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**TOWN OF CARMEL
PLANNING BOARD**



60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 – Ext.190
www.ci.carmel.ny.us

MICHAEL CARNAZZA
*Director of Code
Enforcement*

RICHARD FRANZETTI, P.E.
Town Engineer

PATRICK CLEARY,
AICP, CEP, PP, LEED AP
Town Planner

PLANNING BOARD AGENDA
APRIL 10, 2019 – 7:00 P.M.

MEETING ROOM #2

TAX MAP # PUB. HEARING MAP DATE COMMENTS

SITE PLAN

- | | | | |
|--|------------------|---------|------------------------|
| 1. Willow Wood Country Club, Inc. –
551 Union Valley Road | 87.7-1-6, 7 & 11 | 3/25/19 | Amended Site Plan |
| 2. Homeland Towers Lake Casse – 254 Croton Falls Rd | 65.19-1-43 | 3/13/19 | Site Plan (Cell Tower) |

MISCELLANEOUS

- | | | | |
|--|------------|--------|--------------------------------------|
| 3. Thimm, Karl – 232 East Lake Blvd | 65.17-1-15 | | Re-Approval of Site Plan
Approval |
| 4. Pozzi, Robert – 229 Shear Hill Road | 65.11-1-1 | 2/4/19 | Regrading Application |
| 5. Minutes – 03/27/19 | | | |



March 27, 2019

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, New York 10541

RE: Willow Wood Country Club, Inc.
Amended Site Plan
Union Valley Road
Tax Map No. 87.7-1-6, 7 & 11

Dear Chairman Paeprer and Members of the Board:

Please find enclosed five (5) copies of the following plans and documents in support of an application for Amended Site Plan Approval for the above referenced project:

- Site Plan Drawings (5 sheets total), last revised March 25, 2019.
- Stormwater Pollution Prevention Plan date March 27, 2019
- New York State, Supreme Court, Appellate Division, December 30, 1985 Decision.
- Specification for 400E Sporter Sporting Clay Machine.

In response to any outstanding comments provided by the Board's Consultants, we offer the following:

Memorandum from Michael G. Carnazza, Director of Code Enforcement dated January 7, 2019:

Relative to the comments requiring plan changes we offer the following:

- A Trash Enclosure Detail has been provided on Drawing D-1 as requested.
- Currently there are 202 membership households. The club has two employees and anticipates a maximum membership of 250 households. That would require 502 parking spaces. While the total number of existing parking spaces is currently being developed, it is anticipated a variance will be sought from the required number of spaces
- To the best of the applicant's knowledge there were not any previous Town of Carmel Zoning Board variances issued. A New York Supreme Court, Appellate Division, decision was made on December 30, 1985. A copy of the decision is attached and allows the club as a permitted conditional use under the zoning ordinance as a membership club.
- Drawing SP-1 has been revised to include the Membership Club Zoning requirements in Section 156-24. Specifically the following was added:
 - A. Minimum site size for clubs.
 - C. The landscape buffer has been identified and includes the existing natural buffer to remain and proposed plantings where the trail network comes closest to neighboring residences..
 - D. The number of existing parking spaces is currently being determined and will be provided in future submissions.

3 Garrett Place, Carmel, New York 10512 (845) 225-9690 Fax (845) 225-9717
www.insite-eng.com

Memorandum from Richard J. Franzetti P.E., Town Engineer dated January 4, 2019:

I. General Comments:

1. Permits

- a. Our office will coordinate with the Town Engineer following the completion of the NYSDEC wetland delineation to determine if permits are required from the Environmental Conservation Board.
- b. New York State Department of Environmental Conservation:
 - i. It is acknowledged that coverage under the *NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity* will be required.
2. A Stormwater Pollution Prevention Plan (SWPPP) has been provided as requested.
3. The Stormwater Maintenance Agreement has been provided in Appendix D of the SWPPP. Our office will coordinate the Maintenance Guarantee with the Town as the applications progresses.
4. There are no public improvements proposed as part of this application.

II. Preliminary Detailed Comments:

1. The limits of disturbance has been revised for clarity and added to drawing SP-2.
2. Runoff from the trail along the west side of the site is currently captured by an existing swale and culvert. The existing swale allows for the filtering sediment before runoff enters the existing culvert and flows towards the adjacent NYSDEC Wetland.
3. The approximate slopes of the access road have been provided on Drawing SP-1.
4. The existing parking lot layout is being developed and will provided on subsequent submissions.
5. A Landscaping plan has been provided with the Site Plans (Drawing SP-2). Due to the extensive size of the site, and the location of the club activities, it is proposed to maintain the existing natural landscape buffer throughout the majority of the site. In the area where the trail comes closest to the residences to the north additional landscape screening is proposed.
6. A detail on how the clay cages were constructed is provided on drawing D-1
7. The sporting clay course and various stations / trail are hydraulically connected in that they flow east towards NYSDEC Wetland CF-8. The drainage divide on the subject property can be found on Figure 1 of the SWPPP.
8. A SWPPP has been provided with this submission as requested.
9. The NYSDEC Wetland has been initially delineated by the Club's consultant. We are currently waiting for the NYSDEC to validate the boundary. Once complete the wetland line will be survey located and shown on the site plan drawings.

Memorandum from Patrick Cleary, AICP, CEP, PP, LEEP AP, Town Planner dated January 9, 2019:

Site Plan Review Comments:

- The sporting clay course is an addition to the previously approved site plan. While each station allows for limited mobility, each station is essentially fixed by the locations shown on the site plan. In addition, the majority of the sporting clay course exists on the portion of the site that faces the valley to the east, where the existing shooting operations occur.
- Currently at the club there are 202 member households. The club anticipates a maximum membership of 250 member households. Based on information

provided by the Club the majority of members only utilize the club one to two times per year. It is the club's intention to create a premier sporting clay course in which use is limited to prevent wait times for existing members.

- The portion of the trail closest to the neighbors is used to traverse the hillside and does not contain any shooting stations. Where the trail does come closest to the neighboring residences a landscape berm was previously installed and is proposed to be expanded and reconstructed.
- A detail for the existing trees to be replaced is now provided on drawing D-1.
- A detail for the millings to be installed on the existing trail is provided on drawing D-1. Based on the slope of the existing trail, a natural path, or item 4 path would be subject to erosion.
- A SWPPP has been provided and includes the sizing of the stormwater, collection, conveyance and treatment systems.
- A Sporting Clay Trail Detail has been provided and represents the previously constructed portions of the trail and the areas yet to be stabilized with millings.

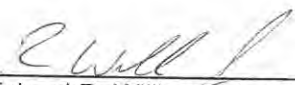
As requested at the January 9th Planning Board meeting the specifications of the sporting clay machines have been provided with this submission.

We respectfully request this matter be placed on your April 10, 2019 meeting agenda for presentation.

Should you have any questions or comments regarding this information, please do not hesitate to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: 
Richard D. Williams, Jr. P.E.
Principal Engineer

RDW/jwm

Enclosure(s)

cc: George J. Calcagnini

Insite File No. 18173.100

 KeyCite Yellow Flag - Negative Treatment

Declined to Follow by Land v. Village of Wesley Chapel, N.C.App.,
August 3, 2010

115 A.D.2d 742

Supreme Court, Appellate Division,
Second Department, New York.

In the Matter of WILLOW WOOD RIFLE
& PISTOL CLUB, INC., Appellant,

v.

The TOWN OF CARMEL ZONING BOARD OF
APPEALS, et al., Respondents. (Matter No. 1)

The TOWN OF CARMEL, Respondent,

v.

WILLOW WOOD RIFLE & PISTOL
CLUB, INC., Appellant. (Matter No. 2)

Dec. 30, 1985.

Synopsis

Not-for-profit membership corporation which owned and operated a gun club on land situated in town brought Article 78 proceeding to review town zoning board's determination denying its application for a variance for improvement of its facilities. While proceeding was pending, town brought action for permanent injunction and moved for preliminary injunction restraining corporation from operating facilities allegedly constructed in violation of zoning ordinance, and requiring it to demolish and remove such facilities. The Supreme Court, Putnam County, Martin, J., dismissed the Article 78 proceeding and granted town's motion for preliminary injunction. Corporation appealed. The Supreme Court, Appellate Division, held that zoning board's interpretation of zoning ordinance so as to exclude operation of a gun club from category of permitted conditional uses was arbitrary and capricious.

Reversed.

West Headnotes (3)

[1] Zoning and Planning

 Construction by board or agency

Interpretation of zoning ordinance by a zoning board is entitled to deference.

1 Cases that cite this headnote

[2] Zoning and Planning

 Clubs, fraternities, and sororities

Zoning and Planning

 Entertainment and recreation; theaters

With regard to zoning ordinance providing that one category of permitted conditional uses in particular zone would be "annual membership clubs, including country, golf, tennis and swim clubs," zoning board's interpretation of ordinance which limited provision to country, golf, tennis and swim clubs, was arbitrary and capricious since it failed to give effect to word "including" contained in provision.

2 Cases that cite this headnote

[3] Zoning and Planning

 Ambiguity

Any ambiguity in a zoning ordinance must be resolved in favor of the property owner and against the municipality.

1 Cases that cite this headnote

Attorneys and Law Firms

****549** Shea & Gould, New York City (Ronald H. Alenstein and Lynne M. Fischman, of counsel), for appellant.

William D. Spain, Jr., Town Attorney, Mahopac, for respondents.

Before ***746** O'CONNOR, J.P., and NIEHOFF, RUBIN and LAWRENCE, JJ.

Opinion

MEMORANDUM BY THE COURT.

***742** In an action for a permanent injunction, and in a proceeding pursuant to CPLR article 78 to review a

determination of the Town of Carmel Zoning Board of Appeals (the zoning board) which, *inter alia*, found that Willow Wood Rifle & Pistol Club, Inc.'s (Willow Wood) use of the subject property was not a permitted use, and denied Willow Wood's request for a variance, the appeals are from (1) a judgment of the Supreme Court, Putnam County (Martin, J.), dated October 22, 1984, which dismissed the proceeding pursuant to CPLR article 78 and (2) an order of the same court dated October 2, 1984, which granted the Town of Carmel's motion for a preliminary injunction.

Judgment reversed, on the law, without costs or disbursements, and petition granted, to the extent that the zoning board's determination is annulled, and respondents are directed to treat appellant's property as a permitted conditional use.

Order reversed, on the law, without costs or disbursements, and the Town of Carmel's motion for a preliminary injunction denied.

Since 1955, petitioner Willow Wood, a not-for-profit membership corporation organized under the laws of this State, has owned and operated a gun club on land situated along Union Valley Road in the Town of Carmel. Willow Wood operated and maintained on the property, trap, rifle and pistol ranges *743 and clubhouse facilities for its members. In or about September 1983, while Willow Wood was in the process of improving its facilities, the Department of Buildings of the Town of Carmel issued an "Order to Comply" ordering Willow Wood's contractor to stop work on the grounds that the work done constituted expansion of a pre-existing nonconforming use and that the work was done without first obtaining proper municipal approval. Thereafter, Willow Wood submitted a site plan for approval to the Town of Carmel Planning Board. In February 1984, the town planning board denied the application on the ground that the improvements constituted **550 an impermissible expansion of a nonconforming use.

On April 10, 1984, Willow Wood applied to the zoning board seeking an interpretation of the zoning ordinance to the effect that the site work done and proposed did not constitute an expansion of a nonconforming use, and, in the alternative, a variance to permit the work to continue. The zoning board rendered a decision which found that Willow Wood's use of the property as a gun club was a

nonconforming use under the zoning ordinance, and that the existing and proposed improvements constituted an impermissible expansion of such nonconforming use. The board then went on to deny Willow Wood's application for a variance.

On or about July 3, 1984, Willow Wood instituted the present CPLR article 78 proceeding to review the zoning board's determination. While this proceeding was pending, the Town of Carmel commenced the instant action for a permanent injunction and moved for a preliminary injunction, restraining Willow Wood from operating, using or maintaining the facilities allegedly constructed in violation of the town's zoning ordinance and without proper municipal approvals, and requiring Willow Wood to demolish and remove such structures and facilities.

In October 1984, Special Term (Martin, J.), dismissed Willow Wood's proceeding, on the grounds, *inter alia*, that the board's interpretation of the zoning ordinance to the effect that a gun club was not a permitted use was not arbitrary or capricious, and that Willow Wood failed to establish the necessary requirements for a use variance. At the same time, Special Term granted the town's motion for a preliminary injunction "to the extent that [Willow Wood] is enjoined effective immediately from using and operating any of the structures or facilities which were built, enlarged, or modified without benefit of permits and in violation of the Zoning *744 Ordinance" and was ordered "to remove and demolish the structures and facilities which are in violation".

We find that Willow Wood's use of the subject property as a gun club is a permitted conditional use under the applicable zoning ordinance provision. Special Term thus erred in dismissing the petition.

[1] [2] The 1982 zoning ordinance of the Town of Carmel placed Willow Wood's property in an R6 0/40 zone. The Schedule of District Regulations, adopted and made a part of the zoning ordinance, provides that one category of permitted conditional uses in an R6 0/40 zone is:

"Annual Membership clubs, *including* country, golf, tennis and swim clubs" (emphasis added).

Note 8 of section 63-10(H) of the zoning ordinance sets forth site size, landscape buffer, and parking and pool

size requirements for clubs. In concluding that a gun club was not a permitted conditional use under the above provision, the zoning board found that "the drafters of the ordinance intended to specifically exclude those 'club' uses inconsonant with country, golf, swimming and tennis". The zoning board took notice of section 63-9(B) of the zoning ordinance which provides in pertinent part, that "[t]he omission of any use or type of use from said schedule shall be deemed to be an exclusion thereof from all districts", and "reasoned that clubs devoted to drag racing, dirt bikes, go carts, guns and other such uses were inconsistent with the Code". While the interpretation of a zoning ordinance by a zoning board is entitled to deference (see, *Matter of Marasco v. Luney*, 99 A.D.2d 492, 470 N.Y.S.2d 436; *Matter of Holy Spirit Assn. for Unification of World Christianity v. Rosenfeld*, 91 A.D.2d 190, 458 N.Y.S.2d 920; *Matter of Albert v. Board of Stds. & Appeals*, 89 A.D.2d 960, 454 N.Y.S.2d 108), in the instant case, the board's interpretation of the ordinance was arbitrary and capricious.

In this regard, it must be noted that it is well-established that each word in a statute is to be given effect, and that words are not to be rejected as superfluous when it is practicable to give each a distinct and consistent meaning (see, *Matter of Capital Cities Communications v. State Tax Comm.*, 65 A.D.2d 25, 411 N.Y.S.2d 46; *Matter of Long Is. Antique Gun Collectors Assn. v. Frank*, 53 A.D.2d 644, 384 N.Y.S.2d 500). Here, the pertinent part of the zoning ordinance states that, "Annual membership clubs, including golf, tennis and swim clubs" (emphasis added) are permitted conditional uses; "[t]he word 'includes' is usually a term of enlargement, and not of limitation * * * it therefore conveys the conclusion that there are other items includable, though not specifically enumerated by the Statutes" (*United States v. City of New York*, 481 F.Supp. 4, 6, *affd.*, 2nd Cir., 614 F.2d 1292, quoting from *745 *Argosy Ltd. v. Hennigan*, 5th Cir., 404 F.2d 14, 20; see also, *Red Hook Cold Storage Co. v. Department of Labor of State of N.Y.*, 295 N.Y. 1, 8, 64 N.E.2d 265). Any interpretation by the zoning board that the permitted conditional uses described in the applicable zoning ordinance provision are limited to country, golf, tennis and swim clubs, fails to give effect to the word "including" contained in that provision (see, *Matter of Five Towns YM & YWHA v. Plaut*, 14 Misc.2d 61, 178 N.Y.S.2d 190, *affd.* 7 A.D.2d 646, 181 N.Y.S.2d 182). Similarly, the zoning board's interpretation that the drafters of the zoning ordinance intended to exclude those

"club" uses inconsonant with country, golf, swimming and tennis club uses is not sustainable. In *Matter of Von Kohorn v. Morrell*, 22 Misc.2d 40-41, 190 N.Y.S.2d 289, *revd.* 9 A.D.2d 949, 195 N.Y.S.2d 866, *revd.* 9 N.Y.2d 27, 210 N.Y.S.2d 525, 172 N.E.2d 287), the court had the burden of interpreting a zoning ordinance which provided that the Zoning Board of Appeals could permit, as a special use, "golf clubs, country clubs and other membership clubs not operated for profit". The petitioners in that case argued that the Y.W.C.A. was not a membership club within that provision, and that provision should be construed so as to permit only those membership clubs not operated for profit which were similar in nature to a golf or country club. The court, in holding that it "would not be justified in so limiting the provision", stated that:

"Had the legislative body of the city intended to permit only golf clubs, country clubs and other 'similar' membership clubs it could easily have so provided. Under the broad language used, however, and in the absence of any definition in the ordinance, any association which may reasonably be considered a nonprofit membership club may be granted a special use permit" (*Matter of Von Kohorn v. Morrell*, 22 Misc.2d 40, 41 [190 N.Y.S.2d 289], *supra*).

Here, as in the *Matter of Von Kohorn v. Morrell* (*supra*), had the drafters of the ordinance intended to permit only clubs consonant with golf, tennis, swim, and country clubs, they could easily have so provided. It must be noted in this regard that Willow Wood has operated as a gun club since 1955, a fact presumably known to the drafters of the 1982 ordinance. Had the drafters intended to exclude gun clubs from the category of permitted conditional uses, they could have specifically done so. The zoning board's reliance on section 63-9(B) of the ordinance to support its construction is misplaced and merely begs the question. That provision, stating that "[t]he omission of any use or type of use from said schedule shall be deemed to be an exclusion thereof from all districts" appears to be a general catch-all provision which would have more relevance if there were no *specific* provision like the one which permitted "annual membership clubs" without any term of limitation.

[3] Finally, even if the ordinance is deemed ambiguous, any ambiguity must be resolved in favor of the property owner and against the municipality (see, *Matter of Frishman v. Schmidt*, 61 N.Y.2d 823, 473 N.Y.S.2d 957,

462 N.E.2d 134; *Matter of Allen v. Adami*, 39 N.Y.2d 275, 383 N.Y.S.2d 565, 347 N.E.2d 890; *Town of Huntington v. Barracuda Transp. Co.*, 80 A.D.2d 555, 435 N.Y.S.2d 354). In view of our above disposition, Special Term's order granting the town a preliminary injunction must also be reversed.

We note that Willow Wood must still obtain the proper municipal building approvals ****552** for its improvements upon the subject property.

All Citations

115 A.D.2d 742, 496 N.Y.S.2d 548



400E SPORTER

BATTUE & STANDARD CAROUSEL

The 400E features an upgraded motor and gearbox designed to throw more targets faster and further. This is the machine of choice for clubs who want a machine capable of throwing high volumes of targets in an economical package.

FEATURES:

- Holds 432 standard targets. Midi carousel available in place of standard carousel at no extra charge.
- Throwing distance up to 110 yards.
- Tilts back to 70 degrees, great for teal target presentations.
- Tilts left and right up to 40 degrees either side of vertical to throw looping targets.
- Elevation and tilt quickly and easily adjusted without the need for wrenches.
- Upgraded motor and gearbox.
- Size: 44"x31"x22" Weight: 163



300E/400E/500E WOBBLE

STANDARD CAROUSEL

The 300E Wobble is the midlevel sporting clay target machine with oscillating base. The 400E and 500E Wobble machines build upon the 300E version by increasing target capacity and the motor and gearbox are upgraded to a heavy-duty unit designed for high volume use.

FEATURES:

- Holds 300, 400 or 500 standard targets.
- Throwing distance up to 110 yards.
- Oscillates up and down between 10-50 degrees.
- Rotates side to side between 36 degrees minimum up to 80 degrees maximum.
- Has a built-in timer/interrupter to prevent shooter "reading" the target.
- 300E Size: 42"x41"x32" Weight: 252
- 400E Size: 44"x45"x32" Weight: 272
- 500E Size: 36"x41"x39" Weight: 455

408 SPORTER XP

STANDARD, LEFT HAND, BATTUE, MINI

The 408XP is our flagship commercial sporting clay target machine made in the USA and manufactured with all aluminum and stainless steel materials. Left handed versions are available at no additional charge. The machine comes with an upgraded motor gearbox and a five-year warranty.

FEATURES:

- Holds 408 standard targets. Midi carousel available in place of standard carousel at no extra charge.
- Genuine 120 yard throwing distance.
- Standard machine tilts forward 30 degrees for downhill targets and tilts back to 70 degrees. Also tilts left and right up to 40 degrees either side of vertical to throw looping targets.
- No upcharge for the left handed version.
- Size: 45"x30"x25" Weight: 166



306/408 XP WOBBLE

STANDARD, LEFT HAND

The 306 Sporter XP Wobble is the commercial sporting clay target machine with an oscillating base. The 408 Sporter XP Wobble is our flagship commercial sporting clay target machine with an oscillating base. Our traps are made in the USA, manufactured with all aluminum and stainless steel materials and come with a five-year warranty.

FEATURES:

- Holds 300 or 400 standard targets.
- Throwing distance up to 120 yards.
- Oscillates up and down between 10 - 50 degrees.
- Rotates side to side between 36 degrees minimum and up to 80 degrees maximum.
- Has a built-in timer/interrupter to prevent shooter "reading" the target.
- 306 XP Size: 48"x46"x32" Weight: 232
- 408 XP Size: 47"x48"x32" Weight: 246





408 CHANDELLE XP

The 408XP is our flagship commercial clay target machine for throwing rabbit or standard targets. The tilt base allows for a variety of target presentations and the machine comes with an upgraded motor gearbox and a five-year warranty.

FEATURES:

- Holds 408 standard Targets. Midi carousel available at no additional charge.
- Genuine 90 yard throwing distance.
- Elevation adjustment tilts forward 45 degrees to throw rabbit targets along the ground, standard targets along the ground or just above if the terrain is too rocky.
- Elevation adjustment tilts back up to 45 degrees to throw a true Chandelle presentation or straight up vertical teal targets.
- The machine comes with an upgraded motor and gearbox and a five-year warranty.
- Size: 53"x27"x20" Weight: 185

CARTS

Our line of carts is specifically designed to fit with the MEC Clay Target Machines. Available in different variations to fit your needs, our carts make transporting your machine a breeze.

*Carts sold separately.



BOLT TOGETHER T-CART:

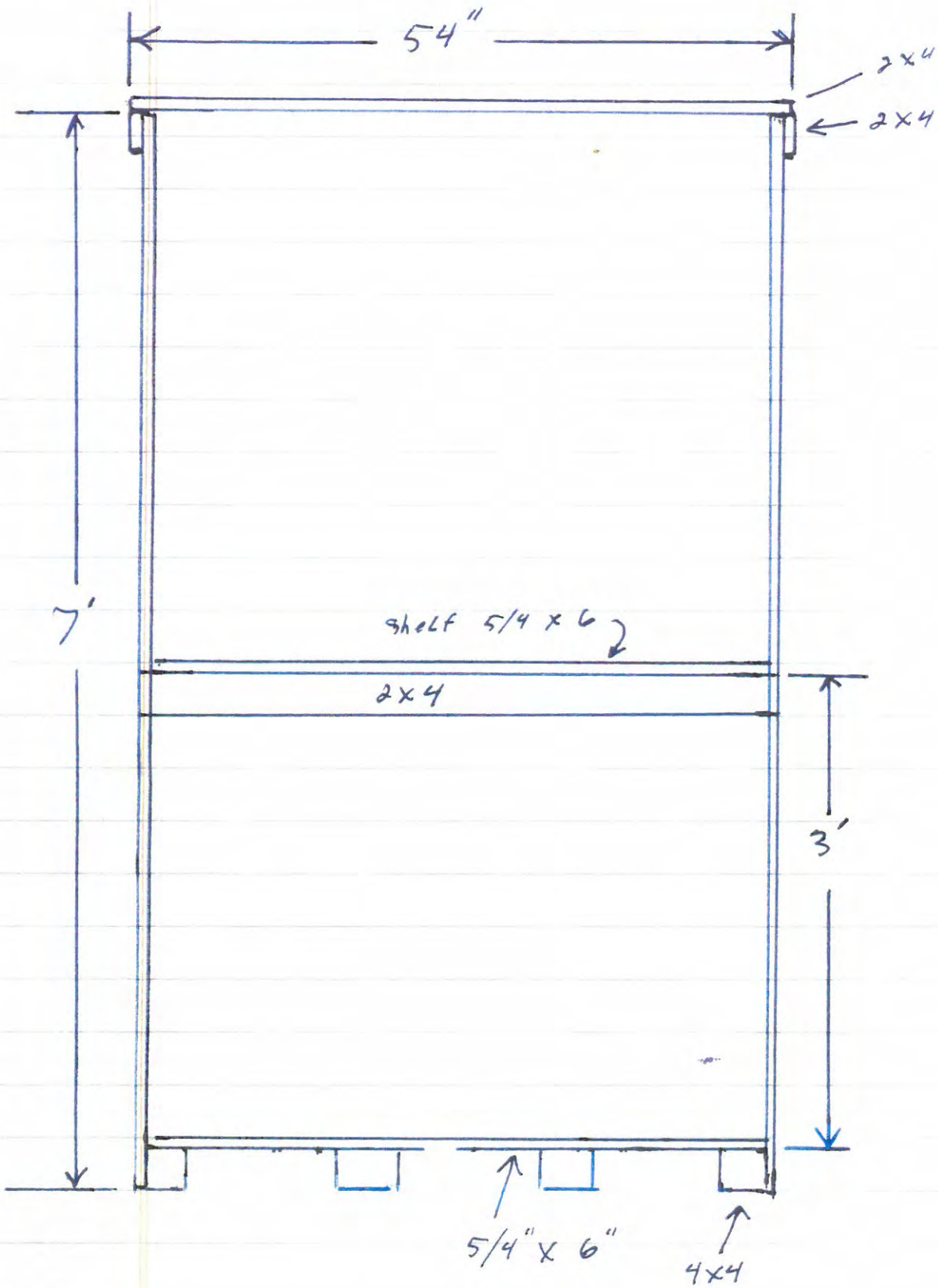
Our Bolt Together T-cart features our all new bolt fastening system, making assembly and disassembly easier.



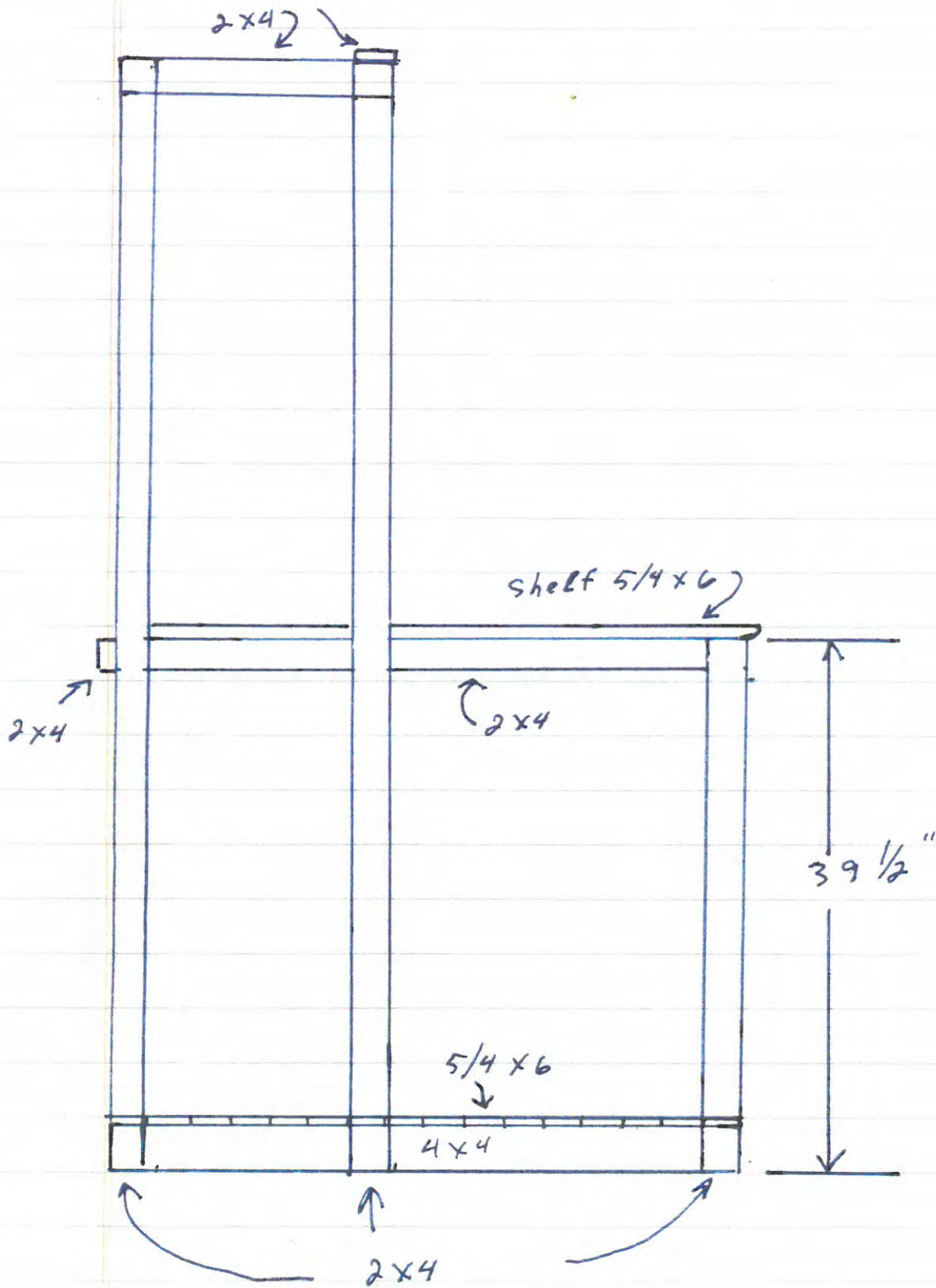
COLLAPSIBLE CART:

Our collapsible cart reduces axle width and tongue length for transportation. The perfect solution for customers who regularly have the need to move large numbers of machines between different locations. Group 24 and 27 deep cycle battery trays available.

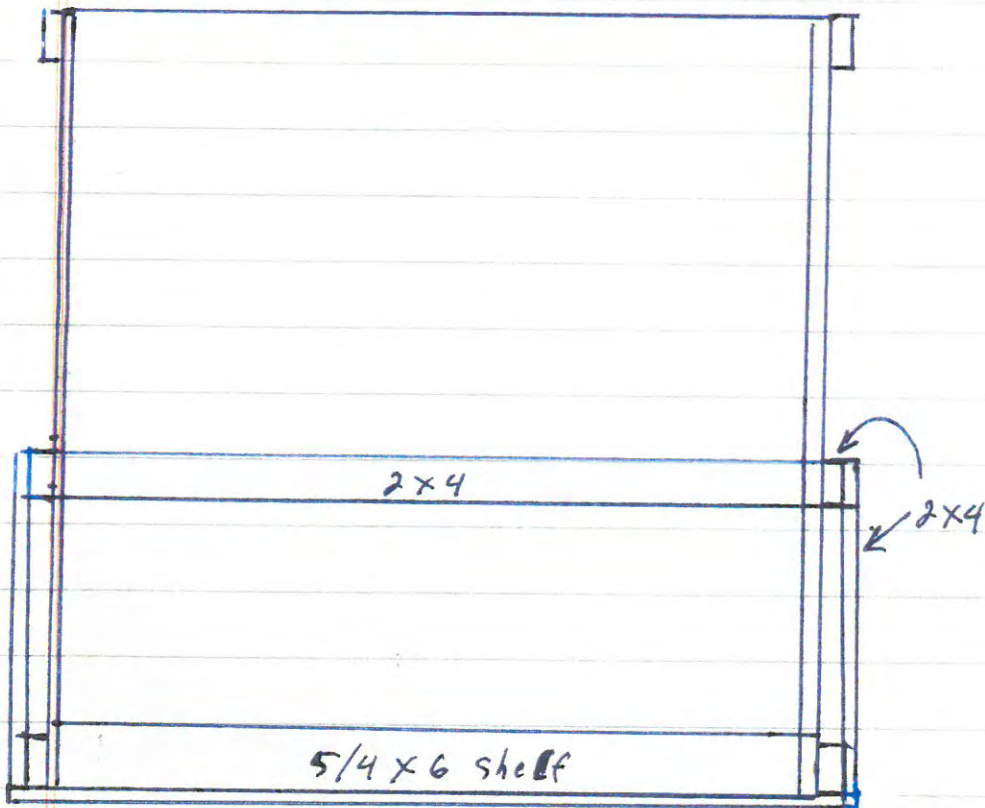
Front view



Left Side View



TOP view



MATERIAL LIST

<u>QUANTITY</u>	<u>Length</u>	<u>SIZE OF LUMBER</u>
4	4'	4 X 4
12	4'	5/4 X 6
4	7'	2 X 4
1	54"	2 X 4
1	51"	2 X 4
2	21 1/2	2 X 4
2	4'	2 X 4
2	39 1/2	2 X 4



STORMWATER POLLUTION PREVENTION PLAN

Prepared For
Willow Wood Country Club, Inc.
Union Valley Road
Mahopac, NY 10541
March 27, 2019

Owner Information:

Willow Wood Country Club, Inc
Union Valley Road
Mahopac, New York 10541

Contractor Information:

To Be Determined

NOTE: This report in conjunction with the project plans make up the complete Stormwater Management Report.

Prepared by:
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512



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APPENDICES

- Appendix A Post-Development Computer Data / Swale Sizing Calculations
- Appendix B Rain Garden Sizing Calculation
- Appendix C Flow Spreader Sizing Calculations
- Appendix D Draft Town of Carmel Stormwater Maintenance Agreement

FIGURES

- Figure 1: Post-development Drainage Map

1.0 INTRODUCTION

1.1 Project Description

The site is located at 551 Union Valley Road in the Town of Carmel. The site is approximately 86.0 acres and is designated as Tax Map 87.7-1-1/6/11. The property currently contains a household membership rifle and pistol club. The proposed development includes the addition of a sporting clay course.

The project site is located in the Muscoot Reservoir Watershed Basin. Since the project is a *land development activity* under Town Code but is disturbing between 5,000 s.f. and one acre this project is subject to *NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities* General Permit (General Permit), and is required to provide erosion controls only.

Notwithstanding, at the request of the Planning Board and Town Engineer, post-construction stormwater management practices (SMP's) have been provided where possible that will provide Water Quality Volume (WQv) Treatment for the proposed improvements.

1.2 Existing Site Conditions

The existing property is primarily forested and undeveloped. The eastern portion of the site contains a NYSDEC Wetland (CF-8). The western portion of the property contains a high point in the center and slopes downward toward the property lines. The runoff that flows north, south and west from the above-mentioned high point sheet flows off the property. The runoff that flows east from the high point sheet flows towards the wetland. Currently there are swales along the entrance driveway and eastern portion of the trail. Soil types onsite are identified as ChD/ChC Charlton fine sandy loam, CrC/CsD Charlton-Chatfield complex, ChE Charlton Loam, LeB Leicester Loam and HrF Holis Rock Outcrop Complex.

1.3 Proposed Site Conditions

The subject project includes permitting the existing sporting clay course and proposes the stabilization of the existing trail, improvements to the collection and conveyance system and provisions of SMP. Improvements proposed consist of trail stabilization, removal and replacement of trees and installation of permanent stormwater collection, conveyance and treatment systems. This report will provide sizing calculations for post-construction collection and conveyance systems throughout the site including four (4) Rip Rap Swales, three (3) Flow Spreaders and one (1) Rain Garden.

2.0 STORMWATER MANAGEMENT

Since this project is disturbing more than 5,000 s.f. the project is subject to Town of Carmel *Chapter 267 Stormwater Management* and the General Permit. As noted above, this means the project is only required to provide erosion and sediment controls. However, at the request of the Town Engineer stormwater management practices have been provided where possible. Rip Rap Swales, Level Spreaders and a Rain Garden are being provided to collect, convey and treat stormwater runoff from the sporting clay course.

Contained in the Appendices are sizing calculations for the proposed stormwater collection, conveyance and treatment systems. Specifically, Appendix A contains the HydroCAD stormwater modeling for the Rip Rap Swales and Flow Spreaders. Both the Rip Rap Swales and Flow Spreaders have been sized for 25-year storm event. As can be seen in the routings the flow spreaders will be able to release the discharge from the 25-year storm event at a non-erosive velocity.

The Flow Spreaders have been sized to meet the requirements of the *New York State Standards and Specifications for Erosion and Sediment Control* (Blue Book). See Appendix C for the Flow Spreaders Calculations.

The Rain Garden has been sized in accordance with the *New York State Stormwater Management Design Manual* (Design Manual). See Appendix B for the Rain Garden Sizing Calculations.

3.2 Permanent Erosion and Sediment Control Facilities

Permanent erosion and sediment control will be accomplished by diverting stormwater runoff from steep slopes, controlling/reducing stormwater runoff velocities and volumes, and vegetative and structural surface stabilization. All of the permanent facilities are relatively maintenance free and only require periodic inspections. The owner will provide maintenance for all the permanent erosion and sediment control facilities. Refer to Project Drawings SP-1 and D-1 for the project Erosion and Sediment Control Plan and additional maintenance items for permanent erosion control facilities. A Stormwater Maintenance Agreement will be entered into with the Town of Carmel which shall require the maintenance of permanent erosion control facilities which can be found in Appendix D.

Flow spreaders have been provided to re-establishing sheet flow from discharge points. At a minimum the flow spreaders will meet the design requirements of the New York State Standards and Specifications for Erosion and Sediment Control (Blue Book). The flow spreader has been included in the routings contained in Appendix A. As can be seen in the routings the level spreader will be able to release the discharge from the 25-year storm event at a non-erosive velocity. The dimensions of the level spreader have been provided on the project drawings.

Rip rap swales have been provided as part of the project. Any erosion should be repaired immediately. In addition, any accumulated sediment or debris identified during inspections should be cleaned from swales.

4.0 IMPLEMENTATION, MAINTENANCE & GENERAL HOUSEKEEPING

4.1 Construction Phase

Details associated with the implementation and maintenance of the proposed stormwater facilities and erosion control measures during construction are shown on the Project Drawings. Soil disturbance shall not exceed one acre. The erosion control plan will include associated details and notes to aid the contractor in implementing the plan. Construction is anticipated to begin in the spring of 2019 and anticipated to be completed by the summer of 2019.

In addition to the proposed erosion and sediment control facilities, the following good housekeeping best management practices shall be implemented to mitigate potential pollution during the construction phase of the project. The general contractor overseeing the day-to-day site operation shall be responsible for the good housekeeping best management practices included in the following general categories:

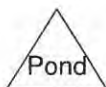
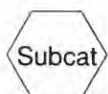
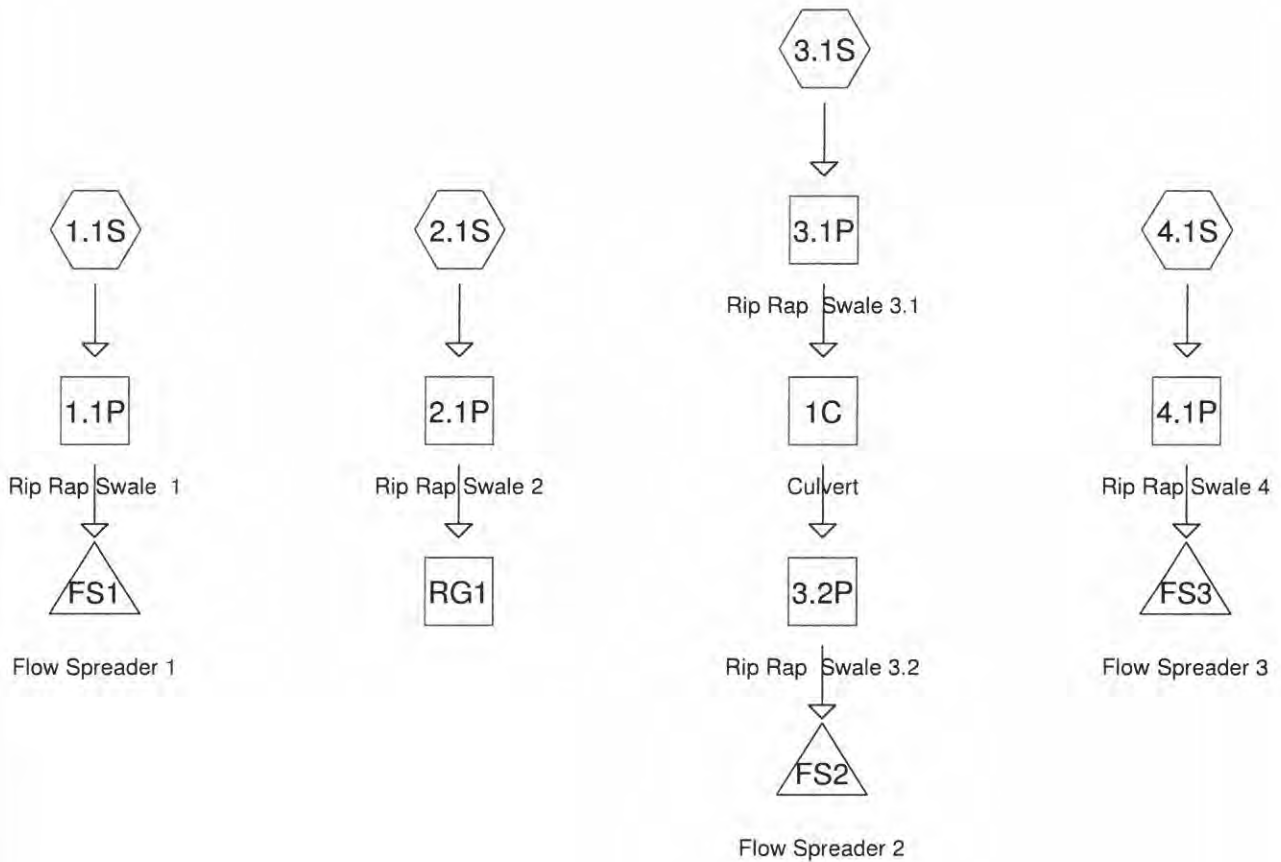
- Material Handling and Waste Management
- Establishment of Building Material Staging Areas
- Establishment of Washout Areas
- Proper Equipment Fueling and Maintenance Practices
- Spill Prevention and Control Plan

All construction waste materials shall be collected and removed from the site regularly by the general contractor. The general contractor shall supply waste barrels for proper disposal of waste materials. All personnel working on the site shall be instructed of the proper procedures for construction waste disposal.

Although it is not anticipated any hazardous waste materials will be utilized during construction, any hazardous waste materials shall be disposed of in accordance with federal, state, and local regulations. No hazardous waste shall be disposed of on-site. Hazardous waste materials shall be stored in appropriate and clearly marked containers and segregated from the other non-waste materials. All hazardous waste shall be stored in a structurally sound and sealed shipping containers located in the staging areas. Material safety data sheets, material inventory, and emergency contact numbers will be maintained in the office trailer. All personnel working on the site shall be instructed of the proper procedures for hazardous waste disposal.

Temporary sanitary facilities (portable toilets) shall be provided on site during the entire length of construction. The sanitary facilities shall be located in the staging areas, or in an alternate area away from

APPENDIX A
Post-Development Computer Data / Swale Sizing Calculations



Routing Diagram for Willow Wood Improvements

Prepared by {enter your company name here}, Printed 3/27/2019
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Willow Wood Improvements

NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

Prepared by {enter your company name here}

Printed 3/27/2019

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Page 2

Summary for Subcatchment 1.1S:

Runoff = 0.8 cfs @ 12.09 hrs, Volume= 0.081 af, Depth= 1.95"

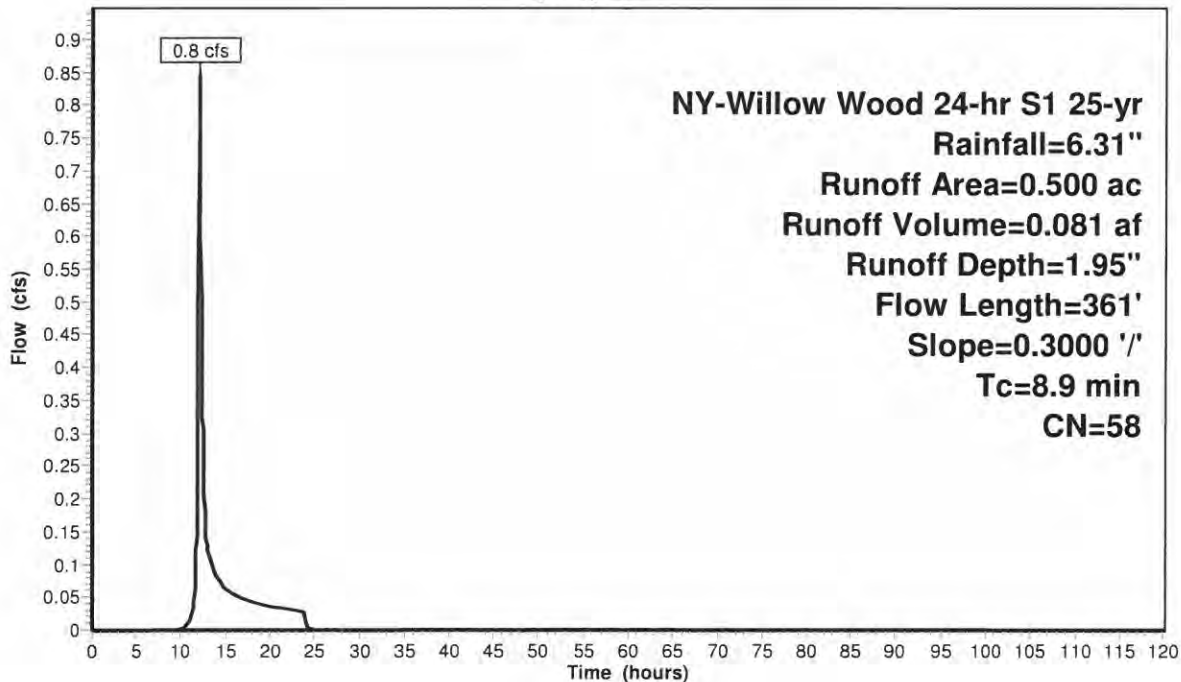
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

Area (ac)	CN	Description
0.400	55	Woods, Good, HSG B
0.100	70	Woods, Good, HSG C
0.500	58	Weighted Average
0.500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.3000	0.20		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.42"
0.5	261	0.3000	8.22		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
8.9	361	Total			

Subcatchment 1.1S:

Hydrograph



Willow Wood Improvements

NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

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Summary for Subcatchment 3.1S:

Runoff = 0.9 cfs @ 12.19 hrs, Volume= 0.104 af, Depth= 2.49"

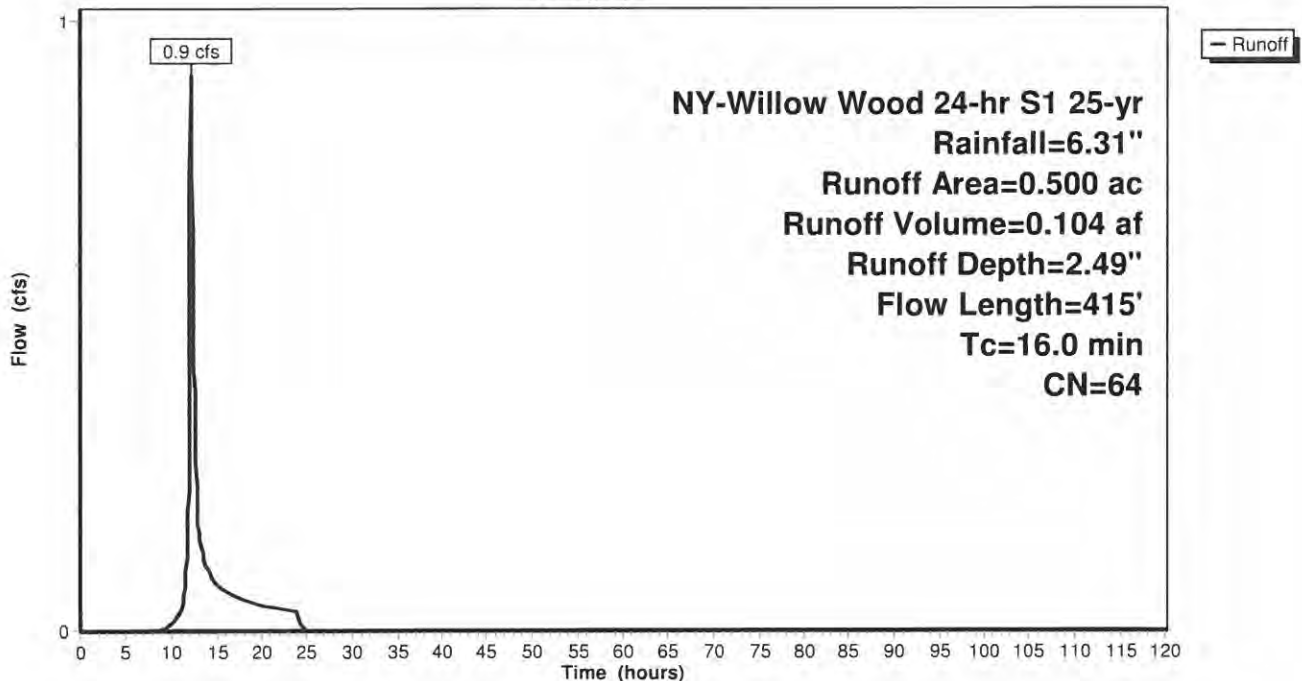
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

Area (ac)	CN	Description
0.400	55	Woods, Good, HSG B
0.100	98	Paved parking, HSG B
0.500	64	Weighted Average
0.400		80.00% Pervious Area
0.100		20.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.5	100	0.0900	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.42"
2.5	315	0.1800	2.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
16.0	415	Total			

Subcatchment 3.1S:

Hydrograph



Willow Wood Improvements

NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

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Summary for Reach 1.1P: Rip Rap Swale 1

Inflow Area = 0.500 ac, 0.00% Impervious, Inflow Depth = 1.95" for 25-yr event
Inflow = 0.8 cfs @ 12.09 hrs, Volume= 0.081 af
Outflow = 0.8 cfs @ 12.10 hrs, Volume= 0.081 af, Atten= 1%, Lag= 0.9 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs

Max. Velocity= 3.66 fps, Min. Travel Time= 0.5 min

Avg. Velocity = 1.36 fps, Avg. Travel Time= 1.3 min

Peak Storage= 24 cf @ 12.10 hrs

Average Depth at Peak Storage= 0.19'

Bank-Full Depth= 1.00' Flow Area= 2.0 sf, Capacity= 16.8 cfs

1.00' x 1.00' deep channel, n= 0.050

Side Slope Z-value= 1.0 '/' Top Width= 3.00'

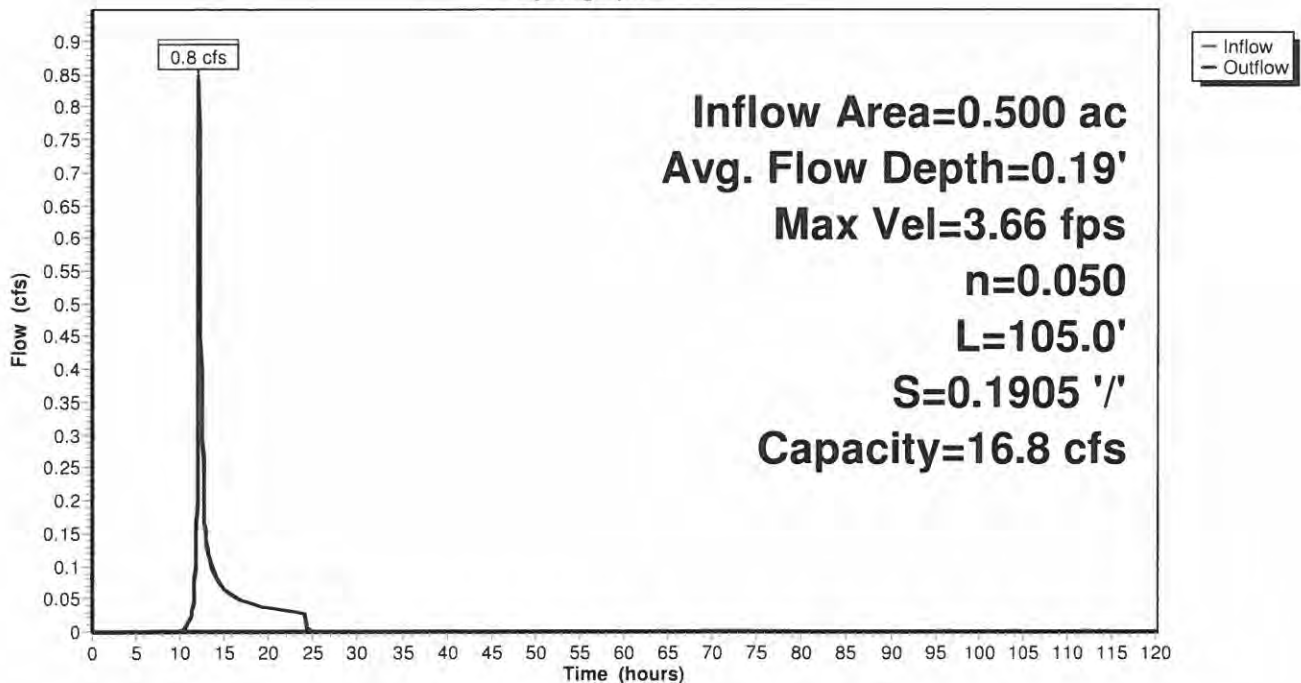
Length= 105.0' Slope= 0.1905 '/'

Inlet Invert= 519.00', Outlet Invert= 499.00'



Reach 1.1P: Rip Rap Swale 1

Hydrograph



Willow Wood Improvements

NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

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Summary for Reach 2.1P: Rip Rap Swale 2

Inflow Area = 0.500 ac, 20.00% Impervious, Inflow Depth = 2.49" for 25-yr event
Inflow = 1.1 cfs @ 12.10 hrs, Volume= 0.104 af
Outflow = 1.1 cfs @ 12.15 hrs, Volume= 0.104 af, Atten= 5%, Lag= 3.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.95 fps, Min. Travel Time= 1.8 min
Avg. Velocity = 1.05 fps, Avg. Travel Time= 5.0 min

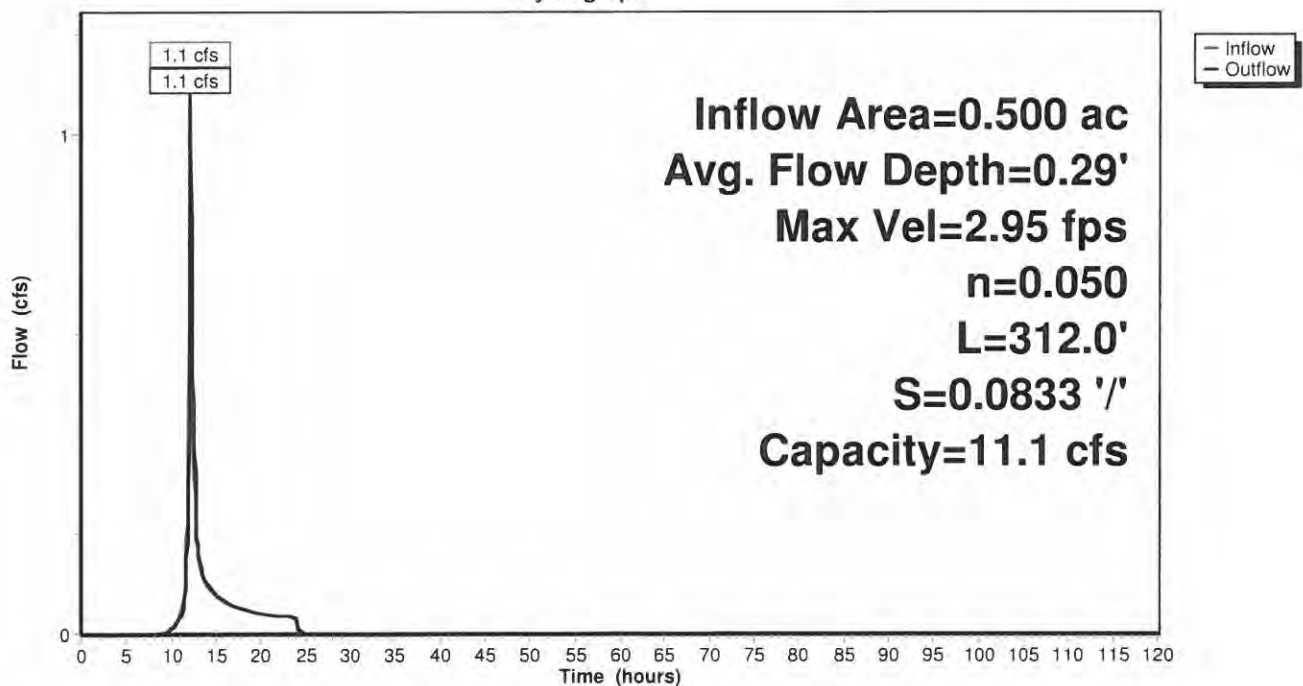
Peak Storage= 115 cf @ 12.12 hrs
Average Depth at Peak Storage= 0.29'
Bank-Full Depth= 1.00' Flow Area= 2.0 sf, Capacity= 11.1 cfs

1.00' x 1.00' deep channel, n= 0.050
Side Slope Z-value= 1.0 '/' Top Width= 3.00'
Length= 312.0' Slope= 0.0833 '/'
Inlet Invert= 640.00', Outlet Invert= 614.00'



Reach 2.1P: Rip Rap Swale 2

Hydrograph



Willow Wood Improvements

NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

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Summary for Reach 3.2P: Rip Rap Swale 3.2

Inflow Area = 0.500 ac, 20.00% Impervious, Inflow Depth = 2.49" for 25-yr event
Inflow = 0.9 cfs @ 12.20 hrs, Volume= 0.104 af
Outflow = 0.9 cfs @ 12.22 hrs, Volume= 0.104 af, Atten= 1%, Lag= 1.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs

Max. Velocity= 4.06 fps, Min. Travel Time= 0.7 min

Avg. Velocity = 1.52 fps, Avg. Travel Time= 2.0 min

Peak Storage= 40 cf @ 12.21 hrs

Average Depth at Peak Storage= 0.19'

Bank-Full Depth= 1.00' Flow Area= 2.0 sf, Capacity= 19.1 cfs

1.00' x 1.00' deep channel, n= 0.050

Side Slope Z-value= 1.0 '/' Top Width= 3.00'

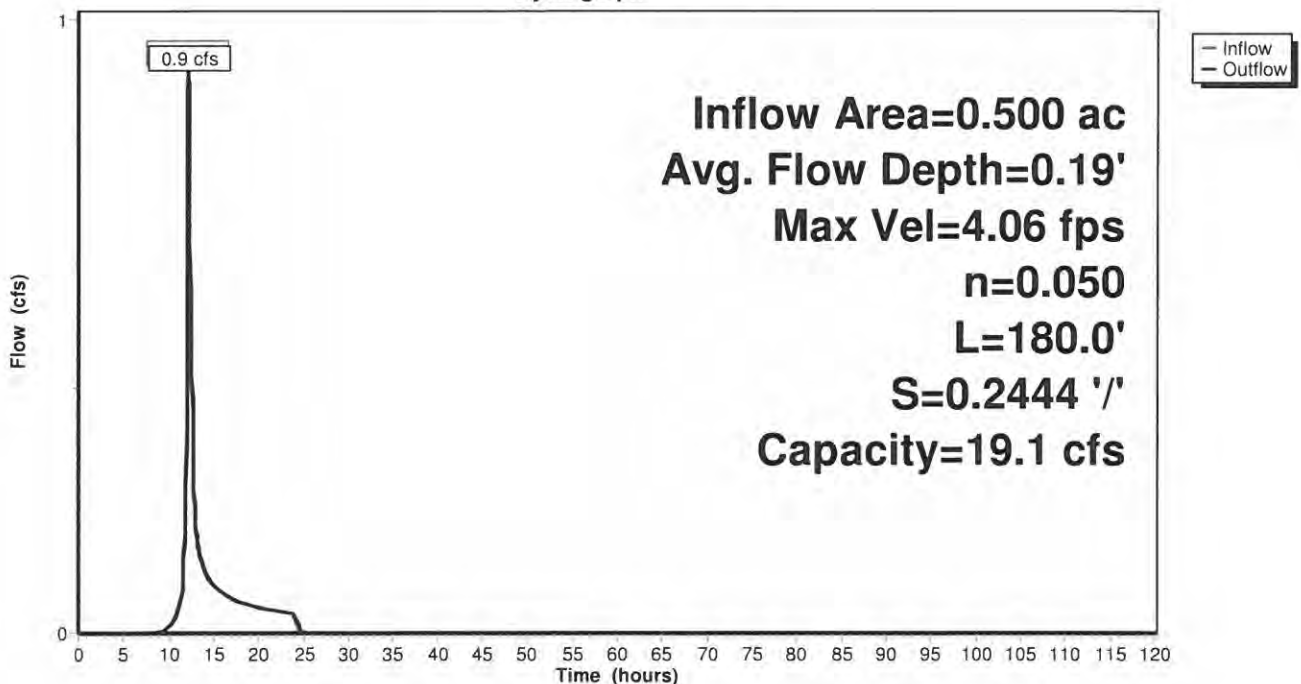
Length= 180.0' Slope= 0.2444 '/'

Inlet Invert= 610.00', Outlet Invert= 566.00'



Reach 3.2P: Rip Rap Swale 3.2

Hydrograph



Willow Wood Improvements

NY-Willow Wood 24-hr S1 25-yr Rainfall=6.31"

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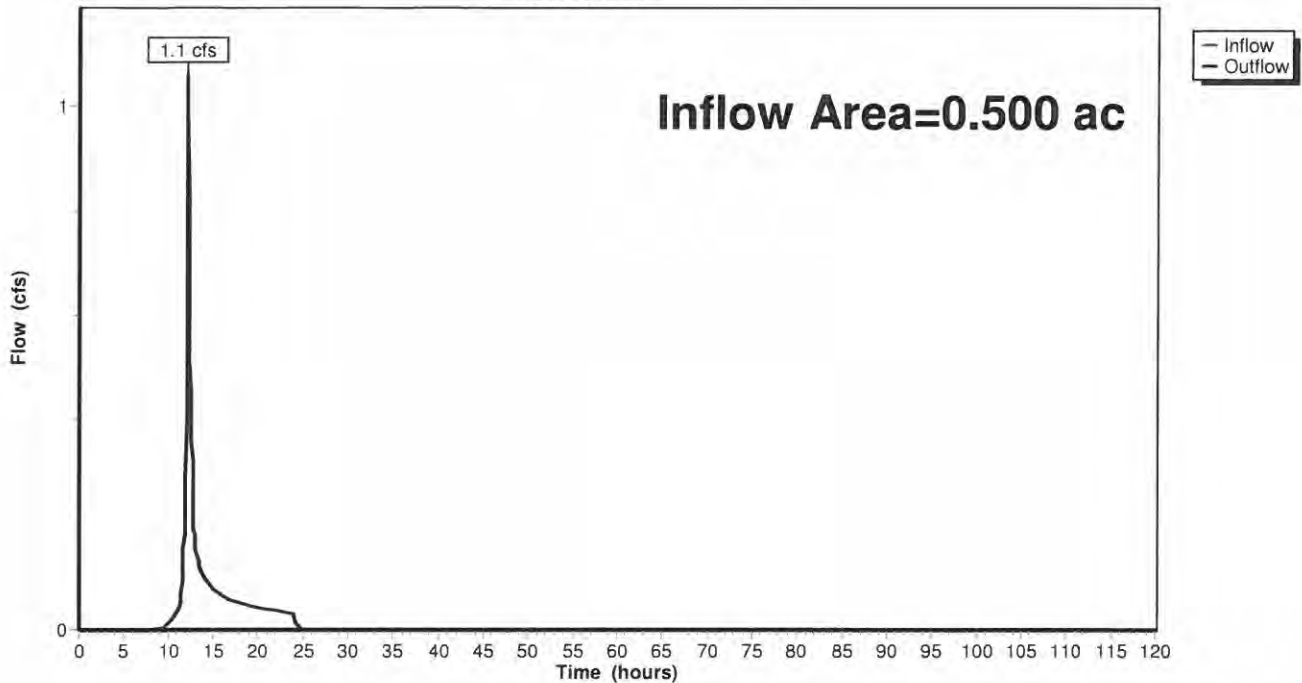
Summary for Reach RG1:

Inflow Area = 0.500 ac, 20.00% Impervious, Inflow Depth = 2.49" for 25-yr event
Inflow = 1.1 cfs @ 12.15 hrs, Volume= 0.104 af
Outflow = 1.1 cfs @ 12.15 hrs, Volume= 0.104 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs

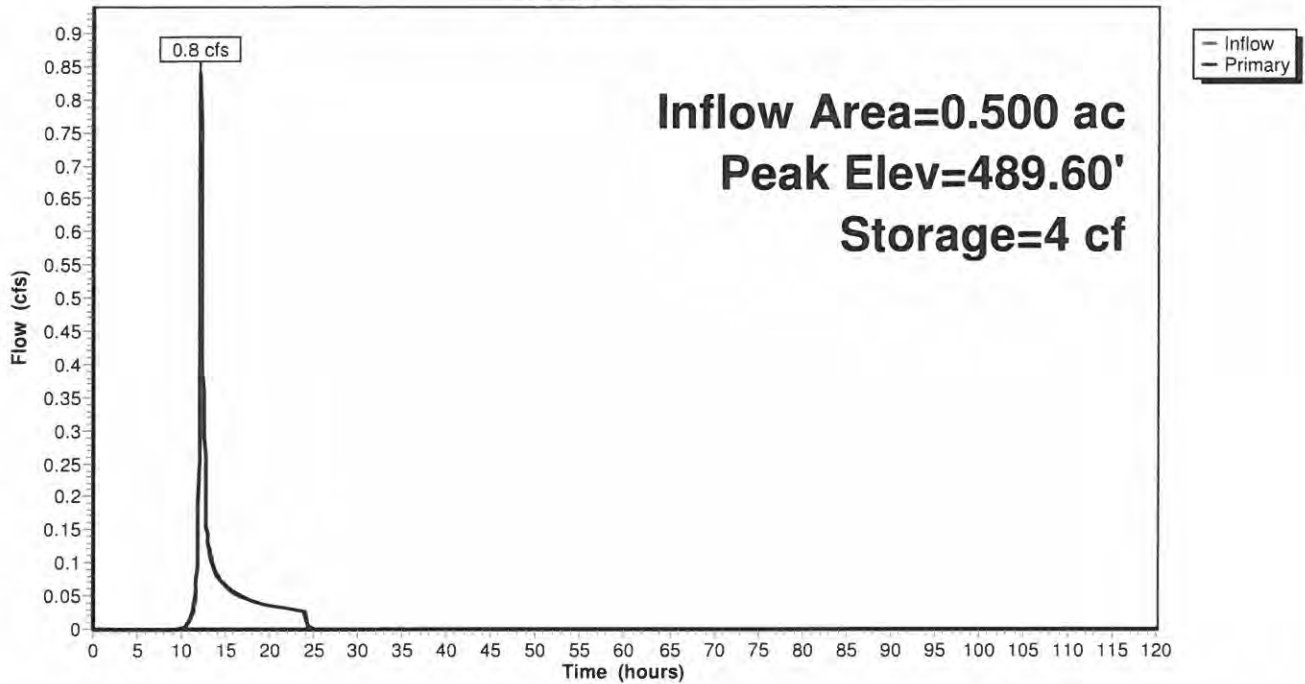
Reach RG1:

Hydrograph

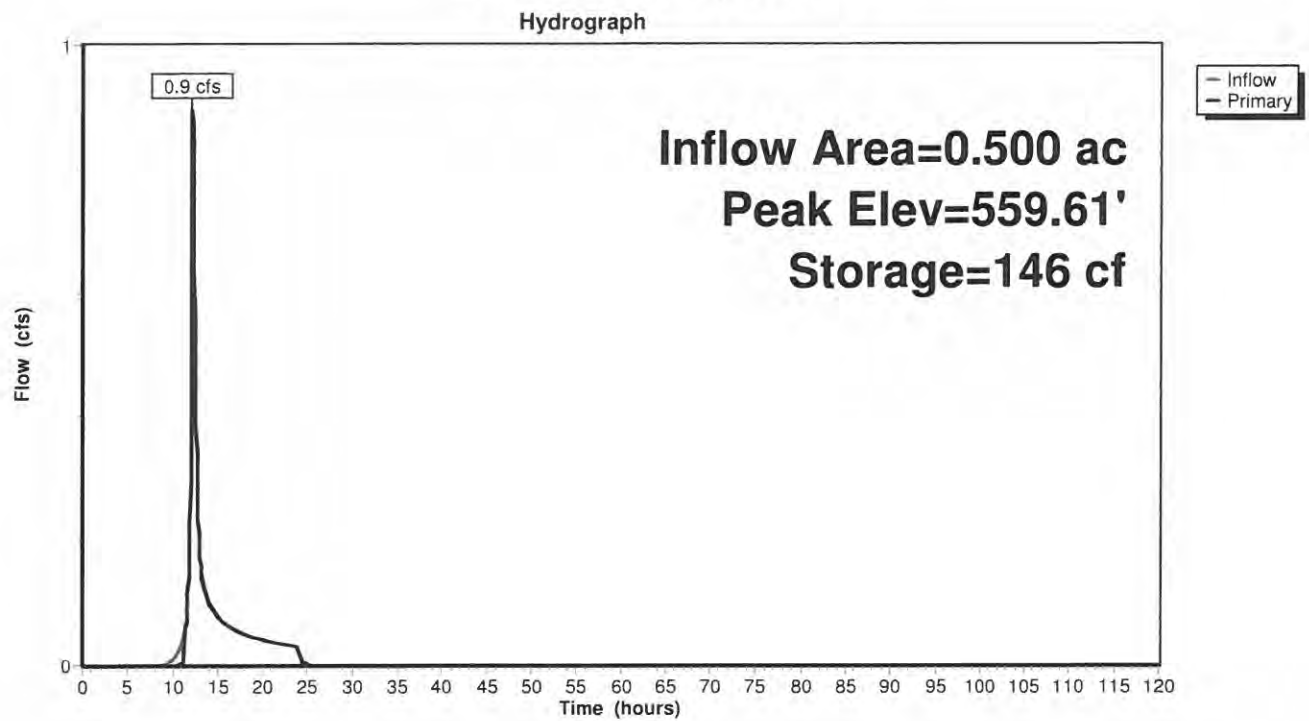


Pond FS1: Flow Spreader 1

Hydrograph

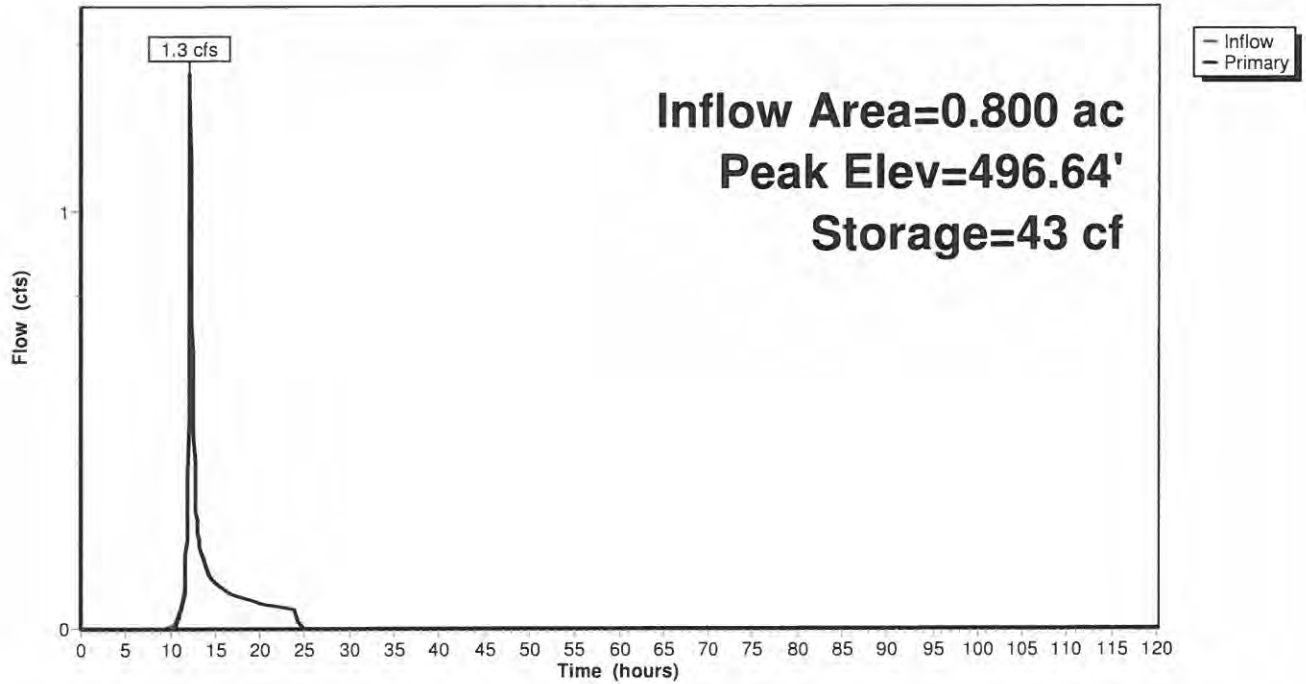


Pond FS2: Flow Spreader 2



Pond FS3: Flow Spreader 3

Hydrograph



APPENDIX B

Rain Garden Sizing Calculations

(See HydroCAD output below for the WQ_v used in the below equation)

Rain Garden Volume Provided (Section 5.3.7 of NYSSWDM)

$$WQ_v \text{ required} \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$$

$$V_{SM} = A_{RG} \times D_{SM} \times n_{SM} = 700 \times 1.5 \times 0.2 = 210 \text{ FT}^3$$

$$V_{DL} = A_{RG} \times D_{DL} \times n_{DL} = 700 \times 0.5 \times 0.4 = 140 \text{ FT}^3$$

V_{SM} = volume of the soil media (in cubic feet)

V_{DL} = volume of the gravel drainage layer (in cubic feet)

A_{RG} = rain garden surface area (in square feet)

D_{SM} = depth of the soil media (1.5 foot)

D_{DL} = depth of the drainage layer (0.5 feet)

D_P = depth of ponding above surface (0.5 feet)

n_{SM} = porosity of the soil media (0.2)

n_{DL} = porosity of the drainage layer (0.4)

$$\text{Therefore, } 697 \leq 210 + 140 + (0.5 \times 700) = 700 \text{ FT}^3$$

The required WQ_v of 697 FT³ ≤ rain garden volume provided of 700 FT³

Therefore, the proposed rain garden design for treating a contributing area of 23,372 square feet exceeds the NYSDEC WQ_v requirements.

Willow Wood Improvements

NY-Willow Wood 24-hr S1 1-yr Rainfall=2.77"

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Page 1

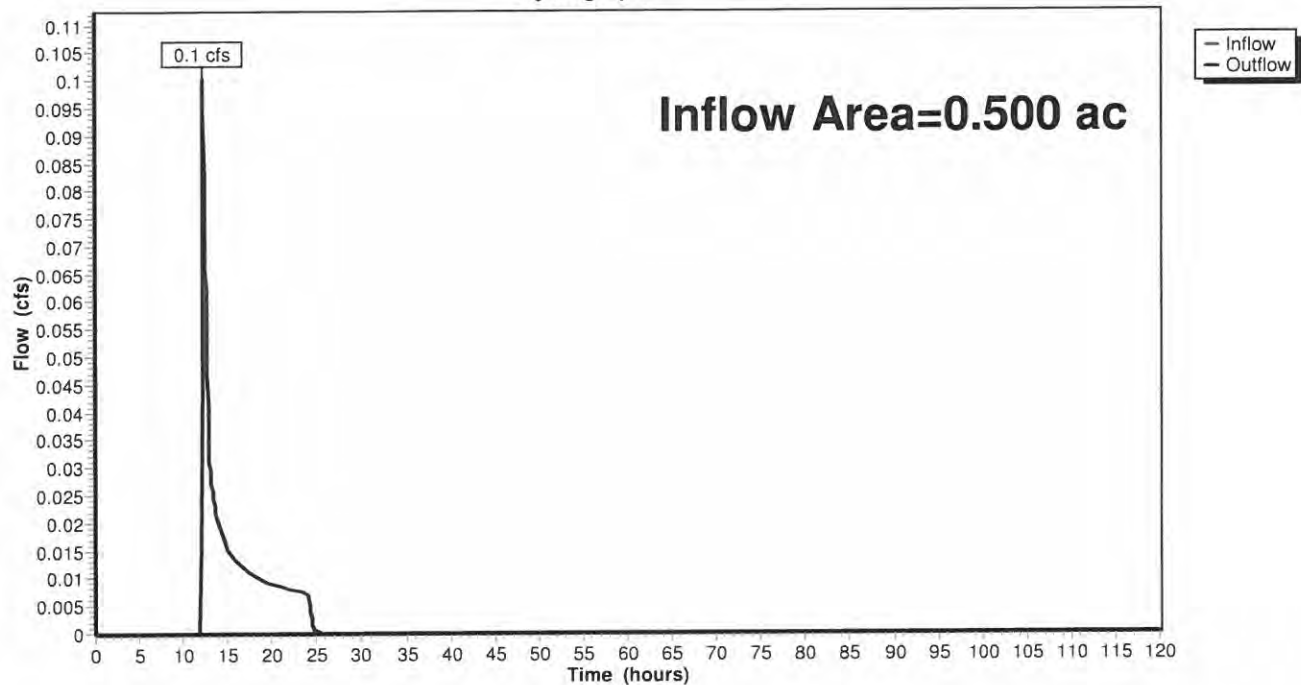
Summary for Reach RG1:

Inflow Area = 0.500 ac, 20.00% Impervious, Inflow Depth = 0.37" for 1-yr event
Inflow = 0.1 cfs @ 12.27 hrs, Volume= 0.016 af
Outflow = 0.1 cfs @ 12.27 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-120.00 hrs, dt= 0.05 hrs

Reach RG1:

Hydrograph



APPENDIX C

Flow Spreader Sizing Calculations

The proposed Flow Spreader for the Willow Wood Country Club project is sized to disperse flow uniformly from the 25-year design storm event and is sized in accordance with the *New York State Standards and Specifications for Erosion and Sediment Control* (Blue Book).

Utilizing the calculated flows from Appendix C and the design criteria stated on Figure 3.7 – *Flow Spreader Detail* of the Blue Book, the size of the Flow Spreader was calculated as follows:

Flow Spreader ID	25-Year Peak Flow (cfs)	Minimum Entrance Width (ft.)	Depth (ft.)	End Width (ft.)	Length (ft.)
FS1	0.8 ⁽¹⁾	10	0.10	10	10
FS2	0.9 ⁽¹⁾	10	0.11	10	10
FS3	1.3 ⁽¹⁾	10	0.14	10	10

¹ 25-year peak flow provided in Appendix A.

APPENDIX D
DRAFT Town of Carmel Stormwater Maintenance Agreement

ZONING

156 Attachment 2

Town of Carmel

Sample Stormwater Facility Maintenance Agreement

[Amended 4-8-2015 by L.L. No. 1-2015]

Whereas, the Town of Carmel, County of Putnam, State of New York and Willow Wood Country Club, Inc. want to enter into an agreement to provide for the long-term maintenance and continuation of stormwater control measures approved by the Municipality for the below named project, and

Whereas, the Municipality and the Willow Wood Country Club, Inc. desire that the stormwater control measures be built in accordance with the approved project plans and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components.

Therefore, the Municipality and the Willow Wood Country Club, Inc. agree as follows:

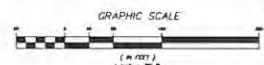
1. This agreement inures to the benefit of the Municipality and binds the Willow Wood Country Club, Inc., its successors and assigns, to the maintenance provisions depicted in the approved project plans which are attached as Schedule A of this agreement.
2. The Willow Wood Country Club, Inc. shall maintain, clean, repair, replace and continue the stormwater control measures depicted in Schedule A as necessary to ensure optimum performance of the measures to design specifications. The stormwater control measures shall include, but shall not be limited to, the following: drainage ditches, swales, rain gardens, flow spreaders, drop inlets, pipes, and culverts.
3. The Willow Wood Country Club, Inc. shall be responsible for all expenses related to the maintenance of the stormwater control measures and shall establish a means for the collection and distribution of expenses among parties for any commonly owned facilities.
4. The Willow Wood Country Club, Inc. shall provide for the periodic inspection of the stormwater control measures, not less than once in every five-year period, to determine the condition and integrity of the measures. Such inspection shall be performed by a professional engineer licensed by the State of New York. The inspecting engineer shall prepare and submit to the Municipality, within 30 days of the inspection, a written report of the findings, including recommendations for those actions necessary for the continuation of the stormwater control measures.
5. The Willow Wood Country Club, Inc. shall not authorize, undertake or permit alteration, abandonment, modification or discontinuation of the stormwater control measures except in accordance with written approval of the Municipality.
6. The Willow Wood Country Club, Inc. shall undertake necessary repairs and replacement of the stormwater control measures at the direction of the Municipality or in accordance with the recommendations of the inspecting engineer.

FIGURES



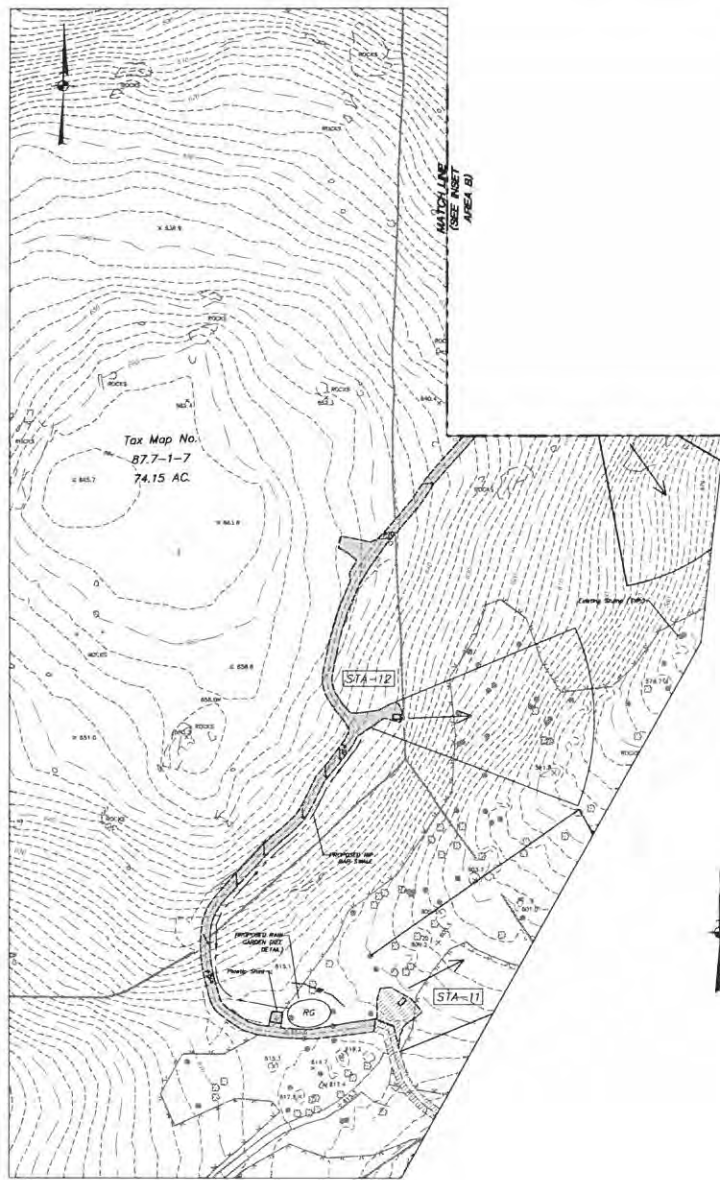
PLANT LIST				
CITY	SYMBOL	BOTANICAL/COMMON NAME	SIZE	ROOT
WEST		EMERSON TREES		
1	10	Abies balsamea (Mill.) (Balsam Fir)	5' - 8' Ht.	B & B

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING BUILDING
	EXISTING DRIVE LANE FENCE
	EXISTING STONEWALL
	EXISTING DRAINAGE PIPE
	EXISTING INLET/OUTLET
	EXISTING SPOT GRADE
	EXISTING CLAY STATION LABEL (SEE CORNER MONUMENT)
	EXISTING TREE
	EXISTING STUMP
	PROPOSED SPOT GRADE
	LIMITS OF DISTURBANCE ACCORDING TO RECENTLY CONDUCTED AND PROPOSED IMPROVEMENTS
	APPROXIMATE LIMITS OF NATURAL WOODS & LANDSCAPE AREA
	EXISTING TREE REMOVAL PROPOSED BETWEEN TREE

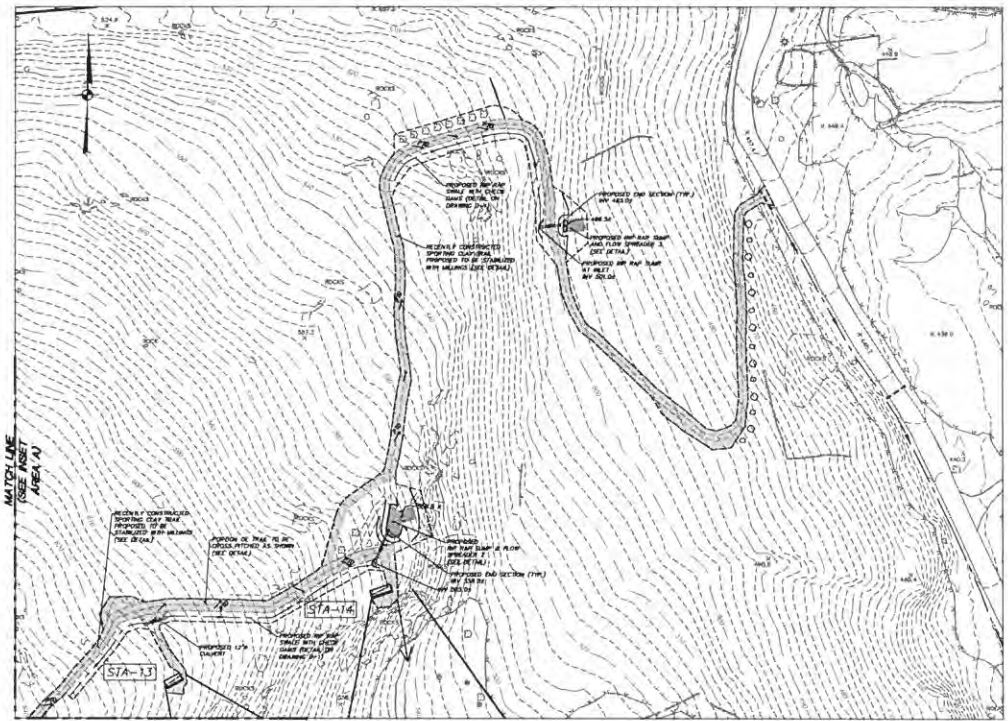


ALL INFORMATION ON THIS DOCUMENT IS UNLESS OTHERWISE NOTED BY A REGISTERED PROFESSIONAL ENGINEER OR A LICENSED SURVEYOR OF THE STATE OF CALIFORNIA.

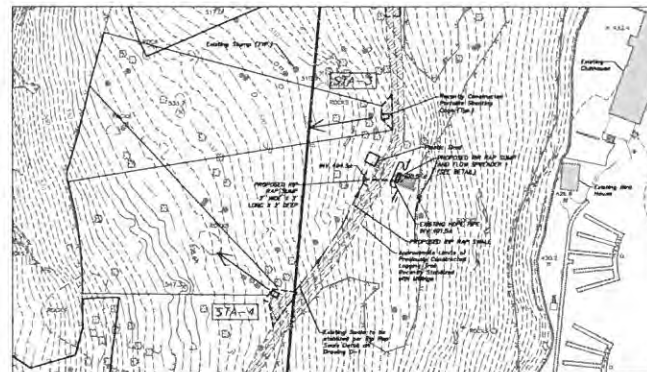
NO. DATE		REVISION		BY
 INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.				
PROJECT: WILLOW WOOD COUNTRY CLUB, INC.				
UNDER WILLOW WOOD, TOWN OF CARROLL, PUTNAM COUNTY, OR				
DRAWING: LANDSCAPE & LIMITS OF DISTURBANCE PLAN				
PROJECT NUMBER: 18173.100	PROJECT MANAGER: R.D.B.	DRAWING NO.: SP-2	SHEET 2	
DATE: 3-27-10	DATE: J.M.M.			
SCALE: AS SHOWN	CHECKED:			



ENLARGED SITE PLAN
INSET AREA A
SCALE: 1" = 40'



ENLARGED SITE PLAN
INSET AREA B
SCALE: 1" = 40'

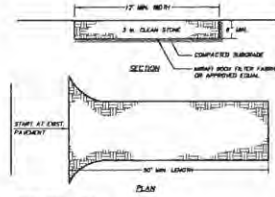


ENLARGED SITE PLAN
INSET AREA C
SCALE: 1" = 40'

NO.	DATE	REVISION	COMMENTS	APP.
1	3-27-18			JMB
2	04-18			BP
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.				
PROJECT: WILLOW WOOD COUNTRY CLUB, INC. 1000 WILLOW WOOD, CORNERS OF CORRAL, ALBUQUERQUE COUNTY, NM				
DRAWING: ENLARGED SITE PLANS				
PROJECT NUMBER	180723100	PROJECT MANAGER	R.D.W.	DRAWING NO.
DATE	12-28-18	DESIGNER	J.W.M.	SHEET
SCALE	AS SHOWN	CHECKED BY		SP-3

EROSION & SEDIMENTATION CONTROL NOTES:

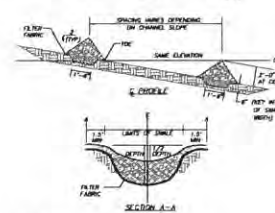
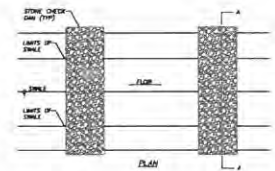
1. The owner's best representative (O.B.R.) shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
2. All construction activities including the removal or disturbance of soil are to be preceded with appropriate protective measures to minimize erosion and sediment disturbance. Erosion and sediment control measures shall be implemented on areas on the plan and shall be maintained in accordance with the "New Hampshire and Massachusetts Erosion and Sediment Control" rules.
3. Maximum feasible, relative vegetation should be retained and protected. Disturbance and its removal is to be minimized to the extent possible. As much as 5 inches of topsoil shall be retained and protected in place.
4. When work is required during development, the measures shall be kept in the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized to the extent possible for practical construction.
5. All construction vehicles shall be kept clear of the topsoil and erosion control measures within the area of proposed development. All heavy and heavy construction loads shall be avoided in the area where the grading is in some probability of the disturbance or removal of topsoil.
6. The stabilized construction entrance, all forms, and storage construction loads shall be located in areas on the plan prior to beginning any clearing, grading or construction.
7. All material to be removed from the area being developed shall be stored and removed in accordance with the appropriate rules and regulations for the removal of material. All material shall be removed in accordance with the appropriate rules and regulations for the removal of material.
8. Any material shall not be subject to further disturbance or construction traffic until it is stabilized. All material shall be removed in accordance with the appropriate rules and regulations for the removal of material.
9. All material shall be removed in accordance with the appropriate rules and regulations for the removal of material.
10. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
11. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
12. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
13. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
14. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
15. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
16. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
17. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
18. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
19. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
20. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
21. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.
22. The O.B.R. shall be responsible for the implementation and maintenance of erosion and sediment control measures on the site prior to and during construction.



INSTALLATION NOTES

1. STONE SIZE - 1/2" TO 1" STONE
2. LENGTH - AS REQUIRED BUT NOT LESS THAN 30 FEET (EXCEPT ON A SLOPE RESISTANCE (OT) WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)
3. THICKNESS - NOT LESS THAN 6" (6" MIN.)
4. WIDTH - 12 FEET MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT THE TOP OF THE ENTRANCE
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENTIAL LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING ON SURFACE FORMING CONCENTRATION CHANNELS SHALL BE DIVERTED AWAY FROM THE ENTRANCE OF THE ENTRANCE. A SEPARATE DRAIN WITH A SLOPE WILL BE PROVIDED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOODING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY. TRACKING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY SHALL BE PROHIBITED. TRACKING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY SHALL BE PROHIBITED. TRACKING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY SHALL BE PROHIBITED.
8. INSPECTION - SHALL BE CLEARED TO REMOVE SEDIMENT FROM THE ENTRANCE ONCE PUBLIC BODY OF 12" MAX. WIDTH IS REQUIRED. IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH CANNOT BE USED AS A PUBLIC RIGHT OF WAY OR AS A PUBLIC RIGHT OF WAY.
9. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

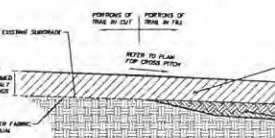
STABILIZED CONSTRUCTION ENTRANCE DETAIL (N.I.S.)



NOTES

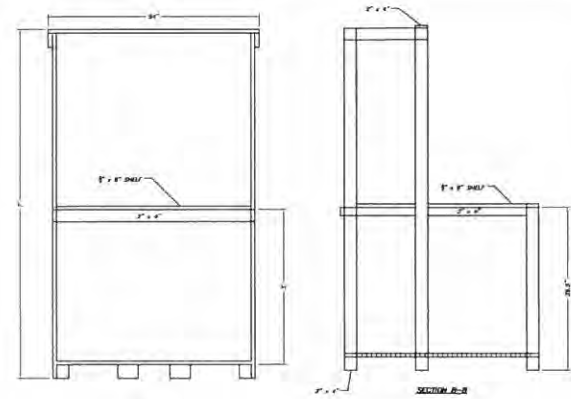
1. STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. ST. BRACING OF STONE DAMS SHALL BE THE ELEVATION OF THE TOP OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOP OF THE UPTHEAM DAM.
3. CLOSING THE STONE A MINIMUM OF 1.5 FEET BEFORE THE DAM BEGINS TO PREVENT CLOSING AROUND THE DAM.
4. PROTECT THE DOWNSTREAM OF THE DOWNSTREAM DAM FROM SEDIMENT AND FLOODING WITH STONE LINES AS AVAILABLE.
5. PROTECT THE DOWNSTREAM OF THE DOWNSTREAM DAM FROM SEDIMENT AND FLOODING WITH STONE LINES AS AVAILABLE.

STONE CHECK DAM DETAIL (N.I.S.)



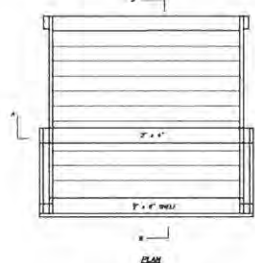
SPORTING CLAY TRAIL DETAIL (N.I.S.)

NOTE: THE ABOVE DETAIL APPLIES TO THE PREVIOUSLY SUBMITTED ROAD AND PROPOSED IMPROVEMENTS TO THE TRAIL.

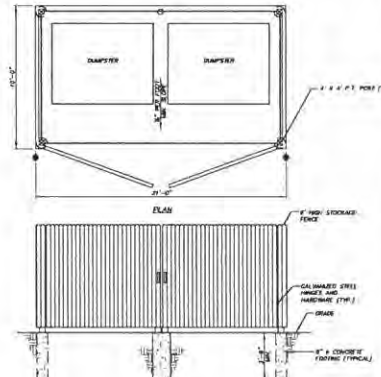


SECTION A-A

EXISTING SPORTING CLAY STAND DETAIL (N.I.S.)

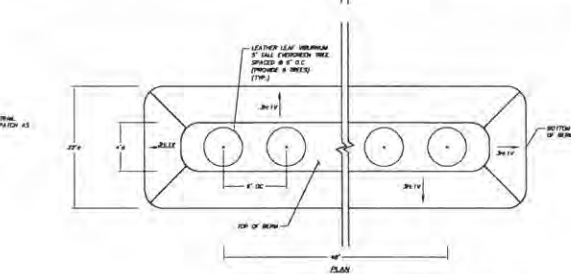
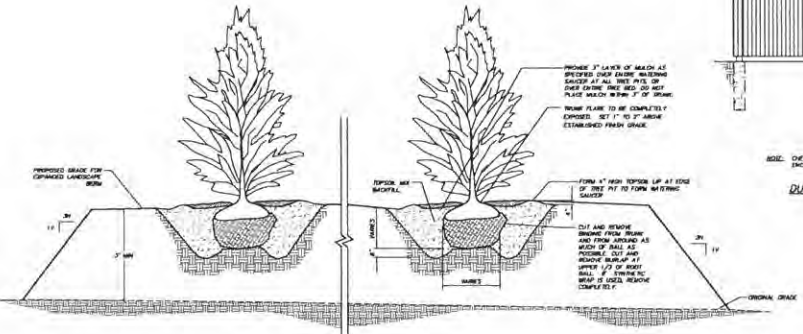


PLAN



ELEVATION

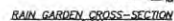
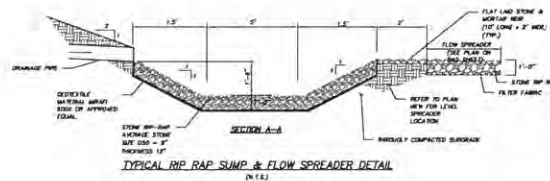
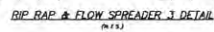
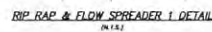
DUMPSTER ENCLOSURE DETAIL (N.I.S.)



EVERGREEN TREE REPLACEMENT AND LANDSCAPE BERM DETAIL (N.I.S.)

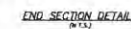
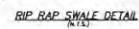


1	3-27-18	REVISED PER OWNER COMMENTS	JAN
NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: MILLOW WOOD COUNTRY CLUB, INC. 1000 MILLOW WOOD DRIVE, CONSUMERS, NEW HAMPSHIRE 03301 (PH) 603-887-1111 (FAX) 603-887-1112 www.insite-eng.com			
DRAWING: DETAILS			
PROJECT NUMBER	18173-100	PROJECT MANAGER	R.D.M.
DATE	12-28-18	DRAWN BY	J.M.M.
SCALE	AS SHOWN	CHECKED BY	
SHEET		D-1	



2. DRAINAGE LAYER TO CONSIST OF 1.5-2.0" (38-51 MM) CLEAN WASHED GRAVEL.

SCHEMATIC RAINGARDEN PLANT LIST			
KEY	BOTANICAL / COMMON NAME	SIZE	ROOT/SPACING
CS	<i>Cornus sericea</i> / Red-leaf Dogwood	16-24" HL	CS
WV	<i>Thalictrum virginicum</i> / Common Blackroot	2'-3' HL	WV
AT	<i>Athyrium filix-femina</i> / Lady Fern	2'-3' HL	AT
CS	<i>Chamaecyparis</i> / White Fir	3'-4' HL	CS
EM	<i>Equisetum hyemale</i> / Scirpus Reed	2'-3' HL	EM
CS	<i>Cornus alternifolia</i> / Spicebush	2'-3' HL	CS
EM	<i>Equisetum arvense</i> / Scirpus Reed	2'-3' HL	EM
CS	<i>Cornus alternifolia</i> / Spicebush	2'-3' HL	CS
EM	<i>Equisetum arvense</i> / Scirpus Reed	2'-3' HL	EM
CS	<i>Cornus alternifolia</i> / Spicebush	2'-3' HL	CS
EM	<i>Equisetum arvense</i> / Scirpus Reed	2'-3' HL	EM



NO.	DATE	REVISION	
 INSITE SIGNATURE DESIGN • SURVEYING & LANDSCAPE ARCHITECTURE, P.C.		3 Church Street Cheshire, VT 05732 (802) 252-0800 (802) 252-8973 fax www.insite-ny.com	
PROJECT:			
WILLOW WOOD COUNTRY CLUB, INC.			
10000 HILLY ROAD, CORRAL, ALBUQUERQUE COUNTY, NM			
DRAWING:			
DETAILS			
PROJECT NUMBER	18773-100	PROJECT NUMBER	R.D. #
SHEET	3-27-19	DRAWN BY	J.M.M.
SCALE	AS SHOWN	CHECKED	
		D-2	
		5	

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REPLY TO:

TARRYTOWN OFFICE

March 29, 2019

Honorable Chairman
and Members of the Planning Board
Town of Carmel Town Hall
60 McAlpin Avenue
Mahopac, New York 10541

Re: Application for site plan and special permit approval for
Lake Casse: 254 Croton Falls Road, Mahopac, New York

Honorable Chairman
and Members of the Planning Board:

We are the attorneys for Homeland Towers LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless (collectively, the "Applicants") in connection with their site plan and special permit applications to locate a public utility wireless telecommunications facility ("Facility") at the above captioned property ("Property"). The proposed Facility consists of a 160-foot tower and a fenced 36' x 100' compound for related equipment. The Property is located in the Residential Zoning District where the Facility is permitted in accordance with Section 156-62 of the Town of Carmel Zoning Code. Please note that based on the enclosed materials the application has been amended to reduce the height of the tower from 180 feet to 160 feet in height.

In support of the foregoing and in response to the Town comments, we are pleased to enclose eleven (11) copies of the following materials and one CD with all documents:

1. Visual Resource Evaluation prepared by Saratoga Associates;
2. RF Justification Report with drive test data prepared by PierCon Solutions;
3. Property value Report prepared by Lane Appraisals;
4. Response letter prepared by APT Engineering;
5. Revised Site Plan.

We thank you for your consideration, and look forward to discussing this matter at next Planning Board meeting. If you have any questions or require any additional documentation, please do not hesitate to contact me at 914-333-0700.

Snyder & Snyder, LLP

By:



Robert D. Gaudio

RDG:cae

Enclosures

cc: Homeland Towers

Verizon Wireless

z:\ssdata\wpdata\ss3\rdg\homelandtowers\carmel\056 (casse)\pb letter 3.29.2018.rtf

Proposed Wireless Telecommunications Facility

Site Name: Lake Casse, NY- 056
254 Croton Falls Road
Mahopac, NY

VISUAL RESOURCE ASSESSMENT



Prepared for:
Homeland Towers
9 Harmony Street, 2nd Floor
Danbury, CT 06810

March 21, 2019

VISUAL RESOURCE ASSESSMENT

Homeland Towers, LLC ("Project Sponsor") seeks approval from the Town of Carmel, NY to construct a wireless telecommunications facility (the "Facility") to be located on property at 254 Croton Falls Road, Mahopac, NY 10541 ("host property"). To address issues of potential visual impact, Saratoga Associates, Landscape Architects, Architects, Engineers, and Planners, P.C. was retained to conduct a Visual Resource Assessment ("VRA") of the proposed Project.

The study area for this VRA extends to a two-mile radius from the Facility (hereafter referred to as the "2-mile study area"). Because much of the project area is heavily wooded substantial limiting extending distance views of the Facility, detailed analysis is largely focused on viewpoints within a ½-mile radius ("½-mile study area").

PROJECT DESCRIPTION

The Facility will be located at 41° 22' 40.5409" N, 73° 42' 14.0725" W ("Facility site"). The 25.57± acre host property is identified in Putnam County tax records as tax parcel 65.19-1-43. The existing ground elevation at the tower site is approximately 585 feet above mean sea level (amsl).

The Facility includes the construction of a 160-foot-tall telecommunications tower designed to support up to four antenna levels.

Note: Six (6) balloon visibility tests were conducted between January 25 and March 2, 2019 to allow the general public and local decision-makers an opportunity to observe the location and potential visibility of the Facility. During each test, one five-foot diameter red balloon was raised to an elevation of 180 feet above existing grade (measured to the bottom of the balloon). At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet. All analysis contained in this VRA is based on the currently proposed tower height of 160 feet.

Associated ground equipment will be located within a 36± foot by 100± foot (3,600± square feet) fenced enclosure at the base of the tower. Access to the Facility site will be directly from an existing gravel driveway/parking area.

The Facility has been designed to minimize adverse visual and aesthetic impact to the maximum extent practicable through camouflaging techniques. The Facility will employ either a traditional steel monopole design with a two-tone paint scheme or a stealth tree (AKA "monopine") type design to minimize visual contrast. The two-tone paint color option will utilize an earth tone tan color and a light gray color. The stealth "monopine" tower design option will include a dense non-uniform branching pattern that will help to blend the structure with the visual characteristics of the surrounding woodland hills.

The host property is substantially wooded and the Facility site is proposed within a 1.25± acre cleared area. The existing tree canopy height surrounding the Facility is approximately 70 feet with only two trees to be removed.

LANDSCAPE SETTING

The Facility is located within the Town of Carmel, NY (2018 estimated population 34,360¹). The host property is zoned Residential as defined by the Carmel Town Code.

The ½-mile study area is largely suburban in character comprised of low to moderate density (i.e., ½ to 20+ acre) single-family residential lots and undeveloped woodland open space. Structures are typically single-family homes within organized subdivisions or individual homes setback from main roads. Residential neighborhoods are typically wooded with well landscaped understory areas. Mature trees commonly extend to road edges limiting long distance vistas.

Seven (7) residential structures (including the main house on the host property) are within 1,000 feet of the Facility. The nearest occupied residential structure is approximately 480 feet to the southeast.

The Eleanor Drive residential subdivision is situated on a low ridgeline approximately 1/3 mile southwest of the Facility site. Approximately 40 single family residences are within the Eleanor drive neighborhood. The McLaughlin Acres residential subdivision is located on a north facing slope approximately ½ mile to the south. Approximately 60 single-family residences are within the McLaughlin Acres neighborhood.

The topography within the 2-mile study area is characterized by a rolling and often steeply sloped landscape. The topographic highpoint within the two-mile radius study area is Watermelon Hill (elevation 961± feet amsl). The topographic low point is the Croton Falls Reservoir (elevation 299± feet amsl).

Two existing telecommunications towers are located on a hilltop approximately 1.25 miles north northwest of the Facility site near Lake Casse. These exiting towers are approximately 120 feet tall with a base elevation of approximately 715 and 730 feet amsl – approximately 130 feet higher in elevation than the proposed Facility. One existing tower is a lattice frame design and the other tower is a monopole design. Neither tower incorporates stealth mitigation design. Both existing telecommunications towers are directly visible from portions of the Eleanor Drive residential neighborhood as well as from the water surface and much of the south and east shore of Lake Casse.

¹ <https://www.census.gov/quickfacts/carmeltownputnamcountynynewyork>



Photo 1 – Existing towers viewed from Lake Drive

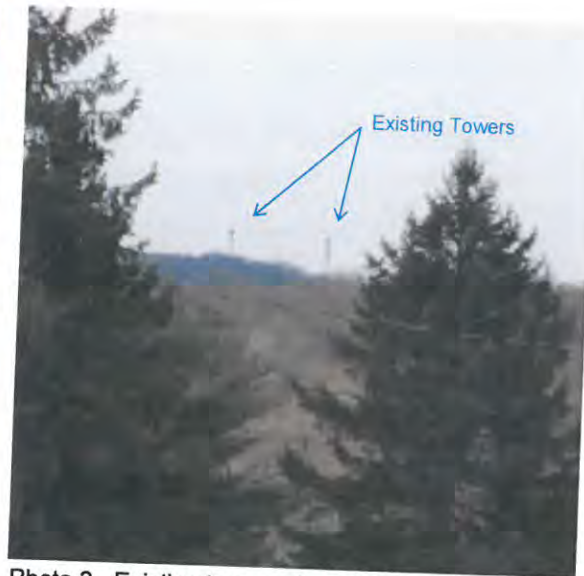


Photo 2 - Existing towers viewed from Eleanor Drive

Waterbodies within the study area include Croton Falls Reservoir, Lake Mahopac, Lake Casse, Lake Giland several other small lakes, ponds, creeks and streams. The study area is heavily wooded with broad tracts of mature second growth deciduous forest interspersed with stands of mature evergreen species. The tree canopy occupies approximately 5,490 acres of the 8,040-acre two-mile study area (68%).² Mature tree cover generally ranges from 50 to 70 feet in height. An additional 1,034 acres (13%) of the two-mile study area is water surface.

Visual Resources

Scenic Resources of Statewide Significance - To avoid subjectivity in assessing potential visual impact, the New York State Department of Environmental Conservation's ("NYSDEC") Program Policy on Assessing and Mitigating Visual Impact (DEP-00-02) ("DEC Visual Policy") provides guidance in the determination of visual significance under the State Environmental Quality Review Act (SEQRA). Visual impact is defined by the DEC Visual Policy as follows:

"Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or quality of such a place."³

The DEC Visual Policy defines an "inventoried resource" as a place recognized for its beauty and designated through federal or state democratic political processes in recognition of its aesthetic value.⁴ Inventoried places are a matter of public record and are not arbitrarily or subjectively determined. The DEC Visual Policy contains specific criteria defining places considered to be aesthetic resources of statewide significance. These places are high value

² Tree cover calculations are based on areas with 50% or greater tree canopy coverage within 30-meter x 30-meter grid cells as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset. <https://viewer.nationalmap.gov/basic/#productSearch>

³ DEC Visual Policy, p.5. (https://www.dec.ny.gov/docs/permits_ej_operations_pdf/visual2000.pdf)

⁴ DEC Visual Policy, p.1.

sites including state parks, scenic roads, wild, scenic and recreational rivers, state forests, wildlife management areas, scenic areas of statewide significance, Heritage Areas, National Natural Landmarks, state or federally designated trails, properties or districts listed on the National Register of Historic Places, among others. There are no places meeting this definition of Scenic Resource of Statewide Significance within the 2-mile study area.

Aesthetic Resources of Local Importance - Aesthetic resources of local importance are publicly accessible places generally recognized and enjoyed by community residents and visitors for their unique aesthetic value. Aesthetic resources of local importance are established through local democratic processes and are not arbitrarily or subjectively determined. Such places are most commonly municipal parks, trails, bikeways, and may also include not-for-profit conservation lands and open space preserves.

Aesthetic resources of local importance within the 2-mile study area include:

- **Putnam County Trailway** (1,820 feet north of tower site at its nearest point) – The Putnam County Trailway is a paved bicycle/pedestrian path located primarily on right-of-way lands of the former Putnam Division of the New York Central Railroad. The Putnam Right-of-Way spans 12.0 linear miles through Putnam County, from the Westchester border at Baldwin Place to Brewster Village. In the vicinity of the Facility the Putnam County Trailway is located in a topographically low and heavily forested area. Views are typically limited to the immediate foreground by trailside vegetation. No views of the Facility from the Putnam County Trailway were found.
- **Chamber Park** (1.6 mile west of tower site) – The Mahopac Chamber Community Park is located in downtown Mahopac at the corner of Routes 6 and 6N. Located on Mahopac lake, it features a gazebo, fountain, playground, walking paths and benches. The project is not visible from Chamber Park.
- **Michael Geary Memorial Roller Hockey Rink** (1.2 miles west of tower site) – Michael Geary Memorial Roller Hockey Rink includes an inline roller hockey rink, concession stand, picnic area, bleachers and restrooms. The project is not visible from the Michael Geary Memorial Roller Hockey Rink.

Resources of local importance are identified on Figures 1 and 2.

Other Areas of Aesthetic Interest

While not rising to the threshold of statewide significance or local importance, other places of local interest have been included in this visual assessment to represent potential Facility views from roadways, residential neighborhoods and adjacent or nearby residential properties. Such locations are not representative of any aesthetically significant place as defined under the DEC Visual Policy and are not directly addressed under SEQRA.

Residential Areas - Within the ½-mile radius study area residential development is largely clustered in planned single-family residential subdivisions. Nearby residential areas include McLaughlin Acres and the Eleanor Drive, Fulmar Road, Stacy Lane and Rebecca Lane neighborhoods. Roadside single-family residential development is found along portions of

Croton Falls, Shear Hill Road, Weber Hill Road and several other local streets within the ½-mile study area. Parcel sizes in these areas generally range from ½ acre to 20 acres or more.

Dense woodland commonly limits views from residential properties to the immediate foreground. From most residential properties views of the Facility will be substantially screened by intervening dense mature woodland vegetation – even during winter leaf-off-season.

The Eleanor Drive, McLaughlin Acres and Odessa Drive residential neighborhoods are situated on hillsides offering views of distant landscape in the direction of the Facility site. Figures A1, A3, A6, A7 & A8 illustrate views from these residential neighborhoods. No views were found from the Stacy Lane and Rebecca Lane neighborhoods.

VIEWSHED ANALYSIS

Viewshed mapping identifies the geographic area within which there is a relatively high probability that some portion of the Facility could be visible.

One viewshed overlay was prepared defining the area within which there would be no visibility of the Facility due to the screening effect of intervening topography. This "bare earth" condition identifies the maximum potential geographic area within which further investigation is appropriate. A second viewshed overlay was prepared illustrating the screening effect of existing mature vegetation and buildings. The more realistic "land cover" condition identifies the geographic area where one would expect to be substantially screened by intervening forest vegetation.

Global Mapper 19.0 GIS software was used to generate viewshed areas based on publicly available topographic and land cover datasets. Topographic data was derived 2-meter resolution digital elevation models (DEM) acquired from the New York State GIS Clearinghouse.⁵ Using Global Mapper's viewshed analysis tool, the proposed Facility location and height were input and a conservative offset of six feet was applied to account for the observer's eye level. The resulting viewshed identifies grid cells with a direct line-of-sight to the Facility high point (160 feet above ground level).

Within one (1) mile of the Facility site existing forest vegetation was manually digitized from ½-foot resolution digital ortho-photographs (2016) acquired from NYS Orthos On-line.⁶ For the remainder of the 2-mile study area existing forest vegetation is based on areas with 75% or greater tree canopy coverage as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset.⁷ Building footprints were manually digitized from ½-foot resolution digital ortho-photographs.

The screening effect of vegetation and built structures was incorporated by adding 50 feet in vertical height to forest areas and 25 feet to building footprints. Forested areas and building footprints were removed from the viewshed result to account for affected areas located within structures or densely wooded cover.

⁵ <https://orthos.dhSES.ny.gov/>

⁶ <https://orthos.dhSES.ny.gov/>

⁷ <https://viewer.nationalmap.gov/basic/#productSearch>

Based on field observation, most trees in forested portions of the study area are taller than 50 feet. This height therefore represents a conservative estimate of the efficacy of vegetative screening. It is important to note that digitized vegetation is based on interpretation of forest areas that are clearly distinguishable in the source aerial photography. As such, the potential screening value of site-specific vegetative cover such as small hedgerows, street trees and individual trees and other areas of non-forest tree cover may not be represented in the viewshed analysis.

It is noteworthy that untrained reviewers often misinterpret "bare earth" condition viewshed maps to represent wintertime, or leafless condition visibility. In fact, deciduous woodlands provide a substantial visual barrier in all seasons. Since the digitized forest cover overlay generally identifies only larger stands of woodland vegetation that are clearly distinguishable from aerial photography, the land cover viewshed map is substantially representative of both leaf-on and leaf-off seasons. The bare earth condition map is provided only to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. Such bare earth viewshed maps are generally not appropriate for public interpretation.

By themselves, the viewshed maps do not determine how much of the proposed wireless telecommunications tower would be visible above intervening landform or vegetation (e.g., 100%, 50%, 10% etc. of total tower height), but rather the geographic area within which some portion of the Facility would theoretically be visible. Their primary purpose is to provide a general understanding of a Facility's potential visibility and identify areas where further investigation is appropriate.

Figure 1 illustrates areas of potential Facility visibility at a macro scale within the 2-mile study area. Figure 2 provides a more localized assessment of potential Facility visibility within the 1/2-mile study area.

The land cover viewshed overlay illustrates that of the 8,040 acres within the 2-mile study area, a direct view (e.g., not screened or filtered by intervening vegetation) of the Facility is theoretically possible from approximately 56 acres (0.7%). Of this, approximately 18 acres falls on the surface of a waterbody. Of the 502 acres within the 1/2-mile study area, a direct view of the Facility is possible from approximately 20 acres (4%), of which approximately 1.8 acres is on the host property.

Aside from a 14-acre area on the surface of the Croton Falls Reservoir more than 1.5 miles east of the Facility location, there are no large geographic areas where Facility views will occur. Places within the public right-of-way where Facility views are found are isolated locations where narrow view corridors exist through small openings in roadside vegetation and between residential structures. Such conditions are not common.

Of the 98 miles of public roads within the 2-mile study area, potential Facility views are found along approximately 2.0 linear miles (2.0%). Of the 6.6 miles of public roads within the 1/2-mile study area, potential Facility views are found along approximately 0.75 miles (11.3%). In all cases affected road segments are short and facility views will be brief and intermittent through roadside vegetation or between structures. Given the complex visual stimuli encountered by

motorists travelling in a moving vehicle, even if the Facility is visible it is probable viewer recognition of the Facility would be limited to a fraction of the total available viewing time. As the tendency of motorists is to focus down the road peripheral views of the Facility may go largely unnoticed by most travelers.

The only notable locations within the public right-of-way where an unobstructed view of the Facility was found was from Eleanor Drive approximately 1,800 feet southeast of the Facility site (refer to Figures A6 & A7) and from a short stretch of McLaughlin Drive approximately (2,000 feet south of the Facility site) where the road alignment is oriented toward the Facility (refer to Figures A1 & A3).

Roadways - Approximately 98 miles of public roadways are within the 2-mile study area. Croton Falls Road is the most heavily travelled roadway within one (1) mile of the Facility. Croton Falls Road near the Facility site has an average daily traffic volume (AADT) of approximately 6,816 vehicles. Webber Hill Road north of the Facility has an AADT of approximately 3,513 vehicles.

From most public roads the project will be substantially or fully screened by dense roadside vegetation. A brief and isolated and intermittent glimpse of the Facility may occur through foreground trees to eastbound motorists on Croton Falls Road as it passes in the vicinity of the facility. Visibility during summer leaf-on season will be substantially or completely screened by roadside deciduous vegetation. No direct visibility of the proposed tower was found from any portion of Croton Falls Road.

Study Area Reconnaissance

Balloon Visibility Tests – The Town of Carmel required balloon visibility tests be conducted on 6 days to allow the general public and local decision-makers an opportunity to observe the location and potential visibility of the Facility. Tests were originally scheduled for Friday January 25, 2019, Saturday January 26, 2019, Monday January 28, 2019, Friday February 1, 2019, Saturday February 2, 2019, and Monday February 4, 2019. The balloon test scheduled for Friday January 25, 2019 was postponed due to inclement weather and successfully completed on Friday March 1, 2019. On each day the balloon was launched at approximately 8am and remained aloft until at least 12pm. In all cases the balloon test was conducted when the weather forecast published on several prominent websites (i.e., weather.com, accuweather.com and wunderground.com) at 12pm the day before the scheduled test predicted winds to be 5mph or less for the duration of the test.

On the dates of the tests actual wind speeds between 8am and 12pm were as follows:

January 25, 2019: 7-9 mph

January 28, 2019: 6-9 mph

February 1, 2019: 4-6 mph

February 2, 2019: 3-7 mph

February 4, 2019: 1-4 mph

March 2, 2019: 4-6 mph

On the dates where winds remained near or below 5mph balloons were generally stable and at or near the intended altitude. On the dates where winds increased above the forecast 5 mph for some portion of the test the balloon occasionally dropped below the intended altitude. In all cases balloons were most stable during the early hours of the test when winds were most calm.

The balloon test was conducted during winter leaf-off season to represent the worst-case (i.e., most exposed) visual condition. Project visibility will be substantially less during summer leaf-on season.

During each balloon visibility test, one five-foot diameter red balloon was raised to an elevation of 180 feet above existing grade (measured to the bottom of the balloon). At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

In addition, a construction crane was positioned at the Facility site on Saturday February 23, 2019 to for the purpose of conducting a signal test. The crane was in place between 8am and 4pm. Signal tests were conducted at 3 different heights (including 180 feet). To further demonstrate potential Facility visibility a 5-foot diameter balloon was tied to the crane boom to represent the tower high point.

During the February 4, 2019 balloon test an experienced visual analyst drove public roads to inventory those areas where viewshed mapping identified potential Facility visibility. Photographs were taken from multiple vantage points to document the views in the direction of the Facility from places where a theoretical view was identified by viewshed analysis. Photos were also taken from locations where balloon visibility was less than worst-case or where the balloons were not visible to balance the photo record and document visual conditions representative of less affected areas on the subject property. Emphasis was placed on locations considered to be of scenic, cultural, and/or social importance to the community. Such places include recreation and conservation areas, historic resources, open spaces, local roadways, and residential neighborhoods.

Photographs were taken using identical Canon EOS D6 Mark II digital single lens reflex ("DSLR") 26-mega pixel cameras with a fixed 50mm lens (full frame sensor). The precise coordinate of each photo location was recorded in the field using a handheld global positioning system (GPS) unit. The Canon EOS D6 Mark II also has a built in GPS sensor which imbeds photo coordinates in the photo file meta data.

Photographs taken during the field reconnaissance are provided as Figures 3-25. Photographs were taken from the following places:

Map ID	Location Description	Direction to Tower	Distance to Tower (feet)	Theoretical View Indicated by Land Cover Viewshed - (See Figure 2)	Balloon Visible*	Photo/Simulation Provided as
1	Croton Falls Reservoir near Croton Falls Rd					
2	Vic Pass near #15	SE	9,340	No	Yes	
3	Tanya Ln near #1	ESE	3,010	No	No	
4	Pigott Rd near #61	N	2,080	No	No	
5	Pigott Rd near #86	S	3,400	Yes	No	
6	McLaughlin Dr near #100	S	2,800	Yes	Yes	Figure A1
7	McLaughlin Dr near #125	S	2,230	Yes	Yes	
		SSE	1,860	No	Filtered**	

8	McLaughlin Dr near Croton Falls Rd	SSE	1,260	No	Filtered**	Figure A2
9	Rebecca Ln near #70	E	2,800	No	No	
10	Stebbins Rd and Croton Falls Rd	SE	2,940	No	No	
11	Croton Falls Rd	SE	1,970	No	No	
12	Croton Falls Rd	SE	1,320	No	No	
13	Bayberry Hill Rd and Pigott Rd	S	3,440	No	No	
14	Bayberry Hill Rd near #4	S	3,520	No	No	
15	Bayberry Hill Rd near #14	S	3,490	No	No	
16	Bayberry Hill Rd near #43	S	2,910	No	Filtered**	
17	Pigott Rd near #26	S	2,970	Yes	Filtered**	Figure A3
18	Pigott Rd and McLaughlin Dr	S	2,470	No	Filtered**	
19	McLaughlin Dr near #45	SSW	2,290	Yes	Yes	
20	McLaughlin Dr	SSW	1,920	Yes	Yes	Figure A4
21	McLaughlin Dr and Croton Falls Rd	SSW	1,340	No	No	Figure A5
22	Croton Falls Rd	SSW	1,080	No	Filtered**	
23	Croton Falls Rd near #398	WSW	1,050	Yes	Filtered**	
24	Old County Rd and Croton Falls Rd	W	2,290	No	No	
25	Eleanor Dr near #131	SSW	3,250	Yes	Filtered**	
26	Eleanor Dr near #90	SSW	2,530	No	No	
27	Eleanor Dr near #82	SSW	2,360	Yes	Filtered**	
28	Eleanor Dr near #76	SSW	2,330	Yes	Yes	
29	Kathryn Ln near #6	SW	2,670	No	No	
30	Kathryn Ln and Eleanor Dr	SW	2,330	Yes	Filtered**	
31	Eleanor Dr near #50	SW	2,120	Yes	Yes	Figure A6
32	Eleanor Dr near #40	SW	1,920	Yes	Filtered**	Figure A7
33	Eleanor Dr near #26	WSW	1,720	Yes	Filtered**	
34	Eleanor Dr near #22	WSW	1,740	Yes	Yes	
35	Shana Ln and Eleanor Dr	WSW	1,950	Yes	Yes	
36	Shana Ln near #26	SW	2,240	No	No	
37	Shana Ln near #14	WSW	2,110	No	Filtered**	
38	Eleanor Dr and Watermelon Hill Rd	WSW	2,240	No	No	
39	Old Country Rd near #13	W	2,640	Yes	Filtered**	
40	Stacey Ln near #18	N	1,540	No	No	
41	Weber Hill Rd and Shear Hill Rd	WNW	1,790	No	No	
42	Odessa Rd near #40	W	2,280	Yes	Yes	Figure A8
43	Odessa Rd and Fulmar Rd	NW	3,020	No	No	
44	Fulmar Rd near #22	NNW	2,640	Yes	Filtered**	
45	Fulmar Rd and Shear Hill Rd	NNW	2,270	No	No	
46	Croton Falls Rd and Shear Hill Rd	W	1,800	No	No	
47	Croton Falls Rd near #398	WSW	960	No	No	
48	Lake Dr near #70	NNW	3,720	Yes	Yes	
49	Putnam Trailway near Lake Dr	NW	3,290	No	No	
50	Lake Dr and Shear Hill Rd	NNW	2,470	No	No	

* "Balloon Visible" differs from "Theoretical View Indicated by Land Cover Viewshed" due to the use of a highly conservative estimate of tree height in viewshed calculation (50 feet). In most cases mature woodland vegetation is significantly taller resulting in reduced project visibility.

** "Filtered" visibility indicates photo locations where the balloon was visible through intervening deciduous vegetation during winter leaf-off season. Such views will likely be fully screened during summer leaf-on season.

Photo Simulations

To illustrate how the alternative two-tone color monopole and monopine design wireless telecommunications towers will appear photo simulations were prepared from eight (8) affected photo locations. Photo simulations were developed by superimposing a rendering of a three-dimensional computer model of the proposed Facility into the base photograph taken from each corresponding visual receptor. The three-dimensional computer model was developed using 3D Studio Max Design® software (3D Studio Max).

Simulated perspectives (camera views) were matched to the corresponding base photograph for each simulated view by replicating the precise coordinates of the field camera position (as

recorded by handheld GPS) and the focal length of the camera lens used (e.g. 50mm). Precisely matching these parameters assures scale accuracy between the base photograph and the subsequent simulated view. The camera's elevation (Z) value is derived from digital elevation model (DEM) data plus the camera's height above ground level. The camera's target position was set to match the bearing of the corresponding existing condition photograph as recorded in the field. With the existing conditions photograph displayed as a "viewport background," and the viewport properties set to match the photograph's pixel dimensions, minor camera adjustments were made (horizontal and vertical positioning, and camera roll) to align the horizon in the background photograph with the corresponding features of the 3D model.

To verify the camera alignment, elements visible within the photograph (e.g., balloon, existing buildings, utility poles, topography, etc.) were identified and digitized from digital orthophotos as needed. Each element was assigned a Z value based on DEM data and then imported to 3D Studio Max. A 3D terrain model was also created (using DEM data) to replicate the existing local topography. The digitized elements were then aligned with corresponding elements in the photograph by adjusting the camera target. If necessary, slight camera adjustments were made for accurate alignment.

A daylight system was created matching the exact date and time of each baseline photograph to assure proper shading and shadowing of modeled elements.

Once the camera alignment was verified, a to-scale 3D model of the proposed 160-foot-tall telecommunications tower was merged into the model space. The 3D model of both the stealth tree and two-tone color alternative tower types were constructed in sufficient detail to accurately convey visual character and reveal impacts. The scale, alignment, elevations and location of the visible elements of the proposed tower are true to the conceptual design. Post production editing (i.e., airbrush out portion of tower that falls below or behind foreground topography and vegetation) was completed using Adobe Photoshop software. The methodology accurately represents the location, height and visual character of the proposed tower.

Photo simulations are provided in Appendix A.

Summary and Conclusions

The study area is characterized by a rolling and steeply sloped landscape and heavily wooded with broad tracts of mature second growth deciduous forest that effectively block or screen views of the Facility from most locations. Of the 8,042 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 56 acres (0.7%). Of this, approximately 18 acres falls on the surface of a waterbody. Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 20 acres (4%).

Of the 98 miles of public roads within the 2-mile radius Study Area, potential project views are found along approximately 2.0 linear miles (2%). Of the 6.6 miles of public roads within the 1/2-mile radius study area, potential project views are found along approximately 0.75 (11.3%). In all cases affected road segments are short and facility views will be brief and intermittent

through roadside vegetation. Given the complex visual stimuli encountered by motorists travelling in a moving vehicle, even if the Facility is visible it is probable viewer recognition of the Facility would be limited to a fraction of the total available viewing time. As the tendency of motorists is to focus down the road peripheral views of the Facility may go largely unnoticed by most travelers.

Aside from a 14-acre area on the surface of the Croton Falls Reservoir more than 1.5 miles east of the Facility location, there are no large geographic areas where Facility views will occur. Places within the public right-of-way where Facility views are found are isolated locations where narrow view corridors exist through small openings in roadside vegetation. Such conditions are not common. The only notable locations within the public right-of-way where an unobstructed view of the Facility was found was from Eleanor Drive approximately 1,800 feet southeast of the Facility site (refer to Figures A6 & A7) and from a short stretch of McLaughlin Drive approximately (2,000 feet south of the Facility site) where the road alignment is oriented toward the Facility (refer to Figures A1 & A3).

Seven (7) residential structures (including the main house on the host property) are within 1,000 feet of the Facility. The nearest occupied residential structure is approximately 480 feet to the southeast. Adjacent residences may experience seasonal visibility through intervening deciduous branches during leaf-off season. Where project views occur, visibility is commonly filtered through foreground vegetation which will substantially screen or completely block views during summer leaf-on season.

Six (6) balloon visibility tests were conducted between January 25 and March 2, 2019. On each of these dates one five-foot diameter red balloon was raised to an elevation of 180 feet above existing grade (measured to the bottom of the balloon). At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been lowered to 160 feet thereby reducing Facility visibility from the balloon visibility presented in Figures 3-27 – Photo Log.

The proposed Facility is not a new visual condition in the study area. Two existing telecommunications towers are located on a hilltop approximately 1.25 miles north northwest of the Facility site near Lake Casse. These exiting towers are approximately 120 feet tall with a base elevation of approximately 715 and 730 feet amsl – approximately 130 feet higher in elevation than the proposed Facility. One existing tower is a lattice frame design and the other tower is a monopole design. Neither tower incorporates stealth mitigation design. Both existing telecommunications towers are directly visible from portions of the Eleanor Drive residential neighborhood as well as from the water surface and much of the south and east shore of Lake Casse.

There are no aesthetic resources of statewide significance located within the two-mile study area. Visual impact is defined by the NYS Department of Environmental Conservation as follows:

“Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Mere visibility, even startling visibility of a project proposal, should not be a

threshold for decision making.”⁸ Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or quality of such a place. Proposed large facilities by themselves should not be a trigger for a declaration of significance.”⁹

In other words, the DEC Visual Policy recognizes that not everything that is visible rises to the level of an Aesthetic Impact, and not all Aesthetic Impacts rise to the level of a Significant Aesthetic Impact that may diminish public enjoyment of the resource.

Based on the degree of Facility visibility and proposed mitigation measures presented in the application, it is clear that any remaining project visibility is not of a size or extent that it would constitute an unacceptable magnitude. Nor does the Facility affect a sufficient number of public viewers or geographic area where the Facility can reasonably be deemed to be visually important as defined by SEQRA.

Furthermore, when considered within the framework of the DEC Visual Policy’s definition of “significant adverse visual impact”, it is clear the Facility will not cause a diminishment of the public enjoyment and appreciation of any scenic or historic resource, or one that impairs the character or quality of such a place. As such the proposed Project will not result in an adverse visual impact.

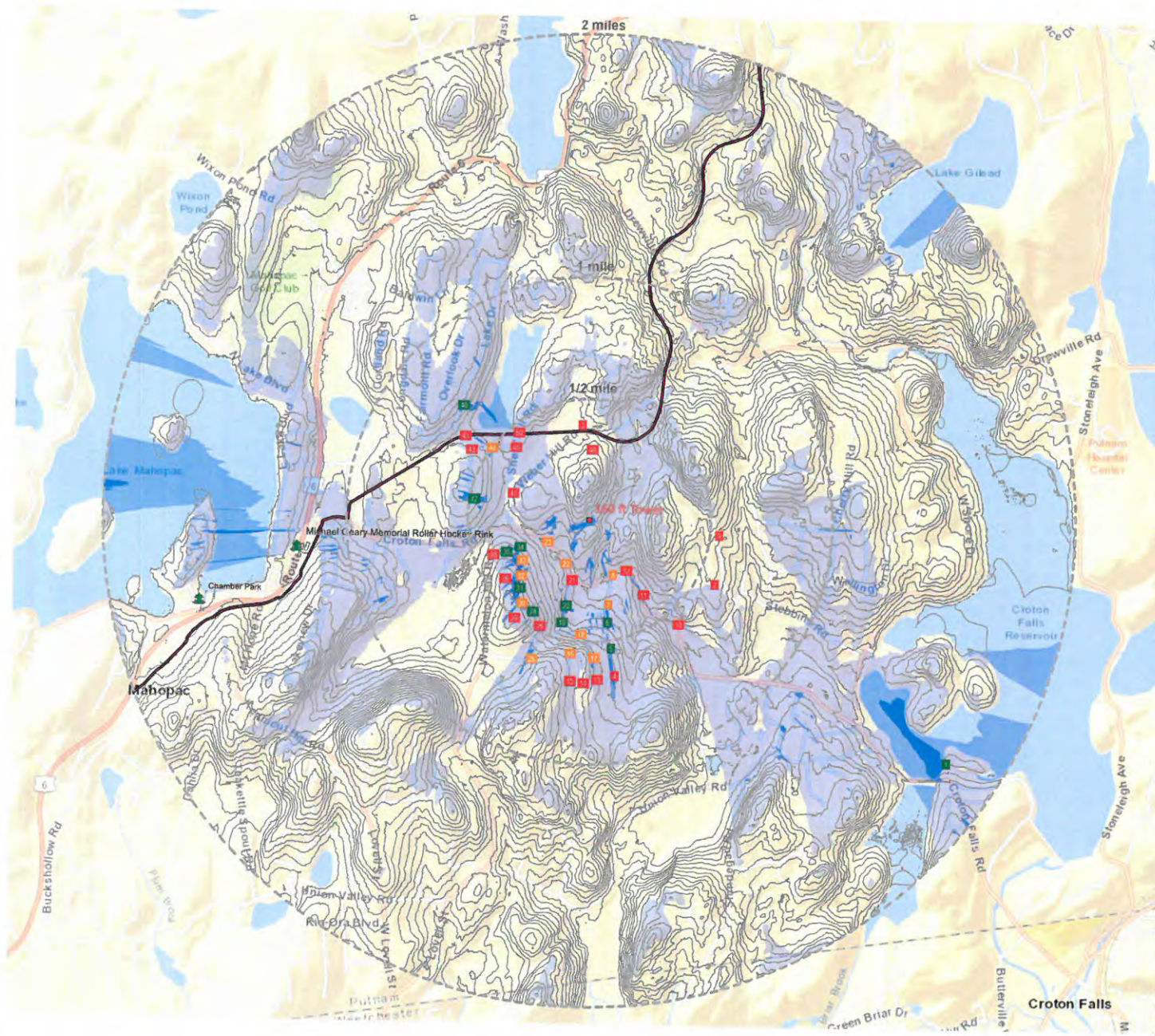
Submitted by:



Matthew W. Allen, RLA

⁸ NYSDEC Visual Policy (DEP-00-2), p.9.

⁹ *Id.* p.5.



LEGEND

- Bare Earth Viewshed Area
(Excludes existing vegetation and structures)
- Land Cover Viewshed Area
(Includes existing vegetation and structures)
- Photo Location- Balloon Visible
- Photo Location - Balloon Visible Through Trees
- Photo Location- Balloon Not Visible
- Putnam Trailway
- Municipal Park

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources

The "Bare Earth" condition overlay identifies areas where the proposed telecommunications tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.

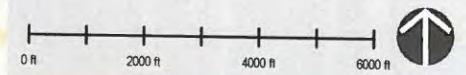


FIGURE 1
VIEWSHED MAP: 2 MILE RADIUS
Visual Resource Assessment
Proposed Telecommunications Tower



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY



LEGEND

- Bare Earth Viewshed Area
(Excludes existing vegetation and structures)
- Land Cover Viewshed Area
(Includes existing vegetation and structures)

- Photo Location- Balloon Visible
- Photo Location- Balloon Visible Through Trees
- Photo Location- Balloon Not Visible
- V Photo Simulation Locations

— Putnam Trailway

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthomage. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.

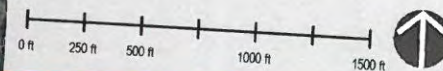


FIGURE 2
VIEWSHED MAP - 1/2 MILE RADIUS
Visual Resource Assessment
Proposed Telecommunications Tower



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY



VP1 - Croton Falls Reservoir near Croton Falls Rd

Distance: 9,340 Feet



VP2 - Vic Pass near #15

Distance: 3,010 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Visual Resource Assessment Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Figure 3

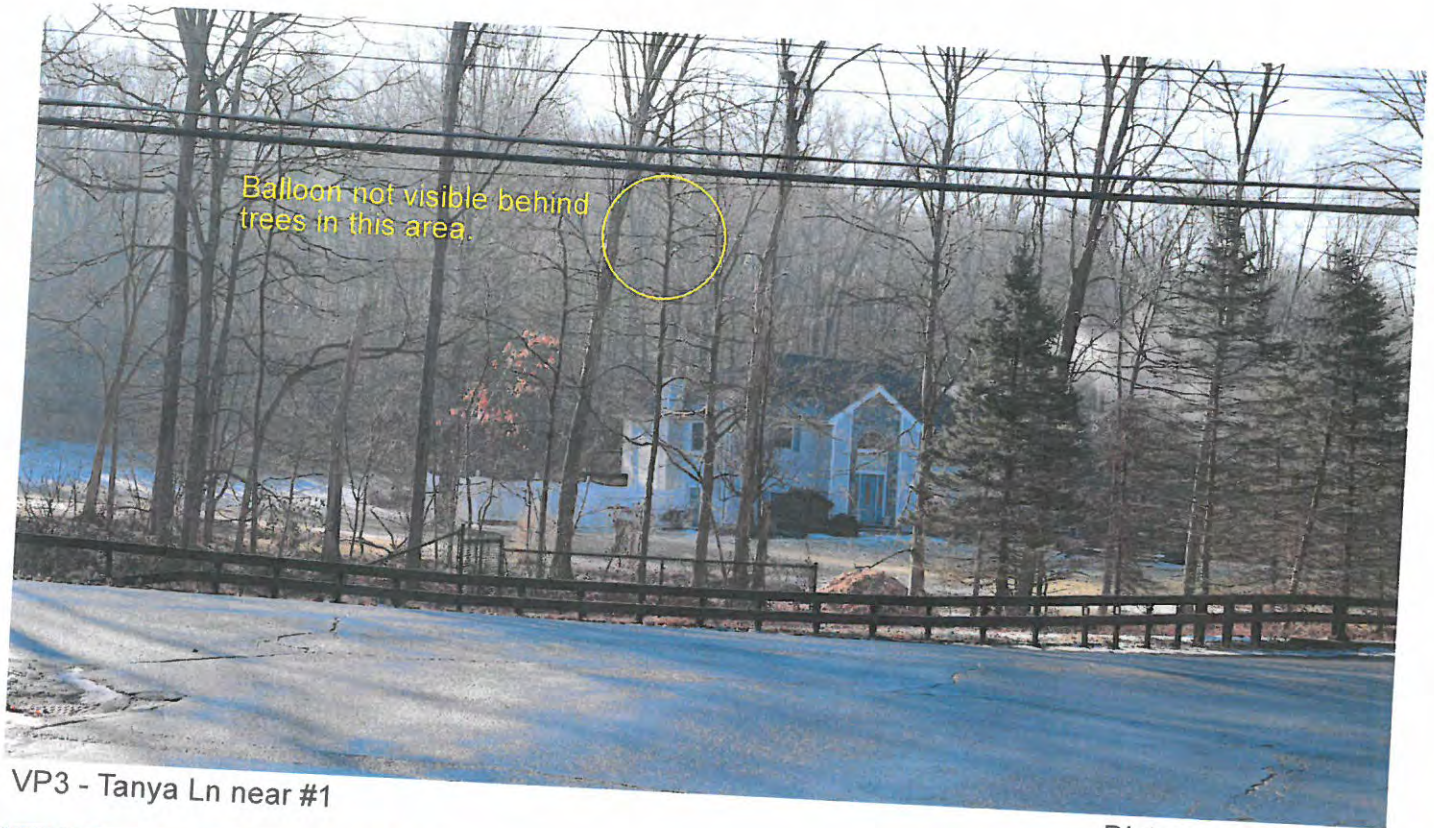


PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

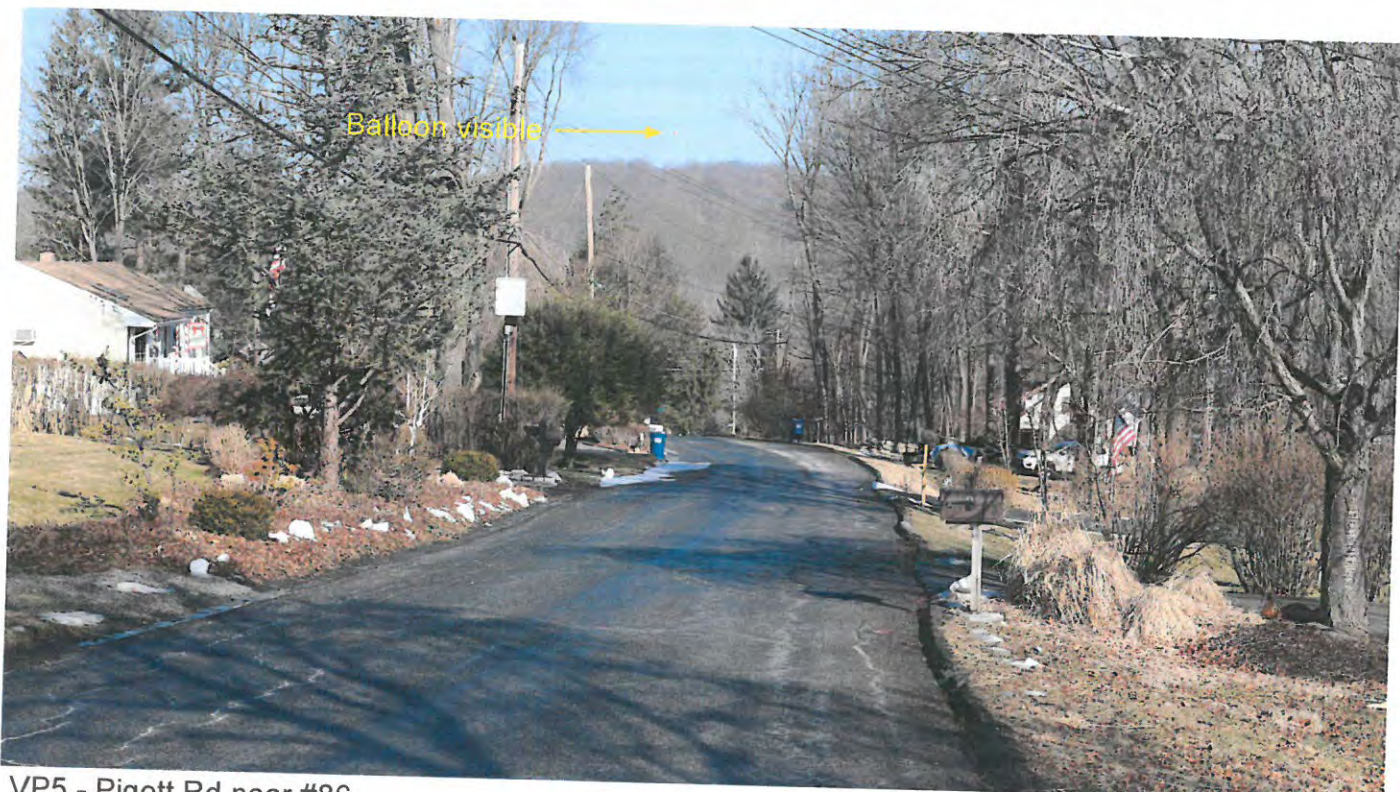
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Visual Resource Assessment Proposed Telecommunications Tower

Figure 4

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP5 - Pigott Rd near #86

Distance: 2,800 Feet



VP6 - McLaughlin Dr near #100

Distance: 2,230 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

Figure 5

Visual Resource Assessment Proposed Telecommunications Tower

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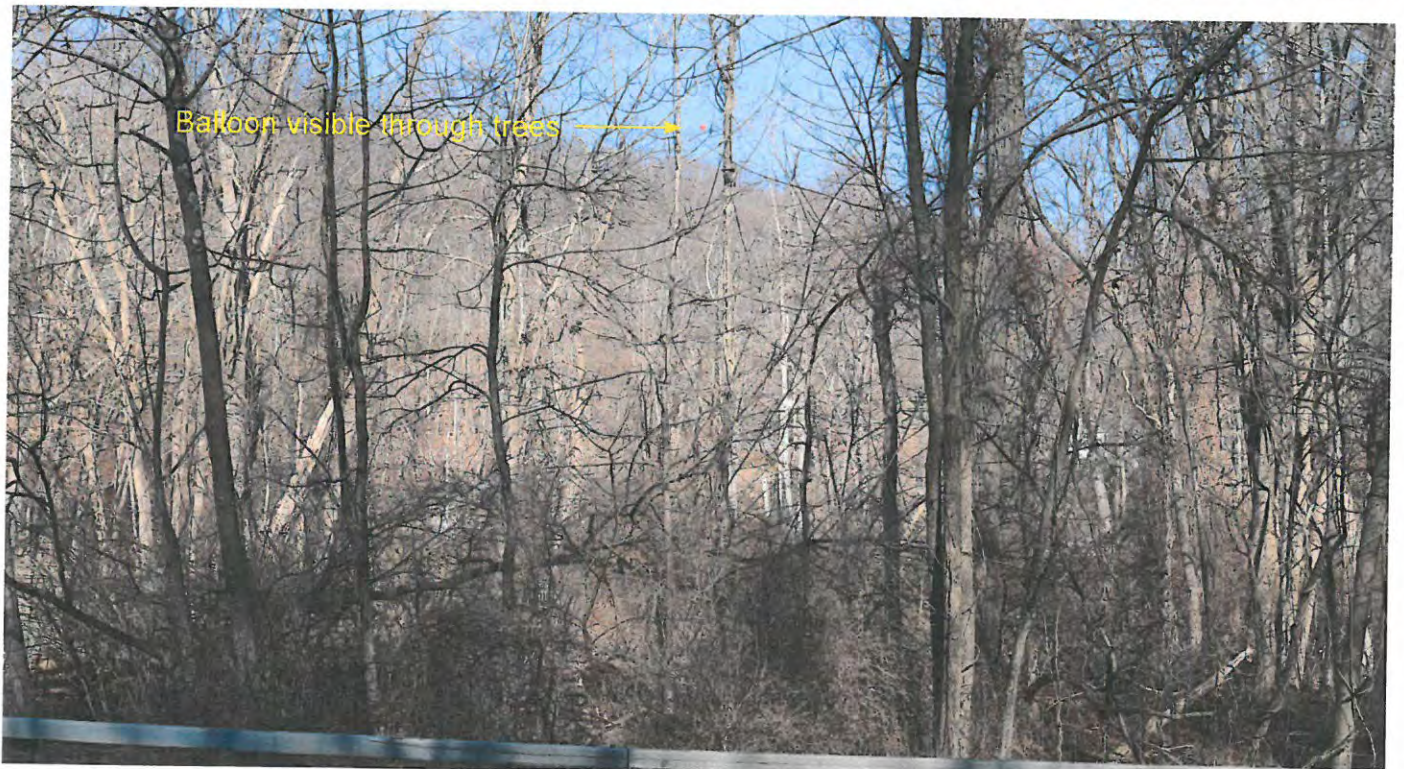


Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP7 - McLaughlin Dr near #125

Distance: 1,860 Feet



VP8 - McLaughlin Dr near Croton Falls Rd

Distance: 1,260 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

Figure 6

Visual Resource Assessment Proposed Telecommunications Tower

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Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP9 - Rebecca Ln near #70

Distance: 2,800 Feet



VP10 - Stebbins Rd and Croton Falls Rd

Distance: 2,940 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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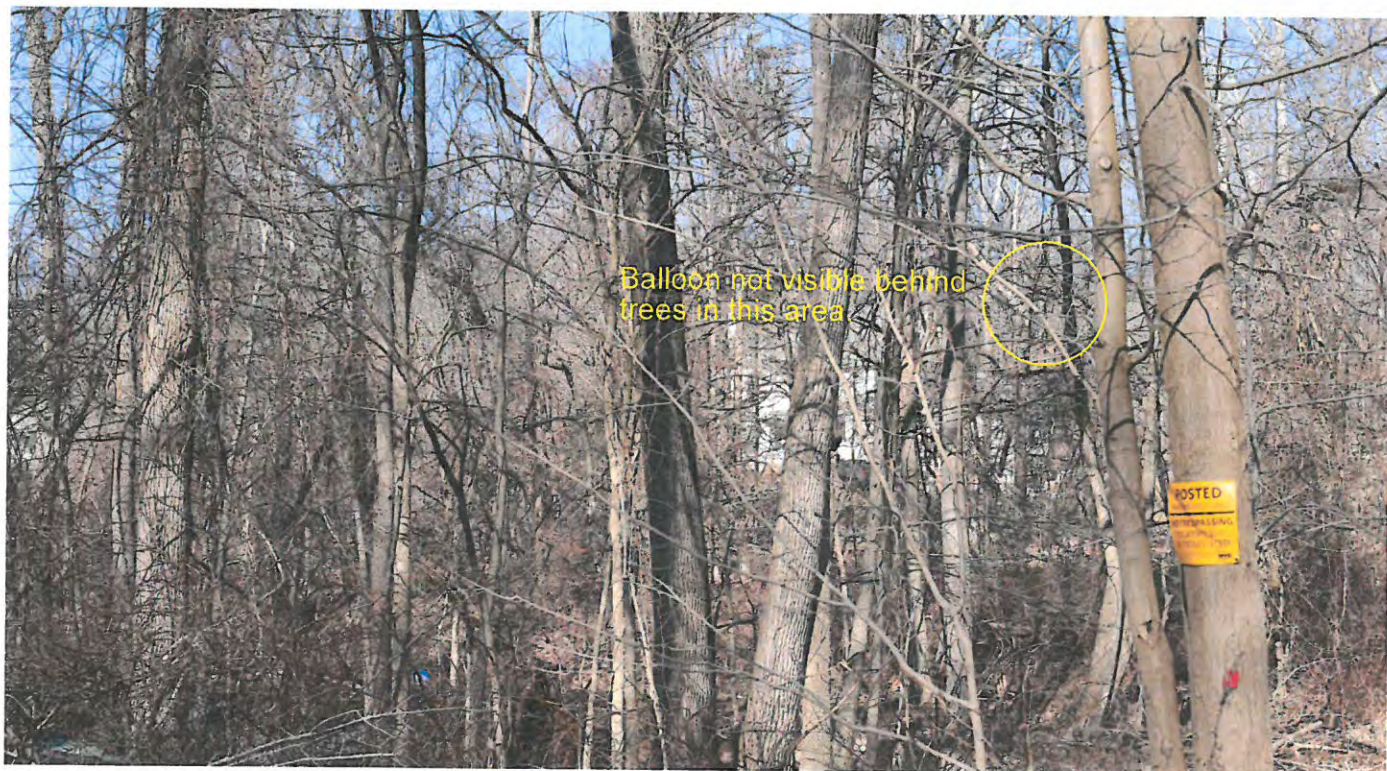
Figure 7 Visual Resource Assessment Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP11 - Croton Falls Rd

Distance: 1,970 Feet



VP12 - Croton Falls Rd

Distance: 1,320 Feet

PHOTO LOG

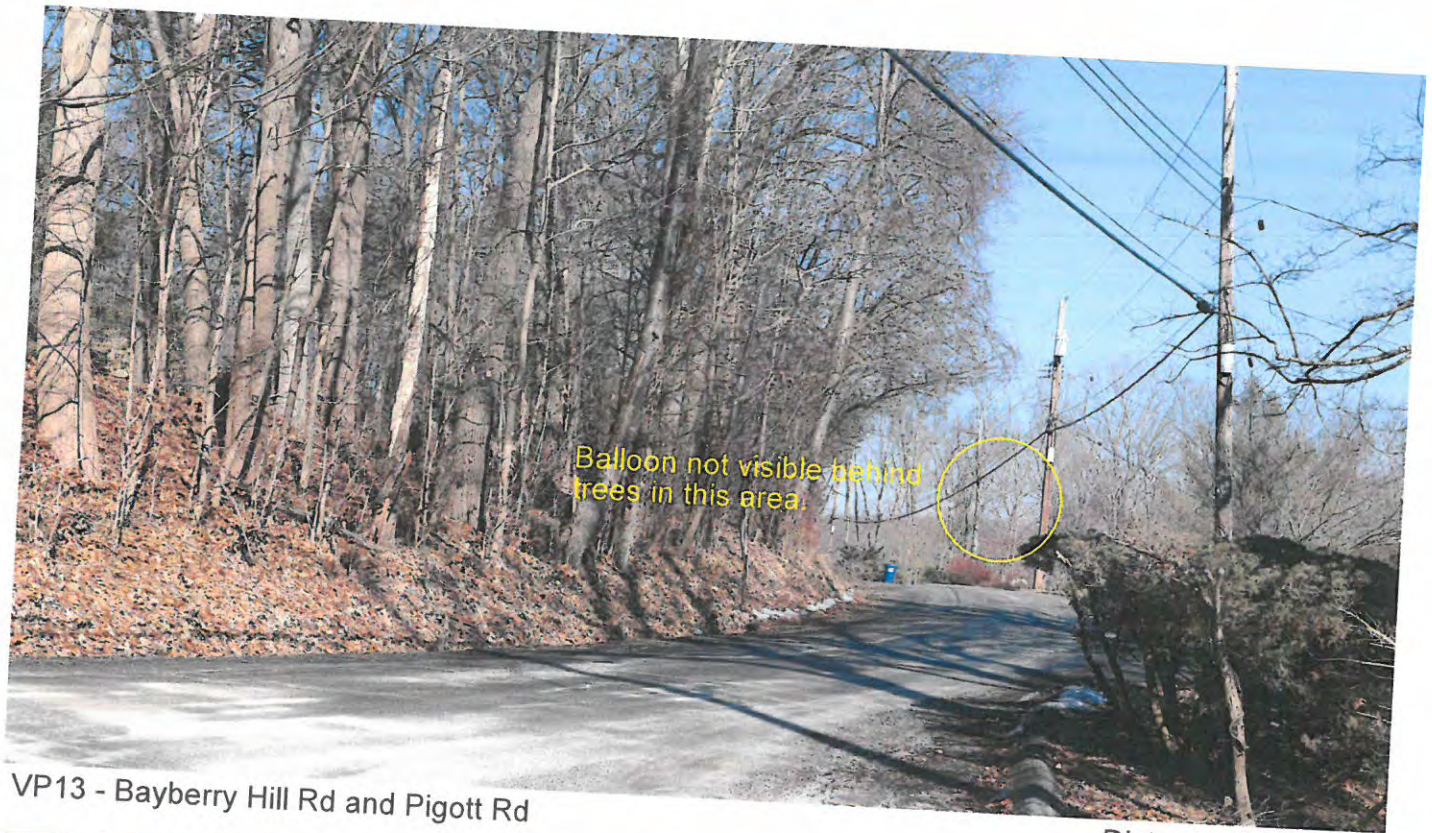
Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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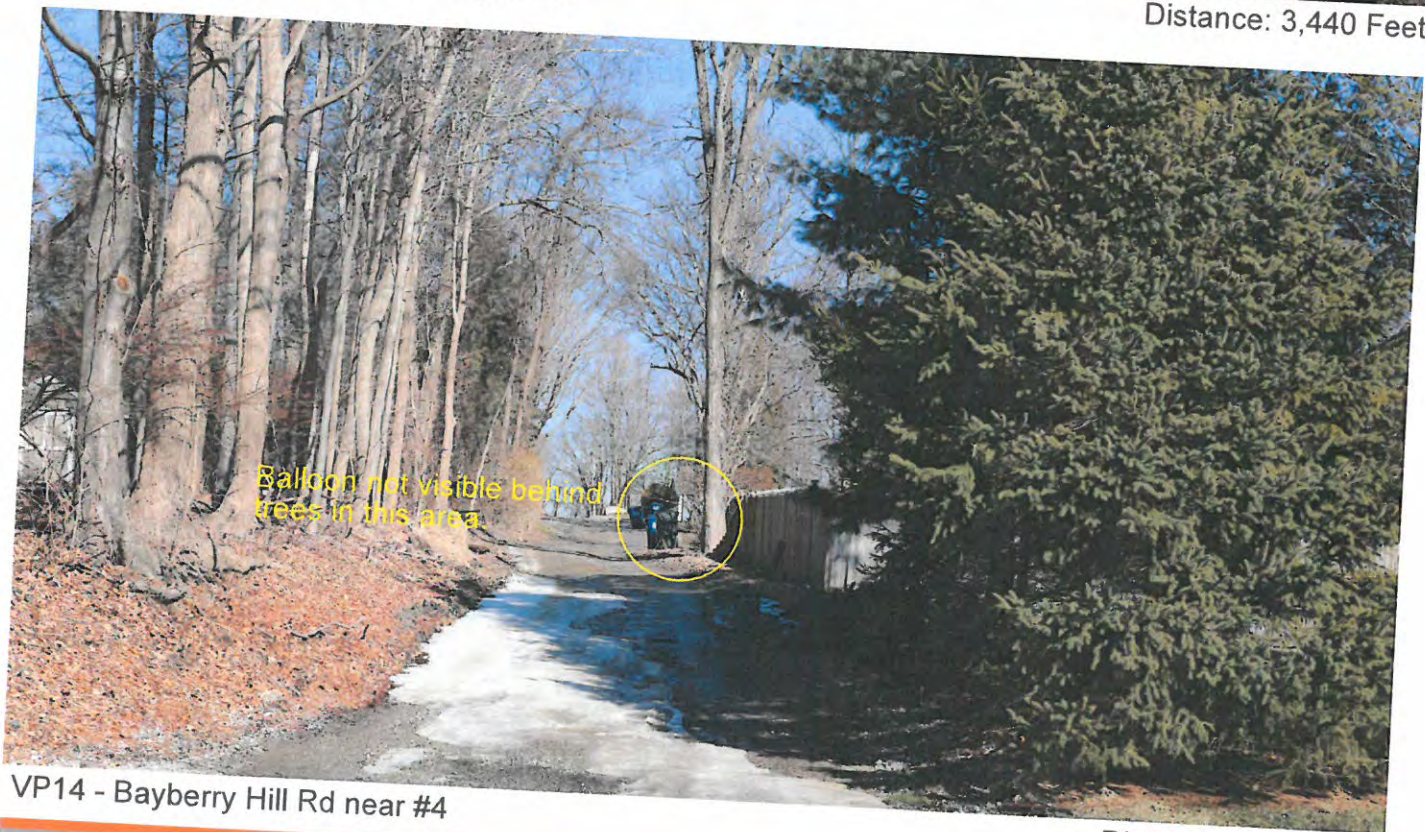
Figure 8 Visual Resource Assessment Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP13 - Bayberry Hill Rd and Pigott Rd

Distance: 3,440 Feet



VP14 - Bayberry Hill Rd near #4

Distance: 3,520 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Visual Resource Assessment Proposed Telecommunications Tower

Figure 9

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP15 - Bayberry Hill Rd near #14

Distance: 3,490 Feet



VP16 - Bayberry Hill Rd near #43

Distance: 2,910 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Figure 10

Visual Resource Assessment



VP17 - Pigott Rd near #26

Distance: 2,970 Feet



VP18 - Pigott Rd and McLaughlin Dr

Distance: 2,470 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Visual Resource Assessment Proposed Telecommunications Tower

Figure 11

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP19 - McLaughlin Dr near #45

Distance: 2,290 Feet



VP20 - McLaughlin Dr

Distance: 1,920 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Visual Resource Assessment Proposed Telecommunications Tower

Figure 12

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP21 - McLaughlin Dr and Croton Falls Rd

Distance: 1,340 Feet



VP22 - Croton Falls Rd

Distance: 1,080 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

Figure 13

Visual Resource Assessment Proposed Telecommunications Tower

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Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP23 - Croton Falls Rd near #398

Distance: 1,050 Feet



VP24 - Old County Rd and Croton Falls Rd

Distance: 2,290 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

Figure 14

Visual Resource Assessment Proposed Telecommunications Tower

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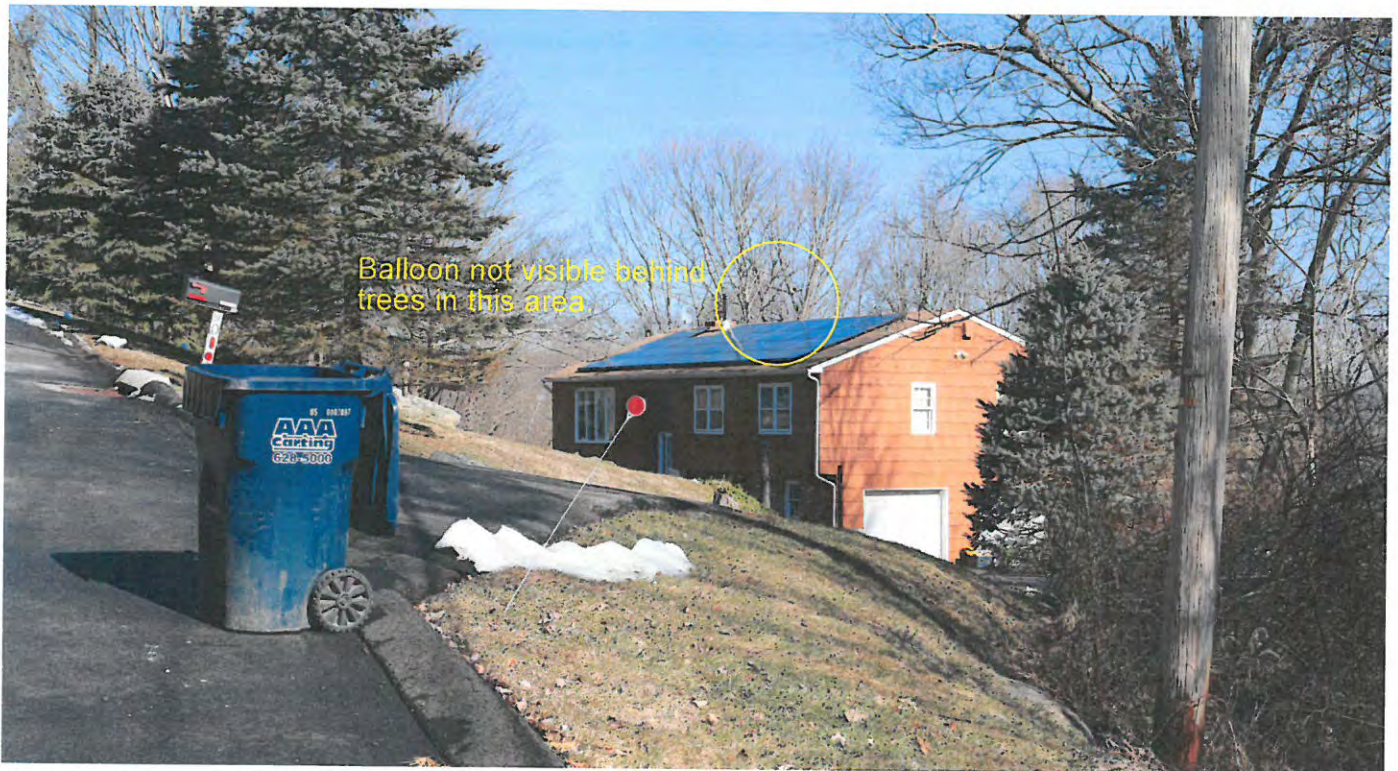


Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP25 - Eleanor Dr near #131

Distance: 3,250 Feet



VP26 - Eleanor Dr near #90

Distance: 2,530 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

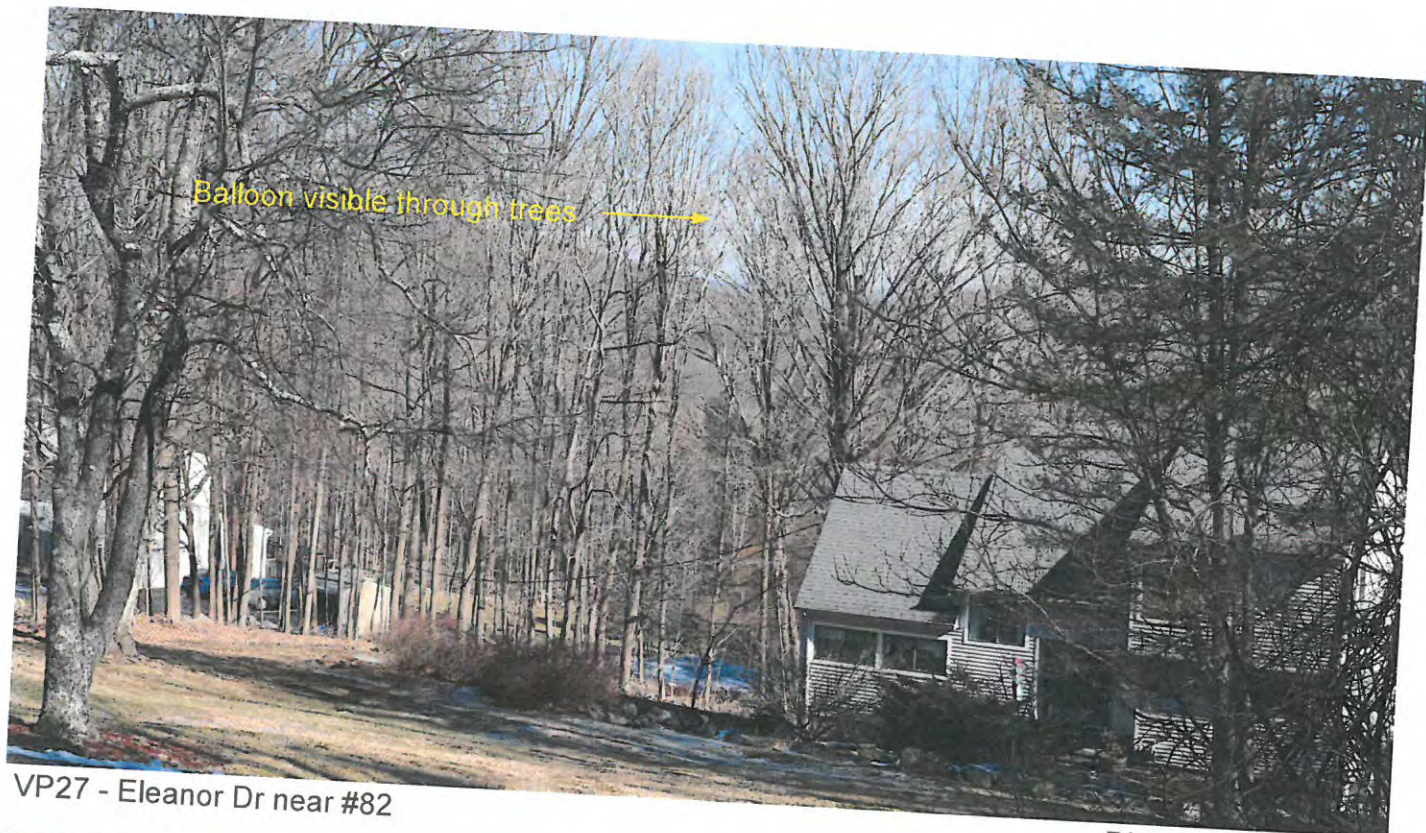
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Figure 15

Visual Resource Assessment Proposed Telecommunications Tower



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP27 - Eleanor Dr near #82

Distance: 2,360 Feet



VP28 - Eleanor Dr near #76

Distance: 2,330 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Figure 16

Visual Resource Assessment



VP29 - Kathryn Ln near #6

Distance: 2,670 Feet



VP30 - Kathryn Ln and Eleanor Dr

Distance: 2,330 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Proposed Telecommunications Tower

Visual Resource Assessment

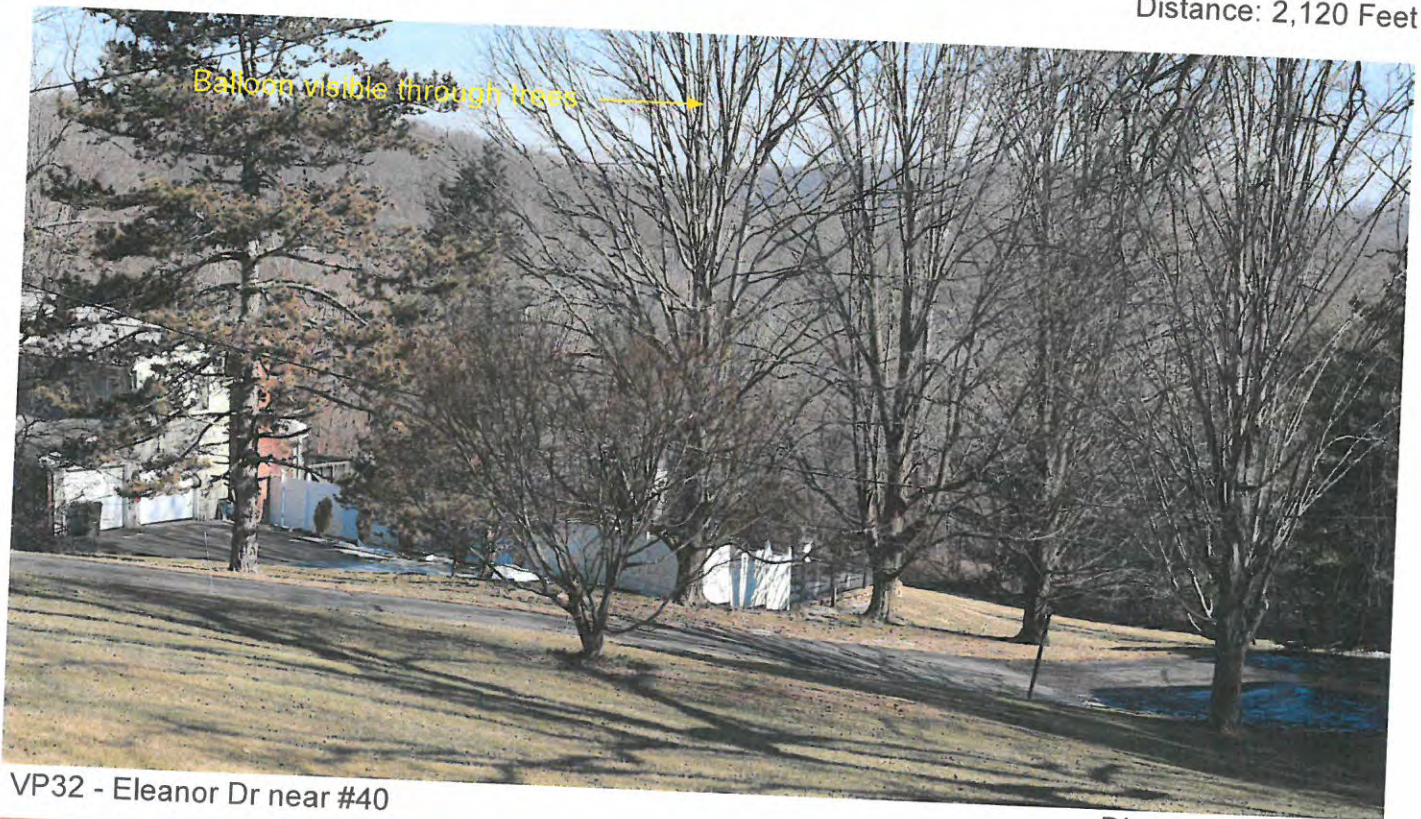
Figure 17

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP31 - Eleanor Dr near #50

Distance: 2,120 Feet



VP32 - Eleanor Dr near #40

Distance: 1,920 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

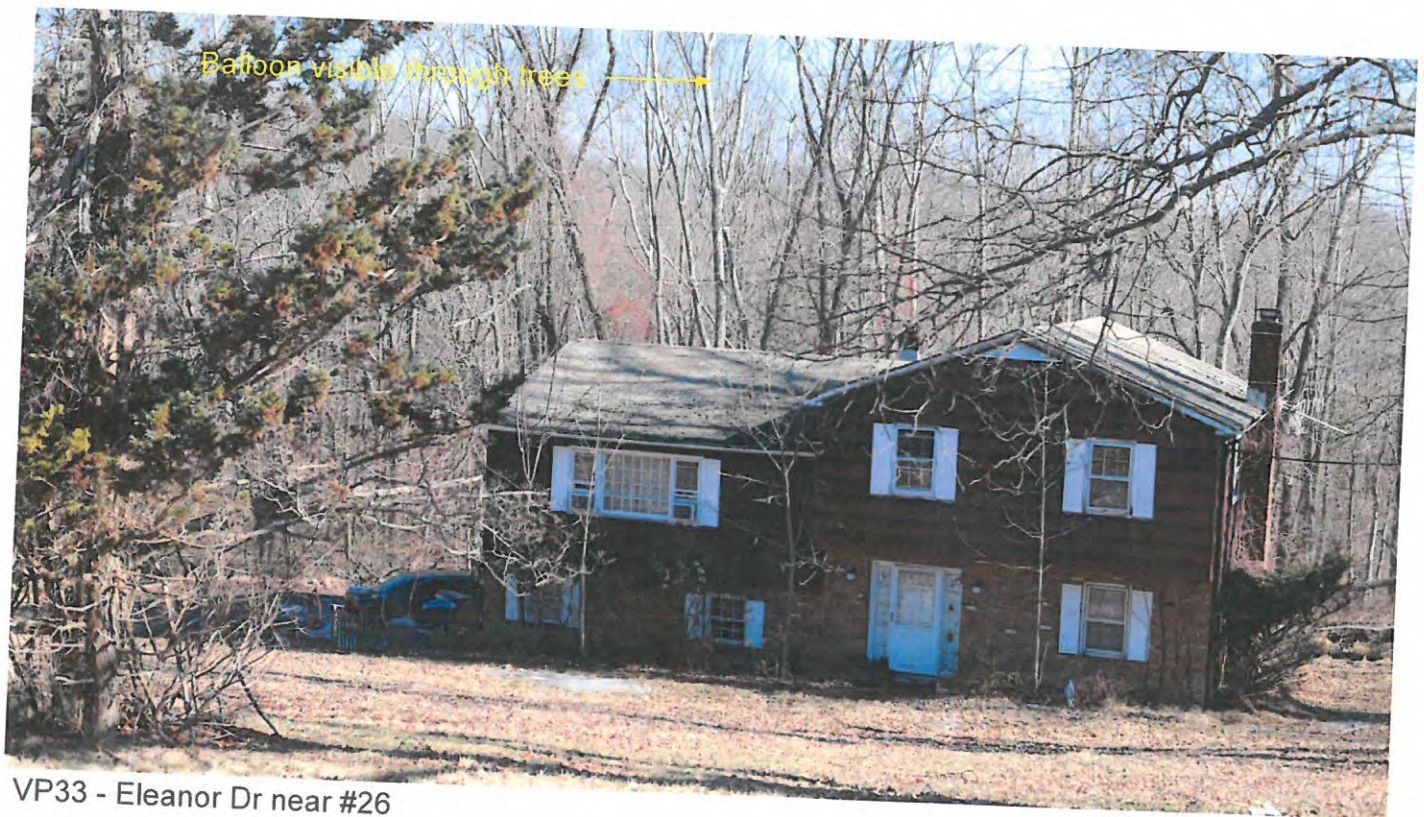
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Visual Resource Assessment Proposed Telecommunications Tower

Figure 18

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP33 - Eleanor Dr near #26

Distance: 1,720 Feet



VP34 - Eleanor Dr near #22

Distance: 1,740 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Visual Resource Assessment Proposed Telecommunications Tower

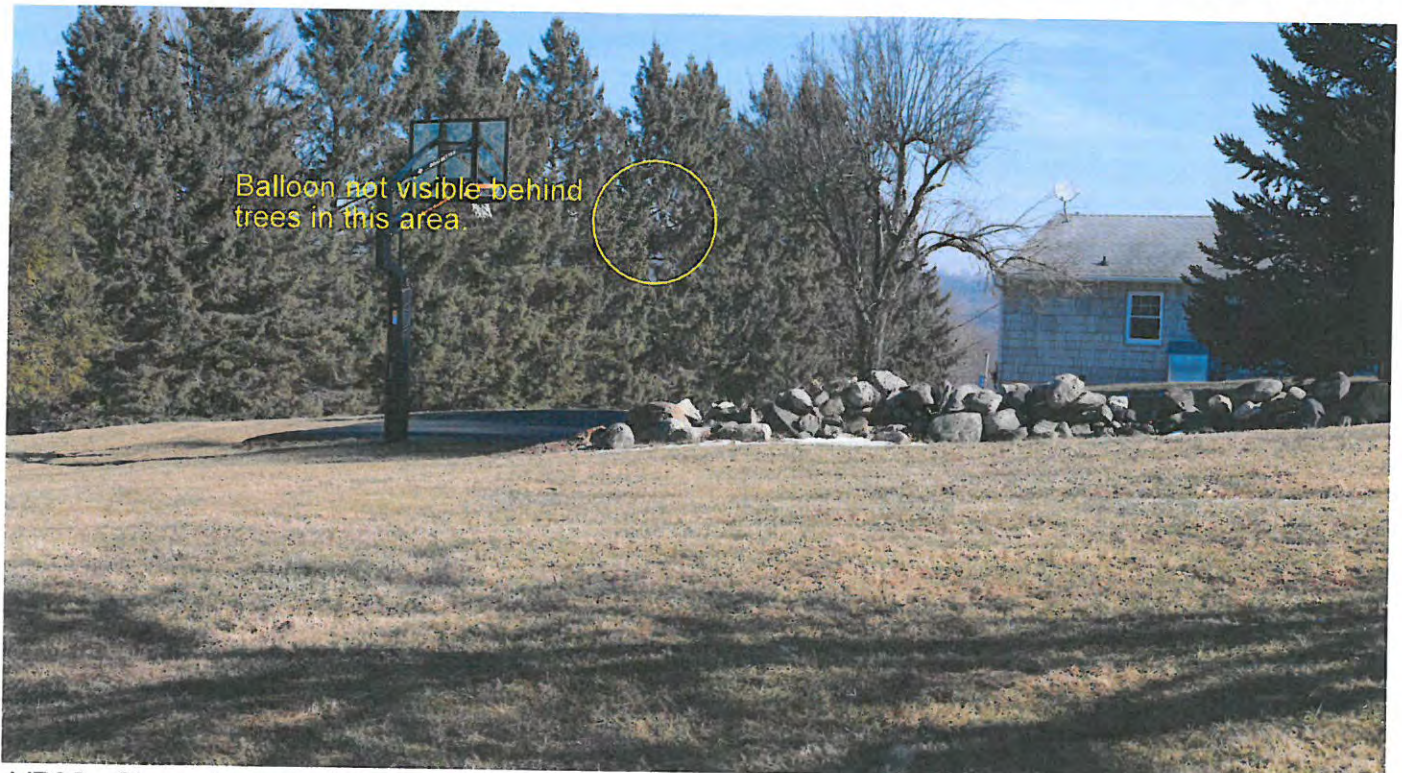
Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Figure 19



VP35 - Shana Ln and Eleanor Dr

Distance: 1,950 Feet



VP36 - Shana Ln near #26

Distance: 2,240 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

Figure 20

Visual Resource Assessment Proposed Telecommunications Tower

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Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP37 - Shana Ln near #14

Distance: 2,110 Feet



VP38 - Eleanor Dr and Watermelon Hill Rd

Distance: 2,240 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

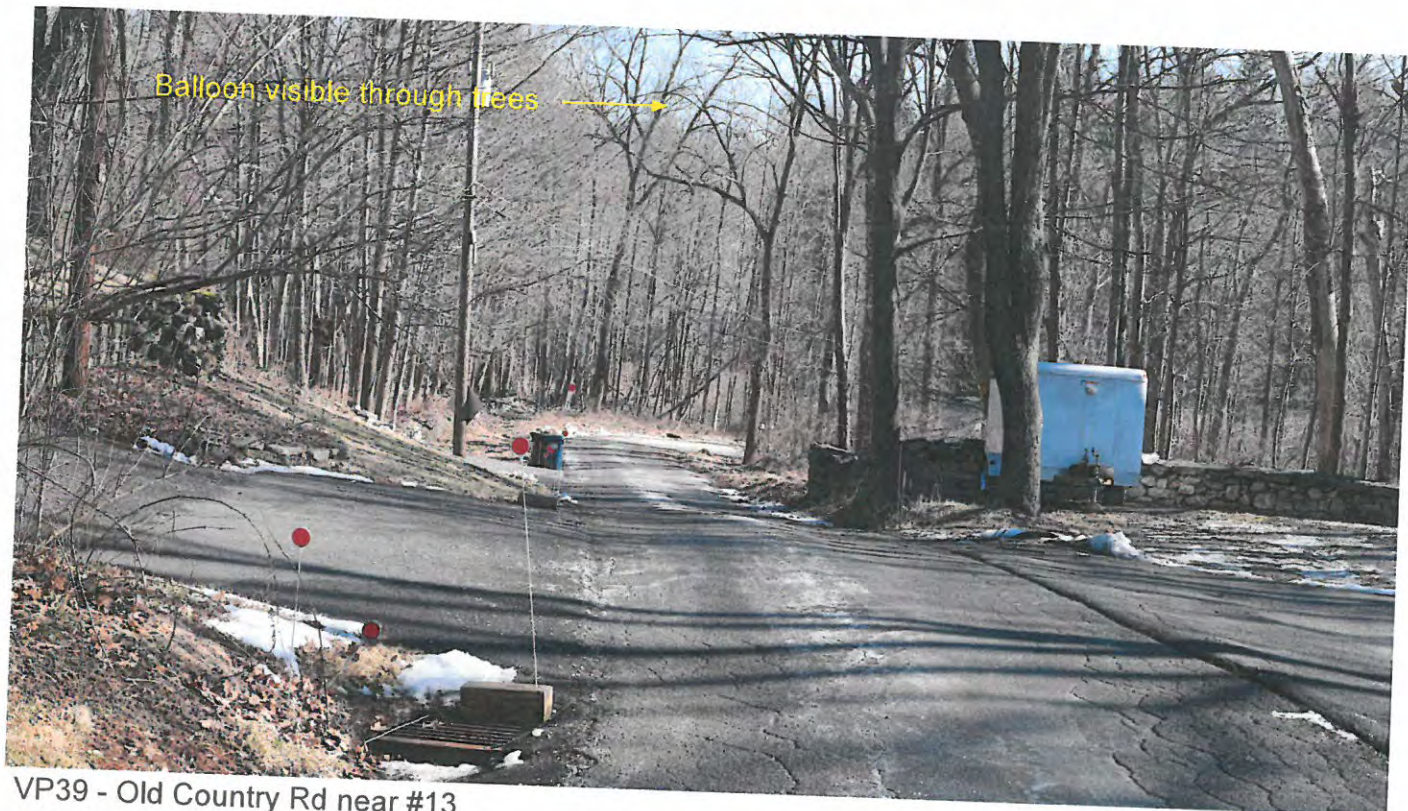
Figure 21

Visual Resource Assessment Proposed Telecommunications Tower

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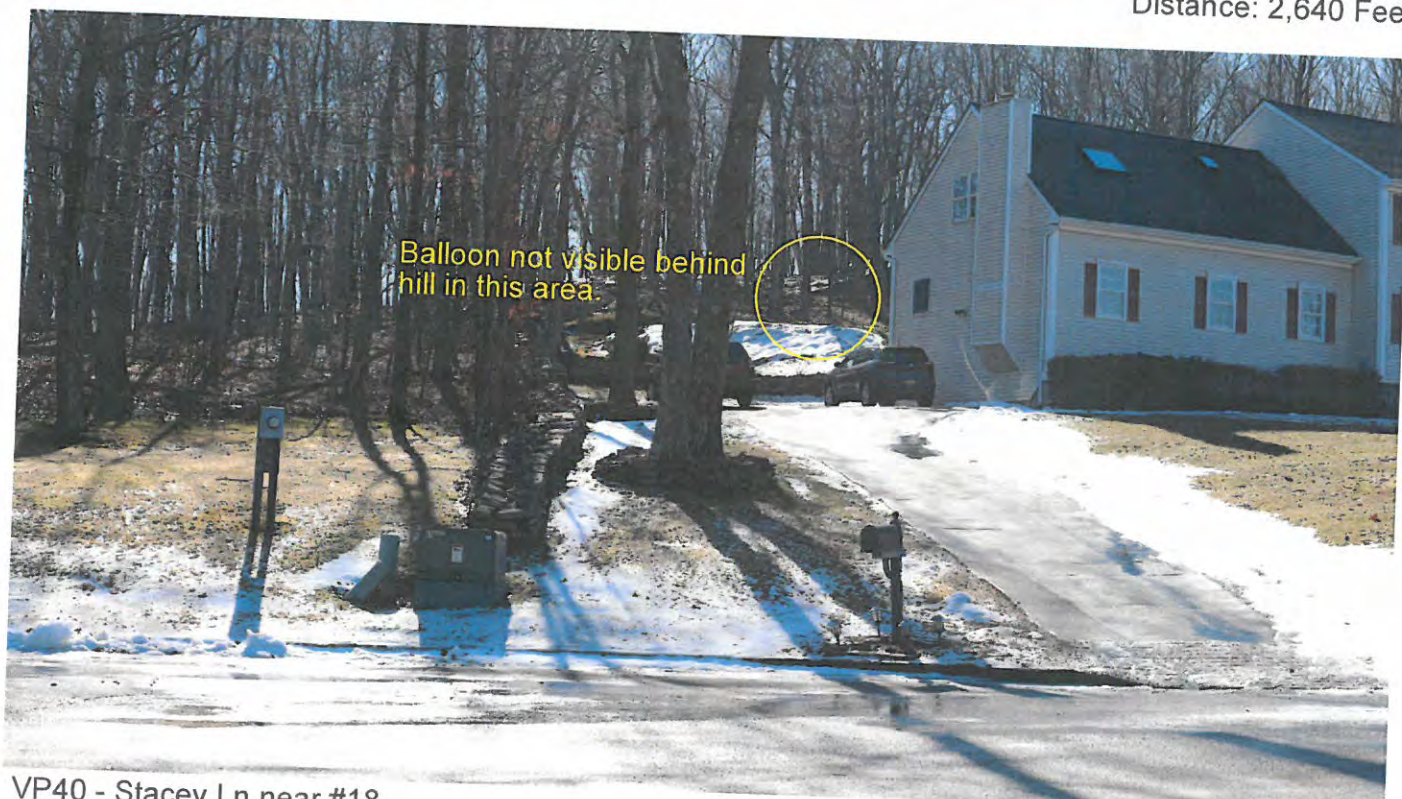


Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP39 - Old Country Rd near #13

Distance: 2,640 Feet



VP40 - Stacey Ln near #18

Distance: 1,540 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Visual Resource Assessment Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Figure 22



VP41 - Weber Hill Rd and Shear Hill Rd

Distance: 1,790 Feet



VP42 - Odessa Rd near #40

Distance: 2,280 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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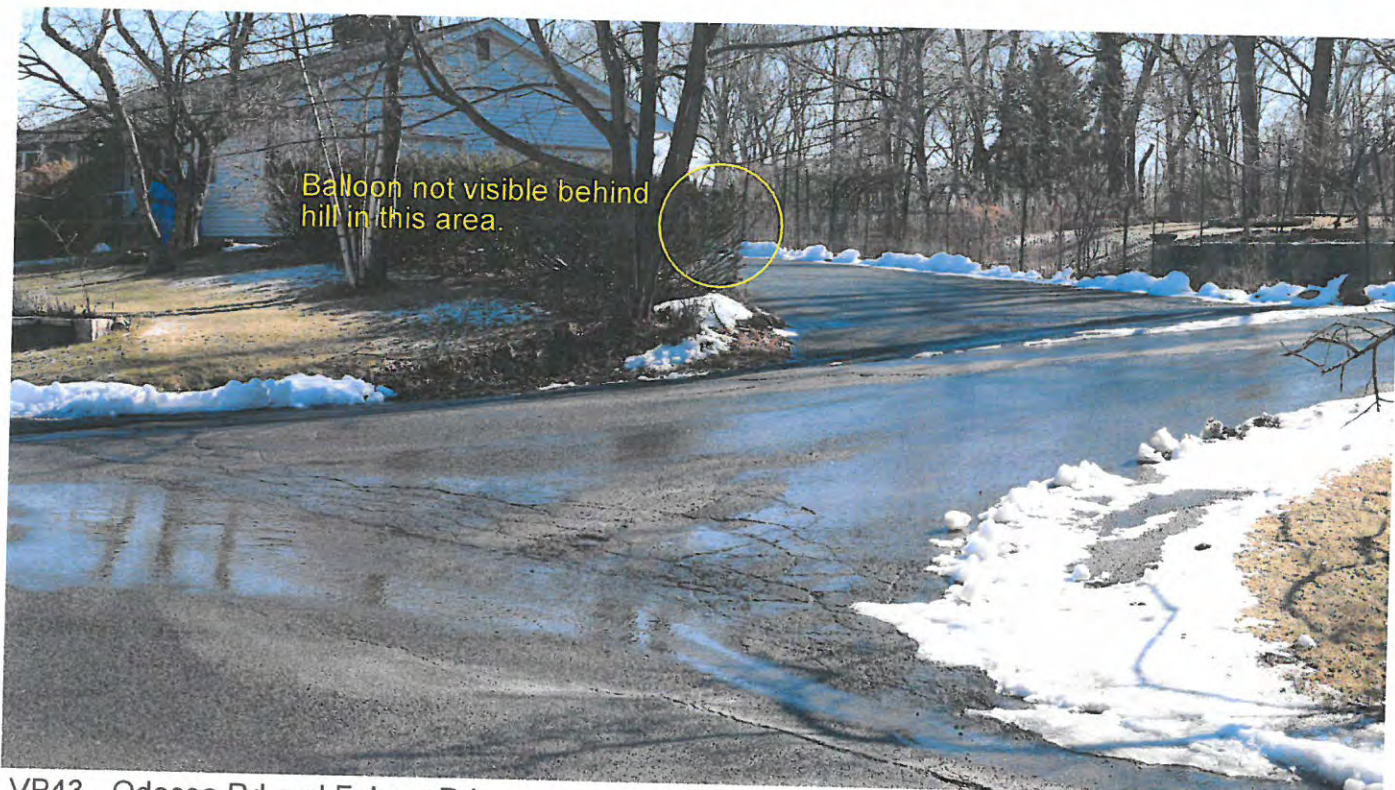
Proposed Telecommunications Tower



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Figure 23

Visual Resource Assessment



VP43 - Odessa Rd and Fulmar Rd

Distance: 3,020 Feet



VP44 - Fulmar Rd near #22

Distance: 2,640 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Figure 24

Visual Resource Assessment Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP45 - Fulmar Rd and Shear Hill Rd

Distance: 2,270 Feet



VP46 - Croton Falls Rd and Shear Hill Rd

Distance: 1,800 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Figure 25

Visual Resource Assessment Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Balloon not visible behind trees in this area.

VP47 - Croton Falls Rd near #398

Distance: 960 Feet



Balloon visible

VP48- Lake Dr near #70

Distance: 3,720 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

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Figure 26

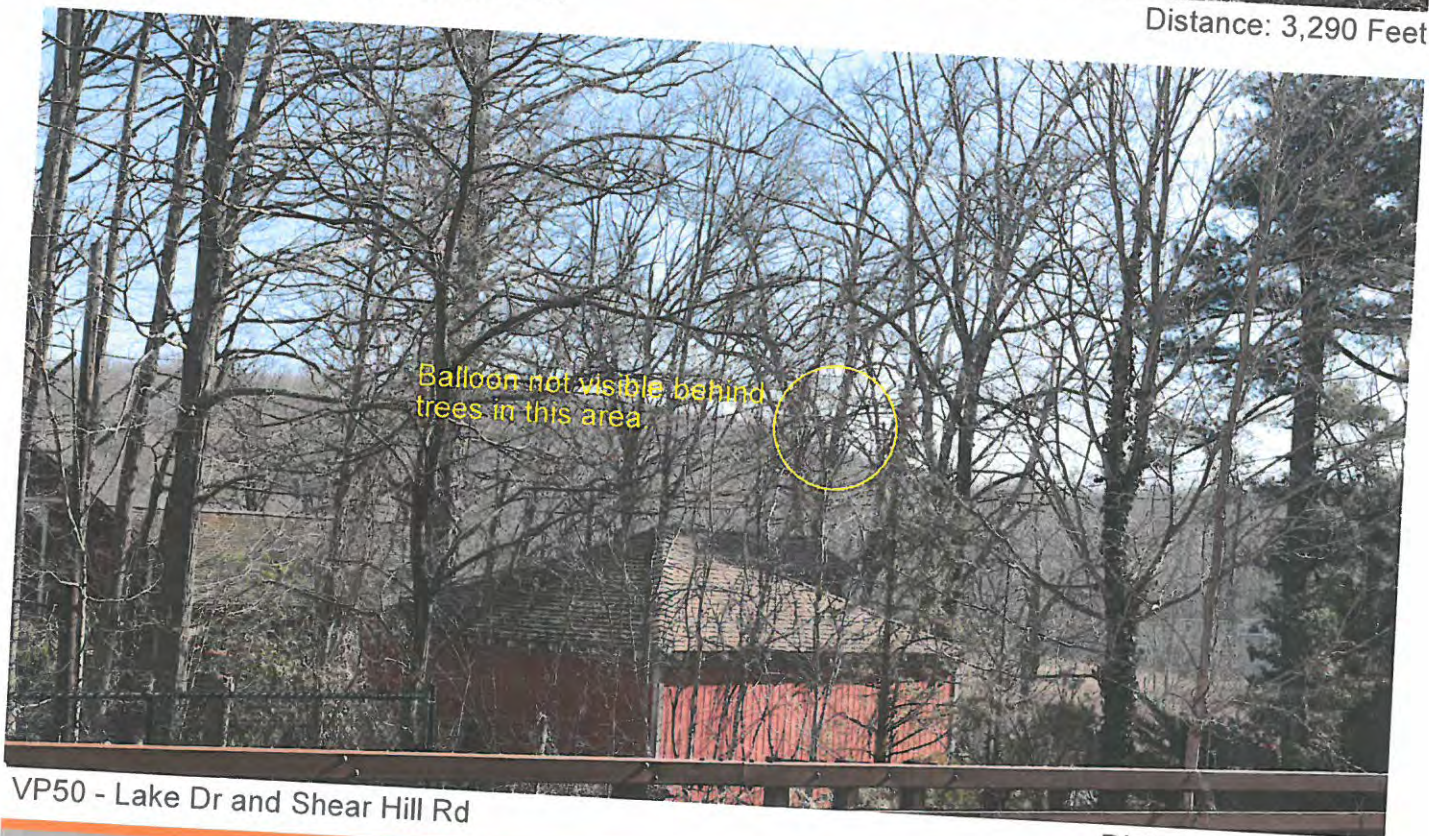
Visual Resource Assessment Proposed Telecommunications Tower

Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



VP49 - Putnam Trailway near Lake Dr

Distance: 3,290 Feet



VP50 - Lake Dr and Shear Hill Rd

Distance: 2,470 Feet

PHOTO LOG

Note: At the time of the balloon tests 180 feet was the proposed height of the Facility. The proposed height has since been reduced to 160 feet.

SARATOGA
ASSOCIATES



Proposed Telecommunications Tower

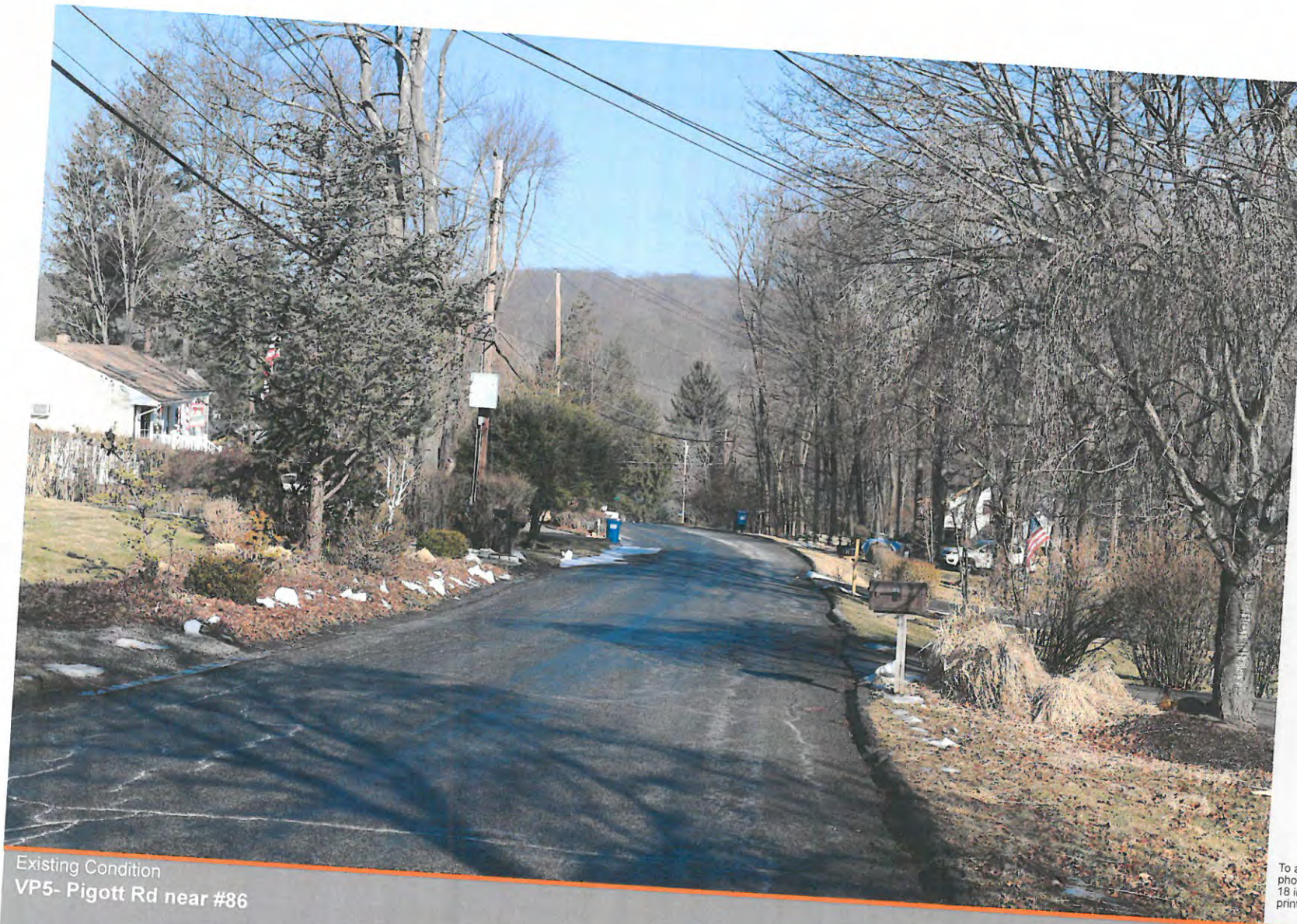
Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Figure 27

Visual Resource Assessment

APPENDIX A

Photo Simulations



Photograph Information

Date:	February 4, 2019
Time:	10:08 am
Focal Length:	50mm
Camera:	Canon 6D Mark II
Photo	41° 22' 13.1484" N
Location:	73° 42' 08.2656" W
Distance:	2,800 Feet

Existing Condition
VP5- Pigott Rd near #86

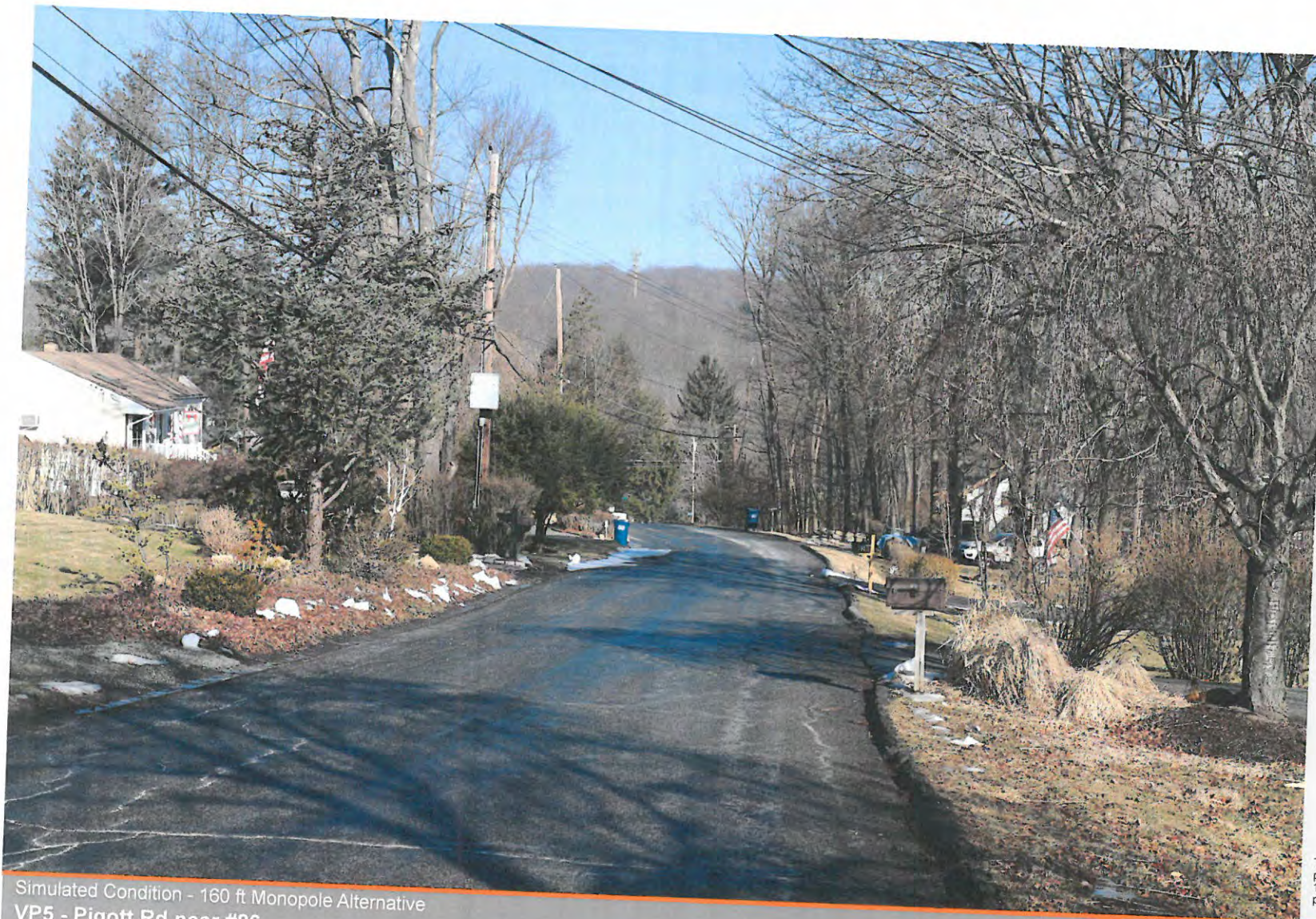
SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A1-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:08 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo
Location: 41° 22' 13.1484" N
73° 42' 08.2656" W
Distance: 2,800 Feet

Simulated Condition - 160 ft Monopole Alternative
VP5 - Pigott Rd near #86

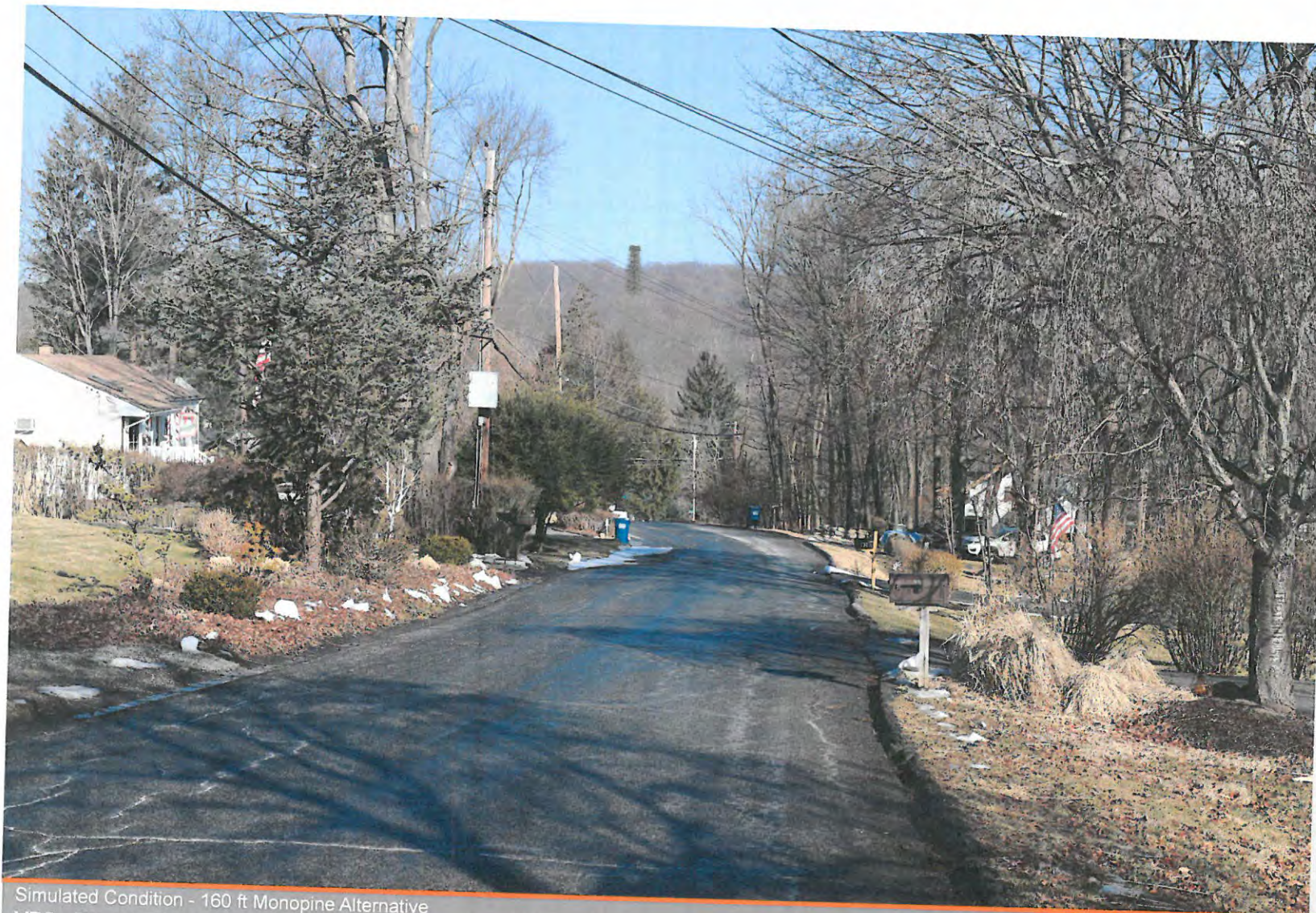
SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A1-B
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:08 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo
Location: 41° 22' 13.1484" N
73° 42' 08.2656" W
Distance: 2,800 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

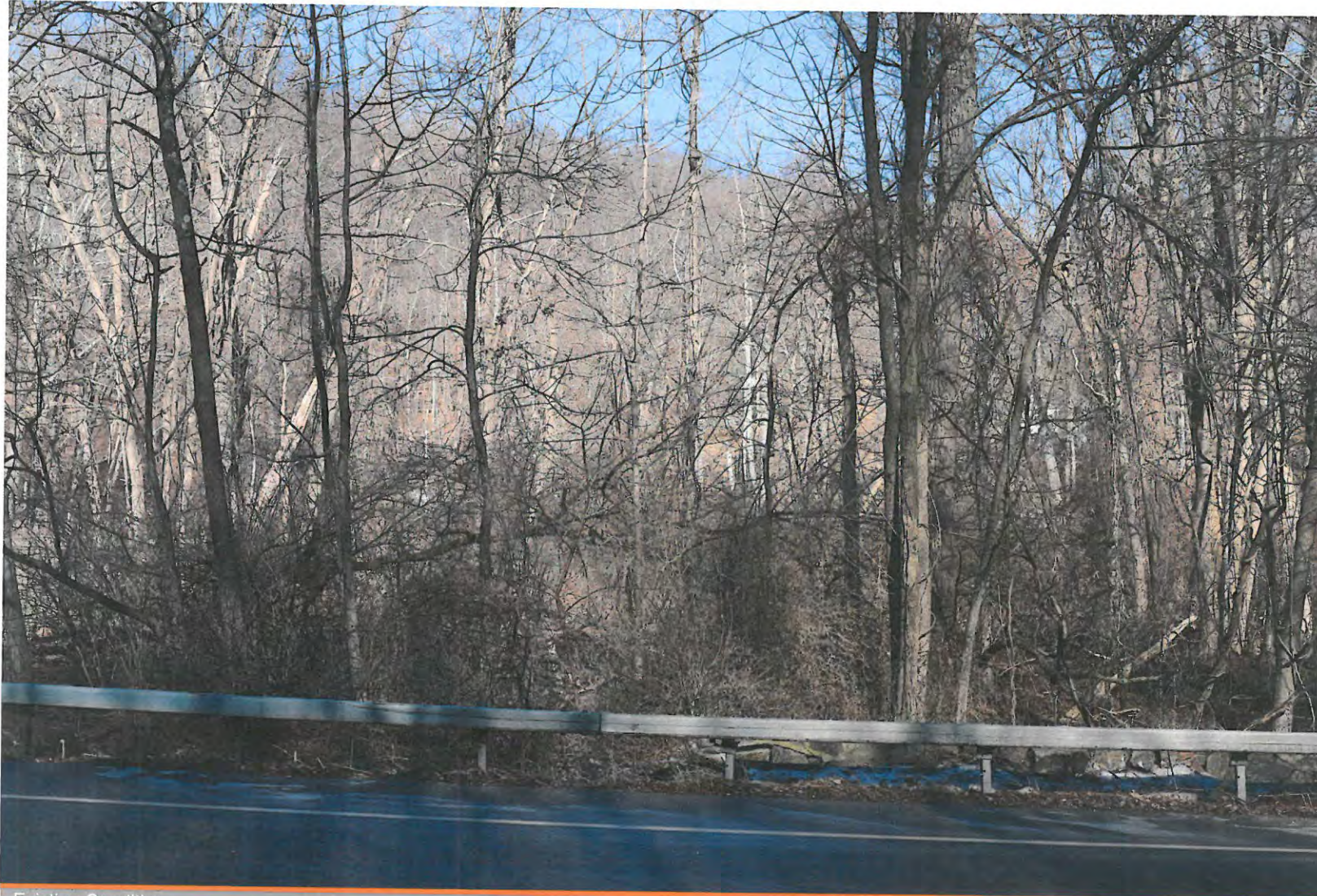
Simulated Condition - 160 ft Monopine Alternative
VP5 - Pigott Rd near #86

SARATOGA
ASSOCIATES

Figure A1-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:13 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 28.9668" N
73° 42' 07.8192" W
Distance: 1,260 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP8 - McLaughlin Dr near Croton Falls Rd

SARATOGA
ASSOCIATES

Figure A2-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:13 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo: 41° 22' 28.968" N
Location: 73° 42' 07.8192" W
Distance: 1,260 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition - 160 ft Monopole Alternative
VP8 - McLaughlin Dr near Croton Falls Rd

SARATOGA
ASSOCIATES

Figure A2-B
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:13 pm
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 28.9668" N
73° 42' 07.8192" W
Distance: 1,260 Feet

Simulated Condition - 160 ft Monopine Alternative
VP8 - McLaughlin Dr near Croton Falls Rd

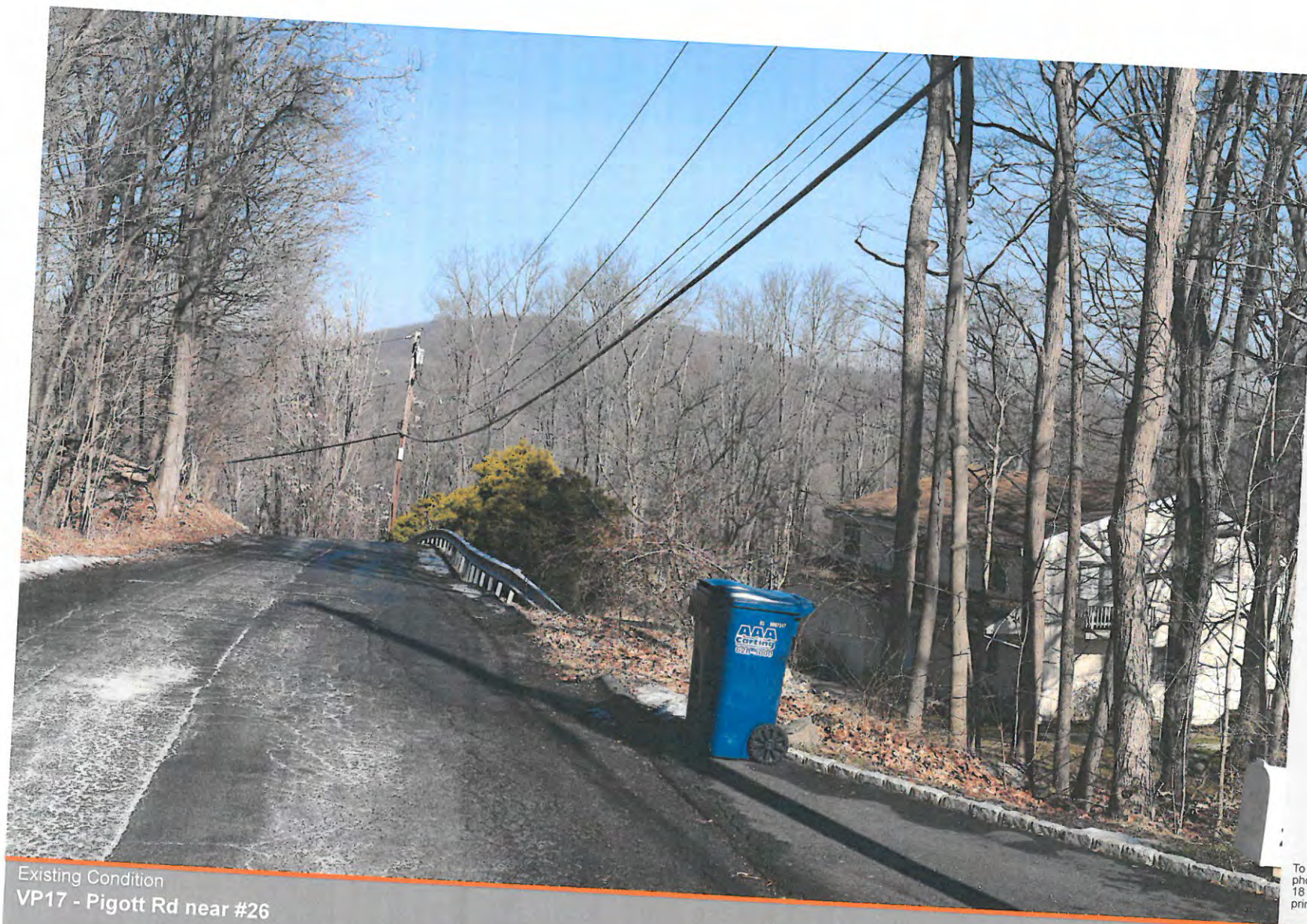
SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A2-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:38 pm
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 11.1252" N
73° 42' 13.0176" W
Distance: 2,970 Feet

Existing Condition
VP17 - Pigott Rd near #26

SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A3-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:38 pm
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 11.1252" N
73° 42' 13.0176" W
Distance: 2,970 Feet

Simulated Condition - 160 ft Monopole Alternative
VP17 - Pigott Rd near #26

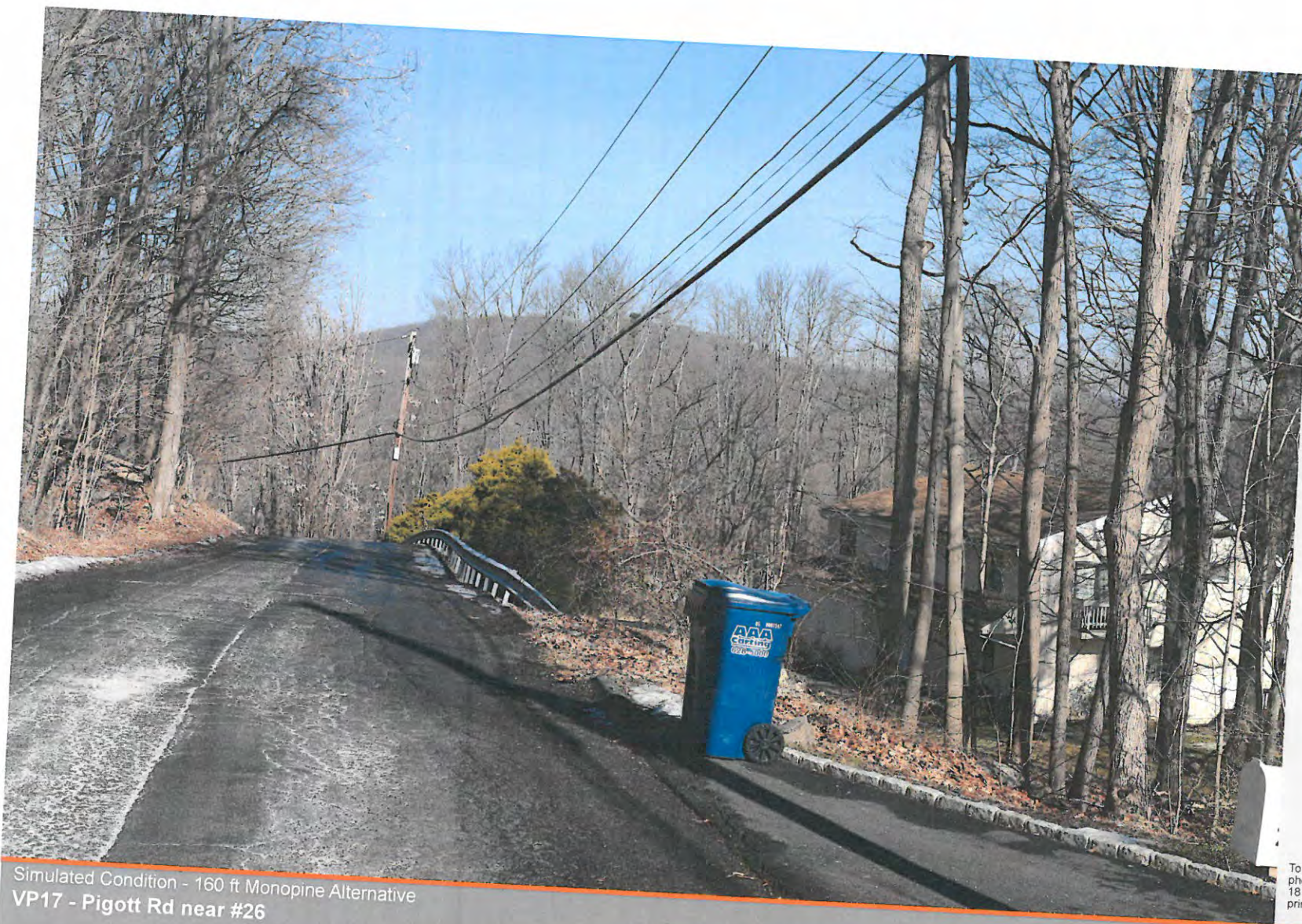
SARATOGA
ASSOCIATES

Figure A3-B
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.



Photograph Information

Date: February 4, 2019
Time: 10:38 pm
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 11.1252" N
73° 42' 13.0176" W
Distance: 2,970 Feet

Simulated Condition - 160 ft Monopine Alternative
VP17 - Pigott Rd near #26

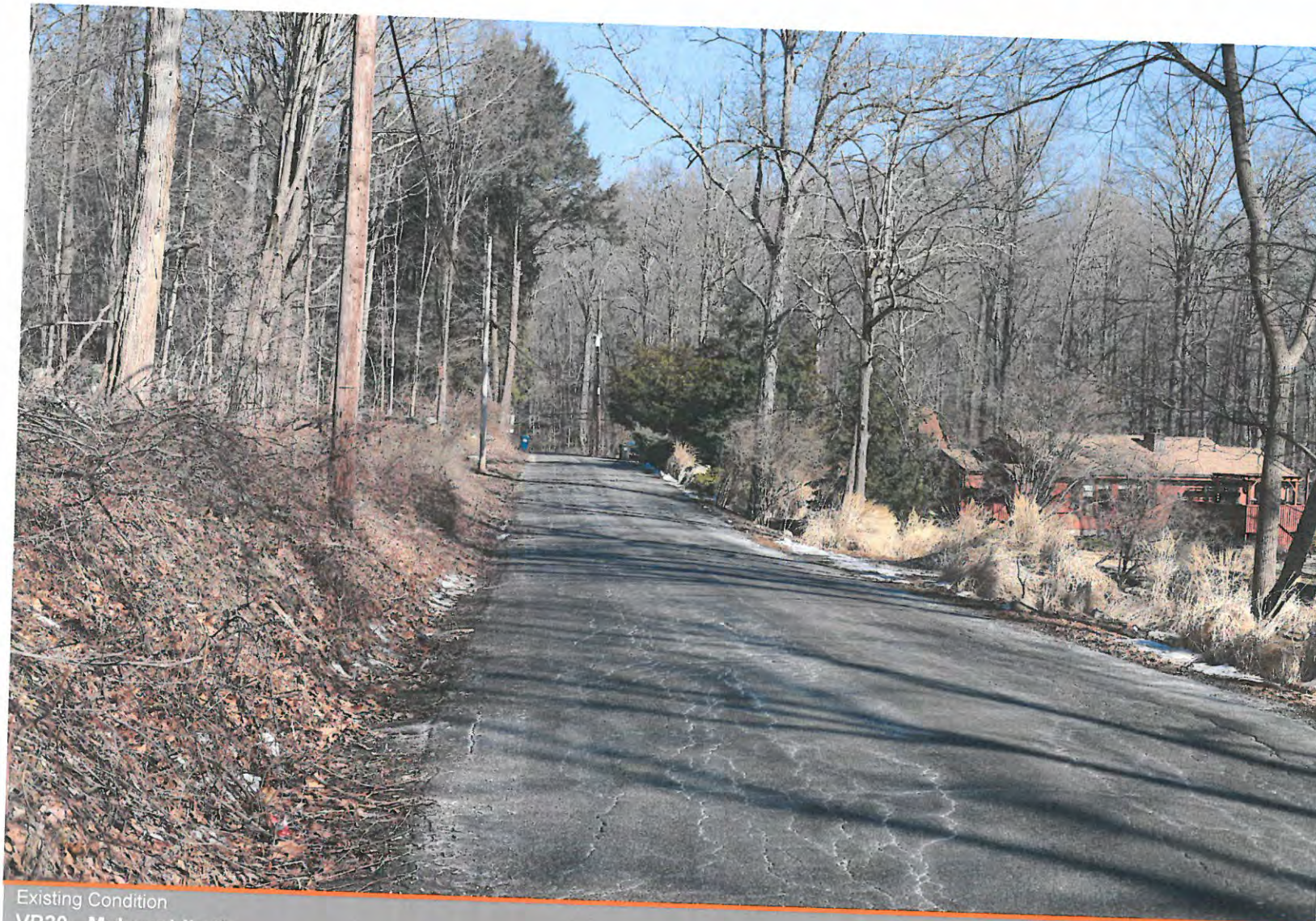
SARATOGA
ASSOCIATES

Figure A3-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.



Photograph Information

Date: February 4, 2019
Time: 10:44 pm
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 22.2708" N
73° 42' 21.0744" W
Distance: 1,920 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP20 - McLaughlin Dr

SARATOGA
ASSOCIATES

Figure A4-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:44 pm
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 22.2708" N
73° 42' 21.0744" W
Distance: 1,920 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition - 160 ft Monopole Alternative
VP20 - McLaughlin Dr

SARATOGA
ASSOCIATES

Figure A4-B
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:44 pm
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo: 41° 22' 22.2708" N
Location: 73° 42' 21.0744" W
Distance: 1,920 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition - 160 ft Monopine Alternative
VP20 - McLaughlin Dr

SARATOGA
ASSOCIATES

Figure A4-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date:	February 4, 2019
Time:	10:48 am
Focal Length:	50mm
Camera:	Canon 6D Mark II
Photo Location:	41° 22' 31.2816" N 73° 42' 21.1428" W
Distance:	1,080 Feet

Existing Condition
VP22 - Croton Falls Rd

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper

SARATOGA
ASSOCIATES

Figure A5-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 10:48 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo
Location: 41° 22' 31.2816" N
73° 42' 21.1428" W
Distance: 1,080 Feet

Simulated Condition - 160 ft Monopole Alternative
VP22 - Croton Falls Rd

SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A5-B
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date:	February 4, 2019
Time:	10:48 am
Focal Length:	50mm
Camera:	Canon 6D Mark II
Photo Location:	41° 22' 31.2816" N 73° 42' 21.1428" W
Distance:	1,080 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition - 160 ft Monopine Alternative
VP22 - Croton Falls Rd

SARATOGA
ASSOCIATES

Figure A5-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 11:10 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo: 41° 22' 26.0868" N
Location: 73° 42' 34.2504" W
Distance: 2,120 Feet

Existing Condition
VP31 - Eleanor Dr near #50

SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A6-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
 Time: 11:10 am
 Focal Length: 50mm
 Camera: Canon 6D Mark II
 Photo: 41° 22' 26.0868" N
 Location: 73° 42' 34.2504" W
 Distance: 2,120 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition - 160 ft Monopole Alternative
 VP31 - Eleanor Dr near #50

SARATOGA
 ASSOCIATES

Figure A6-B
 Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
 254 Croton Falls Road
 Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 11:10 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo: 41° 22' 26.0868" N
Location: 73° 42' 34.2504" W
Distance: 2,120 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition - 160 ft Monopine Alternative
VP31 - Eleanor Dr near #50

SARATOGA
ASSOCIATES

Figure A6-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 11:11 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo
Location: 41° 22' 28.6896" N
73° 42' 33.8796" W
Distance: 1,920 Feet

To appear at the correct scale this photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

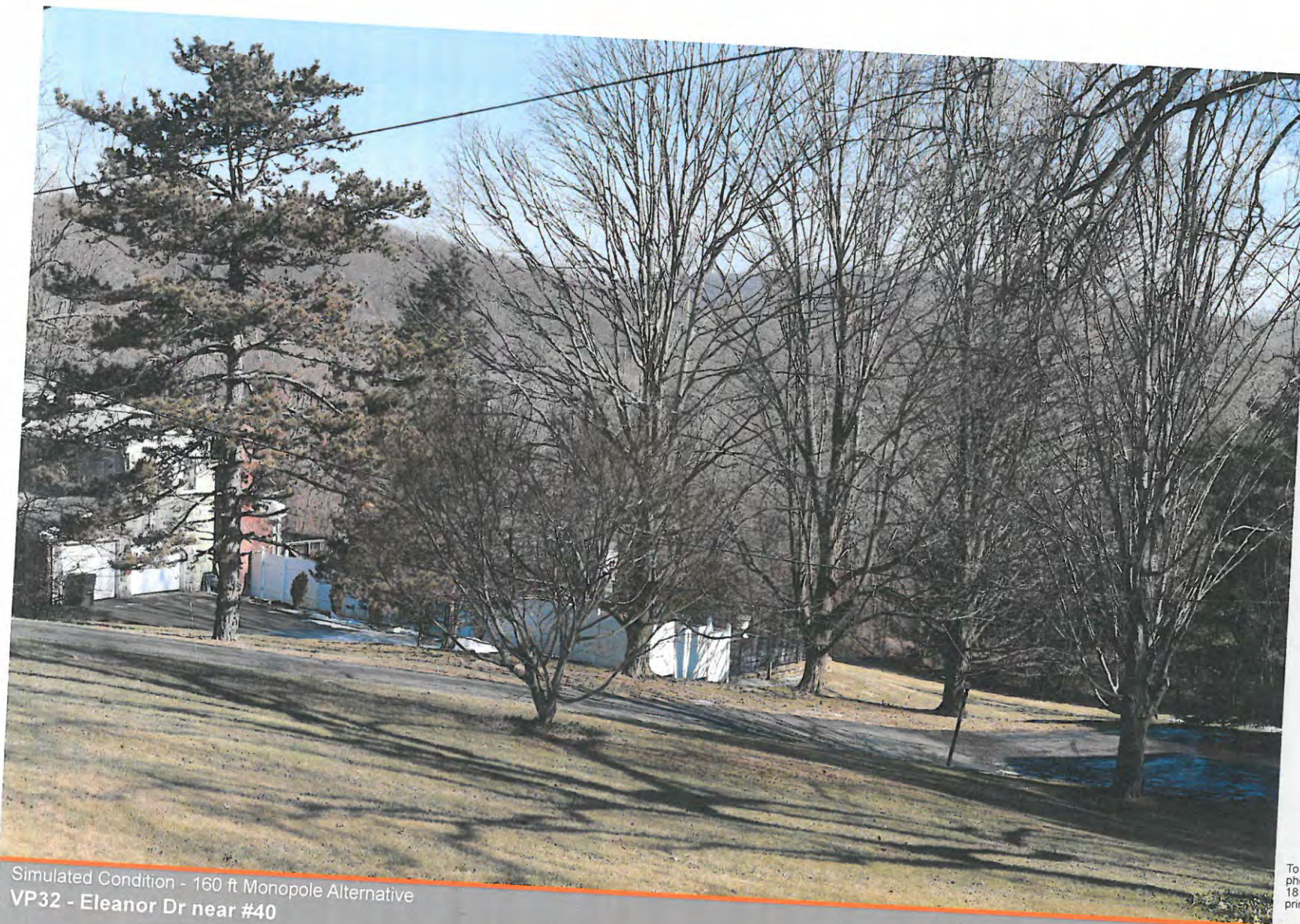
Existing Condition
VP32 - Eleanor Dr near #40

SARATOGA
ASSOCIATES

Figure A7-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 11:11 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 28.6896" N
73° 42' 33.8796" W
Distance: 1,920 Feet

Simulated Condition - 160 ft Monopole Alternative
VP32 - Eleanor Dr near #40

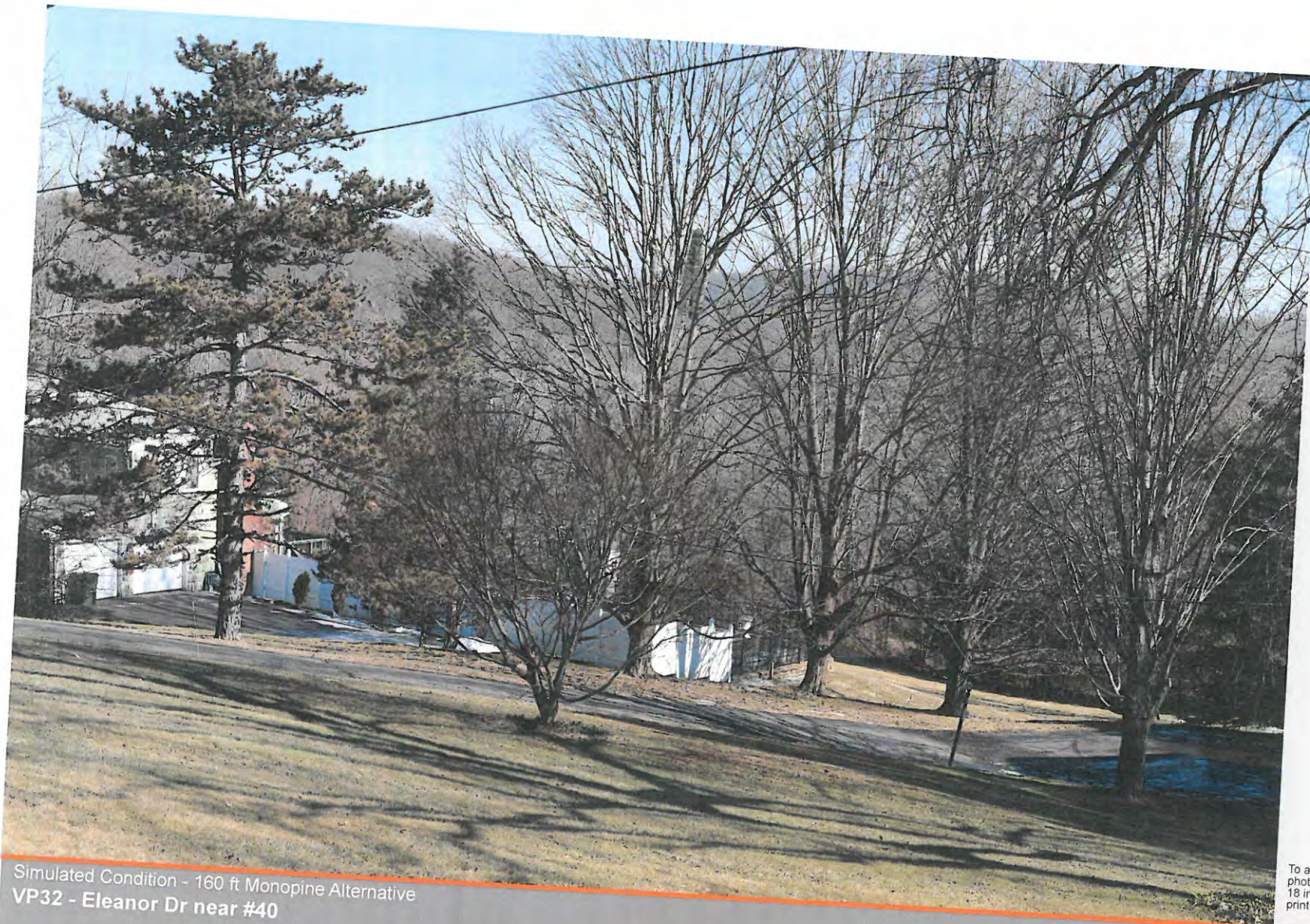
SARATOGA
ASSOCIATES

Figure A7-B
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper



Photograph Information

Date:	February 4, 2019
Time:	11:11 am
Focal Length:	50mm
Camera:	Canon 6D Mark II
Photo Location:	41° 22' 28.6896" N 73° 42' 33.8796" W
Distance:	1,920 Feet

Simulated Condition - 160 ft Monopine Alternative
VP32 - Eleanor Dr near #40

SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A7-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 11:33 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo Location: 41° 22' 45.0948" N
73° 42' 47.3652" W
Distance: 2,280 Feet

Existing Condition
VP42 - Odessa Rd near #40

SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A8-A
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date:	February 4, 2019
Time:	11:33 am
Focal Length:	50mm
Camera:	Canon 6D Mark II
Photo Location:	41° 22' 45.0948" N 73° 42' 47.3652" W
Distance:	2,280 Feet

Simulated Condition - 160 ft Monopole Alternative
VP42 - Odessa Rd near #40

SARATOGA
ASSOCIATES

Figure A8-B
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541



Photograph Information

Date: February 4, 2019
Time: 11:33 am
Focal Length: 50mm
Camera: Canon 6D Mark II
Photo: 41° 22' 45.0948" N
Location: 73° 42' 47.3652" W
Distance: 2,280 Feet

Simulated Condition - 160 ft Monopine Alternative
VP43 - Odessa Rd near #40

SARATOGA
ASSOCIATES

To appear at the correct scale this
photograph is intended to be viewed
18 inches from the reader's eye when
printed on 11"x17" paper.

Figure A8-C
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Lake Casse Site (NY056)
254 Croton Falls Road
Mahopac, NY 10541

Supplemental Report - Drive Test Analysis & Report

Site ID: "Lake Casse NY056"

254 Croton Falls Road
Hamlet of Mahopac, NY
Putnam County

Prepared for
New York SMSA Limited Partnership d/b/a Verizon Wireless

By

PierCon Solutions, LLC
March 26, 2019

TABLE OF CONTENTS

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2	DRIVE TEST METHODOLOGY	3
3	RESULTS OF DRIVE TEST DATA	4
4	CONCLUSION	5
5	APPENDIX – EXHIBITS	6

1 PURPOSE AND SCOPE

PierCon Solutions LLC, an engineering firm specializing in wireless communications, performed an independent drive test for the proposed Lake Casse Site located at 254 Croton Falls Road. The drive test occurred on February 23rd, 2019 and involved measuring signals at three different antenna heights and recording measurements from the Verizon Wireless network. The purpose of the test was to confirm the predictions made by propagation software and to verify that the proposed height is the minimum height required to provide adequate service to the service gap described in the PierCon report dated July 31st, 2018 (RF Report 1).

The following report provides a review of the drive test methodology and results.

2 DRIVE TEST METHODOLOGY

In order to confirm the accuracy of the submitted propagation maps, an independent drive test and CW (continuous wave) test was performed on February 23rd, 2019 by Senior RF Engineer/RF Manager Frances Boschulte. Drive tests are a means to evaluate existing coverage and CW tests are a means to determine the minimum height for a proposed facility.

Drive tests also referred to as Scan Test, are used to produce maps ("Drive Test Maps"), which demonstrate actual signal levels along roadways that are traveled by specially equipped scan test vehicles. In a drive test, the signals from the surrounding on-air sites (LTE and CDMA) are collected by a receive antenna mounted to the roof of the drive test vehicle. The data collected by the receive antenna is then processed by computer equipment within the drive test vehicle. The coordinates and signal strength of each collection point is recorded by the computer equipment and ultimately depicted on a Drive Test Map. Literally thousands of data points are collected during a drive test over the roadways driven by the drive test vehicle to ensure that a complete and statistically relevant number of data points can be evaluated.

The scan test consisted of collecting thousands of data points in the vicinity of the Lake Casse proposed site and surrounding roadways. A PCTEL IBLEX C multiband receiver, capable of measuring signals from the 700, 850, 1900, and 1700/2100 MHz frequency bands, was used to collect data points through the use of a magnetic mounted antenna and GPS device on the outside of the vehicle. The recording software is also capable of measuring CDMA and LTE Technologies. PCTEL drive test software was used to collect the data on a laptop computer while the vehicle was moving. The receiver has a calibration certification from TRS RenTelco and this certificate is attached as Exhibit A.

The CW test also consisted of collecting thousands of data points in the vicinity of the Lake Casse proposed site and surrounding roadways. The same PCTEL IBFLEX C multiband receiver was utilized to measure the CW signal from a magnetic mounted antenna located on the roof of the vehicle. The scan test and CW test were performed at the same time with the same receiver.

Since the testing was performed during the time of year with minimal foliage, the test results will be overstated, and require a factor to account for losses due to dense foliage that will be present during the spring through fall season. The foliage loss correction can vary by the type of environment and range between 5-20 dB. PierCon utilized a conservative 8 dB foliage correction in the analysis to follow. Additional factor was also needed for the CW test only. The CW test factor involved providing an equivalent RSRP signal level from the measured RSSI level in the CW test. RSRP signals are the standard reference signals for LTE networks. By performing these calculations, the drive test data can be compared with the propagation data for the proposed site.

3 RESULTS OF DRIVE TEST DATA

Verizon's current 4th technology generation deployed is LTE and is the relevant standard in which to design to. Verizon is in the process of migrating the 850 MHz frequency band license to 4G (LTE) and in order to do so will be retiring the 3G (CDMA) technology at the end of 2019. Nevertheless, and out of an abundance of caution, an exhibit representing the 850 MHz band 3G CDMA drive test data has been included along with the LTE drive test data for 2100 MHz and 700 MHz. Please find attached Exhibits B, C and D respectively for the 2100 MHz LTE, 700 MHz LTE and the 850 3G CDMA drive test data.

Please note there are 2 changes to the following exhibits:

- The scale in the following Exhibits B-1, E-1, F-1, and G-1 are zoomed in for better viewing, therefore they will not match the scale of the exhibit provided in the RF Report 1.
- A new Verizon site, Mahopac 8, located at 954 Route 6 has been added to the maps. Mahopac 8's on air date was October 23, 2018 and located on an existing rooftop at 33ft antenna centerline. This site provides inbuilding coverage to the homes and business along Route 6 and has no coverage impact to the current gap identified in the RF Report 1.

In exhibits B – J, the color of the dots represents a range of signal strengths at the point. The green dots represent RSRP signals stronger than -95 dBm or suburban in-building coverage levels. The yellow dots represent RSRP signals stronger than -105 dBm and weaker than -95 dBm or in-vehicle coverage levels (no suburban in-building coverage). The red dots represent RSRP signals weaker than -105 dBm, (no suburban in-building or in vehicle in-building coverage).

Analysis of the 2100 and 700 MHz LTE scan test data reveal that the propagation from RF Report 1 for existing LTE coverage is accurate and further demonstrates the significant coverage gap detailed in RF Report 1. Please see Exhibit B and C for the 700 MHz and 2100 MHz scan test. Exhibit B-1 is a zoomed in view of the 700 MHz suburban in-building gap demonstrated by the yellow and red dots. This inbuilding service gap coincide with the 700 MHz gap in the RF report 1.

Analysis of the 850 MHz CDMA scan test data also reveals a significant gap in coverage, however due to the fact Verizon is in the process of migrating the 850 MHz frequency band license to 4G (LTE), most of the existing Verizon Wireless facilities do not have CDMA technology and PierCon has been informed that future sites will not have the CDMA technology as well. Only 3 existing Verizon facilities have CDMA technology on air: Carmel, Mahopac Falls and Croton Falls.

Analysis of the CW data at differing antenna heights revealed that significant differences are present between the tested antenna heights at 2100 MHz. Analysis of the drive test data at differing antenna heights at 700 MHz did not show much difference between the three heights¹. Since Verizon Wireless has most of their bandwidth within the 1900/2100 MHz frequency bands with 20 MHz of spectrum, than the 700/800 MHz frequency band with only 10 MHz, it is equally, if not more important, to have adequate coverage in the higher frequency bands since the larger bandwidth can support more simultaneous users.

Exhibits E, F, and G represent the CW tests from 2/23/19 for the 2100 MHz signal. Exhibits E, F and G represent the measured signals from a single 2100 MHz transmitter located at the Lake Casse proposed site location at three different antenna heights (136' 156', 176'). Please also find attached in Exhibits H, I, and J representing the CW tests from 2/23/19

¹ This is not unusual since coverage by lower frequency bands, such as 700 MHz, is not as adversely affected by rolling hills and dense tree foliage as the higher frequency bands, such as 2100 MHz.

for the 700 MHz signal. Exhibits G, H, and I represent the measured signals from a single 700 MHz transmitter located at the Lake Casse proposed site location at three different antenna heights (136' 156', 176').

Clearly seen in exhibits E – G are the differences present between the three heights at 2100 MHz. There are three street locations which exhibit the largest differences between the two lower heights:

- Croton Falls Road, from the proposed site location toward Route 6
- Watermelon Road, from Croton Falls Road toward Hillside Trail
- Shear Hill Road/Weber Hill Road.

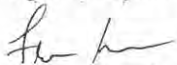
Minor differences are observed between Exhibits E and F, at heights 176ft and 156ft respectively, but a significant difference is observed when lowering the height another 20' seen in Exhibit G². Please see E-1, F-1 and G-1 for a zoomed in view. When the antenna height was lowered to 136' as seen in Exhibit G, coverage on these roads became very poor (nearly all red) representing a significant gap in service.

Therefore, based upon these results, the application has been revised to a tower height of 160' with the tallest antennas located at 156' centerline. This revision is based upon the CW test results which concluded that the minimum height is 160'.

4 CONCLUSION

PierCon conducted an independent drive test in order to determine the minimum height needed to address the gap in service detailed in RF Report 1. PierCon continues to demonstrate that a significant gap persists in the areas described in previous RF report by PierCon and that the proposed location is necessary to remedy a significant gap in service and provide reliable coverage to the Town of Carmel. The drive test revealed that the minimum height required is 160' for an antenna centerline height of 156'. Without the proposed facility, Verizon Wireless will be materially inhibited from providing it's services at a height below 160ft.

Report Prepared by:

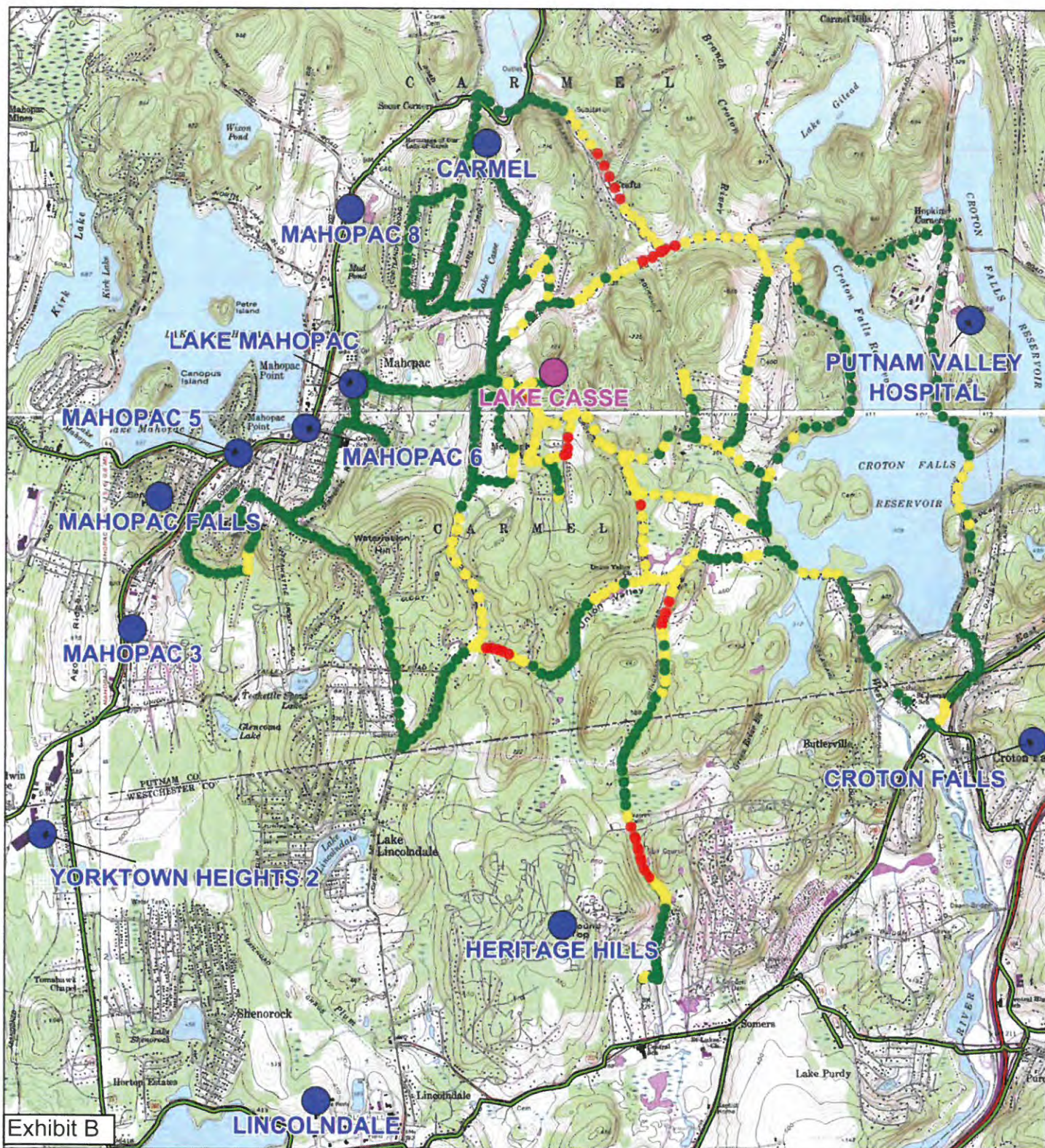


Frances Boschulte
RF Engineer Manager
03/26/2019
PierCon Solutions, LLC

² It is also important to note that the drive test data showed coverage on these roads where the proposed coverage from the first RF report did not. This was due to the configuration of the antenna in that propagation file. This drive test will provide the Verizon Wireless RF engineers with additional information to better design the antenna azimuths at this site such as pointing a sector to the west.

5 APPENDIX – EXHIBITS

- *A – Calibration Certificate*
- *B – 700 MHz Drive Test*
- *B-1 – 700 MHz Drive Test Zoomed In*
- *C – 2100 MHz Drive Test*
- *D – 850 MHz CDMA Drive Test*
- *E – 2100 MHz CW Test @ 176'*
- *F – 2100 MHz CW Test @ 156'*
- *G – 2100 MHz CW Test @ 136'*
- *E-1 – 2100 MHz CW Test @ 176' Zoomed In*
- *F-1 – 2100 MHz CW Test @ 156' Zoomed In*
- *G-1 – 2100 MHz CW Test @ 136' Zoomed In*
- *H – 700 MHz CW Test @ 176'*
- *I – 700 MHz CW Test @ 156'*
- *J – 700 MHz CW Test @ 136'*



Lake Casse

700 MHz Drive Test

254 Croton Falls Road
Mahopac, NY 10541



Verizon Wireless Existing Site

Verizon Wireless Proposed Site

- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

verizon✓

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019

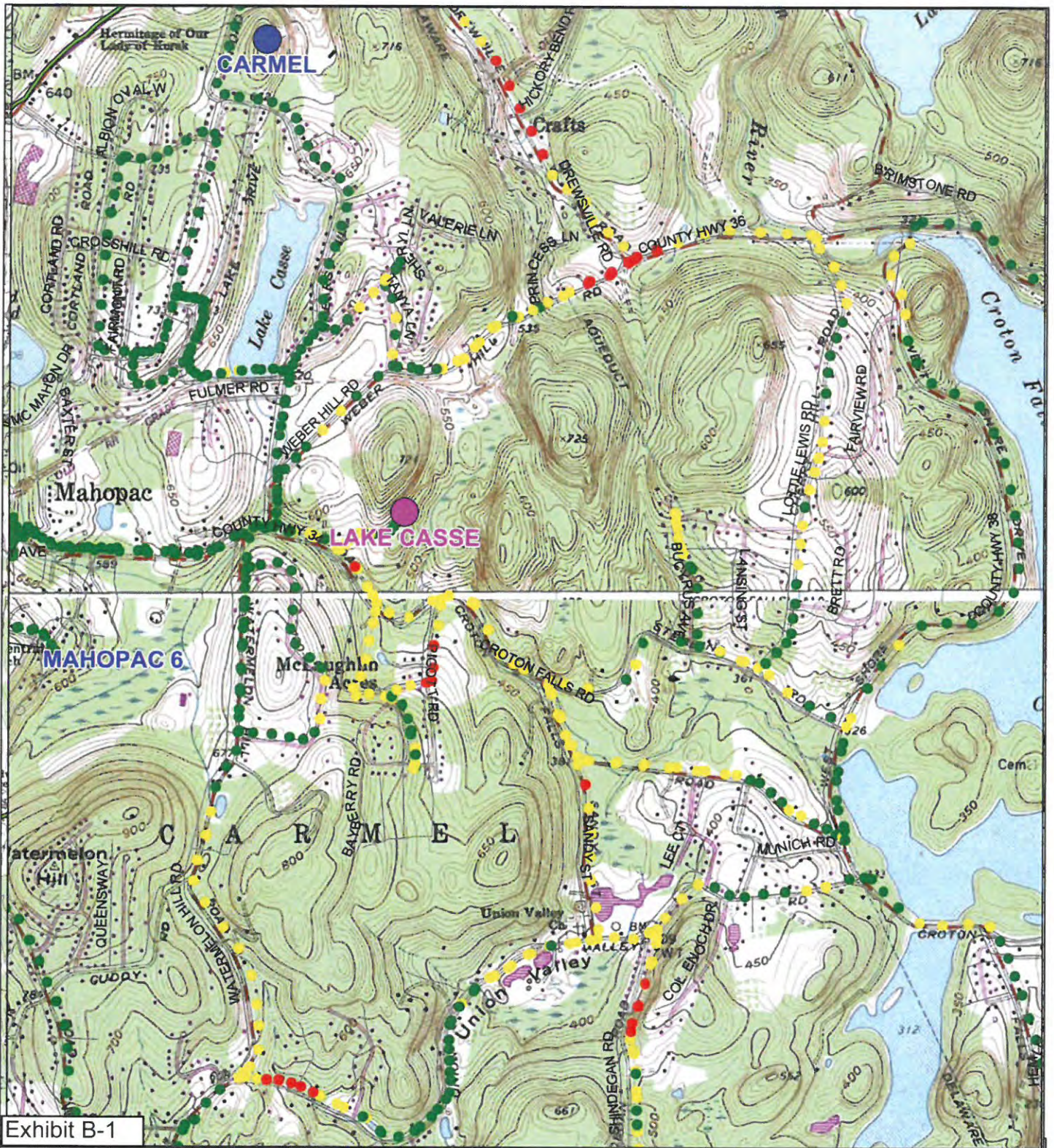


Exhibit B-1

Lake Casse

700 MHz Drive Test

254 Croton Falls Road
Mahopac, NY 10541



Verizon Wireless Existing Site



Verizon Wireless Proposed Site



Reliable In-Building Suburban
Coverage (≥ -95 dBm RSRP)



Reliable In-Vehicle Coverage
(≥ -105 dBm RSRP)



Unreliable In-Vehicle Coverage
(< -105 dBm RSRP)

verizon✓

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019

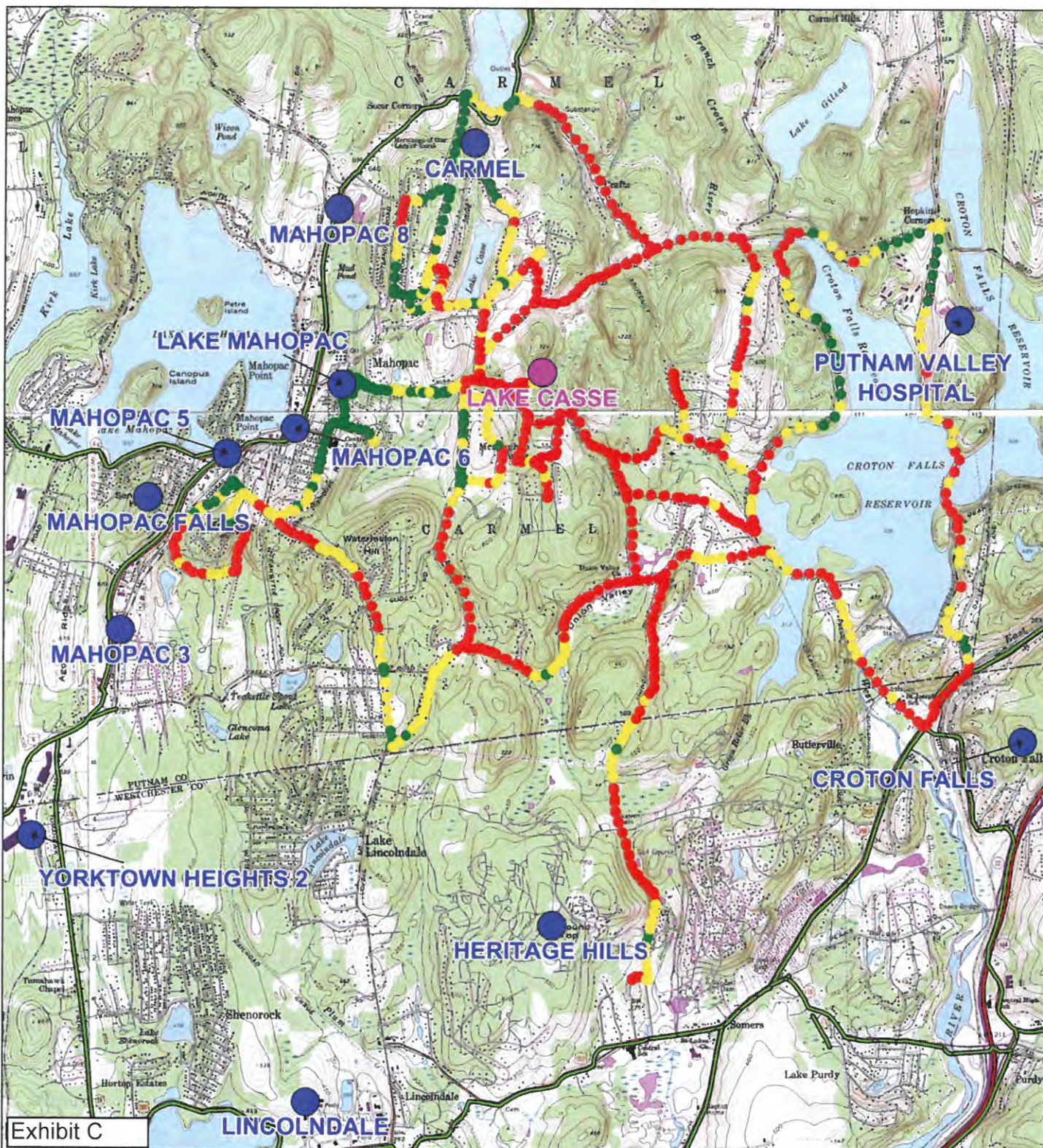


Exhibit C

Lake Casse

2100 MHz Drive Test

254 Croton Falls Road
Mahopac, NY 10541



Verizon Wireless Existing Site



Verizon Wireless Proposed Site



Reliable In-Building Suburban
Coverage (≥ -95 dBm RSRP)



Reliable In-Vehicle Coverage
(≥ -105 dBm RSRP)

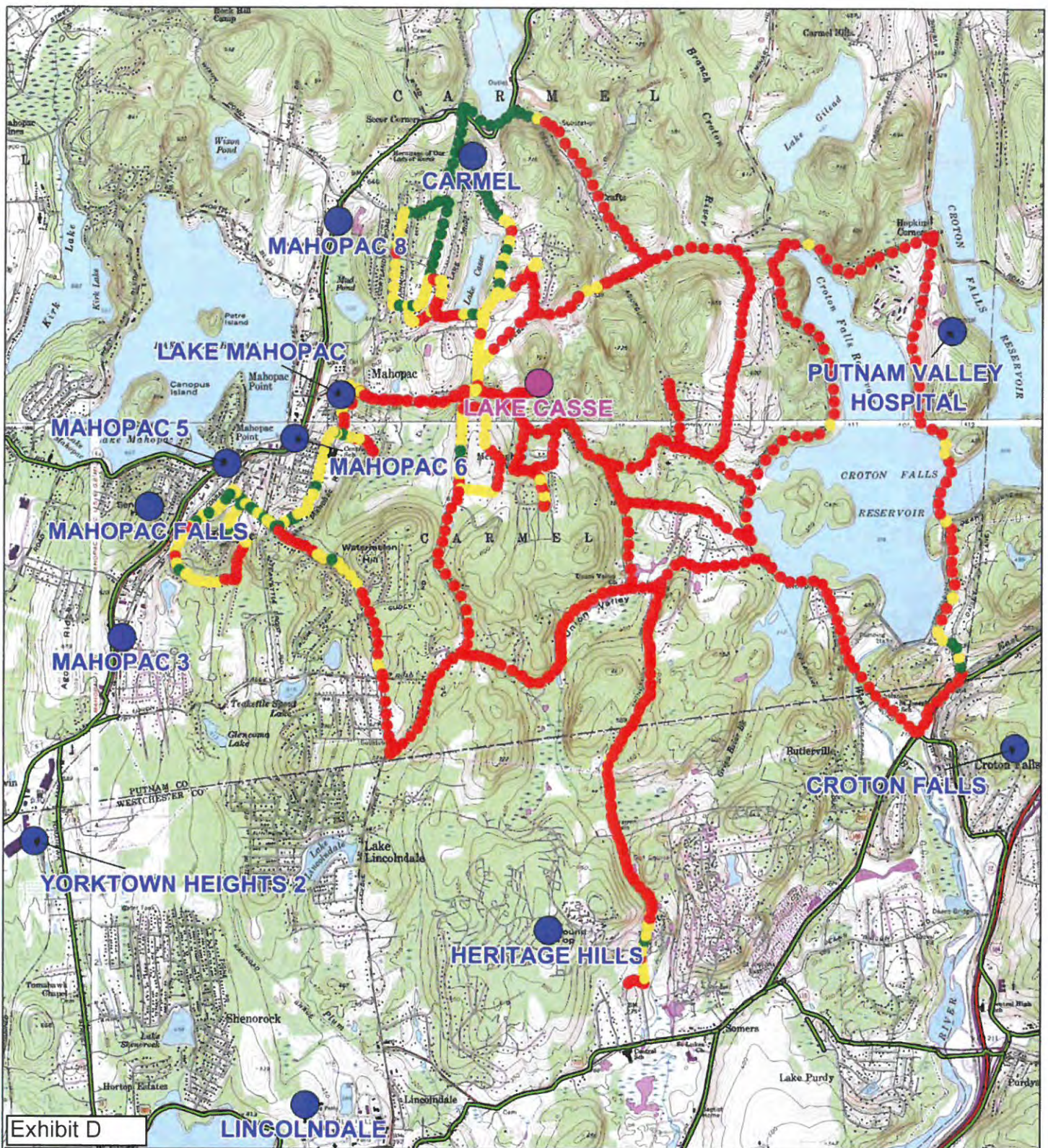


Unreliable In-Vehicle Coverage
(< -105 dBm RSRP)

verizon✓

PierCon Solutions
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019



Lake Casse

3G CDMA 850MHz
Scan test

254 Croton Falls Road
Mahopac, NY 10541



Verizon Wireless Existing Site



Verizon Wireless Proposed Site

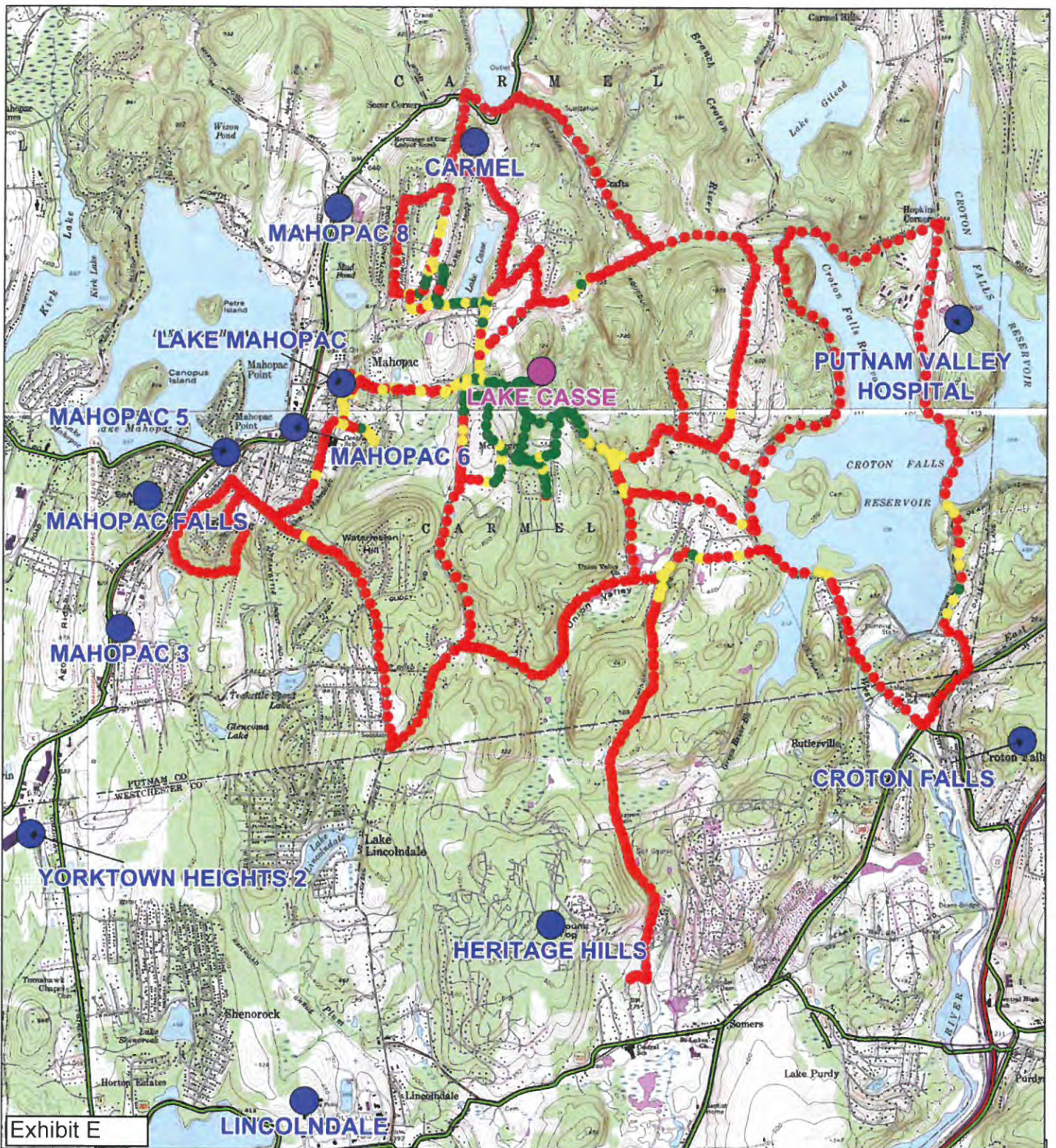
Receive Channel Pilot Power (dBm)

- 110 dB OPL (-75 dBm) Reliable in-building Coverage
- 120 dB OPL (-85 dBm) Reliable in-building Coverage
- >120 dB OPL

verizon✓

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019



Lake Casse

2100 MHz CW Test
@ 176'

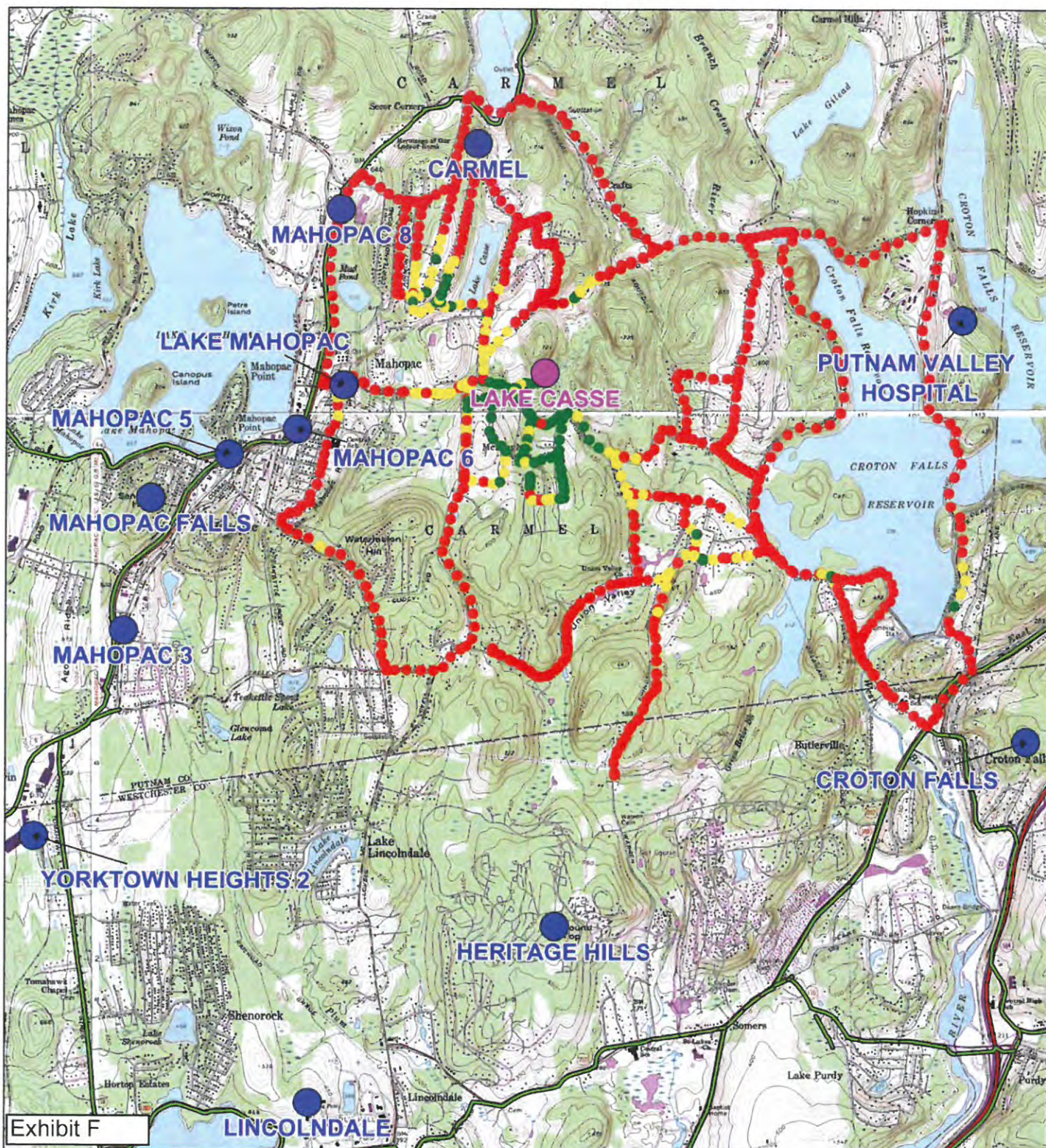
254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

verizon✓

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019



Lake Casse

2100 MHz CW Test
@ 156'

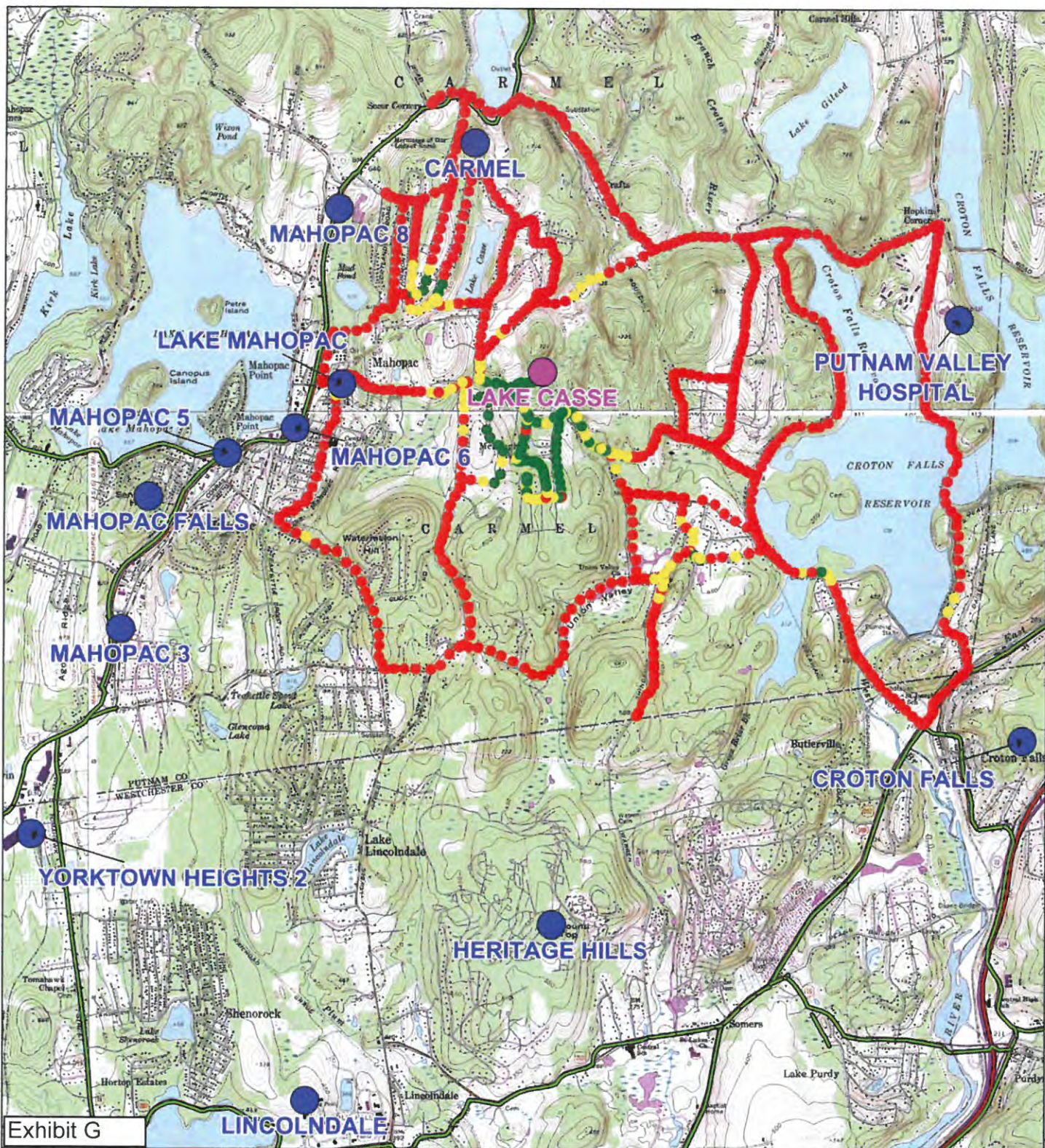
254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

verizon✓

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019



Lake Casse

2100 MHz CW Test
@ 136'

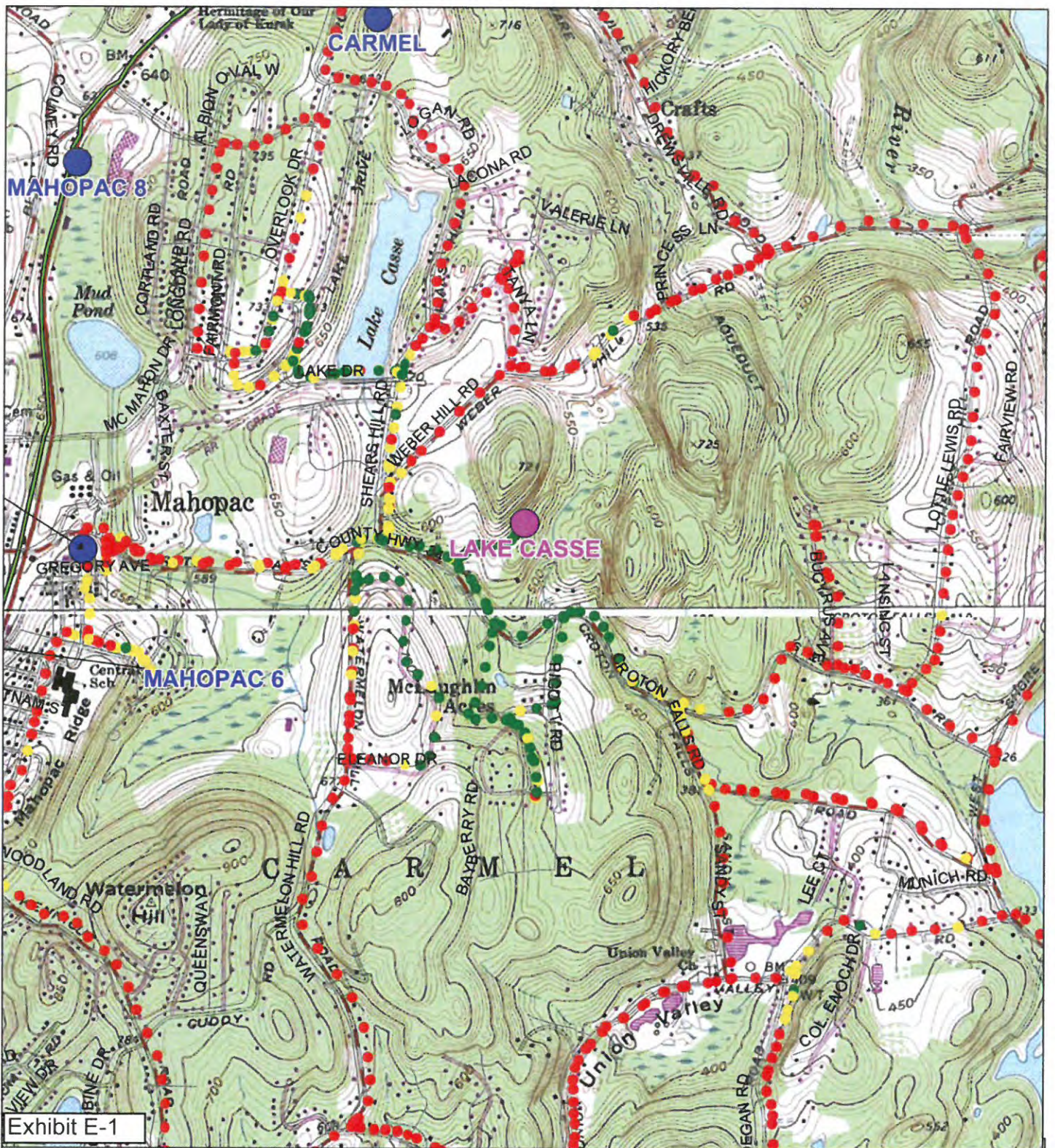
254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

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PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019



Lake Casse

2100 MHz CW Test
@ 176'

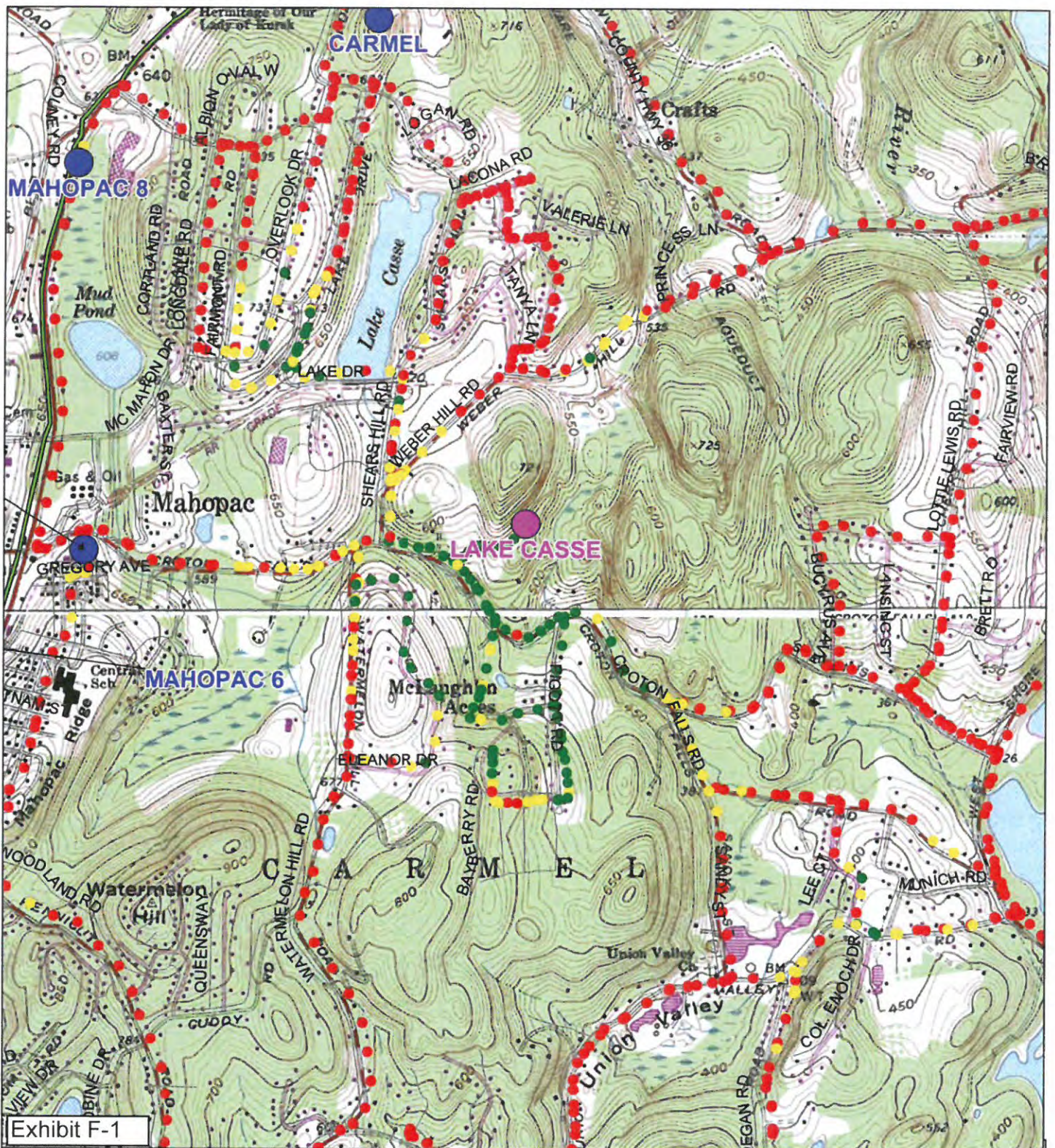
254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

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PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019



Lake Casse

2100 MHz CW Test
@ 156'

254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

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Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019

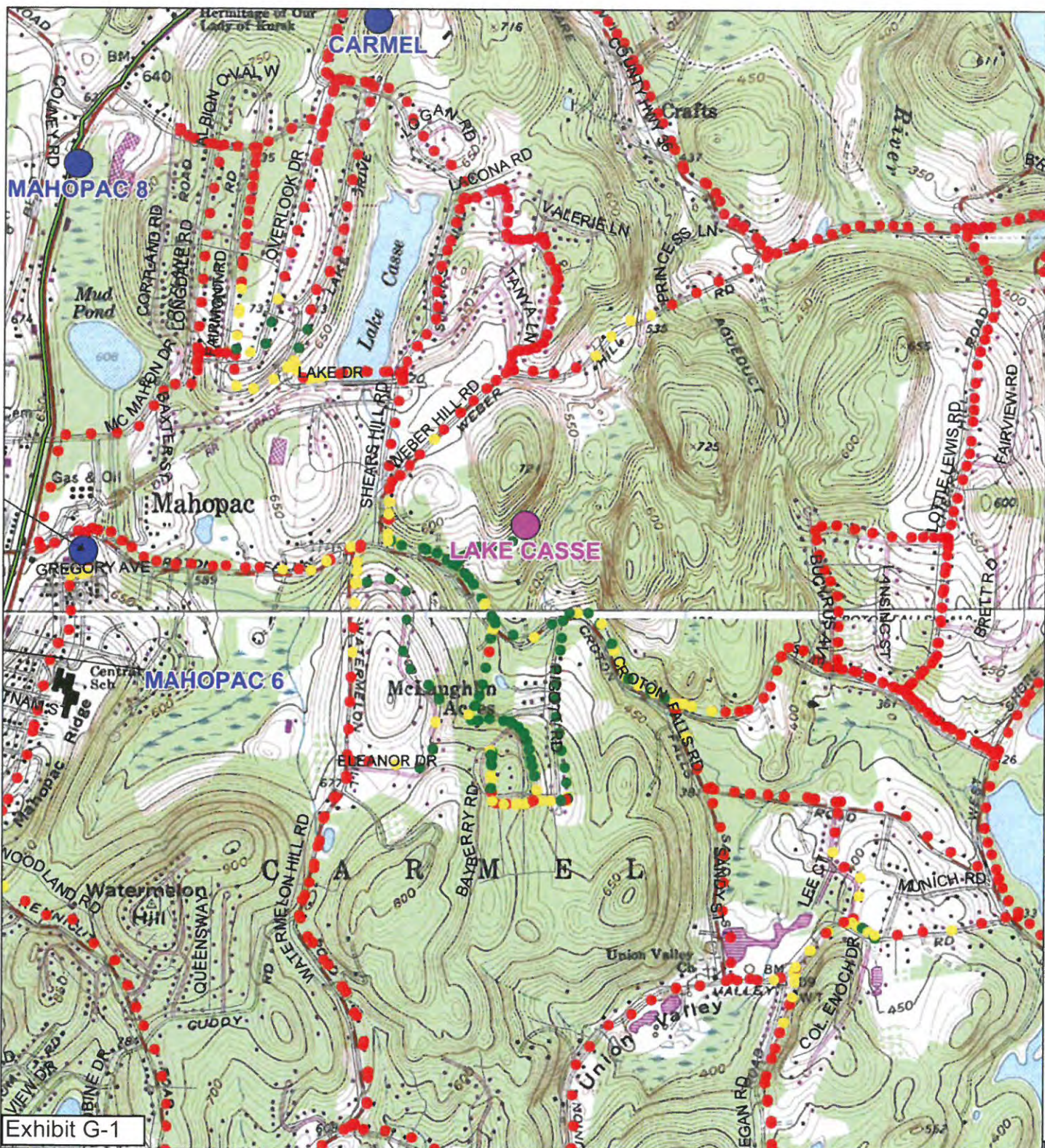


Exhibit G-1

Lake Casse

2100 MHz CW Test
@ 136'

254 Croton Falls Road
Mahopac, NY 10541



Verizon Wireless Existing Site



Verizon Wireless Proposed Site

- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

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PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019

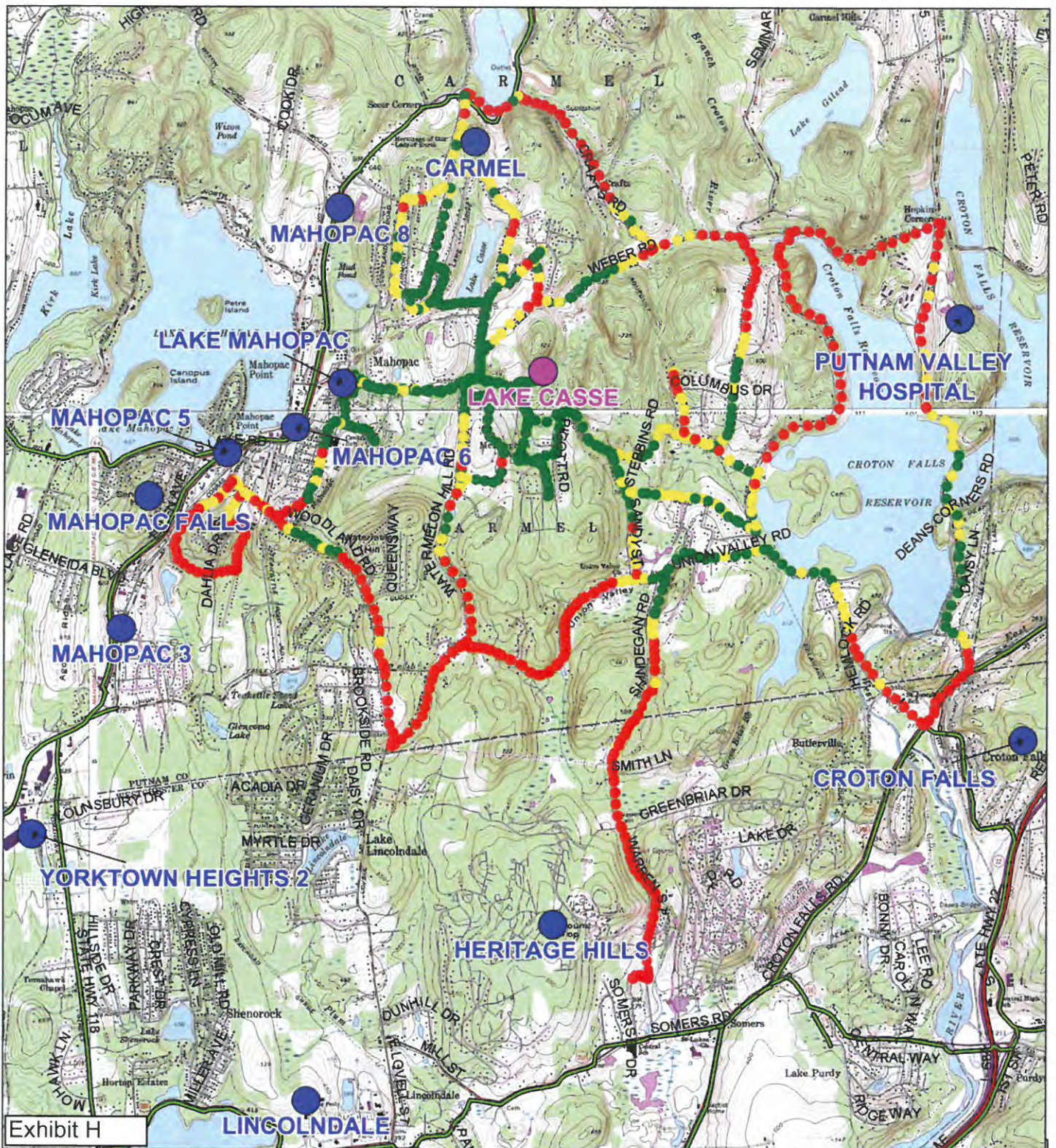


Exhibit H

Lake Casse

700 MHz CW Test
@ 176'

254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

verizon 

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Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019

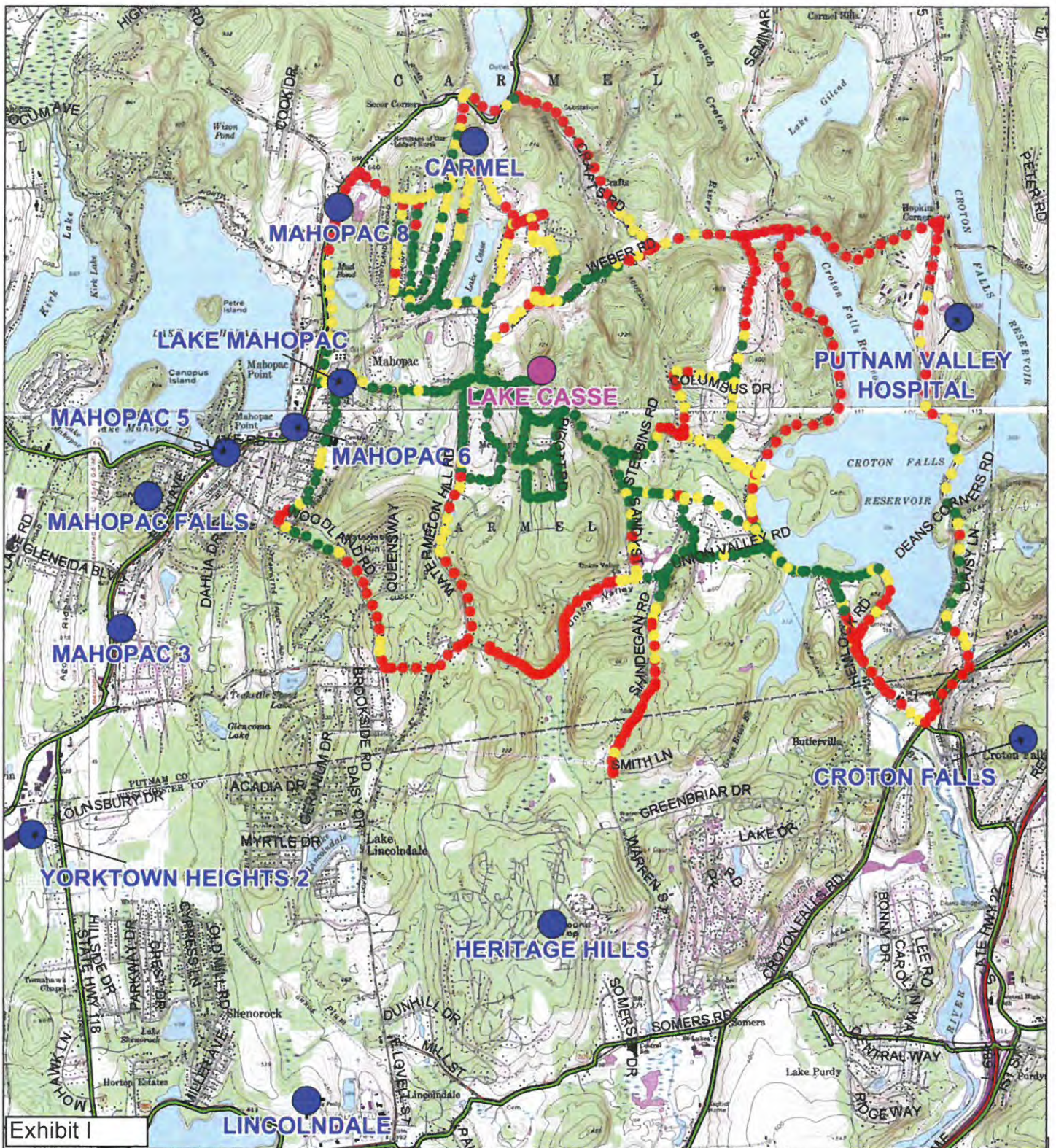


Exhibit I

Lake Casse

700 MHz CW Test
@ 156'

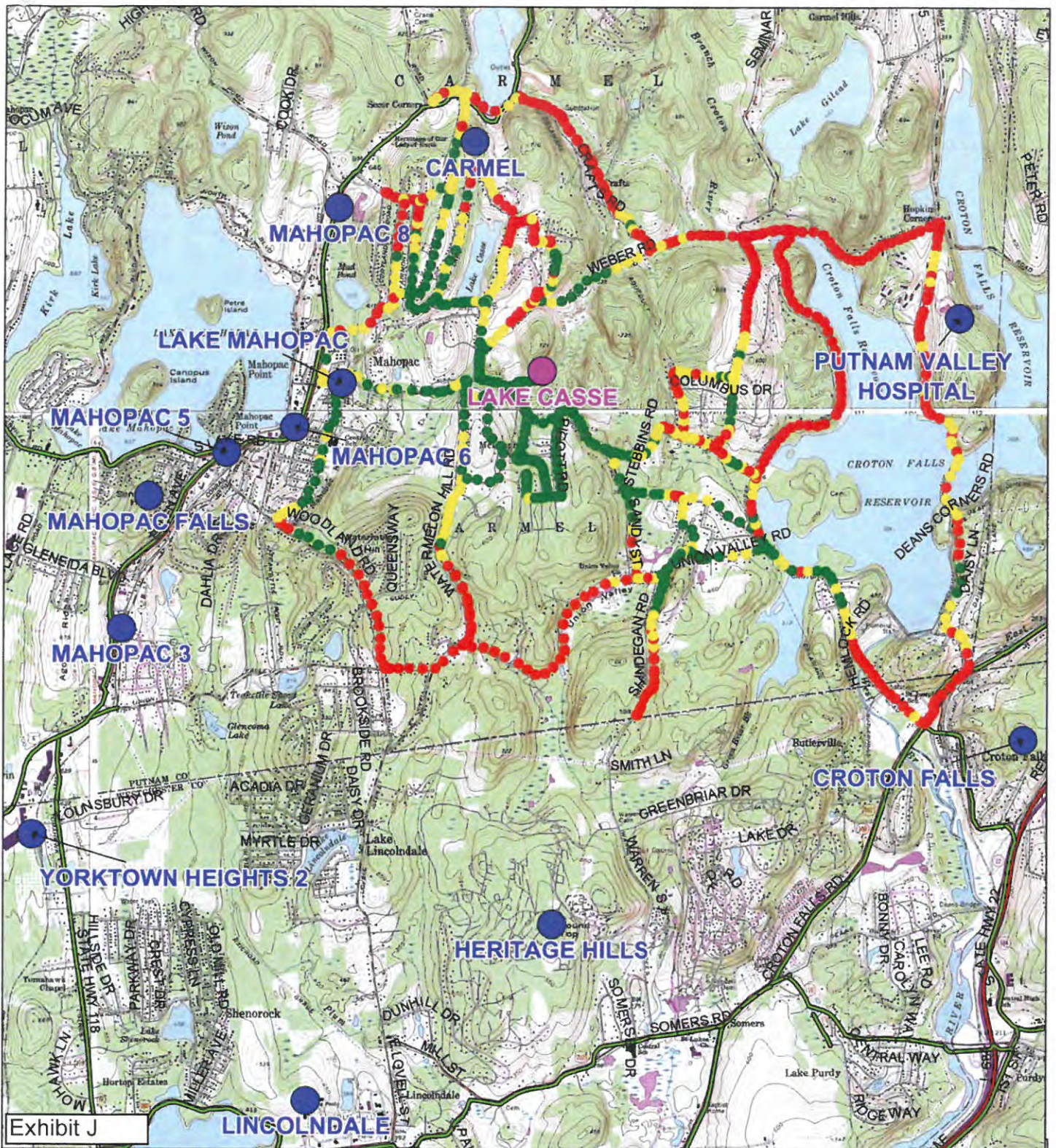
254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

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PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019



Lake Casse

700 MHz CW Test
@ 136'

254 Croton Falls Road
Mahopac, NY 10541

- Verizon Wireless Existing Site
- Verizon Wireless Proposed Site
- Reliable In-Building Suburban Coverage (≥ -95 dBm RSRP)
- Reliable In-Vehicle Coverage (≥ -105 dBm RSRP)
- Unreliable In-Vehicle Coverage (< -105 dBm RSRP)

verizon✓

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by PierCon Solutions LLC
3/25/2019

LANE APPRAISALS, INC.

Real Estate Valuation Consultants

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LARCHMONT, NEW YORK 10538
914-834-1400
FAX 914-834-1380

E Mail : lane.app@verizon.net

JOHN W. LANE, MAI (1907-1993)

March 19, 2019

Honorable Chairman Maxwell and
Members of the Zoning Board of Appeals
Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

Re: Proposed Wireless Telecommunications Facility
254 Croton Falls Road, Mahopac, NY

Dear Chairman Maxwell and
Members of the Zoning Board of Appeal:

In accordance with the request of Homeland Towers, LLC ("Homeland"), I have inspected the above site and have completed an analysis of the potential impact of the proposed public utility wireless telecommunications facility including a 160 foot tower ("Facility"), which is to be located on the property at 254 Croton Falls Road, in the Town of Carmel, Mahopac P.O., NY ("Property"). Homeland Towers, LLC (the "Applicant"), is requesting permission to erect the Facility at the Property. This analysis is to be used in connection with the application for approval which is being presented to the appropriate municipal board.

The Property is known and designated as Section 65.19, Block 1, Lot 43 on the Assessment Maps of Carmel, NY. The site is located in a "R-Residential" zone where the Facility is permitted by Special Use Permit. This site has 26.57 acres of land area to the north of Croton Falls Road, in the Town of Carmel, Mahopac P.O., NY. No changes in the lot size are contemplated. All required setbacks will be met.

The proposed Facility will be located on an undeveloped portion of the property, north of Croton Falls Road. I have reviewed the visual report prepared by Saratoga Associates for the character of the views of the proposed Facility which will be accessed via an existing access driveway and will run north from Croton Falls Road, to the facility.

The proposed Facility will consist of a 160 foot high, "monopole" with panel antenna mounted on the pole. All cables will be run within the monopole. The compound will have a protective fence and gate. Additionally the compound will contain Verizon's equipment on a concrete pad, with room reserved within the compound area for additional carriers and public safety equipment in the future. Future installations may include prefabricated shelters or outdoor equipment on pads provided, however, the compound will not be visible from the surrounding residential homes and public roads.

At the request of Homeland Towers, the subject property was inspected to consider the effect of the proposed Facility upon the value of the

surrounding properties. In connection therewith, I have made use of an ongoing study of sales of homes within a close proximity of similar communications facilities in Orange, Westchester, Putnam and Rockland Counties. I offer the following comments regarding the locations and value trends noted in areas which have similar communications facilities. There are thirteen separate studies, covering various time periods ranging from 2007 to the present.

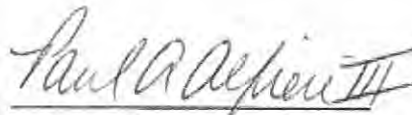
We have completed more than a dozen other such studies in additional, nearby counties in New York State. In every instance, the results have been consistent and similar. There is no diminution in the value of homes with a view of a wireless telecommunications facility.

The sales which were utilized in this analysis are summarized on the thirteen, attached exhibits. All of these studies involved communication monopolies or towers, and in no instance did I find that views of such communication facilities had any detrimental effect on property values. There was a normal range of value with typical increases or decreases in value according to the market for homes regardless of whether or not they had views of communications facilities.

My qualifications and experience are detailed at the end of this report in an attachment titled "Qualification of Appraiser". In sum, I am designated as an MAI (Member of the Appraisal Institute); I am a certified general appraiser in the State of New York and an accredited New York State Department of Transportation, Right of Way Appraiser, and have been qualified as an expert by New York Courts in real estate valuation. I have been engaged exclusively in appraising real estate since 1984, including appraising values of residential and commercial properties in New York.

As a result of this analysis and my inspection of the site in this case, it is my expert opinion that the installation, presence, and/or operation of the proposed Facility will not result in the diminution of property values or reduce the marketability of properties in the immediate area. If you have any questions, please contact me.

Sincerely,

A handwritten signature in dark ink, reading "Paul A. Alfieri III". The signature is written in a cursive, flowing style with a horizontal line underneath the name.

Paul A. Alfieri III, MAI
Certified General Appraiser
State of New York #46-9780
March 19, 2019

Exhibit 1, 94 Gleneida Avenue, Mahopac, Putnam County, NY

A 121' flagpole type tower located at 94 Gleneida Avenue, at the corner of Vink Drive, in the Town of Carmel, Mahopac P.O., NY. The following sales are located on the surrounding streets and are within sight of the tower:

2016 - 2018 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
4 Kyle Ct	\$ 355,000	4-20-2017	2,500	\$142
11 Kyle Ct	\$ 355,000	6-20-2017	2,160	\$164
2 Collier Dr W	\$ 362,000	7-18-2017	2,024	\$179
2 Collier Dr	\$ 222,500	8-03-2018	1,300	\$171
7 North Dr	\$ 322,000	8-23-2018	1,542	\$209
3 Circle Dr	\$ 190,000	5-23-2016	1,344	\$141
1 Raymond Dr	\$ 210,750	5-26-2017	1,640	\$129
4 Raymond Dr	\$ 135,000	9-22-2017	600	\$225
2 East Dr	\$ 365,000	11-15-2018	2,376	\$154
10 Ridge Rd	\$ 335,000	9-15-2016	1,464	\$229
6 Ridge Rd	\$ 370,000	12-9-2016	1,715	\$178

Average Sales Price per Square Foot: \$178

The following properties are in the same neighborhood but have no view of the tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
16 Wyndham Ln	\$ 575,000	10-11-2016	4,198	\$137
44 Wyndham Ln	\$ 512,000	1-12-2017	3,013	\$170
33 Wyndham Ln	\$ 540,000	1-15-2016	4,333	\$125
41 Wyndham Ln	\$ 545,000	6-30-2016	3,867	\$141
29 Wyndham Ln	\$ 542,500	8-01-2017	2,718	\$200
48 Wyndham Ln	\$ 548,500	8-14-2018	3,744	\$147
29 Glenna Dr	\$ 340,000	5-15-2017	1,456	\$234
30 Glenna Dr	\$ 279,900	8-29-2016	1,800	\$156
24 Glenna Dr	\$ 315,000	1-06-2017	1,978	\$159
25 Hill & Dale Rd	\$ 430,000	9-14-2017	2,308	\$186
28 Wainwright Dr	\$ 369,500	5-31-2016	1,718	\$215
11 Fowler Av	\$ 264,050	3-03-2017	1,457	\$181
18 Collier Dr E	\$ 269,850	7-20-2018	2,004	\$135
1 Ridge Rd	\$ 295,000	6-26-2017	1,487	\$198
7 Sunset Ridge	\$ 530,000	12-29-2017	3,198	\$166
21 Sunset Ridge	\$ 368,000	11-5-2018	1,640	\$226
27 Sunset Ridge	\$ 460,000	9-01-2017	3,432	\$134
63 Fair St	\$ 267,000	7-24-2017	1,414	\$189
64 Fair St	\$ 349,900	7-31-2018	1,624	\$215
65 Fair St	\$ 196,000	1-30-2017	1,324	\$148
83 Fair St	\$ 349,000	11-7-2017	1,624	\$215
31 De Colores Dr	\$ 365,000	9-05-2018	2,184	\$167
24 De Colores Dr	\$ 210,000	9-29-2016	1,765	\$119
7 Waring Dr	\$ 482,500	6-23-2016	3,314	\$146
15 Waring Dr	\$ 474,000	6-17-2016	2,694	\$176
41 Waring Dr	\$ 385,000	12-20-2016	1,600	\$241
62 Waring Dr	\$ 440,000	1-22-2016	2,753	\$160
3667 Route 301	\$ 545,000	6-01-2018	3,392	\$161

Average Sales Price per Square Foot: \$173

Study indicates that the properties with views of a communications tower have a greater average price per square foot than those without a view of a communications tower.

Exhibit 2, 55 McAlpin Avenue, Mahopac, Putnam County, NY

A 120' flagpole type tower located at 55 McAlpin Avenue, at the corner of See Avenue and east of Route 6, in the Town of Carmel, Mahopac P.O., NY. The following sales are located on the surrounding streets and are within sight of the tower:

2016 - 2018 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
20 Front St	\$ 300,000	6-14-2017	1,512	\$198
10 Miller Av	\$ 179,900	5-10-2017	840	\$214
5 Baldwin St	\$ 260,000	7-12-2016	1,100	\$236
3 Baldwin St	\$ 235,500	6-26-2017	1,200	\$196
1 Baldwin St	\$ 332,000	12-19-2016	1,798	\$185
160 See Av	\$ 250,000	7-27-2016	1,576	\$159
143 See Av	\$ 357,000	9-16-2016	1,762	\$203
31 Wright Av	\$ 240,000	8-01-2018	974	\$246
28 Wright Av	\$ 310,000	1-03-2018	1,324	\$234
20 McAlpin Av	\$ 310,000	8-16-2017	1,824	\$170
12 McAlpin Av	\$ 447,500	11-28-2018	1,798	\$249
18 McAlpin Av	\$ 372,000	11-3-2016	2,122	\$175

Average Sales Price per Square Foot: \$205

The following properties are in the same neighborhood but have no view of the

tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
21 M & M Ln	\$ 284,900	10-11-2017	2,052	\$139
27 Tanager Rd	\$ 345,000	1-12-2017	2,210	\$156
45 Tanager Rd	\$ 400,000	1-15-2016	2,745	\$146
45 Lakeview Terr	\$ 250,500	6-30-2016	1,856	\$135
4 Olympus Dr	\$ 450,000	8-01-2016	2,602	\$173
535 Kennicut Hill Rd	\$ 312,000	8-14-2018	1,204	\$259
254 Dahlia Dr	\$ 295,000	5-15-2016	1,708	\$173
17 Mt Hope Rd	\$ 277,900	8-29-2016	1,118	\$248
40 Mt Hope Rd	\$ 231,450	1-06-2016	1,732	\$134
43 Mt Hope Rd	\$ 185,000	9-14-2019	1,320	\$140
7 Lakeview Dr	\$ 360,000	5-31-2018	1,843	\$195
2 Lakeview Dr	\$ 342,000	3-03-2016	1,184	\$289
10 Lakeview Dr	\$ 365,000	7-20-2018	2,593	\$141
54 Lakeview Dr	\$ 235,000	6-26-2018	1,824	\$129
107 Lakeview Dr	\$ 315,000	12-29-2018	1,920	\$164
17 Highridge Rd	\$ 360,000	11-5-2016	1,667	\$216
45 Highridge Rd	\$ 439,000	9-01-2018	2,476	\$177
30 Greenfield Rd	\$ 364,950	7-24-2017	1,512	\$241
33 Greenfield Rd	\$ 460,000	7-31-2018	2,940	\$156
30 Mayfair Ln	\$ 360,000	1-30-2017	1,686	\$214
60 N Ridge Rd	\$ 681,106	11-7-2018	2,568	\$265
14 Overhill Rd	\$ 329,900	9-05-2016	1,476	\$224
70 Heather Dr	\$ 225,000	9-29-2016	1,200	\$188
32 Overlook Dr	\$ 404,000	6-23-2018	2,350	\$172
7 Odessa Rd	\$ 412,500	6-17-2018	2,276	\$181
14 Longdale Rd	\$ 403,500	12-20-2018	2,372	\$170
24 Baxter Ct	\$ 425,000	1-22-2018	1,976	\$215
28 Baxter Ct	\$ 392,080	1-22-2017	1,976	\$198
23 Baxter Ct	\$ 295,000	1-22-2016	1,336	\$221
31 Strawberry Fields Ln	\$ 639,000	6-01-2018	3,694	\$173

Average Sales Price per Square Foot: \$188

Study indicates that the properties with views of a communications tower have a greater average price per square foot than those without a view of a communications tower.

Exhibit 3, 51 Crest Avenue, Mahopac, Putnam County, NY

A 195' lattice tower located at 51 Crest Drive, south of Lake Mahopac, in the Town of Carmel, Mahopac P.O., NY. The following sales are located on the surrounding streets and are within sight of the tower:

2016 - 2018 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
718 Hill Dr	\$ 235,000	9-20-2017	1,128	\$208
722 Hill Dr	\$ 260,000	1-08-2018	1,124	\$231
29 Mary Av	\$ 321,000	10-22-2018	1,638	\$196
66 Ellen Av	\$ 97,500	10-31-2016	726	\$134
76 Ellen Av	\$ 160,000	5-24-2018	1,722	\$ 93
65 Ellen Av	\$ 306,000	12-27-2018	1,678	\$182
12 Crest Dr	\$ 200,000	6-15-2018	1,068	\$187
9 Crest Dr	\$ 330,350	12-30-2016	1,080	\$306
34 Indian Av	\$ 290,000	9-28-2016	1,900	\$153
4 Elm Ct	\$ 657,500	5-12-2017	5,016	\$131
5 Locust Ct	\$ 275,000	3-23-2017	989	\$278
30 Colonial Dr	\$ 630,000	2-18-2016	3,833	\$164
34 Colonial Dr	\$ 335,000	2-20-2018	1,381	\$243
25 Colonial Dr	\$ 255,000	3-17-2016	1,444	\$180
751 South Lake Blvd	\$ 490,000	2-15-2018	1,008	\$486
32 Middle Branch Rd	\$ 380,000	9-19-2018	1,852	\$205
288 Bucks Hollow Rd	\$ 230,000	10-3-2016	900	\$256
45 Lakeview Terr	\$ 250,000	5-24-2016	1,856	\$135
4 Olympus Dr	\$ 450,000	9-20-2016	2,602	\$173
535 Kennicut Hill Rd	\$ 312,000	12-19-2018	1,204	\$259
254 Dahlia Dr	\$ 295,000	3-08-2016	1,708	\$173
233 Dahlia Dr	\$ 352,000	3-30-2018	1,796	\$196
7 Astor Dr	\$ 565,000	8-07-2017	2,940	\$192
12 Astor Dr	\$ 450,000	3-16-2016	2,900	\$155
49 Tulip Rd	\$ 379,000	8-08-2018	1,720	\$220

Average Sales Price per Square Foot: \$205

The following properties are in the same neighborhood but have no view of the tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
15 Indian Av	\$ 355,000	6-23-2016	1,668	\$213
25 Senior Av	\$ 650,000	6-20-2016	3,575	\$182
866 South Lake Blvd	\$ 388,000	10-25-2018	1,932	\$201
14 Gleneida Blvd	\$ 462,000	9-25-2017	2,398	\$193
34 Gleneida Blvd	\$ 352,500	2-16-2017	1,342	\$263
12 Muscoot Rd	\$ 293,000	9-06-2018	1,488	\$197
10 Muscoot Rd	\$ 247,000	4-13-2017	1,400	\$176
17 Pine Cone Rd	\$ 389,900	5-31-2018	2,020	\$193
410 Baldwin Place Rd	\$ 200,000	2-05-2018	996	\$201
782 South Lake Blvd	\$ 610,000	1-24-2017	4,185	\$146
10 Veschi Ln N	\$ 344,500	6-28-2018	1,802	\$191
31 Ryan Ct	\$ 603,000	8-23-2018	3,632	\$166
26 Ryan Ct	\$ 557,800	8-31-2018	2,992	\$186
133 Dahlia Dr	\$ 380,000	8-22-2018	1,908	\$199
61 Astor Dr	\$ 430,000	8-15-2018	2,170	\$198
151 Dahlia Dr	\$ 350,000	1-18-2018	2,250	\$156
1 Tulip Rd	\$ 350,000	12-29-2017	2,296	\$152

Average Sales Price per Square Foot: \$189

Study indicates that the properties with views of a communications tower have a greater average price per square foot than those without a view of a communications tower.

Exhibit 4, 1181 Route 6, Mahopac, Putnam County, NY

Two monopole towers approximately 120' each, located south of 1181 Route 6, in the Mahopac area of the Town of Carmel, Mahopac P.O., NY. The following sales are located on the surrounding streets and are within sight of the tower:

2016 - 2018 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
44 Nicole Way	\$ 450,000	8-02-2017	2,488	\$181
51 Nicole Way	\$ 325,500	4-18-2018	2,236	\$146
129 Overlook Dr	\$ 460,000	9-19-2018	2,320	\$198
133 Overlook Dr	\$ 315,000	8-02-2018	1,064	\$296
130 Overlook Dr	\$ 325,000	2-17-2016	2,456	\$132
106 Overlook Dr	\$ 165,000	7-30-2018	1,100	\$150
68 Albion Oval	\$ 258,000	4-25-2016	1,177	\$219
110 Baldwin Ln	\$ 375,000	8-29-2017	2,175	\$172
282 Shear Hill Rd	\$ 375,000	9-12-2016	1,812	\$207
278 Shear Hill Rd	\$ 282,500	5-16-2018	1,521	\$186
244 Shear Hill Rd	\$ 370,000	7-19-2016	1,812	\$204
154 Lake Dr	\$ 450,000	9-15-2016	3,672	\$123
123 Lake Dr	\$ 355,000	7-31-2018	1,900	\$187
139 Lake Dr	\$ 475,000	2-23-2017	2,065	\$230

Average Sales Price per Square Foot:

\$188

The following properties are in the same neighborhood but have no view of the

tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
529 N Lake Blvd	\$ 535,000	11-23-2016	3,876	\$138
390 E Lake Blvd	\$ 315,000	10-26-2017	1,096	\$287
73 Baldwin Ln	\$ 299,500	1-12-2017	1,056	\$284
32 Baldwin Ln	\$ 380,000	1-04-2016	2,936	\$129
26 Baldwin Ln	\$ 185,000	7-29-2016	1,000	\$185
19 Albion Oval	\$ 300,000	5-01-2018	1,482	\$202
41 Albion Oval	\$ 380,000	8-26-2016	2,060	\$184
45 Albion Oval	\$ 390,000	12-21-2018	2,220	\$176
30 Albion Oval	\$ 350,000	10-23-2018	1,858	\$188
59 Albion Oval	\$ 254,639	3-15-2016	1,122	\$120
205 Shear Hill Rd	\$ 259,000	2-08-2018	944	\$274
98 Shear Hill Rd	\$ 390,000	9-12-2016	1,836	\$212
4 Lacona Rd	\$ 415,000	1-18-2018	2,104	\$197
20 Lacona Rd	\$ 352,500	2-21-2017	1,904	\$185
24 Lacona Rd	\$ 265,000	7-29-2016	1,899	\$140
32 Lacona Rd	\$ 340,930	4-04-2017	1,648	\$207
13 Lacona Rd	\$ 425,000	1-10-2018	2,374	\$179
22 Sheryl Ln	\$ 573,000	1-04-2016	3,926	\$146
12 Sheryl Ln	\$ 410,000	11-9-2018	1,982	\$207
10 Sheryl Ln	\$ 490,000	1-27-2017	3,113	\$157
114 Lake Dr	\$ 410,000	3-09-2017	2,156	\$190
94 Lake Dr	\$ 385,000	2-17-2016	2,296	\$168
59 Stuart Rd	\$ 360,000	2-17-2016	2,118	\$170
54 Stuart Rd	\$ 375,000	6-17-2016	1,990	\$188
38 Tanya Ln	\$ 433,000	8-23-2018	2,070	\$209
34 Tanya Ln	\$ 347,000	8-30-2016	1,990	\$174
72 Cortlandt Rd	\$ 342,500	8-12-2016	2,008	\$171
61 Cortlandt Rd	\$ 435,000	8-10-2016	3,434	\$127
74 Longdale Rd	\$ 390,000	6-08-2016	2,230	\$175
63 Longdale Rd	\$ 412,900	12-7-2018	1,950	\$212
544 Crosshill Ln	\$ 380,000	4-11-2016	2,194	\$173
543 Crosshill Ln	\$ 363,000	3-28-2017	1,800	\$202
63 Overlook Dr	\$ 229,000	9-15-2016	2,000	\$115
83 Overlook Dr	\$ 281,915	12-15-2017	1,284	\$220
78 Overlook Dr	\$ 380,000	11-9-2017	1,560	\$244

Average Sales Price per Square Foot:

\$187

Study indicates that the properties with views of a communications tower have a virtually equal average price per square foot as those without a view of a communications tower.

Exhibit 5, Sky Lane, Philipstown, Putnam County, NY

A 400' former radio guyed tower located at the top of Sky Lane, east of Ridge Road, in the Town of Philipstown, NY. The following sales are located on the surrounding streets and are within sight of the tower:

2015 - 2017 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
20 Steuben Rd	\$ 227,000	1-06-2016	1,316	\$172
15 Steuben Rd	\$ 268,000	8-21-2017	1,384	\$194
7 Steuben Rd	\$ 210,000	9-02-2015	1,124	\$187
21 Valley Ln	\$ 215,000	3-21-2016	1,168	\$184
420 Sprout Brook Rd	\$ 307,500	6-23-2015	1,728	\$178
418 Sprout Brook Rd	\$ 379,000	8-03-2016	2,420	\$157
384 Sprout Brook Rd	\$ 135,000	2-21-2017	768	\$176
338 Sprout Brook Rd	\$ 352,000	6-22-2017	1,808	\$195
334 Sprout Brook Rd	\$ 269,000	2-09-2015	1,816	\$148
326 Sprout Brook Rd	\$ 300,000	2-01-2017	1,200	\$250
322 Sprout Brook Rd	\$ 419,800	5-13-2015	2,671	\$157
319 Sprout Brook Rd	\$ 235,000	4-20-2017	1,159	\$203
308 Sprout Brook Rd	\$ 300,000	10-18-2017	1,660	\$181
303 Sprout Brook Rd	\$ 325,000	1-14-2015	1,414	\$230
19 Sky Ln	\$ 687,000	6-29-2017	2,741	\$251
39 Mountain Dr	\$ 447,500	7-22-2015	2,400	\$186

Average Sales Price per Square Foot: \$190

The following properties are in the same neighborhood but have no view of the tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
159 Old Albany Post	\$ 210,000	11-30-2015	1,100	\$191
200 Old Albany Post	\$ 370,000	8-19-2016	1,868	\$198
196 Old Albany Post	\$ 370,000	5-19-2017	1,776	\$208
180 Old Albany Post	\$ 480,000	12-18-2014	3,517	\$136
20 Old Albany Post	\$ 289,000	6-12-2015	1,554	\$186
516 Sprout Brook Rd	\$ 335,000	1-29-2017	1,503	\$223
504 Sprout Brook Rd	\$ 315,000	8-05-2016	1,750	\$180
495 Sprout Brook Rd	\$ 520,000	4-27-2016	2,904	\$179
492 Sprout Brook Rd	\$ 325,000	12-11-2015	2,188	\$149
471 Sprout Brook Rd	\$ 365,000	3-15-2015	1,860	\$196
54 Steuben Rd	\$ 270,000	3-27-2015	1,512	\$179
90 Steuben Rd	\$ 289,000	6-09-2017	1,456	\$198
60 Steuben Rd	\$ 300,000	6-06-2016	1,260	\$238
62 Steuben Rd	\$ 330,000	9-27-2017	1,823	\$181
72 Steuben Rd	\$ 300,000	2-23-2015	1,700	\$176

Average Sales Price per Square Foot: \$188

Study indicates that the properties with views of a radio tower and properties without a view of a radio tower have virtually equal average price per square feet, in this specific neighborhood.

Exhibit 6, 1924 Route 9, Philipstown, Putnam County, NY

A monopine located on the hillside behind 1924 Route 9 in Philipstown, NY. The following sale are located within winter view of the communications tower:

2015 - 2017 Study

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
1910 Route 9	\$630,000	9-30-2016	2,688	\$234
1941 Route 9	\$356,000	2-13-2015	2,610	\$136
41 Daffodil Hill Rd	\$1,350,000	3-15-2017	3,652	\$370
14 Stone Ridge Rd	\$635,000	6-06-2016	2,522	\$252
8 Stone Ridge Rd	\$375,000	7-20-2017	1,060	\$354
Average price per square foot:				\$269

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sale Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
88 Snake Hill Rd	\$1,050,000	5-02-2017	3,638	\$289
18 Coleman Rd	\$749,000	9-28-2015	3,136	\$239
71 Travis Corners Rd	\$549,000	2-24-2015	1,561	\$352
85 Travis Corners Rd	\$736,000	5-22-2017	3,567	\$206
70 Frazier Rd	\$555,000	4-19-2017	2,882	\$193
89 Frazier Rd	\$380,000	11-28-2016	1,332	\$285
64 Kona Way	\$585,000	3-03-2016	2,316	\$253
Average price per square foot:				\$259

Study indicates that the properties with views of a communications tower have a slightly greater average price per square foot than those without a view of a communications tower.

Exhibit 7, Lewisboro, Westchester County, NY

A 130' monopole located at the Lewisboro Town Park on Route 35, in Cross River, NY. The following sales are located on the surrounding streets and are very close to the communications tower, within sight:

2012 - 2016 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
1046 Route 35	\$ 542,000	6-30-2014	2,232	\$242
1 Buck Run	\$ 419,000	6-25-2015	1,784	\$235
7 Buck Run	\$ 578,000	4-10-2014	2,560	\$225
12 Apple Hill Ct	\$ 891,000	2-24-2012	3,416	\$260
4 Apple Hill Ct	\$1,100,000	9-20-2013	5,664	\$194
5 Pamela Ln	\$ 630,000	6-27-2014	2,713	\$232
1173 Old Post Rd	\$ 480,000	11-4-2013	2,112	\$227
5 Hunts Farm Rd	\$ 515,000	6-12-2014	2,040	\$252
14 Hunts Farm Rd	\$ 783,000	7-14-2015	3,236	\$242
19 Hunts Farm Rd	\$ 725,000	4-25-2012	2,973	\$243
42 Hunts Farm Rd	\$ 885,000	9-04-2013	3,179	\$278

Average Sales Price per Square Foot: \$239

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
58 Mark Mead Rd	\$ 395,000	2-18-2014	1,233	\$320
924 Route 35	\$ 325,000	7-17-2014	1,433	\$226
3 Debbie Ln	\$ 533,000	9-11-2012	2,548	\$209
1195 Route 35	\$ 390,000	6-06-2014	2,000	\$195
1191 Route 35	\$ 312,500	2-28-2014	1,896	\$164
20 Hunts Farm Rd	\$ 830,000	5-09-2014	3,266	\$254
21 Hunts Farm Rd	\$ 850,000	12-5-2013	4,500	\$188
22 Hunts Farm Rd	\$ 810,000	8-16-2016	3,444	\$235
23 Hunts Farm Rd	\$ 780,000	7-20-2016	3,503	\$223
24 Hunts Farm Rd	\$ 824,500	1-17-2014	3,333	\$247
27 Hunts Farm Rd	\$ 619,000	7-28-2014	3,300	\$187
33 Hunts Farm Rd	\$ 700,000	6-27-2013	2,715	\$257

Average Sales Price per Square Foot: \$225

Study indicates that the properties with views of a communications tower have a greater average price per square foot than those without a view of a communications tower.

Exhibit 8, New Castle, Westchester County, NY

A 130' monopole constructed in 2015 and located on a nursery property on Armonk Road, in the Town of New Castle, NY. The following sales are located on the surrounding streets and are very close to the communications tower:

2015 - 2016 Study

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
768 Armonk Rd	\$ 470,000	9-15-2016	1,416	\$332
785 Armonk Rd	\$1,266,000	8-26-2016	5,910	\$214
20 Hollow Ridge Rd	\$1,625,000	5-01-2015	5,695	\$285
23 Hollow Ridge Rd	\$3,350,000	9-11-2015	8,976	\$373
77 Whippoorwill Lk	\$1,700,000	12-7-2015	5,000	\$340
72 Whippoorwill Lk	\$1,875,000	9-29-2015	6,617	\$304
Average Sales Price per Square Foot:				\$308

These properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
66 Tripp St	\$ 870,500	1-11-2016	2,972	\$293
30 Roseholm Pl	\$ 764,000	5-21-2015	3,303	\$231
6 Whippoorwill Ct	\$1,260,000	9-21-2015	4,430	\$284
340 Whippoorwill Rd	\$ 885,000	3-30-2016	3,184	\$278
335 Whippoorwill Rd	\$1,500,000	5-02-2016	5,566	\$269
20 Bessel Ln	\$3,648,888	1-06-2015	8,200	\$445
82 Carolyn Pl	\$1,900,000	12-7-2015	6,662	\$285
50 Carolyn Pl	\$2,540,000	9-29-2015	7,675	\$331
Average Sales Price per Square Foot:				\$302

Study indicates roughly equal value for properties, with and without a view of a communications tower.

Exhibit 9, Pound Ridge, Westchester County, NY

A 130' monopole located on a Town site at 89 Westchester Avenue in Pound Ridge, NY. The following sales have a view of the communications tower:

2014 - 2017 STUDY

These properties have a view of the communications tower.

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
17 Trinity Pass Rd	\$885,000	8-10-2016	2,850	\$311
97 Westchester Av	\$2,100,000	7-12-2016	3,853	\$545
24 Pine Dr	\$640,000	12-2-2016	3,112	\$206
32 Pine Dr	\$795,000	7-15-2016	3,456	\$230
10 Trinity Ln	\$640,000	7-18-2014	2,152	\$297
12 Hemlock Hill Dr	\$1,050,000	8-17-2016	3,205	\$328

Average sales price for properties with a view: \$320

Average sales price for properties without 97 Westchester Av \$274

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
57 Upper Shad Rd	\$575,000	7-31-2014	2,040	\$282
49 Upper Shad Rd	\$617,500	6-15-2016	3,234	\$191
17 Bayberry Way	\$750,000	9-29-2015	3,408	\$220
140 Westchester Av	\$985,000	5-08-2014	2,838	\$347
33 Hemlock Hill Dr	\$1,200,000	3-24-2016	4,023	\$298
33 Hemlock Hill Dr	\$1,162,500	7-28-2014	4,023	\$289
34 Hemlock Hill Dr	\$568,000	7-30-2014	2,102	\$270

Average sales price for properties with no view of the tower \$271

Study indicates higher prices for homes with a view of a communications tower if the property next door to the Tower is considered. If the sale at 97 Westchester Avenue is withheld from the average calculation, then the average price per square is virtually the same for properties with and without a view of the Tower.

Exhibit 10, Pound Ridge, Westchester County, NY

A 155' monopine tower, constructed in 2007 and located off Adams Lane in Pound Ridge, NY. The following properties have a view of the communications tower:

2014 - 2017 STUDY

These properties have a view of the communications tower.

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
21 Donbrook Rd	\$799,900	7-28-2016	2,546	\$315
29 Donbrook Rd	\$1,030,000	9-14-2016	4,227	\$244
51 Salem Road	\$1,675,000	9-15-2015	5,993	\$279
65 Salem Road	\$527,000	1-13-2017	1,521	\$346
65 Salem Road	\$360,000	3-24-2014	1,521	\$237

Average sales price for properties with a view: \$284

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
21 Salem Rd	\$407,062	3-14-2014	2,529	\$160
21 Salem Rd	\$715,000	3-21-2016	2,529	\$283
35 Salem Road	\$1,375,000	9-12-2014	5,114	\$269
54 Old Stone Hill Rd	\$4,050,000	4-23-2014	6,273	\$646
90 Old Stone Hill Rd	\$757,500	11-17-2015	2,876	\$263
147 Salem Rd	\$415,000	5-01-2015	1,749	\$237
157 Salem Rd	\$510,000	4-28-2015	3,222	\$158
36 Kitchawan Rd	\$485,000	1-19-2017	2,412	\$201
167 Salem Rd	\$1,327,500	11-22-2016	4,199	\$316

Average sales price for properties with no view of the tower \$282

Study indicates very similar prices on homes with no view of the communications tower and with a view of the communications tower.

Exhibit 11, Somers, Westchester County, NY

A 100' monopole located at the top of the West Hill in the Heritage Hills Condominium complex Somers, NY. The following sales have a view of the communications tower:

2014 - 2016 STUDY

These properties have a direct view of the communications tower.

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
346D Heritage Hills	\$305,000	7-29-2015	1,168	\$261
348A Heritage Hills	\$315,000	1-07-2015	1,428	\$221
349A Heritage Hills	\$362,000	3-20-2015	1,435	\$252
351E Heritage Hills	\$331,500	11-15-2015	1,435	\$231
352C Heritage Hills	\$622,500	6-24-2016	1,973	\$316
449A Heritage Hills	\$350,000	7-18-2014	1,353	\$259
451D Heritage Hills	\$400,000	1-04-2016	1,265	\$316
462B Heritage Hills	\$517,000	8-28-2014	1,905	\$271
464B Heritage Hills	\$370,000	4-23-2014	1,265	\$292
464C Heritage Hills	\$549,000	6-13-2016	1,793	\$306

Average sales price for unit with view of tower: \$273

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Living Area</u>	<u>Price/SF</u>
332A Heritage Hills	\$359,000	7-08-2015	1,550	\$232
332B Heritage Hills	\$395,000	12-23-2016	1,550	\$255
332B Heritage Hills	\$417,000	8-06-2015	1,550	\$269
333C Heritage Hills	\$341,000	11-3-2014	1,435	\$238
339B Heritage Hills	\$390,000	11-18-2016	1,550	\$252
340B Heritage Hills	\$389,000	8-02-2016	1,594	\$244
355B Heritage Hills	\$389,000	1-12-2016	1,484	\$262
355D Heritage Hills	\$495,000	10-3-2014	1,793	\$276
358A Heritage Hills	\$435,000	2-03-2016	1,435	\$303
358C Heritage Hills	\$350,000	1-27-2014	1,550	\$226
361A Heritage Hills	\$545,000	7-22-2014	1,793	\$304
364D Heritage Hills	\$422,500	8-25-2016	1,484	\$285
460B Heritage Hills	\$464,900	9-15-2015	1,472	\$314
468B Heritage Hills	\$600,000	4-06-2015	1,905	\$315
478D Heritage Hills	\$352,500	5-05-2015	1,265	\$279
468A Heritage Hills	\$280,000	10-21-2016	967	\$290
478C Heritage Hills	\$285,500	9-13-2016	967	\$295
480C Heritage Hills	\$443,000	9-16-2014	1,598	\$277
482B Heritage Hills	\$415,000	6-19-2015	1,483	\$280
486B Heritage Hills	\$348,000	5-12-2015	1,265	\$275
487A Heritage Hills	\$297,000	7-26-2016	967	\$307
489B Heritage Hills	\$391,000	12-22-2016	1,483	\$264
490B Heritage Hills	\$485,000	7-17-2014	1,598	\$304
494D Heritage Hills	\$276,000	3-19-2014	967	\$285
497B Heritage Hills	\$580,000	11-7-2014	1,905	\$304
498A Heritage Hills	\$342,420	9-04-2015	1,265	\$271

Average sales price for unit without a view of tower:

\$277

Study indicates very similar prices on homes with no view of the communications tower and with view of the communications tower.

Exhibit 12, 117 Duelk Ave, South Blooming Grove, Orange County, NY

A 150' flagpole type tower located just west of Route 208, on Duelk Avenue, in South Blooming Grove, in the Town of Monroe, NY. The following sales are located on the surrounding streets and are very close to the communications tower, within sight:

2014 - 2017 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
303 Lake Shore Dr	\$ 360,000	9-27-2016	2,147	\$168
316 Lake Shore Dr	\$ 235,000	9-26-2016	1,512	\$155
4 Red Bird Dr	\$ 267,000	10-13-2016	1,716	\$156
2 Beech Tree Rnd	\$ 210,000	7-07-2016	1,040	\$202
25 Merriewold Ln N	\$ 150,000	8-17-2015	1,552	\$ 97
4 Lone Oak Cir	\$ 225,000	10-31-2016	1,728	\$130
14 Old Town Rd	\$ 265,000	12-8-2014	1,778	\$149
11 Lee Av	\$ 319,000	11-8-2016	1,934	\$165
26 Duelk Av	\$ 240,000	12-13-2016	960	\$250
19 Duelk Av	\$ 160,000	3-31-2016	960	\$167
83 Duelk Av	\$ 245,000	12-1-2016	1,092	\$224
25 Duelk Av	\$ 275,000	11-14-2016	1,012	\$272
4 Laredo Ct	\$ 319,900	11-29-2016	1,504	\$213
4 Laredo Ct	\$ 237,900	3-27-2015	1,504	\$158
5 Laredo Ct	\$ 210,000	9-12-2016	960	\$219
23 Duelk Av	\$ 260,000	1-23-2017	960	\$271
106 Duelk Av	\$ 305,000	2-22-2017	1,772	\$172
2 Pecos Ct	\$ 230,000	7-21-2016	1,240	\$185
90 Duelk Av	\$ 209,500	1-29-2016	1,184	\$177
86 Duelk Av	\$ 230,000	11-12-2014	1,280	\$180
Average Sales Price per Square Foot:				\$185

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
10 Hawks Nest Rd	\$ 242,300	1-14-2016	1,332	\$182
252 Lake Shore Dr	\$ 254,800	4-23-2014	1,852	\$138
374 Lake Shore Dr	\$ 307,500	12-8-2016	1,840	\$167
20 Hawthorne Dr	\$ 466,100	11-9-2016	1,993	\$234
22 Hawthorne Dr	\$ 346,000	11-23-2016	1,616	\$214
25 Hawthorne Dr	\$ 350,000	2-21-2017	1,796	\$195
19 Hawthorne Dr	\$ 315,000	1-13-2017	1,792	\$176
15 Hawthorne Dr	\$ 245,000	7-15-2015	1,104	\$222
10 Pine Hill Rd	\$ 250,000	10-10-2014	1,332	\$188
23 Pine Hill Rd	\$ 260,000	7-27-2016	1,340	\$194
37 Pine Hill Rd	\$ 240,000	8-15-2016	1,260	\$190
56 Duelk Av	\$ 299,000	9-29-2016	1,176	\$254
56 Duelk Av	\$ 255,000	5-11-2016	1,176	\$217
56 Duelk Av	\$ 170,000	4-01-2015	1,176	\$145
54 Duelk Av	\$ 240,000	2-23-2017	960	\$250
46 Duelk Av	\$ 250,000	11-8-2016	960	\$260
40 Duelk Av	\$ 190,000	10-1-2015	1,680	\$113
40 Duelk Av	\$ 275,000	1-25-2017	1,680	\$164
65 Duelk Av	\$ 243,000	3-10-2016	1,464	\$166
51 Duelk Av	\$ 230,000	10-14-2016	1,344	\$171
12 San Antonio Cir	\$ 270,000	1-24-2017	1,410	\$191
11 San Antonio Cir	\$ 335,000	11-28-2016	2,124	\$158
1 San Antonio Cir	\$ 190,000	1-30-2017	960	\$198
76 Duelk Av	\$ 220,000	4-04-2016	1,523	\$144
13 Dallas Dr	\$ 170,000	3-03-2016	994	\$171
34 Peddler Hill Rd	\$ 240,000	9-11-2015	1,390	\$173
Average Sales Price per Square Foot:				\$187

Study indicates that the properties with views of a communications tower and properties without a view of a communications tower have virtually equal average price per square feet, in this specific neighborhood.

Exhibit 13, 1 Ridge Rd, Hamptonburgh, Orange County, NY

A 162' lattice tower located just south of Route 207, on Ridge Road, in Hamptonburgh, in the Town of Monroe, NY. The following sales are located on the surrounding streets and are very close to the communications tower, within sight:

2014 - 2017 STUDY

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
506 Ridge Rd	\$ 215,000	10-22-2015	1,528	\$141
4 Lincolndale Rd	\$ 315,000	6-12-2015	2,378	\$132
10 Shea Rd	\$ 380,000	12-3-2015	2,604	\$146
18 Kimberly Dr	\$ 390,000	8-22-2014	3,124	\$125
118 Sarah Wells Trail	\$ 200,000	3-22-2017	1,147	\$174
5 Arbor Rd	\$ 370,000	9-16-2016	2,064	\$143

Average Sales Price per Square Foot: \$143

The following properties are in the same neighborhood but have no view of the communications tower:

<u>Address</u>	<u>Sales Price</u>	<u>Sale Date</u>	<u>Area</u>	<u>Price/SF</u>
43 Day Rd	\$ 405,000	3-09-2017	2,210	\$183
66 Day Rd	\$ 285,000	9-20-2016	2,222	\$128
58 Day Rd	\$ 425,000	6-22-2015	2,956	\$144
7 Darren Dr	\$ 245,900	8-16-2016	1,532	\$161
32 Day Rd	\$ 278,000	6-25-2014	2,044	\$136
27 Arbor Rd	\$ 450,000	8-25-2015	3,208	\$140
27 Arbor Rd	\$ 324,000	8-09-2016	1,993	\$163
27 Arbor Rd	\$ 365,000	2-01-2017	2,592	\$141
27 Arbor Rd	\$ 340,323	10-3-2014	2,400	\$142

Average Sales Price per Square Foot: \$143

Study indicates that the properties with views of a communications tower and properties without a view of a communications tower have virtually equal average price per square feet, in this specific neighborhood.

QUALIFICATIONS OF APPRAISERS

QUALIFICATIONS

PAUL A. ALFIERI, III, MAI

Senior Appraiser
Lane Appraisals, Inc.
178 Myrtle Boulevard
Larchmont, New York 10538

PROFESSIONAL DESIGNATIONS

MAI - Member of the Appraisal Institute - #12165

Certified General Appraiser

State of New York #46000009780

Accredited New York State Department of Transportation, Right of Way Appraiser

GENERAL EDUCATION

St. Lawrence University
Canton, New York
B. A. - 1984

PROFESSIONAL APPRAISAL EDUCATION

The Appraisal Institute -

#1A-1	- Fall, 1985	- Appraisal Principles
# 8-2	- Spring, 1985	- Residential Valuation
#1A-2	- Fall, 1986	- Basic Valuation
#1B-A	- Spring, 1989	- Capitalization Theory and Techniques - A
# SPP	- Summer 1989	- Standards of Professional Practice
#1B-B	- Fall, 1989	- Capitalization Theory and Techniques - B
# 2-1	- Spring 1990	- Case Studies in Real Estate Valuation
# 2-2	- Summer 1991	- Report Writing and Valuation Analysis
# 520	- Winter 1994	- Advanced Highest and Best Use and Market Analysis
# 320	- Spring 1994	- General Applications
# 530	- Summer 1994	- Advanced Sales Comparison and Cost Approaches
# SPP A	- Fall, 1994	- Standards of Professional Practice (USPAP) - A
# SPP B	- Fall, 1994	- Standards of Professional Practice (Ethics) - B
# SPP C	- Fall, 1999	- Standards of Professional Practice (USPAP/Ethics) - C
	- Summer 2003	- Standards of Professional Practice (USPAP/Ethics) - 15 Hr
# 710	- Fall 2004	- Condemnation Appraising: Principals and Applications
	- Summer 2007	- Evaluating Commercial Construction
	- Fall 2007	- Small Hotel and Motel Valuation
	- Summer 2008	- Convenience Store Valuation
	- Winter 2008	- Apartment Valuation
	- Winter 2008	- Subdivision Valuation
	- Spring 2011	- Litigation Skills for the Appraiser
	- Winter 2012	- Residential and General Appraisal Curriculum Overview
	- Spring 2012	- IRS Valuation Webinar
	- Winter 2013	- Business Ethics
	- Spring 2013	- International Valuation Standards
	- Fall 2013	- Analyzing Operating Expenses
	- Fall 2013	- Rates & Ratios: Making Sense of GIMs, OARs & DCFs
	- Fall 2014	- Right-Of-Way Easements; Case Studies Webinar
	- Fall 2015	- Contamination and the Valuation Process
	- Summer 2017	- Uniform Appraisal Standards for Federal Land Acquisitions
	- Winter 2018	- Eminent Domain and Condemnation

QUALIFIED AS AN EXPERT IN REAL ESTATE VALUATION

US Bankruptcy Court

New York State Supreme Court

New York State Court of Claims

Since 1984, engaged exclusively in appraising real estate. Assignments include:

Single family homes, condominiums, cooperative apartments, two to six family dwellings, rental apartment buildings, cooperative apartment buildings, condominium complexes, Section 8, Section 236 (Mitchell Lama) and HUD apartment projects, nursing care and life care communities, senior living facilities, public buildings, municipal properties, parks, hotels, industrial buildings, gas and service stations, auto dealerships, office buildings, retail and wholesale facilities, regional and neighborhood shopping centers, estates, marinas, country clubs, golf courses, sub-divisions, easements, encroachments, air rights and vacant parcels for purposes of finance, purchase, sale, gift tax, estate tax, divorce, bankruptcy, condemnation, tax certiorari proceedings, internal and estate planning, Right-of-Way analysis, gas pipeline expansion, HUD Rent Comparability Study, and New York State Equalization Rate challenges.

Primary professional territory comprises Westchester, Putnam, Dutchess, Rockland, Orange, Ulster, Sullivan, Greene, Columbia, Bronx, Queens, Kings (Brooklyn), Richmond (Staten Island) and New York (Manhattan) Counties in New York, and Fairfield and New Haven Counties in Connecticut.

PAUL A. ALFIERI, III, MAI
APPRAISAL EXPERIENCE
APPRAISALS COMPLETED FOR

New York State Supreme Court
State of New York, Office of General Svcs
State of New York, Dept of Transportation
State of New York Office of Parks,
Recreation & Historic Preservation
State of New York, Office of Mental
Retardation and Developmental Disabilities
State of New York, Office of Mental Health
Bureau of Housing Development & Support
County of Westchester
County of Putnam, Dept. of Finance
County of Rockland, Dept. of Finance
City of Mount Vernon
City of New Rochelle
City of Yonkers
City of Rye
City of Peekskill
City of White Plains
Town of Bedford
Town of Carmel
Town of Greenburgh
Town of Ossining
Town of Pelham
Town of Lewisboro
Town of New Castle
Town of Patterson
Town of Putnam Valley
Town of Harrison
Town of Mt. Pleasant
Town of Rye
Town of Southeast
Town of Scarsdale
Town of Blooming Grove
Village of Ardsley
Village of Croton-on-Hudson
Village of Dobbs Ferry
Village of Harrison
Village of Mamaroneck
Village of Larchmont
Village of Ossining
Village of Pelham Manor
Village of Irvington
Village of Elmsford
Village of Pelham
Village of Port Chester
Village of Scarsdale
Village of South Blooming Grove
Brewster Central School District
Town of Greenburgh Department of
Community Dvlpmt and Conservation
State of New York, Business Dvlpmt Corp.
Empire State Certified Development Corp.
U.S. Small Business Administration
Statewide Zone Capital Corp.
Yonkers, New Main St. Redevelopment Corp.
Legal Services of the Hudson Valley
The Institute for Justice
Westhab
Putnam Community Foundation

Environmental Protection Agency
Dormitory Authority of the State of NY
Mount Vernon Hospital
St. Josephs Medical Center
St. Vincents Hospital Westchester
St. Agnes Hospital
Phelps Memorial Hospital Corp.
White Plains Medical Center
The Burke Rehabilitation Hospital
The Seabury Wilson Home
The March of Dimes
The United Way of Westchester
The Salvation Army
The Congregation of Jehovah's Witnesses
LDS Church
Good Shepard Presbyterian Church
Hudson River Presbyterian Church
St. Johns Lutheran Church
Zion AME Baptist Church
Shiloh Baptist Church
Valhalla United Methodist Church
Bethlehem Lutheran Church
Bryn Mawr Presbyterian Church
Greek Orthodox Church - Evangelismos
Congregation Ohr Torah Synagogue
Central Baptist Church of NY
Montebello Jewish Center
Missionary Church Investment Foundation
Corporation of the Presiding Bishop of the
Church of Jesus Christ of Latter-Day Saints
Retirement Living Services
Hebrew Hospital Home Foundation, Inc.
Beth Abraham Health Services
Schnurmacher Nursing Home
Saint Michael's Home for the Aged
Jewish Board of Family & Children's Svcs
Board of Coop Education Services (BOCES)
YM+YWA of Southern Westchester
YMCA of Central & Northern Westchester
YMCA of Mt. Vernon
Tarrytown YMCA
New Rochelle YMCA
Iona College
The Windward School
The Berkley School
Pace Business School
Mid Westchester Elks Club
Westchester Interfaith Council
The Hackley School
Bokharian Communities Center, Inc.
The Episcopal Church of St. Alban Martyr
Salesian Society, Province of St. Philip
St. Gregory the Enlightener Church
Innovations for Community Advancement
The Masonic Guild of Port Chester
Planned Parenthood of Westchester and
Rockland, Inc.
Westchester Land Trust
Westchester Joint Water Works
National Development Council

PAUL A. ALFIERI, III, MAI
APPRAISAL EXPERIENCE
APPRAISALS COMPLETED FOR

MBIA Insurance Company
Metropolitan Life
Principal Mutual Life Insurance Co.
Guardian Insurance Company
Reckson Operating Partnership, LP
GDC Development Corp.
Capelli Enterprises
GHP Houlihan
APEX Development Company
Urstadt Biddle Properties
Jones, Lang, Wooten
Halpern Enterprises
Forest City Daly Housing Corp.
Mack Cali
Platzner Int'l Group, Ltd.
Colliers Int'l Valuation & Advisory Services
Industrial Heater Corp.
Sunoco
Barrier Oil Company
Castle Oil
Motiva Enterprises
Neptune Moving Company
Toyota
Toyota Financial Services
Pepe Auto Group
Alfredo's Foreign Cars
Soundview Chevrolet
Westchester Chrysler Plymouth
Pace Honda
Rye Ford Subaru
Acura of Westchester
Willow Motors
Heart Kia
Heart Ford
Mallory Kotzen Tires
Direcktor's Boatyard
Steel Style Development Corp.
Swanson Boat Transport Co.
Mid Ocean Tankers
Defender Marine
Mamaroneck Boat and Motors
Nichols Boatyard
McMichael Boating Center
Glen Island Yacht Club
West Harbor Yacht Services, Inc.
Tax Assessment Experts
Consumers Union
Combe Inc.
USTA National Tennis Center
Ticor Title Guarantee Co.
Security Mutual Life Insurance Co. of NY
The Community Builders
Bedford Union Cemetery
Tarrycrest Swim Club
Suez Water Company

Reichhold Chemical
Leroy Pharmacies
Ciba Geigy
Akzo Nobel, Inc.
Mutual Biscuit Company
Imperial Yacht Club
Manursing Island Club
Glen Island Yacht Club Inc.
Willow Ridge Country Club
Beckwith Point Beach and Tennis Club
Board of Directors of the Quay Condo
PCC Real Estate, Inc. (A Penn Central Co.)
Pepsico.
Store 24
Wakefern Foods
The Great Atlantic and Pacific Tea Co.
ShopRite Supermarket Inc.
New York Telephone
Plaza Materials Company
Transpo Industries
Suburban Carting Company
Dunham Paint Company
Landauer Metropolitan Medical
The Chapson Corporation
Robert Martin Rosedale Corporation
Otto Brehm
Neri Bakery
Tork Time Clock
Liberty Lines Bus Company
General Motors
Teledyne, Inc.
Verizon Wireless
Prodigy
Kenneth Cole
Purdue Frederick Company
Rostenberg-Doern Company
Houlihan-Parnes
Strategic Resources Corporation
Flynn Burner
Continental Hosts
Lifetime Fitness Co.
CSX Railroad/CSX Realty Corp.
Spectra Energy/Algonquin Gas
Zipjack Industry
Bertoline Distributors
Cugine Foods
Quick Quality Restaurants
Hudson Valley Resorts
Hudson River Healthcare
Adira at Riverside
Danish Home for the Aged
Energize New York
New York SMSA Ltd. Partnership (Verizon)
New Cingular Wireless PCS (AT&T)
Homeland Towers, LLC
Crown Castle

PAUL A. ALFIERI, III, MAI

**APPRAISAL EXPERIENCE
FINANCIAL INSTITUTIONS**

Abacus Federal Savings Bank	Eagle Funding
American Savings Bank	Eastchester Savings Bank
America's Christian Credit Union	Eastern Savings Bank
Apple Savings	Educational and Governmental Employees Credit Union
Anchor Savings Bank	Edison Funding
Allstate Appraisal Services	Emigrant Savings Bank
Algemene Bank of Netherlands	Empire Financial Corporation
Alliance Bank	Empbanque Capital Corporation
Alliance Funding	Empire of America
A-1 Preferred Mortgage	Ensign Bank
Anchor Equities, Ltd.	Equity Mortgage
BNC National Bank	Equity Stars
BMC Capital	Exchange Mortgage Corporation
Beacon Financial	Express Equity
Banco Popular	Family Financial
Bankers Trust Company	The First Boston Corporation
Bank of America	FDIC
Bank Leumi	First Boston Mortgage Center
Bank of New York	First Fidelity
Barclay's Bank of New York	First Northern
Business Loan Express	First National Mortgage and Finance Co.
Carver Federal Savings Bank	First National Bank of North Tarrytown
The Chase Manhattan Bank, N.A.	First Union Corporation
Chemical Bank	Fleet Bank
Century Capital Corporation	Florida Capital Management
Columbia Equities, Ltd.	Four Star Funding
Consumer Capital Corporation	Foremost Funding
Central Federal Bank	Full Service Funding
Chase Bank	Gibraltar Money Center
Chemical Bank	Goldstar Resources
The Chase Manhattan Bank, N.A.	Goldome
Citibank, N.A.	GM Wolkenberg, Inc.
Cititrust	Green Park Financial
City and Suburban Federal Savings Bank	Heartland Bank
Crossland Savings Bank	Heritage Funding
Comfed Savings Bank	Holme Capital
Commonwealth Mortgage Company	Homequity
Community Mutual Savings Bank	Home Funding
Community Preservation Corporation	Home Mortgage
Conamero Development Corporation	Home Savings Bank
Condo Plus	Houlihan Lawrence Financial
Consortium Financial	Hudson United Bank
Countrywide Funding Corporation	Hudson Valley National Bank
Country Bank	IBM Relocation
Crossway Capital, Ltd.	Intercounty
Customers Bank	Investors Mortgage
Dime Savings Bank	
Dollar Dry Dock Savings Bank	
DuPont Mortgage Corporation	

PAUL A. ALFIERI, III, MAI

**APPRAISAL EXPERIENCE
FINANCIAL INSTITUTIONS**

J P Morgan Chase
Jaguar Capital
Kadillac Funding, Ltd.
Knighthead Funding
LaJolla Bank
Larchmont Federal S & L Association
Lehman Brothers Bank
Love Funding
Mahopac National Bank
Mansfield Mortgage
Marine Midland Bank
Medallion Funding Corporation
Meritor Credit Corporation
Merrill Lynch Mortgage
Merrill Lynch Relocation
Metro Bank
Metropolitan Funding
Metropolis Capital
Midlantic Mortgage Corporation
The Money Store
The Mortgage Center
Mutual Bank
Nazarene Credit Union
National Cooperative Bank
National Westminster Bank U. S. A.
New York Community Bank
New York National Bank
Omega Funding Group
Ocwen
PCSB
People's Mortgage
Peoples Westchester Savings Bank
PMI Mortgage Insurance Company
Preferred Mortgage
Prudential Mortgage Company
Putnam County National Bank

Real Estate Recovery, Inc.
Resolution Trust Company
Resource Funding
Roosevelt Savings Bank
Scarsdale National Bank
Seacoast Mortgage
Service First
Signature Bank
Society for Savings
Sound Federal Savings & Loan Association
Statewide Zone Capital Corp.
Tarrytown and North Tarrytown Savings
& Loan Association
TD Bank
Titan Capital
Tompkins Trust
Tremont Federal Savings & Loan Assoc.
UBS Warburg Real Estate
Ulster Saving Bank
Union State Bank
United Northern Federal Savings Bank
USA Bank
U.S. Mortgage
Village Savings Bank
Wachovia Corporation
Washington Federal S & L Association
Welcome Home Realty
Wells Fargo
Westfair Funding Corporation
Westchester Bank
Westchester Federal Savings Bank
Williamsburgh Savings Bank

PAUL A. ALFIERI, III, MAI
APPRAISAL EXPERIENCE
APPRAISALS OF NOTABLE PROPERTIES

AKZO Property, Lawrence St, Ardsley
CIBA Geigy Property, Greenburgh
Cemetery, Clinton Rd, Bedford
Self Storage, 34 Norm Av, Bedford
Supermarket, 747 S Bedford Rd, Bedford
Readers Digest HQ Property, Chappaqua
Gas Pipeline Easement/Rental, Cortland
Sewer Plant, Cortlandt/Croton
Dockominiums, Half Moon Bay, Croton
Village Hall, 1 Van Wyck St, Croton
Former Brewery, 145 Palisade Av, Dobbs Ferry
AKZO Property, Danforth Av, Dobbs Ferry
Motel, 22 Tarrytown Rd, Greenburgh
Motel 290 Tarrytown Rd, Elmsford
Police/Court Bldg, 188 Tarrytown Rd, Greenburgh
Town Hall, 177 Hillside Av, Greenburgh
Library, Tarrytown & Knollwood Rd, Greenburgh
Church, 2102 Saw Mill River Rd, Greenburgh
Midway Shopping Ctr, Central Prk Av, Greenburgh
Greenville Shopping Ctr, Central Prk, Greenburgh
Con Ed Transmission Lines, Greenburgh
Office/Lab, Landmark at Eastview, Greenburgh
Hotel, 670 White Plains Rd, Greenburgh
Subdivision, W Hartsdale Av, Hartsdale
Newspaper Property, 1 Gannett Dr, Harrison
Subdivision, 2025 Westchester Av, Harrison
Hotel, 80 W Red Oak Ln, Harrison
Willow Ridge Country Club, 123 North St, Harrison
Pepsico HQ, 700 Anderson Hill Rd, Harrison
Andrus Retirement Community, Hastings
Waterfront Industrial, River St, Hastings
Hotel, 18 24 Saw Mill River Rd, Hawthorne
School, Bradhurst Av, Hawthorne
Subdivision, S Broadway, Irvington
Subdivision, Mulligan Ln, Irvington
Waterfront Industrial, Irvington
Larchmont Yacht Club, Larchmont
McMichael Boat Yard, Mamaroneck
Nichols Boatyard, Mamaroneck
Mamaroneck Boat & Motor, Mamaroneck
Mamaroneck Beach & Yacht Club, Mamaroneck
St Johns Church, Cortlandt Av, Mamaroneck
Badger Swim Club, Rockland Av, Mamaroneck
Derektors Ship Yard, Mamaroneck
Church, 19 10th Av, Mt Vernon
YMCA, 20 S 2nd Av, Mt Vernon
Church, 52 S 6th Av, Mt Vernon
Synagogue, Crary Av, Mt Vernon
Supermarket, 960 Broadway, Thornwood
Glen Island Casino Catering, New Rochelle
Marina, 101 Harbor Ln W, New Rochelle
Auto Dealer Portfolio, New Rochelle
New Rochelle City Yard, Main St, New Rochelle
Wright Island Marina, Drake Av, New Rochelle
Church, Stratton Rd, New Rochelle
Imperial Yacht Club, Davenport Av, New Rochelle

Reservoir, Weaver St, Larchmont/New Rochelle
Neptune Marina, Davenport Av, New Rochelle
YMCA, 540 Weyman Av, New Rochelle
Iona College Dormitory Sites, New Rochelle
Dudleys Marina & Restaurant, New Rochelle
Beckwith Beach Club, New Rochelle
Westerly Marina, Westerly Rd, Ossining
City Development Site, Lower South St, Peekskill
Peekskill Waterfront Properties, Peekskill
Village Development Site, Port Chester
DPW Waterfront, Fox Island Rd, Port Chester
Village Hall, 222 Grace Church St, Port Chester
Police/Court, 350 N Main St, Port Chester
Masonic Temple, 356 Irving Av, Port Chester
United Hospital, 406 Boston Post, Port Chester
Hotel, Rye Town Hilton, Rye Brook
Rye Ridge Shopping Center, Rye Ridge
Office, Rye Ridge Plaza, Rye Brook
Washington Park Plaza SC, S Ridge St, Rye Brook
BOCES, Berkley Dr, Rye Brook
Offices, 1-6 International Dr, Rye Brook
Phelps Hospital, N Broadway, Sleepy Hollow
General Motors Property, Sleepy Hollow
Pepsico Offices, Pepsi Way, Somers
Gas Pipeline Easement/Rental, Somers
YMCA, 62 Main St, Tarrytown
Hackley School, Midland Av, Tarrytown
Hotel, Axe Castle, Tarrytown
Bayer Property, Benedict Av, Tarrytown
Kraft Property, S Broadway, Tarrytown
Halpern Office Portfolio, Tarrytown
Mack Cali Office Portfolio, Tarrytown
Christiana Office, White Plains Rd, Tarrytown
Tappan Zee Bridge, Quay DOT Taking, Tarrytown
Self Storage, 160 Wildey Av, Tarrytown
Self Storage, Depot Plaza, Tarrytown
Washington Irving Boat Club, Tarrytown
Retirement/Nursing, Westchestr Meadows, Valhalla
Trump Tower, City Pl, White Plains
Office, 7 Renaissance Sq, White Plains
Parking Garage, Renaissance Sq, White Plains
Windward School, Windward Av, White Plains
Office, 1 N Broadway, White Plains
Pepe Auto Dealerships, White Plains, New Rochelle
Office, 34 44 S Broadway, White Plains
Pavilion Shopping Ctr, S Broadway, White Plains
Church, 65 Lake St, White Plains
Sears, 100 Main Street, White Plains
Office 140, 150 Grand St, White Plains
Office, 1 N Lexington Av, White Plains
Apartments, Bank St Commons, White Plains
Bloomingdales, Bloomingdale Rd, White Plains
DOT Surplus Land, White Plains
Office, 199 Main St, White Plains
Office, 333 Westchester Av, White Plains
Macys, Martine Av, White Plains

County Courthouse, Grove Rd, White Plains
 Schurmacher Nursing Home, White Plains
 Office, 1 Lexington Av, White Plains
 YMCA, Mamaroneck Av, White Plains
 Saks Fifth Ave., Bloomingdale Rd, White Plains
 March of Dimes Office, White Plains
 Gas Pipeline Easement/Rental, Yorktown
 DOT Surplus Land, Crompond Rd, Yorktown
 Office, 2649 2651 Strang Blvd, Yorktown
 Crompond Crossings Shopping Ctr, Yorktown
 Self Storage, 2720 Lexington Av, Yorktown
 Chicken Island Parcels, Yonkers
 Religious/School, Van Cortlandt Park Av, Yonkers
 Nursing Home, 304 Palisade Av, Yonkers
 Amackassin Club, Palisade Av, Yonkers
 CSX Railroad Land, Babcock Av, Yonkers
 Consumers Union Office HQ, Truman Av, Yonkers
 Ferncliff Manor School, Saw Mill Rvr Rd, Yonkers
 Church, 320 Walnut St, Yonkers
 Waterfront Development Sites and Land Underwtr
 Tara Circle School, Mansion, N Broadway, Yonkers
 Church, 77 High St, Yonkers
 Easement, Glenwood Av waterfront, Yonkers
 DOT Surplus Land, Central Park Av, Yonkers
 Church, 306 Rumsey Rd, Yonkers
 City Library, 5 Main St, Yonkers
 Mitchell Lama Apartments, Riverdale Av, Yonkers
 Toys R Us, Central Park Av, Yonkers
 Tanglewood Shopping Ctr, Central Prk Av, Yonkers
 High Ridge Shopping Ctr, Central Prk Av, Yonkers
 Central Plz Shpping Ctr, Central Prk Av, Yonkers

Nichols Boatyard, Hylan Av, Staten Island
 Apartment Portfolio, Harlem
 Boat Slip/Marina, Nyack
 Apartment Portfolio, Spring Valley
 Religious School, Rt. 360, Monsey
 Senior Housing Site, Stoneleigh Av, Carmel
 Office, 60 Merritt Blvd, Fishkill
 113 Acre Subdivision, Nichols St, Kent
 Hotel, 50 Red Oak Mills Rd, LaGrange
 Subdivision, Meadowbrook Ct, Patterson
 Hotel, 2170 South Rd, Poughkeepsie
 150 Acre Residential/Commercial Site, Putnam Vly
 Office/Flex, Myers Corners Rd, Wappinger Falls
 Industrial Site, River Rd, New Windsor
 53 Acre Senior Housing Site & Lake, New Windsor
 Middletown Psychiatric Ctr, Middletown
 DOT Surplus Land, Walkill
 Shopping Center, Blooming Grove
 Two Self Storage Facilities, Monticello
 Orange & Rockland Utility, Inc., S. Blooming Grove
 311 Acre Site, Rt. 9W and River Rd, Esopus
 170 Acre Site, Railroad Av, Ulster
 Supermarkets, Hudson

Numerous Cell Tower Site Sale & Rental Analyses

UNIQUE ID NUMBER

46000009780

State of New York
Department of State

DIVISION OF LICENSING SERVICES

FOR OFFICE USE ONLY
Control
No. **106049**

**PURSUANT TO THE PROVISIONS OF ARTICLE 6E OF THE
EXECUTIVE LAW AS IT RELATES TO R. E. APPRAISERS.**

EFFECTIVE DATE

MO.	DAY	YR.
03	01	18

EXPIRATION DATE

MO.	DAY	YR.
02	29	20

**ALFIERI PAUL A III
C/O LANE APPRAISALS INC
178 MYRTLE BLVD
LARCHMONT, NY 10538**

**HAS BEEN DULY CERTIFIED TO TRANSACT BUSINESS AS A
R. E. GENERAL APPRAISER**

In Witness Whereof, The Department of State has caused
its official seal to be hereunto affixed

**ROSSANA ROSADO
SECRETARY OF STATE**



Honorable Chairman Gary
and Members of the Planning Board
Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

March 27, 2019

RE: Homeland Towers Site Name: Lake Casse NY056
254 Croton Falls Road
Carmel, NY 10541
Response to Comments

Honorable Chairman and Members of the Board:

Please find as follows the responses to the comments from Michael G. Carnazza's comment memo dated September 12, 2018, Richard J. Franzetti, PE comment memo dated September 10, 2018, and Patrick Cleary comment memo dated September 12, 2018 (the response is in red after each of the referenced comments):

Carnazza memo:

- 2nd Bullet: Provide a zoning information note on the plat. Include all of section 156-62 of the Zoning Code and provide ALL information and show compliance and/or need for variances.
Town of Carmel Zoning Code Section 156-62 has been added under Governing Codes on drawing T-1.
- 4th Bullet: What is the width of the driveway? Will a car be able to pass a car driving the opposite direction if needed?
The width on the existing driveway varies from approximately 12' to 58'. A minimum of 12' width is typical for access/drive ways and should therefore provide adequate vehicular access/egress.

Franzetti memo:

- Comment 9: The area of disturbance has not been provided, it is unclear if a Stormwater Pollution Prevention Plan (SWPPP), as detailed by the New York State Department of Environmental Conservation (NYSDEC) is required.
The limit of disturbance is shown on drawing SP-2. The proposed limits of disturbance is 13,115± sf (0.30 Ac) which is less than 1 acre of disturbance, therefore a SWPPP is not required.
- Comment 10: Details regarding the driveway profile must be provided.
A centerline profile of the existing driveway has been provided on drawing SP-3.
- Comment 12: Details regarding tree removal must be provided.
The three (3) trees being removed have been identified and called out on drawing SP-2.

Cleary memo:

- Site Plan Comment 7(2): Indicate the existing tree height.
A note indicating the existing tree height (70'±) has been added to drawing SP-2.

APT ENGINEERING

☐ 3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

☐ P.O. BOX 504 · 116 GRANDVIEW ROAD · CONWAY, NH 03818 · PHONE 603-496-5853 · FAX 603-447-2124

Site Plan Comment 8(3): For all buildings or equipment shelters to be located in a residential zoning district, the equipment shelter shall be treated in an architectural manner compatible with the residences in the vicinity.

There are no buildings and/or equipment shelters being proposed.

Site Plan Comment 8(9): Associated shall be enclosed by a fence, landscaped screening decorative wall, or other screening and buffering measures found acceptable by the Planning Board.

A detail for the proposed chain link fence w/ anti-climbing mesh and green privacy slats is shown on drawing C-3.

Site Plan Comment 9: Are any lights proposed on the monopole tower? Are any lights proposed within the equipment compound?

There are no lights proposed on the tower. There will be lighting under the proposed equipment canopy. The lights will be on a manual timer and they will be dark sky compliant (Detail provided on drawing C-1).

General Comment: An existing "wash-out" area has been identified on the adjacent parcel. This area will be addressed with riprap armor to alleviate the existing erosion and protect the area from future degradation.

Should you have any questions, please do not hesitate to call me at (860) 663-1697 x206.

Sincerely,

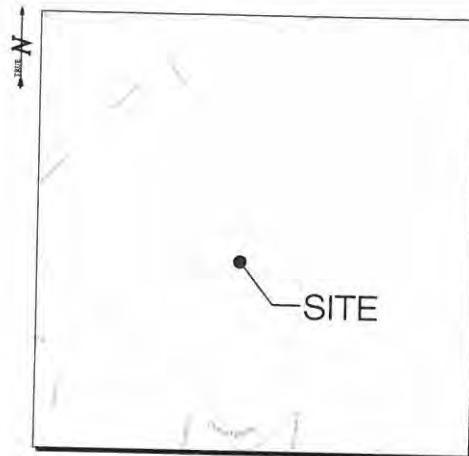
APT Engineering



Robert C. Burns, P.E.
Project Manager



HOMELAND TOWERS, LLC
WIRELESS TELECOMMUNICATIONS FACILITY
LAKE CASSE
254 CROTON FALLS ROAD
CARMEL, NY 10541



VICINITY MAP
 SCALE: 1" = 500'

DRAWING INDEX

- T-1 TITLE SHEET & INDEX
- 1-3 TOPOGRAPHIC SURVEY
- R-1 TO R-2 1,000' RADIUS MAP & PROPERTY OWNERS
- SP-1 SITE PLAN
- SP-2 PARTIAL SITE PLAN
- SP-3 EXISTING DRIVEWAY PROFILE
- CP-1 COMPOUND PLAN
- A-1 ELEVATIONS
- A-2 ELEVATIONS
- EC-1 EROSION CONTROL NOTES
- EC-2 EROSION CONTROL DETAILS
- C-1 VERIZON EQUIPMENT PLAN & DETAILS
- C-2 VERIZON ANTENNA PLAN & DETAILS
- C-3 SITE DETAILS

SITE INFORMATION

PROJECT LOCATION: 254 CROTON FALLS ROAD
 CARMEL, NY 10541

PROJECT DESCRIPTION: RAWLAND SITE W/ GROUND EQUIPMENT WITHIN
 3,600 SF TELECOMMUNICATIONS COMPOUND W/
 NEW 150'± AGL MONOPOLE.

PROPERTY DEVELOPER: HOMELAND TOWERS, LLC
 9 HARMONY STREET
 2ND FLOOR
 DANBURY, CT 06810

DEVELOPER CONTACT: RAY VERGATI
 (203) 297-6345

ENGINEER CONTACT: ROBERT C. BURIS
 (860) 663-1697 X206

LATITUDE: 41° 22' 40.5409"N
 LONGITUDE: 73° 42' 14.0725"W
 ELEVATION: 565.6'± AMSL

SECTION: 65.19
 BLOCK: 1
 LOT: 43
 ZONE: RESIDENTIAL



HOMELAND TOWERS, LLC
 9 HARMONY STREET
 2ND FLOOR
 DANBURY, CT 06810
 (203) 297-6345

verizon
 4 CENTEROCK ROAD
 WEST NYACK, NY 10994

APT ENGINEERING
 3 SADDLEBROOK DRIVE PHONE: (860) 663-1697
 KILLINGWORTH, CT 06439 FAX: (860) 663-0055
 WWW.APTENGINEERING.COM

PERMITTING DOCUMENTS		
NO.	DATE	REVISION
0	07/05/19	FOR REVIEW: RCB
1	07/05/19	CLIENT REVS: RCB
2	07/05/19	CLIENT REVS: RCB
3	11/12/19	TOWN COMMENTS: RCB
4	03/13/19	TOWN COMMENTS: RCB
5		
6		

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE P.E.
 COMP. APT ENGINEERING
 ADD: 3 SADDLEBROOK DRIVE
 KILLINGWORTH, CT 06439

DEVELOPER: HOMELAND TOWERS, LLC
 ADDRESS: 9 HARMONY STREET
 2ND FLOOR
 DANBURY, CT 06810

NOTE:
 IT IS A VIOLATION OF NEW YORK STATE
 EDUCATION LAW ARTICLE 145, SECTION
 7508 (2) FOR ANY PERSON, UNLESS
 ACTING UNDER THE DIRECTION OF A
 LICENSED PROFESSIONAL ENGINEER OR
 LAND SURVEYOR, TO ALTER AN ITEM IN
 ANY WAY, IF AN ITEM BEARING THE SEAL
 OF AN ENGINEER OR LAND SURVEYOR IS
 ALTERED, THE ALTERING ENGINEER OR
 LAND SURVEYOR SHALL AFFIX TO THE
 ITEM HIS SEAL AND THE NOTATION
 "ALTERED BY" FOLLOWED BY THE
 SIGNATURE AND THE DATE OF SUCH
 ALTERATION, AND A SPECIFIC
 DESCRIPTION OF THE ALTERATION.

**HOMELAND TOWERS
 LAKE CASSE**

SITE: 254 CROTON FALLS ROAD
 ADDRESS: CARMEL, NY 10541

APT FILING NUMBER: NY283550

DATE: 07/05/19 DRAWN BY: CBH
 CHECKED BY: RCB

SHEET TITLE:
**TITLE SHEET
 & INDEX**

SHEET NUMBER:
T-1



OWNER

RICHARD J. & ROSEMARIE DIEHL
 254 CROTON FALLS ROAD
 MAHOPAC, NY 10541

APPLICANTS

HOMELAND TOWERS, LLC
 9 HARMONY STREET
 2ND FLOOR
 DANBURY, CT 06810
 RAY VERGATI
 (203) 297-6345

VERIZON
 4 CENTEROCK RD.
 WEST NYACK, NY 10994

HOMELAND PROJECT ATTORNEY

SNYDER & SNYDER, LLP
 94 WHITE PLAINS ROAD
 TARRYTOWN, NY 10591
 (914) 333-0700

POWER PROVIDER

NYSEG (888) 484-2223

TEL CO PROVIDER

VERIZON (914) 890-0200

DIG SAFELY NEW YORK

(800) 962-7962

GOVERNING CODES

2015 IBC W/ 2017 NYS UNIFORM CODE SUPPLEMENT
 NATIONAL ELECTRIC CODE
 TIA-222-G
 TOWN OF CARMEL ZONING CODE
 SECTION 156-62

MAP NOTES

1. THIS MAP AND SURVEY HAVE BEEN PREPARED FOR THE PURPOSE OF DESIGN AND APPLICATION FOR A PROPOSED CELLULAR ANTENNA WITH A LEASE AREA AND IS LIMITED TO THAT PURPOSE ONLY.
2. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE NEW YORK EAST STATE COORDINATE SYSTEM N A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) USING GEOID 1208. COORDINATES AND ELEVATIONS WERE DETERMINED FROM RTK GPS OBSERVATIONS MADE ON MAY 7, 2018, USING THE NYS SPATIAL REFERENCE NETWORK (NYSLC BASE), HAVING THE FOLLOWING VALUES:
LATITUDE = N 41° 28' 51.6700"
LONGITUDE = W 73° 36' 05.3660"
ELLIPSOID HEIGHT = 202.000M
3. IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTIONS OF THE LICENSED SURVEYOR, TO ALTER ANY TEMPER IN ANY WAY.
4. THE FEATURES DEPICTED HEREON ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN MAY, 2018.
5. THE PROPERTY DEPICTED HEREON HAS BEEN COMPILED FROM OTHER MAPS, RECORD RESEARCH, LIMITED FIELD MEASUREMENTS, AND OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSIDERED AS A PROPERTY BOUNDARY SURVEY AND IS SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
6. PARCEL SUBJECT TO 10' WIDE EASEMENT TO INSTALL, MAINTAIN, REPAIR A PAD MOUNTED TRANSFORMER TOGETHER WITH UNSTRUCTURED FREE INGRESS AND EGRESS, MORE PARTICULARLY DESCRIBED IN LIBER 2001 PAGE 27.
7. PARCEL SUBJECT TO A PERMANENT EASEMENT AND RIGHT-OF-WAY TO INSTALL, CONSTRUCT, RECONSTRUCT, EXTEND, OPERATE, INSPECT, MAINTAIN, REPAIR, REPLACE, REMOVE POLES OR LINE OF POLES, SUPPORTING STRUCTURES, CABLES, CROSS ARMS, OVERHEAD AND UNDERGROUND WIRES, GUYS, BRACES, COMMUNICATION FACILITIES AND OTHER FIXTURES MORE PARTICULARLY DESCRIBED IN LIBER 1006 PAGE 157.
8. PARCEL SUBJECT TO A UTILITY POLE EASEMENT AS DESCRIBED IN LIBER 886 PAGE 06.
9. PARCEL SUBJECT TO 30' WIDE PERMANENT EASEMENT AND RIGHT-OF-WAY TO INSTALL, CONSTRUCT, RECONSTRUCT, RELOCATE, EXTEND, OPERATE, INSPECT, MAINTAIN, REPAIR, REPLACE, REMOVE POLES OR LINE OF POLES, SUPPORTING STRUCTURES, CABLES, CROSS ARMS, OVERHEAD AND UNDERGROUND WIRES, GUYS, BRACES, COMMUNICATION FACILITIES AND OTHER FIXTURES MORE PARTICULARLY DESCRIBED IN LIBER 1006 PAGE 157.

MAP REFERENCES

- A. "FINAL SUBDIVISION PLAT PREPARED FOR GEORGE H. AND GAIL J. FIERO SITUATE IN THE TOWN OF CARMEL PUTNAM COUNTY, NEW YORK" SCALE 1"=50' DATED APRIL 16, 1991 REVISED AUGUST 23, 1993 BY WILLIAM F. ZELER MAP NUMBER 2802
- B. "SUBDIVISION PLAT PREPARED FOR WEBER HILLS ESTATES SITUATE IN TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK" SCALE 1"=50' DATED DECEMBER 20, 1993 BY CASH ASSOCIATES
- C. "CITY OF NEW YORK WATER SUPPLY, GAS AND ELECTRICITY PROPERTY IN TOWN OF CARMEL SCHOOL DISTRICT NO. 4 PUTNAM COUNTY SHEET NO. 86" CASE NUMBER 2 DRAFTER NUMBER 14

APPROXIMATE LOCATION OF 202'x100' EASEMENT IN FAVOR OF LOT 65, 19-1-43 AS DISCLOSED IN LIB. 1700 PG. 488

SUBJECT PARCEL
65.19-1-43
254 CROTON FALLS RD
LAND OF
RICHARD J. & ROSEMARIE DIEHL
LIB. 2001 PG. 27

LINE	BEARING	DISTANCE
L1	N 031°10'10" E	146.17
L2	N 033°30'10" E	204.55
L3	N 050°10'10" E	143.06
L4	N 083°30'10" E	143.54
L5	N 89°32'50" W	28.83
L6	N 052°30'10" W	48.83
L7	N 120°00'00" W	14.30
L8	N 082°30'10" W	17.00
L9	N 052°30'10" W	54.31
L10	N 207°30'10" W	20.60
L11	N 031°30'10" E	20.60
L12	S 89°32'50" W	21.54
L13	N 10°44'20" W	104.11
L14	N 19°10'00" W	21.69
L15	N 18°10'00" W	69.08
L16	N 18°10'00" W	114.01
L17	N 037°48'10" W	118.83
L18	N 037°48'10" W	118.83
L19	N 037°48'10" W	118.83
L20	N 037°48'10" W	118.83
L21	N 037°48'10" W	118.83
L22	N 037°48'10" W	118.83
L23	N 037°48'10" W	118.83
L24	N 037°48'10" W	118.83
L25	N 037°48'10" W	118.83
L26	N 037°48'10" W	118.83
L27	N 037°48'10" W	118.83
L28	N 037°48'10" W	118.83
L29	N 037°48'10" W	118.83
L30	N 037°48'10" W	118.83
L31	N 037°48'10" W	118.83
L32	N 037°48'10" W	118.83
L33	N 037°48'10" W	118.83
L34	N 037°48'10" W	118.83
L35	N 037°48'10" W	118.83
L36	N 037°48'10" W	118.83
L37	N 037°48'10" W	118.83
L38	N 037°48'10" W	118.83
L39	N 037°48'10" W	118.83
L40	N 037°48'10" W	118.83
L41	N 037°48'10" W	118.83
L42	N 037°48'10" W	118.83
L43	N 037°48'10" W	118.83
L44	N 037°48'10" W	118.83
L45	N 037°48'10" W	118.83
L46	N 037°48'10" W	118.83
L47	N 037°48'10" W	118.83
L48	N 037°48'10" W	118.83
L49	N 037°48'10" W	118.83
L50	N 037°48'10" W	118.83
L51	N 037°48'10" W	118.83
L52	N 037°48'10" W	118.83
L53	N 037°48'10" W	118.83
L54	N 037°48'10" W	118.83
L55	N 037°48'10" W	118.83
L56	N 037°48'10" W	118.83
L57	N 037°48'10" W	118.83
L58	N 037°48'10" W	118.83
L59	N 037°48'10" W	118.83
L60	N 037°48'10" W	118.83

SCALE: 1"=80'

THIS MAP IS VALID AND AUTHORIZED BY THE FOLLOWING SIGNATURE WHEN AND ONLY WHEN ACCOMPANIED WITH A LIVE SIGNATURE, A DAMPED SEAL, AND A LIVE EMBOSSED SEAL OVER THE SIGNATURE NAME. ANY OTHER REPRODUCTIONS SHALL BE CONSIDERED UNAUTHORIZED.

ONLY COPIES OF THIS SURVEY MARKED WITH THE LAND SURVEYOR'S LIVE SIGNATURE, ORIGINAL EMBOSSED AND AXED SEAL ARE THE PRODUCT OF THE LAND SURVEYOR.

I HEREBY DECLARE THAT THIS SURVEY WAS PERFORMED IN ACCORDANCE WITH THE CODE OF PRACTICE OF NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS.

DEAN MARTIN
NY LICENSE NO. 51038

- LEGEND
- IRON PIN (FOUND)
 - Rebar/Dial Hole (To Be Set)
 - MONUMENT (FOUND)
 - MANHOLE
 - DRAINAGE MANHOLE
 - SANITARY MANHOLE
 - ELEC. MANHOLE
 - TELE. MANHOLE
 - "C" CATCH BASIN
 - "C-L" CATCH BASIN
 - DECIDUOUS TREES
 - EVERGREEN TREES
 - SHRUB/BUSH
 - FLAG POLE
 - TRAFFIC CONTROL BOX
 - POST
 - LIGHT POLE
 - GUY ANCHOR
 - UTILITY POLE
 - WATER GATE
 - WATER METER
 - GAS VALVE
 - GAS METER
 - TRANSFORMER
 - ELEC. METER
 - MAIL BOX
 - HAND HOLE
 - BUTTON BOX
 - A.C. UNIT
 - <30 TRAFFIC LIGHT POLE

- BOUNDARY LINE
- GUARD RAIL
- UNDERGROUND PIPING (San., Elec.)
- U/G GAS LINE
- U/G ELEC. LINE
- WATER LINE
- OVERHEAD UTILITIES
- U/G TELE. LINE
- CHAIN LINK FENCE
- TREE LINE

M martin
Surveying Associates, LLC
201 CHRISTIAN LANE, BERLIN, CT 06037
860-652-8328 860-357-4054 (FAX)

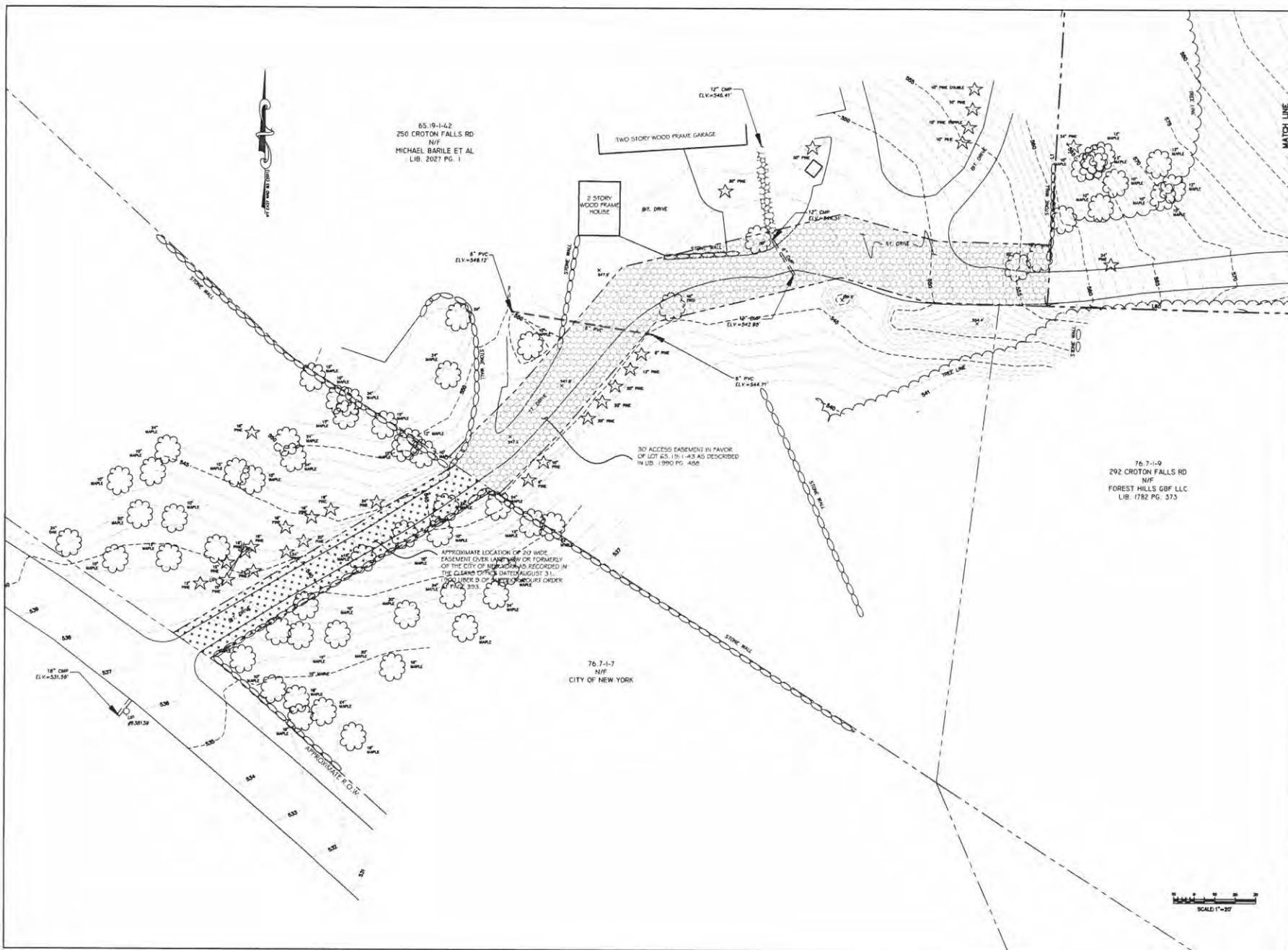
REVISIONS

TOPOGRAPHIC SURVEY
LAND OF
RICHARD J. & ROSEMARIE DIEHL
TAX ID: 65.19-1-43
254 CROTON FALLS ROAD
MAHOPAC
PUTNAM COUNTY
NEW YORK

MSA PROJECT NO: 16338
SCALE: 1"=80'
DATE: 05/2018
DRAWN BY: D.S.D.
CHECKED BY: D.S.D.

SHEET:

1 OF 3



- LEGEND
- IRON PIN (FOUND) △ SIGN
 - Rebar/Drill Hole (To Be Set) ○ POST
 - MONUMENT (FOUND) ○ LIGHT POLE
 - MANHOLE ○ GUY ANCHOR
 - DRAINAGE MANHOLE ○ UTILITY POLE
 - SANITARY MANHOLE ○ WATER GATE
 - ELEC. MANHOLE ○ WATER METER
 - TELE. MANHOLE ○ GAS VALVE
 - "C" CATCH BASIN ○ GAS METER
 - "C-L" CATCH BASIN ○ TRANSFORMER
 - DECIDUOUS TREES ○ ELEC. METER
 - EVERGREEN TREES ○ MAIL BOX
 - SHRUB/BUSH ○ HAND HOLE
 - FLAG POLE ○ BUTTON BOX
 - A.C. UNIT
 - TRAFFIC CONTROL BOX
 - TRAFFIC LIGHT POLE

- BOUNDARY LINE
- GUARD RAIL
- UNDERGROUND PIPING (500-1000)
- U/G GAS LINE
- U/G ELEC. LINE
- WATER LINE
- OVERHEAD UTILITIES
- U/G TELE. LINE
- CHAIN LINK FENCE
- TREE LINE

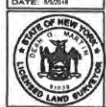


Martin
Surveying Associates, LLC
201 CHRISTIAN LANE, BERLIN, CT 06037
860-832-0328 860-357-4004 (FAX)

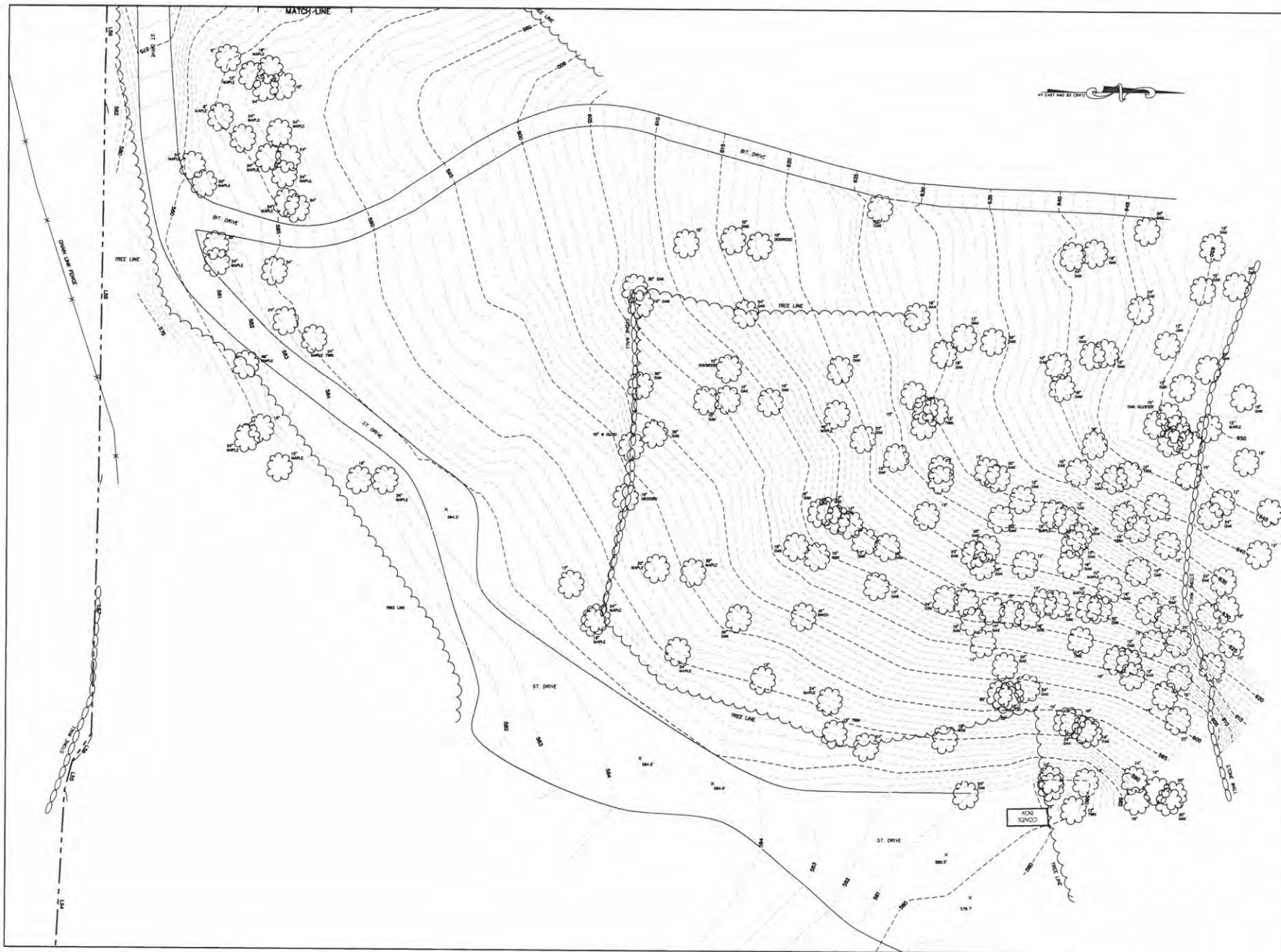
REVISIONS:

TOPOGRAPHIC SURVEY
LAND OF
RICHARD J. & ROSEMARIE DIEHL
TAX ID: 65.19-1-43
254 CROTON FALLS ROAD
MAHOPAC
PUTNAM COUNTY
NEW YORK

MIRA PROJECT NO. 18.08
SCALE: 1"=50'
DATE: 9/20/18
DRAWN BY: G.S.B.
CHECKED BY: G.S.B.



SHEET:
2 OF 3



- LEGEND:
- IRON PIN (FOUND)
 - REBAR/DRILL HOLE (To Be Set)
 - MONUMENT (FOUND)
 - MANHOLE
 - DRAINAGE MANHOLE
 - SANITARY MANHOLE
 - TELE. MANHOLE
 - "C" CATCH BASIN
 - "D-C" CATCH BASIN
 - DECIDUOUS TREES
 - EVERGREEN TREES
 - SHRUB/BUSH
 - FLAG POLE
 - TRAFFIC CONTROL BOX
 - △ SIGN
 - × POST
 - LIGHT POLE
 - CUT ANCHOR
 - UTILITY POLE
 - WATER GATE
 - WATER METER
 - GAS VALVE
 - GAS METER
 - TRANSFORMER
 - ELEC. METER
 - MAIL BOX
 - HAND HOLE
 - BUTTON BOX
 - A.C. UNIT
 - <90 TRAFFIC LIGHT POLE

- BOUNDARY LINE
- GUARD RAIL
- UNDERGROUND PIPING (See S.M.)
- U/G GAS LINE
- U/G ELEC. LINE
- WATER LINE
- OVERHEAD UTILITIES
- U/G TELE. LINE
- CHAIN LINK FENCE
- TREE LINE

M
martin

Surveying Associates, LLC
351 CHRISTIAN LANE, BERLIN, CT 06037
860-832-0328 860-357-4004 (FAX)

REVISIONS:

TOPOGRAPHIC SURVEY
LAND OF
RICHARD J. & ROSEMARIE DIEHL
TAX ID: 65-19-1-43
254 CROTON FALLS ROAD
MAHOPAC
PUTNAM COUNTY
NEW YORK

MSA PROJECT NO: 18-08

SCALE: 1"=20'

DATE: 05/2019

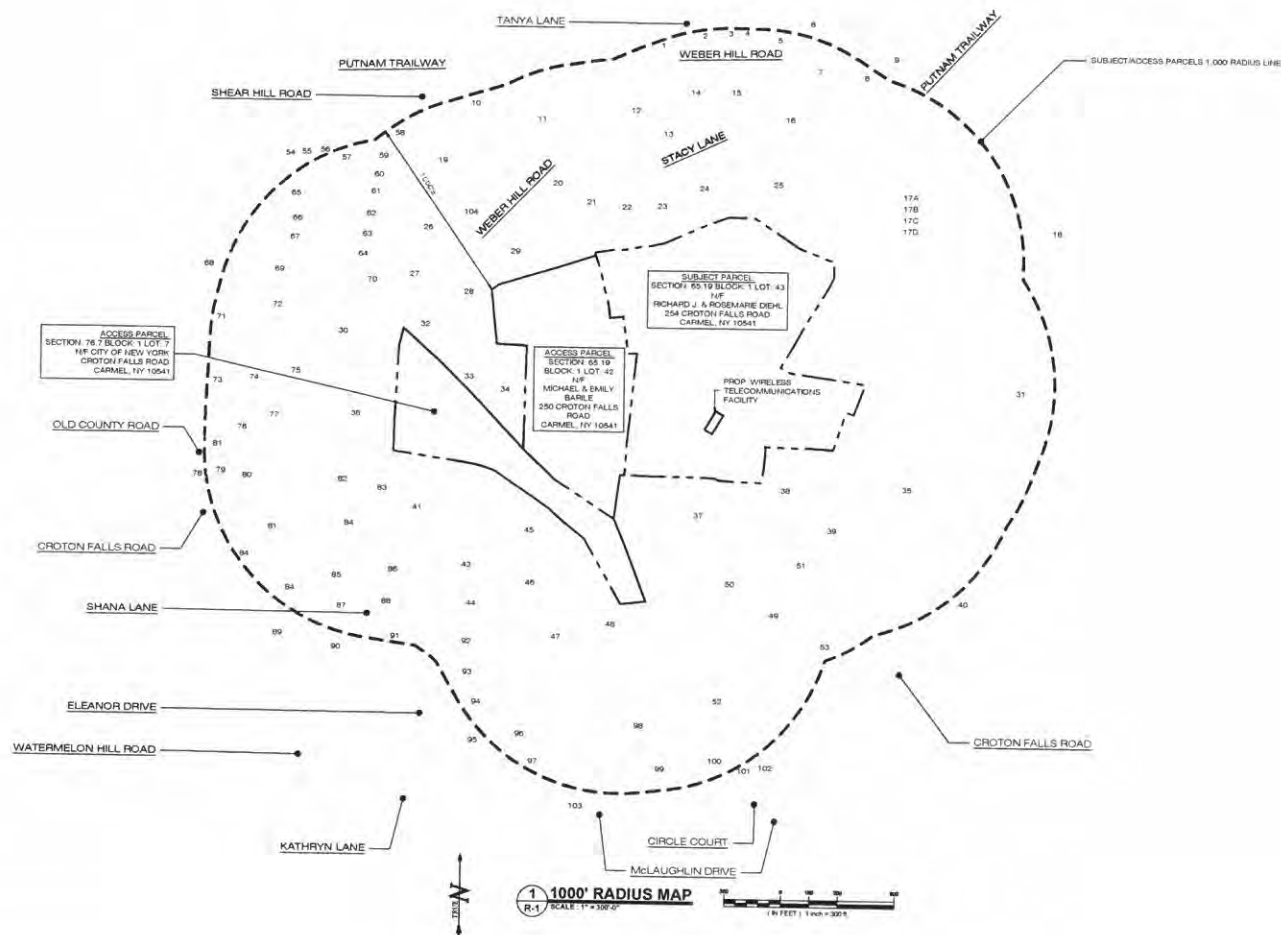
DRAWN BY: D.S.D.

CHECKED BY: D.S.M.

SHEET:

3 OF 3





T
HOMELAND TOWERS, LLC
9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810
(203) 297-6345

verizon
4 CENTERCROOK ROAD
WEST NYACK, NY 10994

APT
ENGINEERING

3 SADDLEBROOK DRIVE PHONE: (860) 463-1600
KILLBUCK, CT 06419 FAX: (860) 463-0631
WWW.APTENGINEERING.COM

PERMITTING DOCUMENTS	
NO.	DATE REVISION
0	07/05/18 FOR REVIEW: RCB
1	07/20/18 CLIENT REVS: RCB
2	07/29/18 CLIENT REVS: RCB
3	11/12/18 TOWN COMMENTS: RCB
4	05/15/19 TOWN COMMENTS: RCB
5	
6	

DESIGN PROFESSIONALS OF RECORD
PROF. SCOTT M. CHASSE P.E.
COMP: APT ENGINEERING
ADD: 3 SADDLEBROOK DRIVE
KILLBUCK, CT 06419
DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
IT IS A VIOLATION OF NEW YORK STATE
EDUCATION LAW ARTICLE 148, SECTION
7209 (2) FOR ANY PERSON, UNLESS
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OF AN ENGINEER OR LAND SURVEYOR IS
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ITEM HIS SEAL AND THE NOTATION
"ALTERED BY" FOLLOWED BY THE
SIGNATURE AND THE DATE OF SUCH
ALTERATION, AND A SPECIFIC
DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS
LAKE CASSE
SITE: 294 CROTON FALLS ROAD
ADDRESS: CARMEL, NY 10541
APT FILING NUMBER: NY283550
DATE: 07/05/18 DRAWN BY: CSH
CHECKED BY: RCB

SHEET TITLE:
1,000' RADIUS MAP

SHEET NUMBER:
R-1



MAP ID	MAP BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
1	65.19	35	1 Tanya Lane, Mahopac, NY, 10541	Richard Reardon & Melissa Reardon	1 Tanya Lane, Mahopac, NY, 10541
2	65.19	36	4 Tanya Lane, Mahopac, NY, 10541	Burton S. Rucker & Sarah L. Rucker	4 Tanya Lane, Mahopac, NY, 10541
3	65.15	2	36 Richard Road, Mahopac, NY, 10541	Joseph Linds & Lynda Linds	36 Richard Road, Mahopac, NY, 10541
4	65.15	2	7 Richard Road, Mahopac, NY, 10541	Stuart H. Whitte, Karen A. Laif	7 Richard Road, Mahopac, NY, 10541
5	65.19	1	303 Weber Hill Road, Mahopac, NY, 10541	Lawrence J. Pistillo & Maria K. Pistillo	303 Weber Hill Road, Mahopac, NY, 10541
6	65.16	1	111 Weber Hill Road, Mahopac, NY, 10541	Carol Lyons	111 Weber Hill Road, Mahopac, NY, 10541
7	65.2	1	104 Weber Hill Road, Mahopac, NY, 10541	Anne Murphy & Kenneth Murphy	104 Weber Hill Road, Mahopac, NY, 10541
8	65.2	1	118 Weber Hill Road, Mahopac, NY, 10541	Stephen S. Zagani & Catherine Zagani	118 Weber Hill Road, Mahopac, NY, 10541
9	65.2	1	124 Weber Hill Road, Mahopac, NY, 10541	Joseph Sadowski	124 Weber Hill Road, Mahopac, NY, 10541
10	65.19	1	76 Shaw Hill Road, Mahopac, NY, 10541	Rolf Anne Swenson & Jill Mathews	76 Shaw Hill Road, Mahopac, NY, 10541
11	65.19	1	31 Weber Hill Road, Mahopac, NY, 10541	Steven Sawicki & Kimberly Sawicki	31 Weber Hill Road, Mahopac, NY, 10541
12	65.18	1	5 Stacey Lane, Mahopac, NY, 10541	Christopher Beltrando & Susan Beltrando	5 Stacey Lane, Mahopac, NY, 10541
13	65.19	1	34 Stacey Lane, Mahopac, NY, 10541	Paul J. Reardon & Karen A. Reardon	34 Stacey Lane, Mahopac, NY, 10541
14	65.19	1	80 Weber Hill Road, Mahopac, NY, 10541	Robert W. Taylor	80 Weber Hill Road, Mahopac, NY, 10541
15	65.1	1	52 73 Stacey Lane, Mahopac, NY, 10541	Natalie Fina Constanti	23 Stacey Lane, Mahopac, NY, 10541
16	65.19	1	51 74 Stacey Lane, Mahopac, NY, 10541	Denek Trzaskowski & Walecia Trzaskowski	24 Stacey Lane, Mahopac, NY, 10541
17A	65.2	3	723 Weber Hill Road, Mahopac, NY, 10541	Jane H. Housh	1518 10th Ave., Brooklyn, NY, 11215
17B	65.2	3	723 Weber Hill Road, Mahopac, NY, 10541	Annie Radnor Laneset, Trustee	387 Sevelyn Street, Brooklyn, NY, 11218
17C	65.2	3	723 Weber Hill Road, Mahopac, NY, 10541	Glennae Nauck Johnson, Trustee	1518 10th Ave., Brooklyn, NY, 11215
17D	65.2	3	723 Weber Hill Road, Mahopac, NY, 10541	Robert H. Nauck, Trustee	8038 Norwood Ave., Brooklyn, NY, 11215
18	65.1	1	66 Weber Hill Road, Mahopac, NY, 10541	Paul R. Bruem	P.O. Box 221, Carmel, NY 10512
19	65.19	1	62 Shaw Hill Road, Mahopac, NY, 10541	Rolf Anne Swenson & Jill Mathews	76 Shaw Hill Road, Mahopac, NY, 10541
20	65.19	1	46 Stacey Lane, Mahopac, NY, 10541	Debra Spence	4 Stacey Lane, Mahopac, NY, 10541
21	65.19	1	85 Stacey Lane, Mahopac, NY, 10541	Joseph Domingo & Nancy Domingo	8 Stacey Lane, Mahopac, NY, 10541
22	65.19	1	47 10 Stacey Lane, Mahopac, NY, 10541	James A. Eichenbaum & Carmen Eichenbaum	10 Stacey Lane, Mahopac, NY, 10541
23	65.19	1	48 14 Stacey Lane, Mahopac, NY, 10541	Ron Levine & Karen Levine	14 Stacey Lane, Mahopac, NY, 10541
24	65.19	1	49 18 Stacey Lane, Mahopac, NY, 10541	Carmelina Zimbardo	18 Stacey Lane, Mahopac, NY, 10541
25	65.19	1	50 22 Stacey Lane, Mahopac, NY, 10541	Scott Hirschmuth & Cindy Hirschmuth	22 Stacey Lane, Mahopac, NY, 10541
26	65.19	1	53 23 Weber Hill Road, Mahopac, NY, 10541	Gerardo Benavito	146 Oxwallow Lane, Putnam Valley, NY 10579
27	65.19	1	1 Weber Hill Road, Mahopac, NY, 10541	Erik L. Rogers	1 Weber Hill Road, Mahopac, NY, 10541
28	65.19	1	12 Weber Hill Road, Mahopac, NY, 10541	Emeline M. Swenson & Thomas J. Swenson	12 Weber Hill Road, Mahopac, NY, 10541
29	65.19	1	44 10 Weber Hill Road, Mahopac, NY, 10541	Michael A. Pomell	P.O. Box 788, Mahopac, NY, 10541
30	65.19	1	1.5 Odessa Road, Mahopac, NY, 10541	5506 LLC	1 Brianna Lane, Tintonville Heights, NY 10508
31	65.2	3	26 Gail Court, Carmel, NY, 10512	Preston M. Brown & Kathleen E. Brown	26 Gail Court, Carmel, NY, 10512
32	65.19	1	2 Weber Hill Road, Carmel, NY, 10512	Richard Simon & Jennifer Simon	2 Weber Hill Road, Carmel, NY, 10512
33	65.19	1	41 18 Shaw Hill Road, Mahopac, NY, 10541	Patrick Kelly	24 Shaw Hill Road, Mahopac, NY, 10541
34	76.7	1	8 238 Croton Falls Road, Mahopac, NY, 10541	Croton Falls Road Holding LLC	P.O. Box 977, Mahopac, NY 10541
35	76.8	1	3 388 Croton Falls Road, Mahopac, NY, 10541	Preston M. Brown & Kathleen E. Brown	26 Gail Court, Carmel, NY, 10512
36	76.7	1	6 Croton Falls Road, Mahopac, NY, 10541	City Of New York	71 Smith Ave., Kingston NY 12041
37	76.7	1	9 291 Croton Falls Road, Mahopac, NY, 10541	Forest Hills Golf LLC	308 Croton Falls Road, Mahopac, NY, 10541
38	76.7	1	13 308 Croton Falls Road, Mahopac, NY, 10541	George Piero & Gail Piero	308 Croton Falls Road, Mahopac, NY, 10541
39	76.8	1	2 334 Croton Falls Road, Mahopac, NY, 10541	Creser Ambrose & Ambrose Trust	334 Croton Falls Road, Mahopac, NY, 10541
40	76.8	1	384 Croton Falls Road, Mahopac, NY, 10541	Robert Viterio & Jennifer Viterio	384 Croton Falls Road, Mahopac, NY, 10541
41	76.7	1	23 Eleanor Drive, Mahopac, NY, 10541	Thomas F. Mondo & Linda Mondo	11 Eleanor Drive, Mahopac, NY, 10541
42	76.7	1	24 Eleanor Drive, Mahopac, NY, 10541	The Hollio Family Trust	24 Eleanor Drive, Mahopac, NY, 10541

MAP ID	MAP BLOCK	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
43	76.7	1 25	26 Eleanor Drive, Mahopac, NY, 10541	26 Eleanor Drive, Mahopac, NY, 10541
44	76.7	1 26	32 Eleanor Drive, Mahopac, NY, 10541	32 Eleanor Drive, Mahopac, NY, 10541
45	76.7	1 18	Croton Falls Road, Mahopac, NY, 10541	City Of New York
46	76.7	1 19	261 Croton Falls Road, Mahopac, NY, 10541	71 Smith Ave, Kingston NY 12041
47	76.7	1 17	17 McLaughlin Drive, Mahopac, NY, 10541	261 Croton Falls Road, Mahopac, NY, 10541
48	76.7	1 15	Croton Falls Road, Mahopac, NY, 10541	17 McLaughlin Drive, Mahopac, NY, 10541
49	76.7	1 13	Croton Falls Road, Mahopac, NY, 10541	City Of New York
49	76.8	1 4	N. Croton Falls Road, Mahopac, NY, 10541	City Of New York
50	76.7	1 30	302 Croton Falls Road, Mahopac, NY, 10541	71 Smith Ave, Kingston NY 12041
51	76.7	1 11.2	130 Croton Falls Road, Mahopac, NY, 10541	808 Croton Falls Road, Mahopac, NY, 10541
52	76.7	1 15	Croton Falls Road, Mahopac, NY, 10541	130 Croton Falls Road, Mahopac, NY, 10541
53	76.12	1 13	2 Sandy Street, Mahopac, NY, 10541	City Of New York
54	76.5	1 18	29 Fulmer Road, Mahopac, NY, 10541	71 Smith Ave, Kingston NY 12041
55	62.15	1 12	25 Fulmer Road, Mahopac, NY, 10541	29 Fulmer Road, Mahopac, NY, 10541
56	62.15	1 11	21 Fulmer Road, Mahopac, NY, 10541	25 Fulmer Road, Mahopac, NY, 10541
57	62.15	1 30	17 Fulmer Road, Mahopac, NY, 10541	21 Fulmer Road, Mahopac, NY, 10541
58	62.15	1 9	17 Fulmer Road, Mahopac, NY, 10541	17 Fulmer Road, Mahopac, NY, 10541
59	62.15	1 8	51 Shear Hill Road, Mahopac, NY, 10541	51 Shear Hill Road, Mahopac, NY, 10541
60	62.15	1 7	55 Shear Hill Road, Mahopac, NY, 10541	51 Shear Hill Road, Mahopac, NY, 10541
61	62.15	1 6	51 Shear Hill Road, Mahopac, NY, 10541	51 Shear Hill Road, Mahopac, NY, 10541
62	62.15	1 5	51 Shear Hill Road, Mahopac, NY, 10541	51 Shear Hill Road, Mahopac, NY, 10541
63	62.15	1 4	41 Shear Hill Road, Mahopac, NY, 10541	41 Shear Hill Road, Mahopac, NY, 10541
64	62.15	1 3	37 Shear Hill Road, Mahopac, NY, 10541	37 Shear Hill Road, Mahopac, NY, 10541
65	62.15	1 16	12 Odessa Road, Mahopac, NY, 10541	12 Odessa Road, Mahopac, NY, 10541
66	62.15	1 17	18 Odessa Road, Mahopac, NY, 10541	18 Odessa Road, Mahopac, NY, 10541
67	62.15	1 18	17 Odessa Road, Mahopac, NY, 10541	17 Odessa Road, Mahopac, NY, 10541
68	62.15	1 74	29 Odessa Road, Mahopac, NY, 10541	29 Odessa Road, Mahopac, NY, 10541
69	62.15	1 5	16 Odessa Road, Mahopac, NY, 10541	16 Odessa Road, Mahopac, NY, 10541
70	62.15	1 2	15 Shear Hill Road, Mahopac, NY, 10541	15 Shear Hill Road, Mahopac, NY, 10541
71	62.15	1 73	41 Odessa Road, Mahopac, NY, 10541	41 Odessa Road, Mahopac, NY, 10541
72	62.15	1 1.2	40 Odessa Road, Mahopac, NY, 10541	40 Odessa Road, Mahopac, NY, 10541
73	76.6	1 30	10-30 Old Country Road, Mahopac, NY, 10541	10-30 Old Country Road, Mahopac, NY, 10541
74	62.15	1 1.3	42 Odessa Road, Mahopac, NY, 10541	42 Odessa Road, Mahopac, NY, 10541
75	62.15	1 1.4	50 Odessa Road, Mahopac, NY, 10541	50 Odessa Road, Mahopac, NY, 10541
76	76.7	1 4	12 Old Country Road, Mahopac, NY, 10541	12 Old Country Road, Mahopac, NY, 10541
77	76.7	1 5	A Old Country Road, Mahopac, NY, 10541	12 Old Country Road, Mahopac, NY, 10541
78	76.6	1 8	186 Croton Falls Road, Mahopac, NY, 10541	186 Croton Falls Road, Mahopac, NY, 10541
79	76.6	1 9	13 Old Country Road, Mahopac, NY, 10541	13 Old Country Road, Mahopac, NY, 10541
80	76.6	1 14	16 Old Country Road, Mahopac, NY, 10541	16 Old Country Road, Mahopac, NY, 10541
81	76.6	1 15	181 Croton Falls Road, Mahopac, NY, 10541	City Of New York
82	76.7	1 20	Croton Falls Road, Mahopac, NY, 10541	71 Smith Ave, Kingston NY 12041
83	76.7	1 22	14 Eleanor Drive, Mahopac, NY, 10541	71 Smith Ave, Kingston NY 12041
84	76.7	1 21	2 Eleanor Drive, Mahopac, NY, 10541	14 Eleanor Drive, Mahopac, NY, 10541
85	76.7	1 3	283 Waterman Hill Road, Mahopac, NY, 10541	2 Eleanor Drive, Mahopac, NY, 10541
86	76.7	1 32	19 Eleanor Drive, Mahopac, NY, 10541	283 Waterman Hill Road, Mahopac, NY, 10541
87	76.7	1 39	14 Shuna Lane, Mahopac, NY, 10541	19 Eleanor Drive, Mahopac, NY, 10541

MAP ID	MAP BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
88	76.7	1	35 Eleanor Drive, Mahopac, NY 10541	Stella Douglas	83 Deane Drive, Mahopac, NY 10541
89	76.7	1	273 Watermelon Hill Road, Mahopac, NY 10541	Married Giffard & Marina Giffard	273 Watermelon Hill Road, Mahopac, NY 10541
90	76.7	1	401 27 Shure Lane, Mahopac, NY 10541	Frank Jampolito & Maria Jampolito	22 Shaw Ave, Mahopac, NY 10541
91	76.7	1	41 Eleanor Drive, Mahopac, NY 10541	Kathleen F. Ratz & Elizabeth Ratz	41 Eleanor Drive, Mahopac, NY 10541
92	76.7	1	27 Eleanor Drive, Mahopac, NY 10541	Robert A. Mayo & Rosemarie Mayo	40 Deane Drive, Mahopac, NY 10541
93	76.7	1	28 Eleanor Drive, Mahopac, NY 10541	John R. Kraker & Linda M. Kraker	90 Deane Drive, Mahopac, NY 10541
94	76.7	1	40 Eleanor Drive, Mahopac, NY 10541	Philip H. Iken	143 Onondaga Lake Road, Putnam Valley, NY 10579
95	76.7	1	70 Eleanor Drive, Mahopac, NY 10541	George Prandi & Cristina Prandi	72 Eleanor Drive, Mahopac, NY 10541
96	76.7	1	76 Eleanor Drive, Mahopac, NY 10541	Robert J. Buckley & Dalia P. Buckley	76 Eleanor Drive, Mahopac, NY 10541
97	76.11	1	21 Eleanor Drive, Mahopac, NY 10541	Thomas J. Deacon, Jr. & Kristin Deacon	82 Eleanor Drive, Mahopac, NY 10541
98	76.7	1	36 McLaughlin Drive, Mahopac, NY 10541	Charlotte De Salvo	36 McLaughlin Drive, Mahopac, NY 10541
99	76.11	1	67 McLaughlin Drive, Mahopac, NY 10541	Charlotte De Salvo	36 McLaughlin Drive, Mahopac, NY 10541
100	76.7	1	13 Circle Court, Mahopac, NY 10541	Eric C. Semmes & Marianne C Semmes	132 Circle Court, Mahopac, NY 10541
101	76.7	1	168 Circle Court, Mahopac, NY 10541	MTRCO Investors, L.P.	95 Beatrice Place - Suite 1, Glen Cove - NY 11545
102	76.7	1	14 McLaughlin Drive, Mahopac, NY 10541	Sean Frykley	112 McLaughlin Drive, Mahopac, NY 10541
103	76.11	1	66 McLaughlin Drive, Mahopac, NY 10541	Raymond M. & Lindsay Burness	31 McLaughlin Drive, Mahopac, NY 10541
104	85.19	1	23 Weber Hill Road, Mahopac, NY 10541	146 Onondaga Lake Road, Putnam Valley, NY 10579	Gerardo Sordello



HOMELAND TOWERS LLC
9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810
(203) 287-6345



4 CENTERCROSS ROAD
WEST NYACK, NY 10994



**APT
ENGINEERING**

32A020,ERBROOK DRIVE
BELLINGWORTH, CT 06810
WWW.APTENGINEERING.COM

PHONE: (800)-863-1997
FAX: (800)-863-3001

PERMITTING DOCUMENTS

NO.	DATE	REVISION
6	07/06/18	FOR REVIEW: RCB
7	07/26/18	CURRENT REVS: RCB
8	11/13/18	TOWN COMMENTS: RCB
9	03/31/19	TOWN COMMENTS: RCB
10		

DESIGN PRACTICES OF RECORD

PROF. SCOTT W. CHASSE P.E.
COMP. APT ENGINEERING
40 S 32A020,ERBROOK DRIVE
BELLINGWORTH, CT 06810

DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 148, SECTION 7209 (2) FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED. THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THE SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC ALTERATION, AND THE ALTERATION DESCRIPTION OF THE ALTERATION.

**HOMELAND TOWERS
LAKE CASSE**

SITE: 254 CROTON FALLS ROAD
ITEMS: CARMEL, NY 10541

APT FILE NUMBER: NY28350

DATE: 09/08/18 DRAIN BY: CSH
CHECKED BY: RCB

SHEET TITLE:

**1,000' RADIUS
PROPERTY OWNERS**

SHEET NUMBER:

OF NEW YORK STATE

R-2

PROP. PROJECT LIMITS OF
DISTURBANCE = 13,115 SF (0.30 ACRES)

EXIST. 12" TREE & STUMP TO BE
REMOVED & TAKEN OFF SITE

PROP. EROSION CONTROL BLANKET
ON ALL SLOPES 3:1 & GREATER (TYP.)

EXIST. 24" MAPLE & STUMP TO BE
REMOVED & TAKEN OFF SITE

PROP. UNDERGROUND ELECTRIC &
TELECOM SERVICE FROM EXIST. DEMARC
POINT (SEE POLE #532139) TO PROP.
COMPOUND (APPROX. 1,000'-1)

4
10'-2" PROTECT EXIST. TREE (TYP. 5 PL.)

EXIST. TWIN 15" TREE & STUMP TO BE
REMOVED AND TAKEN OFF SITE

EXIST. EDGE GRAVEL DRIVE (TYP.)

2
10'-0" PROP. S&T FENCE (TYP.)

PROP. 48x115' (5,280 SF) LEASE AREA

PROP. 140' - AGL GALVANIZED MONOPOLE

1
10'-0" PROP. 36x100' (3,600'-1) 5' R/H HIGH CHAIN LINK
FENCED GRAVEL EQUIPMENT COMPOUND

EXIST. GRAVEL DRIVEWAY/PARKING AREA (TYP.)
(WIDTH VARIES FROM 12' TO 28' -2)

1
10'-0" TEMPORARY STOCKPILE AREA (2 1/2 SIDE
SLOPES - 18% W/ S&T FENCE @ 9'
OFFSET FROM TOE OF STOCKPILE)

NOTES

1. PROPOSED FACILITY IS COMPLETELY NESTLED AMONG
EXISTING MATURE TREES. COMPLETED PROJECT WILL
REMAIN AMONG EXISTING MATURE TREES. NO ADDITIONAL
LANDSCAPING IS PROPOSED.
2. ALL MOUNTING ACCESSORIES TO BE PAINTED TO MATCH
THE COLOR OF THE NEW MONOPOLE.
3. 3 EXISTING TREES - 6" CALIPER DIAMETER & STUMPS TO BE
REMOVED. SEE SITE PLAN.
4. FACILITY WILL INCLUDE A SIGN NOT TO EXCEED 6 SF, LISTING
THE OWNER, OPERATORS NAME & EMERGENCY TELEPHONE
NUMBER.
5. PROPOSED FACILITY IS AN UNARMED FACILITY. EMPLOYEES
WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR
PURPOSES OF SITE & EQUIPMENT MAINTENANCE.

NOTE: THE EXISTING TREE CANOPY HEIGHT IS
APPROXIMATELY 70 FEET ABOVE EXISTING GRADE PER A
FIELD SURVEY CONDUCTED ON NOVEMBER 8, 2018.

NOTE: CONTRACTOR TO HAVE A GPR SURVEY PERFORMED AND
HAVE ALL UNDERGROUND UTILITIES & STRUCTURES MARKED OUT
PRIOR TO CONSTRUCTION.



1 PARTIAL SITE PLAN
SP-2 SCALE: 1" = 20'-0"



LEGEND

- SUBJECT PARCEL PROPERTY LINE
- ADJACENT PROPERTY LINE OR W. LINE
- LIMIT OF DISTURBANCE LINE



HOMELAND TOWERS, LLC
9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810
(203) 297-6345

verizon
4 CENTERCROSS ROAD
WEST NYACK, NY 10994

APT
ENGINEERING

3 SADDLEBROOK DRIVE PHONE: (860) 463-7887
KILLBUCK, CT 06412 FAX: (860) 463-0025
WWW.ALLOWAYENGINEERING.COM

PERMITTING DOCUMENTS

NO.	DATE	REVISION
0	07/05/18	FOR REVIEW: RCB
1	07/20/18	CLIENT REVS: RCB
2	07/20/18	CLIENT REVS: RCB
3	11/12/18	TOWN COMMENTS: RCB
4	05/15/19	TOWN COMMENTS: RCB
5		
6		

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE, P.E.
COMP. APT ENGINEERING
ADD: 3 SADDLEBROOK DRIVE
KILLBUCK, CT 06418

DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
IF IT IS A VIOLATION OF NEW YORK STATE
EDUCATION LAW ARTICLE 14A, SECTION
729(2) FOR ANY PERSON, UNLESS
ACTING UNDER THE DIRECTION OF A
LICENSED PROFESSIONAL ENGINEER OR
LAND SURVEYOR, TO ALTER ANY ITEM IN
ANY WAY, IF AN ITEM BEARING THE SEAL
OF AN ENGINEER OR LAND SURVEYOR IS
ALTERED, THE ALTERING ENGINEER OR
LAND SURVEYOR SHALL AFFIX TO THE
ITEM HIS SEAL AND THE NOTATION
"ALTERED BY" FOLLOWED BY THE SIGNATURE
AND THE DATE OF SUCH
ALTERATION, AND A SPECIFIC
DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS LAKE CASE

SITE: 254 CROTON FALLS ROAD
ADDRESS: CARMEL, NY 10541
APT FILING NUMBER: NY283550
DATE: 07/05/18 DRAWN BY: CSH
CHECKED BY: RCB

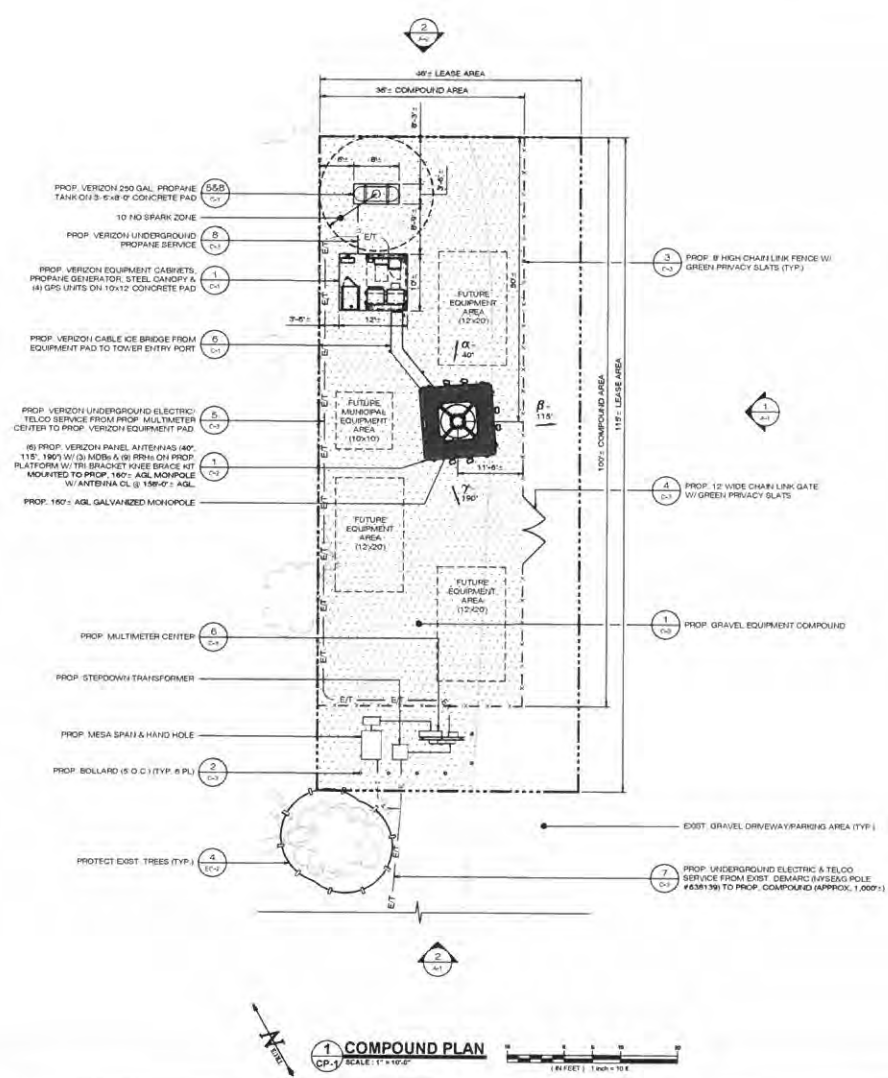
SHEET TITLE

PARTIAL SITE PLAN

SHEET NUMBER

SP-2





1 COMPOUND PLAN
CP-1 SCALE: 1" = 10'-0"

(1/4" = 1' 1 inch = 10 ft)

verizon

4 CENTEROCK ROAD
WEST NYACK, NY 10994

APT ENGINEERING

3 SADDLEBROOK DRIVE PHONE: (860) 863-1887
KILLINGWORTH, CT 06415 FAX: (860) 863-0097
WWW.APTENGINEERING.COM

PERMITTING DOCUMENTS	
NO.	DATE
1	07/20/18
2	07/26/18
3	11/13/18
4	03/13/19
5	
6	

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE P.E.
COMP. APT ENGINEERING
ADD: 3 SADDLEBROOK DRIVE
KILLINGWORTH, CT 06415

DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 (2) FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED. THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THE SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS LAKE CASSE

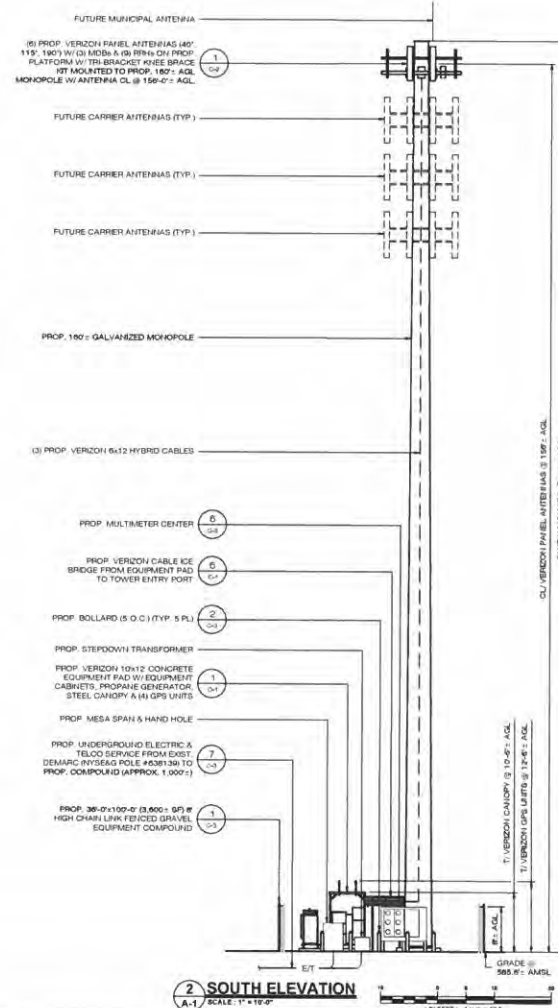
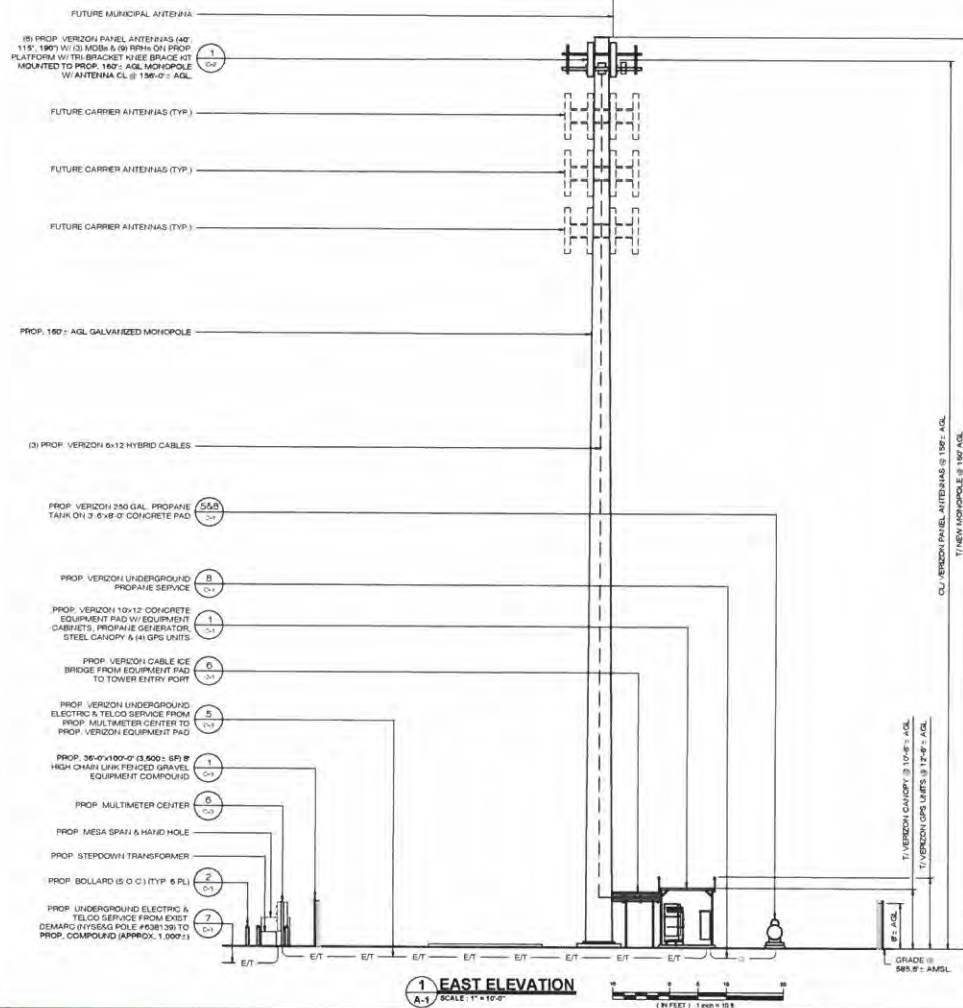
SITE: 254 CROTON FALLS ROAD
ADDRESS: CARMEL, NY 10541

APT FILING NUMBER: NYX23550

DATE: 07/09/18 DRAWN BY: CMB
CHECKED BY: RCB

SHEET TITLE:
COMPOUND PLAN

SHEET NUMBER:
CP-1



HOMELAND TOWERS, LLC.
9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810
(203) 297-6345

4 CENTEROCK ROAD
WEST NYACK, NY 10994

APT
ENGINEERING

3 GADSDENBROOK DRIVE PHONE: (860) 865-1851
KILLINGWORTH, CT 06455 FAX: (860) 865-0051
WWW.APTENGINEERING.COM

PERMITTING DOCUMENTS		
NO.	DATE	REVISION
0	07/05/18	FOR REVIEW: RCB
1	07/20/18	CLIENT REV: RCB
2	07/26/18	CLIENT REV: RCB
3	11/13/18	TOWN COMMENTS: RCB
4	03/13/19	TOWN COMMENTS: RCB
5		
6		

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE P.E.
COMP. APT ENGINEERING
ADD: 3 GADSDENBROOK DRIVE
KILLINGWORTH, CT 06455

DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 14A, SECTION 7209 (2) FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED. THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THE SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

**HOMELAND TOWERS
LAKE CASSE**

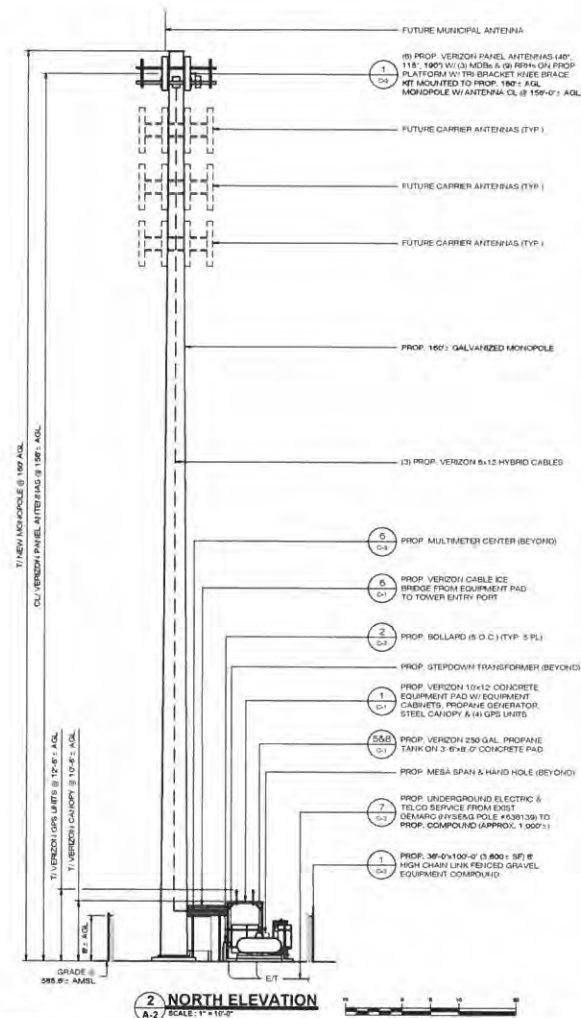
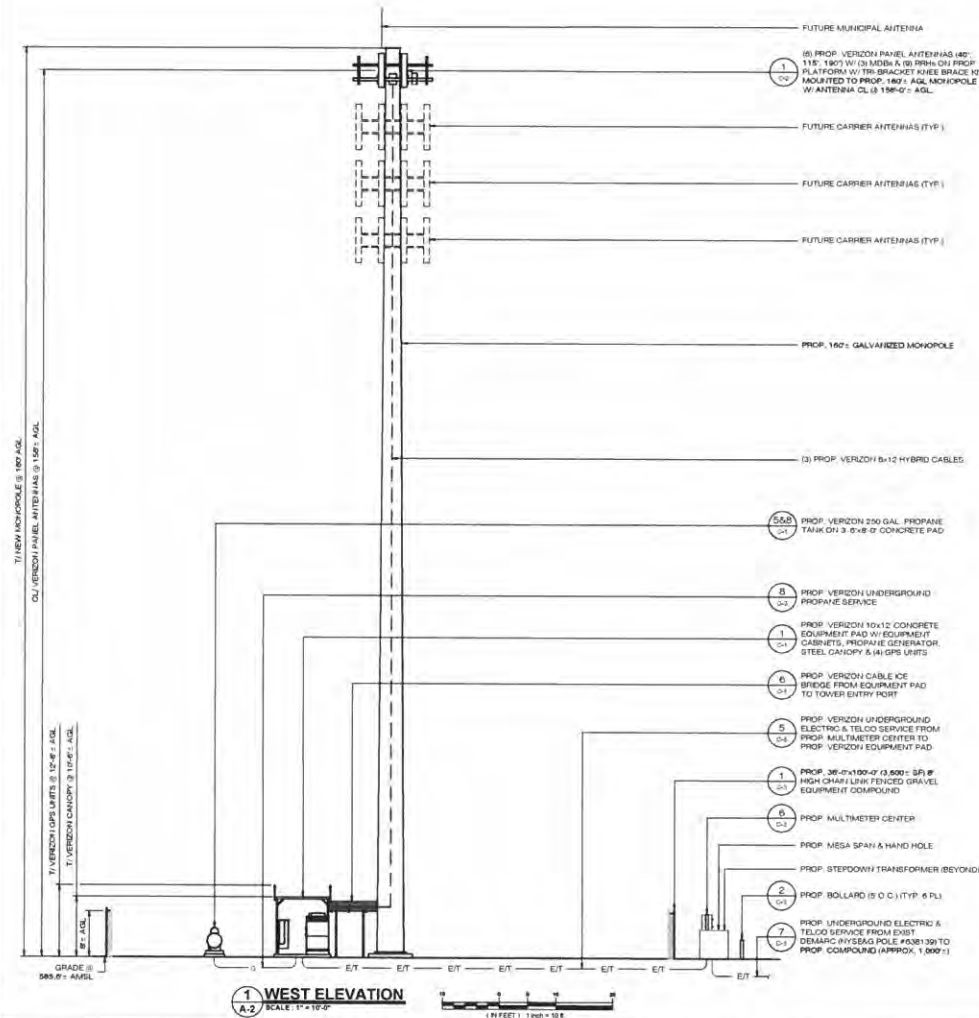
SITE:
354 CROTON FALLS ROAD
ADDRESS: CAMEL, NY 10641

APT FILING NUMBER: NY265550

DATE: 07/05/18 DRAWN BY: CSH
CHECKED BY: RCB

SHEET TITLE:
ELEVATIONS

SHEET NUMBER:
A-1





HOMELAND TOWERS LLC
8 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810
(203) 297-6345



4 CENTERCROCK ROAD
WEST NYACK, NY 10994



3 SADDLEBROOK DRIVE PHONE: (860) 861-1857
KELLSWORTH, CT 06418 FAX: (860) 861-0001
WWW.ALPOINTECH.COM

PERMITTING DOCUMENTS	
NO.	DATE / REVISION
2	07/09/18 FOR REVIEW: RCB
1	07/29/18 CLIENT REVS: RCB
2	07/29/18 CLIENT REVS: RCB
3	11/13/18 TOWN COMMENTS: RCB
4	05/13/19 TOWN COMMENTS: RCB
5	
6	

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE P.E.
COMP. APT ENGINEERING
ADD: 3 SADDLEBROOK DRIVE
KELLSWORTH, CT 06418

DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 8 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 140, SECTION 720(2) FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THE SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS LAKE CASSE

SITE: 254 CROTON FALLS ROAD
ADDRESS: CARMEL, NY 10514

APT FILING NUMBER: NY28136

DATE: 07/09/18 DRAWN BY: CMH
CHECKED BY: RCB

SHEET TITLE: ELEVATIONS

SHEET NUMBER: A-2

EROSION AND SEDIMENT CONTROL PLAN NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL MEASURES, LATEST EDITION, AND THE FOLLOWING:

- [illegible]

SEDIMENT & EROSION CONTROL NARRATIVE

- THE PROJECT PROVIDES THE INSTALLATION OF A NEW, HIGH MONITORING AND WITH APPROPRIATE MONITORING EQUIPMENT, ALL DISTURBED AREAS WILL BE REVEGETATED AND STABILIZED PRIOR TO THE INSTALLATION OF THE REPOSED EQUIPMENT.
- THE PROJECTS REQUIRED INVOLVED THE FOLLOWING CONSTRUCTION:
- A. CLOSURE OF 100' OF MONITORING
 - B. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - C. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - D. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - E. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - F. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - G. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - H. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - I. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - J. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - K. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - L. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - M. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - N. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - O. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - P. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - Q. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - R. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - S. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - T. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - U. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - V. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - W. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - X. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - Y. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
 - Z. CONSTRUCTION OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION
- FOR THE PROJECT, THERE ARE 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION. THE TOTAL AREA OF THE SITE HAS BEEN INCREASED BY A TOTAL OF 100' OF 24" DIAMETER EROSION CONTROL AND STABILIZATION.
- A GEOTECHNICAL ENGINEERING REPORT WILL BE COMPLETED FOR THIS PROJECT AND WILL BE AVAILABLE UNDER REHABILITATION COVERED.
- IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 12 WEEKS.
- REFER TO THE CONSTRUCTION MONITORING AND RECORDS AND RECONSTRUCTION NOTES FOR INFORMATION REGARDING THE SEQUENCES OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION ACTIVITIES.
- EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE AVAILABLE INFORMATION OF THE MONITORING STATION AND RECONSTRUCTION FOR EROSION AND SEDIMENT CONTROL, BLUE BOOK, LATEST EDITION.
- FOR THE PHYSICAL EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON SHEET 2 OF 2 OF PROVIDED AS A REFERENCE TO THE DOCUMENTATION FOR THIS PROJECT.
- CONSTRUCTION REACTANTS TO BE USED DURING CONSTRUCTION ARE:
- A. STABLE CONSTRUCTION:
 - B. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - C. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - D. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - E. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - F. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - G. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - H. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - I. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - J. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - K. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - L. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - M. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - N. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - O. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - P. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - Q. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - R. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - S. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - T. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - U. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - V. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - W. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - X. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - Y. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.
 - Z. MAINTAIN THE DISTURBED AREAS DURING CONSTRUCTION.

SUGGESTED CONSTRUCTION SEQUENCE

- THE FOLLOWING MINIMUM REQUIREMENTS OF CONSTRUCTION ACTIVITIES IS PROPOSED BASED UPON ENVIRONMENTAL ASSIGNMENT AND MANAGEMENT STRATEGIES. THE CONTRACTOR MAY ELECT TO ALTER THE REQUIREMENTS TO BEST MEET THE CONSTRUCTION NEEDS OF THE SITE ACTIVITIES AND WEATHER CONDITIONS. CONTRACTOR TO BE RESPONSIBLE FOR THE BUDGETING OF THE PROJECT BASED AS NOTED THROUGHOUT CONSTRUCTION ACTIVITIES.
1. NOTIFY THE OWNER TO SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE TREE TO BE REMOVED IN THE FIELD. AS NECESSARY TO FACILITATE THE TREE CONSTRUCTION MEETING.
2. CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL. DISCUSS THE SUB-COMMITTEE AND THE REVIEW ON PROGRESS, RESPONSIBLE FOR THE MAINTENANCE, OPERATION, AND THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.
3. NOTIFY THE OWNER AT LEAST FOUR (4) HOURS BEFORE COMMENCEMENT OF ANY CONSTRUCTION PROCESSES FOR THE REGULATED ACTIVITY ON THIS PROJECT. NOTIFY DODD S&B NEW YORK AT (914) 436-1500.
4. CLEAR AND BARE AS REQUIRED TO INSTALL THE PERIMETER EROSION AND SEDIMENTATION CONTROL MEASURES AND, IF APPLICABLE, TREE PROTECTION.
5. PERFORM THE REMAINING CLEARING AND GRUBBING AS NECESSARY. REMOVE CUT LOGWOOD AND STUMPS (ONE BRUSH AND STUMPS FOR FUTURE USE OR REMOVE OFF SITE). REMOVE AND DISPOSE OF CONSTRUCTION DEBRIS OFF-SITE.
6. TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE.
7. DISCARP AND PLOW-GROUND EROSION COMPOUND.
8. DISCARP FOR TOWER FOUNDATION & EQUIPMENT PAD.
9. INSTALL PERIMETER AND INSTALL EROSION, EROSION, REINFORCING A CONCRETE FOR TOWER FOUNDATION, EQUIPMENT PAD & EQUIPMENT HEALTH PROTECTION.
10. INSTALL BARRIERS, GRADING, GRADING, GRADING, UTILITY CONDUITS & UTILITY EQUIPMENT.
11. BACKFILL TOWER FOUNDATION.
12. INSTALL MOBILE.
13. INSTALL TELECOMMUNICATIONS EQUIPMENT ON TOWER & EQUIPMENT.
14. INSTALL & EQUIPMENT GRADING, SURROUND.
15. FINISH GRADING, INSTALL GRASS SURFACES.
16. INSTALL FENCING.
17. CONNECT (GROUNDING LEADS & LIGHTNING PROTECTION).
18. FINAL GRADE AROUND COMPOUND.
19. LAND REED DISTURBED AREAS OUTSIDE COMPOUND, AS REQUIRED.
20. TEST AT A NEW EQUIPMENT.
- AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE OWNER, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROL FENCING.
- PERFORM FINAL PROJECT CLEANUP.

CONSTRUCTION INFORMATION: <http://www.enr.construction.com/resources/special/>

USE CATEGORY	PROTECTION SCHEDULE
CONSTRUCTION ENTRANCE	DAILY
PAVEMENT	WEEKLY & WITHIN 24 HOURS OF RAINFALL @ 1/2"
UTILITY	WEEKLY & WITHIN 24 HOURS OF RAINFALL @ 1/2"
BUILT SLOPE	WEEKLY & WITHIN 24 HOURS OF RAINFALL @ 1/2"
TORCHDOWN STOCKPILE	DAILY
WATERBARS	DAILY
TEMPORARY OVERSLOPE CURBING	DAILY & WITHIN 24 HOURS OF RAINFALL @ 1/2"
TEMPORARY SEDIMENT TRAPBARRIERS	WEEKLY & WITHIN 24 HOURS OF RAINFALL @ 1/2"
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL @ 1/2"

MAINTENANCE FREQUENCY

- PLACE ADDITIONAL STAKE, EXTENDING THE LENGTH TO REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACE OF TRUCKING SEDIMENT.
- REPAIR FENCE WHEN IT REACHES, OR OBSERVED DESTRUCTION, IS OBSERVED. REMOVE BOLT TWENTY INCHES REACHER TO THE HEIGHT OF THE FENCE.
- REPAIR FENCE WHEN IT REACHES, OR OBSERVED DESTRUCTION, IS OBSERVED. REMOVE BOLT TWENTY INCHES REACHER TO THE HEIGHT OF THE FENCE.
- DEBARFERENCE WHEN IT REACHES, OR OBSERVED DESTRUCTION, IS OBSERVED. REMOVE BOLT TWENTY INCHES REACHER TO THE HEIGHT OF THE BACK.
- DEBARFERENCE NEEDING SHARPING IS NECESSARY.
- REPAIR FENCE AS NECESSARY. REMOVE BOLT TWENTY INCHES REACHER TO THE HEIGHT OF THE WATER BAR.
- REPAIR FENCE AS NECESSARY. REMOVE CONDITIONS IF HAVE TIME FAVORABLE OCCUR.
- REMOVE SEDIMENT WHEN IT REACHES 12 TO THE ANCHOR. REPAIR FENCE WITH STONE. PLACE.
- REMOVE EXCEED ON DATE ANCHOR IMMEDIATELY. REMOVE ANCHOR.

H
HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

verizon
4 CENTEROCK ROAD
WEST NYACK, NY 10994



APT
ENGINEERING

3 SADDLEBROOK DRIVE PHONE: (800)-8
KILLINGWORTH, CT 06419 FAX: (800)-8
WWW.ALLPOSTSTEEL.COM

PERMITTING DOCUMENTS

NO	DATE	REVISION
0	07/05/18	FOR REVIEW: RCB
1	07/20/18	CLIENT REVS: RCB
2	07/26/18	CLIENT REVS: RCB
3	11/12/18	TOWN COMMENTS: RCB
4	03/13/19	TOWN COMMENTS: RCB
5		
6		

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE P.E.
COMP. APT ENGINEERING
ADD. 3 SADDLEBROOK DRIVE
KILLINGWORTH, CT 06032

DEVELOPER: HOMELAND TOWERS, LL
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
IT IS A...

IT IS A VIOLATION OF NEW YORK STATE
ECONOMIC LAW ARTICLE 145, SECTION
7209 (2) FOR ANY PERSON, UNLESS
ACTING UNDER THE DIRECTION OF A
LICENSED PROFESSIONAL ENGINEER OR
LAND SURVEYOR, TO ALTER AN ITEM IN
ANY WAY, IF AN ITEM BEARING THE SEAL
OF AN ENGINEER OR LAND SURVEYOR IS
ALTERED, THE ALTERING ENGINEER OR
LAND SURVEYOR SHALL AFFIX TO THE
ITEM HIS SEAL AND THE NOTATION
"ALTERED BY" FOLLOWED BY THE
SIGNATURE AND THE DATE OF SUCH
ALTERATION, AND A SPECIFIC
DESCRIPTION OF THE ALTERATION.

**HOMELAND TOWERS
LAKE CASSE**

APT FILING NUMBER: NY283550

DATE: 07/05/18	DRAWN BY: CSH
	CHECKED BY: RCB

SHEET TITLE

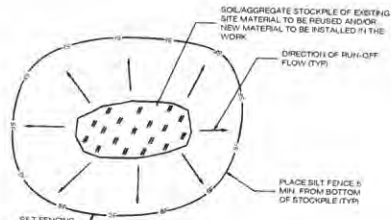
EROSION CONTROL

NOTES

HEET NUMBER:

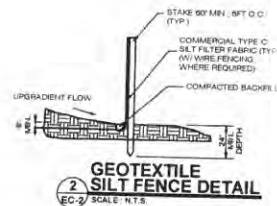
EC-1





- NOTES**
1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
 2. SOIL AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS.
 3. RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
 4. STOCKPILE HEIGHTS MUST NOT EXCEED 35' STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
 5. ANY SOIL IN STOCKPILES IN EXCESS OF SEVEN (7) DAYS SHALL BE RESEED AND MULCHED OR COVERED.

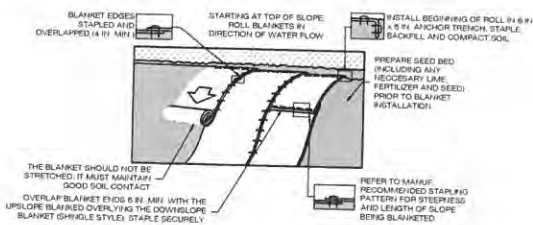
1 TEMPORARY STOCKPILE DETAIL
EC-2 SCALE: N.T.S.



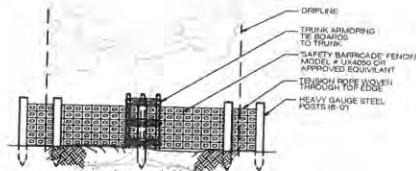
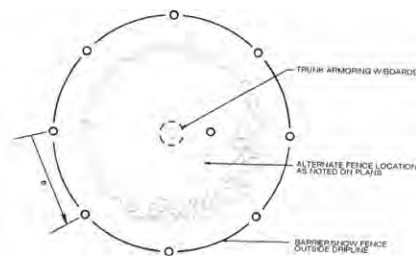
2 GEOTEXTILE SILT FENCE DETAIL
EC-2 SCALE: N.T.S.

- SEQUENCE OF CONSTRUCTION**
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECS IN A 6" DEEP X 8" WIDE TRENCH WITH APPROXIMATELY 12" OF RECS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECS AGAINST THE SOIL SURFACE. ALL RECS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
 3. ROLL THE RECS DOWN HORIZONTALLY ACROSS THE SLOPE. SECURE RECS AGAINST THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
 4. THE EDGES OF PARALLEL RECS MUST BE STAPLED WITH APPROXIMATELY 2" - 3" OVERLAP DEFENDING ON THE RECS TYPE.
 5. CONSECUTIVE RECS SPUN DOWN THE SLOPE MUST BE BID OVER EACH OTHERS STYLE WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECS WIDTH.

- NOTES**
1. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
 2. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
 3. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
 4. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 5. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERMANENT VEGETATION IS ESTABLISHED TO A MINIMUM 90% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.



3 EROSION CONTROL BLANKET STEEP SLOPES
EC-2 SCALE: N.T.S.



4 TREE PROTECTION
EC-2 SCALE: N.T.S.

HOMELAND TOWERS, LLC
9 HARMONY STREET
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(203) 297-6345

verizon
4 CENTERCROSS ROAD
WEST NYACK, NY 10994

APT ENGINEERING
3 SADDLEBROOK DRIVE
KELLSBOROUGH, CT 06419
PHONE (860) 453-1907
WWW.APTENGINEERING.COM

PERMITTING DOCUMENTS	
NO.	DATE
0	07/25/18
1	07/25/18
2	07/25/18
3	11/15/18
4	05/13/19

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSER, P.E.
COMP. APT ENGINEERING
ADD. 3 SADDLEBROOK DRIVE
KELLSBOROUGH, CT 06419

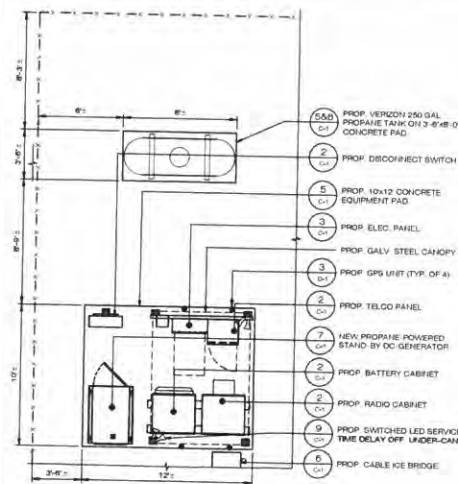
DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 148, SECTION 7208 (2) FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED. THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THE SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

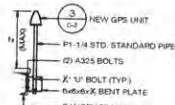
HOMELAND TOWERS, LLC
LAKE CASSE
SITE ADDRESS: 704 CROTON FALLS ROAD
ADDRESS: CARMEL, NY 10514
APT FILING NUMBER: NY23350
DATE: 07/25/18
DRAWN BY: CSH
CHECKED BY: RCB

SHEET TITLE:
EROSION CONTROL
DETAILS

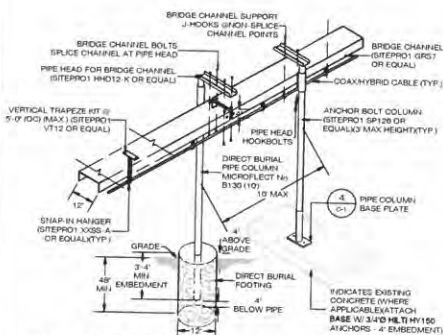
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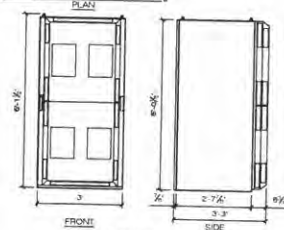
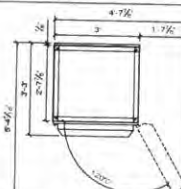
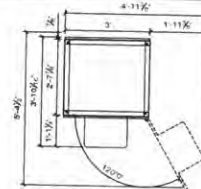
1 VERIZON EQUIPMENT AREA
C-1 SCALE: 1/2" = 1'-0"



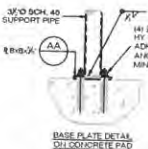
3 GPS MOUNT
C-1 SCALE: N.T.S.



6 CABLE BRIDGE & COAX HANGER DETAIL
C-1 SCALE: N.T.S.



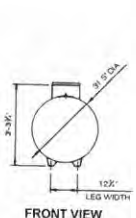
2 EQUIPMENT DETAILS
C-1 SCALE: N.T.S.



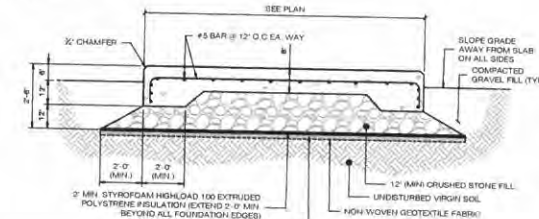
4 PIPE BASE PLATE
C-1 SCALE: N.T.S.



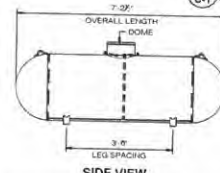
7 PROPANE GENERATOR SCHEMATICS
C-1 SCALE: 1/2" = 1'-0"



8 ABOVE GROUND PROPANE TANK DETAIL
C-1 SCALE: N.T.S.

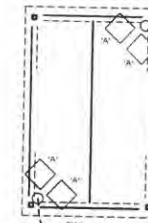


5 EQUIPMENT PAD
C-1 SCALE: N.T.S.



- 250 USING AMSE VII, DIV. 1 ABOVE GROUND LPG TANK AS MANUFACTURED BY TRINITY CONTAINERS, LLC.
- WWW.TRINITYCONTAINERS.COM
- PH. 1-888-558-8088
- WEIGHT (EMPTY) - 472 lbs
- COLOR WHITE
- LPG TANK TO BE BOLTED TO CONCRETE SLAB PER SUPPLIERS REQUIREMENTS

NOTE: PROTECTOR TANK MANUFACTURER SHOP DRAWINGS FOR REVIEW BY ENGINEER OF RECORD PRIOR TO PURCHASE



9 CANOPY LIGHTING
C-1 SCALE: N.T.S.

4 CENTEROCK ROAD
WEST NYACK, NY 10994

3 SADDLE BROOK DRIVE PHONE: (860) 463-1807
TELEPHONE: (860) 463-1807 FAX: (860) 463-1807
WWW.APTENGINEERING.COM

PERMITTING DOCUMENTS		
NO.	DATE	REVISION
1	07/05/18	FOR REVIEW: RCB
2	07/05/18	CLIENT REVE: RCB
3	11/12/18	TOWN COMMENTS: RCB
4	05/13/18	TOWN COMMENTS: RCB
5		
6		

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE, P.E.
COMP. APT ENGINEERING
ADD: 3 SADDLE BROOK DRIVE
KILLINGWORTH, CT 06419

DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

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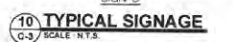
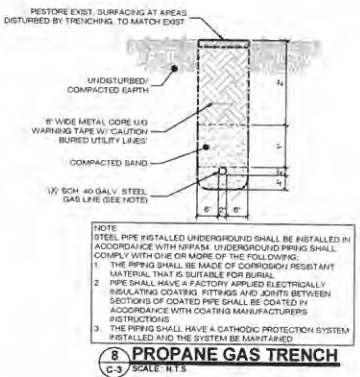
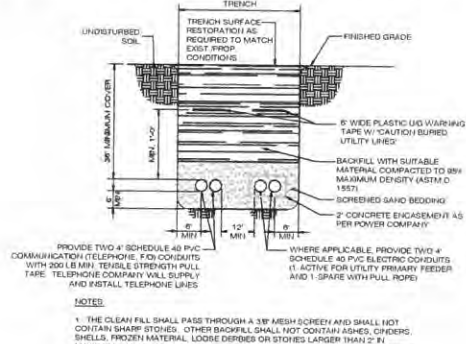
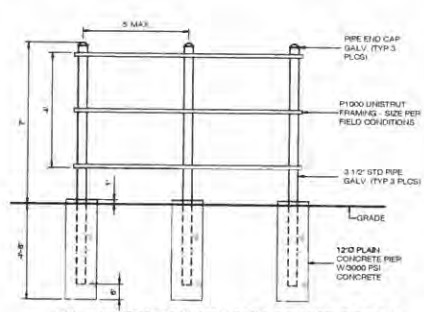
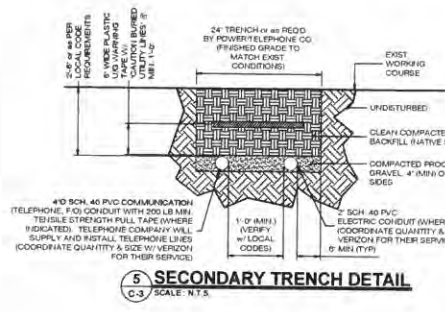
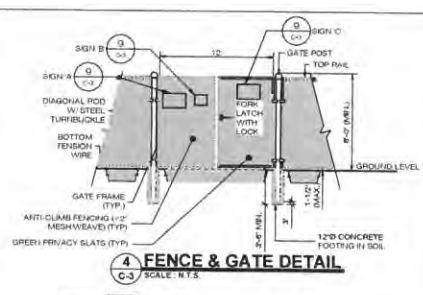
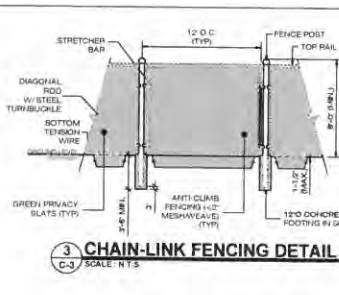
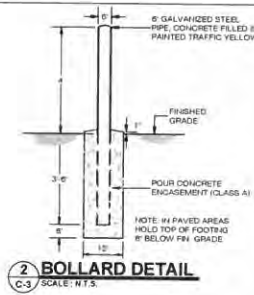
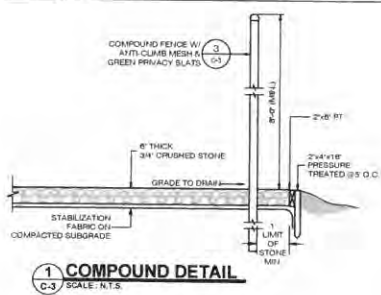
**HOMELAND TOWERS
LAKE CASSE**

SITE: 234 CROTON FALLS ROAD
ADDRESS: CARMEL, NY 12041

APT FILING NUMBER: NY283556
DATE: 07/05/18 DRAWN BY: CBN
CHECKED BY: RCB

SHEET TITLE:
**VERIZON EQUIPMENT
PLAN & DETAILS**

SHEET NUMBER:
C-1



4 CENTERCROCK ROAD
WEST NYACK, NY 10994

APT
ENGINEERING

13 ADDLERBROOK DRIVE PHONE: (914) 983-1831
FLAMINGHEIM, CT 06424 FAX: (914) 983-1831
WWW.APTENGINEERING.COM

PERMITTING DOCUMENTS	
NO.	DATE
0	07/05/18 FOR REVIEW, RCB
1	07/05/18 CLIENT REV. RCB
2	07/05/18 CLIENT REV. RCB
3	11/12/18 TOWN COMMENTS, RCB
4	02/12/19 TOWN COMMENTS, RCB
5	
6	

DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE P.E.
COMP. APT ENGINEERING
ADD. 13 ADDLERBROOK DRIVE
KILLINGWORTH, CT 06419

DEVELOPER: HOMELAND TOWERS, LLC
ADDRESS: 9 HARMONY STREET
2ND FLOOR
DANBURY, CT 06810

NOTE:
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EDUCATION LAW ARTICLE 14C, SECTION
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"ALTERED BY" FOLLOWED BY THE
SIGNATURE AND THE DATE OF SUCH
ALTERATION AND A SPECIFIC
DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS
LAKE CASSE

SITE: 324 CROTON FALLS ROAD
ADDRESS: CARMEL, NY 10541

APT FILING NUMBER: NY283550

DATE: 07/05/18 DRAWN BY: CBN
CHECKED BY: RCB

SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
C-3

STATE OF NEW YORK
OFFICE OF THE ENGINEER
AND LAND SURVEYOR

Trombetta,Rose

From: karlen@bestweb.net
Sent: Thursday, March 28, 2019 2:29 PM
To: Trombetta,Rose
Subject: April 9 planning board

To Craig Paepre,

I would like to be added to the agenda of the planning board for April 9th 2019 for an extension of a building permit for - Thimm lake property 65.17.1-15 which exp 8/17/18.

Thank you,
Karl Thimm
Appliance Sales Plus
914-248-5800
Karl@appliancesalesplus.com

TOWN OF CARMEL
PLANNING BOARD



60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 - Ext.190
www.ci.carmel.ny.us

REGRADE APPLICATION

SUBMIT 11 APPLICATIONS, 11 SHORT EAF FORMS, 2 DISCLOSURE ADDENDUM STATEMENTS,
5 SITE PLANS & APPROPRIATE FEE.

PROPERTY ADDRESS: 229 SITEAR/Hue Rd TAX MAP # 65.11-1-11

DATE SUBMITTED: 3/26/19 COMMERCIAL: _____ RESIDENTIAL: X OTHER: _____

NAME OF APPLICANT: Robert Pozzani TELEPHONE NUMBER: _____

APPLICANT'S ADDRESS: 229 Shear Hug Road, Mahopac

APPLICANT'S SIGNATURE: [Signature] EMAIL: _____

NAME OF PRESENT OWNER (IF DIFFERENT FROM APPLICANT): N/A

ADDRESS: _____ TELEPHONE NUMBER: _____

PROJECT PROFESSIONAL ENGINEER OF RECORD: John Kerrell, Jr. P.E.

ADDRESS: 1210 Shuman Rd, Patterson, NY 12563 TELEPHONE NUMBER: 845 721 0455

EMAIL: JACK 4911 @ yahoo.com SIZE OF LOT: 0.955 A

DESCRIPTION OF PROPOSED WORK & PURPOSE: Placement of fill in rear

yard, ± 500cy

REFER TO ATTACHED TOWN OF CARMEL CODE A FOR FURTHER REGULATIONS AND
REQUIREMENTS.

AMOUNT OF FEE PAID: (UP TO 2 ACRES \$300.00) \$ 300. - Pd - Check #3558
(FROM 2 TO 5 ACRES - \$600.00) \$ _____
(OVER 5 ACRES \$900.00 PLUS \$40.00/ACRE) \$ _____

Short Environmental Assessment Form

Part 1 - Project Information

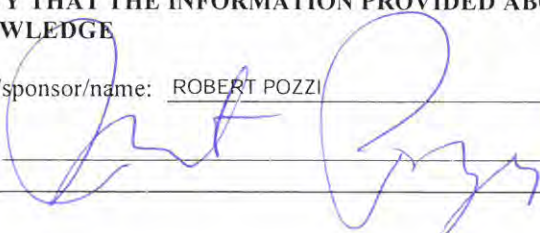
Instructions for Completing

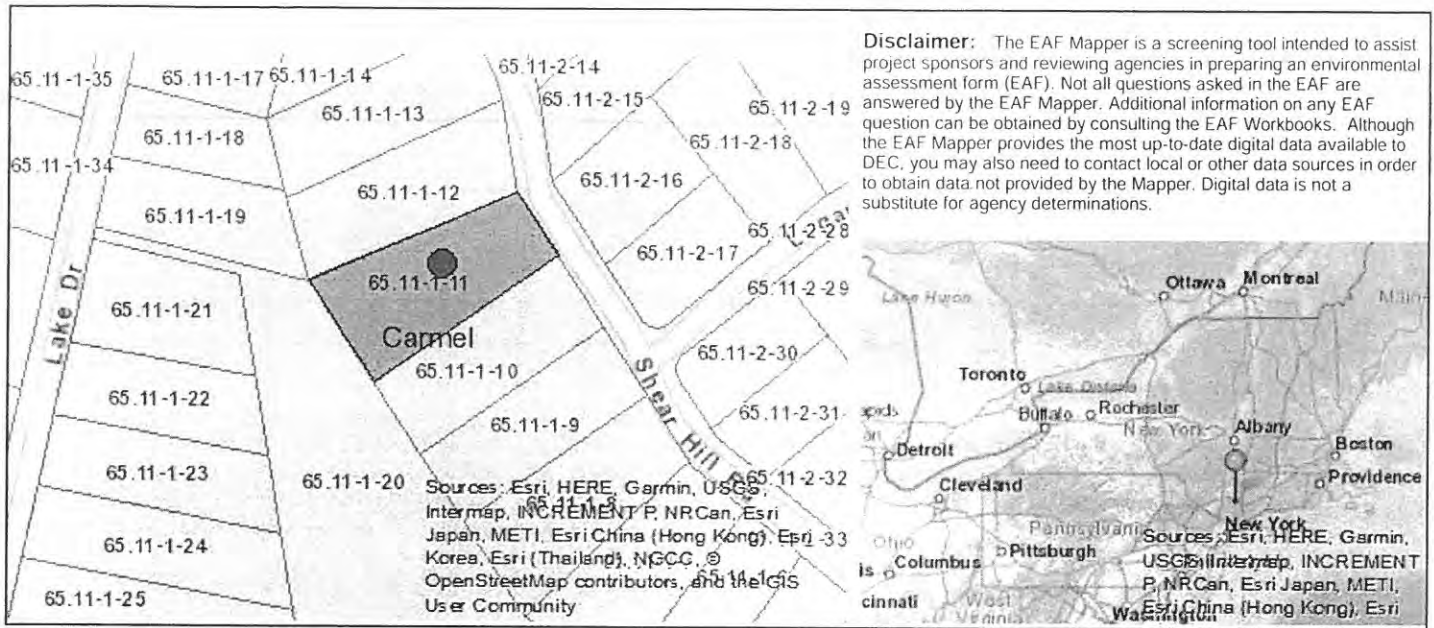
Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information			
Name of Action or Project: POZZI GRADING PERMIT			
Project Location (describe, and attach a location map): 229 SHEAR HILL ROAD, MAHOPAC, NY			
Brief Description of Proposed Action: PLACING APPROXIMATELY 500 YARDS OF CLEAN FILL IN THE REAR YARD			
Name of Applicant or Sponsor: ROBERT AND VIRGINIA POZZI		Telephone: _____	
		E-Mail: L. _____	
Address: 229 SHEAR HILL ROAD			
City/PO: MAHOPAC		State: NY	Zip Code: 10541
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO ☒
			YES ☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:			NO ☒
			YES ☐
3. a. Total acreage of the site of the proposed action?		_____ 1 acres	
b. Total acreage to be physically disturbed?		_____ .2 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		_____ 1 acres	
4. Check all land uses that occur on, are adjoining or near the proposed action:			
5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☒ Residential (suburban)			
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):			
☐ Parkland			

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?	☐	☒	☐
b. Consistent with the adopted comprehensive plan?	☐	☒	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	☐	☒	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?	NO	YES	
If Yes, identify: _____	☒	☐	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
b. Are public transportation services available at or near the site of the proposed action?	☒	☐	
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☒	☐	
9. Does the proposed action meet or exceed the state energy code requirements?	NO	YES	
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☒	
10. Will the proposed action connect to an existing public/private water supply?	NO	YES	
If No, describe method for providing potable water: _____ DRILLED WELL EXISTING	☒	☐	
11. Will the proposed action connect to existing wastewater utilities?	NO	YES	
If No, describe method for providing wastewater treatment: _____ SEPTIC SYSTEM EXISTING	☒	☐	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	NO	YES	
	☒	☐	
b. 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?	☒	☐	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	☐	☒	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☒	☐	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____			

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: ☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional ☐ Wetland ☐ Urban ☒ Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Long-eared Bat	NO	YES
	☐	☒
16. Is the project site located in the 100-year flood plan?	NO	YES
	☒	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:	NO	YES
	☐	☒
	☐	☒
	☒	☐
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	NO	YES
	☒	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	NO	YES
	☒	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	NO	YES
	☒	☐
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor/name: <u>ROBERT POZZI</u> Date: <u>MARCH 3, 2019</u> Signature:  Title: <u>OWNER</u>		



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Northern Long-eared Bat
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No

