \frac{F_{1z}}{2}$$

$$R_{az} = 46.6 \cdot \text{lbf}$$

**Reactions: Due to Gravity Loads:**

$$M_{\text{total}} := m_{\text{ant}} + m_{\text{rru}} + M_{\text{mast}}$$

$$R_{ay} := \frac{M_{\text{total}}}{2}$$

$$R_{ay} = 51.3 \cdot \text{lbf}$$

**Mast Bending Moments:****MAST BENDING FAILURE CHECK**

$$P_1 := W_{x1} = 148.4 \cdot \text{lbf}$$

$$E := 29000 \text{ksi}$$

$$L_1 := h_{\text{mast}}$$

$$L_1 = 4 \cdot \text{ft}$$

$$S_{\text{mod}} := 3.14159 \cdot \frac{(d_{\text{out}}^4 - d_{\text{in}}^4)}{32 \cdot d_{\text{out}}}$$

$$I_m := 3.14159 \cdot \frac{(d_{\text{out}}^4 - d_{\text{in}}^4)}{64}$$

$$I_m = 1.53 \cdot \text{in}^4$$

$$S_{\text{mod}} = 1.064 \cdot \text{in}^3$$

$$F_y := 35 \text{ksi}$$

$$M_{\text{allow}} := S_{\text{mod}} \cdot F_y$$

$$M_{\text{allow}} = 3103.4 \cdot \text{ft} \cdot \text{lbf}$$

$$M_{\text{max}} := \frac{P_1 \cdot L_1}{2} = 296.9 \cdot \text{ft} \cdot \text{lbf} \quad \Rightarrow \text{GOOD}$$

**MAST DEFLECTION CHECK:**

Simply Supported Beam Deflection due to wind loading

$$\Delta := \frac{5}{384} \cdot \frac{P_1 \cdot L_1^3}{E \cdot I_m} = 4.8 \times 10^{-3} \cdot \text{in}$$

$$\Delta_{\text{allow}} := .015 h_{\text{mast}}$$

$$\Delta_{\text{allow}} = 0.72 \cdot \text{in}$$

$$\Delta = 0.005 \cdot \text{in}$$

==&gt; GOOD

**BOLT CONNECTION CHECK:**

$$R_{\text{max}} := \max(R_{ax}, R_{ay}, R_{az})$$

$$R_{\text{max}} = 74.22 \cdot \text{lbf}$$

$$R_A := \sqrt{\left(\frac{R_{\text{max}}}{2}\right)^2 + \left(\frac{m_{\text{ant}}}{2}\right)^2}$$

$$R_A = 40.71 \cdot \text{lbf}$$

Use this as net reaction at each support by  
taking the magnitude of the wind and gravity  
loads1/2" diameter Hilti - MY20 (6" embedded):

$$F_{T,\text{allow}} := 745 \text{ lbf}$$

$$F_{V,\text{allow}} := 600 \text{ lbf}$$

**Max Load on Anchors**

$$F_{Tx} := \frac{R_A}{2}$$

$$F_{Vy} := \frac{R_A}{2}$$

$$F_{Vz} := \frac{R_A}{2}$$

Assume calculated net reaction occurs in all  
three directions simultaneously

$$\frac{F_{Tx}}{F_{T,\text{allow}}} + \frac{F_{Vy}}{F_{V,\text{allow}}} + \frac{F_{Vz}}{F_{V,\text{allow}}} = 0.095$$

==&gt; GOOD

Therefore, the existing pipe mounts connecting to the existing parapet wall are adequate for the proposed installation and the proposed AT&T equipment can be installed as intended. Please see the construction drawings prepared by NB+C ES for further details.

# Product Specifications

COMMScope®

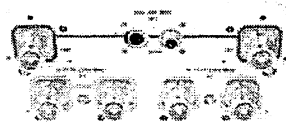
POWERED BY



## SBNHH-1D65A

Andrew® Tri-band Antenna, 698–896 and 2 x 1710–2360 MHz, 65° horizontal beamwidth, internal RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package



### Electrical Specifications

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2180	2300–2360
Gain, dBi	13.6	13.7	16.5	16.9	17.1	17.6
Beamwidth, Horizontal, degrees	66	61	70	65	62	61
Beamwidth, Vertical, degrees	17.6	15.9	7.1	6.6	6.2	5.5
Beam Tilt, degrees	0–18	0–18	0–10	0–10	0–10	0–10
USLS, dB	16	13	13	13	12	12
Front-to-Back Ratio at 180°, dB	25	27	28	28	27	29
CPR at Boresight, dB	20	16	20	23	17	20
CPR at Sector, dB	10	5	11	6	1	4
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	30	30	30	30	30	30
VSWR   Return Loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	350	350	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

### Electrical Specifications, BASTA\*

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	13.1	13.1	16.1	16.5	16.7	17.2
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.5	±0.3	±0.5	±0.4
	0 °   13.4	0 °   13.4	0 °   16.0	0 °   16.3	0 °   16.5	0 °   17.0
Gain by Beam Tilt, average, dBi	9 °   13.1	9 °   13.1	5 °   16.2	5 °   16.5	5 °   16.8	5 °   17.3
	18 °   12.7	18 °   12.7	10 °   16.1	10 °   16.5	10 °   16.6	10 °   16.9
Beamwidth, Horizontal Tolerance, degrees	±3.1	±5.4	±2.8	±4	±6.6	±4.6
Beamwidth, Vertical Tolerance, degrees	±1.8	±1.4	±0.3	±0.4	±0.5	±0.3
USLS, dB	15	14	15	15	15	14
Front-to-Back Total Power at 180° ± 30°, dB	22	21	26	26	24	25
CPR at Boresight, dB	22	16	22	25	21	22
CPR at Sector, dB	10	6	12	8	5	4

\* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

### General Specifications

Antenna Brand	Andrew®
Antenna Type	DualPol® multiband with internal RET
Band	Multiband
Brand	DualPol®   Teletilt®
Operating Frequency Band	1710 – 2360 MHz   698 – 896 MHz

# Product Specifications

COMMScope®

SBNHH-1D65A

POWERED BY



## Mechanical Specifications

Color	Light gray
Lightning Protection	dc Ground
Radiator Material	Aluminum   Low loss circuit board
Radome Material	Fiberglass, UV resistant
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, total	6
Wind Loading, maximum	445.0 N @ 150 km/h 100.0 lbf @ 150 km/h
Wind Speed, maximum	241.4 km/h   150.0 mph

## Dimensions

Depth	180.0 mm   7.1 in
Length	1398.0 mm   55.0 in
Width	301.0 mm   11.9 in
Net Weight	15.2 kg   33.5 lb

## Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Power Consumption, idle state, maximum	2.0 W
Power Consumption, normal conditions, maximum	11.0 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Interface	8-pin DIN Female   8-pin DIN Male
RET Interface, quantity	1 female   1 male
RET System	Teletilt®

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



## Included Products

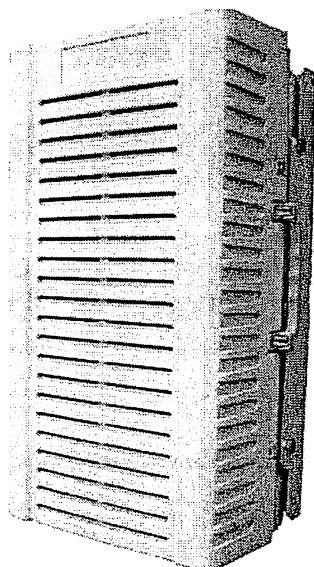
BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

# ALCATEL-LUCENT

## WIRELESS PRODUCT DATASHEET

### RRH2X60-1900A-4R FOR BAND 2 APPLICATIONS

The Alcatel-Lucent RRH2x60-1900A-4R is a high power, small form factor Remote Radio Head operating in the PCS 1900MHz frequency band (3GPP Band 2) for WCDMA and LTE technologies. It is designed with an eco-efficient approach, providing operators with the means to achieve high quality and high capacity coverage with minimum site requirements and efficient operation.



A distributed Node B expands the deployment options by using two components, a Base Band Unit (BBU) containing the digital assets and a separate RRH containing the radio-frequency (RF) elements. This modular design optimizes available space and allows the main components of a Node B to be installed separately, within the same site or several kilometers apart.

The Alcatel-Lucent RRH2x60-1900A-4R is linked to the BBU by an optical-fiber connection carrying downlink and uplink digital radio signals along

with operations, administration and maintenance (OA&M) information.

#### SUPERIOR RF PERFORMANCE

The Alcatel-Lucent RRH2x60-1900A-4R integrates all the latest technologies. This allows to offer best-in-class characteristics.

It delivers an outstanding 120 watts of total RF power thanks to its two transmit RF paths of 60 W each.

It is ideally suited to support multiple-input multiple-output (MIMO) 2x2 operation.

It includes four RF receivers to natively support 4-way uplink reception diversity. This improves the radio uplink coverage and this can be used to extend the cell radius commensurate with 2x2MIMO 2x60 W for the downlink.

The latest generation power amplifiers (PA) used in this product achieve high efficiency (>40%), resulting in improved power consumption figures.

#### OPTIMIZED TCO

The Alcatel-Lucent RRH2x60-1900A-4R is designed to make available all the benefits of a distributed Node B, with excellent RF characteristics, with low capital expenditures (CAPEX) and low operating expenditures (OPEX).

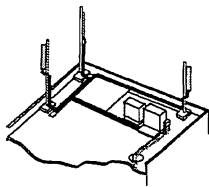
The Alcatel-Lucent RRH2x60-1900A-4R is a very cost-effective solution to deploy LTE MIMO.

#### EASY INSTALLATION

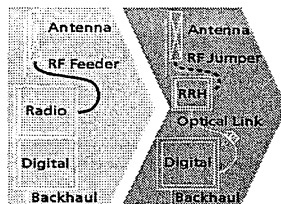
The limited space available in some sites may prevent the installation of traditional single-cabinet BTS equipment. However, many of these sites can host an Alcatel-Lucent RRH2x60-1900A-4R installation, providing more flexible site selection and improved network quality along with greatly reduced installation time and costs.

The Alcatel-Lucent RRH2x60-1900A-4R is a zero-footprint solution and is convection cooled without fans for silent operation, simplifying negotiations with site property owners and minimizing environmental impacts.

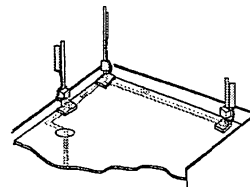
Installation can easily be done by a single person as the Alcatel-Lucent RRH2x60-1900A-4R is compact and weighs about 21 kg, eliminating the need for a crane to hoist the BTS cabinet to the rooftop. A site can be in operation in less than one day.



Macro



RRH for space-constrained cell sites



Distributed

## FEATURES

- RRH2x60-1900A-4R integrates two power amplifiers of 60W rating (at each antenna connector)
- RRH2x60-1900A-4R can operate WCDMA only, LTE only or a mix of WCDMA and LTE
- RRH2x60-1900A-4R offers the possibility for WCDMA (non MIMO) to operate the two radio chains independently (2 blocks of 20MHz anywhere in the band)
- RRH2x60-1900A-4R is a very compact and lightweight product

- Advanced power management techniques are embedded to provide power savings, such as PA bias control or second PA path switch-off

## BENEFITS

- MIMO deployment and/or WCDMA and LTE simultaneous operation with only one single unit per sector
- Improved uplink coverage with built-in 4-way receive diversity capability
- RRH can be mounted close to the antenna, eliminating nearly all losses in RF cables and thus reducing power

consumption by 50% compared to conventional solutions

- Distributed configurations provide easily deployable and cost-effective solutions, near zero footprint and silent solutions, with minimum impact on the neighborhood, which ease the deployment
- RETA and TMA support without additional hardware thanks to the AISG v2.0 port and the integrated Bias-Tees. Bias-Tees support AISG DC supply and signaling.

## TECHNICAL SPECIFICATIONS

Specifications listed are hardware capabilities. Some capabilities depend on support in a specific software release or future release.

### Dimensions and weights

- HxWxD : 510x285x193mm (28 l with solar shield)
- Weight : 21kg (46lbs)

### Electrical Data

- Power Supply : -48V DC (-40.5 to -57V)
- Power Consumption (ETSI average traffic load reference) : 110W for @1x20W; 250W @2x60W

### RF Characteristics

- Frequency band: 1900 (3GPP band 2)
- Output power: 2x60W at antenna connectors
- Technologies supported: W-CDMA and LTE
- Instantaneous bandwidth: 20MHz (MIMO) or 2x20MHz (non MIMO)
- Rx diversity: 2-way and 4-way uplink reception
- Typical sensitivity without Rx diversity (3GPP 25.104): -125.7 dBm for WCDMA and -105 dBm for LTE

### Connectivity

- Two CPRI optical ports for daisy chaining and up to six RRHs per fiber
- Type of optical fiber: Single-Mode (SM) and Multi-Mode (MM) SFPs
- Optical fiber length: up to 500m using MM fiber, up to 20km using SM fiber
- TMA/RETA : AISG 2.0 (RS485 connector and internal Bias-Tee)
- Six external alarms
- Surge protection for all external ports (DC and RF)

### Environmental specifications

- Operating temperature: -40°C to 55°C including solar load
- Operating relative humidity: 8% to 100%
- Environmental Conditions : ETS 300 019-1-4 class 4.1E
- Ingress Protection : IEC 60529 IP65
- Acoustic Noise : Noiseless (natural convection cooling)

### Safety and Regulatory Data

- EMC : 3GPP 25.113, EN 301 489-1, EN 301 489-23, GR 1089
- Safety : IEC60950-1, EN 60825-1
- Regulatory : CE Mark – European Directive : 2002/95/EC (ROHS); 2002/96/EC (WEEE); 1999/5/EC (R&TTE)
- Health : EN 50385

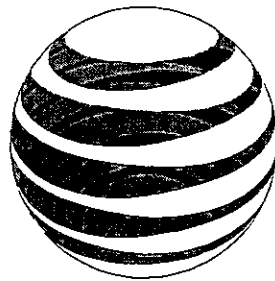
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.....Alcatel-Lucent 

AT THE SPEED OF IDEAS™





at&t  
mobility corp.

FA NUMBER: 10105111 / SITE ID: NYCNNY2Q73  
SITE NAME: PLAYLAND  
(LTE 2C/CARRIER ADD PROJECT)

66 MILTON ROAD  
RYE, NEW YORK 10580



Know what's below.  
Call before you dig.

SITE INFORMATION

SITE ADDRESS: 66 MILTON ROAD  
RYE, NEW YORK 10580

LATITUDE (NAD 83): 40.978189°  
LONGITUDE (NAD 83): -73.684669°

GROUND ELEVATION: 36' (AMSL)

JURISDICTION: CITY OF RYE

PROPERTY TAX ID: SECTION 148.11, BLOCK 1, LOT 73

PROPERTY OWNER: BLIND BROOK LODGE OWNERS  
C/O RMR RESIDENTIAL  
66 MILTON ROAD  
RYE, NY 10580

STRUCTURE TYPE: ROOFTOP

STRUCTURE HEIGHT: 59'± A.G.L.

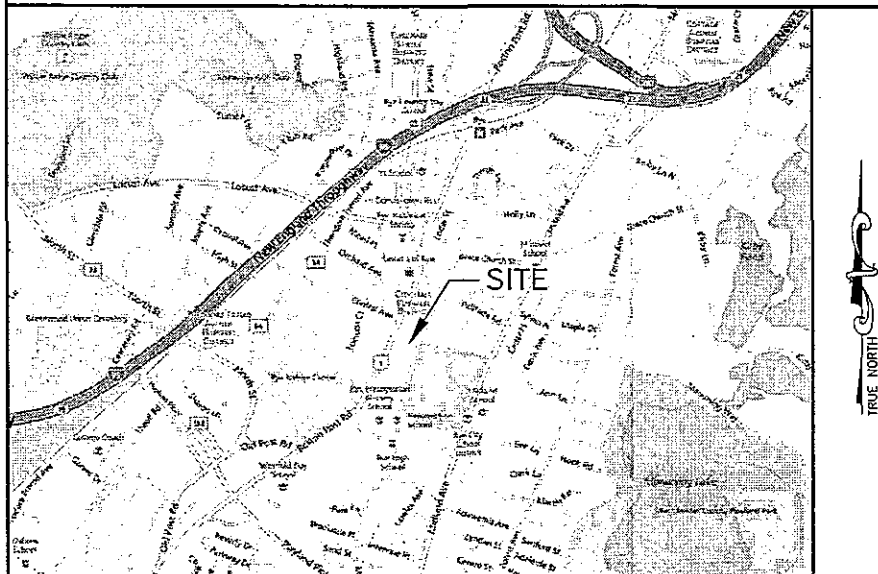
PROJECT TEAM

APPLICANT: AT&T MOBILITY CORPORATION  
ONE AT&T WAY  
BEDMINSTER, NJ 07921

PROJECT MANAGEMENT FIRM: NETWORK BUILDING & CONSULTING, LLC.  
1777 SENTRY PARKWAY WEST  
DUBLIN HALL, SUITE 210  
BLUE BELL, PA 19422  
(267) 460-0122

ENGINEERING FIRM: NB&C ENGINEERING SERVICES, LLC.  
1777 SENTRY PARKWAY WEST  
DUBLIN HALL, SUITE 210  
BLUE BELL, PA 19422  
(267) 460-0122

VICINITY MAP



DIRECTIONS

FROM 1 AT&T WAY BEDMINSTER TOWNSHIP, NJ 07921 HEAD SOUTH. SLIGHT RIGHT ONTO AT&T WAY. MERGE ONTO US-202 S/US-206 S. TURN LEFT ONTO SCHLEY MOUNTAIN RD. TAKE THE INTERSTATE 287 N RAMP. TAKE THE EXIT ONTO I-287 E/A-87 S. KEEP LEFT AT THE FORK TO CONTINUE ON I-287 E. TAKE EXIT 11 FOR US-1 TOWARD PORT CHESTER/RYE. TURN RIGHT ONTO U.S. 1 S/BOSTON POST RD. SLIGHT LEFT ONTO CROSS ST. AT THE TRAFFIC CIRCLE, TAKE THE 1ST EXIT AND STAY ON CROSS ST. CROSS ST TURNS SLIGHTLY RIGHT AND BECOMES MILTON RD. ARRIVE AT SITE ON THE RIGHT.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- 2009 INTERNATIONAL BUILDING CODE
- 2008 NATIONAL ELECTRICAL CODE
- 2009 NFPA 101, LIFE SAFETY CODE
- 2009 IPC
- AMERICAN CONCRETE INSTITUTE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION
- MANUAL OF STEEL CONSTRUCTION 13TH EDITION
- ANSI/TIA-222-G
- TIA 607
- INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
- IEEE C2 NATIONAL ELECTRIC SAFETY CODE LATEST EDITION
- TELECordia GR-1275
- ANSI/T 311

DRAWING INDEX

T-1 TITLE SHEET  
C-1 ROOFTOP PLAN & EQUIPMENT LAYOUT  
A-1 ELEVATION & ANTENNA MOUNTING PLAN  
A-2 DETAILS & ANTENNA SCHEDULE  
E-1 SYSTEM DIAGRAM  
E-2 WIRING DIAGRAM  
G-1 GROUNDING DIAGRAM & DETAILS  
GN-1 GENERAL NOTES

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 24"X36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGNER / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.

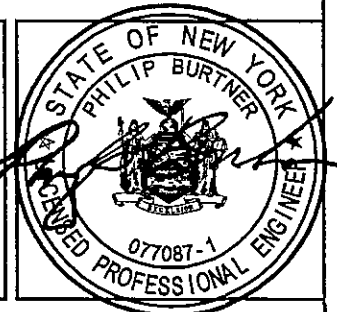
NB&C  
TOTALLY COMMITTED.  
NB&C ENGINEERING SERVICES, LLC.  
1777 SENTRY PARKWAY WEST  
DUBLIN HALL, SUITE 210  
BLUE BELL, PA 19422  
(267) 460-0122



NYCNNY2Q73  
FA# 10105111  
PLAYLAND  
66 MILTON ROAD  
RYE, NEW YORK 10580

REVISIONS

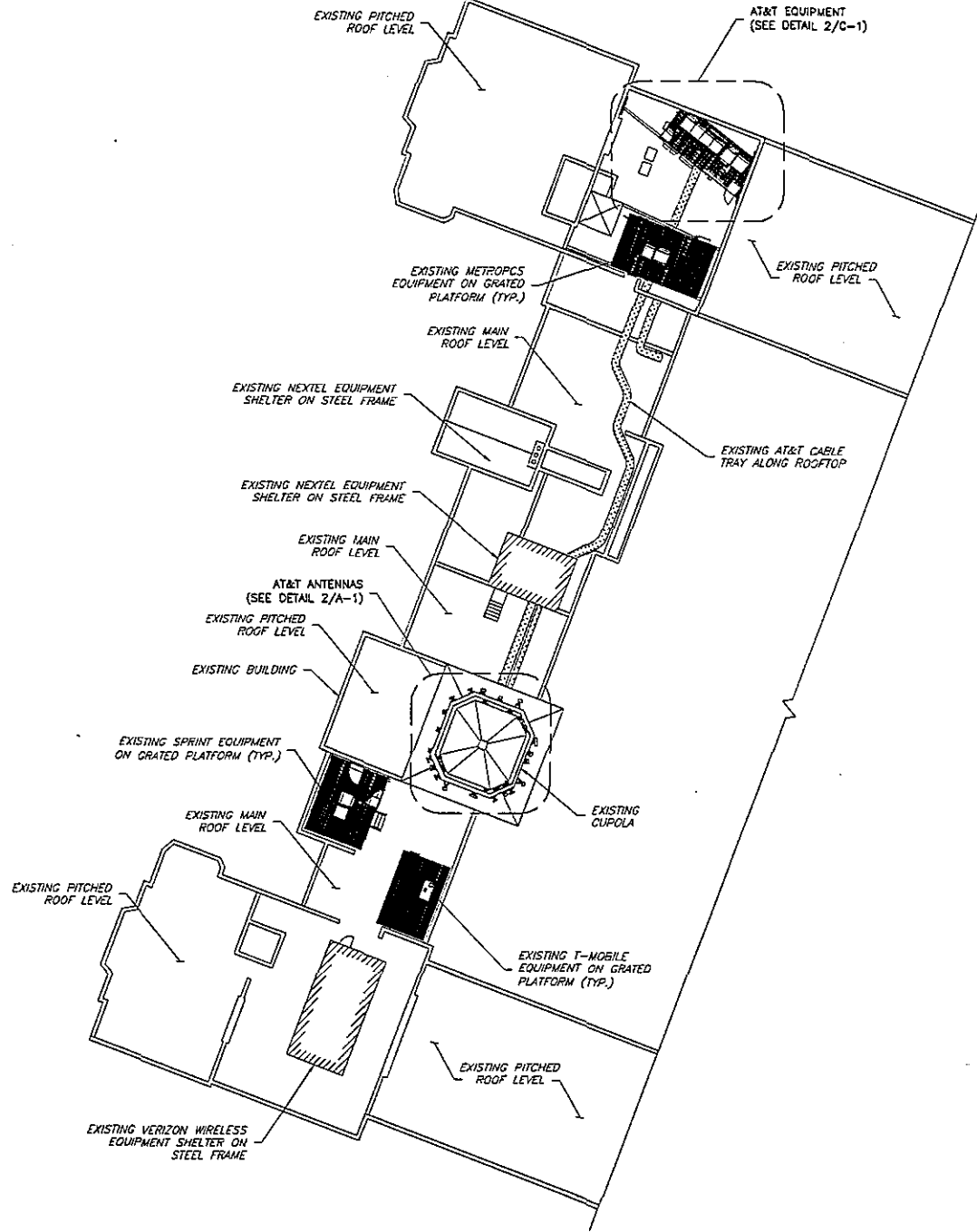
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0	05/08/15	PERMIT READY	JJ
A	02/11/15	PRELIMINARY	JJ



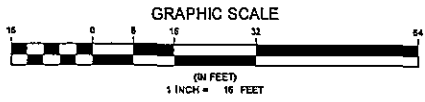
PHILIP A. BURTNER, P.E.  
NY PROFESSIONAL ENGINEER LIC. # 077087-1  
I, PHILIP A. BURTNER, P.E., DO HEREBY CERTIFY THAT I AM THE DESIGNER OF THE ABOVE DRAWING AND I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK. THE ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR THE DRAWING TO BE VALID.

TITLE SHEET

T-1



1 ROOFTOP PLAN  
SCALE: 1" = 16'

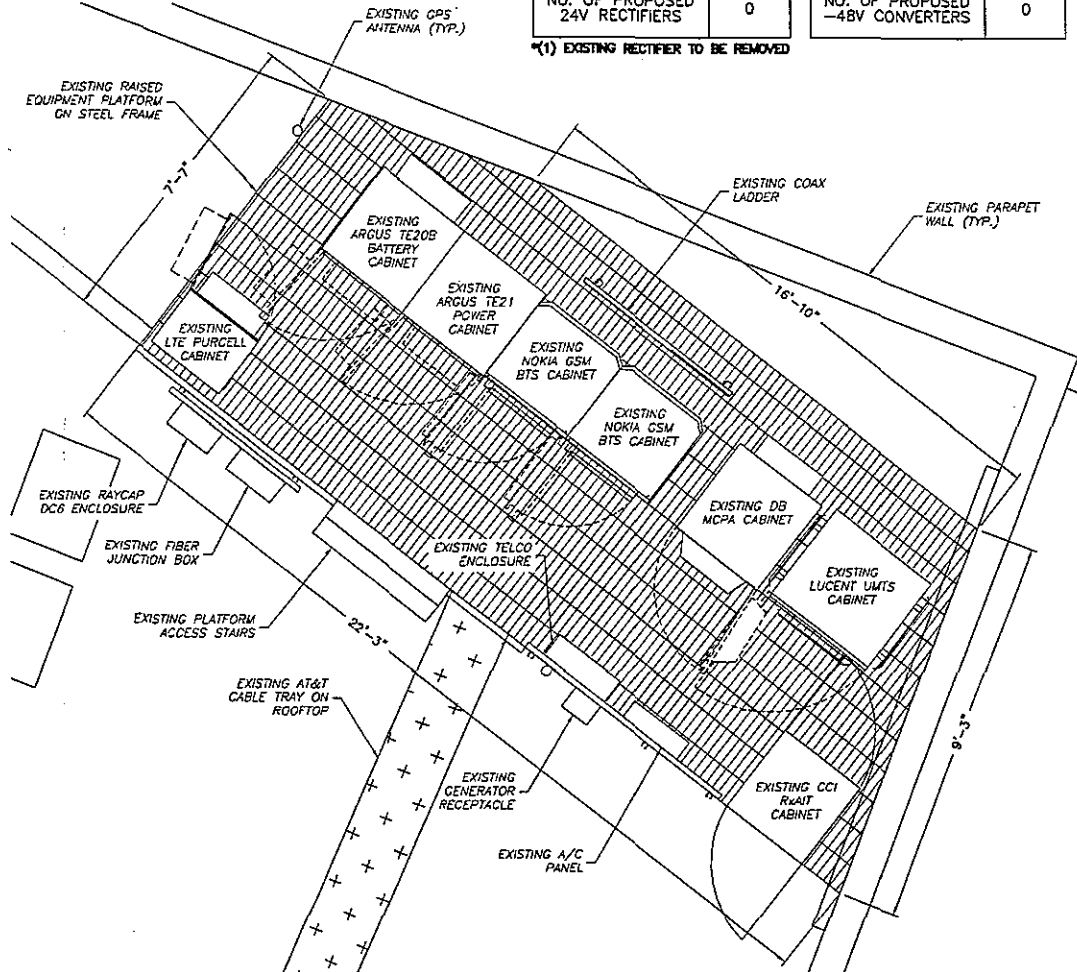


NOTES:

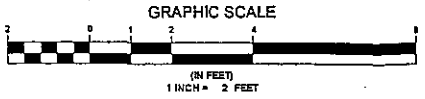
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR. ROUTING OF TRENCHING SHALL BE APPROVED BY CONTRACTOR.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
- ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS UNLESS OTHERWISE SPECIFIED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
- ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.
- CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 247B2-000-3APS-A00Z-00002, GENERAL CONSTRUCTION SERVICES.
- SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK MAY BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

24V RECTIFIER INFO		-48V CONVERTER INFO	
NO. OF REQUIRED 24V RECTIFIERS FOR 2C SCOPE	8	NO. OF REQUIRED CONVERTERS FOR 2C SCOPE	3
NO. OF EXISTING 24V RECTIFIERS	9	NO. OF EXISTING -48V CONVERTERS	3
NO. OF PROPOSED 24V RECTIFIERS	0	NO. OF PROPOSED -48V CONVERTERS	0

(1) EXISTING RECTIFIER TO BE REMOVED



2 EQUIPMENT LAYOUT  
SCALE: 1" = 2'



ENGINEER  
NB+C  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
1777 SENTRY PARKWAY WEST  
DUBLIN, PA 19021  
(215) 480-0122

APPLICANT  
  
at&t  
mobility corp.

SITE INFORMATION  
NYCNY2Q73  
FA# 10105111  
PLAYLAND  
66 MILTON ROAD  
RYE, NEW YORK 10580

DESIGN RECORD  

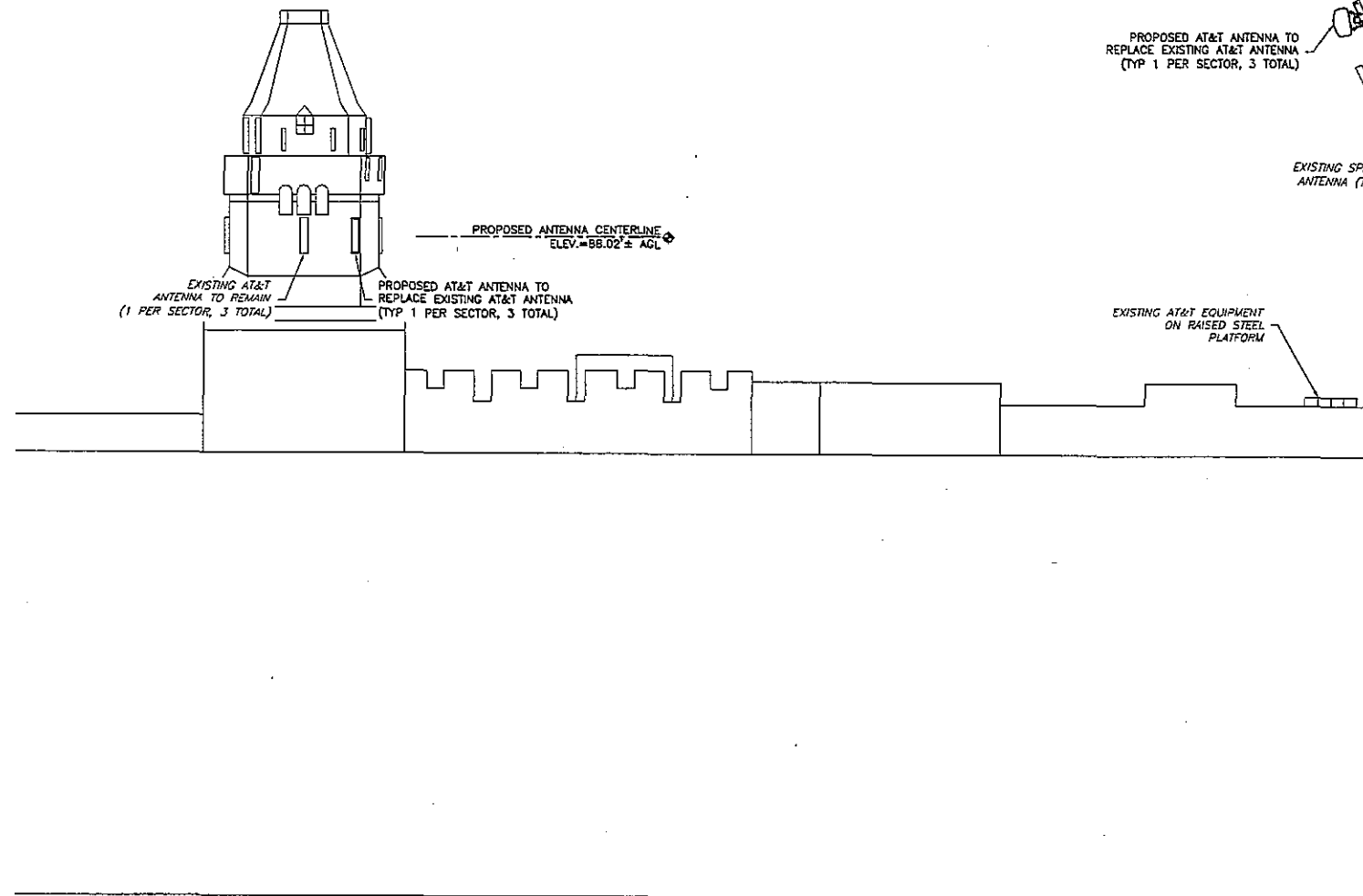
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A	02/11/15	PRELIMINARY	JJ

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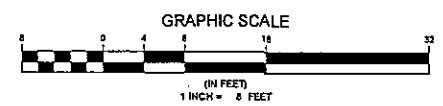
ENGINEER  
PHILIP A. BURTNER, P.E.  
NY PROFESSIONAL ENGINEER LIC. # 077087-1  
PHILIP A. BURTNER, P.E. IS A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK. HE HAS BEEN ISSUED A LICENSE TO PRACTICE AS A PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK. THE LICENSE IS VALID UNTIL 12/31/2018. HE IS NOT A MEMBER OF ANY PROFESSIONAL SOCIETY. HE IS NOT A MEMBER OF ANY PROFESSIONAL SOCIETY. HE IS NOT A MEMBER OF ANY PROFESSIONAL SOCIETY.

SHEET TITLE  
ROOFTOP PLAN &  
EQUIPMENT LAYOUT

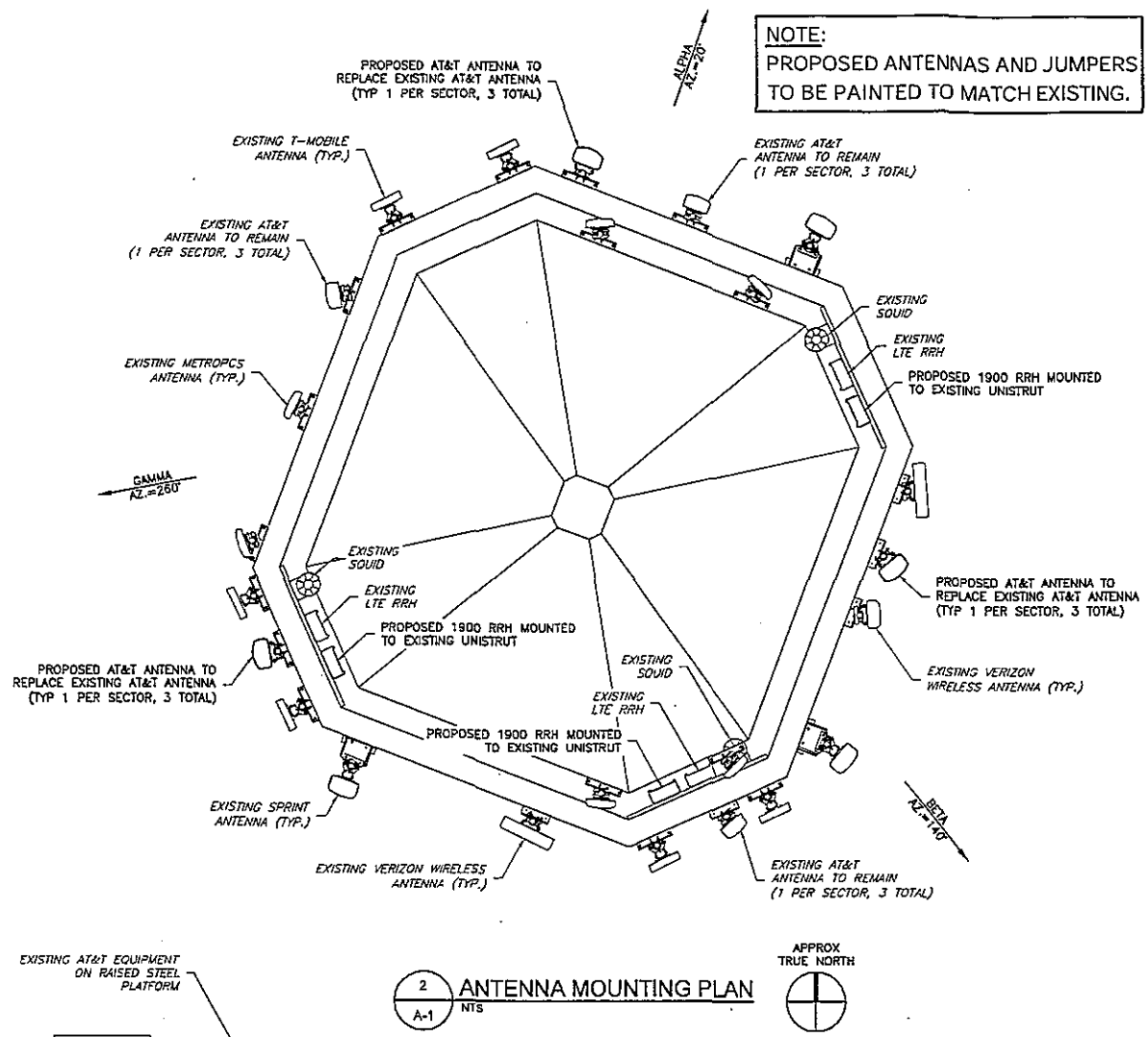
SHEET NUMBER  
C-1



1 ELEVATION  
A-1  
SCALE: 1" = 8'



NOTE:  
CONTRACTOR SHALL OBTAIN THE RF SHEET PRIOR TO CONSTRUCTION.



2 ANTENNA MOUNTING PLAN  
A-1  
NTS



**ENGINEER**

**NB+C**  
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.  
1777 BENTLEY PARKWAY WEST  
DUBLIN, OHIO 43017  
(614) 486-0122

**APPLICANT**

**at&t**  
mobility corp.

**SITE INFORMATION**

NYCNY2Q73  
FA# 10105111  
PLAYLAND  
66 MILTON ROAD  
RYE, NEW YORK 10580

**DESIGN RECORD**

REVISIONS			
REV	DATE	DESCRIPTION	BY
0	05/08/15	PERMIT READY	JJ
A	02/11/15	PRELIMINARY	JJ

**PROFESSIONAL STAMP**

STATE OF NEW YORK  
PHILIP BURTNER  
077087-1  
REGISTERED PROFESSIONAL ENGINEER

**ENGINEER**

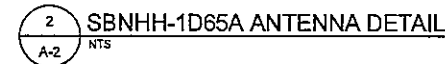
PHILIP A. BURTNER, P.E.  
NY PROFESSIONAL ENGINEER LIC. # 077087-1

**SHEET TITLE**

ELEVATION &  
ANTENNA  
MOUNTING PLAN

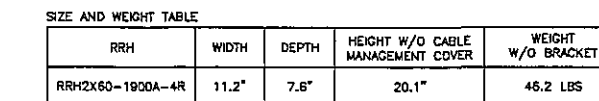
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A-1

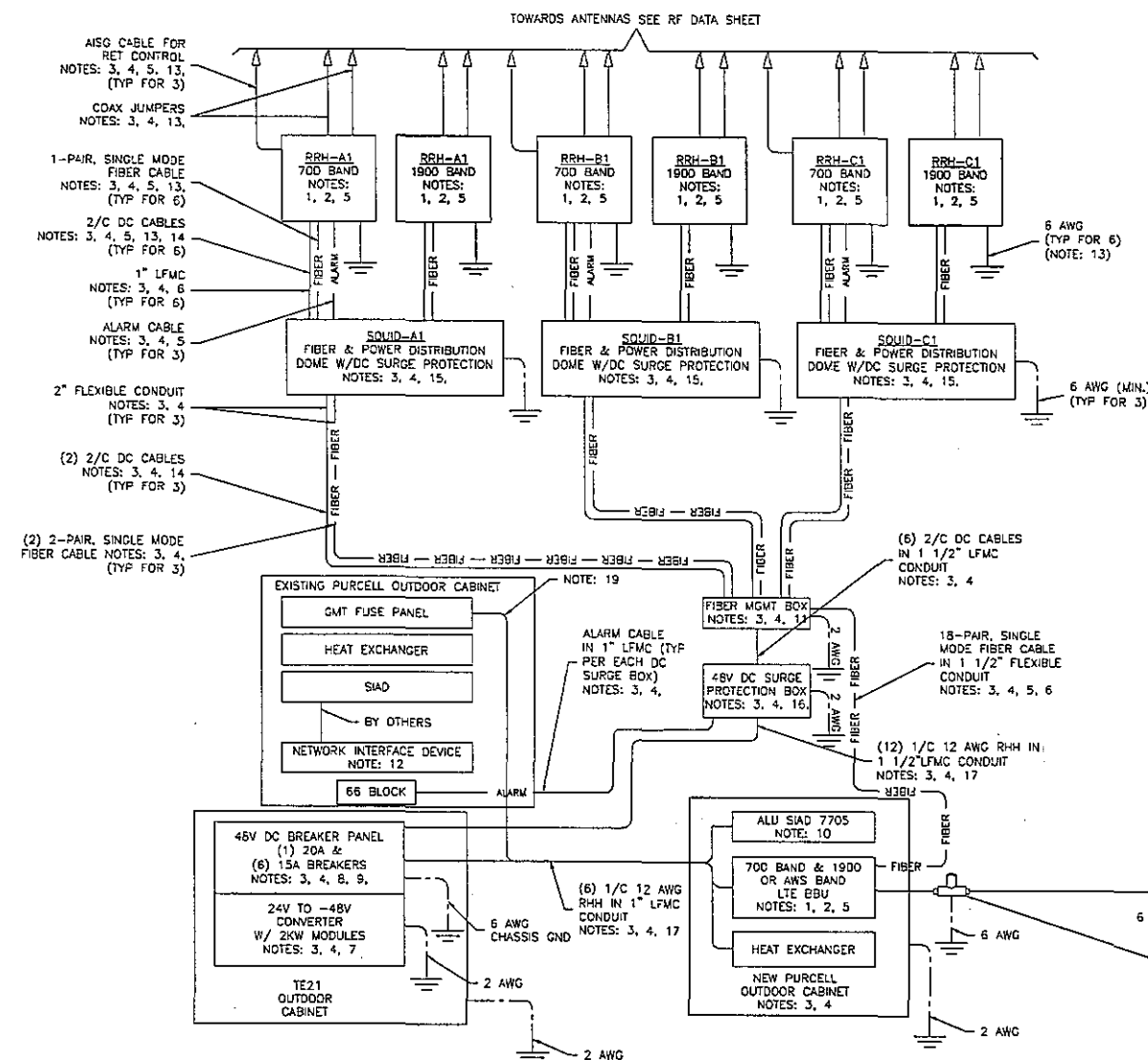


- |  |
|--|
| SINGLE FIBER 7MM/0.28"   |
| USE GROMMET<br>ROSENBERGER: CX603-HAD711<br>ANT: 13854 WITH 7/8" SNAPSTACK SNAP-IN |
| SINGLE PAIR DC POWER 15.4MM/0.61"  |
| USE GROMMET<br>ROSENBERGER: CX604-HA1117<br>ANT: 13853 WITH 7/8" SNAPSTACK SNAP-IN |

ANTENNA AND RRH SCHEDULE					
SECTOR	ANTENNA MODEL	TECHNOLOGY	AZIMUTH	ANTENNA HEIGHT	RRUS TYPE/MODEL
ALPHA	SBNHH-1D65A	LTE	20°	88.02±	(1) RRH2x40W-07L (1) RRH2x60-1900A-4R
	EXISTING ANTENNA TO REMAIN	GSM/UMTS	20°	88.02±	N/A
BETA	SBNHH-1D65A	LTE	140°	88.02±	(1) RRH2x40W-07L (1) RRH2x60-1900A-4R
	EXISTING ANTENNA TO REMAIN	GSM/UMTS	140°	88.02±	N/A
GAMMA	SBNHH-1D65A	LTE	260°	88.02±	(1) RRH2x40W-07L (1) RRH2x60-1900A-4R
	EXISTING ANTENNA TO REMAIN	GSM/UMTS	260°	88.02±	N/A



ENGINEER	<div><b>NB+C</b> TOTALLY COMMITTED.</div> <div>NB+C ENGINEERING SERVICES, LLC. 1777 MENTHY PARKWAY WEST DUBLIN, OH, 43017 BLUE HILL, PA 19122 (610) 480-0122</div>																		
APPLICANT	<div><div>at&amp;t mobility corp.</div></div>																		
SITE INFORMATION	NYCNYN2Q73 FA# 10105111 PLAYLAND 66 MILTON ROAD RYE, NEW YORK 10580																		
DESIGN RECORD	<table><thead><tr><th colspan="4">REVISIONS</th></tr><tr><th>REV</th><th>DATE</th><th>DESCRIPTION</th><th>BY</th></tr></thead><tbody><tr><td>0</td><td>05/08/15</td><td>PERMIT READY</td><td>JJ</td></tr><tr><td>A</td><td>02/11/15</td><td>PRELIMINARY</td><td>JJ</td></tr></tbody></table>			REVISIONS				REV	DATE	DESCRIPTION	BY	0	05/08/15	PERMIT READY	JJ	A	02/11/15	PRELIMINARY	JJ
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PROFESSIONAL STAMP	<div></div>																		
ENGINEER	<div>PHILIP A. BURTNER, P.E. NY PROFESSIONAL ENGINEER LIC. # 077087-1</div> <div><small>READ A DECLARATION OF THE LICENSEE AND VERIFY THAT THEY ARE AUTHORIZED TO DESIGN OR SUPERVISE THE DESIGN OF THE PROJECT. THE LICENSEE SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE LICENSEE SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE LICENSEE SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT.</small></div>																		
SHEET TITLE	DETAILS AND ANTENNA SCHEDULE																		
SHEET NUMBER	A-2																		



NOTES:

1. FURNISHED BY OEM/AT&T.
2. INSTALLED BY OEM OR AS SCOPED BY MARKET.
3. FURNISHED BY OTHERS
4. INSTALLED BY OTHERS
5. FINAL CONNECTION BY OEM OR AS SCOPED BY MARKET.
6. OPEN END OF LFMC TO BE LEFT WEATHERPROOFED UNTIL TERMINATED.
7. ARGUS 053-RPT-20-000 DUAL FEED DC-DC CONVERTER WITH 012-528-20-040 MODULES.
8. PART OF CONVERTER WITH 18 BREAKER POSITIONS. BREAKERS SPECIFIED SOLD SEPARATELY.
9. BREAKERS TO BE TAGGED AND LOCKED OUT.
10. SIAD IS FURNISHED AND INSTALLED BY OTHERS AND INCLUDES POWER CONNECTIONS AND FIBER TO THE UNIT OR AS SCOPED BY MARKET. INSTALL 10 AWG CHASSIS GROUND, PROVIDE (2) 10A BREAKERS FROM A 24V DC POWER SOURCE OR (2) 5A BREAKERS FROM A 48V DC POWER SOURCE AND CONNECT USING WFR POWER CABLE WITH SPECIAL CONNECTOR.
11. FIBER MANAGEMENT BOX IS RAYCAP MODEL FB-15-B01
12. LEC TO FURNISH AND INSTALL NETWORK INTERFACE DEVICE.
13. LEAVE COILED AND PROTECTED UNTIL TERMINATED.
14. SEE DETAIL 140B FOR DC POWER CABLE SIZES.
15. FIBER AND POWER DISTRIBUTION BOX 4/48V SURGE SHALL BE RAYCAP MODEL DC6-48-60-18-8F.
16. FIBER AND POWER DISTRIBUTION W/D SURGE PROTECTION BOX S-HALL BE RAYCAP MODEL DC6-48-60-18-8F. SEE DETAIL 140B FOR INTERNAL WIRING DIAGRAM.
17. SINGLE-CONDUCTOR DC POWER CABLES SHALL BE TELCOFLEX OR K524194, COPPER, UL LISTED RHH NON-HALOGEN, LOW SMOKE WITH BRAIDED COVER, TYPE TC (1/0 AND LARGER), UNLESS OTHERWISE NOTED, STRANDING SHALL BE CLASS B (TYPE II) FOR CABLE SIZES 14, 12 & 10 AWG AND CLASS 1 (TYPE N) FOR SIZES 8 AWG AND LARGER. CABLES SHALL BE COLOR CODED RED FOR +24V, BLUE FOR -48V AND GRAY FOR 24V AND 48V RETURN CONDUCTORS. MULTI-CONDUCTOR DC POWER CABLES SHALL COPPER, CLASS B STRANDED WITH FLAME RETARDANT PVC JACKET, TYPE TC, UL LISTED FOR 90°C DRY/75°C WET INSTALLATION.
18. 10A FUSE FOR HEAT EXCHANGER FURNISHED AND INSTALLED BY OTHERS.
19. DELETED
20. GROUNDING WIRES SHALL BE COPPER, GREEN THHN/THWN UL LISTED FOR 90°C DRY/75°C WET INSTALLATION. MINIMUM SIZE IS 6 AWG UNLESS NOTED OTHERWISE.
21. RET CONTROL FROM THE RHH IS AN OPTIONAL METHOD OF CONNECTION. REFER TO RF DATA SHEET FOR FEASIBILITY.
22. MAXIMUM W/O AWG CABLE LENGTH FROM 24V DC POWER PLANT TO CONVERTER SHALL NOT EXCEED 44 FT.

LTE SYSTEM DIAGRAM, ROOFTOP SITE  
WITH OUTDOOR ALU BASEBAND  
AND RRHS ON ROOF

GPS ANTENNA &  
SURGE SUPPRESSORS  
NOTES: 3, 4.

ENGINEER

**NBC**  
TOTALLY COMMITTED.

**NB+C ENGINEERING SERVICES, LLC.**  
1772 SENTRY PARKWAY WEST  
DUBLIN HALL, SUITE 210  
BLUE BELL, PA 15002  
(281) 462-0122

**NB+C ENGINEERING SERVICES, LLC.**  
1777 SENTRY PARKWAY WEST  
DUBLIN HALL, SUITE 210  
BLUEN HILL, PA 19422  
(281) 462-0122

APPLICANT



SITE INFORMATION

NYC NNY2Q73  
FA# 10105111  
PLAYLAND  
66 MILTON ROAD  
RYE, NEW YORK 10580

FA# 10105111

PLAYLAND

66 MILTON ROAD

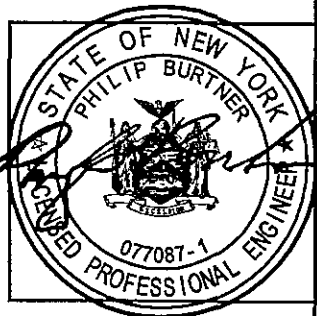
RYE, NEW YORK 10580

DESIGN RECORD

## REVISIONS

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REV	DATE	DESCRIPTION	BY

PROFESSIONAL STAMP



ENGINEER

**PHILIP A. BURTNER, P.E.**  
**NY PROFESSIONAL ENGINEER LIC. # 077087-1**

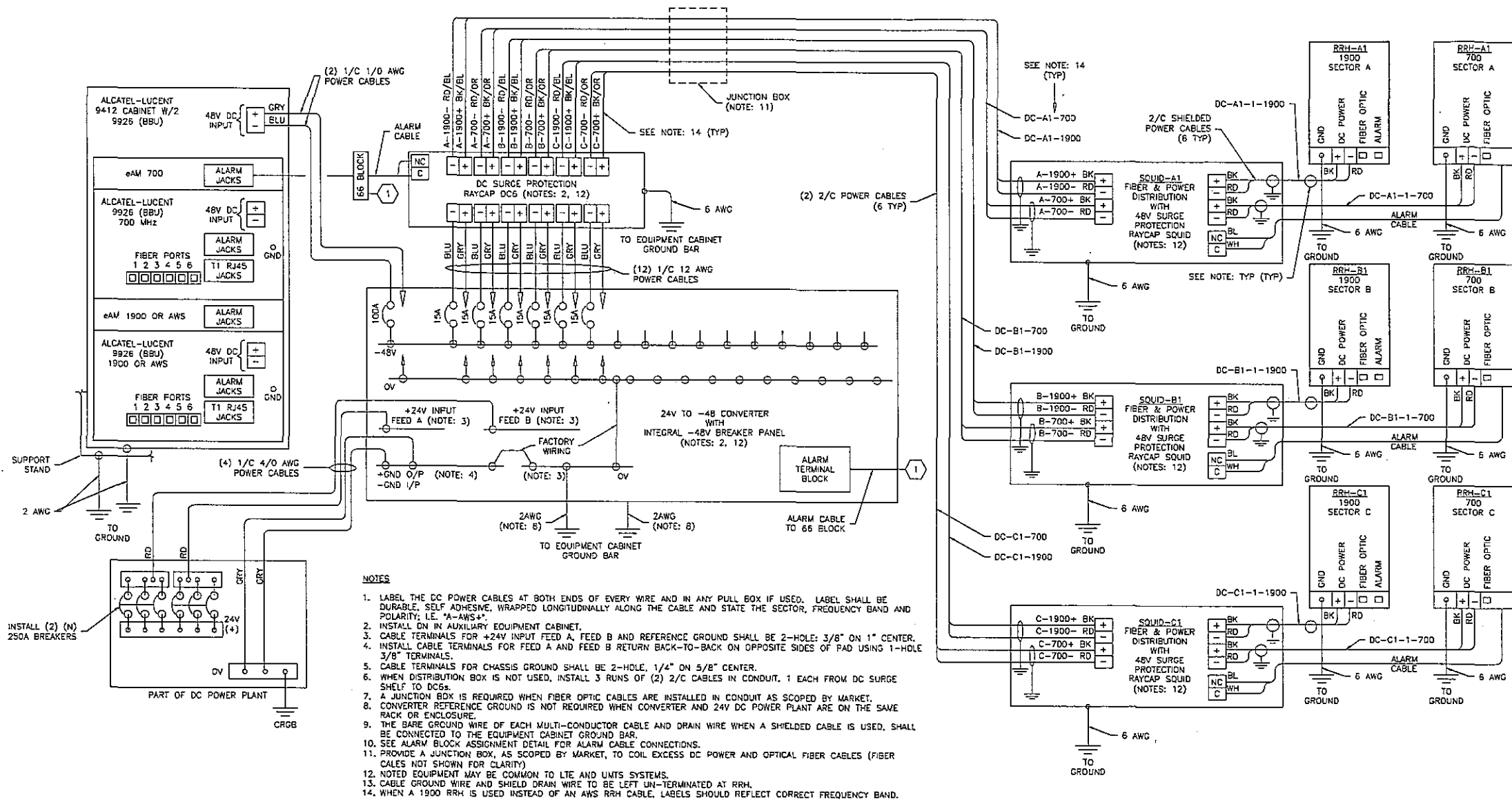
IT IS A DECLARATION OF THE LAWYER AND I, PERSON UNLESS THEY ARE ACTUALLY UNDER THE DIRECTION OF A LICENSED PROFESSIONAL, HAVE READ AND AGREE TO ALTER THE CONVENTION, UNLESS IT IS SPECIFICALLY NOTED BY THE ENGINEER IN WRITING. THIS ENGINEER IS THE ONLY AUTHORIZED PERSON TO SIGN ANY DOCUMENTS THAT ALTER OR ALTER THE SIGNIFICANCE OF THE CONTENTS THEREOF.

SHEET TITLE

### SYSTEM DIAGRAM

SHEET NUMBER

E-1



1 WIRING DIAGRAM  
E-2 NTS

ENGINEER	<b>NB+C</b> <b>TOTALLY COMMITTED.</b> NB+C ENGINEERING SERVICES, LLC. 1777 MONTGOMERY PARKWAY WEST BLUE HILL, PA 19822 (717) 486-0122																
APPLICANT	 <b>at&amp;t</b> mobility corp.																
SITE INFORMATION	NYCNNY2Q73 FA# 10105111 PLAYLAND 66 MILTON ROAD RYE, NEW YORK 10580																
DESIGN RECORD	<table border="1"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>05/08/15</td> <td>PERMIT READY</td> <td>JJ</td> </tr> <tr> <td>A</td> <td>02/11/15</td> <td>PRELIMINARY</td> <td>JJ</td> </tr> </tbody> </table>	REVISIONS				REV	DATE	DESCRIPTION	BY	0	05/08/15	PERMIT READY	JJ	A	02/11/15	PRELIMINARY	JJ
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PROFESSIONAL STAMP																	
ENGINEER	PHILIP A. BURTNER, P.E. NY PROFESSIONAL ENGINEER LIC. # 077087-1 <small>PHILIP A. BURTNER, P.E. HAS BEEN REVIEWED BY THE NEW YORK STATE BOARD OF PROFESSIONAL ENGINEERS AND FOUND TO BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL ENGINEER ACT. THE BOARD HAS NO OBJECTION TO HIS SIGNING AND SEALING THIS DOCUMENT. THE BOARD'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE DOCUMENT AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREIN.</small>																
SHEET TITLE	WIRING DIAGRAM																
SHEET NUMBER	E-2																

CABLE LABELING NOTES:

1. CABLE PORT DIAGRAM ONLY REQUIRED FOR SHELTER SITES.
2. SUBCONTRACTOR SHALL FILL OUT CABLE PORT DIAGRAM UPON INSTALLATION. CABLE PORT DIAGRAM WILL BE AFFIXED TO THE INTERIOR SHELTER WALL NEAR THE CABLE ENTRY PORT TO AID IN CABLE IDENTIFICATION. THE CHART IS INTENDED TO BE USED TO RECORD THE LINE AND CORRESPONDING ANTENNA POSITION ON THE TOWER AT TIME OF INSTALLATION.
3. (1) COMPLETED COPY PLUS (2) BLANK COPIES OF THE CHART SHOULD BE POSTED IN THE SHELTER IN A PROTECTIVE PLASTIC SLEEVE.
4. SWEEP TEST EACH JUMPER AND DOCUMENT THE TEST IN ACCORDANCE WITH PROJECT PROCEDURES.

CABLE COLOR CODING NOTES:

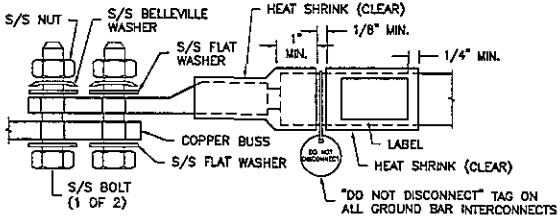
1. SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
2. THE ANTENNA SYSTEM CABLES SHALL BE LABELED WITH VINYL TAPE EXCEPT IN LOCATIONS WHERE ENVIRONMENTAL CONDITIONS CAUSE PHYSICAL DAMAGE, THEN PHYSICAL TAGS ARE PREFERRED.
3. THE STANDARD IS BASED ON EIGHT COLORED TAPES - RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE & VIOLET. THESE TAPES MUST BE 3/4" WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR SUBCONTRACTOR ON SITE.
4. USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLES BY SECTOR AND NUMBER AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE".
5. WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN GSM/3G AND IS-135 TDMA IS ENCOUNTERED, THE SUBCONTRACTOR SHALL REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING AND TAGGING STANDARD THAT IS OUTLINED IN THE CURRENT VERSION OF ND-00027. IN THE ABSENCE OF AN EXISTING COLOR CODING TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
6. ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE A MINIMUM OR (3) WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
7. ALL COLOR BANDS INSTALLED AT THE TOP OF TOWER SHALL HAVE A MINIMUM OF 3/4" OF SPACE IN BETWEEN EACH COLOR.
8. ALL COLOR CODES SHALL BE INSTALLED AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE TO SIDE.
9. IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME, AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE GSM TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

CABLE MARKING TAGS:

CABLE MARKING LOCATIONS TABLE	
NO.	LOCATIONS
1	CABLE ENTRY PORT ON THE INTERIOR OF SHELTER.
2	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.
3	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

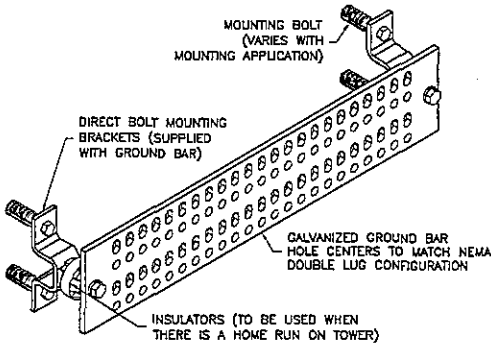
GROUNDING NOTES:

1. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
2. ALL GROUNDING DEVICES SHALL BE U.L. APPROVED OR LISTED FOR THEIR INTENDED USE.
3. ALL WIRES SHALL BE AWG THHN/THWN COPPER UNLESS NOTED OTHERWISE.
4. GROUNDING CONNECTIONS TO GROUND RODS, GROUND RING WIRE, TOWER BASE AND FENCE POSTS SHALL BE EXOTHERMIC ("CADWELDS") UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINY METAL WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACES, SPRAY CADWELD WITH GALVANIZING PAINT.
5. GROUNDING CONNECTIONS TO GROUND BARS ARE TO BE TWO-HOLE BRASS MECHANICAL CONNECTORS WITH STAINLESS STEEL HARDWARE (INCLUDING SCREW SET) CLEAN GROUND BAR TO SHINY METAL AFTER MECHANICAL CONNECTION, TREAT WITH PROTECTIVE ANTIOXIDANT COATING.
6. GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH MANUFACTURER'S GROUNDING KITS.
7. ROUTE GROUNDING CONDUCTORS THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 12" RADIUS.
8. INSTALL #2 AWG GREEN-INSULATED STRANDED WIRE FOR ABOVE GRADE GROUNDING AND #2 BARE TINNED COPPER WIRE FOR BELOW GRADE GROUNDING UNLESS OTHERWISE NOTED.
9. REFER TO GROUNDING PLAN FOR GROUND BAR LOCATIONS. GROUNDING CONNECTIONS SHALL BE EXOTHERMIC TYPE ("CADWELDS") TO ANTENNA MOUNTS AND GROUND RING. REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION FITTINGS. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO-HOLE LUGS.
10. THE GROUND ELECTRODE SYSTEM SHALL CONSIST OF DRIVEN GROUND RODS POSITION ACCORDING TO GROUNDING PLAN. THE GROUND RODS SHALL BE 5/8"x10'-0" COPPER CLAD STEEL INTERCONNECTED WITH #2 BARE TINNED COPPER WIRE BURIED 36" BELOW GRADE. BURY GROUND RODS A MAXIMUM OF 15' APART, AND A MINIMUM OF 8' APART.
11. IF ROCK IS ENCOUNTERED GROUND RODS SHALL BE PLACED AT AN OBLIQUE ANGLE NOT TO EXCEED 45°.
12. EXOTHERMIC WELDS SHALL BE MADE IN ACCORDANCE WITH ERICO PRODUCTS BULLETIN A-AT.
13. CONSTRUCTION OF GROUND RING AND CONNECTIONS TO EXISTING GROUND RING SYSTEM SHALL BE DOCUMENTED WITH PHOTOGRAPHS PRIOR TO BACKFILLING SITE. PROVIDE PHOTOS TO THE AT&T CONSTRUCTION MANAGER.
14. ALL GROUND LEADS EXCEPT THOSE TO THE EQUIPMENT ARE TO BE #2 BARE TINNED COPPER WIRE. ALL EXTERIOR GROUND BARS TINNED COPPER.
15. PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETTS KOPR-SHIELD (TM OF JET LUBE INC.). PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR EQUAL.
16. WHERE BARE COPPER GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO GROUND RING, INSTALL WIRE IN 3/4" PVC SLEEVE, FROM 1' BELOW GRADE AND SEAL TOP WITH SILICONE MATERIAL.
17. PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION PAINT.
18. ANY SITE WHERE THE EQUIPMENT (BTS, CABLE BRIDGE, PPC, GENERATOR, ETC.) IS LOCATED WITHIN 6 FEET OF METAL FENCING, THE GROUND RING SHALL BE BONDED TO THE NEAREST FENCE POST USING (3) RUNS OF #2 BARE TINNED COPPER WIRE.



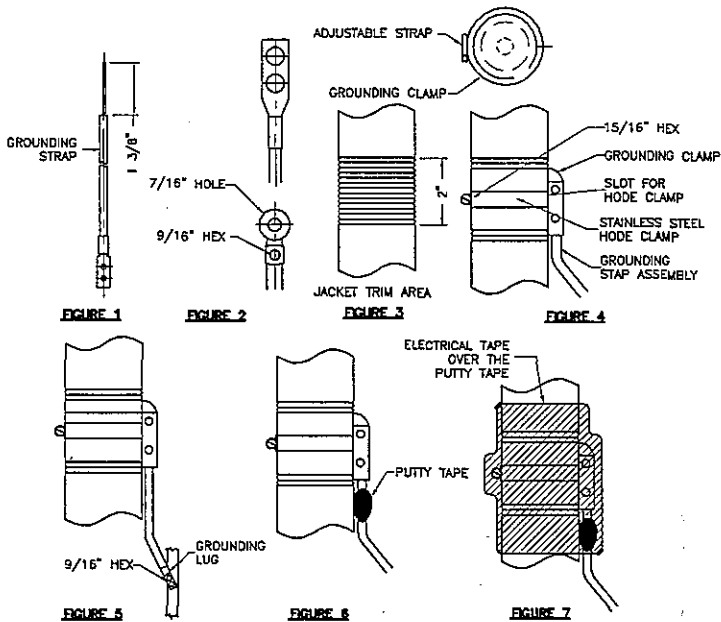
- NOTES:
1. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH ANTI-OXIDATION COMPOUND BEFORE MATING.
  2. FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH ANTI-OXIDATION COMPOUND.
  3. COAT ALL BARRELS WITH ANTI-OXIDATION COMPOUND BEFORE CRIMPING.

1 GENERAL LUG DETAIL  
G-1 NTS



GROUND BAR SCHEDULE				
TYPE	QTY	MANUFACTURER	PART NO.	REMARKS
MCB	2	ITS	GB12	OR EQUAL
CBG	3	ITS	GB24	OR EQUAL

2 GROUND BAR DETAIL  
G-1 NTS



3 GROUNDING STRAP WEATHERPROOFING DETAIL  
G-1 NTS

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

**NB+C**  
TOTALLY COMMITTED.

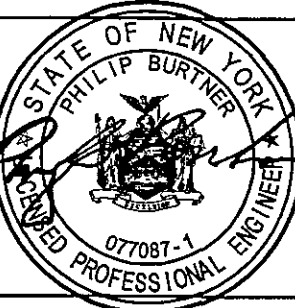
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REVISIONS

REV	DATE	DESCRIPTION	BY
0	05/08/15	PERMIT READY	JJ
A	02/11/16	PRELIMINARY	JJ



PHILIP A. BURTNER, P.E.  
NY PROFESSIONAL ENGINEER LIC. # 077087-1

GROUNDING  
DIAGRAM &  
DETAILS

G-1



## ELECTRICAL NOTES

- SUBMITTAL OF BID INDICATES THAT THE CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATIONS, OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO ORDERING OF ANY EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE PROJECT MANAGER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
- VERIFY HEIGHTS WITH PROJECT MANAGER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- CONTRACTOR SHALL COORDINATE ALL WORK BETWEEN TRADES AND ALL OTHER SCHEDULING AND PROVISIONARY CIRCUMSTANCES SURROUNDING THE PROJECT.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR COMPLETE AND FUNCTIONALLY OPERATING SYSTEMS ENERGIZED AND READY FOR USE THROUGHOUT AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. ELECTRICAL MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION OVER THE CONSTRUCTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH ALL CURRENT APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU. ALL MATERIALS AND EQUIPMENT SHALL BE APPROVED FOR THEIR INTENDED USE AND LOCATION.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE GOVERNING STATE, COUNTY AND CITY CODES AND OSHA, NFPA, NEC & ASHRAE REQUIREMENTS.
- ENTIRE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE. ALL WORK, MATERIAL AND EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- PROPERLY SEAL ALL PENETRATIONS. PROVIDE UL LISTED FIRE-STOPS WHERE PENETRATIONS ARE MADE THROUGH FIRE-RATED ASSEMBLIES. WATER-TIGHT USING SILICONE SEALANT.
- LOCATE ALL PENETRATIONS SUCH THAT ALL REINFORCEMENT CONTAINED WITHIN THE EXISTING BUILDING CONSTRUCTION REMAINS INTACT AND UNDISTURBED. SUBMIT LOCATING METHOD TO THE PROJECT MANAGER FOR APPROVAL PRIOR TO EXECUTION.
- DELIVER ALL BROCHURES, OPERATING MANUALS, CATALOGS AND SHOP DRAWINGS TO THE PROJECT MANAGER AT JOB COMPLETION. PROVIDE MAINTENANCE MANUALS FOR MECHANICAL EQUIPMENT. AFFIX MAINTENANCE LABELS TO MECHANICAL EQUIPMENT.
- ALL CONDUCTORS SHALL BE COPPER. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG., UNLESS OTHERWISE NOTED. CONDUCTORS SHALL BE TYPE THHW, RATED IN ACCORDANCE WITH NEC 110-14(C).
- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM INTERRUPTING CURRENT TO WHICH THEY MAY BE SUBJECTED.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLES 250 & 810 AND THE UTILITY COMPANY STANDARDS.
- CONDUIT:
  - RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
  - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL. FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
  - LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE U.L. LISTED AND SHALL BE USED AT FINAL CONNECTIONS TO MECHANICAL EQUIPMENT & RECTIFIERS AND WHERE PERMITTED BY CODE. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL CONTAIN A FULL-SIZE GROUND CONDUCTOR.
  - CONDUIT RUNS SHALL BE SURFACE MOUNTED ON CEILINGS OR WALLS UNLESS NOTED OTHERWISE. ALL CONDUIT SHALL RUN PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, CEILING, OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH THE PROJECT MANAGER PRIOR TO INSTALLING.
  - PVC CONDUIT MAY BE PROVIDED ONLY WHERE SHOWN, OR IN UNDERGROUND INSTALLATIONS. PROVIDE UV-RESISTANT CONDUIT WHERE EXPOSED TO THE ATMOSPHERE. PROVIDE GROUND CONDUCTOR IN ALL PVC RUNS; EXCEPT WHERE PERMITTED BY CODE TO OMIT.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS. BACKGROUND SHALL BE BLACK WITH WHITE LETTERS; EXCEPT AS REQUIRED BY CODE TO FOLLOW A DIFFERENT SCHEME.
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE PROJECT MANAGER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE.
- CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION. LEGALLY DISPOSE OF ALL REMOVED, UNUSED AND EXCESS MATERIAL GENERATED BY THE WORK OF THIS CONTRACT. DELIVER ITEMS INDICATED ON THE DRAWINGS TO THE OWNER IN GOOD CONDITION. OBTAIN SIGNED RECEIPT UPON DELIVERY.
- COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS SHALL BE PAID BY THE CONTRACTOR.
- VERIFY ALL EXISTING CIRCUITRY PRIOR TO REMOVAL AND NEW WORK. MAINTAIN POWER TO ALL OTHER AREAS & CIRCUITS NOT SCHEDULED FOR REMOVAL.

## DIVISION 01000 - GENERAL REQUIREMENTS

### PART 1 - GENERAL

- ALL WORK TO BE PERFORMED BY AT&T CERTIFIED INSTALLATION PERSONNEL. MINIMUM OF TWO MEMBERS PER CREW.
- REFER TO AT&T STANDARD CONSTRUCTION SPECIFICATIONS. IN CASE OF A CONFLICT, AT&T STANDARD CONSTRUCTION SPECIFICATIONS (LATEST EDITION) SHALL BE FOLLOWED.

### PART 2 - GENERAL NOTES

- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T'S REPRESENTATIVE OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK.
- THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS / CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- THE CONTRACTOR SHALL MAINTAIN A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM'S OR CLARIFICATIONS AVAILABLE FOR THE USE OF ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SITE CONDITIONS DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE ALL UNNECESSARY MATERIAL.
- THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT SECTIONS OF THE STATE BASIC BUILDING CODE, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT/ENGINEER.
- THE CONTRACTOR SHALL NOTIFY AT&T'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL THE CONFLICT IS RESOLVED BY AT&T'S REPRESENTATIVE.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
- THE CONTRACTOR SHALL NOTIFY THE RF ENGINEER FOR ANTENNA AZIMUTH VERIFICATION (DURING ANTENNA INSTALLATION) PRIOR TO CONDUCTING SITE SWEEPING.
- THE GENERAL CONTRACTOR SHALL IN ALL INSTANCES CONFORM TO THE SPECIFICATIONS ISSUED BY AT&T.
- PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS OR RISERS THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS WITHOUT STRUCTURAL ENGINEER'S APPROVAL. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE PACKED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE STRUCTURE. FILL FOR FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE FIRE AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

## GENERAL PROJECT NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:  
OWNER - AT&T  
CONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
- ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AS REQUIRED FOR BID AND CONSTRUCTION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHED MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK AREA SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO: FALL PROTECTION, CONFINED SPACE, ELECTRICAL SAFETY AND TRENCHING & EXCAVATION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
- THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE TELECOMMUNICATIONS EQUIPMENT.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR THE SITE SIGNAGE.
- THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITIONS.
- THE CONTRACTOR SHALL DISPOSE OF ANY EQUIPMENT REMOVED AS PART OF THE WORK SHOWN IN THESE DRAWINGS IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. ANTENNAS REMOVED SHALL BE RECYCLED WHERE FEASIBLE BY THE CONTRACTOR.

## PROJECT COMPLIANCE NOTES:

- THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP ACCESS IS REQUIRED).
- OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
- NO NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS PROPOSAL.
- OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
- ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST AT&T SYSTEM GROUNDING STANDARDS, "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES", "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING". IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED DURING CONSTRUCTION OPERATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
- THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE APPLICANT REPRESENTATIVE. THE CONTRACTOR SHALL NOTIFY AT&T OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- NO ADDITIONAL PARKING IS PROPOSED. EXISTING ACCESS AND PARKING WILL BE USED.
- NO ADDITIONAL LANDSCAPING IS PROPOSED AT THIS SITE.
- ALL COAXIAL & FIBER CABLE INSTALLATION TO FOLLOW MANUFACTURER'S INSTRUCTIONS.
- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL JURISDICTIONS COVERING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.
- TRANSMITTER EQUIPMENT AND ANTENNAS ARE DESIGNED TO MEET ANSI/EIA/TIA 222-F REQUIREMENTS.
- ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
- CONTRACTOR SHALL MAKE A UTILITY "ONE CALL" TO LOCATE ALL UTILITIES PRIOR TO EXCAVATING.

ENGINEER



APPLICANT



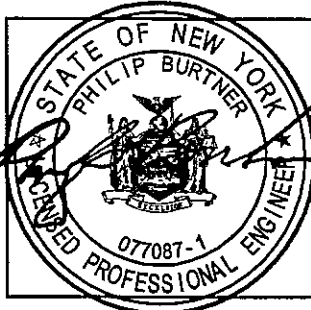
SITE INFORMATION

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FA# 10105111  
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RYE, NEW YORK 10580

DESIGN RECORD

REVISIONS			
0	05/08/15	PERMIT READY	JJ
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REV	DATE	DESCRIPTION	BY

PROFESSIONAL STAMP



ENGINEER

PHILIP A. BURTNER, P.E.  
NY PROFESSIONAL ENGINEER LIC. # 077087-1  
PHILIP A. BURTNER, P.E. HAS BEEN REVIEWED BY THE NEW YORK STATE BOARD OF PROFESSIONAL ENGINEERS AND FOUND TO BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL ENGINEER ACT AND THE ENGINEERING COUNCIL ON PROFESSIONAL ENGINEERING. THE BOARD HAS NO OBJECTION TO HIS SERVING AS A PROFESSIONAL ENGINEER.

SHEET TITLE

GENERAL  
NOTES

SHEET NUMBER

GN-1