

HANOVER ESTATES

Charrette Summary Report



Prepared by:



January 2012

TABLE OF CONTENTS

Foreword	ii
Charrette Committee Participants	iii
Executive Summary	1
Methodology	4
Site Layout	5
Traffic and Site Access	8
Visual Impacts, Noise, Lighting, and Landscaping	11
Natural Resources, Tree Protection and Stormwater	13
Summary of All Recommendations	15
Conclusion	16

LIST OF APPENDICES

- Appendix 1: Petition to Planning Board from the Residents of Apple Hill Estates
- Appendix 2: Letter to Apple Hill Residents from Supervisor Puglisi
- Appendix 3: Comments from Charrette Committee Members on Draft Charrette Summary Report
- Appendix 4: Excerpted Pages from the Survey and Assessment of Historic Roads Report
[full report (*external link*)]
- Appendix 5: AKRF Peak Warrant Analysis and Letter from Cortlandt Traffic and Safety Advisory Committee (TSAC)
- Appendix 6: Town of Cortlandt Comprehensive Master Plan Policy Number 83
[complete document (*external link*)]
- Appendix 7: Apple Hill Estates Approved Subdivision Plat
- Appendix 8: Bartlett Tree Report

FOREWORD

In February of 2011, an application was made to the Cortlandt Planning Board, by Croton Realty & Development for Preliminary Plat Approval and for a Wetland and Tree Removal Permit for a 26 lot major subdivision (25 building lots and 1 conservation parcel) of a 35.9 acre parcel of property located on the east side of Croton Avenue, approximately 400 feet north of Furnace Dock Road.

In April of 2011, the Planning Board declared themselves lead agency under the NYS SEQR process but have not yet made a SEQR determination. It was also in April 2011, when the applicant decided to reach out to the Town Board to discuss various development options for the property. It was mutually agreed to take a "time out" from the Planning Board process to allow for a Design Charrette to be formed.

The Hanover Charrette Committee was formed by the Cortlandt Town Board by Resolution No. 192-11 adopted on July 19, 2011. An environmental, planning and consulting firm, AKRF, was selected and retained by the Town, and paid for by the developer, to act as a third party facilitator and to develop the Charrette Summary Report.

The Charrette committee was composed of several community leaders including representatives from the Conservation Advisory Council, the Parks Recreation and Conservation Advisory Board, Traffic Safety Advisory Council, Open Space Committee as well as area residents and a staff member from Cortlandt. It was decided at the time of the formation of the Committee by the Town Board that the Charrette should take place outside of the direct involvement of the Planning Board, therefore no member of the Planning Board or its direct staff were appointed to the Charrette.

On August 8, 2011, the Planning Board received a petition signed by a majority of the residents of Apple Hill Estates. In the petition, the residents stated their firm opposition to any proposed road connection between Apple Hill Estates and Apple Hill Drive serving the proposed subdivision on the former Croton Egg Farm property (**see Appendix 1**). On September 8, 2011, Supervisor Puglisi wrote a letter to the residents of Apple Hill Estates (**see Appendix 2**) thanking them for the petition and informing them a charrette committee had been formed to consider, discuss, and review various options and plans for the former Croton Egg Farm property. The Supervisor invited the public to attend these meetings and listen to the appointed committee members discuss the various plans. After the close of each of the charrette committee meetings, any members of the public in attendance were given the opportunity to make comments and express their thoughts to the committee.

The committee's objectives were to identify and consider relevant environmental factors early in the planning stages of the proposed project and to make recommendations to the Town regarding the development concept. The goal of any Charrette is to capture the vision, values, and ideas of the community early in the planning process to help build a vision for a site through a collaborative team approach. The hands-on approach of the Charrette, the opportunity to interact with differing perspectives, and the fact that participants receive immediate feedback during the

Charrette, allow issues to be identified and resolved early on in the process. The Charrette not only produces very useful information, but it also enables the community to realize how much consensus there really is for key issues in a constructive format.

We would like to thank all of the participants for agreeing to take part in the Hanover Estates Planning Charrette. The result of this planning effort is a concept plan that reflects both the community's and applicant's needs. The goal of the Charrette was to reach a consensus on issues wherever possible. Recommendations where a consensus was reached have been provided. Where consensus was not reached on an issue it is indicated in the report. This report is intended to document the Charrette and present the vision and illustrative material prepared during the Charrette while giving elected officials and policy makers a strong basis for making decisions regarding future land uses at the site.

CHARRETTE COMMITTEE PARTICIPANTS

Charrette Committee Members:

Ed Coccozza	TSAC Committee/Resident
James Creighton	PRC Advisory Board/Resident
Robert Cusick	Open Space Committee/Resident
David Douglas	Open Space Committee/Resident
Seth Jacobson	Applicant
Cynthia Kalangis	Resident
Peter Kalangis	Resident
Dominick Lauria	Resident
Michele McGovern	Resident
John Milmore	CAC/Resident
Marge Parsons	Resident

Attendees:

Rosemary Boyle Lasher	Town of Cortlandt
Timothy L. Cronin, P.E.	Applicant's Representative
Jim Teed	Applicant's Representative
David Steinmetz, Esq.	Applicant's Attorney
Brad Schwartz, Esq.	Applicant's Attorney

Facilitators:

Michelle Robbins, AICP	AKRF, Inc., Planning and Engineering Consultants
Anthony Russo	AKRF, Inc., Planning and Engineering Consultants

EXECUTIVE SUMMARY

This report summarizes the findings and recommendations of the Hanover Estates Charrette Committee. The committee met four times between September and November 2011 (including one site visit) to consider a proposed development concept for a residential subdivision located at the former Croton Egg Farm site on Croton Avenue (see **Figure 1**).

The committee's objectives were to identify and consider relevant environmental factors early in the planning stages of the proposed project and make recommendations to the Town regarding the development concept. The meetings were attended by: ten community representatives, Seth Jacobson (the Applicant); Rosemary Boyle Lasher (a town representative); and the Applicant's consultants (see list of charrette participants and attendees at the front of this document). The meetings were facilitated by Anthony Russo and Michelle Robbins of AKRF, Inc., an environmental, engineering, and planning consulting firm.

The proposed 35.9-acre project site is zoned R-40 (see **Figures 2 and 3**). Under the applicant's "Preferred Plan" (the original subdivision plan submitted to the Planning Board by the applicant), the site would be subdivided into 25 conventional lots with a minimum lot size of 40,000 square feet (see **Figures 4 and 5**). A new road would be developed to provide access to most of the lots and would connect Croton Avenue to the adjacent Apple Hill subdivision. Three lots with driveways on Croton Avenue would also be developed. In addition, the proposed project would include a 5.07-acre conservation area with a dog park and picnic area.

The applicant's "Preferred Plan" and Alternatives 1, 2, and 3 (see **Figures 6, 7, and 8**) were presented by the applicant at the first charrette meeting. Over the course of the three meetings and one site visit, the committee identified issues and concerns and made recommendations regarding the proposed development plan. Several modifications to the applicant's "Preferred Plan" were also proposed by committee members. Based on the discussion and recommendations made by the committee during the charrette process, the applicant developed four new alternatives. These Alternatives included 4, 5, 6, and 7 (see **Figures 9, 10, 11, and 12**), which were presented for discussion at the second charrette meeting; and Alternatives 9 and 10 (see **Figures 13 and 14**), which were developed based on the discussion, refinements, and recommendations expressed by the committee members at the second charrette meeting. Please note that no Alternative 8 was developed by the applicant.

Through the charrette process, the committee was able to reach consensus on the committee's preferred concept (Alternative 9) (see **Figure 13**). Alternative 9 is a cluster subdivision of 27-lots with 17.2 acres of total site area available for town use including a multi-use sports field with associated parking, a dog park and picnic area, and open space. It is important to note that not every charrette member agreed with all aspects of Alternative 9. Although most committee members expressed a preference for the layout presented in Alternative 9, a few committee members preferred the layout presented in Alternative 10 (see **Figure 14**) and one committee member preferred the layout presented in Alternatives 1 and 2 (see **Figures 6 and 7**).

The most significant changes made to the project based on committee recommendations were:

- **the cluster layout;**
- **the proposed boulevard entrance;**
- **elimination of public road connection to Apple Hill Drive;**
- **the addition of a multi-use sports field and associated parking available to the public;**
- **the removal of all lots and driveways along Croton Avenue;**
- **the elimination of an on-site septic system in favor of a sewer line connection to Cortlandt Ridge (aka Emery Ridge) and the Stephens Lane Pump Station;**
- **and the addition of a buffer between the proposed development and Apple Hill Estates.**

At the first and last meetings, AKRF gave a brief presentation on the State Environmental Quality Review (SEQR) process. The objective of this presentation was to show committee members where the charrette process fit in relative to the Town approval process. It was discussed that the Town of Cortlandt Planning Board is Lead Agency for the proposed project and would decide whether or not an expanded Environmental Assessment Form (EAF) or Environmental Impact Statement (EIS) would be prepared. It was also discussed that the proposed project would be subject to subdivision approval by the Planning Board, and that Town Board approval would be required for Cluster Subdivision authorization. Finally, it was noted that committee members and the public would have additional opportunities to comment through the public hearing process on the proposed application during the SEQR and subdivision review.

The committee spent the greatest amount of time discussing site layout and how site design would affect natural resources, open space, recreational amenities, and the visual character of the site. Traffic concerns and the location of site access were discussed at every meeting. Committee members also expressed significant concerns related to impacts to steep slopes, trees, and wetlands as well as stormwater and emergency access.

Many of the committee's recommendations were incorporated into the revised site plan by the applicant over the course of the four meetings. The table below outlines the revisions agreed to by the applicant based on the committee's recommendations. This table also illustrates the efforts of the committee to improve the proposed project and the applicant's willingness to incorporate the committee's recommendations into a revised subdivision plan to make it a better project for the community.

Please see next page for a summary table of the major plan elements proposed by the applicant before the charrette and after the charrette.

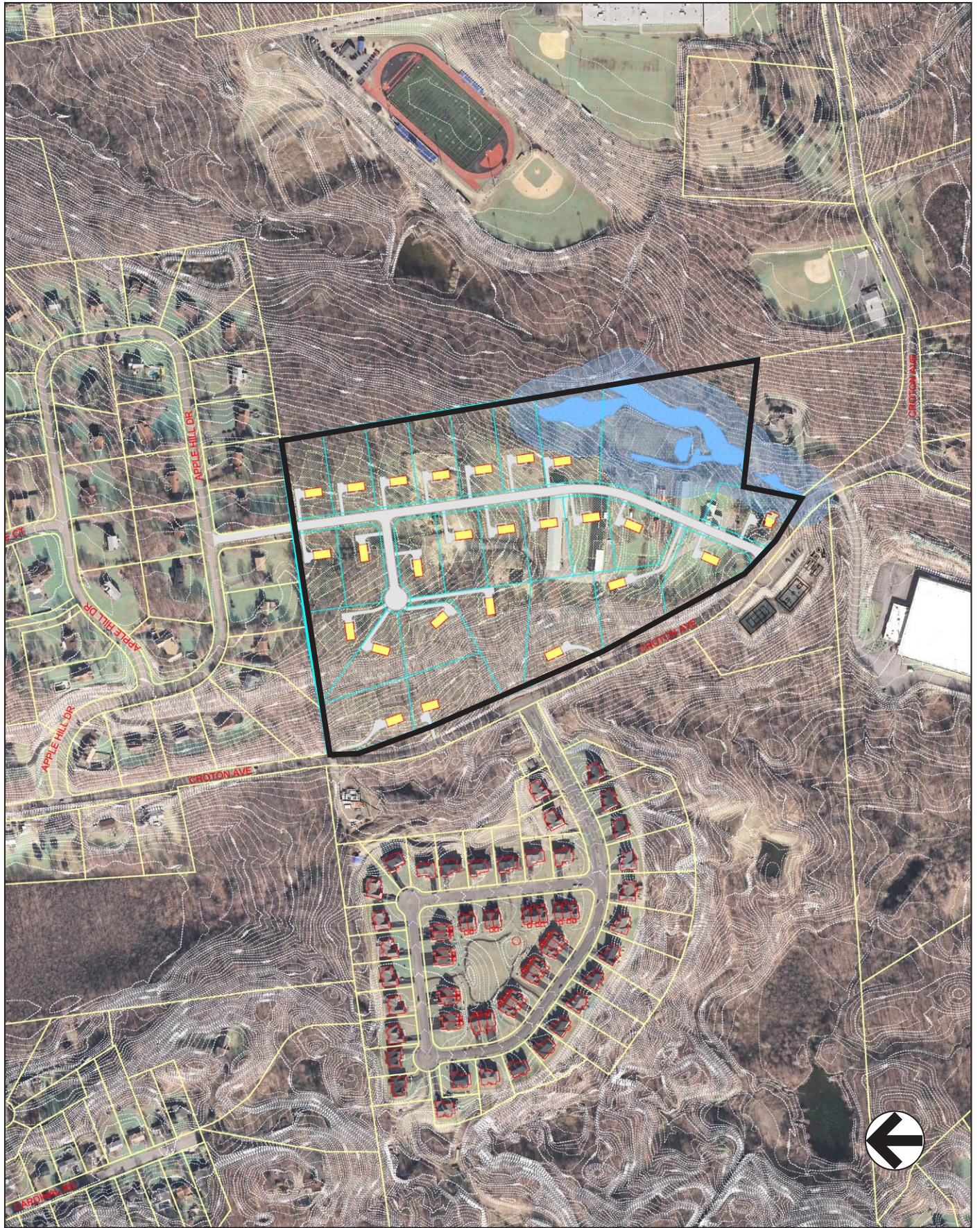




Figure 2

FIGURE 2

LEGEND

N 82°04'05" E 289.63'

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXISTING VEGETATION

EXISTING FENCE

EXISTING STONE WALL

EXISTING TRAIL

EXISTING SOIL BNDRY.

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

EXISTING WATERSHED

EXIST. PAVED DRIVE

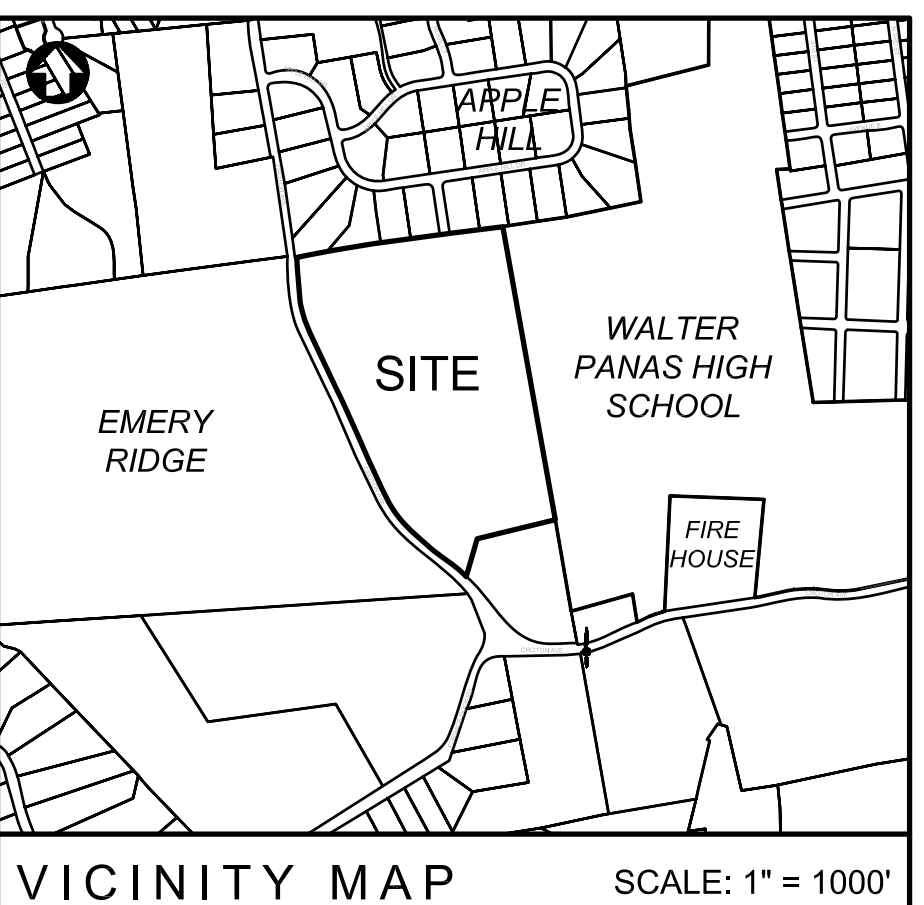
EX. UN-PAVED DRIVE

EX. SLOPE > 20%

ADJOINER PROPERTY INFO			
#	TAX I.D.	OWNER NAME	MAILING ADDRESS
SITE	34.14-2-28	CROTON REALTY & DEVELOPMENT, INC.	150 CROTON AVENUE, CORTLANDT MANOR, NY 10567
1	34.14-1-11	SANTUCCI, VALERIO	37 CROTON DAM ROAD, OSSINING, NY 10562
2	34.14-1-7	GOOD CONSTRUCTION CO. INC.	P.O. BOX 798, YONKERS, NY 10704
3	34.14-2-5	LIEBERT, GEORGE & DEBBIE	10 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
4	34.14-2-6	SCHAEFF, ADRIANA	12 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
5	34.14-2-27	FULLER, JOHN & BOODRUM, SHIRLEY	14 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
6	34.14-2-26	LAURIA, LORINICK & MARGARET	16 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
7	34.14-2-25	KALANOSIS, PETER	18 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
8	34.14-2-24	PARKSON, WILLIAM & MARGARET	20 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
9	34.15-1-1	CENTRAL SCHOOL DIST 1	MAIN STREET, SHRUB OAK, NY 10588
10	34.18-1-7	STROLLER, BRIAN & JASON-STOCKER, GINA	230 CROTON AVENUE, CORTLANDT MANOR, NY 10567
11	34.18-1-14	TOWN OF CORTLANDT	1 HEADY STREET, CORTLANDT MANOR, NY 10567
12	34.18-1-15	CORTLANDT RIDGE HOMEOWNERS	60 MERRITT BOULEVARD, FISHKILL, NY 12524

LANDS OF CENTRAL SCHOOL DISTRICT NO. 1
(WALTER PANAS HIGH SCHOOL)

LOT 1
COUNTY CLERK MAP NO. 219387
"CROTON EGG FARM ACRES"



Dig Safely.

New York

(800) 962-7962

www.digsafelynewyork.com

OWNER/DEVELOPER

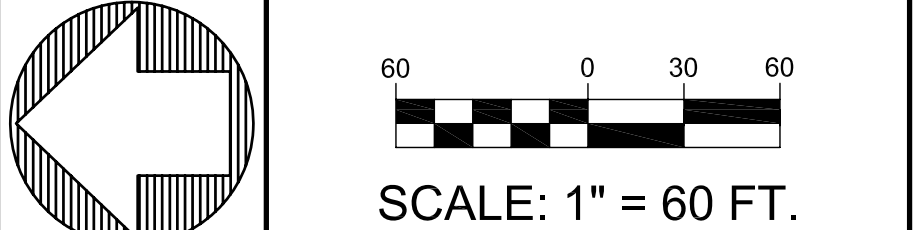
HANOVER ESTATES

PROPERTY OWNER

CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE

CORTLANDT MANOR, NY 10567



OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER

CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE

CORTLANDT MANOR, NY 10567

* UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 148, SECTION 7208 (D), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION. * COPYRIGHT 2011 BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

REVISIONS		
#	REASON	DATE

MUNICIPAL TAX IDENTIFICATION:

SECTION: 34.14

BLOCK: 2

LOT: 28

SUBLOT: ---

DRAWN BY: JWT

CHECKED BY: KCS

PROJECT: JACOBSON

DATE: FEBRUARY 14, 2011

JOB #: 100210

STATE OF NEW YORK

TIMOTHY L. CRONIN III

62980

LICENSED PROFESSIONAL ENGINEER

CRONIN

ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

EXISTING CONDITIONS

SUBDIVISION PLAN

FOR

HANOVER ESTATES

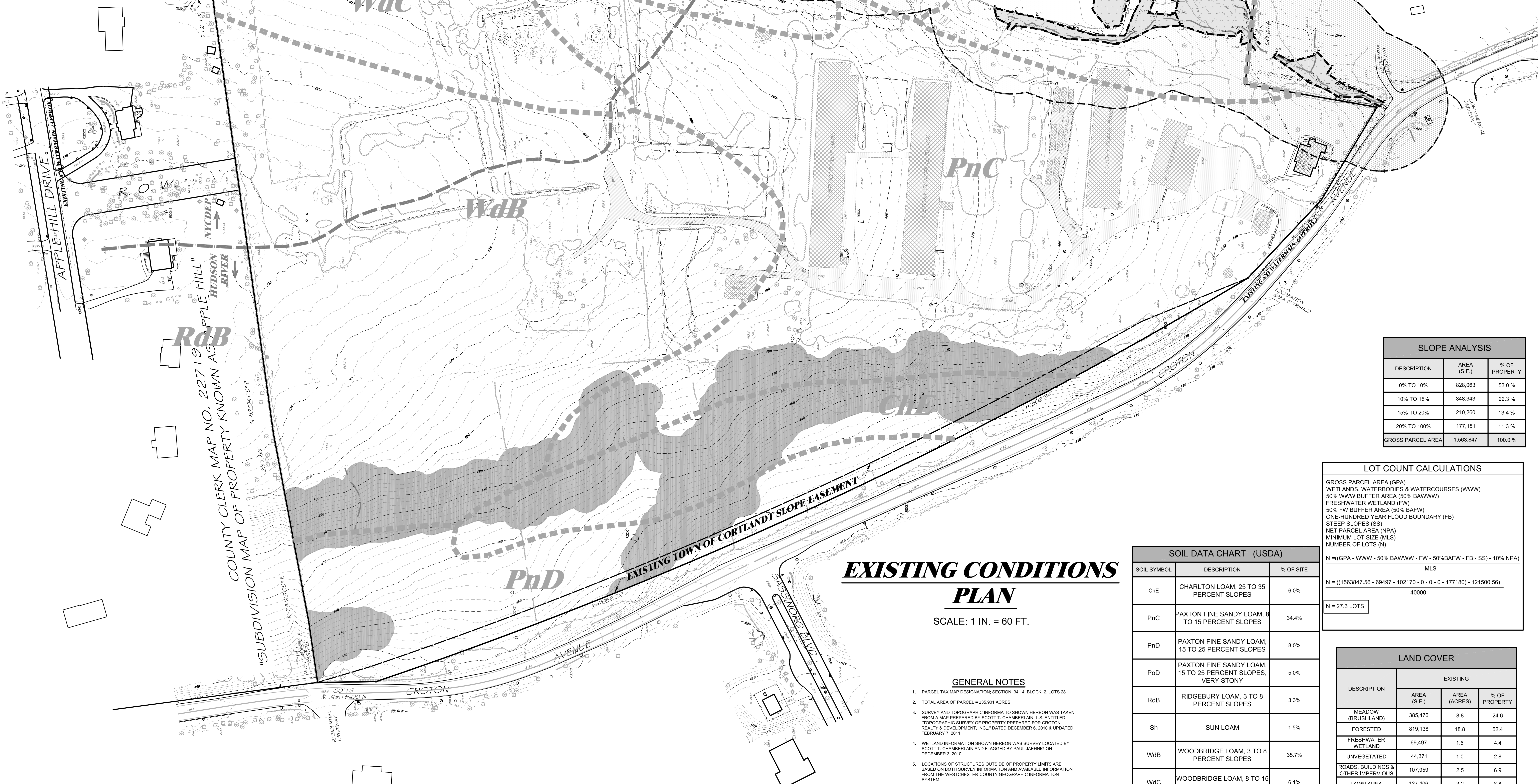
LOCATION:

150 CROTON AVENUE

TOWN OF CORTLANDT, NEW YORK 10567

Figure 3

EX-1.1



- GENERAL NOTES
1. PARCEL TAX MAP DESIGNATION: SECTION: 34.14, BLOCK: 2, LOTS 28

2. TOTAL AREA OF PARCEL = 135.901 ACRES.

3. SURVEY AND TOPOGRAPHIC INFORMATION SHOWN HEREON WAS TAKEN FROM A MAP PREPARED BY SCOTT T. CHAMBERLAIN, L.S. ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY PREPARED FOR CROTON REALTY & DEVELOPMENT, INC.," DATED DECEMBER 8, 2010 & UPDATED FEBRUARY 7, 2011.

4. WETLAND INFORMATION SHOWN HEREON WAS SURVEY LOCATED BY SCOTT T. CHAMBERLAIN AND FLAGGED BY PAUL JAEHNIG ON DECEMBER 3, 2010.

5. LOCATIONS OF STRUCTURES OUTSIDE OF PROPERTY LIMITS ARE BASED ON BOTH SURVEY INFORMATION AND AVAILABLE INFORMATION FROM THE WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEM.

SOIL DATA CHART (USDA)		
SOIL SYMBOL	DESCRIPTION	% OF SITE
ChE	CHARLTON LOAM, 25 TO 35 PERCENT SLOPES	6.0%
PnC	PAXTON FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES	34.4%
PnD	PAXTON FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES	8.0%
PoD	PAXTON FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES, VERY STONY	5.0%
RdB	RIDGEBURY LOAM, 3 TO 8 PERCENT SLOPES	3.3%
Sh	SUN LOAM	1.5%
WdB	WOODBIDGE LOAM, 3 TO 8 PERCENT SLOPES	35.7%
WdC	WOODBIDGE LOAM, 8 TO 15 PERCENT SLOPES	6.1%

LOT COUNT CALCULATIONS

GROSS PARCEL AREA (GPA)

WETLANDS, WATERBODIES & WATERCOURSES (WWW)

50% WWW BUFFER AREA (50% BAWWW)

FRESHWATER WETLAND (FW)

50% FW BUFFER AREA (50% BAFW)

ONE-HUNDRED YEAR FLOOD BOUNDARY (FB)

STEEP SLOPES (SS)

NET PARCEL AREA (NPA)

MINIMUM LOT SIZE (MLS)

NUMBER OF LOTS (N)

N = (GPA - WWW - 50% BAWWW - FW - 50% BAFW - FB - SS) - 10% NPA

MLS

N = ((1563847.56 - 69497 - 102170 - 0 - 0 - 0 - 177180) - 121500.56)

40000

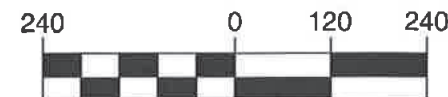
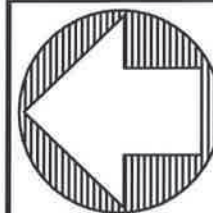
N = 27.3 LOTS

LAND COVER			
DESCRIPTION	EXISTING		
	AREA (S.F.)	AREA (ACRES)	% OF PROPERTY
MEADOW (BRUSHLAND)	385,476	8.8	24.6
FORESTED	819,138	18.8	52.4
FRESHWATER WETLAND	69,497	1.6	4.4
UNVEGETATED	44,371	1.0	2.8
ROADS, BUILDINGS & OTHER IMPERVIOUS	107,959	2.5	6.9
LAWN AREA	137,406	3.2	8.8
GROSS PARCEL AREA	1,563,847	35.9	100.0

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR

DATE: OCTOBER 6, 2011



OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

- UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
- COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN
ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

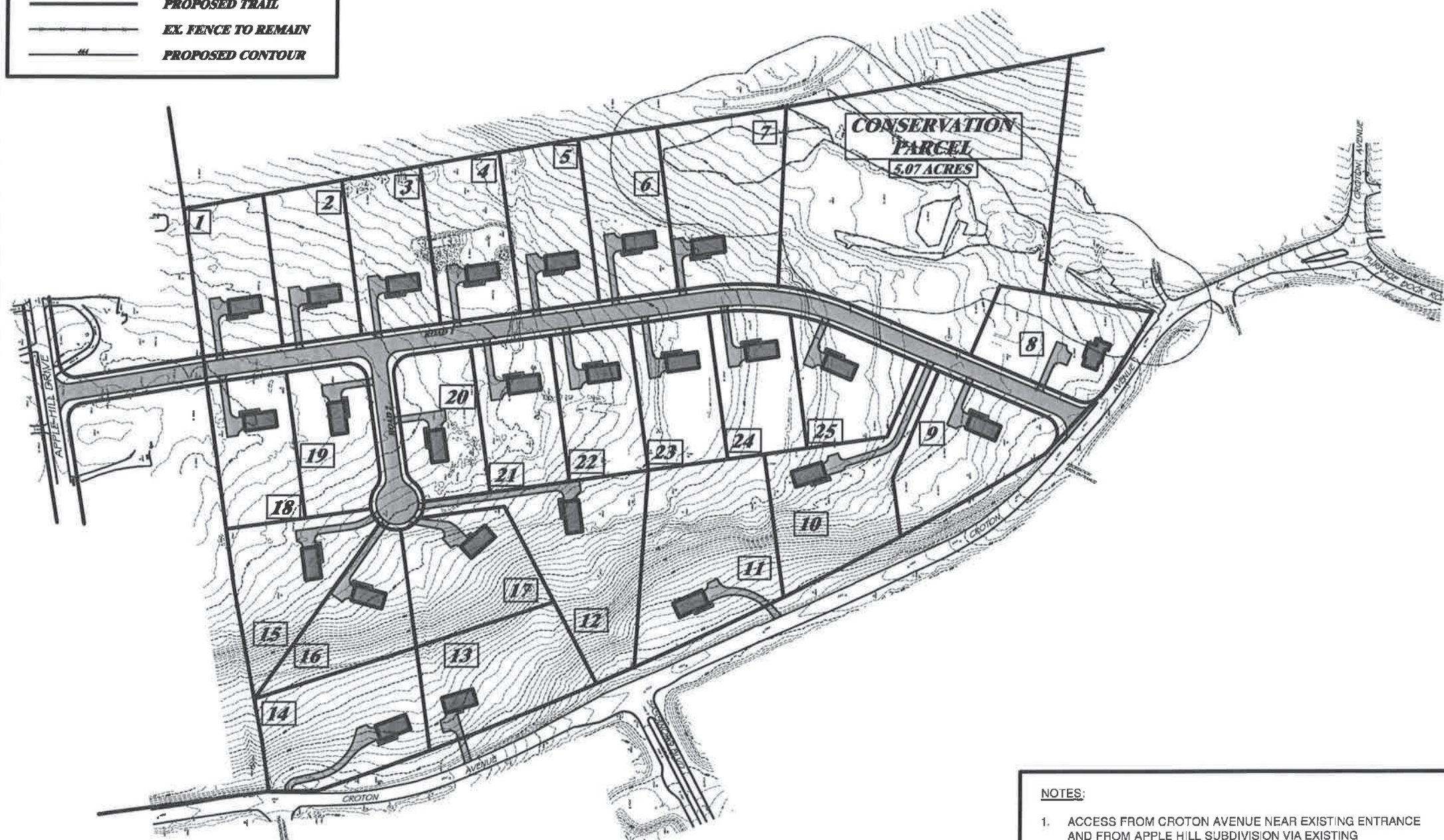
PREFERRED PLAN

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 4

PREF



PREFERRED PLAN

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE AND FROM APPLE HILL SUBDIVISION VIA EXISTING RIGHT-OF-WAY.
2. CONVENTIONAL SUBDIVISION - 25 LOTS
3. DOG PARK AND PICNIC AREA PROVIDED
4. 5.07 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)



Figure 5

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR

The map illustrates a proposed subdivision with 25 numbered lots. A 'CONSERVATION PARCEL' of 5.07 acres is located in the upper right. The site is bordered by Croton Avenue to the south and Apple Hill Drive to the west. Topographic contours and wetland boundaries are shown. A proposed trail is indicated by a dashed line. The map also shows existing property lines, easement lines, and watercourses.

SUBDIVISION ALTERNATIVE 1

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE WITH NO EMERGENCY ACCESS.

2. CONVENTIONAL SUBDIVISION - 25 LOTS

3. DOG PARK AND PICNIC AREA PROVIDED

4. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.

5. 5.07 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)

DATE: OCTOBER 6, 2011

A north arrow pointing towards the top-left and a graphic scale bar showing distances of 240, 0, 120, and 240 feet.


OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

• UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

• COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.



CRONIN

ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 1

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 6

ALT 1

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

140

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

A-37

A-38

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

464

PROPOSED CONTOUR

The map illustrates a subdivision with 25 numbered lots. A 'CONSERVATION PARCEL' of 5.07 acres is located in the upper right. The map includes topographic contours, a proposed trail, and existing wetland boundaries. Access is provided from Croton Avenue and Apple Hill Drive. A note specifies a '16' WIDE GRAVEL W/ GATE AT EACH END' for the access from Apple Hill Drive.

SUBDIVISION ALTERNATIVE 2

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE WITH EMERGENCY ACCESS TO APPLE HILL VIA EXISTING RIGHT-OF-WAY

2. CONVENTIONAL SUBDIVISION - 25 LOTS

3. DOG PARK AND PICNIC AREA PROVIDED

4. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.

5. 5.07 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)

DATE: OCTOBER 6, 2011

A north arrow pointing towards the top-left and a graphic scale bar showing distances of 240, 0, 120, and 240 feet.

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

• UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

• COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN

ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 2

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 7

ALT 2

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

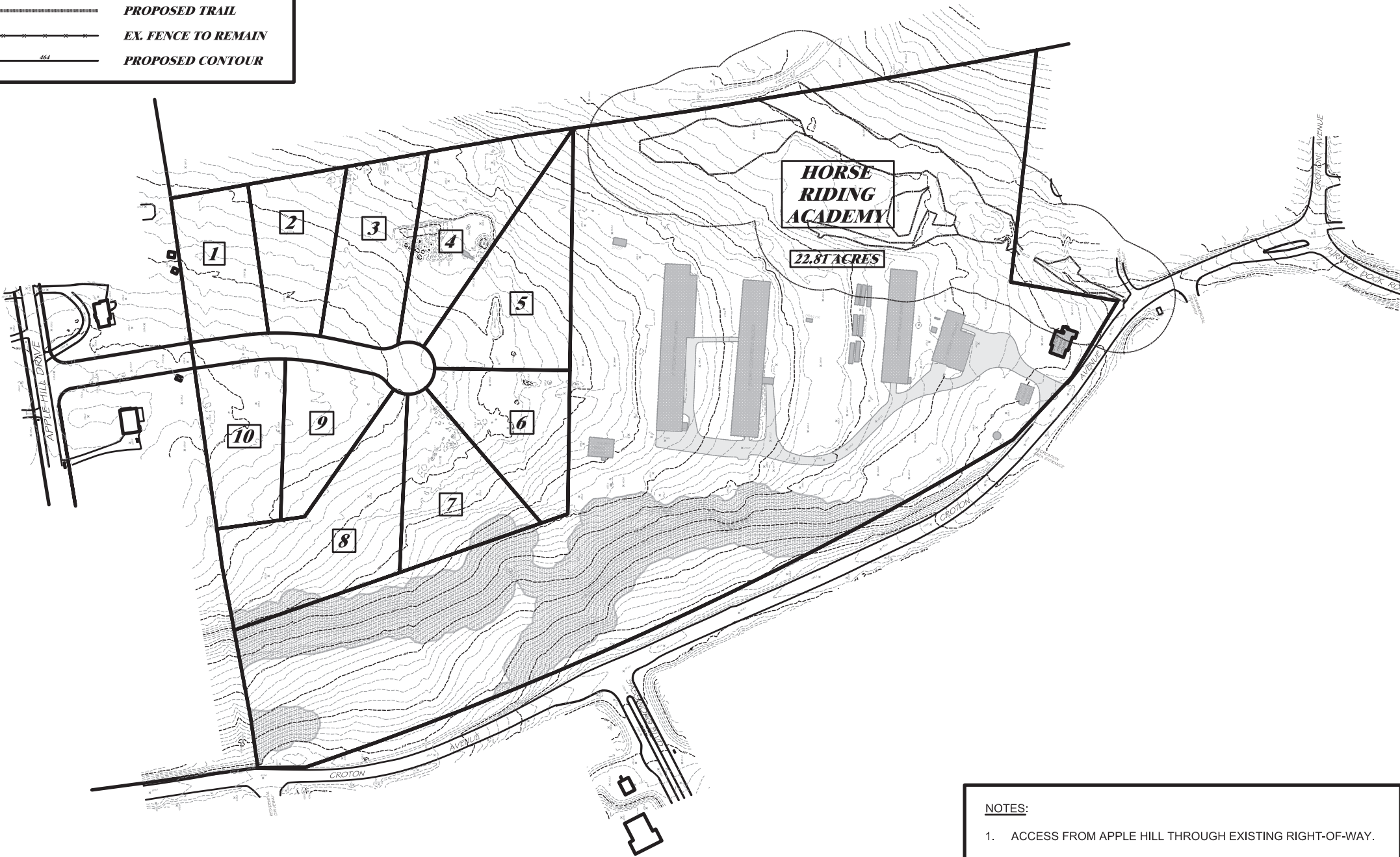
EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR



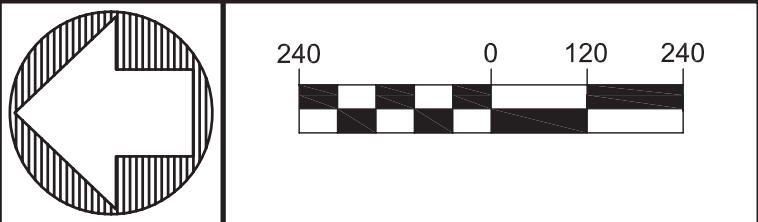
SUBDIVISION ALTERNATIVE 3

- NOTES:
1. ACCESS FROM APPLE HILL THROUGH EXISTING RIGHT-OF-WAY.

2. CONVENTIONAL SUBDIVISION - 10 LOTS WITH COMMERCIAL DEVELOPMENT OF HORSE RIDING ACADEMY

3. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.

DATE: OCTOBER 6, 2011



OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

• UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

• COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN

ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 3

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 8

ALT 3

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

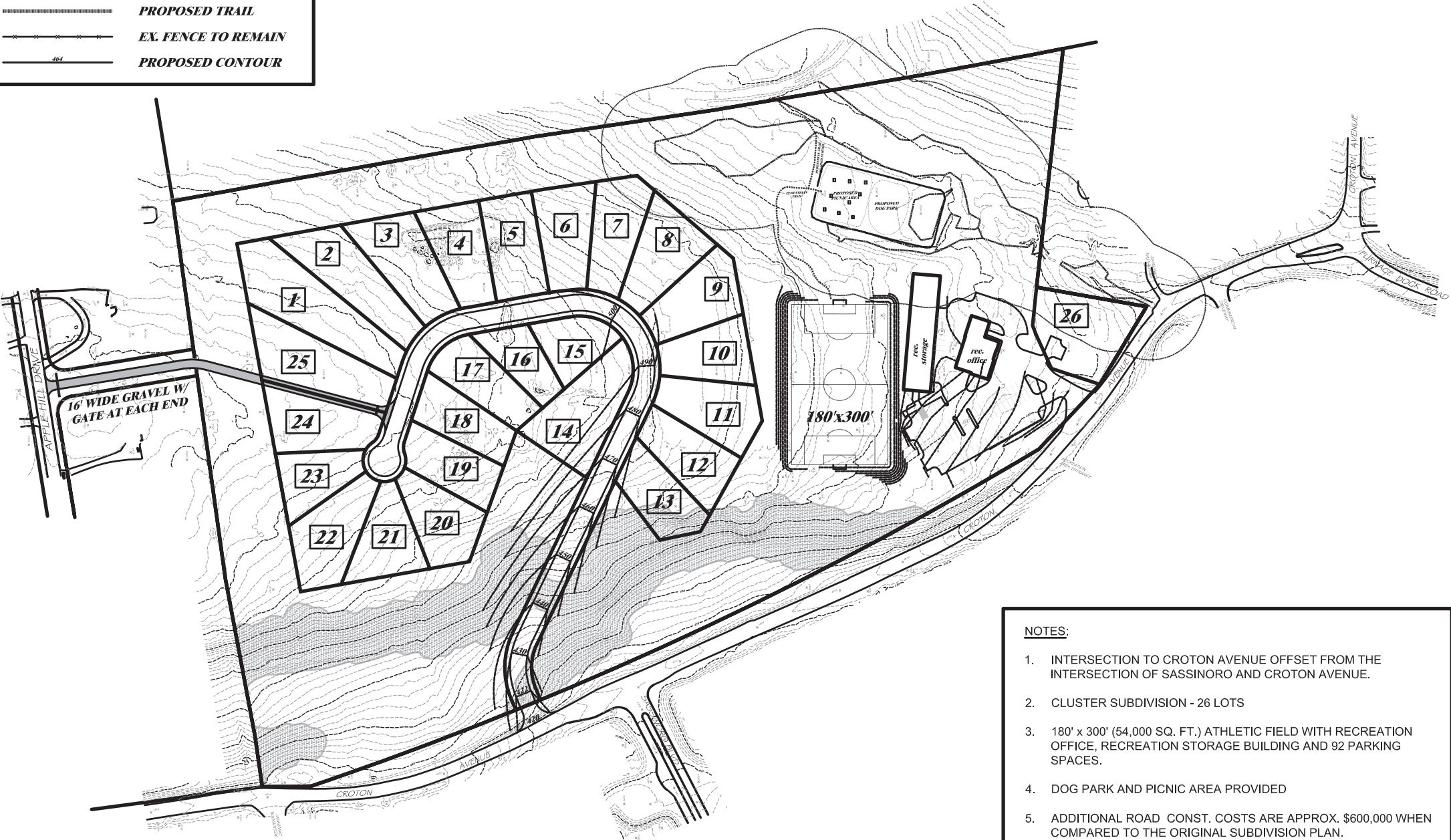
EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 4

- NOTES:
1.

INTERSECTION TO CROTON AVENUE OFFSET FROM THE INTERSECTION OF SASSINORO AND CROTON AVENUE.
2.

CLUSTER SUBDIVISION - 26 LOTS
3.

180' x 300' (54,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE, RECREATION STORAGE BUILDING AND 92 PARKING SPACES.
4.

DOG PARK AND PICNIC AREA PROVIDED
5.

ADDITIONAL ROAD CONST. COSTS ARE APPROX. \$600,000 WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
6.

SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
7.

981,908 SQ. FT. (22.5 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
8.

LOT SIZES ARE 0.3 AC. MIN. TO 0.73 AC. MAX.

DATE: OCTOBER 5, 2011

2400120240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER

CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE

CORTLANDT MANOR, NY 10567

• UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

• COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN

ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE

CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 4

HANOVER ESTATES

LOCATION:

150 CROTON AVENUE

TOWN OF CORTLANDT, NEW YORK 10567

Figure 9

ALT 4

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

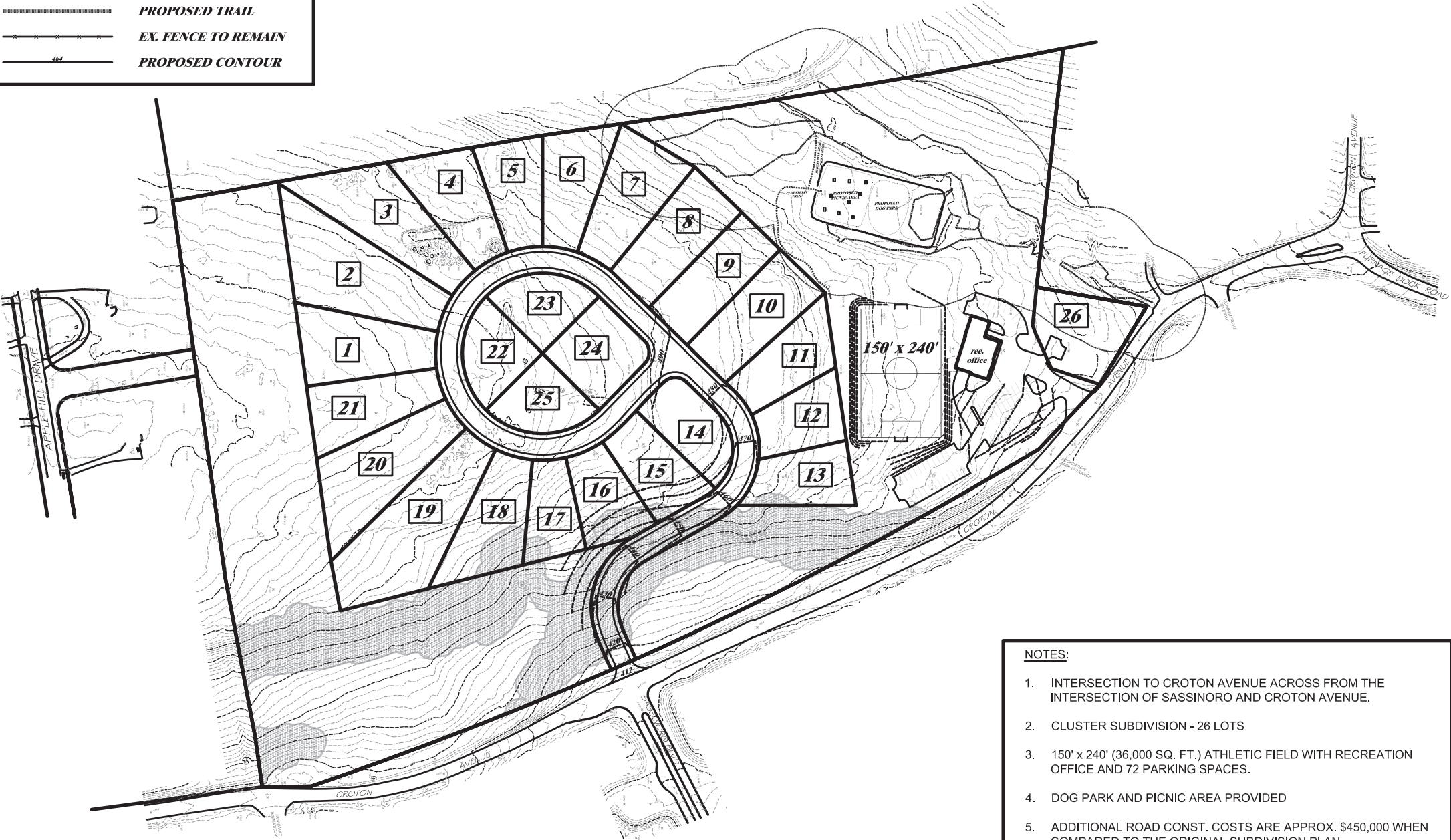
EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 5

- NOTES:
1. INTERSECTION TO CROTON AVENUE ACROSS FROM THE INTERSECTION OF SASSINORO AND CROTON AVENUE.
 2. CLUSTER SUBDIVISION - 26 LOTS
 3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE AND 72 PARKING SPACES.
 4. DOG PARK AND PICNIC AREA PROVIDED
 5. ADDITIONAL ROAD CONST. COSTS ARE APPROX. \$450,000 WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
 6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
 7. 813,572 SQ. FT. (18.7 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
 8. LOT SIZES ARE 0.38 AC. MIN. TO 1.07 AC. MAX.

DATE: OCTOBER 5, 2011

2400120240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

• UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

• COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN
ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 5

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 10

ALT 5

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

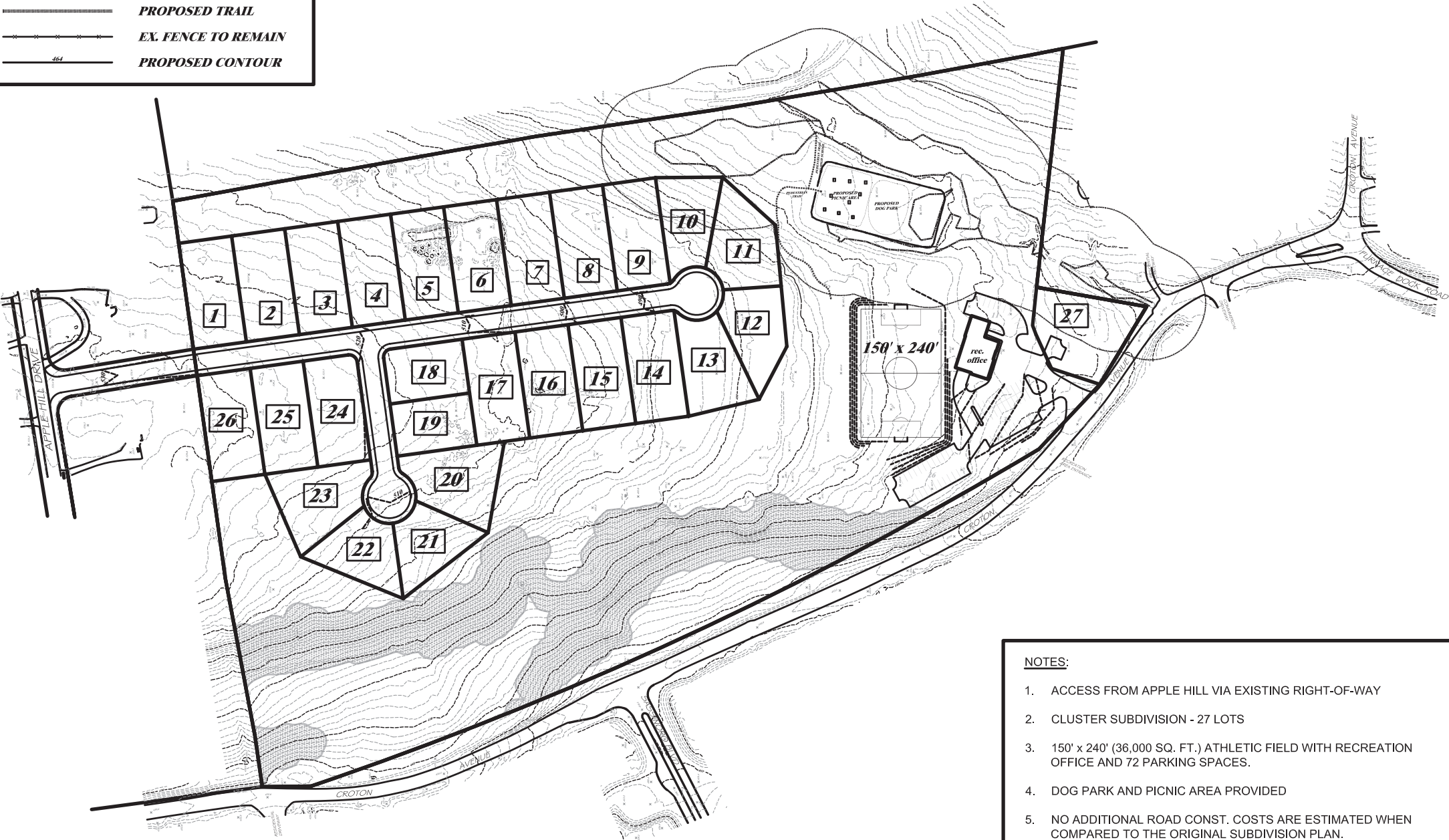
EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 6

- NOTES:
1. ACCESS FROM APPLE HILL VIA EXISTING RIGHT-OF-WAY

2. CLUSTER SUBDIVISION - 27 LOTS

3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE AND 72 PARKING SPACES.

4. DOG PARK AND PICNIC AREA PROVIDED

5. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.

6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.

7. 969,371 SQ. FT. (22.3 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)

8. LOT SIZES ARE 0.34 AC. MIN. TO 0.49 AC. MAX.

DATE: OCTOBER 5, 2011

2400120240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER

CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE

CORTLANDT MANOR, NY 10567

• UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

• COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN

ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE

CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 6

HANOVER ESTATES

LOCATION:

150 CROTON AVENUE

TOWN OF CORTLANDT, NEW YORK 10567

Figure 11

ALT 6

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

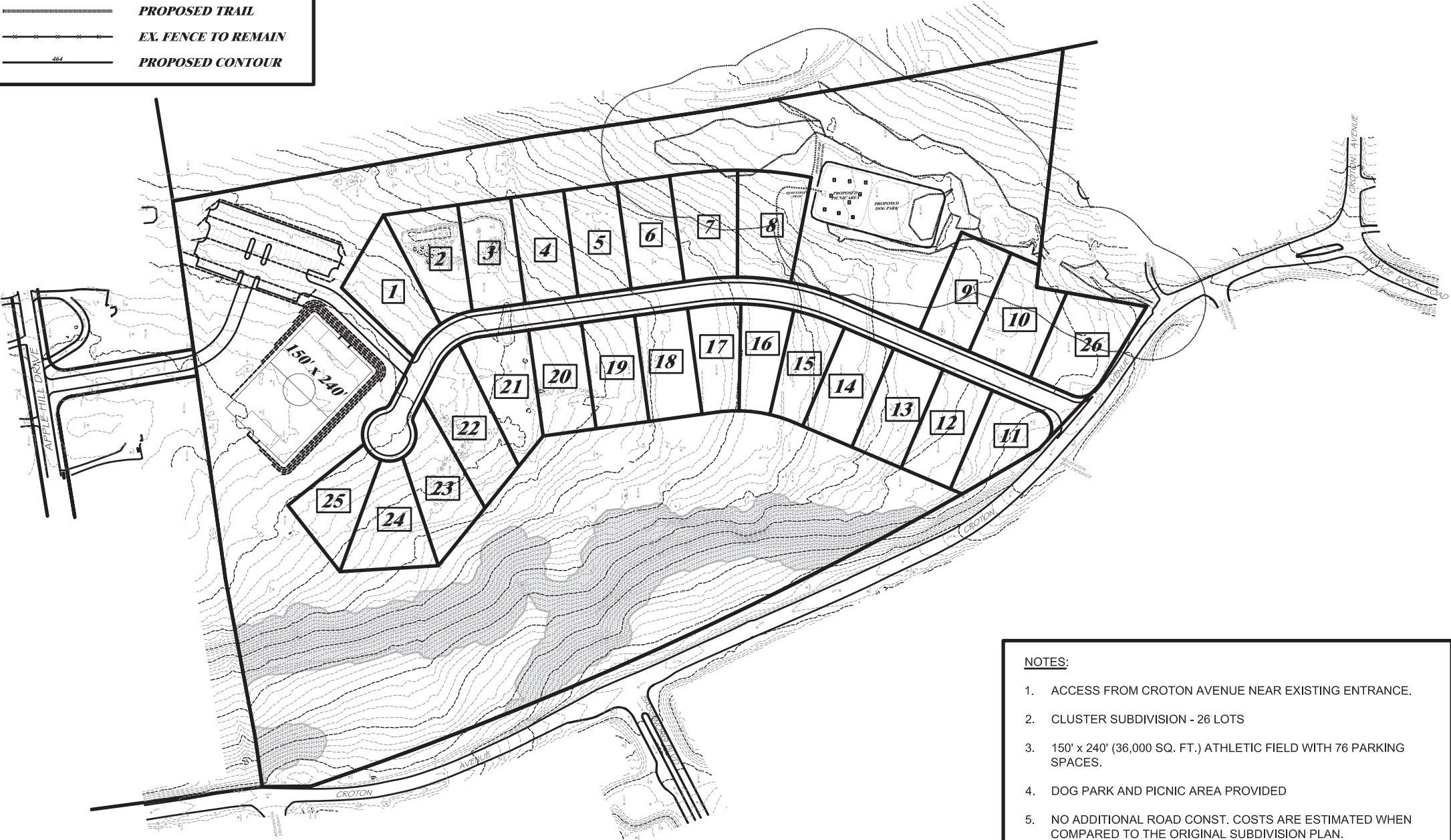
EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR



- NOTES:
1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE.

2. CLUSTER SUBDIVISION - 26 LOTS

3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH 76 PARKING SPACES.

4. DOG PARK AND PICNIC AREA PROVIDED

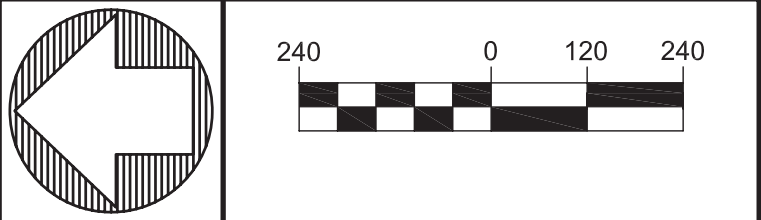
5. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.

6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.

7. 948,684 SQ. FT. (21.8 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)

8. LOT SIZES ARE 0.36 AC. MIN. TO 0.57 AC. MAX.

DATE: OCTOBER 6, 2011



OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

• UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

• COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN

ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 7

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 12

ALT 7

SUBDIVISION ALTERNATIVE 7

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

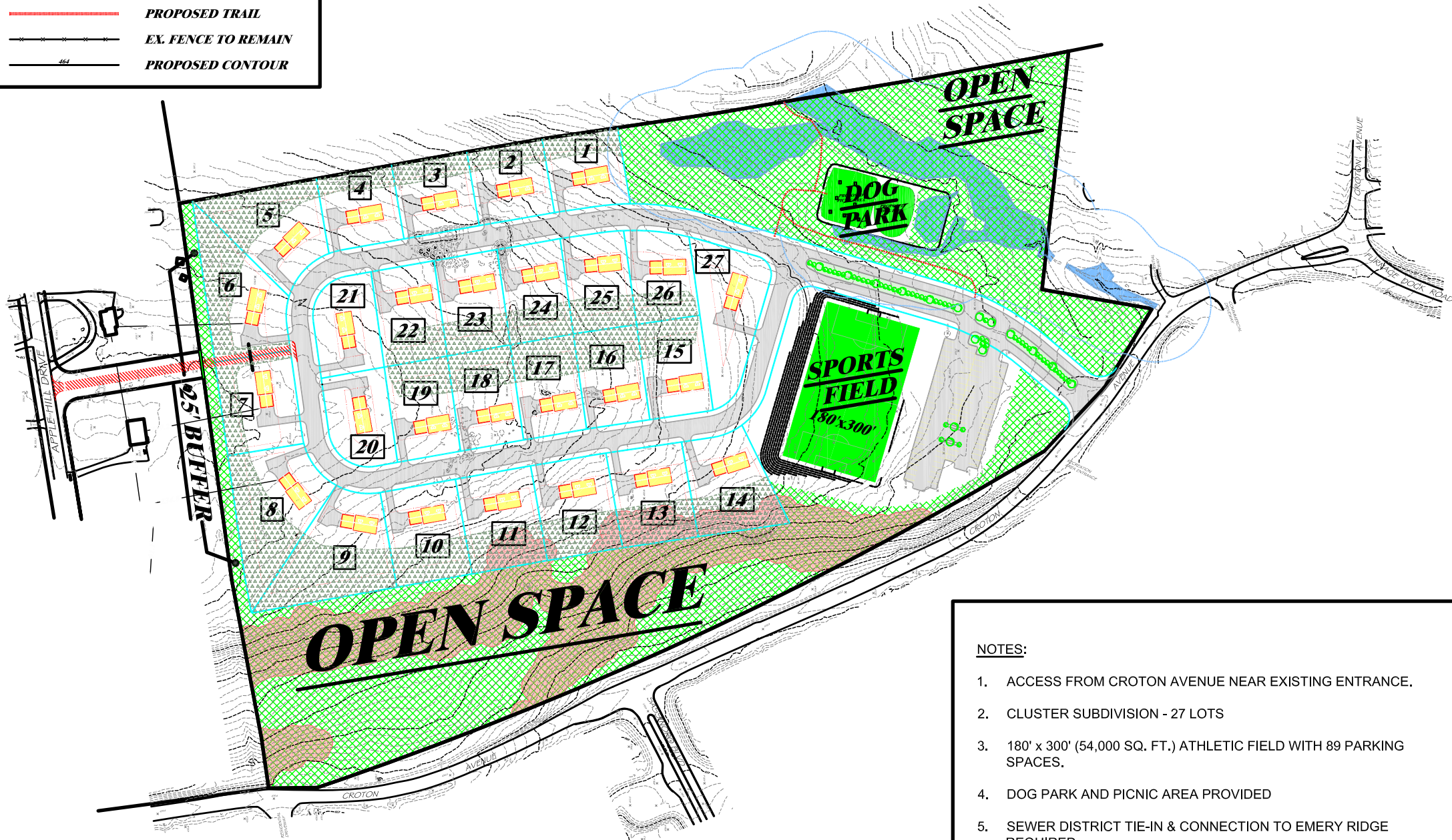
EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR

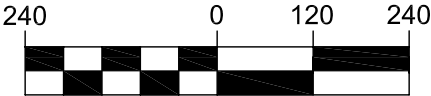
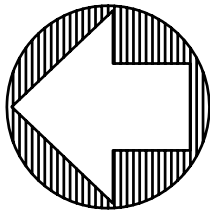


SUBDIVISION ALTERNATIVE 9

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE.
2. CLUSTER SUBDIVISION - 27 LOTS
3. 180' x 300' (54,000 SQ. FT.) ATHLETIC FIELD WITH 89 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
6. 748,042 SQ. FT. (17.2 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
7. LOT SIZES ARE 0.46 AC. MIN. TO 0.81 AC. MAX.

DATE: NOVEMBER 3, 2011



OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

- UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
- COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.



**CRONIN
ENGINEERING**

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

**39 ARLO LANE
CORTLANDT, NEW YORK 10567**

SUBDIVISION ALTERNATIVE 9

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 13

ALT 9

LEGEND

EXIST. PROPERTY LINE

EXIST. EASEMENT LINE

EXISTING CONTOUR 10'

EXISTING CONTOUR 2'

EXIST. WATERCOURSE

EX. WETLAND BNDRY.

EX. 100' WETLAND BUF.

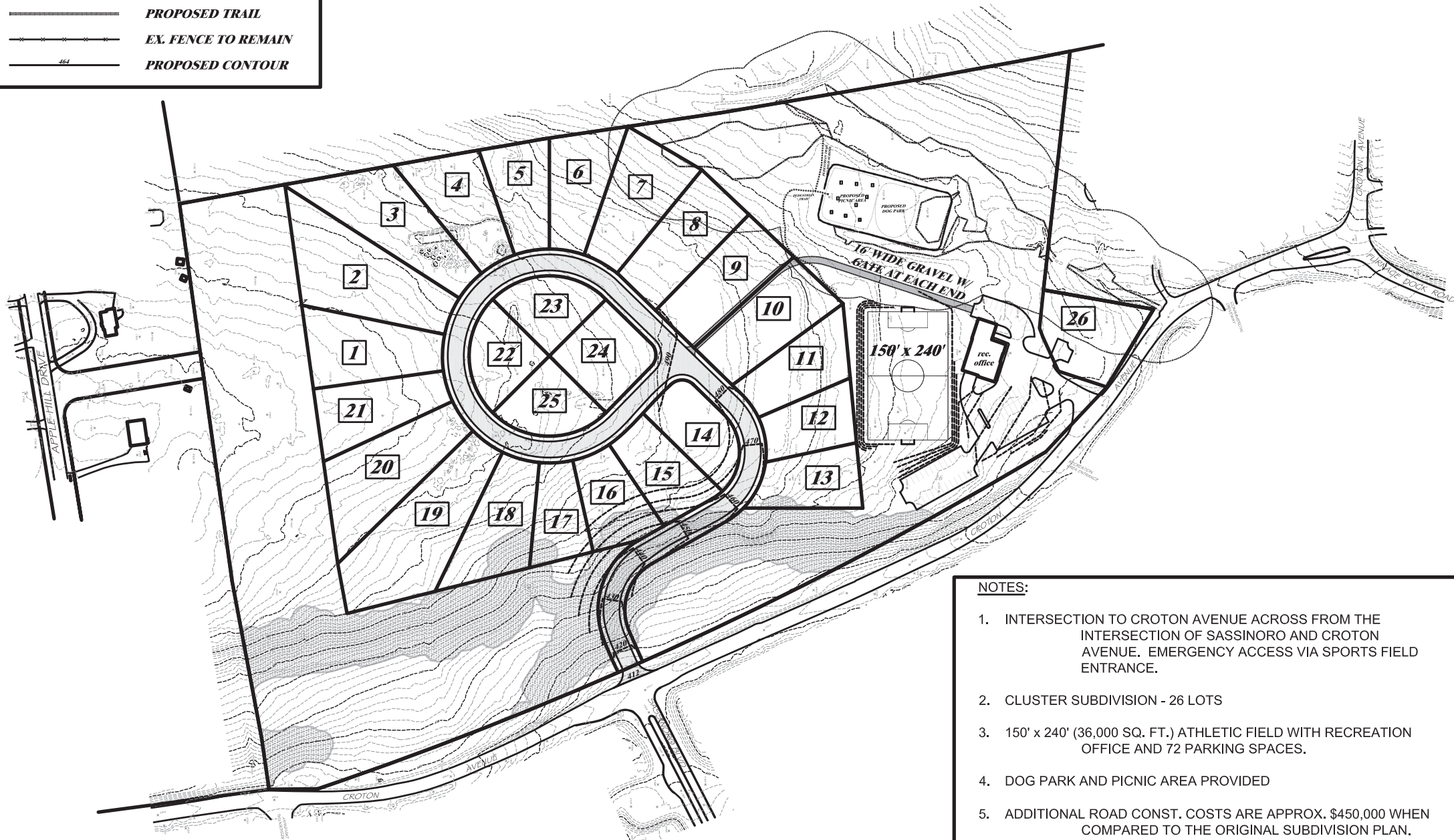
EX. SLOPE > 20%

PROP. PROPERTY LINE

PROPOSED TRAIL

EX. FENCE TO REMAIN

PROPOSED CONTOUR

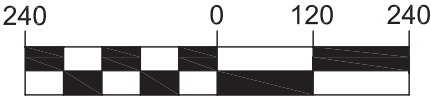
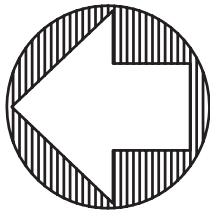


SUBDIVISION ALTERNATIVE 10

NOTES:

1. INTERSECTION TO CROTON AVENUE ACROSS FROM THE INTERSECTION OF SASSINORO AND CROTON AVENUE. EMERGENCY ACCESS VIA SPORTS FIELD ENTRANCE.
2. CLUSTER SUBDIVISION - 26 LOTS
3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE AND 72 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. ADDITIONAL ROAD CONST. COSTS ARE APPROX. \$450,000 WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
7. 813,572 SQ. FT. (18.7 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
8. LOT SIZES ARE 0.38 AC. MIN. TO 1.07 AC. MAX.

DATE: NOVEMBER 3, 2011



OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

- UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
- COPYRIGHT "2011" BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.



CRONIN
ENGINEERING

PROFESSIONAL ENGINEERING & CONSULTING

(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 10

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

Figure 14

ALT 10

Table 1: Major Plan Elements Before and After the Charrette

Before Charrette	After Charrette
<i>Applicant's "Preferred Plan"</i>	<i>Alternative 9 (based on Committee Member Recommendations)</i>
Conventional Layout	Cluster Layout
Lot sizes minimum of 40,000 square feet (0.91 acres)	Lot sizes 20,000 to 35,280 square feet (0.46 to 0.81 acres)
Individual septic	Sewer district tie-in and connection to Cortlandt Ridge (aka Emery Ridge) and the Stephens Lane Pump Station required
Cul-de-sac (more maintenance)	Loop road proposed
Typical subdivision entrance	Boulevard entrance to subdivision
Site access at existing driveway and through Apple Hill Estates	Site access proposed at existing driveway
New subdivision road would provide thru road connection from Croton Avenue to Apple Hill Drive	New subdivision road with access from Croton Avenue would be loop road and would not connect with Apple Hill Drive
Wetland buffer disturbance for access road, Lot 7, and Lot 8	Wetland buffer disturbance only for demolition of existing buildings and the placement of amenities within the proposed dog park.
3 new curb cuts (for house driveways) and a modification to the existing curb cut (for subdivision access road) along Croton Avenue	Modification to existing curb along Croton Avenue. No new curb cuts/driveways proposed on Croton Avenue
No buffer along Croton Avenue	Maximizes buffer along Croton Avenue by keeping disturbance outside of steep slopes area.
Disturbance to steep slopes area along Croton Avenue	No disturbance to steep slopes area along Croton Avenue
Visual changes to the site would be observable from Croton Avenue	A visual buffer would be maintained along Croton Avenue
A total of 5.07 acres of total site area (approximately 14 percent) available for town use as a conservation parcel.	A total of 17.2 acres of total site area (approximately 48 percent) available for town use including a 5.07-acre conservation parcel and multi-use sports field and the additional open space area along Croton Avenue.
No multi-use sports field proposed	Multi-use sports field (180 ft by 300 ft) and approximately 89 parking spaces
Includes a dog park and picnic area	Eliminate dog park and keep picnic area and add more conservation area and trails

METHODOLOGY

The report that follows describes in detail the specific issues, recommendations and concerns identified by committee members during the charrette. All issues, recommendations and concerns identified by members of the committee were recorded by AKRF. For purposes of this report, the issues have been organized into four categories including:

- Site Layout
- Traffic and Site Access
- Natural Resources, Tree Protection, and Stormwater
- Visual Impacts, Lighting, and Landscaping

Overall, 23 recommendations were made by the committee with regard to the four technical areas. The recommendations listed include only those recommendations agreed upon by a majority consensus of the committee members. It should be noted that in some cases multiple options were debated and alternative viewpoints were proposed. These minority viewpoints were also recorded and are captured in the summaries of the open discussions.

A draft of the Charrette Summary Report was provided to committee members for review and comment. Several charrette committee members provided comments on the Draft Charrette Summary Report. A few of the key comments are summarized below.

A number of committee members mentioned that they felt the charrette process was valuable and expressed appreciation for the opportunity to participate in the charrette and to provide input to the applicant and Town on the development concept. One member recommended that the report reflect the fact that the most of the members who did not prefer Alternative 9 were residents of the adjacent subdivision, Apple Hill Estates. A number of members commented on the multi-use sports field. These comments ranged from support of the sports field as presented in Alternative 9 to a preference for no sports field. The reasons for not supporting a sports field at the site varied from concerns about the amount of traffic the field would generate to noise and visual impacts. Some members were also concerned about the loss of trees on the site and felt that disturbance to the site could be minimized without the sports field. Others felt that without a sports field or with a smaller sports field, a larger buffer between Apple Hill Estates and the proposed development could be maintained. All of the comments received by committee members are included in **Appendix 3**.

SITE LAYOUT

Introduction

The charrette committee spent the greatest amount of time discussing the layout of the proposed subdivision. Several revisions to the subdivision plan were proposed by committee members over the course of the four meetings in an attempt to address the committee's concerns related to the layout of the site and how the layout would affect natural resources, visual character, open space and recreational amenities. The following is a summary of this discussion.

Recommendations

The committee proposed the following recommendations:

- (1) Cluster layout preferred over conventional layout**
- (2) Connection to sewer system preferred over individual septic systems**
- (3) Minimum lot size for cluster subdivision 1/2-acre lots**
- (4) Remove proposed lots along Croton Avenue**
- (5) Provide both active and passive recreation area(s) on the site**
- (6) Include a multi-use sports field for use by Town of Cortlandt residents**
- (7) Include additional areas of open space on the site**
- (8) Protect trees and minimize grading to the maximum extent practicable**

Summary of Open Discussion

At the first charrette meeting, the applicant's "Preferred Plan" was presented with the three alternatives (Alternatives 1, 2, and 3) that had been previously submitted to the Planning Board as part of the original Hanover Estates subdivision application. Under the original "Preferred Plan", the applicant proposed to create a residential subdivision with 25-lots and a 5.07-acre conservation area. This plan also showed a public road extending from Croton Avenue (in the location of the existing site access) to the adjacent Apple Hill Estates subdivision. In addition, the original "Preferred Plan" proposed three houses with direct access to and frontage upon Croton Avenue. It was noted that Croton Avenue is listed as a Historic & Scenic Road in the Survey and Assessment of Historic Roads Report¹ (see **Appendix 4**).

A number of concerns related to the layout of the applicant's "Preferred Plan" before the charrette were expressed by committee members, including the location of the site access, the through road to Apple Hill estates, the multiple curb cuts on Croton Avenue, the lack of open space and recreational amenities, the potential run-off from the driveways along Croton Avenue, the potential visual changes to Croton Avenue, the disturbance to areas with steep slopes and wetlands, the lack of tree preservation, and the need for a secondary (emergency) access route.

¹ The Historic and Scenic Roads Law was adopted by the Town Board on 11/16/2010 as Local Law 16-2010 and added to Chapter 188 (highways and Roads) of the Town Code. Section 188-2 lists what the responsibilities of the Planning Board are with respect to the preservation of the features associated with these roads.

To address these concerns, the committee requested that the applicant consider preparing a cluster layout. The committee felt that a cluster layout would minimize impacts to natural resources (wetlands, steep slopes, trees) and would provide more space for recreational and open space opportunities at the site, as well as reduce visual impacts to Croton Avenue by allowing for a larger buffer. The applicant agreed to consider a cluster alternative, but wanted to get confirmation from the Town that connecting to Cortlandt Ridge (aka Emery Ridge) and the Town's Stephens Lane pump station would be feasible before advancing a cluster layout. At the October 12th meeting, the Town confirmed that the existing pump station at Cortlandt Ridge had been sized to accept extra flow and that the Stephens Lane pump station would benefit from extra flow that could come from the sewerling of the Hanover Estates project. Most committee members expressed that they would prefer the site be connected to a sewer system rather than have individual septic.

The proposed lot sizes of the potential cluster subdivision were discussed. Most committee members agreed that the minimum lot size should be at least 0.5 acre. Some members were concerned about smaller lot sizes and its affect on the property values of Apple Hill Estates. The applicant stated a minimum lot size of approximately 0.5 acre would be the smallest lot size he would consider. One member stated that he would prefer larger lots of at least 1.0 acre in size.

Most committee members expressed support for incorporating active and passive recreational uses on the site while a smaller number preferred to see only passive recreational uses or open space at the site. It was mentioned that this site is considered a high priority open space parcel in the Town's Open Space Report.² Some members questioned if the Town would be willing to fund this parcel as open space. One member questioned if the Horse Riding Academy (Alternative 3) was a possible alternative for the site. The applicant stated that there was no interest in the Horse Riding Academy and it was not an economically viable alternative. One member asked approximately how many houses the applicant would need to develop to reach a break even point. The applicant informally responded that approximately 24 houses would be needed.

The high demand for sport fields within the Town of Cortlandt was discussed. Several committee members expressed strong support for a multi-use sports field on the site. One committee member stated that there is a tremendous need for soccer fields and other open space within this area of Town. Concerns expressed about noise from the proposed multi-use field led members to agree that no nighttime field lighting should be allowed and that the use of horns and loudspeaker should be restricted. The amount of parking provided for the multi-use field was discussed. Some members questioned if the 89 spaces provided would be enough parking. A member expressed concern that users of the field could park along Croton Avenue if the number of spaces provided at the sports field was not adequate. One member suggested posting no parking signs along Croton Avenue in the vicinity of the field. Other members thought the number of parking spaces proposed would be adequate.

² The 2004 Town Comprehensive Plan called for the completion of an Open Space Report. The Town Board set up an Open Space Committee that completed the report in May 2004. The Hanover Estates property was investigated and listed as a "Highest Priority Parcel" for preservation based on an investigation of several features of the property such as environmental sensitivity, ecosystem preservation possibilities, recreation possibilities, preservation of community character and potential for public use.

The proposed dog park was also discussed. It was noted that there is an existing dog park in Town, which is very popular and gets heavy use. The committee was asked if they would prefer to see a dog park or other passive recreation at the site. Most committee members suggested walking trails and passive uses should be considered instead of a dog park and others did not care if it was a dog park as long as other passive recreation is provided.

A number of committee members would like to see an increase in the size of the proposed buffer between Apple Hill Estates and the backyards of the lots within the proposed subdivision. A few members suggested that the size of the proposed multi-use sports field should be reduced and the proposed subdivision shifted south to allow for a larger buffer between the proposed development and Apple Hill Estates. During the site visit and at a meeting, the committee also discussed the size of the rear yards on the lots in Apple Hill Estates that back up to the site. It was noted that the homeowners of the adjoining lots would have room to create and plant a vegetated buffer to screen their backyards from the project site.

TRAFFIC AND SITE ACCESS

Introduction

Increased traffic on Croton Avenue related to the proposed project and the location of the site access were discussed at every meeting. Several revisions to the site plan were proposed by committee members and the applicant in an attempt to address the committee's concerns related to traffic and site access. The following is a summary of this discussion.

Recommendations

The committee proposed the following recommendations:

- (9) Keep site access at the existing site driveway**
- (10) Eliminate direct connection to Apple Hill Drive, explore emergency connection if deemed necessary by the Planning Board**
- (11) Remove driveway curb cuts along Croton Avenue**
- (12) Traffic study for the project should include the Route 202/35 and Croton Avenue intersection and the Furnace Dock/Jacob Street and Croton Avenue intersection**
- (13) Traffic study for the proposed project should assess a worst case estimate of the traffic that would be generated during the peak use of the multi-use sports field**

Summary of Open Discussion

Several committee members expressed concern about how the proposed project would affect existing traffic levels and circulation patterns on the roadways surrounding the site. Committee members also expressed concerns about traffic volumes, congestion, queuing, parking, site access, safety, and the affect of the project's traffic on the residential and historic character of Croton Avenue, a locally designated road of historic and scenic significance. A major issue for some committee members was how traffic related to the project would affect traffic operating conditions on Croton Avenue. In addition, concern was expressed about how the proposed project would affect peak hour traffic on the roadways surrounding the site particularly at the Route 202/35 intersection with Croton Avenue and the Croton Avenue and Furnace Dock Road/Jacob Street intersection. It was noted that a recent traffic report prepared by the Town of Cortlandt Traffic and Safety Advisory committee recommended that the Croton Avenue and Route 202/35 intersection be redesigned to make the road more accessible for emergency vehicles. Due to traffic congestion and the lack of shoulders along the road, traffic is not able to move to the side of the road to allow emergency vehicles to pass affecting emergency response times. Some committee members were concerned that additional traffic added to the roadway would exacerbate these conditions.

Some committee members also expressed concern about the amount of additional traffic the multi-use sports field would generate on Croton Avenue. It was recommended that the estimated traffic that would be generated by the multi-use sports field be assessed in the traffic study for the proposed project. To understand the worst-case traffic scenario committee members

requested that the applicant provide the maximum number of users that could be at the fields at any given time.

Possible alternatives for site access were explored by the committee. It was noted that site distance was limited at the existing driveway. Some members suggested lining up the new proposed site entrance with Sassinoro Boulevard. The applicant stated that creating access across from Sassinoro Boulevard would increase the cost of the project by approximately \$500,000 due to the steep slopes in this area. The applicant stated he was willing to consider an alternative that provided access in this location as long as he was able to achieve the lot density he needed to cover the increase in cost. The applicant was also concerned that the Town's Steep Slopes ordinance would prohibit any disturbance to steep slopes in this area. The applicant requested clarification of the steep slopes law to determine whether or not disturbance to steep slopes was prohibited outright or could potentially be allowed by permit. The Town confirmed that it is possible for the Planning Board to issue a Steep Slopes permit for construction within a steep slope area with mitigation. Some members strongly supported site access across from Sassinoro Boulevard because it allowed for a larger buffer between the proposed development and Apple Hill Estates. Other members were strongly opposed to steep slopes disturbance for a road since using the existing site entrance would not require disturbance to steep slopes. Some members expressed concern about stormwater runoff to Croton Avenue if trees are removed and slopes are disturbed in this area.

The committee also discussed possible ways to provide two access points to the site without connecting to Apple Hill Drive. Some members suggested creating the main site access across from Sassinoro Boulevard and using the existing site entrance as emergency access only.

The committee requested that AKRF review the projected trip generation numbers for the proposed project including the multi-use sports field, to determine if traffic warrants for a traffic signal would be met at the project site driveway at the two possible future driveway locations: 1) the existing site driveway on Croton Avenue and; 2) the intersection of Sassinoro Boulevard and Croton Avenue. After analysis, AKRF does **NOT** believe that the build traffic volumes would warrant the installation of a traffic signal at either potential driveway location (**see Appendix 5** for the peak hour warrant analysis and a letter from the Town of Cortlandt Traffic and Safety Advisory Committee (TSAC) regarding the traffic conditions at the Croton Avenue and Route 202 intersection).

In addition, a number of committee members were concerned by the three new curb cuts proposed for driveways on Croton Avenue under the applicant's initial "Preferred Plan". As mentioned previously in the report, Croton Avenue is a locally designated road of scenic and historic importance. As a result of the comments made during the meetings, the applicant agreed to eliminate the proposed lots with driveways on Croton Avenue. In general, the committee viewed the reduction in curb cuts favorably and most members of the committee preferred the site access location proposed in Alternative 9, which modifies the existing site driveway to access the site. A few members expressed concern about site distance at this location and would prefer to see the main access to the subdivision across from Sassinoro Boulevard (the entrance to the Emery Ridge development) as proposed in Alternative 10. One member also preferred site access in this location because it allowed for the subdivision to have a separate entrance from the recreational amenities.

Some committee members expressed significant concern over a proposed road connection or emergency access connection to Apple Hill Estates. It was suggested that a connection would negatively affect Apple Hill resident's privacy, resale values, and security as well as increase traffic through the subdivision. It was also suggested that the new road could be used as a cut-through to avoid Croton Avenue. Some committee members also expressed concern about potential visual, noise and neighborhood character changes to the Apple Hill neighborhood if a new road or emergency access road is constructed. A number of members questioned the necessity of providing emergency access since other subdivisions in Town do not have a secondary access or emergency access such as Apple Hill Estates.

Other committee members viewed a proposed connection to Apple Hill Estates favorably, particularly for emergency access. It was suggested that providing secondary access to a subdivision in case of an emergency is a good planning practice and has been required by the Planning Board for other projects in Town. It was mentioned that an emergency access road was constructed at the existing Emery Ridge development across from Hanover Estates. However, it was later determined that this road was not used for emergency access. It was noted that emergency access is **NOT** a Town Code requirement. However, it is an adopted Comprehensive Master Plan Policy to minimize the construction of cul-de-sacs and connect local roadways wherever possible (see Policy Number 83 in the Town of Cortlandt Comprehensive Master Plan (2004) **Appendix 6**). Further, it was noted that the Planning Board did consider a potential public road connection between the project site and Apple Hill Estates via a dedicated right-of-way as shown on the approved subdivision plat (**Appendix 7**). The right-of-way extends directly from the common property boundary between the project site and Apple Hill Estates to Apple Hill Drive.

VISUAL, NOISE, LIGHTING, AND LANDSCAPING

Introduction

This discussion topic produced a number of recommendations aimed at reducing the visual impact of the proposed subdivision on Croton Avenue and neighboring properties. During the meetings, Committee Members recommended various changes to the initial “Preferred Plan” including the site layout and site access. Restrictions on the use of nighttime lighting at the multi-use sports field were recommended to avoid impacts to Croton Avenue and the neighboring residential uses. Many of the committee’s recommendations (listed below) were incorporated into the revised site plan by the applicant over the course of the charrette. The following is a summary of the Committee’s discussion related to visual impacts, lighting, and landscaping.

Recommendations

The committee proposed the following recommendations:

- (14) Provide visual buffer along Croton Avenue to top of slope**
- (15) Provide buffer between Apple Hill Estates and proposed Hanover Estates subdivision**
- (16) Prohibit the use of nighttime sports lighting at the multi-use sports field**
- (17) Restrict the use of horns and loudspeakers at the multi-use sports field**

Summary of Open Discussion

It was noted that Croton Avenue is a locally designated road of historic and scenic significance (**see Appendix 4**). Committee members expressed concern over the visual character effects the lots and curb cuts proposed would have on Croton Avenue. Several members recommended that the area of steep slopes and the trees within and along the Croton Avenue right-of-way be protected or preserved as open space to protect the scenic character of the road. Some committee members recommended increasing the proposed buffer between Apple Hill Estates and the proposed Hanover Estates to reduce the potential for visual, noise and neighborhood character impacts to the residents of Apple Hill.

Some committee members expressed concern with the location of the parking for the multi-use sports field and the visibility of the parking area along Croton Avenue. It was recommended that the Applicant consider the use of pervious pavers on the parking site to reduce the amount of impervious surface on the site. The charrette committee is aware that additional stormwater improvements to meet the MS4 requirements will be necessary at this site. However, it is understood that details related to meeting water quality and water quantity requirements would be analyzed during SEQR and subdivision review by the Planning Board.

In general, the committee viewed the changes to the site plan favorably and agreed that the revised site layout reduced the potential for visual impacts to Croton Avenue and the surrounding

residential properties. However, some members were still very concerned with proximity of the subdivision to the adjacent Apple Hill Estates. A few committee members recommended increasing the proposed buffer between Apple Hill Estates and the proposed Hanover Estates by reducing the size of the proposed multi-use sports field. Other members pointed out that the buffer as shown on Alternative 9 is already in excess of conventional code requirements. Some committee members expressed a positive view of the proposed location of the multi-use sports field because of its close proximity to Walter Panas High School and the existing town recreation area across the street.

Landscaping of the proposed boulevard was discussed. Some committee members expressed concern that the landscaping in the boulevard would not be maintained. It was recommended that the maintenance of the boulevard landscaping be discussed during subdivision approval process.

NATURAL RESOURCES, TREE PROTECTION, AND STORMWATER

Introduction

The proposed project site is a 35.9-acre parcel formerly occupied by the Croton Egg Farm. A large portion of the site is disturbed and developed with structures related to the former Croton Egg farm operation. The western portion of the site along Croton Avenue is forested and steeply sloped. According to the Bartlett Tree Report prepared on October 31, 2011 (**see Appendix 8**), this is the area of the site most worth preserving. The northeast portion of the site is also forested and contains an area of large Tulip trees and smaller Maple trees. A town regulated wetland is located on the southeastern portion of the site. Committee members conducted a field visit to the proposed project site on Saturday, September 24, 2011. The following is a summary of the Committee's discussion related to Natural Resources, Tree Protection, and Stormwater.

Recommendations

The committee proposed the following recommendations:

- (18) Minimize disturbance to steep slopes on property to the maximum extent practicable**
- (19) Minimize disturbance to wetlands and wetland buffers**
- (20) Keep existing trees along the steep portions of the site visible from Croton Avenue within the area of the site most worth preserving according to the Bartlett Tree Report.**
- (21) If possible, preserve trees within the northeast corner of the site which contains an area of Tulip trees and smaller Maple trees noted as worth preserving in the Bartlett Tree Report dated October 31, 2011**
- (22) Where possible, consider protecting individual trees of value within the developed former egg farm portion of the site. It was noted in the Bartlett tree Report that some of these trees could be protected with tree preservation zones**
- (23) Protect trees identified to be preserved during construction**

Summary of Open Discussion

Some committee members expressed concern over the amount of the disturbance proposed along Croton Avenue. A number of committee members were concerned that disturbance along Croton Avenue would affect the visual character of site, disturb sensitive natural areas and increase the potential for erosion. Most committee members recommended that the area of steep slopes along Croton Avenue be maintained to visually buffer Croton Avenue and the surrounding residential uses from the proposed subdivision. A committee member was concerned with the extent of tree removal that would need to occur and expressed distress over the possible loss of mature trees on the site. It was recommended that the Applicant maintain as many trees on site as possible particularly in the proposed open space areas.

It was also recommended that the applicant install protection around trees to be saved and located within the disturbance area. It was noted that the applicant would be required to complete a formal tree survey as part of the subdivision review. The applicant stated that the trees on the site have been tagged, but the formal tree survey is not yet complete. A preliminary tree report prepared by the Bartlett Tree Experts was provided to the committee at the final charrette meeting. This preliminary report provides a qualitative assessment of the impact on the trees and the projected loss of trees if the development moves forward as proposed in Alternative 1, 2 and 3.

SUMMARY OF ALL RECOMMENDATIONS

The committee proposed the following 23 recommendations:

- (1) Cluster layout preferred over conventional layout**
- (2) Connection to sewer system preferred over individual septic systems**
- (3) Minimum lot size for cluster subdivision ½-acre lots**
- (4) Remove proposed lots along Croton Avenue**
- (5) Provide both active and passive recreation area(s) on the site**
- (6) Include a multi-use sports field for use by Town of Cortlandt residents**
- (7) Include additional areas of open space on the site**
- (8) Protect trees and minimize grading to the maximum extent practicable**
- (9) Keep site access at the existing site driveway**
- (10) Eliminate public road connection to Apple Hill Drive, explore emergency connection if deemed necessary by the Planning Board**
- (11) Remove driveway curb cuts along Croton Avenue**
- (12) Traffic study for the project should include the Route 202/35 and Croton Avenue intersection and the Furnace Dock/Jacob Street and Croton Avenue intersection**
- (13) Traffic study for the proposed project should assess a worst case estimate of the traffic that would be generated during the peak use of the multi-use sports field**
- (14) Provide visual buffer along Croton Avenue to top of slope**
- (15) Provide buffer between Apple Hill Estates and proposed Hanover Estates subdivision**
- (16) Prohibit the use of nighttime sports lighting at the multi-use sports field**
- (17) Restrict the use of horns and loudspeakers at the multi-use sports field**
- (18) Minimize disturbance to steep slopes on property to the maximum extent practicable**
- (19) Minimize disturbance to wetlands and wetland buffers**
- (20) Keep existing trees along the steep portions of the site visible from Croton Avenue within the area of the site most worth preserving according to the Bartlett Tree Report.**
- (21) If possible, preserve trees within the northeast corner of the site which contains an area of Tulip trees and smaller Maple trees noted as worth preserving in the Bartlett Tree Report dated October 31, 2011**
- (22) Where possible, consider protecting individual trees of value within the developed former egg farm portion of the site. It was noted in the Bartlett tree Report that some of these trees could be protected with tree preservation zones**
- (23) Protect trees identified to be preserved during construction**

CONCLUSION

Although most committee members expressed a preference for the layout presented in Alternative 9, a few committee members preferred the layout presented in Alternative 10 and one committee member preferred the layout presented in Alternatives 1 and 2.

Overall, the Charrette Committee meetings were very well attended and successful in identifying issues of concern and suggesting modifications to the proposed subdivision plan initially presented by the applicant to the Town.

The applicant was receptive to these suggestions and over the course of the committee's three meetings and one site visit made several revisions to the original subdivision plan (the "Preferred Plan") presented to the committee.

Although the committee was not always in unanimous agreement on every issue, all the members were committed to seeing this report highlight their concerns and recommendations. Since the beliefs and viewpoints one has concerning their community are based on one's personal experiences, needs, and values it was not unexpected that there were some differences in perspectives among the charrette committee members.

The findings, recommendations, and issues of concern contained in this report were well-considered and fairly debated. As stated above, the committee recognized the value of a collaborative team approach and the opportunity the charrette provided to bring together the different stakeholders including the applicant, neighbors, representatives of key town committees and the public to resolve issues early on in the planning process. The committee is hopeful that the various boards and commissions in the Town of Cortlandt entrusted with the authority and responsibility to make decisions on behalf of all members of the community will strongly consider all the recommendations and concerns identified within this report.

Appendix 1:
Petition to Planning Board from the Residents of Apple Hill Estates

Apple Hill Estates Residents
Apple Hill Drive/Rome Court
Cortlandt Manor, NY 10567

Town of Cortlandt Planning Board
Town of Cortlandt Town Hall
1 Heady Street
Cortlandt Manor, NY 10567

Re: Proposed Subdivision and Road Connection
To Apple Hill Drive

Planning Board Members,

Attached please find a petition signed by a majority of the residents of Apple Hill Estates who are firmly opposed to any proposed road connection to our neighborhood via the existing Right-of-Way on Apple Hill Drive to serve the proposed subdivision on the former Croton Egg Farm property. We feel that the road connection would negatively impact our "one access" neighborhood which we regard as a significant aesthetic and safety feature of our neighborhood.

The lands of the proposed subdivision possess hundreds of feet of road frontage on Croton Avenue from which to access their land. A connection to Apple Hill Drive is not necessary and any through road from Croton Avenue to Apple Hill Drive is totally objectionable. We ask that the Planning Board respect our stance on this matter and directs the developer to create its own "one access" neighborhood not linked to Apple Hill Estates.

Thank you for your consideration in this matter.

The Residents of Apple Hill Estates.

Cc/ Linda Puglisi; Town Supervisor

8/1/11 y.P.

Cc: Town Board

Jim Wood

John Dyckman Rec'd File 8/11 TB agenda

Ed Muzio

Chris Kehoe

Donna R. Barker

Appendix 2:
Letter to Apple Hill Residents from Supervisor Puglisi



LINDA D. PUGLISI
TOWN SUPERVISOR

TOWN OF CORTLANDT

OFFICE OF THE SUPERVISOR
TOWN HALL
1 HEADY STREET
CORTLANDT MANOR, N.Y. 10567-1254
(914) 734-1002
(914) 734-1003 fax
www.townofcortlandt.com

TOWN BOARD
RICHARD H. BECKER
FRANCIS X. FARRELL
ANN LINDAU
JOHN E. SLOAN

September 8, 2011

Dear Apple Hill Residents,

I want to thank you for your petitions and to inform you that the Town Board and I officially received and filed them at our August 15, 2011 Town Board meeting. They also have been distributed to our key staff members that advise both the Planning Board and the Town Board.

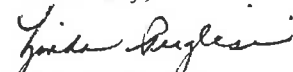
As you know, this property (37 acres) was the Croton Egg Farm and a horse-riding academy for many years. It was owned and operated by the Jacobsen family. The family still owns the property and since Mr. Jacobsen passed away, the family members have this property before the Town's Planning Board for development of houses and for a site plan review application.

During this process a family member reached out to the Town to discuss ideas and various options to preserve a portion of the land and have fewer homes built on only a portion of the property. Obviously, we are always looking for ways to reduce and control development for many reasons (open-space, parkland, potential impacts on schools, roads and on emergency services, etc.). Therefore, we were pleased to begin a dialogue to achieve a better use of this Jacobsen property and a committee called a "charette" has been established to consider, discuss and review various options and plans. We in the Town are fully aware of your concerns regarding a new roadway entering Apple Hill Road and we would not want to have any impact on your lovely residential neighborhood.

This committee or "charette" (a planning term) is comprised of several community members, an experienced planning consultant to chair or facilitate this dialogue, a member of our town planning staff and the applicant (a Jacobsen family member) and his advisors for this project. There will be approximately four committee meetings and they will be held at our Town Hall off Oregon Road. The first meeting is **Wednesday, September 14th at 7:00PM**. This is a public and open meeting where residents can attend to listen to the appointed committee members discuss the various plans. The committee/charette members were appointed by the Town Board.

We are hopeful that this approach having a more informal discussion for the use of this property will result in a plan that will be beneficial for everyone in your neighborhood, for the community and for the property owner. Thank you again for your petitions and for your involvement.

Yours truly,


Linda D. Puglisi
Town Supervisor

CC: Cortlandt Town Board
Ed Vergano
Chris Kehoe
Rosemary Boyle-Lasher
Anthony Russo, AKRF Planning Consultant

Appendix 3:
Comments from Charrette Committee Members on Draft Charrette
Summary Report

From: Bob Cusick [mailto:robertcusick@cs.com]
Sent: Tuesday, December 20, 2011 10:13 AM
To: mrobbins@akrf.com; rosemaryb@townofcortlandt.com
Subject: Re: Draft Hanover Estates Charrette Summary Report

Thank you for your efforts in leading and supporting this process. The report is quite detailed and thorough, and does a great job representing the discussions.

I have a couple of comments:

1) I think it was a real positive in the development process to conduct the charrette, and to have a cross section of objective/unaffected and affected residents attend the meetings. Thanks to all for making this a useful and positive (I think) planning experience

2) While I understand (and support) the need to keep individual member names out of the report, I think it is significant that the *only* members who did not prefer version #9 were residents of Apple Hill Estates. Their motivation in forming this opinion is easily understood, but I would like to see the report in some way reflect the objectivity of the committee members' opinions - perhaps by indicating that the dissenting members were Apple Hill residents. In my opinion, this aspect of the committee's discussions should be communicated to the Planning Board, and future reference to this report (in light of expected heavy turnout to future meetings on this development) not be misconstrued to indicate that some charrette committee members preferred curb cuts and steep slope disturbance

Happy Holidays.
Bob Cusick

From: tiebout2353@aol.com [mailto:tiebout2353@aol.com]
Sent: Thursday, December 29, 2011 2:22 PM
To: mrobbins@akrf.com
Subject: Re: Draft Hanover Estates Charrette Summary Report

To Michelle Robbins
Michelle
Additional comments

With the members concerns of maintains at the entrance to this development long term consideration should be to given to providing much rock and gravel formation with perennial plants and trees without grass similar to the Eagle Bay complex in Ossining where minimum maintains is required .

We still do not feel that the proposed Sportsman area location is a wise marketing decision nor is it a good idea for the tremendous traffic that it will generate. We feel that if this field is to be provided it should be relocated from the entrance and that this field not be for use by Town of Cortlandt residence from other areas as page #15 item #6 indicates. Even though zoning recommends a recreation area for this complex the other one on Croton Ave is completely underutilized

Ed Coccozza TSAC chairman

From: David S. Douglas [mailto:dsd@gdblawn.com]
Sent: Monday, January 09, 2012 7:13 PM
To: Michelle Robbins
Subject: RE: Draft Hanover Estates Charrette Summary Report

Michelle: [Please note my comments below.](#)

I found the Charrette to be a very worthwhile and productive endeavor. All of the committee members appeared to consider and analyze the various issues thoroughly and thoughtfully, and, even on issues as to which there was not unanimity, were respectful of opposing views. The applicant's representative, Mr. Jacobson, likewise approached the Charrette with an open mind and in the spirit of utmost good faith. AKRF did an excellent job in facilitating the Charette and prepared a thorough, clear, well-organized Report. The process, I believe, led to an alternative, specifically Alternative 9, that is far superior to that which the applicant had originally proposed, and to a number of important recommendations that I trust the Town Board, in exercising its approval power over clustering proposals, and the Planning Board, as lead agency, will consider seriously and give due weight.

I have only two additional comments that I would like to be noted.

First, while at certain of the Charrette sessions I raised some questions concerning density, it was my understanding that density questions would primarily be addressed by the Planning Board during the site review process. I would therefore urge the Planning Board seriously to consider whether the number of lots that the applicant currently proposes under Alternative 9 are truly appropriate for the site, or whether a reduced number of clustered lots would be preferable.

Second, I do not believe that recommendation no. 15 in the Report – addressing whether there should be through road or emergency access connection to Apple Hill Estates accurately reflects the majority consensus of the Charrette members. I believe that while there was a majority consensus recommending against a through road, the majority agreed that there should be emergency access connection. In any event, there was most definitely not a consensus opposing an emergency access connection, as recommendation no. 15 suggests. Also, as written, recommendation no. 15 contradicts recommendation no. 9, which correctly states that it was the view of the majority that emergency access to Apple Hill Drive should be explored as deemed necessary by the Planning Board.

David Douglas

David S. Douglas, Esq.
Gallet Dreyer & Berkey, LLP
845 Third Avenue, 8th Floor
New York, New York 10022
Tel. (212) 935-3131
Fax (212) 935-4514
dsd@gdblawn.com

From: Michele McGovern [mailto:michelemcgovern1@mac.com]
Sent: Monday, January 09, 2012 9:16 PM
To: Michelle Robbins
Subject: Re: COMMENTS DUE JANUARY 10th on the Draft Hanover Estates Charrette Summary Report

Hi Michelle,

Happy New Year!

The only comment I have is in reference to the sports field. Sitting in the meetings, I felt as though the field was a given, not an option. I do not believe the majority of participants were in favor of it, rather they did not think it could be deleted. Perhaps I am wrong.

What I am fairly certain of is that several (maybe a majority?) would prefer to see a smaller field.

Otherwise, the report is quite comprehensive. I think we all did a good job!

Regards,

Michele McGovern

From: tiebout2353@aol.com [mailto:tiebout2353@aol.com]
Sent: Tuesday, January 10, 2012 11:46 AM
To: mrobbins@akrf.com
Subject: Re: COMMENTS DUE JANUARY 10th on the Draft Hanover Estates Charrette Summary Report

Michelle

Once again we are against the sports field that has been included. All that traffic will be a disaster .

Ed Coccozza

I am John Milmore, a member of the Charrette and Chairman of the Conservation Advisory Council (CAC) of the Town of Cortlandt.

As stated in the draft report, this 35.9 acre parcel of property is located on Croton Avenue, which is protected by Local Law 16-2010. In addition, in May of 2004, the Town of Cortlandt Open Space Committee classified the property as a **“Highest Priority Parcel” for preservation** based partly on environmental sensitivity, ecosystem preservation possibilities, and preservation of community character.

The Draft Report generated by AKRF states in the Conclusions that: “most committee members expressed a preference for the layout presented in Alternative 9.” It is important to recognize that: 1) the preference was NOT unanimous, and that 2) some of the committee members had strong reservations about Alternative 9.

On several occasions, I raised concerns about adequate preservation of trees on the property. A report of a study by Bartlett Trees (10/31/2011) is found in Appendix 5. This study found that the northeast portion of the property (lots 1 through 4 for Alternative 1), has large, healthy trees that are **“worth trying to preserve.”** Wouldn’t most of these trees be taken down to build the residences in Alternative 9? The Bartlett report also states that the “forest directly alongside Croton Avenue” is “definitely the area most worth preserving.” Wouldn’t the proposed sports field, along with its 89 parking spaces, impinge on this area as laid out in Alternative 9? ***Clearly, these questions need to be addressed by an independent tree expert such as Bartlett rather than by a reply from the applicant’s representatives.***

Appendix 3 contains reports from the Traffic Safety Advisory Committee, one of which points out that the *current* conditions at the intersection of Croton Avenue and Route 202 are, at certain times of day, a problem for emergency vehicles. Adding 27 single residences to the mix certainly will **not help**. And a sports field (with 89 parking spaces) at this location will clearly generate additional traffic that will impact not only the area immediately around Hanover Estates, but the entire network of connected country roads and, notably, the intersection of Croton Avenue and Route 202.

In summary, it is my opinion that Alternative 9, while in some ways an improvement over previous alternatives, needs additional scrutiny and perhaps considerable modification. Please note that a significant number of committee members were NOT in favor of a sports field at this site. If the sports field is removed from Alternative 9, the cluster of homes could be moved away from the areas where the impact on trees and the environment in general would be most severe.

I am an adjacent homeowner (#20 Apple Hill Drive) to the proposed Hanover Estates development. Although many of my concerns have been addressed in The Hanover Estates Charrette Summary, I would like to express my viewpoint on several issues, since I and my neighbors are personally affected by the new development.

The proposed Hanover property is zoned R-40. Initially we were presented with alternative plans 1, 2 and 3 with homes set on 1 acre parcels. My neighbors and I were opposed and still are opposed to ANY DIRECT OR INDIRECT ROAD connect to Apple Hill Drive which was addressed in these plans.

When a cluster development was first proposed as in the early alternative 5 (now alternative 10), the plan included a substantial visual (conservation) buffer of 200 ft. between the rear of our Apple Hill properties and the proposed cluster of now planned 1/2 acre plots. The final preferred plan, alternative 9, has an insufficient buffer of only 25' between our properties and the proposed development. With the final preferred plan, Apple Hill property owners will be looking out at multiple clustered houses on a property zoned R-40. Visual changes (removal of mature trees) to the site will be extremely observable to Apple Hill property owners. Alternative plan 9 reduced the visual impact to Croton Ave but made the visual impact to Apple Hill homeowners far worse than in any other alternative plan.

I would like to highlight Bartlett Tree Experts assessment of the Hanover plans in the area behind #20, #18 and #16 Apple Hill properties. Bartlett refers to this area as lots 1-4 in alternative 1 (which would now be lots 6, 5, 4 and 21 in alternative 9). Bartlett Tree Experts state "there is a lack of tree preservation in the northeast corner and these trees are in good health and if possible this would be a group of trees worth trying to preserve". Bartlett Tree Experts state "these trees are large and would not be able to remain along with the home construction". If the Hanover project were to proceed with alternative 9, most of these trees mentioned would be removed. With a buffer of 200' as in alternative plan 10, many but not all of these trees would remain. Apple Hill homeowners would like to see this area of trees preserved similar to those being preserved along Croton Ave.

I continue to question, as did others at the Charrette meetings, the necessity of a sports field, especially at this location. As a 35 year high school soccer coach in another School District, I was involved in coordinating our School District, Village of Ardsley and Town of Greenburgh shared fields and facilities. It seems that this should be something the Town of Cortlandt should continue to pursue, rather than take on another field to maintain and burden taxpayers with upkeep when Walter Panas and Lincoln Titus fields are in the same general area of the town. Those who live in proximity to the soccer field will be burdened with noise, a significant increase in traffic and a possible hangout in the evening hours for teens. The Croton Ave /Route 202 intersection is presently a problematic intersection. A traffic study should be

undertaken to evaluate the increased traffic from the development itself as well as the additional field traffic prior to any planning board discussions. Increased traffic from a ball field could make the area of Croton Ave/Route 202 impassable, especially on weekends. This will bring about safety concerns for all local residents, as movement of emergency vehicles could be hindered by the congestion.

In summary, I am disturbed about the extreme visual impact by viewing a higher density of homes rather than one acre plots(R-40), privacy, noise, traffic, lack of tree conservation in the northeast corner and change in neighborhood character to Apple Hill and surrounding neighbors. My concern is for those who will have the development in their sight continuously, not just those passing by briefly on Croton Ave. Smaller lot sizes will have a tremendous visual impact on our neighborhood. If the plan continues as a cluster development, I recommend increasing the proposed buffer between Apple Hill and Hanover subdivisions by a significant amount, reducing the number of proposed homes in Hanover and moving the new development farther from Apple Hill. Also, the developer could eliminate the ball field so the subdivision can be shifted south to allow for a more extensive visual buffer and conservation of trees between subdivisions. Rather than the proposed sports field, I am in favor of passive recreation opportunities that could be used by a diverse population. This would also eliminate some of the traffic concerns. I encourage the Town Recreation Department to continue to negotiate with Lakeland concerning use of school district facilities.

As Apple Hill Home Owners directly affected by the proposal to have an active or passive roadway adjacent to our property, we were pleased that further discussions and other alternatives were introduced to the study potentially preserving the serene environment of the Apple Hill community.

Though we commend Mr. Jacobson's desire to address some of the town's recreational necessities, our preference for Hanover Estates is **NOT** to have any type of sports facility as part of the new development. We strongly believe the introduction of any type of sports facility would adversely impact Croton Avenue's infrastructure, its history and scenic allure. We are greatly concerned with the exponential traffic volumes and the security issues which can arise during sponsored and non sanctioned use of the facility. Prior to any formal presentation, we would strongly encourage the developer to perform a formal traffic impact analysis with emphasis on worst case traffic scenarios, inclusive of soccer jamborees & tournaments.

- We are supportive of a passive recreational area on the site with trails, etc. but are **NOT** in favor of a dog park.
- We are of the opinion a new development of 25 homes is an overdevelopment concern.
- I would encourage a joint venture between the villages of Cortlandt & Yorktown and Walter Panas High School to optimize the soccer field on Catherine Street, the high school fields and the dormant little league field on Croton Avenue.
- We favor the preservation of the existing landscape, in particular those areas referenced in the Bartlett Tree Analysis advocating a larger buffer between Apple Hill Estates and the proposed Hanover Estates.
- On page 10, the sentence addressing the concerns of the connection to Apple Hill, "resale appeal" is omitted.
- Also, a statement raised by Mr. Jacobson at the last meeting is not mentioned at all in the document. He had indicated a home(s) in the proposed Hanover Estates adjacent to the emergency route would be less appealing to a potential new owner and decrease the value/ability to sell those properties.

It is referenced the suggested new entrance opposite of Sassinoro Boulevard has an additional expense of \$500,000. It is understood this cost would be passed on to the new home buyer. As such I would like to see the document revised to reflect:

- the cost of the new development with the multi use facility omitted. (It has been mentioned there's a state penalty of \$7,500 per plot)
- the cost of the facility with other associated infrastructure expenses (storm water drainage, parking lot, possible retaining barriers on Croton Avenue, upkeep costs associated with the facility, etc.).

As the playground area was deemed acceptable upon the completion of the Emory Ridge development, what relief, if any, will the developer receive with the inclusion of the passive recreational facility, wet land preservation and tree conservation areas to the proposed Hanover Estate project?

Regards,

Peter and Cynthia Kalangis

Appendix 4:
Excerpted Pages from the Survey and Assessment of Historic Roads
Report



Survey and Assessment of Historic Roads

**Town of
Cortlandt**



**Westchester
County, New
York**



January 2007

Larson Fisher Associates
PO Box 1394
Woodstock, NY 12498

www.larsonfisher.com

Croton Avenue

The surveyed section of Croton Avenue stretches between Crompond Road on the north and State Route 129/Yorktown Road on the south. It is comprised of four rather distinct sections. The first section extends south from Crompond Road to the junction of Furnace Dock Road. The second section originates at this juncture where the road takes a sharp turn to the east and stretches westward to Jacob Road. A sharp turn to the south at this point begins the third section, which extends south from Jacob Road to the northern edge of the Croton Reservoir. The fourth, southernmost, section, with a length of approximately 7,900 feet, wraps around the western edge of the reservoir.

Croton Avenue is clearly delineated on the 1798 map as providing the only north-south route on the east side of the town. It ran south from the old “Road to Danbury” (Route 202) to the Croton River. Originally, at its southern section, the road followed a tributary of the Croton River, crossing it twice. When this stream gorge was flooded in 1905 upon completion of the new Cornell Dam to enlarge the Croton Reservoir, a new road was constructed along the western edge of the new impoundment.³ Many rubblestone walls along the entire route, as well as historic farmhouses (not to mention those that were lost or move due to the flooding), are testaments to the road’s longevity.

The Town of Cortland categorizes Croton Avenue as a “Major Road” (and is perhaps somewhere between a collector road and minor arterial). There is no bus service due to the dispersed development pattern along it. The lack of intense development with its concomitant traffic has in large part preserved much of the roadway’s character and setting. Also, the completion of the Taconic Parkway in 1932 not far to the east in Yorktown provided an alternative north-south through route, which has likely relieved major traffic pressures from this road. There are only a few locations where recent large scale developments with have affected the historic and scenic qualities of Croton Ave. These include a fire station and associated traffic signal and the Walter Panas High School located along the east-west section. The northern section and north-south midsection have seen the bulk of recent housing developments (with more seemingly on the way as evidenced by a Planning Board notice posted on the latter section).

The Historic Roads Advisory Committee ranked this road at 3.5 on a 1-5 scale for integrity (with 5 being the highest integrity).

Beginning at the northern end of Croton Avenue, the following observations were made:

³ Diane Galusha, Liquid Assets – A History of New York City’s Water System (Fleischmanns, NY, Purple Mountain Press, 2002) p. 266.

Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

Stone retaining walls, both dry-laid and mortared, are common along Croton Avenue. The lack of foliage in the fall/winter landscape also allows for views of stone farm boundary walls, rock outcroppings and other artifacts that contribute to the historic setting and feel of this roadway.



This view looking southwest along the northern section of Croton Avenue shows a relatively young forest that has grown up after clear-cutting on 19th century farmland. Stone walls running through the woods in this section also attest to this landscape history.



Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

Another view looking south and east along the northern section of Croton Avenue shows its gently curving path and the topography of the area. Note the stone wall in the woods running perpendicular to the road, which appears to align with a field or property boundary.

The woods on both sides of the road provide a sense of enclosure for the road, as well as screening recent housing developments.



This view looking east in the east-west section of Croton Avenue highlights the impact that traffic signals have on the rural character of the road.

A fire station, located north of the road (on the left), has a manicured lawn extending out to the right-of-way and a specimen spruce tree that are at odds with the overall natural quality of Croton Avenue. An unscreened parking lot behind the split rail fence in the background exacerbates this situation.



Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

In contrast to the previous photo, this open area with some buffering from the road (in this case a row of trees) provides a more picturesque vista.

Mail boxes (and other functional items such as trash receptacles) on roads such as this have a negative visual impact.



This was the home of James Dutton, owner of Summer Hill farm, according to the 1867 Beers map of Cortlandt. The leafless fall and winter seasons reveal the historic house with its stone walls and outbuildings. Rows of mature trees on the property are the vestiges of a designed and cultivated landscape worthy of preservation for the historic and scenic quality it provides to the road's setting.



Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

Another historic house is located at #336 Croton Avenue—the home of James Purdy in 1867, according to the town map. Here a row of mature trees along the front property line and flanking the driveway entrance heighten the sense of the road's history. However, the vinyl fence along the right-of-way detracts from the historic character of the roadway.

By contrast, the rubblestone wall extending to the east of the entrance drive has been preserved and contributes to the road's historic feeling.



An impressive stone wall extends along the west side of the road defining the property at the southwest corner of Croton Avenue and Jacob Road. A subdivision of the property has been proposed. Requiring retention of the wall and some trees along it would help maintain the historic character of the road.



Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

This view is of a portion of the “Hemlock Hill Farm” located at the intersection of Croton and Maple avenues in the north-south midsection. It was the farmstead of H. Ferguson in 1867. Old fashioned wire fencing together with older stone walls provide an appropriate edge treatment between open farm fields and the road. Note the hedgerows in the background that delineate separate areas within the farm landscape.



The road enters a hilly area with large rock outcroppings south of Maple Avenue, through which the road was cut at some point. The location of this road responds to the terrain, which provides much of its scenic quality.



Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

Although not as old as some other farmsteads along Croton Avenue, this house is still historic since in an early 20th century context. With a hedge that lines the right-of-way, it contributes to the historic character of the north-south midsection of the road.



View south to the southernmost end of the north-south midsection. Wooded hillsides, rock outcroppings, stone walls and retaining walls are plentiful. Note the log-faced guardrail—the only one documented in this survey. Someone was evidently able to obtain cooperation from traffic engineers in providing an aesthetic treatment for the required guardrail. Such treatment would be desirable, if expensive, for guardrails along most of the historic/scenic roads in Cortlandt.



Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

Croton Avenue turns sharply westward from the north-south midsection of the road. The fourth, southernmost section of the road is the newest portion, built when the original road, which crossed the Croton tributary at this point, was flooded in 1905 to create a larger reservoir. The land surrounding the reservoir, including this very scenic portion of the road, is owned by New York City. Thus it is not subject to threats from development nor may it be regulated by the town.



This view shows the typical condition of Croton Avenue's southern 7,900 feet, which is characterized by rocky outcroppings on the west side of the road and seasonal water views to the east. This portion of the road wraps around the west side of the reservoir. While the metal guardrail does not contribute to the scenic or historic quality of the road, it doesn't unduly detract from it. Although newest, this section of the road also has historical significance due to its association with the reservoir.



Survey and Assessment of Historic Roads in the Town of Cortlandt, Westchester County, New York

General Observations

Croton Avenue clearly has both historic and scenic value and needs careful management if these qualities are to be maintained over the long-term. Many stone walls, of many different ages and types are abundant, as are wooded lots abutting the roadway. While the town is probably unable to regulate the portion of it owned by New York City, the other three sections are strong candidates for local designation as a Historic and Scenic road.

Assessment

Road / Measure	Location	Design	Setting	Materials	Workman-ship	Feeling	Associ-ation
Croton Avenue	o	o	+	o	-	+	+

Recommendations

- Craft a specific regulatory tool that would disallow destruction and require maintenance of all stone walls and piers in or within 200 feet of the road right-of-way.
- Develop guidelines for vegetative screening of new developments.
- Require all new subdivisions and development to construct stone walls along the roadway at the property line in a design that coordinates with any stone walls on abutting properties.
- Protect mature trees within and along the right-of-way from unnecessary cutting and destruction.
- Develop public education brochures to inform residents and property owner along this road of the importance of maintaining the scenic and historic qualities of the road, with guidelines for selection of mailboxes, trash receptacles, wall and fence designs/materials, and planting choices.
- Limit traffic and advisory signs to the greatest extent possible.

Appendix 5:
**AKRF Peak Warrant Analysis and Letter from Cortlandt Traffic and
Safety Advisory Committee (TSAC)**

PEAK HOUR TRAFFIC TRIP GENERATION AND WARRANT ANALYSIS

TRIP GENERATION

Projected trip generation numbers for the proposed project were calculated based on the following building program for the project:

- 27 single family homes
- 1 sports field

Trip generation rates presented in *Institute of Transportation Engineers (ITE) Trip Generation Manual 8th Edition* were used to compute the vehicle trips anticipated to be generated by the proposed project.

Trip generation rates for ITE Land Use # 210 “Single-Family Detached Housing” and Land Use #488 “Soccer Complex” were utilized for estimating the number of vehicle trips anticipated to be generated by the single family homes and sports field, respectively. These land uses were selected to provide the closest representation of the proposed project components.

In order to provide for a conservative estimate, rates for the Saturday Peak Hour were utilized (as opposed to the Weekday AM or PM peak hours). The estimated trip numbers generated by the proposed project based on these rates are shown in Table A-1. Application of these rates would equate to 54 vehicles with approximately 27 vehicles entering the site and 27 vehicles leaving the site during the Saturday Peak Hour.

SIGNAL WARRANT ANALYSIS

In order to determine if the intersection of Croton Avenue and the proposed project driveway would meet the traffic signal warrants (criteria to determine whether the installation of a traffic signal is justified at a particular location) presented in the 2009 *Manual On Uniform Traffic Control Devices (MUTCD)*, a preliminary signal warrant analysis was conducted considering two scenarios: (1) the proposed driveway aligned directly opposite Sassinoro Boulevard, creating a 4-leg intersection, and (2) the proposed driveway aligned slightly offset from Sassinoro Boulevard, creating a 3-leg intersection.

MUTCD Warrant 3, Peak Hour Vehicular Volume, was examined as peak hour volumes were available for the roadways examined. The peak hour volumes for the associated roadways are as follows:

- Croton Avenue – 474 vehicles per hour (VPH, 2-way)
- Sassinoro Boulevard – 40 VPH (2-way)
- Project Site Driveway – 27 VPH (1 way) , 54 VPH (2 way)

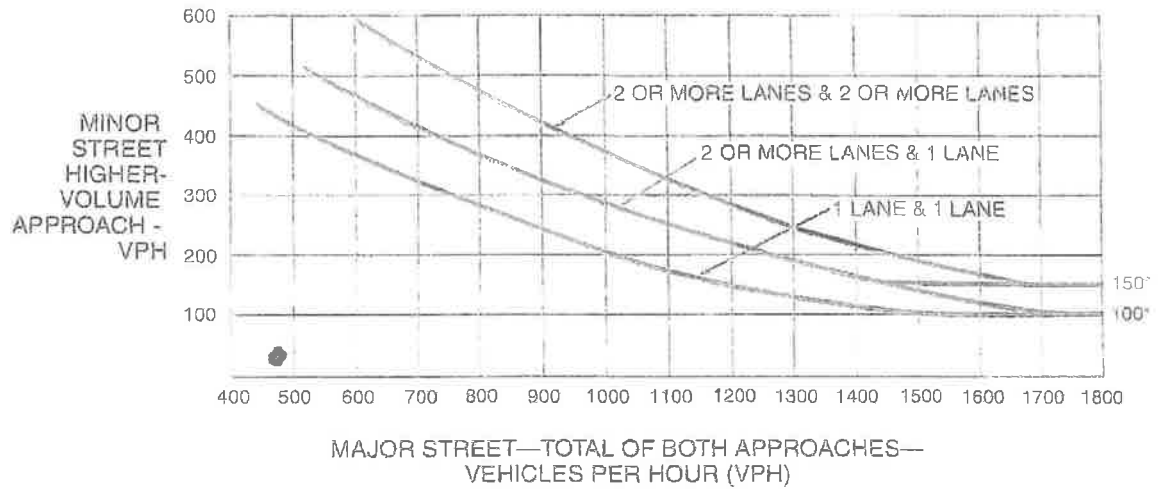
Applying Warrant 3, peak hour vehicular volumes would not satisfy Warrant 3, regardless of whether or not the project site driveway would be aligned opposite or offset from Sassinoro Boulevard. The plotted peak hour volume on Figure 4C-3 shows that the hourly vehicular volumes from the proposed project would be well below the threshold curve to satisfy Warrant 3.

Proposed Project Trip Generation⁽¹⁾

				Saturday Midday Peak Hour					
Building Component	Development Size	ITE Land Use Code	ITE Land Use	Trip Generation Rate	Total # of Trips	% In	% Out	# 'In' Trips	# 'Out' Trips
Single Family Homes	27 Single Family Homes	210	Single-Family Detached Housing	0.93	25	53%	47%	13	12
Sports Field	1 Sports Field	488	Soccer Complex	28.73	29	48%	52%	14	15
PROJECT TOTAL:				Sat. Peak Hr.	54			27	27

Note: Saturday Peak Hour Trips were estimated for a conservative analysis
 (1) Based on ITE Trip Generation Manual, 8th Edition, Institute of Transportation Engineers

Figure 4C-3. Warrant 3, Peak Hour

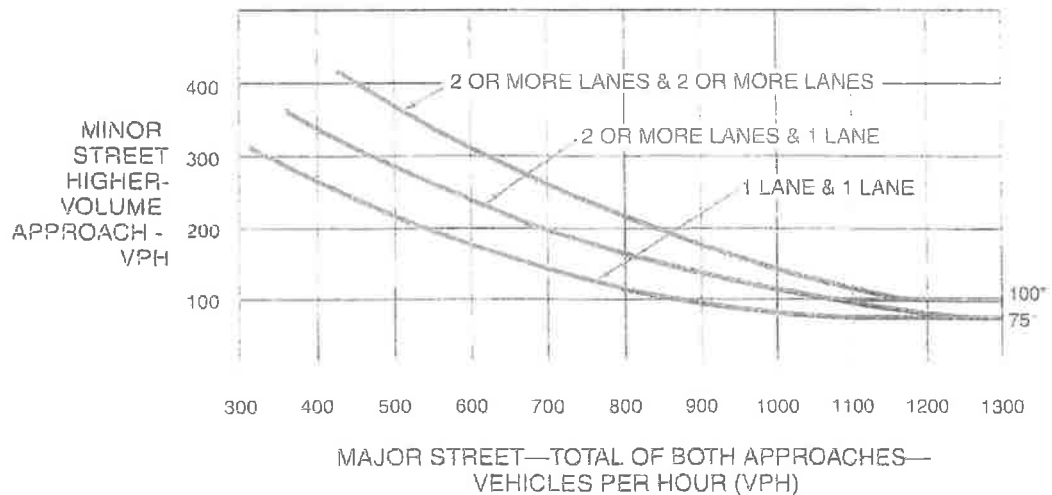


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● Plot of project site driveway and Custer Avenue hourly volumes

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Town of Cortlandt Traffic & Safety Advisory Committee

9/14/11

To: Linda D. Puglisi Town Supervisor
Town Board Members
Thomas Wood ESQ.
ED Vergano D.O.T.S. Director
Jeff Coleman D.E.S.Director
Planning Board
Jo-Ann Dyckman

From: Traffic Safety Advisory Committee (TSAC)

Date: 05/03/11

Re: TS207/0511 Croton Ave and Rt. 202 submitted by TSAC

Our Joseph Kampf visited with Fire Captain Lou Barbieri at the Lake Mohegan Fire Department to discuss any safety concerns that they might have for Cortlandt . We submit Joseph Kampf's report for your review.

We feel the main concern was Croton Ave and Rt.202 and a need to relieve the back up of traffic on Croton Ave. which slows down their response time for Fire Trucks and EMT vehicles.

The main concern is traffic backup as caused by the Walter Panas School students when they leave school.

They have recommended that the road be redesigned at this intersection to make this road more accessible for emergency vehicles. Currently this road is too narrow for the volume of traffic on this segment of the road.

In addition we recommend that the traffic light be provided with a left hand turn signal on Croton Ave. when the Rt.202 signal is red.

The bottleneck is severe because there are no margins on the side of the road and traffic cannot diverge to the side of the road to create a passage for emergency vehicles. The Fire Department has to re-route trucks to avoid this intersection which adds to response time.

A traffic monitor should also be provided by the school in the morning and afternoon dismissal time

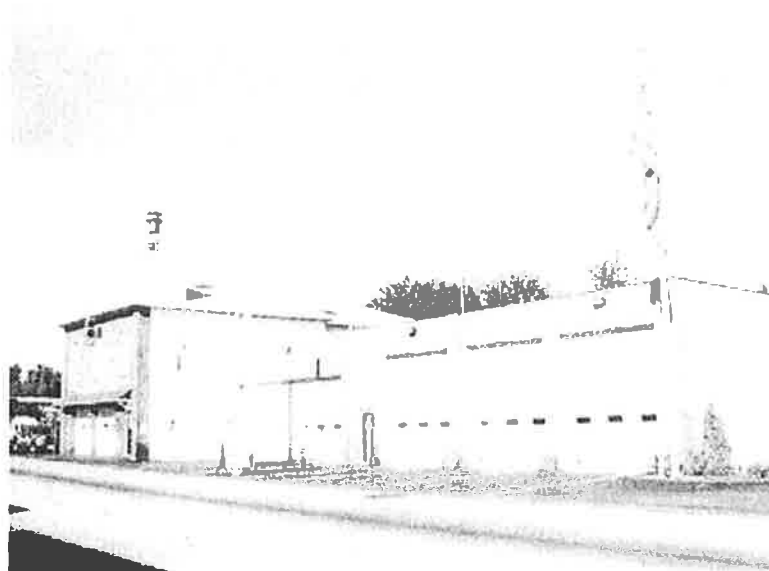
Thank you in advance for considering our concerns. We hope to relieve some of their concerns for Cortlandt.

The Traffic Safety and Advisory Committee of the Town of Cortlandt

LMVFD / TSAC Report

Date: March 18, 2011

Attendees: Captain Lou Barbieri, LMVFD, Joseph Kampf, TSAC member



Acronym Definitions:

LMVFD –Lake Mohegan Volunteer Fire Department	F.D. - Fire Department
TSAC – Traffic Safety Advisory Committee	B.M.P. – Bear Mountain Parkway

Introduction.....	2
I. Route 6	2
II. Bear Mountain Parkway	2
III. Red Mill Rd.....	2
IV. Lexington Ave.	3
V. Route 202 / Croton Ave. Intersection	3
VI. Westbrook Dr. / Oregon Rd. Round-A-Bout.....	3
VII. Rumble Strips/Speeds Humps	3
VIII. Lafayette Ave and Crompond Rd./ Route 202	3
Conclusion/Summary	4
Mohegan Volunteer Fire Associate Volunteer Ambulance Corps.....	4

Introduction

On March 18, 2011 TSAC member Joseph Kampf conducted a meeting with Captain Lou Barbieri of the Lake Mohegan Volunteer Fire Department. The meeting was conducted at Headquarters located on Route 6 in Mohegan Lake. The agenda focused on the traffic issues that pertain to the Lake Mohegan Volunteer Fire Department. The fire department averages between 2,000 and 2,500 calls annually and responds to 6-7 emergencies daily. The following Traffic / Roadway items were discussed.

1. Route 6
2. Bear Mountain Parkway
3. Red Mill Rd.
4. Lexington Ave.
5. Route 202 & Croton Ave. Intersection
6. Westbrook Dr / Oregon Rd, Round-A-Bout
7. Rumble Strips & Speed Humps
8. Lafayette Ave. / 202 (Crompond Rd.) intersection

I. Route 6

Route 6 is a road that is utilized by the fire department on a daily basis. Their opinion was that the road is constantly congested and has a large volume of traffic on it. The fire department can maneuver through the traffic with great efficiency although if the congestion could be relieved it would make things easier for the fire department as well as other travelers. An idea was developed to put a possible fire lane on Route 6 so emergency vehicles and travelers know which lane the emergency vehicles would travel.

II. Bear Mountain Parkway

Subsequent to the installation of the "No Left Turn" sign on Locust Ave. / Bear Mountain Parkway intersection, traffic incident have drastically decreased. No concerns with the Bear Mountain Parkway pertaining to the LMVFD. Noted that traffic has significantly improved at the intersection of the BMP with Crompond Rd./ Route 202 with the Traffic light sequencing between Croton Ave and the BMP/ Crompond Rd.

III. Red Mill Rd.

Ladder Trucks are typically re-routed off of Red Mill Rd due to the conditions of the Road. Trucks proceed down Westbrook Dr toward Oregon Rd versus Red Mill. Trucks are large and bulky and there are signs on the road for "local delivery only". Suggestion would include overall improvement of the road, i.e. make the road wider and smoother for traffic as well as fire trucks. Other improvement would include resurfacing the road to create more friction between tire and pavement for a safer driving terrain.

IV. Lexington Ave.

Improve road conditions, F.D. has noted that “ponding” occurs when snow melts and after rain storms. Consider evaluating drainage and run off design. F.D. mentioned that the road is significantly better than it used to be. Very comfortable driving on Lexington Ave (due to close proximity of headquarters).

V. Route 202 / Croton Ave. Intersection

During morning rush hour and after high school student leave school at the end of the day in the afternoon, Croton Ave. bottlenecks on Croton Ave. at the intersection with Route 202. The fire department has to re-route truck either to Catherine St. or Down Maple Ave. to avoid this intersection. The bottlenecking is severe because there are no margins on the sides of the road and traffic cannot diverge to the side of the road to create a passage for emergency vehicles. F.D. suggests redesigning the road or make the road more accessible for emergency vehicles. Currently the road is too narrow for the volume of traffic on that segment of roadway.

VI. Westbrook Dr. / Oregon Rd. Round-A-Bout

The F.D is very satisfied with the current Round-A-Bout design. The trucks do not have any problem maneuvering through the Round-A-Bout. The only suggestion would be to make it a little wider if possible for the larger emergency vehicles. The intersection is one of the best intersections in the Fire District.

VII. Rumble Strips/Speeds Humps

F.D. prefers rumble strips to speed bumps. F.D. has experience with speed bumps from Quinlan St in Yorktown. Not only do the bumps slow traffic down but they also slow emergency vehicles down and increase response times. Recommend the use of speed humps on tertiary roads and rumble strips on primary and secondary roads.

VIII. Lafayette Ave and Crompond Rd./ Route 202

The intersection seems dangerous because of the traffic volume. Turning right or left especially left from Lafayette onto Route 202/ Crompond is dangerous, they receive numerous calls to this intersection. Consider installing a traffic device at this intersection.

Notes, FYI:

The fire department and the ambulance service are two separate entities. The ambulance service is a for profit firm that performs services in the fire district. The Fire Department is a Volunteer organization with hires people to operate the firm and volunteers assist. They use to be one organization.

Conclusion/Summary

This report is the first report from the Lake Mohegan Volunteer Fire department. We (the TSAC) may follow up with the F.D. in the future to determine if they have any other recommendations or requests pertaining to traffic or road conditions in the Town of Cortlandt.

Mohegan Volunteer Fire Associate Volunteer Ambulance Corps

Meeting Date: March 23, 2011

Kristina McCarthy – EMS Assistant Chief
914.438.4875 / EMTgear353@yahoo.com

Ambulance corps at the Mohegan Fire department discussed the following comments pertaining to road conditions around their Fire district in Cortlandt Manor.

Road Construction:

Alert emergency agencies that road construction is occurring in specific areas and develop a plan to help emergency vehicles navigate through the construction project. In the past emergency vehicles have been held up by road construction.

Route 6 / Lexington Ave.

Would like to see the Mohegan Lake section of Route 6 expanded into 2 lanes going in each direction (2 eastbound – towards Jefferson Valley, 2 westbound – towards Peekskill)

Ambulance Dept is alerted of Traffic hazards on Route 6 and Lexington Ave. Traffic traveling eastbound at the top of the hill at Lexington merges over from the left hand eastbound lane into the right lane proceeding into Mohegan Lake. There are a lot of near misses at this intersection because of this merging traffic maneuver.

Conklin Ave:

Very rough terrain, the “Box” on the ambulance gets bounced around while traveling on Conklin Ave.

Bear Mountain Parkway (Exiting From Taconic)

Automobiles roll over due to high rate of speed while entering the Bear Mountain Parkway and proceeding under the Taconic towards Rout 6. A suggestion to bank the road was made.

Reduce traffic at Route 6/Crompond Rd. and Bear Mountain Extension by closing Cortlandt Lanes egress onto Route 6 and installing egress on the BMP so traffic will go directly from the BMP into Cortlandt Bowling Lanes.

Croton Ave.

-High accident rate

Round-A-Bout Oregon Rd./ Westbrook Dr.

EMS like the Round-A-Bout they think it is very effective on traffic flow

EMS prefers rumble strips over speed bumps. Speed bumps require the ambulance to stop, rumble strips just make noise. Speed bumps impact response time.

-Ambulance does not have the best suspension system

Appendix 6:
Town of Cortlandt Comprehensive Master Plan Policy Number 83

Policy 83: Minimize the use of cul-de-sacs in new developments. The Town has a considerable number of existing lengthy cul-de-sacs which have proven to be difficult for garbage pickup, snow removal and most importantly for emergency response purposes.

The Plan encourages the Town to minimize any future construction of cul-de-sacs, which should be limited to no longer than 500 feet and to create linkages in local roadways wherever possible.

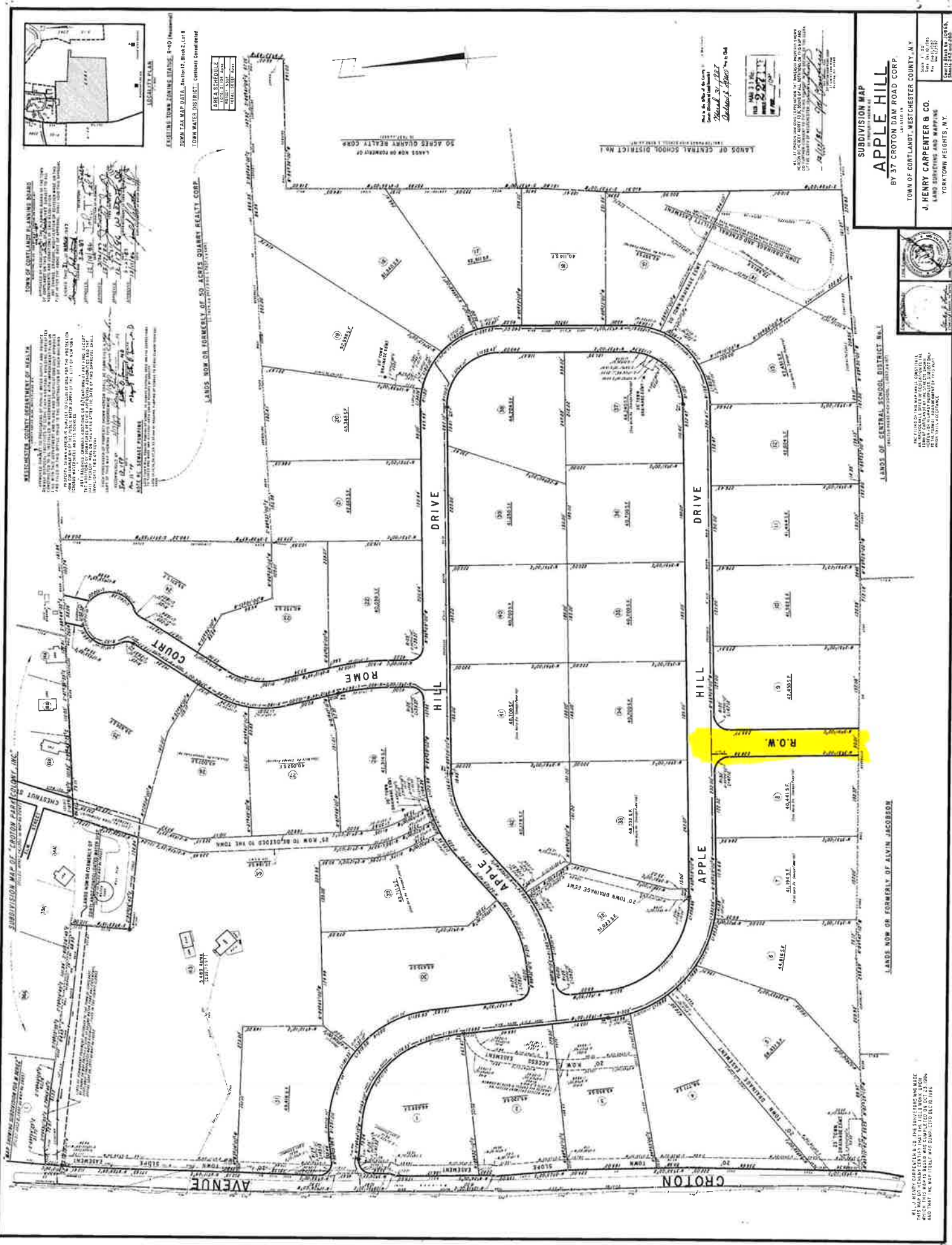
Policy 84: Pursue opportunities to obtain funding and approval for major capital projects including: A new Route 9/9A interchange, completion of the Bear Mountain Parkway to the Taconic State Parkway; plan for future road rights-of-way and shared access; Provide for improvements to existing roads and implement recommendations from the Sustainable Development Study as approved by the Town Board.

As described above, there are opportunities for new roads and changes to the existing local or regional highway system in Cortlandt. A review of the Base Studies and previous Master Plan efforts indicates that certain major improvements are justified. At present, the following projects should be pursued:

- A. **Provide new Route 9 access in Montrose** - New access to and from the north and south bound lanes of Route 9 to Memorial Drive where the New York State Police Headquarters Troop K – Zone 3 and the Cortlandt Regional Paramedics are located in the Cortlandt Emergency Services Building and where the Metro-North Cortlandt Station is located, is a clear and important recommendation. The new interchange will provide critical access to Route 9 for the NYS Police, the Paramedics and the approximately 700 weekday train commuters. In addition, this interchange will provide an additional evacuation route for a potential Indian Point emergency. This proposed interchange will also help to reduce the amount of traffic on Albany Post Road (Rt. 9A) and provide more direct traffic access for the FDR VA Hospital.
- B. **Completion of Bear Mountain Parkway** - Currently, the Town experiences serious traffic congestion along Route 35/202 from the Bear Mountain Parkway (BMP) eastward to the Taconic. The Bear Mountain Extension was originally planned to connect not to Route 202/35 as it is currently channeled, but instead to the Taconic State Parkway. If the BMP had been build as originally envisioned, it would have permitted Route 35 to operate as a secondary arterial and commercial corridor, while providing a through route for non-locally based traffic.

The recommendation for completion of the Bear Mountain Parkway has a long history, beginning with the Town's 1955 Master Plan and has been recommended in every Master Plan the Town of Cortlandt has adopted since 1955.

Appendix 7:
Apple Hill Estates Approved Subdivision Plat



LEGEND

EXISTING TOWN ZONING MAP, N-0 (Residential)

TOWN TAX MAP DATA, District 1, Block 2, Lot 5

TOWN WATER DISTRICT, District 1, Block 2, Lot 5

AREA SCHEDULE

AREA	AREA	AREA
AREA	AREA	AREA
AREA	AREA	AREA

THIS MAP WAS PREPARED BY THE TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y. IN ACCORDANCE WITH THE TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y. SUBDIVISION MAP ACT, CHAPTER 100, SECTION 100-1, AND THE TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y. SUBDIVISION MAP ACT, CHAPTER 100, SECTION 100-2.

DATE: 11/1/82

BY: [Signature]

SUBDIVISION MAP

APPLE HILL

BY 37 CROTON DAN ROAD CORP.

TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y.

J. HENRY CARPENTER & CO.

LAND SURVEYING AND MAPPING

TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y.



ALVIN JACOBSON, LAND SURVEYOR, TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y.

ALVIN JACOBSON, LAND SURVEYOR, TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y.

ALVIN JACOBSON, LAND SURVEYOR, TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y.

LANDS NOW OR FORMERLY OF ALVIN JACOBSON

LANDS OF CENTRAL SCHOOL DISTRICT No. 1

LANDS OF CENTRAL SCHOOL DISTRICT No. 1

LANDS OF CENTRAL SCHOOL DISTRICT No. 1

THIS MAP WAS PREPARED BY THE TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y. IN ACCORDANCE WITH THE TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y. SUBDIVISION MAP ACT, CHAPTER 100, SECTION 100-1, AND THE TOWN OF CORTLANDT, WESTCHESTER COUNTY, N.Y. SUBDIVISION MAP ACT, CHAPTER 100, SECTION 100-2.

DATE: 11/1/82

BY: [Signature]

Appendix 8:
Bartlett Tree Report



BARTLETT TREE EXPERTS

2240 SAW MILL RIVER ROAD, ELMSFORD, NY 10523-2501 • (914) 592-4520 • FAX (914) 592-5068

October 31, 2011

Town of Cortlandt Planning Board
ATTN: Chris Kehoe
1 Heady Street
Cortlandt NY 10567

Work Location: Hanover Estates Development Croton Avenue

Dear Mr. Kehoe



An inspection was done of the proposed site of the Hanover Estates subdivision being discussed on Croton Avenue in the Town of Cortlandt. As requested I looked to determine the extent of impact on the trees located at the property and assess the projected loss of forest cover if the development moves forward as laid out on the plans.

The plans given to me show 3 alternatives with anywhere from 25 to 10 building lots, new main road through the site, entrance from Apple Hill Road and a proposed conservation area. Each lot is not specifically marked in the field and so determining the exact impact of each building lot is not really feasible and so I have broken them into groups of lots based on similar tree groupings and existing conditions. Some of the things we look to determine are the species make up of the forest, size and condition of the trees and any significant groupings. Aside from trees, which would be removed because they are in the footprint of an individual site we also need to take into account the trees which would be damaged to an unacceptable level by root disturbance or other disturbances like erosion. There was a tree inventory completed but it does not include any trees less than 8" in diameter, which includes some significant trees such as Dogwoods, Ironwoods and Hickories. Some recommendations will be proposed, which may help reduce or minimize damage if the project moves forward. Each proposed area of the plan shown on the drawings will be addressed here.

SUBDIVISION ALTERNATIVES 1 AND 2 DRAWINGS

APPLE HILL DRIVE

There are two alternatives that appear to be only separated by the type of entrance used to gain access off of Apple Hill Drive. The option for a gravel road would generally cause the least impact for the trees in this area. The area is a swath between houses 16 and 18 Apple Hill Drive and is comprised primarily of Oaks and Maples and some smaller trees. It is a narrow area and in all likelihood any roadway put through here would require the removal of all or most of the trees. If a road is dug it would damage the roots of the adjacent trees and likely cause decline of those trees going forward. There are not a great number of trees in this area but they do provide a buffer between the two houses.

THE F.A. BARTLETT TREE EXPERT COMPANY
SCIENTIFIC TREE CARE SINCE 1907

Corporate Office: P.O. Box 3067, Stamford, Connecticut 06905-0067 • (203) 323-1131, FAX (203) 323-1129
www.bartlett.com



BARTLETT TREE EXPERTS

2240 SAW MILL RIVER ROAD, ELMSFORD, NY 10523-2501 • (914) 592-4520 • FAX (914) 592-5068

Alternative 1 and 2 drawing cont:

CONSERVATION AREA

This area appears to roughly overlap what is the existing wetland. The trees in this area are of the typical type to wetland areas. There are not a large number of trees in this zone which is typical for some wetlands. There is an extensive problem with invasive vines affecting the trees in the zone as well. Some trees are in very poor condition due to the suffocating vines. If this remains the area to be preserved some work should be done to curb the invasive plants.

BUILDING LOTS 1 THRU 4

These lots run along the border of the property with the school from the rear of 18 Apple Hill. This area primarily consists of large Tulip trees and smaller Maple trees. The trees are large and would not be able to remain along with the home construction as too many roots would be damaged and they would likely decline in subsequent years. The trees are in good health and if possible this would be a group of trees worth trying to preserve.

BUILDING LOTS 5 THRU 7

There are very few trees in this area that are in good condition or are highly desirable. The area has a lot of meadow and the few trees that exist are in poor health or are covered in vines. There is a group of invasive *Ailanthus* trees in the center of this area that would not be beneficial to the site. There are a few individual Oak and Tulip trees that could remain if provided good protection measures during construction leaving some mature trees that would benefit the site. There are really no significant tree related conflicts in these sites but they do appear to get close to the wetland at the one end.

BUILDING LOTS 8 THRU 9

These 2 lots are located directly adjacent the current entrance off Croton Ave. and are already developed with houses and drives. There are not a large number of trees that would be affected in development but there are some existing trees. There are several mature Maples and Spruces that are in good condition and should be preserved if possible in the development with proper tree protection zones. Depending on the size of houses this could be feasible for some of them to remain.

BUILDING LOTS 10 THRU 17

These lots currently consist of a young forest directly alongside Croton Avenue. This area was cleared at some point in the too distant past as almost all the trees are in the range of 6 to 14 inch in diameter. There are several places where larger individual trees exist and several very nice larger trees. The species makeup is primarily Sugar Maple which is a very desirable species and different from most locations where the invasive Norway Maple species takes over a cleared site. Other species include Sassafras, Hickory, White Oak and Black Locust. There are pockets where invasive Grape Vine is damaging trees but this can usually be controlled with some cutting. The area has a slope and if trees were removed it would likely increase runoff and erosion significantly. The top of the hill is where the quality of trees diminishes but there should be some buffer at the top to help prevent erosion. This is definitely the area most worth preserving of the whole site.

THE F.A. BARTLETT TREE EXPERT COMPANY
SCIENTIFIC TREE CARE SINCE 1907

Corporate Office: P.O. Box 3067, Stamford, Connecticut 06905-0067 • (203) 323-1131, FAX (203) 323-1129
www.bartlett.com



BARTLETT TREE EXPERTS

2240 SAW MILL RIVER ROAD, ELMSFORD, NY 10523-2501 • (914) 592-4520 • FAX (914) 592-5068

BUILDING LOTS 18 THRU 25

This area extends from the rear of 16 Apple Hill Drive down through the existing egg farm. This area is mainly meadow and buildings occupied by the egg farm. There are very few trees in this area and of the entire site this is the best area for construction from a tree preservation standpoint. There are a few nice individual trees which could be protected with tree preservation zones but really no groups of specimen plants.

SUBDIVISION ALTERNATIVE 3 DRAWING

BUILDING LOTS 1 THRU 4

These lots run along the border of the property with the school from the rear of 18 Apple Hill. This area primarily consists of large Tulip trees and smaller Maple trees. The trees are large and would not be able to remain along with the home construction as too many roots would be damaged and they would likely decline in subsequent years. The trees are in good health and if possible this would be a group of trees worth trying to preserve.

BUILDING LOTS 5 THRU 10

This area extends from the rear of 16 Apple Hill Drive down through the existing egg farm. This area is mainly meadow and buildings occupied by the egg farm. There are very few trees in this area and of the entire site this is the best area for construction from a tree preservation standpoint. There are a few nice individual trees which could be protected with tree preservation zones but really no groups of specimen plants.

Conclusions

1. The portions of the site with existing forest are a healthy mix of hardwood trees consistent with this area including Black Birch, Oaks, Sugar Maples and Hickories. There is also a mix of invasive species, like Bittersweet, Norway Maple & Barberry which are common in this area and are often the first plants to thrive once the forest canopy is opened up. The deer have eaten most of the low growing foliage leaving no evergreens to speak of.
2. The bulk of the site is mostly already disturbed or currently in use. Trying to develop within these areas will always help minimize the impacts on the forest and existing trees. The development of plots listed as 1 thru 4 and 10 thru 17 are the ones that would result in the worst impact on the trees and likely cause erosion issues.

THE F.A. BARTLETT TREE EXPERT COMPANY
SCIENTIFIC TREE CARE SINCE 1907

Corporate Office: P.O. Box 3067, Stamford, Connecticut 06905-0067 • (203) 323-1131, FAX (203) 323-1129
www.bartlett.com



BARTLETT TREE EXPERTS

2240 SAW MILL RIVER ROAD, ELMSFORD, NY 10523-2501 • (914) 592-4520 • FAX (914) 592-5068

3. If construction moves forward there are individual tree's located within plots that will need protection of the root zones to prevent mechanical damage, soil compaction, root cutting and grade changes all of which will harm trees that are meant to remain. Most tree mortality will not be a result of clearing for the site but from tree decline due to stress caused from the construction. This can easily raise the loss of trees from 20 % to 40% within a few years of construction.
4. The better of the 2 plans from the tree loss point of view is the Alternative 3 drawing but it leaves out some areas where building could occur with little to no impact on the trees. I have marked up a drawing and attached it with the areas that I feel are most worthy of protection. In prioritizing the site I would say the area along Croton Ave. would be more important to preserve then the area at the rear of 18 Apple Hill Drive.

If you have any questions please feel free to give me a call.

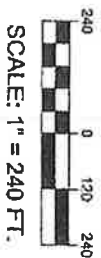
Sincerely

Trevor Hall
Bartlett Tree Experts
ISA PD0269

THE F.A. BARTLETT TREE EXPERT COMPANY
SCIENTIFIC TREE CARE SINCE 1907

Corporate Office: P.O. Box 3067, Stamford, Connecticut 06905-0067 • (203) 323-1131, FAX (203) 323-1129
www.bartlett.com

DATE: FEBRUARY 14, 2011



OWNER/DEVELOPER
HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 136, SECTION 2009 (D), IT IS THE POLICY OF THE STATE OF NEW YORK TO PROVIDE FOR THE EDUCATION OF ALL CHILDREN RESIDING IN THE STATE OF NEW YORK. THE STATE OF NEW YORK HAS A COMMITMENT TO PROVIDE A QUALITY EDUCATION FOR ALL CHILDREN. ANY FEE IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE FEE A SEAL AND THE SEAL MUST BE FOLLOWED BY HIS SIGNATURE AND THE SEAL OF QUALIFICATION AND A SIGNATURE DISSEMINATION OF THE ALTERNATION. (SECTION 2011 OF EDUCATION LAW, P.E. P.E. ALL RIGHTS RESERVED.)

CRONIN
ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

39 ARLIO LANE
CORTLANDT, NEW YORK 10567

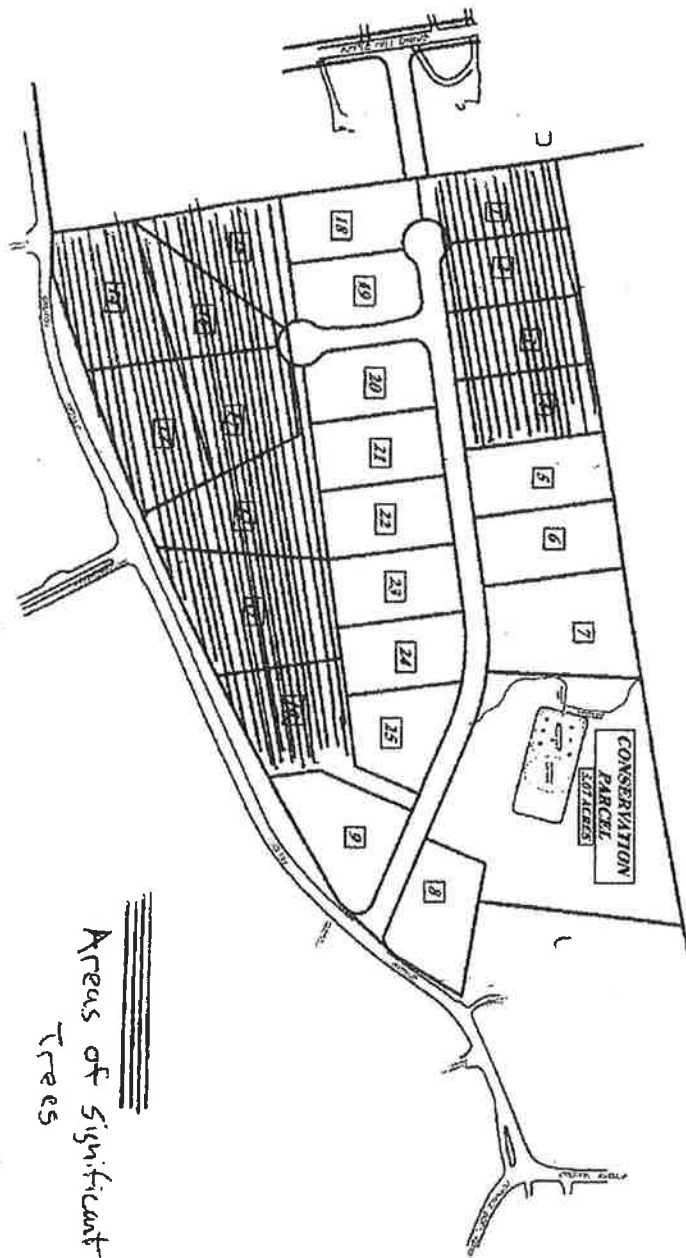
SUBDIVISION ALTERNATIVE 1

SUBDIVISION PLAN
FOR

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 ALT 1



Areas of Significant
Trees

SUBDIVISION ALTERNATIVE 1
SCALE: 1 IN. = 240 FT.

SCALE: 1" = 240 FT.

HANOVER ESTATES

CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE

CORTLANDT MANOR, NY 10567

* UNDER NEW STATE EDUCATIONAL LAW ARTICLE 14, SECTION 7309 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL, AND THE NOTATION, ALTERED BY FOLLOWED BY HIS SIGNATURE, AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION. COPYRIGHT © 2011 BY CROWN ENGINEERING, P.C., ALL RIGHTS RESERVED.



CRONIN
ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

**39 ARLO LANE
CORTLANDT, NEW YORK 10567**

SUBDIVISION ALTERNATIVE 1

SUBDIVISION PLAN

FOR

HANOVER ESTATES

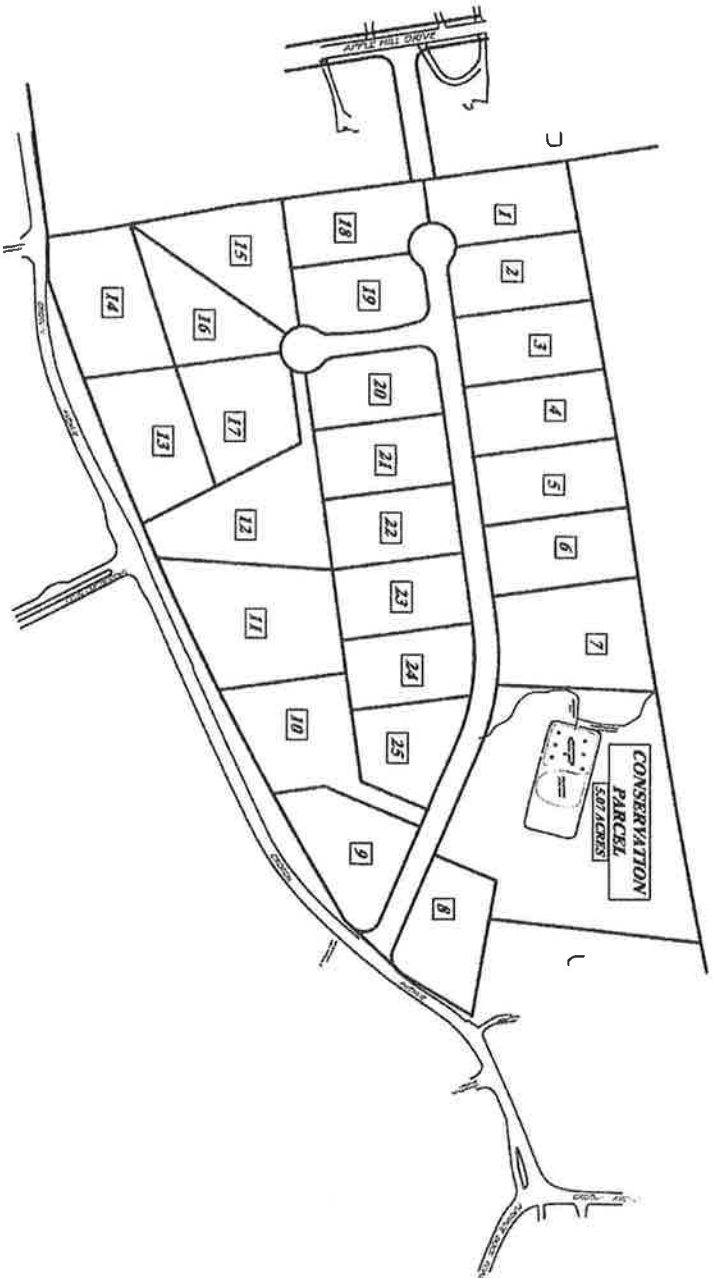
LOCATION:

150 CROTON AVENUE

TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1

ALT 1



SUBDIVISION ALTERNATIVE 1

SCALE: 1 IN. = 240 FT.

240 0 120 240

SCALE: 1" = 240 FT.

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER 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. COPYRIGHT © 2017 BY CROOKIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.



CRONIN
ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

**39 ARLO LANE
CORTLANDT, NEW YORK 10567**

SUBDIVISION ALTERNATIVE 2

SUBDIVISION PLAN

FOR

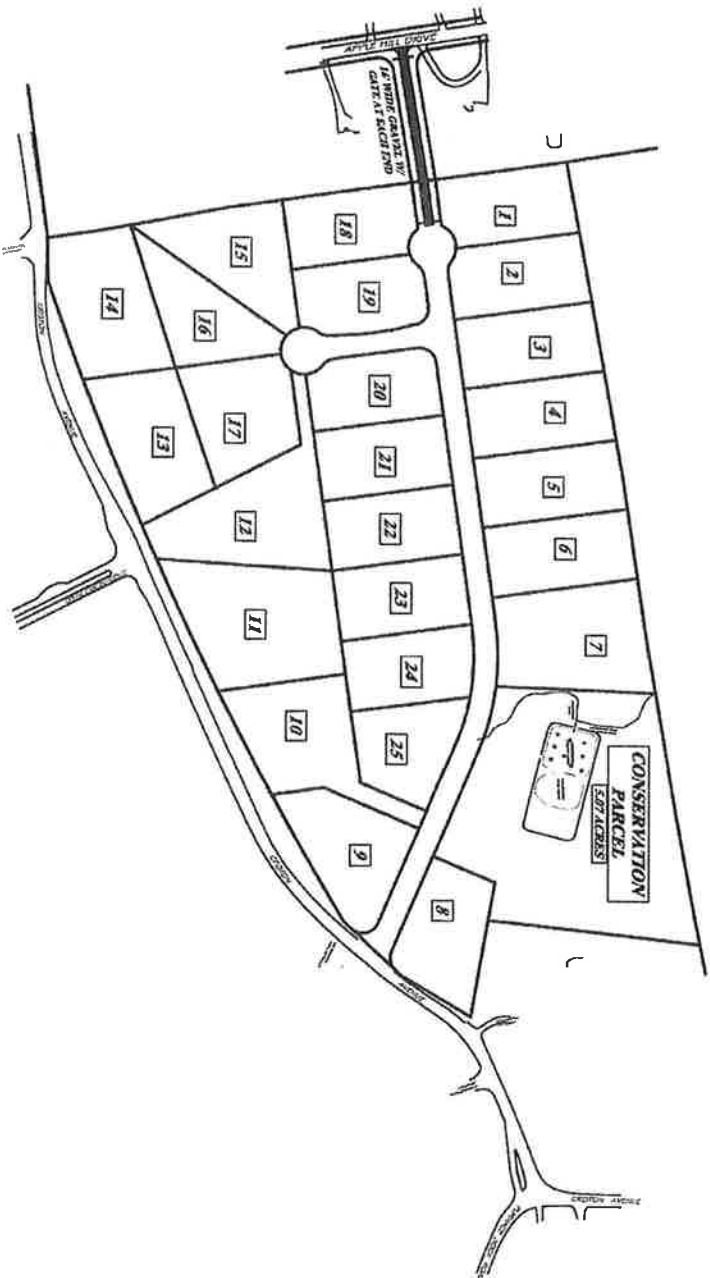
HANOVER ESTATES

LOCATION:

150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1

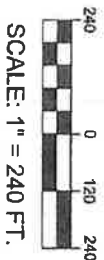
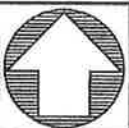
ALT 2



SUBDIVISION ALTERNATIVE 2

SCALE: 1 IN. = 240 FT.

DATE: FEBRUARY 14, 2011



SCALE: 1" = 240 FT.

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

* UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT IS UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY SUCH ALTERATION IS MADE, THE DATE OF SUCH ALTERATION AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION. * COPYRIGHT 2011 BY CRONIN ENGINEERING, P.E., P.C. ALL RIGHTS RESERVED.

CRONIN
ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

39 ARILO LANE
CORTLANDT, NEW YORK 10567

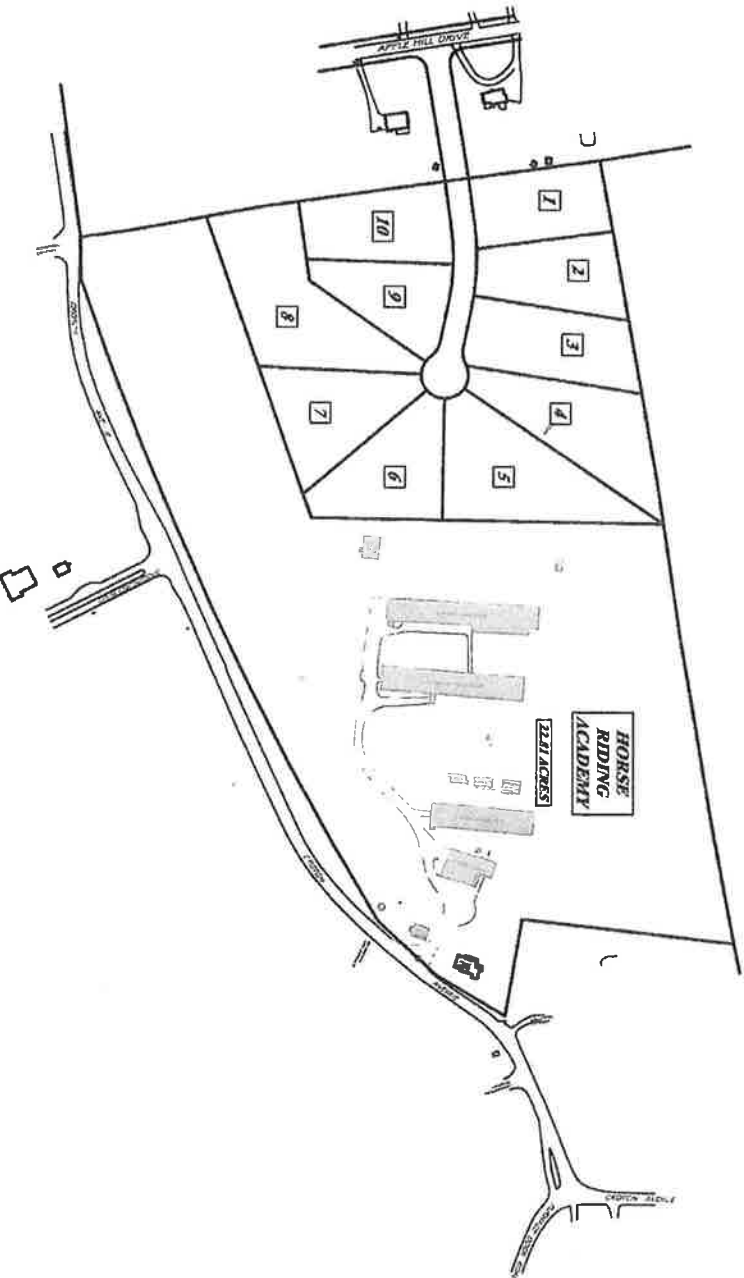
SUBDIVISION ALTERNATIVE 3

SUBDIVISION PLAN
FOR

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 ALT 3



SUBDIVISION ALTERNATIVE 3

SCALE: 1 IN. = 240 FT.